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STUCTURAL ENGINEER
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PHILLIP LALONDE
6617 RED BUD RD
FORT WORTH TX, 76135
(817) 238-1520
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NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

Reviewed for Code Compliance

10/02/2023

Harnett COUNTY NORTH CAROLINA

LOUISIANA KITCHEN
2112 PROTOTYPE
1517 NC 24-87
CAMERON, NC 28326

ABBREVIATIONS

BOH:	BACK OF HOUSE
C/W:	COMPLETE WITH
CL:	CENTER LINE
CONC:	CONCRETE
CPM:	CONSTRUCTION PROJECT MANAGER
EQ:	EQUAL
FOH:	FRONT OF HOUSE
G.C:	GENERAL CONTRACTOR
MAX.:	MAXIMUM
MIN.:	MINIMUM
N/A:	NOT APPLICABLE
O.C:	ON CENTER
P-LAM:	PLASTIC LAMINATE
S.F.C:	STORE FIXTURE COMPANY
SPEC:	SPECIFICATION
T/O:	TOP OF
TBD:	TO BE DETERMINED
TYP.:	TYPICAL
U/S:	UNDERSIDE
WRM:	WASHROOM

DRAWING LIST

CODE INFORMATION

FIRM NAME: THE DIMENSION GROUP

NAME OF PROJECT:
POPEYES - 2112 MODEL

LOCATION:
ADDRESS: 1517 NC 24-87, CAMERON, NC

THE ARCHITECT NOTED ABOVE HAS EXERCISED RESPONSIBLE CONTROL WITH RESPECT TO DESIGN ACTIVITIES.

1	**APPLICABLE CODES**	BUILDING :	2018 INTERNATIONAL BUILDING CODE
		PLUMBING :	2018 INTERNATIONAL PLUMBING CODE
		FIRE :	2018 INTERNATIONAL FIRE CODE
		MECHANICAL :	2018 INTERNATIONAL MECHANICAL CODE
		ELECTRICAL :	2020 NATIONAL ELECTRICAL CODE
		ACCESSIBILITY :	ICC / ANSI A117.1 2009
		ENERGY :	2018 INTERNATIONAL ENERGY CONSERVATION CODE
2	**ZONING CLASSIFICATION**	C2 - COMMERCIAL	
3	**OCCUPANCY CLASSIFICATION**	MIXED USE: A-2 - (ASSEMBLY) & B - (BUSINESS)	3
4	**CONSTRUCTION TYPE**	V-B	COMBUSTIBLE MATERIALS, UNPROTECTED
5	**BUILDING AREA**	ALLOWED : 6000 SQ FT.	PROVIDED : 1965 SQ FT.
6	**BUILDING HEIGHT**	ALLOWED : 40'-0" HIGH	PROVIDED : 19'-0" HIGH
7	**SCOPE OF WORK STATMENT**	NEW BUILD, CONSTRUCTION	

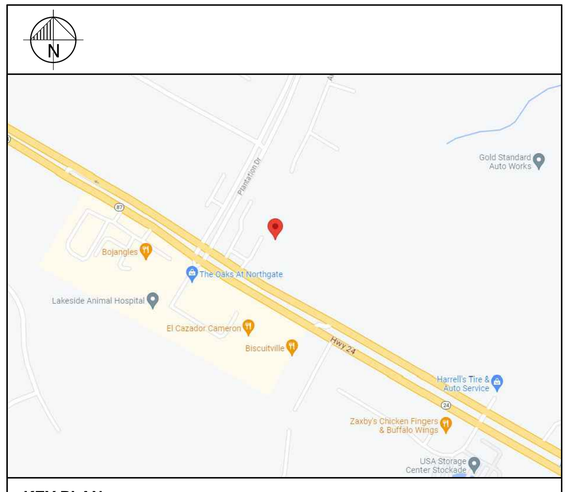
8 **OCCUPANCY CALCULATIONS**

FLOOR	USE	SQUARE FOOTAGE	OCCUPANT LOAD FACTOR	NUMBER OF OCCUPANTS	NUMBER OF SEATS
1 OF 1	DINING (UNCONCENTRATED)	224 SQ. FT	1: 15	15	12
1 OF 1	DINING (STANDING)	59 SQ. FT	1: 15	4	-
1 OF 1	KITCHEN	1100 SQ. FT	1: 200	6	-
1 OF 1	UNOCCUPIED AREAS	342 SQ. FT	-	-	-
			TOTAL NUMBER OF OCCUPANTS:	25	-

3

* UNOCCUPIED AREAS INCLUDE: WALK-IN FREEZER/COOLER, WALLS, CANOPIES / OVERHANGS, WASHROOM VESTIBULE, VESTIBULE AND RESTROOMS

9	**EGRESS CALCULATION**	**TOTAL OCCUPANTS**	**CALCULATED MIN. EGRESS (1005.1)**	**MIN. EGRESS WIDTH REQUIRED**	**TOTAL EGRESS WIDTH PROVIDED**
		25	.20" X 25 = 4.0"	(32" MIN.)	114"
10	**EXITS**	TOTAL REQUIRED : 1	TOTAL PROVIDED : 3	EGRESS WIDTH PER EXIT : 44" CLEAR	
		LOSS OF ONE REQUIRED MEANS OF EGRESS SHALL NOT REDUCE THE EGRESS CAPACITY TO LESS THAN 50% OF REQUIRED			
11	**FIRE RESISTIVE REQUIREMENTS**	EXTERIOR BEARING WALL :	(0 HOUR)		
		ROOF CONSTRUCTION :	(0 HOUR)		
		CEILING :	(0 HOUR)		
12	**SPRINKLER SYSTEM**	___ ENTIRE BUILDING (EXISTING)	___ IN LIEU OF ROOF RATING		
		___ BASEMENT ONLY	_X_ NOT REQUIRED		
13	**FIRE ALARM**	NOT REQUIRED			
14	**MAX. TRAVEL DISTANCE**	200' (250' WITH SPRINKLER SYSTEM)			
15	**PLUMBING REQUIREMENT**	**WATER CLOSETS**	1 REQUIRED		
		LAVATORIES	1 REQUIRED		
		URINALS	NOT REQUIRED		
		DRINKING FOUNTAIN	NOT REQUIRED		
		PUBLIC ACCESS	PROVIDED		
		UNISEX IS PERMITTED	YES		



KEY PLAN
N.T.S.

CONTRACTORS

CONTRACTORS ARE TO CONTACT THE CONSTRUCTION PROJECT MANAGER AS INDICATED IN THE WRITTEN SCOPE OF WORK FOR BIDDERS LIST. FOR APPROVED SUPPLIERS LIST, NATIONAL ACCOUNT PHONE NUMBERS AND CONTRACTORS REFER TO SPECIFICATION DRAWINGS.

PROJECT NO.: C22-129
POPEYES NO.: RN. xxxx

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

TANNER EDWARDS KINDE REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE · CIVIL ENGINEERING · MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

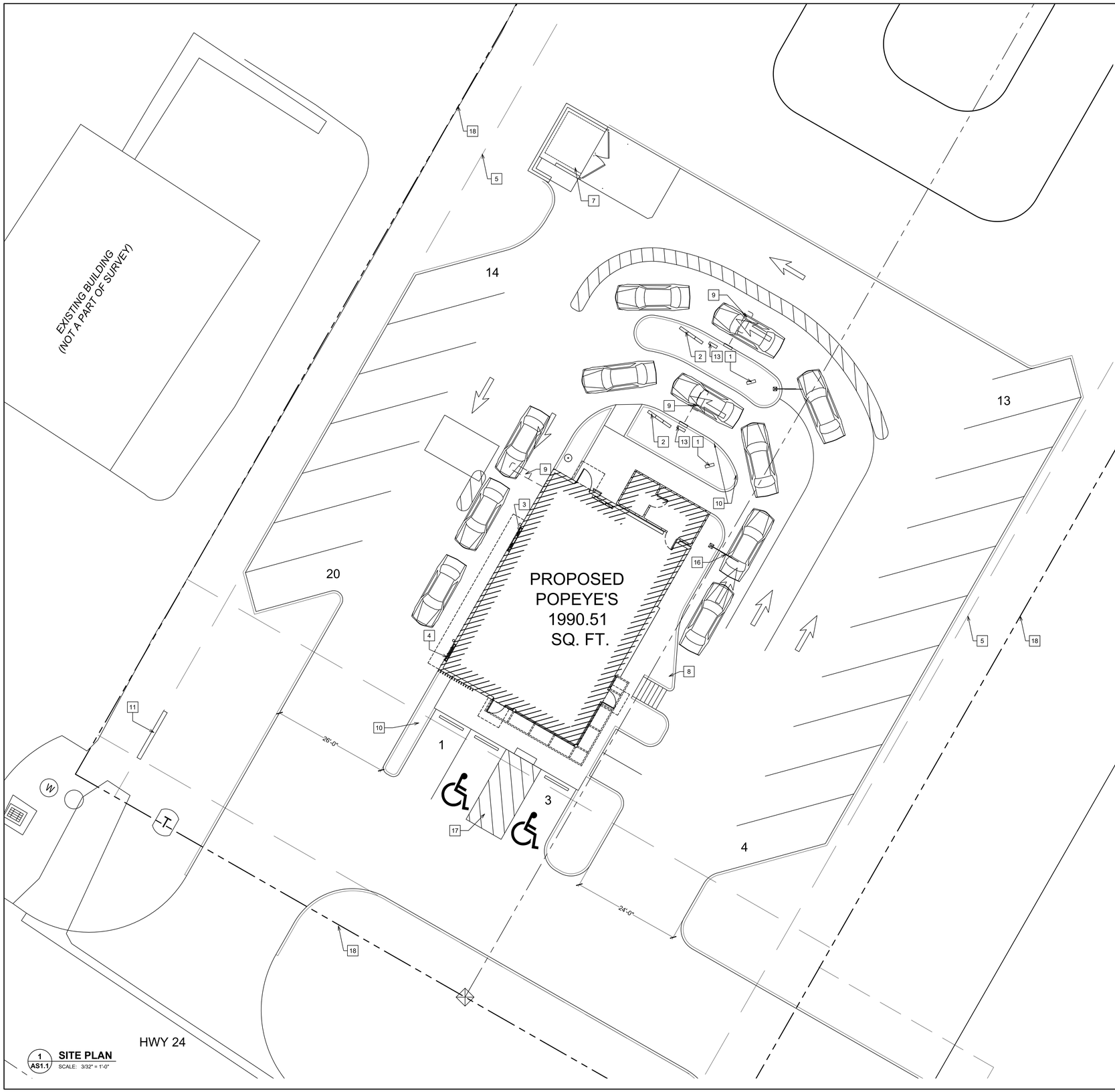
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
COVER SHEET

Drawn	Checked
SH	AL
Scale	**Date**
NTS	JUNE 2023
Project No.	**Drawing No.**
C22-129	CS 1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 AS1.1 **SITE PLAN**
SCALE: 3/32" = 1'-0"

NOTES

1. DT DIGITAL PRE-SELL MENU BOARD LOCATION. SEE DETAILS ON SHEET AS2.1.
2. DT DIGITAL MENU BOARD LOCATION. SEE DETAILS ON SHEET AS2.1.
3. POPEYE'S RESTAURANT DRIVE THRU WINDOW LOCATION. SEE FLOOR PLAN ON SHEET A1 FOR ADDITIONAL INFORMATION.
4. 6" STEEL PIPE BOLLARD AT PULL-UP WINDOW. SEE DETAIL 13/AS2.3, FLOOR PLAN A1 AND EXTERIOR ELEVATIONS A5 SERIES.
5. 10' PAVEMENT SETBACK
6. APPROXIMATE LOCATION OF GREASE INTERCEPTOR BELOW SITE PAVING. COORDINATE WITH PLUMBING & CIVIL DRAWINGS.
7. POPEYE'S DUMPSTER ENCLOSURE. COORDINATE EXACT LOCATION WITH CIVIL DRAWINGS. REFER TO ARCHITECTURAL SITE DETAILS AS2.2 FOR CONSTRUCTION.
8. SIDEWALK / SLAB. REFER TO CIVIL SITE PLAN DRAWINGS FOR LOCATION AND DIMENSIONS.
9. VEHICLE LOOP. REFER TO DETAIL 5/AS2.1.
10. ALL PATIO AND LANDSCAPE DESIGN BY CIVIL ENGINEER TO BE APPROVED BY POPEYE'S DESIGN.
11. PYLON / MONUMENT SIGN / SIGN BASE. REFER TO POPEYES SIGNAGE PACKAGE FOR DETAIL.
12. SITE SIGNAGE. REFER TO DETAIL 9/AS2.1 AND SIGNAGE PACKAGE BY POPEYES FOR DETAILS.
13. SPEAKER POST. REFER TO DETAILS ON SHEET AS2.1.
14. DRIVE THRU CANOPY. REFER TO POPEYES SIGNAGE DRAWINGS.
15. SITE PLAN LIGHTING. REFER TO CIVIL SITE PLAN DRAWINGS FOR LOCATION AND DIMENSIONS. REFER TO DETAIL 1/AS2.1.
16. HEIGHT RESTRICTION BAR. REFER TO POPEYES SIGNAGE DRAWINGS.
17. PEDESTRIAN WALKWAY. DESIGN BY CIVIL ENGINEER TO BE APPROVED BY POPEYE'S DESIGN.
18. PROPERTY LINE REFER TO CIVIL SITE PLAN DRAWINGS

GENERAL NOTES

ARCHITECTURAL SITE PLAN IS TO BE USED FOR GUIDELINE REFERENCE ONLY. ALL SITE SPECIFIC INFORMATION AND REQUIREMENTS IS TO BE COORDINATED WITH ARCHITECT, MECHANICAL/ELECTRICAL AND CIVIL ENGINEER OF RECORD. CIVIL ENGINEER/ARCHITECT TO PROVIDE POPEYE'S DESIGN COMPLETE CIVIL PACKAGE WITH LANDSCAPE PLAN FOR APPROVALS.

PYLON SIGN AT MAIN STREET. REFER TO LOCAL AUTHORITIES FOR PERMITS AND APPROVALS "DIGITAL MENU BOARDS AND PREVIEW BOARDS ARE REQUIRED FOR ALL SITES," "LED LOT LIGHTING IS REQUIRED ON ALL SITES"

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PROJECT NORTH

TANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE+CIVIL ENGINEERING+MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ARCHITECTURAL
SITE PLAN

Drawn	Checked
SH	AL
Scale	**Date**
AS NOTED	JUNE 2023
Project No.	**Drawing No.**
C22-129	AS1.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

CRITICAL NOTES

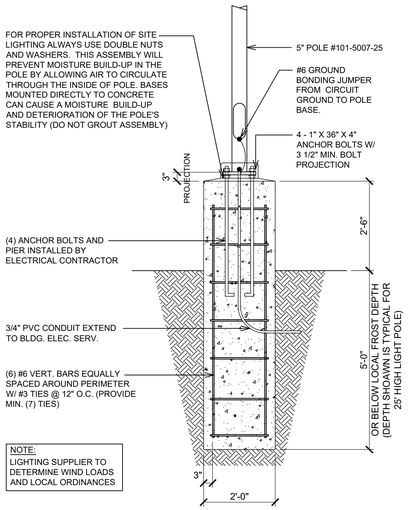
ODMB, SPEAKER POST AND PRESELL MENU BOARD ALL PROVIDED BY OWNER. SHIPPED TO SITE FROM VENDOR TO BE ORDERED 12 WEEKS AHEAD OF INSTALL

INSTALLED AND SCHEDULED BY OWNER / VENDOR. INSTALL TO BE SCHEDULE A MIN OF 4 WEEKS BEFORE DESIRED DATE

FOUNDATION, DATA AND ELECTRICAL BY CIVIL/GC.

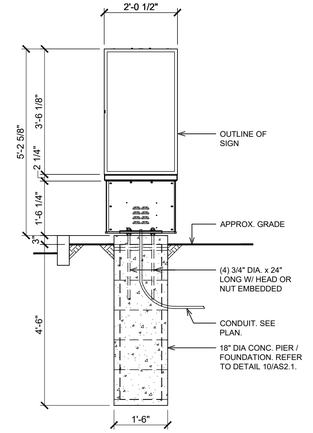
ANCHOR BOLTS TO BE IN AN 8X8 PATTERN, INSTALL BY GC. TO BE COMPLETED PRIOR TO HAVING BW ON SITE

THESE DRAWINGS ARE INTENDED TO BE REVIEWED IN CONJUNCTION WITH THE ODMB INSTALL DETAILS. YOU CANNOT RELY ON THESE DRAWINGS ALONE FOR A SUCCESSFUL INSTALLATION



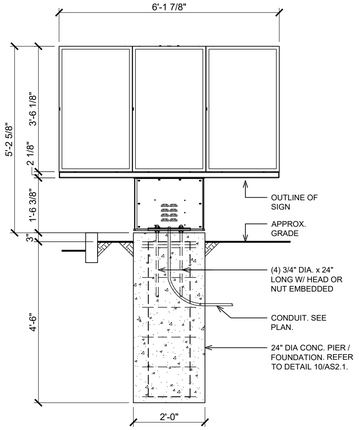
1 AS2.1 EXTERIOR POLE LIGHTS

SCALE: 1/2" = 1'-0"



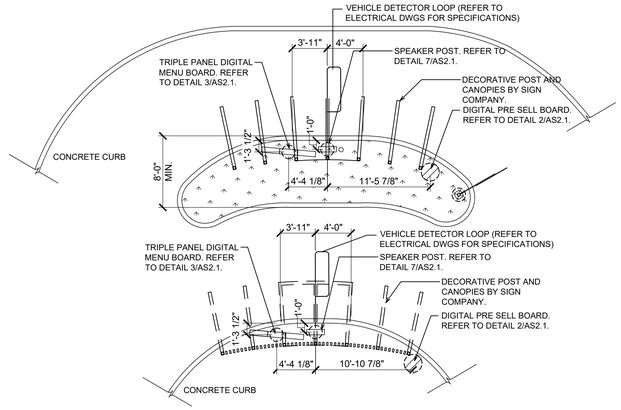
2 AS2.1 DT DIGITAL PRE-SELL MENU BOARD

SCALE: 1/2" = 1'-0"



3 AS2.1 DT DIGITAL MENU BOARD

SCALE: 1/2" = 1'-0"

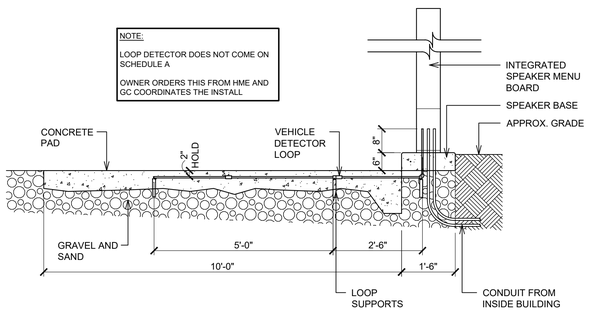


4 AS2.1 TYPICAL DOUBLE DT MENU BOARD LAYOUT

SCALE: 1/8" = 1'-0"

NOTE:
LOOP DETECTOR DOES NOT COME ON SCHEDULE A

OWNER ORDERS THIS FROM HME AND GC COORDINATES THE INSTALL



5 AS2.1 VEHICLE DETECTOR LOOP SECTION

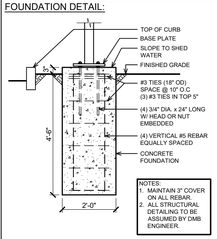
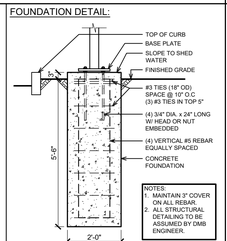
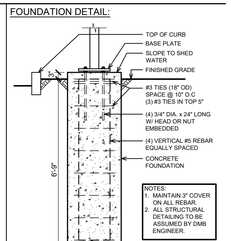
SCALE: 1/2" = 1'-0"

6 AS2.1 N/A

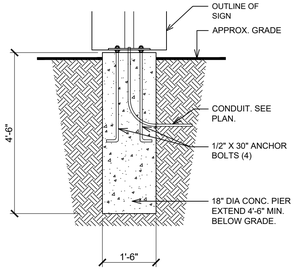
7 AS2.1 SPEAKER POST DETAIL

SCALE: 1/2" = 1'-0"

SOIL CLASS 5

WIND LOAD: 90 MPH (ASCE 7-05) 115 MPH (ASCE 7-10)	WIND LOAD: 120 MPH (ASCE 7-05) 153 MPH (ASCE 7-10)	WIND LOAD: 150 MPH (ASCE 7-05) 192 MPH (ASCE 7-10)
DESIGN PARAMETERS: 2009 INTERNATION BUILDING CODE ASCE 7-05 WIND SPEED DATA: 1. BASIC WIND SPEED = 90 MPH (3 SEC. GUST) 2. WIND IMPORTANCE FACTOR 1.0 3. WIND EXPOSURE C 4. INTERNAL PRESSURE COEF. N/A 4. COMPNENT AND CLADDING N/A ASCE 7-10 SPEC RATED APPX. 28% HIGHER OVER ASCE 7-05 SPEC MATERIALS: GRADE F1554 Gr 36 ANCHOR BOLTS GRADE A615 60 KSI REBAR 3000 PSI CONCRETE @ 28 DAYS CLASS 5 SOIL: 1500 PSF SOIL BEARING 100 PSF/LF SOIL LATERAL BEARING UNDISTURBED SOIL	DESIGN PARAMETERS: 2009 INTERNATION BUILDING CODE ASCE 7-05 WIND SPEED DATA: 1. BASIC WIND SPEED = 120 MPH (3 SEC. GUST) 2. WIND IMPORTANCE FACTOR 1.0 3. WIND EXPOSURE C 4. INTERNAL PRESSURE COEF. N/A 4. COMPNENT AND CLADDING N/A ASCE 7-10 SPEC RATED APPX. 28% HIGHER OVER ASCE 7-05 SPEC MATERIALS: GRADE F1554 Gr 36 ANCHOR BOLTS GRADE A615 60 KSI REBAR 3000 PSI CONCRETE @ 28 DAYS CLASS 5 SOIL: 1500 PSF SOIL BEARING 100 PSF/LF SOIL LATERAL BEARING UNDISTURBED SOIL	DESIGN PARAMETERS: 2009 INTERNATION BUILDING CODE ASCE 7-05 WIND SPEED DATA: 1. BASIC WIND SPEED = 150 MPH (3 SEC. GUST) 2. WIND IMPORTANCE FACTOR 1.0 3. WIND EXPOSURE C 4. INTERNAL PRESSURE COEF. N/A 4. COMPNENT AND CLADDING N/A ASCE 7-10 SPEC RATED APPX. 28% HIGHER OVER ASCE 7-05 SPEC MATERIALS: GRADE F1554 Gr 36 ANCHOR BOLTS GRADE A615 60 KSI REBAR 3000 PSI CONCRETE @ 28 DAYS CLASS 5 SOIL: 1500 PSF SOIL BEARING 100 PSF/LF SOIL LATERAL BEARING UNDISTURBED SOIL
FOUNDATION DETAIL: 	FOUNDATION DETAIL: 	FOUNDATION DETAIL: 

8 AS2.1 N/A



9 AS2.1 SIGNAGE BOARD DETAIL

SCALE: 1/2" = 1'-0"

10 AS2.1 FOUNDATION DETAIL @ DIGITAL MENU BOARD

SCALE: 1/2" = 1'-0"

NOTES:

1. SIGNAGE VENDOR TO DETERMINE NUMBER OF DIRECTIONAL SIGNS AND LOCATIONS (SITE VERIFY)

2. NOTES:
DETAILS FOR REFERENCE ONLY. COORDINATE WITH SITE PLAN DRAWING FOR EXACT REQUIREMENTS.

GENERAL NOTES

1. ALL SIGNS SHALL BE ERECTED IN ACCORDANCE WITH ALL LOCAL CODES AND SOIL CONDITIONS.

2. DESIGNS ARE PER 15 PSF WIND LOADS (VERIFY LOCAL WIND AND SOIL CONDITIONS).

3. ALL PAINTED PAVEMENT MARKERS ARE TO BE SOLID YELLOW AND FURNISHED BY GENERAL CONTRACTOR.

4. WHEN UNABLE TO VIEW CARS PLACING ORDERS DIRECTLY FROM PICK-UP WINDOW A 24" CONVEX MIRROR SHALL BE PLACED IN AN APPROPRIATE LOCATION TO VIEW CUSTOMERS ORDER AT STATION.

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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS LANE REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE·CIVIL ENGINEERING·MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

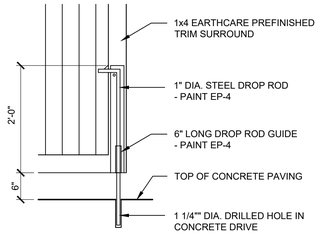
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

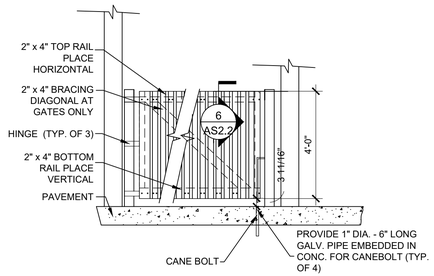
Drawing Title
MENU SIGN DETAILS
SINGLE DOUBLE
DRIVE-THRU

Drawn	Checked
SH	AL
Scale: AS NOTED	Date: JUNE 2023
Project No.: C22-129	Drawing No.: AS2.1

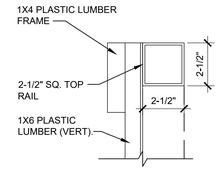
POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



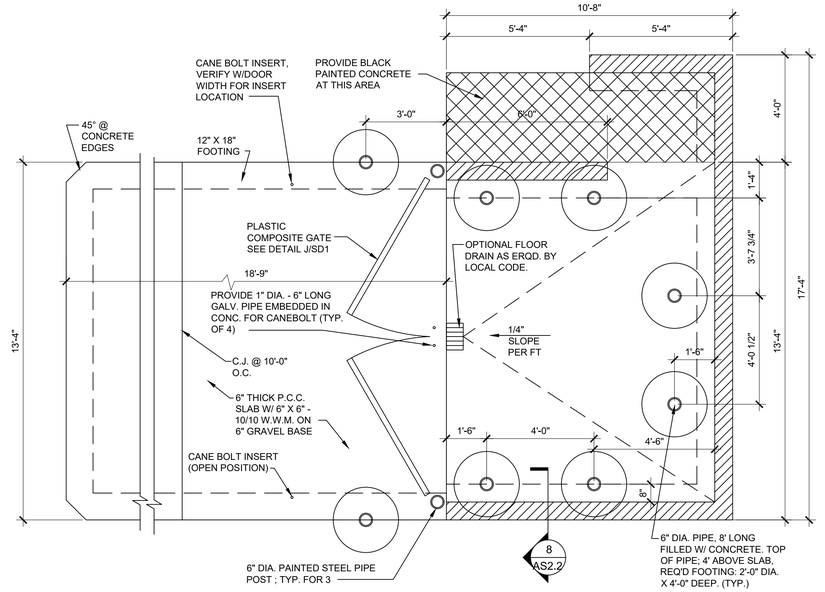
4 AS2.2 DROP ROD DETAIL
SCALE: 3/4" = 1'-0"



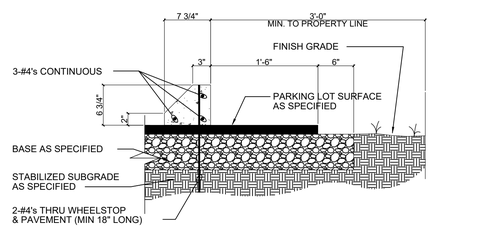
5 AS2.2 GATE DETAIL AT REAR ENCLOSURE
SCALE: 3/8" = 1'-0"



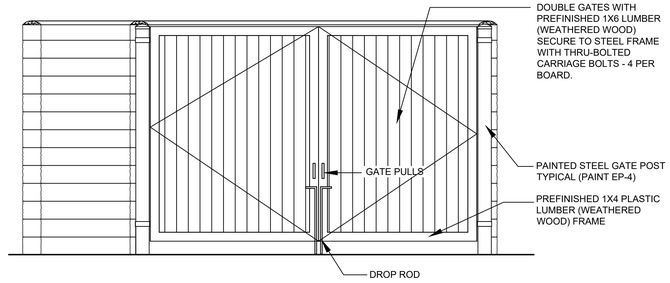
6 AS2.2 FLASHING DETAIL
SCALE: 3/8" = 1'-0"



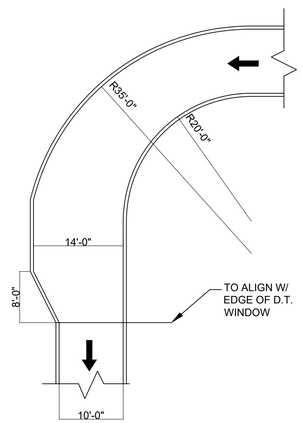
1 AS2.2 STANDARD DUMPSTER ENCLOSURE
SCALE: 3/8" = 1'-0"



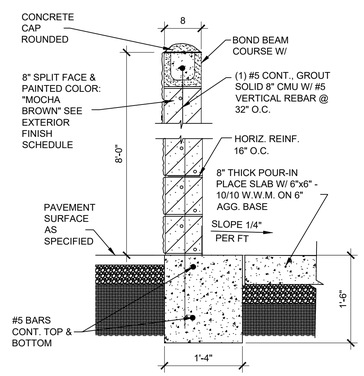
7 AS2.2 WHEELSTOP (PRECAST)
SCALE: 1" = 1'-0"



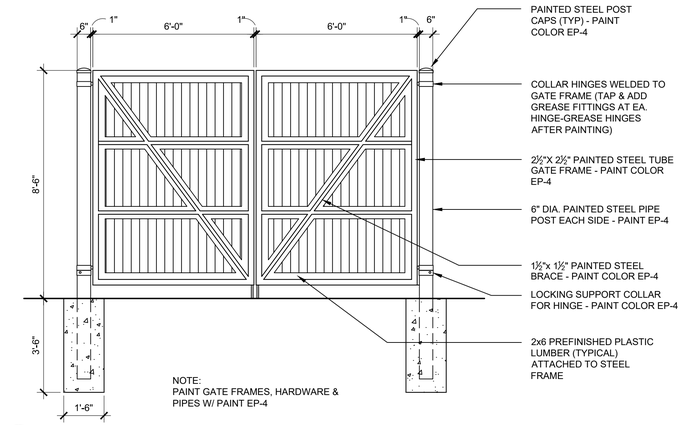
2 AS2.2 DUMPSTER ENCLOSURE & GATE EXT. ELEV.
SCALE: 3/8" = 1'-0"



9 AS2.2 DT W/ OUT BYPASS LANE
SCALE: NTS



8 AS2.2 DUMPSTER WALL SECTION
SCALE: 3/8" = 1'-0"



3 AS2.2 DUMPSTER ENCLOSURE & GATE INT. ELEV.
SCALE: 3/8" = 1'-0"

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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

SANNER EDWARDS KING REGISTERED ARCHITECT NORTH CAROLINA SEAL 15704
9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE · CIVIL ENGINEERING · MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

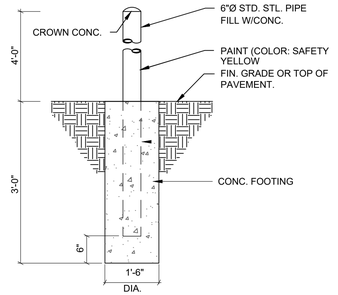
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
SITE DETAILS - TRASH ENCLOSURE WOOD

Drawn	Checked
SH	AL
Scale	**Date**
AS NOTED	JUNE 2023
Project No.	**Drawing No.**
C22-129	AS2.2

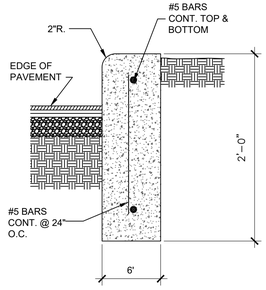
POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



CANE BOLT INSERT, VERIFY W/DOOR WIDTH FOR INSERT LOCATION

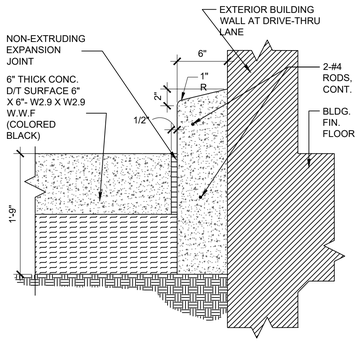
13 AS2.3 BOLLARD DETAIL

SCALE: 3/8" = 1'-0"



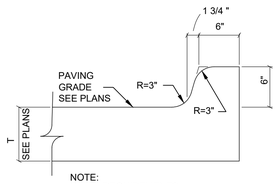
11 AS2.3 CURB DETAIL

SCALE: 3/8" = 1'-0"



5 AS2.3 6" BARRIER CURB @ DRIVE-THRU WINDOW

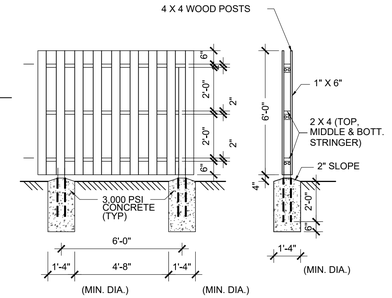
SCALE: 3/8" = 1'-0"



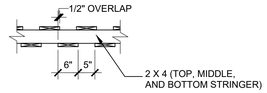
NOTE:
STEEL REQUIREMENTS PER LOCAL CODE

4 AS2.3 EXTRUDED CURB & GUTTER

SCALE: 3/8" = 1'-0"



SECTION

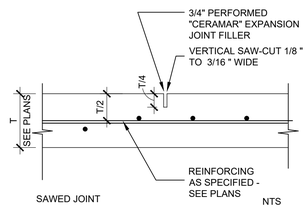


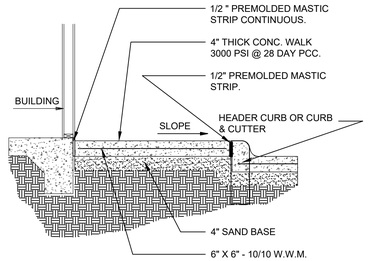
TOP VIEW

NOTE
1. ALL LUMBER TO BE SOUTHERN YELLOW PINE #1 OR EQUAL COMMON GRADE TREATED WITH ONE COAT CURPINOL OR APPROVED PRESERVATIVE AFTER FABRICATION AND BEFORE ASSEMBLY. AFTER ASSEMBLY APPLY OLYMPIC SEMI-TRANSPARENT STAIN #709

1 AS2.3 SHADOW BOX WOOD FENCE

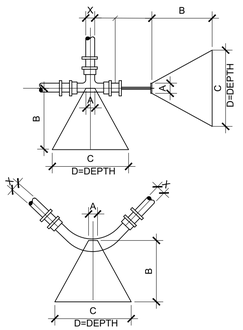
SCALE: 3/8" = 1'-0"





9 AS2.3 SIDEWALK DETAIL

SCALE: 3/8" = 1'-0"



10 AS2.3 THRUST BLOCKS

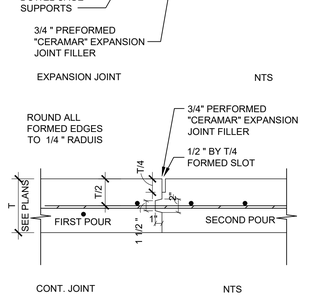
SCALE: 3/8" = 1'-0"

NOTE:
CONCRETE TO HAVE A MIN. 28 DAY STRENGTH OF 3000 PSI

BLOCKING DIMENSIONS

		X	A	B	C	D
DEAD END AND TEES		8"	10"	2'-3"	3'-3"	2'-0"
		12"	12"	3'-0"	4'-6"	3'-0"
BENDS	90°	8"	10"	2'-9"	4'-0"	2'-3"
		12"	12"	4'-3"	6'-0"	3'-3"
	45°	8"	10"	1'-6"	2'-6"	2'-0"
		12"	12"	2'-9"	4'-3"	2'-6"
	22 1/2°	8"	10"	1'-0"	2'-0"	1'-3"
		12"	12"	1'-9"	3'-0"	1'-9"
	11 1/4°	8"	10"	0'-6"	1'-4"	1'-0"
		12"	12"	0'-6"	1'-9"	1'-6"

X= DIAMETER OF PIPE TO BE BLOCKED NOTE: BLOCKING SHALL BE CONSTRUCTED AS PER AWWA STD. 0600, SECTION 12.3, OR LATEST REVISION



NOTE:
CENTER DOWEL BAR IN CURB.

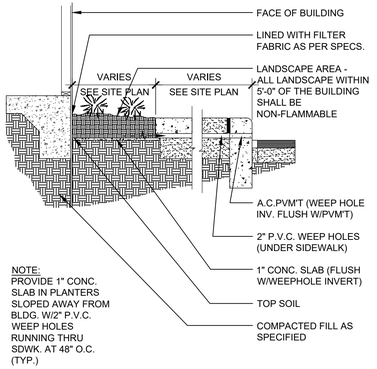
EXPANSION JOINT NTS

CONT. JOINT NTS

NOTE: TYP. JOINT AND CURB DETAILS SEE CIVIL DWGS. FOR ACTUAL DETAILS.

13 AS2.3 TYPICAL JOINT DETAILS

SCALE: 3/8" = 1'-0"



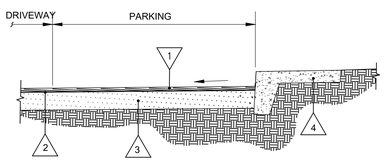
NOTE:
PROVIDE 1" CONC. SLAB IN PLANTERS SLOPED AWAY FROM BLDG. W/2" P.V.C. WEEP HOLES RUNNING THRU SDWK. AT 48" O.C. (TYP.)

7 AS2.3 PLANTER SIDEWALK

SCALE: 3/8" = 1'-0"

KEY TO TYPICAL PAVEMENT SECTIONS

1. 2" ASPHALTIC CONCRETE.
2. BITUMINOUS PRIME COAT AND TOPPING.
3. 6" BASE COURSE, REFER TO GEOTECHNICAL REPORT.
4. CONCRETE SIDEWALK.

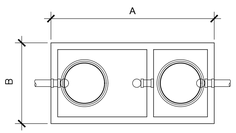


NOTE: VERIFY GEOTECHNICAL REPORT AS WELL AS LOCAL GUIDELINES FOR PAVEMENT REQUIREMENTS AND RECOMMENDATIONS

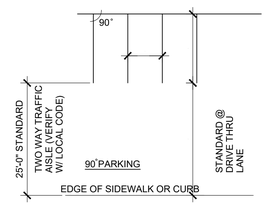
8 AS2.3 TYP. ASPHALT PAVEMENT DETAIL

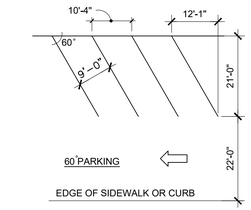
SCALE: 3/8" = 1'-0"

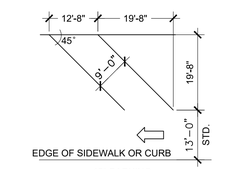
GREASE TRAP SIZE TABLE		
G.T. SIZE	DIM "A"	DIM "B"
1000 GALLON	8'-2"	5'-1"
1200 GALLON	8'-6"	5'-9"
VERIFY PER LOCAL CODE		



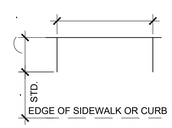
TOP VIEW



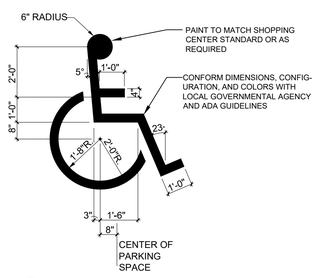




45° PARKING

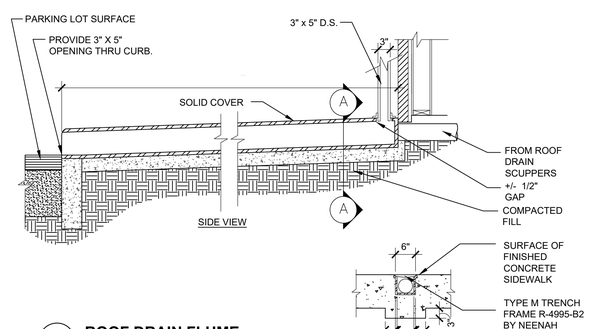


PARALLEL PARKING



12 AS2.3 HANDICAP SYMBOL

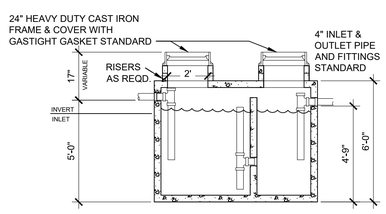
SCALE: 3/8" = 1'-0"



SECTION A-A

6 AS2.3 ROOF DRAIN FLUME

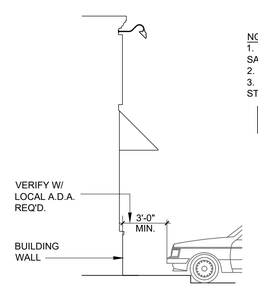
SCALE: 3/8" = 1'-0"



SECTION

3 AS2.3 EXTERIOR GREASE TRAP

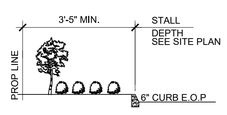
SCALE: 3/8" = 1'-0"



PARKING AGAINST SIDEWALK

NOTES:
1. WHEEL STOPS NOT TO BE USED UNLESS REQ'D FOR SAFETY REASONS.
2. USE 90 DEGREE PARKING WHENEVER POSSIBLE.
3. DIMENSIONS SHOWN ABOVE ARE BASED ON 9'X18' STALLS.

VERIFY DIMENSIONS WITH LOCAL REGULATORY AGENCY.



CURBED PARKING STALL AGAINST SIDEWALK

2 AS2.3 PARKING STALL STANDARDS

SCALE: 3/8" = 1'-0"

ISSUE TABLE		
No.	Date (mm/dd/yy)	Description

REVISIONS		
No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN		
No.	Date	Description

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE·CIVIL ENGINEERING·MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type	
US 2112 PROTOTYPE 2112-21	

Location

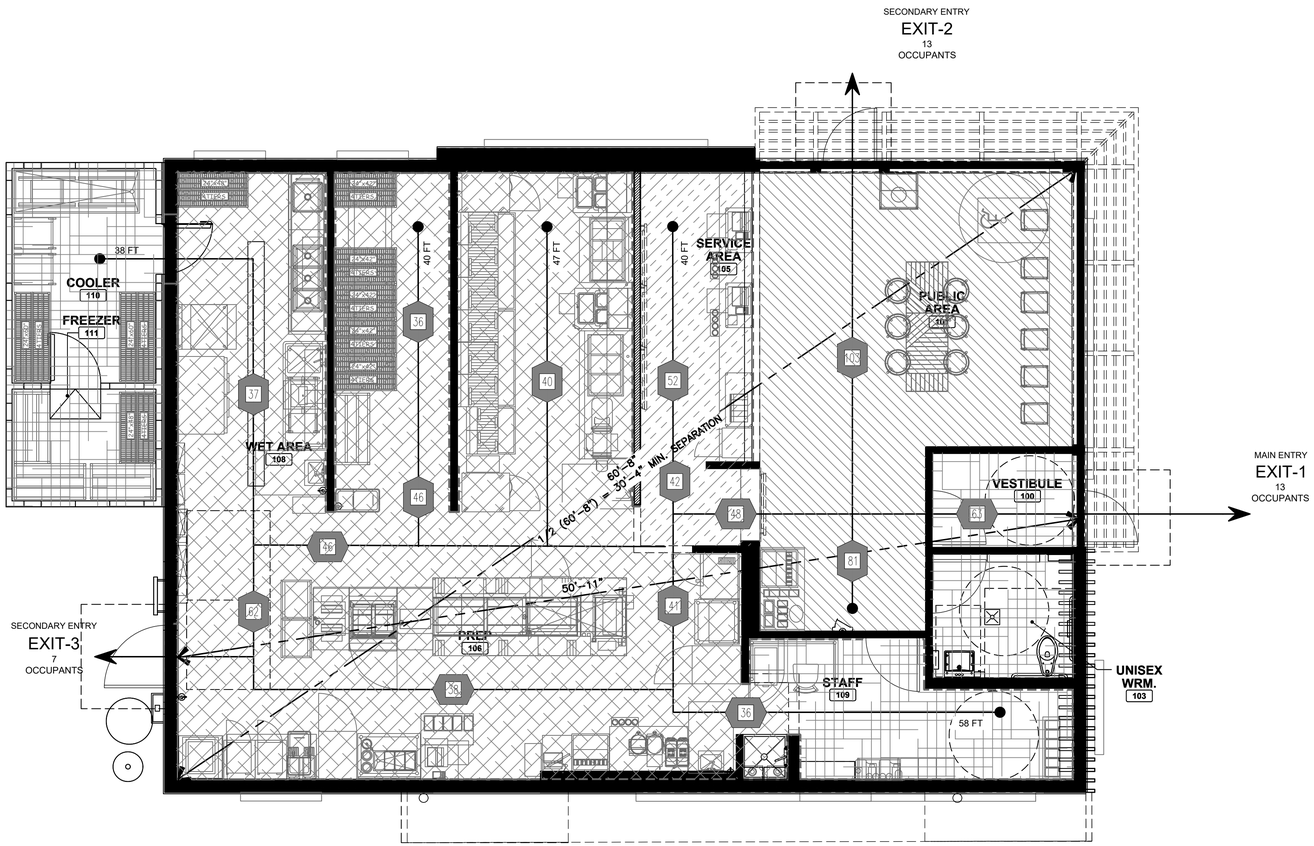
1517 NC 24-87
CAMERON, NC

Drawing Title

SITE DETAILS

Drawn	Checked
SH	AL
Scale	Date
AS NOTED	JUNE 2023
Project No.	Drawing No.
C22-129	AS2.3

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 / A1 **EXITING PLAN**

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

GENERAL NOTES:

A. FIRE EXTINGUISHER (K CLASS) TO BE PROVIDED BY G.C.
VERIFY NUMBER AND LOCATION OF EXTINGUISHERS WITH LOCAL AUTHORITIES. SEE SHEET A2 FOR ADDITIONAL INFORMATION

OCCUPANCY SIGNAGE NOTES:

SIGNS STATING THE MAXIMUM OCCUPANT CONTENT SHALL BE CONSPICUOUSLY POSTED IN EACH AREA OF ASSEMBLY, ASSEMBLY ROOM, OR ROOM USED FOR SIMILAR PURPOSE.

LEGEND

XX — EGRESS PATH DIRECTION & WIDTH (INCHES)

PATH OF EGRESS TRAVEL; 36" MINIMUM

BUILDING CODE INFORMATION

BUILDING CODE:	2018 INTERNATIONAL BUILDING CODE
OCCUPANCY CLASSIFICATION:	BUSINESS & ASSEMBLY GROUP B & A-2
CONSTRUCTION TYPE:	TYPE VB
SPRINKLER:	NOT SPRINKLERED
TOTAL MAXIMUM OCCUPANT LOAD: MERCANTILE AREA:	25 OCCUPANTS

EXITING REQUIREMENTS:

MAX TRAVEL DISTANCE 200' (250' WITH SPRINKLER SYSTEM)
EXITS: TOTAL REQ: 1 TOTAL PROVIDED: 3 EGRESS WIDTH PER EXIT: 44" CLEAR.
LOSS OF ONE REQUIRED MEANS OF EGRESS SHALL NOT REDUCE THE EGRESS CAPACITY TO LESS THAN 50% OF REQUIRED.

OCCUPANCY CALCULATIONS

BUILDING CODE:	SQFT	TOTAL SQFT	PERSONS	TOTAL PERSONS
ASSEMBLY (RESTAURANT) 15 SQ.FT PER OCCUPANT				
DINING (CONCONCENTRATED)	224		15	
DINING (STANDING)	59	283	4	19
ASSEMBLY (STORAGE) 200 SQFT PER OCCUPANT				
KITCHEN	1,100	1,100	6	6
UNOCCUPIED AREAS				
VESTIBULE	42			
RESTROOM	56			
COOLER VAULT	154			
OFFICE	90	342	0	0
TOTAL OCCUPANCY				25

EGRESS CAPACITY

MAIN ENTRY EXIT 1 WIDTH	= 34"/.02" = 170 PERSONS
SECONDARY EXIT 2 WIDTH	= 34"/.02" = 170 PERSONS
SECONDARY EXIT 3 WIDTH	= 40"/.02" = 200 PERSONS

TOTAL = 540 PERSONS

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

TANNER EDWARDS KING — REGISTERED — ARCHITECT — NORTH CAROLINA — SEAL 15704

9.14.2023

Company Logo

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10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 19 72 — POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

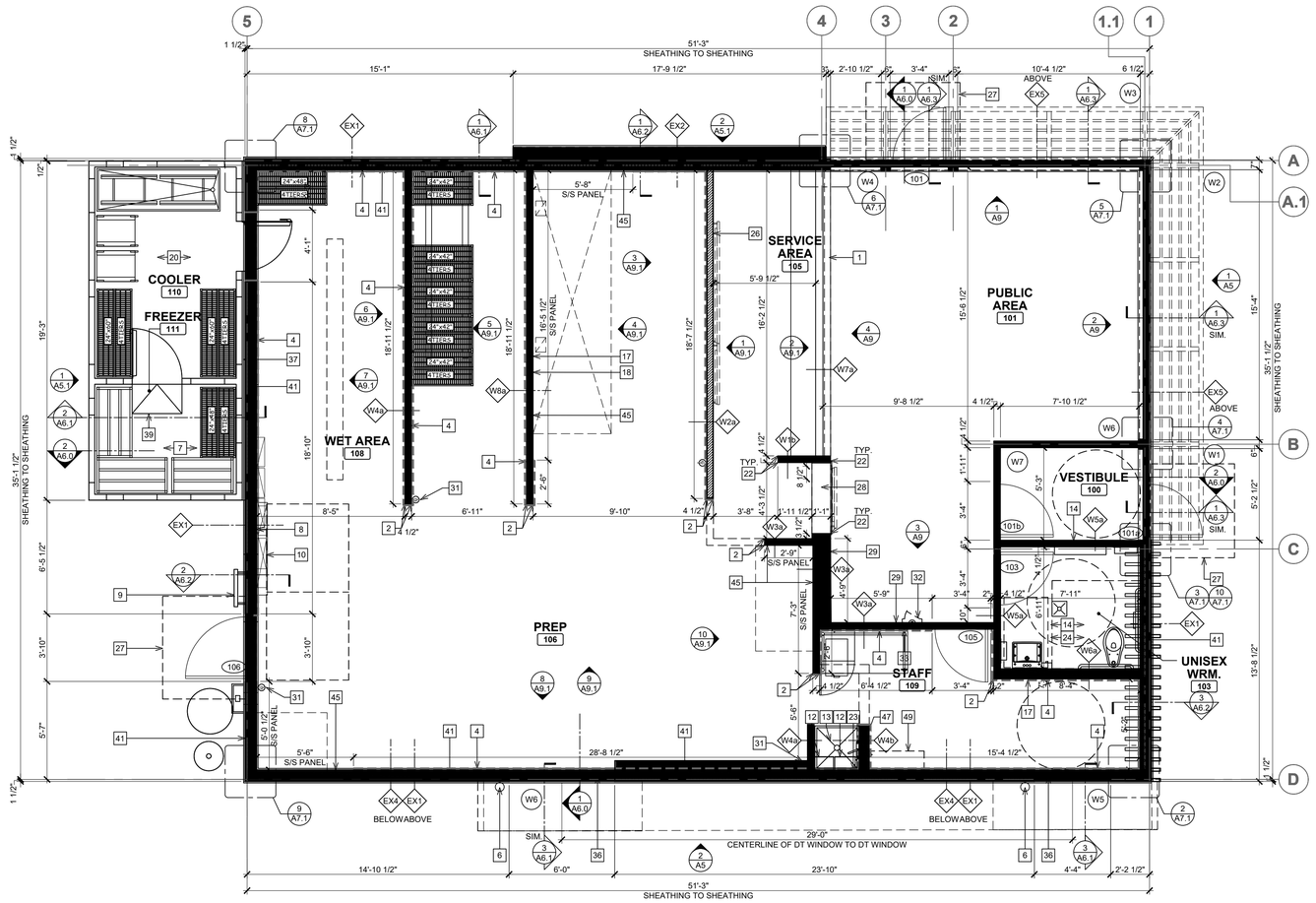
Location
1517 NC 24-87
CAMERON, NC

Drawing Title
LIFE SAFETY & EXITING PLAN

Drawn	Checked
SH	AL
Scale: AS NOTED	Date: JUNE 2023
Project No.: C22-129	Drawing No.: AS2.4

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

3



1 **FLOOR PLAN**
A1 SCALE: 1/4"=1'-0"

FLOOR PLAN NOTES

1. APPROXIMATE LOCATION OF FRONT COUNTER. CONSULT MILLWORK DRAWINGS FOR ACTUAL LOCATION. G.C TO ENSURE FLOOR TILE TRANSITION FALLS UNDERNEATH MILLWORK COUNTERS. G.C TO COORDINATE WITH MILLWORK COMPANY FOR ACTUAL LOCATION.
2. G.C TO PROVIDE AND INSTALL 2" X 2" (4FT LIGHT DUTY 20 GAUGE "#4 BRUSHED") S/S CORNER GUARDS FROM 4" A.F.F AND 1 1/2" X 1 1/2" PLASTIC CORNER GUARDS (FROM FRP SUPPLIER) FROM 4'-4" TO U/S OF CEILINGS AND BULKHEADS ON ALL OUTSIDE CORNERS.
3. G.C TO COORDINATE WITH UTILITY COMPANIES FOR PLACEMENT / LOCATION OF BOLLARDS . G.C TO PROVIDE 6" DIA. METAL BOLLARD FILL W/ CONCRETE AND PAINTED. REFER TO DETAIL 13/AS2.3 & EXTERIOR ELEVATIONS A5 & A5.1.
4. PROVIDE PLYWOOD BACKING / BLOCKING IN WALL AS REQUIRED TO SUPPORT WALL MOUNTED ITEM.
5. N/A.
6. 6" DIA. METAL BOLLARD FILL W/ CONCRETE AND PAINTED. REFER TO DETAIL 13/AS2.3 & EXTERIOR ELEVATIONS A5 & A5.1.
7. NO TILE REQUIRED ON FLOOR AT FREEZER. FREEZER TO HAVE INSULATED FLOOR. G.C TO PROVIDE & INSTALL 2" RIGID INSULATION UNDER SLAB FOR ENTIRE AREA OF COOLER / FREEZER. G.C TO COORDINATE SIZE WITH WALK-IN MANUFACTURER.
8. PROVIDE ½" FIRE RATED PLYWOOD FROM FINISHED FLOOR TO 8'-0" BEHIND ELECTRICAL PANEL. PAINT PLYWOOD W/ 1 COAT OF PRIMERX PEEL BONDING PRIMER & 2 FINISH COATS OF WHITE LATEX PAINT W/ CLASS A RATING (BY SHERWIN WILLIAMS).
9. INTERIOR ROOF ACCESS LADDER AND ROOF HATCH. REFER TO DETAIL 2/A6.2.
10. 8" DEEP x 6" HIGH CONCRETE HOUSE KEEPING PAD @ LOCATION OF ELECTRICAL PANELS. PROVIDE TILE FINISH ON HORIZONTAL & VERTICAL SURFACES.
11. N/A.
12. HOT WATER TANK C/W EXPANSION TANK (IF REQUIRED) MOUNTED ABOVE MOP SINK. REFER TO MECHANICAL DRAWINGS.
13. G.C TO PROVIDE AND INSTALL SURFACE MOUNTED MOP SINK. WALLS AROUND MOP SINK TO RECEIVE ½" CEMENTITIOUS BACKER BOARD FROM FLOOR TO 4'-0" A.F.F. REFER TO MECHANICAL DWGS.
14. G.C. TO SUPPLY AND INSTALL SOUND BATT INSULATION ON ALL PUBLIC WASHROOM WALLS.
15. N/A.
16. N/A.
17. WALL TO BE COMPLETE W/ 1 LAYER ½" DUROCK NEXT GEN CEMENT BOARD ON 2"X6" METAL STUDS @ 16" O.C. CARRY STUDS & CEMENT BOARD TO 6" ABOVE CEILING.
18. PROVIDE PROPER NON-COMBUSTIBLE SUPPORT IN WALL AS REQUIRED TO SUPPORT EXHAUST HOOD. COORDINATE WITH HOOD VENDOR.
19. N/A.
20. INSTALL FLOOR TILE AFTER INSTALLATION OF COOLER UNIT. G.C TO COORDINATE WITH COOLER/ FREEZER MANUFACTURER.
21. N/A.
22. PROVIDE & INSTALL SCHLUTER STRIP AT TILED CORNERS. REFER TO SHEET A10 FOR SPECIFICATIONS.
23. WATER FILTRATION SYSTEM BY EQUIPMENT SUPPLIER. REFER TO MEP DRAWINGS. WATER FILTRATION SYSTEM TO BE INSTALLED TIGHT AGAINST THE CORNER.
24. REFER TO SHEET A9.3 FOR WASHROOM ELEVATIONS.
25. N/A.
26. PROVIDE BACKING/BLOCKING IN WALL AS REQUIRED TO SUPPORT WALL MOUNTED LED SCREENS.
27. DASHED LINE INDICATES LOCATION OF FROST SLAB (FOR COLDER CLIMATE REGIONS). REFER TO STRUCTURAL DRAWINGS FOR SIZE.
28. 1/2" CEMENT BOARD EXTEND 24" A.F.F AND 1/2" GYPSUM WALL BOARD ABOVE ON 3 5/8" METAL STUDS.
29. G.C TO PROVIDE LEVEL 5 DRYWALL FINISH (AT A LOCATION BEHIND WALL GRAPHIC) C/W 2 COATS OF PRIMER OR 1 COAT OF LATEX PAINT.
30. N/A.
31. WALL MOUNTED FIRE EXTINGUISHER TO BE SUPPLY AND INSTALL BY G.C. G.C. TO VERIFY LOCATION WITH FIRE MARSHALL.
32. SEMI- RECESSED FIRE EXTINGUISHER AND CABINET. REFER TO INTERIOR ELEVATION 3/A9.
33. PROVIDE PLYWOOD BEHIND PORTAL OFFICE CABINET. REFER TO INTERIOR ELEVATION 9/A9.1.
34. N/A.
35. N/A.
36. DRIVE THRU WINDOW SUPPLY AND INSTALL BY G.C.
37. PROVIDE MIN. 2" AIR SPACE BETWEEN COOLER / FREEZER AND FACE OF WALL.
38. N/A.
39. COOLER / FREEZER UNIT PROVIDED & INSTALLED BY MANUFACTURER. INTERIOR RAMP TO BE PROVIDED INSIDE FREEZER UNIT BY MANUFACTURER. G.C TO COORDINATE.
40. N/A.
41. CROSS HATCH INDICATES LOCATION OF SHEAR WALLS. REFER TO STRUCTURAL DRAWINGS.
42. N/A.
43. N/A.
44. N/A.
45. G.C TO PROVIDE AND INSTALL S/S PANELS BEHIND AND BESIDE FRY STATION AS INDICATED. REFER TO DETAIL 1/A8 AND INTERIOR ELEVATIONS 9/A9.1.
46. N/A.
47. RAIN WATER LEADER. REFER TO PLUMBING DRAWINGS.
48. WATER METER AND BACK FLOW PREVENTER. REFER TO PLUMBING DRAWINGS. EXACT LOCATION OF WATER METER TO BE COORDINATED WITH CIVIL PLANS.

WALL TYPE LEGEND

EX1 — EXTERIOR WALL AT STUCCO (EIFS):
- STOTHERM CI LOTUSAN EXTERIOR INSULATION FINISHING SYSTEM (EIFS): 1" EXPANDED POLYSTYRENE INSULATION BOARD W/ ⅛" BASE COAT, REINFORCING MESH AND 1/16" FINISH. (REFER TO EXTERIOR ELEVATIONS).
- STO GOLD COAT FLUID APPLIED MEMBRANE AIR BARRIER. ALL TRANSITIONS AT FOUNDATION, ROUGH OPENINGS, SHEATHING JOINTS, FLASHINGS, WALL PENETRATIONS AND PARAPETS TO BE SEALED W/ STO RAPID GUARD PER MANUFACTURERS SPECS PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER.
- 1 LAYER ½" EXTERIOR GRADE PLYWOOD
- 2"X6" WOOD STUDS @16" O.C.
- UNFACED BATT INSULATION (R-20) UP TO 10'-0" MAX C/W 2"X6" FIRE STOP.
- FSK FOIL FACED FLAME SPREAD 25 BATT INSULATION (R-20) FROM 10'-0" TO U/S OF DECK C/W 2"X6" FIRE STOP.
- UNFACED BATT INSULATION (R-20) FROM U/S OF DECK TO 18" MIN. ABOVE DECK.
- 1 LAYER OF ½" GYPSUM BOARD SHEATHING ON CONTINUOUS 6 MIL. POLYETHYLENE VAPOR BARRIER TO (U/S OF DECK).
- PROVIDE ½" CEMENTITIOUS BACKER BOARD INSTEAD OF PLYWOOD SHEATHING TO 12" ABOVE FLOOR SLAB C/W ACOUSTICAL SEALANT AT BASE.

NOTE:
1. PROVIDE DOUBLE LAYER OF REINFORCING MESH TO MIN. 2'-0" ABOVE GRADE AT ALL EIFS LOCATIONS.
2. G.C TO ENSURE DARK COLOURED EIFS NOT TO BE INSTALLED IN DIRECT SUNLIGHT (COORDINATE WITH MANUFACTURER)

EX2 — EXTERIOR WALL AT NICHIHA SIDING (VINTAGEBRICK):
- NICHIHA VINTANGE BRICK: COLOR: ALEXANDRIA BUFF; 17 ⅞" HIGH X 71 ⅝" LONG X ¾" THICK. COMES WITH STARTER TRACK AND JOINT CLIP.
- 1 LAYER ½" EXTERIOR GRADE PLYWOOD
- 2"X6" WOOD STUDS @16" O.C.
- STO GOLD COAT FLUID APPLIED MEMBRANE AIR BARRIER. ALL TRANSITIONS AT FOUNDATION, ROUGH OPENINGS, SHEATHING JOINTS, FLASHINGS, WALL PENETRATIONS AND PARAPETS TO BE SEALED W/ STO RAPID GUARD PER MANUFACTURERS SPECS PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER.
- 1 LAYER ½" EXTERIOR GRADE PLYWOOD
- 2"X6" WOOD STUDS @16" O.C.
- UNFACED BATT INSULATION (R-20) UP TO 10'-0" MAX C/W 2"X6" FIRE STOP.
- FSK FOIL FACED FLAME SPREAD 25 BATT INSULATION (R-20) FROM 10'-0" TO U/S OF DECK C/W 2"X6" FIRE STOP.
- UNFACED BATT INSULATION (R-20) FROM U/S OF DECK TO 18" MIN. ABOVE DECK.
- 1 LAYER OF ½" GYPSUM BOARD SHEATHING ON CONTINUOUS 6 MIL. POLYETHYLENE VAPOR BARRIER TO (U/S OF DECK).
- PROVIDE ½" CEMENTITIOUS BACKER BOARD INSTEAD OF GYPSUM BOARD TO 2'-0" ABOVE FLOOR SLAB C/W ACOUSTICAL SEALANT AT BASE.

EX3 — EXTERIOR WALL AT NICHIHA SIDING (VINTAGEBRICK) EXTEND 9'-0" A.F.F.:
- NICHIHA VINTANGE BRICK: COLOR: ALEXANDRIA BUFF; 17 ⅞" HIGH X 71 ⅝" LONG X ¾" THICK. COMES WITH STARTER TRACK AND JOINT CLIP. EXTEND 9'-0" A.F.F.
- STO GOLD COAT FLUID APPLIED MEMBRANE AIR BARRIER. ALL TRANSITIONS AT FOUNDATION, ROUGH OPENINGS, SHEATHING JOINTS, FLASHINGS, WALL PENETRATIONS AND PARAPETS TO BE SEALED W/ STO RAPID GUARD PER MANUFACTURERS SPECS PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER.
- 1 LAYER ½" EXTERIOR GRADE PLYWOOD EXTEND 9'-0" A.F.F.
- 2"X4" WOOD STUDS @16" O.C. EXTEND 9'-0"A.F.F.
- UNFACED BATT INSULATION (R-20) UP TO 10'-0" MAX C/W 2"X6" FIRE STOP.
- FSK FOIL FACED FLAME SPREAD 25 BATT INSULATION (R-20) FROM 10'-0" TO U/S OF DECK C/W 2"X6" FIRE STOP.
- UNFACED BATT INSULATION (R-20) FROM U/S OF DECK TO 18" MIN. ABOVE DECK.
- 1 LAYER OF ½" GYPSUM BOARD SHEATHING ON CONTINUOUS 6 MIL. POLYETHYLENE VAPOR BARRIER TO (U/S OF DECK).
- PROVIDE ½" CEMENTITIOUS BACKER BOARD INSTEAD OF PLYWOOD SHEATHING TO 12" ABOVE FLOOR SLAB C/W ACOUSTICAL SEALANT AT BASE.

EX4 — EXTERIOR WALL AT NICHIHA SIDING (VINTAGEWOOD) EXTEND 9'-3" A.F.F.:
- NICHIHA VINTANGE WOOD: COLOR: CEDAR; 17 ⅞" HIGH X 119 ⅝" LONG X ¾" THICK. COMES WITH STARTER TRACK AND JOINT CLIP. EXTEND 9'-3" A.F.F.
- STO GOLD COAT FLUID APPLIED MEMBRANE AIR BARRIER. ALL TRANSITIONS AT FOUNDATION, ROUGH OPENINGS, SHEATHING JOINTS, FLASHINGS, WALL PENETRATIONS AND PARAPETS TO BE SEALED W/ STO RAPID GUARD PER MANUFACTURERS SPECS PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER.
- 1 LAYER ½" EXTERIOR GRADE PLYWOOD EXTEND 9'-3" A.F.F.
- 2"X6" WOOD STUDS @16" O.C. EXTEND 9'-3"A.F.F.
- UNFACED BATT INSULATION (R-20) UP TO 10'-0" MAX C/W 2"X6" FIRE STOP.
- FSK FOIL FACED FLAME SPREAD 25 BATT INSULATION (R-20) FROM 10'-0" TO U/S OF DECK C/W 2"X6" FIRE STOP.
- UNFACED BATT INSULATION (R-20) FROM U/S OF DECK TO 18" MIN. ABOVE DECK.
- 1 LAYER OF ½" GYPSUM BOARD SHEATHING ON CONTINUOUS 6 MIL. POLYETHYLENE VAPOR BARRIER TO (U/S OF DECK).
- PROVIDE ½" CEMENTITIOUS BACKER BOARD INSTEAD OF PLYWOOD SHEATHING TO 12" ABOVE FLOOR SLAB C/W ACOUSTICAL SEALANT AT BASE.

EX5 — EXTERIOR WALL AT NICHIHA SIDING (VINTAGEBRICK):
- NICHIHA VINTANGE BRICK: COLOR: WHITEWASH (SITE PAINT); 17 ⅞" HIGH X 71 ⅝" LONG X ¾" THICK. COMES WITH STARTER TRACK AND JOINT CLIP.
- STO GOLD COAT FLUID APPLIED MEMBRANE AIR BARRIER. ALL TRANSITIONS AT FOUNDATION, ROUGH OPENINGS, SHEATHING JOINTS, FLASHINGS, WALL PENETRATIONS AND PARAPETS TO BE SEALED W/ STO RAPID GUARD PER MANUFACTURERS SPECS PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER.
- 1 LAYER ½" EXTERIOR GRADE PLYWOOD
- 2"X6" WOOD STUDS @16" O.C.
- UNFACED BATT INSULATION (R-20) UP TO 10'-0" MAX C/W 2"X6" FIRE STOP.
- FSK FOIL FACED FLAME SPREAD 25 BATT INSULATION (R-20) FROM 10'-0" TO U/S OF DECK C/W 2"X6" FIRE STOP.
- UNFACED BATT INSULATION (R-20) FROM U/S OF DECK TO 18" MIN. ABOVE DECK.
- 1 LAYER OF ½" GYPSUM BOARD SHEATHING ON CONTINUOUS 6 MIL. POLYETHYLENE VAPOR BARRIER TO (U/S OF DECK).
- PROVIDE ½" CEMENTITIOUS BACKER BOARD INSTEAD OF PLYWOOD SHEATHING TO 12" ABOVE FLOOR SLAB C/W ACOUSTICAL SEALANT AT BASE.

*NOTE:
"a" DENOTES 2 X 4 METAL STUDS
"b" DENOTES 2 X 6 METAL STUDS
"c" DENOTES 2 X 8 METAL STUDS

W1 — ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" GYPSUM BOARD FROM 2'-0" A.F.F. TO U/S OF CEILING (PUBLIC AREA SIDE)
- METAL STUDS @ 16" O.C.
- ½" PLYWOOD BACKING (BETWEEN STUDS @ LOCATION OF WALL MOUNTED EQUIPMENTS)
- ½" CEMENTITIOUS BACKER BOARD (SERVICE AREA SIDE)

W2 — ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" MOLD RESISTANT GYPSUM BOARD FROM 2'-0" A.F.F. TO 48" A.F.F. (SERVICE AREA SIDE)
- METAL STUDS @ 16" O.C.
- ½" PLYWOOD BACKING (BETWEEN STUDS @ LOCATION OF WALL MOUNTED EQUIPMENTS)
- ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" MOLD RESISTANT GYPSUM BOARD FROM 2'-0" A.F.F. TO 48" A.F.F.(KITCHEN SIDE)

DOTTED LINE INDICATES LOCATION OF FIBREGLASS REINFORCED PANEL (FRP) LOCATION.

HIDDEN LINE INDICATES LOCATION OF BLOCKING IN BETWEEN THE STUDS FOR THE MILLWORK

*NOTE:
"a" DENOTES 2 X 4 METAL STUDS
"b" DENOTES 2 X 6 METAL STUDS
"c" DENOTES 2 X 8 METAL STUDS

W3 — ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" GYPSUM BOARD FROM 2'-0" A.F.F. TO U/S OF CEILING (PUBLIC AREA SIDE)
- METAL STUDS @ 16" O.C.
- ½" PLYWOOD BACKING (BETWEEN STUDS @ LOCATION OF WALL MOUNTED EQUIPMENTS)
- ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" MOLD RESISTANT GYPSUM BOARD FROM 2'-0" A.F.F. (KITCHEN SIDE)

W4 — ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" MOLD RESISTANT GYPSUM BOARD FROM 2'-0" A.F.F. (KITCHEN SIDE)
- ½" PLYWOOD BACKING (BETWEEN STUDS @ LOCATION OF WALL MOUNTED EQUIPMENTS)
- METAL STUDS @ 16" O.C.
- ½" PLYWOOD BACKING (BETWEEN STUDS @ LOCATION OF WALL MOUNTED EQUIPMENTS)
- ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" MOLD RESISTANT GYPSUM BOARD FROM 2'-0" A.F.F. (KITCHEN SIDE)

W5 — ½" DUROCK NEXT GEN CEMENT BOARD (WASHROOM SIDE)
- ½" PLYWOOD BACKING (BETWEEN STUDS @ LOCATION OF WALL MOUNTED EQUIPMENTS)
- WOOD STUDS @ 24" O.C.
- ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" GYPSUM BOARD FROM 2'-0" A.F.F. TO U/S OF CEILING (PUBLIC AREA SIDE)

W6 — ½" DUROCK NEXT GEN CEMENT BOARD (WASHROOM SIDE)
- ½" PLYWOOD BACKING (BETWEEN STUDS @ LOCATION OF WALL MOUNTED EQUIPMENTS)
- WOOD STUDS @ 24" O.C.
- ½" PLYWOOD BACKING (BETWEEN STUDS @ LOCATION OF WALL MOUNTED EQUIPMENTS)
- ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" MOLD RESISTANT GYPSUM BOARD FROM 2'-0" A.F.F. (KITCHEN SIDE)

W7 — ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" GYPSUM BOARD FROM 2'-0" A.F.F. TO 29" A.F.F. (PUBLIC AREA SIDE)
- METAL STUDS @ 16" O.C.
- ½" PLYWOOD BACKING (BETWEEN STUDS @ LOCATION OF WALL MOUNTED EQUIPMENTS)
- ½" DUROCK NEXT GEN CEMENT BOARD UP TO 2'-0" A.F.F. AND ½" MOLD RESISTANT GYPSUM BOARD FROM 2'-0" A.F.F. (SERVICE AREA SIDE)

W8 — ½" FIRE-RATED GYPSUM WALL BOARD EXTEND UP TO 6" ABOVE CEILING. (KITCHEN SIDE)
- ½" DUROCK NEXT GEN CEMENT BOARD UP TO U/S OF DECK.
- METAL STUDS @ 16" O.C. EXTEND UP TO U/S OF DECK.
- ½" DUROCK NEXT GEN CEMENT BOARD UP TO U/S OF DECK.
- ½" FIRE-RATED GYPSUM WALL BOARD EXTEND UP TO 6" ABOVE CEILING. (KITCHEN SIDE)

NOTE:
1. PROVIDE FULL PLYWOOD BACKING INSTEAD OF DRYWALL IN BACK OF HOUSE WHERE PERMITTED BY CODE.
2. G.C TO ENSURE THE FOLLOWING SHOP DRAWINGS ARE SUBMITTED:
- BULKHEADS (FRONT COUNTER, MENU SCREEN & PUBLIC AREA SUSPENDED GB CEILING) (P. ENG. STAMPED)
- ROOF ACCESS LADDER/CAGE/ROOF HATCH (P. ENG. STAMPED)
- CURTAIN WALL (P. ENG. STAMPED)
- LIST OF HARDWARE / DOORS
- DRIVE THRU WINDOW
- ROOFING MATERIALS

REFER ALSO TO SPECIFICATION SECTIONS FOR SHOP DRAWINGS REQUIREMENTS.
3. PRIME CONSULTANT TO REQUEST THE FOLLOWING SHOP DRAWINGS TO THE RELATED VENDOR FOR REVIEW:
- REFRIGERATION BOXES
- MILLWORK
- GRAPHICS
4. REFER TO MECHANICAL, ELECTRICAL AND STRUCTURAL DRAWINGS FOR MECHANICAL, ELECTRICAL AND STRUCTURAL REQUIREMENTS.

GENERAL NOTES:

1. ALL INTERIOR NON-STRUCTURAL PARTITION SHALL BE 2 X 4 METAL STUDS @ 16" O.C. FROM SLAB TO 6" ABOVE FINISHED CEILING, UNLESS NOTED OTHERWISE. DIAGONALLY BRACE TOP OF WALL TO ROOF STRUCTURE AS REQUIRED TO SUPPORT ADDITIONAL LOADS.
2. REFER TO SITE PLAN FOR LOCATION & EXTENTS OF SIDEWALKS ETC.
3. ALL EXTERIOR WALLS SHALL BE FRAMED WITH 2 X6 STUDS @ 16" O.C. REFER TO STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR LAYOUT, DIMENSIONS, DETAILS, MATERIAL INFORMATION & SPECIFIC STRUCTURAL DESIGN REQUIREMENTS.
4. G.C TO PROVIDE SOLID WOOD BLOCKING BEHIND ALL WALL MOUNTED FIXTURES AND ACCESSORIES.
5. FOR ANOMALIES, REFER TO WALL SECTIONS REFERENCE KEYED ON PLANS.
6. LOCATION OF CEMENTITIOUS BACKER BOARD INDICATES LOCATION OF WALL TILE FINISH. VERIFY WITH INT. ELEVATIONS ON SHEET A9 & A9.1 FOR WALL TILE LOCATIONS.
7. GYPSUM BOARD, PLYWOOD & CEMENTITIOUS BACKER BOARD TO EXTEND TO 4" ABOVE T-BAR CEILING & TO U/S OF CEILING IN LOCATIONS WITH GYPSUM BOARD CEILING.
8. REFER TO MANUFACTURE SPECIFICATIONS FOR ALL INSTALLATION PROCEDURE.
9. G.C TO PERFORM AN AIR BARRIER TEST (LEAKAGE TEST) ON THE BUILDING ENVELOPE PRIOR TO THE COMPLETION OF CONSTRUCTION, IN ACCORDANCE WITH THE NYS ENERGY CODE.
10. G.C TO SEAL/CAULK ALL BUILDING PENETRATIONS PRIOR TO PERFORMING AN AIR BARRIER TEST.
11. PROVIDE FIRE CAULKING ALL PIPES, CONDUITS, WIRES AND FRAMING PENETRATIONS THROUGH FIRE RATED SEPARATIONS. FIRE CAULK TOP & BOTTOM OF FIRE RATED SEPARATIONS. HILTI USA FS-ONE MAX FIRESTOP INTUMESCENT SEALANT, HILTI USA 1-800-879-8000 FIRE CAULK TOP & BOTTOM OF FIRE RATED SEPARATIONS.
12. G.C TO PROVIDE & INSTALL 1/2" CEMENTITIOUS BACKER BOARD INSTEAD OF GYPSUM BOARD TO 2-0" ABOVE FLOOR SLAB (FOR ALL INTERIOR PARTITIONS).
13. REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX
REGISTERED
SEAL
15704
ARCHITECT
NORTH CAROLINA
9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL. 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

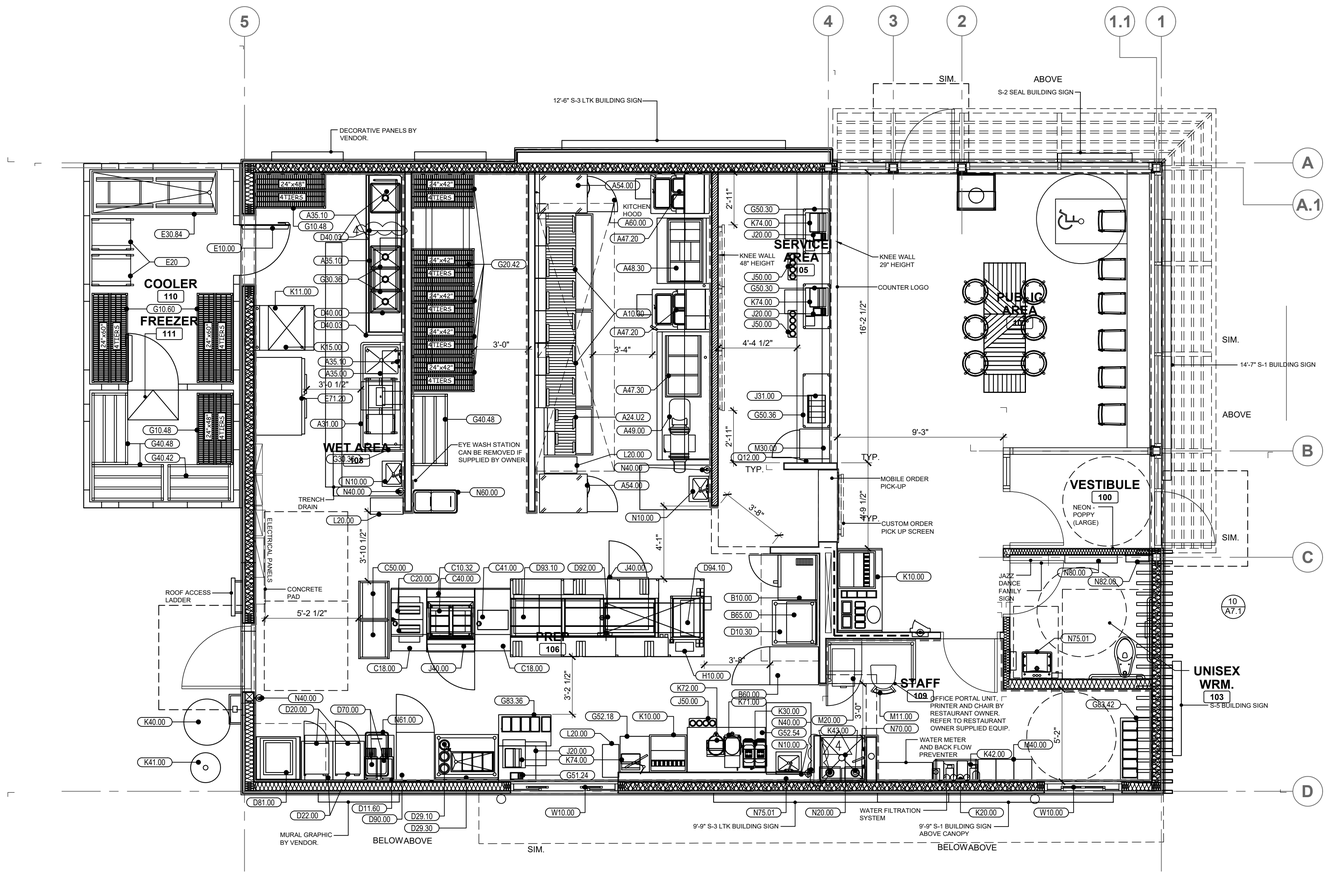
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
FLOOR PLAN
AND SCHEDULES

Drawn	Checked
SH	AL
Scale	Date
1/4"=1'-0"	JUNE 2023
Project No.	Drawing No.
C22-129	A1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 / A2 **EQUIPMENT PLAN**

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

NOTE

1. IT IS RESPONSIBILITY OF THE G.C. TO COORDINATE DELIVERY, UNCRATING, POSITIONING, FINAL HOOK UP AND REMOVAL OF TRASH OF ALL OWNER SUPPLIED KITCHEN EQUIPMENT.

2. ALL KITCHEN EQUIPMENT TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS.

3. DECOR ITEMS SUPPLIED BY OWNER AND INSTALLED BY GENERAL CONTRACTOR.

4. FOR DINING ROOM FURNITURE, SEE DECOR PACKAGE, CONTACT DECOR VENDOR FOR DETAILS.

5. ARCHITECT OF RECORD TO ENSURE AND COORDINATE THAT ALL INTERIOR AND EXTERIOR COMPLIES WITH ADA REQUIREMENTS AS WELL AS LOCAL JURISDICTIONS.

6. AS OF DECEMBER 31, 2021, CAPTIVE AIRE NO LONGER MANUFACTURERS OR SELLS THE POPEYES LOW PROFILE HOOD. THE ONLY APPROVED HOOD IS THE FRANKE PLK HOOD. THE ONLY APPROVED HOOD IS THE FRANKE PLK HOOD. CAD DWGS AND SPECS CAN BE FOUND IN THE DESIGN PORTAL ON THE EQUIPMENT SCHEDULE TAB.

NEW KITCHEN EQUIPMENT SCHEDULE

NOTE:
CONTRACTOR SHOULD REFER TO MANUFACTURER SPECIFICATIONS FOR ALL SERVICE REQUIREMENTS AND PROPER CONNECTIONS.

ITEMNO	QTY	CATEGORY	MFR	MODEL	EQUIPMENT REMARKS
A10.30	2	MULTIPLE FRYER SYSTEM, ELECTRIC	ULTRAFRYER	B-E20-20-3-UC	
A10.40	2	SHORTENING DISPOSAL UNIT	ULTRAFRYER	DISPOSAL	NOT SHOWN IN PLAN
A10.50	2	BOILOUT HOSE	ULTRAFRYER	BOILOUT	NOT SHOWN IN PLAN
A24.U2	1	MULTIPLE FRYER SYSTEM, ELECTRIC	ULTRAFRYER	B-E17-14-2-UCP	
A31.00	1	MARINATOR	AYRKING	M101-110	
A35.00	1	ONE COMPARTMENT SINK	WINHOLT	1143828	
A35.10	3	PRE-RINSE FAUCET ASSEMBLY	T & S	B2180	
A35.20	1	ONE COMPARTMENT SINK	WINHOLT		
A47.20	2	BATTER STATION 29"	AYRKING	BBSUL2934P	
A47.30	1	BATTER STATION 86"	KES	CUSTOM	
A48.30	1	3-PAN ICE BATH TABLE FABRICATION	KES	CUSTOM	
A49.00	1	DRUMROLL	AYRKING	DRUF120TPR 8POP	
A54.00	2	REACH-IN FREEZER	DELFIELD	GBF1P-S	
A60.00	1	15' HOOD	FRANKEE	3347 FR-BD-2	
B10.00	1	CONVECTION OVEN, DOUBLE STACKED	BLODGETT OVEN	CTB DBL	
B20.00	1	COUNTERTOP MIXER			
B60.00	1	REACH-IN REFRIGERATOR	DELFIELD	GBR1P-S	
B65.00	1	BISCUIT HOLDING UNIT	NWS	D328304000N	
C10.32	1	POPEYES DUAL SIDE SANDWICH PREP	NWS	F775670100N	
C20.00	1	TOASTER	ANTUNES	VCT-2	
C40.00	1	PRODUCT HOLDING UNIT	PRINCE CASTLE	EHBP23	
C41.00	1	PROTEIN HOLDING UNIT	PRINCE CASTLE	PHB41F	
C50.00	2	BUN / SHEET PAN RACK	CAMBRO	UPR1826F20580	
D10.30	1	WORK TABLE	NWS	D202070400N	
D11.60	1	WORK TABLE 60"	KES	CUSTOM	
D20.00	2	MICROWAVE OVEN	PANASONIC	NE-17523	
D22.00	2	MICROWAVE SHELF	NWS	D413310300N	
D29.10	1	PACKING TABLE, CONSERVIEWELL UTENSIL	SERVER	CW-DI	
D29.30	1	PACKING TABLE, SINGLE SIDED	KES	CUSTOM	
D29.80	1	HOT WELLS	KES		
D40.00	1	3-BOWL SINK	NWS	F775660100N	
D40.03	1	SPLASH DIVIDER	NWS	F367400100N	
D41.00		NOT USED	ADVANCE TABCO	DTC-S60-24R	
D50.00		NOT USED	HOBART	AM-15VLT-2	
D70.00	2	HOT WATER DISPENSER	BUNN	HSXEL	
D81.00	1	RETHERMALIZER, WATER TANK, ELECTRIC	ULTRAFRYER	REO-1620-X	
D90.00	1	HOLDING UNIT / CVAP	WINSTON	HA4522	
D92.00	1	HOLDING BINS	PRINCE CASTLE	PHB21N2	
D92.00DM	1	HOT HOLDING CABINET			
D93.10	1	HOLDING BINS	PRINCE CASTLE	DHB2PT-60P	
D94.00	1	PROTEIN HOLDING BIN	PRINCE CASTLE	PHB34R2	
D94.10	1	BISCUIT HOLDING BIN	PRINCE CASTLE	PHB21N1	
E10.00	1	WALK-IN COOLER	KOLPAK	WICF A185891	
E20.00	2	CHICKEN RACKS	SPG	4H1286	
E30.84	1	CHICKEN CRATE	NWS	D125050500N	
E71.00	1	EVEN-THAW REFRIGERATOR			
E71.20	1	DOUBLE EVEN-THAW REFRIGERATOR	TRAULSEN	RE232N-1	
F15.10	1	FAB ELECTRICAL			
G10.48	2	COATED WIRE SHELVING - 4 TIERS	METRO	2448NK3	
G10.60	2	COATED WIRE SHELVING - 4 TIERS	METRO	2448NK3	
G20.42	5	WIRE SHELVING WITH TRACK 42"	METRO	2448NK3	
G30.36	4	WIRE SHELVING WALL MOUNTED - 36" 2 TIER	METRO	2448NK3	
G40.42	2	DUNNAGE RACK	KES	CUSTOM	
G40.48	1	DUNNAGE RACK	KES	CUSTOM	
G50.30	2	WIRE SHELVING UNCOATED - 2 TIER 30"	METRO	CUSTOM	
G50.36	1	WIRE SHELVING UNCOATED - 2 TIER 36"	METRO	CUSTOM	
G51.24	1	POS TABLE 24"	METRO	CUSTOM	
G52.18	1	DRIVE-THRU TABLE 18"	KES	CUSTOM	
G52.54	1	DRIVE-THRU TABLE 54"	KES	CUSTOM	
G83.36	1	EXPEDITE TABLE	KES	CUSTOM	
G83.42	1	EXPEDITE TABLE	KES	CUSTOM	
GR10.00	1	CONTACT GRILL			
H10.00	1	MODULAR PRODUCTION COUNTER - DUAL LINE	KES	CUSTOM	
H90.00	1	HOLDING CABINET			
J20.00	3	CASH CONTROLLER	NKL INDUSTRIES	W-101	
J31.00	1	CONDIMENT ORGANIZER BIN RACK	CAMBRO	12RS12	
J40.00	1	UNDERCOUNTER REFRIGERATOR	SILVER KING	SKRS28	
J50.00	3	DISPOSABLE CUP DISPENSER	DISPENSE-RITE	WR-CC-22-POP	
K10.00	2	SODA MACHINE	MANITOWOC	IBF0620C	
K11.00	1	ICE MAKER, CUBE-STYLE	MANITOWOC	IYF0900N	
K15.00	1	ICE BIN	MANITOWOC	D570 8POP	
K20.00	1	WATER FILTER SYSTEM	EVERPURE	EV943710	
K30.00	1	FROZEN LEMONADE	BUNN	34000.0012	
K40.00	1	GREASE TANK			
K41.00	1	CO2 TANK			
K42.00	1	BAG N BOX			BY OTHERS
K43.00	2	WATER HEATERS			BY OTHERS
K71.00	1	TEA BREWER	BUNN	ITCB	
K72.00	2	TEA DISPENSER	BUNN	TDO40	
K74.00	4	POS			BY OTHERS
L20.00	3	TRASH BINS			
LP45.00	1	OUTSIDE TRASH RECEPTACLE	WAUSAU	TF1015	NOT SHOWN IN PLAN
LP46.00	1	OUTSIDE TRASH RECEPTACLE	WAUSAU	TF1021	NOT SHOWN IN PLAN
M11.00	1	MANAGERS DESK	NWS	F367310100N	
M20.00	1	OFFICE SUPPLIES	WASSER	106053	
M30.00	1	SAFE	FIRE KING	BSD2920	
M40.00	1	LOCKERS W/ 6 HIGH UNIT	KELMAX	EL SERIES	
N10.00	1	HAND SINK	KROWNE	HS-68	CLASS K
N20.00	1	MOP SINK (30"x30")	FIAT	MSB3030	
N40.00	2	FIRE EXTINGUISHER	ACTION	436500	CLASS K
N40.10	1	FIRE EXTINGUISHER	ACTION	434909	
N60.00	2	FLOUR BIN	RUBBERMAID	FG360288WHT	
N61.00	1	INGREDIENTS BIN	RUBBERMAID	FG360288WHT	
N70.00	1	MOP & BROOM HAGER	ADVANCED	K42	
N75.01	1	FAUCET	KROWNE	16-197	
Q12.00	1	PRESELL BOARD			
W10.00	2	DRIVE-THRU WINDOW	QUIKSERV	BP-72x	

EQUIPMENT GENERAL NOTES

- AS OF APRIL 31, 2021, CAPTIVE AIRE NO LONGER MANUFACTURES OR SELLS THE POPEYES LOW PROFILE HOOD. THE ONLY APPROVED HOOD IS THE FRANKE PLK HOOD. CAD DWGS AND SPECS CAN BE FOUND IN THE DESIGN PORTAL ON THE EQUIPMENT SCHEDULE TAB.
- IDMBS CLEARANCE MUST REMAIN AT 135" MIN AFTER FINISHES TO BE ABLE TO FIT (3) 50" TV MONITOR SCREENS

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 1972
POPEYES

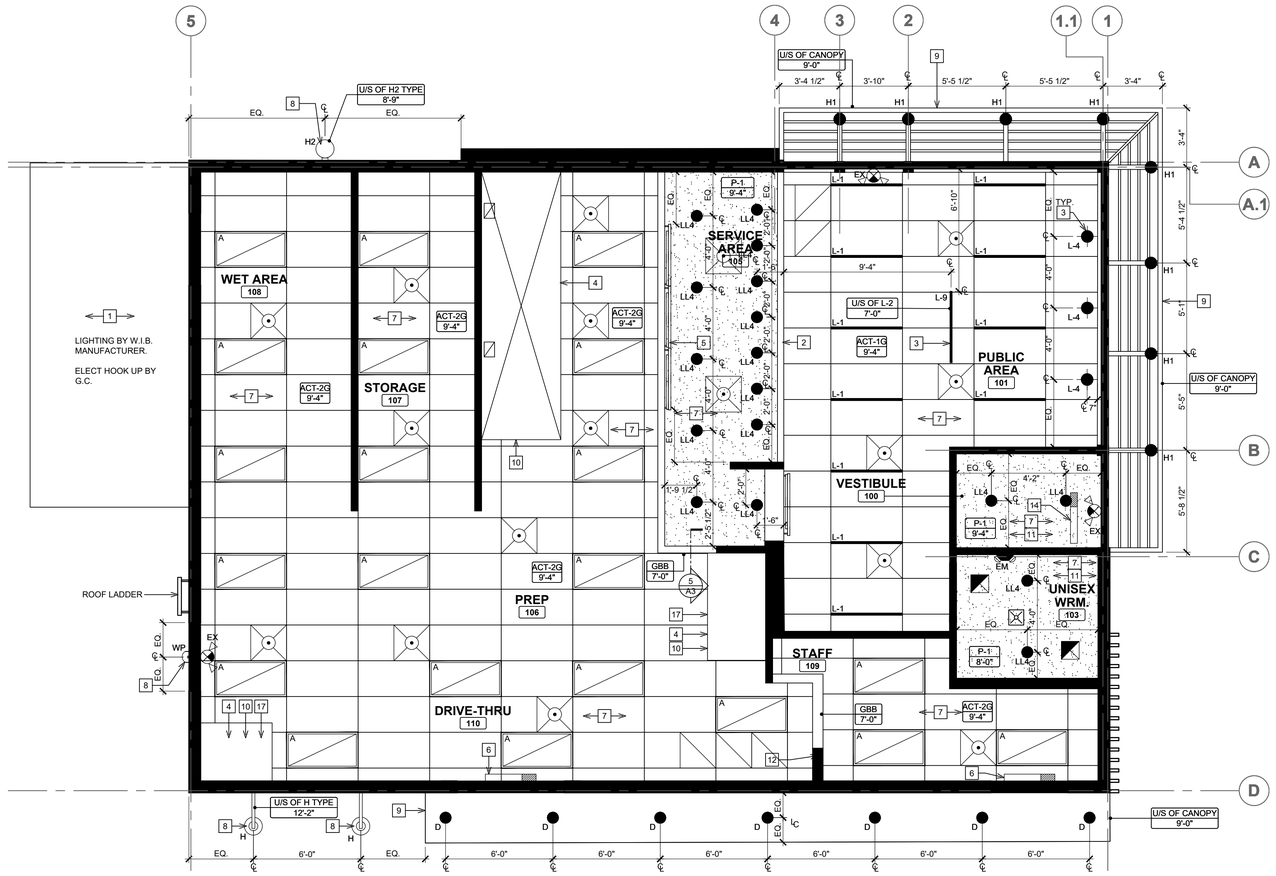
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
EQUIPMENT PLAN & SCHEDULES

Drawn	Checked
SH	AL
Scale: 1/4"=1'-0"	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 A3 REELECTED CEILING PLAN

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

NOTE:

1. THE GENERAL CONTRACTOR IS TO ENSURE THE FOLLOWING ITEMS ARE BUILT IN ACCORDANCE WITH STRUCTURAL DRAWINGS AND TO MEET CODE REQUIREMENTS (INCLUDING SEISMIC AND LATERAL RESTRAINT) AS REQUIRED:
   - SUSPENDED SHELVING SUPPORTS
   - SEISMIC AND LATERAL RESTRAINT FOR DUCTWORK
   - SUSPENDED CEILING PANELS, GYPSUM BOARD / T-BAR CEILINGS IN RELATION TO SEISMIC AND LATER RESTRAINT.
2. THE GENERAL CONTRACTOR IS RESPONSIBLE THAT ALL SUB-TRADES HAVE RETAINED A QUALIFIED STRUCTURAL ENGINEER TO REVIEW THEIR APPROPRIATE WORK. STRUCTURAL ENGINEER(S) TO ISSUE LETTER (ON THEIR LETTERHEAD) STATING THAT ALL WORK MEETS THE REQUIREMENT OF BUILDING CODE FOR SEISMIC RESTRAINTS.

SYMBOL LEGEND

- SECTION NUMBER / DRAWING NUMBER
- NOTE REFERENCE
- SACT 2800 — DENOTES CEILING HT & MATERIAL
  - GB GYPSUM BOARD
  - GBB GYPSUM BOARD BULKHEAD
  - LGB LAY-IN GYPSUM BOARD
- HVAC DUCTWORK WITH AIR GRILLE. REFER TO MECHANICAL DRAWINGS.
- RETURN AIR GRILLE. REFER TO MECHANICAL DRAWINGS.
- SUPPLY AIR GRILLE. REFER TO MECHANICAL DRAWINGS.
- EXHAUST FAN. REFER TO MECHANICAL DRAWINGS.
- (S) SPEAKERS ATTACHED TO U/S OD TRUSS. REFER TO ELECTRICAL DRAWINGS.
- (S) RADIO & AMPLIFIER. REFER TO ELECTRICAL DRAWINGS.
- AIR TRANSFER DUCT. REFER TO MECHANICAL DRAWINGS.
- CEILING MOUNTED HORN / STROBE INDICATING DEVICE. REFER TO ELECTRICAL DRAWINGS.
- CEILING MOUNTED STROBE ONLY DEVICE. REFER TO ELECTRICAL DRAWINGS.

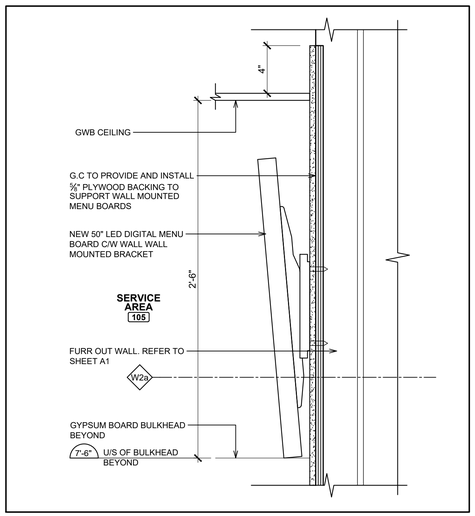
ELECTRICAL SCHEDULE

- A — 2'-0" X 4'-0" RECESSED FIXTURE
- L-4 — PENDANT LIGHTING INSTALLED @ 7'-0" A.F.F. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.
- LL4 — RECESSED DOWN LIGHT. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.
- L-1 — LINEAR LIGHTING INSTALLED @ 9'-4" A.F.F. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.
- L-9 — LINEAR SUSPENDED LIGHTING INSTALLED @ 7'-0" A.F.F. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.
- H1 — CANOPY DOWN LIGHT. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.
- D — RECESSED DOWN LIGHT IN CANOPIES. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.
- H — EXTERIOR LIGHTING. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.
- EX — EMERGENCY LIGHTING. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.
- EM — EMERGENCY LIGHTING. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.
- WP — EXTERIOR WALL PACK LIGHTING. REFER TO ELECTRICAL DRAWINGS AND MASTER SCHEDULE.

REFER TO ELECTRICAL DRAWINGS FOR SPECIFICATIONS

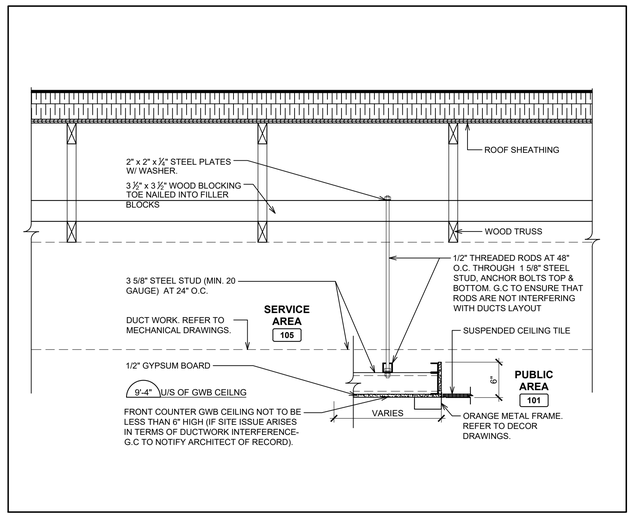
CEILING PLAN NOTES

1. REFER TO WALK-IN FREEZER & COOLER MANUFACTURER FOR EVAPORATOR AND LIGHTING. FINAL CONNECTION BY G.C.
2. ORANGE METAL FRAME AROUND OPENING OF FRONT COUNTER. REFER TO POPEYES DECOR PACKAGE.
3. ALL PENDANTS / LIGHTS TO BE SUPPLY BY GC / OWNER AND INSTALLED BY G.C. JUNCTION BOX AND FINAL ELECTRICAL CONNECTION BY G.C. PENDANT LIGHTS TO BE MOUNTED AT 7'-0" A.F.F. REFER TO ELECTRICAL DRAWINGS FOR FIXTURE INFORMATION.
4. EXHAUST HOODS SUPPLY BY OWNER AND INSTALL BY G.C.REFER TO MECHANICAL DRAWINGS.
5. WALL MOUNTED LED SCREENS SUPPLIED BY POPEYES. AND INSTALLED BY G.C. REFER TO DETAIL 3/A3. G.C TO PROVIDE & INSTALL ADEQUATE BLOCKING/BACKING FOR SUPPORT.
6. PROPOSED LOCATION OF AIR CURTAIN IF REQUESTED BY RESTAURANT OWNER . REFER TO MECHANICAL/ELECTRICAL DRAWINGS. GC TO PROVIDE AND INSTALL ELECTRICAL POWER FOR FUTURE AIR CURTAIN. OPERATORS TO BE PROVIDED AT DRIVE-THRU WINDOW IF AIR CURTAIN IS INSTALLED. ALL ELECTRICAL OULETS PROVIDED TO BE CAPPED OFF. REFER TO ELECTRICAL DRAWINGS.
7. ALL DIFFUSERS & RETURN AIR GRILLES TO MATCH CEILINGS (THROUGHOUT THE ENTIRE RESTAURANT).
8. REFER TO EXTERIOR ELEVATIONS FOR MOUNTING LOCATION OF WALL MOUNTED LIGHT FIXTURES (TYP.)
9. LINE OF CANOPY ABOVE. SUPPLY AND INSTALL BY SIGNAGE VENDOR. REFER TO DETAILS AND STRUCTURAL DRAWINGS.
10. G.C. TO SUPPLY AND INSTALL 20 GA. STAINLESS STEEL PANEL ON CEILING TILE W/ HOLD DOWN CLIP AROUND EXHAUST HOOD. DO NOT FASTEN TO EXHAUST FOOD. ANY DAMAGED TO THE EQUIPMENT HOOD WILL BE AT THE COST OF G.C.
11. CEILING IN PUBLIC RESTROOMS / WASHROOM VESTIBULE TO BE PAINTED GYPSUM BOARD INSTALLED OVER 2" X 4" WOOD CEILING FRAMING @ 2'-0" O.C.
12. RAINWATER LEADER. REFER TO MECHANICAL DRAWINGS.
13. G.C. TO SUPPLY AND INSTALL EXHAUST FAN IN THE CABINET TO VENT ABOVE CEILING AT OFFICE DESK.
14. HOOD USED ONLY WHERE THE CITY REQUESTS HOOD ABOVE EQUIPMENT.
15. FRONT COUNTER BULKHEAD REFER TO DETAIL 4/A3. FRONT COUNTER BULKHEAD NOT TO BE LESS THAN 6" HIGH (IF SITE ISSUE ARISES IN TERMS OF DUCTWORK INTERFERENCE- GC TO NOTIFY ARCHITECT OF RECORD).
16. JLC T-BAR LED LINEAR LIGHTING FIXTURE INSTALL T-BAR GRID. REFER TO FINISH SCHEDULE.



3 A3 MENU SCREEN DETAIL (WALL MOUNTED)

SCALE: 2"=1'-0"



4 A3 FRONT COUNTER BULKHEAD DETAIL

SCALE: 1"=1'-0"

SECURITY CAMERA LEGEND (16.3)

CAP INDEX	SECURITY PACKAGE #	CAMERA #S
0<100	1	1-4
100<250	2	1-8
>250	3	1-12

NOTES:
- WITH PACKAGE #2 AND #3, 4 EXTRA CAMERAS ARE AVAILABLE TO BE LOCATED AT THE OWNERS DISCRETION
* IF A CAMERA IS INSTALLED IN STAFF AREA, OWNER IS TO INFORM STAFF. *

CAMERAS # NUMBER OF CAMERAS

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

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1	8/01/2023	RESPONSE TO CITY
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4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
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10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL. 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

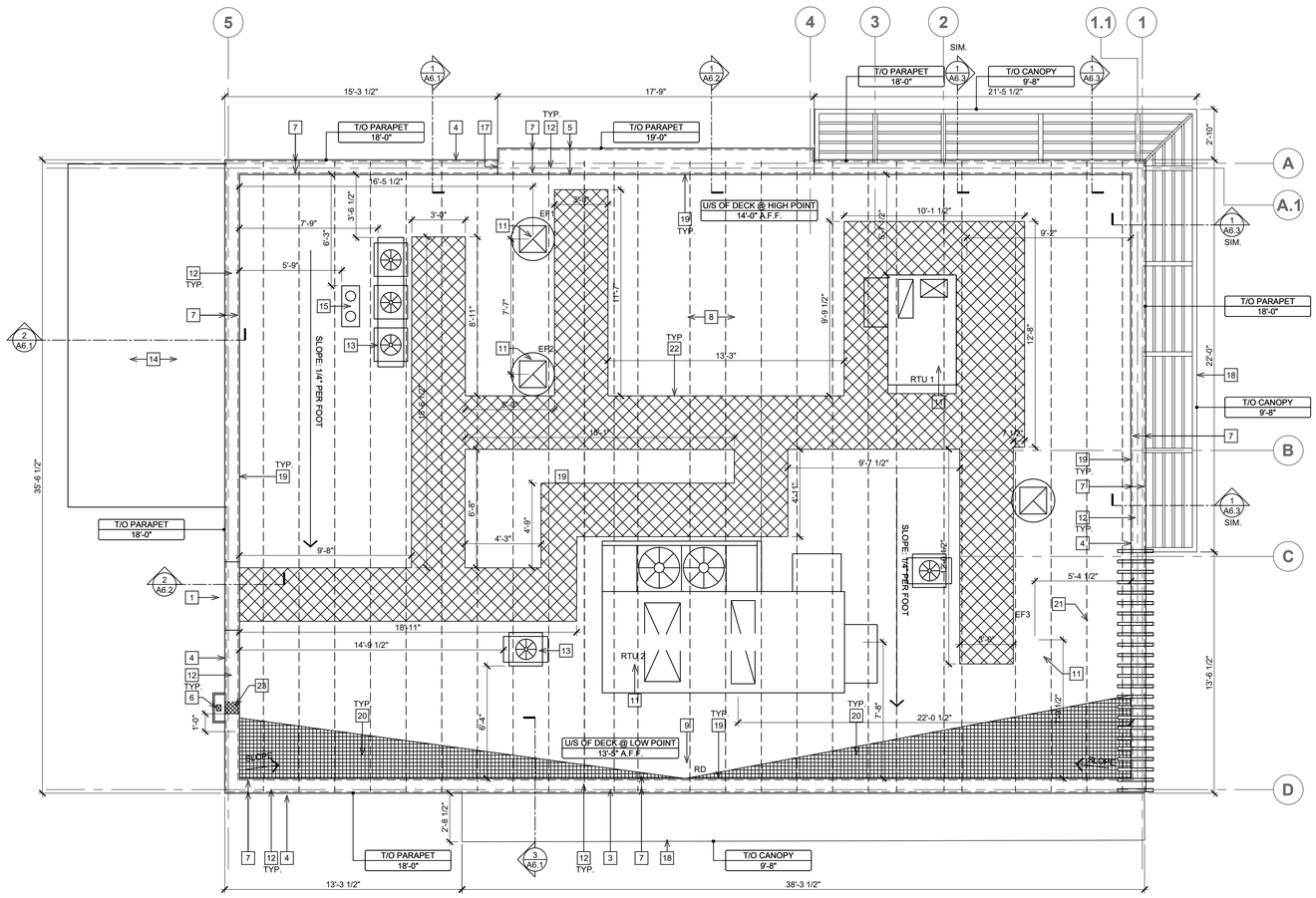
Store Type: US 2112 PROTOTYPE 2112-21

Location: 1517 NC 24-87 CAMERON, NC

Drawing Title: REFLECTED CEILING PLAN & DETAILS

Drawn	Checked
SH	AL
Scale: 1/4"=1'-0"	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A3

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 A4 ROOF PLAN

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

SYMBOL LEGEND

1 / A1	DETAIL NUMBER / DRAWING NUMBER
1	NOTE REFERENCE

NOTE:
ALL ROOFING TO BE IN STRICT ACCORDANCE WITH THE NATIONAL ROOFING CONTRACTORS ASSOCIATION ROOFING MANUAL

G.C IS RESPONSIBLE FOR SEALING ALL ROOF PENETRATIONS UPON COMPLETION OF THE PROJECT.

ROOF TYPE LEGEND

ROOF ASSEMBLY:
- MAS 60mil WHITE ULTRAPLY TPO MEMBRANE (OR APPROVED EQUAL)
- 2 LAYERS OF RIGID INSULATION (R-33 MIN.)
- 10mil VAPOUR RETARDER
- WOOD ROOF DECK
- WOOD TRUSS
(AS PER NRCA STANDARDS)

CALCULATED ROOF AREA

HORIZONTAL ROOF SURFACE (S.F)	1694
VERTICAL SURFACE 50% AREA (S.F)	589
TOTAL PROJECTED ROOF AREA (S.F)	2283

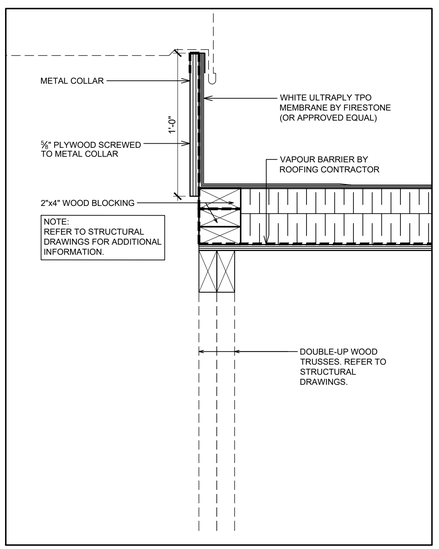
DRAINAGE CALCULATIONS:

(SIZE OF VERTICAL CONDUCTORS AND LEADERS)

100 YEAR, 1 HOUR RAIN FALL (IN.) (PER FIGURE 1106.1, NC PLUMBING CODE)	4"
VERTICAL LEADER SIZE (RECTANGULAR)	3-1/2" X 4"
SPECIFIED LEADER CAPACITY (SINGLE) (PER TABLE 1106.2(2), NC PLUMBING CODE	5300 S.F
REQUIRED OVERFLOW SCUPPER SIZE (SINGLE)	1" X 10.7"
VERTICAL LEADER (X1) CAPACITY PROVIDED	5,300 S.F.

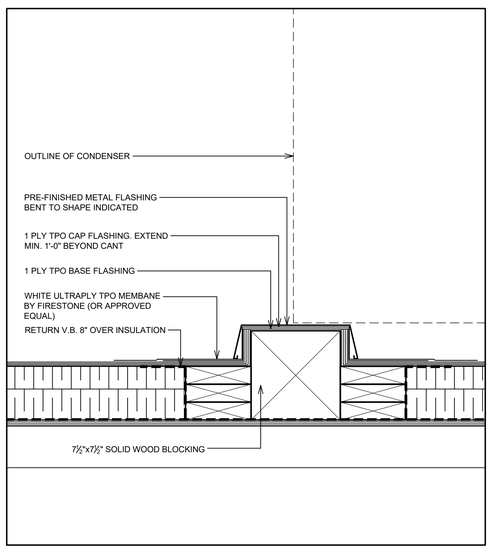
ROOF PLAN NOTES

1. ROOF ACCESS HATCH TO MATCH PRE-FINISHED METAL CAP FLASHING. REFER TO DETAIL 1/A6.3.
2. N/A.
3. N/A.
4. LINE OF PARAPET. REFER TO DETAIL ON SHEET 1/A7 & 9/A7.
5. LINE OF HIGH PARAPET. REFER TO DETAIL ON SHEET 5/A7.
6. PRE-FINISHED COLLECTOR BOX & DOWNSPOUT. REFER TO DETAIL 2/A4.1.
7. LINE OF WALL BELOW.
8. WHITE ULTRAPLY TPO MEMBRANE BY FIRESTONE (OR APPROVED EQUAL). REFER TO ROOF TYPE SCHEDULE & SPECIFICATIONS.
9. ROOF DRAIN. REFER MECHANICAL DRAWINGS.
10. WHITE ULTRAPLY TPO MEMBRANE BY FIRESTONE (OR APPROVED EQUAL) OVER DIAGONAL BRACING C/W RIGID INSULATION. REFER TO STRUCTURAL DRAWINGS.
11. H.V.A.C UNITS AND EXHAUST FANS AS PER MECHANICAL DRAWINGS. PROVIDE CURB WHERE REQUIRED. REFER TO DETAIL 2/A4.
12. PRE-FINISHED METAL CAP FLASHING. REFER TO EXTERIOR FINISH SCHEDULE ON SHEET A5 FOR COLOUR AND TYPE.
13. PROVIDE SLEEPERS FOR ROOF TOP CONDENSER UNIT. SLEEPERS TO SPAN ACROSS JOISTS BELOW. REFER TO DETAIL 3/A4 & STRUCTURAL DRAWINGS.
14. EXTERIOR WALK-IN COOLER/FREEZER ROOF.
15. G.C TO PROVIDE AND INSTALL DOUBLE PIPE PORTAL (PART NO. 36002) C/W C-126 & C-212 CAP FOR PCL LINES FOR WALK-INS. ROOF OPENING (2'-3½" x1'-0") AND ROOF CURBS TO BE PROVIDED AND FURNISHED BY G.C. REFER TO DETAIL 4/A4 & 1/A4.1.
16. PROVIDE & INSTALL 3M NON-SLIP TAPE ON FLASHING AT LADDER LOCATION.
17. VINTAGEBRICK FINISH TO WRAP ON SIDE OF HIGH PARAPET WALLS. REFER TO EXTERIOR ELEVATIONS.
18. CANOPY BELOW. REFER TO EXTERIOR ELEVATIONS.
19. EXTEND ROOF MEMBRANE UP PARAPET WALL AND OVER TOP OF FRAMING (TYP.). SECURE PREFABRICATED ROOF EDGE CLEATS THROUGH MEMBRANE AS SPECIFIED BY MANUFACTURER. REFER TO WALL SECTIONS AND DETAILS.
20. CROSS HATCH INDICATES TAPERED INSULATION OVER SPECIFIED RIGID THERMAL INSULATION (TYP.) FIELD VERIFY ROOF DRAIN LOCATIONS PRIOR TO INSTALLATION & INSTALL PER ROOF MANUFACTURER SPECIFICATIONS. G.C TO COORDINATE ACTUAL EXTENTS OF TAPERED INSULATION MATERIALS WITH ROOF INSTALLER & VERIFY INSTALLED COUNTER SLOPE OF ¼" PER FOOT (MIN., AS MEASURED FROM LEVEL PLANE) TO DIRECT STORM WATER TOWARD ROOF DRAINS AS INDICATED ON PLAN.
21. VENTS. REFER TO MECHANICAL DRAWINGS & DETAIL 4/A4.
22. TPO WALK WAY PADS OR X-TREADS. REFER TO SPECIFICATIONS. CUT TPO WALK WAY PAD ROLLS TO MAXIMUM OF 9'-10". LEAVE A GAP OF 1" BETWEEN PIECES TO ALLOW FOR WATER DRAINAGE.
23. THRU-WALL SCUPPER W/ METAL FLANGE BY ROOFING MANUFACTURER. HOLD TOP OF COLLECTOR BOX 1" BELOW ROOF DECK TO ALLOW FOR SECONDARY OVERFLOW DRAINAGE. SECONDARY ROOF DRAIN SYSTEMS SHALL HAVE THE END POINT OF DISCHARGE SEPARATE FROM THE PRIMARY SYSTEM. DISCHARGE SHALL BE ABOVE GRADE.VERIFY OPENING REQUIREMENTS WITH LOCAL CONDITIONS.



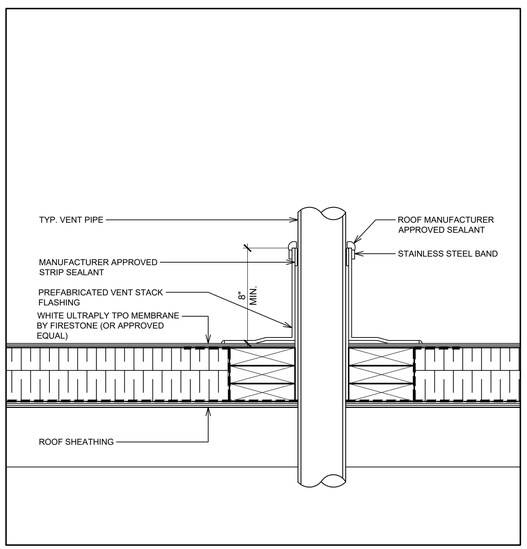
2 A4 TYPICAL ROOF CURB DETAIL

SCALE: 2"=1'-0"



3 A4 TYPICAL SLEEPER DETAIL

SCALE: 2"=1'-0"



4 A4 VENT PENETRATION DETAIL

SCALE: 2"=1'-0"

ISSUE TABLE		
No.	Date (mm/dd/yy)	Description

REVISIONS		
No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN		
No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

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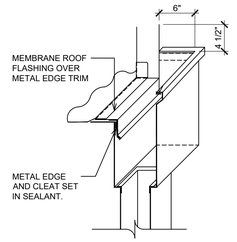
TEL: 214-343-9400 www.dimensiongrp.com

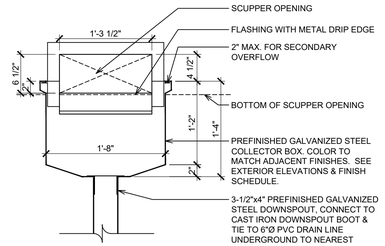
Project

LOUISIANA 19 72 KITCHEN
POPEYES

Store Type	US 2112 PROTOTYPE 2112-21
Location	1517 NC 24-87 CAMERON, NC
Drawing Title	ROOF PLAN AND DETAILS
Drawn: SH	Checked: AL
Scale: 1/4"=1'-0"	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A4

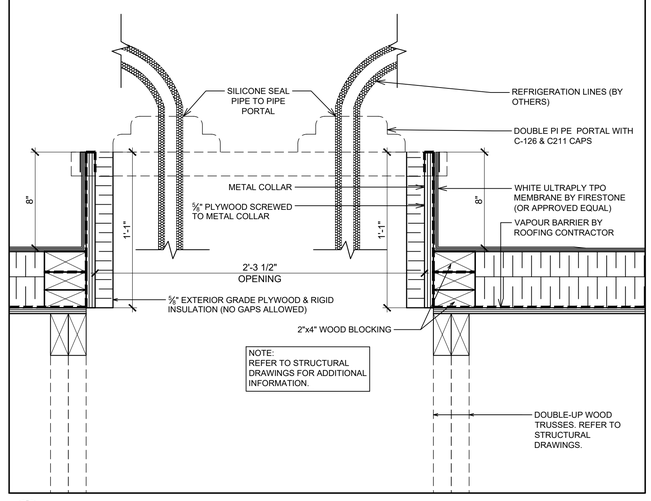
POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129





2 / A4.1 SCUPPER COLLECTOR DETAIL

SCALE: 1"=1'-0"



1 / A4.1 TYPICAL ROOF OPENING DETAIL AT PIPE PORTAL

SCALE: 2"=1'-0"

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

TANNER EDWARDS KING REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

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TEL: 214-343-0400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type

US 2112 PROTOTYPE
2112-21

Location

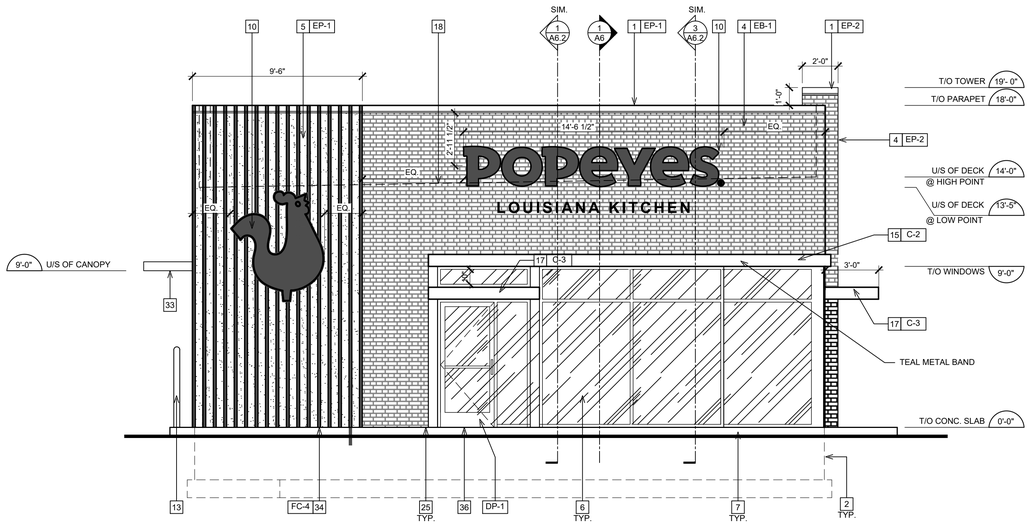
1517 NC 24-87
CAMERON, NC

Drawing Title

ROOF DETAILS

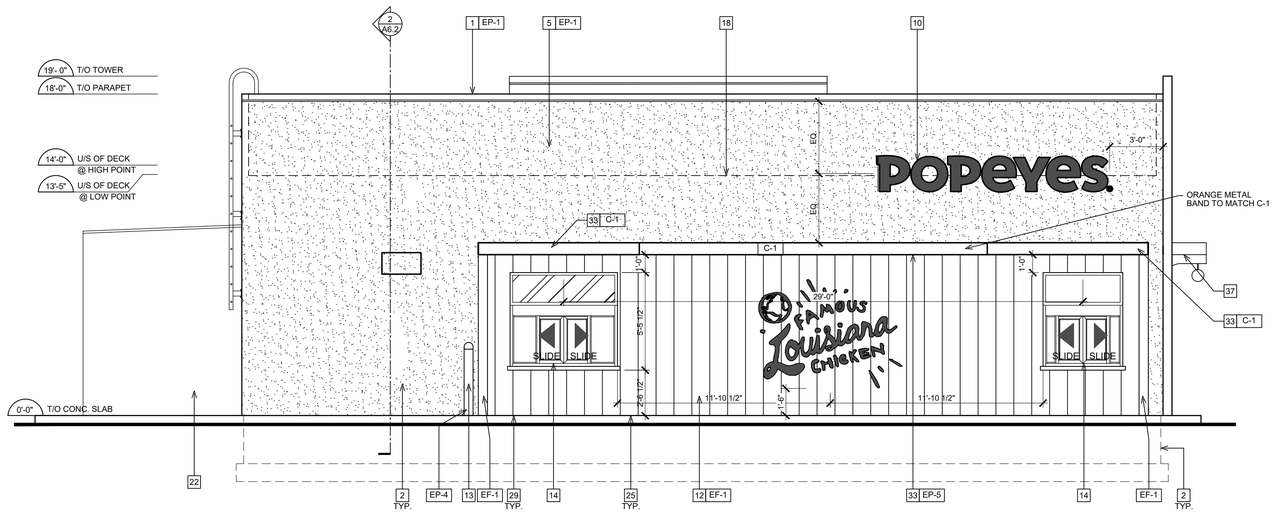
Drawn	Checked
SH	AL
Scale	**Date**
1/4"=1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	A4.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



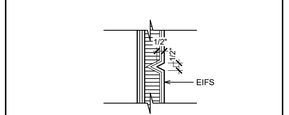
1 A5 **PROPOSED FRONT ELEVATION**

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



2 A5 **PROPOSED DT ELEVATION**

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



3 A5 **SECTION DETAIL @ TYPICAL EIFS REVEAL**

SCALE: 2 ½"=1'-0"

GENERAL NOTES

1. SEALANT / CAULKING AROUND DOOR / WINDOW FRAMES. COLOUR: TO MATCH WINDOW / DOOR FRAMES.
2. THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND FOLLOW ALL DRAWINGS AND SPECIFICATIONS.

SYMBOL LEGEND

1	NOTE REFERENCE REFER TO ELEVATION NOTES
FN#	FINISH TYPE

EXTERIOR ELEVATION NOTES

1. PRE-FINISHED METAL CAP FLASHING C/W DRIP.
2. G.C TO PROVIDE AND INSTALL DOUBLE LAYER OF REINFORCING MESH TO MIN. 2'-2" ABOVE GRADE AT ALL EIFS LOCATIONS (TYP.) IN ORDER TO ATTAIN ABUSE RESISTANCE STUCCO SYSTEM.
3. NICHIHA VINTAGEBRICK, COLOR: ALEXANDRIA BUFF. REFER TO POPEYES MASTER SCHEDULE.
4. NICHIHA VINTAGEBRICK, COLOR: WHITE WASH. REFER TO POPEYES MASTER SCHEDULE.
5. EIFS. REFER TO POPEYES MASTER SCHEDULE.
6. PRE-FINISHED 'BLACK ANODIZED' ALUMINUM STOREFRONT SYSTEM WITH INSULATED GLAZING.
7. EXPOSED FOUNDATION TO BE PARGED AND FREE OF IMPERFECTIONS.
8. N/A.
9. REFER TO STRUCTURAL DRAWINGS FOR FOUNDATION WALL AND FOOTING DETAILS.
10. INTERNALLY ILLUMINATED BUILDING SIGNAGE PROVIDED AND INSTALLED BY SIGN COMPANY. G.C TO PROVIDE AND INSTALL ¾" EXTERIOR GRADE PRESSURE TREATED PLYWOOD BACKING AND ALL FINAL ELECTRICAL CONNECTION. SIGN MANUFACTURER SHALL OBTAIN STRUCTURALLY SEALED DRAWINGS AND SIGNAGE PERMITS FROM THE CITY BASED ON LOCAL REQUIREMENTS. G.C SHALL VERIFY ACTUAL LOCATION & SIZE OF SIGNS WITH SIGN MANUFACTURER'S APPROVED DRAWINGS AND COORDINATE LOCATIONS OF BLOCKING AND UTILITIES. G.C TO COORDINATE WITH SIGN INSTALLER TO USE VHM DRILL BIT WHILE DRILLING FOR ELECTRICAL FEED LINES AND SIGNAGE FASTENERS. ALL ELEMENTS PROVIDED BY SIGNAGE FABRICATOR TO BE REVIEWED AND APPROVED BY POPEYES PRIOR TO PRODUCTION
11. NON-ILLUMINATED BUILDING SIGNAGE PROVIDED AND INSTALLED BY SIGN COMPANY. G.C TO PROVIDE AND INSTALL ¾" EXTERIOR GRADE PRESSURE TREATED PLYWOOD BACKING.. SIGN MANUFACTURER SHALL OBTAIN STRUCTURALLY SEALED DRAWINGS AND SIGNAGE PERMITS FROM THE CITY BASED ON LOCAL REQUIREMENTS. G.C SHALL VERIFY ACTUAL LOCATION & SIZE OF SIGNS WITH SIGN MANUFACTURER'S APPROVED DRAWINGS AND COORDINATE LOCATIONS OF BLOCKING AND UTILITIES. G.C TO COORDINATE WITH SIGN INSTALLER TO USE VHM DRILL BIT WHILE DRILLING FOR ELECTRICAL FEED LINES AND SIGNAGE FASTENERS. ALL ELEMENTS PROVIDED BY SIGNAGE FABRICATOR TO BE REVIEWED AND APPROVED BY POPEYES PRIOR TO PRODUCTION
12. NICHIHA VINTAGE WOOD, COLOR: CEDAR. REFER TO POPEYES MASTER SCHEDULE.
13. PROVIDE & INSTALL 6" DIAMETER STEEL PIPE BOLLARD TOP AT 4'-6" A.F.F. G.C. TO PAINT "SAFETY YELLOW". REFER TO POPEYES MASTER SCHEDULE.
14. DRIVE-THRU WINDOW. REFER TO DRIVE-THRU WINDOW SCHEDULE ON SHEET A11.
15. TEAL PRE FINISHED METAL BANDING
16. PRE-FINISHED GALVANIZED STEEL DOWNSPOUT & COLLECTOR BOX. G.C. TO COORDINATE WITH CIVIL ENGINEERS TO CONFIRM IF DOWNSPOUTS ARE SPLASHING ON CONCRETE PAD OR TIED TO THE STORM SEWER LINE. REFER TO MECHANICAL DRAWINGS.
17. CANTILEVERED BLACK CANOPY
18. DASHED LINE INDICATES T/O OF ROOF BEHIND PARAPET.
19. C/T CABINET AND METER.
20. LINE OF PARAPET WALLS BEYOND.
21. GENERAL PURPOSE EXTERIOR LIGHTING FIXTURES.
22. WALK-IN COOLER/FREEZER FINISH TO BE COMPLETED BY MANUFACTURER.
23. METAL RAILING SUPPLIED AND INSTALLED BY G.C (ONLY IF REQUIRED). ARCHITECT TO COORDINATE WITH CIVIL ENGINEER ON THE SITE PLAN. PAINT FINISH 'BLACK'.
24. PRE-FINISHED GALVANIZED STEEL DOWNSPOUT & COLLECTOR BOX. G.C. TO COORDINATE CIVIL ENGINEERS TO CONFIRM IF DOWNSPOUTS ARE SPLASHING ON CONCRETE PAD OR TIED TO THE STORM SEWER LINE. REFER TO MECHANICAL DRAWINGS.
25. ALL BASE FLASHING TO MATCH ADJACENT MATERIAL COLORS.
26. HOSE BIB. G.C. TO PAINT. COLOUR TO MATCH ADJACENT STUCCO COORDINATE EXACT LOCATION WITH G.C. REFER TO MECHANICAL DRAWINGS.
27. ½" X ½" REVEAL LINE IN STUCCO FINISH. REFER TO DETAIL 3/A5.
28. DECORATIVE PANELS SUPPLY AND INSTALL BY SIGN COMPANY.
29. G.C TO PROVIDE CONCRETE CURB ALONG DRIVE-THRU LANE. CURB TO PROJECT 8" FROM FACE OF PANELS AND LENGTH OF CURB IS EXTENT OF FEATURE WALL.
30. MURAL GRAPHIC SUPPLY AND INSTALL BY SIGN COMPANY.
31. REAR EXIT DOOR TO BE PAINT WHITE.
32. WALL SCONCE SUPPLY AND INSTALL BY SIGN COMPANY.
33. PRE-FABRICATED CANOPIES W/ PRE-WIRED RECESSED LIGHTS ABOVE DRIVE-THRU SUPPLY BY SIGN COMPANY AND INSTALL BY G.C. ALL CANOPIES IN WALL SUPPORT BY G.C. REFER TO STRUCTURAL DRAWINGS.
34. VERTICAL SIMULATED WOOD SLATS. REFER TO POPEYES MASTER SCHEDULE.
35. WALL SCONCE LIGHTING. REFER TO ELECTRICAL SCHEDULE.
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37. HORIZONTAL WOOD GRAIN ENTRANCE CANOPY W/ TEAL VERTICAL & HORIZONTAL SUPPORTS SUPPLY BY SIGN COMPANY AND INSTALL BY G.C. PRE-WIRED LED LIGHT GLOBE FIXTURE.

EXTERIOR ELEVATIONS GENERAL NOTES

- PURCHASE OF WHITE/RED BRICK AND WOOD GRAIN SLATS TO BE PURCHASED VIA RESPECTIVE VENDOR (NICHIHA OR EQUAL)
- WOOD GRAIN TOWER TO BE PURCHASED EITHER DIRECTLY (VIA B+N) OR PROVIDED BY SIGNAGE COMPANY
- ANY DEVIATIONS MUST BE SUBMITTED AS AN EXCEPTION REQUEST
- ALL PARAPETS SHALL BE PAINTED ACCORDING TO THE FACADE COLOR, IF FACADE COLOR IS WHITE, PARAPET SHALL BE WHITE. IF FACADE IS RED BRICK, PARAPET SHALL BE PAINTED BROWN
- ALL EXTERIOR GLASS DOORS TO BE ORANGE COLORY
- REFERENCE LATEST FINISH SCHEDULE IN THE DESIGN PORTAL IN A REGULAR BASIS
- ALL CANOPIES TO BE TEAL, EXCEPT AT DRIVE THRU WINDOW
- ALL EXTERIOR GLASS DOORS TO BE ORANGE COLOR

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
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2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP

ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionpg.com

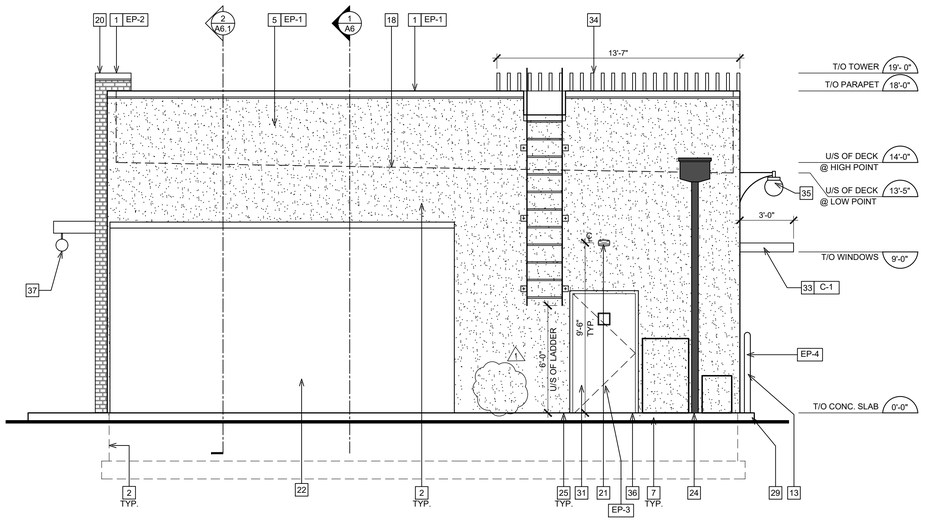
Project

LOUISIANA KITCHEN 19 72

POPEYES

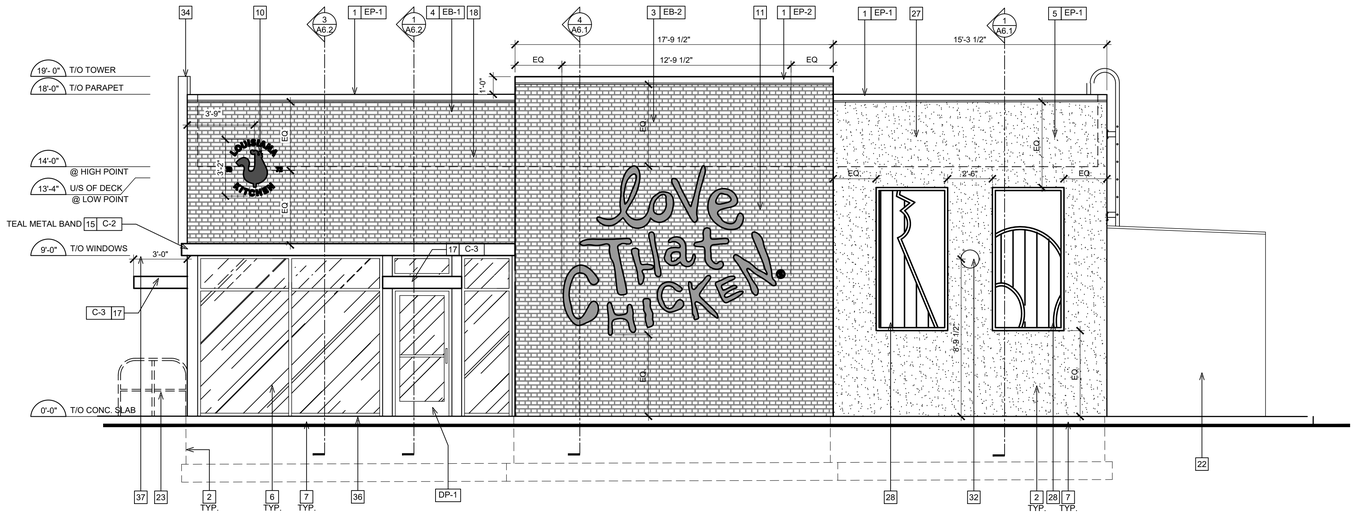
Store Type	US 2112 PROTOTYPE 2112-21
Location	1517 NC 24-87 CAMERON, NC
Drawing Title	EXTERIOR ELEVATIONS
Drawn: SH	Checked: AL
Scale: 1/4"=1'-0"	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A5

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



2 A5 PROPOSED REAR ELEVATION

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



1 A5.1 PROPOSED SIDE ELEVATION

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

EXTERIOR ELEVATION NOTES

1. PRE-FINISHED METAL CAP FLASHING C/W DRIP.
2. G.C TO PROVIDE AND INSTALL DOUBLE LAYER OF REINFORCING MESH TO MIN. 2'-2" ABOVE GRADE AT ALL EIFS LOCATIONS (TYP.) IN ORDER TO ATTAIN ABUSE RESISTANCE STUCCO SYSTEM.
3. NICHIHA VINTAGEBRICK, COLOR: ALEXANDRIA BUFF. REFER TO POPEYES MASTER SCHEDULE.
4. NICHIHA VINTAGEBRICK, COLOR: WHITE WASH. REFER TO POPEYES MASTER SCHEDULE.
5. EIFS. REFER TO POPEYES MASTER SCHEDULE.
6. PRE-FINISHED 'BLACK ANODIZED' ALUMINUM STOREFRONT SYSTEM WITH INSULATED GLAZING.
7. EXPOSED FOUNDATION TO BE PARGED AND FREE OF IMPERFECTIONS.
8. N/A.
9. REFER TO STRUCTURAL DRAWINGS FOR FOUNDATION WALL AND FOOTING DETAILS.
10. INTERNALLY ILLUMINATED BUILDING SIGNAGE PROVIDED AND INSTALLED BY SIGN COMPANY. G.C TO PROVIDE AND INSTALL ¾" EXTERIOR GRADE PRESSURE TREATED PLYWOOD BACKING AND ALL FINAL ELECTRICAL CONNECTION. SIGN MANUFACTURER SHALL OBTAIN STRUCTURALLY SEALED DRAWINGS AND SIGNAGE PERMITS FROM THE CITY BASED ON LOCAL REQUIREMENTS. G.C SHALL VERIFY ACTUAL LOCATION & SIZE OF SIGNS WITH SIGN MANUFACTURER'S APPROVED DRAWINGS AND COORDINATE LOCATIONS OF BLOCKING AND UTILITIES. G.C TO COORDINATE WITH SIGN INSTALLER TO USE VHM DRILL BIT WHILE DRILLING FOR ELECTRICAL FEED LINES AND SIGNAGE FASTENERS. ALL ELEMENTS PROVIDED BY SIGNAGE FABRICATOR TO BE REVIEWED AND APPROVED BY POPEYES PRIOR TO PRODUCTION
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EXTERIOR GENERAL NOTES

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- PLEASE MAKE SURE TO REFERENCE LATEST FINISH SCHEDULE IN THE DESIGN PORTAL IN A REGULAR BASIS
- ALL CANOPIES TO BE TEAL, EXCEPT AT DRIVE THRU WINDOW
- ALL EXTERIOR GLASS DOORS TO BE ORANGE COLOR

GENERAL NOTES

1. SEALANT / CAULKING AROUND DOOR / WINDOW FRAMES. COLOUR: TO MATCH WINDOW / DOOR FRAMES.
2. THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND FOLLOW ALL DRAWINGS AND SPECIFICATIONS.

SYMBOL LEGEND

1	NOTE REFERENCE REFER TO ELEVATION NOTES
FN#	FINISH TYPE

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

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No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE+CIVIL ENGINEERING+MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 1972 POPEYES

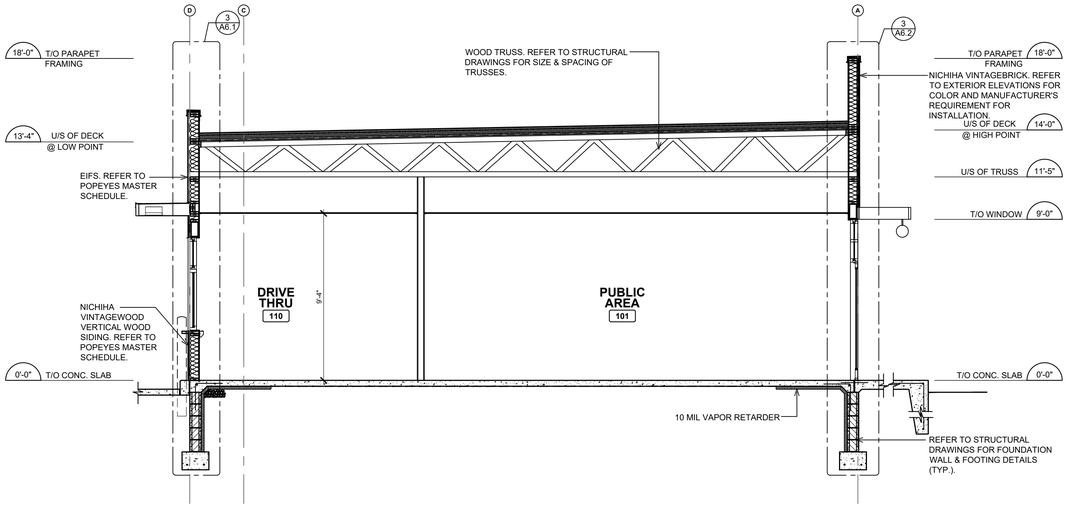
Store Type: US 2112 PROTOTYPE 2112-21

Location: 1517 NC 24-87 CAMERON, NC

Drawing Title: EXTERIOR ELEVATIONS

Drawn	Checked
SH	AL
Scale	**Date**
1/4"=1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	A5.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

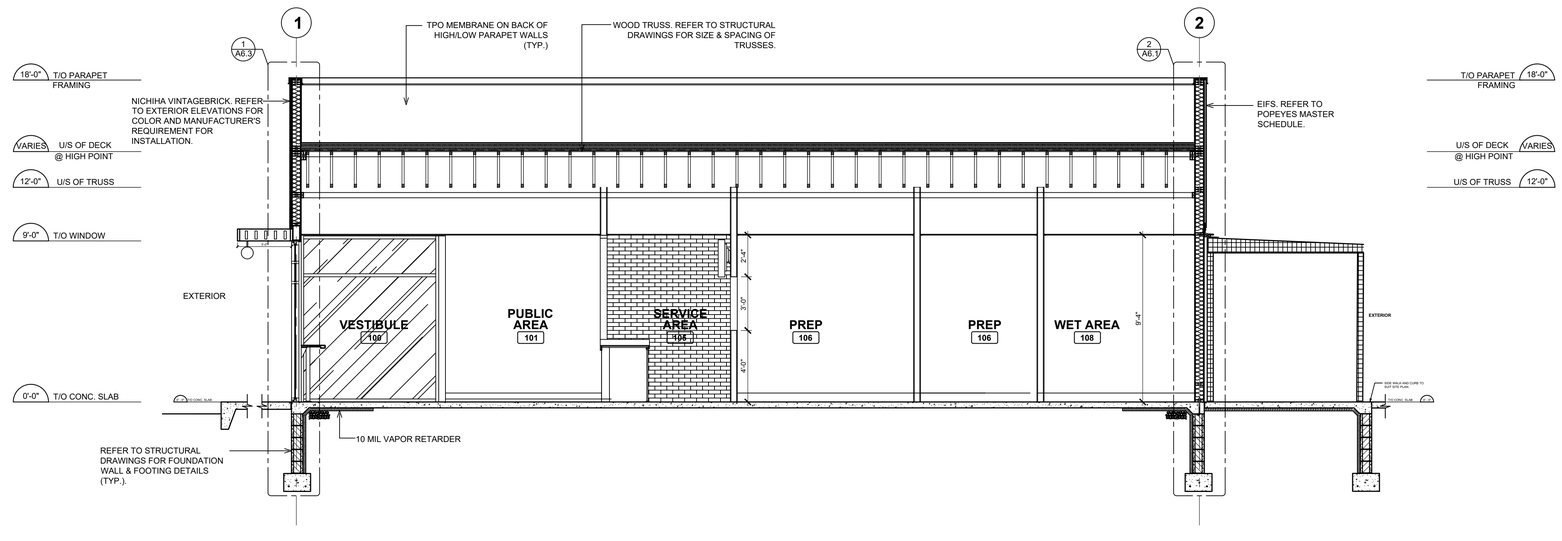


1 A6 **BUILDING SECTION**

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

NOTE:

CONTINUE GYPSUM BOARD TO U/S OF DECK & BETWEEN TRUSSES AT EXTERIOR WALLS (TYP.).



2 A6 **BUILDING SECTION**

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

ISSUE TABLE

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4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

TANNER EDWARDS KING REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP

ARCHITECTURE·CIVIL ENGINEERING·MEP ENGINEERING

10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72

POPEYES

Store Type

US 2112 PROTOTYPE
2112-21

Location

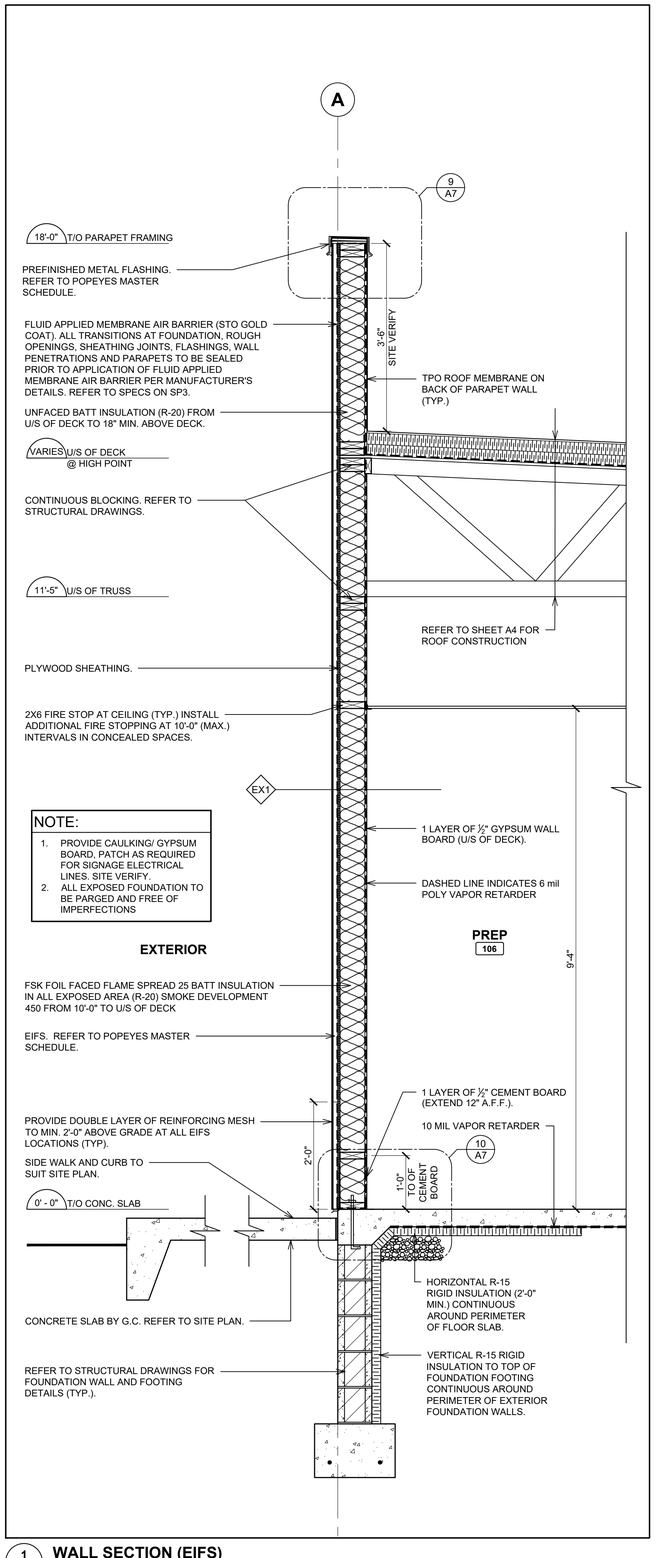
1517 NC 24-87
CAMERON, NC

Drawing Title

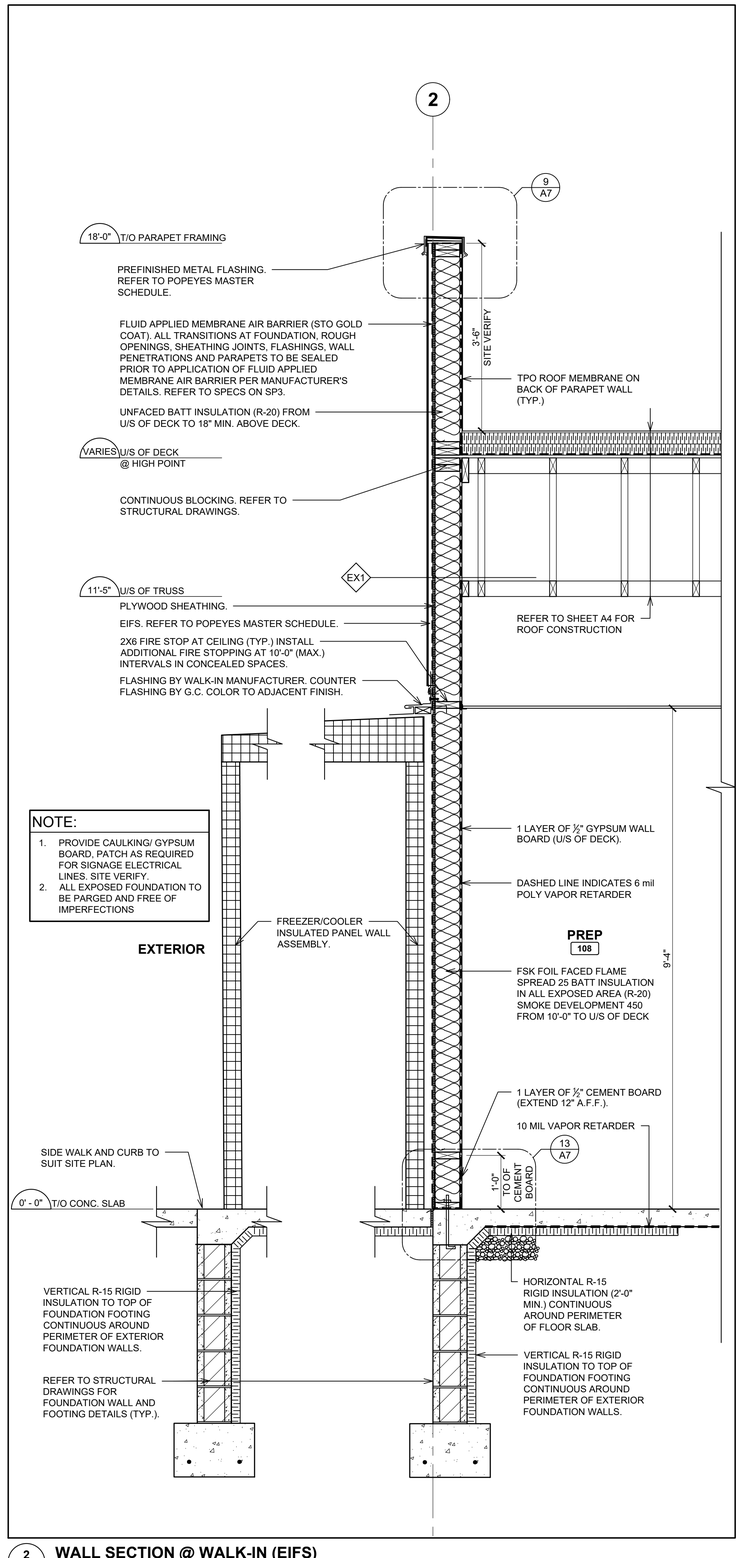
BUILDING SECTIONS

Drawn	Checked
SH	AL
Scale	**Date**
AS NOTED	JUNE 2023
Project No.	**Drawing No.**
C22-129	A6

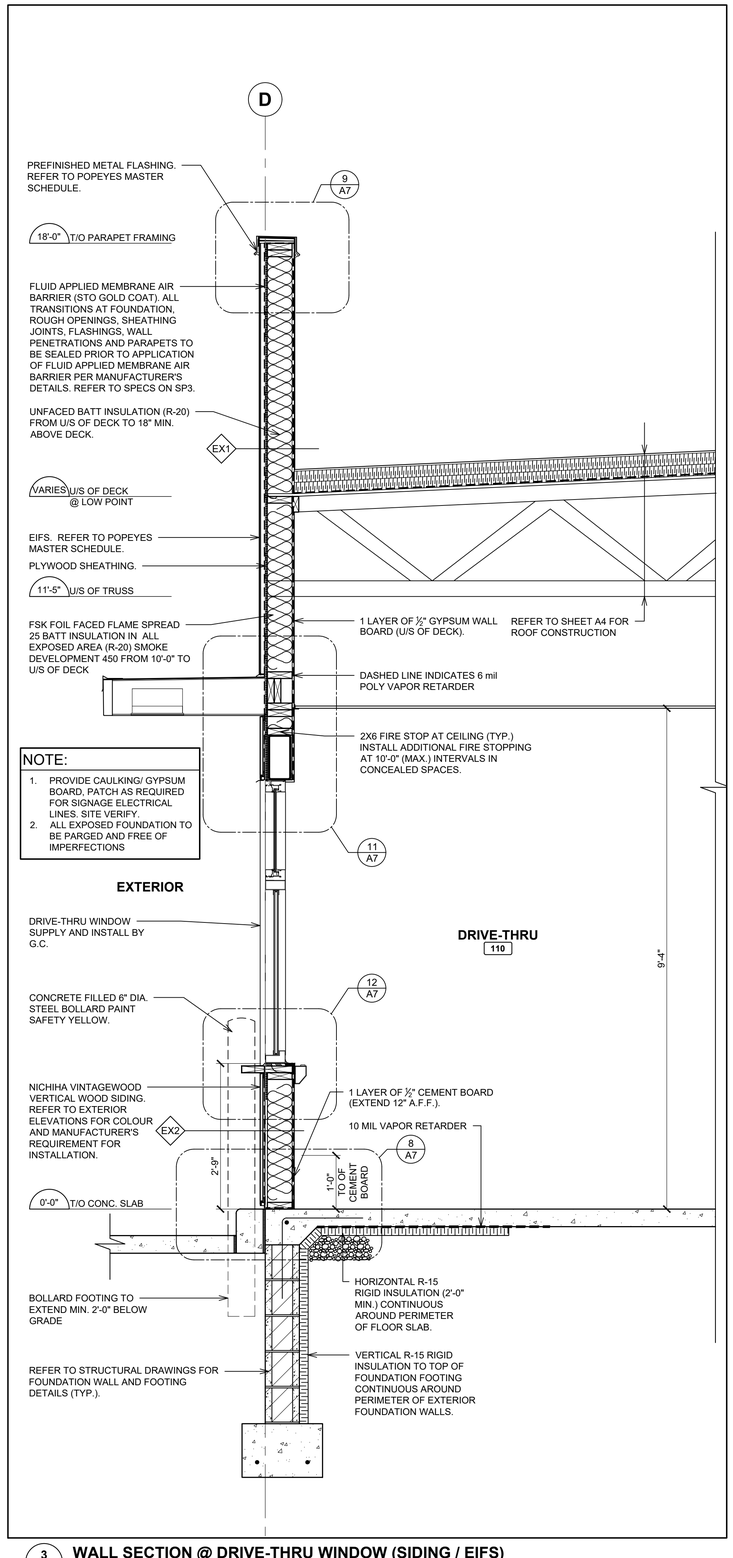
POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 A6.1 **WALL SECTION (EIFS)**
SCALE: 3/4" = 1'-0"



2 A6.1 **WALL SECTION @ WALK-IN (EIFS)**
SCALE: 3/4" = 1'-0"



3 A6.1 **WALL SECTION @ DRIVE-THRU WINDOW (SIDING / EIFS)**
SCALE: 3/4" = 1'-0"

ISSUE TABLE

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No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX
REGISTERED
SEAL
15704
ARCHITECT
NORTH CAROLINA
9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

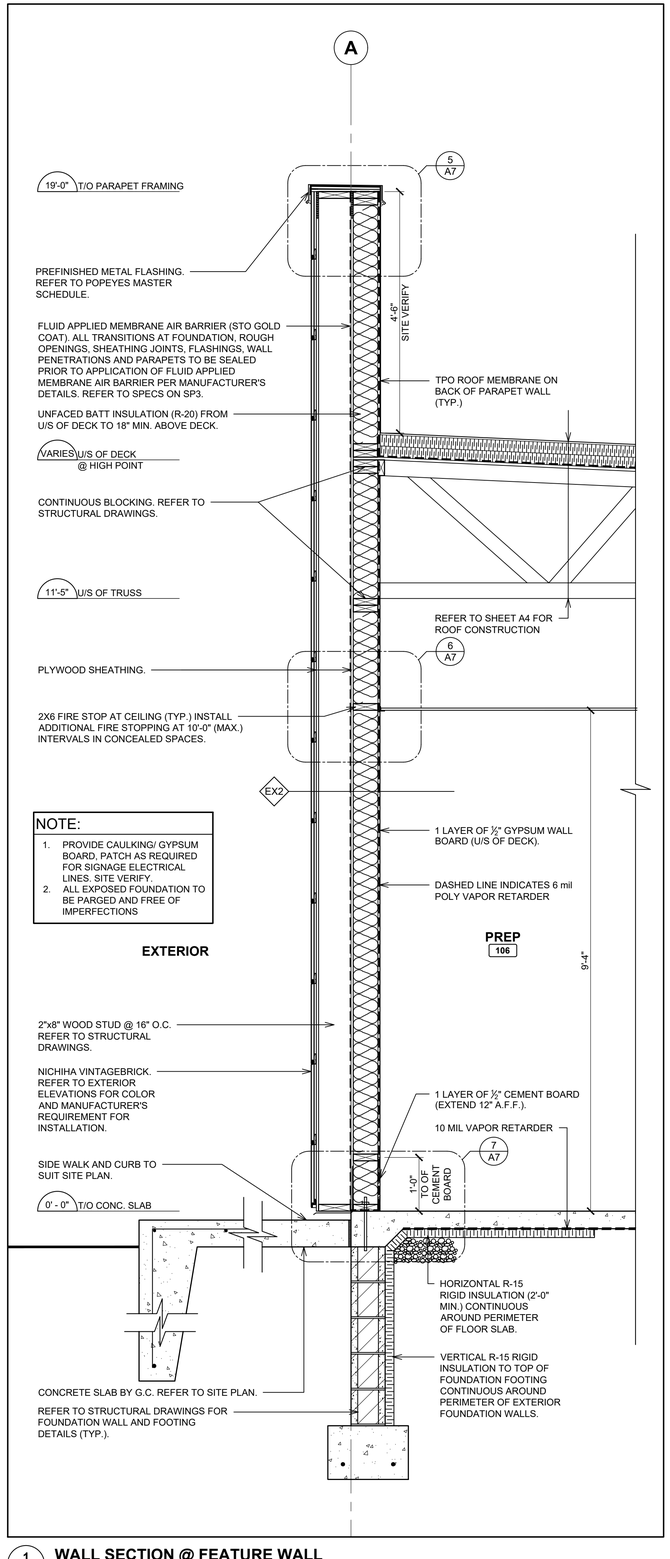
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

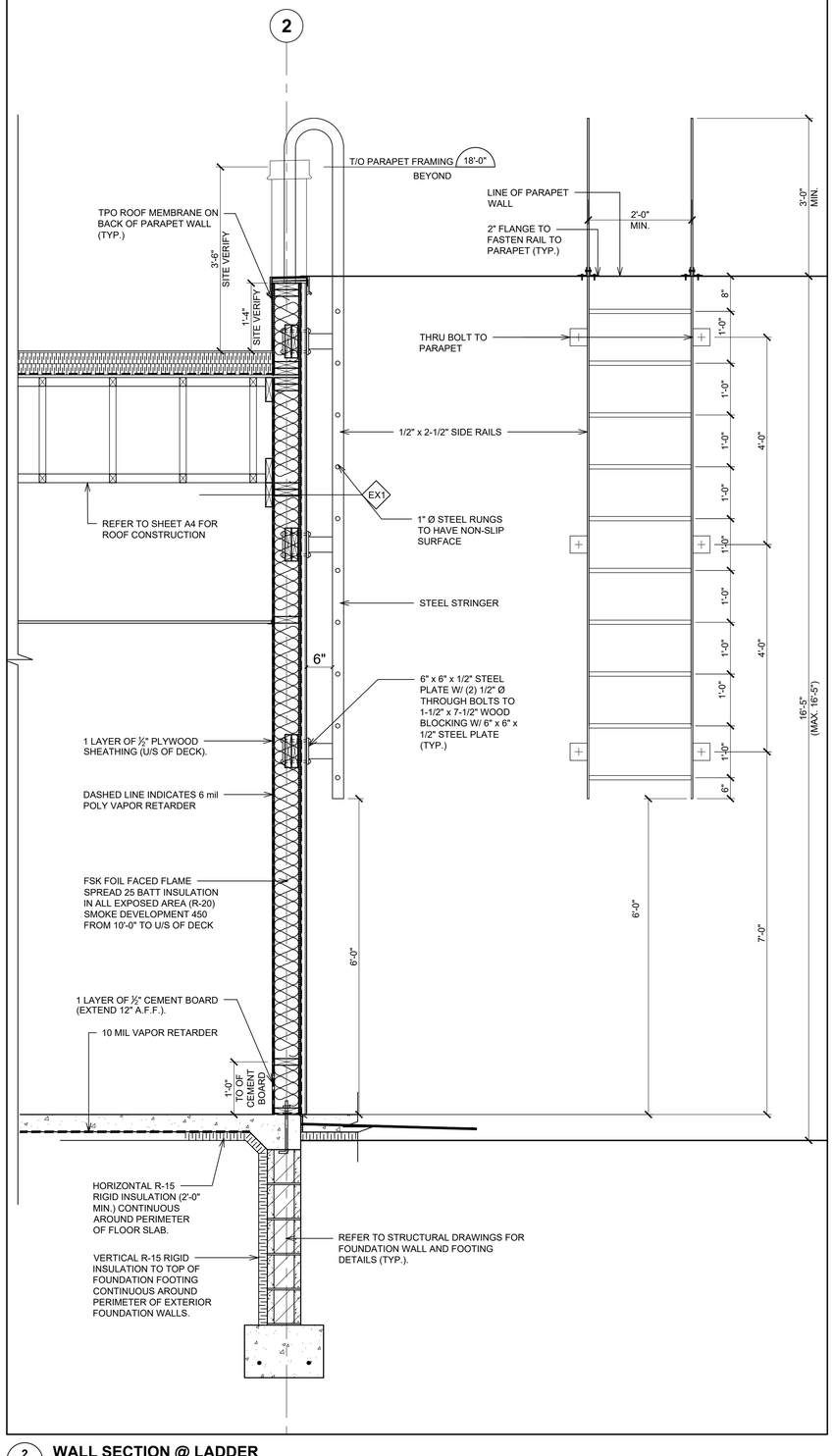
Drawing Title
WALL SECTIONS

Drawn	Checked
SH	AL
Scale	**Date**
AS NOTED	JUNE 2023
Project No.	**Drawing No.**
C22-129	A6.1

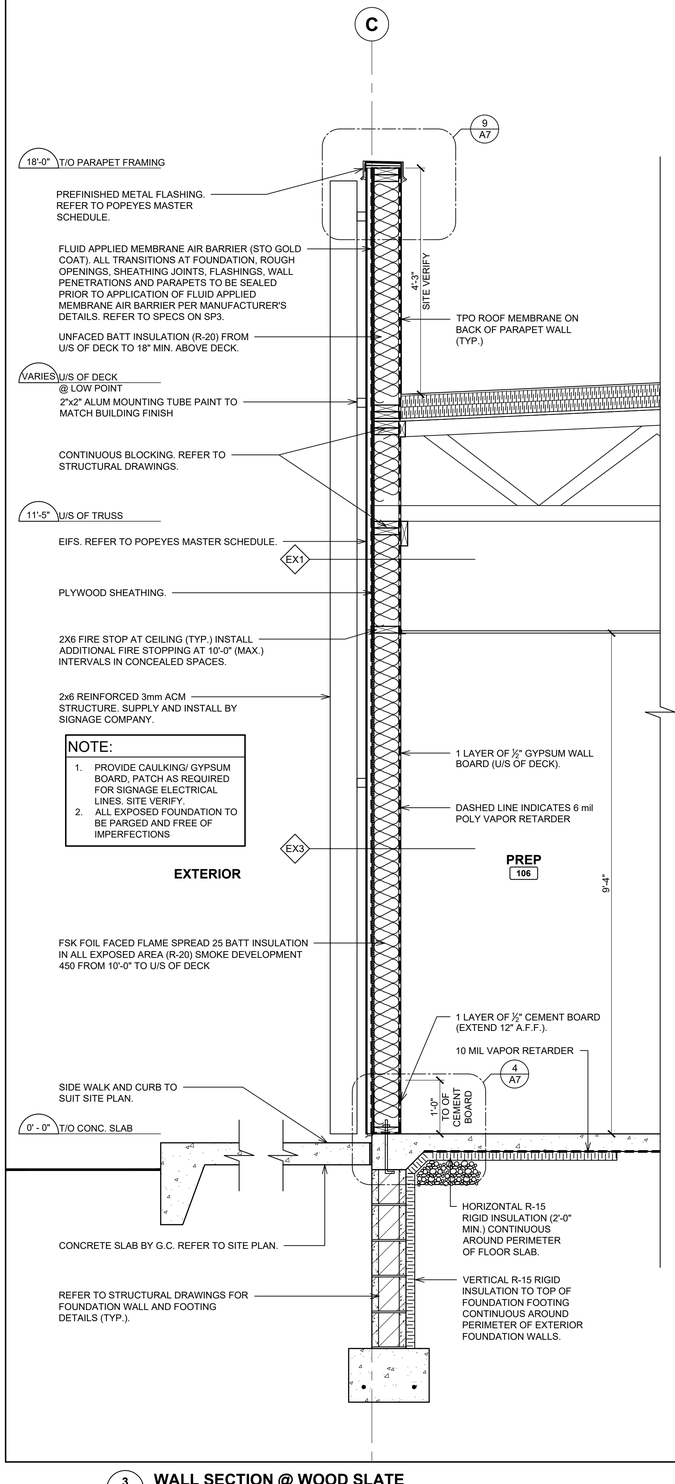
POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 A6.2 **WALL SECTION @ FEATURE WALL**
SCALE: 3/4" = 1'-0"



2 A6.2 **WALL SECTION @ LADDER**
SCALE: 3/4" = 1'-0"



3 A6.2 **WALL SECTION @ WOOD SLATE**
SCALE: 3/4" = 1'-0"

ISSUE TABLE

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PROJECT NORTH

9.14.2023

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Project

LOUISIANA KITCHEN 19 72 POPEYES

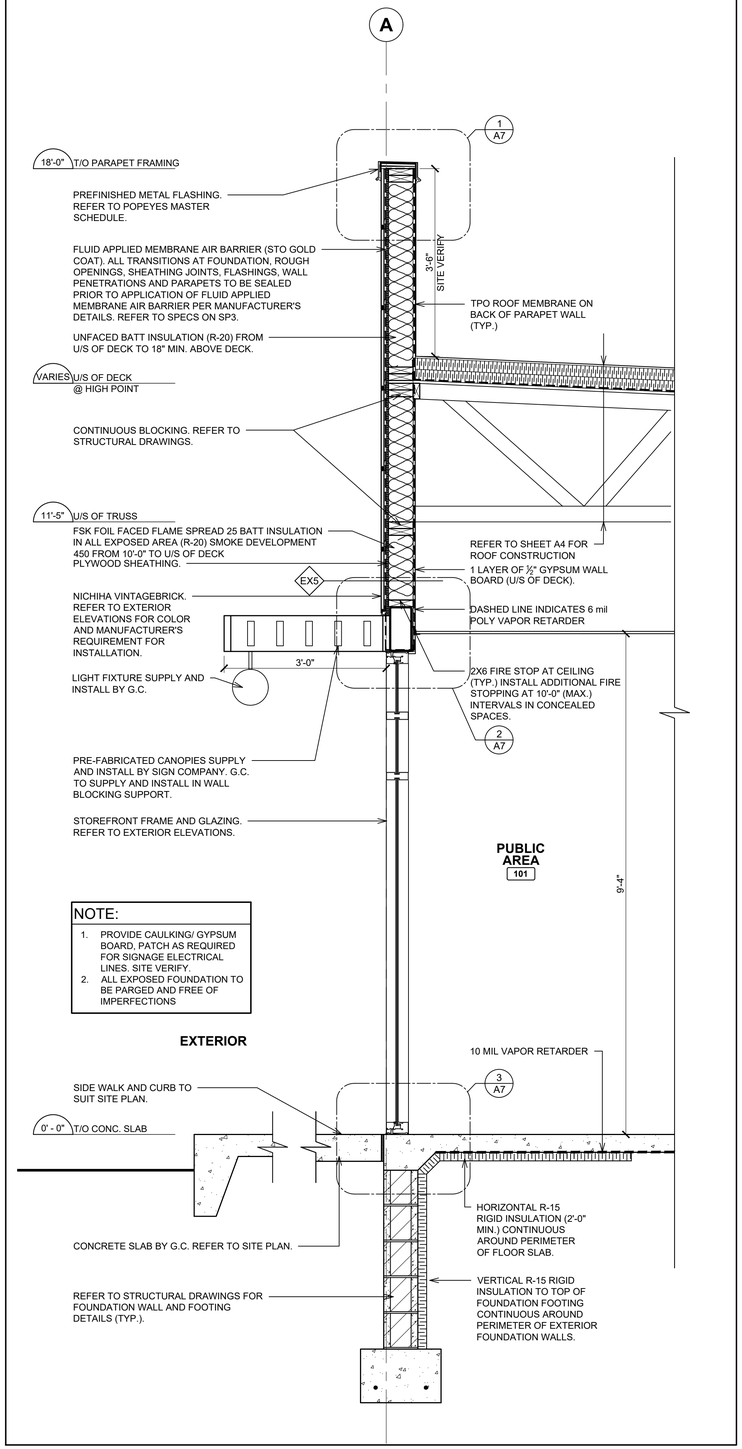
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
WALL SECTIONS

Drawn	Checked
SH	AL
Scale	Date
AS NOTED	JUNE 2023
Project No.	Drawing No.
C22-129	A6.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 A6.2 **WALL SECTION @ FEATURE WALL**

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DRAWINGS REVISED AS PER DESIGN BULLETIN

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PROJECT NORTH

TANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

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Project

LOUISIANA KITCHEN 19 72
POPEYES

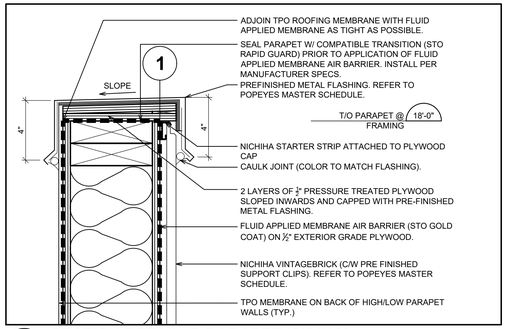
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

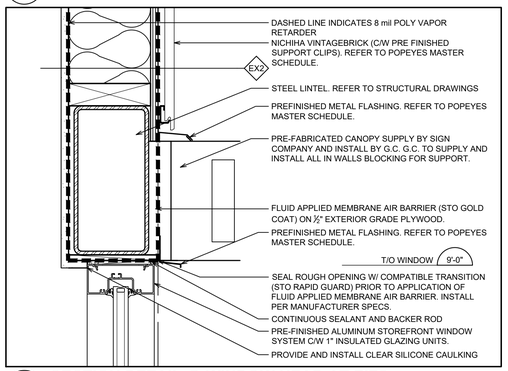
Drawing Title
WALL SECTIONS

Drawn	Checked
SH	AL
Scale: AS NOTED	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A6.3

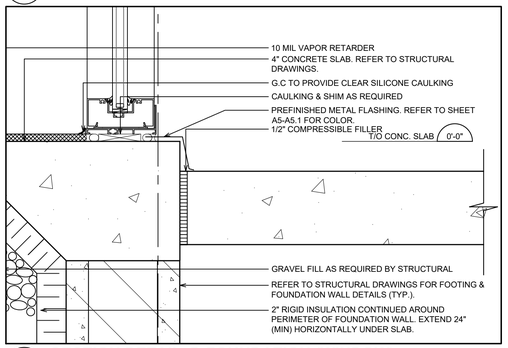
POPEYES LOUISIANA KITCHEN MODEL 2112. 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



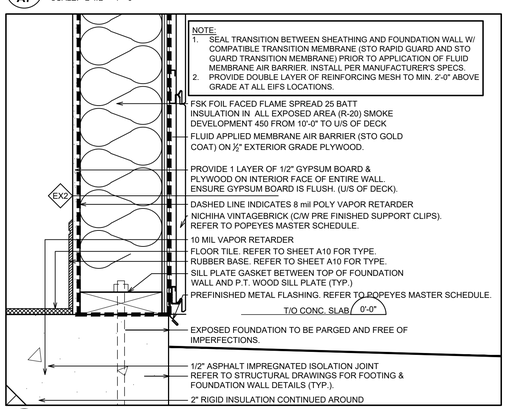
1 / A7 SECTION DETAIL @ PARAPET (SIDING)
SCALE: 2-1/2" = 1' - 0"



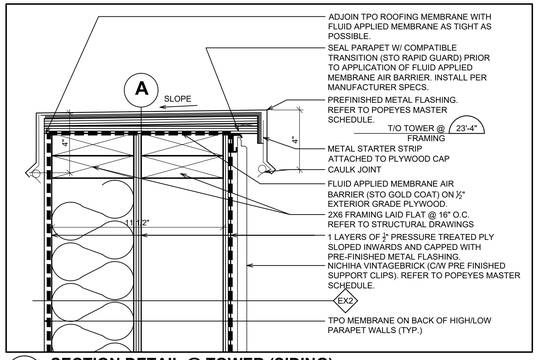
2 / A7 SECTION DETAIL @ WINDOW HEAD AT EIFS
SCALE: 2-1/2" = 1' - 0"



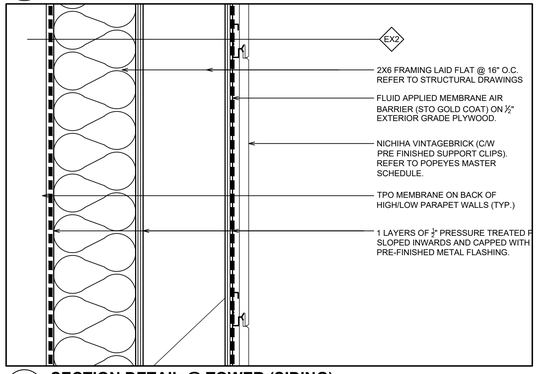
3 / A7 SECTION DETAIL @ FOUNDATION (WINDOW)
SCALE: 2-1/2" = 1' - 0"



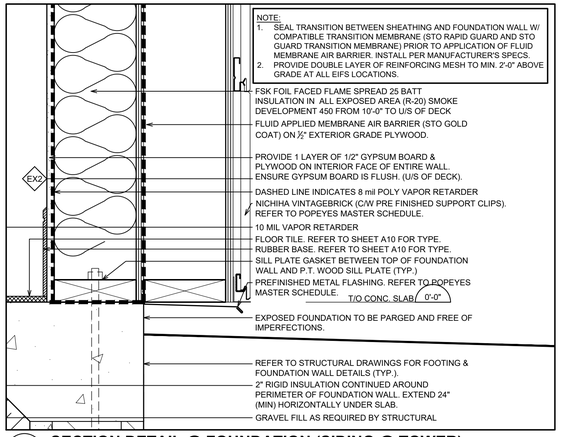
4 / A7 SECTION DETAIL @ FOUNDATION (WINDOW)
SCALE: 2-1/2" = 1' - 0"



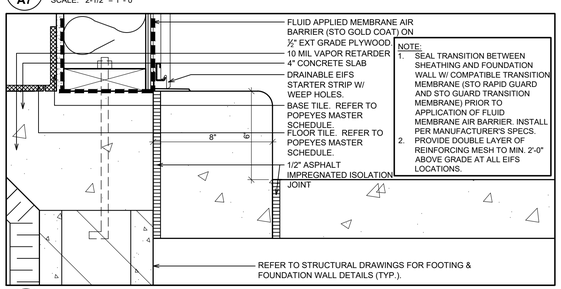
5 / A7 SECTION DETAIL @ TOWER (SIDING)
SCALE: 2-1/2" = 1' - 0"



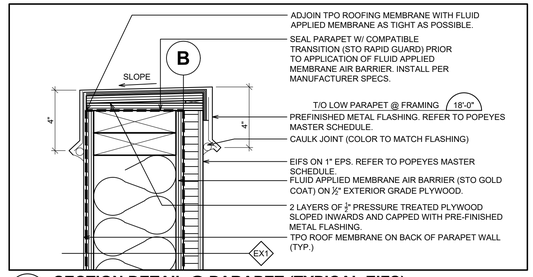
6 / A7 SECTION DETAIL @ TOWER (SIDING)
SCALE: 2-1/2" = 1' - 0"



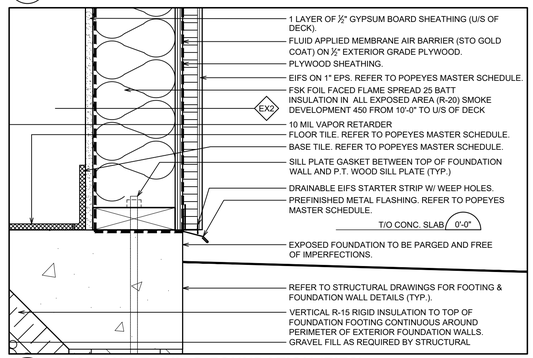
7 / A7 SECTION DETAIL @ FOUNDATION (SIDING @ TOWER)
SCALE: 2-1/2" = 1' - 0"



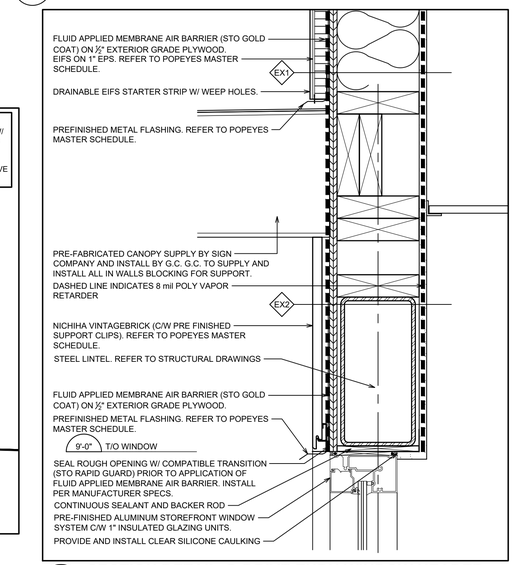
8 / A7 SECTION DETAIL @ FOUNDATION (D/T WINDOW)
SCALE: 2-1/2" = 1' - 0"



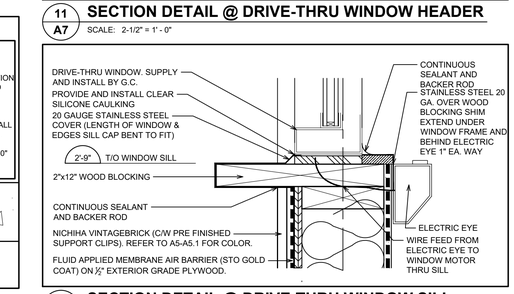
9 / A7 SECTION DETAIL @ PARAPET (TYPICAL EIFS)
SCALE: 2-1/2" = 1' - 0"



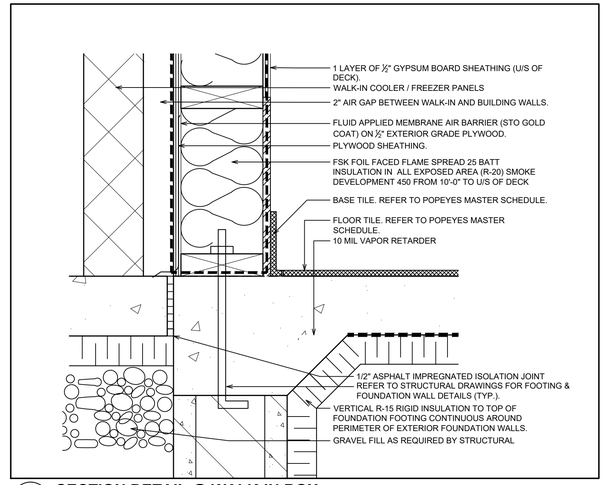
10 / A7 SECTION DETAIL @ FOUNDATION (EIFS)
SCALE: 2-1/2" = 1' - 0"



11 / A7 SECTION DETAIL @ DRIVE-THRU WINDOW HEADER
SCALE: 2-1/2" = 1' - 0"



12 / A7 SECTION DETAIL @ DRIVE-THRU WINDOW SILL
SCALE: 2-1/2" = 1' - 0"



13 / A7 SECTION DETAIL @ WALK-IN BOX
SCALE: 2-1/2" = 1' - 0"

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

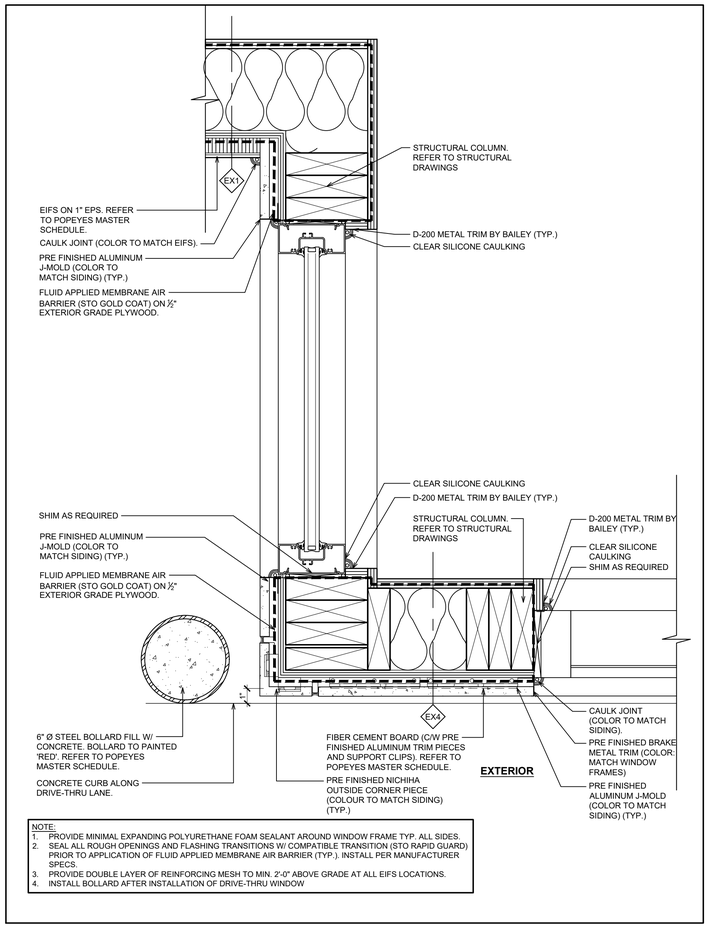
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
SECTION DETAILS

Drawn	Checked
SH	AL
Scale	**Date**
AS NOTED	JUNE 2023
Project No.	**Drawing No.**
C22-129	A7

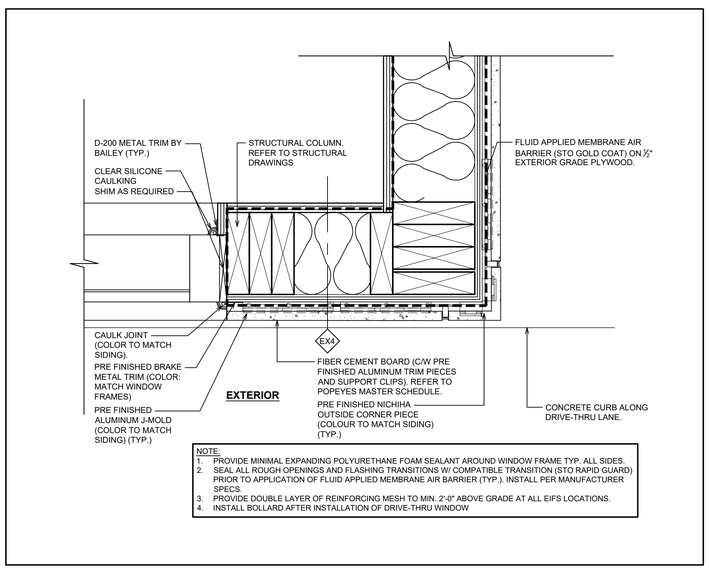
POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



NOTE:
1. PROVIDE MINIMAL EXPANDING POLYURETHANE FOAM SEALANT AROUND WINDOW FRAME TYP. ALL SIDES.
2. SEAL ALL ROUGH OPENINGS AND FLASHING TRANSITIONS W/ COMPATIBLE TRANSITION (STO RAPID GUARD) PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER (TYP.). INSTALL PER MANUFACTURER SPECS.
3. PROVIDE DOUBLE LAYER OF REINFORCING MESH TO MIN. 2'-0" ABOVE GRADE AT ALL EIFS LOCATIONS.
4. INSTALL BOLLARD AFTER INSTALLATION OF DRIVE-THRU WINDOW

1 A7.1 PLAN DETAIL @ DRIVE-THRU WINDOW

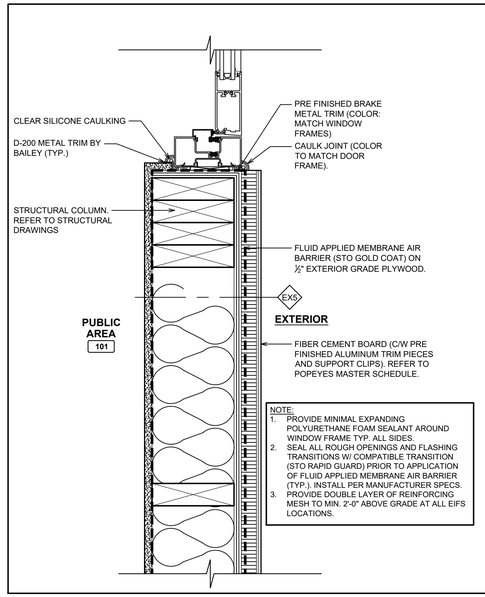
SCALE: 2 ½"=1'-0"



NOTE:
1. PROVIDE MINIMAL EXPANDING POLYURETHANE FOAM SEALANT AROUND WINDOW FRAME TYP. ALL SIDES.
2. SEAL ALL ROUGH OPENINGS AND FLASHING TRANSITIONS W/ COMPATIBLE TRANSITION (STO RAPID GUARD) PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER (TYP.). INSTALL PER MANUFACTURER SPECS.
3. PROVIDE DOUBLE LAYER OF REINFORCING MESH TO MIN. 2'-0" ABOVE GRADE AT ALL EIFS LOCATIONS.

2 A7.1 PLAN DETAIL @ DRIVE-THRU BUMP OUT

SCALE: 2 ½"=1'-0"



NOTE:
1. PROVIDE MINIMAL EXPANDING POLYURETHANE FOAM SEALANT AROUND WINDOW FRAME TYP. ALL SIDES.
2. SEAL ALL ROUGH OPENINGS AND FLASHING TRANSITIONS W/ COMPATIBLE TRANSITION (STO RAPID GUARD) PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER (TYP.). INSTALL PER MANUFACTURER SPECS.
3. PROVIDE DOUBLE LAYER OF REINFORCING MESH TO MIN. 2'-0" ABOVE GRADE AT ALL EIFS LOCATIONS.

3 A7.1 PLAN DETAIL @ DOOR

SCALE: 2 ½"=1'-0"

NOTE:
1. PROVIDE MINIMAL EXPANDING POLYURETHANE FOAM SEALANT AROUND WINDOW FRAME TYP. ALL SIDES.
2. SEAL ALL ROUGH OPENINGS AND FLASHING TRANSITIONS W/ COMPATIBLE TRANSITION (STO RAPID GUARD) PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER (TYP.). INSTALL PER MANUFACTURER SPECS.
3. PROVIDE DOUBLE LAYER OF REINFORCING MESH TO MIN. 2'-0" ABOVE GRADE AT ALL EIFS LOCATIONS.

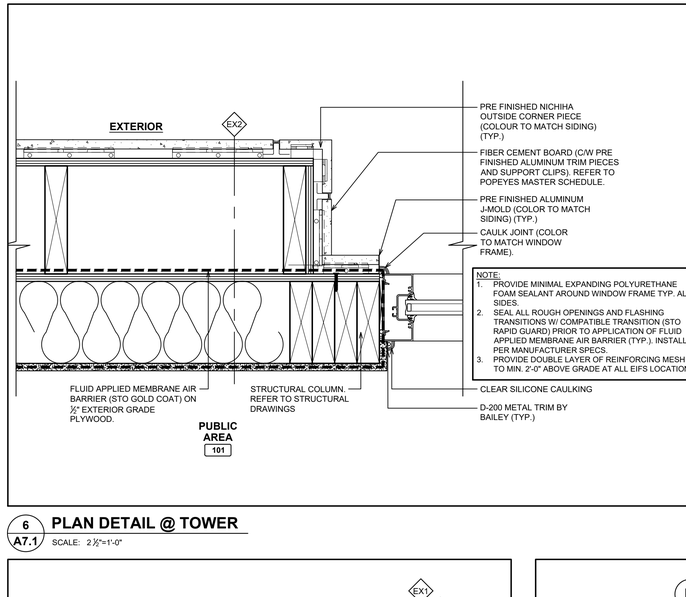
4 A7.1 PLAN DETAIL @ WINDOW FRAME

SCALE: 2 ½"=1'-0"

NOTE:
1. PROVIDE MINIMAL EXPANDING POLYURETHANE FOAM SEALANT AROUND WINDOW FRAME TYP. ALL SIDES.
2. SEAL ALL ROUGH OPENINGS AND FLASHING TRANSITIONS W/ COMPATIBLE TRANSITION (STO RAPID GUARD) PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER (TYP.). INSTALL PER MANUFACTURER SPECS.
3. PROVIDE DOUBLE LAYER OF REINFORCING MESH TO MIN. 2'-0" ABOVE GRADE AT ALL EIFS LOCATIONS.

5 A7.1 PLAN DETAIL @ CORNER

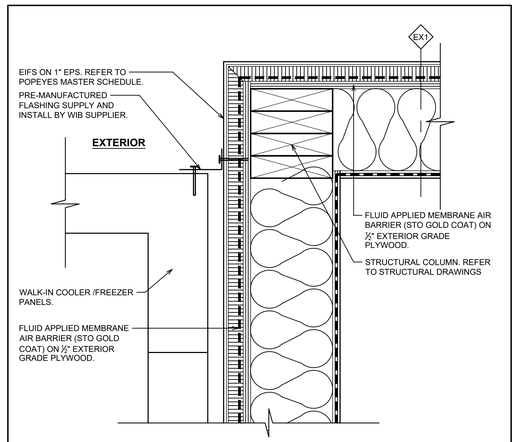
SCALE: 2 ½"=1'-0"



NOTE:
1. PROVIDE MINIMAL EXPANDING POLYURETHANE FOAM SEALANT AROUND WINDOW FRAME TYP. ALL SIDES.
2. SEAL ALL ROUGH OPENINGS AND FLASHING TRANSITIONS W/ COMPATIBLE TRANSITION (STO RAPID GUARD) PRIOR TO APPLICATION OF FLUID APPLIED MEMBRANE AIR BARRIER (TYP.). INSTALL PER MANUFACTURER SPECS.
3. PROVIDE DOUBLE LAYER OF REINFORCING MESH TO MIN. 2'-0" ABOVE GRADE AT ALL EIFS LOCATIONS.

6 A7.1 PLAN DETAIL @ TOWER

SCALE: 2 ½"=1'-0"

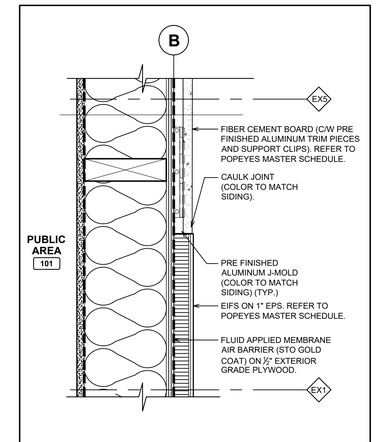


8 A7.1 PLAN DETAIL @ WALK-IN BOX

SCALE: 2 ½"=1'-0"

9 A7.1 PLAN DETAIL @ CORNER

SCALE: 2 ½"=1'-0"



10 A7.1 PLAN DETAIL @ FINISH TRANSITION

SCALE: 2 ½"=1'-0"

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 1972 POPEYES

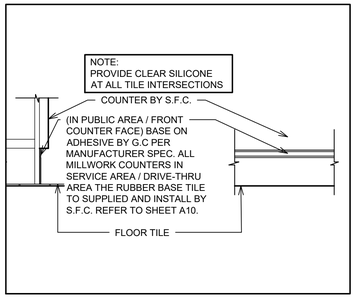
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
PLAN DETAILS

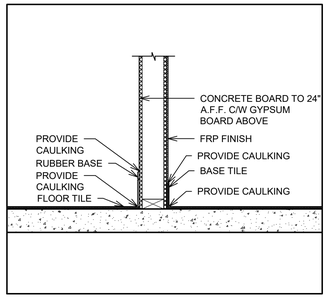
Drawn	Checked
SH	AL
Scale	Date
AS NOTED	JUNE 2023
Project No.	Drawing No.
C22-129	A7.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



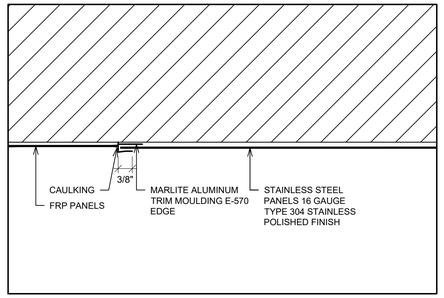
5 A8 **RUBBER BASE @ COUNTER**

SCALE: 1" = 1'-0"



4 A8 **BASE @ FRP & GYPSUM BOARD**

SCALE: 1" = 1'-0"



1 A8 **FRP-STAINLESS STEEL TRIM DETAIL**

SCALE: 6" = 1'-0"

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
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3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

TANNER EDWARDS HAND REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

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ARCHITECTURE•CIVIL ENGINEERING•MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type

US 2112 PROTOTYPE
2112-21

Location

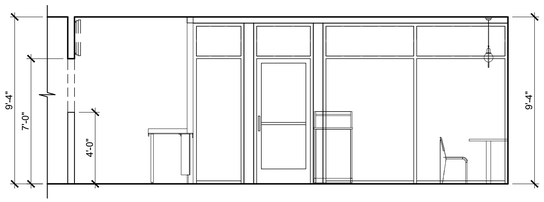
1517 NC 24-87
CAMERON, NC

Drawing Title

DETAILS

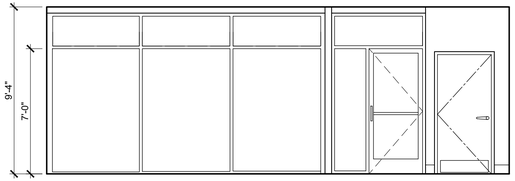
Drawn	Checked
SH	AL
Scale	**Date**
AS NOTED	JUNE 2023
Project No.	**Drawing No.**
C22-129	A8

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



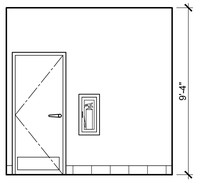
1 A9 SERVICE AREA / PUBLIC AREA

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



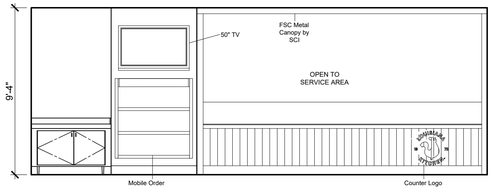
2 A9 PUBLIC AREA

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



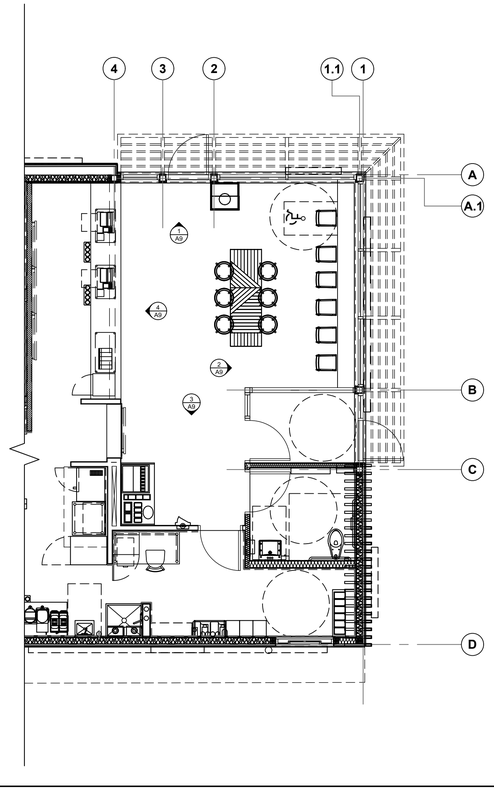
3 A9 PUBLIC AREA

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



4 A9 PUBLIC AREA

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



ISSUE TABLE

No.	Date (mm/dd/yy)	Description

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2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE·CIVIL ENGINEERING·MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL. 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 18 72 POPEYES

Store Type

US 2112 PROTOTYPE
2112-21

Location

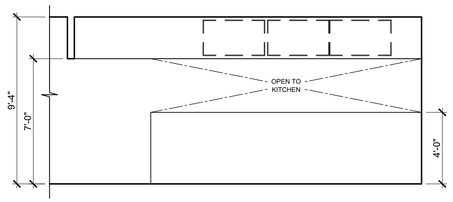
1517 NC 24-87
CAMERON, NC

Drawing Title

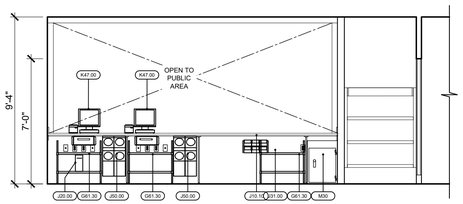
INTERIOR ELEVATIONS

Drawn	Checked
Scale	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A9

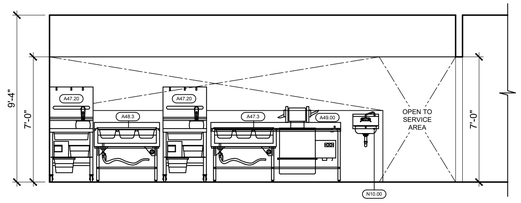
POPEYES LOUISIANA KITCHEN MODEL 2112. 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



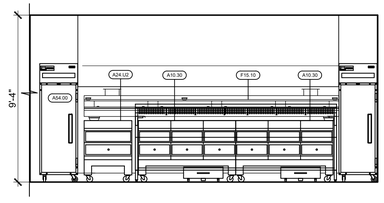
1 A9.1 **MENU BOARD**
SCALE: 1/4" = 1'-0"



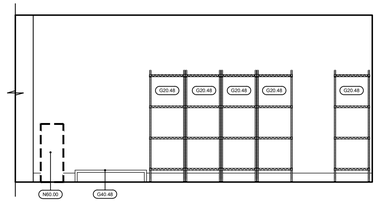
2 A9.1 **PSO AREA**
SCALE: 1/4" = 1'-0"



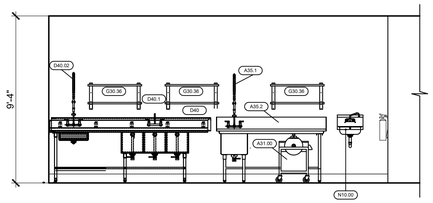
3 A9.1 **BATTER**
SCALE: 1/4" = 1'-0"



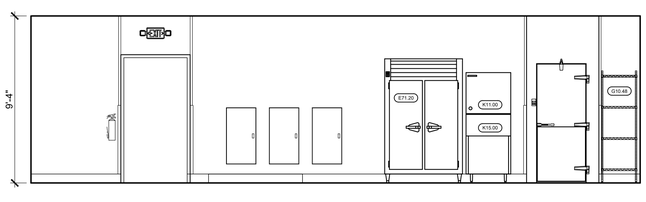
4 A9.1 **FRYER**
SCALE: 1/4" = 1'-0"



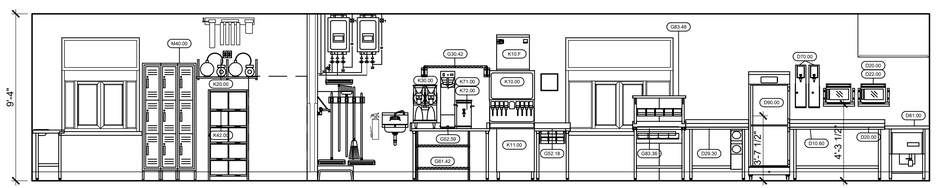
5 A9.1 **STORAGE**
SCALE: 1/4" = 1'-0"



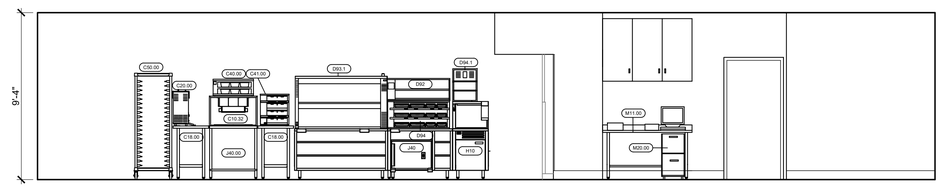
6 A9.1 **WET AREA**
SCALE: 1/4" = 1'-0"



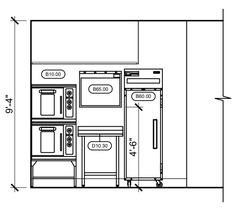
7 A9.1 **REFRIGERATION**
SCALE: 1/4" = 1'-0"



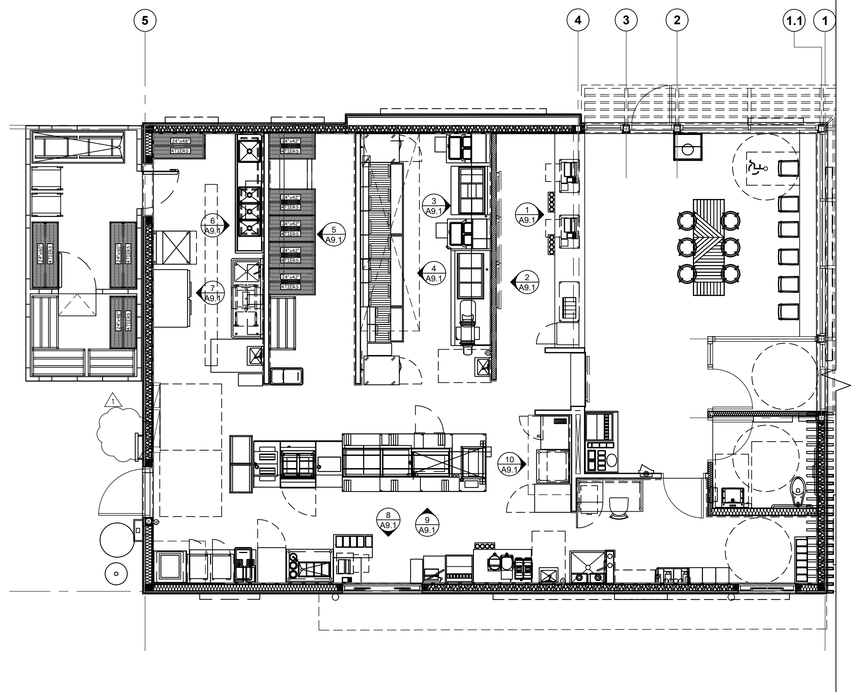
8 A9.1 **PREP**
SCALE: 1/4" = 1'-0"



9 A9.1 **PRODUCTION LINE**
SCALE: 1/4" = 1'-0"



10 A9.1 **BISCUITS**
SCALE: 1/4" = 1'-0"



ISSUE TABLE

No.	Date (mm/dd/yy)	Description

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No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KING
REGISTERED
SEAL
15704
ARCHITECT
NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
popeyes

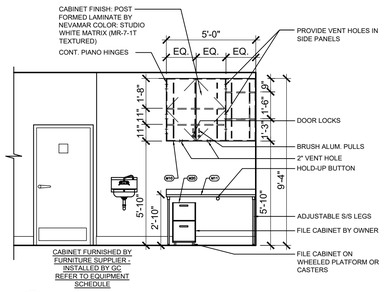
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

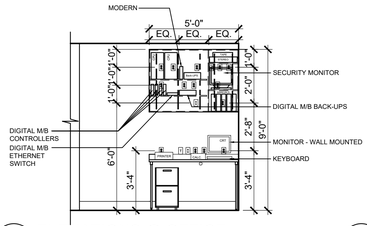
Drawing Title
INTERIOR ELEVATIONS

Drawn	Checked
Scale	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A9.1

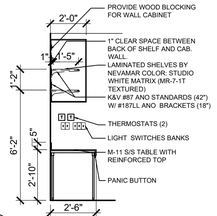
POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



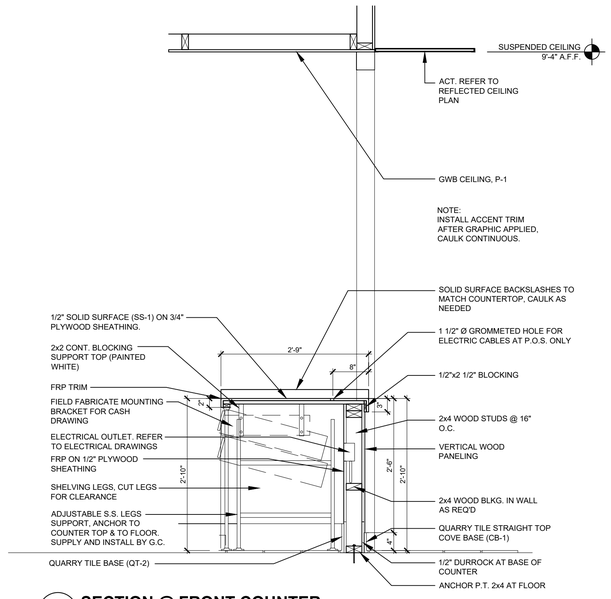
1 / A9.2 ELEVATIONS @ OFFICE, CABINET
SCALE: 1/4" = 1'-0"



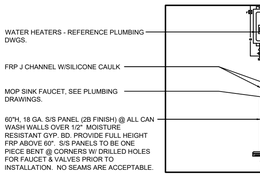
2 / A9.2 ELEVATIONS @ OFFICE
SCALE: 1/4" = 1'-0"



3 / A9.2 ELEVATIONS @ OFFICE
SCALE: 1/4" = 1'-0"

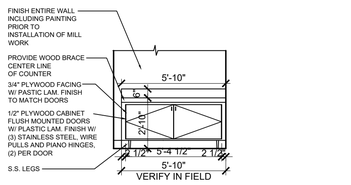


7 / A9.2 SECTION @ FRONT COUNTER
SCALE: 3/4" = 1'-0"



4 / A9.2 PERFORATED SIDE PANELS
SCALE: 1/4" = 1'-0"

5 / A9.2 SECTION @ MOP SINK
SCALE: 1/4" = 1'-0"



6 / A9.2 SELF-SERVE COUNTER ELEVATIONS
SCALE: 1/4" = 1'-0"

ISSUE TABLE

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4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

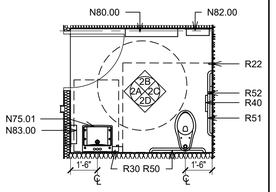
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
INTERIOR ELEVATIONS

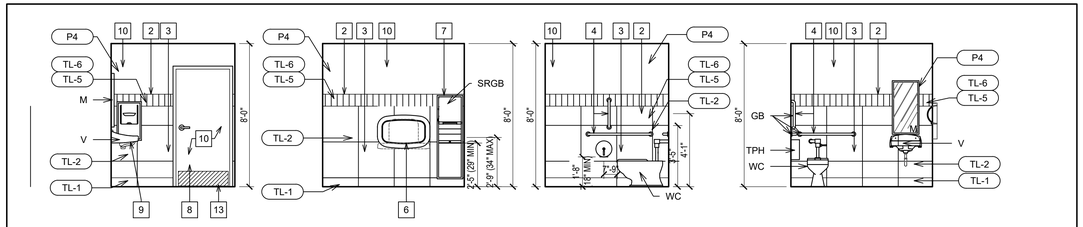
Drawn	Checked
Scale	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A9.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 A9.3 PLAN MEN'S WASHROOM

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



2 A9.3 ELEVATIONS MEN'S WASHROOM

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

3 A9.3 PLAN WOMEN'S WASHROOM

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

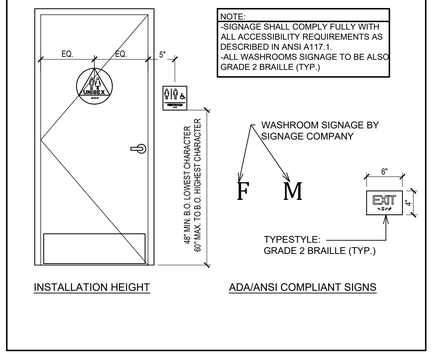
4 A9.3 ELEVATIONS WOMEN'S WASHROOM

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

5 A9.3 N/A.

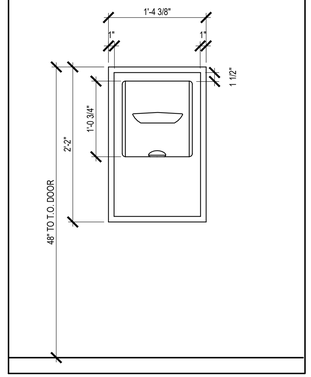
6 A9.3 N/A.

7 A9.3 N/A



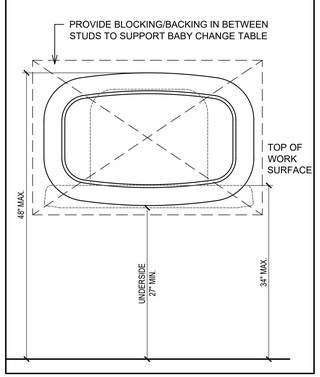
8 A9.3 ACCESSIBILITY SIGNAGE.

SCALE: 1" = 1'-0"



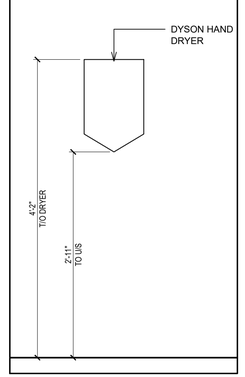
9 A9.3 DETAIL @ SEMI-RECESSED GARBAGE

SCALE: 1" = 1'-0"



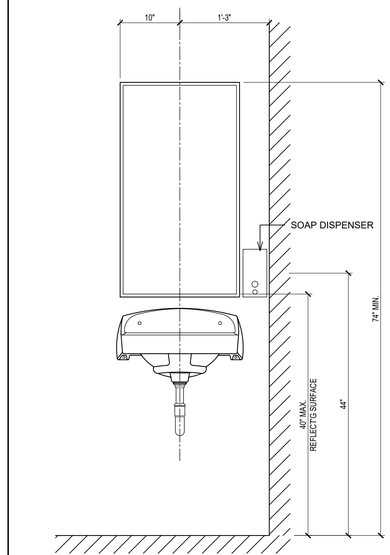
10 A9.3 DETAIL @ BABY CHANGE TABLE

SCALE: 1" = 1'-0"



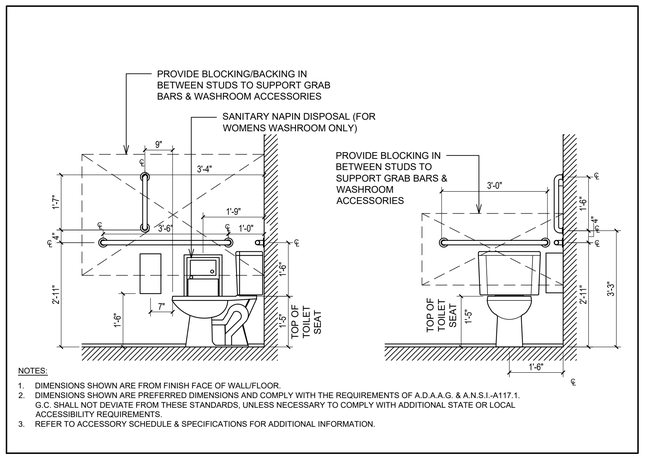
11 A9.3 DETAIL @ HAND DRYER

SCALE: 1" = 1'-0"



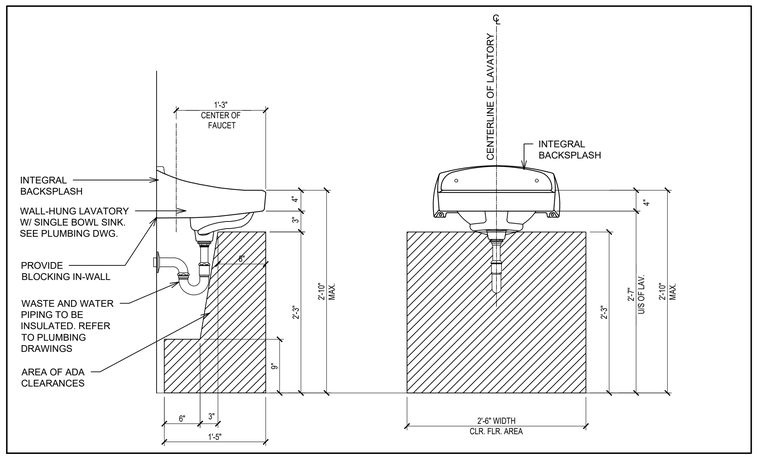
14 A9.3 MIRROR AND SOAP DISPENSER DETAIL

SCALE: 1" = 1'-0"



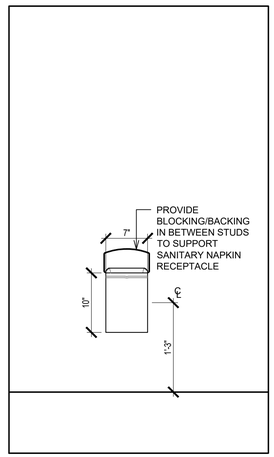
12 A9.3 DETAIL @ GRAB BARS

SCALE: 1/2" = 1'-0"



13 A9.3 DETAIL @ VANITY

SCALE: 1" = 1'-0"



11 A9.3 DETAIL @ SANITARY NAPKIN RECEPTACLE

SCALE: 1" = 1'-0"

INTERIOR ELEVATION NOTES

1. MIRROR IN PUBLIC WASHROOMS TO BE 1'-6" x 3'-0". MIRROR TO BE CENTERED ABOVE VANITIES & SURFACE MOUNTED ON WALL FINISH. SEE DRAWING A2 FOR SPECIFICATION BOTTOM AND ONE OF THE VERTICAL SIDE FRAMES TO BE PRE-DRILLED & SCREWED TO WALL. REMAINDER OF FRAMES AND MIRROR TO BE ADHERED W/ APPROVED MIRROR ADHESIVE OR SILICONE. REFER TO DETAIL 14/A9.3
2. WALL TILE FINISH TL-5 AND TL-6 - REFER TO FINISH SCHEDULE ON SHEET A10 FOR TYPE. GC TO BE SUPPLIED AND INSTALLED.
3. WALL TILE TL-2 - REFER TO FINISH SCHEDULE ON SHEET A10 FOR TYPE.
4. PROVIDE PLYWOOD BACKING IN BETWEEN STUDS TO ACCOMMODATE GRAB BARS. PROVIDE ADEQUATE SIZE. REFER TO DETAIL 12/A9.3.
5. N/A.
6. PROVIDE ADEQUATE PLYWOOD BACKING IN BETWEEN STUDS AT BABY CHANGE TABLE. REFER TO DETAIL 10/A9.3.
7. PROVIDE OPENING IN WALL TO ACCOMMODATE SEMI-RECESSED GARBAGE. REFER TO DETAIL 9/A9.3.
8. DOORS & FRAMES. REFER TO FINISH SCHEDULES ON SHEET A10 FOR FINISHES & A11 FOR TYPE.
9. VANITY - REFER TO DETAIL 13/A9.3.
10. PAINT FINISH - REFER TO TYPICAL WASHROOM ELEVATION ON SHEET A10 FOR TYPE
11. LAVATORY CARRIER - SEE PLUMBING SCHEDULE
12. PROVIDE & INSTALL SCHLUTER STRIP AT TILED CORNERS (INSIDE/ OUTSIDE). REFER TO SHEET A10 FOR SPECS.
13. G.C TO PROVIDE AND INSTALL KICK PLATE. REFER TO HARDWARE SCHEDULE ON SHEET A11.

SYMBOL LEGEND

1 NOTE REFERENCE REFER TO ELEVATION NOTES

WASHROOM ACCESSORIES

TPH	-TOILET PAPER HOLDER (R40), BOBRICK B-2890
GB	-GRAB BAR (R50), GAMCO 150-S x36" -GRAB BAR (R51), GAMCO 150-S x42" -GRAB BAR (R52), GAMCO 150-S x18"
M	-MIRROR (R20), CHANNEL FRAME 18"x36" - GAMCO C-18x36
SRGB	-SEMI-RECESSED GARBAGE BIN (N82) - BOBRICK B-3961
EHD	-ELECTRIC HAND DRYER (N83) - BRUSHED STAINLESS STEEL - XLERATOR XL-SB
BCT	-BABY CHANGE TABLE (N80), SURFACE MOUNT - KOALA KARE KB200-00
SD	-SOAP DISPENSER (R30), SURFACE MOUNT - BOBRICK B-4112
V	-VANITY
WC	-WATER CLOSET
CH	-COAT HOOK (R22), HEAVY-DUTY COAK HOOK BOBRICK B-4112
SND	-SANITARY NAPKIN DISPENSER (R60), SURFACE MOUNT BOBRICK B-270

NOTES

1. REFER TO TYPICAL ACCESSORIES DETAILS FOR MOUNTING HEIGHTS AND OTHER SPECIFIC DIMENSIONS.
2. REFER TO TILE PLAN AND FINISHES SCHEDULE ON SHEET A10 FOR FINISHES.
3. G.C SHALL PROVIDE ADDITIONAL SOLID WOOD BLOCKING IN WALL AS NEEDED FOR PROPER INSTALLATION AND STRUCTURAL SUPPORT OF ACCESSORY ITEMS.
4. VERIFY ALL PAPER & SOAP PRODUCTS WITH VENDOR.
5. THE G.C. SHALL VERIFY WITH THE OWNER THAT THE PAPER AND SOAP SUPPLIER IS AVAILABLE FOR ALL REPLENISHMENT PRIOR TO HEALTH INSPECTION

NOTES

1. **DIMENSIONS SHOWN ARE FROM FINISH FACE OF WALL/FLOOR.**
2. **DIMENSION SHOWN ARE PREFERRED DIMENSIONS AND COMPLY WITH THE REQUIREMENTS OF A.D.A.A.G AND A.N.S.I -A117.1 G.C SHALL NOT DEVIATE FROM THESE STANDARDS UNLESS NECESSARY TO COMPLY WITH ADDITIONAL STATE OR LOCAL ACCESSIBILITY REQUIREMENTS.**
3. **REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION**
4. **G.C TO PROVIDE CLEAR CAULKING AT ALL WASHROOM FIXTURES AND TILE INTERSECTIONS.**

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

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3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

TANNER EDWARDS WARD REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

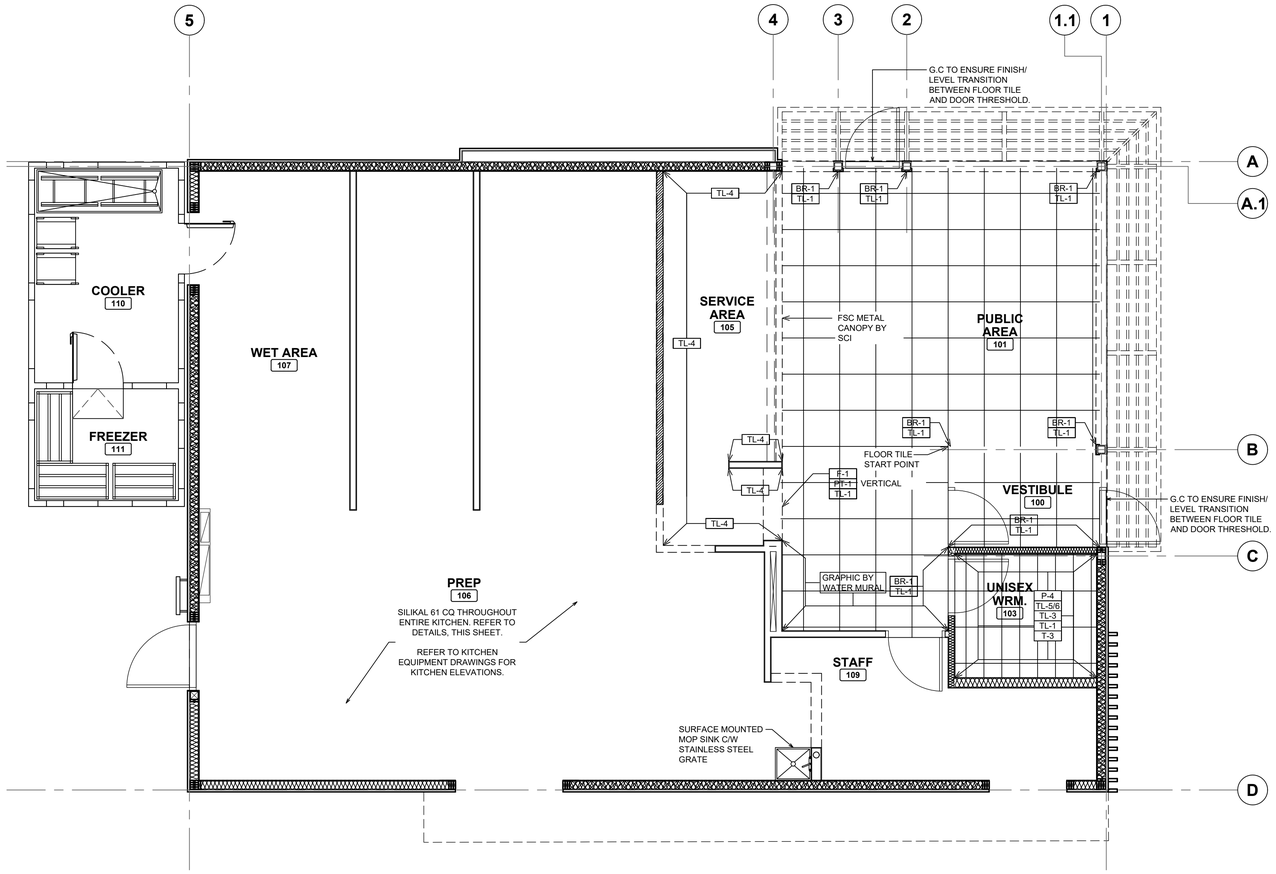
Store Type: US 2112 PROTOTYPE 2112-21

Location: 1517 NC 24-87 CAMERON, NC

Drawing Title: WASHROOM DETAILS

Drawn	Checked
SH	AL
Scale	**Date**
AS NOTED	JUNE 2023
Project No.	**Drawing No.**
C22-129	A9.3

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



1 A10 **TILE PLAN**
SCALE: 1/4"=1'-0"

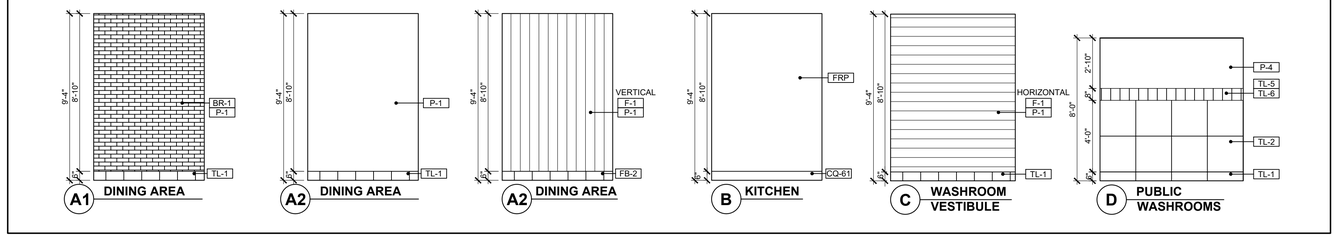
ROOM FINISH SCHEDULE

● SEE INTERIOR ELEVATIONS FOR LOCATION AND TYPE OF INTERIOR FINISHES.

ROOM		FLOORS						WALLS														CEILINGS				
		TILE				BASE																				
NO.	NAME	T-2	T-3	CQ-61		TL-1	CQ-61	BR-1	PT-1	PT-2	PT-3	F-1	TL-1	TL-2	TL-3	TL-4	TL-5	TL-6	P-1	P-4	WD-AC	FRP	P-1	ACT-1G	ACT-2G	HEIGHT	
100	VESTIBULE	●				●																	●			9'-4"	
101	PUBLIC AREA	●				●		●	●				●											●		9'-4"	
103	UNISEX WASHROOM		●			●							●	●			●	●		●			●			8'-0"	
105	SERVICE AREA			●			●									●							●			9'-4"	
106	PREP			●			●															●			●	9'-4"	
107	WET AREA			●			●															●			●	9'-4"	
109	STAFF			●			●															●			●	9'-4"	
110	COOLER			●			●																				

NOTES

1. GENERAL CONTRACTOR TO PROVIDE MINIMUM 1 CASE OF EACH SET OF FLOOR TILES, WALL TILES & CEILING TILES AND 1 GALLON OF EACH PAINT COLOUR FOR FUTURE USE. THESE MATERIALS ARE TO BE LEFT ON SITE WITH THE RESTAURANT OWNER.
2. PROVIDE & INSTALL SCHLUTER STRIP (SHL-2) AT OUTSIDE / WALL TILE CORNERS WITHIN SERVICE AREA.
3. PROVIDE & INSTALL SCHLUTER STRIP (SHL-3) AT ALL FLOOR TILE TRANSITION THROUGH OUT THE ENTIRE STORE. REFER TO FINISHING SCHEDULE.
4. PROVIDE & INSTALL SCHLUTER-DILEX-KSN AT LOCATION OF FLOOR TILE AT DELIVERY DOOR. REFER TO POPEYES MASTER SCHEDULE.
5. GENERAL CONTRACTOR TO INSTALL BASE TILE FOR ALL FIXED BOOTH SEATING. G.C TO USE LATICRETE - LATAPOXY 300 ADHESIVE TO ADHERE BASE TILE TO BASE BOX BOOTH SEATING AND FOR USE WITH BASE TILE ON FRONT COUNTER. CONTACT: 1-800-243-4788 EXT. 235. WEBSITE: WWW.LATICRETE.COM
6. COVE BASE TILES FOR MILLWORK CABINETS TO BE INSTALLED BY MILLWORK VENDOR.
7. G.C. TO SEAL ALL MILLWORK / MILLWORK AND GWB / MILLWORK JOINTS WITH CLEAR SILICONE CAULKING AFTER COMPLETION OF PAINTING, WAINSCOTING AND FINAL CLEANING.
8. ALL BUTT JOINTS IN THE MILLWORK (VERTICAL AND HORIZONTAL) WILL BE CAULKED WILL CLEAR SILICONE CAULKING BY MILLWORK COMPANY.



2 A10 **TYPICAL INTERIOR ELEVATIONS**
SCALE: 1/4"=1'-0"

ISSUE TABLE

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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo
THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL. 214-343-9400 www.dimensionpg.com

Project
LOUISIANA KITCHEN 19 72
POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
TILE PLAN AND FINISHING SCHEDULE

Drawn	Checked
SH	AL
Scale	**Date**
1/4"=1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	A10

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

DOOR AND FRAME SCHEDULE

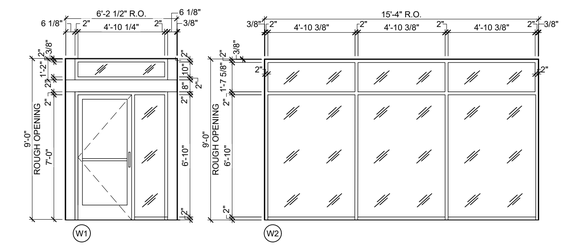
DOORS						FRAMES			HARDWARE	REMARKS
NO.	SIZE	R.O SIZE	TYPE	MAT.	FIN.	TYPE	MAT.	FIN.	SET NO.	
101	3'-0" x 7'-0" x 1-3/4"	--	A	AL	POWDER COATED BLACK	F1	AL	POWDER COATED BLACK	02	HARDWARE SET BY STOREFRONT COMPANY.(STORE FRONT COMPANY TO PROVIDE AND INSTALL THE PADDLES / LEVERS AND ENSURE NO THUMB TURNS TO BE PROVIDED). ARCHITECT TO REVIEW SHOP DRAWINGS FOR HARDWARE INSTALLED AT FRONT ENTRANCE DOORS AND ENSURE ALL HARDWARE IS ADA COMPLIANT.
101a	3'-0" x 7'-0" x 1-3/4"	--	A	AL	POWDER COATED BLACK	F1	AL	POWDER COATED BLACK	02	
101b	3'-0" x 7'-0" x 1-3/4"	--	A	AL	POWDER COATED BLACK	F1	AL	POWDER COATED BLACK	02	
102	N/A									
103	3'-0" x 6'-8" x 1-3/4"	DOOR WIDTH + 1-1/4" x DOOR HEIGHT + 5/8"	D	HM	--	F2	HM KNOCKDOWN	--	03	UNDERCUT DOOR 5/8". DOORS / FRAMES TO BE PAINTED AS PER POPEYES DECOR PACKAGE. TRANSITION TO OCCUR AT DOOR JAMB.
104	N/A									
105	3'-4" x 6'-8" x 1-3/4"	DOOR WIDTH + 1-1/4" x DOOR HEIGHT + 5/8"	C	HM	--	-	--	--	04	FRAMELESS DOOR.
106	3'-6" x 7'-0" x 1-3/4"	DOOR WIDTH + 1-1/4" x DOOR HEIGHT + 5/8"	B	HM/N	--	F2	HM/N	--	01	16 GA. GALVANIZED LOCKNET SECURITY DOOR.

ABBREVIATIONS

AL	ALUMINUM	HM	HOLLOW METAL	PLY	PLYWOOD	P.LAM	PLASTIC LAMINATE
GL	GLASS	HMIN	HOLLOW METAL INSULATED	PM	PREFINISHED METAL	MILLW'K	MILLWORK

WD ● WOOD PROVIDED BY DOOR MANUFACTURER

EXTERIOR WINDOW SCHEDULE

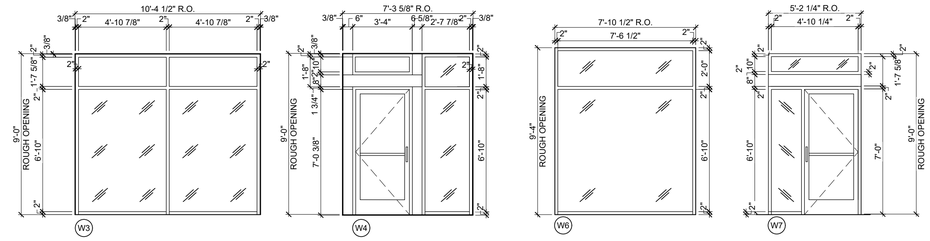


WINDOW TYPE
PRIMARY MANUFACTURER
- KAWNEER
- KAWNEER TRIFAB VERSAGLAZE 451T THERMALLY BROKEN 2"x4 ½"
- COLOUR: BLACK ANODIZED
- CLASS 2, .0004 ANODIZING
- LOW 'E' INSULATED

ALL GLAZING IN DOORS TO BE SAFETY HEAT TREATED.
REFER TO SP4 FOR APPROVED ALTERNATE MANUFACTURERS
ALL CAULKING TO MATCH FRAMES (TREMCO DYMONIC)
MAXIMUM U-FACTOR OF FIXED GLAZING ASSEMBLY (GLASS UNIT & ALUMINUM FRAMING) -0.38

GLAZING TYPE:
-(GL-1) 1" INSULATED GLAZING PANEL, CLEAR GLASS
- (GL-2) 1" INSULATED GLAZING PANEL, CLEAR TEMPERED / SAFETY GLASS

REFER TO SPECIFICATION SECTION 08 8000
MAX. SHGC (GLASS ONLY) - 0.40



DOOR HARDWARE SCHEDULE

HARDWARE SET NO. 1: (LOCKNET SERIES DOOR PACKAGE)

DOOR FRAME & HARDWARE INCLUDING ONE- WAY VISION PANEL W/ FLAP, CONTINUOUS HINGE, HEAVY DUTY CLOSER AND PANIC HARDWARE ORDERED THROUGH
LOCKNET (800) 887-4307
1 EA. 3'-6" X 7'-0" X 1.75" X 16 GA. X G60 GALVANIZED LOCKNET SECURITY DOOR
1 EA. 3'-6" X 7'-0" X (5-7/8" OR 6-3/4") JAMB DEPTH X 14 GA. X G60 GALVANIZED X WELDED IN PLACE EOA X 1/4" X 2-1/2" HR PLATE SPREADER BAR X 4-SIDED WELDED DOOR FRAME X FACTORY FINISH PAINTED
8 EA. 3/4"Ø COVER PLUGS (BLACK)
1 EA. AIR LOUVER VLF-IG-PVC-1/2" LEXAN - 9" X 9" GALVANIZED SECURITY VISION
1 EA. PEMKO CDHFM82SLF-HD FULL MORTISE CONT. GEARED ALUM. HINGE X 628
1 EA. SECURITY LATCH GUARD X FULL LENGTH X TORX SD/ST SMS X FACTORY FINISH
1 EA. ARROW 1250S X EO X AL EXIT DEVICE
1 EA. DORMA 8616 X DS X FCOV S SN1 X AL CLOSER
1 EA. ROCKWOOD 24" X 40" X .050 X US32D X SECURITY TORX SD/ST SMS ARMOR PLATE ON PUSH SIDE
1 EA. PEMKO 171A X 42" X DOUBLE NOTCH CUT ENDS X THRESHOLD
1 EA. PEMKO 346C X 46" AL OVERHEAD RAIN DRIP X SECURITY TORX SD/ST SMS
1 EA. PEMKO 221APK X 42" AL COMBINATION KICK PLAT & DOOR SHOE X TORX
1 SET. P8512 X CONT. PERIMETER WEATHER SEAL (BLACK)
1 EA. INSTALLATION KIT (PER LOCKNET)
1 EA. CARDBOARD PACKAGING (2 PIECE BOX)
1 EA. DELIVERED ON FULL LENGTH WOODEN PALLET

HARDWARE SET NO. 2: (BY YKK AP AMERICA INC.)

DOORS AND FRAMES

QTY	PART #	FINISH	MODEL	DESCRIPTION
1	49111DOR	YB5N	YKK AP #20D	3' x 7' O/P OFFSET PIVOTS, HBR RH
1	92115FTR	YB5N	2" x 4-1/2"	3' x 7' O/P, FRAME, W/TRANSOM, RH
1	49114DOP	YB5N	20D	6' x 7' O/P, OFFSET PIVOTS, HBR PR
1	92118FTP	YB5N	2" x 4-1/2"	6' x 7' O/P, FRAME, W/TRANSOM, PR
3	P61205	335		SM CLOSER W/BACK CHECK NHO PRES
3	H1104SD	335		PUSH/PULL 1" DIAM. TYPE SC (9" CTC)
3	H7107	YB5N	3-0	BOTTOM RAIL WEATHERSTRIP
3	SD101	YB5N		10" BOTTOM RAIL UP TO 3'
1	V50			DETEX PANIC HARDWARE W/ DOGGING FEATURE

STOCK LENGTHS

QTY	PART #	FINISH	LENGTH	DESCRIPTION
11	BE91503	YB5N	24-0	HEAD / JAMB / VERTICAL
3	BE91512	YB5N	24-0	SHALLOW POCKET FILLER
2	BE91506	YB5N	24-0	HORIZONTAL
2	BE91513	YB5N	24-0	4-1/2" SIDELITE BASE
4	E91015	YB5N	24-0	GLASS STOP
2	BE91510	YB5N	24-0	SILL FLASHING

ACCESSORIES

QTY	PART #	PKG	DESCRIPTION
1	E20020	50P/B	SETTING BLOCK
1	E20047	50P/B	WATER DEFLECTOR
1	E20154	50P/B	"W" SIDE BLOCK FOR DEEP POCKET
1	E10168	20P/B	END DAM
2	E20052	500P/B	GLAZING GASKET
2	PC1220	100P/B	#12 x 1-1/4" PHSMS TYPE AB
1	E11015	50P/B	SHEAR BLOCK
1	PC1028	100P/B	#10 x 1-3/4" PHSMS TYPE AB

HARDWARE SET NO. 3:

1-1/2 PR. HINGES	McKINNEY	BEARING HINGES,4-1/2" X 4-1/2" US26D
1 EA. LATCHSET W/LOCK	SCHLAGE	SATURN X US26D
1 EA. FLOOR STOP	BALDWIN	#4000 FLOOR MOUNT
1 EA. KICKPLATE	BURNS	8" X 30" X 8" 16GA. US628
1 EA. COAT HOOK	JACKNOB	#400 WITH RUBBER BUMPER
1 EA. CLOSER	LCN	1460 ALUMINUM CLOSER

FOLLOWING ITEMS PROVIDED & INSTALLED BY G.C.:

1 EA. SIGN	HANDICAP ACCESSIBILITY (ADA)
1 EA. SIGN	AS REQD: DOOR #103 "MEN" 7" X 2" DOOR #104 "WOMEN" 7" X 2"

HARDWARE SET NO. 4:

1-1/2 PR. HINGES	McKINNEY	BEARING HINGES,4-1/2" X 4-1/2" US26D
1 EA. KICKPLATE	BURNS	8" X 30" X 8" 16GA. US26D
1 EA. LATCHSET W/LOCK	SCHLAGE	SATURN X US26D
1 EA. 6"x6" VIEWING WINDOW		
1 EA. CLOSER	LCN	1460 ALUMINUM CLOSER

HARDWARE SET NO. 5:

1-1/2 PR. HINGES	McKINNEY	BEARING HINGES,4-1/2" X 4-1/2" US26D
1 EA. LATCHSET W/LOCK	SCHLAGE	SATURN X US26D
1 EA. CLOSER	LCN	1460 ALUMINUM CLOSER

HARDWARE SCHEDULE NOTES:

1. ALL HARDWARE IS NEW UNLESS OTHERWISE NOTED.
2. ALL DOOR LOCKSETS / LATCHES SHALL BE "LEVER TYPE" IN COMPLIANCE WITH A.D.A.A.G. SECTION 4.1.3.9).
3. ALL DOOR HANDLES, PULLS, LATCHES, LOCKS, AND/OR OTHER OPERATING DEVICES SHALL BE INSTALLED BETWEEN 34" MINIMUM AND 48" MAXIMUM ABOVE FINISHED FLOOR.
4. ALL DOOR THRESHOLDS SHALL BE IN 1/2" HIGH MAXIMUM.
5. ALL DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3 INCHES FROM THE LATCH, MEASURED TO THE LEAD EDGE (A.D.A.A.G. 4.13.10).

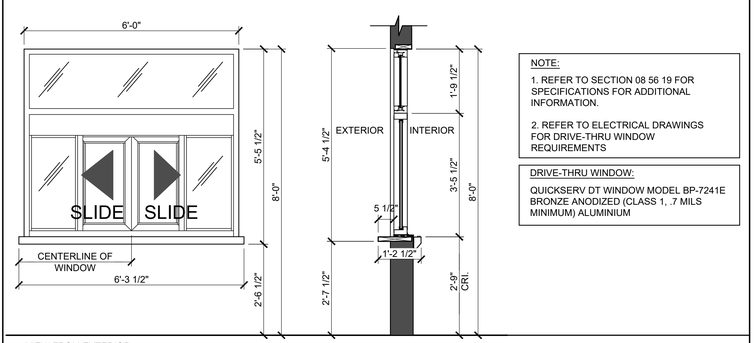
WINDOW SCHEDULE

MARK	R.O. SIZE	CONST.	GLASS TYPE	HEAD HEIGHT	REMARKS
W1	6'-9 1/4" x 9'-0"	ALUM	GL-1	9'-2"	BLACK ANODIZED (CLASS I, 0.7 MILS MINIMUM) FINISH
W2	11'-8 1/8" x 9'-0"	ALUM	GL-1 / GL-2	9'-2"	BLACK ANODIZED (CLASS I, 0.7 MILS MINIMUM) FINISH
W3	17'-6" x 9'-0"	ALUM	GL-1	9'-2"	BLACK ANODIZED (CLASS I, 0.7 MILS MINIMUM) FINISH
W4	15'-6 1/4" x 9'-0"	ALUM	GL-1	9'-2"	BLACK ANODIZED (CLASS I, 0.7 MILS MINIMUM) FINISH
W5	6'-0" x 5'-5 1/2"	ALUM	GL-1 / GL-2	9'-2"	BLACK ANODIZED (CLASS I, 0.7 MILS MINIMUM) FINISH
W6	6'-0" x 5'-5 1/2"	ALUM	GL-1 / GL-2	9'-2"	BLACK ANODIZED (CLASS I, 0.7 MILS MINIMUM) FINISH
W7	2'-0 3/4" x 2'-0 3/4"	ALUM	GL-1	9'-2"	BLACK ANODIZED (CLASS I, 0.7 MILS MINIMUM) FINISH
W8	5'-2 1/4" x 9'-0"	ALUM	GL-1 / GL-2	9'-2"	BLACK ANODIZED (CLASS I, 0.7 MILS MINIMUM) FINISH
W9	7'-5 1/2" x 9'-0"	ALUM	GL-1 / GL-2	9'-2"	BLACK ANODIZED (CLASS I, 0.7 MILS MINIMUM) FINISH

WINDOW SCHEDULE NOTES:

1. REFER TO WINDOW ELEVATIONS FOR SPECIFIC DIMENSIONS AND ADDITIONAL DETAIL INFORMATION.
2. WINDOW CONTRACTOR SHALL FIELD VERIFY ALL ROUGH OPENINGS FOR ALL WINDOWS PRIOR TO PREPARATION OF SHOP DRAWINGS.

DRIVE-THRU WINDOW SCHEDULE



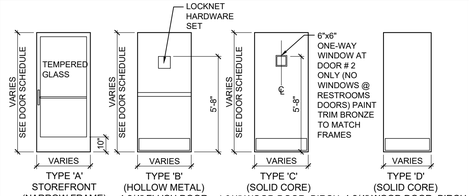
VIEW FROM EXTERIOR

W5 W6 **ELEVATION**
SCALE: 1/2" = 1'-0"

NOTE:
1. REFER TO SECTION 08 56 19 FOR SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. REFER TO ELECTRICAL DRAWINGS FOR DRIVE-THRU WINDOW REQUIREMENTS

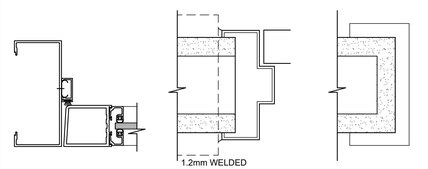
DRIVE-THRU WINDOW:
QUICKSERV DT WINDOW MODEL BP-7241E BRONZE ANODIZED (CLASS 1, .7 MILS MINIMUM) ALUMINIUM

DOOR TYPES



GENERAL NOTE
ALL DOORS TO BE SUPPLIED BY G.C. UNLESS OTHERWISE NOTED.

DOOR FRAME TYPES



ISSUE TABLE

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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KING REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE•CIVIL ENGINEERING•MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

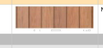
Location
1517 NC 24-87
CAMERON, NC

Drawing Title
DOOR AND WINDOW SCHEDULES

Drawn	Checked
SH	AL
Scale	**Date**
AS NOTED	JUNE 2023
Project No.	**Drawing No.**
C22-129	A11

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

FINISHES

	TAG	MATERIAL	APPLICATION	SOURCE	PRODUCT	COLOR	DIMENSION	REF IMAGE	IMAGE TYPE	VENDOR
1	**EXTERIOR**									
2	EF-1	Exterior Wood Siding	Front Facade Exterior Walls	Nichiha Fiber Cement	Vintage Wood AWP 3030	Cedar	17-7/8" H x 119-5/16" L		Nola Makers	Matt Stephenson (o)7707890228 popeyes@nichiha.com
3	BRICK									
4	EB-1									
5	EB-1	Brick (Clip System)	Front of Building	Nichiha Fiber Cement	Vintage Brick	White Wash Prefinished	7 3/8" x 2 1/2" x 3/4"		Nola Makers	Matt Stephenson (o)7707890228 popeyes@nichiha.com
6	EB-2									
7	NOTE:	Reference image for mortar spacing for brick installation.	Grout product selection to be determined by GC for proper application of material.	Grout color selection to be similar to Laticrete 24 Natural Grey						
8	EB-2	Brick (Clip System)	Accent Tower Brick	Nichiha Fiber Cement	Vintage Brick	Alexandria Buff	7 3/8" x 2 1/2" x 3/4"		Nola Makers	Matt Stephenson (o)7707890228 popeyes@nichiha.com
9	EB-2	Thin Brick	Accent Tower Brick	Creative Materials Corporation	Thin Brick	Flagstaff	8-1/8" x 2-1/16" x 5/8"		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyesfiles@creativematerialscorp.com
10	EB-2	Face Brick	Accent Tower Brick	Glen-Gery	Cherry Creek Williamsburg	Red	8-5/8" x 2-13/16" x 3-1/8"		Nola Makers	
11	EB-2	Thin Brick	Accent Tower Brick	Design and Direct Source	Sand Urban Series	Flagstaff	2" x 8"		Nola Makers	
12	PAINT									
13	EP-1									
14	EP-1	Exterior Paint	Main Wall Surface, Rear Door	Benjamin Moore	Ultra Spec Ext Low Lustre (N455)	OC-125 Moonlight White			Nola Makers	Rodger Lippman (o): 848-702-0239 rodger.llopman@benjaminmoore.com
15	EP-1	Exterior Paint	Main Wall Surface, Rear Door	Sherwin Williams	A-100 Exterior Latex Satin	SW-7551 Greek Villa			Nola Makers	Glenn Remler (o): 954-547-1217 glenn.j.remler@sherwin.com
16	EP-2									
17	EP-2	Exterior Paint	Brick Tower Parapet	Benjamin Moore	Ultra Spec Ext Low Lustre (N455)	2105-20 Root Beer Candy			Nola Makers	Rodger Lippman (o): 848-702-0239 rodger.llopman@benjaminmoore.com

	TAG	MATERIAL	APPLICATION	SOURCE	PRODUCT	COLOR	DIMENSION	REF IMAGE	IMAGE TYPE	VENDOR
18	EP-2	Exterior Paint	Brick Tower Parapet	Sherwin Williams	A-100 Exterior Latex Satin	SW-6062 Rugged Brown			Nola Makers	Glenn Remler (o): 954-547-1217 glenn.j.remler@sherwin.com
19	EP-3									
20	EP-3	Exterior Paint	Dumpster Walls	Benjamin Moore	Ultra Spec Ext Low Lustre (N455)	HC-170 Stonington Grey			Nola Makers	Rodger Lippman (o): 848-702-0239 rodger.llopman@benjaminmoore.com
21	EP-3	Exterior Paint	Dumpster Walls	Sherwin Williams	A-100 Exterior Latex Satin	SW-7657 Tinsmith			Nola Makers	Glenn Remler (o): 954-547-1217 glenn.j.remler@sherwin.com
22	EP-4									
23	EP-4	Metal Paint	Bollards	Benjamin Moore	Corotech High Solids Rapid Dry Enamel	Safety Yellow			Nola Makers	Rodger Lippman (o): 848-702-0239 rodger.llopman@benjaminmoore.com
24	EP-4	Metal Paint	Bollards	Sherwin Williams	Industrial Enamel HS	Safety Yellow			Nola Makers	Glenn Remler (o): 954-547-1217 glenn.j.remler@sherwin.com
25	EP-5									
26	EP-5	Metal Paint	Dumpster Gates and Pylon Pole	Benjamin Moore	Corotech High Solids Rapid Dry Enamel	Factory Finish Black			Nola Makers	Rodger Lippman (o): 848-702-0239 rodger.llopman@benjaminmoore.com
27	EP-5	Metal Paint	Dumpster Gates and Pylon Pole	Sherwin Williams	Industrial Enamel HS	SW-6991 Black Magic			Nola Makers	Glenn Remler (o): 954-547-1217 glenn.j.remler@sherwin.com
28	EP-6									
29	EP-6	Anti Graffitti Coat	Exterior Walls	Benjamin Moore	Aliphatic Acrylic Urethane - Gloss	V500-00 Clear			Nola Makers	Rodger Lippman (o): 848-702-0239 rodger.llopman@benjaminmoore.com

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4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KING
REGISTERED
SEAL
15704
ARCHITECT
NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE•CIVIL ENGINEERING•MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 1972
POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
FINISH SCHEDULE

Drawn	Checked
Scale: AS NOTED	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A12.0

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

	TAG	MATERIAL	APPLICATION	SOURCE	PRODUCT	COLOR	DIMENSION	REF IMAGE	IMAGE TYPE	VENDOR
30	EP-6	Anti Graffiti Coat	Exterior Walls	Sherwin Williams	2K Water Based Urethane - Gloss	B65-190/B65V190			Nola Makers	Glenn Remler (c): 954-547-1217 glenn.j.remler@sherwin.com
31										
32	MISC									
33	C-1	Canopy - Metal	Drive Thru Window Canopy	Provided by Manufacturer	Provided by Manufacturer	Orange. Pantone #3564 C			Nola Makers	Provided by Manufacturer
34	C-2	Canopy - Metal	Building Canopies	Provided by Manufacturer	Provided by Manufacturer	Teal. Pantone #326 C			Nola Makers	Provided by Manufacturer
35	S-1	Shutters - Poppy	Exterior Walls Rear of Building	Provided by Manufacturer	Provided by Manufacturer	Provided by Manufacturer			Nola Makers	Provided by Manufacturer
36	DP-1	Door	Main Entrance Doors	Provided by Manufacturer	Provided by Manufacturer	Orange. Pantone #3564 C			Nola Makers	Provided by Manufacturer
37										
38	**INTERIOR**									
39	CEILING									
40	NOTE:	Armstrong products can now be								
41	ACT-1G	Acoustic Ceiling Tile	Dining Room	Armstrong	Ultima	Color: White Finish: Fine Texture Grid: 9/16" Beveled Tegular	24x48"		Nola Makers	Cheryl B. Smith (c) 252-214-4426 cbsmith@armstrongceilings.com
42	ACT-2G	Acoustic Ceiling Tile	Back of House	GC/USG Interiors	Sheetrock Bland Climaplus Vinyl	Color: 3270 White Finish: Smooth	24X48X1/2		Nola Makers	Cheryl B. Smith (c) 252-214-4426 cbsmith@armstrongceilings.com
43	FLOORING									
44	TL-1									
45	TL-1	Base Tile	Wall Base	Creative Materials Corporation	Business - Slate 2.0	Color: Matte. Grout: Ultracolor Plus Iron #107	6X24. Thickness: 10.5mm		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyesfile@creativematerialscorp.com
46	TL-1	Base Tile	Wall Base	Dalltile		Color: Ash Grey. Grout: Malpei Iron #107	6X24		Nola Makers	Alexandra Stefan (o): 305-477-8216 (c): 305-975-0689 E-Mail: Alexandra.stefan@dalltile.com
47	TL-1	Base Tile	Wall Base	Emser Tile	Louisiana	Color: Slate Elevate. Grout: Laticrete Dusty Grey	6X24		Nola Makers	Christina Dunbar / Sandra Torres Holland (o): 713-462-2411 popeyes@emser.com

	TAG	MATERIAL	APPLICATION	SOURCE	PRODUCT	COLOR	DIMENSION	REF IMAGE	IMAGE TYPE	VENDOR
48	TL-1	Base Tile	Wall Base	Bedrosian Tile	Moderna	Color: Grey. Grout: Laticrete Dusty Grey	6X24		Nola Makers	Tamara Ramsey (o): 469-560-6133 popeyes@bedrosians.com
49	TL-2									
50	TL-2	Tile	Dining Room Floor and Restroom Walls	Creative Materials Corporation	Business - Slate 2.0	Finish: Natural/Clefted Body: Porcelain Glazed Color Body Grout Color: Ultracolor Plus Iron #107	24X24. Thickness: 10.5mm		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyesfile@creativematerialscorp.com
51	TL-2	Tile	Dining Room Floor and Restroom Walls	Dalltile		Color: Ash Grey. Grout: Malpei Iron #107	24X24		Nola Makers	Alexandra Stefan (o): 305-477-8216 (c): 305-975-0689 E-Mail: Alexandra.stefan@dalltile.com
52	TL-2	Tile	Dining Room Floor and Restroom Walls	Emser Tile	Louisiana	Color: Slate Elevate. Grout: Laticrete Dusty Grey	24X24		Nola Makers	Christina Dunbar / Sandra Torres Holland (o): 713-462-2411 popeyes@emser.com
53	TL-2	Tile	Dining Room Floor and Restroom Walls	Bedrosian Tile	Moderna	Color: Grey. Grout: Laticrete Dusty Grey	24X24		Nola Makers	Tamara Ramsey (o): 469-560-6133 popeyes@bedrosians.com
54	TL-3									
55	TL-3	Tile	Restroom Floor Tile	Creative Materials Corporation	Business - Slate 2.0	Finish: Natural/Clefted Body: Porcelain Glazed Color Body Grout Color: Ultracolor Plus Iron #107	12X24. Thickness: 10.5mm		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyesfile@creativematerialscorp.com
56	TL-3	Tile	Restroom Floor Tile	Dalltile		Color: Ash Grey. Grout: Malpei Iron #107	12X24		Nola Makers	Alexandra Stefan (o): 305-477-8216 (c): 305-975-0689 E-Mail: Alexandra.stefan@dalltile.com
57	TL-3	Tile	Restroom Floor Tile	Emser Tile	Louisiana	Color: Slate Elevate. Grout: Laticrete Dusty Grey	12X24		Nola Makers	Christina Dunbar / Sandra Torres Holland (o): 713-462-2411 popeyes@emser.com
58	TL-3	Tile	Restroom Floor Tile	Bedrosian Tile	Moderna	Color: Grey. Grout: Laticrete Dusty Grey	12X24		Nola Makers	Tamara Ramsey (o): 469-560-6133 popeyes@bedrosians.com
59	TL-4									

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4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

TANNER EDWARDS KING REGISTERED SCALE 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP

ARCHITECTURE•CIVIL ENGINEERING•MEP ENGINEERING

10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 1972

POPEYES

Store Type

US 2112 PROTOTYPE
2112-21

Location

1517 NC 24-87
CAMERON, NC

Drawing Title

FINISH SCHEDULE

Drawn	Checked
Scale: AS NOTED	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A12.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

	TAG	MATERIAL	APPLICATION	SOURCE	PRODUCT	COLOR	DIMENSION	REF IMAGE	IMAGE TYPE	VENDOR
60	TL-4	Wall Tile	Front Service Counter Walls	Creative Materials Corporation	Subway Tile / Painted Brick	Color: Omni - White Ice Finish: Matte Grout Color: Ultracolor Plus Rain #101	3"X12". Thickness: 6 mm.		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyestile@creativematerialscorp.com
61	TL-4	Wall Tile	Front Service Counter Walls	Daltile	National Account	Color: Color Wheel N524 White Grout: Malpe Rain #101	3" x 12"		Nola Makers	Alexandra Stefan (o): 305-477-8216 (c): 305-975-0689 E-Mail: Alexandra.stefan@daltile.com
62	TL-4	Wall Tile	Front Service Counter Walls	Emser Tile	Catch	Color: Ice Grout: Laticrete Smoke Grey	3" x 12"		Nola Makers	Christina Dunbar / Sandra Torres Holland (o): 713-462-2411 popeyes@emser.com
63	TL-4	Wall Tile	Front Service Counter Walls	Bedrosian Tile	Traditions	Color: White Grout: Laticrete Smoke Grey	3" x 12"		Nola Makers	Tamara Ramsey (o): 469-560-6133 popeyes@bedrosians.com
64	TL-5									
65	TL-5	Wall Tile	Restroom Accent Band - Blank Spaces	Creative Materials Corporation	Boon and Beaming	Color: White Finish: Matte Grout Color: Popeye's Custom Color	4.25"x8.5"		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyestile@creativematerialscorp.com
66	TL-5	Wall Tile	Restroom Accent Band - Blank Spaces	Daltile		Color: Arctic White 0790 Finish: Matte Grout Color: Popeye's Custom Color	4x8		Nola Makers	Alexandra Stefan (o): 305-477-8216 (c): 305-975-0689 E-Mail: Alexandra.stefan@daltile.com
67	TL-5	Wall Tile	Restroom Accent Band - Blank Spaces	Emser Tile	Select	Color: White Finish: Matte Grout Color: Popeye's Custom Color	4x8		Nola Makers	Christina Dunbar / Sandra Torres Holland (o): 713-462-2411 popeyes@emser.com
68	TL-5	Wall Tile	Restroom Accent Band - Blank Spaces	Bedrosian Tile					Nola Makers	Tamara Ramsey (o): 469-560-6133 popeyes@bedrosians.com
69	TL-6									
70	TL-6	Wall Tile	Restroom Accent Band - Teal Letters	Creative Materials Corporation	Custom Popeye's Letter Logo Tile Sets	Color: White Finish: Matte Lettering Font: Chicken Sans Grout And Letters To Match Color: BM OC-669 "Oceanic Teal"	4.25"x8.5"		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyestile@creativematerialscorp.com
71	TL-6	Wall Tile	Restroom Accent Band - Teal Letters	Daltile					Nola Makers	Alexandra Stefan (o): 305-477-8216 (c): 305-975-0689 E-Mail: Alexandra.stefan@daltile.com
72	TL-6	Wall Tile	Restroom Accent Band - Teal Letters	Emser Tile	Select	Color: White Finish: Matte Lettering Font: Chicken Sans Grout And Letters To Match Color: BM OC-669 "Oceanic Teal"	4x8		Nola Makers	Christina Dunbar / Sandra Torres Holland (o): 713-462-2411 popeyes@emser.com
73	TL-6	Wall Tile	Restroom Accent Band - Teal Letters	Bedrosian Tile					Nola Makers	Tamara Ramsey (o): 469-560-6133 popeyes@bedrosians.com
74	QT-1									

	TAG	MATERIAL	APPLICATION	SOURCE	PRODUCT	COLOR	DIMENSION	REF IMAGE	IMAGE TYPE	VENDOR
75	QT-1	Alternate: Quarry Tile	Back of House Floors	Creative Materials Corporation	Quarry Tile	Color: Grey Finish: Smooth To Be Used With Matching Epoxy Grout	6x6		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyestile@creativematerialscorp.com
76	QT-1	Alternate: Quarry Tile	Back of House Floors	Daltile		Color: OT03 Ashen Gray	6x6		Nola Makers	Alexandra Stefan (o): 305-477-8216 (c): 305-975-0689 E-Mail: Alexandra.stefan@daltile.com
77	QT-1	Alternate: Quarry Tile	Back of House Floors	Emser Tile	E-Quarry	Color: Smoke Finish: Smooth Grout: Laticrete Sandstone	6x6		Nola Makers	Christina Dunbar / Sandra Torres Holland (o): 713-462-2411 popeyes@emser.com
78	QT-1	Alternate: Quarry Tile	Back of House Floors	Bedrosian Tile	Mason	Color: Morning Fog Grout: Laticrete Sandstone	6x6		Nola Makers	Tamara Ramsey (o): 469-560-6133 popeyes@bedrosians.com
79	QT-2									
80	QT-2	Alternate: Quarry Tile Base	Back of House Base	Creative Materials Corporation	Quarry Tile	Color: Grey Finish: Smooth To Be Used With Matching Epoxy Grout	6x6		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyestile@creativematerialscorp.com
81	QT-2	Alternate: Quarry Tile Base	Back of House Base	Daltile		Color: OT03 Ashen Gray	6x6		Nola Makers	Alexandra Stefan (o): 305-477-8216 (c): 305-975-0689 E-Mail: Alexandra.stefan@daltile.com
82	QT-2	Alternate: Quarry Tile Base	Back of House Base	Emser Tile	E-Quarry	Color: Smoke Finish: Smooth Grout: Laticrete Sandstone	6x6		Nola Makers	Christina Dunbar / Sandra Torres Holland (o): 713-462-2411 popeyes@emser.com
83	QT-2	Alternate: Quarry Tile Base	Back of House Base	Bedrosian Tile	Mason	Color: Morning Fog Grout: Laticrete Sandstone	6x6		Nola Makers	Tamara Ramsey (o): 469-560-6133 popeyes@bedrosians.com
84	E-1	Primary: Resin Flooring	Back of House Floors	Silikal	Acrylic Resin	Color: Quartz Blend #4 Integral Cove Base			Nola Makers	Mark Feldman (c) 775-772-2797 (o) 775-850-1404 mfeldmsn@silikalamerica.com
85	BRICK									
86	BR-1									
87	BR-1	Brick (Clip System)	Dining Room Accent Walls	Nichiha Fiber Cement	Vintage Brick	White Wash Prefinished	7 3/8" x 2 1/2" x 3/4"		Nola Makers	Matt Stephenson (o)770789.8229 popeyes@nichiha.com
88	PAINT									
89	PT-1									
90	PT-1	Interior Paint	Interior Walls, Beadboard, Brick Walls And Soffits/Ceiling	Benjamin Moore	Ultra Spec 500 Eggshell	OC-068 Distant Gray			Nola Makers	Rodger Lippman (o) 848-702-0239 rodger.lippman@benjaminmoore.com

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

JANNER EDWARDS KNOX REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP

ARCHITECTURE•CIVIL ENGINEERING•MEP ENGINEERING

10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL. 214-343-8400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 1972

POPEYES

Store Type

US 2112 PROTOTYPE
2112-21

Location

1517 NC 24-87
CAMERON, NC

Drawing Title

FINISH SCHEDULE

Drawn	Checked
Scale: AS NOTED	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A12.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

	TAG	MATERIAL	APPLICATION	SOURCE	PRODUCT	COLOR	DIMENSION	REF IMAGE	IMAGE TYPE	VENDOR
91	PT-1	Interior Paint	Interior Walls, Beadboard, Brick Walls And Soffits/Ceiling	Sherwin Williams	Promar 200 Zero VOC Eggshell	SW-7551 Greek Villa			Nola Makers	Glenn Remler (c): 954-547-1217 glenn.j.remler@sherwin.com
92	PT-2									
93	PT-2	Metal Paint	Main Entrance Doors - Interior Frame	Benjamin Moore	Corotech High Solids Rapid Dry Enamel	2133-20 Black Jack			Nola Makers	Rodger Lippman (c): 848-702-0239 rodger.lippman@benjaminmoore.com
94	PT-2	Metal Paint	Main Entrance Doors - Interior Frame	Sherwin Williams	Industrial Enamel HS	SW-6991 Black Magic			Nola Makers	Glenn Remler (c): 954-547-1217 glenn.j.remler@sherwin.com
95	PT-3									
96	PT-3	Interior Paint	Orange Brick Accent Wall	Benjamin Moore	Ultra Spec 500 Eggshell	091 Tangerine Melt			Nola Makers	Rodger Lippman (c): 848-702-0239 rodger.lippman@benjaminmoore.com
97	PT-3	Interior Paint	Orange Brick Accent Wall	Sherwin Williams	Promar 200 Zero VOC Eggshell	SW-6886 Invigorate			Nola Makers	Glenn Remler (c): 954-547-1217 glenn.j.remler@sherwin.com
98	PT-4									
99	PT-4	Interior Paint	Restroom Walls	Benjamin Moore	Ultra Spec 500 Eggshell	OC-669 Oceanic Teal			Nola Makers	Rodger Lippman (c): 848-702-0239 rodger.lippman@benjaminmoore.com
100	PT-4	Interior Paint	Restroom Walls	Sherwin Williams	Promar 200 Zero VOC Eggshell	SW-0075 Holiday Turquoise			Nola Makers	Glenn Remler (c): 954-547-1217 glenn.j.remler@sherwin.com
101	PT-5									

	TAG	MATERIAL	APPLICATION	SOURCE	PRODUCT	COLOR	DIMENSION	REF IMAGE	IMAGE TYPE	VENDOR
102	PT-5	Interior Paint	Restroom Door Frame	Benjamin Moore	Ultra Spec 500 Eggshell	1127 Sedona Brown			Nola Makers	Rodger Lippman (c): 848-702-0239 rodger.lippman@benjaminmoore.com
103	PT-5	Interior Paint	Restroom Door Frame	Sherwin Williams	Promar 200 Zero VOC Eggshell	SW-6103 Tea Chest			Nola Makers	Glenn Remler (c): 954-547-1217 glenn.j.remler@sherwin.com
104	MISC									
105	F-1	Beadboard	Restroom Vestibule Accent Walls	GC	Beadboard Paneling	Painted PT-1	4" - Channel Bead 1/8" X 1/8"		Nola Makers	GC
106	WT-1	Wall Tile	Dining Room Accent Walls	Creative Materials Corporation	Motivate	Color: Walnut Finish: Natural	8"X40". 9MM.		Nola Makers	Creative Materials Corporation (o) 1-800-207-2967 Ext. 7797 Popeyestile@creativematerialscorp.com
107										
108	L-1									
109	L-1	Restroom Door Faces	Interior Door Laminate	GC	Laminate	Mocha Modern Cherry - W465EV			Nola Makers	GC
110	L-1	Restroom Door Faces	Interior Door Laminate	Sherwin Williams	Stain Minwax	439 Walnut			Nola Makers	Glenn Remler (c): 954-547-1217 glenn.j.remler@sherwin.com
111	SOLID SURFACES									
112	SS-1	Solid Surface	Front Service Counter Top	Provided by Decor Vendor	HI-MACS	G554 Urban Concrete			Nola Makers	Decor Vindor
113	SS-2	Solid Surface	Front of House Window Sills	GC	HI-MACS	G554 Urban Concrete			Nola Makers	GC
114	W-1	FRP Sheet	Back of House Walls	Marlite	FRP Sheet	Color: P100 - White Finish: Pebble			Nola Makers	
115										

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PROJECT NORTH

JANNER EDWARDS KING REGISTERED SEAL 15704 ARCHITECT NORTH CAROLINA

9.14.2023

Company Logo

THE DIMENSION GROUP

ARCHITECTURE•CIVIL ENGINEERING•MEP ENGINEERING

10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL. 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72

POPEYES

Store Type

US 2112 PROTOTYPE
2112-21

Location

1517 NC 24-87
CAMERON, NC

Drawing Title

FINISH SCHEDULE

Drawn	Checked
Scale: AS NOTED	Date: JUNE 2023
Project No.: C22-129	Drawing No.: A12.3

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

PROJECT SPECIFICATIONS

DIVISION 01 - GENERAL REQUIREMENTS

GENERAL REQUIREMENTS	SECTION 01 01 00

DIVISION 02 - EXISTING CONDITIONS (NOT INCLUDED)

DIVISION 03 - CONCRETE

REINFORCED CONCRETE	SECTION 03 30 00

DIVISION 04 - MASONRY

UNIT MASONRY	SECTION 04 20 00

DIVISION 05 - METALS

DECORATIVE METAL RAILING	SECTION 05 73 00

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

ROUGH CARPENTRY	SECTION 06 10 00
SHEATHING	SECTION 06 16 00
SHOP FABRICATED WOOD TRUSSES	SECTION 06 17 53
FINISH CARPENTRY	SECTION 06 20 00

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

THERMAL INSULATION	SECTION 07 21 00
EXTERIOR INSULATION AND FINISH SYSTEMS	SECTION 07 24 00
FLUID APPLIED MEMBRANE AIR BARRIER	SECTION 07 27 26
EXTRUDED ALUMINUM SIDING	SECTION 07 46 16
MEMBRANE ROOFING	SECTION 07 50 00
SHEET METAL FLASHING AND TRIM	SECTION 07 62 00
GUTTERS AND DOWNSPOUTS	SECTION 07 71 23
FIRESTOPPING	SECTION 07 84 00
JOINT SEALANTS	SECTION 07 92 00

DIVISION 08 - OPENINGS

METAL DOORS AND FRAMES	SECTION 08 11 00
ALUMINUM ENTRANCES AND STOREFRONT WINDOWS	SECTION 08 41 13
PASS-THRU WINDOWS	SECTION 08 56 19
DOOR HARDWARE	SECTION 08 70 00
GLAZING	SECTION 08 80 00

DIVISION 09 - FINISHES

GYPSUM BOARD ASSEMBLIES	SECTION 09 21 00
CERAMIC TILING	SECTION 09 30 13
ACOUSTIC TILE CEILINGS	SECTION 09 51 23
FIBERGLASS REINFORCED PANELS	SECTION 09 77 50
PAINTING	SECTION 09 91 00

DIVISION 10 - SPECIALTIES

SIGNAGE	SECTION 10 14 23
WALL PROTECTION	SECTION 10 26 00
TOILET ACCESSORIES	SECTION 10 28 00
FIRE PROTECTION SPECIALTIES	SECTION 10 44 00

DIVISION 12 - WINDOW TREATMENTS

ROLL-DOWN BLINDS	SECTION 12 21 23

DIVISION 22 - PLUMBING

SEE MECHANICAL DRAWINGS

DIVISION 23 - HEATING, VENTILATING AND AIR CONDITIONING (HVAC)

SEE MECHANICAL DRAWINGS

DIVISION 26 - ELECTRICAL

SEE ELECTRICAL DRAWINGS

APPROVED SUPPLIERS LIST

BIDDING REQUIREMENTS; INSTRUCTIONS TO BIDDERS

EXAMINATION OF SITE:

ALL BIDDERS SUBMITTING PROPOSALS FOR THIS WORK SHALL FIRST EXAMINE THE SITE (PREMISES) AND ALL SUCH CONDITIONS AS MAY AFFECT THE WORK UNDER THIS CONTRACT. FAILURE TO EXAMINE THE SITE WILL NOT RELIEVE THE SUCCESSFUL BIDDER FROM THE NECESSITY TO PROVIDE WORK THAT MAY BE REQUIRED TO COMPLETE THE WORK WITHOUT ADDITIONAL COST TO THE OWNER.

EXPLANATION TO BIDDERS:

A. NO ORAL EXPLANATION IN REGARD TO THE MEANING OF THE DRAWINGS AND SPECIFICATIONS WILL BE MADE AND NO ORAL INSTRUCTIONS WILL BE GIVEN BEFORE THE AWARD OF THE CONTRACT.

DISCREPANCIES, OMISSIONS, OR DOUBTS AS TO MEANING OF THE DRAWINGS AND SPECIFICATIONS SHALL BE COMMUNICATED IN WRITING TO THE OWNER FOR INTERPRETATION.

IN THE EVENT OF UNRESOLVED DISCREPANCIES OR AMBIGUITY, ARCHITECT OF RECORD WILL BE THE FINAL JUDGE ON PLAN INTERPRETATION. BIDDERS SHOULD ACT PROMPTLY AND ALLOW SUFFICIENT TIME FOR A REPLY TO REACH THEM BEFORE THE SUBMISSION OF THEIR BIDS. ANY REVISION MADE WILL BE IN THE FORM OF AN ADDENDUM TO THE SPECIFICATIONS BEARING THE APPROVAL OF THE OWNER AND WILL BE FORWARDED TO ALL BIDDERS AND ITS RECEIPT BY THE BIDDER SHOULD BE ACKNOWLEDGED BY THE BIDDER BY HIS SIGNATURE AFFIXED THERETO AT THE TIME OF RECEIPT AND VERIFIED BY HIS ACKNOWLEDGMENT ON THE BID FORM.

B. EACH PROSPECTIVE BIDDER WILL BE FURNISHED BIDDING DOCUMENTS TO COMPLETE THEIR BID.

PREPARATION & SUBMISSION OF BIDS:

A. THE BIDDER IS REQUIRED TO BID ON ALL ALTERNATES AND/OR ALLOWANCES OR ON ALL ITEMS CALLED FOR IN THE BID FORM, EXCEPT WHEN ALTERNATES ARE CALLED FOR ON A TYPE OR METHOD OF CONSTRUCTION AS TO WHICH BIDDER DOES NOT DESIRE TO BID, HE MAY INSERT THE WORDS "NO BID" IN THE SPACE PROVIDED FOR PRICES ON SUCH ALTERNATE TYPE OR METHOD OF CONSTRUCTION.

B. BIDS SHALL BE SUBMITTED ON THE FORMS FURNISHED AND SHALL BE SIGNED IN INK. ERASURES OR OTHER CHANGES IN A BID MUST BE EXPLAINED OR NOTED OVER THE SIGNATURE OF THE BIDDER. BIDS CONTAINING ANY CONDITIONS, OMISSIONS, UNEXPLAINED ERASES OR ALTERNATES, OR ITEMS NOT CALLED FOR IN THE PROPOSAL, OR IRREGULARITIES OF ANY KIND, MAY BE REJECTED BY THE OWNER AS BEING INCOMPLETE.

BID ANALYSIS:

BIDS SHALL BE ACCOMPANIED BY ONE (1) SIGNED COPY OF POPEYE'S STANDARD "BID ANALYSIS" FORM. AS INDICATED ON THE FORM, INDIVIDUAL LINE ITEMS ARE TO BE SHOWN AT THE GENERAL CONTRACTOR'S COST WITH NO MARKUP FOR OVERHEAD OR PROFIT BY THE GENERAL CONTRACTOR. HOWEVER, EACH LINE ITEM SHALL INDICATE THE FULL VALUE OF SUBCONTRACTOR WORK INCLUDING SUBCONTRACTOR'S OVERHEAD AND PROFIT. SUPERVISION, OVERHEAD, AND PROFIT FOR THE GENERAL CONTRACTOR'S WORK SHALL BE SHOWN ON THE APPROPRIATE LINES.

AWARD OF CONTRACT:

THE OWNER RESERVES THE RIGHT TO DETERMINE WHAT ARE INFORMALITIES IN THE MAKING, RECEIVING, AND OPENING OF BIDS AND THE AWARDING OF CONTRACTS THEREON, AND THE FURTHER RIGHT TO WAIVE ANY SUCH INFORMALITY WHEN SUCH WAIVER IS, IN THE DISCRETION OF THE OWNER, TO THE BEST INTEREST, ALSO. TO ACCEPT ANY ITEM IN THE BID UNLESS OTHERWISE SPECIFIED.

REJECTION OF BIDS:

THE OWNER RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS.

STANDARD FORMS:

1. AIA DOCUMENT A305 - CONTRACTORS QUALIFICATIONS STATEMENT.
2. AIA DOCUMENT G701 - CHANGE ORDER.
3. AIA DOCUMENT G702 - APPLICATION AND CERTIFICATE OF PAYMENT. THIS DOCUMENT SUMMARIZES THE CONTRACT AMOUNT, WORK COMPLETED, STORED MATERIALS, RETAINAGE, PREVIOUS CERTIFICATES OF PAYMENT, AND THE CURRENT AMOUNT DUE.
4. AIA DOCUMENT G703 - CONTINUATION SHEET (ONE (1) OR MORE SHEETS AS REQUIRED). THIS DOCUMENT DETAILS THE AMOUNTS SUMMARIZED ON DOCUMENTS G702. IT PROVIDES A PROJECT BREAKDOWN AND DISCLOSES THE NAME OF THE COMPANY PROVIDING LABOR AND MATERIALS. WHEN LABOR IS PAID BY THE CONTRACTOR DIRECTLY TO INDIVIDUAL WORKERS, IT SHOULD BE IDENTIFIED AS "G.C. LABOR". THIS DOES NOT INCLUDE ANY LABOR PAID TO A THIRD PARTY. MATERIALS TAKEN FROM THE CONTRACTOR'S INVENTORY SHOULD BE LISTED AS "G.C. MATERIALS". THIS MAY NOT INCLUDE MATERIALS DELIVERED DIRECTLY TO THE JOB SITE OR IDENTIFIED IN ANY WAY THE SUPPLIER WITH AFCE. CONTRACTOR'S OVERHEAD AND PROFIT SHALL BE SHOWN AS A SEPARATE LINE ITEM. IF SUBCONTRACTOR AMOUNTS CHANGE FROM AMOUNTS SHOWN ON THE ORIGINAL PROJECT BREAKDOWN, THE CHANGES SHALL BE SHOWN ON THE PAYMENT REQUEST WITH A CORRESPONDING CHANGE TO THE CONTRACTOR'S OVERHEAD AND PROFIT LINE. UNLESS A CHANGE ORDER IS INVOLVED, THE TOTAL CONTRACT AMOUNT SHALL REMAIN THE SAME.
5. CERTIFICATE OF SUBSTANTIAL COMPLETION, AIA DOCUMENT A704.
6. CERTIFICATE OF INSURANCE, AIA DOCUMENT G705.
7. AIA DOCUMENT G706 - CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS - IN THIS DOCUMENT, THE CONTRACTOR SWEARS THAT ALL SUBCONTRACTORS AND MATERIALMEN ARE DISCLOSED ON G703 AND THAT EACH HAS BEEN PAID.
8. AIA DOCUMENT G706A - CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS - IN THIS DOCUMENT, THE CONTRACTOR SWEARS THAT ALL SUBCONTRACTORS AND MATERIALMEN ARE LISTED ON G703 AND THAT WAIVERS OF LIENS, HIS OWN INCLUDED, ARE ATTACHED.
9. AIA DOCUMENT G805 - LIST OF SUBCONTRACTORS
10. AIA DOCUMENT G713 - CHANGE ORDER AUTHORIZATIONS.
11. CONSENT OF SURETY (SURETY COMPANY'S FORM).
12. PARTIAL WAIVER OF LIEN FORM - IN THIS FORM, THE CONTRACTOR, SUBCONTRACTORS AND MATERIALMEN WAIVE THEIR RIGHT TO FILE A LIEN FOR WORK PERFORMED TO DATE. THIS DOCUMENT IS ACCEPTABLE FOR INTERIM CERTIFICATES OF PAYMENT.
13. FINAL WAIVER OF LIEN FORM - IN THIS FORM, THE CONTRACTOR, SUBCONTRACTORS AND MATERIALMEN WAIVE THEIR RIGHT TO FILE A LIEN FOREVER.
14. CONTRACTOR'S AFFIDAVIT OF DISCLOSURE OF DEBTS AND CLAIMS. IN THIS DOCUMENT, THE CONTRACTOR SWEARS THAT ALL DEBTS AND CLAIMS ARE DISCLOSED. IT SUMMARIZES THE CURRENT AMOUNT DUE EACH FIRM (CONTRACTOR, SUBCONTRACTOR, OR MATERIALMEN) LISTED ON G703. IT ALSO PROVIDES THE ADDRESS, PHONE NUMBER, AND REPRESENTATIVE OF EACH FIRM.

CONTRACT FORMS

1. THE CONTRACT FOR CONSTRUCTION SHALL BE POPEYES LOUISIANA KITCHEN, INC. "CONSTRUCTION CONTRACT AGREEMENT" FOR ALL CONSTRUCTION.

GENERAL CONDITIONS

GENERAL:

A. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", STANDARD FORM OF THE AMERICAN INSTITUTE OF ARCHITECTS, FORM A-201, LATEST EDITION, ARE HEREBY, EXCEPT AS THE SAME MAY BE INCONSISTENT HEREWITH, MADE A PART OF THIS SPECIFICATION. COPIES ARE TO BE OBTAINED AND ARE INCORPORATED BY REFERENCE AND HEREBY MADE A PART OF THE CONTRACT.

B. WHERE ANY ARTICLE OF THE AIA "GENERAL CONDITIONS" IS SUPPLEMENTED HEREBY THE AIA PROVISION OF SUCH ARTICLE SHALL REMAIN IN EFFECT. ALL THE SUPPLEMENTARY CONDITIONS SHALL BE CONSIDERED AS IF ADDED THERETO. WHERE ANY PORTION OF SUCH ARTICLE IS AMENDED, VOIDED OR SUPERSEDED THEREBY, THE PROVISIONS OF SUCH ARTICLE NOT SO SPECIFICALLY AMENDED, VOIDED, OR SUPERSEDED SHALL REMAIN IN EFFECT.

C. THE GENERAL CONDITION SUPPLEMENTARY CONDITIONS AND APPLICABLE PORTIONS OF DIVISION I OF THE SPECIFICATIONS APPLY TO ANY AND ALL SUBSEQUENT SECTIONS OF THESE SPECIFICATIONS.

D. WHERE ANY ARTICLE OR PORTION OF AN ARTICLE CONFLICTS WITH THE LAWS OF THE STATE OF THE LOCATION OF THE PROJECT, SUCH ARTICLE, OR PORTION OF THE ARTICLE IS HEREBY STRICKEN.

E. "CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH THE 1990 AMERICANS WITH DISABILITIES ACT (29CFR PART 1630). TITLE III AND THE REGULATIONS PROMULGATED IN ACCORDANCE THEREIN. CONTRACTOR SHALL INDEMNIFY AND HOLD OWNER AND ARCHITECT HARMLESS FROM ANY AND ALL LOSSES, SUITS, CLAIMS, COSTS, EXPENSES AND OTHER DAMAGES WHICH MAY BE INCURRED BY OWNER/ARCHITECT AS A RESULT OF CONTRACTOR'S FAILURE TO COMPLY WITH SAID ACT".

ARTICLE 3 - CONTRACTOR:

A. ARTICLE 3.4 LABOR AND MATERIALS OF SAID "GENERAL CONDITION" PARAGRAPH 4.4.3 IS HEREBY ADDED AS FOLLOWS: "ALL CONTRACTORS AND SUBCONTRACTORS EMPLOYED UPON THE WORK SHALL BE REQUIRED TO CONFORM TO THE FEDERAL, STATE, AND LOCAL LABOR LAWS AND VARIOUS ACTS AMENDATORY AND SUPPLEMENTARY THERETO, AND TO ALL OTHER LAWS, ORDINANCES, AND LEGAL REQUIREMENTS APPLICABLE THERETO."

B. ARTICLE 3.6 TAXES OF SAID "GENERAL CONDITIONS" PARAGRAPH 3.6.1 IS HEREBY AMENDED AND SUPPLEMENTED AS FOLLOWS: "THE CONTRACTOR SHALL PAY FOR ALL TAXES NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK, BOTH TEMPORARY AND PERMANENT."

C. ARTICLE 3.7 PERMITS, FEES AND NOTICES OF SAID "GENERAL CONDITIONS" PARAGRAPH 4.7.3 DELETE IN ITS ENTIRETY AND SUBSTITUTE IN LIEU THEREOF AS FOLLOWS: "THE CONTRACTOR SHALL BRING TO THE ATTENTION OF THE OWNER ANY CONFLICTS, OMISSIONS, DELETIONS, OR ERRORS IN THE DRAWINGS AND/OR SPECIFICATIONS WHICH DO NOT CONFORM TO APPLICABLE ZONING, CODE AND OTHER USE REGULATIONS AND/OR TO THE AMERICANS WITH DISABILITIES ACT AND REGULATIONS PROMULGATED THEREUNDER. THE CONTRACTOR SHALL NOT BE LIABLE TO THE OWNER OR THE ARCHITECT FOR ANY DAMAGES RESULTING FROM ANY SUCH ERRORS EXCEPT THAT CONTRACT SHALL BE FULLY AND EXCLUSIVELY LIABLE UPON FAILURE TO PUT ARCHITECT ON NOTICE OF SAID CONFLICTS, OMISSIONS, DELETIONS, OR ERRORS."

D. ARTICLE 3.15 CLEANING UP OF SAID "GENERAL CONDITIONS" PARAGRAPH 3.15.1 HEREBY AMENDED AND ADDED AS FOLLOWS: "HE SHALL REMOVE FROM THE JOB SITE ALL CRATES, PACKING, DEBRIS, ETC. FROM KITCHEN EQUIPMENT. HE SHALL BROOM CLEAN THE BUILDING INTERIOR DAILY. AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL LEAVE THE BUILDING CLEANED DUST FREE, CLEAN ALL GLASS, REPLACE ANY BROKEN GLASS, REMOVE STAINS, SPOTS, MARKS AND DIRT FROM DECORATED WORK, CLEAN HARDWARE, REMOVE PAINT SPOTS FROM ALL SURFACES, CLEAN FIXTURES, AND WASH ALL TILE FLOORS."

ARTICLE 11 - INSURANCE:

A. ARTICLE 11.1 CONTRACTOR'S LIABILITY INSURANCE OF SAID "GENERAL CONDITIONS" IS HEREBY MODIFIED AS FOLLOWS: INSURANCE: COMPREHENSIVE, AUTOMOBILE, UMBRELLA LIABILITY CERTIFICATES OF INSURANCE FROM CARRIERS APPROVED BY THE OWNER SHALL BE FILED IN NOT LESS THAN THE FOLLOWING AMOUNTS OR GREATER AMOUNTS AS REQUIRED BY LAW PRIOR TO COMMENCEMENT OF THE WORK:
1. WORKMEN'S COMPENSATION: AS REQUIRED BY LAW IN APPLICABLE STATE
2. COMPREHENSIVE GENERAL LIABILITY:
   (A) $1,000,000 PER OCCURRENCE COMBINED- SINGLE LIMIT
   (B) $2,000,000 AGGREGATE
3. OWNED AND NON-OWNED AUTOMOBILE LIABILITY: $500,000 PER OCCURRENCE
4. 4. EXCESS (UMBRELLA) LIABILITY: $2,000,000 PER OCCURRENCE ALL INSURANCE POLICIES AND CERTIFICATES FOR WORK PERFORMED FOR AFCE SHALL SHOW THE OWNER AS AN ADDITIONAL NAMED INSURED PARTY. THEY MUST ALSO STATE THAT THE COVERAGE AFFORDED UNDER THE POLICIES SHALL NOT BE CANCELED WITHOUT THIRTY (30) DAYS' PRIOR NOTICE TO THE OWNER AS EVIDENCED BY THE RETURN RECEIPT OF A REGISTERED LETTER AND BE IN FULL FORCE FOR 3 YEARS FOLLOWING COMPLETION EXPIRATION OR TERMINATION OF THIS CONTRACT.

B. ARTICLE 11.3 PROPERTY INSURANCE OF SAID "GENERAL CONDITIONS" IS HEREBY AMENDED AND MODIFIED AS FOLLOWS:

INSURANCE: FOR PROJECTS WHERE AFC ENTERPRISES IS THE OWNER, THE CONTRACTOR SHALL PROVIDE THE BUILDER'S RISK INSURANCE.

THE INSURANCE SHALL BE IN AN AMOUNT EQUAL TO THE TOTAL AMOUNT OF THE CONTRACT, LESS THE AMOUNT OF THE SITE WORK. INSURANCE WILL BE ON ALL RISK BASIS WITH $5,000.00 DEDUCTIBLE. THE $5,000 DEDUCTIBLE WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TOTAL AMOUNT OF LOSSES OF ALL BUILDING MATERIAL, TOOLS AND EQUIPMENT IN HIS POSSESSION AND NOT PERMANENTLY AFFIXED TO THE BUILDING OR SITE.

BUILDERS' RISK INSURANCE CERTIFICATES WILL BE FURNISHED UPON REQUEST BY AFCE. ONE COPY WILL BE SENT DIRECTLY TO AFCE'S CONSTRUCTION COORDINATOR.

CLAIMS FOR DAMAGES MUST BE REPORTED TO AFCE'S INSURANCE DEPARTMENT. IMMEDIATELY BY TELEPHONE (404) 391-9500. TELEPHONE REPORTS MUST BE FOLLOWED UP WITHIN TWENTY FOUR (24) HOURS BY A WRITTEN REPORT. SEND THE FIRST COPY TO AFCE'S INSURANCE DEPARTMENT, 5555 GLENRIDGE CONNECTOR, NE, SUITE 300, ATLANTA, GA 30342, AND SEND THE COPY TO AFCE'S CONSTRUCTION DEPARTMENT (SAME ADDRESS). THE CONTRACTOR SHALL RETAIN THE THIRD COPY FOR HIS FILES. BLANK FORMS ARE AVAILABLE FROM AFCE'S INSURANCE DEPT.

ARTICLE 7 - CHANGES IN THE WORK:

A. ARTICLE 7.2 CHANGE ORDERS OF SAID "GENERAL CONDITIONS" SUBPARAGRAPH 7.2.1 IS HEREBY EXTENDED AS FOLLOWS:
4. IN CONSIDERING PROPOSALS FOR CHANGES INVOLVING ADDED WORK, OMITTED WORK, OR ANY COMBINATION OF THE TWO, CHECKING OF ESTIMATES WILL BE MADE BY THE OWNER, UTILIZING UNIT PRICES WHERE SPECIFIED OR AGREED UPON, WITH THE VIEW OF ARRIVING AT EQUITABLE ADJUSTMENTS".
5. WITH EACH PROPOSAL FOR A CHANGE INVOLVING INCREASE OR DECREASE IN THE AMOUNT OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT SEPARATELY AN ITEMIZED BREAKDOWN THAT WILL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
   (A) MATERIAL QUANTITIES AND UNIT PRICES (SEPARATED INTO TRADES). PROVIDE BONA FIDE MANUFACTURER'S OR SUPPLIERS' PROPOSALS FOR MANUFACTURED OR PRE ASSEMBLED ITEMS.
   (B) LABOR COST
   (C) CONSTRUCTION EQUIPMENT
   (D) WORKMEN'S COMPENSATION AND PUBLIC LIABILITY
   (E) OVERHEAD
   (F) PROFIT
   (G) SOCIAL SECURITY TAX

SUPPLEMENTARY CONDITIONS

1. PAYMENT TO CONTRACTOR:

A. MONTHLY CONTRACT PAYMENT

MONTHLY PROGRESS PAYMENTS SHALL BE PAID BY THE OWNER FOR 90% OF THE WORK COMPLETED AND MATERIALS STORED AS OF THE LAST DAY OF EACH MONTH. PAYMENTS MAY BE MADE BY THE OWNER ON THE JOINT PAYEE BASIS, REIMBURSEMENT BASIS, OR CASH ADVANCE BASIS AT THE ELECTION OF THE OWNER. CONTRACTOR IS TO FORWARD AUTHORIZED CHANGE ORDER DIRECTIVES, AIA DOCUMENT G701, WHICH HAVE BEEN INCURRED TO THAT POINT, WITH APPLICATION FOR PAYMENT. CONTRACTOR IS TO ADVISE OWNER OR ITS AGENT OF ANY ITEM HE OR SUBCONTRACTOR BELIEVES IS AN ADDITIONAL COST OVER CONTRACT AMOUNT PRIOR TO DOING WORK.

(1) JOINT PAYEE BASIS

CONTRACTORS WILL MAKE APPLICATION TO AFCE ON OR BEFORE THE TENTH OF EACH MONTH FOR A CHECK PAYABLE JOINTLY TO THE SUBCONTRACTORS AND/OR MATERIAL SUPPLIERS AND THE CONTRACTOR. THE REQUEST WILL BE SUPPORTED BY THE ORIGINALS OF THE FOLLOWING DOCUMENTATION (EXPLANATION OF THESE FORMS ARE GIVEN UNDER STANDARD FORMS):
- (A) AIA DOCUMENT G702 - APPLICATION AND CERTIFICATE OF PAYMENT
- (B) AIA DOCUMENT G703 - CONTINUATION SHEET.
- (C) CONTRACTOR'S AFFIDAVIT OF DISCLOSURE OF DEBTS AND CLAIMS. THIS FORM WILL BE PROVIDED BY POPEYES LOUISIANA KITCHEN , INC
- (D) INVOICES AND/OR TIME SHEETS WILL ACCOMPANY THE CERTIFICATE OF PAYMENT IN SUPPORT OF WORK AND MATERIALS PROVIDED DURING THE PERIOD OF THE APPLICATION FOR THE CONTRACTOR AND FOR EACH SUBCONTRACTOR AND MATERIAL SUPPLIER REFLECTED ON THE APPLICATION.

CONTRACTOR'S PARTIAL WAIVER OF LIENS FOR ALL WORK AND MATERIALS COMPLETED THROUGH THE BILLING DATE FOR THE CONTRACTOR AND FOR EACH SUBCONTRACTOR AND MATERIAL SUPPLIER REFLECTED ON THE APPLICATION WILL BE EXECUTED BY THE JOINT PAYEE CHECK ENDORSEMENT AS FOLLOWS:

ALL PAYEES MUST SIGN THIS DISCHARGE

"ALL CLAIMS, INTEREST, AND DEMANDS OF THE UNDERSIGNED FOR LABOR DONE OR MATERIAL FURNISHED, AND FOR LIENS, JUDGMENTS, MORTGAGES, OR ANY ACCOUNT WHATSOEVER AGAINST THE PROPERTY (TO BE) OCCUPIED AS A POPEYE'S RESTAURANT AT: (ADDRESS HERE)

OR

"THE OWNER THEREOF, ARE PAID AND SATISFIED, RELEASED, AND DISCHARGED TO THE EXTENT OF THE AMOUNT OF THIS CHECK. THE ENDORSEMENT OF THIS CHECK IS FULL EXECUTION OF THE FOREGOING RELEASE AND SHALL BEAR MY SIGNATURE THEREON."

EXCEPT FOR ANNOTATING THE ADDRESS OF THE CONSTRUCTION SITE, THE ENDORSEMENT MUST NOT BE ALTERED OR QUALIFIED IN ANY WAY.

(2) REIMBURSEMENT BASIS

CONTRACTORS WILL PAY ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS AND MAKE PRESENTATION TO POPEYES LOUISIANA KITCHEN ON OR BEFORE THE TENTH OF EACH MONTH FOR REIMBURSEMENT. THEIR REQUEST WILL BE SUPPORTED BY THE ORIGINALS OF THE FOLLOWING DOCUMENTS (EXPLANATIONS OF THESE FORMS ARE GIVEN UNDER STANDARD FORMS):
- (A) AIA DOCUMENT G702 - APPLICATION AND CERTIFICATE FOR PAYMENT
- (B) AIA DOCUMENT G703 - CONTINUATION SHEET.
- (C) AIA DOCUMENT G706 - CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS.
- (D) AIA DOCUMENT G706A - CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS.
- (E) PARTIAL WAIVER OF LIEN FORM.

B. FINAL PAYMENT

CONTRACTORS WILL MAKE APPLICATION TO POPEYES LOUISIANA KITCHEN , INC. OR OWNER/FRANCHISEE FOR THE FINAL PAYMENT. THE REQUEST WILL BE SUPPORTED BY THE ORIGINALS OF THE FOLLOWING DOCUMENTATION (EXPLANATIONS OF THESE FORMS ARE GIVEN UNDER STANDARD FORMS):
- (1) AIA DOCUMENT G702 - APPLICATION AND CERTIFICATE FOR PAYMENT
- (2) AIA DOCUMENT G703 - CONTINUATION SHEET.
- (3) AIA DOCUMENT G706, AIA DOCUMENT G706A AND FINAL WAIVER OF LIENS FORM PROPERLY EXECUTED AND ACKNOWLEDGED.
- (4) AIA DOCUMENT G805 - LIST OF SUBCONTRACTORS

WITHIN THIRTY (30) DAYS AFTER RECEIPT OF THE FILING FOR FINAL PAYMENT, THE OWNER SHALL PAY TO THE CONTRACTOR THE AMOUNT THEREIN STATED, LESS ALL DEDUCTIONS AUTHORIZED BY THE TERMS OF THIS CONTRACT AND PRIOR PAYMENTS AND ADVANCES WHATSOEVER TO OR FOR THE ACCOUNT OF THE CONTRACTOR.

ALL PRIOR ESTIMATES AND PAYMENTS INCLUDING THOSE RELATING TO EXTRA WORK SHALL BE SUBJECT TO CORRECTION AT THE TIME OF THIS PAYMENT, WHICH IS THROUGHOUT THIS CONTRACT CALLED FINAL PAYMENT. FINAL PAYMENT SHALL BE SUBJECT TO INSPECTION AND ACCEPTANCE BY THE OWNER OR DULY AUTHORIZED REPRESENTATIVES OF THE OWNER, AND BY THE REPRESENTATIVES OF ALL AGENCIES HAVING DIRECT INTEREST IN THE PROJECT.

QUESTIONS REGARDING APPLICATIONS CAN BE RESOLVED BY CONTACTING POPEYE'S CONSTRUCTION MANAGER.

2. CERTIFICATE OF SUBSTANTIAL COMPLETION:

THE DATE OF THIS CERTIFICATE SHALL SERVE AS THE TIME FOR COMPUTING THE GUARANTEE PERIOD OF THE BUILDING UNLESS OTHERWISE AGREED UPON.

3. OWNER'S USE AND OCCUPANCY OF BUILDING BEFORE ACCEPTANCE OF CONSTRUCTION:

THE OWNER, FOR OCCUPANCY OF THE BUILDING DESCRIBED IN THE DRAWINGS, MAY TAKE POSSESSION OF AND USE SAME AS HE SO DESIRES UPON A SUBSTANTIAL COMPLETION OF THE CONTRACT, ALSO FURTHER UPON RELIEVING THE CONTRACTOR OF ANY DAMAGE DONE TO THE BUILDING DUE SOLELY TO SUCH OCCUPANCY BY SAID OWNER BUT UNDER NO CIRCUMSTANCES SHALL SUCH OCCUPANCY BE AN ACCEPTANCE OF THE WORK FOR THE COMPLETION OF THE CONTRACT OR AN ACCEPTANCE OF THE LABOR DONE AND MATERIALS USED OR INSTALLED.

4. MANUFACTURED ITEMS IN THE SPECIFICATIONS:

WHERE ITEMS ARE LISTED IN THE SPECIFICATIONS AND/OR "OR EQUAL" IS MENTIONED, THE MATERIALS LISTED SHALL BE USED. THESE MATERIALS SHALL BE INCLUDED IN THE BID SUBMITTED ON THE BID FORM. NO DEVIATION FROM THE MATERIALS LISTED SHALL BE MADE BY THE CONTRACTORS SUBMITTING BIDS. AFTER AWARD OF THE CONTRACT, THE CONTRACTOR MAY SUBMIT A SUBSTITUTE MATERIAL FOR THE ITEMS SPECIFIED AS AN "EQUAL" TO THE MATERIAL. SUCH REQUEST SHALL BE SUPPORTED BY TECHNICAL DATA SHOWING THAT THE MATERIALS OR SERVICE IS EQUAL TO THE ITEMS SPECIFIED AND STATING THE AMOUNT OF DECREASE OR INCREASE IN THE CONTRACT SUM. IF NO CHANGE IN THE CONTRACT SUM WILL BE MADE, STATE "NO CHANGE". THE CONSULTANT'S ARCHITECTURE AND ENGINEERING DEPARTMENT WILL DETERMINE IF THE MATERIAL IS ACCEPTABLE AS A SUBSTITUTE FOR THE SPECIFIED ITEM AND MAKE NOTIFICATION IN WRITING TO THE CONTRACTOR, THIS RULING BEING FINAL. CHANGES TO THE CONTRACT SUM WILL BE HANDLED BY CHANGE ORDER AUTHORIZATION OR CHANGE ORDER FORM.

5. SALES TAX:

A. THIS PROJECT IS SUBJECT TO STATE AND LOCAL SALES TAX. INCLUDE SALES TAX ON ALL MATERIALS USED IN THE PROJECT.

B. WITH EACH REQUEST FOR PAYMENT, PROVIDE A CERTIFIED STATEMENT OF THE AMOUNT PAID FOR SALES TAX IN THE REQUESTED SUM.

6. NONDISCRIMINATION CLAUSE:

THE CONTRACTOR, HIS AGENT, OR HIS EMPLOYEES SHALL NOT DISCRIMINATE IN ANY MANNER ON THE BASIS OF RACE, COLOR, CREED, SEX, OR NATIONAL ORIGIN WITH REFERENCE TO THE SUBJECT MATTER OF THIS CONTRACT, NO MATTER HOW REMOTE.

DIVISION 01 - GENERAL REQUIREMENTS

WORK OF CONTRACT 01 01 00

PART 1 - GENERAL

1.1 CONTRACT DOCUMENTS

A. THE CONSTRUCTION CONTRACT DOCUMENT WILL BE PREPARED BY POPEYES. A COPY MAY NOT BE BOUND WITH THESE DOCUMENTS.

B. THE STANDARD FORM OF GENERAL CONDITIONS OF THE STIPULATED PRICE CONTRACT CCDC 2, 2008, AND SUPPLEMENTARY CONDITIONS THERETO FORM AN INTEGRAL PART OF THE SPECIFICATIONS.

C. PERFORM ALL WORK DESCRIBED IN THE CONTRACT DOCUMENTS UNDER ONE CONTRACT.

D. AN EXECUTED CCDC CONTRACT WILL BE REQUIRED BEFORE APPLICATION OF PERMIT.

1.2 CONTRACT WORK

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INCLUSION OF ALL WORK REQUIRED FOR COMPLETION OF THE PROJECT AND SHALL CO-ORDINATE THE WORK OF HIS SUBCONTRACTORS SO THAT IT IS ACCOMPLISHED.

B. THE CONTRACTOR SHALL EXAMINE ALL DRAWINGS AND SPECIFICATIONS AND REPORT AND DISCREPANCIES TO THE OWNER PRIOR TO SUBMITTING TENDER.

C. THE CONTRACTOR IS RESPONSIBLE FOR CO-ORDINATION OF ALL SUB-TRADES AS OUTLINED IN INSTRUCTIONS TO BIDDERS.

**D. THE CONTRACTOR SHALL OFF-LOAD KITCHEN EQUIPMENT SUPPLIED BY STORE FIXTURE COMPANY AND POPEYES. **

E. THE CONTRACTOR IS TO CLEAN THE SITE AND BUILDING BEFORE THE STORE FIXTURES AND POPEYES EQUIPMENT DELIVERY.

F. CONTRACTOR AND SUB-TRADES TO BE ON SITE AT ALL TIMES DURING EQUIPMENT INSTALLATION.

G. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING REFUSE REMOVAL FOR DURATION OF PROJECT.

H. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING ROOF OF ALL DEBRIS AT THE END OF CONSTRUCTION.

I. THE CONTRACTOR SHALL KEEP THE SITE CLEAN AND ORDERLY CLEAN THE BUILDING AND SITE AT THE END OF EACH DAY DURING THE CONSTRUCTION PERIOD.

1.3 CONSTRUCTION STANDARDS

A. CONSTRUCTION WORK TO EQUAL OR EXCEED MINIMUM STANDARDS SPECIFIED FOR MATERIALS, INSTALLATION METHODS, WORKMANSHIP AND CONSTRUCTION IN PART 3 OF THE BUILDING CODE, LATEST EDITION, EXCEPT WHERE ADDITIONAL OR MORE STRINGENT REQUIREMENTS ARE IMPOSED BY REFERENCE TO OTHER PARTS OF THE NATIONAL BUILDING CODE OF CANADA, BY PROVINCIAL CODES, BY LOCAL JURISDICTIONAL AUTHORITIES, OR BY THE DRAWINGS, SPECIFICATIONS, SPECIFIED REFERENCE STANDARDS, AND OTHER INSTRUCTIONS INCLUDED WITH, OR ISSUED IN RELATION TO, THE CONTRACT DOCUMENTS FOR THIS PROJECT.

1.4 GENERAL CONTRACTOR

A. GENERAL CONTRACTOR TO CO-ORDINATE AND OBTAIN ALL REQUIRED INSPECTION CERTIFICATES AND DELIVER TO THE OWNER A FINAL OCCUPANCY PERMIT.

B. GENERAL CONTRACTOR TO OBTAIN ALL REQUIRED SURVEYS TO MEET BUILDING LAYOUT AND BUILDING PERMIT REQUIREMENTS.

C. GENERAL CONTRACTOR TO OBTAIN A REGISTERED SURVEY FOR THE BUILDING AND SITE PRIOR TO RELEASE OF FINAL PAYMENT AS NOTED IN THE INSTRUCTION TO BIDDERS.

1.5 SECURITY

A. GENERAL CONTRACTOR TO BE RESPONSIBLE FOR SECURITY OF ALL AREAS AFFECTED BY WORK OF THIS CONTRACT UNTIL TAKEN OVER BY THE POPEYES, TO TAKE STEPS TO PREVENT ENTRY TO THE WORK BY UNAUTHORIZED PERSONS AND GUARD AGAINST THEFT, FIRE AND DAMAGE BY ANY CAUSE.

B. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PREVENTION OF VANDALISM AND THEFT OF ALL TOOLS, EQUIPMENT, MATERIALS AND OWNER'S CONTENTS.

1.6 SAFETY

A. BE GOVERNED BY PERTINENT SAFETY REQUIREMENTS OF FEDERAL, PROVINCIAL OR MUNICIPAL BODIES HAVING AUTHORITY, PARTICULARLY THE CONSTRUCTION SAFETY ACT, THE OCCUPATIONAL HEALTH AND SAFETY ACT, AND WORK IN CONJUNCTION WITH THE PROPER SAFETY ASSOCIATIONS OPERATING UNDER THE AUTHORITY OF EACH JURISDICTION.

B. PROTECT OWNER, OWNER'S EMPLOYEES, THE PUBLIC AND THOSE EMPLOYED ON THE WORK FROM BODILY INJURY AND TO PROTECT ADJACENT PUBLIC, PRIVATE AND OWNER'S PROPERTY FROM DAMAGE.

C. FURNISH AND MAINTAIN PROTECTION, SUCH AS WARNING SIGNS, TARPAULINS, GUARD RAILS, BARRIERS, NIGHT LIGHTS, RAILINGS AROUND SHAFTS, PIT AND STAIRWELLS, ETC. AS REQUIRED. REMOVE TEMPORARY PROTECTIVE MEASURES WHEN NO LONGER REQUIRED.

1.7 SHOP DRAWINGS

A. SUBMIT SHOP DRAWINGS FOR ALL NON-SPECIFIED MATERIALS AND PRODUCTS IN CONFORMANCE WITH INDUSTRY STANDARDS.

B. REFER TO DIVISION AND SECTIONS OF THE SPECIFICATION FOR WORK REQUIRING SHOP DRAWING SUBMISSION. SUCH WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: ROOF JOISTS, ROOFING MATERIAL LIST, DOORS AND FRAMES, HARDWARE, ELECTRICAL PANELS AND CIRCUITING.

1.8 SHOP DRAWINGS

A. THE CONTRACTOR TO PROVIDE AS BUILT DRAWINGS AND MAINTENANCE MANUALS AS DETAILED IN THE INSTRUCTION TO BIDDERS.

DIVISION 02 - SITE WORK

SECTION 2A: CLEARING THE SITE

GENERAL PROVISIONS

1. SCOPE: FURNISH ALL MATERIALS, EQUIPMENT AND LABOR, CLEARING, EXCAVATING, REMOVAL OF RUBBISH, TRASH AND OTHER NOTED ITEMS, FILLING, GRADING AND RELATED ITEMS NECESSARY TO COMPLETE CLEARING OF SITE WHERE SHOWN AND SPECIFIED.

PERFORMANCE

REFER TO THE SITE PLAN AND GRADING PLAN TO DETERMINE EXTENT OF WORK NECESSARY UNDER THIS HEADING. WHERE DEMOLITION OF BUILDINGS AND REMOVAL OF TREES IS REQUIRED, A DEMOLITION PLAN SHOWING THE LOCATION OF THE NEW BUILDING, FINISH FLOOR ELEVATION, AND ITEMS TO REMAIN WHERE APPLICABLE.

FIRES, STORAGE OF MATERIALS, DEBRIS, OR PARKING OF EQUIPMENT SHALL NOT BE PERMITTED WITHIN THE SPREAD OF BRANCHES OF TREES TO REMAIN.

SECTION 2B: SITE DRAINAGE

GENERAL PROVISIONS

1. SCOPE: FURNISH AND INSTALL STORM DRAIN PIPES, CATCH BASINS, CURB INLETS, GRATING FRAMES, MANHOLES, AND RELATED ITEMS.

MATERIALS AND PERFORMANCE

1. CONCRETE PIPE SHALL CONFORM TO ASTM SPECIFICATIONS C76 CLASS III EXCEPT PIPE OVER 18" IN DIAMETER SHALL BE CLASS III AND/OR CLASS IV WHERE SURCHARGES REQUIRE.
2. CORRUGATED METAL PIPE SHALL CONFORM TO ASTM A-760, A761, OR A-762. FABRICATION AND INSTALLATION SHALL BE IN ACCORDANCE WITH AISI SPECIFICATIONS.
3. MANHOLES, YARD DRAINS, CURB INLETS, AND CATCH BASINS SHALL BE CONSTRUCTED OF CAST-IN-PLACE AND/OR PRECAST REINFORCED CONCRETE. GRATING AND FRAMES SHALL BE OF CAST IRON. PRECAST MANHOLES SHALL BE PER ASTM SPECIFICATION C-478.
4. VITRIFIED CLAY PIPE SHALL CONFORM TO ASTM SPECIFICATION C-200 FOR EXTRA STRENGTH PIPE.
5. THE HEIGHTS OF STORM DRAINAGE STRUCTURES SHALL BE ADJUSTED SO THAT THE SITE DRAINS PROPERLY AS INTENDED ON THE DRAWINGS WITHIN THE SLOPE LIMITS.

SECTION 2C: EARTHWORK

GENERAL PROVISIONS

1. SCOPE: FURNISH AND INSTALL/PERFORM ALL GENERAL EXCAVATION, FOOTING EXCAVATION, FILLING, BACKFILLING, STRIPPING OF TOPSOIL, SITE GRADING, AND RELATED ITEMS NECESSARY TO BRING THE SUB-GRADE TO PROPER CONTOUR.
2. QUALITY CONTROL: TO ASSURE COMPLIANCE WITH THE FILLING AND BACKFILLING COMPACTION REQUIREMENTS, A SOIL TESTING LABORATORY SHALL BE NOTIFIED BY THE CONTRACTOR TO CHECK COMPACTION WHEN SO INSTRUCTED BY THE OWNER OR HIS AGENT. PROVIDE THE OWNER WITH A COPY OF THE COMPACTION TEST RESULTS.
3. A SOIL REPORT WILL BE CONDUCTED AND FURNISHED BY OWNER AND SHALL BE REFERENCED FOR SPECIFIC SITE, SOIL, AND FOUNDATION MODIFICATIONS.

MATERIAL AND PERFORMANCE

1. FOOTING EXCAVATION: ALL FOOTING EXCAVATION SHALL EXTEND INTO UNDISTURBED VIRGIN SOIL OF 2000 PSF MINIMUM BEARING CAPACITY, TO THE DEPTH OF THE FOOTING SHOWN, OR TO A MINIMUM DEPTH REQUIRED BY LOCAL CODE TO MEET FROST LINE OR OTHER RESTRICTIONS, WHICHEVER IS GREATER.

ALL EXCAVATION BELOW THE BOTTOM OF THE FOOTING SHALL BE BACKFILLED WITH 2000 PSI CONCRETE, BUT EXCAVATION SHALL NOT EXCEED 10' WITHOUT THE APPROVAL OF THE ENGINEER.

ALL FOUNDATION EXCAVATIONS SHALL BE FREE OF MUD, WATER, AND ALL FOREIGN MATERIAL PRIOR TO POURING.

PROVIDE ADEQUATE PROTECTION AGAINST CAVE-IN.

EXCAVATION FOR PLUMBING, HEATING, AND ELECTRICAL WORK SHALL BE DONE BY THE TRADES INVOLVED.

2. GRADING: THE ENTIRE SITE SHALL BE GRADED TO DRAIN PROPERLY. EXISTING AND FINISH GRADES ARE SHOWN ON THE GRADING PLAN. GRADE AND PROVIDE NECESSARY CUT OR FILL TO BRING THE SUB-GRADE TO THE REQUIRED LEVEL FOR THE BUILDING AND PARKING LOT. ALL FILL MATERIAL AND COMPACTION SHALL BE AS RECOMMENDED IN SOIL ENGINEER'S REPORT. IN THE EVENT THAT NO SOIL ENGINEER'S REPORT IS PROVIDED, ALL FILL MATERIAL AND COMPACTION SHALL BE CLEAN YELLOW SAND OR OTHER BORROW MATERIAL AS SPECIFICALLY APPROVED IN WRITING BY THE OWNER.

IN THE EVENT OF CONFLICT BETWEEN GRADES ESTABLISHED ON THE POPEYE'S SITE AND EXISTING GRADES ON ADJACENT PROPERTIES, THE OWNER SHALL BE NOTIFIED IMMEDIATELY.

3. FILL MATERIAL: REFER TO SOIL REPORT FOR FILL MATERIAL AND COMPACTION SPECIFICATIONS. IF NO SOIL REPORT IS PROVIDED, FOR EACH TYPE OF BORROW MATERIAL DELIVERED TO THE SITE, ONE (1) OPTIMUM MAXIMUM DENSITY CURVE SHALL BE ESTABLISHED BY AN ACCEPTED LABORATORY. THESE DENSITIES SHALL BE DETERMINED BY ASTM D1557, MODIFIED PROCTOR DENSITY. COMPACTION SHALL BE 95% OF MAXIMUM DENSITY WITH MOISTURE CONTENT WITHIN 3% OF OPTIMUM AND CAPABLE OF SUPPORTING 2000 PSF. FILL MATERIAL TO BE LACED IN 6 TO 8 INCH LIFTS.

SECTION 2D: SOIL POISONING

GENERAL REQUIREMENTS

1. SCOPE: FURNISH AND INSTALL CHEMICAL TREATMENT TO PREVENT TERMITE INFESTATION FOR AREAS TO BE COVERED BY BUILDING SLABS, FOOTINGS, AND SIDEWALKS.
2. GUARANTEE: FURNISH WRITTEN GUARANTEE PROVIDING THAT (A) CHEMICAL AS APPLIED MEETS CONCENTRATION REQUIREMENTS AND APPLICATION RATE SPECIFIED HEREIN, (B) SOIL IS EFFECTIVELY TREATED AGAINST TERMITE INFESTATION FOR A PERIOD OF FIVE (5) YEARS FROM DATE OF TREATMENT, AND (C) IF ANY EVIDENCE OF INFESTATION OCCURS WITHIN FIVE (5) YEARS, ENTIRE PROJECT WILL BE COMPLETELY RETREATED AND ALL CONSTRUCTION DAMAGE CAUSED BY TERMITES WILL BE REPAIRED AT NO COST TO OWNER.

MATERIALS

SOIL AREAS DESIGNATED SHALL BE TREATED BY ON OF THE FOLLOWING CHEMICALS AT NOT LESS THAN THE CONCENTRATIONS AS SHOWN BELOW:

CHEMICAL	CONCENTRATION
ALDRIN	.5% IN WATER EMULSION
CHLORIANE	1.0% IN WATER EMULSION
DIELDRIN	.5% IN WATER EMULSION
HELPTACHLOR	.5% IN WATER EMULSION

PERFORMANCE

BECAUSE OF THE TOXIC NATURE OF THESE MATERIALS, THEY SHALL BE APPLIED CAREFULLY TO ONLY THE DESIGNATED AREAS BY AN EXPERIENCED APPLICATOR.

FOUNDATION, WALLS 4 GALLONS PER 10 MIX TO A DEPTH OF
PIERS, ETC. LINEAR FEET 1'0" MIN.
UNIT MASONRY AND 2 GALLONS PER 10 APPLY NEAR BOTTOM
PIERS UNDER LINEAR FEET OF FOUNDATION
FLOOR SLABS
SLABS 1.5 GALLONS PER 10 UNIFORM COVERAGE SQ. FT.

E. DURING - CONCRETE SHALL BE CURED BY PROTECTING IT AGAINST LOSS OF MOISTURE, RAPID TEMPERATURE CHANGE, AND MECHANICAL INJURY FOR AT LEAST THREE (3) DAYS AFTER PLACEMENT. MOIST CURING, WATERPROOF PAPER, WHITE POLYETHYLENE SHEETING, WHITE LIQUID MEMBRANE COMPOUND, OR A COMBINATION THEREOF MAY BE USED. AFTER FINISHING OPERATIONS HAVE BEEN COMPLETED, THE ENTIRE SURFACE OF THE NEWLY-PLACED CONCRETE SHALL BE COVERED BY WHATEVER CURING MEDIUM IS APPLICABLE TO LOCAL CONDITIONS AND APPROVED BY THE ENGINEER. THE EDGES OF CONCRETE SLABS EXPOSED BY THE REMOVAL OF FORMS SHALL BE PROTECTED IMMEDIATELY TO PROVIDE THESE SURFACES WITH CONTINUOUS CURING TREATMENT EQUAL TO THE METHOD SELECTED FOR CURING THE SLAB AND CURB SURFACE. THE CONTRACTOR SHALL HAVE AT HAND AND READY TO INSTALL BEFORE ACTUAL PLACEMENT BEGINS THE EQUIPMENT NEEDED FOR ADEQUATE CURING.

F. OPENING TO TRAFFIC - THE ENGINEER SHALL DECIDE WHEN THE PAVEMENT SHALL BE OPENED TO TRAFFIC. IT SHALL NOT BE OPENED TO TRAFFIC UNTIL THE FIELD-CURED CONCRETE HAS ATTAINED A FLEXURAL STRENGTH OF 550 PSI, OR A COMPRESSIVE STRENGTH OF 3,500 PSI. IF SUCH TEST ARE NOT CONDUCTED, THE PAVEMENT SHALL NOT BE OPENED TO TRAFFIC UNTIL FOURTEEN (14) DAYS AFTER THE CONCRETE WAS PLACED. BEFORE OPENING TO TRAFFIC, THE PAVEMENT SHALL BE CLEANED.

2. ASPHALT:

A. PAVEMENT PREPARATION FOR SUBGRADE: MATERIAL IN SOFT SPOTS SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND REPLACED WITH A MATERIAL EQUAL TO THE BEST SUB-GRADE MATERIAL ON SITE. LOOSELY BONDED SUB-GRADE SHALL BE PRIMED WITH AN ASPHALT PRIMING MATERIAL. THE ENTIRE SUB-GRADE AREA SHALL BE COMPACTED BY AT LEAST FIVE (5) COVERAGES OF A PNEUMATIC-TIRED ROLLER. THE SURFACE OF THE SUB-GRADE AFTER COMPACTION SHALL BE HARD, UNIFORM, SMOOTH AND TRUE TO GRADE AND CROSS SECTION. IF ANY QUESTIONS ARISE AS TO THE CONDITION OF SUB-GRADE, A SOILS ENGINEERING FIRM EMPLOYED BY THE OWNER WILL DETERMINE CONDITION OF SUB-GRADE PRIOR TO PAVING AT THE REQUEST OF THE CONTRACTOR.

B. SPREADING BASE AND SURFACE COURSES - ASPHALT BASE AND SURFACE: FOR ALL AREAS OF MORE THAN 1000 SQUARE YARDS, ASPHALT BASE AND SURFACE COURSES SHALL BE SPREAD AND STRUCK OFF WITH A PAVER. ANY IRREGULARITIES IN SURFACE OF PAVEMENT COURSE SHALL BE CORRECTED DIRECTLY BEHIND THE PAVER. EXCESS MATERIAL FORMING HIGH SPOTS SHALL BE REMOVED WITH A SHOVEL OR LUTE. INTENDED AREAS SHALL BE FILLED WITH HOT MIX AND SMOOTHED WITH A LUTE OR THE EDGE OF A SHOVEL BEING PULLED OVER THE SURFACE. CASTING OF MIX OVER SUCH AREAS SHALL NOT BE PERMITTED.

C. COMPACTION - ASPHALT BASE AND SURFACE: ROLLING SHALL START AS SOON AS THE HOT MIX MATERIAL CAN BE COMPACTED WITHOUT DISPLACEMENT. ROLLING SHALL CONTINUE UNTIL THOROUGHLY COMPACTED AND ALL ROLLER MARKS HAVE DISAPPEARED.

D. SPECIFICATIONS FOR SAMPLING AND PATCHING NEW ASPHALTIC CONCRETE PAVEMENTS

1. AT COMPLETION OF PAVING, TEST CORES SHALL BE TAKEN BY AN INDEPENDENT LABORATORY SELECTED AND PAID BY THE OWNER, TO VERIFY THAT THE THICKNESS OF THE PAVING MATERIALS MEETS THE MINIMUM SPECIFICATION REQUIREMENTS.
2. SUFFICIENT CORES SHALL BE TAKEN IN BOTH PARKING STALLS AND DRIVES TO ENSURE REPRESENTATIVE SAMPLING. HOWEVER, NO LESS THAN FOUR (4) LOCATIONS SHALL BE TESTED.
3. THE TESTING LABORATORY SHALL NOTIFY THE GENERAL CONTRACTOR AT LEAST TWO (2) DAYS PRIOR TO CORING.
4. THE PAVING CONTRACTOR SHALL PATCH CORE HOLES IMMEDIATELY UPON COMPLETION.
5. IF THE ASPHALTIC CONCRETE PATCH CANNOT BE INSTALLED IMMEDIATELY AFTER COMPLETION OF CORING, A MINIMUM OF 5" OF PORTLAND CEMENT CONCRETE SHOULD BE PLACED IN THE TEST HOLE, SUCH THAT THE SURFACE CONCRETE SHOULD HAVE A MINIMUM TWENTY EIGHT (28) DAYS' COMPRESSIVE STRENGTH OF 3,000 PSI, WITH PROPER AIR ENTRAINMENT. SIX (6) TEST HOLES WITH DEPTH IN EXCESS OF 6" MAY BE BACKFILLED TO THE REQUIRED PATCH DEPTH WITH COMPACTED CRUSHED STONE OR PORTLAND CEMENT CONCRETE.
6. PATCHING METHOD:

A. A TACK COAT SHALL BE APPLIED TO THE SIDES OF THE CORE HOLES. THE TACK COAT MAY CONSIST OF SS-1, SS-1H, CSS-1H, RS-1, CRS-1, EMULSIFIED ASPHALT OR RC-70 CUTBACK ASPHALT.

B. AN ASPHALTIC CONCRETE PATCH WITH A MINIMUM THICKNESS EQUAL TO THE ORIGINAL ASPHALTIC CONCRETE OR 3", WHICHEVER IS GREATER, SHOULD BE INSTALLED IN THE CORE HOLE, FLUSH WITH THE EXISTING PAVEMENT SURFACE. THE MINIMUM THICKNESS MAY BE REDUCED TO 1" IF A TEMPORARY CONCRETE PATCH IS UTILIZED AS IN (5) ABOVE.

C. THE ASPHALTIC CONCRETE MAY CONSIST OF HOT MIX PLACED AT A TEMPERATURE OF AT LEAST 285 DEGREES F, OR COLD MIX UTILIZING EMULSIFIED OR CUTBACK ASPHALT. THE ASPHALTIC CONCRETE SHOULD MEET THE APPROPRIATE STATE SPECIFICATIONS FOR ASPHALTIC CONCRETE SURFACE COURSE, AND SHOULD BE PROPERLY COMPACTED.

D. PATCHING SHOULD BE PERFORMED AT TEMPERATURES ABOVE 40 DEGREES F TO ENSURE PROPER SETTING OF THE PORTLAND CEMENT CONCRETE, IF USED, AND CURING OF THE ASPHALTIC CONCRETE, IF COLD MIX IS USED.

3. MARKING: MARK ALL PARKING BAYS, ARROWS, AND OTHER TRAFFIC MARKINGS INDICATED ON SITE PLAN. PAINT TRAFFIC YELLOW REFER TO SITE PLAN. ALL PAINT PRODUCTS TO COMPLY WITH STATE HIGHWAY DEPARTMENT SPECIFICATIONS.

SECTION 2F: OPENING SOON SIGN (OPTIONAL)

GENERAL PROVISIONS

1. SCOPE: FURNISH AND INSTALL WOOD POSTS AND INSTALL SIGN FURNISHED BY OWNER.

MATERIALS

1. "OPENING SOON" LOGO SIGN: SUPPLIED AND SHIPPED TO THE SITE BY THE OWNER. THE SIGN CONSIST OF TWO (2) 4' X 8' WOOD SHEETS. INSTALL ON THREE (3) 4" X 4" X 8' WOOD POST IN "V" SHAPE SO THE SIGN MAY BE READ FROM EITHER DIRECTION. INSTALL THE DAY RECEIVED IN A LOCATION TO ENSURE PRIME VISIBILITY.

SECTION 2G: LANDSCAPING

GENERAL PROVISIONS

1. SCOPE: FURNISH AND INSTALL TOPSOIL TO PROPER CONTOUR FOR ALL AREAS NOTED ON THE SITE PLAN TO BE LANDSCAPED.
2. NOTES:

A. PLANTING MATERIALS AND INSTALLATION SHALL BE PROVIDED UNDER SEPARATE CONTRACT BY THE OWNER.

B. COORDINATE THE TIMING OF THE PLACEMENT OF TOPSOIL WITH THE OWNER IN ORDER TO PREVENT EROSION OF TOPSOIL.

MATERIALS

1. TOPSOIL: 6" MINIMUM TOPSOIL.

PERFORMANCE

THE TOPSOIL FILL SHALL BE PLACED AFTER THE COMPLETION OF ALL FOUNDATION AND SITE UTILITY WORK WHEN CONSTRUCTION IS NEARING COMPLETION. RAKE SMOOTH IN PREPARATION OF PLANT MATERIAL INSTALLATION, AND REMOVE ALL LUMPS AND TRASH. TOPSOIL SHALL BE BACKFILLED TO ALL PERIMETER CURBS, AND TO ANY PAVING. TOPSOIL SHALL BE PLACED IN THE OUTSIDE PLANTER.

2. NO MULCH SHALL BE USED WITHIN 5'-0" OF BUILDING ENVELOPE . USE VOLCANIC ROCK OR NON-FLAMMABLE MULCH WITHIN 5'-0". MULCH CAN BE USED OUTSIDE THIS DIMESION.A

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

TANNER EDWARDS KINDE
15704
Tanner Kinde

9.14.2023

Company Logo

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Project

LOUISIANA KITCHEN 1972 POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ARCHITECTURAL SPECIFICATIONS

Drawn	Checked
SH	AL

Scale	Date
	JUNE 2023

Project No.	Drawing No.
C22-129	SP1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

DIVISION 03 - CONCRETE

REINFORCED CONCRETE 03 30 00

PART 1 - GENERAL

1.1 SUMMARY

A. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST, ADOPTED EDITIONS OF THE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED HEREIN.

B. REFERENCE STANDARDS BY THE AMERICAN CONCRETE INSTITUTE (ACI)

1. ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE," EXCEPT AS SPECIFICALLY MODIFIED IN THE SPECIFICATIONS AND/OR HEREIN.
2. ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."
3. ACI 305, "HOT WEATHER CONCRETING" AND ACI 306, "COLD WEATHER CONCRETING."
4. ACI 315, "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" UNLESS DETAILED OTHERWISE ON THE STRUCTURAL DRAWINGS.

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.

B. DESIGN MIXTURES: FOR EACH CONCRETE MIXTURE.

C. STEEL REINFORCEMENT SHOP DRAWINGS: PLACING DRAWINGS THAT DETAIL FABRICATION, BENDING, AND PLACEMENT.

D. FORMWORK SHOP DRAWINGS: PREPARED BY OR UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER DETAILING FABRICATION, ASSEMBLY, AND SUPPORT OF FORMWORK.

1.3 INFORMATIONAL SUBMITTALS

A. WELDING CERTIFICATES.

B. MATERIAL CERTIFICATES.

C. MATERIAL TEST REPORTS.

D. FLOOR SURFACE FLATNESS AND LEVELNESS MEASUREMENTS.

1.4 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS: A FIRM EXPERIENCED IN MANUFACTURING READY-MIXED CONCRETE PRODUCTS AND THAT COMPLIES WITH ASTM C 94/C 94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT.

1. MANUFACTURER CERTIFIED ACCORDING TO NRMCA'S "CERTIFICATION OF READY MIXED CONCRETE PRODUCTION FACILITIES."

B. TESTING AGENCY QUALIFICATIONS: AN INDEPENDENT AGENCY,[ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION,] QUALIFIED ACCORDING TO ASTM C 1077 AND ASTM E 329 FOR TESTING INDICATED.

C. WELDING QUALIFICATIONS: QUALIFY PROCEDURES AND PERSONNEL ACCORDING TO AWS D1.4/D 1.4M, "STRUCTURAL WELDING CODE - REINFORCING STEEL."

D. ACI PUBLICATIONS: COMPLY WITH THE FOLLOWING UNLESS MODIFIED BY REQUIREMENTS IN THE CONTRACT DOCUMENTS:

1. ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE."
2. ACI 117, "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS."

E. CONCRETE TESTING SERVICE: ENGAGE A QUALIFIED INDEPENDENT TESTING AGENCY TO PERFORM MATERIAL EVALUATION TESTS AND TO DESIGN CONCRETE MIXTURES.

PART 2 - PRODUCTS

2.1 MATERIALS

A. STRUCTURAL CONCRETE

SEE STRUCTURAL DRAWINGS FOR CLASS, LOCATION, AND COMPRESSIVE STRENGTH OF CONCRETE AND BACKFILL.

B. REINFORCING BARS AND WELDED WIRE FABRIC
SEE STRUCTURAL DRAWINGS FOR SPECIFICATION.

C. BAR SUPPORTS: BOLSTERS, CHAIRS, SPACERS, AND OTHER DEVICES FOR SPACING, SUPPORTING, AND FASTENING REINFORCING BARS AND WELDED WIRE REINFORCEMENT IN PLACE. MANUFACTURE BAR SUPPORTS FROM STEEL WIRE, PLASTIC, OR PRECAST CONCRETE ACCORDING TO CRSI'S "MANUAL OF STANDARD PRACTICE.

2.2 FIELD MANUAL: PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.

2.3 FOOTINGS AND FOUNDATION WALLS

A. PROVIDE AND INSTALL DOWELS IN CONCRETE FOOTINGS TO MATCH VERTICAL FOUNDATION WALL REINFORCING.

1. WHERE CONCRETE IS CONSTRUCTED ON TOP OF FOOTINGS PROVIDE 48 BAR DIAMETER REINFORCING LAP SPLICES BETWEEN DOWELS AND VERTICAL WALL REINFORCING.

B. INSTALL CORNER BARS AT FOUNDATION WALL AND FOOTING CORNERS TO MATCH HORIZONTAL REINFORCING. LAP CORNER BARS WITH HORIZONTAL WALL AND FOOTING REINFORCING A MINIMUM OF 48 BAR DIAMETERS.

C. INSTALL LEAN CONCRETE (CLASS IV) UNDER FOUNDATIONS FOR ACCIDENTAL OVER-EXCAVATION, SOFT SPOTS AND TRENCHES.

D. CONCRETE FOUNDATION WALLS ARE NOT DESIGNED TO BE STABLE DURING CONSTRUCTION. THE CONTRACTOR SHALL INSTALL, IN A TIMELY MANNER TO PREVENT COLLAPSE OF THE WALLS, ADEQUATE BRACING DESIGNED TO RESIST ALL APPLICABLE LOADS OR FORCES. BRACING SHALL REMAIN IN PLACE UNTIL ALL STRUCTURAL ELEMENTS PROVIDING LATERAL SUPPORT FOR THE WALLS ARE IN PLACE AND THE WALLS HAVE ATTAINED THE SPECIFIED DESIGN STRENGTH.

2.4 PROVIDE 48 BAR DIAMETER LAP SPLICES AT ENDS OF CONTINUOUS HORIZONTAL AND CONTINUOUS VERTICAL REINFORCING.

2.5 CONCRETE COVER: UNLESS NOTED OTHERWISE, DETAIL REINFORCING TO PROVIDE MINIMUM CONCRETE COVER AS FOLLOWS:

A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3	INCHES
B. CONCRETE EXPOSED TO EARTH OR WEATHER #5 BARS AND SMALLER	1-1/2	INCHES
OTHERS	2	INCHES

2.6 VAPOR RETARDERS

A. SHEET VAPOR RETARDER: ASTM E 1745. INCLUDE MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE-SENSITIVE TAPE.

B. SHEET VAPOR RETARDER: POLYETHYLENE SHEET, ASTM D 4397, NOT LESS THAN 10 MILS THICK

PART 3 - EXECUTION

3.1 FORMWORK

A. DESIGN, ERECT, SHORE, BRACE, AND MAINTAIN FORMWORK, ACCORDING TO ACI 301, TO SUPPORT VERTICAL, LATERAL, STATIC, AND DYNAMIC LOADS, AND CONSTRUCTION LOADS THAT MIGHT BE APPLIED, UNTIL STRUCTURE CAN SUPPORT SUCH LOADS.

B. CONSTRUCT FORMWORK SO CONCRETE MEMBERS AND STRUCTURES ARE OF SIZE, SHAPE, ALIGNMENT, ELEVATION, AND POSITION INDICATED, WITHIN TOLERANCE LIMITS OF ACI 117.

3.2 EMBEDDED ITEMS

A. PLACE AND SECURE ANCHORAGE DEVICES AND OTHER EMBEDDED ITEMS REQUIRED FOR ADJOINING WORK THAT IS ATTACHED TO OR SUPPORTED BY CAST-IN-PLACE CONCRETE. USE SETTING DRAWINGS, TEMPLATES, DIAGRAMS, INSTRUCTIONS, AND DIRECTIONS FURNISHED WITH ITEMS TO BE EMBEDDED.

3.3 VAPOR RETARDERS

A. SHEET VAPOR RETARDERS: PLACE, PROTECT, AND REPAIR SHEET VAPOR RETARDER ACCORDING TO ASTM E 1643 AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

1. LAP JOINTS 6 INCHES AND SEAL WITH MANUFACTURER'S RECOMMENDED TAPE.

3.4 STEEL REINFORCEMENT

A. GENERAL: COMPLY WITH CRSI'S "MANUAL OF STANDARD PRACTICE" FOR PLACING REINFORCEMENT.

1. DO NOT CUT OR PUNCTURE VAPOR RETARDER. REPAIR DAMAGE AND RESEAL VAPOR RETARDER BEFORE PLACING CONCRETE.

3.5 JOINTS

A. GENERAL: CONSTRUCT JOINTS TRUE TO LINE WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE.

B. CONSTRUCTION JOINTS: INSTALL SO STRENGTH AND APPEARANCE OF CONCRETE ARE NOT IMPAIRED, AT LOCATIONS INDICATED OR AS APPROVED BY ARCHITECT.

C. CONTRACTION JOINTS IN SLABS-ON-GRADE: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED ON FOUNDATION PLAN:

1. GROOVED JOINTS: FORM CONTRACTION JOINTS AFTER INITIAL FLOATING BY GROOVING AND FINISHING EACH EDGE OF JOINT TO A RADIUS OF 1/8 INCH. REPEAT GROOVING OF CONTRACTION JOINTS AFTER APPLYING SURFACE FINISHES. ELIMINATE GROOVER TOOL MARKS ON CONCRETE SURFACES.
2. SAWED JOINTS: FORM CONTRACTION JOINTS WITH POWER SAWS EQUIPPED WITH SHATTERPROOF ABRASIVE OR DIAMOND-RIMMED BLADES. CUT 1/8-INCH-WIDE JOINTS INTO CONCRETE WHEN CUTTING ACTION WILL NOT TEAR, ABRADE, OR OTHERWISE DAMAGE SURFACE AND BEFORE CONCRETE DEVELOPS RANDOM CONTRACTION CRACKS.

D. ISOLATION JOINTS IN SLABS-ON-GRADE: AFTER REMOVING FORMWORK, INSTALL JOINT-FILLER STRIPS AT SLAB JUNCTIONS WITH VERTICAL SURFACES, SUCH AS COLUMN PEDESTALS, FOUNDATION WALLS, GRADE BEAMS, AND OTHER LOCATIONS, AS INDICATED.

E. WATERSTOPS: INSTALL IN CONSTRUCTION JOINTS AND AT OTHER JOINTS INDICATED ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.6 CONCRETE PLACEMENT

A. BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

B. DEPOSIT CONCRETE CONTINUOUSLY IN ONE LAYER OR IN HORIZONTAL LAYERS OF SUCH THICKNESS THAT NO NEW CONCRETE WILL BE PLACED ON CONCRETE THAT HAS HARDENED ENOUGH TO CAUSE SEAMS OR PLANES OF WEAKNESS. IF A SECTION CANNOT BE PLACED CONTINUOUSLY, PROVIDE CONSTRUCTION JOINTS AS INDICATED. DEPOSIT CONCRETE TO AVOID SEGREGATION.

1. CONSOLIDATE PLACED CONCRETE WITH MECHANICAL VIBRATING EQUIPMENT ACCORDING TO ACI 301.

C. COLD-WEATHER PLACEMENT: COMPLY WITH ACI 306.1.

D. HOT-WEATHER PLACEMENT: COMPLY WITH ACI 301.

3.7 FINISHING FORMED SURFACES

A. ROUGH-FORMED FINISH: AS-CAST CONCRETE TEXTURE IMPARTED BY FORM-FACING MATERIAL WITH TIE HOLES AND DEFECTS REPAIRED AND PATCHED. REMOVE FINS AND OTHER PROJECTIONS THAT EXCEED SPECIFIED LIMITS ON FORMED-SURFACE IRREGULARITIES.

1. APPLY TO CONCRETE SURFACES [NOT EXPOSED TO PUBLIC VIEW] <INSERT LOCATIONS>

B. SMOOTH-FORMED FINISH: AS-CAST CONCRETE TEXTURE IMPARTED BY FORM-FACING MATERIAL, ARRANGED IN AN ORDERLY AND SYMMETRICAL MANNER WITH A MINIMUM OF SEAMS. REPAIR AND PATCH TIE HOLES AND DEFECTS. REMOVE FINS AND OTHER PROJECTIONS THAT EXCEED SPECIFIED LIMITS ON FORMED-SURFACE IRREGULARITIES.

1. APPLY TO CONCRETE SURFACES [EXPOSED TO PUBLIC VIEW,] [TO RECEIVE A RUBBED FINISH,] [TO BE COVERED WITH A COATING OR COVERING MATERIAL APPLIED DIRECTLY TO CONCRETE] <INSERT LOCATIONS>..

C. RUBBED FINISH: APPLY THE FOLLOWING TO SMOOTH-FORMED FINISHED AS-CAST CONCRETE WHERE INDICATED:

1. SMOOTH-RUBBED FINISH: NOT LATER THAN ONE DAY AFTER FORM REMOVAL, MOISTEN CONCRETE SURFACES AND RUB WITH CARBORUNDUM BRICK OR ANOTHER ABRASIVE UNTIL PRODUCING A UNIFORM COLOR AND TEXTURE. DO NOT APPLY CEMENT GROUT OTHER THAN THAT CREATED BY THE RUBBING PROCESS.
2. GROUT-CLEANED FINISH: WET CONCRETE SURFACES AND APPLY GROUT OF A CONSISTENCY OF THICK PAINT TO COAT SURFACES AND FILL SMALL HOLES. MIX ONE PART PORTLAND CEMENT TO ONE AND ONE-HALF PARTS FINE SAND WITH A 1:1 MIXTURE OF BONDING ADMIXTURE AND WATER. ADD WHITE PORTLAND CEMENT IN AMOUNTS DETERMINED BY TRIAL PATCHES SO COLOR OF DRY GROUT WILL MATCH ADJACENT SURFACES. SCRUB GROUT INTO VOIDS AND REMOVE EXCESS GROUT. WHEN GROUT WHITENS, RUB SURFACE WITH CLEAN BURLAP AND KEEP SURFACE DAMP BY FOG SPRAY FOR AT LEAST 36 HOURS.
3. CORK-FLOATED FINISH: WET CONCRETE SURFACES AND APPLY A STIFF GROUT. MIX ONE PART PORTLAND CEMENT AND ONE PART FINE SAND WITH A 1:1 MIXTURE OF BONDING AGENT AND WATER. ADD WHITE PORTLAND CEMENT IN AMOUNTS DETERMINED BY TRIAL PATCHES SO COLOR OF DRY GROUT WILL MATCH ADJACENT SURFACES. COMPRESS GROUT INTO VOIDS BY GRINDING SURFACE. IN A SWIRLING MOTION, FINISH SURFACE WITH A CORK FLOAT.

A. RELATED UNFORMED SURFACES: AT TOPS OF WALLS, HORIZONTAL OFFSETS, AND SIMILAR UNFORMED SURFACES ADJACENT TO FORMED SURFACES, STRIKE OFF SMOOTH AND FINISH WITH A TEXTURE MATCHING ADJACENT FORMED SURFACES. CONTINUE FINAL SURFACE TREATMENT OF FORMED SURFACES UNIFORMLY ACROSS ADJACENT UNFORMED SURFACES UNLESS OTHERWISE INDICATED.

3.8 FINISHING FLOORS AND SLABS

A. GENERAL: COMPLY WITH ACI 302.1R RECOMMENDATIONS FOR SCREEDING, RESTRAIGHTENING, AND FINISHING OPERATIONS FOR CONCRETE SURFACES. DO NOT WET CONCRETE SURFACES.

B. FLOAT FINISH: CONSOLIDATE SURFACE WITH POWER-DRIVEN FLOATS OR BY HAND FLOATING IF AREA IS SMALL OR INACCESSIBLE TO POWER DRIVEN FLOATS. RESTRAIGHTEN, CUT DOWN HIGH SPOTS, AND FILL LOW SPOTS. REPEAT FLOAT PASSES AND RESTRAIGHTENING UNTIL SURFACE IS LEFT WITH A UNIFORM, SMOOTH, GRANULAR TEXTURE.

1. APPLY FLOAT FINISH TO INTERIOR SLAB SURFACES.

C. TROWEL AND FINE-BROOM FINISH: APPLY A FIRST TROWEL FINISH TO EXTERIOR SLAB SURFACES. WHILE CONCRETE IS STILL PLASTIC, SLIGHTLY SCARIFY SURFACE WITH A FINE BROOM.

1. COMPLY WITH FLATNESS AND LEVELNESS TOLERANCES FOR TROWEL-FINISHED FLOOR SURFACES.

3.9 CONCRETE PROTECTING AND CURING

A. GENERAL: PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. COMPLY WITH ACI 306.1 FOR COLD-WEATHER PROTECTION AND ACI 301 FOR HOT-WEATHER PROTECTION DURING CURING.

B. EVAPORATION RETARDER: APPLY EVAPORATION RETARDER TO UNFORMED CONCRETE SURFACES IF HOT, DRY, OR WINDY CONDITIONS CAUSE MOISTURE LOSS APPROACHING 0.2 LB/SQ. FT. X H BEFORE AND DURING FINISHING OPERATIONS. APPLY ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AFTER PLACING, SCREEDING, AND BULL FLOATING OR DARBYING CONCRETE, BUT BEFORE FLOAT FINISHING.

C. CURE CONCRETE ACCORDING TO ACI 308.1, BY ONE OR A COMBINATION OF THE FOLLOWING METHODS:

1. MOISTURE CURING: KEEP SURFACES CONTINUOUSLY MOIST FOR NOT LESS THAN SEVEN DAYS.
2. MOISTURE-RETAINING-COVER CURING: COVER CONCRETE SURFACES WITH MOISTURE-RETAINING COVER FOR CURING CONCRETE, PLACED IN WIDEST PRACTICABLE WIDTH, WITH SIDES AND ENDS LAPPED AT LEAST 12 INCHES, AND SEALED BY WATERPROOF TAPE OR ADHESIVE. CURE FOR NOT LESS THAN SEVEN DAYS. IMMEDIATELY REPAIR ANY HOLES OR TEARS DURING CURING PERIOD USING COVER MATERIAL AND WATERPROOF TAPE.
3. CURING COMPOUND: APPLY UNIFORMLY IN CONTINUOUS OPERATION BY POWER SPRAY OR ROLLER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. RECOAT AREAS SUBJECTED TO HEAVY RAINFALL WITHIN THREE HOURS AFTER INITIAL APPLICATION. MAINTAIN CONTINUITY OF COATING AND REPAIR DAMAGE DURING CURING PERIOD.
    a. REMOVAL: AFTER CURING PERIOD HAS ELAPSED, REMOVE CURING COMPOUND WITHOUT DAMAGING CONCRETE SURFACES BY METHOD RECOMMENDED BY CURING COMPOUND MANUFACTURER.
4. CURING AND SEALING COMPOUND: APPLY UNIFORMLY TO FLOORS AND SLABS INDICATED IN A CONTINUOUS OPERATION BY POWER SPRAY OR ROLLER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. RECOAT AREAS SUBJECTED TO HEAVY RAINFALL WITHIN THREE HOURS AFTER INITIAL APPLICATION. REPEAT PROCESS 24 HOURS LATER AND APPLY A SECOND COAT. MAINTAIN CONTINUITY OF COATING AND REPAIR DAMAGE DURING CURING PERIOD.

3.10 CONCRETE SURFACE REPAIRS

A. DEFECTIVE CONCRETE: REPAIR AND PATCH DEFECTIVE AREAS WHEN APPROVED BY ARCHITECT. REMOVE AND REPLACE CONCRETE THAT CANNOT BE REPAIRED AND PATCHED TO ARCHITECT'S APPROVAL.

3.11 FIELD QUALITY CONTROL

A. TESTING AND INSPECTING: OWNER WILL ENGAGE A QUALIFIED TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

END OF SECTION 03 30 00

DIVISION 04 - MASONRY

UNIT MASONRY 04 20 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE LATEST, ADOPTED EDITIONS OF THE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED HEREIN.

B. REFERENCE STANDARDS

1. ACI 530/ASCE 5/TMS 402, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES."
2. ACI 530.1/ASCE 6/TMS 602, "SPECIFICATION FOR MASONRY STRUCTURES."
    a. CONFORM COLD WEATHER MASONRY CONSTRUCTION TO PARAGRAPH 1.8.C.
    b. CONFORM HOT WEATHER MASONRY CONSTRUCTION TO PARAGRAPH 1.8.D.

1.3 DELIVERY, STORAGE, AND HANDLING

A. DELIVER MASONRY MATERIALS TO PROJECT IN UNDAMAGED CONDITION.

B. STORE AND HANDLE MASONRY UNITS OFF THE GROUND, UNDER COVER, AND IN A DRY LOCATION TO PREVENT THEIR DETERIORATION OR DAMAGE DUE TO MOISTURE, TEMPERATURE CHANGES, CONTAMINANTS, CORROSION, AND OTHER CAUSES. IF UNITS BECOME WET, DO NOT PLACE UNITS UNTIL UNITS ARE IN AN AIR-DRIED CONDITION.

C. STORE CEMENTITIOUS MATERIALS OFF THE GROUND, UNDER COVER, AND IN DRY LOCATION.

D. STORE AGGREGATES WHERE GRADING AND OTHER REQUIRED CHARACTERISTICS CAN BE MAINTAINED AND CONTAMINATION AVOIDED.

E. STORE MASONRY ACCESSORIES INCLUDING METAL ITEMS TO PREVENT CORROSION AND ACCUMULATION OF DIRT AND OIL.

1.4 PROJECT CONDITIONS

A. PROTECTION OF MASONRY: DURING ERECTION, COVER TOPS OF WALLS, PROJECTIONS, AND SILLS WITH WATERPROOF SHEETING AT END OF EACH DAY'S WORK. COVER PARTIALLY COMPLETED MASONRY WHEN CONSTRUCTION IS NOT IN PROGRESS.

1. EXTEND COVER A MINIMUM OF 24 INCHES DOWN BOTH SIDES AND HOLD COVER SECURELY IN PLACE.

B. STAIN PREVENTION: PREVENT GROUT, MORTAR, AND SOIL FROM STAINING THE FACE OF MASONRY TO BE LEFT EXPOSED OR PAINTED. REMOVE IMMEDIATELY ANY GROUT, MORTAR, AND SOIL THAT COMES IN CONTACT WITH SUCH MASONRY.

1. PROTECT BASE OF WALLS FROM RAIN-SPLASHED MUD AND MORTAR SPLATTER BY MEANS OF COVERINGS SPREAD ON GROUND AND OVER WALL SURFACE.
2. PROTECT SILLS, LEDGES, AND PROJECTIONS FROM MORTAR DROPPINGS.
3. PROTECT SURFACES OF WINDOW AND DOORFRAMES, AS WELL AS SIMILAR PRODUCTS WITH PAINTED AND INTEGRAL FINISHES FROM MORTAR DROPPINGS.

C. COLD-WEATHER CONSTRUCTION: COMPLY WITH REFERENCED UNIT MASONRY STANDARD FOR COLD-WEATHER CONSTRUCTION AND THE FOLLOWING:

1. DO NOT LAY MASONRY UNITS THAT ARE WET OR FROZEN.
2. REMOVE MASONRY DAMAGED BY FREEZING CONDITIONS.

D. HOT-WEATHER CONSTRUCTION: COMPLY WITH REFERENCED UNIT MASONRY STANDARD.

PART 2 - PRODUCTS

2.1 MATERIALS

A. CONCRETE BLOCK: ASTM C90, MINIMUM NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS: 2,500 PSI.

1. BOND BEAM AND CORE FILL: ASTM C476, COARSE TYPE, MINIMUM COMPRESSIVE STRENGTH: 2,500 PSI.
2. SIZE: PROVIDE CONCRETE MASONRY UNITS COMPLYING WITH REQUIREMENTS INDICATED BELOW FOR SIZES THAT ARE MANUFACTURED TO SPECIFIED FACE DIMENSIONS WITHIN TOLERANCES SPECIFIED IN THE APPLICABLE REFERENCED ASTM SPECIFICATION FOR CONCRETE MASONRY UNITS.
3. CONCRETE MASONRY UNITS: MANUFACTURED TO SPECIFIED DIMENSIONS OF 3/8 INCH LESS THAN NOMINAL WIDTHS BY NOMINAL HEIGHTS BY NOMINAL LENGTHS INDICATED ON DRAWINGS.
4. CONCRETE MASONRY UNITS WITH INTEGRAL WATER REPELLANT: WHERE SHOWN, PROVIDE UNITS MADE WITH LIQUID POLYMERIC, INTEGRAL WATER-REPELLANT ADMIXTURE THAT DOES NOT REDUCE FLEXURAL BOND STRENGTH FOR EXPOSED UNITS; PRODUCT: GRACE CONSTRUCTION PRODUCTS, A UNIT OF W.R. GRACE & CO. - CONN; "DRY-BLOCK"

2.2 BRICK (AS APPLICABLE)

A. STANDARD FACE BRICK AS MANUFACTURED BY BORAL, GENERAL SHALE, OR BELDEN BRICK; TO COMPLY WITH ASTM C 216, SEVERE WEATHERING GRADE, TYPE FBS.

B. BRICK COLOR: SEE THE EXTERIOR FINISH SCHEDULE.

C. SAMPLES FOR VERIFICATION:

1. FACE BRICK, IN THE FORM OF STRAPS OF FIVE OR MORE BRICKS.
2. COLOR FOR COMPARISON TO EXISTING IF APPLICABLE.
3. SPECIAL SHAPES AS REQUIRED TO COMPLETE THE WORK AS DESCRIBED IN THE DRAWINGS.
4. WEEP HOLES AND VENTS.

2.3 MORTAR AND GROUT MIXES

A. MORTAR: TYPE S, MINIMUM COMPRESSIVE STRENGTH: 1,800 PSI.

B. FILL VERTICAL COLLAR JOINTS BELOW GRADE SOLIDLY WITH MORTAR.

2.4 MISCELLANEOUS

A. MASONRY WALLS ARE NOT DESIGNED TO BE STABLE DURING CONSTRUCTION. THE CONTRACTOR SHALL INSTALL, IN A TIMELY MANNER TO PREVENT COLLAPSE OF THE WALLS, ADEQUATE BRACING DESIGNED TO RESIST ALL APPLICABLE LOADS OR FORCES. BRACING SHALL REMAIN IN PLACE UNTIL ALL STRUCTURAL ELEMENTS PROVIDING LATERAL SUPPORT FOR THE WALLS ARE IN PLACE AND THE WALLS HAVE ATTAINED THE SPECIFIED DESIGN STRENGTH.

B. FILL CORES SOLIDLY AROUND ANCHOR RODS.

C. LAY HOLLOW MASONRY UNITS WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. PROVIDE FULL MORTAR COVERAGE FOR ALL WEBS IN THE STARTING COURSE ON FOOTINGS, AND WHEN ADJACENT TO CELLS OR CAVITIES TO BE FILLED WITH GROUT. LAY SOLID UNITS WITH FULL HEAD AND BED JOINTS.

D. WHERE MASONRY UNITS OF DIFFERING WIDTHS ARE CONSTRUCTED ON ONE ANOTHER, INSTALL AT LEAST ONE FULL COURSE OF 100% SOLID OR SOLIDLY-GROUTED MASONRY FOR THE WIDER OF THE TWO UNITS, CONTINUOUSLY ALONG THE TRANSITION (FOR EXAMPLE, AT BRICK LEDGES).

2.5 HORIZONTAL JOINT REINFORCEMENT, WALL TIES AND ANCHORS MANUFACTURERS: HOHMANN & BARNARD, DUR-O-WAL, NATIONAL WIRE PRODUCTS CORP.

A. HORIZONTAL JOINT REINFORCEMENT:

1. EYE AND PINTLE TYPE RODS SPACED NOT MORE THAN 16 INCHES ON CENTER, CLASS B-2, HOT DIPPED GALVANIZED, WITH 9 GAGE SIDE RODS. SIZE, 2 INCHES LESS THAN NOMINAL WALL THICKNESS.
2. FREE STANDING COMPOSITE WALLS: LADDER DESIGN, CROSS RODS SPACED NOT MORE THAN 16 INCHES ON CENTER, CLASS B-2, HOT DIPPED GALVANIZED, WITH 9 GAGE SIDE RODS. SIZE, 2 INCHES LESS THAN NOMINAL WALL THICKNESS.
    a. CONCRETE BLOCK LATERAL SUPPORT ANCHORS: 1/8 INCH THICK X 1-1/4 INCH WIDE X 16 INCH LONG, MILL GALVANIZED WITH DOWN-TURNED END BENDS.
    b. WIRE MESH WALL TIES SHALL BE 16 GAGE HOT-DIPPED GALVANIZED WIRE MESH WITH 1/2 INCH OPENINGS.

B. MASONRY VENEER ANCHORS:

1. GALV. ADJUSTABLE VENEER ANCHOR WITH TWO CADMIUM COATED SCREWS, 14 GAGE ANCHOR AND 3/16 INCH DIAMETER STEEL TIES. PROVIDE ONE ANCHOR FOR EACH 2.0 SQUARE FEET OF WALL AREA. TIES SHALL BE SIZED TO EXTEND WITHIN 3/4 INCH OF FACE MASONRY. ANCHORS MUST BE FASTENED DIRECTLY TO METAL STUDS.
2. CORRUGATED METAL VENEER TIES SHALL NOT BE USED.

2.6 MISCELLANEOUS MASONRY ACCESSORIES

A. NONMETALLIC EXPANSION JOINT STRIPS: PREMOLDED FILLER STRIPS COMPLYING WITH ASTM D 1056, TYPE 2 (CLOSED CELL), CLASS A (CELLULAR RUBBER AND RUBBER-LIKE MATERIALS WITH SPECIFIC RESISTANCE TO PETROLEUM BASE OILS), GRADE 1 (COMPRESSION-DEFLECTION RANGE OF 2-5 PSI), COMPRESSIBLE UP TO 35 PERCENT, OF WIDTH AND THICKNESS INDICATED, FORMULATED FROM THE FOLLOWING MATERIAL:

1. NEOPRENE.

B. PREFORMED CONTROL JOINT GASKETS: MATERIAL AS INDICATED BELOW, DESIGNED TO FIT STANDARD SASH BLOCK AND TO MAINTAIN LATERAL STABILITY IN MASONRY WALL; SIZE AND CONFIGURATION AS INDICATED.

1. STYRENE-BUTADIENE RUBBER COMPOUND: ASTM D 2000, DESIGNATION 2AA-805.

C. BOND BREAKER STRIPS: ASPHALT-SATURATED ORGANIC ROOFING FELT COMPLYING WITH ASTM D 226, TYPE I (NO. 15 ASPHALT FELT).

D. WEEP/VENT PRODUCTS: USE RECTANGULAR PLASTIC WEEP/VENT TUBING: CLEAR BUTYRATE, 3/8" BY 1-1/2" BY 3-1/2" LONG. SPACE AS SHOWN BUT NOT LESS THAN 2'-0" O.C.

2.7 THRU WALL FLASHING

A. COPPER/PAPER FLASHING: 3 OZ. COPPER SHEET LAMINATED BETWEEN 2 SHEETS OF BITUMINOUS IMPREGNATED CREPE KRAFT PAPER OR SATURATED FABRIC.

B. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS SPECIFIED, PROVIDE ONE OF THE FOLLOWING:

1. W.R. GRACE & CO., "PERMA-A-BARRIER".
2. AFCO PRODUCTS, INC., "COP-A-BOND DUPLEX".
3. PHOENIX BUILDING PRODUCTS, INC.; "DUPLEX COP-R FLASH".
4. YORK MANUFACTURING, INC.; "COP-R-TEX DUPLEX".

C. ADHESIVE FOR FLASHING: TYPE RECOMMENDED BY MANUFACTURER OF FLASHING MATERIAL FOR USE INDICATED.

2.8 MASONRY CLEANERS

A. JOB-MIXED DETERGENT SOLUTION: SOLUTION OF TRISODIUM PHOSPHATE (1/2-CUP DRY MEASURE) AND LAUNDRY DETERGENT (1/2-CUP DRY MEASURE) DISSOLVED IN ONE GALLON OF WATER.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER SPECIFIC CONDITIONS, AND OTHER CONDITIONS AFFECTING PERFORMANCE OF UNIT MASONRY.

1. FOR THE RECORD, PREPARE WRITTEN REPORT, ENDORSED BY INSTALLER, LISTING CONDITIONS DETRIMENTAL TO PERFORMANCE OF UNIT MASONRY.

B. EXAMINE ROUGH-IN AND BUILT-IN CONSTRUCTION TO VERIFY ACTUAL LOCATIONS OF PIPING CONNECTIONS PRIOR TO INSTALLATION.

C. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 INSTALLATION, GENERAL

A. COMPLY WITH REFERENCED UNIT MASONRY STANDARD AND OTHER REQUIREMENTS INDICATED APPLICABLE TO EACH TYPE OF INSTALLATION INCLUDED IN PROJECT.

B. THICKNESS: BUILD SINGLE-WYTHE WALLS TO THE ACTUAL THICKNESS OF THE MASONRY UNITS, USING UNITS OF NOMINAL THICKNESS INDICATED.

C. GUILD CHASES AND RECESSES AS SHOWN OR REQUIRED TO ACCOMMODATE ITEMS SPECIFIED IN THIS AND OTHER SECTIONS OF THE SPECIFICATIONS. PROVIDE NOT LESS THAN 8 INCHES OF MASONRY BETWEEN CHASE OR RECESS AND JAMB OF OPENINGS AND BETWEEN ADJACENT CHASES AND RECESSES.

D. LEAVE OPENINGS FOR EQUIPMENT TO BE INSTALLED BEFORE COMPLETION OF MASONRY. AFTER INSTALLATION OF EQUIPMENT, COMPLETE MASONRY TO MATCH CONSTRUCTION IMMEDIATELY ADJACENT TO THE OPENING.

E. CUT MASONRY UNITS WITH MOTOR-DRIVEN SAWS TO PROVIDE CLEAN, SHARP, UNCHIPPED EDGES. CUT UNITS AS REQUIRED TO PROVIDE CONTINUOUS PATTERN AND TO FIT ADJOINING CONSTRUCTION. USE FULL-SIZE UNITS WITHOUT CUTTING WHERE POSSIBLE.

3.3 CONSTRUCTION TOLERANCES

A. COMPLY WITH CONSTRUCTION TOLERANCES OF REFERENCED UNIT MASONRY STANDARD.

3.4 LAYING MASONRY WALLS

A. LAY OUT WALLS IN ADVANCE FOR ACCURATE SPACING OF SURFACE BOND PATTERNS WITH UNIFORM JOINT WIDTHS AND FOR ACCURATE LOCATING OF OPENINGS, MOVEMENT-TYPE JOINTS, RETURNS, AND OFFSETS. AVOID THE USE OF LESS-THAN-HALF-SIZE UNITS AT CORNERS, JAMBS, AND WHERE POSSIBLE AT OTHER LOCATIONS.

B. LAY UP WALLS TO COMPLY WITH SPECIFIED CONSTRUCTION TOLERANCES, WITH COURSES ACCURATELY SPACED AND COORDINATED WITH OTHER CONSTRUCTION.

C. BOND PATTERN FOR EXPOSED MASONRY: LAY EXPOSED MASONRY IN THE FOLLOWING BOND PATTERN; DO NOT USE UNITS WITH LESS THAT NOMINAL 4-INCH HORIZONTAL FACE DIMENSIONS AT CORNERS OR JAMBS.

1. ONE-HALF RUNNING BOND WITH VERTICAL JOINT IN EACH COURSE CENTERED ON UNITS IN COURSES ABOVE AND BELOW.

D. LAY CONCEALED MASONRY WITH ALL UNITS IN A WYTHE IN RUNNING BOND OR BONDED BY LAPPING NOT LESS THAN 2 INCHES. BOND AND INTERLOCK EACH COURSE OF EACH WYTHE AT CORNERS. DO NOT USE UNITS WITH LESS THAN NOMINAL 4-INCH HORIZONTAL FACE DIMENSIONS AT CORNERS OR JAMBS.

E. STOPPING AND RESUMING WORK: IN EACH COURSE, RACK BACK 1/2-UNIT LENGTH FOR ONE-HALF RUNNING BOND OR 1/3-UNIT LENGTH FOR ONE-THIRD RUNNING BOND; DO NOT TOOTH. CLEAN EXPOSED SURFACES OF SET MASONRY, WET CLAY MASONRY UNITS LIGHTLY (IF REQUIRED), AND REMOVE LOOSE MASONRY UNITS AND MORTAR PRIOR TO LAYING FRESH MASONRY.

F. BUILT-IN-WORK: AS CONSTRUCTION PROGRESSES, BUILD-IN-ITEMS SPECIFIED UNDER THIS AND OTHER SECTIONS OF THE SPECIFICATIONS. FILL IN SOLIDLY WITH MASONRY AROUND BUILT-IN ITEMS.

1. FILL SPACE BETWEEN HOLLOW METAL FRAMES AND MASONRY SOLIDLY WITH MORTAR, UNLESS OTHERWISE INDICATED.
2. WHERE BUILT-IN-ITEMS ARE TO BE EMBEDDED IN CORES OF HOLLOW MASONRY UNITS, PLACE A LAYER OF METAL LATH IN THE JOINT BELOW AND ROD MORTAR OR GROUT INTO CORE.

3.5 MORTAR BEDDING AND JOINTING

A. LAY HOLLOW CONCRETE MASONRY UNITS AS FOLLOWS:

1. WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS TOOL FINISHED JOINT TO SLIGHT CONCAVE SECTION FORMING UNIFORMLY DENSE GROUT SURFACE.
2. BED WEBS IN MORTAR IN STARTING COURSE ON FOOTINGS AND IN ALL COURSES OF PIERS AND WHERE ADJACENT TO CELLS OR CAVITIES TO BE FILLED WITH GROUT.
3. FOR STARTING COURSE ON FOOTINGS WHERE CELLS ARE NOT GROUTED, SPREAD OUT FULL MORTAR BED INCLUDING AREAS UNDER CELLS.

B. CUT JOINTS FLUSH FOR MASONRY WALLS TO BE CONCEALED OR TO BE COVERED BY OTHER MATERIALS, UNLESS OTHERWISE INDICATED.

C. REPOINT MORTAR JOINTS ADJOINING GLAZED SURFACES OF PREFACED CONCRETE MASONRY UNITS WITH CHEMICAL-RESISTANT, WATER-CLEANABLE, EPOXY GROUT. AFTER BEDDING MORTAR HAS BECOME FIRM BUT BEFORE IT HARDENS OR SETS, RAKE JOINTS ADJOINING GLAZED SURFACES BACK 1/4-INCH FROM FACE. REPOINT WITH CHEMICAL-RESISTANT, WATER-CLEANABLE, EPOXY GROUT. TOOL FINISHED JOINT TO SLIGHTLY CONCAVE SECTION FORMING UNIFORMLY DENSE GROUT SURFACE.

3.6 MOVEMENT (CONTROL AND EXPANSION) JOINTS

A. GENERAL: INSTALL CONTROL AND EXPANSION JOINTS IN UNIT MASONRY WHERE INDICATED. BUILD IN RELATED ITEMS AS THE MASONRY PROGRESSES. DO NOT FORM A CONTINUOUS SPAN THROUGH MOVEMENT JOINTS UNLESS PROVISIONS ARE MADE TO PREVENT IN-PLANE RESTRAINT OF WALL OR PARTITION MOVEMENT.

B. FORM CONTROL JOINTS IN CONCRETE MASONRY AS FOLLOWS:

1. INSTALL PREFORMED CONTROL JOINT GASKETS DESIGNED TO FIT STANDARD SASH BLOCK.

3.7 REPAIRING, POINTING, AND CLEANING

A. REMOVE AND REPLACE MASONRY UNITS THAT ARE LOOSE, CHIPPED, BROKEN, STAINED, OR OTHERWISE DAMAGED OR IF UNITS DO NOT MATCH ADJOINING UNITS. INSTALL NEW UNITS TO MATCH ADJOINING UNITS AND IN FRESH MORTAR OR GROUT, POINTED TO ELIMINATE EVIDENCE OF REPLACEMENT.

B. POINTING: DURING THE TOOLING OF JOINTS, ENLARGE ANY VOIDS OR HOLES, EXCEPT WEEP HOLES, AND COMPLETELY FILL WITH MORTAR. POINT-UP ALL JOINTS INCLUDING CORNERS, OPENINGS, AND ADJACENT CONSTRUCTION TO PROVIDE A NEAT, UNIFORM APPEARANCE, PREPARED FOR APPLICATION OF SEALANTS.

C. FINAL CLEANING: AFTER MORTAR IS THOROUGHLY SET AND CURED, CLEAN EXPOSED MASONRY AS FOLLOWS:

1. TEST CLEANING METHODS ON SAMPLE WALL PANEL; LEAVE 1/2 PANEL UNCLEANED FOR COMPARISON PURPOSES. OBTAIN ASSOCIATE'S APPROVAL OF SAMPLE CLEANING BEFORE PROCEEDING WITH CLEANING OF MASONRY.
2. CLEAN CONCRETE MASONRY BY MEANS OF CLEANING METHOD INDICATED IN NCMA TEK 45 APPLICABLE TO TYPE OF STAIN PRESENT ON EXPOSED SURFACES.

D. PROTECTION: PROVIDE FINAL PROTECTION AND MAINTAIN CONDITIONS, IN A MANNER ACCEPTABLE TO INSTALLER THAT ENSURES UNIT MASONRY IS WITHOUT DAMAGE AND DETERIORATION AT TIME OF CONTRACT COMPLETION.

END OF SECTION 04 20 00

DIVISION 5 - METALS

DECORATIVE METAL RAILINGS SECTION 05 73 00

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:

1. STEEL AND IRON DECORATIVE RAILINGS.

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR THE FOLLOWING:

1. MANUFACTURER'S PRODUCT LINES OF RAILINGS ASSEMBLED FROM STANDARD COMPONENTS.
2. GROUT, ANCHORING CEMENT, AND PAINT PRODUCTS.

B. SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, AND ATTACHMENT DETAILS.

C. SAMPLES: FOR EACH TYPE OF EXPOSED FINISH REQUIRED.

D. DELEGATED-DESIGN SUBMITTAL: FOR INSTALLED PRODUCTS INDICATED TO COMPLY WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

1.3 INFORMATIONAL SUBMITTALS

A. QUALIFICATION DATA: FOR [PROFESSIONAL ENGINEER] [TESTING AGENCY].

B. PRODUCT TEST REPORTS: BASED ON EVALUATION OF COMPREHENSIVE TESTS PERFORMED BY A QUALIFIED TESTING AGENCY, ACCORDING TO ASTM E 894 AND ASTM E 935.

C. PRECONSTRUCTION TEST REPORTS.

D. EVALUATION REPORTS: FOR POST-INSTALLED ANCHORS, FROM ICC-ES.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. STEEL AND IRON DECORATIVE RAILINGS:

1. MANUFACTURER:
    c. FORTRESS RAILING PRODUCTS, OR ACCEPTED EQUIVALENT AS SUPPLIED BY GENERAL CONTRACTOR.

B. PRODUCT OPTIONS: INFORMATION ON CIVIL DRAWINGS AND IN SPECIFICATIONS ESTABLISHES REQUIREMENTS FOR SYSTEM'S AESTHETIC EFFECTS AND PERFORMANCE CHARACTERISTICS.

1. DO NOT MODIFY INTENDED AESTHETIC EFFECTS, AS JUDGED SOLELY BY OWNER, EXCEPT WITH OWNER'S APPROVAL.

2.2 METALS, GENERAL

A. BRACKETS, FLANGES, FASTENERS, AND ANCHORS: SAME METAL AND FINISH AS SUPPORTED RAILS AS PROVIDED FROM FORTRESS RAILING PRODUCTS BY GENERAL CONTRACTOR

2.3 STEEL AND IRON

A. TUBING, BARS, PLATES, AND OTHER CAST IRON MEMBERS PER ICC AC-273.

2.5 STEEL AND IRON FINISHES

A. GALVANIZED RAILINGS:

1. PRE GALVANIZED EXTERIOR STEEL AND IRON RAILINGS, INCLUDING HARDWARE, AFTER FABRICATION.
2. COMPLY WITH ICC AC-237.
3. DO NOT QUENCH OR APPLY POST-GALVANIZING TREATMENTS THAT MIGHT INTERFERE WITH PAINT ADHESION.

PART 3 - EXECUTION

3.1 INSTALLATION

A. FIT EXPOSED CONNECTIONS TOGETHER TO FORM TIGHT, HAIRLINE JOINTS.

B. PERFORM CUTTING, DRILLING, AND FITTING REQUIRED FOR INSTALLING RAILINGS. SET RAILINGS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION; MEASURED FROM ESTABLISHED LINES AND LEVELS AND FREE OF RACK.

1. SET POSTS PLUMB WITHIN A TOLERANCE OF 1/16 INCH IN 3 FEET.
2. ALIGN RAILS PER MANUFACTURER'S INSTRUCTIONS.

C. TOUCHUP PAINTING: IMMEDIATELY AFTER ERECTION, CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS OF SHOP PAINT, AND PAINT EXPOSED AREAS WITH THE SAME MATERIAL USED FOR SHOP PAINTING TO COMPLY WITH SSPC-PA 1 FOR TOUCHING UP SHOP-PAINTED SURFACES.

END OF SECTION 05 73 00

DIVISION 6 - WOOD, PLASTICS, AND COMPOSITES

ROUGH CARPENTRY SECTION 06 10 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION

1.2 DELIVERY, STORAGE AND HANDLING

A. DELIVERY AND STORAGE: KEEP MATERIALS UNDER COVER AND DRY. PROTECT AGAINST EXPOSURE TO WEATHER AND CONTACT WITH DAMP OR WET SURFACES. STACK LUMBER AS WELL AS PLYWOOD AND OTHER PANELS FLAT WITH SPACERS BETWEEN EACH BUNDLE; PROVIDE FOR AIR CIRCULATION WITHIN AND AROUND STACKS AND UNDER TEMPORARY COVERINGS INCLUDING POLYETHYLENE AND SIMILAR MATERIALS.

1.3 INFORMATIONAL SUBMITTALS

A. ALL STRUCTURAL LUMBER CONSTRUCTION SHALL CONFORM TO THE LATEST, ADOPTED EDITIONS OF THE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED HEREIN

PART 2 - PRODUCTS

2.1 LUMBER PRODUCTS

A. GENERAL: ALL LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF DOC PS 20. FURNISH LUMBER WITH EACH PIECE FACTORY-MARKED WITH GRADE STAMP OF INSPECTION AGENCY VERIFYING COMPLIANCE WITH GRADING RULE REQUIREMENTS AND IDENTIFYING GRADING AGENCY, GRADE, SPECIES, MOISTURE CONTENT AND MILL.

1. FOR EXPOSED LUMBER INDICATED TO RECEIVE A STAINED OR NATURAL FINISH, MARK GRADE STAMP ON END OR BACK OF EACH PIECE OR PROVIDE CERTIFICATE OF GRADE COMPLIANCE ISSUED BY GRADING AGENCY.
2. PROVIDE DRESSED LUMBER, S4S, UNLESS OTHERWISE INDICATED.

B. INSPECTION AGENCIES: INSPECTION AGENCIES AND THE ABBREVIATIONS USED TO REFERENCE THEM WITH LUMBER GRADES AND SPECIES PER SPIB - SOUTHERN PINE INSPECTION BUREAU.

C. GRADE STAMPS: PROVIDE LUMBER WITH EACH PIECE FACTORY-MARKED WITH GRADE STAMP OF INSPECTION AGENCY EVIDENCING COMPLIANCE WITH GRADING RULE REQUIREMENTS AND IDENTIFYING GRADING AGENCY, GRADE, SPECIES, MOISTURE CONTENT AT TIME OF SURFACING, AND MILL.

2.2 DIMENSION LUMBER AND BOARDS FOR CONCEALED CONDITIONS

A. SPECIES: SPRUCE PINE FIR.

B. MOISTURE CONTENT: S-DRY, KD 19 OR MC 19 (19 PERCENT MAXIMUM MOISTURE CONTENT).

C. GRADE: STRUCTURAL LUMBER: NO. 2 OR STANDARD GRADE. BOARDS: NO. 2, 2 COMMON, OR CONSTRUCTION BOARDS.

2.3 FIRE RETARDANT-TREATED MATERIALS

A. GENERAL: COMPLY WITH PERFORMANCE REQUIREMENTS IN AWPA C20 (LUMBER) AND AWPA C27 (PLYWOOD).

1. USE EXTERIOR TYPE FOR EXTERIOR LOCATIONS AND WHERE INDICATED.
2. USE INTERIOR TYPE A, HIGH TEMPERATURE (HT) FOR ENCLOSED ROOF FRAMING, FRAMING IN ATTIC SPACES AND WHERE INDICATED.

2.4 CONSTRUCTION PANELS

A. STANDARDS: COMPLY WITH REQUIREMENTS OF DOC PS 1 VOLUNTARY PRODUCT STANDARD "CONSTRUCTION INDUSTRIAL PLYWOOD" FOR VENEER PLYWOOD AND APA PRP-108 "PERFORMANCE STANDARDS AND POLICIES FOR STRUCTURAL-USE PANELS" FOR PERFORMANCE-RATED PANELS. TRADEMARK: FURNISH CONSTRUCTION PANELS THAT ARE EACH FACTORY-MARKED WITH APA TRADEMARK FOR GRADE SPECIFIED.

B. MISCELLANEOUS CONCEALED PANELS: APA-RATED SHEATHING, EXPOSURE 1, SPAN RATING TO SUIT FRAMING IN EACH LOCATION.

C. ELECTRICAL/TELEPHONE BACKING PANELS: APA-RATED SHEATHING, EXPOSURE 1, FIRE-RETARDANT TREATED, THICKNESS AS INDICATED BUT NOT LESS THAN 15/32 INCH.

2.5 MISCELLANEOUS LUMBER

A. GENERAL: PROVIDE LUMBER FOR SUPPORT OR ATTACHMENT OF OTHER CONSTRUCTION INCLUDING ROOFTOP EQUIPMENT CURBS AND SUPPORT BASES, CANT STRIPS, BUCKS, NAILERS, BLOCKING, FURRING, GROUNDS, STRIPPING AND SIMILAR MEMBERS.

B. UNLESS NOTED OTHERWISE, INSTALL MINIMUM DOUBLE JACK BEARING STUDS UNDER EACH END OF ALL BEAMS AND GIRDER TRUSSES, BUT NOT LESS THAN THE NUMBER REQUIRED TO PROVIDE FULL-WIDTH SOLID BEARING OF THE SUPPORTED MEMBERS.

C. FABRICATE MISCELLANEOUS LUMBER FROM DIMENSION LUMBER OF SIZES INDICATED AND INTO SHAPES SHOWN.

D. INSTALL STANDARD THREE-STUD CORNER CONSTRUCTION AT INSIDE AND OUTSIDE CORNERS, PROVIDING NAILING SURFACES FOR SHEATHING. INSTALL BLOCKING AS REQUIRED.

E. INSTALL ONE LAYER OF 1/2" THICK WOOD STRUCTURAL PANEL BETWEEN EACH MEMBER OF DIMENSIONAL LUMBER HEADERS.

F. TREAT ALL EXTERIOR LUMBER OR LUMBER IN CONTACT WITH CONCRETE OR MASONRY WITH PRESERVATIVE IN ACCORDANCE WITH AWPA.

2.6 FASTENERS

A. GENERAL: PROVIDE STAINLESS STEEL FASTENERS OF SIZE AND TYPE TO SUIT APPLICATION UNLESS INDICATED OTHERWISE THAT COMPLY WITH REQUIREMENTS SPECIFIED IN THIS ARTICLE FOR MATERIAL AND MANUFACTURE. WHERE ROUGH CARPENTRY IS EXPOSED TO WEATHER, IN GROUND CONTACT, OR IN AREA OF HIGH RELATIVE HUMIDITY, PROVIDE FASTENERS WITH A HOT-DIP ZINC COATING PER ASTM A 153 OR OF AISI TYPE 304 STAINLESS STEEL.

B. PROVIDE FASTENERS FOR USE WITH METAL FRAMING ANCHORS THAT COMPLY WITH WRITTEN RECOMMENDATIONS OF METAL FRAMING MANUFACTURER.

C. CONCEALED JOINT FASTENERS: THREADED STEEL.

D. NAILS, WIRE, BRADS, AND STAPLES: ASTM F 1667.

E. POWER DRIVEN FASTENERS: NATIONAL EVALUATION REPORT NER - 272.

F. WOOD SCREWS: FLAT HEAD, CONFORMING TO ANSI/ASME B18.6.1

G. BOLTS, NUTS, AND WASHERS: ASTM A 307, GRADE A; WITH ASTM A563 HEX NUTS AND ASTM F436 FLAT WASHERS.

H. CONNECTIONS: AS A MINIMUM, CONFORM CONNECTIONS FOR STRUCTURAL MEMBERS TO THE FASTENING SCHEDULE LISTED IN LOCAL BUILDING CODES.

1. PROVIDE GALVANIZED CONNECTORS BY THE SIMPSON STRONG-TIE CO. INSTALL ALL CONNECTORS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
2. WOOD STRUCTURAL PANELS TO WOOD ROOF RAFTERS AND TRUSSES: NAILED, USE 10d COMMON NAILS SPACED AT 6 INCHES O.C. AT PANEL EDGES AND 12 INCHES O.C. AT INTERMEDIATE SUPPORTS. PROVIDE SOLID 2x4 (MINIMUM) BLOCKING BETWEEN ROOF FRAMING MEMBERS AT ALL ROOF PANEL EDGES.
3. WOOD STRUCTURAL PANELS TO WOOD STUDS: USE 8d COMMON NAILS SPACED AT 6 INCHES O.C. AT PANEL EDGES AND 12 INCHES O.C. AT INTERMEDIATE SUPPORTS. BLOCK ALL PANEL EDGES WITH SOLID FULL-DEPTH BLOCKING.
4. PROVIDE GALVANIZED FASTENERS FOR ALL EXTERIOR APPLICATIONS AND FOR ALL FIRE-RETARDANT TREATED OR WOOD-PRESERVATIVE TREATED MATERIALS.
    a. HOT-DIP GALVANIZE ALL STEEL CONNECTORS AND PRODUCTS 14 GA. AND THICKER AFTER FABRICATION THAT ARE IN CONTACT WITH PRESERVATIVE-TREATED WOOD. PROVIDE MINIMUM 2.0 OZ. COATING, ALL SIDES, PER ASTM A123. PROVIDE HOT-DIPPED GALVANIZED CONNECTORS PER ASTM A153 OR STAINLESS STEEL CONNECTORS.
    b. HOT-DIP GALVANIZE ALL STEEL CONNECTORS AND PRODUCTS LESS THAN 14 GA. THICK AFTER FABRICATION THAT ARE IN CONTACT WITH PRESERVATIVE-TREATED WOOD. PROVIDE MINIMUM 1.85 OZ. COATING, ALL SIDES, PER ASTM A653. PROVIDE HOT-DIPPED GALVANIZED CONNECTORS PER ASTM A153 OR STAINLESS STEEL CONNECTORS.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. DISCARD UNITS OF MATERIAL WITH DEFECTS THAT IMPAIR QUALITY OF ROUGH CARPENTRY CONSTRUCTION AND THAT ARE TOO SMALL TO USE IN FABRICATING ROUGH CARPENTRY WITH MINIMUM JOINTS OR OPTIMUM JOINT ARRANGEMENT.

B. SET ROUGH CARPENTRY TO REQUIRED LEVELS AND LINES, WITH MEMBERS PLUMB AND TRUE TO LINE AND CUT AND FITTED.

C. FIT ROUGH CARPENTRY TO OTHER CONSTRUCTION; SCRIBE AND COPE AS REQUIRED FOR ACCURATE FIT. CORRELATE LOCATION OF FURRING, NAILERS, BLOCKING, GROUNDS, AND SIMILAR SUPPORTS TO ALLOW ATTACHMENT OF OTHER CONSTRUCTION.

D. SECURELY ATTACH ROUGH CARPENTRY WORK TO SUBSTRATE BY ANCHORING AND FASTENING AS INDICATED AND IN ACCORDANCE WITH TABLE 2304.9.1 "FASTEN SCHEDULE" IN ICC'S INTERNATIONAL BUILDING CODE.

E. PROVIDE BLOCKING AND FRAMING AS INDICATED AND AS REQUIRED TO SUPPORT FACING MATERIALS, FIXTURES, SPECIALTY ITEMS AND TRIM.

F. PROVIDE FIRE BLOCKING IN FURRED SPACES, STUD SPACES AND OTHER CONCEALED CAVITIES AS INDICATED AND AS FOLLOWS:

1. FURRED SPACES OF WALLS, AT EACH FLOOR LEVEL AND AT CEILINGS.
2. CONCEALED SPACES OF WOOD FRAMED WALLS AND PARTITIONS AT EACH FLOOR LEVEL AND AT CEILING LINE OF TOP STORY.
3. CONCEALED SPACES BETWEEN FLOOR SLEEPERS AND TO SOLIDLY FILL SPACE BELOW PARTITIONS.
4. CONCEALED SPACES BEHIND COMBUSTIBLE CORNICES AND EXTERIOR TRIM.

3.2 WOOD GROUNDS, NAILERS, BLOCKING, AND SLEEPERS

A. INSTALL WOOD GROUNDS, NAILERS, BLOCKING, AND SLEEPERS WHERE SHOWN AND WHERE REQUIRED FOR SCREEDING OR ATTACHMENT OF OTHER WORK. FORM TO SHAPES AS SHOWN AND CUT AS REQUIRED FOR TRUE LINE AND LEVEL OF WORK TO BE ATTACHED. COORDINATE LOCATION WITH OTHER WORK INVOLVED.

B. ATTACH TO SUBSTRATES AS REQUIRED TO SUPPORT APPLIED LOADING. COUNTER SINK BOLTS AND NUTS FLUSH WITH SURFACES, UNLESS OTHERWISE INDICATED. BUILD INTO MASONRY DURING INSTALLATION OF MASONRY WORK. WHERE POSSIBLE, ANCHOR TO FORM WORK BEFORE CONCRETE PLACEMENT.

3.3 CONSTRUCTION PANELS

A. COMPLY WITH APPLICABLE INSTALLATION RECOMMENDATIONS IN APA FORM E30 "DESIGN/CONSTRUCTION GUIDE - RESIDENTIAL AND COMMERCIAL."

END OF SECTION 06 10 00

SHEATHING SECTION 06 16 00

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:

1. WALL SHEATHING.
2. ROOF SHEATHING.

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PROCESS AND FACTORY-FABRICATED PRODUCT. INDICATE COMPONENT MATERIALS AND DIMENSIONS AND INCLUDE CONSTRUCTION AND APPLICATION DETAILS.

1. INCLUDE DATA FOR WOOD-PRESERVATIVE TREATMENT FROM CHEMICAL TREATMENT MANUFACTURER AND CERTIFICATION BY TREATING PLANT THAT TREATED PLYWOOD COMPLIES WITH REQUIREMENTS.
2. INCLUDE DATA FOR FIRE-RETARDANT TREATMENT FROM CHEMICAL TREATMENT MANUFACTURER AND CERTIFICATION BY TREATING PLANT THAT TREATED PLYWOOD COMPLIES WITH REQUIREMENTS.

1.3 INFORMATIONAL SUBMITTALS

B. MANUFACTURER QUALIFICATIONS: A QUALIFIED MANUFACTURER THAT IS CERTIFIED FOR CHAIN OF CUSTODY BY AN FSC-ACCREDITED CERTIFICATION BODY.

C. VENDOR QUALIFICATIONS: A VENDOR THAT IS CERTIFIED FOR CHAIN OF CUSTODY BY AN FSC-ACCREDITED CERTIFICATION BODY.

D. ALL STRUCTURAL LUMBER CONSTRUCTION SHALL CONFORM TO THE LATEST, ADOPTED EDITIONS OF THE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED HEREIN.

1.4 REFERENCE STANDARD

A. NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" BY THE AMERICAN FOREST & PAPER ASSOCIATION (AF & PA).

PART 2 - PRODUCTS

2.1 WOOD PANEL PRODUCTS

A. GENERAL: ALL LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF DOC PS 20. FURNISH LUMBER WITH EACH PIECE FACTORY-MARKED WITH GRADE STAMP OF INSPECTION AGENCY VERIFYING COMPLIANCE WITH GRADING RULE REQUIREMENTS AND IDENTIFYING GRADING AGENCY, GRADE, SPECIES, MOISTURE CONTENT AND MILL.

B. ALL WOOD STRUCTURAL PANELS SHALL COMPLY WITH REQUIREMENTS OF DOC PS 1, DOC PS 2, HPVA HP I AND APA PDS. FACTORY-MARK ALL WOOD STRUCTURAL PANELS WITH A GRADING STAMP OF THE INSPECTION AGENCY.

C. EMISSIONS: PRODUCTS SHALL MEET THE TESTING AND PRODUCT REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES' "STANDARD PRACTICE FOR THE TESTING OF VOLATILE ORGANIC EMISSIONS FROM VARIOUS SOURCES USING SMALL-SCALE ENVIRONMENTAL CHAMBERS."

2.2 WALL SHEATHING

A. 15/32" (1/2" NOMINAL), APA RATED SHEATHING, 32/16, EXPOSURE 1.

2.3 ROOF SHEATHING

A. 19/32" (5/8" NOMINAL), APA RATED SHEATHING, 40/20, EXPOSURE 1, U.N.O.

2.4 FASTENERS

A. FOR FASTENER SPECIFICATIONS, SEE
ROUGH CARPENTRY - SECTION 06 10 00.

2.5 MISCELLANEOUS

A. INSTALL STANDARD THREE-STUD CORNER CONSTRUCTION AT INSIDE AND OUTSIDE CORNERS, PROVIDING NAILING SURFACES FOR SHEATHING. INSTALL BLOCKING AS REQUIRED.

B. INSTALL ONE LAYER OF 1/2" THICK WOOD STRUCTURAL PANEL BETWEEN EACH MEMBER OF DIMENSIONAL LUMBER HEADERS.

C. TREAT ALL EXTERIOR LUMBER OR LUMBER IN CONTACT WITH CONCRETE OR MASONRY WITH PRESERVATIVE IN ACCORDANCE WITH AWPA.

D. INSTALL WOOD STRUCTURAL PANEL WALL SHEATHING ON ALL EXTERIOR WALLS.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. DO NOT USE MATERIALS WITH DEFECTS THAT IMPAIR QUALITY OF SHEATHING OR PIECES THAT ARE TOO SMALL TO USE WITH MINIMUM NUMBER OF JOINTS OR OPTIMUM JOINT ARRANGEMENT. ARRANGE JOINTS SO THAT PIECES DO NOT SPAN BETWEEN FEWER THAN THREE SUPPORT MEMBERS.

B. CUT PANELS AT PENETRATIONS, EDGES, AND OTHER OBSTRUCTIONS OF WORK; FIT TIGHTLY AGAINST ABUTTING CONSTRUCTION UNLESS OTHERWISE INDICATED.

C. SECURELY ATTACH TO SUBSTRATE BY FASTENING AS INDICATED, COMPLYING WITH THE FOLLOWING:

1. NES NER-272 FOR POWER-DRIVEN FASTENERS.
2. TABLE 2304.9.1, "FASTENING SCHEDULE," IN ICC'S "INTERNATIONAL BUILDING CODE."
3. TABLE R602.3(1), "FASTENER SCHEDULE FOR STRUCTURAL MEMBERS," AND TABLE R602.3(2), "ALTERNATE ATTACHMENTS," IN ICC'S "INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS."

D. COORDINATE WALL AND ROOF SHEATHING INSTALLATION WITH FLASHING AND JOINT-SEALANT INSTALLATION SO THESE MATERIALS ARE INSTALLED IN SEQUENCE AND MANNER THAT PREVENT EXTERIOR MOISTURE FROM PASSING THROUGH COMPLETED ASSEMBLY.

E. DO NOT BRIDGE BUILDING EXPANSION JOINTS; CUT AND SPACE EDGES OF PANELS TO MATCH SPACING OF STRUCTURAL SUPPORT ELEMENTS.

3.2 WOOD STRUCTURAL PANEL INSTALLATION

A. GENERAL: COMPLY WITH APPLICABLE RECOMMENDATIONS IN APA FORM NO. E30, "ENGINEERED WOOD CONSTRUCTION GUIDE," FOR TYPES OF STRUCTURAL-USE PANELS AND APPLICATIONS INDICATED.

B. FASTENING METHODS: FASTEN PANELS AS INDICATED BELOW:

1. WALL AND ROOF SHEATHING:
    a. NAIL TO WOOD FRAMING. APPLY A CONTINUOUS BEAD OF GLUE TO FRAMING MEMBERS AT EDGES OF WALL SHEATHING PANELS.
    b. SPACE PANELS 1/8 INCH APART AT EDGES AND ENDS.

END OF SECTION 06 16 00

SHOP-FABRICATED WOOD TRUSSES SECTION 06 17 53

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:

1. WOOD ROOF TRUSSES.
2. WOOD GIRDER TRUSSES.
3. WOOD TRUSS BRACING.
4. METAL TRUSS ACCESSORIES.

B. ALLOWANCES: PROVIDE WOOD TRUSS BRACING UNDER THE METAL-PLATE-CONNECTED TRUSS BRACING ALLOWANCE AS SPECIFIED IN SECTION 012100 "ALLOWANCES."

C. ALL STRUCTURAL LUMBER CONSTRUCTION SHALL CONFORM TO THE LATEST, ADOPTED EDITIONS OF THE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED HEREIN.

D. REFERENCE STANDARD

1. NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" BY THE AMERICAN FOREST & PAPER ASSOCIATION (AF & PA).

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR METAL-PLATE CONNECTORS, METAL TRUSS ACCESSORIES, AND FASTENERS.

B. SHOP DRAWINGS: SHOW FABRICATION AND INSTALLATION DETAILS FOR TRUSSES.

1. SHOW LOCATION, PITCH, SPAN, CAMBER, CONFIGURATION, AND SPACING FOR EACH TYPE OF TRUSS REQUIRED.
2. INDICATE SIZES, STRESS GRADES, AND SPECIES OF LUMBER.
3. INDICATE LOCATIONS, SIZES, AND MATERIALS FOR PERMANENT BRACING REQUIRED TO PREVENT BUCKLING OF INDIVIDUAL TRUSS MEMBERS DUE TO DESIGN LOADS.
4. INDICATE TYPE, SIZE, MATERIAL, FINISH, DESIGN VALUES, ORIENTATION, AND LOCATION OF METAL CONNECTOR PLATES AND HANGER CONNECTOR TYPES.
5. INDICATE ALL TEMPORARY AND PERMANENT BRACING REQUIREMENTS OF TRUSS MEMBERS. IN AREAS WHERE TRUSS TOP CHORDS AND/OR BOTTOM CHORDS DO NOT RECEIVE SHEATHING, INDICATE THE REQUIRED CHORD BRACING AND BRACE SPACINGS FOR ALL APPLICABLE LOAD CASES. INDICATE ANCHORAGE OF "CAP" TRUSSES AND/OR "OVERLAY" TRUSSES.
6. SHOW SPLICE DETAILS AND BEARING DETAILS.
7. SUBMIT TRUSS SHOP DRAWINGS WHICH EXHIBIT THE SEAL OF THE ENGINEER RESPONSIBLE FOR THE TRUSS DESIGN.

C. DELEGATED-DESIGN SUBMITTAL: FOR METAL-PLATE-CONNECTED WOOD TRUSSES INDICATED TO COMPLY WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR DESIGN AND PREPARATION.

1.3 INFORMATIONAL SUBMITTALS

A. PRODUCT CERTIFICATES.

B. EVALUATION REPORTS: FOR THE FOLLOWING, FROM ICC-ES:

1. METAL-PLATE CONNECTORS.
2. METAL TRUSS ACCESSORIES.

1.4 QUALITY ASSURANCE

A. METAL CONNECTOR-PLATE MANUFACTURER QUALIFICATIONS: A MANUFACTURER THAT IS A MEMBER OF TPI AND THAT COMPLIES WITH QUALITY-CONTROL PROCEDURES IN TPI 1 FOR MANUFACTURE OF CONNECTOR PLATES.

1. MANUFACTURER'S RESPONSIBILITIES INCLUDE PROVIDING PROFESSIONAL ENGINEERING SERVICES NEEDED TO ASSUME ENGINEERING RESPONSIBILITY.
2. ENGINEERING RESPONSIBILITY: PREPARATION OF SHOP DRAWINGS AND COMPREHENSIVE ENGINEERING ANALYSIS BY A QUALIFIED PROFESSIONAL ENGINEER.

A. FABRICATOR QUALIFICATIONS: SHOP THAT PARTICIPATES IN A RECOGNIZED QUALITY-ASSURANCE PROGRAM THAT COMPLIES WITH QUALITY-CONTROL PROCEDURES IN TPI 1 AND THAT INVOLVES THIRD-PARTY INSPECTION BY AN INDEPENDENT TESTING AND INSPECTING AGENCY ACCEPTABLE TO ARCHITECT AND AUTHORITIES HAVING JURISDICTION AND IS CERTIFIED FOR CHAIN OF CUSTODY BY AN FSC-ACCREDITED CERTIFICATION BODY.

1.5 DELIVERY, STORAGE, AND HANDLING

A. HANDLE AND STORE TRUSSES TO COMPLY WITH RECOMMENDATIONS IN TPI BCSI, "BUILDING COMPONENT SAFETY INFORMATION: GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING, & BRACING METAL PLATE CONNECTED WOOD TRUSSES."

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. SEE STRUCTURAL DRAWINGS FOR TRUSS DESIGN LOADS AND DEFLECTION CRITERIA FROM ORIGINAL SPECIFICATION INFORMATION.

B. DELEGATED DESIGN: ENGAGE A QUALIFIED PROFESSIONAL ENGINEER, AS DEFINED IN SECTION 014000 "QUALITY REQUIREMENTS," TO DESIGN METAL-PLATE-CONNECTED WOOD TRUSSES.

C. STRUCTURAL PERFORMANCE: PROVIDE METAL-PLATE-CONNECTED WOOD TRUSSES CAPABLE OF WITHSTANDING DESIGN LOADS WITHIN LIMITS AND UNDER CONDITIONS INDICATED. COMPLY WITH REQUIREMENTS IN TPI 1 UNLESS MORE STRINGENT REQUIREMENTS ARE SPECIFIED BELOW.

2.2 DIMENSION LUMBER

A. ALL LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF DOC PS 20. FURNISH LUMBER WITH EACH PIECE FACTORY-MARKED WITH GRADE STAMP OF INSPECTION AGENCY VERIFYING COMPLIANCE WITH GRADING RULE REQUIREMENTS AND IDENTIFYING GRADING AGENCY, GRADE, SPECIES, MOISTURE CONTENT AND MILL.

B. PERMANENT BRACING: PROVIDE WOOD BRACING THAT COMPLIES WITH REQUIREMENTS FOR MISCELLANEOUS LUMBER IN SECTION 06 10 00 "ROUGH CARPENTRY."

2.3 METAL CONNECTOR PLATES

A. USE GALVANIZED SHEET STEEL CONFORMING WITH ASTM A653, COATING CLASS G60 . MANUFACTURE WITH HOLES, PLUGS, TEETH, OR PRONGS UNIFORMLY SPACED AND FORMED.

B. THE TRUSS MANUFACTURER SHALL DESIGN, DETAIL, PROVIDE AND INSTALL ALL INTERNAL TRUSS COMPONENT CONNECTIONS.

2.4 FASTENERS

A. FOR FASTENER SPECIFICATIONS, SEE
ROUGH CARPENTRY - SECTION 06 10 00.

2.5 METAL TRUSS-TO-TRUSS HANGERS

A. THE TRUSS MANUFACTURER SHALL DESIGN AND DESIGNATE ALL TRUSS-TO-TRUSS HANGERS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TRUSS-TO-TRUSS HANGERS IN ACCORDANCE WITH THE HANGER MANUFACTURER'S SPECIFICATIONS.

2.6 MISCELLANEOUS

A. PROVIDE AND INSTALL TEMPORARY AND PERMANENT BRACING FOR PRE-ENGINEERED, PRE-FABRICATED WOOD TRUSSES AS INDICATED ON THE TRUSS MANUFACTURER'S APPROVED SHOP DRAWINGS.

2.7 FABRICATION

A. ASSEMBLE TRUSS MEMBERS IN DESIGN CONFIGURATION INDICATED; USE JIGS OR OTHER MEANS TO ENSURE UNIFORMITY AND ACCURACY OF ASSEMBLY WITH JOINTS CLOSELY FITTED TO COMPLY WITH TOLERANCES IN TPI 1. POSITION MEMBERS TO PRODUCE DESIGN CAMBER INDICATED.

1. FABRICATE WOOD TRUSSES WITHIN MANUFACTURING TOLERANCES IN TPI 1.

B. CONNECT TRUSS MEMBERS BY METAL CONNECTOR PLATES LOCATED AND SECURELY EMBEDDED SIMULTANEOUSLY IN BOTH SIDES OF WOOD MEMBERS BY AIR OR HYDRAULIC PRESS.

PART 3 - EXECUTION

3.1 INSTALLATION

A. INSTALL WOOD TRUSSES ONLY AFTER SUPPORTING CONSTRUCTION IS IN PLACE AND IS BRACED AND SECURED.

B. IF TRUSSES ARE DELIVERED TO PROJECT SITE IN MORE THAN ONE PIECE, ASSEMBLE TRUSSES BEFORE INSTALLING.

C. HOIST TRUSSES IN PLACE BY LIFTING EQUIPMENT SUITED TO SIZES AND TYPES OF TRUSSES REQUIRED, EXERCISING CARE NOT TO DAMAGE TRUSS MEMBERS OR JOINTS BY OUT-OF-PLANE BENDING OR OTHER CAUSES.

D. INSTALL AND BRACE TRUSSES ACCORDING TO TPI RECOMMENDATIONS AND AS INDICATED.

E. ANCHOR TRUSSES SECURELY AT BEARING POINTS; USE METAL TRUSS TIE-DOWNS OR FLOOR TRUSS HANGERS AS APPLICABLE. INSTALL FASTENERS THROUGH EACH FASTENER HOLE IN METAL FRAMING ANCHORS ACCORDING TO MANUFACTURER'S FASTENING SCHEDULES AND WRITTEN INSTRUCTIONS.

F. SECURELY CONNECT EACH TRUSS PLY REQUIRED FOR FORMING BUILT-UP GIRDER TRUSSES.

G. INSTALL AND FASTEN PERMANENT BRACING DURING TRUSS ERECTION AND BEFORE CONSTRUCTION LOADS ARE APPLIED. ANCHOR ENDS OF PERMANENT BRACING WHERE TERMINATING AT WALLS OR BEAMS.

1. INSTALL BRACING TO COMPLY WITH SECTION 06 10 00 "ROUGH CARPENTRY."
2. INSTALL AND FASTEN STRONGBACK BRACING VERTICALLY AGAINST VERTICAL WEB OF PARALLEL-CHORD FLOOR TRUSSES AT CENTERS INDICATED.

H. INSTALL WOOD TRUSSES WITHIN INSTALLATION TOLERANCES IN TPI 1.

I. DO NOT ALTER TRUSSES IN FIELD. DO NOT CUT, DRILL, NOTCH, OR REMOVE TRUSS MEMBERS.

J. REPLACE WOOD TRUSSES THAT ARE DAMAGED OR DO NOT MEET REQUIREMENTS.

END OF SECTION 06 17 53

FINISH CARPENTRY SECTION 06 20 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 DELIVERY, STORAGE AND HANDLING

A. DELIVERY AND STORAGE: KEEP MATERIALS UNDER COVER AND DRY. PROTECT AGAINST EXPOSURE TO WEATHER AND CONTACT WITH DAMP OR WET SURFACES. STACK LUMBER AS WELL AS PLYWOOD AND OTHER PANELS FLAT WITH SPACERS BETWEEN EACH BUNDLE. PROVIDE FOR AIR CIRCULATION WITHIN AND AROUND STACKS AND UNDER TEMPORARY COVERINGS INCLUDING POLYETHYLENE AND SIMILAR MATERIALS.

1.3 QUALITY ASSURANCE

A. PERFORM WORK IN ACCORDANCE WITH AWI ARCHITECTURAL WOODWORK QUALITY STANDARDS, PREMIUM GRADE AND WIC MANUAL OF MILLWORK, PREMIUM GRADE.

B. FABRICATORS: MUST BE PRE-APPROVED BY THE ARCHITECT.

C. FABRICATORS: COMPANY SPECIALIZING IN FABRICATING THE PRODUCTS SPECIFIED IN THE SECTION WITH MINIMUM TEN YEARS DOCUMENTED EXPERIENCE.

1.4 REGULATORY REQUIREMENTS

A. CONFORM TO APPLICABLE LOCAL CODE FOR FIRE RETARDANT REQUIREMENTS.

PART 2 - PRODUCTS

2.1 MATERIALS GENERAL: UNLESS OTHERWISE INDICATED, PROVIDE MATERIALS THAT COMPLY WITH THE CRITERIA SPECIFIED IN THIS SECTION.

A. LUMBER: DOC PS 20 AND APPLICABLE GRADING RULES OF INSPECTION AGENCIES CERTIFIED BY ALSC'S BOARD OF REVIEW.

B. SOFTWOOD PLYWOOD: DOC PS 1.

C. HARDBOARD: AHA A135.4.

D. MDF: ANSI A208.2, GRADE 130

E. PARTICLE BOARD: ANSI A208.1, GRADE M-2 EXTERIOR GLUE.

F. MELAMINE-FACED PARTICLEBOARD: PARTICLE BOARD COMPLYING WITH ANSI A208.1, GRADE M-2, FINISHED ON BOTH SIDES WITH THERMALLY FUSED, MELAMINE-IMPREGNATED DECORATIVE PAPER COMPLYING WITH LMA SAT-1.

2.2 FIRE-RETARDANT-TREATED MATERIALS

A. LUMBER: COMPLY WITH PERFORMANCE REQUIREMENTS IN AWPA C20, INTERIOR TYPE A. KILN DRY TO A MAXIMUM MOISTURE CONTENT OF 19 PERCENT.

B. PLYWOOD: COMPLY WITH PERFORMANCE REQUIREMENTS IN AWPA C27, INTERIOR TYPE A. KILN DRY TO A MAXIMUM MOISTURE CONTENT OF 18 PERCENT.

2.3 LUMBER SIDING

A. PROVIDE SIDING PER THIS SECTION, UNLESS OTHERWISE INDICATED.

B. PROVIDE KILN-DRIED LUMBER SIDING COMPLYING WITH DOC PS 20, FACTORY COATED WITH EXTERIOR ALKYD PRIMER, UNLESS OTHERWISE NOTED.

C. SPECIES AND GRADE: WESTERN RED CEDAR, CLEAR HEART, AWI PREMIUM GRADE.

2.4 EXTERIOR STANDING AND RUNNING TRIM

A. PROVIDE TRIM PER THIS SECTION, UNLESS OTHERWISE NOTED

B. LUMBER TRIM:

1. SPECIES AND GRADE: WESTERN RED CEDAR, CLEAR HEART, AWI PREMIUM GRADE.
2. MAXIMUM MOISTURE CONTENT: 15 PERCENT.
3. FACE SURFACE: SURFACED (SMOOTH).
4. MATERIAL SUITABLE FOR TRANSPARENT FINISH.

C. MOLDINGS: WMMPA WM 4 P-GRADE WOOD MOLDINGS, WITHOUT FINGER JOINTING. MADE FROM KILN-DRIED STOCK TO PATTERNS INCLUDED IN WMMPA WM 12.

1. SPECIES AND GRADE: WESTERN RED CEDAR, CLEAR HEART, AWI PREMIUM GRADE.
2. MAXIMUM MOISTURE CONTENT: 15 PERCENT.
3. MATERIAL SUITABLE FOR TRANSPARENT FINISH.

D. MANUFACTURED POLYURETHANE TRIM: MOLDED HIGH DENSITY POLYURETHANE FOAM WITH INTERIM PROTECTIVE BARRIER COAT PRIMER, RESISTANT TO UV DEGRADATION.

1. AVAILABLE PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
2. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
    a. FYPON, LTD.: PROFILES AS INDICATED ON DRAWINGS.
    b. APPROVED EQUAL
3. APPLY FINISH PAINT TO ALL EXPOSED SURFACES OF PRIME COATED MATERIALS INSTALLED ON EXTERIOR OF PROJECT.

E. CELLULAR PVC TRIM: EXTRUDED, EXPANDED PVC WITH SMALL CELL MICROSTRUCTURE, MADE FROM UV- AND HEAT-STABILIZED, RIGID MATERIAL.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

TANNER EDWARDS KINDE
15704
Tanner Kinde

9.14.2023

Company Logo

THE DIMENSION GROUP
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10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA 19 72 KITCHEN
Popeyes

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ARCHITECTURAL SPECIFICATIONS

Drawn SH	Checked AL
Scale	Date JUNE 2023
Project No. C22-129	Drawing No. SP2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

1. AVAILABLE PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

2. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

a. PLY-TRIM, INC.; DURABOARD.

b. ROYAL MOULDINGS LIMITED; PRO SERIES EXTERIOR MOULDINGS.

c. VYCOM CORP.; AZEK.

3. DENSITY: NOT LESS THAN 31 LB/CU. FT. (500 KG/CU. M.)

4. HEAT DEFLECTION TEMPERATURE: NOT LESS THAN 130° F (54° C), PER ASTM D 648.

5. FLAME-SPREAD INDEX: 75 OR LESS, PER ASTM E 84.

2.5 INTERIOR STANDING AND RUNNING TRIM

A. PROVIDE TRIM PER THIS SECTION, UNLESS OTHERWISE INDICATED.

B. SOFTWOOD LUMBER TRIM:

1. SPECIES AND GRADE: EASTERN WHITE PINE; AWI PREMIUM GRADE.

2. MAXIMUM MOISTURE CONTENT: 15 PERCENT.

3. FACE SURFACE: SURFACED (SMOOTH).

4. MATERIAL SUITABLE TO RECEIVE TRANSPARENT FINISH.

C. HARDWOOD LUMBER TRIM:

1. SPECIES AND GRADE: SELECT WHITE BIRCH, MILL CLEAR, AWI PREMIUM GRADE.

2. MAXIMUM MOISTURE CONTENT: 9 PERCENT.

3. FACE SURFACE: SURFACED (SMOOTH).

4. MATERIAL SUITABLE TO RECEIVE TRANSPARENT FINISH.

D. SOFTWOOD MOLDINGS: WMMPA WM 4, N-GRADE WOOD MOLDINGS. MAKE PATTERNS INCLUDED IN WMMPA WM 12.

1. SPECIES AND GRADE: EASTERN WHIT PINE; AWI PREMIUM GRADE.

2. MAXIMUM MOISTURE CONTENT: 15 PERCENT.

3. MATERIAL SUITABLE TO RECEIVE TRANSPARENT FINISH.

E. HARDWOOD MOLDINGS: WMMPA HWM 2, N-GRADE WOOD MOLDINGS. MAKE PATTERNS INCLUDED IN WMMPA WM 12.

1. SPECIES AND GRADE: SELECT WHITE BIRCH, MILL CLEAR, AWI PREMIUM GRADE.

2. MAXIMUM MOISTURE CONTENT: 9 PERCENT.

3. MATERIAL SUITABLE TO RECEIVE TRANSPARENT FINISH.

2.6 SHEET MATERIALS

A. PROVIDE SHEET MATERIAL PER THIS SECTION, UNLESS OTHERWISE INDICATED.

B. INTERIOR SOFTWOOD PLYWOOD:

1. SPECIES AND GRADE: DOUGLAS FIR, AWI PREMIUM GRADE.

2. FACE SURFACE: SURFACED (SMOOTH) PLUGGED AND SANDED.

C. EXTERIOR MEDIUM DENSITY OVERLAY PLYWOOD:

1. GRADE: PS 1-95 AWI PREMIUM VENEER GRADE.

2. VENEER CORE.

3. TYPE OF GLUE: AS RECOMMENDED FOR APPLICATION.

4. PAPER SATURATED WITH PHENOLIC RESIN SOLID FACE (PAPER SATURATED FACE ONE SIDE ONLY AND EQUAL TO TOSENBERG MDO BY ROSEBURG FORREST PRODUCTS. FURNISH FACTORY PRIMED (2) SIDES AND EDGES).

2.7 MISCELLANEOUS MATERIALS

A. FOR FASTENER SPECIFICATIONS, SEE
ROUGH CARPENTRY - SECTION 06 10 00

B. GLUE: ALIPHATIC-RESIN, POLYURETHANE, OR RESORCINOL WOOD GLUE.

1. USE WOOD GLUE THAT HAS A VOC CONTENT OF 30 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CRF 59, SUBPART D (EPA METHOD 24).

C. ACCESSORIES:

1. LUMBER FOR SHIMMING, BLOCKING, AND MISCELLANEOUS USE: SOFTWOOD LUMBER OF DOUGLAS FIR, UTILITY GRADE SPECIES. SIZE AS REQUIRED FOR CONDITION UNLESS SHOWN OTHERWISE.

2. PLASTIC EDGE TRIM: EXTRUDED CONVEX SHAPE; SMOOTH FINISH; SELF LOCKING SERRATED TONGUE; WIDTH TO MATCH COMPONENT THICKNESS; COLOR AS SELECTED BY ARCHITECT.

3. PRIMER: ALKYD PRIMER SEALER TYPE. PRIME IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENT AND PER SECTION 09900 (PAINTING).

4. WOOD FILLER: OIL BASE, TINTED TO MATCH SURFACE FINISH COLOR.

D. HARDWARE:

1. BHMA A156.9 AS FOLLOWS: ALL HARDWARE TO BE AS SHOWN ON DRAWINGS. IF NOT SHOWN PROVIDE HARDWARE AS DIRECTED BY OWNER AND/OR AS REQUIRED FOR A COMPLETE INSTALLATION.

E. FABRICATION:

1. FABRICATE TO AWI PREMIUM STANDARDS.

2. SHOP ASSEMBLE WORK FOR DELIVERY TO SITE, PERMITTING PASSAGE THROUGH BUILDING OPENINGS.

3. FIT INTERIOR EXPOSED SHEET MATERIAL EDGES WITH PLASTIC EDGING WHERE SHOWN (NEVER LEAVE IN FINISHED EDGE EXPOSED TO VIEW).

4. WHEN NECESSARY TO CUT AND FIT ON SITE, PROVIDE MATERIALS WITH AMPLE ALLOWANCE FOR CUTTING. PROVIDE TRIM FOR SCRIBING AND SITE CUTTING.

F. SHOP FINISHING

1. SAND WORK SMOOTH AND SET EXPOSED NAILS AND SCREWS.

2. APPLY WOOD FILLER IN EXPOSED NAIL AND SCREW INDENTATIONS.

3. ON ITEMS TO RECEIVE TRANSPARENT FINISHES, USE WOOD FILLER WHICH MATCHES SURROUNDING SURFACES AND OF TYPES RECOMMENDED FOR APPLIED FINISHES.

4. FINISH WORK IN ACCORDANCE WITH AWI AS SHOWN ON DRAWINGS AND AS DIRECTED BY OWNER.

PART 3 - EXECUTION

3.1 EXAMINATION

A. VERIFY EXISTING CONDITIONS BEFORE STARTING WORK.

B. VERIFY ADEQUACY OF BACKING AND SUPPORT FRAMING.

C. VERIFY MECHANICAL, ELECTRICAL, AND BUILDING ITEMS AFFECTING WORK OF THIS SECTION ARE PLACED AND READY TO RECEIVE THIS WORK.

3.2 INSTALLATION

A. INSTALL WORK IN ACCORDANCE WITH AWI PREMIUM QUALITY STANDARD.

B. SET AND SECURE MATERIALS AND COMPONENTS IN PLACE, PLUMB, AND LEVEL.

C. CAREFULLY SCRIBE WORK ABUTTING OTHER COMPONENTS, WITH MAXIMUM GAPS OF 1/32 INCH (1 MM). DO NOT USE ADDITIONAL OVERLAY TRIM TO CONCEAL LARGER GAPS.

D. MITER 90 DEGREES EXTERIOR CORNERS OF MDO EXTERIOR PLYWOOD.

E. INSTALL HARDWARE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

F. SET EXPOSED FASTENERS. APPLY WOOD FILLER IN EXPOSED FASTENER INDENTATIONS. SAND WORK SMOOTH.

3.3 ERECTION TOLERANCES

A. MAXIMUM VARIATION FROM TRUE POSITION: 1/16 INCH (1.5 MM).

B. MAXIMUM OFFSET FROM TRUE ALIGNMENT WITH ABUTTING MATERIALS: 1/32 INCH (0.7MM).

END OF SECTION 06 20 00

DIVISION 7 - THERMAL & MOISTURE PROTECTION

THERMAL INSULATION SECTION 07 21 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. SINGLE-SOURCE RESPONSIBILITY FOR INSULATION PRODUCTS: OBTAIN EACH TYPE OF BUILDING INSULATION FROM A SINGLE SOURCE WITH RESOURCES TO PROVIDE CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES WITHOUT DELAYING PROGRESS OF THE WORK.

1.3 DELIVERY, STORAGE AND HANDLING

A. PROTECT INSULATION MATERIALS FROM PHYSICAL DAMAGE AND FROM DETERIORATION BY MOISTURE, SOILING, AND OTHER SOURCES. STORE INSIDE AND IN A DRY LOCATION. COMPLY WITH MANUFACTURER'S RECOMMENDATIONS FOR HANDLING, STORAGE, AND PROTECTION DURING INSTALLATION.

B. PROTECT PLASTIC INSULATION AS FOLLOWS: DO NOT EXPOSE TO SUNLIGHT, EXCEPT TO EXTENT NECESSARY FOR PERIOD OF INSTALLATION AND CONCEALMENT. PROTECT AGAINST IGNITION AT ALL TIMES. DO NOT DELIVER PLASTIC INSULATING MATERIALS TO PROJECT SITE AHEAD OF INSTALLATION TIME. COMPLETE INSTALLATION AND CONCEALMENT OF PLASTIC MATERIALS AS RAPIDLY AS POSSIBLE IN EACH AREA OF CONSTRUCTION.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. EXTRUDED POLYSTYRENE BOARD INSULATION: OWENS CORNING OR DOW CHEMICAL COMPANY OR DIVERSIFOAM PRODUCTS.

B. BATT INSULATION: OWENS CORNING OR JOHNS MANVILLE INTERNATIONAL, INC. OR CERTAINTEED PRODUCTS CORPORATION.

2.2 INSULATING MATERIALS

A. GENERAL: PROVIDE INSULATING MATERIALS AS SCHEDULED IN THE DRAWINGS, THAT COMPLY WITH REQUIREMENTS AND WITH REFERENCED STANDARDS. PREFORMED UNITS: SIZES TO FIT APPLICATIONS INDICATED, SELECTED FROM MANUFACTURER'S STANDARD THICKNESS, WIDTHS AND LENGTHS.

B. EXTRUDED POLYSTYRENE BOARD INSULATION: RIGID, CELLULAR POLYSTYRENE THERMAL INSULATION WITH CLOSED-CELLS AND INTEGRAL HIGH DENSITY SKIN, FORMED BY THE EXPANSION OF POLYSTYRENE BASE RESIN IN AN EXTRUSION PROCESS TO COMPLY WITH ASTM C 578 FOR TYPE INDICATED; WITH 5-YEAR AGED R-VALUES OF 5.4 AND 5 AT 40 AND 75 DEG F (4.4 AND 23.9 DEG C), RESPECTIVELY; AND TYPE IV, 1.6-PCF MIN. DENSITY, UNLESS OTHERWISE INDICATED. SURFACE BURNING CHARACTERISTICS: MAXIMUM FLAME SPREAD AND SMOKE DEVELOPMENT VALUES OF 75 AND 450, RESPECTIVELY. FOR EXPOSED INSULATION FLAME SPREAD SHALL NOT EXCEED 25.

C. BATT INSULATION: GLASS FIBER BLANKET TYPE INSULATION: TYPE III, FOIL-SCRIM-KRAFT LAMINATE FACED, CLASS A, ASTM C665 AND FLAME SPREAD OF 25 OR LESS AND SMOKE DEVELOPMENT OF 50 OR LESS. MANUFACTURER'S STANDARD LENGTHS AND WIDTHS REQUIRED TO COORDINATE WITH SPACES INSULATED.

D. MINERAL FIBER FIRESTOPPING INSULATION: UNITED STATES GYPSUM CO. "THERMAFIBER SAFING INSULATION" OR AN APPROVED EQUAL, TYPE 1 UNFACED. MANUFACTURER'S STANDARD LENGTHS, WIDTHS AND THICKNESS. PROVIDE MANUFACTURER'S STANDARD IMPALING STYLE GALVANIZED STEEL SAFING INSULATION CLIPS AND BRACKETS.
MATERIALS SHALL BE RATED NON-COMBUSTIBLE AS DEFINED BY NFPA WHEN TESTED IN ACCORDANCE WITH ASTM E136.

2.3 VAPOR RETARDERS

A. POLYETHYLENE VAPOR RETARDER: ASTM D4397, 8 MILS THICK WITH MAXIMUM PERM RATING OF 0.1 PERM. PROVIDE PRESSURE SENSITIVE TAPE OF TYPE RECOMMENDED BY VAPOR-RETARDER MANUFACTURER FOR SEALING JOINTS AND PENETRATIONS.

2.4 PROTECTION

A. GENERAL: PROTECT INSTALLATION AND VAPOR RETARDERS FROM DAMAGE DUE TO HARMFUL WEATHER EXPOSURES, PHYSICAL ABUSE, AND OTHER CAUSES. PROVIDE TEMPORARY COVERINGS OR ENCLOSURES WHERE INSULATION WILL BE SUBJECT TO ABUSE AND CANNOT BE CONCEALED AND PROTECTED BY PERMANENT CONSTRUCTION IMMEDIATELY AFTER INSTALLATION.

PART 3 - EXECUTION

3.1 INSTALLATION

A. INSTALL INSULATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR CONDITIONS OF INSTALLATION INDICATED.

B. EXTEND INSULATION FULL THICKNESS OVER ENTIRE AREA TO BE INSULATED. CUT AND FIT TIGHTLY AROUND OBSTRUCTIONS. FILL ALL VOIDS.

C. INSTALL INSULATION IN SINGLE LAYER OF REQUIRED THICKNESS. DO NOT INSTALL BROKEN RIGID BOARD PANELS OR TORN BLANKET INSULATION.

D. PROVIDE INSULATION CONTINUOUS BEHIND ELECTRICAL BOXES, CONDUIT AND PIPING AT EXTERIOR WALLS.

E. INSTALL BLANKET TYPE INSULATION WITH TIGHT FITTING BUTT JOINTS. INSTALL FOIL FACING VAPOR BARRIER EXPOSED TO THE INTERIOR. PROVIDE SUPPLEMENTARY SUPPORT WHEN REQUIRED TO MAINTAIN INSULATION IN PERMANENT PROPER LOCATION.

F. INSTALL BLANKET TYPE INSULATION LOCATED NEAR BOTTOM CHORD OF ROOF TRUSS OVER A WIRE MESH SUPPORT PLANE WHICH IS SECURED TO THE ROOF TRUSS MEMBER. INSTALL FOIL FACING VAPOR BARRIER EXPOSED TO THE INTERIOR. WIRE MESH TO BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE BLANKET TYPE INSULATION MANUFACTURER'S RECOMMENDATIONS.

G. INSTALL FIRESTOPPING MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS TO MAINTAIN FIRE SEPARATIONS INDICATED. INSTALL FIRESTOPPING INSULATION OF PROPER SIZES AND THICKNESS' WITH BRACKETS OR SAFING CLIPS SPACED AS NEEDED AND NOT MORE THAN 24" ON CENTER. FILL SAFE-OFF AREA. FILL ALL VOIDS. PROVIDE CONTINUITY OF FIRE SAFETY SYSTEMS AS INDICATED.

END OF SECTION 07 21 00

EXTERIOR INSULATION AND SECTION 07 24 00 FINISH SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. PROVIDE AIR AND MOISTURE BARRIER, AND COMPATIBLE EIFS FOR VERTICAL ABOVE GRADE EXTERIOR WALLS

B. RELATED SECTIONS:

1. SECTION 06 16 00: SHEATHING
2. SECTION 07 62 00: SHEET METAL FLASHING AND TRIM
3. SECTION 08 11 00 METAL DOORS AND FRAMES
4. SECTION 08 41 13 ALUMINUM ENTRANCES AND STOREFRONT WINDOWS

1.2 SUBMITTALS

A. MANUFACTURER'S SPECIFICATIONS, DETAILS, INSTALLATION INSTRUCTIONS AND PRODUCT DATA

B. MANUFACTURER'S CODE COMPLIANCE REPORT

C. MANUFACTURER'S STANDARD WARRANTY

D. APPLICATOR'S INDUSTRY TRAINING CREDENTIALS

E. SAMPLES FOR APPROVAL AS DIRECTED BY ARCHITECT OR OWNER

F. SEALANT MANUFACTURER'S CERTIFICATE OF COMPLIANCE WITH ASTM C 1382

G. PREPARE AND SUBMIT PROJECT-SPECIFIC DETAILS (WHEN REQUIRED BY CONTRACT DOCUMENTS)

1.3 REFERENCES

A. ASTM STANDARDS:

ATSM C 578 SPECIFICATION FOR PREFORMED, CELLULAR POLYSTYRENE THERMAL INSULATION
ASTM C 1382 TEST METHOD FOR DETERMINING TENSILE ADHESION PROPERTIES OF SEALANTS WHEN USED IN EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) JOINTS

ASTM E 84 TEST METHOD FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS
ASTM E 96 TEST METHODS FOR WATER VAPOR TRANSMISSION OF MATERIALS
ASTM E 119 METHOD FOR FIRE TESTS OF BUILDING CONSTRUCTION AND MATERIALS
ASTM E 2134 TEST METHOD FOR EVALUATING THE TENSILE-ADHESION PERFORMANCE OF AN EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)
ASTM E 2178 TEST METHOD FOR AIR PERMEANCE OF BUILDING MATERIALS
ASTM E 2273 TEST METHOD FOR DETERMINING THE DRAINAGE EFFICIENCY OF EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) CLAD WALL ASSEMBLIES
ASTM E 2357 STANDARD TEST METHOD FOR DETERMINING AIR LEAKAGE OF AIR BARRIER ASSEMBLIES
ASTM E 2485 STANDARD TEST METHOD FOR FREEZE/THAW RESISTANCE OF EXTERIOR I NSULATION AND FINISH SYSTEMS (EIFS) AND WATER RESISTIVE BARRIER COATINGS

B. BUILDING CODE STANDARDS

AC 235 ACCEPTANCE CRITERIA FOR EIFS CLAD DRAINAGE WALL ASSEMBLIES (NOVEMBER, 2009)

C. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS

NFPA 268 STANDARD TEST METHOD FOR DETERMINING IGNITABILITY OF EXTERIOR WALL ASSEMBLIES USING A RADIANT HEAT ENERGY SOURCE
NFPA 285 STANDARD METHOD OF TEST FOR THE EVALUATION OF FLAMMABILITY CHARACTERISTICS OF EXTERIOR NON-LOAD-BEARING WALL ASSEMBLIES CONTAINING COMBUSTIBLE COMPONENTS USING THE INTERMEDIATE-SCALE, MULTISTORY TEST APPARATUS

D. OTHER REFERENCED DOCUMENTS

1. AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS AATCC-127 WATER RESISTANCE: HYDROSTATIC PRESSURE TEST

3. ICC-ES ESR-1233, STOGUARD WITH GOLD COAT, STOGUARD WITH EMERALDCOAT, AND STOGUARD VAPORSEAL WATER-RESISTIVE BARRIERS AND STOENERGY GUARD
4. ICC-ES ESR-1748, STOTHERM® CI

1.4 DESIGN REQUIREMENTS

A. WIND LOAD

1. DESIGN FOR MAXIMUM ALLOWABLE SYSTEM DEFLECTION, NORMAL TO THE PLANE OF THE WALL, OF L/240.
2. DESIGN FOR WIND LOAD IN CONFORMANCE WITH CODE REQUIREMENTS.
3. MAXIMUM WIND LOAD RESISTANCE: + 188 PSF (9.00 KPA), PROVIDED STRUCTURAL SUPPORTS AND SHEATHING/SHEATHING ATTACHMENT ARE ADEQUATE TO RESIST THESE PRESSURES.

B. MOISTURE CONTROL

1. PREVENT THE ACCUMULATION OF WATER BEHIND THE EIFS OR INTO THE WALL ASSEMBLY, EITHER BY CONDENSATION OR LEAKAGE THROUGH THE WALL CONSTRUCTION, IN THE DESIGN AND DETAILING OF THE WALL ASSEMBLY:

a. PROVIDE FLASHING TO DIRECT WATER TO THE EXTERIOR WHERE IT IS LIKELY TO PENETRATE COMPONENTS IN THE WALL ASSEMBLY, INCLUDING, ABOVE WINDOW AND DOOR HEADS, BENEATH WINDOW AND DOOR SILLS, AT ROOF/WALL INTERSECTIONS, DECKS, ABUTMENTS OF LOWER WALLS WITH HIGHER WALLS, ABOVE PROJECTING FEATURES, AT FLOOR LINES, AND AT THE BASE OF THE WALL.

b. AIR LEAKAGE PREVENTION - PROVIDE CONTINUITY OF THE AIR BARRIER SYSTEM AT FOUNDATION, ROOF, WINDOWS, DOORS, AND OTHER PENETRATIONS THROUGH THE WALL WITH CONNECTING AND COMPATIBLE AIR BARRIER COMPONENTS TO MINIMIZE CONDENSATION AND LEAKAGE CAUSED BY AIR MOVEMENT.

c. VAPOR DIFFUSION AND CONDENSATION - PERFORM A DEW POINT ANALYSIS AND/OR DYNAMIC HYGROTHERMAL MODELING OF THE WALL ASSEMBLY TO DETERMINE THE POTENTIAL FOR ACCUMULATION OF MOISTURE IN THE WALL ASSEMBLY BY DIFFUSION. ADJUST INSULATION THICKNESS AND/OR OTHER WALL ASSEMBLY COMPONENTS ACCORDINGLY TO MINIMIZE RISK. AVOID THE USE OF VAPOR RETARDERS ON THE INTERIOR SIDE OF THE WALL IN WARM,

C. IMPACT RESISTANCE

1. PROVIDE 2 LAYERS OF STO MESH TO A MINIMUM HEIGHT OF 2'-0" ABOVE GRADE AT ENTIRE BUILDING PERIMETER.

D. JOINTS

1. PROVIDE MINIMUM 3/4 INCH (19 MM) WIDE JOINTS IN THE EIFS WHERE THEY EXIST IN THE SUBSTRATE OR SUPPORTING CONSTRUCTION, WHERE THE CLADDING ADJOINS DISSIMILAR CONSTRUCTION OR MATERIALS, AT CHANGES IN BUILDING HEIGHT, AT EXPANSION, CONTROL, AND COLD JOINTS IN CONSTRUCTION, AND AT FLOOR LINES IN MULTI-LEVEL WOOD FRAME CONSTRUCTION. SIZE JOINTS TO CORRESPOND WITH ANTICIPATED MOVEMENT. ALIGN TERMINATING EDGES OF EIFS WITH JOINT EDGES OF THROUGH WALL EXPANSION JOINTS AND SIMILAR JOINTS IN CONSTRUCTION. REFER TO STO DETAILS.
2. PROVIDE MINIMUM 1/2 INCH (13 MM) WIDE PERIMETER SEALANT JOINTS AT ALL PENETRATIONS THROUGH THE EIFS (WINDOWS, DOORS, MECHANICAL, ELECTRICAL, AND PLUMBING PENETRATIONS, ETC.).
3. PROVIDE COMPATIBLE BACKER ROD AND SEALANT THAT HAS BEEN EVALUATED IN ACCORDANCE WITH ASTM C 1382, AND THAT MEETS MINIMUM 50% ELONGATION AFTER CONDITIONING.
4. 2.PROVIDE JOINTS SO THAT AIR BARRIER CONTINUITY IS MAINTAINED ACROSS THE JOINT, AND DRAIN JOINTS TO THE EXTERIOR, OR PROVIDE OTHER MEANS TO PREVENT OR CONTROL WATER INFILTRATION AT JOINTS.

E. GRADE CONDITION

1. PROVIDE MINIMUM 6 INCH (152 MM) CLEARANCE ABOVE GRADE OR AS REQUIRED BY CODE.

F. TRIM, PROJECTING ARCHITECTURAL FEATURES AND REVEALS

1. ALL TRIM AND PROJECTING ARCHITECTURAL FEATURES MUST HAVE A MINIMUM 1:2 [27°] SLOPE ALONG THEIR TOP SURFACE. ALL REVEALS MUST HAVE MINIMUM ¾ INCH (19 MM) INSULATION THICKNESS AT THE BOTTOM OF THE REVEAL. ALL HORIZONTAL REVEALS MUST HAVE A MINIMUM 1:2 [27°] SLOPE ALONG THEIR BOTTOM SURFACE. INCREASE SLOPE FOR NORTHERN CLIMATES TO PREVENT ACCUMULATION OF ICE/SNOW AND WATER ON SURFACE. WHERE TRIM/FEATURE OR BOTTOM SURFACE OF REVEAL PROJECTS MORE THAN 2 INCHES (51 MM) FROM THE FACE OF THE EIFS WALL PLANE, PROTECT THE TOP SURFACE WITH WATERPROOF BASE COAT. PERIODIC INSPECTIONS AND INCREASED MAINTENANCE MAY BE REQUIRED TO MAINTAIN SURFACE INTEGRITY OF THE EIFS FINISH ON WEATHER EXPOSED SLOPED SURFACES. LIMIT PROJECTING FEATURES TO EASILY ACCESSIBLE AREAS AND LIMIT TOTAL AREA TO FACILITATE AND MINIMIZE MAINTENANCE. REFER TO STO DETAILS.
2. DO NOT USE THE EIFS ON WEATHER EXPOSED PROJECTING LEDGES, SILLS, OR OTHER PROJECTING FEATURES UNLESS SUPPORTED BY FRAMING OR OTHER STRUCTURAL SUPPORT AND PROTECTED WITH METAL COPING OR FLASHING. REFER TO STO DETAIL 10.61.

G. INSULATION THICKNESS

1. MINIMUM EPS INSULATION THICKNESS IS 1 INCH (25 MM).
2. MAXIMUM EPS INSULATION THICKNESS IS 12 INCHES (305 MM), EXCEPT AS NOTED BELOW FOR FIRE-RESISTANCE RATED WALL ASSEMBLIES.

H. FIRE PROTECTION

1. DO NOT USE EPS FOAM PLASTIC IN EXCESS OF 12 INCHES (305 MM) THICK ON TYPES I, II, III, OR IV CONSTRUCTION UNLESS APPROVED BY THE CODE OFFICIAL.
2. WHERE A FIRE-RESISTANCE RATING IS REQUIRED BY CODE USE THE EIFS OVER A RATED CONCRETE OR CONCRETE MASONRY ASSEMBLY. LIMIT USE OVER RATED FRAME ASSEMBLIES TO NON-LOAD BEARING ASSEMBLIES (THE EIFS IS CONSIDERED NOT TO ADD OR DETRACT FROM THE FIRE-RESISTANCE OF THE RATED ASSEMBLY). MAXIMUM ALLOWABLE EPS THICKNESS: 4 INCHES (102 MM).
3. REFER TO MANUFACTURER'S TESTING OR APPLICABLE CODE COMPLIANCE REPORT FOR OTHER LIMITATIONS THAT MAY APPLY.

1.5 PERFORMANCE REQUIREMENTS

A. COMPLY WITH ASTM E 2570 (AIR/MOISTURE BARRIER) AND ASTM E 2568 (EIFS).

1.6 QUALITY ASSURANCE

A. MANUFACTURER REQUIREMENTS

1. MEMBER IN GOOD STANDING OF THE EIFS INDUSTRY MEMBERS ASSOCIATION (EIMA)
2. AIR/MOISTURE BARRIER AND EIFS MANUFACTURER FOR A MINIMUM OF THIRTY (30) YEARS
3. MANUFACTURING FACILITIES ISO 9001:2008 CERTIFIED QUALITY SYSTEM AND ISO 14001:2004 CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM

B. CONTRACTOR REQUIREMENTS

1. ENGAGED IN APPLICATION OF SIMILAR SYSTEMS FOR A MINIMUM OF THREE (3) YEARS
2. KNOWLEDGEABLE IN THE PROPER USE AND HANDLING OF STO MATERIALS
3. EMPLOY SKILLED MECHANICS WHO ARE EXPERIENCED AND KNOWLEDGEABLE IN AIR/MOISTURE BARRIER AND EIFS APPLICATION, AND FAMILIAR WITH THE REQUIREMENTS OF THE SPECIFIED WORK
4. SUCCESSFUL COMPLETION OF MINIMUM OF THREE (3) PROJECTS OF SIMILAR SIZE AND COMPLEXITY TO THE SPECIFIED PROJECT
5. PROVIDE THE PROPER EQUIPMENT, MANPOWER AND SUPERVISION ON THE JOB SITE TO INSTALL THE SYSTEM IN COMPLIANCE WITH STO'S PUBLISHED SPECIFICATIONS AND DETAILS AND THE PROJECT PLANS AND SPECIFICATIONS

C. INSULATION BOARD MANUFACTURER REQUIREMENTS

1. EPS BOARD LISTED BY AN APPROVED AGENCY
2. EPS BOARD MANUFACTURED UNDER STO LICENSING AGREEMENT AND RECOGNIZED BY STO AS BEING CAPABLE OF PRODUCING EPS INSULATION BOARD TO MEET EIFS REQUIREMENTS
3. EPS BOARD LABELED WITH INFORMATION REQUIRED BY STO, THE APPROVED LISTING AGENCY, AND THE APPLICABLE BUILDING CODE.

D. MOCK-UP TESTING

1. CONSTRUCT FULL-SCALE MOCK-UP OF TYPICAL AIR/MOISTURE BARRIER AND EIFS/WINDOW WALL ASSEMBLY WITH SPECIFIED TOOLS AND MATERIALS AND TEST AIR AND WATER INFILTRATION AND STRUCTURAL PERFORMANCE IN ACCORDANCE WITH ASTM E 283, ASTM E 331 AND ASTM E 330, RESPECTIVELY, THROUGH INDEPENDENT LABORATORY. MOCK-UP SHALL COMPLY WITH REQUIREMENTS OF PROJECT SPECIFICATIONS. WHERE MOCK-UP IS TESTED AT JOB SITE MAINTAIN APPROVED MOCK-UP AT SITE AS REFERENCE STANDARD. IF TESTED OFF-SITE ACCURATELY RECORD CONSTRUCTION DETAILING AND SEQUENCING OF APPROVED MOCK-UP FOR REPLICATION DURING CONSTRUCTION.

E. INSPECTIONS

1. PROVIDE INDEPENDENT THIRD PARTY INSPECTION WHERE REQUIRED BY CODE OR CONTRACT DOCUMENTS
2. CONDUCT INSPECTIONS IN ACCORDANCE WITH CODE REQUIREMENTS AND CONTRACT DOCUMENTS

1.7 DELIVERY, STORAGE AND HANDLING

A. DELIVER ALL MATERIALS IN THEIR ORIGINAL SEALED CONTAINERS BEARING MANUFACTURER'S NAME AND IDENTIFICATION OF PRODUCT

B. PROTECT COATINGS (PAIL PRODUCTS) FROM FREEZING AND TEMPERATURES IN EXCESS OF 90°F (32° C). STORE AWAY FROM DIRECT SUNLIGHT.

C. PROTECT PORTLAND CEMENT BASED MATERIALS (BAG PRODUCTS) FROM MOISTURE AND HUMIDITY. STORE UNDER COVER OFF THE GROUND IN A DRY LOCATION.

1.8 PROJECT/SITE CONDITIONS

A. MAINTAIN AMBIENT AND SURFACE TEMPERATURES ABOVE 40°F (4°C) DURING APPLICATION AND DRYING PERIOD, MINIMUM 24 HOURS AFTER APPLICATION OF AIR/MOISTURE BARRIER AND EIFS PRODUCTS

B. PROVIDE SUPPLEMENTARY HEAT FOR INSTALLATION IN TEMPERATURES LESS THAN 40°F (4°C)

C. PROVIDE PROTECTION OF SURROUNDING AREAS AND ADJACENT SURFACES FROM APPLICATION OF PRODUCTS

1.9 COORDINATION/SCHEDULING

A. PROVIDE SITE GRADING SUCH THAT THE EIFS TERMINATES ABOVE GRADE A MINIMUM OF 6 INCHES (150 MM) OR AS REQUIRED BY CODE

B. COORDINATE INSTALLATION OF FOUNDATION WATERPROOFING, ROOFING MEMBRANE, WINDOWS, DOORS AND OTHER WALL PENETRATIONS TO PROVIDE A CONTINUOUSLY CONNECTED AIR AND MOISTURE BARRIER

C. PROVIDE PROTECTION OF ROUGH OPENINGS BEFORE INSTALLING WINDOWS, DOORS, AND OTHER PENETRATIONS THROUGH THE WALL

D. INSTALL WINDOW AND DOOR HEAD FLASHING IMMEDIATELY AFTER WINDOWS AND DOORS ARE INSTALLED

E. INSTALL DIVERTER FLASHINGS WHEREVER WATER CAN ENTER THE WALL ASSEMBLY TO DIRECT WATER TO THE EXTERIOR

F. INSTALL SPLICES OR TIE-INS FROM AIR/MOISTURE BARRIER OVER BACK LEG OF FLASHINGS, STARTER TRACKS, AND SIMILAR DETAILS TO FORM A SHINGLE LAP THAT DIRECTS INCIDENTAL WATER TO THE EXTERIOR

G. INSTALL COPINGS AND SEALANT IMMEDIATELY AFTER INSTALLATION OF THE EIFS WHEN COATINGS ARE DRY, AND SUCH THAT, WHERE SEALANT IS APPLIED AGAINST THE EIFS SURFACE, IT IS APPLIED AGAINST THE BASE COAT OR PRIMED BASE COAT SURFACE

a. STO GOLD FILL® - READY MIXED COATING APPLIED BY TROWEL OR KNIFE FOR ROUGH OPENING PROTECTION OF FRAME WALLS AND JOINT TREATMENT OF SHEATHING WHEN USED WITH STOGUARD MESH. ALSO USED AS A DETAIL COMPONENT WITH STOGUARD MESH TO SPLICE OVER BACK FLANGE OF STARTER TRACK, FLASHING, AND SIMILAR SHIP LAP DETAILS

H. SCHEDULE WORK SUCH THAT AIR/MOISTURE BARRIER IS EXPOSED TO WEATHER NO LONGER THAN 180 DAYS IF STO GOLD COAT IS USED, 90 DAYS IF STO AIRSEAL IS USED.

I. ATTACH PENETRATIONS THROUGH THE EIFS TO STRUCTURAL SUPPORT AND PROVIDE WATER TIGHT SEAL AT PENETRATIONS

1.10 WARRANTY

A. PROVIDE MANUFACTURER'S STANDARD WARRANTY

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. PROVIDE AIR/MOISTURE BARRIER AND EIFS COATINGS AND ACCESSORIES FROM SINGLE SOURCE MANUFACTURER OR APPROVED SUPPLIER

B. THE FOLLOWING ARE ACCEPTABLE MANUFACTURERS:

1. STO CORP. - AIR/MOISTURE BARRIER, EIFS
2. PLASTIC COMPONENTS, INC. - EIFS ACCESSORIES

2.2 AIR/MOISTURE BARRIER

REFER TO FLUID APPLIED MEMBRANE AIR BARRIERS SECTION 07 27 26

2.3 ADHESIVE

A. STO TURBOSTICK™ - ONE COMPONENT POLYURETHANE SPRAY FOAM ADHESIVE

2.4 INSULATION BOARD

A. STO EPS INSULATION BOARD: NOMINAL 1.0 LB/FT3 (16 KG/M3) EXPANDED POLYSTYRENE (EPS) INSULATION BOARD IN COMPLIANCE WITH ASTM E 2430 AND ASTM C 578 TYPE I REQUIREMENTS AND LISTED, LABELED, AND FURNISHED IN ACCORDANCE WITH SECTION 1.6C.

2.5 BASE COAT

B. CEMENTITIOUS BASE COAT

1. STO BTS PLUS - FACTORY BLENDED ONE COMPONENT POLYMER MODIFIED PORTLAND CEMENT BASED HIGH BUILD BASE COAT. ALSO USED AS A LEVELER FOR CONCRETE AND MASONRY SURFACES

2.6 REINFORCING MESHES

A. STANDARD MESH

1. STO MESH - NOMINAL 4.5 OZ/YD2 (153 G/M2), SYMMETRICAL, INTERLACED OPEN-WEAVE GLASS FIBER FABRIC MADE WITH ALKALINE RESISTANT COATING FOR COMPATIBILITY WITH STO MATERIALS

2.7 PRIMER

A. STOPRIME SAND - ACRYLIC BASED TINTABLE PRIMER WITH SAND FOR ROLLER APPLICATION

2.8 FINISH COAT

A. STOLIT® LOTUSAN® - ACRYLIC BASED TEXTURED WALL FINISH WITH GRADED MARBLE AGGREGATE AND SELF-CLEANING PROPERTIES

2.9 JOB MIXED INGREDIENTS

A. WATER - CLEAN AND POTABLE \

B. PORTLAND CEMENT - TYPE I, TYPE II, OR TYPE I-II IN CONFORMANCE WITH ASTM C 150

2.10 ACCESSORIES

A. STARTER TRACK - RIGID PVC (POLYVINYL CHLORIDE) PLASTIC TRACK PART NO. STDE AS FURNISHED BY PLASTIC COMPONENTS, INC., 9051 NW 97TH TERRACE, MIAMI, FL 33178 (800 327 - 7077).

B. STO-MESH CORNER BEAD STANDARD - ONE COMPONENT PVC (POLYVINYL CHLORIDE) ACCESSORY WITH INTEGRAL REINFORCING MESH FOR OUTSIDE CORNER REINFORCEMENT.

C. STO DRIP EDGE PROFILE - ONE COMPONENT PVC (POLYVINYL CHLORIDE) ACCESSORY WITH INTEGRAL REINFORCING MESH THAT CREATES A DRIP EDGE AND PLASTER RETURN

2.11 MIXING

A. STO GOLD COAT - MIX WITH A CLEAN, RUST-FREE HIGH SPEED MIXER TO A UNIFORM CONSISTENCY

B. STO BTS PLUS - MIX RATIO WITH WATER: 5-6.5 QUARTS (4.7-6.2 L) OF WATER PER 47 POUND (21.3 KG) BAG OF STO BTS PLUS. POUR WATER INTO A CLEAN MIXING PAIL. ADD STO BTS PLUS, MIX TO A UNIFORM CONSISTENCY AND ALLOW TO SET FOR APPROXIMATELY 5 MINUTES. ADJUST MIX IF NECESSARY WITH ADDITIONAL STO BTS PLUS OR WATER AND REMIX TO A UNIFORM TROWEL CONSISTENCY. AVOID RETEMPERING. KEEP MIX RATIO CONSISTENT. DO NOT EXCEED MAXIMUM WATER AMOUNT IN MIX RATIO.

C. STOLIT LOTUSAN - MIX WITH A CLEAN, RUST-FREE HIGH SPEED MIXER TO A UNIFORM CONSISTENCY. A SMALL AMOUNT OF WATER MAY BE ADDED TO ADJUST WORKABILITY. LIMIT ADDITION OF WATER TO AMOUNT NEEDED TO ACHIEVE THE FINISH TEXTURE.

D. MIX ONLY AS MUCH MATERIAL AS CAN READILY BE USED
DO NOT USE ANTI-FREEZE COMPOUNDS OR OTHER ADDITIVES

PART 3 EXECUTION

3.1 ACCEPTABLE INSTALLERS

A. PREQUALIFY UNDER QUALITY ASSURANCE REQUIREMENTS OF THIS SPECIFICATION (SECTION 1.06 B)

3.2 EXAMINATION

A. INSPECT SHEATHING APPLICATION FOR COMPLIANCE WITH APPLICABLE REQUIREMENT AND INSTALLATION IN CONFORMANCE WITH SPECIFICATION AND MANUFACTURER REQUIREMENTS:

1. GLASS MAT FACED GYPSUM SHEATHING COMPLIANT WITH ASTM C 1177
2. EXTERIOR GRADE AND EXPOSURE I WOOD BASED SHEATHING - APA ENGINEERED WOOD ASSOCIATION E 30
3. CEMENTITIOUS SHEATHING - CONSULT MANUFACTURER
4. ATTACHMENT INTO STRUCTURAL SUPPORTS WITH ADJOINING SHEETS ABUTTED (GAPPED IF WOOD-BASED SHEATHING) AND FASTENERS AT REQUIRED SPACING TO RESIST DESIGN WIND PRESSURES AS DETERMINED BY DESIGN PROFESSIONAL
5. FASTENERS SEATED FLUSH WITH SHEATHING SURFACE AND NOT OVER-DRIVEN

B. REPORT DEVIATIONS FROM THE REQUIREMENTS OF PROJECT SPECIFICATIONS OR OTHER CONDITIONS THAT MIGHT ADVERSELY AFFECT THE AIR/MOISTURE BARRIER AND THE EIFS INSTALLATION TO THE GENERAL CONTRACTOR. DO NOT START WORK UNTIL DEVIATIONS ARE CORRECTED.

3.3 SURFACE PREPARATION

A. REMOVE SURFACE CONTAMINANTS GYPSUM SHEATHING

B. REPAIR CRACKS, SPALLS OR DAMAGE IN CONCRETE AND CONCRETE MASONRY SURFACES AND LEVEL CONCRETE AND MASONRY SURFACES TO COMPLY WITH REQUIRED TOLERANCES

C. APPLY CONDITIONER (CONSULT STO) BY SPRAY OR ROLLER TO CHALKING OR EXCESSIVELY ABSORPTIVE SURFACES OR PRESSURE WASH TO REMOVE SURFACE CHALKINESS

D. REMOVE FASTENERS THAT ARE NOT ANCHORED INTO SUPPORTING CONSTRUCTION AND SEAL HOLES WITH AIR BARRIER MATERIAL

E. SEAL OVER-DRIVEN FASTENERS WITH AIR BARRIER MATERIAL AND INSTALL ADDITIONAL FASTENERS AS NEEDED TO COMPLY WITH FASTENER SPACING REQUIREMENT

F. FILL LARGE GAPS BETWEEN SHEATHING OR VOIDS AROUND PIPE, CONDUIT, SCUPPER, AND SIMILAR PENETRATIONS WITH SPRAY FOAM AND SHAVE FLUSH WITH SURFACE (REFER TO STO DETAILS)

G. REPLACE WEATHER-DAMAGED SHEATHING AND REPAIR OR REPLACE DAMAGED OR CRACKED SHEATHING

3.4 INSTALLATION

A. TRANSITION DETAILING

1. DETAIL TRANSITION AREAS WITH STO RAPIDGUARD OR STOGUARD TRANSITION MEMBRANE TO ACHIEVE AIR BARRIER CONTINUITY. FOR ILLUSTRATIONS OF INSTALLATION, REFER TO STO GUIDE DETAILS AND STO RAPIDGUARD INSTALLATION GUIDE OR STOGUARD TRANSITION MEMBRANE INSTALLATION GUIDE (WWW.STOCORP.COM)

B. ROUGH OPENING

1. STO GOLD FILL WITH STOGUARD MESH: APPLY 9 INCH (229 MM) WIDE STOGUARD MESH AT ROUGH OPENINGS. IMMEDIATELY APPLY STO GOLD FILL BY SPRAY OR TROWEL OVER THE MESH AND SPREAD WITH A TROWEL TO CREATE A SMOOTH SURFACE THAT COMPLETELY COVERS THE MESH (REFER TO STO DETAIL 20.20M).

C. SHEATHING JOINT TREATMENT

1. STO GOLD FILL WITH STOGUARD MESH: PLACE 4 INCH (102 MM) WIDE MESH CENTERED ALONG SHEATHING JOINTS AND MINIMUM 9 INCH (229 MM) WIDE MESH CENTERED AND FOLDED AT INSIDE AND OUTSIDE CORNERS. IMMEDIATELY APPLY STO GOLD FILL BY SPRAY OR TROWEL AND SPREAD WITH A TROWEL TO CREATE A SMOOTH SURFACE THAT COMPLETELY COVERS THE MESH.

D. AIR/MOISTURE BARRIER COATING INSTALLATION

1. PLYWOOD AND GYPSUM SHEATHING: APPLY WATERPROOF COATING BY SPRAY OR ROLLER OVER SHEATHING SURFACE, INCLUDING THE DRY JOINT TREATMENT, ROUGH OPENING PROTECTION, AND TRANSITION AREAS, TO A UNIFORM WET MIL THICKNESS OF 10 MILS IN ONE COAT (STO GOLD COAT) OR 20 MILS IN ONE COAT (STO AIRSEAL). USE ½ INCH (13 MM) NAP ROLLER FOR PLYWOOD. USE ¾ INCH (19 MM) NAP ROLLER FOR GLASS MAT FACED GYPSUM SHEATHING. PROTECT FROM WEATHER UNTIL DRY.

E. AIR /MOISTURE BARRIER CONNECTIONS AND SHINGLE LAPS

1. COORDINATE INSTALLATION OF CONNECTING AIR BARRIER COMPONENTS WITH OTHER TRADES TO PROVIDE A CONTINUOUS AIR TIGHT MEMBRANE.
2. COORDINATE INSTALLATION OF FLASHING AND OTHER MOISTURE PROTECTION COMPONENTS WITH OTHER TRADES TO ACHIEVE COMPLETE MOISTURE PROTECTION SUCH THAT WATER IS DIRECTED TO THE EXTERIOR, NOT INTO THE WALL ASSEMBLY, AND DRAINED TO THE EXTERIOR AT SOURCES OF LEAKS (WINDOWS, DOORS AND SIMILAR PENETRATIONS THROUGH THE WALL ASSEMBLY).
3. SPLICE-IN HEAD FLASHINGS ABOVE WINDOWS, DOORS, FLOOR LINES, ROOF/SIDEWALL STEP FLASHING, AND SIMILAR LOCATIONS WITH STOGUARD DETAIL COMPONENT TO ACHIEVE SHINGLE LAP OF THE AIR/MOISTURE BARRIER SUCH THAT WATER IS DIRECTED TO THE EXTERIOR.

3.4.2 EIFS INSTALLATION

A. STARTER TRACK

1. STRIKE A LEVEL LINE AT THE BASE OF THE WALL TO MARK WHERE THE TOP OF THE STARTER TRACK TERMINATES.
2. ATTACH THE STARTER TRACK EVEN WITH THE LINE INTO STRUCTURAL SUPPORTS WITH THE PROPER FASTENER: TYPE S-12 CORROSION RESISTANT SCREWS FOR STEEL FRAMING WITH MINIMUM 3/8 INCH (9 MM) AND THREE THREAD PENETRATION, GALVANIZED OR ZINC COATED NAILS FOR WOOD FRAMING WITH MINIMUM 3/4 INCH (19 MM) PENETRATION, AND CORROSION RESISTANT CONCRETE OR MASONRY SCREWS WITH MINIMUM 1 INCH (25 MM) PENETRATION FOR CONCRETE OR CMU. ATTACH BETWEEN STUDS INTO BLOCKING AS NEEDED TO SECURE THE TRACK FLAT AGAINST THE WALL SURFACE. ATTACH AT MAXIMUM 16 INCHES (406 MM) ON CENTER INTO FRAMING. FOR SOLID WOOD SHEATHING OR CONCRETE/MASONRY SURFACES, ATTACH DIRECTLY AT 12 INCHES (305 MM) ON CENTER MAXIMUM.
3. BUTT SECTIONS OF STARTER TRACK TOGETHER. MITER CUT OUTSIDE CORNERS AND ABUT. SNIP FRONT FLANGE OF ONE INSIDE CORNER PIECE (TO ALLOW EPS INSULATION BOARD TO BE SEATED INSIDE OF TRACK) AND ABUT.

a. POLYURETHANE SPRAY FOAM ADHESIVE (STO TURBOSTICK): APPLY ADHESIVE TO THE BACK OF THE INSULATION BOARD WITH THE DISPENSING PISTOL APPROXIMATELY ¾ INCH (19 MM) FROM ENDS. APPLY 5 ADDITIONAL RIBBONS SPACED EQUALLY AT NO GREATER THAN 7 INCHES (177 MM) APART BETWEEN THE END RIBBONS. APPLY UNIFORM RIBBONS OF ADHESIVE PARALLEL WITH THE SHORT DIMENSION OF THE BOARD SO THAT WHEN BOARDS ARE PLACED ON THE WALL THE RIBBONS WILL BE VERTICAL. APPLY ADHESIVE RIBBONS APPROXIMATELY ½ INCH (51 MM) IN DIAMETER WHICH WILL EXPAND TO ¾ - 1 INCH (19 - 25 MM). KEEP ADHESIVE ½ INCH (51 MM) SHORT OF BOARD EDGES. APPLY ADHESIVE UNIFORMLY SO RIBBONS OF ADHESIVE DO NOT CONVERGE. ALLOW ADHESIVE TO “DWELL” AND BECOME “TACKY” BEFORE PLACING BOARDS ON WALL. ADHESIVE WILL LOOK SMOOTH, NOT JAGGED, WHEN READY TO APPLY TO WALL SURFACE. PLACE BOARDS WHILE ADHESIVE IS “TACKY” AND BEFORE ADHESIVE “SKINS”.

4. INSTALL STARTER TRACK AT OTHER EIFS TERMINATIONS AS DESIGNATED ON DETAIL DRAWINGS: ABOVE ROOF ALONG DORMERS OR GABLE END WALLS, AND BENEATH WINDOW SILLS WITH CONCEALED FLASHING (REFER TO STO DETAILS).
5. DETAIL SPLICE STRIPS FOR STARTER TRACK, FLASHING AT FLOOR LINES, HEAD OF WINDOWS AND DOORS
6. STARTER TRACK, WINDOW/DOOR HEAD FLASHING, FLOOR LINE FLASHING, AND ROOF/SIDE WALL STEP FLASHING: INSTALL MINIMUM 4 INCH (100 MM) WIDE DETAIL COMPONENT OVER BACK FLANGE OF STARTER TRACK, FLOOR LINE FLASHING, HEAD FLASHING, AND ROOF/SIDE WALL STEP FLASHING. CENTER THE DETAIL COMPONENT SO IT SPANS EVENLY BETWEEN THE BACK LEG OF FLASHING (OR ACCESSORY) AND THE COATED SHEATHING. MAKE A SMOOTH TRANSITION TO THE COATED SHEATHING WITH A TROWEL, KNIFE, OR ROLLER, DEPENDING ON THE DETAIL COMPONENT MATERIAL BEING USED. WHEN STO GOLD FILL WITH STOGUARD MESH IS THE DETAIL COMPONENT APPLY ANOTHER COAT OF THE WATERPROOF COATING OVER THE DETAIL AREA. DO NOT LEAVE DETAIL COMPONENTS EXPOSED FOR MORE THAN 30 DAYS.

C. BACKWRAPPING

1. APPLY A STRIP OF DETAIL MESH TO THE DRY AIR/MOISTURE BARRIER AT ALL SYSTEM TERMINATIONS (WINDOWS, DOORS, EXPANSION JOINTS, ETC.) EXCEPT WHERE THE STARTER TRACK IS INSTALLED. THE MESH MUST BE WIDE ENOUGH TO ADHERE APPROXIMATELY 4 INCHES (100 MM) OF MESH ONTO THE WALL, BE ABLE TO WRAP AROUND THE INSULATION BOARD EDGE AND COVER A MINIMUM OF 2 ½ INCHES (64 MM) ON THE OUTSIDE SURFACE OF THE INSULATION BOARD. ATTACH MESH STRIPS TO THE AIR/MOISTURE BARRIER AND ALLOW THEM TO DANGLE UNTIL THE BACKWRAP PROCEDURE IS COMPLETED (PARAGRAPH 3.04 G1). ALTERNATIVELY, PRE-WRAP TERMINATING EDGES OF INSULATION BOARD.

D. ADHESIVE APPLICATION AND INSTALLATION OF INSULATION BOARD

1. ENSURE THE AIR/MOISTURE BARRIER SURFACE (STO GOLD COAT) IS FREE OF SURFACE CONTAMINATION. INSTALL THE INSULATION BOARD WITHIN 30 DAYS OF THE APPLICATION OF THE AIR/MOISTURE BARRIER COATING (STO GOLD COAT), OR CLEAN THE SURFACE AND RECOAT WITH STO GOLD COAT.
2. RASP THE INTERIOR LOWER FACE OF INSULATION BOARDS TO PROVIDE A SNUG FRICTION FIT INTO THE STARTER TRACK. (NOTE: RASPING PREVENTS AN OUTWARD BOW AT THE STARTER TRACK).
3. USE EITHER POLYURETHANE SPRAY FOAM ADHESIVE (STO TURBOSTICK) OR CEMENTITOUS ADHESIVE:
CEMENTITIOUS ADHESIVE: APPLY ADHESIVE TO THE BACK OF THE INSULATION BOARD WITH THE PROPER SIZE (1/2 X ½ X 2 INCH [13 X 13 X 51 MM]) STAINLESS STEEL NOTCHED TROWEL. APPLY UNIFORM RIBBONS OF ADHESIVE PARALLEL WITH THE SHORT DIMENSION OF THE BOARD SO THAT WHEN BOARDS ARE PLACED ON THE WALL THE RIBBONS WILL BE VERTICAL. APPLY ADHESIVE UNIFORMLY SO RIBBONS OF ADHESIVE DO NOT CONVERGE. IMMEDIATELY PLACE INSULATION BOARDS IN A RUNNING BOND PATTERN ON THE WALL WITH THE LONG DIMENSION HORIZONTAL. START BY INSERTING THE LOWER EDGE OF THE BOARDS INSIDE THE STARTER TRACK AT THE BASE OF THE WALL UNTIL THEY CONTACT THE BOTTOM OF THE TRACK. APPLY FIRM PRESSURE OVER THE ENTIRE SURFACE OF THE BOARDS TO ENSURE UNIFORM CONTACT OF PLACE INSULATION BOARDS IN A RUNNING BOND PATTERN ON THE WALL WITH THE LONG DIMENSION HORIZONTAL. START BY INSERTING THE LOWER EDGE OF THE BOARDS INSIDE THE STARTER TRACK AT THE BASE OF THE WALL UNTIL THEY CONTACT THE BOTTOM OF THE TRACK. APPLY LIGHT PRESSURE WHEN PLACING THE BOARDS. AFTER BOARDS HAVE BEEN IN PLACE FOR 5-10 MINUTES USE A STRAIGHT EDGE TO LIGHTLY PRESS THE BOARDS INWARD AND TO KEEP BOARD JOINTS FLUSH, AS POST EXPANSION OF THE ADHESIVE MAY FORCE BOARDS SLIGHTLY OUTWARD.
4. BRIDGE SHEATHING JOINTS BY A MINIMUM OF 6 INCHES (152 MM). INTERLOCK INSIDE AND OUTSIDE CORNERS.
5. BUTT ALL BOARD JOINTS TIGHTLY TOGETHER TO ELIMINATE ANY THERMAL BREAKS. CARE MUST BE TAKEN TO PREVENT ANY ADHESIVE FROM GETTING BETWEEN THE JOINTS OF THE BOARDS.
6. CUT INSULATION BOARD IN AN L-SHAPED PATTERN TO FIT AROUND OPENINGS. DO NOT ALIGN BOARD JOINTS WITH CORNERS OF OPENINGS.
7. CHECK FOR SATISFACTORY CONTACT OF THE INSULATION BOARD WITH THE SUBSTRATE. IF ANY BOARDS HAVE LOOSE AREAS USE THE SPRAY FOAM ADHESIVE DISPENSING PISTOL TO CREATE A HOLE THROUGH THE BOARD AND INJECT ADHESIVE TO ATTACH THE LOOSE AREA. ALLOW THE ADHESIVE TO EXPAND TO THE OUTER FACE OF THE BOARD WHILE WITHDRAWING THE PISTOL. CUT EXCESS ADHESIVE FLUSH WITH THE SURFACE OF THE INSULATION. DO NOT USE NAILS, SCREWS, OR ANY OTHER TYPE OF NON-THERMAL MECHANICAL FASTENER.

E. SLIVERING AND RASPING OF INSULATION BOARD SURFACE

1. MAKE SURE INSULATION BOARDS ARE FULLY ADHERED TO THE SUBSTRATE BEFORE PROCEEDING TO STEPS 3.04 E2 AND 3.04 E3 BELOW.
2. FILL ANY OPEN JOINTS IN THE INSULATION BOARD LAYER WITH SLIVERS OF INSULATION OR THE SPRAY FOAM ADHESIVE.
3. RASP THE INSULATION BOARD SURFACE TO ACHIEVE A SMOOTH, EVEN SURFACE AND TO REMOVE ANY ULTRAVIOLET RAY DAMAGE.

F. TRIM, REVEALS AND PROJECTING AESTHETIC FEATURES

1. ATTACH FEATURES AND TRIM WHERE DESIGNATED ON DRAWINGS WITH ADHESIVE TO A BASE LAYER OF INSULATION BOARD OR TO THE COATED SHEATHING SURFACE. FILL ANY GAPS BETWEEN THE TRIM AND BASE LAYER OF INSULATION WITH SPRAY FOAM ADHESIVE AND RASP FLUSH WITH THE TRIM SURFACE. SLOPE THE TOP SURFACE OF ALL TRIM/FEATURES MINIMUM 1:2 (27°) AND THE BOTTOM OF ALL HORIZONTAL REVEALS MINIMUM 1:2 (27°).
2. CUT REVEALS/AESTHETIC GROOVES WITH A HOT-KNIFE, ROUTER OR GROOVE-TOOL IN LOCATIONS INDICATED ON DRAWINGS.
3. OFFSET REVEALS/AESTHETIC GROOVES MINIMUM 3 INCHES (75 MM) FROM INSULATION BOARD JOINTS.
4. DO NOT LOCATE REVEALS/AESTHETIC GROOVES AT HIGH STRESS AREAS.
5. ENSURE MINIMUM ¾ INCH (19 MM) THICKNESS OF INSULATION BOARD AT THE BOTTOM OF THE REVEALS/AESTHETIC GROOVES.

G. COMPLETION OF BACKWRAPPING

1. COMPLETE THE BACKWRAPPING PROCEDURE BY APPLYING BASE COAT TO EXPOSED EDGES OF INSULATION BOARD AND APPROXIMATELY 4 INCHES (100 MM) ONTO THE FACE OF THE INSULATION BOARD. PULL MESH TIGHT AROUND THE BOARD AND EMBED IT IN THE BASE COAT WITH A STAINLESS STEEL TROWEL. USE A CORNER TROWEL FOR CLEAN, STRAIGHT LINES. SMOOTH ANY WRINKLES OR GAPS IN THE MESH.

H. ACCESSORY INSTALLATION

1. CORNER BEAD: CUT THE CORNER BEAD ACCESSORY TO PROPER LENGTH AS NEEDED. USE FULL PIECES WHEREVER POSSIBLE AND AVOID USING SHORT FILLER PIECES. OFFSET ACCESSORY BUTT JOINTS FROM SUBSTRATE JOINTS. APPLY BASE COAT WITH A STAINLESS STEEL TROWEL TO AN APPROXIMATE THICKNESS OF 1/8 INCH (3 MM) TO THE OUTSIDE CORNER AREA THAT WILL RECEIVE THE ACCESSORY. IMMEDIATELY PLACE THE ACCESSORY DIRECTLY INTO THE WET BASE COAT MATERIAL. DO NOT SLIDE INTO PLACE. PRESS THE ACCESSORY INTO PLACE. A CORNER TROWEL IS BEST FOR THIS PURPOSE. EMBED AND COMPLETELY COVER THE MESH AND PVC BY TROWELING FROM THE CORNER TO THE EDGE OF THE MESH SO THAT NO MESH OR PVC COLOR IS VISIBLE. AVOID EXCESS BUILD-UP OF BASE COAT AND FEATHER ALONG MESH EDGES. ADJOIN SEPARATE PIECES BY ABUTTING PVC TO PVC AND OVERLAPPING THE MESH “TAIL” FROM ONE PIECE ONTO THE NEXT PIECE. FULLY EMBED THE ACCESSORY AND MESH “TAIL” IN BASE COAT MATERIAL. WHEN INSTALLING FIELD MESH REINFORCEMENT OVERLAP ACCESSORY MESH AND PVC. REMOVE ANY EXCESS BASE COAT FROM THE OUTSIDE CORNER.
2. DRIP EDGE: INSTALL THE DRIP EDGE ACCESSORY PRIOR TO APPLICATION OF FIELD MESH (PARAGRAPH 3.4.2 I5 BELOW). INSTALL WITH ARROW ON MESH POINTING UP. CUT THE ACCESSORY TO PROPER LENGTH AS NEEDED. USE FULL PIECES WHEREVER POSSIBLE AND AVOID USING SHORT FILLER PIECES. OFFSET ACCESSORY BUTT JOINTS FROM SUBSTRATE JOINTS. APPLY BASE COAT WITH A STAINLESS STEEL TROWEL TO AN APPROXIMATE THICKNESS OF 1/8 INCH (3 MM) TO THE AREA THAT WILL RECEIVE THE ACCESSORY. IMMEDIATELY PLACE THE ACCESSORY DIRECTLY INTO THE WET BASE COAT MATERIAL AND PRESS INTO PLACE. DO NOT SLIDE INTO PLACE. EMBED AND COMPLETELY COVER THE MESH AND PVC BY TROWELING FROM THE DRIP EDGE SCREED RAIL TO THE EDGE OF THE MESH. AVOID EXCESS BUILD-UP OF BASE COAT, FEATHER ALONG MESH EDGES, AND REMOVE ANY EXCESS BASE COAT FROM THE DRIP EDGE NOSING. ABUT ADJOINING PIECES AND INSTALL AS DESCRIBED ABOVE. WHEN INSTALLING FIELD MESH REINFORCEMENT OVERLAP ACCESSORY MESH 4 INCHES (10 CM) ON BOTH VERTICAL AND HORIZONTAL FACES SO THE PVC IS OVERLAPPED, AND REMOVE ANY EXCESS BASE COAT FROM THE DRIP EDGE NOSING. ON VERTICAL AND HORIZONTAL FACES OF THE ACCESSORY INSTALL FINISH TO THE DRIP EDGE LINES AND REMOVE ANY PROTRUDING FINISH FROM THE DRIP EDGE NOSING.

I. BASE COAT AND REINFORCING MESH APPLICATION

1. ENSURE THE INSULATION BOARD IS FIRMLY ADHERED AND FREE OF SURFACE CONTAMINATION OR UV DEGRADATION, AND IS THOROUGHLY RASPED BEFORE COMMENCING THE BASE COAT APPLICATION.
2. APPLY MINIMUM 9X12 INCH (225X300 MM) DIAGONAL STRIPS OF DETAIL MESH AT CORNERS OF WINDOWS, DOORS, AND ALL PENETRATIONS THROUGH THE SYSTEM. EMBED THE STRIPS IN WET BASE COAT AND TROWEL FROM THE CENTER TO THE EDGES OF THE MESH TO AVOID WRINKLES.
3. APPLY DETAIL MESH AT TRIM, REVEALS AND PROJECTING ARCHITECTURAL FEATURES. EMBED THE MESH IN THE WET BASE COAT. TROWEL FROM THE BASE OF REVEALS TO THE EDGES OF THE MESH.
4. ULTRA-HIGH IMPACT MESH APPLICATION (RECOMMENDED TO A MINIMUM HEIGHT OF 6'-0" [1.8 M] ABOVE FINISHED GRADE AT ALL AREAS ACCESSIBLE TO PEDESTRIAN TRAFFIC AND OTHER AREAS EXPOSED TO ABNORMAL STRESS OR IMPACT, AND WHERE INDICATED ON CONTRACT DRAWINGS): APPLY BASE COAT OVER THE INSULATION BOARD WITH A STAINLESS STEEL TROWEL TO A UNIFORM THICKNESS OF APPROXIMATELY 1/8 INCH (3 MM). WORK HORIZONTALLY OR VERTICALLY IN STRIPS OF 40 INCHES (1016 MM), AND IMMEDIATELY EMBED THE MESH INTO THE WET BASE COAT BY TROWELING FROM THE CENTER TO THE EDGE OF THE MESH. BUTT ULTRA-HIGH IMPACT MESH AT SEAMS. ALLOW THE BASE COAT TO DRY.
5. STANDARD MESH APPLICATION: APPLY BASE COAT OVER THE INSULATION BOARD, INCLUDING AREAS WITH ULTRA-HIGH IMPACT MESH, WITH A STAINLESS STEEL TROWEL TO A UNIFORM THICKNESS OF APPROXIMATELY ⅛ INCH (3 MM). WORK HORIZONTALLY OR VERTICALLY IN STRIPS OF 40 INCHES (1016MM), AND IMMEDIATELY EMBED THE MESH INTO THE WET BASE COAT BY TROWELING FROM THE CENTER TO THE EDGE OF THE MESH. OVERLAP MESH NOT LESS THAN 2-½ INCHES (64 MM) AT MESH SEAMS AND AT OVERLAPS OF DETAIL MESH. FEATHER SEAMS AND EDGES. DOUBLE WRAP ALL INSIDE AND OUTSIDE CORNERS WITH MINIMUM 6 INCH (152 MM) OVERLAP IN EACH DIRECTION (OPTIONAL IF CORNER BEAD ACCESSORY IS USED - SEE NOTE TO PARAGRAPH 3.4.2 H1 ABOVE).AVOID WRINKLES IN THE MESH. THE MESH MUST BE FULLY EMBEDDED SO THAT NO MESH COLOR SHOWS THROUGH THE BASE COAT WHEN IT IS DRY. RE-SKIM WITH ADDITIONAL BASE COAT IF MESH COLOR IS VISIBLE.
6. SLOPED SURFACES: FOR TRIM, REVEALS, AESTHETIC BANDS, CORNICE PROFILES, SILLS OR OTHER ARCHITECTURAL FEATURES THAT PROJECT BEYOND THE VERTICAL WALL PLANE MORE THAN 2 INCHES (51 MM) APPLY WATERPROOF BASE COAT WITH A STAINLESS STEEL TROWEL TO THE SLOPED SURFACE AND MINIMUM FOUR INCHES (100 MM) ABOVE AND BELOW IT. EMBED STANDARD MESH OR DETAIL MESH IN THE WATERPROOF BASE COAT AND OVERLAP MESH SEAMS A MINIMUM OF 2-½ INCHES (65 MM).
7. ALLOW BASE COAT TO THOROUGHLY DRY BEFORE APPLYING PRIMER OR FINISH.

a. AVOID APPLICATION IN DIRECT SUNLIGHT.
b. APPLY FINISH IN A CONTINUOUS APPLICATION, AND WORK TO AN ARCHITECTURAL BREAK IN THE WALL.
c. WEATHER CONDITIONS AFFECT APPLICATION AND DRYING TIME. HOT OR DRY CONDITIONS LIMIT WORKING TIME AND ACCELERATE DRYING. ADJUSTMENTS IN THE SCHEDULING OF WORK MAY BE REQUIRED TO ACHIEVE DESIRED RESULTS. COOL OR DAMP CONDITIONS EXTEND WORKING TIME AND RETARD DRYING AND MAY REQUIRE ADDED MEASURES OF PROTECTION AGAINST WIND, DUST, DIRT, RAIN AND FREEZING. ADJUST WORK SCHEDULE AND PROVIDE PROTECTION.
d. DO NOT INSTALL SEPARATE BATCHES OF FINISH SIDE-BY-SIDE.
e. DO NOT APPLY FINISH INTO OR OVER SEALANT JOINTS. APPLY FINISH TO OUTSIDE FACE OF WALL ONLY.
f. DO NOT APPLY FINISH OVER IRREGULAR OR UNPREPARED SURFACES, OR SURFACES NOT IN COMPLIANCE WITH THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.

8. DARK COLOURED EIFS NOT TO BE INSTALLED IN DIRECT SUNLIGHT.

J. PRIMER APPLICATION

1. ENSURE THE BASE COAT SURFACE IS FREE OF SURFACE CONTAMINATION BEFORE COMMENCING THE PRIMER APPLICATION.
2. APPLY PRIMER EVENLY WITH BRUSH, ROLLER OR PROPER SPRAY EQUIPMENT OVER THE CLEAN, DRY BASE COAT AND ALLOW TO DRY THOROUGHLY BEFORE APPLYING FINISH.

K. FINISH COAT APPLICATION

1. ENSURE THE BASE COAT SURFACE OR PRIMED BASE COAT IS FREE OF SURFACE CONTAMINATION BEFORE COMMENCING THE FINISH APPLICATION.
2. APPLY FINISH DIRECTLY OVER THE BASE COAT OR PRIMED BASE COAT WHEN DRY. APPLY FINISH BY SPRAY OR STAINLESS STEEL TROWEL, DEPENDING ON THE FINISH SPECIFIED. FOLLOW THESE GENERAL RULES FOR APPLICATION OF FINISH:

3.5 PROTECTION

A. PROVIDE PROTECTION OF INSTALLED MATERIALS FROM WATER INFILTRATION INTO OR BEHIND THEM

B. PROVIDE PROTECTION OF INSTALLED MATERIALS FROM DUST, DIRT, PRECIPITATION, FREEZING AND CONTINUOUS HIGH HUMIDITY UNTIL THEY ARE FULLY DRY

3.6 CLEANING, REPAIR AND MAINTENANCE

A. CLEAN AND MAINTAIN THE EIFS FOR A FRESH APPEARANCE AND TO PREVENT WATER ENTRY INTO AND BEHIND THE SYSTEM. REPAIR CRACKS, IMPACT DAMAGE, SPALLS OR DELAMINATION PROMPTLY.

B. MAINTAIN ADJACENT COMPONENTS OF CONSTRUCTION SUCH AS SEALANTS, WINDOWS, DOORS, AND FLASHING, TO PREVENT WATER ENTRY INTO OR BEHIND THE EIFS AND ANYWHERE INTO THE WALL ASSEMBLY

C. REFER TO STO RESTORE REPAIR AND MAINTENANCE GUIDE (RESTORE PROGRAM) FOR DETAILED INFORMATION ON RESTORATION - CLEANING, REPAIRS, RECOATING, RESURFACING AND REFINISHING, OR RE-CLADDING

END OF SECTION 07 24 00

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

TANNER EDWARDS KINDE
15704
Tanner Kinde

9.14.2023

Company Logo

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Project

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ARCHITECTURAL SPECIFICATIONS

Drawn: SH
Checked: AL
Scale:
Date: JUNE 2023
Project No.: C22-129
Drawing No.: SP3

FLUID APPLIED MEMBRANE AIR BARRIER SECTION 07 27 26

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES MATERIALS AND INSTALLATION OF VAPOR PERMEABLE FLUID APPLIED AIR AND MOISTURE BARRIER MEMBRANE OVER VERTICAL ABOVE GRADE CONCRETE WALLS, CONCRETE MASONRY WALLS, AND WALL SHEATHING.

B. RELATED SECTIONS INCLUDE THE FOLLOWING:

1.2 DEFINITIONS

A. AIR BARRIER MATERIAL: A PRIMARY ELEMENT THAT PROVIDES A CONTINUOUS BARRIER TO THE MOVEMENT OF AIR.

B. AIR BARRIER ACCESSORY: A TRANSITIONAL COMPONENT OF THE AIR BARRIER THAT PROVIDES CONTINUITY.

C. AIR BARRIER AUXILIARY MATERIAL: A TRANSITIONAL COMPONENT THAT PROVIDES AIR BARRIER CONTINUITY FURNISHED BY A SOURCE OTHER THAN THE PRIMARY AIR BARRIER MANUFACTURER.

D. AIR BARRIER ASSEMBLY: THE COLLECTION OF AIR BARRIER MATERIALS, ACCESSORY AND AUXILIARY MATERIALS APPLIED TO AN OPAQUE WALL, INCLUDING JOINTS AND JUNCTIONS TO ABUTTING CONSTRUCTION, TO CONTROL AIR MOVEMENT THROUGH THE WALL.

1.3 PRE-INSTALLATION MEETINGS

A. PRE-INSTALLATION CONFERENCE

1. REVIEW AIR BARRIER INSTALLATION REQUIREMENTS AND INSTALLATION DETAILS, MOCK-UPS, TESTING REQUIREMENTS, PROTECTION, AND SEQUENCING OF WORK.

1.4 REFERENCES

A. BUILDING CODE AND MATERIAL EVALUATION SERVICE STANDARDS

B. ASTM STANDARDS

D 4541-09 TEST METHOD FOR PULL-OFF STRENGTH OF COATINGS USING PORTABLE ADHESION TESTERS

E 84-98 TEST METHOD FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIAL

E 96-00 TEST METHOD FOR WATER VAPOR TRANSMISSION OF MATERIALS

E 779-10 STANDARD TEST METHOD FOR DETERMINING AIR LEAKAGE RATE BY FAN PRESSURIZATION

E 783-02 STANDARD TEST METHOD FOR FIELD MEASUREMENT OF AIR LEAKAGE THROUGH INSTALLED EXTERIOR WINDOWS AND DOORS

E 1186-03 (2009) STANDARD PRACTICES FOR AIR LEAKAGE SITE DETECTION IN BUILDING ENVELOPES AND AIR BARRIER SYSTEMS

1E 1827-96 (2007) STANDARD TEST METHODS FOR DETERMINING AIR TIGHTNESS OF BUILDINGS USING AN ORIFICE BLOWER DOOR

1E 2178-03 TEST METHOD FOR AIR PERMEANCE OF BUILDING MATERIALS

15.E 2357-05 STANDARD TEST METHOD FOR DETERMINING AIR LEAKAGE OF AIR BARRIER ASSEMBLIES

C. AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC. (ASHRAE) 2005 ASHRAE HANDBOOK FUNDAMENTALS ASHRAE 90.1 2016, ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS

D. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) NFPA 285 STANDARD FIRE TEST METHOD FOR EVALUATION OF FIRE PROPAGATION CHARACTERISTICS OF EXTERIOR NON-LOAD-BEARING WALL ASSEMBLIES CONTAINING COMBUSTIBLE COMPONENTS

E. SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) RULE 1113 (2007) ARCHITECTURAL COATINGS

1.5 COORDINATION/SCHEDULING

A. COORDINATE INSTALLATION OF FOUNDATION WATERPROOFING, ROOFING MEMBRANE, WINDOWS, DOORS AND OTHER WALL PENETRATIONS TO PROVIDE A CONTINUOUS AIR BARRIER.

B. PROVIDE PROTECTION OF ROUGH OPENINGS BEFORE INSTALLING WINDOWS, DOORS, AND OTHER PENETRATIONS THROUGH THE WALL.

C. PROVIDE SILL FLASHING TO DIRECT WATER TO THE EXTERIOR BEFORE WINDOWS AND DOORS ARE INSTALLED.

D. INSTALL WINDOW AND DOOR HEAD FLASHING IMMEDIATELY AFTER WINDOWS AND DOORS ARE INSTALLED.

E. INSTALL DIVERTER FLASHINGS WHEREVER WATER CAN ENTER THE ASSEMBLY TO DIRECT WATER TO THE EXTERIOR.

F. INSTALL PARAPET CAP FLASHING AND SIMILAR FLASHING AT COPINGS AND SILLS TO PREVENT WATER ENTRY INTO THE WALL ASSEMBLY.

G. INSTALL CLADDING WITHIN 180 DAYS OF AIR AND MOISTURE BARRIER INSTALLATION.

SUBMITTALS

A. MANUFACTURER'S SPECIFICATIONS, DETAILS AND PRODUCT DATA.

B. MANUFACTURER'S STANDARD WARRANTY.

C. MANUFACTURER'S ICC EVALUATION REPORT CONFIRMING COMPLIANCE WITH THE IBC, IRC, AND IECC AS AN AIR BARRIER AND WATER-RESISTIVE BARRIER.

D. SAMPLES FOR APPROVAL AS DIRECTED BY ARCHITECT OR OWNER.

E. SHOP DRAWINGS: SUBSTRATE JOINTS, CRACKS, FLASHING TRANSITIONS, PENETRATIONS, CORNERS, TERMINATIONS, AND TIE-INS WITH ADJOINING CONSTRUCTION, AND INTERFACES WITH SEPARATE MATERIALS THAT FORM PART OF THE AIR BARRIER ASSEMBLY.

1.8 QUALITY ASSURANCE

A. MANUFACTURER REQUIREMENTS

1. MANUFACTURER OF EXTERIOR WALL AIR AND MOISTURE BARRIER MATERIALS FOR A MINIMUM OF 30 YEARS IN NORTH AMERICA.

2. ISO 9001:2008 CERTIFIED QUALITY SYSTEM AND ISO 14001:2004 CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM.

B. CONTRACTOR REQUIREMENTS

1. KNOWLEDGEABLE IN THE PROPER USE AND HANDLING OF STO MATERIALS.

2. EMPLOY SKILLED MECHANICS WHO ARE EXPERIENCED AND KNOWLEDGEABLE IN WATERPROOFING AND AIR BARRIER APPLICATION, AND FAMILIAR WITH THE REQUIREMENTS OF THE SPECIFIED WORK.

3. PROVIDE THE PROPER EQUIPMENT, MANPOWER AND SUPERVISION ON THE JOB-SITE TO INSTALL THE AIR BARRIER ASSEMBLY IN COMPLIANCE WITH THE PROJECT PLANS & SPECIFICATIONS, SHOP DRAWINGS, AND STO'S PUBLISHED SPECIFICATIONS AND DETAILS.

C. REGULATORY COMPLIANCE

1. PRIMARY AIR BARRIER AND JOINT TREATMENT REINFORCEMENT MATERIALS:

a. LISTED BY IBC AND RECOGNIZED FOR USE ON ALL TYPES OF CONSTRUCTION. REFER TO ICC ESR 1233 FOR LIMITATIONS.

b. COMPLY WITH VOC REQUIREMENTS OF SCAQMD RULE 1113.

c. COMPLY WITH AIR BARRIER MATERIAL REQUIREMENTS OF ASHRAE 90.1 - 2010, 2013

d. COMPLY WITH AIR BARRIER MATERIAL REQUIREMENTS OF ASHRAE 189.1 - 2009

e. COMPLY WITH 2012 AND 2015 IRC REQUIREMENT FOR A CONTINUOUS AIR BARRIER

f. COMPLY WITH AIR BARRIER MATERIAL REQUIREMENTS OF 2012 AND 2015 IBC AND IECC.

D. MOCK-UPS

1. BUILD STAND-ALONE SITE MOCK UP OR SAMPLE WALL AREA ON AS-BUILT CONSTRUCTION TO INCORPORATE BACK-UP WALL CONSTRUCTION, TYPICAL DETAILS COVERING SUBSTRATE JOINTS, CRACKS, FLASHING TRANSITIONS, PENETRATIONS, CORNERS, TERMINATIONS, TIE-INS WITH ADJOINING CONSTRUCTION, AND INTERFACES WITH SEPARATE MATERIALS THAT FORM PART OF THE AIR BARRIER ASSEMBLY.

1.9 PRE-CONSTRUCTION TESTING

A. CONDUCT TESTING BY QUALIFIED TEST AGENCY OR BUILDING ENVELOPE CONSULTANT.

1. CONDUCT ASSEMBLY AIR LEAKAGE TESTING IN ACCORDANCE WITH ASTM E 783.

2. CONDUCT ADHESION TESTING TO SUBSTRATES IN ACCORDANCE WITH ASTM D 4541.

3. CONDUCT WET SEALANT COMPATIBILITY TESTING IN ACCORDANCE WITH SEALANT MANUFACTURER'S FIELD QUALITY CONTROL TEST PROCEDURE.

4. NOTIFY DESIGN PROFESSIONAL MINIMUM 7 DAYS PRIOR TO TESTING.

1.10 DELIVERY, STORAGE AND HANDLING

A. DELIVER ALL MATERIALS IN THEIR ORIGINAL SEALED CONTAINERS BEARING MANUFACTURER'S NAME AND IDENTIFICATION OF PRODUCT.

B. PROTECT COATINGS (PAIL PRODUCTS) FROM FREEZING TEMPERATURES AND TEMPERATURES IN EXCESS OF 90 DEGREES F (32 DEGREES C). STORE AWAY FROM DIRECT SUNLIGHT.

C. PROTECT PORTLAND CEMENT BASED MATERIALS (BAG PRODUCTS) FROM MOISTURE AND HUMIDITY. STORE UNDER COVER OFF THE GROUND IN A DRY LOCATION.

D. PROTECT AND STORE ACCESSORY AND AUXILIARY PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

1.11 PROJECT/SITE CONDITIONS

A. MAINTAIN AMBIENT AND SURFACE TEMPERATURES ABOVE 40 DEGREES F (4 DEGREES C) DURING APPLICATION AND DRYING PERIOD, MINIMUM 24 HOURS AFTER APPLICATION OF AIR AND MOISTURE BARRIER MATERIALS.

B. PROVIDE SUPPLEMENTARY HEAT FOR INSTALLATION IN TEMPERATURES LESS THAN 40 DEGREES F (4 DEGREES C) OR IF SURFACE TEMPERATURE IS LIKELY TO FALL BELOW 40 DEGREES F (4 DEGREES C).

C. PROVIDE PROTECTION OF SURROUNDING AREAS AND ADJACENT SURFACES FROM APPLICATION OF MATERIALS.

1.12 WARRANTY

A. PROVIDE MANUFACTURER'S STANDARD WARRANTY.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. PRODUCTS: VAPOUR PERMEABLE AIR BARRIER MEMBRANE, SELF ADHERED FOR [RAIN SCREEN SYSTEMS] [SLOPED ROOFING] : TRIPLE LAYER SPUNBONDED POLYPROPYLENE WITH A NOMINAL THICKNESS OF 0.60MM (24 MILS) AND WATER VAPOUR TRANSMISSION OF 1373 NG/PA.S.M2 (24 PERMS) AS PER ASTM E96 METHOD B. MEMBRANES MUST COMPLY
WITH THE CAN/ULC S741-08 AND THE MEMBRANE SYSTEM MUST COMPLY WITH CAN/ULC S742-11 AND HAVE AN AIR LEAKAGE RATE CLASSIFICATION OF “A1” [AT A 1 IN 50 HOURLY WIND PRESSURE DIFFERENCE OF 650PA, 12 METRES ABOVE GRADE]. SRP AIROUTSHIELD SA280 1 866 533 0233 WWW.SRPCANADA.CA

B. COLOUR: BLACK

2.2 MATERIALS

A. PRIMARY AIR BARRIER MATERIAL: STOGUARD WITH STO EMERALDCOAT - READY-MIXED FLEXIBLE SPRAY OR ROLLER APPLIED AIR AND MOISTURE BARRIER MATERIAL.

B. ACCESSORY MATERIALS

1. SHEATHING JOINT TREATMENTS

a. STO RAPIDGUARD™: ONE COMPONENT STPE RAPID DRYING GUN-APPLIED TREATMENT FOR SHEATHING JOINTS, ROUGH OPENINGS, SEAMS, CRACKS, PENETRATIONS AND OTHER TRANSITIONS IN ABOVE GRADE WALL CONSTRUCTION.

2. ROUGH OPENING TREATMENTS

a. STO RAPIDGUARD™: ONE COMPONENT STPE RAPID DRYING GUN-APPLIED TREATMENT FOR SHEATHING JOINTS, ROUGH OPENINGS, SEAMS, CRACKS, PENETRATIONS AND OTHER TRANSITIONS IN ABOVE GRADE WALL CONSTRUCTION.

3. TRANSITION DETAIL COMPONENTS

a. STOGUARD TRANSITION MEMBRANE: FLEXIBLE AIR AND MOISTURE BARRIER MEMBRANE FOR CONTINUITY AT STATIC TRANSITIONS: SHEATHING TO FOUNDATION, DISSIMILAR MATERIALS (CMU TO FRAME WALL), WALL TO BALCONY FLOOR SLAB OR CEILING, AND SHINGLE LAP TRANSITIONS TO FLASHING. ALSO USED FOR DYNAMIC JOINTS: FLOOR LINE DEFLECTION JOINTS, MASONRY CONTROL JOINTS, AND THROUGH WALL JOINTS IN MASONRY OR FRAME CONSTRUCTION.

4. PRIMERS

a. STOGUARD PRIMER: RUBBER RESIN EMULSION PRIMER FOR USE WITH STOGUARD TAPE TO ENHANCE ADHESION.

C. AUXILIARY MATERIALS

1. WET SEALANT: DOW CORNING 758, 790, 791, AND 795 SEALANTS

2. PRE-CURED SEALANT TAPE: DOW 123

3. SPRAY ADHESIVE: 3M SUPER 77 SPRAY ADHESIVE

4. SPRAY FOAM: DOW GREAT STUFF FOR GAPS AND CRACKS

D. PATCH AND LEVELING MATERIAL FOR CONCRETE AND MASONRY

1. STO LEVELER: POLYMER MODIFIED CEMENTITIOUS PATCH AND LEVELING MATERIAL FOR PREPARED CONCRETE AND MASONRY SURFACES FOR LEVELING UP TO 1/4 INCH (6 MM).

2. STO BTS-XTRA: POLYMER MODIFIED LIGHTWEIGHT CEMENTITIOUS PATCH AND LEVELING MATERIAL FOR PREPARED CONCRETE AND MASONRY SURFACES FOR LEVELING UP TO 1/8 INCH (3 MM).

2.3 PERFORMANCE REQUIREMENTS

A. DURABILITY, RESISTANCE TO AGING, WATER AND WATER PENETRATION RESISTANCE, STRUCTURAL LOADING: JOINT TREATMENT AND PRIMARY AIR BARRIER MATERIAL, COMPLY WITH ICC ES AC 212

B. FLEXIBILITY: ASTM D 522, PRIMARY AIR BARRIER MATERIAL, NO CRACKING OR DELAMINATION BEFORE AND AFTER AGING USING 1/8 INCH (3 MM) MANDREL AT 14º F (10º C)

C. NAIL SEALABILITY: ASTM D 1970, 7.9.1, PRIMARY AIR BARRIER PASSES

D. RESISTANCE TO MOLD: ASTM D 3273, NO MOLD GROWTH AFTER 28 DAY EXPOSURE

E. ADHESION: JOINT TREATMENT AND PRIMARY AIR BARRIER MATERIAL, ASTM C 297 OR D 4541, > 30 PSI (207 KPA), OR EXCEEDS STRENGTH OF GLASS MAT FACING ON GLASS MAT GYPSUM SUBSTRATES

F. SURFACE BURNING: ASTM E 84, JOINT TREATMENT AND PRIMARY AIR BARRIER MATERIAL FLAME SPREAD < 25, SMOKE DEVELOPED < 450, CLASS A BUILDING MATERIAL

G. WATER VAPOR PERMEANCE: ASTM E 96 METHOD B, > 10 PERMS (570 NG/PA·S·M2)

H. FIELD ADHESION TESTING: ASTM D 4541, > 30 PSI (207 KPA) OR EXCEEDS STRENGTH OF GLASS MAT FACING ON GLASS MAT GYPSUM SUBSTRATES

I. FIRE RESISTANCE: ASTM E 119, PERMITTED FOR USE IN EXTERIOR WALLS OF FIRE-RESISTANCE-RATED CONSTRUCTION ASSEMBLIES. REFER TO ICC-ESR 1233.

J. BUILDING ENVELOPE AIR LEAKAGE: ASTM E 779 OR 1827, < 0.4 CFM/FT2 (2 L/S·M2)

K. MATERIAL AIR LEAKAGE: ASTM E 2178, PRIMARY AIR BARRIER AND JOINT TREATMENT < 0.004 CFM/FT2 AT 1.57 PSF (0.02 L/SM2 AT 75 PA)

L. ASSEMBLY AIR LEAKAGE: ASTM E 2357, < 0.04 CFM/FT2 (0.2 L/S·M2) AIR LEAKAGE AFTER CONDITIONING PROTOCOL

M. FIRE PROPAGATION: NFPA 285, MEETS REQUIREMENTS FOR USE ON ALL TYPES OF CONSTRUCTION. REFER TO ICC-ESR 1233.

N. VOLATILE ORGANIC COMPOUNDS: SCAQMD RULE 1113, JOINT TREATMENT AND PRIMARY AIR BARRIER MATERIAL < 100 G/L

O. WATER-RESISTIVE BARRIER: ICC ES 212, JOINT TREATMENT AND PRIMARY AIR BARRIER MATERIAL COMPLY AND ARE LISTED IN A VALID ICC ESR.

2.4 DESIGN CRITERIA

A. STRUCTURAL (WIND AND AXIAL LOADS)

1. DESIGN FOR MAXIMUM ALLOWABLE DEFLECTION NORMAL TO THE PLANE OF THE WALL: L/240. WHERE CLADDING DICTATES STIFFER DEFLECTION CRITERIA USE CLADDING DESIGN CRITERIA FOR MAXIMUM ALLOWABLE DEFLECTION.

2. DESIGN FOR WIND LOAD IN CONFORMANCE WITH CODE REQUIREMENTS.

B. MOISTURE CONTROL

1. PREVENT THE ACCUMULATION OF WATER IN THE WALL ASSEMBLY AND BEHIND THE EXTERIOR WALL CLADDING: STO

a. MINIMIZE CONDENSATION WITHIN THE ASSEMBLY.

b. DRAIN WATER DIRECTLY TO THE EXTERIOR WHERE IT IS LIKELY TO PENETRATE COMPONENTS IN THE WALL ASSEMBLY (WINDOWS AND DOORS, FOR EXAMPLE).

c. PROVIDE CORROSION RESISTANT FLASHING TO DIRECT WATER TO THE EXTERIOR IN ACCORDANCE WITH CODE REQUIREMENTS, INCLUDING: ABOVE WINDOW AND DOOR HEADS, BENEATH WINDOW AND DOOR SILLS, AT ROOF/WALL INTERSECTIONS, FLOOR LINES, DECKS, INTERSECTIONS OF LOWER WALLS WITH HIGHER WALLS, AND AT THE BASE OF THE WALL.

C. AIR BARRIER CONTINUITY: PROVIDE CONTINUOUS AIR BARRIER ASSEMBLY OF COMPATIBLE AIR BARRIER COMPONENTS.

D. SUBSTRATES

1. CONCRETE MASONRY UNITS: PROVIDE CMU SURFACES IN CONFORMANCE WITH THE APPLICABLE BUILDING CODE, AND SUCH THAT A VOID AND PINHOLE FREE AIR BARRIER IS ACHIEVED. PROVIDE NORMAL WEIGHT UNITS WITH FLUSH JOINTS (STRUCK FLUSH WITH THE SURFACE) AND ALLOW FOR A MINIMUM OF 2 COATS OF THE PRIMARY AIR BARRIER MATERIAL APPLIED BY SPRAY OR ROLLER ALTERNATIVELY, FOR “ROUGH” CMU WALL SURFACES ALLOW FOR A CEMENTITIOUS PARGE COAT TO FILL AND LEVEL IRREGULAR SURFACES, PRIOR TO 1 COAT OF THE PRIMARY AIR BARRIER MATERIAL.

2. CONCRETE: PROVIDE CONCRETE IN CONFORMANCE WITH THE APPLICABLE BUILDING CODE.

3. SHEATHING: PROVIDE GYPSUM SHEATHING IN COMPLIANCE WITH ASTM C 1177, PROVIDE APA EXTERIOR OR EXPOSURE 1 WOOD-BASED SHEATHING, AND PROVIDE SHEATHING THAT MEETS REQUIRED DESIGN WIND PRESSURES.

E. MECHANICAL VENTILATION: MAINTAIN PRESSURIZATION AND INDOOR HUMIDITY LEVELS IN ACCORDANCE WITH RECOMMENDATIONS OF ASHRAE (SEE 2005 ASHRAE HANDBOOK--FUNDAMENTALS).

PART 3 EXECUTION

3.1 EXAMINATION

A. INSPECT CONCRETE AND CONCRETE MASONRY SURFACES FOR:

1. CONTAMINATION - ALGAE, DIRT, DUST, EFFLORESCENCE, FORM OIL, FUNGUS, GREASE, MILDEW OR OTHER FOREIGN SUBSTANCES.

2. SURFACE DEFICIENCIES - WEAK, FRIABLE, CHALKINESS, LAITANCE, BUGHOLES, AND SPALLS.

3. CRACKS - MEASURE CRACK WIDTH AND RECORD LOCATION OF CRACKS.

4. DAMAGE OR DETERIORATION.

5. MOISTURE CONTENT AND MOISTURE DAMAGE - USE A MOISTURE METER TO DETERMINE IF THE SURFACE IS DRY ENOUGH TO RECEIVE THE WATERPROOF AIR BARRIER AND RECORD ANY AREAS OF MOISTURE DAMAGE OR EXCESS MOISTURE.

6. FLUSH MASONRY MORTAR JOINTS COMPLETELY FILLED WITH MORTAR.

B. INSPECT SHEATHING APPLICATION FOR COMPLIANCE WITH APPLICABLE REQUIREMENT:

1. EXTERIOR GRADE AND EXPOSURE I WOOD BASED SHEATHING: E30U-2007, ENGINEERED WOOD CONSTRUCTION GUIDE, AND THE REQUIREMENTS OF THE APPLICABLE BUILDING CODE.

2. GLASS MAT FACED GYPSUM SHEATHING IN COMPLIANCE WITH ASTM C 1177: CONSULT MANUFACTURER'S PUBLISHED RECOMMENDATIONS AND ICC ES REPORT. CONFORM WITH PROJECT REQUIREMENTS FOR WIND LOAD RESISTANCE.

3. CEMENTITIOUS SHEATHING - CONSULT MANUFACTURER'S PUBLISHED RECOMMENDATIONS AND ICC ES REPORT. CONFORM WITH PROJECT REQUIREMENTS FOR WIND LOAD RESISTANCE.

C. REPORT DEVIATIONS FROM THE REQUIREMENTS OF PROJECT SPECIFICATIONS OR OTHER CONDITIONS THAT MIGHT ADVERSELY AFFECT THE AIR AND MOISTURE BARRIER INSTALLATION. DO NOT START WORK UNTIL DEVIATIONS ARE CORRECTED.

3.2 SURFACE PREPARATION

A. CONCRETE MASONRY

1. SURFACE MUST BE STRUCTURALLY SOUND AND FREE OF WEAK OR DAMAGED SURFACE CONDITIONS SUCH AS LAITANCE OR SPALLS. SURFACE MUST BE CLEAN, DRY, FROST-FREE, AND FREE OF ANY BOND-INHIBITING MATERIALS SUCH AS DUST, DIRT, OIL, ALGAE, MILDEW, SALTS, EFFLORESCENCE, OR ANY OTHER SURFACE CONTAMINATION. MORTAR JOINTS MUST BE STRUCK FLUSH WITH THE SURFACE.

2. REMOVE EXCESS MORTAR FROM MASONRY TIES, LINTELS AND SHELF ANGLES.

3. REMOVE LOOSE OR DAMAGED MATERIAL BY WATER-BLASTING, SANDBLASTING OR MECHANICAL WIRE BRUSHING. REMOVE SURFACE CONTAMINATION SUCH AS DIRT OR EFFLORESCENCE BY CHEMICAL OR MECHANICAL MEANS. REPAIR SURFACE DEFECTS SUCH AS SPALLS, VOIDS AND HOLES WITH STO BTS XTRA (UP TO 1/8 INCH [3 MM] THICK) OR STO LEVELER (UP TO 1/4 INCH [6 MM] THICK).

4. REPAIR NON-STRUCTURAL CRACKS UP TO 1/8 INCH (3 MM) WIDE BY RAKING WITH A SHARP TOOL TO REMOVE LOOSE, FRIABLE MATERIAL AND BLOW CLEAN WITH OIL-FREE COMPRESSED AIR. APPLY JOINT TREATMENT MATERIAL OVER CRACK, EMBED REINFORCEMENT (WHERE APPLICABLE), AND SMOOTH JOINT TREATMENT MATERIAL WITH A TROWEL, DRYWALL OR PUTTY KNIFE TO COVER THE REINFORCEMENT.

B. CONCRETE

1. SURFACE MUST BE STRUCTURALLY SOUND AND FREE OF WEAK OR DAMAGED SURFACE CONDITIONS SUCH AS LAITANCE, BUGHOLES, OR SPALLS. SURFACE MUST BE CLEAN, DRY, FROST-FREE, AND FREE OF ANY BOND-INHIBITING MATERIALS SUCH AS DUST, DIRT, OIL, FORM RELEASE, ALGAE, MILDEW, SALTS, EFFLORESCENCE, OR ANY OTHER SURFACE CONTAMINATION.

2. REMOVE PROJECTING FINS, RIDGES, FORM TIES, AND HIGH SPOTS BY MECHANICAL MEANS.

3. REMOVE LOOSE OR DAMAGED MATERIAL BY WATER-BLASTING, SANDBLASTING OR MECHANICAL WIRE BRUSHING. REMOVE FORM RELEASE BY CHEMICAL OR MECHANICAL MEANS. REPAIR SURFACE DEFECTS SUCH AS HONEYCOMBS, PITTING, SPALLS, VOIDS OR HOLES WITH STO BTS XTRA (UP TO 1/8 INCH [3 MM] THICK) OR STO LEVELER (UP TO 3/8 INCH [9 MM] THICK).

4. REPAIR NON-STRUCTURAL CRACKS UP TO 1/8 INCH (3 MM) WIDE BY RAKING WITH A SHARP TOOL TO REMOVE LOOSE, FRIABLE MATERIAL AND BLOW CLEAN WITH OIL-FREE COMPRESSED AIR. APPLY JOINT TREATMENT MATERIAL OVER CRACK, EMBED REINFORCEMENT (WHERE APPLICABLE), AND SMOOTH JOINT TREATMENT MATERIAL WITH A TROWEL, DRYWALL OR PUTTY KNIFE TO COVER THE REINFORCEMENT.

C. SHEATHING

1. REMOVE AND REPLACE DAMAGED SHEATHING.

2. SPOT SURFACE DEFECTS SUCH AS OVER-DRIVEN FASTENERS, KNOT HOLES, OR OTHER VOIDS IN SHEATHING WITH KNIFE GRADE JOINT TREATMENT MATERIAL.

3. SPOT FASTENERS WITH KNIFE GRADE OR COATING JOINT TREATMENT MATERIAL.

3.3 INSTALLATION

3.3.1 AIR/MOISTURE BARRIER INSTALLATION OVER EXTERIOR OR EXPOSURE I WOOD-BASED SHEATHING (PLYWOOD AND OSB), GLASS MAT FACED GYPSUM SHEATHING IN COMPLIANCE WITH ASTM C 1177, CONCRETE, AND CONCRETE MASONRY (CMU) WALL CONSTRUCTION

A. COORDINATE WORK WITH OTHER TRADES TO ENSURE AIR BARRIER CONTINUITY WITH CONNECTIONS AT FOUNDATION, FLOOR LINES, FLASHINGS, LINTELS AND SHELF ANGLES, OPENINGS AND PENETRATIONS SUCH AS PIPES, VENTS, WINDOWS AND DOORS, MASONRY ANCHORS, RAFTERS OR BEAMS, JOINTS IN CONSTRUCTION, PROJECTIONS SUCH AS DECKS AND BALCONIES, AND ROOF LINE.

B. TRANSITION DETAILING: DETAIL TRANSITION AREAS WITH STO RAPIDGUARD OR STOGUARD TRANSITION MEMBRANE TO ACHIEVE AIR BARRIER CONTINUITY. FOR ILLUSTRATIONS OF INSTALLATION, REFER TO STO GUIDE DETAILS AND STO RAPIDGUARD INSTALLATION GUIDE OR STOGUARD TRANSITION MEMBRANE INSTALLATION GUIDE (WWW.STOCORP.COM).

C. ROUGH OPENING PROTECTION

1. INSTALL ROUGH OPENING PROTECTION. REFER TO STO DETAILS AND APPLICABLE STO PRODUCT BULLETINS.

D. SHEATHING JOINTS

1. INSTALL JOINT TREATMENT MATERIAL SHEATHING JOINTS. REFER TO STO DETAILS AND APPLICABLE STO PRODUCT BULLETINS.

E. AIR AND MOISTURE BARRIER COATING

1. CONCRETE - INSTALL ONE COAT OF STO EMERALDCOAT BY SPRAY OR ROLLER IN A UNIFORM, CONTINUOUS WET FILM OF 10 MILS TO THE PREPARED CONCRETE SUBSTRATE. DO NOT INSTALL OVER WORKING OR MOVING JOINT SEALANTS.

2. CONCRETE MASONRY - INSTALL ONE LIBERAL COAT OF STO EMERALDCOAT BY SPRAY OR ROLLER IN A UNIFORM, CONTINUOUS FILM TO THE PREPARED CONCRETE MASONRY SUBSTRATE. BACKROLL SPRAY APPLICATIONS. ALLOW TO DRY. INSTALL A SECOND LIBERAL COAT IN A UNIFORM, CONTINUOUS FILM, AND BACKROLL SPRAY APPLICATIONS, TO ACHIEVE A VOID AND PINHOLE FREE SURFACE. DEPENDING ON THE CONDITION OF THE SURFACE A MINIMUM OF 10 WET MILS UP TO A MAXIMUM OF 30 WET MILS PER COAT IS REQUIRED. APPLY ADDITIONAL COATS IF NEEDED TO ACHIEVE A VOID AND PINHOLE FREE SURFACE. DO NOT INSTALL OVER WORKING OR MOVING JOINT SEALANTS.

3. SHEATHING

a. GLASS MAT FACED GYPSUM SHEATHING: INSTALL ONE COAT OF STO EMERALDCOAT BY SPRAY OR ROLLER IN A UNIFORM, CONTINUOUS FILM OF 10 WET MILS TO THE PREPARED GLASS MAT GYPSUM SUBSTRATE TO ACHIEVE A VOID AND PINHOLE FREE SURFACE. DO NOT INSTALL OVER WORKING OR MOVING JOINT SEALANTS.

b. PLYWOOD SHEATHING: INSTALL ONE COAT OF STO EMERALDCOAT BY SPRAY OR ROLLER IN A UNIFORM, CONTINUOUS FILM OF 10 WET MILS TO THE PREPARED SUBSTRATE TO ACHIEVE A VOID AND PINHOLE FREE SURFACE. DO NOT INSTALL OVER WORKING OR MOVING JOINT SEALANTS.

c. OSB SHEATHING: INSTALL ONE COAT OF STO EMERALDCOAT BY SPRAY OR ROLLER IN A UNIFORM, CONTINUOUS FILM OF 10 WET MILS TO THE PREPARED SUBSTRATE AND TO A VOID AND PINHOLE FREE SURFACE. INSPECT SURFACE AND TOUCH-UP WITH A SECOND COAT AT RAISED WOOD STRANDS. DO NOT INSTALL OVER WORKING OR MOVING JOINT SEALANTS.

3.4 FIELD QUALITY CONTROL

A. OWNER'S QUALIFIED TESTING AGENCY OR BUILDING ENVELOPE CONSULTANT SHALL PERFORM INSPECTIONS AND TESTS.

B. INSPECTIONS: AIR BARRIER MATERIALS ARE SUBJECT TO INSPECTION TO VERIFY COMPLIANCE WITH REQUIREMENTS.

1. CONDITION OF SUBSTRATES AND SUBSTRATE PREPARATION.

2. INSTALLATION OF PRIMARY AIR BARRIER MATERIAL, ACCESSORY MATERIALS, AND COMPATIBLE AUXILIARY MATERIALS OVER STRUCTURALLY SOUND SUBSTRATES AND IN CONFORMANCE WITH ARCHITECTURAL DESIGN DETAILS, CONTRACTOR'S SHOP DRAWINGS, PROJECT MOCK-UP, AND MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.

3. AIR BARRIER CONTINUITY AND CONNECTIONS WITHOUT GAPS AND HOLES AT FOUNDATION, FLOOR LINES, FLASHINGS, LINTELS AND SHELF ANGLES, OPENINGS AND PENETRATIONS SUCH AS PIPES, VENTS, WINDOWS AND DOORS, MASONRY ANCHORS, RAFTERS OR BEAMS, JOINTS IN CONSTRUCTION, PROJECTIONS SUCH AS DECKS AND BALCONIES, AND ROOF LINE.

C. TESTS: AIR BARRIER MATERIALS AND ASSEMBLY ARE SUBJECT TO TESTS TO VERIFY COMPLIANCE WITH PERFORMANCE REQUIREMENTS:

1. QUALITATIVE AIR LEAKAGE TEST: ASTM E 1186

2. QUANTITATIVE AIR LEAKAGE TEST: ASTM E 779, E 783, AND E 1827

3. ADHESION TEST: ASTM D 4541

4. QUALITATIVE ADHESION AND COMPATIBILITY TESTING: WET SEALANT MANUFACTURER'S FIELD QUALITY CONTROL ADHESION TEST

D. REPAIR NON-CONFORMING SUBSTRATES AND AIR BARRIER MATERIAL INSTALLATION TO CONFORM WITH PROJECT REQUIREMENTS.

E. TAKE CORRECTIVE ACTION TO REPAIR AND REPLACE, REINSTALL, SEAL OPENINGS, GAPS, OR OTHER SOURCES OF AIR LEAKAGE TO CONFORM WITH PROJECT PERFORMANCE REQUIREMENTS.

3.5 PROTECTION AND CLEANING

A. PROTECT AIR BARRIER MATERIALS FROM DAMAGE DURING CONSTRUCTION CAUSED BY WIND, RAIN, FREEZING, CONTINUOUS HIGH HUMIDITY, OR PROLONGED EXPOSURE TO SUN LIGHT.

B. PROTECT AIR BARRIER MATERIALS FROM DAMAGE FROM TRADES, VANDALS, AND WATER INFILTRATION DURING CONSTRUCTION.

C. REPAIR DAMAGED MATERIALS TO MEET PROJECT SPECIFICATION REQUIREMENTS.

D. CLEAN SPILLS, STAINS, SOILING FROM FINISHES OR OTHER CONSTRUCTION MATERIALS THAT WILL BE EXPOSED IN THE COMPLETED WORK WITH COMPATIBLE CLEANERS.

E. REMOVE ALL MASKING MATERIALS AFTER WORK IS COMPLETED.

ATTENTION

END OF SECTION 07 27 26

EXTRUDED ALUMINUM SIDING SECTION 07 46 16

PART 1 GENERAL

1.1 PERFORMANCE REQUIREMENTS

A. COMPONENTS: DESIGN AND SIZE COMPONENTS TO WITHSTAND DEAD AND LIVE LOADS CAUSED BY POSITIVE AND NEGATIVE WIND PRESSURE ACTING NORMAL TO PLANE OF WALLS AS CALCULATED IN ACCORDANCE WITH APPLICABLE CODE.

B. MOVEMENT: ACCOMMODATE MOVEMENT WITHIN SYSTEM WITHOUT DAMAGE TO COMPONENTS OR MOVEMENT WITHIN SYSTEM: MOVEMENT BETWEEN SYSTEM AND PERIMETER COMPONENTS WHEN SUBJECT TO SEASONAL TEMPERATURE CYCLING: DYNAMIC LOADING AND RELEASE OF LOADS: DEFLECTION OF STRUCTURAL SUPPORT FRAMING.

C. DRAINAGE: PROVIDE POSITIVE DRAINAGE TO EXTERIOR FOR MOISTURE ENTERING OR CONDENSATION OCCURRING WITHIN PANEL SYSTEM.

1.1 SUBMITTALS

A. PRODUCT DATA: MANUFACTURER'S DATA SHEETS ON EACH PRODUCT TO BE USED, INCLUDING:

1. PREPARATION INSTRUCTIONS AND RECOMMENDATIONS.

2. STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS.

3. INSTALLATION METHODS.

B. SHOP DRAWINGS: INDICATE DIMENSIONS, LAYOUT, JOINTS, EXPANSION JOINTS, CONSTRUCTION DETAILS, METHODS OF ANCHORAGE, AND INTERFACE WITH ADJACENT MATERIALS.

C. SELECTION SAMPLES: FOR EACH FINISH PRODUCT SPECIFIED, TWO COMPLETE SETS OF COLOR CHIPS REPRESENTING THE MANUFACTURER'S FULL RANGE OF AVAILABLE COLORS AND PATTERNS.

D. VERIFICATION SAMPLES: FOR EACH FINISH PRODUCT SPECIFIED, TWO SAMPLES, MINIMUM SIZE 2 INCHES (51MM) BY 3-1/2 INCHES (89MM), REPRESENTING ACTUAL PRODUCT, COLOR AND GLOSS.

E. MANUFACTURER'S CERTIFICATES: CERTIFY PRODUCTS MEET OR EXCEED SPECIFIED REQUIREMENTS.

F. CLOSEOUT SUBMITTALS: PROVIDE MANUFACTURER'S MAINTENANCE INSTRUCTIONS THAT INCLUDE RECOMMENDATIONS FOR PERIODIC CLEANING AND MAINTENANCE OF COMPONENTS.

1.2 QUALITY ASSURANCE

A. MANUFACTURER'S QUALIFICATIONS: MINIMUM TEN YEARS' EXPERIENCE PRODUCING ALUMINUM FINISHES OF THE TYPES SPECIFIED IN AAMA 2604 AND 2605 CERTIFIED.

B. INSTALLER: COMPANY SPECIALIZING IN PERFORMING WORK OF THIS SECTION WITH MINIMUM THREE YEARS DOCUMENTED EXPERIENCE.

C. MOCK-UP: PROVIDE A MOCK-UP FOR EVALUATION OF SURFACE PREPARATION TECHNIQUES AND APPLICATION WORKMANSHIP.

1. FINISH AREAS DESIGNED BY ARCHITECT.

2. DO NOT PROCEED WITH REMAINING WORK UNTIL WORKMANSHIP, COLOR, AND GLOSS ARE APPROVED BY ARCHITECT.

3. REFINISH MOCK-UP AREA AS REQUIRED TO PRODUCE ACCEPTABLE WORK.

1.3 DELIVERY, STORAGE, AND HANDLING

A. PACKAGE AND STORE PRODUCTS UNDER COVER IN MANUFACTURER'S UNOPENED PACKAGING UNTIL READY FOR TRANSPORT AND INSTALLATION.

B. PROTECT PANELS FROM ACCELERATED WEATHERING BY REMOVING OR VENTING SHEET PLASTIC SHIPPING WRAP.

C. STORE PREFINISHED MATERIAL OFF GROUND PROTECTED FROM WEATHER, TO PREVENT TWISTING, BENDING, OR ABRASION, AND PROVIDE VENTILATION. SLOP METAL SHEETS TO ENSURE DRAINAGE.

D. PREVENT CONTACT WITH MATERIALS CAPABLE OF CAUSING DISCOLORATION OR STAINING.

1.4 PROJECT CONDITIONS

A. MAINTAIN ENVIRONMENTAL CONDITIONS (TEMPERATURE, HUMIDITY, AND VENTILATION) WITHIN LIMITS RECOMMENDED BY MANUFACTURER FOR OPTIMUM RESULTS. DO NOT FABRICATE PRODUCTS UNDER ENVIRONMENTAL CONDITIONS OUTSIDE MANUFACTURER'S ABSOLUTE LIMITS.

1.5 COORDINATION

A. COORDINATE WORK WITH INSTALLATION OF WINDOWS, LOUVERS, AND ADJACENT COMPONENTS OR MATERIALS.

1.6 WARRANTY

A. KNOTWOOD'S LIMITED LIFETIME WARRANTY AGAINST CRACKING, PEELING AND GLOSS/COLOR RETENTION WITHIN THE GUIDELINES STATED BY THE AMERICAN ALUMINUM MANUFACTURERS ASSOCIATION (AAMA).

1. STANDARD COLORS

a. DULUX DURATEC - AAMA 2604 (5 YEAR FLORIDA) 15 YEAR MANUFACTURER'S WARRANTY.

b. DULUX FLUOROSET - AAMA 2605 (10 YEAR FLORIDA) 20 YEAR MANUFACTURER'S WARRANTY.

2. WOOD GRAINS

a. AMMA 2064 (5 YEAR FLORIDA) 15 YEAR MANUFACTURER'S WARRANTY.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. ACCEPTABLE MANUFACTURER: KNOTWOOD LLC. , WHICH IS LOCATED AT: 10914 NE 39TH/ STREET SUITE B-3
VANCOUVER, WA 98682: INFO AT SALES@KNOTWOOD.COM WEB: WWW.KNOTWOOD.COM ;

B. SUBSTITUTIONS:

C. REQUESTS FOR SUBSTITUTIONS WILL BE CONSIDERED IN ACCORDANCE WITH PROVISIONS OF SECTION 01600.

2.2 MATERIALS

A. EXTRUDED ALUMINUM SIDING AND SOFFITS: KNOTWOOD WOOD GRAIN ALUMINUM SIDING AND SOFFITS WITH ALLUMINATE BONDED FILM FINISH IS EXTRUDED ALUMINUM.

B. EXTRUDED ALUMINUM VENTED SOFFIT: KNOTWOOD WOOD GRAIN ALUMINUM VENTED SOFFITS WITH ALLUMINATE BONDED FILM FINISH IS EXTRUDED ALUMINUM.

C. EXTRUDED ALUMINUM ACCESSORIES AND TRIM: KNOTWOOD WOOD GRAIN ALUMINUM TRIM AND ACCESSORIES WITH ALLUMINATE BONDED FILM FINISH IS EXTRUDED ALUMINUM.

D. EXTRUDED ALUMINUM SHUTTER BLADE, SLAT, SMALL INFILL, AND FIXED LOUVER SECTIONS: KNOTWOOD WOOD GRAIN ALUMINUM TRIM AND ACCESSORIES WITH ALLUMINATE BONDED FILM FINISH IS EXTRUDED ALUMINUM.

2.3 FINISHES

A. PRETREATMENT: E-CLPS CHROME FREE FIVE STAGER ALUMINUM PRETREATMENT SYSTEM. COMPLIES WITH, AAMA 2604, AND AAMA 2605 SUPERIOR PERFORMANCE STANDARD AND MEETS EPA, OSHA, STATE AND LOCAL ENVIRONMENTAL REQUIREMENTS AND CONTAINS NO CHROMATES, CYANIDES, OR OTHER HEAVY METALS. WASTE TREATMENT IS USUALLY A SIMPLE PH NEUTRALIZATION AND DISPOSAL TO THE SANITARY SEWER.

B. DULUX GROUP MANNEX BASE COAT AND DURATEC SERIES ELECTROSTATIC APPLIED ARCHITECTURAL POWDER COATINGS ARE APPROVED TO AAMA 2604 PERFORMANCE STANDARD.

1. GLOSS LEVEL: STANDARD GLOSS IS 30 PERCENT, PLUS OR MINUS 5 PERCENT.

C. SUPER DURABLE POWDER COATINGS: ALLUMINATE PREMIUM WOOD FINISHES USE A POLYURETHANE POWDER COAT WITH INK BASED WOOD GRAIN PATTERNS SUBLIMATED INTO THE BASE POWDER EFFECTIVELY TATTOOING THE POWDER. THE COMBINED EFFECT CREATES ALL THE AESTHETIC ASPECTS OF REAL WOOD WHILE OFFERING THE SAME ENVIRONMENTAL ADVANTAGES OF POWDER COATED FINISHES.

1. WOOD GRAINED CUSTOM FINISH AS APPROVED BY CLIENT.

2.4 FABRICATION

A. PREPARE SURFACES, PRE-TREAT AND COAT COMPONENTS IN ACCORDANCE WITH AAMA 2604 AND 2605 QUALITY STANDARDS AND APPLICABLE EUROPEAN STANDARDS FOR THE COATING MATERIAL SPECIFIED.

B. WRAP AND PACKAGE COATED COMPONENTS USING METHODS SUITABLE FOR TRANSIT AND COVERED SITE STORAGE WITHOUT DAMAGE.

PART 3 EXECUTION

3.1 EXAMINATION

A. DO NOT BEGIN INSTALLATION UNTIL COLORS HAVE BEEN VERIFIED.

B. VERIFY FRAMING MEMBERS ARE READY TO RECEIVE PANEL SYSTEM.

C. IF PREPARATION IS THE RESPONSIBILITY OF ANOTHER INSTALLER, NOTIFY ARCHITECT OF UNSATISFACTORY PREPARATION BEFORE PROCEEDING.

3.2 PREPARATION

A. CLEAN SURFACES THOROUGHLY PRIOR TO INSTALLATION.

B. PREPARE SURFACES USING METHODS RECOMMENDED BY THE MANUFACTURER.

3.3 INSTALLATION

A. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

B. BARRIER PROTECTION: DO NOT INSTALL OVER CEMENTITIOUS MATERIALS, DISSIMILAR METALS OR PRESSURE TREATED MATERIAL WITHOUT ADEQUATE BARRIER PROTECTION.

1. INSTALL BUILDING PAPER HORIZONTALLY ON WALLS TO RECEIVE METAL SIDING.

2. WEATHER LAP EDGES 6 INCHES (150MM) AND ENDS MINIMUM 6 INCHES (150MM).

3. STAGGER VERTICAL JOINTS F EACH LAYER.

SECURELY STAPLE, NAIL IN PLACE.

FASTEN SIDING TO STRUCTURAL SUPPORTS; ALIGNED, LEVEL, AND PLUMB.

LOCATE JOINTS OVER SUPPORTS.

INSTALL EXPANSION CONTROL JOINTS WHERE NEEDED. GC TO COORDINATE LOCATIONS OF EXPANSION/ SPLICE JOINTS WITH CONSTRUCTION PROJECT MANAGER.

USE CONCEALED FASTENERS UNLESS OTHERWISE APPROVED BY ARCHITECT.

INSTALL SOFFITS, AND ACCESSORIES IN ACCORDANCE WITH BEST PRACTICE, WITH ALL JOINT MEMBERS PLUMB AND TRUE.

3.4 FIELD QUALITY CONTROL

AFTER INSTALLATION OF SOFFITS, CHECK ENTIRE SURFACE FOR OBVIOUS FLAWS OR DEFECTS.

REPLACE AND REPAIR ANY PROBLEM AREAS, PAYING CLOSE ATTENTION TO THE SUBSTRATE FOR CAUSES OF THE PROBLEM.

3.5 CLEANING

AFTER APPLICATION OF SOFFITS, CLEAN AS NECESSARY TO REMOVE ALL FINGERPRINTS AND SOILED AREAS.

UPON COMPLETION OF SOFFIT APPLICATION, CLEAN ENTIRE AREA, REMOVING ALL SCRAP, PACKAGING AND UNUSED MATERIALS RELATED TO THIS WORK.

3.6 PROTECTION

PROTECT INSTALLED PRODUCTS UNTIL COMPLETION OF PROJECT

TOUCH-UP, REPAIR OR REPLACE DAMAGED PRODUCTS BEFORE SUBSTANTIAL COMPLETION.

END OF SECTION 07 46 16.

MEMBRANE ROOFING SECTION 07 50 00

1.0 GENERAL

1.1 REFERENCE:
.1 COMPLY WITH GENERAL CONDITIONS OF THE CONTRACT AND WITH SECTION 010100 GENERAL REQUIREMENTS.
.2 COMPLY WITH THE GENERAL REQUIREMENTS OF THE NBC, PROVINCIAL BUILDING CODE LATEST EDITION, LOCAL CODES, AND SAFETY ACTS.
.3 RELATED WORK SPECIFIED ELSEWHERE:
  .1 SUPPLY OF ROOF HOPPERS, ROOF DRAINS, PLUMBING, AND CONNECTIONS TO R.W.L. - SECTION 220000.
  .2 SHEET METAL FLASHING MATERIALS - SECTION 076000.
.4 REFERENCE STANDARDS:
  .1 ALL ROOFING TO BE COMPLETE IN ACCORDANCE WITH THE NATIONAL ROOFING CONTRACTORS ASSOCIATION ROOFING MANUAL.

1.2 SCOPE OF WORK INCLUDES:
.1 SUBSTRATE PREPARATION.
.2 WOOD BLOCKING.
.3 ROOFING ACCESSORY INSTALLATION.
.4 VAPOUR RETARDER INSTALLATION.
.5 INSULATION INSTALLATION.
.6 MEMBRANE INSTALLATION.
.7 MEMBRANE FLASHING.
.8 METAL FLASHING.
.9 ROOF HATCH.

1.3 DESCRIPTION:
.1 FURNISH AND INSTALL A FIRESTONE MECHANICALLY FASTENED ULTRAPLY TPO ROOFING SYSTEM AND RELATED ROOFING ACCESSORIES IN STRICT ACCORDANCE WITH SPECIFICATIONS AND DETAILS APPROVED BY FIRESTONE. INSULATION IS TO BE MECHANICALLY FASTENED OVER A VAPOUR RETARDER TO THE ROOF DECK ACCORDING TO MANUFACTURER REQUIREMENTS. TPO MEMBRANE SHEETS ARE TO BE MECHANICALLY FASTENED TO THE ROOF DECK WITH MANUFACTURER MEMBRANE FASTENERS AND HEAT WELDED TOGETHER.

1.4 QUALITY ASSURANCE:
.1 THE ROOF AND PROPOSED ROOF CONSTRUCTION IS TO MEET ALL THE "ROOF DESIGN CONSIDERATIONS" REQUIREMENTS DETAILED IN MEMBRANE MECHANICALLY FASTENED ROOF SYSTEM, UNLESS SPECIFICALLY APPROVED IN WRITING BY MANUFACTURER.
.2 GENERAL CONTRACTOR SHALL RESTRICT ACCESS TO THE ROOF BY ALL OTHER TRADES DURING AND AFTER THE ROOFING SYSTEM CONSTRUCTION. GENERAL CONTRACTOR SHALL ENSURE THAT OTHER TRADE PERSONNEL PERMITTED ACCESS TO THE ROOF TAKE PROPER CARE TO PREVENT DAMAGE TO WORK DONE UNDER THIS SECTION.
.3 ROOFING CONTRACTOR SHALL BE AN APPROVED APPLICATOR OF FIRESTONE ROOFING SYSTEMS AS DETERMINED BY FIRESTONE BUILDING PRODUCTS.
.4 WORKMEN SHALL BE TRAINED AND EXPERIENCED IN THE INSTALLATION OF THIS TYPE OF ROOFING SYSTEM AND SHALL BE UNDER FULL TIME COMPETENT SUPERVISION.

1.5 SUBMITTALS:
.1 SHOP DRAWINGS ARE TO BE PREPARED DETAILING ROOF SIZE, MEMBRANE SHEET PLACEMENT, QUANTITY, TYPE AND SPACING OF MEMBRANE FASTENERS, LOCATION AND TYPE OF PENETRATIONS AND TYPE OF VAPOUR RETARDER, INSULATION AND INSULATION FASTENER TO BE USED.
.2 SUBMIT SHOP DRAWINGS AND ANY PROPOSED NON-STANDARD DETAILS TO FIRESTONE A MINIMUM OF TWO WEEKS PRIOR TO JOB START FOR APPROVAL.
.3 SUBMIT SHOP DRAWINGS, CURRENT MANUFACTURER INSTALLATION INSTRUCTIONS AND DETAIL DRAWINGS BEING USED ON THIS PROJECT TO THE OWNER.

1.6 DELIVERY, STORAGE & HANDLING:
.1 DELIVER ALL ROOFING MATERIALS IN ORIGINAL, UNOPENED CONTAINERS, COMPLETE WITH LABELS INDICATING BRAND NAME, CONTENTS, USAGE INSTRUCTIONS AND SAFETY PRECAUTIONS. MEMBRANE ROLLS ARE TO BE LEFT IN THEIR UNOPENED PACKAGING UNTIL IMMEDIATELY PRIOR TO USE.
.2 PROTECT MEMBRANES FROM CUTS, ABRASION OR OTHER ABUSE THAT MIGHT ADVERSELY AFFECT PERFORMANCE IN SERVICE.
.3 WHIMS SAFETY BULLETINS ON ALL HAZARDOUS PRODUCTS ARE TO BE READILY AVAILABLE TO THE WORK CREW AT ALL TIMES.
.4 ADHESIVES, SEALANTS AND FLASHING ACCESSORIES ARE TO BE STORED IN A CLEAN, DRY AREA AT A TEMPERATURE BETWEEN 5°C AND 27°C. IF EXPOSED TO A LOWER TEMPERATURE, RESTORE TO AN ACCEPTABLE LEVEL BEFORE USING.
.5 DO NOT WORK DURING PERIODS OF RAIN, FOG, SLEET, SNOW OR COLD TEMPERATURES (BELOW - 15°C).
.6 ENSURE INSULATION AND MEMBRANE FASTENERS WILL NOT DAMAGE OR PENETRATE UNDER DECK WIRES,CONDUITS,PIPES ETC.

1.7 WARRANTY:
.1 CONTRACTOR SHALL ENTER PRE-INSTALLATION NOTICE WITH FIRESTONE IN WRITING A MINIMUM OF TWO WEEKS PRIOR TO JOB START THAT A WARRANTY HAS BEEN REQUESTED FOR THIS PROJECT AND THE PROBABLE START DATE OF ROOFING WORK.
.2 ROOFING SYSTEM SUPPLIER SHALL PROVIDE A WRITTEN WATERTIGHT WARRANTY ON SUPPLIER'S STANDARD FORM FOR A PERIOD OF 20 YEARS FROM THE DATE OF ROOFING SYSTEM COMPLETION.
.3 ROOFING CONTRACTOR SHALL PROVIDE A WRITTEN WARRANTY AGAINST LEAKS OR WORKMANSHIP DEFECTS FOR A PERIOD OF 5 YEARS FROM THE DATE OF ROOFING SYSTEM COMPLETION.

2.0 PRODUCTS

2.1 SUBSTITUTIONS:
.1 PRODUCT SUBSTITUTIONS MUST BE APPROVED IN ADVANCE BY BOTH THE SPECIFIER AND THE ROOFING SYSTEM SUPPLIER TO VERIFY COMPATIBILITY AND ACCEPTABILITY. THE MANUFACTURER OF THE SUBSTITUTE PRODUCT MUST SPECIFICALLY RECOMMEND THEIR PRODUCT FOR THIS TYPE OF APPLICATION.

2.2 VAPOUR RETARDER:
.1 MINIMUM 10 MIL THICK POLYETHYLENE VAPOUR RETARDER MEETING CGSB 51-34-M86 AND WITH A MOISTURE VAPOUR TRANSMISSION RATE LESS THAN 2.4 NG/PAS M2 (0.04 PERMS) WHEN TESTED IN ACCORDANCE WITH ASTM E-96, PROCEDURE B.

2.3 INSULATION FASTENERS:
.1 STRUCTURAL STEEL OR WOOD DECKS: INSULATION SECUREMENT SCREWS ARE TO BE FACTORY MUTUAL LISTED AND APPROVED #12 DIAMETER WITH ROUND OR FLAT HEAD, CORROSION TREATED TO WITHSTAND 30 CYCLES OF THE KESTERNICH TEST WITH ONLY A MINIMUM AMOUNT OF RED RUST SHOWING. FASTENER MUST BE OF SUFFICIENT LENGTH TO PENETRATE PLATE, INSULATION, VAPOUR RETARDER, EXISTING ROOF AND STRUCTURAL [STEEL OR PLYWOOD DECK A MINIMUM OF 13 MM (0.5"); WOOD PLANK A MINIMUM OF 38 MM (1.5").
.2 ACCEPTABLE PRODUCT FOR WOOD OR METAL DECKS:FIRESTONE PRE-ASSEMBLED INSULATION FASTENERS TREATED WITH CX-5 COATING, COMPLETE WITH METAL STRESS PLATE.

A. INSULATION

1. PROVIDE OVERALL THERMAL RESISTANCE FOR ROOFING SYSTEM AS FOLLOWS

a. MINIMUM R-VALUE: 27.7.

2. INSTALL USING A MINIMUM OF TWO LAYERS. CONFIGURATION AS INDICATED ON THE DRAWINGS.

2.5 ROOFING MEMBRANE SYSTEM:
.1 MEMBRANE: WHITE, 1.5 MM THICK POLYESTER SCRIM REINFORCED ULTRAPLY TPO MEMBRANE MEETING THE PHYSICAL CHARACTERISTICS SPECIFIED IN MANUFACTURERS "MECHANICALLY FASTENED FIRESTONE ULTRAPLY TPO ROOF SYSTEM SPECIFICATIONS. MINIMUM SOLAR REFLECTIVE INDEX (SRI) VALUES FOR LOW SLOPED ROOF (< 2:12) TO BE: INITIAL SRI VALUE: 82; 3 YEAR AGED SRI VALUE: 64.
.2 PERIMETER SHEETS: ULTRAPLY TPO MEMBRANE SHEETS AS DESCRIBED IN 2.2.1, WIDTH LIMITED AS REQUIRED BY MANUFACTURER.
.3 PARAPET / WALL FLASHING: ULTRAPLY TPO MEMBRANE AS DESCRIBED IN 2.2.1, CUT TO APPROPRIATE WIDTHS AND LENGTHS.
.4 CORNER & PROTRUSION FLASHING: ULTRAPLY TPO NON-REINFORCED FLASHING.
.5 MEMBRANE CLEANER: ULTRAPLY TPO SEAM CLEANER.
.6 CUT MEMBRANE EDGE SEALANT: ULTRAPLY TPO CUT EDGE SEALANT.PACKAG
.7 MEMBRANE FASTENERS: STEEL OR WOOD DECKS:MEMBRANE FASTENERS (PRE-ASSEMBLED OR LOOSE), TREATED WITH CX-5 COATING AND COMPLETE WITH 60 MM (2-3/8") DIAMETER BARBED LAP PLATE. FASTENER MUST BE OF SUFFICIENT LENGTH TO PENETRATE PLATE, MEMBRANE, INSULATION, VAPOUR RETARDER, EXISTING ROOF AND STRUCTURAL [STEEL OR PLYWOOD DECK A MINIMUM OF 13 MM (0.5"); WOOD PLANK A MINIMUM OF 38 MM (1.5")].
.8 BONDING ADHESIVES: ULTRAPLY TPO BONDING ADHESIVE.
.9 WATER CUT-OFF MASTIC: ULTRAPLY TPO GENERAL PURPOSE SEALANT.
.10 POURABLE SEALER: ULTRAPLY TPO GENERAL PURPOSE SEALANT.
.11 TERMINATION SEALER TAPE: ULTRAPLY TERMINATION SEALER TAPE.
.12 TERMINATION BAR: FIRESTONE TERMINATION BAR.
.13 PIPE / CONDUIT FLASHINGS: ULTRAPLY TPO PRE-FORMED PIPE BOOTS OR SPLIT PIPE BOOTS.
.14 IRREGULAR ROOF PROTRUSIONS: ULTRAPLY TPO GENERAL PURPOSE SEALANT.
.15 TRAFFIC PADS: ULTRAPLY TPO PREMIUM WALKWAY PADS OR X-TREDS

2.6 WOOD NAILERS:
.1 WOOD NAILERS SHALL BE NEW, #2 WOOD OR BETTER WOOD, FACTORY TREATED FOR ROT RESISTANCE. CREOSOTE OR ASPHALT TREATED WOOD IS NOT ACCEPTABLE. NAILERS ARE REQUIRED AT ALL ROOF EDGES OR GRAVEL STOPS AND SHALL BE INSTALLED SO THAT THE TOP IS FLUSH WITH THE TOP OF THE MEMBRANE UNDERLAYMENT, ± 5 MM (1/4").

2.7 FLASHING:
.1 REFER TO SECTION 076000 - SHEET METAL FLASHING.

2.8 FLASHING ACCESSORIES:
.1 HVAC & ELECTRICAL FLASHINGS : TO BE FABRICATED FROM SEAMLESS SPUN ALUMINIUM, COMPLETE WITH PRIMER COATED FLANGES. USE APPROPRIATE FLASHING FOR EACH APPLICATION.

2.9 ROOF DRAINS:
.1 TO SUIT ROOFING. REFER TO MECHANICAL.

2.10 ROOF HATCH:
.1 762 X 914MM BILCO TYPE S ROOF HATCH. 14 GA. PRIMER COATED GALVANIZED STEEL COMPLETE WITH 75MM BEADED FLANGE, NEATLY WELDED. INSULATION TO BE 25MM GLASS FIBRE FULLY COVERED BY PRIMER COATED METAL LINER - 22 GA. THICKNESS. PROVIDE 300MM HIGH 14 GA. PRIMER COATED GALVANIZED STEEL CURB COMPLETE WITH INTEGRAL CAP FLASHING. HATCH SHALL BE COMPLETELY ASSEMBLED WITH HEAVY DUTY PINTLE HINGES, TORSION BAR OPERATED DOORS, NEOPRENE DRAFT SEAL, LATCHING MECHANISM, PADLOCK HASP AND AN AUTOMATIC HOLD-OPEN HANDLE WITH RUBBER GRIP. ALL HARDWARE SHALL BE CADMIUM PLATED. SAFETY BAR: 35 MM DIAMETER SAFETY BAR COATED WITH 20 MIL PVC, COLOR COATED ROOF SAFETY GREEN. SAFETY BAR SHALL BE MOUNTED ON THE RIGHT CORNER OF HATCH CURB WITHOUT IMPEDING DOOR OPERATION.

2.11 KITCHEN EXHAUST VENTS:
.1 REFER TO MECHANICAL.

2.12 SUPPORTS:
.1 REFER TO MECHANICAL FOR PIPING, DUCTING, ETC. SUPPORTS.
.2 REFER TO ROOF DETAILS ON DRAWINGS FOR SLEEPER DETAILS.

3.0 EXECUTION

3.1 INSTALLATION:
.1 ONLY INSTALL AS MUCH VAPOUR RETARDER AND INSULATION AS CAN BE COMPLETELY AND PROPERLY COVERED BY THE WATERPROOFING MEMBRANE BY THE END OF EACH WORK PERIOD.
.2 COMPLY WITH CURRENT FIRESTONE PUBLISHED INSTALLATION INSTRUCTIONS AND DETAILS THROUGHOUT THE ROOFING MEMBRANE INSTALLATION.
.3 THERE SHALL BE NO SMOKING BY ANY PERSONNEL WHILE ON THE ROOF. PROTECT THE ROOF MEMBRANE AT ALL TIMES FROM HIGH HEAT SOURCES SUCH AS CIGARETTE BUTTS OR SPARKS FROM NEARBY WELDING.

3.2 INSPECTION:
.1 EXAMINE ROOF DECK TO VERIFY PROPER PLACEMENT OF ALL ROOF OPENINGS, PIPES, CURBS, SLEEVES, DUCTS, VENTS AND DRAINS. ENSURE ALL WOOD BLOCKING IS INSTALLED WHERE REQUIRED. ENSURE ROOF DECK IS CLEAN, DRY AND FREE FROM DEBRIS THAT MIGHT BE DETRIMENTAL TO THE PERFORMANCE OF THE VAPOUR RETARDER, INSULATION OR MEMBRANE.

3.3 VAPOUR RETARDER & NAILER INSTALLATION:
.1 INSTALL VAPOUR RETARDER MEMBRANE ACCORDING TO THE VAPOUR RETARDER SUPPLIER'S INSTALLATION INSTRUCTIONS. ENSURE VAPOUR RETARDER MEMBRANE IS COMPLETELY SEALED TO ALL ROOF PROTRUSIONS AND AROUND THE PERIMETER.
.2 FASTEN NAILERS WHERE SHOWN ON THE SHOP DRAWINGS. WOOD NAILERS SHALL BE FASTENED TO RESIST A MINIMUM FORCE OF 300 KG/M IN ANY DIRECTION.

3.4 INSULATION INSTALLATION:
.1 POSITION THE APPROVED INSULATION PANELS WITH THEIR LONGEST DIMENSION PERPENDICULAR TO THE DIRECTION OF THE MEMBRANE SEAMS AND WITH THEIR ENDS STAGGERED. ON FLUTED STEEL DECKS, THE LONGER DIMENSION OF THE INSULATION PANELS SHOULD RUN PARALLEL WITH THE FLUTES. PANELS ARE TO BE BUTT-EDGED TIGHTLY TOGETHER WITH A MAXIMUM SPACE BETWEEN PANELS OF 2 MM. VOIDS IN THE INSULATION ARE TO BE FILLED WITH FIRESTONE SEALANT OR ANOTHER COMPATIBLE FILLER. INSULATION INSTALLED IN MULTIPLE LAYERS SHALL HAVE ALL EDGES STAGGERED FROM THE ADJACENT LAYER. INSULATION THAT HAS BECOME DAMAGED IN ANY WAY, INCLUDING FACER DELAMINATION OR COLLAPSE, SHALL BE CUT OUT AND REPLACED WITH STRUCTURALLY SOUND INSULATION.
.2 ALL INSULATION PANELS MUST BE MECHANICALLY ATTACHED TO THE STRUCTURAL DECK WITH FIRESTONE INSULATION FASTENERS AS PER MANUFACTURER MINIMUM REQUIREMENTS. REFER TO MANUFACTURERS SPECIFICATIONS.
.3 FASTENERS MUST BE A MINIMUM OF 15 CM (6") FROM INSULATION PANEL'S EDGE. BOARDS MUST CONFORM TO THE DECK SURFACE. IRREGULAR SURFACES WILL REQUIRE ADDITIONAL FASTENERS. IF THE INSULATION MANUFACTURER'S FASTENING REQUIREMENTS EXCEED THOSE OF FIRESTONE, THEY MUST BE USED IN LIEU OF FIRESTONE'S .

3.5 POSITIONING & FASTENING OF MEMBRANE:
.1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUITABILITY OF THE SUBSTRATE SURFACE TO ACCEPT THE MEMBRANE. ENSURE INSULATION SURFACE OR SUBSTRATE IS CLEAN, FLAT AND FREE FROM DIRT, DEBRIS OR SHARP OBJECTS THAT MIGHT BE DETRIMENTAL TO THE PERFORMANCE OF THE MEMBRANE.
.2 MEMBRANE SHEETS SHALL BE INSTALLED IN ACCORDANCE WITH FIRESTONE REQUIREMENTS - REFER TO MANUFACTURERS SPECIFICATIONS & FACTORY MUTUAL. IF USING FIRESTONE REQUIREMENTS, PERIMETER SHEETS MUST BE FASTENED IN A PICTURE FRAME PATTERN AROUND THE PERIMETER. FIELD SHEETS SHALL BE INSTALLED PERPENDICULAR TO THE UNDERLYING INSULATION'S GREATER DIMENSION AND, IF ON A STEEL DECK, PERPENDICULAR TO THE FLUTE DIRECTION UNLESS THE DECK SLOPE EXCEEDS 3:1, WHEREUPON THE FIELD SHEETS MUST BE INSTALLED PERPENDICULAR TO THE SLOPE.
.3 UNROLL MEMBRANE SHEETS AND POSITION ACCORDING TO THE APPROVED SHOP DRAWINGS. OUTSIDE PERIMETER SHEETS SHALL BE BROUGHT FLUSH TO THE BASE OF THE PERIMETER PARAPET OR WALL, OR IN THE CASE OF A ROOF EDGE, EXTEND OVER THE OUTSIDE EDGE A MINIMUM OF 75 MM (3"). ADJOINING SHEETS ARE TO OVERLAP A MINIMUM OF 140 MM (5.5") ON SIDES AND WHEREVER FASTENERS ARE INCLUDED WITHIN THE SEAM. END LAPS WITHOUT FASTENERS ARE TO BE LAPPED A MINIMUM OF 6 CM (2"). EXTEND MEMBRANE UP AND OVER A PARAPET WALL OR A ROOF EDGE & SECURE IT ALONG THE PERIMETER EDGE USING THE STRIPBOND™ METHOD OF PERIMETER SECUREMENT.
.4 FIRESTONE MEMBRANE FASTENERS FOR THE TYPE OF DECK ARE TO BE FASTENED 50 MM (2") IN FROM THE SIDE EDGE OF BOTH PERIMETER AND FIELD MEMBRANE SHEETS, ON MAXIMUM 305 MM (12") CENTRES. FASTENER PLATES AND HEADS SHALL BE FLUSH WITH THE MEMBRANE AND SHALL PENETRATE THE MEMBRANE, INSULATION (EXISTING ROOF, IF APPLICABLE) AND STRUCTURAL DECK ACCORDING TO THE SPECIFIC REQUIREMENTS OF THE TYPE OF FASTENER. DO NOT OVERDRIVE FASTENERS TO THE POINT WHERE THE MEMBRANE PLATE IS DEFORMED.
.5 EACH MEMBRANE SHEET SHALL BE COMPLETELY FASTENED BEFORE PROCEEDING TO THE NEXT SHEET.

3.6 SPLICING MEMBRANE SHEETS:
.1 FIELD SEAMS MUST BE WELDED WITH AN AUTOMATIC HOT AIR WELDER OPERATED BY AN INDIVIDUAL THOROUGHLY TRAINED AND COMPETENT IN THE MACHINE'S OPERATION. SMALL WORK AND REPAIRS CAN BE DONE EFFICIENTLY WITH A HAND WELDER, HOWEVER, HAND-HELD WELDERS ARE NOT AN ACCEPTED MEANS OF FIELD SEAMING.
.2 HOT AIR WELD ALL SEAMS A MINIMUM OF 38 MM (1.5") WIDE.
.3 DIRTY, DUSTY OR CONTAMINATED MEMBRANE OR MEMBRANE EXPOSED FOR MORE THAN SEVEN DAYS PRIOR TO WELDING MUST BE CLEANED WITH TPO WEATHERED MEMBRANE CLEANER. WITH A CLEAN SCRUB PAD SATURATED WITH TPO WEATHERED MEMBRANE CLEANER, AGGRESSIVELY SCRUB THE SEAM AREA OF THE ROOF MEMBRANE. FOLLOW WITH A FINAL ONE SWIPE PASS, BEING CAREFUL NOT TO RE-DEPOSIT CONTAMINANTS BACK ONTO THE CLEANED AREA. ENSURE THAT THE CLEANER AND ADJACENT BONDING ADHESIVE HAS COMPLETELY FLASHED OFF BEFORE WELDING. FOLLOW STANDARD WELDING PROCEDURES WITH A 20% REDUCTION IN SPEED.
.4 ALL SPLICES ARE TO BE PROBED ALONG THEIR ENTIRE LENGTH WITH A SEAM PROBING TOOL TO VERIFY THAT THE WELDER IS OPERATING EFFECTIVELY. THE MEMBRANE MUST BE ALLOWED TO COOL PRIOR TO TESTING. IN ADDITION, THERE SHOULD BE A DESTRUCTIVE PEEL STRENGTH TEST PERFORMED AT THE START OF EACH DAY AND EACH TIME THE ROBOT WELDER IS REUSED AFTER BEING ALLOWED TO COOL. THE DESTRUCTIVE TEST SAMPLE SHOULD BE 5 CM (2") WIDE AND SHOULD SHOW MEMBRANE DELAMINATION FROM THE SCRIM PRIOR TO WELD FAILURE.
.5 CUT MEMBRANE EDGES SHALL BE SEALED BY APPLYING TPO CUT EDGE SEALANT ALONG THE EXPOSED EDGE.

3.7 PERIMETER FLASHING & SECUREMENT:
.1 INSTALL THE [ROOF EDGE SYSTEM; GRAVEL STOP; DRIP EDGE] ACCORDING TO AN APPROVED MANUFACTURER'S DETAIL AND IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS. NAILERS ARE REQUIRED AT ALL ROOF EDGES, GRAVEL STOPS OR DRIP EDGES.
.2 DIRECT FASTENER PERIMETER SECUREMENT METHOD: ULTRAPLY MEMBRANE SHALL BE BROUGHT FLUSH TO ROOF EDGES, PARAPETS, WALLS, EXPANSION JOINTS, CURBS AND ALL OTHER ROOF PENETRATIONS THAT EXCEED 60 CM (24") IN ANY DIMENSION AND BE MECHANICALLY FASTENED PARALLEL TO THE PERIMETER THROUGH THE INSULATION, VAPOUR RETARDER [EXISTING ROOFING] TO THE STRUCTURAL DECK ON 30 CM (12") CENTRES WITH MEMBRANE FASTENERS AND PLATES. THE PERIMETER FASTENER ROW SHALL BE CENTRED NO FURTHER THAN 150 MM (6") FROM THE PERIMETER.
.3 ULTRAPLY QUICKSEAM REINFORCED PERIMETER FASTENING (RFP) STRIP: UNROLL THE ULTRAPLY QUICKSEAM REINFORCED PERIMETER FASTENING STRIP (UPQSRPF STRIP) WITH THE RELEASE PAPER UP AND THE TAPER PORTION FARTHEST AWAY FROM THE WALL OR PENETRATION. ANCHOR UPQSRPF STRIP USING HEAVY DUTY OR HEAVY DUTY PLUS SEAM PLATES AND FASTENERS 12” (305MM) O.C. MAXIMUM PER CURRENT BASE TIE-IN DETAILS. POSITION ULTRAPLY TPO MEMBRANE OVER UPQSRPF STRIP WITH RELEASE PAPER IN PLACE AND ALLOW MEMBRANE TO RELAX. FOLD BACK ULTRAPLY TPO MEMBRANE TO EXPOSE THE TAPE. PRIME THE ULTRAPLY TPO TO BE SPLICED TO THE TAPE USING ULTRAPLY QUICKPRIME AND QUICKSCRUBBER OR QUICKSCRUBBER PLUS PAD AND HANDLE PER CURRENT PROCEDURES. USE TOUCH-PUSH TEST TO DETERMINE WHEN THE ULTRAPLY QUICKPRIME IS READY TO BE MATED WITH THE TAPE. REMOVE THE RELEASE PAPER. ROLL THE PRIMED ULTRAPLY TPO MEMBRANE INTO THE TAPE. THE PORTION OF THE UPQSRPF WITHOUT TAPE MAY BE BONDED TO THE MEMBRANE USING ULTRAPLY BONDING ADHESIVE OR WATER-BASED BONDING ADHESIVE. ROLL THE ULTRAPLY TPO MEMBRANE OVER THE UPQSRPF STRIP WITH A 1 ½” (51MM) WIDE SILICONE HAND ROLLER TO ENSURE PROPER ADHESION. REFER TO INSTALLATION INSTRUCTIONS FOR SPECIFICS
.4 REINFORCED FLASHING MEMBRANE SHALL BE EXTENDED UP ALL PARAPET WALLS, CURBS, ROOF EDGES, ETC. IF USING THE DIRECT FASTENER METHOD OF PERIMETER SECUREMENT, THE FLASHING MEMBRANE MUST EXTEND A MINIMUM OF 51 MM (2") BEYOND THE PERIMETER FASTENER PLATES OUT ONTO THE FLAT AREA OF THE ROOF.
.5 WHERE REQUIRED, ENHANCED SECUREMENT IN PERIMETER AREAS MAY BE ACHIEVED BY SECURING THE MEMBRANE UNDER COVER STRIPS OR WITH DOUBLE P.S. STRIPBOND STRIPS.
.6 ADHERING ULTRAPLY TPO TO CONCRETE, WOOD, METAL OR ACCEPTABLE INSULATIONS: FLASHING MEMBRANE IS TO BE FULLY BONDED TO ALL VERTICAL WALLS AND PARAPETS. APPLY TPO BONDING ADHESIVE WITH A ROLLER TO THE UNDERSIDE OF THE FLASHING MEMBRANE AND TO THE SUBSTRATE AT THE NET COVERAGE RATE OF 5.7 M2 (60 SQ.FT.) / GALLON. DO NOT APPLY THE BONDING ADHESIVE TO AREAS ON THE MEMBRANE THAT ARE TO BE HEAT WELDED. APPLY ADHESIVE EVENLY, WITHOUT GLOBS OR PUDDLES. ALLOW THE ADHESIVE TO FLASH-OFF UNTIL IT IS TACKY BUT DOES NOT STRING WHEN TOUCHED WITH A DRY FINGER. ROLL THE MEMBRANE ONTO THE SUBSTRATE, BEING CAREFUL NOT TO WRINKLE THE MEMBRANE OR BRIDGE IT AT THE VERTICAL / HORIZONTAL JUNCTURE (CREASE THE MEMBRANE FIRST). BRUSH THE MEMBRANE HEAVILY WITH A PUSH BROOM TO ASSURE COMPLETE CONTACT OVER ALL BONDED AREAS.
.7 UNLESS APPROVED DETAIL SHOWS OTHERWISE, MEMBRANE MUST EITHER TERMINATE IN A REGLET, BE FASTENED ACCORDING TO PARAGRAPH 3.6.6 BELOW, OR BE CARRIED OVER TOP OF WALL OR PARAPET AND COUNTER-FLASHED WITH SHEET METAL OR A STONE CAP. ALL METAL WORK MUST BE INSTALLED TO BE WIND RESISTANT AND SEALED AND WATERPROOFED IN AN ACCEPTABLE MANNER.
.8 IF TERMINATING MEMBRANE PART WAY UP A WALL OR PARAPET, APPLY TERMINATION SEALER TAPE TO BACKSIDE OF MEMBRANE EDGE. PRESS MEMBRANE AGAINST WALL AND ROLL WITH A STEEL HAND ROLLER. FASTEN TERMINATION BAR ALONG THE UPPER EDGE OF THE MEMBRANE INTO THE WALL, USING APPROPRIATE FASTENERS ON 15 CM (6") CENTRES. APPLY ALL PURPOSE SEALANT ALONG UPPER EDGE OF BAR AND OVER TOP OF ALL FASTENER HEADS.

3.8 PROTRUSION & CORNER FLASHINGS:
.1 INSTALL PRE-FORMED METAL FLASHINGS, DRAIN HOPPERS ETC. ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. OLD EXISTING FLASHINGS MUST BE THOROUGHLY CLEANED OF ALL CONTAMINANTS OR REPLACED WITH NEW FLASHINGS. DO NOT FLASH TO LEAD.
.2 FLASH ALL CORNERS, VENT PIPES, POSTS, CURBS AND PRE-FORMED FLASHINGS IN STRICT ACCORDANCE WITH CURRENT FIRESTONE INSTALLATION INSTRUCTIONS AND DETAILS. USE ADHESIVES AND SEALANTS IN CONJUNCTION WITH PRE-MOLDED FLASHINGS, INSTALLED IN ACCORDANCE WITH INSTALLATION REQUIREMENTS AND DETAILS. DO NOT APPLY ADHESIVES TO AREAS ON THE FLASHING THAT ARE TO BE SEAMED. SEAM AS PER SECTION 3.5 ABOVE.
.3 ALL FLASHING SHALL BE MECHANICALLY FASTENED AT THE TOP, UNDER OR THROUGH APPROPRIATE COUNTERFLASHING WITH APPROVED FASTENERS AND IN ACCORDANCE WITH MANUFACTURERS DETAILS.
.4 MEMBRANE CONNECTIONS TO DRAINS ARE TO BE SEALED WITH ALL PURPOSE SEALANT OR TERMINATION SEALER TAPE AND CLAMPED WITH A CLAMPING RING TO ASSURE A 100% CONTINUOUS SEAL, AS PER MANUFACTURER DETAILS. FIELD SEAMS SHALL NOT RUN THROUGH DRAINS.

3.9 TRAFFIC WALKWAYS
.1 ENSURE MEMBRANE TO RECEIVE TRAFFIC PADS IS CLEAN AND DRY. IF THE MEMBRANE IS NOT CLEAN AND DRY, FOLLOW THE STEPS IN SECTION 3.5.3 BEFORE PROCEEDING WITH THE REMAINDER OF THIS SECTION.
.2 POSITION THE WALKWAY PAD AND CUT TO DESIRED LENGTH. WHEREVER POSSIBLE, WALKWAY PAD SHALL NOT COVER SEAMS. WHEN INSTALLED ADJACENT TO A SEAM, THE PAD SHOULD BE KEPT A MINIMUM 50 MM (2") FROM THE EDGE OF THE SEAM ON THE BOTTOM SHEET AND 15 CM (6") AWAY FROM THE EDGE OF THE SEAM ON THE TOP SHEET. WHEN COVERING SEAMS IS UNAVOIDABLE, THE LAP SEAM SHOULD BE COMPLETED PER SECTION 3.5 ABOVE AND THOROUGHLY PROBED, WITH ANY DEFICIENCIES CORRECTED PRIOR TO PAD INSTALLATION. WHERE DRAINAGE AROUND THE PADS IS DESIRED, CUT PADS TO A UNIFORM LENGTH AND SPACE THE SECTIONS 50 MM (2") APART.
.3 WELD THE PERIMETER OF THE WALKWAY PAD TO THE MEMBRANE FOLLOWING STANDARD WELDING PROCEDURES. LEAVE 25 MM TO 50 MM (1" TO 2") GAPS IN THE WELD ON THE LOW SLOPE EDGE EVERY 60 CM (2 FT.) TO PREVENT THE ACCUMULATION OF WATER UNDER THE PAD.

3.10 TEMPORARY NIGHT SEAL:
.1 AT THE END OF EACH DAY OR AT THE THREAT OR ONSET OF INCLEMENT WEATHER, THE INSULATION SHALL BE PROTECTED BY EXTENDING THE MEMBRANE BEYOND THE INSULATION AND SEALING IT TO THE DECK WITH MANUFACTURER NIGHT SEALANT OR ANOTHER APPROVED TEMPORARY SEALANT. ENSURE MEMBRANE EDGE IS EITHER MECHANICALLY FASTENED OR SUFFICIENTLY BALLASTED TO PROTECT AGAINST WIND UPLIFT.
.2 WHEN RESUMING WORK, CUT AND DISPOSE OF PORTION OF MEMBRANE CONTAMINATED WITH THE NIGHT SEALANT.

3.11 CLEAN-UP
.1 REMOVE ALL CUT PIECES, WRAPPINGS, WASTE AND DEBRIS FROM THE JOB SITE.
.2 ENSURE THAT THE MEMBRANE IS CLEANED OF ALL SPILLED ADHESIVES OR RESIDUES AND PRESENTS AN AESTHETICALLY ATTRACTIVE APPEARANCE.

3.12 WARRANTY INSPECTION:
.1 UPON COMPLETION OF THE ROOFING SYSTEM, AN AUTHORIZED FIRESTONE REPRESENTATIVE WILL MAKE AN INSPECTION OF THE INSTALLATION FOR WARRANTY ACCEPTANCE.

3.13 SCUPPERS:
.1 PROVIDE PRE-FINISHED METAL SCUPPERS, TO MATCH METAL FLUSHING, AT LOCATIONS AND AS DETAILED ON DRAWINGS.
.2 MOP ROOF FELTS INTO SCUPPERS TO FORM WATERTIGHT PENETRATION THROUGH PARAPET WALL.

END OF SECTION 07 50 00

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

TANNER EDWARDS KING
15704

9.14.2023

Company Logo

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Project

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ARCHITECTURAL SPECIFICATIONS

Drawn	Checked
SH	AL

Scale	Date
	JUNE 2023

Project No.	Drawing No.
C22-129	SP4

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

SHEET METAL FLASHING AND TRIM SECTION 07 62 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

PART 2 - PRODUCTS

2.1 MANUFACTURER'S

A. COUNTER FLASHINGS: FRY REGLET: TYPE M-A MASONRY SPRINGLOCK FLASHING OR CHENEY: TYPE B, SNAPLOCK SYSTEM OR O'KEEFFE'S, INC.: TYPE MI, MASONRY REGLET.

B. PARAPET CAP/COPINGS: PAC-CLAD PETERSON ALUMINUM; PAC-CONTINUOUS CLEAT COPING.

C. VENTED SOFFIT: DIMENSIONAL METALS, INC. OR PETERSON ALUMINUM CORPORATION OR ATLAS ALUMINUM, INC.

2.2 SHEET METAL FLASHING AND TRIM MATERIALS

A. ZINC-COATED STEEL: COMMERCIAL QUALITY WITH 0.20 PERCENT COPPER, ASTM A526, EXCEPT ASTM A527 FOR LOCK FORMING, G90 HOT-DIPPED GALVANIZED, MILL PHOSPHATISED WHERE INDICATED FOR PAINTING.

B. MATERIAL GAUGES TO BE AS FOLLOWS:

4. METAL FLASHING: 26 GA.

5. METAL CAP/COPING: 24 GA.

6. MISCELLANEOUS TRIM: 24 GA.

7. LOUVER RAIN HOODS: 22 GA.

C. ALL FLASHINGS AND COPINGS TO BE SELF-LOCKING WITH PERMANENT HOLD-DOWN CLIPS. ALL EXPOSED EDGES TO BE HEMMED.

D. ALL EXPOSED METALS SHALL BE PRE-FINISHED IN "KYNAR 500" AND SHALL HAVE A 20 YEAR LIMITED PAINT WARRANTY. COLOR: AS INDICATED ON DRAWINGS OR AS CHOSEN BY ARCHITECT FROM MANUFACTURER'S STANDARD SELECTION.

2.3 MISCELLANEOUS MATERIALS AND ACCESSORIES

A. SOLDER: FOR USE WITH STEEL OR COPPER, PROVIDE 50-50 TIN/LEAD SOLDER (ASTM B32), WITH ROSIN FLUX.

B. FASTENERS: SAME METAL AS FLASHING /SHEET METAL OR OTHER NON-CORROSIVE METAL AS RECOMMENDED BY SHEET MANUFACTURER. MATCH FINISH OF EXPOSED HEADS WITH MATERIAL BEING FASTENED.

C. BITUMINOUS COATING: SSPC - PAINT 12, SOLVENT TYPE BITUMINOUS MASTIC, NOMINALLY FREE OF SULFUR, COMPOUNDED OF 15 MIL DRY FILM THICKNESS PER COAT.

D. MASTIC SEALANT: POLYISOBUTYLENE; NON-HARDENING, NON-SKINNING, NON-DRYING, NON-MIGRATING SEALANT.

E. ELASTOMERIC SEALANT: GENERIC TYPE RECOMMENDED BY MANUFACTURER OF METAL AND FABRICATED COMPONENTS BEING SEALED AND COMPLYING WITH REQUIREMENTS FOR JOINT SEALANTS AS SPECIFIED IN DIVISION 7 - SEALANTS.

F. EPOXY SEAM SEALER: TWO-PART NON-CORROSIVE METAL SEAM CEMENTING COMPOUND, RECOMMENDED BY THE METAL MANUFACTURER FOR EXTERIOR/INTERIOR NON-MOVING JOINTS INCLUDING RIVETED JOINTS.

G. ADHESIVE: TYPE RECOMMENDED BY FLASHING SHEET MANUFACTURER FOR WEATHERPROOF/WEATHER-RESISTANT SEAMING AND ADHESIVE APPLICATION FOR FLASHING SHEET.

H. PAPER SLIP SHEET: 5-LB. ROSIN - SIZED BUILDING PAPER.

I. POLYETHYLENE UNDERLAYMENT: MINIMUM 6 MIL CARBONATED POLYETHYLENE FILM; RESISTANT TO DECAY WHEN TESTED IN ACCORDANCE WITH ASTM E154.

J. REGLETS: METAL UNITS OF TYPE AND PROFILE INDICATED, COMPATIBLE WITH FLASHING INDICATED, NON-CORROSIVE.

K. METAL ACCESSORIES: PROVIDE SHEET METAL CLIPS, STRAPS, ANCHORING DEVICES, AND SIMILAR ACCESSORY UNITS AS REQUIRED FOR INSTALLATION OF WORK, MATCHING OR COMPATIBLE WITH MATERIAL BEING INSTALLED, NON-CORROSIVE, SIZE, AND GAUGE REQUIRED FOR PERFORMANCE.

L. ELASTIC FLASHING FILLER: CLOSED CELL POLYETHYLENE OR OTHER SOFT CELL MATERIAL RECOMMENDED BY ELASTIC FLASHING MANUFACTURER AS FILLER UNDER FLASHING LOOPS TO ENSURE MOVEMENT WITH MINIMUM STRESS ON FLASHING SHEET.

M. ROOFING CEMENT: ASTM D2822, ASPHALTIC.

2.4 FABRICATED UNITS

A. GENERAL METAL FABRICATION: COMPLY WITH DETAILS SHOWN AND WITH APPLICABLE REQUIREMENTS OF SMACNA "ARCHITECTURAL SHEET METAL MANUAL" AND OTHER RECOGNIZED INDUSTRY PRACTICES. FABRICATE WATERPROOF AND WEATHER RESISTANT PERFORMANCE; WITH EXPANSION PROVISIONS FOR RUNNING WORK, SUFFICIENT TO PERMANENTLY PREVENT LEAKAGE, DAMAGE, OR DETERIORATION OF THE WORK. FORM WORK TO SUBSTRATES. COMPLY WITH MATERIAL MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS FOR FORMING MATERIAL. FORM EXPOSED SHEET METAL WORK WITHOUT EXCESSIVE OIL-CANNING, BUCKLING OR TOOL MARKS, TRUE TO LINE AND LEVELS INDICATED WITH ALL EXPOSED EDGES FOLDED BACK TO FORM SEAMS AND SOLDER.

B. SEAMS: FABRICATE NON-MOVING SEAMS IN SHEET METAL WITH FLAT-LOCK SEAMS. TIN EDGES TO BE SEAMED, FORM SEAMS, AND SOLDER.

C. EXPANSION PROVISIONS: WHERE LAPPED OR BAYONET-TYPE EXPANSION PROVISIONS IN WORK CANNOT BE USED, OR WOULD NOT BE SUFFICIENTLY WATER/WEATHERPROOF, FORM EXPANSION JOINTS OF INTERMESHING HOOKED FLANGES, NOT LESS THAN 1 INCH DEEP, FILLED WITH MASTIC SEALANT (CONCEALED WITH JOINT).

D. SEALANT JOINTS: WHERE MOVABLE, NON-EXPANSION TYPE JOINTS ARE INDICATED OR REQUIRED FOR PROPER PERFORMANCE OF WORK, FORM METAL TO PROVIDE FOR PROPER INSTALLATION OF ELASTOMERIC SEALANT, IN COMPLIANCE WITH SMACNA STANDARDS.

E. SEPARATIONS: PROVIDE FOR SEPARATION OF METAL FROM NONCOMPATIBLE METAL OR CORROSIVE SUBSTRATE BY COATING CONCEALED SURFACES AT LOCATIONS OF CONTACT, WITH BITUMINOUS COATING OR OTHER PERMANENT SEPARATION AS RECOMMENDED BY THE MANUFACTURER/FABRICATOR.

PART 3 - EXECUTION

3.1 INSTALLATION

A. GENERAL: UNLESS OTHERWISE INDICATED, COMPLY WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS, AND WITH SMACNA "ARCHITECTURAL SHEET METAL MANUAL". ANCHOR UNITS OF WORK SECURELY IN PLACE BY METHODS INDICATED, PROVIDING FOR THERMAL EXPANSION OF METAL UNITS; CONCEAL FASTENERS WHERE POSSIBLE, SET UNITS TRUE TO LINE AND LEVEL AS INDICTED. INSTALL WORK WITH LAPS, JOINTS, AND SEAMS TO BE PERMANENTLY WATERTIGHT AND WEATHERPROOF.

B. UNDERLAYMENT: WHERE STAINLESS STEEL OR ALUMINUM IS TO BE INSTALLED DIRECTLY ON CEMENT OR WOOD SUBSTRATES, INSTALL A SLIP SHEET OF RED ROSIN PAPER AND A COURSE OF POLYETHYLENE UNDERLAYMENT.

C. BED FLANGES OF WORK IN A THICK COAT OF BITUMINOUS ROOFING CEMENT WHERE REQUIRED FOR WATERPROOF PERFORMANCE.

D. INSTALL REGLETS TO RECEIVE COUNTERFLASHING IN A MANNER AND BY METHODS INDICATED. WHERE SHOWN IN CONCRETE, FURNISH REGLETS TO TRADES OF CONCRETE WORK FOR INSTALLATIONS WORK OF DIVISION 3. WHERE SHOWN IN MASONRY, FURNISH REGLETS TO TRADES OF MASONRY WORK, FOR INSTALLATION AS WORK OF DIVISION 4.

1. INSTALL COUNTERFLASHING IN REGLETS, EITHER BY SNAP-IN SEAL ARRANGEMENT, OR BY WELDING IN PLACE OF ANCHORAGE AND FILLING REGLET WITH MASTIC OR ELASTOMERIC SEALANT. AS INDICATED AND DEPENDING ON DEGREE OF SEALANT EXPOSURE.

E. INSTALL ELASTIC FLASHING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. WHERE REQUIRED, PROVIDE FOR MOVEMENT AT JOINTS BY FORMING LOOPS OF BELLOWS IN WIDTH OF FLASHING. LOCATE COVER OR FILLER STRIPS AT JOINTS TO FACILITATE COMPLETE DRAINAGE OF WATER FROM FLASHING. SEAM ADJACENT FLASHING SHEETS WITH ADHESIVE, SEAL AND ANCHOR EDGES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

3.2 CLEANING

A. CLEAN EXPOSED METAL SURFACES, REMOVING SUBSTANCES THAT MIGHT CAUSE CORROSION OF METAL OR DETERIORATION OF FINISHES.

B. ADVISE THE CONTRACTOR OF REQUIRED PROCEDURES FOR SURVEILLANCE AND PROTECTION OF FLASHING AND SHEET METAL WORK DURING CONSTRUCTION, TO ENSURE THAT WORK WILL BE WITHOUT DAMAGE OR DETERIORATION, OTHER THAT NATURAL WEATHERING AT TIME OF SUBSTANTIAL COMPLETION.

END OF SECTION 07 62 00

GUTTERS AND DOWNSPOUTS SECTION 07 71 23

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. PRE-FINISHED GALVANIZED STEEL, DOWNSPOUTS, GUTTERS, COLLECTOR BOXES AND SCUPPERS.

1.2 RELATED SECTIONS

A. DIVISION 7

1.3 REFERENCES

A. ASTM A526/A526M-STANDARD SPECIFICATION FOR STEEL SHEET, ZINC COATED (GALVANIZED) BY HOT-DIP PROCESS, COMMERCIAL QUALITY.

1.4 DESIGN REQUIREMENTS

A. CONFORM TO APPLICABLE CODE FOR SIZE AND METHOD OF RAINWATER DISCHARGE.

1.5 PROJECT CONDITIONS

A. COORDINATE THE WORK WITH DOWNSPOUT DISCHARGE PIPE INLET.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. DIMENSIONAL METALS INC.

B. APPROVED EQUALS BY PETERSON ALUMINUM CO. OR BERRIDGE MANUFACTURING CO.

2.2 MATERIALS

A. PRE-FINISHED GALVANIZED STEEL SHEET: ASTM A361/A361M, ASTM A446/A446M, GRADE A, OR ASTM A526/A526M, G90 ZINC COATING; 24 GAUGE CORE STEEL, SHOP PRE-COATED WITH THERMO-CURED FLUOROCARBON "KYNAR" 500 RESIN COATING. COLOR: TO BE CHOSEN BY OWNER. SUBMIT SAMPLE TO OWNER FOR APPROVAL.

2.3 COMPONENTS

A. GUTTERS, COLLECTOR BOXES AND SCUPPERS: SMACNA PROFILE TO MATCH EXISTING.

B. DOWNSPOUTS: SMACNA PROFILE TO MATCH EXISTING.

C. ANCHORS AND SUPPORTS: PROFILED TO SUIT GUTTERS AND DOWNSPOUTS.

1. ANCHORING DEVICES: IN ACCORDANCE WITH SMACNA REQUIREMENTS.

2. GUTTER SUPPORTS: SPIKES AND FERRULES.

3. DOWNSPOUT SUPPORTS: STRAPS.

D. FASTENERS: SAME MATERIAL AND FINISH AS GUTTERS AND DOWNSPOUTS. SPLASH BLOCK: CONCRETE, 12" W. X 24" L. (MIN.)

2.4 FABRICATION

A. FORM GUTTERS AND DOWNSPOUTS OF PROFILES AND SIZE INDICATED.

B. FABRICATE WITH REQUIRED CONNECTION PIECES.

C. FORM SECTIONS SQUARE, TRUE, AND ACCURATE IN SIZE, IN MAXIMUM POSSIBLE LENGTHS, FREE OF DISTORTION OR DEFECTS DETRIMENTAL TO APPEARANCE OR PERFORMANCE. ALLOW FOR EXPANSION AT JOINTS.

D. HEM EXPOSED EDGES OF METAL MIN 1/2" FOLD OVER.

E. FABRICATE GUTTER AND DOWNSPOUT ACCESSORIES; SEAL WATERTIGHT.

2.5 FACTORY FINISHING

A. THERMO CURED FLUOROCARBON "KYNAR 500" RESIN COATING.

B. PRIMER COAT: FINISH CONCEALED SIDE OF METAL SHEETS WITH WASH COAT AND PRIMER COMPATIBLE WITH FINISH SYSTEM, AS RECOMMENDED BY FINISH SYSTEM MANUFACTURER.

PART 3 - EXECUTION

3.1 EXAMINATION

A. VERIFY THAT SURFACES ARE READY TO RECEIVE WORK.

3.2 PREPARATION

A. PAINT CONCEALED METAL SURFACES AND SURFACES IN CONTACT WITH DISSIMILAR METALS WITH PROTECTIVE BACKING PAINT TO A MINIMUM DRY FILM THICKNESS OF 15 MIL.

3.3 INSTALLATION

A. INSTALL GUTTERS, DOWNSPOUTS, AND ACCESSORIES AS SPECIFIED.

B. SHEET METAL: JOIN LENGTHS WITH SEAMS SEALED WATERTIGHT. FLASH AND SEAL GUTTERS TO DOWNSPOUTS (PROVIDE POSITIVE DRAINAGE TO DOWNSPOUTS).

C. SLOPE GUTTERS TO DOWNSPOUTS (PROVIDE POSITIVE DRAINAGE TO DOWNSPOUTS).

D. CONNECT DOWNSPOUTS TO DOWNSPOUT BOOTS AT STORM SEWER SYSTEM. SEAL CONNECTION WATERTIGHT. PROVIDE SPLASH BLOCKS AT ALL LOCATIONS WHERE DOWNSPOUTS DO NOT TIE INTO A STORM SEWER.

END OF SECTION 07 71 23

FIRESTOPPING SECTION 07 84 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. FIRE-TEST-RESPONSE CHARACTERISTICS: PROVIDE FIRESTOPPING THAT COMPLIES WITH THE FOLLOWING REQUIREMENTS AND THOSE SPECIFIED UNDER THE "SYSTEM PERFORMANCE REQUIREMENTS" ARTICLE:

3. FIRESTOPPING TESTS ARE PERFORMED BY A QUALIFIED TESTING AND INSPECTING AGENCY. A QUALIFIED TESTING AND INSPECTING AGENCY IS UL, WAMOCK HERSEY, OR ANOTHER AGENCY PERFORMING TESTING AND FOLLOW-UP INSPECTION SERVICES FOR FIRESTOP SYSTEMS THAT IS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

4. THROUGH-PENETRATION FIRESTOP SYSTEMS ARE IDENTICAL TO THOSE TESTED PER ASTM E 814 UNDER CONDITIONS WHERE POSITIVE FURNACE PRESSURE DIFFERENTIAL OF AT LEAST 0.01 INCH OF WATER IS MAINTAINED AT A DISTANCE OF 0.78 INCH BELOW THE FILL MATERIALS SURROUNDING THE PENETRATING ITEMS IN THE TEST ASSEMBLY. PROVIDE RATED SYSTEMS COMPLYING WITH THE FOLLOWING REQUIREMENTS:

a. THROUGH-PENETRATION FIRESTOP SYSTEM PRODUCTS BEAR CLASSIFICATION MARKING OF QUALIFIED TESTING AND INSPECTING AGENCY.

b. THROUGH-PENETRATION FIRESTOP SYSTEMS CORRESPOND TO THOSE INDICATED BY REFERENCE TO THROUGH-PENETRATION FIRESTOP SYSTEM DESIGNATIONS LISTED BY UL IN THEIR "FIRE RESISTANCE DIRECTORY," BY WAMOCK HERSEY.

5. FIRE-RESISTIVE JOINT SEALANT SYSTEMS ARE IDENTICAL TO THOSE TESTED FOR FIRE-RESPONSE CHARACTERISTICS PER ASTM E 119 UNDER CONDITIONS WHERE THE POSITIVE FURNACE PRESSURE DIFFERENTIAL IS AT LEAST 0.01 INCH OF WATER, AS MEASURED 0.78 INCH FROM THE FACE EXPOSED TO FURNACE FIRE. PROVIDE SYSTEMS COMPLYING WITH THE FOLLOWING REQUIREMENTS:

a. FIRE-RESISTANCE RATINGS OF JOINT SEALANTS: AS INDICATED BY REFERENCE TO DESIGN DESIGNATIONS LISTED BY UL IN THEIR "FIRE RESISTANCE DIRECTORY" OR BY ANOTHER QUALIFIED TESTING AND INSPECTING AGENCY.

b. JOINT SEALANTS, INCLUDING BACKING MATERIALS, BEAR CLASSIFICATION MARKING OF QUALIFIED TESTING AND INSPECTION AGENCY.

B. INSTALLER QUALIFICATIONS: ENGAGE AN EXPERIENCED INSTALLER WHO HAS COMPLETED FIRESTOPPING THAT IS SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR PROJECT AND THAT HAS PERFORMED SUCCESSFULLY.

C. SINGLE-SOURCE RESPONSIBILITY: OBTAIN THROUGH-PENETRATION FIRESTOP SYSTEMS FOR EACH KIND OF PENETRATION AND CONSTRUCTION CONDITION INDICATED FROM A SINGLE MANUFACTURER.

D. PROVIDE FIRESTOPPING PRODUCTS CONTAINING NO DETECTABLE ASBESTOS AS DETERMINED BY THE METHOD SPECIFIED IN 40 CFR PART 763, SUBPART F, APPENDIX A, SECTION 1, "POLARIZED LIGHT MICROSCOPY."

1.3 DELIVERY, STORAGE AND HANDLING

A. DELIVER FIRESTOPPING PRODUCTS TO PROJECT SITE IN ORIGINAL, UNOPENED CONTAINERS OR PACKAGES WITH INTACT AND LEGIBLE MANUFACTURERS' LABELS IDENTIFYING PRODUCT AND MANUFACTURER; DATE OF MANUFACTURE; LOT NUMBER; SHELF LIFE, IF APPLICABLE; QUALIFIED TESTING AND INSPECTING AGENCY'S CLASSIFICATION MARKING APPLICABLE TO PROJECT; CURING TIME: AND MIXING INSTRUCTIONS FOR MULTICOMPONENT MATERIALS.

B. STORE AND HANDLE FIRESTOPPING MATERIALS TO PREVENT THEIR DETERIORATION OR DAMAGE DUE TO MOISTURE, TEMPERATURE CHANGES, CONTAMINANTS, OR OTHER CAUSES.

1.4 PROJECT CONDITIONS

A. ENVIRONMENTAL CONDITIONS: DO NOT INSTALL FIRESTOPPING WHEN AMBIENT OR SUBSTRATE TEMPERATURES ARE OUTSIDE LIMITS PERMITTED BY FIRESTOPPING MANUFACTURERS OR WHEN SUBSTRATES ARE WET DUE TO RAIN, FROST, CONDENSATION, OR OTHER CAUSES.

B. VENTILATION: VENTILATE FIRESTOPPING PER FIRESTOPPING MANUFACTURERS' INSTRUCTIONS BY NATURAL MEANS OR, WHERE THIS IS INADEQUATE, FORCED AIR CIRCULATION.

2.1 FIRESTOPPING, GENERAL

A. COMPATIBILITY: PROVIDE FIRESTOPPING COMPOSED OF COMPONENTS THAT ARE COMPATIBLE WITH EACH OTHER, THE SUBSTRATES FORMING OPENINGS, AND THE ITEMS, IF ANY, PENETRATING THE FIRESTOPPING UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY FIRESTOPPING MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.

B. ACCESSORIES: PROVIDE COMPONENTS FOR EACH FIRESTOPPING SYSTEM THAT ARE NEEDED TO INSTALL FILL MATERIALS AND TO COMPLY WITH "SYSTEM PERFORMANCE REQUIREMENTS" ARTICLE IN PART 1. USE ONLY COMPONENTS SPECIFIED BY THE FIRESTOPPING MANUFACTURER AND APPROVED BY THE QUALIFIED TESTING AND INSPECTING AGENCY FOR THE DESIGNATED FIRE-RESISTANCE-RATED SYSTEMS. ACCESSORIES INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING ITEMS:

1. PERMANENT FORMING/DAMMING/BACKING MATERIALS INCLUDING THE FOLLOWING:

a. SEMIREFRACTORY FIBER (MINERAL WOOL) INSULATION.

b. CERAMIC FIBER.

c. SEALANTS USED IN COMBINATION WITH OTHER FORMING/DAMMING MATERIALS TO PREVENT LEAKAGE OF FILL MATERIALS IN LIQUID STATE.

d. FIRE-RATED FORMBOARD.

e. JOINT FILLERS FOR JOINT SEALANTS.

2.2 MATERIALS FOR THROUGH-PENETRATION FIRESTOP SYSTEMS

A. INTUMESCENT WRAP STRIPS: SINGLE-COMPONENT, ELASTOMERIC SHEET WITH ALUMINUM FOIL ON ONE SIDE.

B. SILICONE FOAM: TWO-COMPONENT, SILICONE-BASED LIQUID ELASTOMER THAT, WHEN MIXED, EXPANDS AND CURES IN PLACE TO PRODUCE A FLEXIBLE, NONSHRINKING FOAM.

C. SILICONE SEALANT: MOISTURE-CURING, SINGLE-COMPONENT, SILICONE-BASED, NEUTRAL-CURING ELASTOMERIC SEALANT OF NONSAG GRADE FOR OPENINGS IN VERTICAL AND OTHER SURFACES.

D. <u>INTUMESCENT WRAP STRIPS:</u> PROVIDE ONE OF THE FOLLOWING PRODUCTS: FIRE STOP INTUMESCENT WRAP STRIP 2002 BY DOW CORNING CORP. OR CS2420 INTUMESCENT WRAP BY HILTI CONSTRUCTION CHEMICALS. INC. OR FIRE BARRIER FS-195 WRAP/STRIP, 3M FIRE PROTECTION PRODUCTS.

E. <u>SILICONE FOAMS:</u> FIRE STOP FOAM 2001 BY DOW CORNING CORP. OR PENSIL 200 FOAM BY GENERAL ELECTRIC CO.

F. <u>SILICONE SEALANTS:</u> FIRESTOP SEALANT 2003 BY DOW CORNING CORP. OR PENSIL 100 FIRESTOP SEALANT BY GENERAL ELECTRIC CO. OR CS240 FIRESTOP SEALANT BY HILTI CONSTRUCTION CHEMICALS, INC.

2.3 FIRE-RESISTIVE ELASTOMERIC JOINT SEALANTS

A. ELASTOMERIC SEALANT STANDARD: PROVIDE MANUFACTURER'S STANDARD CHEMICALLY CURING, ELASTOMERIC SEALANTS OF BASE POLYMER INDICATED THAT COMPLIES WITH ASTM C 920 REQUIREMENTS, INCLUDING THOSE REFERENCED FOR TYPE, GRADE, CLASS, AND USES, AND REQUIREMENTS SPECIFIED IN THIS SECTION APPLICABLE TO FIRE-RESISTIVE JOINT SEALANTS.

B. SEALANT COLORS: PROVIDE COLOR OF EXPOSED JOINT SEALANT. COLOR SELECTIONS MADE BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF STANDARD COLORS FOR PRODUCTS OF TYPE INDICATED.

C. SINGLE-COMPONENT, NEUTRAL-CURING SILICONE SEALANT: TYPE S: GRADE NS: CLASS 25: EXPOSURE-RELATED USE NT, AND JOINT-SUBSTRATE-RELATED USES M, G, A, AND (AS APPLICABLE TO JOINT SUBSTRATES INDICATED) O.

1. ADDITIONAL MOVEMENT CAPABILITY: PROVIDE SEALANT WITH THE CAPABILITY TO WITHSTAND THE FOLLOWING PERCENTAGE CHANGES IN JOINT WIDTH EXISTING AT TIME OF INSTALLATION, WHEN TESTED FOR ADHESION AND COHESION UNDER MAXIMUM CYCLIC MOVEMENT PER ASTM C 719, AND REMAIN IN COMPLIANCE WITH OTHER REQUIREMENTS OF ASTM C 920 FOR USES INDICATED:

2. 100 PERCENT MOVEMENT IN EXTENSION AND 50 PERCENT MOVEMENT IN COMPRESSION FOR A TOTAL OF 150 PERCENT MOVEMENT.

D. SINGLE-COMPONENT, NEUTRAL-CURING, SILICONE SEALANT: DOW CORNING 790 BY DOW CORNING CORP. OR SPECTRUM 1 BY TREMCO.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE SUBSTRATES AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR OPENING CONFIGURATIONS, PENETRATING ITEMS, SUBSTRATES, AND OTHER CONDITIONS AFFECTING PERFORMANCE OF FIRESTOPPING. DO NOT PROCEED WITH INSTALLATION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 PREPARATION

A. SURFACE CLEANING: CLEAN OUT OPENINGS AND JOINTS IMMEDIATELY PRIOR TO INSTALLING FIRESTOPPING TO COMPLY WITH RECOMMENDATIONS OF FIRESTOPPING MANUFACTURER AND THE FOLLOWING REQUIREMENTS: REMOVE ALL FOREIGN MATERIALS FROM SURFACES OF OPENING AND JOINT SUBSTRATES AND FROM PENETRATING ITEMS THAT COULD INTERFERE WITH ADHESION OF FIRESTOPPING. CLEAN OPENING AND JOINT SUBSTRATES AND PENETRATING ITEMS TO PRODUCE CLEAN, SOUND SURFACES CAPABLE OF DEVELOPING OPTIMUM BOND WITH FIRESTOPPING. REMOVE LOOSE PARTICLES REMAINING FROM CLEANING OPERATION. REMOVE LAITANCE AND FORM RELEASE AGENTS FROM CONCRETE.

B. PRIMING: PRIME SUBSTRATES WHERE RECOMMENDED BY FIRESTOPPING MANUFACTURER USING THAT MANUFACTURER'S RECOMMENDED PRODUCTS AND METHODS. CONFINE PRIMERS TO AREAS OF BOND: DO NOT ALLOW SPILLAGE AND MIGRATION ONTO EXPOSED SURFACES.

C. MASKING TAPE: USE MASKING TAPE TO PREVENT FIRESTOPPING FROM CONTACTING ADJOINING SURFACES THAT WILL REMAIN EXPOSED UPON COMPLETION OF WORK AND THAT WOULD OTHERWISE BE PERMANENTLY STAINED OR DAMAGED BY SUCH CONTACT OR BY CLEANING METHODS USED TO REMOVE SMEARS FROM FIRESTOPPING MATERIALS. REMOVE TAPE AS SOON AS IT IS POSSIBLE TO DO SO WITHOUT DISTURBING FIRESTOPPING'S SEAL WITH SUBSTRATES.

3.3 INSTALLING THROUGH-PENETRATION FIRESTOPS

A. GENERAL: COMPLY WITH THE "SYSTEM PERFORMANCE REQUIREMENTS" ARTICLE IN PART 1 AND THE THROUGH-PENETRATION FIRESTOP MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DRAWINGS PERTAINING TO PRODUCTS AND APPLICATIONS INDICATED.

B. INSTALL FORMING/DAMMING MATERIALS AND OTHER ACCESSORIES OF TYPES REQUIRED TO SUPPORT FILL MATERIALS DURING THEIR APPLICATION AND IN THE POSITION NEEDED TO PRODUCE THE CROSS-SECTIONAL SHAPES AND DEPTHS REQUIRED TO ACHIEVE FIRE RATINGS OF DESIGNATED THROUGH-PENETRATION FIRESTOP SYSTEMS. AFTER INSTALLING FILL MATERIALS, REMOVE COMBUSTIBLE FORMING MATERIALS AND OTHER ACCESSORIES NOT INDICATED AS PERMANENT COMPONENTS OF FIRESTOP SYSTEMS.

3.4 INSTALLING FIRE-RESISTIVE JOINT SEALANTS

A. GENERAL: COMPLY WITH THE "SYSTEM PERFORMANCE REQUIREMENTS' ARTICLE IN PART 1, WITH ASTM C 1193 AND WITH THE SEALANT MANUFACTURER'S INSTALLATION INSTRUCTIONS AND DRAWINGS PERTAINING TO PRODUCTS AND APPLICATIONS INDICATED.

B. INSTALL JOINT FILLERS TO PROVIDE SUPPORT OF SEALANTS DURING APPLICATION AND AT POSITION REQUIRED TO PRODUCE THE CROSS-SECTIONAL SHAPES AND DEPTHS OF INSTALLED SEALANTS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY AND DEVELOP FIRE-RESISTANCE RATING REQUIRED.

C. INSTALL SEALANTS BY PROVEN TECHNIQUES THAT RESULT IN SEALANTS DIRECTLY CONTACTING AND FULLY WETTING JOINT SUBSTRATES, COMPLETELY FILLING RECESSES PROVIDED FOR EACH JOINT CONFIGURATION, AND PROVIDING UNIFORM, CROSS-SECTIONAL SHAPES AND DEPTHS RELATIVE TO JOINT WIDTH THAT OPTIMUM SEALANT MOVEMENT CAPABILITY. INSTALL SEALANTS AT THE SAME TIME JOINT FILLERS ARE INSTALLED.

3.5 CLEANING

A. CLEAN OFF EXCESS FILL MATERIALS AND SEALANTS ADJACENT TO OPENINGS AND JOINTS AS WORK PROGRESSES BY METHODS AND WITH CLEANING MATERIALS APPROVED BY MANUFACTURERS OF FIRESTOPPING PRODUCTS AND OF PRODUCTS IN WHICH OPENING AND JOINTS OCCUR.

B. PROTECT FIRESTOPPING DURING AND AFTER CURING PERIOD FROM CONTACT WITH CONTAMINATING SUBSTANCES OR FROM DAMAGE RESULTING FROM CONSTRUCTION OPERATIONS OR OTHER CAUSES SO THAT THEY ARE WITHOUT DETERIORATION OR DAMAGE AT TIME OF CONTRACT COMPLETION. IF, DESPITE SUCH PROTECTION, DAMAGE OR DETERIORATION OCCURS, CUT OUT AND REMOVE DAMAGED OR DETERIORATED FIRESTOPPING IMMEDIATELY AND INSTALL NEW MATERIALS TO PRODUCE FIRESTOPPING COMPLYING WITH SPECIFIED REQUIREMENTS.

END OF SECTION 07 84 00

JOINT SEALANTS SECTION 07 92 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: ENGAGE AN EXPERIENCED INSTALLER WHO HAS COMPLETED JOINT SEALANT APPLICATIONS SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR PROJECT THAT HAVE RESULTED IN CONSTRUCTION WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.

B. SINGLE SOURCE RESPONSIBILITY FOR JOINT SEALANT MATERIALS: OBTAIN JOINT SEALANT MATERIALS FROM A SINGLE MANUFACTURER FOR EACH DIFFERENT PRODUCT REQUIRED.

C. PRODUCT TESTING: PROVIDE COMPREHENSIVE TEST DATA FOR EACH TYPE OF JOINT SEALANT BASED ON TESTS CONDUCTED BY A QUALIFIED INDEPENDENT TESTING LABORATORY ON CURRENT PRODUCT FORMULATIONS WITHIN A 24-MONTH PERIOD PRECEDING DATE OF CONTRACTOR'S SUBMITTAL OF TEST RESULTS TO ASSOCIATE.

1. TEST ELASTOMERIC SEALANTS FOR COMPLIANCE WITH REQUIREMENTS SPECIFIED BY REFERENCE TO ASTM C 920. INCLUDE TEST RESULTS FOR HARDNESS; STAIN RESISTANCE, ADHESION AND COHESION UNDER CYCLIC MOVEMENT (PER ASTM C 719), LOW-TEMPERATURE FLEXIBILITY, AND MODULUS OF ELASTICITY AT 100 PERCENT STRAIN, EFFECTS OF HEAT AGING, AND EFFECTS OF ACCELERATED WEATHERING.

2. INCLUDES TEST RESULTS PERFORMED ON JOINT SEALANTS AFTER THEY HAVE CURED FOR 1 YEAR.

D. PRECONSTRUCTION FIELD TESTING: PRIOR TO INSTALLATION OF JOINT SEALANTS, FIELD-TEST THEIR ADHESION TO JOINT SUBSTRATES AS FOLLOWS: LOCATE TEST JOINTS WHERE INDICATED OR, IF NOT INDICATED, AS DIRECTED BY ASSOCIATE. CONDUCT FIELD TESTS FOR EACH APPLICATION INDICATED FOR EACH TYPE OF ELASTOMERIC SEALANT AND JOINT SUBSTRATE INDICATED.

1.3 DELIVERY, STORAGE AND HANDLING

A. DELIVER MATERIALS TO PROJECT SITE IN ORIGINAL UNOPENED CONTAINERS OR BUNDLES WITH LABELS INDICATING MANUFACTURER, PRODUCT NAME AND DESIGNATION, COLOR, EXPIRATION PERIOD FOR USE, POT LIFE, CURING TIME, AND MIXING INSTRUCTIONS FOR MULTICOMPONENT MATERIALS.

B. STORE AND HANDLE MATERIALS IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS TO PREVENT THEIR DETERIORATION OR DAMAGE DUE TO MOISTURE, HIGH OR LOW TEMPERATURES, CONTAMINANTS, OR OTHER CAUSES.

1.4 WARRANTY

A. SPECIAL INSTALLER'S WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH INSTALLER AGREES TO REPAIR OR REPLACE JOINT SEALANTS THAT DO NOT COMPLY WITH PERFORMANCE AND OTHER REQUIREMENTS SPECIFIED IN THIS SECTION WITHIN SPECIFIED WARRANTY PERIOD.

1. WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

B. SPECIAL MANUFACTURER'S WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH JOINT-SEALANT MANUFACTURER AGREES TO FURNISH JOINT SEALANTS TO REPAIR OR REPLACE THOSE THAT DO NOT COMPLY WITH PERFORMANCE AND OTHER REQUIREMENTS SPECIFIED IN THIS SECTION WITHIN SPECIFIED WARRANTY PERIOD.

1. WARRANTY PERIOD: 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

C. SPECIAL WARRANTIES SPECIFIED IN THIS ARTICLE EXCLUDE DETERIORATION OR FAILURE OF JOINT SEALANTS FROM THE FOLLOWING:

1. MOVEMENT OF THE STRUCTURE CAUSED BY STRUCTURAL SETTLEMENT OR ERRORS ATTRIBUTABLE TO DESIGN OR CONSTRUCTION RESULTING IN STRESSES ON THE SEALANT EXCEEDING SEALANT MANUFACTURER'S WRITTEN SPECIFICATIONS FOR SEALANT ELONGATION AND COMPRESSION.

2. DISINTEGRATION OF JOINT SUBSTRATES FROM NATURAL CAUSES EXCEEDING DESIGN SPECIFICATIONS.

3. MECHANICAL DAMAGE CAUSED BY INDIVIDUALS, TOOLS, OR OTHER OUTSIDE AGENTS.

4. CHANGES IN SEALANT APPEARANCE CAUSED BY ACCUMULATION OF DIRT OR OTHER ATMOSPHERIC CONTAMINANTS.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. COMPATIBILITY: PROVIDE JOINT SEALANTS, BACKINGS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY JOINT-SEALANT MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.

B. LIQUID-APPLIED JOINT SEALANTS: COMPLY WITH ASTM C 920 AND OTHER REQUIREMENTS INDICATED FOR EACH LIQUID-APPLIED JOINT SEALANT SPECIFIED, INCLUDING THOSE REFERENCING ASTM C 920 CLASSIFICATIONS FOR TYPE, GRADE, CLASS, AND USES RELATED TO EXPOSURE AND JOINT SUBSTRATES.

C. STAIN-TEST-RESPONSE CHARACTERISTICS: WHERE SEALANTS ARE SPECIFIED TO BE NONSTAINING TO POROUS SUBSTRATES, PROVIDE PRODUCTS THAT HAVE UNDERGONE TESTING ACCORDING TO ASTM C 1248 AND HAVE NOT STAINED POROUS JOINT SUBSTRATES INDICATED FOR PROJECT.

D. SUITABILITY FOR CONTACT WITH FOOD: WHERE SEALANTS ARE INDICATED FOR JOINTS THAT WILL COME IN REPEATED CONTACT WITH FOOD, PROVIDE PRODUCTS THAT COMPLY WITH 21 CFR 177.2600.

E. COLORS OF EXPOSED JOINT SEALANTS: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.

SILICONE JOINT SEALANTS

A. 'JS-1'-SINGLE-COMPONENT, NONSAG, NEUTRAL-CURING SILICONE JOINT SEALANT: ASTM C 920, TYPE S, GRADE NS, CLASS 50, FOR USE NT.

1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

a. GE ADVANCED MATERIALS - SILICONES; SILPRUF SCS2000.

b. PECORA CORPORATION; 898.

c. POLYMERIC SYSTEMS, INC.; PSI-641.

d. TREMCO INCORPORATED; SPECTREM 3.

B. 'JS-2'-SINGLE-COMPONENT, MILDEW RESISTANT, NEUTRAL-CURING SILICONE JOINT SEALANT: ASTM C 920, TYPE S, GRADE NS, CLASS 25, FOR USE NT.

1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

a. PECORA CORPORATION; 898.

b. TREMCO INCORPORATED; TREMSIL 200 CLEAR.

2.3 URETHANE JOINT SEALANTS

A. 'JS-3'- SINGLE-COMPONENT, NONSAG, URETHANE JOINT SEALANT: ASTM C 920, TYPE S, GRADE NS, CLASS 100/50, FOR USE NT.

1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

a. POLYMERIC SYSTEMS, INC.; PSI-901.

b. SIKA CORPORATION, CONSTRUCTION PRODUCTS DIVISION; SIKAFLEX - 15LM.

c. TREMCO INCORPORATED; VULKEM 921 OR DYMONIC FC.

B. 'JS-4'- SINGLE-COMPONENT, POURABLE, MOISTURE CURING, POLYURETHANE JOINT SEALANT: ASTM C 920, TYPE S, GRADE P, CLASS 100/50, FOR USE NT.

1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

a. DOW CORNING CORPORATION; 890-SL.

b. PECORA CORPORATION; 300 PAVEMENT SEALANT (SELF-LEVELING).

c. TREMCO INCORPORATED; VULKEM 45.

2.4 LATEX JOINT SEALANTS

A. 'JS-5'- LATEX JOINT SEALANT: ACRYLIC LATEX OR SILICONIZED ACRYLIC LATEX, ASTM C 834, TYPE OP, GRADE NF.

1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

a. BOSTIK, INC.; CHEM-CALK 600.

b. PECORA CORPORATION; AC-20+.

c. TREMCO INCORPORATED; TREMFLEX 834.

2.5 METALLIC PUTTY SEALANTS

A. 'JS-7' - METALLIC PUTTY: RIGID, TWO-PART EPOXY RESIN BASED PUTTY SYSTEM.

1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

a. PEERLESS INDUSTRIAL SYSTEMS; EPIGEM 2008.

b. EQUAL PRODUCTS AS APPROVED BY ARCHITECT.

2.6 ACOUSTICAL JOINT SEALANTS

A. ACOUSTICAL JOINT SEALANT: MANUFACTURER'S STANDARD NONSAG, PAINTABLE, NONSTAINING LATEX SEALANT COMPLYING WITH ASTM C 834. PRODUCT EFFECTIVELY REDUCES AIRBORNE SOUND TRANSMISSION THROUGH PERIMETER JOINTS AND OPENINGS IN BUILDING CONSTRUCTION AS DEMONSTRATED BY TESTING REPRESENTATIVE ASSEMBLIES ACCORDING TO ASTM E 90.

1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:

a. PECORA CORPORATION; AC-20 FTR OR AIS-919.

b. USG CORPORATION; SHEETROCK ACOUSTICAL SEALANT.

2.7 JOINT SEALANT BACKING

A. GENERAL: PROVIDE SEALANT BACKINGS OF MATERIAL AND TYPE THAT ARE NON-STAINING; ARE COMPATIBLE WITH JOINT SUBSTRATES, SEALANTS, PRIMERS AND OTHER JOINT FILLERS; AND ARE APPROVED FOR APPLICATIONS INDICATED BY SEALANT MANUFACTURER BASED ON FIELD EXPERIENCE AND LABORATORY TESTING.

B. CYLINDRICAL SEALANT BACKINGS: ASTM C 1330, TYPE C (CLOSED-CELL MATERIAL WITH A SURFACE SKIN) OR ANY TYPE, AS APPROVED IN WRITING BY JOINT-SEALANT MANUFACTURER FOR JOINT APPLICATION INDICATED, AND OF SIZE AND DENSITY TO CONTROL SEALANT DEPTH AND OTHERWISE CONTRIBUTE TO PRODUCING OPTIMUM SEALANT PERFORMANCE.

C. BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE AS RECOMMENDED BY SEALANT MANUFACTURER FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT WHERE SUCH ADHESION WOULD RESULT IN SEALANT FAILURE. PROVIDE SELF-ADHESIVE TAPE WHERE APPLICABLE.

2.8 MISCELLANEOUS MATERIALS

A. PRIMER: MATERIAL RECOMMENDED BY JOINT SEALANT MANUFACTURER WHERE REQUIRED FOR ADHESION OF SEALANT TO JOINT SUBSTRATES INDICATED, AS DETERMINED FROM PRECONSTRUCTION JOINT SEALANT-SUBSTRATE TESTS AND FIELD TESTS.

B. CLEANERS FOR NONPOROUS SURFACES: CHEMICAL CLEANERS ACCEPTABLE TO MANUFACTURERS OF SEALANTS AND SEALANT BACKING MATERIALS, FREE OF OILY RESIDUES OR OTHER SUBSTANCES CAPABLE OF STAINING OR HARMING IN ANY WAY JOINT SUBSTRATES AND ADJACENT NONPOROUS SURFACES, AND FORMULATED TO PROMOTE OPTIMUM ADHESION OF SEALANTS WITH JOINT SUBSTRATES.

C. MASKING TAPE: NONSTAINING, NONABSORBENT MATERIAL COMPATIBLE WITH JOINT SEALANTS AND SURFACES ADJACENT TO JOINTS.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE JOINTS INDICATED TO RECEIVE JOINT SEALANTS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR JOINT CONFIGURATION, INSTALLATION TOLERANCES, AND OTHER CONDITIONS AFFECTING JOINT SEALANT PERFORMANCE. DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 PREPARATION

A. SURFACE CLEANING OF JOINTS: CLEAN OUT JOINTS IMMEDIATELY BEFORE INSTALLING JOINT SEALANTS TO COMPLY WITH RECOMMENDATIONS OF JOINT SEALANT MANUFACTURER.

3.3 INSTALLATION OF JOINT SEALANTS

A. GENERAL: COMPLY WITH JOINT SEALANT MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS APPLICABLE TO PRODUCTS AND APPLICATIONS INDICATED, EXCEPT WHERE MORE STRINGENT REQUIREMENTS APPLY.

B. SEALANT INSTALLATION STANDARD: COMPLY WITH RECOMMENDATIONS OF ASTMC 1193 FOR USE OF JOINT SEALANTS AS APPLICABLE TO MATERIALS, APPLICATIONS, AND CONDITIONS INDICATED.

3.4 CLEANING

A. CLEAN OFF EXCESS SEALANTS OR SEALANT SMEARS ADJACENT TO JOINTS AS WORK PROGRESSES BY METHODS AND WITH CLEANING MATERIALS APPROVED BY MANUFACTURERS OF JOINT SEALANTS AND OF PRODUCTS IN WHICH JOINTS OCCUR.

END OF SECTION 07 92 00

DIVISION 8 - OPENINGS

METAL DOORS & FRAMES SECTION 08 11 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. PROVIDE FRAMES COMPLYING WITH STEEL DOOR INSTITUTE "RECOMMENDED SPECIFICATIONS STANDARD STEEL DOORS AND FRAMES" ANSI/SDI-100 AND AS HEREIN SPECIFIED.

B. FIRE-RATED DOOR ASSEMBLIES: UNITS THAT COMPLY WITH NFPA 80, ARE IDENTICAL TO DOOR AND FRAME ASSEMBLIES WHOSE FIRE RESISTANCE CHARACTERISTICS HAVE BEEN DETERMINED PER ASTM E 152 AND WHICH ARE LABELED AND LISTED BY UL, FACTORY MUTUAL, WAMOCK HERSEY, OR OTHER TESTING AND INSPECTING ORGANIZATION ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

1.3 DELIVERY, STORAGE AND HANDLING

A. DELIVER FRAMES CARDBOARD-WRAPPED OR CRATED TO PROVIDE PROTECTION DURING TRANSIT AND JOB STORAGE. PROVIDE ADDITIONAL PROTECTION TO PREVENT DAMAGE TO FINISH OF FACTORY-FINISHED FRAMES.

B. INSPECT FRAMES UPON DELIVERY FOR DAMAGE. MINOR DAMAGES MAY BE REPAIRED PROVIDED REFINISHED ITEMS ARE EQUAL IN ALL RESPECTS TO NEW WORK AND ACCEPTABLE TO ARCHITECT; OTHERWISE, REMOVE AND REPLACE DAMAGED ITEMS AS DIRECTED.

C. STORE FRAMES AT BUILDING SITE UNDER COVER. PLACE UNITS ON MINIMUM 4-INCHES HIGH WOOD BLOCKING. AVOID USE OF NON-VENTED PLASTIC OR CANVAS SHELTERS WHICH COULD CREATE HUMIDITY CHAMBER. IF CARDBOARD WRAPPER ON DOOR BECOMES WET, REMOVE CARTON IMMEDIATELY. PROVIDE SPACES BETWEEN STACKED DOORS TO PROMOTE AIR CIRCULATION.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. PROVIDE PRODUCTS FROM ONE OF THE FOLLOWING:
AMWELD CORPORATION
1500 SERIES

2.2 MATERIALS

A. HOT-ROLLED STEEL SHEETS AND STRIP: COMMERCIAL QUALITY CARBON STEEL, PICKLED AND OILED, COMPLYING WITH ASTM A 569 AND ASTM A 568.

B. COLD-ROLLED STEEL SHEETS: COMMERCIAL QUALITY CARBON STEEL, COMPLYING WITH ASTM A 366 AND ASTM A 568.

C. GALVANIZED STEEL SHEETS: ZINC-COATED CARBON STEEL SHEETS OF COMMERCIAL QUALITY, COMPLYING WITH ASTM A 526, OR DRAWING QUALITY, ASTM A 642, HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A 525, WITH A60 OR G60 COATING DESIGNATION, MILL PHOSPHATIZED.

D. SUPPORTS AND ANCHORS: FABRICATE OF NOT LESS THAN 18-GAGE SHEET STEEL; GALVANIZED WHERE USED WITH GALVANIZED FRAMES.

E. INSERTS, BOLTS AND FASTENERS: MANUFACTURER'S STANDARD UNITS. WHERE ITEMS ARE TO BE BUILT INTO EXTERIOR WALLS, HOT-DIP GALVANIZE IN COMPLIANCE WITH ASTM A 153, CLASS C OR D AS APPLICABLE.

F. SHOP APPLIED PAINT: APPLY AFTER FABRICATION. PRIMER RUST-INHIBITIVE ENAMEL OR PAINT, EITHER AIR-DRYING OR BAKING, SUITABLE AS A BASE FOR SPECIFIED FINISH PAINTS COMPLYING WITH ANSI A224.1, "TEST PROCEDURE AND ACCEPTANCE CRITERIA FOR PRIME PAINTED STEEL SURFACES FOR STEEL DOORS AND FRAMES."

G. ALL STEEL PRODUCTS SHALL BE FABRICATED UTILIZING ONLY DOMESTICALLY PRODUCED STEEL.

2.3 FRAMES

A. PROVIDE METAL FRAMES FOR DOORS OF TYPES AND STYLES AS SHOWN ON DRAWINGS AND SCHEDULES. CONCEAL FASTENINGS, UNLESS OTHERWISE INDICATED. FABRICATE FRAMES OF MINIMUM 18-GAGE COLD-ROLLED STEEL.

1. FABRICATE FRAMES WITH MITERED OR COPED CORNERS, WELDED CONSTRUCTION.

2. FORM EXTERIOR FRAMES FROM 18-GAGE GALVANIZED STEEL.

3. MECHANICAL INTERLOCK NOT ACCEPTED.

4. REFER TO DOOR SCHEDULE.

B. DOOR SILENCERS: EXCEPT ON WEATHERSTRIPPED FRAMES, DRILL STOPS TO RECEIVE 3 SILENCERS ON STRIKE JAMBS OF SINGLE-DOOR FRAMES AND 2 SILENCERS ON HEADS OF DOUBLE-DOOR FRAMES.

2.4 DOORS (AS APPLICABLE)

A. EXTERIOR DOORS: 1-3/4" THICK, FLUSH TYPE, ANSI/SDI-100, GRADE III, HEAVY-DUTY, MODEL 4, MINIMUM 18-GAGE GALVANIZED STEEL FACES WITH POLYSTYRENE CORE INSULATION, ETC. AND MANUFACTURED AS FRAMES ABOVE. REFER TO DOOR SCHEDULE.

PART 3 - EXECUTION

3.1 INSTALLATION

A. GENERAL: INSTALL STANDARD STEEL FRAMES AND ACCESSORIES IN ACCORDANCE WITH FINAL SHOP DRAWINGS, MANUFACTURERS DATA, AND AS HEREIN SPECIFIED.

B. PLACING FRAMES: COMPLY WITH PROVISIONS OF SDI-105 "RECOMMENDED ERECTION INSTRUCTIONS FOR STEEL FRAMES," UNLESS OTHERWISE INDICATED.

3.2 ADJUST AND CLEAN

A. PRIME COAT TOUCH-UP: IMMEDIATELY AFTER ERECTION, SAND SMOOTH ANY RUSTED OR DAMAGED AREAS OF PRIME COAT AND APPLY TOUCH-UP OF COMPATIBLE AIR-DRYING PRIMER.

B. PROTECTION REMOVAL: IMMEDIATELY PRIOR TO FINAL INSPECTION, REMOVE PROTECTIVE PLASTIC WRAPPINGS FROM PREFINISHED DOORS.

C. FINAL ADJUSTMENTS: CHECK AND READJUST OPERATING HARDWARE ITEMS, LEAVING STEEL DOORS AND FRAMES UNDAMAGED AND IN COMPLETE AND PROPER OPERATING CONDITION.

END OF SECTION 08 11 00

ALUMINUM ENTRANCES AND STOREFRONT WINDOWS SECTION 08 41 13

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: ENGAGE AN EXPERIENCED INSTALLER WITH NOT LESS THAN 5 YEARS SUCCESSFUL EXPERIENCE WHO HAS COMPLETED INSTALLATIONS OF ALUMINUM STOREFRONT AND ENTRANCES SIMILAR IN DESIGN AND EXTENT TO THOSE REQUIRED FOR THE PROJECT AND WHOSE WORK HAS RESULTED IN CONSTRUCTION WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.

B. FABRICATOR QUALIFICATIONS: PROVIDE ALUMINUM ENTRANCES AND STOREFRONT SYSTEMS FABRICATED BY A FIRM EXPERIENCED IN PRODUCING SYSTEMS THAT ARE SIMILAR TO THOSE INDICATED FOR THIS PROJECT, AND THAT HAVE A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE. THE FABRICATOR SHALL HAVE SUFFICIENT PRODUCTION CAPACITY TO PRODUCE COMPONENTS REQUIRED WITHOUT CAUSING DELAY IN PROGRESS OF THE WORK.

C. SINGLE SOURCE RESPONSIBILITY: OBTAIN ALUMINUM ENTRANCE, OPERATING HARDWARE, AND STOREFRONT SYSTEMS FROM ONE SOURCE AND FROM A SINGLE MANUFACTURER, UNLESS NOTED OTHERWISE.

D. DESIGN CRITERIA: THE DRAWINGS INDICATE THE SIZE, PROFILE AND DIMENSIONAL REQUIREMENTS OF ALUMINUM ENTRANCE AND STOREFRONT WORK REQUIRED AND ARE BASED ON THE SPECIFIC TYPES AND MODELS INDICATED.

E. SYSTEM PERFORMANCE REQUIREMENTS.

1. STRUCTURAL PERFORMANCE: DESIGN, ENGINEER, FABRICATE, AND INSTALL THE GLAZED ALUMINUM CURTAIN WALL SYSTEM TO WITHSTAND THE EFFECTS OF A WIND LOAD OF SPEED AT HEIGHT OF INSTALLATION AS REQUIRED BY THE APPLICABLE BUILDING CODE, WITH NO MATERIAL FAILURES OR PERMANENT DEFORMATION OF STRUCTURAL MEMBERS.

a. STRUCTURAL TEST PRESSURE SHALL BE EQUAL TO 150 PERCENT OF THE INWARD AND OUTWARD ACTING DESIGN WIND PRESSURES.

b. MAXIMUM DEFLECTION SHALL BE 1/175 OF THE SPAN.

c. ALLOWABLE STRESS WITH A SAFETY FACTOR OF 1.65.

d. MANUFACTURER SHALL PROVIDE INTERNAL STEEL REINFORCING AS REQUIRED FOR INDICATED SPANS AND CODE REQUIRED WIND LOADS.

2. AIR INFILTRATION RATE SHALL NOT EXCEED 0.06 CFM/FT(2) AT A STATIC PRESSURE DIFFERENTIAL OF 6.24 PSF, PER ASTM E283.

3. WATER RESISTANCE: SYSTEM SHALL COMPLY WITH ASTM E331. THERE SHALL BE NO AIR LEAKAGE AT A MIN. STATIC AIR PRESSURE DIFFERENTIAL OF 8 PSI AS DEFINED IN AAMA 501.

1.3 DELIVERY, STORAGE AND HANDLING

A. DELIVER ALUMINUM ENTRANCE AND STOREFRONT COMPONENTS IN THE MANUFACTURER'S ORIGINAL PROTECTIVE PACKAGING.

B. STORE ALUMINUM COMPONENTS IN A CLEAN DRY LOCATION AWAY FROM UNCURED MASONRY OR CONCRETE. COVER COMPONENTS WITH WATERPROOF PAPER, TARPAULIN OR POLYETHYLENE SHEETING IN A MANNER TO PERMIT CIRCULATION OF AIR. STACK FRAMING COMPONENTS IN A MANNER THAT WILL PREVENT BENDING AND AVOID SIGNIFICANT OR PERMANENT DAMAGE.

1.4 PROJECT CONDITIONS

A. FIELD MEASUREMENTS: SHOW RECORD MEASUREMENTS ON SHOP DRAWINGS. CHECK OPENINGS BY ACCURATE FIELD MEASUREMENT BEFORE FABRICATION. COORDINATE FABRICATION SCHEDULE WITH CONSTRUCTION PROGRESS TO AVOID DELAY OF THE WORK.

1.5 WARRANTY

A. WARRANTY: SUBMIT A WRITTEN WARRANTY, EXECUTED BY THE MANUFACTURER, AGREEING TO REPAIR OR REPLACE UNITS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN THE SPECIFIED WARRANTY PERIOD. FAILURES INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO:

1. STRUCTURAL FAILURE OF FRAMING MEMBERS.

2. EXCESSIVE DEFLECTION, EXCESSIVE LEAKAGE OR AIR INFILTRATION.

3. FAULTY OPERATION OF SWING DOORS.

4. DETERIORATION OF GASKETS AND SEALS.

5. FAILURE OF SEALANT.

B. WARRANTY PERIOD: FIVE (5) YEARS AFTER THE DATE OF SUBSTANTIAL COMPLETION.

PART 2 - PRODUCTS

2.1 MANUFACTURERS AND PRODUCTS

A. KAWNEER
(770) 449-5555
ATTENTION: CHERYL WILKERSON

B. CRL-US ALUMINUM
(800) 421-6144, EXT. 17780

C. YKK AP COMMERCIAL
(687) 838-6000

C. EXTERIOR STOREFRONT:

1. KAWNEER TRIFAB VERSAGLAZE 451T, THERMALLY BROKEN, 2" X 4 1/2" WITH 1" INSULATED CLASS LOW E GLASS UNIT.

2. CRL-US ALUMINUM SERIES IT451 STOREFRONT SYSTEM, THERMALLY BROKEN, 2" X 4-1/2" WITH 1" INSULATED CLASS LOW E GLASS UNIT.

3. YKK AP YES 45 FI Center Set Flush Glazed Storefront System, Thermally Broken, 2" x 4-1/2" with 1" Insulated Class Low E Glass Unit.

D. INTERIOR STOREFRONT:

1. KAWNEER TRIFAB VERSAGLAZE 451, 2" X 4 1/2" WITH 1/4" GLASS.

2. CRL-US ALUMINUM SERIES 451 STOREFRONT SYSTEM, NON-THERMAL, 2" X 4-1/2" WITH 1/4" GLASS.

3. YKK AP 45 FI CENTER SET FLUSH GLAZED STOREFRONT SYSTEM W/ GLAZING ADAPTER, NON-THERMAL, 2" X 4-1/2" WITH 1/4" GLASS.

E. SWING DOORS (AS APPLICABLE): (BASIS OF DESIGN)

1. KAWNEER 190 SERIES SINGLE ACTING NARROW STILE DOOR WITH 1" TEMPERED GLASS AND 10" BOTTOM RAIL.

2. CRL-US ALUMINUM NARROW STILE SERIES 250 DOOR SYSTEM WITH 1" TEMPERED GLASS AND 10" BOTTOM RAIL.

3. YKK AP 20D ENTRANCE SYSTEM WITH 1" TEMPERED GLASS AND 10" BOTTOM RAIL.

2.2 MATERIALS

A. ALUMINUM MEMBERS: ALLOY AND TEMPER RECOMMENDED BY THE MANUFACTURER FOR STRENGTH, CORROSION RESISTANCE, AND APPLICATION OF REQUIRED FINISH; EXTRUSIONS SHALL BE 6063 T5 ALLOY AND TEMPER TO COMPLY WITH ASTM B 221 FOR ALUMINUM EXTRUSIONS, ASTM B 209 FOR ALUMINUM SHEET OR PLATE, AND ASTM B 211 FOR ALUMINUM BARS, RODS AND WIRE.

B. CARBON STEEL REINFORCEMENT OF ALUMINUM FRAMING MEMBERS SHALL COMPLY WITH ASTM A 36 FOR STRUCTURAL SHAPES, PLATES AND BARS, ASTM A 611 FOR COLD ROLLED SHEET AND STRIP, OR ASTM A 570 FOR HOT ROLLED SHEET AND STRIP.

C. GLASS AND GLAZING MATERIALS: COMPLY WITH REQUIREMENTS OF SECTION 08800, OF THESE SPECIFICATIONS.

D. FASTENERS: PROVIDE FASTENERS OF ALUMINUM, NONMAGNETIC STAINLESS STEEL, IN ACCORDANCE WITH ASTM A 164.

1. REINFORCEMENT: WHERE FASTENERS SCREW-ANCHOR INTO ALUMINUM MEMBERS LESS THAN 0.125 INCHES THICK, REINFORCE THE INTERIOR WITH ALUMINUM OR NONMAGNETIC STAINLESS STEEL TO RECEIVE SCREW THREADS, OR PROVIDE STANDARD NONCORROSIVE PRESSED-IN SPLINED GROMMET NUTS.

2. EXPOSED FASTENERS: DO NOT USED EXPOSED FASTENERS EXCEPT FOR APPLICATION OF HARDWARE. FOR APPLICATION OF HARDWARE, USE PHILLIPS FLAT-HEAD MACHINE SCREWS THAT MATCH THE FINISH OF MEMBER OR HARDWARE BEING FASTENED.

E. CONCEALED FLASHING: 0.040-INCH-THICK ALUMINUM BRAKE METAL TRIM. ANODIZED FINISH TO MATCH STOREFRONT.

F. BRACKETS AND REINFORCEMENTS: HIGH-STRENGTH ALUMINUM BRACKETS AND REINFORCEMENTS; WHERE USE OF ALUMINUM IS NOT FEASIBLE PROVIDE NONMAGNETIC STAINLESS STEEL OR HOT-DIP GALVANIZED STEEL COMPLYING WITH ASTM A 123.

G. CONCRETE AND MASONRY INSERTS: CAST IRON, MALLEABLE IRON, OR HOT-DIP GALVANIZED STEEL INSERTS COMPLYING WITH ASTM A 123 (WHERE APPLICABLE).

H. COMPRESSION WEATHER-STRIPPING: MANUFACTURER'S STANDARD REPLACEABLE COMPRESSIBLE WEATHER-STRIPPING GASKETS OF MOLDED NEOPRENE COMPLYING WITH ASTM D 2000 OR MOLDED PVC COMPLYING WITH ASTM D 2287.

2.3 ALUMINUM FINISHES

A. FRAME AND DOOR FINISHES SHALL BE: BLACK ANODIZED (CLASS I, .7 MILS MINIMUM) ALUMINUM.

2.4 HARDWARE

A. PROVIDE HEAVY-DUTY HARDWARE UNITS AS INDICATED, SCHEDULED, OR REQUIRED FOR OPERATION OF EACH DOOR, PROVIDE ITEMS OF SIZES, NUMBER, QUANTITY AND TYPE RECOMMENDED BY MANUFACTURER FOR SERVICE REQUIRED; FINISH TO MATCH DOOR. SUBMIT SHOP DRAWINGS WITH STANDARD HARDWARE COMPONENTS AND PROVISIONS FOR SPECIAL SECURITY HARDWARE COMPONENT. FOUR (4) SETS OF KEYS FOR HOLD OPEN DEVICES ARE REQUIRED WITH HARDWARE PACKAGE.

1. SEE DOOR HARDWARE SCHEDULE.

2.5 COMPONENTS

B. STOREFRONT FRAMING SYSTEM: PROVIDE STOREFRONT AND ENTRANCE FRAMING SYSTEMS FABRICATED FROM EXTRUDED ALUMINUM MEMBERS OF SIZE AND PROFILE INDICATED. INCLUDE SUBFRAMES AND OTHER REINFORCING MEMBERS AS REQUIRED BY STRUCTURAL LOADS.

C. ENTRANCE DOOR FRAMES: PROVIDE TUBULAR AND CHANNEL FRAME ENTRANCE DOOR FRAME ASSEMBLIES, AS INDICATED, WITH WELDED OR MECHANICAL JOINTS IN ACCORDANCE WITH MANUFACTURER'S STANDARDS. REINFORCE AS NECESSARY TO SUPPORT REQUIRED LOADS.

2.6 FABRICATION

A. GENERAL: FABRICATE ALUMINUM ENTRANCE AND STOREFRONT COMPONENTS TO DESIGNS, SIZES AND THICKNESSES INDICATED AND TO COMPLY WITH INDICATED STANDARDS. SIZES AND PROFILE REQUIREMENTS ARE INDICATED ON THE DRAWINGS. VARIABLE DIMENSIONS ARE INDICATED, WITH MAXIMUM AND MINIMUM DIMENSIONS REQUIRED, TO ACHIEVE DESIGN REQUIREMENTS AND COORDINATION WITH OTHER WORK.

B. PREFABRICATION: COMPLETE FABRICATION, ASSEMBLY, FINISHING, HARDWARE APPLICATION, AND OTHER WORK TO THE GREATEST EXTENT POSSIBLE BEFORE SHIPMENT TO THE PROJECT SITE. DISASSEMBLY COMPONENTS ONLY AS NECESSARY FOR SHIPMENT AND INSTALLATION.

1. PERFORM FABRICATION OPERATIONS, INCLUDING CUTTING, FITTING, FORMING, DRILLING AND GRINDING OF METAL WORK TO PREVENT DAMAGE TO EXPOSED FINISH SURFACES. COMPLETE THESE OPERATIONS FOR HARDWARE PRIOR TO APPLICATION OF FINISHES.

2. PREGLAZE DOOR AND FRAME UNITS TO GREATEST EXTENT POSSIBLE.

C. WELDING: COMPLY WITH AWS RECOMMENDATIONS. GRIND EXPOSED WELDS SMOOTH TO REMOVE WELD SPATTER AND WELDING OXIDES. RESTORE MECHANICAL FINISH.

D. REINFORCING: INSTALL REINFORCING AS REQUIRED FOR HARDWARE AND AS NECESSARY FOR PERFORMANCE REQUIREMENTS, SAG RESISTANCE AND RIGIDITY.

E. DISSIMILAR METALS: SEPARATE DISSIMILAR METALS WITH BITUMINOUS PAINT, OR A SUITABLE SEALANT, OR A NON-ABSORPTIVE PLASTIC OR ELASTOMERIC TAPE, OR A GASKET BETWEEN THE SURFACES. DO NOT USE COATINGS CONTAINING LEAD.

F. CONTINUITY: MAINTAIN ACCURATE RELATION OF PLANES AND ANGLE WITH WEATHERPROOF, HAIRLINE FIT OF CONTACTING MEMBERS. UNIFORMITY OF METAL FINISH: ABUTTING EXTRUDED ALUMINUM MEMBERS SHALL NOT HAVE AN INTEGRAL COLOR TEXTURE VARIATION GREATER THAN HALF THE RANGE INDICATED IN THE SAMPLE PAIR SUBMITTAL.

G. FASTENERS: CONCEAL FASTENERS WHEREVER POSSIBLE.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE SUBSTRATES AND SUPPORTS, WITH THE INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS INDICATED, INSTALLATION TOLERANCES, AND OTHER CONDITIONS THAT AFFECT INSTALLATION OF ALUMINUM ENTRANCES AND STOREFRONTS. CORRECT UNSATISFACTORY CONDITIONS BEFORE PROCEEDING WITH THE INSTALLATION. DO NOT PROCEED WITH INSTALLATION UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.

B. VERIFY ALL MEASUREMENTS/OPENINGS BY FIELD MEASUREMENTS BEFORE FABRICATION. COORDINATE W/ FABRICATION SCHEDULE AND CONSTRUCTION PROGRESS TO AVOID CONSTRUCTION DELAYS.

3.2 INSTALLATION

A. COMPLY WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS FOR INSTALLATION.

B. SET UNITS PLUMB, LEVEL, AND TRUE TO LINE, WITHOUT WARP OR RACK OF FRAMING MEMBERS, DOORS, OR GLAZING PANELS. INSTALL COMPONENTS IN PROPER ALIGNMENT AND RELATION TO ESTABLISHED LINES AND GRADES INDICATED. PROVIDE PROPER SUPPORT AND ANCHOR SECURELY IN PLACE.

C. CONSTRUCTION TOLERANCES: INSTALL ALUMINUM ENTRANCE AND STOREFRONT TO COMPLY WITH THE FOLLOWING TOLERANCES:

1. VARIATION FROM PLANE: DO NOT EXCEED 1/8 INCH IN 12 FEET OF LENGTH OR 1/4 INCH IN ANY TOTAL LENGTH.

2. OFFSET FROM ALIGNMENT: THE MAXIMUM OFFSET FROM TRUE ALIGNMENT BETWEEN TWO IDENTICAL MEMBERS ABUTTING END TO END INLINE SHALL NOT EXCEED 1/64 INCH.

3. DIAGONAL MEASUREMENTS: THE MAXIMUM DIFFERENCE IN DIAGONAL MEASUREMENTS SHALL NOT EXCEED 1/16 INCH.

4. OFFSET AT CORNERS: THE MAXIMUM OUT-OF-PLANE OFFSET OF FRAMING AT CORNERS SHALL NOT EXCEED 1/32 INCH.

D. SEPARATE ALUMINUM AND OTHER CORRODIBLE METAL SURFACES FROM SOURCES OF CORROSION OR ELECTROLYTIC ACTION AT POINTS OF CONTACT WITH OTHER MATERIALS.

1. ZINC OR CADMIUM PLATE STEEL ANCHORS AND OTHER UNEXPOSED FASTENERS AFTER FABRICATION.

2. PAINT DISSIMILAR METALS WHERE DRAINAGE FROM THEM PASSES OVER ALUMINUM.

3. PAINT ALUMINUM SURFACES IN CONTACT WITH MORTAR, CONCRETE OR OTHER MASONRY WITH ALKALI RESISTANT COATING.

E. DRILL AND TAP FRAMES AND DOORS AND APPLY SURFACE-MOUNTED HARDWARE ITEMS. COMPLY WITH HARDWARE MANUFACTURER'S INSTRUCTIONS AND TEMPLATE REQUIREMENTS. USE CONCEALED FASTENERS WHEREVER POSSIBLE.

F. SET SILL MEMBERS IN BED OF SEALANT AS INDICATED, OR WITH JOINT FILLERS OR GASKETS AS INDICATED TO PROVIDE WEATHER TIGHT CONSTRUCTION. COMPLY WITH REQUIREMENTS OF DIVISION 7 FOR SEALANTS, FILLERS, AND GASKETS.

3.3 CLEANING

A. CLEAN THE COMPLETED SYSTEM, INSIDE AND OUT, PROMPTLY AFTER INSTALLATION, EXERCISING CARE TO AVOID DAMAGE TO COATINGS.

B. CLEAN GLASS SURFACES AFTER INSTALLATION, COMPLYING WITH REQUIREMENTS CONTAINED IN SECTION 08800 FOR CLEANING AND MAINTENANCE. REMOVE EXCESS GLAZING AND SEALANT COMPOUNDS, DIRT AND OTHER SUBSTANCES FROM ALUMINUM SURFACES.

3.4 PROTECTION

A. INSTITUTE PROTECTIVE MEASURES REQUIRED THROUGHOUT THE REMAINDER OF THE CONSTRUCTION PERIOD TO ENSURE THAT ALUMINUM ENTRANCES AND STOREFRONTS WILL BE WITHOUT DAMAGE OR DETERIORATION, OTHER THAN NORMAL WEATHERING, AT TIME OF ACCEPTANCE.

END OF SECTION 08 41 13

PASS-THRU WINDOWS SECTION 08 56 19

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:

1. AUTOMATIC OPERATED PASS WINDOW UNITS.

B. RELATED SECTIONS:

1. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 REFERENCES

A. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION SPECIFICATIONS

B. AMERICAN SOCIETY MECHANICAL ENGINEERS STANDARDS SPECIFICATIONS

C. ASTM INTERNATIONAL SPECIFICATIONS

D. CONSUMER PRODUCTS SAFETY COMMISSION.

E. DUPONT POWDER COATING TEST METHOD.

F. H.P. WHITE LABORATORY, INC.

G. NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS.

H. SAE INTERNATIONAL.

I. STEEL STRUCTURES PAINTING COUNCIL.

J. UNDERWRITERS LABORATORY.

1.3 PERFORMANCE REQUIREMENTS

A. SYSTEM DESIGN: DESIGN AND SIZE COMPONENTS TO WITHSTAND DEAD LOADS AND LIVE LOADS CAUSED BY PRESSURE AND NEGATIVE WIND LOADS ACTING NORMAL TO PLANE OF WINDOW AS CALCULATED IN ACCORDANCE WITH APPLICABLE CODE.

B. SYSTEM INTERNAL DRAINAGE: DRAIN WATER ENTERING JOINTS, CONDENSATION OCCURRING IN GLAZING CHANNELS, AND MIGRATING MOISTURE OCCURRING WITHIN SYSTEM, TO EXTERIOR BY WEEP DRAINAGE NETWORK.

C. AIR AND VAPOR SEAL: MAINTAIN CONTINUOUS AIR BARRIER AND VAPOR RETARDER THROUGHOUT ASSEMBLY, PRIMARILY IN LINE WITH [INSIDE] PANE OF GLASS AND HEEL BEAD OF GLAZING COMPOUND. [POSITION THERMAL INSULATION ON EXTERIOR SURFACE OF AIR BARRIER AND VAPOR RETARDER.]

D. PROVIDE GLASS AND GLAZING MATERIALS FOR CONTINUITY OF BUILDING ENCLOSURE VAPOR RETARDER AND AIR BARRIER:

1. TO UTILIZE THE INNER PANE OF MULTIPLE PANE SEALED UNITS FOR THE CONTINUITY OF THE AIR BARRIER AND VAPOR RETARDER SEAL.

2.

1.4 SUBMITTALS

E. SHOP DRAWINGS:

1. INDICATE CONFIGURATION, SIZES, ROUGH-IN, MOUNTING, CONSTRUCTION AND GLAZING DETAILS AS WELL AS INSTALLATION CLEARANCES AND FINISHES.

F. PRODUCT DATA:

1. SUBMIT MANUFACTURER'S PRODUCT DATA FOR SPECIFIED PRODUCTS INDICATING MATERIALS, OPERATION CHARACTERISTICS, AND FINISHES.

C. SAMPLES:

1. SUBMIT TWO SAMPLES, 4 X 4 INCHES (100 X 100 MM) IN SIZE ILLUSTRATING METAL FINISHES FOR EACH FINISH SPECIFIED.

D. MANUFACTURER'S INSTALLATION INSTRUCTIONS:

1. SUBMIT INSTALLATION INSTRUCTIONS WITH REQUIREMENTS TO ACCOMMODATE SPECIFIC SITE CONDITIONS.

1.5 QUALITY ASSURANCE

A. PRODUCTS REQUIRING ELECTRICAL CONNECTION: LISTED AND CLASSIFIED BY UL OR TESTING FIRM ACCEPTABLE TO AUTHORITY HAVING JURISDICTION.

1.6 QUALIFICATIONS

A. MANUFACTURER: EASISERV CORPORATION, (604) 422-8611.

B. INSTALLER: COMPANY SPECIALIZING IN INSTALLATION OF WINDOW SYSTEMS SPECIFIED WITH MINIMUM THREE YEARS DOCUMENTED EXPERIENCE.

1.7 DELIVERY, STORAGE, AND PROTECTION

A. ORDERING: TO AVOID CONSTRUCTION DELAYS COMPLY WITH ORDERING INSTRUCTIONS AND LEAD TIME REQUIREMENTS AS SET BY WINDOW SYSTEM MANUFACTURER.

B. PACK WINDOW UNITS AND ACCESSORIES IN MANUFACTURER'S STANDARD SHIPPING CONTAINERS AND PROTECTIVE PACKAGING. DELIVER UNITS IN MANUFACTURER'S ORIGINAL PACKAGING AND UNOPENED CONTAINERS WITH IDENTIFICATION LABELS INTACT.

C. STORE WINDOW UNITS AND ACCESSORIES ON RAISED BLOCKS TO PREVENT MOISTURE DAMAGE PROTECTED FROM EXPOSURE TO WEATHER AND VANDALISM.

1.8 FIELD MEASUREMENTS

A. VERIFY FIELD MEASUREMENTS PRIOR TO FABRICATION AND RECORD ON SHOP DRAWINGS.

1.9 COORDINATION

A. COORDINATE WORK WITH ADJACENT MATERIALS SPECIFIED IN OTHER SECTIONS AND AS INDICATED ON DRAWINGS AND APPROVED SHOP DRAWINGS.

B. COORDINATE INSTALLATION OF ANCHORAGES FOR SECURITY WINDOWS. FURNISH SETTING DRAWINGS, TEMPLATES, AND DIRECTIONS FOR INSTALLING ANCHORAGES, INCLUDING SLEEVES, CONCRETE INSERTS, ANCHOR BOLTS, AND ITEMS WITH INTEGRAL ANCHORS, THAT ARE TO BE EMBEDDED IN CONCRETE OR MASONRY. DELIVER SUCH ITEMS TO PROJECT SITE IN TIME FOR INSTALLATION.

1.10 WARRANTY

A. FURNISH MANUFACTURER'S STANDARD WARRANTY DOCUMENT, EXECUTED BY AN AUTHORIZED QUIKSERV CORP. OFFICER IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE WINDOWS, DRAWERS AND AIR CURTAINS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD. THIS WARRANTY IS IN ADDITION TO, AND NOT A LIMITATION OF OTHER RIGHTS OWNER HAS UNDER THE CONTRACT.

1. WARRANTY PERIOD:

a. ONE YEAR PARTS AND LABOR FROM DATE OF INSTALLATION.

2. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

a. DETERIORATION OF METALS, METAL FINISHES, AND OTHER MATERIALS BEYOND NORMAL WEATHERING AND USE.

b. STRUCTURAL FAILURES INCLUDING DEFLECTIONS EXCEEDING 1/4 INCH.

c. FAILURE OF WELDS.

d. EXCESSIVE AIR LEAKAGE.

e. FAULTY OPERATION OF SLIDING WINDOW HARDWARE.

f. FAULTY OPERATION OF TRANSACTION DRAWERS.

g. FAULTY OPERATION OF AIR CURTAINS.

PART 2 - PRODUCTS

2.1 MATERIALS

A. ALUMINUM EXTRUSIONS: ASTM B221/B221M. PROVIDE ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER FOR STRENGTH, CORROSION RESISTANCE, AND APPLICATION OF REQUIRED FINISH, BUT NOT LESS THAN 22,000-PSI (150-MPA) ULTIMATE TENSILE STRENGTH AND NOT LESS THAN 0.125 INCH (3.2 MM) THICK AT ANY LOCATION FOR MAIN FRAME AND SASH MEMBERS.

B. STEEL PLATES, SHAPES, AND BARS: ASTM A36/A36M.

C. METALLIC-COATED STEEL SHEET:

1. ASTM A653/A653M, CS (COMMERCIAL STEEL), TYPE B; WITH G90 (Z275)ZINC (GALVANIZED) COATING DESIGNATION.

2. AMS5511, STEEL, CORROSION-RESISTANT, SHEET, STRIP, AND PLATE, 19CR - 9.5NI (304L), SOLUTION HEAT TREATED.

3. AMS5513, STEEL, CORROSION-RESISTANT, SHEET, STRIP, AND PLATE 19CR 9.2NI (SAE 30304) SOLUTION HEAT TREATED.

D. STAINLESS STEEL SHEET, STRIP, PLATE, AND FLAT BARS:

1. ASTM A666, AUSTENITIC STAINLESS STEEL, TYPE 304, STRETCHER- LEVELED STANDARD OF FLATNESS.

2. ASME SA-240/SA-240M, CHROMIUM AND CHROMIUM-NICKEL STAINLESS STEEL PLATE, SHEET, AND STRIP FOR GENERAL APPLICATIONS.

E. CONCEALED BOLTS: ASTM A307, GRADE A UNLESS OTHERWISE INDICATED.

F. CAST-IN-PLACE ANCHORS IN CONCRETE: FABRICATED FROM CORROSION-RESISTANT MATERIALS CAPABLE OF SUSTAINING, WITHOUT FAILURE, A LOAD EQUAL TO FOUR TIMES THE LOAD IMPOSED, AS DETERMINED BY TESTING PER ASTM E488, CONDUCTED BY A QUALIFIED TESTING AGENCY.

1. THREADED OR WEDGE TYPE; GALVANIZED FERROUS CASTINGS, EITHER ASTM A27/A27M CAST STEEL OR ASTM A47/A47M MALLEABLE IRON. PROVIDE BOLTS, WASHERS, AND SHIMS AS REQUIRED; HOT-DIP GALVANIZED PER ASTM A153/A153M OR ASTM F2329.

G. EMBEDDED PLATE ANCHORS: FABRICATED FROM STEEL SHAPES AND PLATES, MINIMUM 3/16 INCH (4.8 MM) THICK; WITH MINIMUM 1/2-INCH- (12.7-MM-) DIAMETER, HEADED STUDS WELDED TO BACK OF PLATE.

H. WELDING RODS AND BARE ELECTRODES: SELECT ACCORDING TO AWS SPECIFICATIONS FOR METAL ALLOY WELDED.

I. BITUMINOUS PAINT: COLD-APPLIED, ASPHALT-MASTIC PAINT COMPLYING WITH SSPC-PAINT 12 REQUIREMENTS EXCEPT CONTAINING NO ASBESTOS; FORMULATED FOR 30-MIL (0.76-MM) THICKNESS PER COAT.

J. SEALANTS: FOR SEALANTS REQUIRED WITHIN FABRICATED SECURITY WINDOWS, PROVIDE TYPE RECOMMENDED BY MANUFACTURER FOR JOINT SIZE AND MOVEMENT. SEALANT SHALL REMAIN PERMANENTLY ELASTIC, NONSHRINKING, AND NONMIGRATING.

K. GASKETS: FOR GASKETS REQUIRED WITHIN FABRICATED SECURITY WINDOWS, PROVIDE TYPE RECOMMENDED BY MANUFACTURER FOR JOINT SIZE AND MOVEMENT. GASKETS SHALL REMAIN PERMANENTLY ELASTIC, NONSHRINKING, AND NONMIGRATING.

2.2 WINDOW COMPONENTS

A. GLASS:

1. INSULATED GLASS: 5/8 INCH THICK OVERALL THICKNESS.

B. TRACK/SLIDES: STAINLESS STEEL BALL BEARING SLIDES ALL WINDOWS AND DRAWERS.

C. MISCELLANEOUS GLAZING MATERIALS: PROVIDE MATERIAL, SIZE, AND SHAPE COMPLYING WITH REQUIREMENTS OF GLASS MANUFACTURERS, AND WITH A PROVEN RECORD OF COMPATIBILITY WITH SURFACES CONTACTED IN INSTALLATION:

1. CLEANERS, PRIMERS, AND SEALERS: TYPE RECOMMENDED BY SEALANT OR GASKET MANUFACTURER.

2. SETTING BLOCKS: ELASTOMERIC MATERIAL WITH A TYPE A SHORE DUROMETER HARDNESS OF 85, PLUS OR MINUS 5.

3. SPACERS: ELASTOMERIC BLOCKS OR CONTINUOUS EXTRUSIONS WITH A TYPE A SHORE DUROMETER HARDNESS REQUIRED BY GLASS MANUFACTURER TO MAINTAIN GLASS LITES IN PLACE FOR INSTALLATION INDICATED.

4. EDGE BLOCKS: ELASTOMERIC MATERIAL OF HARDNESS NEEDED TO LIMIT GLASS LATERAL MOVEMENT (SIDE WALKING).

B. FLASHING.

C. WELDING MATERIALS.

D. ANCHORS, CLIPS, AND WINDOW ACCESSORIES: STAINLESS STEEL; HOT-DIP, ZINC-COATED STEEL OR IRON, OF SUFFICIENT STRENGTH TO WITHSTAND DESIGN PRESSURE INDICATED.

2.3 MANUAL PASS, SERVICE AND TELLER WINDOW UNITS

A. MANUFACTURERS:

1. QUICK SERVICE.

B. MODEL PW-54E AUTOMATIC.

C. SERVICE OPENING: 18 1/4 INCHES (W) X 31 1/2 INCHES (H).

D. ROUGH OPENING: 53 7/8 INCHES (W) X 40 3/8 INCHES (H).

E. GLAZING: 1" INSULATED GLASS WITH SOLARBAN 60 LOW-E.

F. FINISH: BRONZE ANODIZED.

2.4 GLAZING

A. INSULATING GLASS:

1. INSULATING GLASS: ASTM E2190 CERTIFIED BY INSULATING GLASS CERTIFICATION COUNCIL AND INSULATING GLASS MANUFACTURERS ALLIANCE; WITH LOW E COATING ON SURFACE 2 AND GLASS ELASTOMER EDGE SEAL; PURGE INTERPANE SPACE WITH DRY AIR; TESTED IN ACCORDANCE WITH ASTM E2188 FOR UNIT PERFORMANCE AND ASTM E2189 FOR RESISTANCE TO FOGGING.

a. INSULATING GLASS UNIT EDGE SEAL CONSTRUCTION: ALUMINUM, BENT AND SPOT WELDED CORNERS.

2.5 SECURITY DEVICE ACCESSORIES

A. SECURITY LOCK BAR: SLIDING ALUMINUM LOCK BAR.

B. HOOK-LOCK: MAXIMUM SECURITY ADAMS RITE STYLE HOOK LOCK ON ALL SLIDERS.

2.7 FABRICATION

A. FABRICATE WINDOW TO DIMENSIONS INDICATED ON DRAWINGS.

B. FABRICATE WINDOWS, DRAWERS AND ACCESSORIES TO PROVIDE A COMPLETE SYSTEM FOR ASSEMBLY OF COMPONENTS AND ANCHORAGE OF WINDOW, DRAWERS AND ACCESSORIES.

1. PROVIDE UNITS THAT ARE REGLAZABLE FROM THE SECURE SIDE WITHOUT DISMANTLING THE NONSECURE SIDE OF FRAMING.

2. PREPARE SECURITY WINDOWS FOR GLAZING UNLESS PREGLAZING AT THE FACTORY IS INDICATED.

C. PROVIDE WEEP HOLES AND INTERNAL WATER PASSAGES FOR EXTERIOR SECURITY WINDOWS TO CONDUCT INFILTRATING WATER TO THE EXTERIOR.

D. RIGIDLY FIT AND SECURE JOINTS AND CORNERS WITH INTERNAL REINFORCEMENT. MAKE JOINTS AND CONNECTIONS FLUSH, HAIRLINE, AND WEATHERPROOF. FULLY WELD CORNERS.

1. FABRICATE FRAMING WITH MANUFACTURER'S STANDARD, INTERNAL OPAQUE ARMORING IN THICKNESSES REQUIRED FOR SECURITY WINDOWS TO COMPLY WITH BALLISTICS-RESISTANCE PERFORMANCE INDICATED.

E. PREPARE COMPONENTS WITH REINFORCEMENT REQUIRED FOR HARDWARE.

F. WELDING: TO GREATEST EXTENT POSSIBLE, WELD BEFORE FINISHING AND IN CONCEALED LOCATIONS TO MINIMIZE DISTORTION OR DISCOLORATION OF FINISH. REMOVE WELD SPATTER AND WELDING OXIDES FROM EXPOSED SURFACES BY DESCALING OR GRINDING.

G. METAL PROTECTION: SEPARATE DISSIMILAR METALS TO PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH PRIMER OR BY APPLYING SEALANT OR TAPE RECOMMENDED BY MANUFACTURER FOR THIS PURPOSE.

H. FACTORY-CUT OPENINGS IN GLAZING FOR SPEAKING APERTURES.

I. PREGLAZED FABRICATION: PREGLAZE WINDOW UNITS AT FACTORY, WHERE REQUIRED FOR APPLICATIONS INDICATED.

J. WEATHER STRIPPING: FACTORY APPLIED.

K. BOTTOM SILLS: STAINLESS STEEL CONSTRUCTION, NO BOTTOM TRACKS AND NO POP RIVETS.

L. HANDLES: STAINLESS STEEL, MANUFACTURER'S STANDARD PROFILE AND FINISH.

2.8 SHOP FINISHING

A. ALUMINIUM FINISHES:

1. BRONZE ANODIZED ALUMINIUM SURFACES: AA-M10C22A31 NON-SPECULAR AS FABRICATED MECHANICAL FINISH, MEDIUM MATTE CHEMICAL FINISH, AND ARCHITECTURAL CLASS II 0.7 MILS (0.018 MM) CLEAR ANODIZED COATING.

a. CONFORM TO AAMA 611

B. CONCEALED STEEL ITEMS: GALVANIZED IN ACCORDANCE WITH ASTM A123 TO THICKNESS GRADE 85, 2.0 OZ/SQ FT (610 GM/SQ M).

C. STAINLESS STEEL: 304 STAINLESS STEEL WITH NAAMM NO. 3 FINISH.

D. APPLY BITUMINOUS PAINT TO CONCEALED METAL SURFACES IN CONTACT WITH CEMENTITIOUS OR DISSIMILAR MATERIALS.

E. TOUCH-UP PRIMER FOR GALVANIZED STEEL SURFACES: SSPC PAINT 20 ZINC RICH.

F. EXTENT OF FINISH:

1. APPLY FACTORY COATING TO ALL SURFACES EXPOSED AT COMPLETED ASSEMBLIES.

2. APPLY FINISH TO SURFACES CUT DURING FABRICATION SO THAT NO NATURAL ALUMINUM IS VISIBLE IN COMPLETED ASSEMBLIES, INCLUDING JOINT EDGES.

3. APPLY TOUCH-UP MATERIALS RECOMMENDED BY COATING MANUFACTURER FOR FIELD APPLICATION TO CUT ENDS AND MINOR DAMAGE TO FACTORY APPLIED FINISH.

PART 3 - EXECUTION

3.1 EXAMINATION

A. VERIFY CONSTRUCTION IS READY TO RECEIVE PRODUCTS SPECIFIED IN THIS SECTION.

B. VERIFY ROUGH OPENINGS ARE CORRECT SIZE AND IN CORRECT LOCATION.

C. EXAMINE ROUGHING-IN FOR EMBEDDED AND BUILT-IN ANCHORS TO VERIFY ACTUAL LOCATIONS OF SECURITY WINDOW CONNECTIONS BEFORE SECURITY WINDOW INSTALLATION.

D. INSPECT BUILT-IN AND CAST-IN ANCHOR INSTALLATIONS, BEFORE INSTALLING SECURITY WINDOWS, TO VERIFY THAT ANCHOR INSTALLATIONS COMPLY WITH REQUIREMENTS. PREPARE INSPECTION REPORTS.

1. REMOVE AND REPLACE ANCHORS WHERE INSPECTIONS INDICATE THAT THEY DO NOT COMPLY WITH SPECIFIED REQUIREMENTS. REINSPECT AFTER REPAIRS OR REPLACEMENTS ARE MADE.

2. PERFORM ADDITIONAL INSPECTIONS TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK. PREPARE ANCHOR INSPECTION REPORTS.

E. FOR GLAZING MATERIALS WHOSE ORIENTATION IS CRITICAL FOR PERFORMANCE, VERIFY INSTALLATION ORIENTATION.

F. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 PREPARATION

A. FURNISH FRAMES AND ANCHORS TO OTHER SECTIONS AS REQUIRED FOR INSTALLATION IN SURROUNDING PARTITION AND CASEWORK CONSTRUCTION.

3.3 INSTALLATION

A. INSTALL PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

B. ALIGN PRODUCTS PLUMB, LEVEL AND SQUARE.

C. RIGIDLY SECURE PRODUCTS TO ADJACENT SUPPORTING CONSTRUCTION.

D. GLAZE WINDOWS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

E. SEAL PERIMETER JOINTS.

F. CONNECT ELECTRICAL COMPONENTS TO POWER SOURCE.

G. PROTECTION: WHERE DISSIMILAR METALS WILL CONTACT EACH OTHER, PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH PRIMER OR BY APPLYING SEALANT OR TAPE RECOMMENDED IN WRITING BY MANUFACTURER FOR THIS PURPOSE. WHERE ALUMINUM WILL CONTACT CONCRETE OR MASONRY, PROTECT AGAINST CORROSION BY PAINTING CONTACT SURFACES WITH BITUMINOUS PAINT.

3.4 ADJUSTING

A. ADJUST HORIZONTAL-SLIDING, TRANSACTION SECURITY WINDOWS TO PROVIDE A TIGHT FIT AT CONTACT POINTS FOR SMOOTH OPERATION AND A SECURE ENCLOSURE.

B. ADJUST TRANSACTION DRAWERS TO PROVIDE A TIGHT FIT AT CONTACT POINTS FOR SMOOTH OPERATION AND [WEATHERTIGHT AND] SECURE ENCLOSURE.

C. REMOVE AND REPLACE DEFECTIVE WORK, INCLUDING SECURITY WINDOWS THAT ARE WARPED, BOWED, OR OTHERWISE UNACCEPTABLE.

3.5 CLEANING AND PROTECTION

A. SECTION 01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS {01700 - EXECUTION REQUIREMENTS}: REQUIREMENTS FOR CLEANING.

B. REMOVE PROTECTIVE MATERIAL FROM FACTORY FINISHED SURFACES.

C. WASH SURFACES BY METHOD RECOMMENDED AND ACCEPTABLE TO SEALANT AND WINDOW MANUFACTURER; RINSE AND WIPE SURFACES CLEAN.

D. REMOVE EXCESS SEALANT BY MODERATE USE OF MINERAL SPIRITS OR OTHER SOLVENT ACCEPTABLE TO SEALANT AND WINDOW MANUFACTURER.

C. CLEAN METAL AND GLASS SURFACES TO POLISHED CONDITION.

1. LUBRICATE SLIDING SECURITY WINDOW HARDWARE.

2. LUBRICATE TRANSACTION DRAWER HARDWARE.

F. PROVIDE TEMPORARY PROTECTION TO ENSURE THAT SECURITY WINDOWS ARE WITHOUT DAMAGE AT TIME OF SUBSTANTIAL COMPLETION.

END OF SECTION 08 56 19

DOOR HARDWARE SECTION 08 70 00

PART 1 - GENERAL

1.1 SUMMARY

A. DEFINITION: "FINISH HARDWARE" INCLUDES ITEMS KNOWN COMMERCIALLY AS FINISH HARDWARE WHICH ARE REQUIRED FOR SWING, SLIDING AND FOLDING DOORS, EXCEPT SPECIAL TYPES OF UNIQUE AND NON-MATCHING HARDWARE SPECIFIED IN THE SAME SECTION AS THE DOOR AND DOOR FRAME.

B. PROVIDE LABOR, MATERIALS, TRANSPORTATION, SERVICES AND APPLIANCES NECESSARY TO COMPLETE THE FOLLOWING WORK:

1. FINISH DOOR HARDWARE INSTALLATION INCLUDING NECESSARY SCREWS, BOLTS, SPECIAL FASTENERS, EXPANSION SHIELD AND OTHER DEVICES NECESSARY AND REQUIRED FOR PROPER HARD WARE APPLICATION AND USE.

2. FURNISH AND INSTALL CYLINDERS AND LATCHES AT EXTERIOR STOREFRONT ENTRANCE AS INDICATED. COORDINATING KEYING WITH OTHER LOCKSETS.

3. PROVIDE TEMPORARY LOCKSETS AT EXTERIOR DOORS DURING CONSTRUCTION.

4. IF ITEMS OF HARDWARE ARE NOT DEFINITELY SPECIFIED BUT REQUIRED FOR COMPLETION OF THE WORK, FURNISH ITEMS OF TYPE OF QUALITY SUITABLE TO THE SERVICE AND FUNCTION REQUIRED AND COMPARABLE TO ADJACENT HARDWARE.

1.2 INTENT

A. THIS SPECIFICATION CONTEMPLATES PROVIDING PROPER HARDWARE, IN ACCORD WITH APPLICABLE CODES FOR ALL DOORS AS LISTED. FINISH HARDWARE CONTRACTOR'S RESPONSIBILITY IS TO EXAMINE PLANS AND SPECIFICATIONS AND CALL CONFLICTS, OMISSIONS OR OBVIOUS REQUIREMENTS NOT LISTED TO THE ATTENTION OF THE GENERAL CONTRACTOR OR ARCHITECT FOR INSTRUCTIONS.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

TANNER EDWARDS KIND
15704
Tanner Kind

9.14.2023

Company Logo

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Project

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ARCHITECTURAL
SPECIFICATIONS

Drawn	Checked
SH	AL
Scale	**Date**
	JUNE 2023
Project No.	**Drawing No.**
C22-129	SP5

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

(CONTINUED FROM PREVIOUS SHEET)

1.3 QUALITY ASSURANCE

A. ALL HARDWARE SHALL MEET ALL STATE AND LOCAL CODES, AND COMPLY WITH AMERICANS WITH DISABILITIES ACT (ADA), SECTION 4.13, DOORS.

1.4 SUBMITTALS

A. SUPPLIERS SHALL SUBMIT FOR APPROVAL SIX (6) COPIES OF A PROPOSED HARDWARE SCHEDULE LISTING COMPLETE ARCHITECTURAL FINISH HARDWARE DERIVED FROM THE DRAWINGS AND THESE SPECIFICATIONS.

1.5 PRODUCT HANDLING

A. SUPPLIER IS RESPONSIBLE FOR DELIVERY OF PROPER ITEMS TO PROPER INSTALLER, WITH TAG ATTACHED IDENTIFYING: CATALOG NUMBER, SPECIFIC LOCATION, AND MANUFACTURER.

1.6 WARRANTY

A. THIS CONTRACTOR SHALL WARRANT AND GUARANTEE ALL MATERIALS FOR WHICH HE IS RESPONSIBLE UNDER THIS SECTION THAT ALL MATERIALS WILL BE FREE FROM DEFECTS OF MATERIAL, WORKMANSHIP AND FUNCTION FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE. THIS CONTRACTOR FURTHER AGREES THAT HE WILL AT HIS OWN EXPENSE REPLACE ANY DEFECTIVE ITEMS AND DAMAGED ARTICLES RESULTING FROM SUCH DEFECTIVE MATERIALS. THIS CONTRACTOR MUST NOTIFY THE GENERAL CONTRACTOR IN WRITING IF ANY OF THE MATERIALS AND/OR ITEMS HE HAS SUPPLIED HAVE BEEN DAMAGED BY OTHER TRADES ON THE PROJECT.

PART 2 - PRODUCTS

2.1 MATERIALS AND FABRICATION

A. HARDWARE SUPPLIER SHALL FURNISH PAPER TEMPLATES WITH COPIES OF APPROVED HARDWARE SCHEDULE TO INSTALLER.

B. MISCELLANEOUS ITEMS: FURNISH HARDWARE WITH ALL INCIDENTAL ITEMS, I.E. SCREWS, BOLTS, EXPANSION SLEEVES, OR SHIELDS, ANCHORS, AND OTHER FASTENERS, AS RECOMMENDED BY MANUFACTURER TO INSURE HEAVY USAGE AND LONG LIFE.

C. INSTRUCTIONS: FULL MANUFACTURER'S PRINTED INSTRUCTIONS AND SPECIAL INFORMATION NEEDED FOR THE PROPER INSTALLATION AND ADJUSTMENT OF HARDWARE AND ANY ASSISTANCE NECESSARY TO MAKE HARDWARE FUNCTION AS INTENDED SHALL BE PROVIDED BY THE SUPPLIER TO INSURE PROPER OPERATION.

2.2 MANUFACTURERS

A. SUBJECT TO CODE COMPLIANCE AND THESE SPECIFICATIONS, PROVIDE HARDWARE BY MANUFACTURERS SCHEDULED ON DRAWINGS.

2.3 HINGES, BUTTS AND PIVOTS

A. SCREWS: FURNISH PHILLIPS FLAT-HEAD OR MACHINE SCREWS FOR INSTALLATION OF UNITS, EXCEPT FURNISH PHILLIPS FLAT-HEAD WOOD SCREWS FOR INSTALLATION INTO WOODS. FINISH SCREW HEADS TO MATCH SURFACE OF HINGES OR PIVOTS.

B. HINGE PINS: EXCEPT AS OTHERWISE INDICATED, PROVIDE HINGE PINS AS FOLLOWS:

1. HINGES: FIVE-KNUCKLE.
2. EXTERIOR DOORS: NON-REMOVABLE PINS.
3. NUMBER OF HINGES: PROVIDE NUMBER OF HINGES INDICATED BUT NOT LESS THAN 3 FOR DOOR LEAF 90" OR LESS IN HEIGHT AND ONE ADDITIONAL HINGE FOR EACH 30" OF ADDITIONAL HEIGHT.

2.4 LOCK CYLINDERS AND KEYING

A. GENERAL: SUPPLIER WILL MEET WITH OWNER TO FINALIZE KEYING AND OBTAIN FINAL INSTRUCTIONS IN WRITING.

B. ALL LOCKABLE DOORS TO RECEIVE INTERCHANGEABLE CORES KEYED TO OWNERS EXISTING SYSTEM.

C. KEYING: PROVIDE A MASTER-KEYED SYSTEM WITH KEYING ARRANGEMENTS AS SCHEDULED. PROVIDE THREE (3) MASTER KEYS AND THREE (3) KEYS PER LOCK CLEARLY LABELED WITH LOCATION OF LOCKSET THEY OPERATE.

2.5 SOUND STRIPPING

A. PROVIDE SOUND STRIPPING AT ALL TOILET AND MECHANICAL ROOM DOORS.

2.6 MISCELLANEOUS PROVISIONS

A. SILENCERS: PROVIDE THREE (3) SILENCERS PER DOOR UNLESS OTHERWISE SPECIFIED.

B. PROVIDE ONE PAIR OF FLUSH BOLTS AT INACTIVE LEAF OF ALL DOUBLE DOORS.

C. PROVIDE A WALL STOP AT EACH DOOR UNLESS A FLOOR STOP IS REQUIRED OR OTHERWISE SPECIFIED.

D. NO STICK-ON ADHERED WEATHERSTRIPPING WILL BE ACCEPTED.

2.7 HARDWARE SCHEDULE - REFER TO SCHEDULE ON DRAWINGS.

PART 3 - EXECUTION

3.1 INSTALLATION

A. MOUNT HARDWARE UNITS AT HEIGHTS INDICATED IN "RECOMMENDED LOCATIONS FOR BUILDERS HARDWARE FOR STANDARD STEEL DOORS AND FRAMES" BY THE DOOR AND HARDWARE INSTITUTE, EXCEPT AS SPECIFICALLY INDICATED OR REQUIRED TO COMPLY WITH GOVERNING REGULATIONS, AND AS MAY BE OTHERWISE DIRECTED BY ARCHITECT.

B. INSTALL EACH HARDWARE ITEM IN COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTION AND RECOMMENDATIONS USING FULLY EXPERIENCED AND QUALIFIED PERSONNEL. WHEREVER CUTTING AND FITTING IS REQUIRED TO INSTALL HARDWARE ONTO OR INTO SURFACES WHICH ARE LATER TO BE PAINTED OR FINISHED IN ANOTHER WAY, COORDINATE REMOVAL, STORAGE AND REINSTALLATION OR APPLICATION OF SURFACE PROTECTION WITH FINISHING WORK SPECIFIED IN DIVISION 9 SECTIONS. DO NOT INSTALL SURFACE-MOUNTED ITEMS UNTIL FINISHES HAVE BEEN COMPLETED ON THE SUBSTRATE.

C. COORDINATE WITH DOOR AND FRAME SUPPLIERS TO OBTAIN DOORFRAME HARDWARE INSTALLATIONS WHICH ARE LISTED BY APPROVED TESTING AGENCY.

D. SET UNITS LEVEL, PLUMB AND TRUE TO LINE LOCATION. ADJUST AND REINFORCE THE ATTACHMENT SUBSTRATE NECESSARY FOR PROPER INSTALLATION AND OPERATION.

E. ALL SURFACE MOUNTED CLOSER TO BE MOUNTED ON THE ROOM SIDE OF DOORS IN ALL CORRIDORS, LOBBIES AND OTHER PUBLIC SPACES.

1. PROVIDE ARCHITECTURAL BINDING (SEX) BOLTS FOR MOUNTING.

3.2 ADJUST AND CLEAN

A. ADJUST AND CHECK EACH OPERATING ITEM OF HARDWARE AND EACH DOOR, TO ENSURE PROPER OPERATION OF FUNCTION OF EVERY UNIT. REPLACE UNITS THAT CANNOT BE ADJUSTED TO OPERATE FREELY AND SMOOTHLY AS DETERMINED BY THE ARCHITECT.

1. UPON COMPLETION, DOOR SHALL LATCH WITHOUT FORCING AND CLOSE LATCH UNDER THE FORCE OF THE CLOSER.
2. PROVIDE DOOR CONTROL EQUIPMENT AS REQUIRED. MOUNT EQUIPMENT SO AS TO PERMIT MAXIMUM DOOR OPENING, BUT TO PREVENT CONTACT OF THE DOOR WITH BUILDING CONSTRUCTION AND EQUIPMENT.

B. REMOVE ALL HARDWARE FROM DOORS PRIOR TO PAINTING.

C. CLEAN ADJACENT SURFACES SOILED BY HARDWARE INSTALLATION.

D. FINAL ADJUSTMENT: WHEREVER HARDWARE INSTALLATION IS MADE MORE THAN ONE MONTH PRIOR TO ACCEPTANCE OR OCCUPANCY OF A SPACE OR AREA, RETURN TO THE WORK DURING THE WEEK PRIOR TO ACCEPTANCE OR OCCUPANCY, AND MAKE FINAL CHECK AND ADJUSTMENT OF ALL HARDWARE ITEMS IN SUCH SPACE OR AREA. CLEAN OPERATING ITEMS AS NECESSARY TO RESTORE FUNCTION AND FINISH OF HARDWARE AND DOORS. ADJUST DOOR DEVICES TO COMPENSATE FOR FINAL OPERATION OF HEATING AND VENTILATING EQUIPMENT.

E. INSTRUCT OWNER'S PERSONNEL IN PROPER ADJUSTMENT AND MAINTENANCE OF HARDWARE AND HARDWARE FINISHES, DURING THE FINAL ADJUSTMENTS.

F. PROVIDE TO THE OWNER SIX (6) DOOR ADJUSTMENT TOOLS AT THE PROJECT CLOSE-OUT.

END OF SECTION 08 70 00

GLAZING SECTION 08 80 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 DEFINITIONS

A. MANUFACTURER IS USED IN THIS SECTION TO REFER TO A FIRM THAT PRODUCES PRIMARY GLASS OR FABRICATED GLASS AS DEFINED IN THE REFERENCED GLAZING STANDARD.

B. DETERIORATION OF INSULATING GLASS: FAILURE OF THE HERMETIC SEAL UNDER NORMAL USE DUE TO CAUSES OTHER THAN GLASS BREAKAGE AND IMPROPER PRACTICES FOR MAINTAINING, AND CLEANING INSULATING GLASS. EVIDENCE OF FAILURE IS THE OBSTRUCTION OF VISION BY DUST, MOISTURE, OR FILM ON THE INTERIOR SURFACES OF GLASS. IMPROPER PRACTICES FOR MAINTAINING AND CLEANING GLASS DO NOT COMPLY WITH THE MANUFACTURER'S DIRECTIONS.

1.3 SYSTEM PERFORMANCE REQUIREMENTS

A. GENERAL: PROVIDE GLAZING SYSTEMS THAT ARE PRODUCED, FABRICATED, AND INSTALLED TO WITHSTAND NORMAL THERMAL MOVEMENT, WIND LOADING, AND IMPACT LOADING (WHERE APPLICABLE), WITHOUT FAILURE INCLUDING LOSS OR GLASS BREAKAGE ATTRIBUTABLE TO THE FOLLOWING: DEFECTIVE MANUFACTURE, FABRICATION, AND INSTALLATION; FAILURE OF SEALANTS OR GASKETS TO REMAIN WATERTIGHT AND AIRTIGHT; DETERIORATION OF GLAZING MATERIALS: AND OTHER DEFECTS IN CONSTRUCTION.

B. GLASS DESIGN: GLASS THICKNESSES INDICATED ON DRAWINGS ARE FOR DETAILING ONLY. CONFIRM GLASS THICKNESSES BY ANALYZING PROJECT LOADS AND IN-SERVICE CONDITIONS. PROVIDE GLASS LITES FOR THE VARIOUS SIZE OPENINGS IN THE THICKNESSES AND STRENGTHS (ANNEALED OR HEAT-TREATED) TO MEET OR EXCEED THE FOLLOWING CRITERIA:

1. MINIMUM GLASS THICKNESS, NOMINALLY, OF LITES IN EXTERIOR WALLS IS 6.0 MM (0.23 INCH).
2. MINIMUM GLASS THICKNESSES OF LITES WHETHER COMPOSED OF ANNEALED OR HEAT-TREATED GLASS, ARE SELECTED SO THE WORST-CASE PROBABILITY OF FAILURE DOES NOT EXCEED THE FOLLOWING: 8 LITES PER 1000 FOR LITES SET VERTICALLY OR NOT OVER 15 DEGREES OFF VERTICAL AND UNDER WIND ACTION. DETERMINE MINIMUM THICKNESS OF MONOLITHIC ANNEALED GLASS ACCORDING TO ASTM E 1300. FOR OTHER THAN MONOLITHIC ANNEALED GLASS, DETERMINE THICKNESS PER GLASS MANUFACTURER'S STANDARD METHOD OF ANALYSIS INCLUDING APPLYING ADJUSTMENT FACTORS TO ASTM E 1300 BASED ON TYPE OF GLASS.
3. NORMAL THERMAL MOVEMENTS RESULTS FROM AMBIENT AND SURFACE TEMPERATURES CHANGES ACTING ON GLASS-FRAMING MEMBERS AND GLAZING COMPONENTS. BASE ENGINEERING CALCULATION ON MATERIALS' ACTUAL SURFACE TEMPERATURES DUE TO BOTH SOLAR HEAT GAIN AND NIGHTTIME SKY HEAT LOSS.
   a. TEMPERATURE CHANGE: 120 DEG F (67 DEG C), AMBIENT; 180 DEG F (100 DEG C), MATERIAL SURFACES.

1.4 QUALITY ASSURANCE

A. GLAZING PUBLICATIONS: COMPLY WITH PUBLISHED RECOMMENDATIONS OF GLASS PRODUCT MANUFACTURERS AND ORGANIZATIONS BELOW, EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE INDICATED. REFER TO THESE PUBLICATIONS FOR GLAZING TERMS NOT OTHERWISE DEFINED IN THIS SECTION OR IN REFERENCED STANDARDS.

1. FGMA PUBLICATIONS: "FGMA GLAZING MANUAL."
2. SIGMA PUBLICATIONS: TM-3000 "VERTICAL GLAZING GUIDELINES" AND TB-3001 "SLOPED GLAZING GUIDELINES." (IF APPLICABLE)

B. SAFETY GLASS: PRODUCTS COMPLYING WITH ANSI Z97.1 AND TESTING REQUIREMENTS OF 16 CFR PART 1201 FOR CATEGORY II MATERIALS.

C. FIRE-RESISTIVE GLAZING PRODUCTS FOR DOOR AND INTERIOR WINDOW ASSEMBLIES: PRODUCTS IDENTICAL TO THOSE TESTED PER ASTM E 152, LABELED AND LISTED BY UL OR ANOTHER TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

D. FIRE-RESISTIVE GLAZING PRODUCTS FOR WINDOW ASSEMBLIES: PRODUCTS IDENTICAL TO THOSE TESTED PER ASTM E 163, LABELED AND LISTED BY UL OR ANOTHER TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

E. INSULATING GLASS CERTIFICATION PROGRAM: PROVIDE INSULATING GLASS UNITS PERMANENTLY MARKED EITHER ON SPACERS OR AT LEAST ONE COMPONENT LIFE OF UNITS WITH APPROPRIATE CERTIFICATION LABEL OF THE INSULATING GLASS CERTIFICATION COUNCIL (IGCC).

F. GLAZIER QUALIFICATIONS: ENGAGE AN EXPERIENCED GLAZIER WHO HAS COMPLETED GLAZING SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR PROJECT WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.

G. SINGLE-SOURCE RESPONSIBILITY FOR GLASS: OBTAIN GLASS FROM ONE SOURCE FOR EACH PRODUCT INDICATED BELOW:

1. PRIMARY GLASS OF EACH (ASTM C 1036) TYPE AND CLASS INDICATED.
2. HEAT-TREATED GLASS OF EACH (ASTM C 1048) CONDITION INDICATED.
3. INSULATING GLASS OF EACH CONSTRUCTION INDICATED.

H. SINGLE-SOURCE RESPONSIBILITY FOR GLAZING ACCESSORIES: OBTAIN GLAZING ACCESSORIES FROM ONE SOURCE FOR EACH PRODUCT AND INSTALLATION METHOD INDICATED.

1.5 DELIVERY, STORAGE AND HANDLING

A. PROTECT GLAZING MATERIALS TO COMPLY WITH MANUFACTURER'S DIRECTIONS AND AS NEEDED TO PREVENT DAMAGE TO GLASS AND GLAZING MATERIALS FROM CONDENSATION, TEMPERATURE CHANGES, DIRECT EXPOSURE TO SUN OR OTHER CAUSES.

1.6 PROJECT CONDITIONS

A. ENVIRONMENTAL CONDITIONS: DO NOT PROCEED WITH GLAZING WHEN AMBIENT AND SUBSTRATE TEMPERATURE CONDITIONS ARE OUTSIDE THE LIMITS PERMITTED BY GLAZING MATERIALS MANUFACTURER OR WHEN GLAZING CHANNEL SUBSTRATES ARE WET FROM RAIN, FROST, CONDENSATION, OR OTHER CAUSES.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS FROM ONE OF THE FOLLOWING: PPG, OR OLDCASTLE.

2.2 INSULATING GLASS PRODUCTS - GENERAL

A. SEALED INSULATING GLASS UNITS: PREASSEMBLED UNITS CONSISTING OF ORGANICALLY SEALED LITES OF GLASS SEPARATED BY DEHYDRATED AIR SPACES COMPLYING WITH ASTM E 774 AND WITH OTHER REQUIREMENTS INDICATED.

1. FOR PROPERTIES OF INDIVIDUAL GLASS LITES MAKING UP UNITS, REFER TO REQUIREMENTS SPECIFIED ELSEWHERE IN THIS SECTION APPLICABLE TO TYPES, CLASSES, KINDS, AND CONDITIONS OF GLASS PRODUCTS COMPRISING LITES OF INSULATING GLASS UNITS.
2. PROVIDE HEAT-TREATED, COATED FLOAT GLASS OF KIND FT (FULLY TEMPERED).
3. SAFETY GLAZING LABELING: WHERE SAFETY GLAZING IS INDICATED, PERMANENTLY MARK GLAZING WITH CERTIFICATION LABEL. LABEL SHALL INDICATE MANUFACTURER'S NAME, TYPE OF GLASS, THICKNESS AND SAFETY GLAZING STANDARD WITH WHICH GLASS COMPLIES.
4. U-VALUES ARE EXPRESSED AS BTU/HOUR X SQ. FT. X DEG F.
5. INSULATING-GLASS CERTIFICATION PROGRAM: PERMANENTLY MARKED ON SPACERS WITH CERTIFICATION LABEL OF IGCC.

2.3 1-INCH, CLEAR, INSULATED GLASS: GL-1

A. CLASSIFICATION OF UNITS: CLASS C, B, A PER ASTM E 774 (WITHDRAWN).

B. AIR SPACE WIDTH: NOMINAL 1/2 INCH MEASURED PERPENDICULARLY FROM SURFACES OF GLASS LITES AT UNIT'S EDGE.

C. GAS FILLING: AIR.

D. SEALING SYSTEM: DUAL SEAL, PRIMARY AND SECONDARY SEALANTS: MANUFACTURER'S STANDARD SEALANTS.

E. SPACER SPECIFICATIONS: ALUMINUM WITH MILL OR CLEAR-ANODIZED FINISH.

F. DESSICANT: EITHER MOLECULAR SIEVE OR SILICA GEL OR BLEND OF BOTH.

G. CORNER CONSTRUCTION: MANUFACTURER'S STANDARD CORNER CONSTRUCTION.

H. THICKNESS OF EACH LITE: 6.0 MM (0.23 INCH).

I. INDOOR LITE: CLEAR.

1. KIND: ANNEALED FLOAT GLASS: ASTM C 1036, TYPE 1, CLASS 1 (CLEAR), QUALITY-Q3.

J. OUTDOOR LITE: CLEAR WITH "SOLARBAN 60" LOW-E PYROLYTIC COATED ON SURFACE 2, BY PPG INDUSTRIES, INC.

1. KIND: ANNEALED FLOAT GLASS: ASTM C 1036, COATED, TYPE 1, CLASS 2, QUALITY-Q3.

K. AVAILABLE MANUFACTURER(S):

1. OLDCASTLE GLASS.
2. PPG INDUSTRIES, INC.

2.4 1-INCH, CLEAR, INSULATED, TEMPERED GLASS: GL-2

A. CLASSIFICATION OF UNITS: CLASS C, B, A PER ASTM E 774 (WITHDRAWN).

B. AIR SPACE WIDTH: NOMINAL 1/2 INCH MEASURED PERPENDICULARLY FROM SURFACES OF GLASS LITES AT UNIT'S EDGE.

C. GAS FILLING: AIR.

D. SEALING SYSTEM: DUAL SEAL, PRIMARY AND SECONDARY SEALANTS: MANUFACTURER'S STANDARD SEALANTS.

E. SPACER SPECIFICATIONS: ALUMINUM WITH MILL OR CLEAR-ANODIZED FINISH.

F. DESSICANT: EITHER MOLECULAR SIEVE OR SILICA GEL OR BLEND OF BOTH.

G. CORNER CONSTRUCTION: MANUFACTURER'S STANDARD CORNER CONSTRUCTION.

H. THICKNESS OF EACH LITE: 6.0 MM (0.23 INCH).

I. INDOOR LITE: CLEAR.

1. KIND: FULLY TEMPERED FLOAT GLASS: ASTM C 1048, KIND FT (FULLY TEMPERED), TYPE 1, CLASS 1 (CLEAR), QUALITY-Q3.

J. OUTDOOR LITE: CLEAR WITH "SOLARBAN 60" LOW-E PYROLYTIC COATED ON SURFACE 2, BY PPG INDUSTRIES, INC.

1. KIND: FULLY TEMPERED FLOAT GLASS: ASTM C 1048, KIND FT (FULLY TEMPERED), COATED, TYPE 1, CLASS 2, QUALITY-Q3.

K. AVAILABLE MANUFACTURER(S):

1. OLDCASTLE GLASS.
2. PPG INDUSTRIES, INC.

2.5 1/4-INCH, CLEAR GLASS: GL-3

A. CLASS: CLASS 1.

B. AVAILABLE MANUFACTURERS:

1. OLDCASTLE GLASS.
2. PPG INDUSTRIES, INC.

2.6 1/4-INCH, CLEAR, TEMPERED GLASS: GL-4

A. CLASS: CLASS 1, FULLY TEMPERED.

B. AVAILABLE MANUFACTURERS:

1. OLDCASTLE GLASS.
2. PPG INDUSTRIES, INC.

2.7 ELASTOMERIC GLAZING SEALANTS

A. GENERAL: PROVIDE PRODUCTS OF TYPE INDICATED, COMPLYING WITH THE FOLLOWING REQUIREMENTS:

1. COMPATIBILITY: SELECT GLAZING SEALANTS AND TAPES OF PROVEN COMPATIBILITY WITH OTHER MATERIALS THEY WILL CONTACT, INCLUDING GLASS PRODUCTS, SEALS OF INSULATING GLASS UNITS, AND GLAZING CHANNEL SUBSTRATES, UNDER CONDITIONS OF INSTALLATION AND SERVICE, AS DEMONSTRATED BY TESTING AND FIELD EXPERIENCE.
2. SUITABILITY: COMPLY WITH SEALANT AND GLASS MANUFACTURER'S RECOMMENDATIONS FOR SELECTING GLAZING SEALANTS AND TAPES THAT ARE SUITABLE FOR APPLICATIONS INDICATED AND CONDITIONS EXISTING AT TIME OF INSTALLATION.
3. PROVIDE COLOR OF EXPOSED JOINT SEALANTS TO COMPLY WITH THE FOLLOWING: PROVIDE SELECTIONS MADE BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF STANDARD COLORS FOR PRODUCTS OF TYPE INDICATED.

B. MANUFACTURERS: PROVIDE PRODUCTS FROM ONE OF THE FOLLOWING: SPECTRUM BY TREMCO OR 790 BUILDING SEALANT BY DOW CORNING, INC.

C. ELASTOMERIC GLAZING SEALANT STANDARD: PROVIDE MANUFACTURER'S STANDARD CHEMICALLY CURING, ELASTOMERIC SEALANTS OF BASE POLYMER INDICATED THAT COMPLY WITH ASTM C 920 REQUIREMENTS INDICATED ON EACH ELASTOMERIC GLAZING SEALANT PRODUCT DATA SHEET AT THE END OF THIS SECTION, INCLUDING THOSE REFERENCING ASTM CLASSIFICATIONS FOR TYPE, GRADE, CLASS AND USES.

1. ADDITIONAL MOVEMENT CAPABILITY: WHERE ADDITIONAL MOVEMENT CAPABILITY IS SPECIFIED IN ELASTOMERIC GLAZING SEALANT PRODUCT DATA SHEET, PROVIDE PRODUCTS, WHEN TESTED FOR ADHESION AND COHESION UNDER MAXIMUM CYCLIC MOVEMENT PER ASTM C 719, WITH THE CAPABILITY TO WITHSTAND THE SPECIFIED PERCENTAGE CHANGE IN THE JOINT WIDTH EXISTING AT TIME OF INSTALLATION AND REMAIN IN COMPLIANCE WITH OTHER REQUIREMENTS OF ASTM C 920 FOR USES INDICATED.

D. GLAZING SEALANT FOR FIRE-RESISTANT GLAZING PRODUCTS: IDENTICAL TO PRODUCT USED IN TEST ASSEMBLY TO OBTAIN FIRE-RESISTIVE RATING.

2.8 GLAZING TAPES

A. EXPANDED CELLULAR GLAZING TAPE: CLOSED-CELL, POLYVINYL CHLORIDE FOAM TAPE, FACTORY COATED WITH ADHESIVE ON BOTH SURFACES, PACKAGED ON ROLLS WITH RELEASE LINER PROTECTING ADHESIVE, AND COMPLYING WITH AAMA 800 FOR PRODUCT 810.5.

B. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS AS FOLLOWS: NORSEAL V-980 CLOSED-CELL GLAZING TAPE, NORTON COMPANY.

2.9 MISCELLANEOUS GLAZING MATERIALS

A. GENERAL: PROVIDE PRODUCTS OF MATERIAL, SIZE, AND SHAPE COMPLYING WITH REFERENCED GLAZING STANDARD, REQUIREMENTS OF MANUFACTURERS OF GLASS AND OTHER GLAZING MATERIALS INVOLVED FOR GLAZING APPLICATION INDICATED, AND WITH A PROVEN RECORD OF COMPATIBILITY WITH SURFACES CONTACTED IN INSTALLATION.

B. CLEANERS, PRIMERS AND SEALERS: TYPE RECOMMENDED BY SEALANT OR GASKET MANUFACTURER.

C. SETTING BLOCKS: ELASTOMERIC MATERIAL WITH A SHORE A DUROMETER HARDNESS OF 85 PLUS OR MINUS 5.

D. SPACERS: ELASTOMERIC BLOCKS OR CONTINUOUS EXTRUSIONS WITH A SHORE A DUROMETER HARDNESS REQUIRED BY GLASS MANUFACTURER TO MAINTAIN GLASS LITES IN PLACE FOR INSTALLATION INDICATED.

E. EDGE BLOCKS: ELASTOMERIC MATERIAL OF HARDNESS NEEDED TO LIMIT GLASS LATERAL MOVEMENT (SIDE-WALKING).

F. PERIMETER INSULATION FOR FIRE-RESISTIVE GLAZING: IDENTICAL TO PRODUCT USED IN TEST ASSEMBLY TO OBTAIN FIRE-RESISTIVE RATING.

2.10 FABRICATION OF GLASS AND OTHER GLAZING PRODUCTS

A. FABRICATE GLASS AND OTHER GLAZING PRODUCTS IN SIZES REQUIRED TO GLAZE OPENINGS INDICATED FOR PROJECT, WITH EDGE AND FACE CLEARANCES, EDGE AND SURFACE CONDITIONS, AND BITE COMPLYING WITH RECOMMENDATIONS OF PRODUCT MANUFACTURER AND REFERENCED GLAZING STANDARD AS REQUIRED TO COMPLY WITH SYSTEM PERFORMANCE REQUIREMENTS.

B. CLEAN CUT OR FLAT GRIND VERTICAL EDGES OF BUTT-GLAZED MONOLITHIC LITES IN A MANNER THAT PRODUCES SQUARE EDGES WITH SLIGHT KERFS AT JUNCTIONS WITH INDOOR AND OUTDOOR FACES.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE GLASS FRAMING, WITH GLAZIER PRESENT, FOR COMPLIANCE WITH THE FOLLOWING:

1. MANUFACTURING AND INSTALLATION TOLERANCES, INCLUDING THOSE FOR SIZE, SQUARENESS, OFFSETS AT CORNERS.
2. PRESENCE AND FUNCTIONING OF WEEP SYSTEM.
3. MINIMUM REQUIRED FACE OR EDGE CLEARANCES.
4. EFFECTIVE SEALING BETWEEN JOINTS OF GLASS-FRAMING MEMBERS.

B. DO NOT PROCEED WITH GLAZING UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 PREPARATION

A. CLEAN GLAZING CHANNELS AND OTHER FRAMING MEMBERS RECEIVING GLASS IMMEDIATELY BEFORE GLAZING. REMOVE COATINGS THAT ARE NOT FIRMLY BONDED TO SUBSTRATES.

3.3 GLAZING, GENERAL

A. COMPLY WITH COMBINED RECOMMENDATIONS OF MANUFACTURERS OF GLASS, SEALANTS, GASKETS, AND OTHER GLAZING MATERIALS, EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE INDICATED, INCLUDING THOSE IN REFERENCED GLAZING PUBLICATIONS.

B. GLAZING CHANNEL DIMENSIONS AS INDICATED ON DRAWINGS PROVIDE NECESSARY BITE ON GLASS, MINIMUM EDGE AND FACE CLEARANCES, AND ADEQUATE SEALANT THICKNESSES, WITH REASONABLE TOLERANCES. ADJUST AS REQUIRED BY PROJECT CONDITIONS DURING INSTALLATION.

C. PROTECT GLASS FROM EDGE DAMAGE DURING HANDLING AND INSTALLATION AS FOLLOWS:

1. USE A ROLLING BLOCK IN ROTATING GLASS UNITS TO PREVENT DAMAGE TO GLASS CORNERS. DO NOT IMPACT GLASS WITH METAL FRAMING. USE SUCTION CUPS TO SHIFT GLASS UNITS WITHIN OPENINGS; DO NOT RAISE OR DRIFT GLASS WITH A PRY BAR. ROTATE GLASS LITES WITH FLARES OR BEVELS ON BOTTOM HORIZONTAL EDGES SO EDGES ARE LOCATED AT TOP OF OPENING, UNLESS OTHERWISE INDICATED BY MANUFACTURER'S LABEL.
2. REMOVE DAMAGED GLASS FROM PROJECT SITE AND LEGALLY DISPOSE OF OFF SITE. DAMAGED GLASS IS GLASS WITH EDGE DAMAGE OR OTHER IMPERFECTIONS THAT, WHEN INSTALLED, WEAKEN GLASS AND IMPAIR PERFORMANCE AND APPEARANCE.

D. APPLY PRIMERS TO JOINT SURFACES WHERE REQUIRED FOR ADHESION OF SEALANTS. AS DETERMINED BY PRECONSTRUCTION SEALANT-SUBSTRATE TESTING.

E. INSTALL ELASTOMERIC SETTING BLOCKS IN SILL RABBETS, SIZED AND LOCATED TO COMPLY WITH REFERENCED GLAZING STANDARD, UNLESS OTHERWISE REQUIRED BY GLASS MANUFACTURER. SET BLOCKS IN THIN COURSE OF COMPATIBLE SEALANT SUITABLE FOR HEEL BEAD.

F. DO NOT EXCEED EDGE PRESSURES STIPULATED BY GLASS MANUFACTURERS FOR INSTALLING GLASS LITES.

G. PROVIDE SPACER'S FOR GLASS SIZES LARGER THAN 50 UNITED INCHES (LENGTH PLUS HEIGHT) AS FOLLOWS: LOCATE SPACERS INSIDE, OUTSIDE, AND DIRECTLY OPPOSITE EACH OTHER. INSTALL CORRECT SIZE AND SPACING TO PRESERVE REQUIRED FACE CLEARANCES, EXCEPT WHERE GASKETS AND GLAZING TAPES ARE USED THAT HAVE DEMONSTRATED ABILITY TO MAINTAIN REQUIRED FACE CLEARANCES AND COMPLY WITH SYSTEM PERFORMANCE REQUIREMENTS. PROVIDE 1/8-INCH MINIMUM BITE OF SPACERS ON GLASS AND USE THICKNESS EQUAL TO SEALANT WIDTH. WITH GLAZING TAPE, USE THICKNESS SLIGHTLY LESS THAN FINAL COMPRESSED THICKNESS OF TAPE.

H. PROVIDE EDGE BLOCKING TO COMPLY WITH REQUIREMENTS OF REFERENCED GLAZING PUBLICATIONS, UNLESS OTHERWISE REQUIRED BY GLASS MANUFACTURER.

3.4 TAPE GLAZING

A. POSITION TAPES ON FIXED STOPS SO THAT WHEN COMPRESSED BY GLASS THEIR EXPOSED EDGES ARE FLUSH WITH OR PROTRUDE SLIGHTLY ABOVE SIGHTLINE OF STOPS.

B. INSTALL TAPES CONTINUOUSLY BUT NOT IN ONE CONTINUOUS LENGTH. DO NOT STRETCH TAPES TO MAKE THEM FIT OPENING.

C. WHERE FRAMING JOINTS ARE VERTICAL, COVER THESE JOINTS BY APPLYING TAPES TO HEADS AND SILLS FIRST AND THEN TO JAMBS. WHERE FRAMING JOINTS ARE HORIZONTAL, COVER THESE JOINTS BY APPLYING TAPES TO JAMBS AND THEN TO HEADS AND SILLS.

D. PLACE JOINTS IN TAPES AT CORNERS OF OPENING WITH ADJOINING LENGTHS BUTTED TOGETHER, NOT LAPPED. SEAL JOINTS IN TAPES WITH COMPATIBLE SEALANT APPROVED BY TAPE MANUFACTURER.

E. DO NOT REMOVE RELEASE PAPER FROM TAPE UNTIL JUST BEFORE EACH LITE IS INSTALLED.

F. CENTER GLASS LITES IN OPENINGS ON SETTING BLOCKS AND PRESS FIRMLY AGAINST TAPE BY INSERTING DENSE COMPRESSION GASKETS FORMED AND INSTALLED TO LOCK IN PLACE AGAINST FACES OF REMOVABLE STOPS. START GASKET APPLICATIONS AT CORNERS AND WORK TOWARD CENTERS OF OPENINGS.

G. AT EXTERIOR EXPOSURES, APPLY CAP BEAD OF ELASTOMERIC GLAZING SEALANT OVER EXPOSED EDGE OF TAPE.

3.5 PROTECTION AND CLEANING

A. PROTECT EXTERIOR GLASS FROM BREAKAGE IMMEDIATELY AFTER INSTALLATION BY ATTACHING CROSSED STREAMERS TO FRAMING HELD AWAY FROM GLASS. DO NOT APPLY MARKERS TO GLASS SURFACE. REMOVE NONPERMANENT LABELS, AND CLEAN SURFACES.

B. PROTECT GLASS FROM CONTACT WITH CONTAMINATING SUBSTANCES RESULTING FROM CONSTRUCTION OPERATIONS INCLUDING WELD SPLATTER. IF, DESPITE SUCH PROTECTION, CONTAMINATING SUBSTANCES DO COME INTO CONTACT WITH GLASS, REMOVE THEM IMMEDIATELY AS RECOMMENDED BY GLASS MANUFACTURER.

C. EXAMINE GLASS SURFACES ADJACENT TO OR BELOW EXTERIOR CONCRETE AND OTHER MASONRY SURFACES AT FREQUENT INTERVALS DURING CONSTRUCTION, BUT NOT LESS THAN ONCE A MONTH, FOR BUILD-UP OF DIRT, SCUM, ALKALI DEPOSITS, OR STAINS, AND REMOVE AS RECOMMENDED BY GLASS MANUFACTURER.

D. REMOVE AND REPLACE GLASS THAT IS BROKEN, CHIPPED, CRACKED, ABRADED, OR DAMAGED IN ANY WAY, INCLUDING NATURAL CAUSES, ACCIDENTS AND VANDALISM, DURING CONSTRUCTION PERIOD.

E. WASH GLASS ON BOTH FACES IN EACH AREA OF PROJECT NOT MORE THAN 4 DAYS PRIOR TO DATE SCHEDULED FOR INSPECTIONS THAT ESTABLISH DATE OF CONTRACT COMPLETION. WASH GLASS AS RECOMMENDED BY GLASS MANUFACTURER.

END OF SECTION 08 80 00

DIVISION 09 - FINISHES

GYPSUM BOARD ASSEMBLIES SECTION 09 21 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 DEFINITIONS

A. GYPSUM BOARD CONSTRUCTION TERMINOLOGY: REFER TO ASTM C 11 AND GA-505 FOR DEFINITIONS OF TERMS FOR GYPSUM BOARD ASSEMBLIES NOT DEFINED IN THIS SECTION OR IN OTHER REFERENCED STANDARDS.

1.3 ASSEMBLY PERFORMANCE REQUIREMENTS

A. FIRE RESISTANCE: PROVIDE GYPSUM BOARD ASSEMBLIES WITH FIRE-RESISTANCE RATINGS INDICATED.

1.4 QUALITY ASSURANCE

A. SINGLE-SOURCE RESPONSIBILITY FOR PANEL PRODUCTS: OBTAIN EACH TYPE OF GYPSUM BOARD AND OTHER PANEL PRODUCTS FROM A SINGLE MANUFACTURER.

B. SINGLE-SOURCE RESPONSIBILITY FOR FINISHING MATERIALS: OBTAIN FINISHING MATERIALS FROM EITHER THE SAME MANUFACTURER THAT SUPPLIES GYPSUM BOARD AND OTHER PANEL PRODUCTS OR FROM A MANUFACTURER ACCEPTABLE TO GYPSUM BOARD MANUFACTURER.

C. FIRE-TEST-RESPONSE CHARACTERISTICS: WHERE FIRE-RESISTANCE-RATED GYPSUM BOARD ASSEMBLIES ARE INDICATED, PROVIDE GYPSUM BOARD ASSEMBLIES THAT COMPLY WITH THE FOLLOWING REQUIREMENTS: FIRE-RESISTANCE RATINGS: AS INDICATED BY GA FILE NUMBERS IN GA-600 'FIRE RESISTANCE DESIGN MANUAL" OR DESIGN DESIGNATIONS IN UL "FIRE RESISTANCE DIRECTORY" OR IN THE LISTING OF ANOTHER TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

1.5 DELIVERY, STORAGE, AND HANDLING

A. DELIVER MATERIALS IN ORIGINAL PACKAGES, CONTAINERS, OR BUNDLES BEARING BRAND NAME AND IDENTIFICATION OF MANUFACTURER OR SUPPLIER.

B. STORE MATERIALS INSIDE UNDER COVER AND KEEP THEM DRY AND PROTECTED AGAINST DAMAGE FROM WEATHER, DIRECT SUNLIGHT, SURFACE CONTAMINATION, CORROSION, CONSTRUCTION TRAFFIC, AND OTHER CAUSES. NEATLY STACK GYPSUM PANELS FLAT TO PREVENT SAGGING.

1.6 PROJECT CONDITIONS

A. ENVIRONMENTAL CONDITIONS, GENERAL: ESTABLISH AND MAINTAIN ENVIRONMENTAL CONDITIONS FOR APPLYING AND FINISHING GYPSUM BOARD TO COMPLY WITH ASTM C 840 REQUIREMENTS OR GYPSUM BOARD MANUFACTURER'S RECOMMENDATIONS, WHICHEVER ARE MORE STRINGENT.

B. ROOM TEMPERATURES: FOR NONADHESIVE ATTACHMENT OF GYPSUM BOARD TO FRAMING, MAINTAIN NOT LESS THAN 40 DEG F. FOR ADHESIVE ATTACHMENT AND FINISHING OF GYPSUM BOARD, MAINTAIN NOT LESS THAN 50 DEG F FOR 48 HOURS BEFORE APPLICATION AND CONTINUOUSLY AFTER UNTIL DRY. DO NOT EXCEED 95 DEG F WHEN USING TEMPORARY HEAT SOURCES.

C. VENTILATION: VENTILATE BUILDING SPACES AS REQUIRED TO DRY JOINT TREATMENT MATERIALS. AVOID DRAFTS DURING HOT, DRY WEATHER TO PREVENT FINISHING MATERIALS FROM DRYING TOO RAPIDLY.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS FROM ONE OF THE FOLLOWING: NATIONAL GYPSUM COMPANY, GOLD BOND BUILDING PRODUCTS DIVISION, OR UNITED STATES GYPSUM CO.

2.2 GYPSUM BOARD PRODUCTS

A. GENERAL: PROVIDE GYPSUM BOARD OF TYPES INDICATED IN MAXIMUM LENGTHS AVAILABLE THAT WILL MINIMIZE END-TO-END BUTT JOINTS IN EACH AREA INDICATED TO RECEIVE GYPSUM BOARD APPLICATION. WIDTHS: PROVIDE GYPSUM BOARD IN WIDTHS OF 48 INCHES.

B. GYPSUM WALLBOARD: ASTM C 36 AND AS FOLLOWS:

1. TYPE: TYPE X.
2. TYPE: MOISTURE-RESISTANT.
3. TYPE: SAG-RESISTANT TYPE FOR CEILING SURFACES.
4. EDGES: TAPERED AND FEATURED (ROUNDED OR BEVELED) FOR PRE-FILLING.
5. THICKNESS: 1/2 INCH, UNLESS OTHERWISE INDICATED.

C. CEMENTITIOUS BACKER UNITS: ANSI A118.9 AND ASTM C 1288 OR 1325, WITH MANUFACTURER'S STANDARD EDGES.

1. MOLD RESISTANCE: ASTM D 3273, SCORE OF 10 AS RATED ACCORDING TO ASTM D 3274.

D. GYPSUM BOARD BASE LAYER(S) FOR MULTI-LAYER APPLICATIONS: GYPSUM WALLBOARD, ASTM C 36, AND AS FOLLOWS:

1. TYPE: TYPE X.
2. TYPE: SAG-RESISTANT TYPE FOR CEILING SURFACES, UNLESS OTHERWISE INDICATED.
3. EDGES: MANUFACTURER'S STANDARD.
4. THICKNESS: 1/2 INCH, UNLESS OTHERWISE INDICATED.

2.3 TRIM ACCESSORIES

A. ACCESSORIES FOR INTERIOR INSTALLATION: CORNERBEAD, EDGE TRIM, AND CONTROL JOINTS COMPLYING WITH ASTM C 1047 AND FORMED METAL OR PLASTIC, WITH METAL COMPLYING WITH THE FOLLOWING REQUIREMENTS:

1. STEEL SHEET ZINC COATED BY HOT-DIP PROCESS OR ROLLED ZINC.
2. SHAPES INDICATED BELOW BY REFERENCE TO FIG. 1 DESIGNATIONS IN ASTM C 1047.

B. CORNERBEAD ON OUTSIDE CORNERS, UNLESS OTHERWISE INDICATED.

C. LC-BEAD WITH BOTH FACE AND BACK FLANGES: FACE FLANGE FORMED TO RECEIVE JOINT COMPOUND. USE LC-BEADS FOR EDGE TRIM, UNLESS OTHERWISE INDICATED.

D. ONE-PIECE CONTROL JOINT FORMED WITH V-SHAPED SLOT AND REMOVABLE STRIP COVERING SLOT OPENING.

2.4 JOINT TREATMENT MATERIALS

A. GENERAL: PROVIDE JOINT TREATMENT MATERIALS COMPLYING WITH ASTM C 475 AND THE RECOMMENDATIONS OF BOTH THE MANUFACTURERS OF SHEET PRODUCTS AND OF JOINT TREATMENT MATERIALS FOR EACH APPLICATION INDICATED.

B. JOINT TAPE FOR GYPSUM BOARD: PAPER-REINFORCING TAPE, UNLESS OTHERWISE INDICATED.

C. DRYING-TYPE JOINT COMPOUNDS FOR GYPSUM BOARD: FACTORY-PACKAGED VINYL-BASED PRODUCTS COMPLYING WITH THE FOLLOWING REQUIREMENTS FOR FORMULATION AND INTENDED USE. READY-MIXED FORMULATION: FACTORY-MIXED PRODUCT, ALL-PURPOSE COMPOUND FORMULATED FOR BOTH TAPING AND TOPPING COMPOUNDS.

2.5 MISCELLANEOUS MATERIALS

A. GENERAL: PROVIDE AUXILIARY MATERIALS FOR GYPSUM BOARD CONSTRUCTION THAT COMPLY WITH REFERENCED STANDARDS AND RECOMMENDATIONS OF GYPSUM BOARD MANUFACTURER.

B. LAMINATING ADHESIVE: SPECIAL ADHESIVE OR JOINT COMPOUND RECOMMENDED FOR LAMINATING GYPSUM PANELS.

C. STEEL DRILL SCREWS COMPLYING WITH ASTM C 1002 FOR FASTENING GYPSUM BOARD TO STEEL MEMBERS LESS THAN 0.033-INCH THICK.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE SUBSTRATES TO WHICH GYPSUM BOARD ASSEMBLIES ATTACH OR ABUT, INSTALLED WOOD FRAMES, CAST-IN-ANCHORS, AND STRUCTURAL FRAMING, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF ASSEMBLIES SPECIFIED IN THIS SECTION. DO NOT PROCEED WITH INSTALLATION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 PREPARATION

A. CEILING ANCHORAGES: COORDINATE INSTALLATION OF CEILING SUSPENSION SYSTEMS WITH INSTALLATION OF OVERHEAD STRUCTURAL ASSEMBLIES TO ENSURE THAT INSERTS AND OTHER PROVISIONS FOR ANCHORAGES TO BUILDING STRUCTURE HAVE BEEN INSTALLED TO RECEIVE CEILING HANGERS THAT WILL DEVELOP THEIR FULL STRENGTH AND AT SPACING REQUIRED TO SUPPORT CEILINGS AND ALL RELATED ITEMS.

3.3 NON-LOAD-BEARING STEEL FRAMING INSTALLATION

A. GENERAL: COMPLY WITH ASTM C754, AND ASTM C840 REQUIREMENTS THAT APPLY TO FRAMING INSTALLATION.

B. SUSPENDED CEILING AND SOFFIT FRAMING:

1. SUSPEND CEILING HANGERS PLUMB AND FREE FROM CONTACT WITH INSULATION OR OTHER OBJECTS WITHIN CEILING PLENUM THAT ARE NOT PART OF SUPPORTING STRUCTURAL OR CEILING SUSPENSION SYSTEM. SPLAY HANGERS ONLY WHERE REQUIRED TO MISS OBSTRUCTIONS AND OFFSET RESULTING HORIZONTAL FORCES BY BRACING, COUNTERSPLAYING, OR OTHER EQUALLY EFFECTIVE MEANS.
2. WHERE WIDTH OF DUCTS AND OTHER CONSTRUCTION WITHIN CEILING PLENUM PRODUCES HANGER SPACINGS THAT INTERFERE WITH THE LOCATION OF HANGERS REQUIRED TO SUPPORT STANDARD SUSPENSION SYSTEM MEMBERS, INSTALL SUPPLEMENTAL SUSPENSION MEMBERS AND HANGERS IN FORM OF TRAPEZES OR EQUIVALENT DEVICES. SIZE SUPPLEMENTAL SUSPENSION MEMBER AND HANGERS TO SUPPORT CEILING LOADS WITHIN PERFORMANCE LIMITS ESTABLISHED BY REFERENCED STANDARDS.
3. ATTACH HANGERS TO STRUCTURAL MEMBERS. DO NOT SUPPORT CEILINGS FROM OR ATTACH HANGERS TO PERMANENT METAL FORMS, STEEL DECK TABS, STEEL ROOF DECKS, DUCTS, PIPES, OR CONDUIT.
4. SCREW FURRING TO WOOD FRAMING.
5. WIRE-TIE FURRING CHANNELS TO SUPPORTS AS REQUIRED TO COMPLY WITH REQUIREMENTS FOR ASSEMBLIES INDICATED.
6. GRID SUSPENSION SYSTEM: ATTACH PERIMETER WALL TRACK OR ANGLE WHERE GRID SUSPENSION SYSTEM MEETS VERTICAL SURFACES. MECHANICALLY JOIN MAIN BEAM AND CROSS FURRING MEMBERS TO EACH OTHER AND BUTT-CUT TO FIT INTO WALL TRACK.

C. PARTITION AND SOFFIT FRAMING:

1. WHERE STUDS ARE INSTALLED DIRECTLY AGAINST EXTERIOR WALLS, INSTALL ISOLATION STRIP BETWEEN STUDS AND WALL.
2. EXTEND PARTITION FRAMING FULL HEIGHT TO STRUCTURAL SUPPORTS OR SUBSTRATES ABOVE SUSPENDED CEILINGS, EXCEPT WHERE PARTITIONS ARE INDICATED TO TERMINATE AT SUSPENDED CEILINGS. CONTINUE FRAMING OVER FRAMES FOR DOORS AND OPENINGS AND FRAME AROUND DUCTS PENETRATING PARTITIONS ABOVE CEILING TO PROVIDE SUPPORT FOR GYPSUM BOARD.
3. FRAME DOOR OPENINGS TO COMPLY WITH GA-600 AND WITH GYPSUM BOARD MANUFACTURER'S APPLICABLE WRITTEN RECOMMENDATIONS, UNLESS OTHERWISE INDICATED. SCREW VERTICAL STUDS AT JAMBS TO JAMB ANCHOR CLIPS ON DOOR FRAMES; INSTALL RUNNER TRACK SECTION (FOR CRIPPLE STUDS) AT HEAD AND SECURE JAMB STUDS.
   a. INSTALL TWO STUDS AT EACH JAMB, UNLESS OTHERWISE INDICATED.
   b. EXTEND JAMB STUDS THROUGH SUSPENDED CEILINGS AND ATTACH TO UNDERSIDE OF FLOOR OR ROOF STRUCTURE ABOVE.
4. FRAME OPENINGS OTHER THAN FLOOR OPENINGS THE SAME AS REQUIRED FOR DOOR OPENINGS, UNLESS OTHERWISE INDICATED. INSTALL FRAMING BELOW SILLS OF OPENINGS TO MATCH FRAMING REQUIRED ABOVE DOOR HEADS.

D. Z-FURRING MEMBERS: ERECT INSULATION VERTICALLY AND HOLD IN PLACE WITH Z-FURRING MEMBERS.

1. UNTIL GYPSUM BOARD IS INSTALLED, HOLD INSULATION IN PLACE WITH 10-INCH (250-MM) STAPLES FABRICATED FROM 0.0625-INCH- (1.59-MM-) DIAMETER, TIE WIRE AND INSERTED THROUGH SLOT IN WEB OF MEMBER.

E. POLYETHYLENE VAPOR RETARDER: INSTALL TO COMPLY WITH REQUIREMENTS SPECIFIED IN DIVISION 7 SECTION "BUILDING INSULATION."

3.4 APPLYING AND FINISHING GYPSUM BOARD, GENERAL

A. GYPSUM BOARD APPLICATION AND FINISHING STANDARDS: INSTALL AND FINISH GYPSUM PANELS TO COMPLY WITH ASTM C840 AND GA-216.

B. INSTALL CEILING BOARD PANELS ACROSS FRAMING TO MINIMIZE THE NUMBER OF ABUTTING END JOINTS AND TO AVOID ABUTTING END JOINTS IN THE CENTRAL AREA OF EACH CEILING. STAGGER ABUTTING END JOINTS OF ADJACENT PANELS NOT LESS THAN ONE FRAMING MEMBER.

C. INSTALL GYPSUM PANELS WITH FACE SIDE OUT. DO NOT INSTALL IMPERFECT, DAMAGED, OR DAMP PANELS. BUTT PANELS TOGETHER FOR A LIGHT CONTACT AT EDGES AND ENDS WITH NOT MORE THAN 1/16 INCH OF OPEN SPACE BETWEEN PANELS. DO NOT FORCE INTO PLACE.

D. LOCATE BOTH EDGE OR END JOINTS OVER SUPPORTS, EXCEPT IN CEILING APPLICATIONS WHERE INTERMEDIATE SUPPORTS OR GYPSUM BOARD BACK BLOCKING IS PROVIDED BEHIND END JOINTS. DO NOT PLACE TAPERED EDGES AGAINST CUT EDGES OR ENDS. STAGGER VERTICAL JOINTS ON OPPOSITE SIDES OF PARTITIONS. AVOID JOINTS OTHER THAN CONTROL JOINTS AT CORNERS OF FRAMED OPENINGS WHERE POSSIBLE.

E. ATTACH GYPSUM PANELS TO STUDS SO LEADING EDGE OR END OF EACH PANEL IS ATTACHED TO OPEN (UNSUPPORTED) EDGES OF STUD FLANGES FIRST.

F. ATTACH GYPSUM PANELS TO FRAMING PROVIDED AT OPENINGS AND CUTOUTS.

1. FIRE TAPE, SPACKLE, AND FIRE CAULK ALL PENETRATIONS INTO RATED AND/OR SHAFT WALLS.

G. FORM CONTROL AND EXPANSION JOINTS AT LOCATIONS INDICATED AND AS DETAILED, WITH SPACE BETWEEN EDGES OF ADJOINING GYPSUM PANELS, AS WELL AS SUPPORTING FRAMING BEHIND GYPSUM PANELS.

H. ISOLATE PERIMETER OF NONLOAD-BEARING GYPSUM BOARD PARTITIONS AT STRUCTURAL ABUTMENTS, EXCEPT FLOORS. PROVIDE 1/4- TO 1/2-INCH-WIDE SPACES AT THESE LOCATIONS AND TRIM EDGES WITH LC-BEAD EDGE TRIM WHERE EDGES OF GYPSUM PANELS ARE EXPOSED. SEAL JOINTS BETWEEN EDGES AND ABUTTING STRUCTURAL SURFACES WITH ACOUSTICAL SEALANT.

I. SPACE FASTENERS IN GYPSUM PANELS ACCORDING TO REFERENCED GYPSUM BOARD APPLICATION AND FINISHING STANDARD AND MANUFACTURER'S RECOMMENDATIONS.

J. SPACE SCREWS A MAXIMUM OF 12 INCHES O.C. FOR VERTICAL APPLICATIONS.

3.5 GYPSUM BOARD APPLICATION METHODS

A. SINGLE-LAYER APPLICATION: INSTALL GYPSUM WALLBOARD PANELS AS FOLLOWS:

1. ON CEILINGS, APPLY GYPSUM PANELS PRIOR TO WALL/PARTITION BOARD APPLICATION TO THE GREATEST EXTENT POSSIBLE AND AT RIGHT ANGLES TO FRAMING, UNLESS OTHERWISE INDICATED. ON PARTITIONS/WALLS, APPLY GYPSUM PANELS VERTICALLY (PARALLEL TO FRAMING), UNLESS OTHERWISE INDICATED, AND PROVIDE PANEL LENGTHS THAT WILL MINIMIZE END JOINTS.

B. MULTILAYER APPLICATION ON CEILINGS: APPLY GYPSUM BOARD INDICATED FOR BASE LAYERS PRIOR TO APPLYING BASE LAYERS ON WALLS/PARTITIONS. APPLY GYPSUM WALLBOARD FACE LAYERS IN SAME SEQUENCE. OFFSET FACE-LAYER JOINTS ONE FRAMING MEMBER, 16 INCHES MINIMUM, FROM PARALLEL BASE-LAYER JOINTS.

C. MULTILAYER APPLICATION ON PARTITIONS/WALLS: APPLY GYPSUM BOARD INDICATED FOR BASE LAYERS AND GYPSUM WALLBOARD FACE LAYERS VERTICALLY (PARALLEL TO FRAMING) WITH JOINTS OF BASE LAYERS LOCATED OVER STUD OR FURRING MEMBER AND FACE-LAYER JOINTS OFFSET AT LEAST ONE STUD OR FURRING MEMBER WITH BASE-LAYER JOINTS. STAGGER JOINTS ON OPPOSITE SIDES OF PARTITIONS.

D. ACOUSTICAL TILE BASE: WHERE GYPSUM PANELS FORM THE BASE FOR ADHESIVELY APPLIED ACOUSTICAL TILE, INSTALL GYPSUM WALLBOARD PANELS WITH TAPERED EDGES TAPED AND FINISHED TO PRODUCE A FLAT SURFACE.

E. SINGLE-LAYER FASTENING METHODS: APPLY GYPSUM PANELS TO SUPPORTS WITH SCREWS.

F. MULTILAYER FASTENING METHODS: APPLY BASE LAYERS OF GYPSUM PANELS AND FACE LAYER TO BASE LAYERS. FASTEN BOTH BASE LAYERS AND FACE LAYERS SEPARATELY TO SUPPORTS WITH SCREWS.

G. DIRECT-BONDING TO SUBSTRATE: WHERE GYPSUM PANELS ARE INDICATED AS DIRECTLY ADHERED TO A SUBSTRATE (OTHER THAN STUDS, JOISTS, FURRING MEMBERS, OR BASE LAYER OF GYPSUM BOARD), COMPLY WITH GYPSUM BOARD MANUFACTURER'S RECOMMENDATIONS, AND TEMPORARILY BRACE OR FASTEN GYPSUM PANELS UNTIL FASTENING ADHESIVE HAS SET.

3.6 INSTALLING TRIM ACCESSORIES

A. GENERAL: FOR TRIM ACCESSORIES WITH BACK FLANGES, FASTEN TO FRAMING WITH THE SAME FASTENERS USED TO FASTEN GYPSUM BOARD. OTHERWISE, FASTEN TRIM ACCESSORIES ACCORDING TO ACCESSORY MANUFACTURER'S DIRECTIONS FOR TYPE, LENGTH, AND SPACING OF FASTENERS.

B. INSTALL CORNER BEAD AT EXTERNAL CORNERS.

C. INSTALL EDGE TRIM WHERE EDGE OF GYPSUM PANELS WOULD OTHERWISE BE EXPOSED. PROVIDE EDGE TRIM TYPE WITH FACE FLANGE FORMED TO RECEIVE JOINT COMPOUND, EXCEPT WHERE OTHER TYPES ARE INDICATED.

1. INSTALL LC-BEAD WHERE GYPSUM PANELS ARE TIGHTLY ABUTTED TO OTHER CONSTRUCTION AND BACK FLANGE CAN BE ATTACHED TO FRAMING OR SUPPORTING SUBSTRATE.

D. INSTALL CONTROL JOINTS ACCORDING TO ASTM C840 AND MANUFACTURER'S RECOMMENDATIONS AND IN SPECIFIC LOCATIONS APPROVED BY ASSOCIATE FOR VISUAL EFFECT.

3.7 FINISHING GYPSUM BOARD ASSEMBLIES

A. GENERAL: TREAT GYPSUM BOARD JOINTS, INTERIOR ANGLES, FLANGES OF CORNER-BEAD, EDGE TRIM, CONTROL JOINTS, PENETRATIONS, FASTENER HEADS, SURFACE DEFECTS, AND ELSEWHERE AS REQUIRED TO PREPARE GYPSUM BOARD SURFACES FOR DECORATION.

B. PREFILL OPEN JOINTS, ROUNDED OR BEVELED EDGES, AND DAMAGED AREAS USING SETTING-TYPE JOINT COMPOUND.

C. APPLY JOINT TAPE OVER GYPSUM BOARD JOINTS, EXCEPT THOSE WITH-TRIM ACCESSORIES HAVING FLANGES NOT REQUIRING TAPE.

D. LEVELS OF GYPSUM BOARD FINISH: PROVIDE THE FOLLOWING LEVELS OF GYPSUM BOARD FINISH PER GA-214.

1. LEVEL 4 FOR GYPSUM BOARD SURFACES, UNLESS OTHERWISE INDICATED.

E. USE THE FOLLOWING JOINT COMPOUND COMBINATION AS APPLICABLE TO THE FINISH LEVELS SPECIFIED:

1. EMBEDDING AND FIRST COAT: READY-MIXED, DRYING-TYPE, ALL-PURPOSE OR TAPING COMPOUND.
2. FILL (SECOND) COAT: READY-MIXED, DRYING-TYPE, ALL-PURPOSE OR TOPPING COMPOUND.
3. FINISH (THIRD) COAT: READY-MIXED, DRYING-TYPE, ALL-PURPOSE OR TOPPING COMPOUND.

F. FOR LEVEL 4 GYPSUM BOARD FINISH, EMBED TAPE IN JOINT COMPOUND AND APPLY FIRST, FILL (SECOND), AND FINISH (THIRD) COATS OF JOINT COMPOUND OVER JOINTS, ANGLES, FASTENER HEADS, AND ACCESSORIES. TOUCH UP AND SAND BETWEEN COATS AND AFTER LAST COAT AS NEEDED TO PRODUCE A SURFACE FREE OF VISUAL DEFECTS AND READY FOR DECORATION.

G. BASE FOR ACOUSTICAL TILE: WHERE GYPSUM BOARD IS INDICATED AS A BASE FOR ADHESIVELY APPLIED ACOUSTICAL TILE, INSTALL JOINT TAPE AND A 2-COAT COMPOUND TREATMENT, WITHOUT SANDING.

3.8 FIELD QUALITY CONTROL

A. ABOVE-CEILING OBSERVATION: THE OWNER'S FIELD REPRESENTATIVE WILL CONDUCT AN ABOVE-CEILING OBSERVATION PRIOR TO INSTALLATION OF GYPSUM BOARD CEILINGS AND REPORT ANY DEFICIENCIES IN THE WORK OBSERVED. DO NOT PROCEED WITH INSTALLATION OF GYPSUM BOARD TO CEILING SUPPORT FRAMING UNTIL DEFICIENCIES HAVE BEEN CORRECTED.

3.9 CLEANING AND PROTECTION

A. PROMPTLY REMOVE ANY RESIDUAL JOINT COMPOUND FROM ADJACENT SURFACES.

B. PROVIDE FINAL PROTECTION AND MAINTAIN CONDITIONS, IN A MANNER ACCEPTABLE TO INSTALLER. ENSURE THAT GYPSUM BOARD ASSEMBLIES ARE WITHOUT DAMAGE OR DETERIORATION AT THE TIME OF CONTRACT COMPLETION.

END OF SECTION 09 21 00

CERAMIC TILING SECTION 09 30 13

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2 REFERENCE STANDARDS

A. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI):

1. ANSI A 108.5 "CERAMIC TILE INSTALLED WITH DRY-SET PORTLAND CEMENT MORTAR"
2. ANSI A 108.10 "INSTALLATION OF GROUT IN TILEWORK"
3. ANSI A 118.4 "LATEX-PORTLAND CEMENT MORTAR"
4. ANSI A 136.1 "ORGANIC ADHESIVES FOR INSTALLATION OF CERAMIC TILE"
5. ANSI A 137.1 - 2012 "CERAMIC TILE"

B. ASTM C144 "AGGREGATE FOR MASONRY MORTAR" AND ASTM C150 "PORTLAND CEMENT".

C. TILE COUNCIL OF AMERICA (TCA): TCA "HANDBOOK FOR CERAMIC TILE INSTALLATION", CURRENT EDITION.

D. CONFORM TO STANDARDS OF THE AMERICAN NATIONAL STANDARDS INSTITUTE AS SPECIFIED AND APPLICABLE TO TILE WORK IN THIS PROJECT AND RECOMMENDATIONS OF THE TILE COUNCIL OF AMERICA.

1.3 QUALITY ASSURANCE

A. INSTALLER MUST BE APPROVED BY TILE MANUFACTURER, AND MUST HAVE A MINIMUM OF 5 YEARS INSTALLATION EXPERIENCE.

B. THE CERAMIC WALL TILE INSTALLER SHALL GUARANTEE HIS INSTALLATION AGAINST BOND FAILURE, CRACKING OR OTHER DEFECTS RESULTING FROM POOR WORKMANSHIP, INFERIOR OR INCOMPATIBLE MATERIALS, ETC. FOR A PERIOD OF ONE-YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER.

1.4 DELIVERY, STORAGE AND HANDLING

A. DELIVER ALL PRODUCTS TO JOB SITE IN MANUFACTURER'S UNOPENED, ORIGINAL CONTAINERS WITH STANDARD GRADE MARKINGS INTACT.

B. PROTECT MATERIALS FROM DAMAGE.

1.5 JOB CONDITIONS

A. MAINTAIN TEMPERATURE AT 50 DEGREES F MINIMUM DURING INSTALLATION OF TILE WORK AND FOR SEVEN (7) DAYS AFTER COMPLETION.

B. PROHIBIT ALL FOOT AND WHEEL TRAFFIC FROM USING NEWLY TILED FLOORS FOR AT LEAST THREE (3) DAYS, PREFERABLY SEVEN (7) DAYS. WHEN TRAFFIC IS UNAVOIDABLE, USE LARGE FLAT BOARDS FOR WALKWAYS FOR SEVEN (7) DAYS AND INSTALLED IN MANNER TO PREVENT DAMAGE OR MARRING OF TILE. REPAIR AND REPLACE DAMAGED UNITS.

1.6 EXTRA MATERIALS

A. FURNISH EXTRA MATERIALS FOR OWNER'S FUTURE USE. FLOOR, BASE, & WALL TILE: ONE FULL BOX, OF EACH TYPE AND PATTERN OF TILE MATERIAL INSTALLED. DELIVER IN PLAINLY MARKED BOXES. INCLUDE GROUT IN QUANTITIES TO MATCH TILE. STORE AS DIRECTED BY OWNER.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. CERAMIC TILE: AS SCHEDULED ON FLOOR FINISH PLAN(S).

B. MORTAR, GROUT, AND ADHESIVE: SUBJECT TO COMPLIANCE WITH REQUIREMENTS HEREIN, PROVIDE PRODUCTS FROM ONE OF THE FOLLOWING: LATICRETE INTERNATIONAL, INC. OR MAPEI CORPORATION PER FLOOR FINISH PLAN(S).

2.2 MATERIALS

A. SETTING BED MATERIALS:

1. FOR STANDARD THIN-SET METHOD ON CONCRETE OR MASONRY: PRE-SANDED, FACTORY MIXED DRY-SET MORTAR PER ANSI A 118.1 OR LATEX/CEMENT MORTAR PER ANSI A 118.4.
2. FOR WATERPROOFING THIN-SET METHOD: APPLIED POLYMERS OF AMERICA, INC. "TILE-TITE", A TROWEL-APPLIED, ONE PART POLYURETHANE WATERPROOFING MEMBRANE ADHESIVE, DISTRIBUTED BY AMERICAN OLEAN TILE COMPANY.
3. SETTING MATERIAL SHALL BE AN ORGANIC ADHESIVE (ANSI A 136.1) TYPE II. USE TYPE I IN SHOWER ROOMS, TUB ROOMS, TOILET ROOMS, AND ALL SPACES SUBJECT TO DAMP OR WET CONDITIONS.

B. GROUT MATERIAL:

1. FOR CERAMIC WALL TILE, GROUT SHALL BE LATEX AND WHITE WATERPROOF PORTLAND CEMENT.
2. FOR CERAMIC FLOOR TILE, GROUT SHALL BE GROUT AND JOINT FILLER FORTIFIED WITH A STAINLESS ADMIX AND CHEMICAL RESISTANCE AS RECOMMENDED BY THE FLOOR TILE MANUFACTURER. ALL RENDERING, SCREEDING, SOUND CONTROL, WEATHERPROOFING, TILE INSTALLATION AND GROUTING/POINTING MATERIALS SHALL BE AS SUPPLIED BY MANUFACTURER RECOMMENDED BY THE CERAMIC TILE SUPPLIER. COLOR CHOSEN BY THE OWNER'S REPRESENTATIVE.

C. TRIM:

1. PROVIDE NECESSARY CAPS, STOPS, RETURNS, TRIMMERS AND OTHER SHAPES TO COMPLETE INSTALLATION.
2. COLOR AND FINISH TO MATCH WALL TILE.

D. RENOVATIONS - CRACKED WALL TILE.

1. MAPEI FIBERGLASS MESH
2. WP-900 HYDRO BLOC WATERPROOF AND CRACK ISOLATION MEMBRANE.

2.3 ACCESSORIES -

A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS HEREIN, PROVIDE PRODUCTS FROM: SCHLUTER SYSTEMS LP, JOLLY AND RONDEC.

PART 3 - EXECUTION

3.1 INSPECTION AND PREPARATION

A. INSPECT SURFACES TO RECEIVE TILE WORK AND REPORT DEFECTS OR UNSATISFACTORY CONDITIONS TO THE ARCHITECT IN WRITING. CLEAN AND PREPARE SURFACES AS REQUIRED TO ASSURE PROPER BONDING. COMMENCING WORK SIGNIFIES ACCEPTANCE.

3.2 TILE LAY OUT AND WORKMANSHIP

A. LAY OUT TILE WORK SO AS TO MINIMIZE CUT TILE LESS THAN ONE-HALF TILE IN SIZE.

B. SEAL SURFACE OF TAPED JOINTS ON WATER RESISTANT GYPSUM BOARD BACKING TO PREVENT WATER DAMAGE. WHEN RECOMMENDED BY ADHESIVE MANUFACTURER, PRIME SURFACES BEFORE APPLYING ADHESIVES.

C. EXCEPT AS OTHERWISE SHOWN OR DIRECTED BY ARCHITECT OR OWNER'S REPRESENTATIVE, MAKE JOINTS IN FLOOR TILE PERPENDICULAR AND PARALLEL TO WALLS AND EVENLY SPACED. ALIGN UNITS FOR STRAIGHT GROUT LINES. VERIFY LAYOUT WITH OWNER.

D. FIT TILE CAREFULLY AT TRIM, PENETRATIONS AND BUILT-IN ITEMS.

E. BACK-UP BOARD FOR CERAMIC WALL TILE SHALL BE WATER-RESISTANT GYPSUM BOARD.

3.3 RENOVATIONS - CRACKED WALL TILE

A. REMOVAL OF THE BROKEN TILES; STAGGERING ALONG THE LINE OF THE CRACK, SCRAP, AND CLEAN.

B. APPLY A TRANSITION MAPEI FIBERGLASS MESH TO THE JOINT OF THE SUBSTRATE.

C. APPLY A LAYER OF WP-900 HYDRO BLOC WATERPROOF AND CRACK ISOLATION MEMBRANE.

D. SET TILE AND GROUT.

3.4 SETTING OF TILE

A. USE THIN-BED SETTING FOR ALL TILE WORK. PROVIDE LEVEL FINISHED SURFACE OF TILE WITH ALL UNITS ALIGNED. IF NECESSARY, PROVIDE LEVELING COAT TO ASSURE TOP QUALITY INSTALLATION USING A LEVELING COMPOUND, COMPATIBLE WITH RELATED WORK AND AS RECOMMENDED BY TILE MANUFACTURER.

B. MIX AND APPLY SETTING MATERIAL PER MANUFACTURER'S INSTRUCTIONS.

3.5 GROUTING OF TILE

A. GROUT TILE JOINTS WITH TYPE AND COLOR OF GROUT MATERIALS SPECIFIED AND APPROVED BY THE OWNER'S REPRESENTATIVE.

B. MIX AND APPLY GROUT PER MANUFACTURER'S INSTRUCTIONS.

3.6 CLEANING

A. CLEAN SETTING BED AND GROUT MATERIALS FROM TILE SURFACES TO REMAIN EXPOSED AS SOON AS POSSIBLE AS WORK PROGRESSES.

B. CLEAN ALL EXPOSED SURFACES OF TILE AFTER INSTALLATION AND CURING OF GROUT IS COMPLETE.

C. USE NO ACID, AGENT, OR DEVICE THAT WILL MAR TILE SURFACES.

D. RINSE TILE WORK THOROUGHLY WITH CLEAN WATER AFTER USE OF CLEANING AGENT.

3.7 PROTECTION

A. PROTECT TILE FROM DAMAGE AS REQUIRED UNTIL SUBSTANTIAL COMPLETION.

END OF SECTION 09 30 13

ACOUSTIC TILE CEILINGS SECTION 09 51 23

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: AN EXPERIENCED INSTALLER WHO HAS SUCCESSFULLY COMPLETED ACOUSTICAL CEILING SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR PROJECT, WITH A MINIMUM OF 5 YEARS EXPERIENCE.

B. FIRE PERFORMANCE CHARACTERISTICS (IF REQUIRED): PROVIDE ACOUSTICAL CEILINGS THAT ARE IDENTICAL TO THOSE TESTED FOR THE FOLLOWING FIRE PERFORMANCE CHARACTERISTICS, PER ASTM TEST METHOD INDICATED BELOW, BY UL OR OTHER TESTING AND INSPECTING ORGANIZATIONS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. IDENTIFY ACOUSTICAL CEILING COMPONENTS WITH APPROPRIATE MARKINGS OF APPLICABLE TESTING AND INSPECTING ORGANIZATION.

1. SURFACE BURNING CHARACTERISTICS: FLAME SPREAD OF 25 OR LESS AND SMOKE DEVELOPED OF 50 OR LESS, TESTED PER ASTM E84 AND COMPLYING WITH ASTM E 1264 FOR CLASS A PRODUCTS.

C. SINGLE-SOURCE RESPONSIBILITY FOR CEILING UNITS: OBTAIN EACH TYPE OF ACOUSTICAL CEILING UNIT FROM A SINGLE SOURCE WITH RESOURCES TO PROVIDE PRODUCTS OF CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES WITHOUT DELAYING PROGRESS OF THE WORK.

D. SINGLE-SOURCE RESPONSIBILITY FOR SUSPENSION SYSTEM: OBTAIN EACH TYPE OF SUSPENSION SYSTEM FROM A SINGLE SOURCE WITH RESOURCES TO PROVIDE PRODUCTS OF CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES WITHOUT DELAYING PROGRESS OF THE WORK.

E. COORDINATION OF WORK: COORDINATE LAYOUT AND INSTALLATION OF ACOUSTICAL CEILING UNITS AND SUSPENSION SYSTEM COMPONENTS WITH OTHER CONSTRUCTION THAT PENETRATES CEILINGS OR IS SUPPORTED BY THEM, INCLUDING LIGHT FIXTURES, HVAC EQUIPMENT, FIRE-SUPPRESSION SYSTEM COMPONENTS, AND PARTITION SYSTEM.

1.3 DELIVERY, STORAGE, AND HANDLING

A. DELIVER ACOUSTICAL CEILING UNITS TO PROJECT SITE IN ORIGINAL, UNOPENED PACKAGES AND STORE THEM IN A FULLY ENCLOSED SPACE WHERE THEY WILL BE PROTECTED AGAINST DAMAGE FROM MOISTURE, DIRECT SUNLIGHT, SURFACE CONTAMINATION, AND OTHER CAUSES.

B. BEFORE INSTALLING ACOUSTICAL CEILING UNITS, PERMIT THEM TO REACH ROOM TEMPERATURE AND A STABILIZED MOISTURE CONTENT.

C. HANDLE ACOUSTICAL CEILING UNITS CAREFULLY TO AVOID CHIPPING EDGES OR DAMAGING UNITS IN ANY WAY.

1.4 PROJECT CONDITIONS

A. SPACE ENCLOSURE: DO NOT INSTALL INTERIOR ACOUSTICAL CEILINGS UNTIL SPACE IS ENCLOSED AND WEATHERPROOF, WET WORK IN SPACE IS COMPLETED AND NOMINALLY DRY, WORK ABOVE CEILINGS (BY OTHER TRADES) IS COMPLETE, AND AMBIENT CONDITIONS OF TEMPERATURE AND HUMIDITY WILL BE CONTINUOUSLY MAINTAINED AT VALUES NEAR THOSE INDICATED FOR FINAL OCCUPANCY.

1.5 EXTRA MATERIALS

A. FURNISH EXTRA MATERIALS FOR OWNER'S FUTURE USE, IN FULL OPENED BOXES, TEN PERCENT (10%) OF EACH TYPE AND PATTERN OF ACOUSTIC MATERIAL INSTALLED. DELIVER IN PLAINLY MARKED BOXES. STORE AS DIRECTED BY OWNER.

PART 2 - PRODUCTS

2.1 ACOUSTIC CEILING TILES AND SUSPENSION SYSTEM

A. SEE FINISH PLAN AND SCHEDULE FOR MANUFACTURER AND MATERIAL SIZE, COLOR INFORMATION, AND INSTALLATION LOCATION.

2.2 ACCESSORY MATERIALS

A. ATTACHMENT DEVICES: SIZE FOR 5 TIMES DESIGN LOAD INDICATED IN ASTM C635, TABLE 1, DIRECT HUNG UNLESS OTHERWISE INDICATED.

B. WIRE HANGERS AND TIES: ASTM A641, CLASS 1 ZINC COATING, SOFT TEMPER, SIZED SO STRESS AT 3 TIMES HANGER DESIGN LOAD (ASTM C635, TABLE 1, DIRECT-HUNG), WILL BE LESS THAN YIELD STRESS OF WIRE, BUT PROVIDE NOT LESS THAN 0.106 INCH DIAMETER (12 GAUGE).

C. EDGE MOLDINGS AND TRIM: METAL OR EXTRUDED ALUMINUM OF TYPES AND PROFILES INDICATED OR, IF NOT INDICATED, MANUFACTURER'S STANDARD MOLDINGS FOR EDGES AND PENETRATIONS THAT FIT TYPE OF EDGE DETAIL AND SUSPENSION SYSTEM INDICATED.

1. LAY-IN PANELS WITH REVEAL EDGE DETAILS: STEPPED EDGE MOLDING THAT FORMS REVEAL OF SAME DEPTH AND WIDTH AS THAT FORMED BETWEEN EDGE OF PANEL AND FLANGE AT EXPOSED SUSPENSION MEMBER.
2. CIRCULAR PENETRATIONS OF CEILING: PROVIDE EDGE MOLDINGS FABRICATED TO DIAMETER REQUIRED TO FIT PENETRATION EXACTLY.
3. NARROW FACED SUSPENSION SYSTEMS: SUSPENSION SYSTEM MANUFACTURER'S STANDARD EDGE MOLDINGS THAT MATCH WIDTH AND CONFIGURATION OF EXPOSED RUNNER.

D. SUSPENSION SYSTEM SHALL NOT BE LESS IN SIZE AND STRENGTH THAN REQUIRED TO SUPPORT ITSELF AND SHALL BE INCREASED IN SIZE AND STRENGTH AS NECESSARY TO SUPPORT THE LIGHT FIXTURES, ACOUSTICAL UNITS AND RELATED ITEMS WITHOUT DEFLECTING MORE THAN 1/360 OF THE SPAN WHEN TESTED AS A SIMPLE BEAM, ENDS FREE.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE SUBSTRATES AND STRUCTURAL FRAMING TO WHICH CEILING SYSTEM ATTACHES OR ABUTS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS SPECIFIED IN THIS AND OTHER SECTIONS THAT AFFECT INSTALLATION AND ANCHORAGE OF CEILING SYSTEM. DO NOT PROCEED WITH INSTALLATION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 PREPARATION

A. COORDINATION: FURNISH LAYOUTS FOR PRESET INSERTS, CLIPS, AND OTHER CEILING ANCHORS WHOSE INSTALLATION IS SPECIFIED IN OTHER SECTIONS.

1. FURNISH INSERTS AND SIMILAR DEVICES TO OTHER TRADES FOR INSTALLATION WELL IN ADVANCE OF TIME NEEDED FOR COORDINATION OF OTHER WORK.

B. MEASURE EACH CEILING AREA AND ESTABLISH LAYOUT OF ACOUSTICAL UNITS TO BALANCE BORDER WIDTHS AT OPPOSITE EDGES OF EACH CEILING. AVOID USE OF LESS-THAN-HALF-WIDTH UNITS AT BORDERS, AND COMPLY WITH REFLECTED CEILING PLANS.

3.3 INSTALLATION

A. GENERAL: INSTALL ACOUSTICAL CEILING SYSTEMS IN ACCORDANCE WITH ASTM C636 REQUIREMENTS, MANUFACTURER'S INSTALLATION INSTRUCTIONS AND CISCA "CEILING SYSTEMS HANDBOOK."

B. ARRANGE ACOUSTICAL UNITS AND ORIENT DIRECTIONALLY PATTERNED UNITS IN MANNER SHOWN BY REFLECTED CEILING PLANS.

C. SUSPEND CEILING HANGERS FROM BUILDING STRUCTURAL MEMBERS AND AS FOLLOWS:

1. INSTALL HANGERS PLUMB AND FREE FROM CONTACT WITH INSULATION OR OTHER OBJECTS WITHIN CEILING PLENUM THAT ARE NOT PART OF SUPPORTING STRUCTURAL OR CEILING SUSPENSION SYSTEM. SPLAY HANGERS ONLY WHERE REQUIRED TO MISS OBSTRUCTIONS AND OFFSET RESULTING HORIZONTAL FORCES BY BRACING, COUNTER-PLAYING, OR OTHER EQUALLY EFFECTIVE MEANS.
2. WHERE WIDTH OF DUCTS AND OTHER CONSTRUCTION WITHIN CEILING PLENUM PRODUCES HANGER SPACINGS THAT INTERFERE WITH THE LOCATION OF HANGERS AT SPACINGS REQUIRED TO SUPPORT STANDARD SUSPENSION SYSTEM MEMBERS, INSTALL SUPPLEMENTAL SUSPENSION MEMBERS AND HANGERS IN FORM OF TRAPEZES OR EQUIVALENT DEVICES. SIZE SUPPLEMENTAL SUSPENSION MEMBERS AND HANGERS TO SUPPORT CEILING LOADS WITHIN PERFORMANCE LIMITS ESTABLISHED BY REFERENCED STANDARDS.
3. SECURE WIRE HANGERS BY LOOPING AND WIRE-TYING, EITHER DIRECTLY TO STRUCTURES OR TO INSERTS, EYESCREWS, OR OTHER DEVICES THAT ARE SECURE AND APPROPRIATE FOR SUBSTRATE, AND IN A MANNER THAT WILL NOT CAUSE THEM TO DETERIORATE OR OTHERWISE FAIL DUE TO AGE, CORROSION, OR ELECTED TEMPERATURES.
4. DO NOT ATTACH HANGERS TO STEEL ROOF DECK. ATTACH HANGERS TO STRUCTURAL MEMBERS.
5. SPACE HANGERS NOT MORE THAN 4 FEET ON CENTER ALONG EACH MEMBER SUPPORTED DIRECTLY FROM HANGERS, UNLESS OTHERWISE SHOWN, AND PROVIDE HANGERS NOT MORE THAN 8 INCHES FROM ENDS OR EACH MEMBER.

A. INSTALL EDGE MOLDINGS OF TYPE INDICATED AT PERIMETER OF ACOUSTICAL CEILING AREA AND WHERE NECESSARY TO CONCEAL EDGES OF ACOUSTICAL UNITS.

1. SCREW-ATTACH MOLDINGS TO SUBSTRATE AT INTERVALS NOT OVER 16 INCHES O.C. AND NOT MORE THAN 3 INCHES FROM ENDS, LEVELING WITH CEILING SUSPENSION SYSTEM TO TOLERANCE OF 1/8 INCH IN 12'-0". MITER CORNERS ACCURATELY AND CONNECT SECURELY.

E. INSTALL ACOUSTICAL PANELS IN COORDINATION WITH SUSPENSION SYSTEM, WITH EDGES CONCEALED BY SUPPORT OF SUSPENSION MEMBERS. SCRIBE AND CUT PANEL TO FIT ACCURATELY AT BORDERS AND AT PENETRATIONS.

3.4 CLEANING

A. CLEAN EXPOSED SURFACES OF ACOUSTICAL CEILINGS, INCLUDING TRIM, EDGE MOLDINGS, AND SUSPENSION MEMBERS. COMPLY WITH MANUFACTURER'S INSTRUCTIONS FOR CLEANING AND TOUCH-UP OF MINOR FINISH DAMAGE. REMOVE AND REPLACE WORK THAT CANNOT BE SUCCESSFULLY CLEANED AND REPAIRED TO PERMANENTLY ELIMINATE EVIDENCE OF DAMAGE.

END OF SECTION 09 51 23

FIBERGLASS REINFORCED PANELS SECTION 09 77 50

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. SINGLE-SOURCE RESPONSIBILITY FOR PANEL PRODUCTS: OBTAIN EACH TYPE OF PANEL PRODUCTS FROM A SINGLE MANUFACTURER.

1.3 DELIVERIES, STORAGE, AND HANDLING

A. DELIVER MATERIALS TO THE JOB SITE IN THE MANUFACTURER'S ORIGINAL, UNOPENED PACKAGES AND CONTAINERS BEARING MANUFACTURER'S NAME AND LABEL.

B. STORE MATERIALS IN A DRY PLACE AT THE PROJECT SITE.

C. REMOVE FOREIGN MATTER FROM FACE OF PANELS BY USE OF A SOFT BRISTLE BRUSH, AVOIDING ABRASIVE ACTION.

1.4 PROJECT CONDITIONS

A. INSTALLATION SHALL NOT BEGIN UNTIL BUILDING IS ENCLOSED, PERMANANT HEATING AND COOLING EQUIPMENT IS IN OPERATION AND RESIDUAL MOISTURE FROM PLASTER, CONCRETE OR TERAZZO.

B. DURING INSTALLATION AND FOR NOT LESS THAN 48 HOURS BEFORE, MAINTAIN AN AMBIENT TEMPERATURE AND RELATIVE HUMIDITY WITHIN LIMITS REQUIRED BY TYPE OF ADHESIVE USED AND RECOMMENDATION OF ADHESIVE MANUFACTURER.

C. PROVIDE VENTILATION TO DISPERSE FUMES DURING APPLICATION OF ADHESIVE AS RECOMMENDED BY THE ADHESIVE MANUFACTURER.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. MARLITE TEXTURED FIBERGLASS REINFORCED PLASTIC PANELS OR APPROVED EQUAL.

2.2 MATERIALS GENERAL

A. WALL PANELS: PROVIDE FIBERGLASS REINFORCED PANELS WITH A FINISHED EMBOSSED TEXTURE AND THICKNESS OF 0.09".

B. COLOR: SEE FINISH SCHEDULE.

C. SIZE: 4' x 8', 4' x 10'

D. USE OF "CLASS A" OR "CLASS C" MATERIALS, SEE FINISH SCHEDULE.

E. ALTERNATE PRODUCTS SHALL MEET OR EXCEED THE FOLLOWING PROPERTIES:

1. UNDERWRITERS LABORATORIES (U.L.) LISTED-EMBOSSED FXI 0.09" (2.3MM) ONLY.
2. CLASS A FLAME SPREAD OF LESS THAN 25, SMOKE DEVELOPED LESS THAN 450.
3. BARCOL HARDNESS (SCRATCH RESISTANCE) OF 55 AS PER ASTM D-2583.
4. PANELS WILL EXHIBIT NO MORE THAN A 0.038% WEIGHT LOSS AFTER A 25-CYCLE TABER ABRASION TEST.
5. GARDNER IMPACT STRENGTH OF 22 IN./LBS (25.6 CM/KG) PER ASTM D-3029.
6. FMRC (FACTORY MUTUAL RESEARCH CENTER) APPROVED, SUBJECT TO THE CONDITIONS OF APPROVAL AS DESCRIBED IN FMRC REPORT 2B2A2.AM-EMBOSSES FXI 0.09" ONLY.
7. MEETS USDA/FSIS REQUIREMENTS.
8. ICBO REPORT NUMBER ER-4583
9. A MEANS OF FRONTSIDE IDENTIFICATION AND CONFIRMATION OF MEETING CLASS I (A) INTERIOR FINISH REQUIREMENTS AFTER INSTALLATION AND WHILE IN SERVICE (WITHOUT LABELS) EMBOSSED FXI ONLY.

F. DIVISION BARS, CORNER TRIM: PROVIDE MANUFACTURER'S STANDARD LENGTH EXTRUDED VINYL PIECES; LONGEST LENGTH POSSIBLE TO ELIMINATE END JOINTS.

G. ADHESIVE AND SEALANTS ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.

PART 3 - EXECUTION

3.1 PREPARATION

A. EXAMINE BACKUP SURFACES TO DETERMINE THAT CORNERS ARE PLUMB AND STRAIGHT, SURFACES ARE SMOOTH, UNIFORM, CLEAN AND FREE FROM FOREIGN MATTER, NAILS, COUNTERSUNK JOINTS AND CRACKS FILLED FLUSH AND SMOOTH WITH THE ADJOINING SURFACE.

B. DO NOT BEGIN INSTALLATION UNTIL BACKUP SURFACES ARE PUT INTO SATISFACTORY CONDITION.

3.2 APPLICATION

A. DO ALL CUTTING WITH CARBIDE TIPPED SAW BLADES OR DRILL BITS, OR CUT WITH SNIPS.

B. INSTALL PANELS WITH MANUFACTURER'S RECOMMENDED GAP FOR PANEL FIELD AND CORNER JOINTS.

C. FASTENER HOLES IN THE PANELS MUST BE PREDRILLED 1/8" (3.2 MM) OVERSIZE.

D. FOR TROWEL TYPE AND APPLICATION OF ADHESIVE, FOLLOW ADHESIVE MANUFACTURER'S RECOMMENDATION.

E. USING PRODUCTS ACCEPTABLE TO MANUFACTURER, INSTALL THE FRP PANEL SYSTEM IN ACCORDANCE WITH PANEL MANUFACTURER'S PRINTED INSTRUCTIONS.

F. USE SOLVENT BASED ADHESIVE ACCEPTABLE TO MANUFACTURER FOR DIRECT INSTALLATION ON MASONRY.

3.3 CLEANING

A. REMOVE ANY ADHESIVE OR EXCESSIVE SEALANT FROM PANEL FACE USING SOLVENT OR CLEANER RECOMMENDED BY PANEL MANUFACTURER.

END OF SECTION 09 77 50

PAINTING SECTION 09 91 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. APPLICATOR QUALIFICATIONS: ENGAGE AN EXPERIENCED APPLICATOR WHO HAS COMPLETED PAINTING SYSTEM APPLICATIONS SIMILAR IN MATERIAL AND EXTENT TO THOSE INDICATED FOR THE PROJECT THAT HAVE RESULTED IN A CONSTRUCTION RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.

B. APPLICATOR SHALL FURNISH ALL MATERIALS, LABOR, TOOLS, AND EQUIPMENT REQUIRED TO COMPLETE THE PAINTING OF BUILDING AS SPECIFIED

C. SINGLE-SOURCE RESPONSIBILITY: PROVIDE PRIMERS AND UNDERCOAT PAINT PRODUCED BY THE SAME MANUFACTURER AS THE FINISH COATS.

1.3 DELIVERIES, STORAGE, AND HANDLING

A. DELIVER MATERIALS TO THE JOB SITE IN THE MANUFACTURER'S ORIGINAL, UNOPENED PACKAGES AND CONTAINERS BEARING MANUFACTURER'S NAME AND LABEL, AND THE FOLLOWING INFORMATION:

1. PRODUCT NAME OR TITLE OF MATERIAL.
2. PRODUCT DESCRIPTION (GENERIC CLASSIFICATION OR BINDER TYPE).
3. MANUFACTURER'S STOCK NUMBER AND DATE OF MANUFACTURE.
4. CONTENTS BY VOLUME, FOR PIGMENT AND VEHICLE CONSTITUENTS.
5. THINNING INSTRUCTIONS.
6. APPLICATION INSTRUCTIONS.
7. COLOR NAME AND NUMBER.

C. STORE MATERIALS NOT IN USE IN TIGHTLY COVERED CONTAINERS IN A WELL-VENTILATED AREA AT A MINIMUM AMBIENT TEMPERATURE OF 45 DEG F (7 DEG C). MAINTAIN CONTAINERS USED IN STORAGE IN A CLEAN CONDITION, FREE OF FOREIGN MATERIALS AND RESIDUE.

1. PROTECT FROM FREEZING. KEEP STORAGE AREA NEAT AND ORDERLY. REMOVE OILY RAGS AND WASTE DAILY. TAKE NECESSARY MEASURES TO ENSURE THAT WORKERS AND WORK AREAS ARE PROTECTED FROM FIRE AND HEALTH HAZARDS RESULTING FROM HANDLING, MIXING, AND APPLICATION.

1.4 JOB CONDITIONS

A. APPLY WATER-BASED PAINTS ONLY WHEN THE TEMPERATURE OF SURFACES TO BE PAINTED AND SURROUNDING AIR TEMPERATURES ARE BETWEEN 50 DEG F (10 DEG C) AND 90 DEG F (32 DEG C).

B. APPLY SOLVENT-THINNED PAINTS ONLY WHEN THE TEMPERATURE OF SURFACES TO BE PAINTED AND SURROUNDING AIR TEMPERATURES ARE BETWEEN 45 DEG F (7 DEG C) AND 95 DEG F (35 DEG C).

C. DO NOT APPLY PAINT IN SNOW, RAIN, FOG, OR MIST; OR WHEN THE RELATIVE HUMIDITY EXCEEDS 85 PERCENT; OR AT TEMPERATURES LESS THAN 5 DEG F (3 DEG C) ABOVE THE DEW POINT; OR TO DAMP OR WET SURFACES.

6. PAINTING MAY CONTINUE DURING INCLEMENT WEATHER IF SURFACES AND AREAS TO BE PAINTED ARE ENCLOSED AND HEATED WITHIN TEMPERATURE LIMITS SPECIFIED BY THE MANUFACTURER DURING APPLICATION AND DRYING PERIODS.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. PAINT: PROVIDE PAINT AS SCHEDULED ON DRAWINGS.

2.2 PAINT MATERIALS, GENERAL

A. MATERIAL COMPATIBILITY: PROVIDE BLOCK FILLERS, PRIMERS, FINISH COAT MATERIALS, AND RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND THE SUBSTRATES INDICATED UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY THE MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.

B. MATERIAL QUALITY: PROVIDE THE MANUFACTURER'S BEST-QUALITY TRADE SALE PAINT MATERIAL OF THE VARIOUS COATING TYPES SPECIFIED. PAINT MATERIAL CONTAINERS NOT DISPLAYING MANUFACTURER'S PRODUCT IDENTIFICATION WILL NOT BE ACCEPTABLE.

C. THE PAINT MANUFACTURERS LISTED IN THESE SPECIFICATIONS IS INCLUDED TO ESTABLISH A BASIS OF QUALITY FOR EACH RELATED PAINT MATERIAL. THE CONTRACTOR IS TO PROVIDE ALL PAINT MATERIAL AS SHOWN ON THE DRAWINGS AND WHICH IS OF THE SAME QUALITY AS THE MANUFACTURER'S PAINT MATERIAL LISTED HEREIN.

2.3 PRIMERS

A. PRIMERS: PROVIDE THE MANUFACTURER'S RECOMMENDED FACTORY-FORMULATED PRIMERS THAT ARE COMPATIBLE WITH THE SUBSTRATE AND FINISH COATS INDICATED.

B. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE THE FOLLOWING:

1. GYPSUM DRYWALL PRIMER: BENJAMIN MOORE: #201 LATEX QUICKDRY PRIME SEAL.

2.4 EXTERIOR FINISH PAINT MATERIAL

A. FINISH PAINT: PROVIDE BENJAMIN MOORE: RECOMMENDED FACTORY-FORMULATED FINISH-COAT MATERIALS THAT ARE COMPATIBLE WITH THE SUBSTRATE AND UNDERCOATS INDICATED.

2.5 INTERIOR FINISH PAINT MATERIAL

A. FINISH PAINT: PROVIDE BENJAMIN MOORE: RECOMMENDED FACTORY-FORMULATED FINISH-COAT MATERIALS THAT ARE COMPATIBLE WITH THE SUBSTRATE AND UNDERCOATS INDICATED.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE SUBSTRATES AND CONDITIONS UNDER WHICH PAINTING WILL BE PERFORMED FOR COMPLIANCE WITH PAINT APPLICATION REQUIREMENTS. SURFACES RECEIVING PAINT MUST BE THOROUGHLY DRY BEFORE PAINT IS APPLIED.

1. DO NOT BEGIN TO APPLY PAINT UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
2. START OF PAINTING WILL BE CONSTRUED AS THE APPLICATOR'S ACCEPTANCE OF SURFACES AND CONDITIONS WITHIN A PARTICULAR AREA.
3. IF THE PAINTING CONTRACTOR HAS BEEN INSTRUCTED BY THE GENERAL CONTRACTOR TO BEGIN PAINTING UNDER CONDITIONS AND CIRCUMSTANCES HE BELIEVES COULD RESULT IN POOR PERFORMANCE AND EARLY FAILURE OF THE COATINGS, HE SHALL REQUEST A DECISION IN WRITING FROM TIM HORTONS.

B. COORDINATION: REVIEW OTHER SECTIONS IN WHICH PRIMERS ARE PROVIDED TO ENSURE COMPATIBILITY OF THE TOTAL SYSTEM FOR VARIOUS SUBSTRATES. VERIFY ALL FACTORY PRIMED ITEMS FOR COMPATIBILITY WITH SCHEDULED FINISHED COATINGS. IF FACTORY APPLIED PRIMER IS INCOMPATIBLE WITH FINISH COATINGS SPECIFIED, EITHER REMOVE FACTORY APPLIED PRIMER OR PROVIDE INTERMEDIATE PRIMER THAT IS COMPATIBLE WITH BOTH FACTORY APPLIED PRIMER AND FINISH COATING.

3.2 PREPARATION

A. GENERAL: REMOVE HARDWARE AND HARDWARE ACCESSORIES, PLATES, MACHINED SURFACES, LIGHTING FIXTURES, AND SIMILAR ITEMS ALREADY INSTALLED THAT ARE NOT TO BE PAINTED, OR PROVIDE SURFACE-APPLIED PROTECTION PRIOR TO SURFACE PREPARATION AND PAINTING. REMOVE THESE ITEMS, IF NECESSARY, TO COMPLETELY PAINT THE ITEMS AND ADJACENT SURFACES. FOLLOWING COMPLETION OF PAINTING OPERATIONS IN EACH SPACE OR AREA, HAVE ITEMS REINSTALLED BY WORKERS SKILLED IN THE TRADES INVOLVED.

B. CLEANING: BEFORE APPLYING PAINT OR OTHER SURFACE TREATMENTS, CLEAN THE SUBSTRATES OF SUBSTANCES THAT COULD IMPAIR THE BOND OF THE VARIOUS COATINGS. REMOVE OIL AND GREASE PRIOR TO CLEANING. SCHEDULE CLEANING AND PAINTING SO DUST AND OTHER CONTAMINANTS FROM THE CLEANING PROCESS WILL NOT FALL ON WET, NEWLY PAINTED SURFACES.

C. SURFACE PREPARATION: CLEAN AND PREPARE SURFACES TO BE PAINTED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS FOR EACH PARTICULAR SUBSTRATE CONDITION AND AS SPECIFIED.

1. PROVIDE BARRIER COATS OVER INCOMPATIBLE PRIMERS OR REMOVE AND RE-PRIME. NOTIFY OWNER IN WRITING ABOUT ANTICIPATED PROBLEMS USING THE SPECIFIED FINISH-COAT MATERIAL WITH SUBSTRATES PRIMED BY OTHERS.
2. CEMENTITIOUS MATERIALS: PREPARE CONCRETE, CONCRETE MASONRY BLOCK, CEMENT PLASTER, AND MINERAL-FIBER-REINFORCED CEMENT PANEL SURFACES TO BE PAINTED. REMOVE EFFLORESCENCE, CHALK, DUST, DIRT, GREASE, OILS, AND RELEASE AGENTS. ROUGHEN, AS REQUIRED, TO REMOVE GLAZE (EXCEPT PRE-GLAZED UNITS). DETERMINE ALKALINITY AND MOISTURE CONTENT OF SURFACES BY PERFORMING APPROPRIATE TESTS. IF SURFACES ARE SUFFICIENTLY ALKALINE TO CAUSE THE FINISH PAINT TO BLISTER AND BURN, CORRECT THIS CONDITION BEFORE APPLICATION. DO NOT PAINT SURFACES WHERE MOISTURE CONTENT EXCEEDS THAT PERMITTED IN MANUFACTURER'S PRINTED DIRECTIONS.
3. FERROUS METALS: CLEAN UNGALVANIZED FERROUS METAL SURFACES THAT HAVE NOT BEEN SHOP-COATED; REMOVE OIL, GREASE, DIRT, LOOSE MILL SCALE AND OTHER FOREIGN SUBSTANCES. USE SOLVENT OR MECHANICAL CLEANING METHODS THAT COMPLY WITH RECOMMENDATIONS OF THE STEEL STRUCTURES PAINTING COUNCIL (SSPC). TOUCH-UP BARE AREAS AND SHOP-APPLIED PRIME COATS THAT HAVE BEEN DAMAGED. WIRE-BRUSH; CLEAN WITH SOLVENTS RECOMMENDED BY THE PAINT MANUFACTURER, AND TOUCH UP WITH THE SAME PRIMER AS THE SHOP COAT.
4. GALVANIZED SURFACES: CLEAN GALVANIZED SURFACES WITH NON-PETROLEUM-BASED SOLVENTS SO THAT THE SURFACE IS FREE OF OIL AND SURFACE CONTAMINANTS. REMOVE PRETREATMENT FROM GALVANIZED SHEET METAL FABRICATED FROM COIL STOCK BY MECHANICAL METHODS.

D. MATERIALS PREPARATION: CAREFULLY MIX AND PREPARE PAINT MATERIALS ACCORDING TO MANUFACTURERS DIRECTIONS.

1. MAINTAIN CONTAINERS USED IN MIXING AND APPLYING PAINT IN A CLEAN CONDITION, FREE OF FOREIGN MATERIALS AND RESIDUE.
2. STIR MATERIAL BEFORE APPLICATION TO PRODUCE A MIXTURE OF UNIFORM DENSITY; STIR AS REQUIRED DURING APPLICATION. DO NOT STIR SURFACE FILM INTO MATERIAL. REMOVE FILM AND, IF NECESSARY, STRAIN MATERIAL BEFORE USING.
3. USE ONLY THINNERS APPROVED BY THE PAINT MANUFACTURER AND ONLY WITHIN RECOMMENDED LIMITS.

E. TINTING: TINT EACH UNDERCOAT A LIGHTER SHADE TO FACILITATE IDENTIFICATION OF EACH COAT WHERE MULTIPLE COATS OF THE SAME MATERIAL ARE APPLIED. TINT UNDERCOATS TO MATCH THE COLOR OF THE FINISH COAT, BUT PROVIDE SUFFICIENT DIFFERENCES IN SHADE OF UNDERCOATS TO DISTINGUISH EACH SEPARATE COAT.

3.3 APPLICATION

A. GENERAL: APPLY PAINT ACCORDING TO MANUFACTURER'S DIRECTIONS. USE APPLICATORS AND TECHNIQUES BEST SUITED FOR SUBSTRATE AND TYPE OF MATERIAL BEING APPLIED.

B. DO NOT PAINT OVER DIRT, RUST, SCALE, GREASE, MOISTURE, SCUFFED SURFACES, OR CONDITIONS DETRIMENTAL TO FORMATION OF A DURABLE PAINT FILM.

1. PAINT COLORS, SURFACE TREATMENTS, AND FINISHES ARE INDICATED IN THE SCHEDULES.
2. PROVIDE FINISH COATS THAT ARE COMPATIBLE WITH PRIMERS USED.
3. THE NUMBER OF COATS AND THE FILM THICKNESS REQUIRED ARE THE SAME REGARDLESS OF THE APPLICATION METHOD. DO NOT APPLY SUCCEEDING COATS UNTIL THE PREVIOUS COAT HAS CURED AS RECOMMENDED BY THE MANUFACTURER. SAND BETWEEN APPLICATIONS WHERE SANDING IS REQUIRED TO PRODUCE A SMOOTH EVEN SURFACE ACCORDING TO THE MANUFACTURER'S DIRECTIONS.
4. APPLY ADDITIONAL COATS IF UNDERCOATS, STAINS, OR OTHER CONDITIONS SHOW THROUGH FINAL COAT OF PAINT UNTIL PAINT FILM IS OF UNIFORM FINISH, COLOR, AND APPEARANCE. GIVE SPECIAL ATTENTION TO ENSURE THAT SURFACES, INCLUDING EDGES, CORNERS, CREVICES, WELDS, AND EXPOSED FASTENERS, RECEIVE A DRY FILM THICKNESS EQUIVALENT TO THAT OF FLAT SURFACES.
5. THE TERM EXPOSED SURFACES INCLUDES AREAS VISIBLE WHEN PERMANENT OR BUILT-IN FIXTURES, CONVECTOR COVERS, COVERS FOR FINNED TUBE RADIATION, GRILLES, AND SIMILAR COMPONENTS ARE IN PLACE. EXTEND COATINGS IN THESE AREAS, AS REQUIRED, TO MAINTAIN THE SYSTEM INTEGRITY AND PROVIDE DESIRED PROTECTION.

C. SCHEDULING PAINTING: APPLY FIRST COAT TO SURFACES THAT HAVE BEEN CLEANED, PRETREATED, OR OTHERWISE PREPARED FOR PAINTING AS SOON AS PRACTICABLE AFTER PREPARATION AND BEFORE SUBSEQUENT SURFACE DETERIORATION.

1. ALLOW SUFFICIENT TIME BETWEEN SUCCESSIVE COATS TO PERMIT PROPER DRYING. DO NOT RECOAT UNTIL PAINT HAS DRIED TO WHERE IT FEELS FIRM, DOES NOT DEFORM OR FEEL STICKY UNDER MODERATE THUMB PRESSURE, AND WHERE APPLICATION OF ANOTHER COAT OF PAINT DOES NOT CAUSE THE UNDERCOAT TO LIFT OR LOSE ADHESION.

D. APPLICATION PROCEDURES: APPLY PAINTS AND COATINGS BY BRUSH, ROLLER, SPRAY, OR OTHER APPLICATORS ACCORDING TO THE MANUFACTURER'S DIRECTIONS.

E. MINIMUM COATING THICKNESS: APPLY MATERIALS NO THINNER THAN THE MANUFACTURER'S RECOMMENDED SPREADING RATE. PROVIDE THE TOTAL DRY FILM THICKNESS OF THE ENTIRE SYSTEM AS RECOMMENDED BY THE MANUFACTURER.

F. BLOCK FILLERS: APPLY BLOCK FILLERS TO CONCRETE MASONRY BLOCK AT A RATE TO ENSURE COMPLETE COVERAGE WITH PORES FILLED.

G. PRIME COATS: BEFORE APPLYING FINISH COATS, APPLY A PRIME COAT OF MATERIAL, AS RECOMMENDED BY THE MANUFACTURER, TO MATERIAL THAT IS REQUIRED TO BE PAINTED OR FINISHED AND THAT HAS NOT BEEN PRIME-COATED BY OTHERS. RECOAT PRIMED AND SEALED SURFACES WHERE EVIDENCE OF SUCTION SPOTS OR UNSEALED AREAS IN FIRST COAT APPEARS, TO ENSURE A FINISH COAT WITH NO BURN-THROUGH OR OTHER DEFECTS DUE TO INSUFFICIENT SEALING.

H. PIGMENTED (OPAQUE) FINISHES: COMPLETELY COVER TO PROVIDE A SMOOTH, OPAQUE SURFACE OF UNIFORM FINISH, COLOR, APPEARANCE, AND COVERAGE. CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, RUNS, SAGS, ROPINESS, OR OTHER SURFACE IMPERFECTIONS WILL NOT BE ACCEPTABLE.

I. COMPLETED WORK: MATCH APPROVED SAMPLES FOR COLOR, TEXTURE, AND COVERAGE. REMOVE, REFINISH, OR REPAINT WORK NOT COMPLYING WITH SPECIFIED REQUIREMENTS.

3.4 CLEANING

A. CLEANUP: AT THE END OF EACH WORK DAY, REMOVE EMPTY CANS, RAGS, RUBBISH, AND OTHER DISCARDED PAINT MATERIALS FROM THE SITE. AFTER COMPLETING PAINTING, CLEAN GLASS AND PAINT-SPATTERED SURFACES. REMOVE SPATTERED PAINT BY WASHING AND SCRAPING. BE CAREFUL NOT TO SCRATCH OR DAMAGE ADJACENT FINISHED SURFACES.

3.5 PROTECTION

A. PROTECT WORK OF OTHER TRADES, WHETHER BEING PAINTED OR NOT AGAINST DAMAGE BY PAINTING. CORRECT DAMAGE BY CLEANING, REPAIRING OR REPLACING, AND REPAINTING, AS ACCEPTABLE TO ARCHITECT.

B. PROVIDE "WET PAINT" SIGNS TO PROTECT NEWLY PAINTED FINISHES. REMOVE TEMPORARY PROTECTIVE WRAPPINGS PROVIDED BY OTHERS TO PROTECT THEIR WORK AFTER COMPLETING PAINTING OPERATIONS.

1. AT COMPLETION OF CONSTRUCTION ACTIVITIES OF OTHER TRADES, TOUCH UP AND RESTORE DAMAGED OR DEFACED PAINTED SURFACES.

END OF SECTION 09 91 00

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

TANNER EDWARDS KINDE
15704
Tanner Kinde

9.14.2023

Company Logo

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Project

LOUISIANA 19 72 KITCHEN
POPEYES®

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ARCHITECTURAL SPECIFICATIONS

Drawn	Checked
SH	AL

Scale	Date
	JUNE 2023

Project No.	Drawing No.
C22-129	SP6

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

DIVISION 10 - SPECIALTIES

SIGNAGE SECTION 10 14 23

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:

1. ILLUMINATED PANEL SIGNS.

2. ROOM-IDENTIFICATION SIGNS.

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.

B. SHOP DRAWINGS: FOR PANEL SIGNS.

1. INCLUDE FABRICATION AND INSTALLATION DETAILS AND ATTACHMENTS TO OTHER WORK.

2. SHOW SIGN MOUNTING HEIGHTS, LOCATIONS OF SUPPLEMENTARY SUPPORTS TO BE PROVIDED BY OTHERS, AND ACCESSORIES.

3. SHOW MESSAGE LIST, TYPESTYLES, GRAPHIC ELEMENTS[, INCLUDING RAISED CHARACTERS AND BRAILLE], AND LAYOUT FOR EACH SIGN AT LEAST [HALF SIZE] <INSERT SCALE>.

4. SHOW LOCATIONS OF ELECTRICAL SERVICE CONNECTIONS.

5. INCLUDE DIAGRAMS FOR POWER, SIGNAL, AND CONTROL WIRING.

C. SAMPLES: FOR EACH EXPOSED PRODUCT AND FOR EACH COLOR AND TEXTURE SPECIFIED.

D. SIGN SCHEDULE: USE SAME DESIGNATIONS SPECIFIED OR INDICATED ON DRAWINGS OR IN A SIGN SCHEDULE.

1.3 INFORMATIONAL SUBMITTALS

A. SAMPLE WARRANTY.

1.4 CLOSEOUT SUBMITTALS

A. MAINTENANCE DATA.

1.5 WARRANTY

A. SPECIAL WARRANTY: MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF SIGNS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.

1. WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

PART 2 - PRODUCTS

2.1 SIGNS

A. MANUFACTURER: APPROVED POPEYES SIGNAGE MANUFACTURER.

B. PANEL SIGN: SIGN WITH SMOOTH, UNIFORM SURFACES; WITH MESSAGE AND CHARACTERS HAVING UNIFORM FACES, SHARP CORNERS, AND PRECISELY FORMED LINES AND PROFILES; AND AS FOLLOWS:

1. ILLUMINATED PANEL SIGN: BACKLIT CONSTRUCTION LIGHTING INCLUDING TRANSFORMERS, INSULATORS, AND/OR OTHER ACCESSORIES FOR OPERABILITY, WITH PROVISION FOR SERVICING AND CONCEALING CONNECTIONS TO BUILDING ELECTRICAL SYSTEM. USE TIGHT OR SEALED JOINT CONSTRUCTION TO PREVENT UNINTENTIONAL LIGHT LEAKAGE. SPACE LAMPS APART FROM EACH OTHER AND AWAY FROM SIGN SURFACES AS NEEDED TO ILLUMINATE EVENLY.

a. POWER: AS INDICATED ON ELECTRICAL DRAWINGS.

2. MOUNTING: MANUFACTURER'S STANDARD METHOD FOR SUBSTRATES INDICATED ON EXTERIOR ELEVATIONS.

C. RESTROOM-IDENTIFICATION SIGN: SIGN WITH SMOOTH, UNIFORM SURFACES; WITH MESSAGE AND CHARACTERS HAVING UNIFORM FACES, SHARP CORNERS, AND PRECISELY FORMED LINES AND PROFILES; AND AS FOLLOWS:

1. LAMINATED-SHEET SIGN: FACE SHEET WITH RAISED GRAPHICS LAMINATED TO BACKING SHEET TO PRODUCE COMPOSITE SHEET.

a. COLOR AS PER AUTHORITIES HAVING JURISDICTION.

2. MOUNTING: SURFACE MOUNTED TO WALL WITH ADHESIVE.

PART 3 - EXECUTION

3.1 INSTALLATION

A. GENERAL: INSTALL SIGNS USING MOUNTING METHODS INDICATED AND ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

1. INSTALL SIGNS LEVEL, PLUMB, TRUE TO LINE, AND AT LOCATIONS AND HEIGHTS INDICATED, WITH SIGN SURFACES FREE OF DISTORTION AND OTHER DEFECTS IN APPEARANCE.

2. INSTALL SIGNS SO THEY DO NOT PROTRUDE OR OBSTRUCT ACCORDING TO THE ACCESSIBILITY STANDARD.

3. BEFORE INSTALLATION, VERIFY THAT SIGN SURFACES ARE CLEAN AND FREE OF MATERIALS OR DEBRIS THAT WOULD IMPAIR INSTALLATION.

4. CORROSION PROTECTION: COAT CONCEALED SURFACES OF EXTERIOR
ALUMINUM IN CONTACT WITH GROUT, CONCRETE, MASONRY, WOOD, OR DISSIMILAR METALS, WITH A HEAVY COAT OF BITUMINOUS PAINT.

B. MOUNTING METHODS:

1. EXTERIOR ILLUMINATED BUILDING SIGNS: MOUNTING METHOD TO BE PROVIDED BY MANUFACTURER.

2. RESTROOM-IDENTIFICATION SIGN:

a. ADHESIVE: CLEAN BOND-BREAKING MATERIALS FROM SUBSTRATE
SURFACE AND REMOVE LOOSE DEBRIS. APPLY LINEAR BEADS OR SPOTS OF ADHESIVE SYMMETRICALLY TO BACK OF SIGN AND OF SUITABLE QUANTITY TO SUPPORT WEIGHT OF SIGN AFTER CURE WITHOUT SLIPPAGE. KEEP ADHESIVE AWAY FROM EDGES TO PREVENT ADHESIVE EXTRUSION AS SIGN IS APPLIED AND TO PREVENT VISIBILITY OF CURED ADHESIVE AT SIGN EDGES. PLACE SIGN IN POSITION, AND PUSH TO ENGAGE ADHESIVE. TEMPORARILY SUPPORT SIGN IN POSITION UNTIL ADHESIVE FULLY SETS.

b. TWO-FACE TAPE: CLEAN BOND-BREAKING MATERIALS FROM SUBSTRATE SURFACE AND REMOVE LOOSE DEBRIS. APPLY TAPE STRIPS SYMMETRICALLY TO BACK OF SIGN AND OF SUITABLE QUANTITY TO SUPPORT WEIGHT OF SIGN WITHOUT SLIPPAGE. KEEP STRIPS AWAY FROM EDGES TO PREVENT VISIBILITY AT SIGN EDGES. PLACE SIGN IN POSITION, AND PUSH TO ENGAGE TAPE ADHESIVE.

C. REMOVE TEMPORARY PROTECTIVE COVERINGS AND STRIPPABLE FILMS AS SIGNS ARE INSTALLED.

END OF SECTION 10 14 23

WALL PROTECTION SECTION 10 26 00

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:

1. CORNER GUARDS.

1.2 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.

B. SAMPLES: FOR EACH EXPOSED PRODUCT AND FOR EACH COLOR AND TEXTURE SPECIFIED, 12 INCHES LONG.

1.3 INFORMATIONAL SUBMITTALS

A. MATERIAL CERTIFICATES.

B. MATERIAL TEST REPORTS.

C. WARRANTY: SAMPLE OF SPECIAL WARRANTY.

1.4 CLOSEOUT SUBMITTALS

A. MAINTENANCE DATA.

1.5 QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: AN EMPLOYER OF WORKERS TRAINED AND APPROVED BY MANUFACTURER.

B. SURFACE-BURNING CHARACTERISTICS: AS DETERMINED BY TESTING IDENTICAL PRODUCTS PER ASTM E 84, NFPA 255, OR UL 723 BY UL OR ANOTHER QUALIFIED TESTING AGENCY.

1.6 WARRANTY

A. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF IMPACT-RESISTANT WALL PROTECTION UNITS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.

1. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

a. STRUCTURAL FAILURES.

b. DETERIORATION OF PLASTIC AND OTHER MATERIALS BEYOND NORMAL USE.

2. WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

PART 2 - PRODUCTS

2.1 MATERIALS

A. PVC PLASTIC: ASTM D 1784, CLASS 1, TEXTURED, CHEMICAL- AND STAIN-RESISTANT, HIGH-IMPACT-RESISTANT PVC OR ACRYLIC-MODIFIED VINYL PLASTIC WITH INTEGRAL COLOR THROUGHOUT.

1. IMPACT RESISTANCE TO MEET ASTM D 256, TEST METHOD A.

2. CHEMICAL AND STAIN RESISTANCE PER ASTM STANDARDS.

3. SELF-EXTINGUISHING WHEN TESTED ACCORDING TO ASTM D 635.

4. FLAME-SPREAD INDEX: 25 OR LESS.

5. SMOKE-DEVELOPED INDEX: 450 OR LESS.

B. POLYCARBONATE PLASTIC SHEET: ASTM D 6098, S-PC01, CLASS 1 OR 2, ABRASION RESISTANT; WITH A MINIMUM IMPACT-RESISTANCE RATING PER ASTM D 256, TEST METHOD A.

C. FASTENERS: ALUMINUM, NONMAGNETIC STAINLESS-STEEL, OR OTHER NONCORROSIVE METAL SCREWS, BOLTS, AND OTHER FASTENERS COMPATIBLE WITH ITEMS BEING FASTENED. USE SECURITY-TYPE FASTENERS WHERE EXPOSED TO VIEW.

D. ADHESIVE: AS RECOMMENDED BY IMPACT-RESISTANT PLASTIC WALL PROTECTION MANUFACTURER AND WITH A VOC CONTENT OF [70] <INSERT VALUE> G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

2.2 CORNER GUARDS

A. SURFACE-MOUNTED, RESILIENT, CORNER GUARDS: ASSEMBLY CONSISTING OF COVER INSTALLED OVER CONTINUOUS RETAINER; INCLUDING MOUNTING HARDWARE; FABRICATED WITH 90-DEGREE TURN.

1. CRANE COMPOSITES, INC.

2. MARLITE PRODUCTS, INC.

B. COLOR AND TEXTURE (TO BE VERIFIED WITH OWNER):

1. STAINLESS STEEL.

2. PVC PLASTIC - WHITE .

C. RETAINER CLIPS: MANUFACTURER'S STANDARD IMPACT-ABSORBING CLIPS.

1. TOP AND BOTTOM CAPS: PREFABRICATED, INJECTION-MOLDED PLASTIC; COLOR MATCHING COVER; FIELD ADJUSTABLE FOR CLOSE ALIGNMENT WITH SNAP-ON COVER.

PART 3 - EXECUTION

3.1 INSTALLATION

A. GENERAL: INSTALL IMPACT-RESISTANT WALL PROTECTION UNITS LEVEL, PLUMB, AND TRUE TO LINE WITHOUT DISTORTIONS. DO NOT USE MATERIALS WITH CHIPS, CRACKS, VOIDS, STAINS, OR OTHER DEFECTS THAT MIGHT BE VISIBLE IN THE FINISHED WORK.

1. INSTALL IMPACT-RESISTANT WALL PROTECTION UNITS IN LOCATIONS AND AT MOUNTING HEIGHTS INDICATED ON DRAWINGS.

2. PROVIDE SPLICES, MOUNTING HARDWARE, ANCHORS, AND OTHER ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.

a. PROVIDE ANCHORING DEVICES TO WITHSTAND IMPOSED LOADS.

B. IMMEDIATELY AFTER COMPLETION OF INSTALLATION, CLEAN PLASTIC COVERS AND ACCESSORIES USING A STANDARD, AMMONIA-BASED, HOUSEHOLD CLEANING AGENT.

C. REMOVE EXCESS ADHESIVE USING METHODS AND MATERIALS RECOMMENDED IN WRITING BY MANUFACTURER.

END OF SECTION 10 26 00

TOILET ACCESSORIES SECTION 10 28 00

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. SINGLE-SOURCE RESPONSIBILITY: PROVIDE PRODUCTS OF SAME MANUFACTURER FOR EACH TYPE OF ACCESSORY UNIT AND FOR UNITS EXPOSED TO VIEW IN SAME AREAS.

1.3 PROJECT CONDITIONS

A. COORDINATION: COORDINATE ACCESSORY LOCATIONS, INSTALLATION, AND SEQUENCING WITH OTHER WORK TO AVOID INTERFERENCE AND TO ASSURE PROPER INSTALLATION, OPERATION, ADJUSTMENT, CLEANING, AND SERVICING OF TOILET ACCESSORY ITEMS.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. SEE EQUIPMENT PLAN AND SCHEDULE FOR TOILET ACCESSORIES INFORMATION.

2.2 MATERIALS GENERAL

A. STAINLESS STEEL: AISI TYPE 302/304, WITH POLISHED NO. 4 FINISH, 22 GAUGE (.034 INCH) MINIMUM THICKNESS.

B. BRASS: LEADED AND UNLEADED, FLAT PRODUCTS, ASTM B19; RODS, SHAPES, FORGINGS, AND FLAT PRODUCTS WITH FINISHED EDGES, ASTM B16; CASTINGS, ASTM B30.

C. CHROMIUM PLATING: NICKEL AND CHROMIUM ELECTRO-DEPOSITED ON BASE METAL, ASTM B 456, TYPE SC2.

D. FASTENERS: SCREWS, BOLTS, AND OTHER DEVICES OF SAME MATERIAL AS ACCESSORY UNIT OR OF GALVANIZED STEEL WHERE CONCEALED.

E. ALL STEEL PRODUCTS SHALL BE FABRICATED UTILIZING ONLY DOMESTICALLY PRODUCED STEEL.

2.3 RECESSED SANITARY NAPKIN DISPOSAL

A. SATIN-FINISH STAINLESS STEEL. SEAMLESS BEVELED FLANGE. DOOR HAS TUMBLER LOCK. SELF-CLOSING PANEL COVERS DISPOSAL OPENING. REMOVABLE, LEAK-PROOF, 1.2 GAL. PLASTIC RECEPTACLE.

2.4 BABY-CHANGING TABLE

A. SURFACE MOUNTED TYPE, HORIZONTAL. POLYPROPYLENE AND UNIBODY STEEL CHASSIS. STEEL ON STEEL HINGE WITH GAS SPRING MECHANISM.

2.5 SEMI-RECESSED GARBAGE

A. TYPE 304 STAINLESS STEEL ALLOY 18-8 WITH SATIN FINISH. 18 GAUGE DOOR MOUNTED ON STAINLESS STEEL PIANO HINGE AND SHALL BE HELD CLOSED WITH TUMBLER. 20 GAUGE PUSH DOOR WITH INTERNATIONAL GRAPHIC SYMBOL IDENTIFYING WASTE DISPOSAL.

2.6 GRAB BARS

A. STAINLESS STEEL TYPE: PROVIDE GRAB BARS WITH WALL THICKNESS NOT LESS THAN 0.05 INCH (18 GAUGE). MOUNTING: CONCEALED, MANUFACTURER'S STANDARD FLANGES AND ANCHORAGE. MOUNTING PER MANUFACTURER'S STANDARD FLANGES AND ANCHORAGE. CLEARANCE: 1-1/2 INCH CLEARANCE BETWEEN WALL SURFACE AND INSIDE FACE OF BAR. GRIPPING SURFACES: MANUFACTURER'S STANDARD. HEAVY-DUTY SIZE: OUTSIDE DIAMETER OF 1-1/2 INCHES. PROVIDE ONE 18" LONG GRAB BAR; ONE 36" LONG GRAB BAR; ONE 42"
LONG GRAB BAR; PER RESTROOM.

2.7 HAND DRYER

A. WARM AIR, RAPID DRYING, ENERGY EFFICIENT ELECTRIC HAND DRYER. SURFACE MOUNTED. RECESSED KIT. POWER SOURCE 110/120V, 12.5AMP.

2.8 MIRROR UNIT

A. STAINLESS STEEL FRAMED MIRROR UNITS: FABRICATE FRAME WITH ANGLE SHAPES NOT LESS THAN 0.05 INCH (18 GAUGE), WITH SQUARE CORNERS MITERED, WELDED, AND GROUND SMOOTH. PROVIDE IN NO. 4 SATIN POLISHED FINISH. ONE REQUIRED OVER EACH TOILET ROOM SINK.

2.9 MISCELLANEOUS ACCESSORIES

A. MOP AND BROOM HOLDER: WALL MOUNTING. 0.062 INCH (16 GAUGE) STAINLESS STEEL WITH SPRING-LOADED, RUBBER HAT, CAM-TYPE MOP/BROOM HOLDERS. PROVIDE UNIT 24 INCHES LONG AND COMPLETE WITH FOUR MOP/BROOM HOLDERS.

B. DOUBLE-PRONG ROBE HOOK: HEAVY-DUTY SATIN FINISHED STAINLESS STEEL DOUBLE-PRONG ROBE HOOK. RECTANGULAR WALL BRACKET WITH BACKPLATE FOR CONCEALED MOUNTING. ONE REQUIRED FOR EACH TOILET ROOM.

2.10 FABRICATION

A. GENERAL: A MAXIMUM 1-1/2 INCH DIAMETER, UNOBTRUSIVE STAMPED LOGO OF MANUFACTURER, AS APPROVED BY ARCHITECT, IS PERMITTED ON EXPOSED FACE OF TOILET OR BATH ACCESSORY UNITS. ON EITHER INTERIOR SURFACE NOT EXPOSED TO VIEW OR BACK SURFACE, PROVIDE ADDITIONAL IDENTIFICATION BY MEANS OF EITHER A PRINTED, WATERPROOF LABEL OR A STAMPED NAMEPLATE, INDICATING MANUFACTURER'S NAME AND PRODUCT MODEL NUMBER.

B. SURFACE-MOUNTED TOILET ACCESSORIES, GENERAL: EXCEPT WHERE OTHERWISE INDICATED, FABRICATE UNITS WITH TIGHT SEAMS AND JOINTS, EXPOSED EDGES ROLLED. HANG DOORS OR ACCESS PANELS WITH CONT. STAINLESS STEEL PIANO HINGE. PROVIDE CONCEALED ANCHORAGE WHEREVER POSSIBLE.

C. KEYS: PROVIDE UNIVERSAL KEYS FOR ACCESS TO TOILET ACCESSORY UNITS REQUIRING INTERNAL ACCESS FOR SERVICING, RE-SUPPLY, ETC. PROVIDE MINIMUM OF SIX KEYS TO OWNER'S REPRESENTATIVE.

PART 3 - EXECUTION

3.1 INSTALLATION

A. INSTALL TOILET ACCESSORY UNITS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE AS RECOMMENDED BY MANUFACTURER. INSTALL UNITS PLUMB AND LEVEL, FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

B. IN LOCATIONS MARKED FOR HANDICAPPED ACCESSIBILITY, INSTALL TOILET ACCESSORIES IN COMPLIANCE WITH REQUIREMENTS OF THE AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).

C. SECURE MIRRORS TO WALLS IN CONCEALED, TAMPERPROOF MANNER WITH SPECIAL HANGERS, TOGGLE BOLTS OR SCREWS. SET UNITS PLUMB, LEVEL, AND SQUARE AT LOCATIONS INDICATED, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION FOR TYPE OF SUBSTRATE INVOLVED.

D. INSTALL GRAB BARS TO WITHSTAND A DOWNWARD LOAD OF AT LEAST 250 LBF, COMPLYING WITH ASTM F446.

3.2 ADJUSTING AND CLEANING

A. ADJUST TOILET ACCESSORIES FOR PROPER OPERATION AND VERIFY THAT MECHANISMS FUNCTION SMOOTHLY. REPLACE DAMAGED OR DEFECTIVE ITEMS.

B. CLEAN AND POLISH ALL EXPOSED SURFACES IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AFTER REMOVING TEMPORARY LABELS AND PROTECTIVE COATINGS.

END OF SECTION 10 28 00

FIRE PROTECTION SPECIALTIES SECTION 10 44 00

(AS APPLICABLE)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT APPLY TO THIS SECTION.

1.2 QUALITY ASSURANCE

A. SINGLE-SOURCE RESPONSIBILITY: OBTAIN EXTINGUISHERS AND CABINETS FROM A SINGLE MANUFACTURER.

B. COORDINATION: VERIFY THAT CABINETS ARE SIZED TO ACCOMMODATE TYPE AND CAPACITY
OF EXTINGUISHERS INDICATED.

C. UL-LISTED PRODUCTS: FIRE EXTINGUISHERS SHALL BE UL LISTED WITH UL LISTING MARK FOR TYPE, RATING, AND CLASSIFICATION OF FIRE EXTINGUISHER.

D. NFPA COMPLIANCE: FABRICATE AND LABEL FIRE EXTINGUISHERS TO COMPLY WITH NFPA 10, "STANDARD FOR PORTABLE FIRE EXTINGUISHERS".

E. FIRE EXTINGUISHERS: LISTED AND LABELED FOR TYPE, RATING, AND CLASSIFICATION BY AN INDEPENDENT TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. PORTABLE FIRE EXTINGUISHES AND CABINETS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING: POTTER ROEMER.

2.2 MATERIALS

A. COLD-ROLLED STEEL SHEET: CARBON STEEL, COMPLYING WITH ASTM A366/A366M, COMMERCIAL QUALITY, STRETCHED LEVELED, TEMPER ROLLED.

B. ALUMINUM: ALLOY AND TEMPER RECOMMENDED BY ALUMINUM PRODUCER AND MANUFACTURER FOR TYPE OF USE AND FINISH INDICATED AS FOLLOWS:

1. SHEET: ASTM B209.

2. EXTRUDED SHAPES: ASTM B221.

STAINLESS-STEEL SHEET: ASTM A666, TYPE 302 OR TYPE 304 ALLOY.

2.3 PORTABLE FIRE EXTINGUISHERS

A. GENERAL: PROVIDE FIRE EXTINGUISHERS OF TYPE, SIZE, AND CAPACITY FOR EACH CABINET AND OTHER LOCATIONS INDICATED.

B. MULTIPURPOSE DRY-CHEMICAL TYPE: UL-RATED 4-A:60-B:C, 10-LB NOMINAL CAPACITY, IN ENAMELED STEEL CONTAINER.

2.4 FIRE - PROTECTION CABINETS

A. CABINET CONSTRUCTION: PROVIDE MANUFACTURER'S STANDARD BOX (TUB), WITH TRIM, FRAME, DOOR, AND HARDWARE TO SUIT CABINET TYPE, TRIM STYLE, AND DOOR STYLE INDICATED. WELD JOINTS AND GRIND SMOOTH. MITER AND WELD PERIMETER DOOR FRAMES. CONTRACTOR TO VERIFY COLOR SELECTION OF ALL FIRE-PROTECTION CABINETS WITH OWNER PRIOR TO ANY WORK.

1. FIRE-RATED CABINETS: LISTED AND LABELED TO MEET REQUIREMENTS OF ASTM E814 FOR FIRE-RESISTANCE RATING OF WALL WHERE IT IS INSTALLED. CONSTRUCTION FIRE-RATED CABINETS WITH DOUBLE WALLS FABRICATED FROM 0.0478 INCH THICK, COLD-ROLLED STEEL SHEET LINED WITH MINIMUM 5/8 INCH THICK, FIRE-BARRIER MATERIAL. PROVIDE FACTORY DRILLED MOUNTING HOLES.

2. CABINET METAL: ENAMELED STEEL HOLES.

B. CABINET TYPE: SUITABLE FOR FIRE EXTINGUISHER.

C. CABINET MOUNTING: PROVIDE SEMI-RECESSED CABINET BOX PARTIALLY TO SUIT STYLE OF TRIM INDICATED. LOCATE CABINET PER ADAAG'S REACH REQUIREMENTS. FOR AN UNOBSTRUCTED APPROACH, THE MAXIMUM REACH IS 48 INCHES (1220 MM) ABOVE THE FLOOR. THE MAXIMUM REACH FOR A SIDE APPROACH IS 54 INCHES (1370 MM).

D. CABINET TRIM STYLE: FABRICATE TRIM IN ONE PIECE WITH CORNERS MITERED, WELDED, AND GROUND SMOOTH. EXPOSED TRIM: ONE-PIECE COMBINATION TRIM AND PERIMETER DOOR FRAME OVERLAPPING SURROUNDING WALL SURFACE WITH EXPOSED TRIM FACE AND WALL RETURN AT OUTER EDGE (BACKEND). ROLLED-EDGE TRIM: 2-1/2 INCH BACKBEND DEPTH.

E. CABINET TRIM MATERIAL: MANUFACTURER'S STANDARD, SAME METAL AND FINISH AS DOOR.

F. DOOR MATERIAL: MANUFACTURER'S STANDARD, SHEET METAL.

G. DOOR STYLE: MANUFACTURER'S STANDARD DESIGN, SOLID OPAQUE PANEL WITH FRAME.

H. DOOR CONSTRUCTION: FABRICATE DOORS ACCORDING TO MANUFACTURER'S STANDARDS, OF MATERIALS INDICATED, AND COORDINATED WITH CABINET TYPES AND TRIM STYLES SELECTED.

I. DOOR HARDWARE: PROVIDE MANUFACTURER'S STANDARD DOOR-OPERATING HARDWARE OF PROPER TYPE FOR CABINET TYPE, TRIM STYLE, AND DOOR MATERIAL AND STYLE INDICATED. PROVIDE EITHER LEVER HANDLE WITH CAM-ACTION LATCH, OR EXPOSED OR CONCEALED DOOR PULL AND FRICTION LATCH. PROVIDE CONCEALED OR CONTINUOUS-TYPE HINGE PERMITTING DOOR TO OPEN 180 DEGREES.

2.5 ACCESSORIES

A. MOUNTING BRACKETS: MANUFACTURER'S STANDARD STEEL, DESIGNED TO SECURE EXTINGUISHER, OF SIZES REQUIRED FOR TYPES AND CAPACITIES OF EXTINGUISHERS INDICTED, WITH PLATED OR BAKED ENAMEL FINISH.

1. PROVIDE BRACKETS FOR EXTINGUISHERS NOT LOCATED IN CABINETS.

2. PROVIDE BRACKETS FOR EXTINGUISHERS LOCATED IN CABINETS.

B. IDENTIFICATION: PROVIDE LETTERING TO COMPLY WITH AUTHORITIES HAVING JURISDICTION FOR LETTER STYLE, COLOR, SIZE, SPACING, AND LOCATION. LOCATE AS DIRECTED BY THE OWNERS REPRESENTATIVE.

1. IDENTIFY FIRE EXTINGUISHER IN CABINET WITH THE WORDS "FIRE EXTINGUISHER" APPLIED TO DOOR. APPLY BLACK VINYL LETTERS, HORIZONTALLY.

2.6 COLORS AND TEXTURES

A. COLORS AND TEXTURES: AS SELECTED BY OWNER FROM MANUFACTURER'S FULL RANGE FOR CHARACTERISTICS.

2.7 FINISHES, GENERAL

A. COMPLY WITH NAAMM'S "METAL FINISHES MANUAL" FOR RECOMMENDATIONS FOR APPLYING AND DESIGNATION FINISHES.

B. PROTECT MECHANICAL FINISHES ON EXPOSED SURFACES FROM DAMAGE BY APPLYING A STRIPPABLE, TEMPORARY PROTECTIVE COVERING BEFORE SHIPPING.

C. APPEARANCE OF FINISHED WORK: VARIATIONS IN APPEARANCE OF ABUTTING OR ADJACENT PIECES ARE ACCEPTABLE IF THEY ARE WITHIN ONE-HALF OF THE RANGE OF APPROVED SAMPLES. NOTICEABLE VARIATIONS IN THE SAME PIECE ARE NOT ACCEPTABLE. VARIATIONS IN APPEARANCE OF OTHER COMPONENTS ARE ACCEPTABLE IF THEY ARE WITHIN THE RANGE OF THE APPROVED SAMPLES AND ARE ASSEMBLED OR INSTALLED TO MINIMIZE CONTRAST.

D. CABINET AND DOOR FINISHES: PROVIDE MANUFACTURER'S STANDARD BAKED-ENAMEL PAINT FOR THE FOLLOWING:

1. EXTERIOR OF CABINETS AND DOORS.

2. INTERIOR OF CABINETS AND DOORS.

2.8 STEEL FINISHES

A. SURFACE PREPARATION: CLEANING SURFACES OF DIRT, OIL, GREASE, MILL SCALE, RUST, AND CONTAMINANTS THAT COULD IMPAIR PAINT BOND USING MANUFACTURER'S STANDARD METHODS.

B. FACTORY PRIMING FOR FIELD PAINTED FINISH: APPLY SHOP PRIMER SPECIFIED BELOW IMMEDIATELY AFTER SURFACE PREPARATION AND PRETREATMENT.

1. SHOP PRIMER: MANUFACTURER'S OR FABRICATOR'S STANDARD, FAST-CURING, LEAD AND CHROMATE-FREE, UNIVERSAL PRIMER, SELECTED FOR RESISTANCE TO NORMAL ATMOSPHERIC CORROSION, FOR COMPATIBILITY TO PROVIDE A SOUND FOUNDATION FOR FIELD-APPLIED
TOPCOATS DESPITE PROLONGED EXPOSURE.

C. BAKED-ENAMEL FINISH: IMMEDIATELY AFTER CLEANING PRETREATING, APPLY MANUFACTURER'S STANDARD TWO-COAT, BAKED-ENAMEL FINISH CONSISTING OF PRIME COAT AND THERMOSETTING TOPCOAT. COMPLY WITH PAINT MANUFACTURER'S WRITTEN INSTRUCTIONS FOR APPLYING AND BAKING TO ACHIEVE A MINIMUM DRY FILM THICKNESS OF 2 MILS.

1. COLOR AND GLOSS: AS SELECTED BY OWNER FROM MANUFACTURER'S FULL RANGE.

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE WALLS ROUGH-IN FOR HOSE VALVES, HOSE RACKS, AND CABINETS TO VERIFY ACTUAL
LOCATIONS OF PIPING CONNECTIONS BEFORE CABINET INSTALLATION.

B. EXAMINE WALLS AND PARTITIONS FOR SUITABLE FRAMING DEPTH AND BLOCKING WHERE RECESSED AND SEMI-RECESSED CABINETS ARE TO INSTALLED.

C. EXAMINE FIRE EXTINGUISHERS FOR PROPER CHARGING AND TAGGING.

1. REMOVE AND REPLACE DAMAGE, DEFECTIVE, OR UNDERCHARGED UNITS.

D. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 INSTALLATION

A. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING FIRE-PROTECTION
SPECIALTIES.

B. INSTALL IN LOCATIONS AND AT MOUNTING HEIGHTS INDICATED OR, IF NOT INDICATED, AT HEIGHTS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

1. PREPARE RECESSES FOR CABINETS AS REQUIRED BY TYPE AND SIZE OF CABINET AND TRIM STYLE.

2. FASTEN MOUNTING BRACKETS TO STRUCTURE AND CABINETS, SQUARE AND PLUMB.

3. FASTEN CABINETS TO STRUCTURE, SQUARE AND PLUMB.

3.3 ADJUSTING, CLEANING AND PROTECTION

A. ADJUST CABINET DOORS THAT DO NOT SWING OR OPERATE FREELY.

B. REFINISH OR REPLACE CABINETS AND DOORS DAMAGED DURING INSTALLATION.

C. PROVIDE FINAL PROTECTION AND MAINTAIN CONDITIONS THAT ENSURE THAT CABINETS AND DOORS ARE WITHOUT DAMAGE OR DETERIORATION AT THE TIME OF SUBSTANTIAL COMPLETION.

3.4 FIRE-PROTECTION CABINET SCHEDULE

A. FIRE-PROTECTION CABINET PROVIDE FIRE-PROTECTION CABINET COMPLYING WITH THE FOLLOWING:

1. CONSTRUCTION: NONRATED.

2. CABINET MATERIAL: STEEL-COLD ROLLED STEEL W/ RECOATABLE WHITE POLYESTER FINISH.

3. TYPE: FIRE EXTINGUISHER.

4. MOUNTING: SEMIRECESSED.

5. TRIM STYLE: EXPOSED, 2 INCH.

6. CABINET TRIM MATERIAL: SAME MATERIAL AND FINISH AS CABINET.

7. DOOR MATERIAL: SAME MATERIAL AND FINISH AS CABINET.

8. DOOR STYLE: FULL GLASS W/ TEMPERED SAFETY GLASS.

9. ACCESSORIES: MOUNTING BRACKETS, AND INDENTIFICATION LETTERING.

END OF SECTION 10 44 00

DIVISION 12 - WINDOW TREATMENTS

ROLL-DOWN BLINDS SECTION 12 21 23

PART 1 - GENERAL

1.1 SUMMARY

A. MANUAL ROLLER SHADES AND HARDWARE.

1.2 SYSTEM DESCRIPTION

A. CLUTCH OPERATED ROLLER SHADES WITH BEAD CHAIN CONTROL.

1.3 SUBMITTALS

A. PRODUCT DATA: SUBMIT AN ELECTRONIC PDF COPY OF MANUFACTURER'S TECHNICAL DATA AND INSTALLATION INSTRUCTIONS.

B. SAMPLES: SUBMIT THREE SAMPLES OF EACH SHADE CLOTH WITH COMPLETE COLOR SWATCH.

C. SHOP DRAWINGS: SUBMIT DRAWINGS OF MECHANICAL PRODUCTS WITH APPROPRIATE DIMENSIONS.

1.4 QUALITY ASSURANCE

A. THE MANUFACTURER OF THESE PRODUCTS SHALL SHOW A MINIMUM OF 20 YEARS DOCUMENTED EXPERIENCE.

B. THE INSTALLER SHALL SHOW A MINIMUM OF 3 YEARS EXPERIENCE WITH THESE SYSTEMS.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. SOS "SUN OR SHADE" A DIVISION OF INSIDE OUTFITTERS, INC.
8333 GREEN MEADOWS DRIVE N., STE B, LEWIS CENTER, OH, 43085
P: 800.742.3372, F: 877.880.3496, E:INFO@SOSSHADES.COM

2.2 MATERIALS

A. SHADE FABRICS: TRANSLUCENT FABRICS HAVE AN OPENNESS FACTOR OF 10%. THE FABRIC SHALL HAVE A HIGH DEGREE OF OPACITY FOR EFFECTIVE CONTROL OF LIGHT. THE FABRIC MUST HAVE SUFFICIENT RIGIDITY TO INSURE STRAIGHT HANGING, RESIST CURL, TWIST, BOWING AND DISTORTION. IT MUST BE DIMENSIONALLY STABLE AND WILL NOT SHRINK OR STRETCH. THE FABRIC IS TO BE COLORFAST AND SHALL NOT BE AFFECTED BY MOISTURE OR HEAT. THE COLOR SHALL BE SELECTED FROM STANDARD COLORS. ALL SEAMS ARE TO BE HEAT-SEALED. SEWING IS NOT ACCEPTED. THE FABRIC COLOR SHALL BE SELECTED FROM THE MANUFACTURER'S STANDARD COLOR LINE.
SHEERWEAVE 4100 - COLOR PEBBLESTONE
FABRIC STYLE (10% OPENNESS)

B. TUBE: THE FABRIC SHADES SHALL BE MOUNTED ON TO A 1-1/4", 1-1/2", 2", OR 2-1/2" OR 3.1 DIAMETER ALUMINUM TUBE DEPENDING ON THE WIDTH OF THE SHADE AND FABRIC CHOSEN FOR THE SHADE.

C. BEAD CHAIN CLUTCH: THE CLUTCH INCORPORATES AN ADJUSTABLE SLIP CLUTCH TO CONTROL THE RATE OF FALL FROM FREE RUNNING ZERO FRICTION FACTOR TO A FACTOR OF 100%. THE SHADE MAY BE ADJUSTED TO STOP AND HOLD AT ANY POSITION. THE BEAD CHAIN SHALL CONTAIN AUTOMATIC STOPS TO PREVENT THE SHADE FROM OVER WINDING OR UNROLLING. THE BEAD CHAIN WILL BE SECURED BY A HOLD DOWN CLIP.

1. BEAD CHAIN: BEAD CHAIN WILL NICKEL BALL TYPE.

D. EASY LIFT: THIS OPTION IS ADDED TO ALL SHADES THAT ARE OVER 30 POUNDS.

E. HEMBAR: SHALL BE A CONTINUOUS ALUMINUM BAR 1" X 3/16" WITH SUFFICIENT WEIGHT TO ALLOW THE SHADE TO CLOSE WITHOUT BUCKLING OR SAGGING. STANDARD HEMBAR IS WRAPPED IN FABRIC AND SEALED AROUND ALL EDGES.

F. SHADE MOUNTING BRACKETS: SHADE MOUNTING BRACKETS: SHALL BE MANUFACTURED FROM .060" GALVANIZED STEEL, REVERSIBLE FOR RIGHT AND LEFT HAND MOUNTING. THE BRACKETS MAY BE FIELD MOUNTED INSIDE, OUTSIDE OR CEILING MOUNTED. FASCIA BRACKETS SHALL MATCH FASCIA COLOR.

G. FASCIA SYSTEM: ALL FASCIA SYSTEMS SHALL BE PRIME PAINTED WITH BAKED ENAMEL UTILIZING THE POWDER PAINT METHOD TO ENSURE AN ENVIRONMENTAL FRIENDLY APPLICATION. WET PAINT METHOD SHALL NOT BE ACCEPTED.

1. L-ANGLE FASCIA: FASCIA PANELS SHALL BE MADE FROM EXTRUDED ALUMINUM. FASCIA FACE SHALL BE 3" OR 4" TO ACCOMMODATE SHADE ROLL. FASCIA SHALL CLIP TO BRACKETS AND SNAP EASILY INTO PLACE. IT SHALL BE EASILY REMOVED FOR ANY NECESSARY MAINTENANCE.

a. FASCIA COLOR: VANILLA.

PART 3 - EXECUTION

3.1 INSTALLATION

A. INSTALL THE SHADES WHERE SHOWN ON THE CONTRACT DRAWINGS IN ACCORDANCE WITH PRINTED INSTRUCTIONS PROVIDED BY THE MANUFACTURER, SOS SHADE SYSTEMS, OR A MODIFICATION AS APPROVED BY THE MANUFACTURER.

B. THE SHADE FABRIC SHALL HANG FLAT WITHOUT BUCKLING OR DISTORTION. THE EDGE WHEN TRIMMED, SHALL HANG STRAIGHT WITHOUT CURLING OR RAVELING. UNGUIDED ROLLER FABRICS SHALL ROLL WITHOUT SHIFTING SIDEWAYS MORE THAN 1/4" IN EITHER DIRECTION. TOLERANCE FOR BRACKETS SHALL NOT EXCEED 3/4" ON EITHER SIDE.

C. VERIFY THAT ALL SURFACES AND OPENINGS ARE READY TO RECEIVE THE WORK. DO NOT COMMENCE THE WORK UNTIL THE INSTALLER VERIFIES FIELD MEASUREMENTS.

D. BEGINNING THE INSTALLATION INDICATES THE INSTALLER ACCEPTS THE SUBSTRATE.

3.2 ADJUSTING

A. THE SYSTEM SHALL BE ADJUSTED BY THE INSTALLER FOR SMOOTH OPERATION. ALL COMPLETED SHADES WILL BE OPERATED BY THE INSTALLER TO ENSURE THAT THEY FUNCTION CORRECTLY.

B. INSTRUCT THE OWNERS OR HIS REPRESENTATIVE AS TO THE PROPER OPERATING PROCEDURES AND MAINTENANCE OF THE SYSTEM.

END OF SECTION 12 21 23

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY
4	9/12/2023	HEALTH COMMENTS

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

TANNER EDWARDS KINDE
15704
Tanner Kinde

9.14.2023

Company Logo

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ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
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Project

LOUISIANA 19 72 KITCHEN
POPEYES®

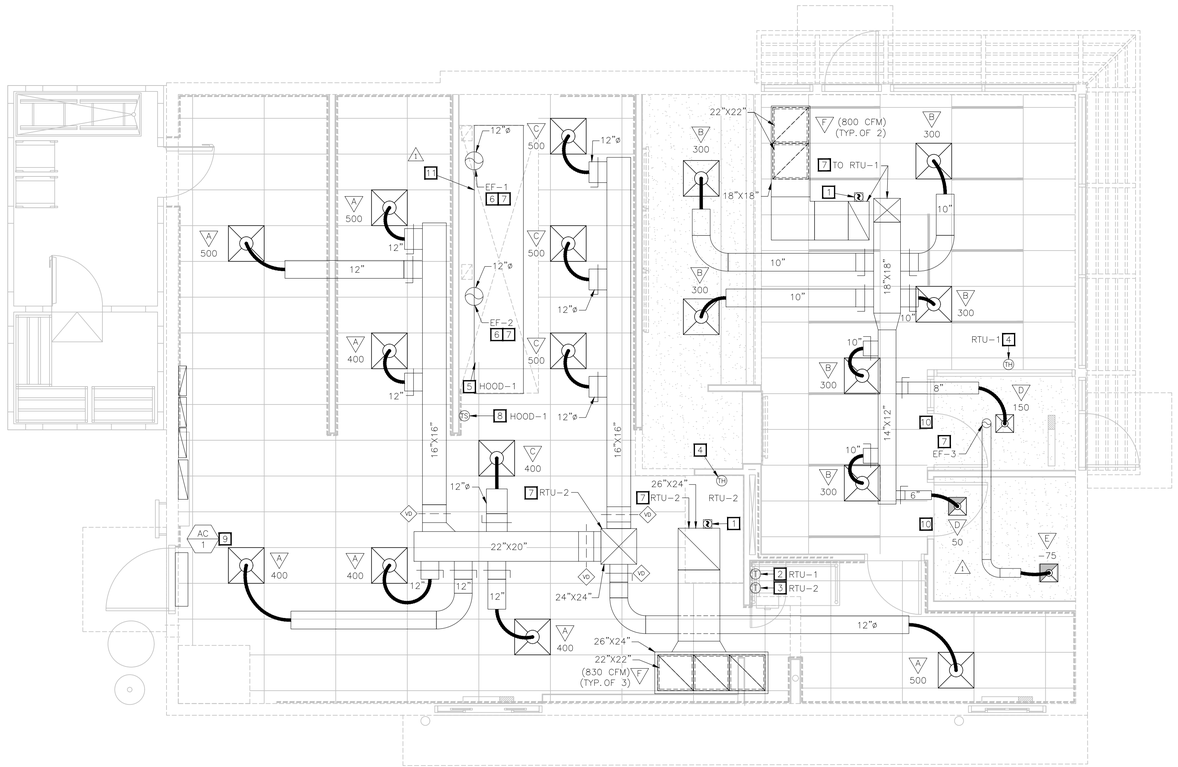
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ARCHITECTURAL SPECIFICATIONS

Drawn SH	Checked AL
Scale	Date JUNE 2023
Project No. C22-129	Drawing No. SP7

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



01 MECHANICAL PLAN
1/4"=1'-0"

MECHANICAL KEY NOTES

1. PROVIDE DUCT MOUNTED SMOKE DETECTOR. TIE IN AUDIO-VISUAL ANNUNCIATOR. UPON DETECTION OF SMOKE, ROOFTOP UNIT SHALL SHUT DOWN AND ACTIVATE ALARM. COORDINATE INSTALLATION LOCATION WITH ACCESS REQUIREMENTS.
2. PROVIDE HONEYWELL VISION PRO 8000 TOUCHSCREEN 7-DAY PROGRAMMABLE THERMOSTAT WITH AUTO-CHANGEOVER AND AUTOMATIC START CAPABILITY. MOUNT THERMOSTAT 48" ABOVE FINISHED FLOOR. COORDINATE FINAL INSTALLATION LOCATION OF THERMOSTAT WITH OWNER'S REPRESENTATIVE.
3. PROVIDE MICROPROCESSOR REMOTE INTERFACE. MOUNT MICROPROCESSOR REMOTE INTERFACE 48" ABOVE FINISHED FLOOR. COORDINATE FINAL INSTALLATION LOCATION OF MICROPROCESSOR REMOTE INTERFACE WITH OWNER'S REPRESENTATIVE.
4. PROVIDE COMBINATION TEMPERATURE/HUMIDITY SENSOR. MOUNT SENSOR 48" ABOVE FINISHED FLOOR. HUMIDITY SENSOR SHALL OPERATE REFRIGERATION SYSTEM AND INITIATE HOT GAS REHEAT AS REQUIRED TO MAINTAIN SPACE HUMIDITY AT 55% RH.
5. INSTALL OWNER FURNISHED TYPE I GREASE EXHAUST HOOD. SUPPORT HOOD PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE TRAPEZE HANGERS FOR ALL THREAD SUPPORT UNDER DUCTWORK AS REQUIRED. REFER TO HOOD DRAWING SET ON SHEET M3.1-M3.4 FOR HOOD SPECIFICATION AND ADDITIONAL INFORMATION.
6. INSTALL OWNER FURNISHED UL-2221 LISTED DOUBLE-WALL GREASE DUCT, EQUAL TO FRANKE SYSTEMS MODEL FRDW-2R ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL FROM HOOD COLLAR EXHAUST FAN ON ROOF. INSTALL EXHAUST DUCT PER MANUFACTURER'S INSTRUCTIONS. PROVIDE CLEANOUTS AT EVERY CHANGE OF DIRECTION IN THE DUCT AND/OR EVERY 10 FEET WITH MINIMUM OF 3 FEET OF CLEARANCE IN FRONT OF CLEAN-OUT.
7. DUCT UP TO EQUIPMENT ON ROOF. REFER TO SHEET M1.2 FOR EQUIPMENT LOCATION.
8. INSTALL ROOM TEMPERATURE SENSOR FOR HOOD THERMOSTATIC CONTROL. SEE HOOD DRAWING SET ON M3.1-M3.4 FOR HOOD SPECIFICATIONS AND ADDITIONAL INFORMATION.
9. PROVIDE AIR CURTAIN. MOUNT UNIT ON WALL DIRECTLY ABOVE DOOR PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
10. UNDERCUT DOOR BY 3/4" FOR AIR TRANSFER

⚠ 11. PULL STATION & TENSION CABLE FOR KITCHEN HOOD FIRE SUPPRESSION SYSTEM ACTIVATION TO BE PROVIDED BY FIRE SUPPRESSION SUBCONTRACTOR. GENERAL CONTRACTOR TO COORDINATE WITHE ELECTRICAL CONTRACTOR FOR JUNCTION BOX AND CONDUIT TO PULL STATION. LINE-SIZED MECHANICAL (OR ELECTRICAL) GAS SHUT OFF VALVE PROVIDED BY HOOD VENDOR. FIRE SUPPRESSION SUBCONTRACTOR SHALL VERIFY APPROVED LOCATION WITH LOCAL AUTHORITY AND COORDINATE THE COMPLETE INSTALLATION WITH ALL OTHER TRADES

GENERAL NOTES

A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.

B. COORDINATE WITH THE WORK OF OTHER SECTIONS. EQUIPMENT FURNISHED BY OTHERS. REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE DUCT RISES AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.

C. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

D. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.

E. SUPPORT NEW MECHANICAL SYSTEMS WITH SEISMIC RESTRAINTS IN ACCORDANCE WITH SEISMIC HAZARD LEVEL 'A' OF THE SEISMIC RESTRAINT MANUAL, AS PUBLISHED BY SMACNA, AND IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE, LATEST EDITION.

AIR DISTRIBUTION SIZING - ROUND DUCT

UNLESS NOTED OTHERWISE ON PLANS, THE FOLLOWING CHART SHALL APPLY TO ROUND DUCT SIZES FOR SUPPLY AIR*, EXHAUST AIR, AND RETURN AIR.

SUPPLY AND EXHAUST AIR CFM RANGE	DUCT SIZE	RETURN AIR CFM RANGE
0-100	6"ø	0-70
105-200	8"ø	75-155
205-395	10"ø	160-285
400-605	12"ø	290-465
610-920	14"ø	470-710
925-1200	16"ø	715-1015

* DIFFUSER NECK SIZES SHALL MATCH SUPPLY AIR DUCT SIZING.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER AFSHIN HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

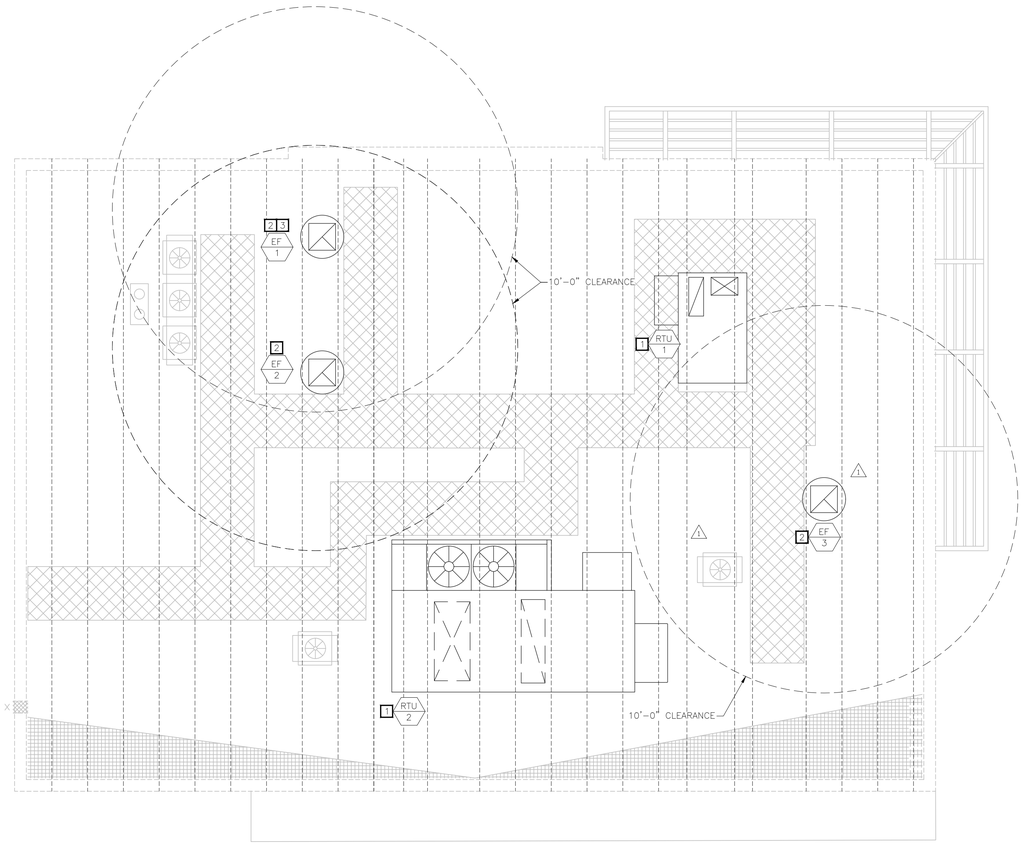
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
MECHANICAL PLAN

Drawn	Checked
NI	AH
Scale	Date
1/4" = 1'-0"	JUNE 2023
Project No.	Drawing No.
C22-129	M1.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



01 MECHANICAL ROOF PLAN
1/4"=1'-0"

MECHANICAL KEY NOTES

1. PROVIDE ROOFTOP UNIT AND CURB. COORDINATE UNIT WITH STRUCTURE. SHIM UNIT AND CURB LEVEL FOR PROPER CONDENSATE DRAINAGE. PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AND RETURN AIR DUCT CONNECTIONS. TRANSITION TO DUCT SIZES SHOWN ON SHEET M1.1.
2. INSTALL OWNER FURNISHED ROOF MOUNTED EXHAUST FAN AND CURB.
3. INSTALL OWNER FUNISHED WIND BAND EXTENSION FOR GREASE EXHAUST FAN. EXHAUST TERMINATION MUST BE EQUAL OR HIGHER THAN ANY WALL OR PARAPET WITHIN 5'-0" OF FAN. VERIFY REQUIRED HEIGHT PRIOR TO BID AND COORDINATE WITH HOOD MANUFACTURER FOR ADDITION TO EQUIPMENT PRIOR TO BID.

GENERAL NOTES

A. SEAL ALL ROOF PENETRATIONS WATER TIGHT. COORDINATE ALL PENETRATIONS WITH GENERAL CONTRACTOR AND ROOFING CONTRACTOR.

B. ALL OUTDOOR INTAKES SHALL BE LOCATED AT LEAST 10 FEET FROM EXHAUST OUTLETS, APPLIANCE FLUES AND PLUMBING VENTS.

C. MAINTAIN ALL CODE AND MANUFACTURER'S RECOMMENDED CLEARANCES AROUND ALL ROOF EQUIPMENT.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER AFSHIN HASAN

9.13.2023

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Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
MECHANICAL ROOF PLAN

Drawn	Checked
NI	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	M1.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

2018 INTERNATIONAL MECHANICAL CODE - TABLE 403.3.1.1 VENTILATION SUMMARY

OCCUPANCY CATEGORY	PEOPLE OUTDOOR AIR RATE - (Rp) (CFM/PERSON)	AREA OUTDOOR AIR RATE - (Ra) (CFM/SQ.FT.)	OCCUPANCY DENSITY P/1,000 SQ.FT.	OCCUPANCY CLASSIFICATION P/1,000 SQ.FT.	CALCULATED OCCUPANCY DENSITY	ZONE OCCUPANCY OVERRIDE	PEOPLE EXPECTED TO OCCUPY THE ZONE - (Pz)	Rp*Pz	Ra*Az	AREA - (Az) SQ.FT.	ZONE AIR DISTRIBUTION EFFECTIVENESS - Ez	BREATHING ZONE OUTDOOR AIRFLOW - (Vbz) CFM	ZONE OUTDOOR AIRFLOW (Voz) Voz=Vbz/Ez	ZONE PRIMARY AIRFLOW (Vpz)	PRIMARY OUTDOOR AIR FRACTION (Zp) Zp=Voz/Vpz	OCCUPANT DIVERSITY RATIO (D)	UNCORRECTED OUTDOOR AIR INTAKE (Vou) CFM	SYSTEM VENTILATION EFFICIENCY Ev	CORRECTED OUTDOOR AIRFLOW (Vot) CFM	PROVIDED OUTDOOR AIRFLOW CFM
RTU-1																				
DINING	7.5	0.18	70	DINING	26	—	26	194	67	370	0.8	261	326	1400	0.23		261		284	
SALES	7.5	0.12	20	KITCHEN	3	—	3	20	16	130	0.8	35	44	400	0.11		35		35	
VESTIBULE	—	0.06	—	CORRIDOR	—	—	—	—	2	40	0.8	2	3	150	0.02		2		3	
RESTROOM	—	—	—	RESTROOM	—	—	—	—	—	55	0.8	—	—	50	—		—		—	
				SYSTEM POPULATION INCLUDING DIVERSITY (Ps) =			26							MAX. Zp =	0.23	1.00	298	0.92	324	400
DOAS-1																				
KITCHEN	7.5	0.12	20	KITCHEN	4	—	4	32	25	210	0.8	57	71	1600	0.04		57		57	
BOH	7.5	0.12	20	KITCHEN	14	—	14	107	85	710	0.8	192	240	2800	0.09		192		192	
DRIVE THRU	7.5	0.12	20	KITCHEN	2	—	2	17	13	110	0.8	30	37	400	0.09		30		30	
				SYSTEM POPULATION INCLUDING DIVERSITY (Ps) =			21							MAX. Zp =	0.09	1.00	278	1.00	278	2,500

ROOFTOP UNIT SCHEDULE

MARK (RTU- #)	1	2	
MANUFACTURER	CARRIER	GREENHECK	
MODEL	50GCBK06	RV-45-15	
AIR FLOW (CFM)	2,000	5,000	
OA FLOW (CFM)	400	2,500	
AMBIENT OAT (°F)	95.5	95.5	
EXTERNAL STATIC (IN. W.C.)	0.60	1.00	
DX COOLING COIL			
EAT (°FDB/WB)	80/67	80/67	
TOTAL (BTU/HR)	59,000	202,000	
SENSIBLE (BTU/HR)	46,800	141,100	
ELECTRIC HEAT			
FUEL	ELECTRIC (332A)	ELECTRIC	
ELECTRIC HEAT (KW)	18.4	57.4	
WINTER SA TEMP (°F)	87	81	
FLA (Amps)	51.1	159.3	
ELECTRICAL			
VOLTS/Ø/HZ	208-230/3/60	208/3/60	
UNIT MCA	83	181.3	
MOCP AMPS	90	200	
APPROX. WEIGHT (LBS)	844	3,012 (±5%)	
EER (SEER)	12.8 (17.4)	11	
NOTES	1-14	1-11,13-15	

NOTES:
1) PROVIDE FACTORY FABRICATED 14" HIGH ROOF CURB. CURB SHALL MATCH SLOPE OF ROOF. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION
2) PROVIDE FACTORY MOUNTED WEATHERHOOD AND BIRDSCREEN AT OUTSIDE AIR INTAKE.
3) PROVIDE FACTORY INSTALLED LOW-LEAK DRY BULB ECONOMIZER WITH FAULT DETECTION AND DIAGNOSTICS.
4) PROVIDE UNIT WITH LOUVERED HAIL GUARDS.
5) PROVIDE 5 MINUTE COMPRESSOR RESTART TIME DELAY.
6) PROVIDE FILTER RACK AND 2 SETS OF MERV 8 FILTERS.
7) PROVIDE FACTORY MOUNTED AND WIRED DISCONNECT SWITCH.
8) CONTRACTOR SHALL INSTALL ALL COMPONENTS SHIPPED LOOSE TO THE FIELD.
9) PROVIDE WITH FACTORY CONDENSATE OVERFLOW SWITCH, FOIL FACED INSULATION, AND HINGED ACCESS PANELS.
10) SET MINIMUM OUTSIDE AIR AS SPECIFIED ABOVE. FIELD SET 2 MINIMUM POSITIONS TO MAINTAIN SCHEDULED OUTSIDE AIR FLOW RATE AT SUPPLY FAN MINIMUM AND MAXIUM SPEEDS. OUTSIDE AIR DAMPER SHALL FULLY CLOSE UPON UNIT SHUTDOWN
11) PROVIDE POWERED GFCI CONVENIENCE OUTLET. OUTLET TO BE POWERED BY LINE SIDE OF DISCONNECT.
12) PROVIDE FAN WITH 2-SPEED FAN CONTROL.
13) PROVIDE FACTORY MOUNTED POWER EXHAUST.
14) PROVIDE HOT GAS REHEAT COIL FOR DEHUMIDIFICATION WITH HUMIDISTAT SET TO 55% R.H.
15) PROVIDE FACTORY MOUNTED SINGLE ZONE VAV AND DIGITAL SCROLL COMPRESSOR.

⚠1

AIR BALANCE SCHEDULE

	RTU-1	RTU-2	EF-1	EF-2	EF-3	TOTALS
OUTSIDE AIR FLOW (CFM)	400	2,500	0	0	0	2,900
RETURN AIR FLOW (CFM)	1,600	2,500	0	0	0	4,100
SUPPLY AIR FLOW (CFM)	2,000	5,000	0	0	0	7,000
EXHAUST AIR FLOW (CFM)	0	0	1,230	1,230	75	2,535
BUILDING PRESSURE (CFM)	400	2,500	-1,230	-1,230	-75	365
RESULTING BUILDING PRESSURIZATION (CFM)						365

EXHAUST AND VENTILATION FAN SCHEDULE - OWNER FURNISHED

MARK (EF-#)	1	2	3	
MANUFACTURER	FRANKE	FRANKE	FRANKE	
MODEL	FR-DU50HFA	FR-DU50HFA	FR-DR10HFA	
TYPE	UPBLAST	UPBLAST	DOWNBLAST	
DRIVE TYPE	DIRECT	DIRECT	DIRECT	
PERFORMANCE				
AIR FLOW (CFM)	1,230	1,230	75	
EXT. STATIC (IN W.C.)	0.8	0.8	0.125	
FAN SPEED (RPM)	1,500	1,500	1,015	
ELECTRICAL				
VOLTS/Ø/HZ	120/1/60	120/1/60	120/1/60	
FAN MOTOR HP	1/2	1/2	1/8	
ACCESSORIES	GDC,RC,WB	GDC,RC	BD,BS,DS,RC,SC	
APPROX. WEIGHT (LBS)	120	120	75	
SERVES	HOOD	HOOD	RESTROOM	
NOTES	1,2,3	1,2,3	3,4	

ACCESSORIES:
BD-BACKDRAFT DAMPER, BS-BIRD SCREEN, DS-DISCONNECT SWITCH, GDC-GREASE DRAIN AND CUP, RC-ROOF CURB PER HOOD PACKAGE SPECIFICATION, SC-FACTORY MOUNTED AND WIRED SPEED CONTROL, WB-WIND BAND EXTENSION, WP-NEMA 3R DISCONNECT SWITCH

NOTES:
1) FAN SHALL BE CONTROLLED BY SWITCH AT KITCHEN HOOD. INTERLOCK RTU-1 AND RTU-2 TO OPERATE IN OCCUPIED MODE WHILE HOOD EXHAUST FAN IS ENERGIZED. SEE HOOD PACKAGE ON M3.x SHEETS FOR MORE INFORMATION.
2) PROVIDE WITH VARIABLE SPEED CONTROLLER.
3) COORDINATE WITH MANUFACTURER FOR FINAL SELECTION.
4) ELECTRICAL CONTRACTOR SHALL INTERLOCK FAN WITH TIMECLOCK.

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

MARK	A	B	C
MANUFACTURER	TITUS	TITUS	TITUS
MODEL	TMS-AA	TMS-AA	PAR-AA
TYPE	SQUARE CONE DIFFUSER	SQUARE CONE DIFFUSER	PREFORATED FACE DIFFUSER
NECK SIZE (L"XW")	PER PLAN	PER PLAN	PER PLAN
FACE SIZE (L"XW")	24"X24"	24"X24"	24"X24"
FRAME TYPE	LAY-IN	LAY-IN	LAY-IN
FINISH	WHITE	WHITE	WHITE
NOISE CRITERIA LEVEL	<30	<30	<30
ACCESSORIES		TRM	

MARK	D	E	F
MANUFACTURER	TITUS	TITUS	TITUS
MODEL	TMS-AA	355FL	50F
TYPE	SQUARE CONE DIFFUSER	LOUVERED EXHAUST GRILLE	EGGCRATE GRILLE
NECK SIZE (L"XW")	PER PLAN	10"X10"	22"X22"
FACE SIZE (L"XW")	12"X12"	12"X12"	24"X24"
FRAME TYPE	LAY-IN	SURFACE	LAY-IN
FINISH	WHITE	WHITE	WHITE
NOISE CRITERIA LEVEL	<30	<30	<30
ACCESSORIES	TRM	STR	

ACCESSORIES:
STR-SQUARE TO ROUND TRANSITION (AS REQUIRED), TRM-RAPID MOUNT SHEETROCK FRAME

AIR CURTAIN SCHEDULE

MARK (AC-#)	1	
MANUFACTURER	MARS	
MODEL	LPV236-1UA-OB	
AIR FLOW (CFM)	900	
ELECTRICAL		
VOLTS/Ø/HZ	115	
MOTOR QUANTITY	1	
MOTOR HP	1/6	
MCA (AMPS)	3	
MOCP (AMPS)	15	
FINISH	OBSIDIAN BLACK	
APPROX. WEIGHT (LBS)	32	
NOTES	1-3	

NOTES:
1) PROVIDE WITH INTREGRAL DISCONNECT SWITCH.
2) PROVIDE WITH DOOR MICRO-SWITCH.
3) PROVIDE WITH FILTER.
4) PROVIDE MOUNTING HARDWARE REQUIRED BY MANUFACTURER FOR COMPLETE INSTALLATION.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHIA HASAN

9.13.2023

Company Logo

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ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

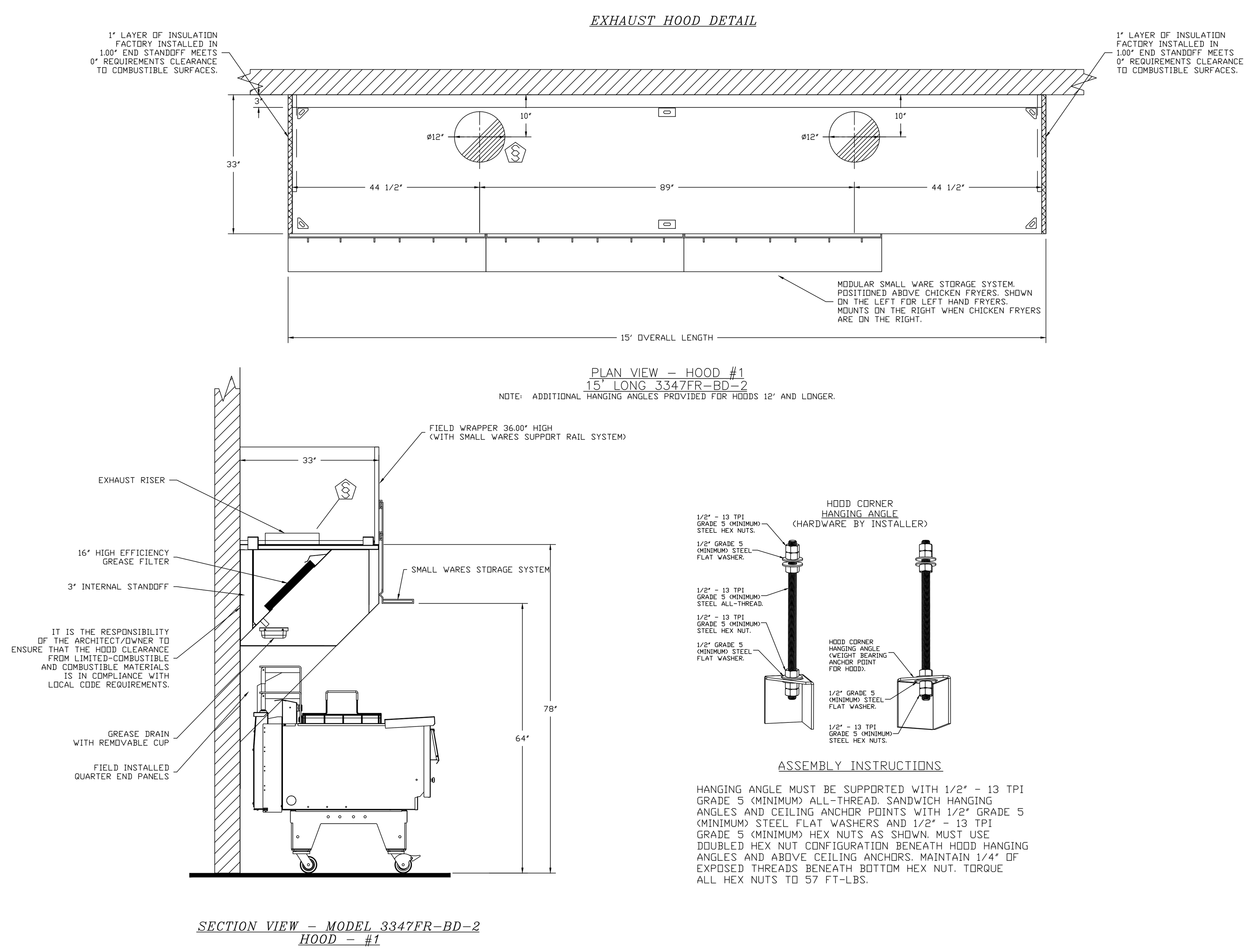
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
MECHANICAL SCHEDULES

Drawn	Checked
NI	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	M2.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



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 BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

1 EXHAUST HOOD DETAIL
1 SCALE: NO SCALE

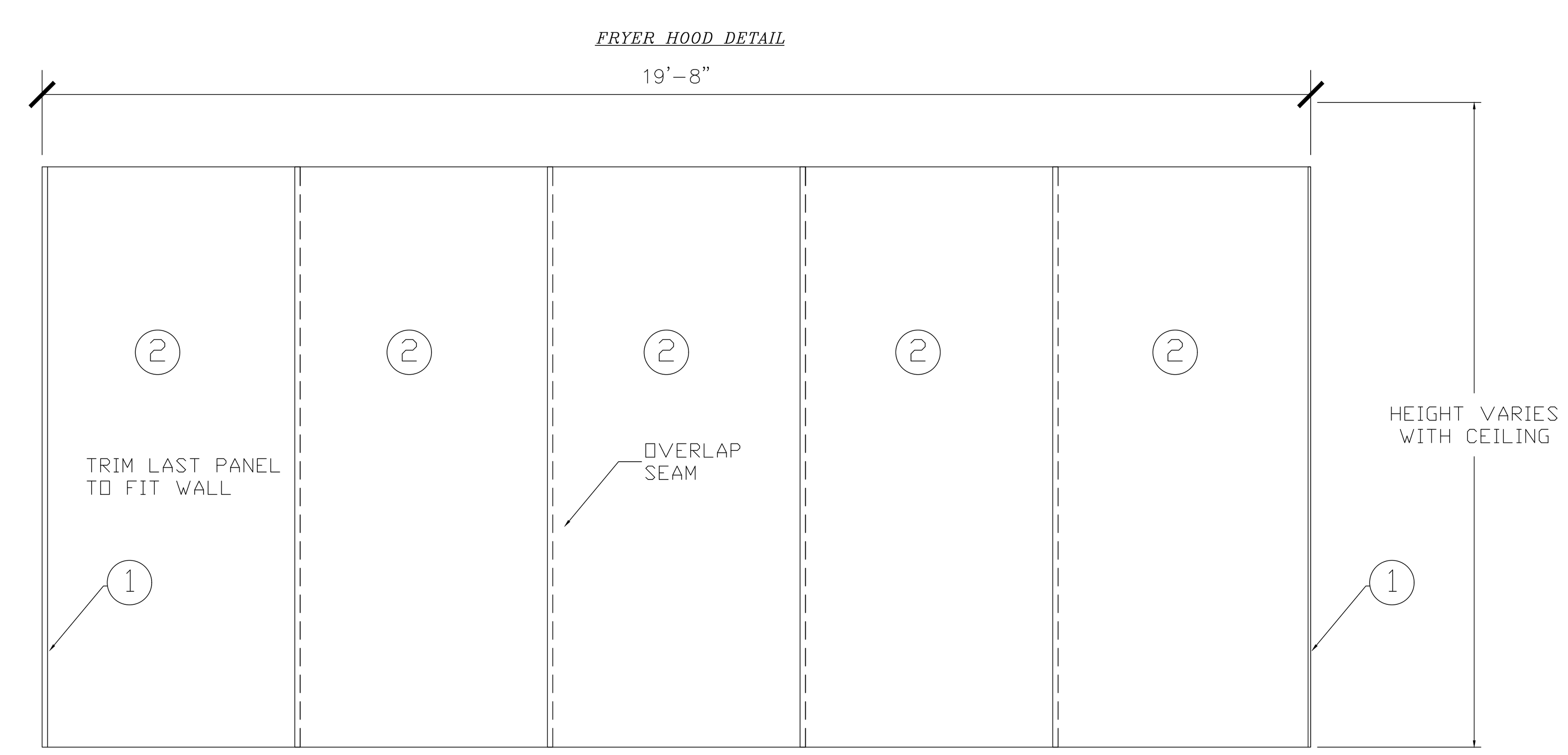
FRANKE

PLK 2112
15' HOOD PACKAGE

FRANKE FOODSERVICE SYSTEMS AMERICAS, INC.

800 AVIATION PARKWAY
SMYRNA, TN USA 37167

PHONE: 1-800-877-5178
WWW.FRANKESUPPLY.COM
FS-BKSALES.US@FRANKE.COM



COVERS ENTIRE WALL BEHIND HOOD

ITEM	QTY	DESCRIPTION
1	2	S/S CAP STRIP
2	5	WALL FLASHING 48" WIDE

2 BACKSPLASH DETAIL
1 SCALE: NO SCALE

Revision #	Date	Description	By
A	10/01/20	INITIAL ISSUE	AM029
-	-	-	

FRANKE

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800 Aviation Parkway
Smyrma, TN USA 37167

Tel. +800 472-2954
fs_customerservice.us@franke.com
www.frankesupply.com

Exclusion of Liabililty
FRANKE takes no responsibility for the accuracy of the floor plans and constructional drawings. All dimensions and connections specified by FRANKE must be checked by the client prior to installation. Specifications for power consumption and connections are limited to equipment supplied by FRANKE. All third party accessories shown lie within the responsibility of the client. FRANKE reserves the right to change equipment without notice.

Account: POPEYES
Restaurant #: PLK 2112
Title: WALL MOUNTED INSTALLATION DETAIL
Site ID: -
Operator: -
Site Address: -
City: -
State: - Zip Code: - Country: -
Region: -
Building Type: -
Electrical Service: -
Gas Service: -
Market Manager: -
Franke Project Number: -
Created by: HP033
Date Issued: 10/01/20
Modified By: AM029
Drawing Scale: AS NOTED
Units: INCHES
Drawing Number: -
Revision: A
Sheet Name: 1 OF 4

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

N
PROJECT NORTH

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 41082

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE · CIVIL ENGINEERING · MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA 1972 KITCHEN
POPEYES

Store Type: US 2112 PROTOTYPE 2112-21

Location: 1517 NC 24-87 CAMERON, NC

Drawing Title: MECHANICAL HOOD DRAWINGS

Drawn	Checked
NI	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	M3.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

EXHAUST FAN DATA

EXHAUST FAN INFORMATION – PLK 2136 PROTO

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	EF-LEFT	1	FR-DU50HFA	FRANKE FOODSERVICE	1231	0.800	1501	TEAO-ECM	0.500	0.3500	1	115	6.3	468 FPM	78	15.9
2	EF-RIGHT	1	FR-DU50HFA	FRANKE FOODSERVICE	1231	0.800	1501	TEAO-ECM	0.500	0.3500	1	115	6.3	468 FPM	78	15.9

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	EF-LEFT	1	GREASE BOX.
		1	EXHAUST FAN HEAT BAFFLE.
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.
2	EF-RIGHT	1	GREASE BOX.
		1	EXHAUST FAN HEAT BAFFLE.
		1	ECM WIRING PACKAGE - PWM SIGNAL FROM ECPM03 PREWIRE (TELCO MOTOR), CCW ROTATION.

FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	EF-LEFT	YES						
2	EF-RIGHT	YES						

CURB ASSEMBLIES

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	EF-LEFT	34 LBS	CURB	19.500"W X 19.500"L X 24.000"H HINGED.
2	# 2	EF-RIGHT	34 LBS	CURB	19.500"W X 19.500"L X 24.000"H HINGED.

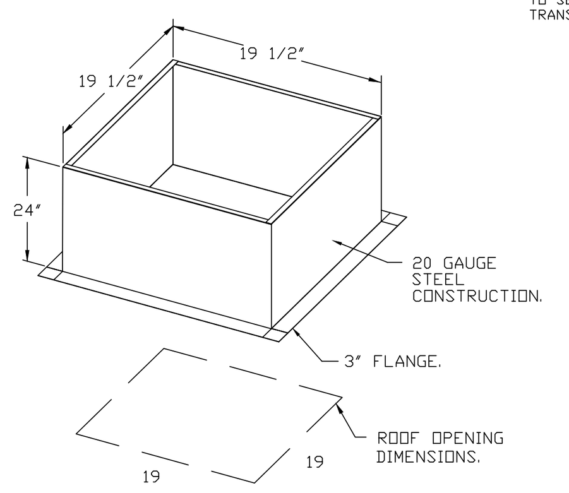
FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

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.

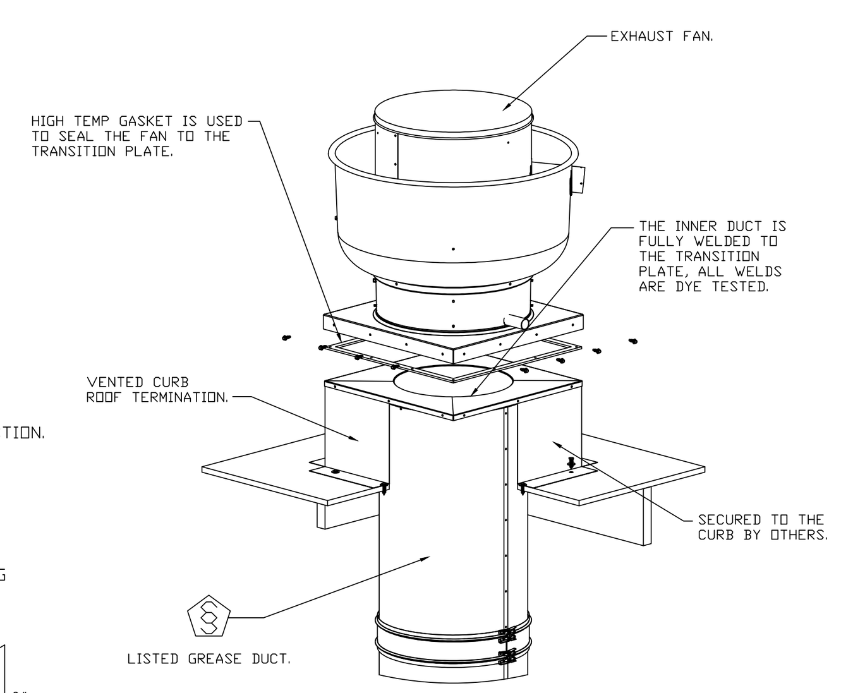
ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS
GREASE BOX.
EXHAUST FAN HEAT BAFFLE.
FAN BASE CERAMIC SEAL - SHIP LOOSE - FOR GREASE DUCTS.
ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL (TELCO MOTOR), CCW ROTATION.

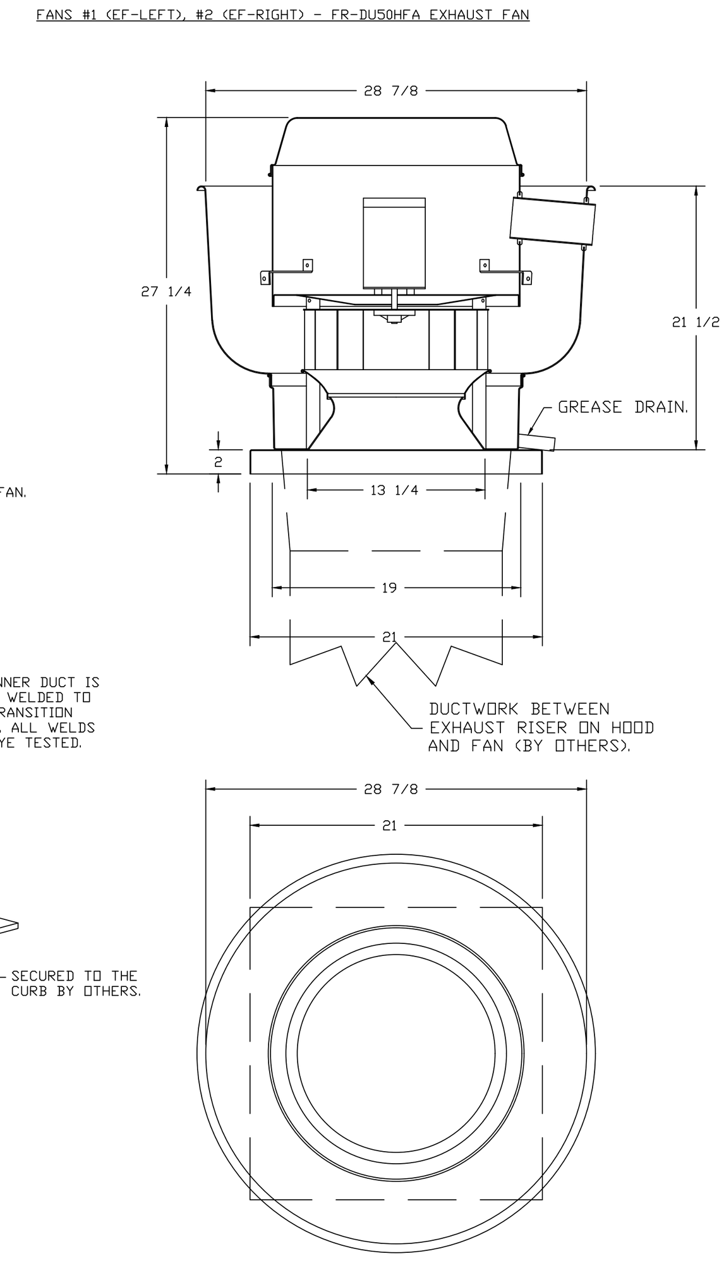


PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

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



FANS #1 (EF-LEFT), #2 (EF-RIGHT) - FR-DU50HFA EXHAUST FAN



4 / 2 EXHAUST FAN DATA
SCALE: NO SCALE

EXHAUST HOOD DATA

HOOD INFORMATION – PLK 2136 PROTO

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S) WIDTH	LENG	HEIGHT	DIA	CFM	VEL	SP	HOOD CONSTRUCTION	HOOD CONFIG END TO END	ROW
1		3347 FR-BD-2	FRANKE FOODSERVICE	14' 10"	450 DEG	I	MEDIUM	166	2462			4"	12"	1231	1567	-0.734"	430 SS WHERE EXPOSED	ALONE	ALONE
												4"	12"	1231	1567	-0.734"			

HOOD INFORMATION

HOOD NO	TAG	FILTER(S) TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	LIGHT(S) QTY	TYPE	WIRE GUARD	UTILITY CABINET(S) LOCATION	SIZE	FIRE SYSTEM TYPE	FIRE SYSTEM SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
1		HIGH EFFICIENCY	11	16"	16"	>70%	0									YES	449 LBS

(S) GREASE DUCT & CHIMNEY SPECIFICATIONS:
PROVIDE GREASE DUCT EQUAL TO FRANKE FOODSERVICE SYSTEMS MODEL "FRDW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "FRDW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "FRDW" 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 FRANKE FOODSERVICE SYSTEMS MODEL "FRDW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

FRANKE FOODSERVICE SYSTEMS RECOMMENDS THE USE OF LISTED, PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

HVAC DISTRIBUTION NOTE

HIGH VELOCITY DIFFUSERS OR HVAC RETURNS SHOULD NOT BE PLACED WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

VERIFY CEILING HEIGHT

__' - __"

HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED ☐
APPROVED WITH NO EXCEPTION TAKEN ☐
REVISE AND RESUBMIT ☐
SIGNATURE ________
YOUR TITLE ________ DATE ________

3 / 2 EXHAUST HOOD DATA
SCALE: NO SCALE

RESTROOM EXHAUST FAN DATA

EXHAUST FAN INFORMATION – JOB PLK PROTO

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
3	RESTROOM	1	FR-DR10HFA	75	0.25	1015	TEAO-ECM	0.166	0.02	1	115	1.9		50	1.9

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
3	RESTROOM	1	I 12-BDD DAMPER.
		1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL (TELCO MOTOR), CCW ROTATION.

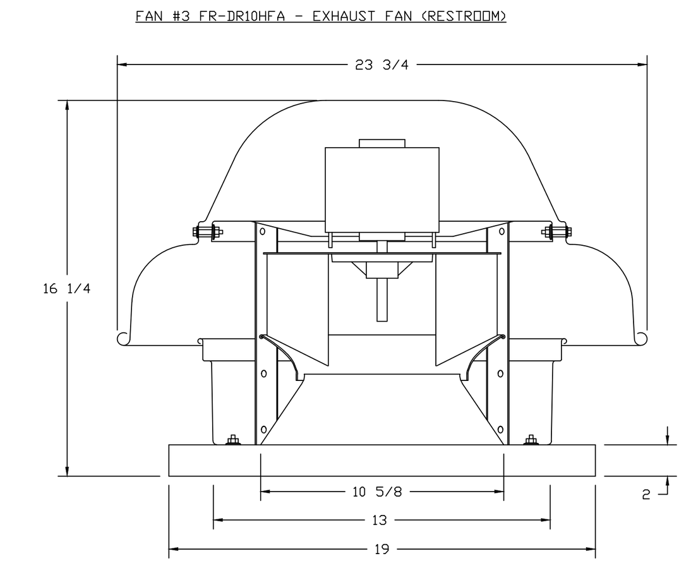
FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
3	RESTROOM		YES					

CURB ASSEMBLIES

NO	ON FAN	TAG	WEIGHT	ITEM	SIZE
3	# 3	RESTROOM	25 LBS	CURB	17.500"W X 17.500"L X 20.000"H .

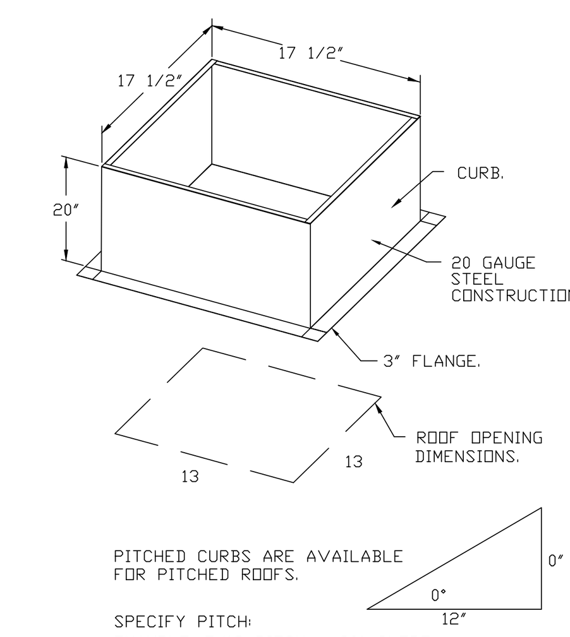
FAN #3 FR-DR10HFA - EXHAUST FAN (RESTROOM)



FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- UL705.
- SAFETY DISCONNECT.
- STANDARD BIRD SCREEN.
- SPEED CONTROL.

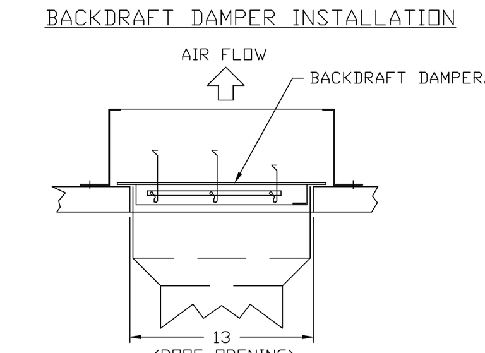
OPTIONS
I 12-BDD DAMPER.
ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL (TELCO MOTOR), CCW ROTATION.



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

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

BACKDRAFT DAMPER INSTALLATION



CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED ☐
APPROVED WITH NO EXCEPTION TAKEN ☐
REVISE AND RESUBMIT ☐
SIGNATURE ________
YOUR TITLE ________ DATE ________

5 / 2 RESTROOM EXHAUST FAN DATA
SCALE: NO SCALE

Revision #	Date	Description	By
A	10/01/20	INITIAL ISSUE	AM029
-	-		

FRANKE

Franke Foodservice Systems Americas, Inc.

800 Aviation Parkway
Smyrma, TN USA 37167

Tel. +800 472-2954
fs_customerservice.us@franke.com
www.frankesupply.com

Account: POPEYES
Restaurant # PLK 2112
Title: WALL MOUNTED INSTALLATION DETAIL
Site ID: -
Operator: -
Site Address: -
City: -
State: - Zip Code: - Country: -
Region: -
Building Type: -
Electrical Service: -
Gas Service: -
Market Manager: -
Franke Project Number: -
Created by: HP033
Date Issued: 10/01/20
Modified By: AM029
Drawing Scale: AS NOTED
Units: INCHES
Revision: A
Drawing Number: -
Sheet Name: 2 OF 4

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER AFSHAR HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE•CIVIL ENGINEERING•MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project: LOUISIANA KITCHEN 1972 POPEYES

Store Type: US 2112 PROTOTYPE 2112-21

Location: 1517 NC 24-87 CAMERON, NC

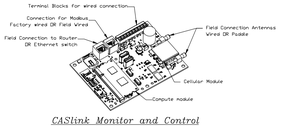
Drawing Title: MECHANICAL HOOD DRAWINGS

Drawn	Checked
NI	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	M3.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

ELECTRICAL PACKAGE – JOB#4702950

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED					
				LOCATION	QUANTITY		FAN TAG	TYPE	Φ	HP	VOLT	FLA
1		SC-120110MA_MA4	WALL MOUNT IN SS BOX	05 – SS WALL MOUNT BOX	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EF-LEFT	EXHAUST	1	0.500	115	6.3
							EF-RIGHT	EXHAUST	1	0.500	115	6.3



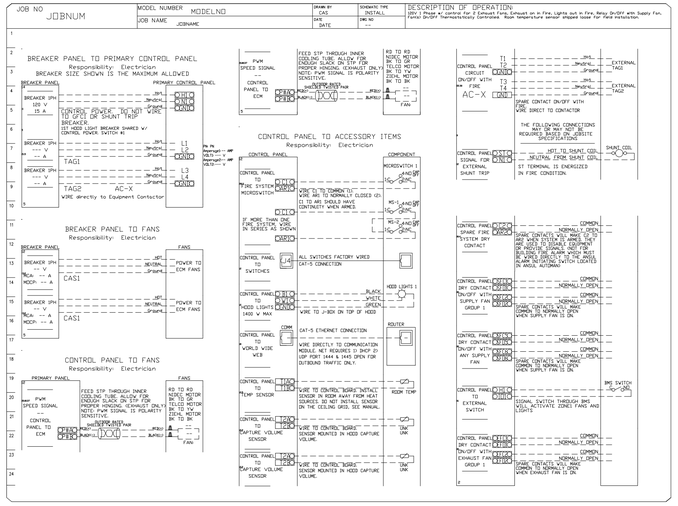
CASlink Monitor and Control

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

MONITORING AND CONTROL POINTS LIST

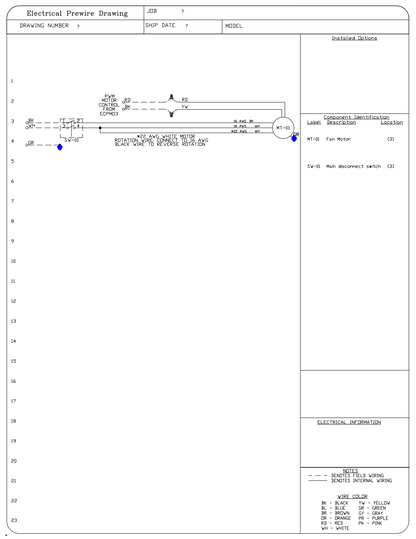
DCV Packages	Function
Room Temperature	MONITOR
Duct Temperature(s)	MONITOR
MUA Discharge Temperature	MONITOR
Kitchen RTU Discharge Temperature	MONITOR
Fan Speed	MONITOR
Fan Amperage	MONITOR
Fan Power	MONITOR
VFD Faults	MONITOR
Controller Faults	MONITOR
Fan Faults	MONITOR
Fan Status	MONITOR
PCU Faults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

IC Packages	Function
Room Temperature(s)	MONITOR
Duct Temperature(s)	MONITOR
MUA Discharge Temperature	MONITOR
Kitchen RTU Discharge Temperature	MONITOR
Controller Faults	MONITOR
Fan Faults	MONITOR
Fan Status	MONITOR
PCU Faults	MONITOR
PCU Filter Clog Percentages	MONITOR
Fire Condition	MONITOR
CORE Fire System	MONITOR
Building Pressures	MONITOR
Fans Button(s)	MONITOR & CONTROL
Light Button(s)	MONITOR & CONTROL
Wash Button	MONITOR & CONTROL

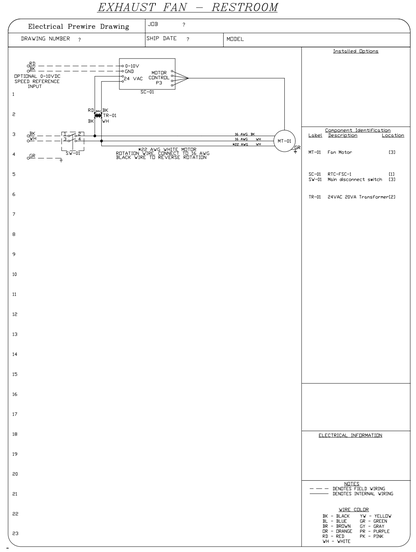


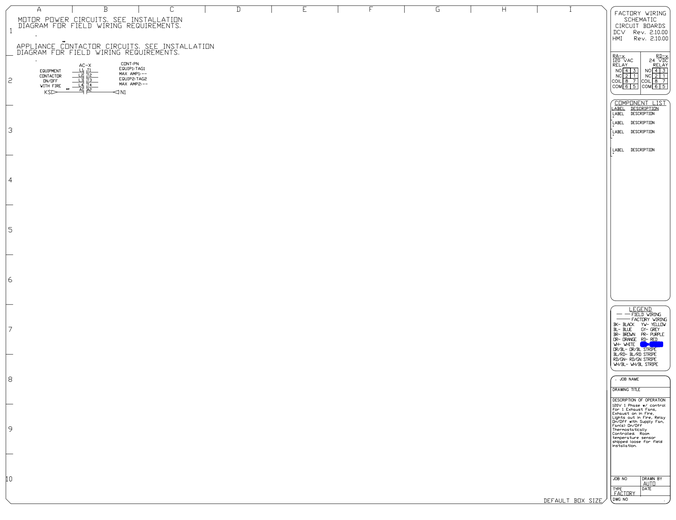
CONTROL SCHEMATIC – EXHAUST FANS

EXHAUST FAN – 12' HOOD



EXHAUST FAN – RESTROOM





6 / 3 CONTROL SCHEMATIC
SCALE: NO SCALE

No.	Revision #	Date	Description	By
	A	10/01/20	INITIAL ISSUE	AM029
	-	-	-	
	-	-	-	

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

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2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER AESHA HASAN

9.13.2023

FRANKE

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Company Logo

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ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Account
POPEYES
Restaurant #
PLK 2112
Title
WALL MOUNTED INSTALLATION DETAIL
Site ID
-
Operator
-
Site Address
-
City
-
State
-
Zip Code
-
Country
-
Region
-
Building Type
-
Electrical Service
-
Gas Service
-
Market Manager
-
Franke Project Number
-
Created by:
HP033
Date Issued
10/01/20
Modified By:
AM029
Drawing Scale
AS NOTED
Units
INCHES
Revision
A
Drawing Number
-
Sheet Name
3 OF 4

Project

LOUISIANA KITCHEN 1972
POPEYES

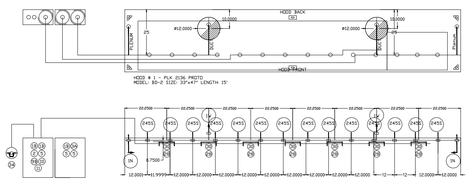
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
MECHANICAL HOOD DRAWINGS

Drawn	Checked
NI	AH
Scale	Date
1/4" = 1'-0"	JUNE 2023
Project No.	Drawing No.
C22-129	M2.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



DUAL ANSUL SYSTEM – CHICKEN AND FRY HOODS

HOOD # 1 - PLK 2136 PROTO
MODEL: BD-2 SIZE: 33"x47" LENGTH: 15'

SHOWN WITH CHICKEN FRYERS ON LEFT END. COVERAGE IS THE SAME WHEN CHICKEN FRYERS ARE ON THE RIGHT END.

INCLUDES: FIELD INSTALLATION AND HOOKUP DURING NORMAL BUSINESS HOURS BY CERTIFIED INSTALLERS ONLY IN THE LOCATION NOTED ABOVE, TWO SITE VISITS ONLY (ONE VISIT TO SET PULL STATION & SYSTEM HOOKUP AND ONE VISIT FOR ONE TEST; ADDITIONAL VISITS WILL RESULT IN ADDITIONAL CHARGES), ONE MECHANICAL GAS VALVE PER SYSTEM AT A MAXIMUM SIZE OF 2", PERMIT, AND SYSTEM TEST.
EXCLUDES: UNION LABOR & PREVAILING WAGE (LABOR & WAGES WILL BE ADDED IF APPLICABLE), GAS VALVE INSTALLATION, ELECTRICAL HOOKUP AND CONNECTIONS, HANGING OF FIRE CABINET, SHUNT TRIP, HANDHELD EXTINGUISHER(S), ON-SITE RE-PIPING DUE TO EQUIPMENT LAYOUT CHANGES.

NOTES
- FIELD PIPE DROPS AS SHOWN
  SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- MAXIMUM 9 ELBOWS IN SUPPLY LINE.
- MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE COVERING A RANGE, FRYER, OR WOK TO REFLECT GENERAL PIPING REQUIREMENTS.
- IF APPLICABLE, PRE-PIPED CHARBROILER DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

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)

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.

JOB #: 4531075.
JOB NAME: ** POPEYES - 2020 PROTO.

SYSTEM SIZE: ANSUL-3.0/3.0/3.0 TOTAL FP REQUIRED: 33.
HOOD # 1 12' 0.00" LONG x 33" WIDE x 47" HIGH.
RISER # 1 SIZE: 0" x 0".
HOOD # 2 4' 0.00" LONG x 30" WIDE x 44" HIGH.
RISER # 1 SIZE: 0" x 0".

TYPICAL ANSUL R102 SYSTEM LAYOUT WITH REMOTE MOUNTED AUTOMAN

NOTES
- FIELD PIPE DROPS AS SHOWN
  SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- MAXIMUM 9 ELBOWS IN SUPPLY LINE.
- MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE COVERING A RANGE, FRYER, OR WOK TO REFLECT GENERAL PIPING REQUIREMENTS.
- IF APPLICABLE, PRE-PIPED CHARBROILER DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

JOB #: PLK 2136 PROTO
JOB NAME: POPEYES -"KITCHEN OF THE FUTURE" STRAIGHT DUC.

SYSTEM SIZE: ANSUL-3.0/3.0/3.0 TOTAL FP REQUIRED: 32.
HOOD # 1 15' LONG x 33" WIDE x 47" HIGH.
RISER # 1 SIZE: 12" DIA.
RISER # 2 SIZE: 12" DIA.
HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

LEGEND – WALL MOUNTED ANSUL SYSTEM

1A	1.5 GALLON TANK
1B	3.0 GALLON TANK
2	AUTOMAN RELEASE
3	3 GALLON TANK ENCLOSURE
3A	6 GALLON TANK ENCLOSURE
4	REGULATED ACTUATOR
5	ANSULEX LIQUID AGENT (3 GAL.)
6	ANSULEX LIQUID AGENT (1.5 GAL.)
7	CARTRIDGE (101-20)
8	CARTRIDGE (101-10)
9	CARTRIDGE (101-30)
9A	CARTRIDGE (LT-A-101-30)
9B	DOUBLE TANK CARTRIDGE
10	TEST LINK
11	DOUBLE MICROSWITCH
2W	DUCT NOZZLE (419337)
1W	NOZZLE ASSEMBLY (419336)
1F	NOZZLE ASSEMBLY (419333)
1N	NOZZLE ASSEMBLY (419335)
1/2N	NOZZLE ASSEMBLY (419334)
3N	NOZZLE ASSEMBLY (419338)
245	NOZZLE ASSEMBLY (419340)
230	NOZZLE ASSEMBLY (419339)
2120	NOZZLE ASSEMBLY (419343)
290	NOZZLE ASSEMBLY (419342)
260	NOZZLE ASSEMBLY (419341)
28	DETECTOR BRACKET
29	LOW TEMP FUSIBLE LINK
30	HIGH TEMP FUSIBLE LINK
MGV	MECHANICAL GAS VALVE
EGV	ELECTRICAL GAS VALVE
34	REMOTE MANUAL PULL STATION
S	SWIVEL ADAPTOR

8/4 ANSUL PIPING
SCALE: NO SCALE

UL LISTED NON-WELDED DUCT WORK

DUCTWORK PARTS – JOB#2136 PROTO – DOUBLE WALL SINGLE WALL DUCT

TAG	PART #	CFM	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	DW1235DWLT-2R-S	1245	-0.0151	40.86	1585.18	1	DOUBLE WALL DUCT – 12" INNER DUCT, 35" LONG – 2 LAYERS REDUCED CLEARANCE – 16" STAINLESS STEEL OUTER SHELL.
P2	DW1247DWAJD-2R-S	1245	-0.0119	83.19	1585.18	1	DOUBLE WALL ADJUSTABLE DUCT – 12" INNER DUCT – 2 LAYERS REDUCED CLEARANCE – 16" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P3 ASSEMBLED W/P4	DW124550DWLTTP-2R-S	1245	-0.02	53.52	1585.18	1	DOUBLE WALL DUCT – 12" INNER DUCT, 45.5" LONG – 2 LAYERS REDUCED CLEARANCE – 16" STAINLESS STEEL OUTER SHELL – USED WITH TRANSITION PLATE.
P4 ASSEMBLED W/P3	DW1912TPDBEX	1245		7.50	1585.18	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 19-1/2" CURB TO 12" DUCT, 16 GA ALUMINIZED STEEL. FOR USE WITH EXHAUST FANS.
SYSTEM AT P4			-0.799	0.00			
P5	DW1235DWLT-2R-S	1245	-0.0151	40.86	1585.18	1	DOUBLE WALL DUCT – 12" INNER DUCT, 35" LONG – 2 LAYERS REDUCED CLEARANCE – 16" STAINLESS STEEL OUTER SHELL.
P6	DW1247DWAJD-2R-S	1245	-0.0119	83.19	1585.18	1	DOUBLE WALL ADJUSTABLE DUCT – 12" INNER DUCT – 2 LAYERS REDUCED CLEARANCE – 16" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P7 ASSEMBLED W/P8	DW124550DWLTTP-2R-S	1245	-0.02	53.52	1585.18	1	DOUBLE WALL DUCT – 12" INNER DUCT, 45.5" LONG – 2 LAYERS REDUCED CLEARANCE – 16" STAINLESS STEEL OUTER SHELL – USED WITH TRANSITION PLATE.
P8 ASSEMBLED W/P7	DW1912TPDBEX	1245		7.50	1585.18	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 19-1/2" CURB TO 12" DUCT, 16 GA ALUMINIZED STEEL. FOR USE WITH EXHAUST FANS.
SYSTEM AT P8			-0.799	0.00			
	3M-2000PLUS			0.80		1	DUCT – 3M FIRE BARRIER 2000 PLUS SILICONE – USED AS SEALANT TO SEAL DUCT JOINTS.
TOTAL WEIGHT				370.94			

DOUBLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

DUCT DIAMETER	HORIZONTAL SUPPORT (FT)	VERTICAL WALL SUPPORT (FT)	VERTICAL CURB SUPPORT (FT)
12"	10'	10'	24'

CONFORMS TO UL STD 2221 AND UL STD 1978
CERTIFIED TO CAN/UL-S115, CAN/ULC-S662 AND ASTM E814
MODEL # FRDW-2R
Double Wall Duct - 10" Inner Duct, 2 Layers Reduced Clearance - 14" Stainless Steel Outer Shell

Intertek
2001474

Notes:
- This duct has been evaluated for use as a 2 hour fire rated grease duct system. It is classified as an alternative to 2 hour fire resistive rated shaft enclosure systems.
- For grease duct systems installed without a continuous fire-rated enclosure, an evaluated through-penetrated fire stop assembly shall be used.
- Complies all applicable requirements of the referenced standards as required by the National Building Code of Canada (NBCC). International Mechanical Code (IMC) or NFPA96, and when installed in accordance with the manufacturers's recommended installation instructions.

Clearances:
- This duct may be installed with $\frac{3}{4}$ inch clearance from the outer surface of the duct to combustible materials. The outer v-band may be installed in contact with combustible materials.

DUCTWORK #1 FRONT VIEW
DOUBLE WALL DUCT

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES.

7/4 UL LISTED NON-WELDED DUCT WORK
SCALE: NO SCALE

ANSUL FIRE SYSTEM EQUIPMENT SCHEDULE

FIRE SYSTEM INFORMATION – JOB PLK 2136 PROTO

FIRE SYSTEM NO	TAG	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		ANSUL R102	3.0/3.0/3.0	32	WALL MOUNT LEFT	N/A

GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		MECHANICAL	1.500	FRANKE FOODSERVICE SYSTEMS

FIRE SYSTEM PARTS LIST KEY

FIRE SYSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
1		0 - 0 - 439861 LARGE BLOWOFF CAP, METAL, TO FIT NEW LASER-ETCHED ANSUL NOZZLES, A0024201.	18	0
		1 - 1 - AT - 3.0 TANK(#1B) - 3.0 GALLON SS TANK (FOR USE WITH AUTOMAN RELEASE, ACTUATOR, OR SS ENCLOSURE (UL/ULC)) MACOLA # 01-429862.	3	0
		2 - 2 - AP - AR AUTOMAN RELEASE - ANSUL AUTOMAN MECHANICAL RELEASE (UL). TANK SOLD SEPARATELY. ANSUL PART # 429853; MACOLA # 01-429853.	1	0
		3 - 3 - AP - ADE ENCLOSURE (DOUBLE) - DOUBLE STAINLESS STEEL ENCLOSURE (UL), ANSUL PART # 429872; MACOLA # 03-429872.	1	0
		3 - 3 - AP - AE ENCLOSURE - STAINLESS STEEL ENCLOSURE ASSEMBLY (UL), ANSUL PART # 429870; MACOLA # 01-429870.	0	0
		5 - 5 - LIQ-3.0 AGENT - ANSULEX LOW PH WET CHEMICAL AGENT, 3 GALLON (UL) 79372.	3	0
		9 - 9 - DT-CART DOUBLE TANK NITROGEN CARTRIDGE.	0	1
		10 - 10 - TLINK LINK - TEST LINK (1 TEST LINK) ANSUL PART # 24916, MACOLA # 20-24916.	1	0
		11 - 11 - MICRO-SDA MICROSWITCH KIT- INCLUDES 2 SWITCHES AND MOUNTING HARDWARE. SINGLE DUAL ELECTRIC SWITCH, ONE STANDARD SWITCH, ONE ALARM DUTY SWITCH ANSUL PART # 437155, MACOLA # 08-437155.	1	0
		14 - 14 - 419336 NOZZLE - 1W NOZZLE, DUCT/APPLIANCE (REPLACES ANSUL PART# 419347, CAS PART# 419336) A0001266.	2	0
		16 - 16 - 419335 NOZZLE - 1N NOZZLE, PLENUM/APPLIANCE (REPLACES ANSUL PART# 419346, CAS PART# 419335) A0001265.	2	0
		20 - 20 - 419340 NOZZLE - 245 NOZZLE, APPLIANCE (REPLACES ANSUL PART# 419351, PART# 419340) A0001270.	14	0
		25 - 25 - 418569 NOZZLE ADAPTOR - SWIVEL NOZZLE ADAPTOR (REPLACES CAS PART # 418569) A0001274.	14	0
		26 - 26 - QSA-3/8 QUIK SEAL - 3/8" (UL).	18	0
		27 - 27 - QPSA-1/2 PULLEY SEAL - 1/2" HOOD SEAL (UL) ANSUL PART # 423253, MACOLA # 32-79768.	1	0
		28 - 28 - S-DET DETECTOR - SERIES (SCISSOR LINKAGE) ANSUL PART # 435547/435548 (OLD # 417369/434480); MACOLA # 05-417369.	7	0
		30 - 30 - ANS-500FL FUSIBLE LINK - 500DEG F, R-102 AND PIRANHA, ANSUL PART # 439232.	7	0
		34 - 34 - RPS-A REMOTE PULL STATION - RED COMPOSITE (WITHOUT WIRE ROPE) 434618 (OLD MACOLA #06-4835).	1	0
		35 - 35 - PE-LT PULLEY ELBOW - LOW TEMP. PULLEY ELBOW, SET SCREW TYPE ANSUL PART # 415670, MACOLA # 11-415671.	0	10
		36 - 36 - PE-HT PULLEY ELBOW - HIGH TEMP PULLEY ELBOW, COMPRESSION TYPE, ANSUL PART # 423251, MACOLA # 10-45771.	1	0

GAS VALVES AND STRAINERS

	GAS VALVE SIZING							GAS VALVE DIMENSIONS						INSTALLATION	PART NUMBERS		
	TYPE	SIZE	VOLTAGE	MIN. INLET PRESSURE	MAX. INLET PRESSURE	FLOW AT 1 IN.W.C. DROP NATURAL GAS	FLOW AT 1 IN.W.C. DROP PROPANE	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "F"	DIM "G"	MOUNTING ORIENTATION	GAS VALVE PART NUMBER	STRAINER PART NUMBER	GAS VALVE/STRAINER KIT
GAS VALVE FOR FS#1 →	MECHANICAL	1-1/2"	N/A	0 PSI (0 IN.W.C.)	10 PSI (277 IN.W.C.)	2,630,000 BTU/HR	1,706,569 BTU/HR	6-3/8"	4-7/8"	5-3/4"	6-3/16"	12-5/8"	11-3/8"	HORIZONTAL	27-55607	4417K67	MGVA1-1/2

ALL GAS VALVES/STRAINERS

PROPER CLEARANCE MUST BE PROVIDED IN ORDER TO SERVICE THE STRAINERS A MINIMUM OF 4" CLEARANCE DISTANCE MUST BE PROVIDED AT THE BASE OF THE STRAINER CUSTOMER MUST VERIFY BTU CONSUMPTION AS WELL AS PRESSURE RATING SPECIFIC GRAVITY OF NATURAL GAS = 0.64, SPECIFIC GRAVITY OF LP = 1.52.

CALCULATIONS

TO CALCULATE GAS FLOW FOR OTHER THAN 1 IN.W.C. PRESSURE DROP
NEW BTU/HR = (BTU/HR AT 1 IN.W.C. PRESSURE DROP) X NEW PRESSURE $\text{DROP}^{0.5}$
TO CALCULATE GAS FLOW FOR OTHER THAN 0.64 SPECIFIC GRAVITY
NEW BTU/HR = (BTU/HR AT 0.64) X $(0.64 / \text{NEW SPECIFIC GRAVITY})^{0.5}$.

9/4 ANSUL FIRE SYSTEM EQUIPMENT SCHEDULE
SCALE: NO SCALE

Revision #	Date	Description	By
A	10/01/20	INITIAL ISSUE	AM029

FRANKE

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Exclusion of Liability
FRANKE takes no responsibility for the accuracy of the floor plans and constructional drawings. All dimensions and connections specified by FRANKE must be checked by the client prior to installation. Specifications for power consumption and connections are limited to equipment supplied by FRANKE. All third party accessories shown lie within the responsibility of the client. FRANKE reserves the right to change equipment without notice.

Account:
POPEYES
Restaurant #
PLK 2112
Title
WALL MOUNTED INSTALLATION DETAIL
Site ID
-
Operator
-
Site Address
-
City
- - -
State Zip Code Country
-
Region
-
Building Type
-
Electrical Service
-
Gas Service
-
Market Manager
-
Franke Project Number
-
Created by:
HP033
Date Issued
10/01/20
Modified By:
AM029
Drawing Scale
AS NOTED
Units
INCHES
Revision
A
Drawing Number
-
Sheet Name
4 OF 4

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

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SEAL 41082
AFSAR HASAN
9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA 19 72 KITCHEN
POPEYES

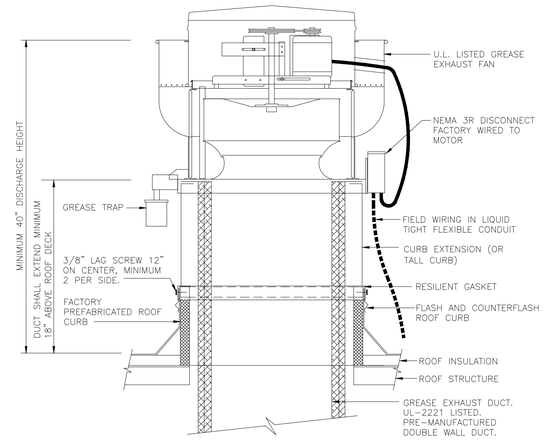
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
MECHANICAL HOOD DRAWINGS

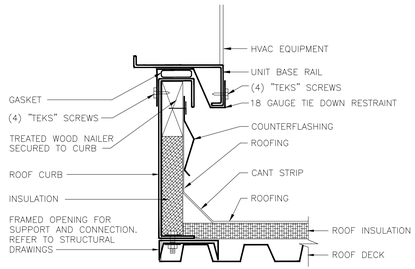
Drawn	Checked
NI	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	M3.4

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

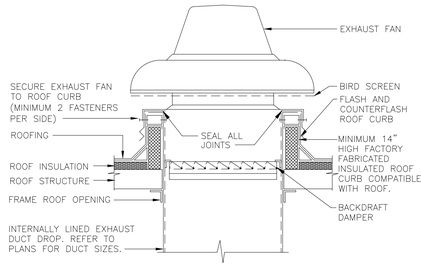


NOTE: INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 96 REQUIREMENTS.

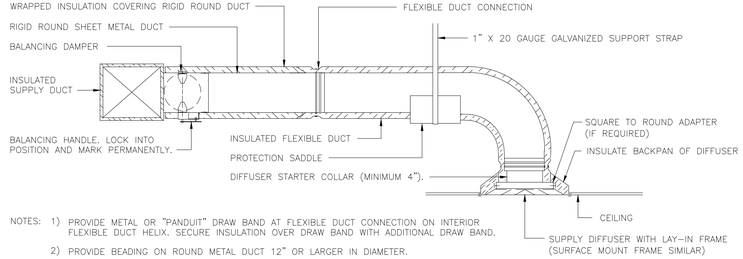
01 ROOF MOUNTED GREASE EXHAUST FAN DETAIL
NOT TO SCALE



03 ROOFTOP UNIT CURB DETAIL
NOT TO SCALE

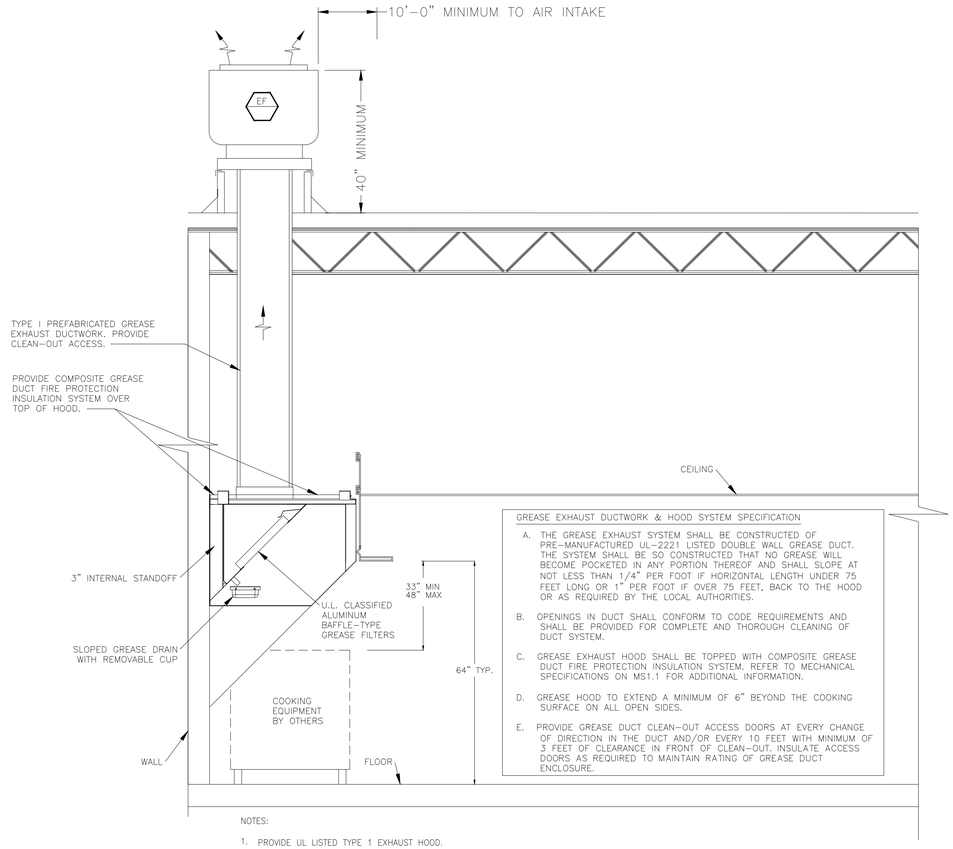


02 EXHAUST FAN DETAIL
NOT TO SCALE



NOTES:
1) PROVIDE METAL OR "PANDUIT" DRAW BAND AT FLEXIBLE DUCT CONNECTION ON INTERIOR FLEXIBLE DUCT HELIX. SECURE INSULATION OVER DRAW BAND WITH ADDITIONAL DRAW BAND.
2) PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER.
3) PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF FLEXIBLE DUCT TO ROUND DUCT, DAMPERS AND DIFFUSERS.
4) BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

04 DIFFUSER CONNECTION DETAIL
NOT TO SCALE



GREASE EXHAUST DUCTWORK & HOOD SYSTEM SPECIFICATION

A. THE GREASE EXHAUST SYSTEM SHALL BE CONSTRUCTED OF PRE-MANUFACTURED UL-2221 LISTED DOUBLE WALL GREASE DUCT. THE SYSTEM SHALL BE SO CONSTRUCTED THAT NO GREASE WILL BECOME POCKETED IN ANY PORTION THEREOF AND SHALL SLOPE AT NOT LESS THAN 1/4" PER FOOT IF HORIZONTAL LENGTH UNDER 75 FEET LONG OR 1" PER FOOT IF OVER 75 FEET, BACK TO THE HOOD OR AS REQUIRED BY THE LOCAL AUTHORITIES.

B. OPENINGS IN DUCT SHALL CONFORM TO CODE REQUIREMENTS AND SHALL BE PROVIDED FOR COMPLETE AND THOROUGH CLEANING OF DUCT SYSTEM.

C. GREASE EXHAUST HOOD SHALL BE TOPPED WITH COMPOSITE GREASE DUCT FIRE PROTECTION INSULATION SYSTEM. REFER TO MECHANICAL SPECIFICATIONS ON MS1.1 FOR ADDITIONAL INFORMATION.

D. GREASE HOOD TO EXTEND A MINIMUM OF 6" BEYOND THE COOKING SURFACE ON ALL OPEN SIDES.

E. PROVIDE GREASE DUCT CLEAN-OUT ACCESS DOORS AT EVERY CHANGE OF DIRECTION IN THE DUCT AND/OR EVERY 10 FEET WITH MINIMUM OF 3 FEET OF CLEARANCE IN FRONT OF CLEAN-OUT. INSULATE ACCESS DOORS AS REQUIRED TO MAINTAIN RATING OF GREASE DUCT ENCLOSURE.

NOTES:
1. PROVIDE UL LISTED TYPE 1 EXHAUST HOOD.
2. GREASE HOOD SHALL MEET THE REQUIREMENTS OF MECHANICAL CODE, NSF AND NFPA FOR A TYPE I HOOD.
3. FIRE DEPARTMENT APPROVAL SHALL BE REQUIRED ON FIRE PROTECTION SYSTEM FOR GREASE HOODS AND DUCTS AS REQUIRED BY MECHANICAL AND FIRE CODES.
4. PROVIDE CHEMICAL FIRE SUPPRESSION SYSTEM AS REQUIRED BY NFPA 17A.
5. PERFORM SMOKE TEST ON GREASE EXHAUST DUCTWORK AFTER DUCTWORK INSTALLATION IS COMPLETE BUT PRIOR TO DUCTWORK CONCEALMENT PER REQUIREMENTS OF LOCAL CODE AUTHORITIES.

05 KITCHEN HOOD SCHEMATICS
NOT TO SCALE

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER AFSHIN HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
MECHANICAL DETAILS

Drawn	Checked
NI	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	M4.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

HVAC SEQUENCE OF OPERATIONS

PROVIDE ALL NECESSARY SENSORS, DAMPER ACTUATORS, CONTROL TRANSFORMERS WITH SECONDARY OVERLOAD PROTECTION, WIRING AND CONDUIT TO ACCOMPLISH FOLLOWING SEQUENCE OF OPERATION:

ROOFTOP UNIT:

THERMOSTATS SHALL BE SET TO DETERMINE OCCUPIED AND UNOCCUPIED HOURS OF OPERATION. HOURS SHALL BE COORDINATED WITH OWNER. ROOFTOP UNITS SHALL BE INTERLOCKED WITH KITCHEN EXHAUST FANS TO PROVIDE MAKE-UP AIR FOR HOODS.

OCCUPIED MODE:

SUPPLY FAN SHALL RUN CONTINUOUSLY AND OUTSIDE AIR DAMPER SHALL OPEN TO MINIMUM POSITION TO DELIVER SCHEDULED QUANTITY OF VENTILATION AIR.

SUPPLY FAN SPEED SHALL VARY AIRFLOW AS A FUNCTION OF LOAD. DURING NON-COOLING, FIRST STAGE COOLING, AND NON-HEATING TIMES, SUPPLY FAN SHALL RUN AT MINIMUM SPEED. DURING SECOND STAGE COOLING AND HEATING TIMES, SUPPLY FAN SHALL RUN AT FULL SPEED. OUTSIDE AIR DAMPER SHALL MODULATE POSITION TO MAINTAIN REQUIRED QUANTITY OF OUTSIDE AIR AS SUPPLY FAN VARIES SPEED.

COOLING:
WHEN SPACE TEMPERATURE RISES ABOVE OCCUPIED COOLING SET POINT, PACKAGED DIRECT EXPANSION COOLING SHALL BE ENERGIZED AND STAGE AS REQUIRED TO MAINTAIN SPACE TEMPERATURE.

ECONOMIZER:
WHEN OUTDOOR AIR TEMPERATURE IS BELOW 65°F (ADJUSTABLE), ECONOMIZER SHALL MODULATE BETWEEN ITS MINIMUM SET POINT AND FULL OPEN TO MAINTAIN SPACE COOLING SET POINT, SUBJECT TO A MIXED AIR TEMPERATURE LOW LIMIT CONTROLLER SET POINT OF 55°F. IF OUTDOOR TEMPERATURE IS ABOVE COMPRESSOR LOCKOUT THERMOSTAT SETTING, MECHANICAL COOLING SHALL BE ENABLED AS SECOND STAGE OF COOLING.

DEHUMIDIFICATION (WHERE APPLICABLE):
WHEN SPACE HUMIDITY READING EXCEEDS 55%RH (ADJUSTABLE), REFRIGERATION SYSTEM SHALL OPERATE AND INITIATE HOT GAS REHEAT AS REQUIRED TO MAINTAIN SPACE HUMIDITY.

HEATING:
WHEN SPACE TEMPERATURE FALLS BELOW OCCUPIED HEATING SET POINT, GAS HEATER SHALL BE ENERGIZED IN STAGES (WHERE APPLICABLE) TO MAINTAIN SPACE TEMPERATURE.

UNOCCUPIED MODE:

COOLING:
UPON SIGNAL FROM THERMOSTAT, SUPPLY FAN SHALL BE DEENERGIZED AND OUTSIDE AIR DAMPER SHALL CLOSE. IF SPACE TEMPERATURE RISES 2 DEGREES OR MORE ABOVE UNOCCUPIED SET POINT, OUTSIDE AIR DAMPER SHALL REMAIN CLOSED, SUPPLY FAN SHALL BE ACTIVATED AND DX COOLING SHALL BE STAGED AS REQUIRED TO MAINTAIN UNOCCUPIED SPACE TEMPERATURE. WHEN TEMPERATURE FALLS 2 DEGREES BELOW SET POINT, COMPRESSOR SHALL BE DE-ENERGIZED AND SUPPLY FAN SHALL SHUT OFF.

HEATING:
UPON A SIGNAL FROM THERMOSTAT, SUPPLY FAN SHALL BE DE-ENERGIZED AND OUTSIDE AIR DAMPER SHALL CLOSE. IF SPACE TEMPERATURE FALLS 2 DEGREES OR MORE BELOW SET POINT, OUTSIDE AIR DAMPER SHALL REMAIN CLOSED, SUPPLY FAN SHALL BE ACTIVATED AND GAS HEAT SHALL BE ENERGIZED UNTIL UNOCCUPIED SPACE TEMPERATURE IS SATISFIED. WHEN TEMPERATURE RISES 2 DEGREES ABOVE SET POINT, GAS HEAT SHALL BE DISABLED AND SUPPLY FAN SHALL BE DE-ENERGIZED.

MORNING WARM-UP/COOL DOWN:
CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY ADJUSTING DAILY START TIME OF UNIT IN ORDER TO BRING EACH SPACE TO DESIRED OCCUPIED TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY.

OCCUPIED COOLING SET POINT	75 DEGREES
OCCUPIED HEATING SET POINT:	70 DEGREES
UNOCCUPIED COOLING SET POINT:	85 DEGREES
UNOCCUPIED HEATING SET POINT:	55 DEGREES

A SMOKE DETECTOR SHALL DE-ENERGIZE ROOFTOP UNIT SUPPLY FAN AND CLOSE OUTSIDE AIR DAMPER IN BOTH OCCUPIED AND UNOCCUPIED MODES WHENEVER SMOKE IS SENSED BY SMOKE DETECTORS.

MECHANICAL SPECIFICATIONS

PROVIDE EQUIPMENT INDICATED ON DRAWINGS, AND AS REQUIRED FOR A COMPLETE FUNCTIONING SYSTEM.

DEFINITIONS: FURNISH MEANS TO SUPPLY AND DELIVER TO PROJECT SITE, READY FOR INSTALLATION. INSTALL MEANS TO PLACE IN POSITION AND MAKE CONNECTIONS FOR SERVICE OR USE. PROVIDE MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR INTENDED USE.

WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF COMPLETED PROJECT. PROVIDE SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE, AT OWNER'S OPTION.

COORDINATION: COORDINATE WITH WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF OWNER, AND WITH CONSTRAINTS OF EXISTING CONDITIONS OF PROJECT SITE.

DUCT DIMENSIONS: UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS.

SHEET METAL DUCTWORK: PROVIDE SHEET METAL DUCTWORK FABRICATED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS, FOR 1" W.G. PRESSURE CLASS, SEAL CLASS "A". SHEET METAL SHALL BE GALVANIZED SHEET STEEL OF LOCK FORMING QUALITY, WITH G90 ZINC COATING. SHEET STEEL SHALL COMPLY WITH ASTM A653 STANDARD SPECIFICATION FOR STEEL SHEET METAL, ZINC COATED (GALVANIZED) OR ZINC-IRON ALLOY-COATED (GALVANNEALED) BY HOT DIP PROCESS, AND A924 STANDARD SPECIFICATION FOR GENERAL REQUIREMENTS FOR SHEET, METALLIC-COATED BY HOT DIP PROCESS. ALL ANGLE IRON USED FOR SUPPORT SHALL BE GALVANIZED. CONNECTIONS TO WALLS OR FLOOR SHALL BE AIR TIGHT WITH ANGLE IRON AND CAULKING. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL, AIR TIGHT. PROVIDE TURNING VANES AT ALL 90° ELBOWS.

REFRIGERANT PIPING: TYPE ACR HARD DRAWN COPPER TUBING MEETING THE REQUIREMENTS OF ASTM B280, WITH WROUGHT COPPER FITTINGS MEETING REQUIREMENTS OF ANSI B16.22, WITH BRAZED JOINTS MEETING REQUIREMENTS OF AWS A 5.8, USING BAG-1 (SILVER) FILLER MATERIAL. INSULATE SUCTION LINE PIPING WITH 1" THICK ARMAFLEX TYPE AP. PAINT INSULATION LOCATED OUTDOORS WITH ARMAFLEX WB FINISH.

ROUND SHEET METAL DUCT: PROVIDE SPIRAL SEAM (ALL SIZES) OR SNAP LOCK (CONCEALED DUCT SIZES UP TO 10") GALVANIZED STEEL COMPLYING WITH SMACNA STANDARDS. SPIRAL SEAM DUCTWORK SHALL HAVE SMACNA SEAM TYPE RL-1.

FLEXIBLE DUCT: PROVIDE FACTORY ASSEMBLED CLASS 1 AIR DUCT (UL 181) WITH 1" THICK 1 PCF FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER/VAPOR BARRIER. FLEXIBLE DUCT SHALL MEET NFPA 90A WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50, AND SHALL BE RATED FOR MINIMUM 2" W.G. PRESSURE AND 0 TO 250°F TEMPERATURE. PROVIDE SCREW-OPERATED METAL ADJUSTABLE CLAMPING DEVICES. USE TWIST-LOCK TAP COLLARS AT CONNECTIONS INTO SHEET METAL DUCTWORK. MAXIMUM EXTENDED LENGTH OF FLEXIBLE DUCT SHALL NOT EXCEED 6 FEET.

DUCT SEALANT: PROVIDE WATER BASED SYNTHETIC LATEX EMULSION PERMANENTLY FLEXIBLE HIGH VELOCITY DUCT SEALANT, DUCTMATE INDUSTRIES INC., PRO SEAL OR EQUAL. SEALANT TO BE LOW VOC LEED COMPLIANT CAPABLE OF 15" W.G., NFPA 90A AND 90B APPROVED, UL 181B-M LISTED AND UL 723 CLASSIFIED. INSTALL PER MANUFACTURER INSTRUCTIONS. SEALANT SHALL BE APPROVED FOR PLENUM INSTALLATIONS AND MEET FLAME SPREAD AND SMOKE DEVELOPED RATINGS FOR PLENUM APPLICATIONS.

DUCT INSULATION (ALL ROUND SUPPLY DUCT AND ROUND RETURN DUCT ABOVE CEILING): PROVIDE MINIMUM 1-1/2" THICK BLANKET TYPE FIBERGLASS INSULATION COMPLYING WITH ASTM C-553, TYPE II, WITH FACTORY APPLIED KRAFT BONDED TO ALUMINUM FOIL, REINFORCED WITH FIBERGLASS VAPOR BARRIER/JACKET. JACKET SHALL CONFORM TO ASTM C-1136, TYPE II. INSTALLED R VALUE SHALL BE 4.2 OR HIGHER WITH 0.75 PCF DENSITY.

DUCT LINER (ALL RECTANGULAR SUPPLY AND RETURN DUCT): PROVIDE MINIMUM 1" THICK, 2 PCF DENSITY, LONG TEXTILE FIBER TYPE DUCT LINER, WITH COATING ON AIR STREAM SIDE CONFORMING TO NFPA 90A. DUCT LINER SHALL BE SECURED TO DUCT WITH BOTH ADHESIVE AND MECHANICAL FASTENERS. ADHESIVE SHALL BE LEED COMPLIANT LOW VOC AS RECOMMENDED BY DUCT LINER MANUFACTURER, AND SHALL COMPLY WITH ASTM C-916. DUCT LINER FASTENERS SHALL COMPLY WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS", LATEST EDITION. THERMAL CONDUCTIVITY SHALL BE EQUAL TO OR LESS THAN 0.24 AT 75°F.

ROUND VOLUME DAMPERS: PROVIDE MINIMUM 20 GAUGE GALVANIZED STEEL FRAME AND BLADES, MINIMUM 3/8" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS, WITH LOCKING POSITION REGULATOR. REGULATOR SHALL BE POSITIONED WITH SHEET METAL BRACKET BEYOND DUCT COVERING. WHERE POSITIONING REGULATOR IS NOT ACCESSIBLE, PROVIDE COUPLING AND EXTENSION ROD WITH REGULATOR FOR CEILING OR WALL INSTALLATION, AS REQUIRED.

RECTANGULAR VOLUME DAMPERS: PROVIDE MINIMUM 16 GAUGE GALVANIZED STEEL CHANNEL FRAME, 16 GAUGE GALVANIZED STEEL BLADES, MINIMUM 1/2" HEXAGONAL AXLE, MOLDED SYNTHETIC BEARINGS, WITH 3/8" SQUARE PLATED STEEL CONTROL SHAFT. LINKAGES SHALL BE CONCEALED IN FRAME. OPERATING SHAFT SHALL EXTEND BEYOND FRAME AND DUCT TO A LOCKING QUADRANT WITH ADJUSTABLE LEVER. MAXIMUM BLADE WIDTH SHALL NOT EXCEED 6".

DUCT TURNING VANES: PROVIDE FABRICATED TURNING VANES AND VANE RUNNERS CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS". PROVIDE TURNING VANES CONSTRUCTED OF CURVED BLADES, SUPPORTED WITH BARS PERPENDICULAR TO BLADES, AND SET INTO SIDE STRIPS SUITABLE FOR MOUNTING IN DUCTWORK. FOLLOW SMACNA GUIDELINES FOR SPACING SUPPORT, AND CONSTRUCTION. ALL BLADES SHALL BE DOUBLE THICKNESS AIRFOIL TYPE.

FLEXIBLE DUCT CONNECTORS: PROVIDE UL LABELED 30 OUNCE NEOPRENE COATED FIBERGLASS FABRIC DUCT CONNECTORS AT DUCT CONNECTIONS TO VIBRATING EQUIPMENT.

DUCT ACCESS DOORS: PROVIDE HINGED ACCESS DOORS IN DUCTWORK WHERE REQUIRED FOR ACCESS TO EQUIPMENT. PROVIDE INSULATED ACCESS DOORS FOR INSULATED DUCTWORK. CONSTRUCT OF SAME OR THICKER GAUGE SHEET METAL AS DUCT IN WHICH IT IS INSTALLED. PROVIDE FLUSH FRAMES FOR UNINSULATED DUCTS, AND EXTENDED FRAMES FOR EXTERNALLY INSULATED DUCTS. PROVIDE CONTINUOUS HINGE ON ONE SIDE, WITH ONE HANDLE-TYPE LATCH FOR ACCESS DOORS 12" HIGH AND SMALLER, AND TWO HANDLE-TYPE LATCHES FOR LARGER ACCESS DOORS.

DUCT ACCESS DOORS: PROVIDE HINGED ACCESS DOORS IN DUCTWORK WHERE REQUIRED FOR ACCESS TO EQUIPMENT. PROVIDE INSULATED ACCESS DOORS FOR INSULATED DUCTWORK. CONSTRUCT OF SAME OR THICKER GAUGE SHEET METAL AS DUCT IN WHICH IT IS INSTALLED. PROVIDE FLUSH FRAMES FOR UNINSULATED DUCTS, AND EXTENDED FRAMES FOR EXTERNALLY INSULATED DUCTS. PROVIDE CONTINUOUS HINGE ON ONE SIDE, WITH ONE HANDLE-TYPE LATCH FOR ACCESS DOORS 12" HIGH AND SMALLER, AND TWO HANDLE-TYPE LATCHES FOR LARGER ACCESS DOORS.

MECHANICAL PIPING IDENTIFICATION: PROVIDE PIPE MARKERS, FLOW ARROWS AND ENGRAVED PLASTIC-LAMINATE SIGNS FOR MECHANICAL PIPING AND VALVES TO COMPLY WITH ANSI A13.1. PROVIDE ONLY ONE TYPE OF PIPE MARKERS AND FLOW ARROWS FOR ALL SYSTEMS.

GREASE EXHAUST DUCTWORK: FACTORY FABRICATED DOUBLE WALL DUCTWORK COMPLIANT WITH UL 2221 AND UL 1978. SEE HOOD SYSTEM DRAWINGS FOR MORE INFORMATION.

COMPOSITE GREASE DUCT FIRE PROTECTION INSULATION ASSEMBLY: PROVIDE FLEXIBLE BLANKET-TYPE INSULATION COMPOSED OF FIBER BLANKET ENCAPSULATED IN AN ALUMINUM FOIL SCRIM, PROVIDING A NONCOMBUSTIBLE WRAP TO PROVIDE A VAPOR AND DUST BARRIER. DUCT WRAP SYSTEM SHALL HAVE FLAME SPREAD INDEX OF NOT MORE THAN 5 AND SMOKE DEVELOPED INDEX NOT EXCEEDING 5, WHEN TESTED PER ASTM E-84 METHOD. INSULATION AND JACKET SHALL BE RATED FOR OPERATING TEMPERATURES UP TO 2000°F. DUCT WRAP SYSTEM MUST COMPLY WITH ALL FIVE FIRE TESTS OF STANDARD ASTM E2336, GREASE DUCT ENCLOSURE SYSTEM, AND THE DUCT FIRESTOP SYSTEM SHALL BE ASTM E 814 CLASSIFIED. PROVIDE COMPOSITE GREASE DUCT FIRE PROTECTION INSULATION FROM ONE OF THE FOLLOWING: THERMAL CERAMICS FIREMASTER FASTWRAP XL, UNIFRAX FYREWRAP 2.0 MAX.

MECHANICAL EQUIPMENT IDENTIFICATION: PROVIDE ENGRAVED PLASTIC LAMINATE LABEL FOR EACH MAJOR ITEM OF MECHANICAL EQUIPMENT AND EACH OPERATIONAL DEVICE. LETTERS SHALL BE MINIMUM OF 1/2" HIGH. PROVIDE SIGNS TO INFORM OPERATOR OF OPERATIONAL REQUIREMENTS, TO INDICATE SAFETY AND EMERGENCY PRECAUTIONS, AND TO WARN OF HAZARDS AND IMPROPER OPERATION.

TESTING AND BALANCING: TEST AND ADJUST ALL MECHANICAL SYSTEMS AND EQUIPMENT TO ASSURE PROPER BALANCE AND OPERATION. PERFORM TESTS IN ACCORDANCE WITH THE MOST CURRENT NEBB OR AABC, AND ASHRAE STANDARDS. ELIMINATE OBJECTIONABLE NOISE AND VIBRATION, AND ASSURE PROPER FUNCTION OF CONTROLS. BALANCING CONTRACTOR SHALL BE AN INDEPENDENT CERTIFIED TEST AND BALANCE CONTRACTOR, WITH NEBB OR AABC CERTIFICATION. SUBMIT COMPLETED AND CERTIFIED TEST AND BALANCE REPORT TO OWNER'S REPRESENTATIVE. BALANCE ALL SYSTEMS TO WITHIN 5% OF AIR FLOWS INDICATED ON THE DRAWINGS, AND REPORT DISCREPANCIES TO HVAC INSTALLER FOR CORRECTION. MARK FINAL BALANCE POSITIONS ON DAMPERS WITH PERMANENT MARKER.

OPERATIONS AND MAINTENANCE MANUALS (O&M): AT COMPLETION OF PROJECT PROVIDE A MINIMUM OF TWO O&M MANUALS IN THREE RING BINDERS TO OWNER/TENANT. MANUALS SHALL HAVE TABS LABELED WITH ALL SECTIONS SEPARATED WITH A CLEAR INDEX AT FRONT. PROVIDE WARRANTY LETTER AT FRONT OF MANUAL STATING DATES OF WARRANTY (START DATE AND END DATE) AND CONTACTS WITH PHONE NUMBERS FOR WARRANTY WORK. PROVIDE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE INCLUDING RECOMMENDED SETPOINTS. MANUALS SHALL INCLUDE SUBMITTALS OF ALL EQUIPMENT, SIZE AND OPTIONS SELECTED. PROVIDE ALL BALANCING REPORTS. PROVIDE MANUFACTURER LITERATURE FOR OPERATIONS AND MAINTENANCE FOR ALL EQUIPMENT ON PROJECT. ALL PERIODIC AND ROUTINE MAINTENANCE SHALL BE CLEARLY IDENTIFIED. PROVIDE CONTROLS SECTION LISTING SYSTEM OPERATING AND CONTROL INSTRUCTIONS, MAINTENANCE, CALIBRATION, WIRING DIAGRAMS, SCHEMATICS AND CONTROL SEQUENCE DESCRIPTIONS.

SHOP DRAWINGS/SUBMITTALS: SUBMIT ELECTRONIC SUBMITTALS AND SHOP DRAWINGS VIA EMAIL AS PDF ELECTRONIC FILES. PROVIDE SEPARATE PDF SUBMITTALS ON ALL MECHANICAL EQUIPMENT (INCLUDING CONTROLS PACKAGES), AIR DISTRIBUTION DEVICES, DUCTWORK, DAMPERS, AND INSULATION. SUBMITTALS AND SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING INFORMATION:

- PROJECT NAME
- DATE
- NAME AND ADDRESS OF ARCHITECT AND MEP ENGINEER
- NAME OF CONSTRUCTION MANAGER
- NAME OF CONTRACTOR
- NAME OF FIRM OR ENTITY THAT PREPARED SUBMITTAL
- NAMES OF SUBCONTRACTOR, MANUFACTURER, AND SUPPLIER.
- CATEGORY AND TYPE OF SUBMITTAL
- SUBMITTAL PURPOSE AND DESCRIPTION
- MANUFACTURER NAME
- PRODUCT NAME
- DRAWING NUMBER AND DETAIL REFERENCES, AS APPROPRIATE
- INDICATION OF FULL OR PARTIAL SUBMITTAL
- TRANSMITTAL NUMBER
- REMARKS

IDENTIFY DEVIATIONS FROM THE CONTRACT DOCUMENTS ON SHOP DRAWINGS AND SUBMITTALS. FURNISH COPIES OF FINAL SUBMITTALS TO MANUFACTURERS, SUBCONTRACTORS, SUPPLIERS, FABRICATORS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHERS AS NECESSARY FOR PERFORMANCE OF CONSTRUCTION ACTIVITIES. SHOW DISTRIBUTION ON TRANSMITTAL FORMS.

SUBMITTALS SHALL INCLUDE (AS APPLICABLE):

- MANUFACTURER'S CATALOG CUTS
- MANUFACTURER'S PRODUCT SPECIFICATIONS
- STATEMENT OF COMPLIANCE WITH SPECIFIED REFERENCED STANDARDS
- TESTING BY RECOGNIZED TESTING AGENCY
- APPLICATION OF TESTING AGENCY LABELS AND SEALS
- WIRING DIAGRAMS SHOWING FACTORY-INSTALLED WIRING
- PERFORMANCE CURVES
- OPERATIONAL RANGE DIAGRAMS
- CLEARANCES REQUIRED TO OTHER CONSTRUCTION, IF NOT INDICATED ON SHOP DRAWINGS.

FULL SIZE SHOP DRAWINGS SHALL INCLUDE (AS APPLICABLE):

- IDENTIFICATION OF PRODUCTS
- SCHEDULES
- COMPLIANCE WITH SPECIFIED STANDARDS
- NOTATION OF COORDINATION REQUIREMENTS
- NOTATION OF DIMENSIONS ESTABLISHED BY FIELD MEASUREMENT
- RELATIONSHIP AND ATTACHMENT TO ADJOINING CONSTRUCTION CLEARLY INDICATED.

MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING DUCT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION AND INSTALLATION.

MECHANICAL SYMBOLS LEGEND

ABBREVIATIONS:

AHJ	AUTHORITY HAVING JURISDICTION
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
ESP	EXTERNAL STATIC PRESSURE
GC	GENERAL CONTRACTOR
HZ	FREQUENCY
LAT	LEAVING AIR TEMPERATURE
MC	MECHANICAL CONTRACTOR
NC	NOISE CRITERIA
RTU	ROOFTOP UNIT
WB	WET BULB

GRILLES/DIFFUSERS:

SUPPLY DIFFUSER

RETURN GRILLE

EXHAUST GRILLE

DOUBLE LINE DUCT SYMBOLS:

NEW SHEET METAL DUCTWORK & SIZE

SUPPLY OR OUTSIDE AIR DUCT

RETURN AIR DUCT

EXHAUST AIR DUCT

DUCTWORK TRANSITION

DUCTWORK TRANSITION – RECTANGULAR TO ROUND

SUPPLY DUCT ELBOW UP OR DOWN

RETURN DUCT ELBOW UP OR DOWN

EXHAUST DUCT ELBOW UP OR DOWN

DUCT ELBOW WITH FIXED TURNING VANES

DUCT BRANCH TAKE-OFF

ROUND SPIN-IN WITH DAMPER

VOLUME DAMPER

FLEXIBLE DUCTWORK

GENERAL REFERENCES/NOTATIONS:

SQUARE NOTE DESIGNATION

REVISION DESIGNATION

MECHANICAL EQUIPMENT DESIGNATION

DIFFUSER DESIGNATION AND CFM

EQUIPMENT:

ROOF MOUNTED EXHAUST FAN

ROOFTOP UNIT

THERMOSTAT – ELECTRIC

TEMPERATURE SENSOR

TEMPERATURE/HUMIDITY SENSOR

DUCT SMOKE DETECTOR

SYMBOLS LEGEND NOTES:
1. REFER TO SPECIFICATIONS AND PLAN NOTES FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN IN THIS SCHEDULE, PROVIDED BY THIS CONTRACTOR.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER A. SABAHASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE·CIVIL ENGINEERING·MEP ENGINEERING
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Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
MECHANICAL SPECIFICATIONS

Drawn	Checked
NI	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	MS1.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

GENERAL NOTES

A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.

B. COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE PIPE RISES, DROPS, AND OFFSETS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.

C. DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE PIPING, CONNECTIONS, FITTINGS, VALVES, OFFSETS AND ALL MATERIALS NECESSARY FOR A COMPLETE SYSTEM.

D. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY AND THE AUTHORITY HAVING JURISDICTION. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.

E. PROVIDE WATER HAMMER ARRESTORS THROUGHOUT WATER SYSTEMS AS REQUIRED PER "WATER HAMMER ARRESTERS" DETAIL.

F. PROVIDE BACKFLOW PREVENTION DEVICES IN WATER LINES FEEDING PLUMBING FIXTURES AND/OR EQUIPMENT AS SHOWN ON PLANS AND ELSEWHERE AS REQUIRED BY AUTHORITY HAVING JURISDICTION. USE DEVICES OF APPROVED MANUFACTURER AND TYPE IN ACCORDANCE WITH REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.

G. CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. IF PRESSURE AT BUILDING ENTRY PRIOR TO ALL LOCALLY REQUIRED DEVICES IS LESS THAN 60 PSIG STATIC, CONTACT OWNER'S REPRESENTATIVE. IF PRESSURE EXCEEDS 80 PSIG, PROVIDE PRESSURE REDUCING VALVE.

H. SUSPEND HORIZONTAL SERVICE PIPING FROM UNDERSIDE OF ROOF OR FLOOR STRUCTURE UNLESS OTHERWISE INDICATED. INSTALL PIPING AS HIGH AS POSSIBLE. EXTEND PIPING DOWN IN WALLS, PARTITIONS AND CHASES TO SERVE FIXTURES AND EQUIPMENT.

I. VERIFY SERVICE CONNECTION POINTS, SIZES, ELEVATIONS AND METERING LOCATIONS FOR PROJECT WITH LOCAL UTILITY COMPANIES AND/OR CIVIL ENGINEER, AS APPLICABLE.

J. WATER ENTRY SERVICE PIPING, NEW AND/OR REVISED. CONTRACTOR SHALL ENSURE AND PROVIDE MINIMUM 10'-0" LINEAR FEET OF METAL PIPING MATERIAL BELOW GRADE IN CONTACT WITH EARTH FOR CONNECTION OF ELECTRICAL SERVICE GROUNDING.

K. PLUMBING CONTRACTOR SHALL EXECUTE ALL WORK SO THAT IT PROCEDES WITH A MINIMUM OF INTERFERENCE.

L. FLOOR DRAINS SHALL HAVE 6" DEEP SEAL TRAPS.

M. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING WATER SUPPLY TO THE COFFEE MAKERS, TEA BREWERS, AND ICE MACHINES.

N. WRAP ALL CONDENSATE PIPE IN FREEZER WITH HEAT TRACING TAPE AND INSULATE ALL CONDENSATE DRAIN PIPING. ROUTE COOLER CONDENSATE DRAIN PIPING TO HUB DRAIN/FLOOR DRAIN AS INDICATED.

O. POT SINKS SHALL BE ANCHORED TO WALL AND SEALED WITH SILICONE CAULKING.

P. INSTALL GAS VALVE (FBC) IN GAS LINE TO COOKING EQUIPMENT, INTERLOCK WITH HOOD FIRE PROTECTION SYSTEM. VERIFY REQUIREMENTS WITH HOOD SUPPLIER. INSTALL UNIONS AT THE SOLENOID VALVE.

Q. PROVIDE SHUTOFF COCKS, QUICK DISCONNECTS AND FLEXIBLE LINES AT GAS EQUIPMENT.

R. PROVIDE VACUUM BREAKERS AT FIXTURES WITH HOSE THREAD CONNECTIONS.

S. PROVIDE DIELECTRIC UNIONS AT ALL DISSIMILAR METAL PIPE CONNECTIONS.

T. LAVATORY FAUCETS SHALL LIMIT HOT WATER FLOW TO 0.5 GPM AND HOT WATER TEMPERATURE TO 110° F

U. PROVIDE 1"Ø SCH 40 BLACK STEEL PIPE FOR GREASE DISCHARGE. RUN LINE FLUSH ON WALL BESIDE FRYERS, VERTICALLY UP IN WALL THROUGH CEILING. SLOPE LINE @ 1"/FT TOWARDS REAR OF BUILDING. RUN LINE DOWN THROUGH CEILING ON FACE OF EXTERIOR WALL TO 75" AFF THEN THROUGH REAR WALL FOR DISCHARGE. HEAT TAPE SHALL BE INSTALLED ON ENTIRE LINE @ 5 WATTS/LINEAR FT. G.C. TO PROVIDE STAINLESS STEEL COVERS FOR LINE MOUNTED FLUSH ON WALLS (ENTIRE LENGTH – CEILING DOWN).

PLUMBING SYMBOLS LEGEND

ABBREVIATIONS:

AFF/AFG	ABOVE FINISHED FLOOR/GRADE
FFCO/FGCO/WCO/CO	FLUSH FLOOR/FLUSH GRADE/WALL/CLEANOUT
FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR
TYP	TYPICAL
VTR	VENT THRU ROOF
(E)	EXISTING

LINETYPES:

- EXISTING PLUMBING LINE – SEE DRAWING
- COLD WATER (CW)
- COLD WATER (CW) – BELOW SLAB/GRADE
- FW — FILTERED WATER SUPPLY (FW)
- HOT WATER (HW) 140°
- HOT WATER RETURN (HWR)
- G — NATURAL GAS LINE
- D — CONDENSATE LINE (D)
- PLUMBING VENT (V)
- PLUMBING VENT (V) – BELOW SLAB/GRADE
- SANITARY WASTE (SAN) – BELOW SLAB/GRADE
- GW — GREASE WASTE (GW) – BELOW SLAB/GRADE
- WATER HEATER VENT
- SODA CHASE
- USED COOKING OIL
- ST — STORM LINE (ST)
- OST — OVERFLOW STORM LINE (OST)

GENERAL REFERENCES/NOTATIONS:

- 01/P1 DETAIL OR SECTION
- CONNECT TO EXISTING
- # / # HVAC EQUIPMENT
- # REVISION
- # PLAN NOTE
- #### FOOD SERVICE EQUIPMENT

PIPE SYMBOLS:

- PIPE UP/DOWN
- TEE UP/DOWN
- END CAP
- BALL/PLUG VALVE
- BALANCING/CHECK VALVE

SYMBOLS LEGEND NOTES:
REFER TO SPECIFICATIONS AND PLAN NOTES FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN IN THIS SCHEDULE, PROVIDED BY THIS CONTRACTOR.

PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE TYPE	MANUF.	MODEL	DESCRIPTION	ACCESSORIES/OPTIONS
WC	WATER CLOSET (ACCESSIBLE)	AMERICAN STANDARD	3043.001 "MADERA"	FLOOR MOUNT, WHITE VITREOUS CHINA, 1.1–1.6 GPF ELONGATED SIPHON JET BOWL, 1–1/2" TOP SPUD, & RIM HEIGHT 17" A.F.F. PROVIDE WITH SLOAN MANUAL DUAL FLUSH 1.6/1.1 GPF WATER CLOSET FLUSH VALVE. PROVIDE FLUSH LEVER ON ACCESSIBLE SIDE. INSTALL IN ACCORDANCE TO ADA ACCESSIBILITY REQUIREMENTS.	MAINLINE #ML1055SSC00 WHITE OPEN FRONT ELONGATED TOILET SEAT LESS COVER.
LAV	LAVATORY (ACCESSIBLE)	AMERICAN STANDARD	#0356.921.020 LUCERNE	WALL HUNG, 20"X18" WHITE VITREOUS CHINA, BACK OVERFLOW. PROVIDE WITH SLOAN EBF–650 4" CENTER SET, BATTERY POWERED SENSOR FAUCET WITH FACTORY SET 0.175 GPC 0.35 GPM AERATOR. INSTALL IN ACCORDANCE TO ADA ACCESSIBILITY REQUIREMENTS.	PROVIDE WITH QUARTER TURN BRASS ANGLE COMPRESSION STOPS WITH LOOSE KEY HANDLES, STAINLESS BRAIDED SUPPLIES, CHROME ESCUTCHEONS, CHROME GRID STRAINER DRAIN WITH TAILPIECE, & CHROME PLATED CAST BODY P–TRAP WITH CLEANOUT. INSULATE WASTE AND WATER PIPING WITH TRUEBRO "LAV–GUARD2" #101–EZ. FURNISH WITH ZURN #Z–1231–81 LAVATORY CARRIER.
FPWH	FROST PROOF WALL HYDRANT	WOODFORD	MODEL 65	ANTI–SIPHON, AUTOMATIC DRAINING, WALL HYDRANT, NON–FREEZE INTEGRAL VACUUM BREAKER, ALL BRONZE INTERIOR PARTS, KEY OPERATED, 3/4" SOLDER INLET.	MOUNT 18" ABOVE FINISHED GRADE. PROVIDE APPROPRATE MODEL FOR WALL THICKNESS AND SITE SPECIFIC TEMPERATURE REQUIREMENTS.
TD	TRENCH DRAIN	ZURN	Z886–SOG	6–1/4"X24" HDPE TRENCH DRAIN WITH STAINLESS DECORATIVE GRATE. FIELD CUT TRENCH DRAIN AS REQUIRED. COORDINNATE FINISHED WIDTH AND LOCATION WITH ARCHITECT PRIOR TO ISNTALLATION.	SET TRENCH DRAIN LEVEL WITH FINISH FLOOR.
FD	FLOOR DRAIN	SIOUX CHIEF / ZURN	832–35D–NR / #ZN415–B–3N H	FLOOR DRAIN WITH 5" ROUND NICKEL BRONZE ADJUSTABLE STRAINER & 3" BOTTOM OUTLET.	PROVIDE WITH TRAP PRIMER CONNECTION AND WITH ASSE 1072 APPROVED TRAP SEAL DEVICE. TRAP SEAL DEVICE SHALL BE TRAP PROSET TRAPGUARD OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE DRAINS IN CUSTOMER AREAS WITH VANDAL RESISTANT SCREWS.
FS	FLOOR SINK	SIOUX CHIEF / ZURN	#861–3PN–D / #Z1900–3NH–K –4	12" SQUARE TOP FLOOR SINK W/8" DEEP & 3" BOTTOM OUTLET	SET FLOOR SINK LEVEL WITH FINISH FLOOR.
RD	ROOF DRAIN	WATTS	RD–250	CAST IRON COMBINATION ROOF DRAIN/OVERFLOW WITH DECK FLANGE, FLASHING CLAMPS WITH INTEGRAL GRAVEL GUARD, OVERFLOW STANDPIPE, SELF LOCKING CAST IRON DOME, AND NO HUB OUTLETS. PROVIDE OUTLET SIZE AS SHOWN ON PLANS.	INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. UNDERDECK CLAMP AND SUMP RECEIVER , FIELD VERIFY ROOF INSTALLATION REQUIREMENTS AND COORDINATE INSULATION THICKNESS.
DSN	DOWNSPOUT NOZZLE	WATTS	Z199	ALL NICKEL BRONZE BODY WITH DECORATIVE FACE OF WALL FLANGE AND OUTLET NOZZLE.	COORDINATE MOUNTING LOCATION WITH ARCHITECTURAL ELEVATIONS.
TP	TRAP PRIMER	PPP	P1–500	AUTOMATIC OPERATION, 1/2" INLET AND OUTLET. SERVICE UP TO FOUR FLOOR DRAINS WITH DISTRIBUTION UNIT.	INSTALL IN ACCESSIBLE LOCATION WITH PRIMER LOCATED MINIMUM OF 6" ABOVE FLOOD LEVEL OF FLOOR DRAIN RIM. PROVIDE ACCESS PANEL AS REQUIRED.
MV	MIXING VALVE	SYMMONS	7–225–CK "MAXLINE"	1/2" INLETS AND OUTLET, THERMOSTATIC CONTROLLER WITH INTEGRAL CHECKS, ALL BRASS BODY WITH DUAL STAINLESS STEEL STRAINER, VANDAL RESISTANT TEMPERATURE ADJUSTMENT HANDLE.	SET TO 105°F. MOUNT IN ACCESSIBLE LOCATION.

TANK ELECTRIC WATER HEATER SCHEDULE

SYMBOL	MANUFACTURER	MODEL	KW (BTU)	V/PH	GPH @ 70°F RISE	SET POINT (°F)	NOTES (#)
WH–1	RHEEM	ES120–24–G	15 (51,183)	208/3	89	120	(1), (2), (3)

NOTES:
1. WATER HEATER TANK SHALL HAVE A WORKING PRESSURE OF 150PSI, PER MANUFACTURER'S REQUIREMENTS.
2. FURNISH WITH EXPANSION TANK AS SPECIFIED ON PLANS.
3. PROVIDE WITH 1–1/2" COLD WATER AND HOT WATER LINES

EXPANSION TANK SCHEDULE

SYMBOL	MANUFACTURER	MODEL	TOTAL VOLUME (GALLONS)	ACCEPTANCE VOLUME (GALLONS)	CONNECTION LOCATION	CONNECTION SIZE	MOUNTING	NOTES (#)
ET	AMTROL	ST–5	2	.45	TOP	¾"	NEAR WH–1	(1), (2)

NOTES:
1. EXPANSION TANK: STEEL SHELL, HEAVY DUTY BUTYL NSF/ANSI 61, FACTORY PRECHARGED TO 40 PSIG. MAX OPERATING TEMPERATURE 100°, MAX OPERATING PRESSURE 150 PSI, 1 YEAR MANUFACTURER'S WARRANTY. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
2. FIELD CHARGE EXPANSION TANK TO SYSTEM PRESSURE BEFORE CONNECTION TO DOMESTIC WATER SYSTEM. FIELD VERIFY PRESSURE REQUIREMENTS.

PUMP SCHEDULE

SYMBOL	MANUFACTURER	MODEL	GPM	HEAD (FT)	VOLTAGE	PHASE	WATTS	AMPS	NOTES (#)
RCP	GRUNDFOS	ALPHA2	5	12	115	1	5 – 65	0.65	(1)

NOTES:
1. RECIRCULATING PUMP: BRONZE BODY RECIRCULATING PUMP WITH "AUTOADAPT" VARIABLE SPEED MOTOR. INSTALL NEAR WATER HEATER PER MANUFACTURER'S INSTRUCTIONS. PROVIDE WITH ALPHA 3–PRONG PLUG AND COORDINATE CONNECTION WITH ELECTRICAL CONTRACTOR. PROVIDE WITH HONEYWELL L6006C SURFACE MOUNT AQUASTAT SET TO 5°F BELOW WATER HEATER OPERATING TEMPERATURE.

HEAT TRACING

SYMBOL	MANUFACTURER	MODEL	TEMP	LENGTH (MAX)	VOLTAGE	PHASE	WATTS/FOOT	AMP (MAX)	NOTES (#)
HC	RAYCHEM	8XL2–CR/CT	105°F	350	208	1	8	15	(1), (2)

NOTES:
1. SELF–REGULATING HEATING CABLE TO MAINTAIN TEMPERATURE OF USED COOKING OIL LINE. REFER TO PLANS FOR ROUTING. MAXIMUM CIRCUIT LENGTH IS 350'–0" OF CABLE. 208–1V AT 8W/FT (2800 WATT / 15 AMP MAX).
2. PROVIDE WITH EC–W–GF CONTROLLER WITH GROUND FAULT PROTECTION, AND NECESSARY COMPONENTS TO PUT IN WORKING ORDER. INSTALL CABLE PER MANUFACTURER'S RECOMMENDATIONS.

FOODSERVICE PLUMBING SCHEDULE

ID	DESCRIPTION	REMARKS
A10.30	MULTIPLE FRYER SYSTEM, GAS	
A24.U2	MULTIPLE FRYER SYSTEM, GAS	
A35.00	1 COMPARTMENT SINK	
A35.10	PRE–RINSE FAUCET ASSEMBLY	
C10.32	POPEYES DUAL SIDE SANDWICH PREP	
D29.00	PACKING TABLE, DOUBLE SIDED	
D40.00	3 COMPARTMENT SINK	
D40.01	PRE–RINSE FAUCET ASSEMBLY	
D50.00	DISHWASHER	
D70.00	HOT WATER DISPENSER	
D81.00	RETHERMALIZER	
E10.00	WALK–IN COOLER/FREEZER	
E30.84	CHICKEN CRATE	
H10.00	DUAL LINE PRODUCTION COUNTER	
K10.00	ICE MAKER, CUBE–STYLE	
K11.00	ICE MAKER, CUBE–STYLE	
K15.00	ICE BIN	
K20.00	WATER FILTER SYSTEM	
K40.00	GREASE TANK	
K41.00	CO TANK	
K42.00	BAG N BOX	
K71.00	TEA BREWER	
N10.00	HAND SINK	
N20.00	MOP SINK	

THIS SCHEDULE IS A PARTIAL LISTING OF THE EQUIPMENT SUPPLIED BY THE FOOD SERVICE EQUIPMENT CONTRACTOR (FSEC). REFER TO FSEC DRAWINGS FOR A COMPLETE LISTING OF EQUIPMENT, TYPES, SIZES, AND LOCATIONS. PLUMBING CONTRACTOR (PC) TO PROVIDE NECESSARY ITEMS TO INSTALL FSEC EQUIPMENT (INCLUDING VALVES, UNIONS, FITTINGS, ETC.) TO MAKE COMPLETE SYSTEM. THIS LISTING DOES NOT SUPERSEDE THE FSEC DRAWINGS.

BACKFLOW PREVENTER SCHEDULE

LOCATION	TAG	MODEL	ASSE
MAIN WATER SUPPLY	RPZ	WATTS 009QTS	1013
CARBONATOR	DCV–1	WATTS SD–3	1022
SODA DISPENSERS	DCV–2	WATTS SD–2	1032
OTHER EQUIPMENT	DCV–3	WATTS SERIES 7	1024

NOTE:
VERIFY BACKFLOW VALVE REQUIREMENTS AND APPROVAL FOR ALL EQUIPMENT WITH AUTHORITIES HAVING JURISDICTION PRIOR TO INSTALLATION.

GRAVITY GREASE INTERCEPTOR SIZING

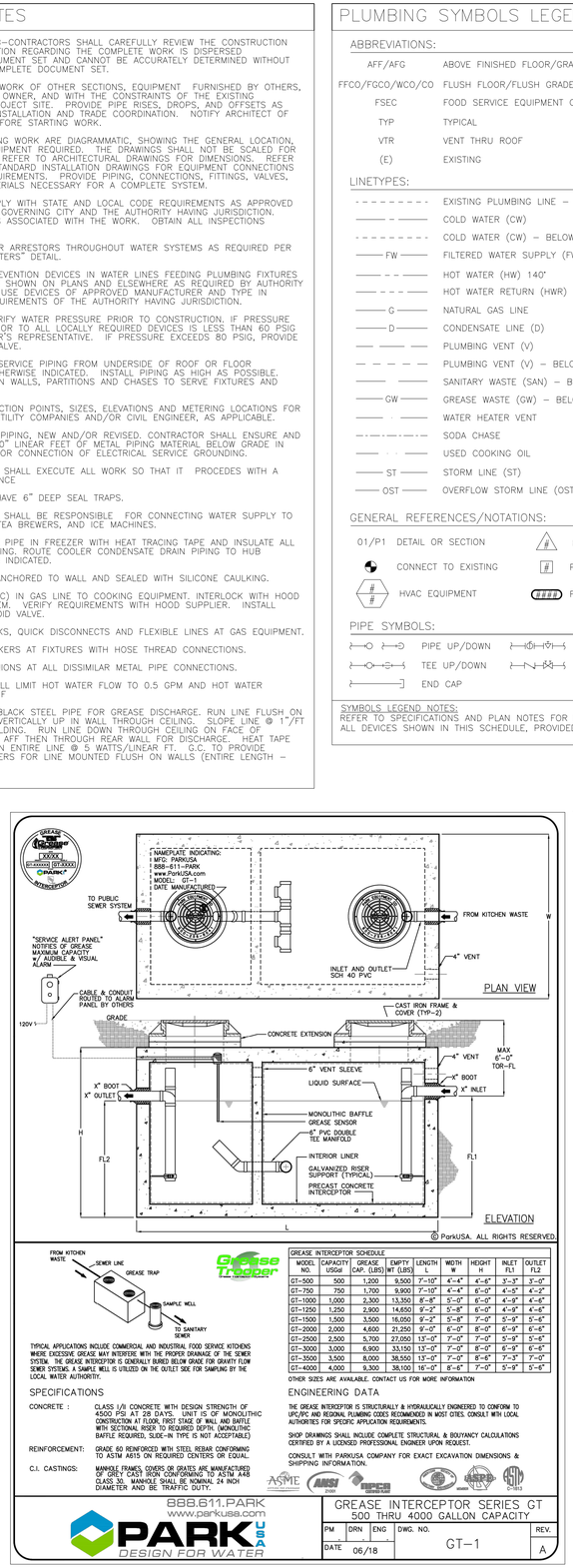
FIXTURE	QTY.	FLOW RATE (30 MIN)	TOTAL	FLOW RATE (15 MIN)	TOTAL
FLOOR DRAIN	4	0.00	0.00	0.00	0.00
FLOOR SINK	3	7.50	22.50	3.75	11.25
MOP BASIN	1	140.25	140.25	70.13	70.13
THREE COMP SINK	1	450.00	450.00	30.00	30.00

		CALCULATED FLOW RATE (GPM)
TOTAL FIXTURE FLOW RATE (30 MIN)	612.75	
TOTAL FIXTURE FLOW RATE (15 MIN)	103.88	42.00
PIPE SIZE FLOW RATE (4 IN)	75	42.00

[(CU IN / 231) = GAL X 0.75 / 2 MIN = 2 MIN FLOW RATE]

		GREASE PRODUCTION (LBS OF FOG)
NUMBER OF SEATS	22	
AVG. MEALS PER SEAT PER DAY	4	116.0
FAST FOOD – FULL PREP (HIGH / NO FLATWARE; 0.035 LBS PER SERVING)	0.035	
DAYS BETWEEN PUMP OUTS	90	

[SERVINGS PER DAY X GREASE PRODUCTION VALUE X DAYS BETWEEN PUMP–OUTS = GREASE OUTPUT]



TYPICAL APPLICATIONS INCLUDE COMMERCIAL AND INDUSTRIAL FOOD SERVICE KITCHENS WHERE EXCESSIVE GREASE MAY INTERFERE WITH THE PROPER DRAINAGE OF THE SEWER SYSTEM. THE GREASE INTERCEPTOR IS GENERALLY BURIED BELOW GRADE FOR GRAVITY FLOW SEWER SYSTEMS. A SAMPLE WELL IS UTILIZED ON THE OUTLET SIDE FOR SAMPLING BY THE LOCAL WATER AUTHORITY.

SPECIFICATIONS

CONCRETE : CLASS I/II CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR, FIRST STAGE OF WALL AND BAFFLE WITH SECTIONAL RISER TO REQUIRED DEPTH. (MONOLITHIC BAFFLE REQUIRED, SLIDE–IN TYPE IS NOT ACCEPTABLE)

REINFORCEMENT: GRADE 60 REINFORCED WITH STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL

C.I. CASTINGS: MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48 CLASS 30. MANHOLE SHALL BE NOMINAL 24 INCH DIAMETER AND BE TRAFFIC DUTY.

GREASE INTERCEPTOR SCHEDULE									
MODEL NO.	CAPACITY USGal	GREASE CAP. (LBS)	EMPTY WT (LBS)	LENGTH L	WIDTH W	HEIGHT H	INLET FL1	OUTLET FL2
GT–500	500	1,200	9,500	7'–10"	4'–4"	4'–6"	3'–3"	3'–0"
GT–750	750	1,700	9,900	7'–10"	4'–4"	6'–0"	4'–5"	4'–2"
GT–1000	1,000	2,300	13,350	8'–8"	5'–0"	6'–0"	4'–8"	4'–5"
GT–1250	1,250	2,900	14,650	9'–2"	5'–8"	6'–0"	4'–9"	4'–6"
GT–1500	1,500	3,500	16,050	9'–2"	5'–8"	7'–0"	5'–9"	5'–6"
GT–2000	2,000	4,600	21,250	9'–0"	6'–0"	8'–0"	6'–9"	6'–6"
GT–2500	2,500	5,700	27,050	13'–0"	7'–0"	7'–0"	5'–9"	5'–6"
GT–3000	3,000	6,900	33,150	13'–0"	7'–0"	8'–0"	6'–9"	6'–6"
GT–3500	3,500	8,000	38,550	13'–0"	7'–0"	8'–6"	7'–3"	7'–0"
GT–4000	4,000	9,300	38,100	16'–0"	8'–6"	7'–0"	5'–9"	5'–6"

OTHER SIZES ARE AVAILABLE. CONTACT US FOR MORE INFORMATION

ENGINEERING DATA

THE GREASE INTERCEPTOR IS STRUCTURALLY & HYDRAULICALLY ENGINEERED TO CONFORM TO UPC/IPC AND REGIONAL PLUMBING CODES RECOMMENDED IN MOST CITIES. CONSULT WITH LOCAL AUTHORITIES FOR SPECIFIC APPLICATION REQUIREMENTS.

SHOP DRAWINGS SHALL INCLUDE COMPLETE STRUCTURAL & BOUYANCY CALCULATIONS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER UPON REQUEST.

CONSULT WITH PARKUSA COMPANY FOR EXACT EXCAVATION DIMENSIONS & SHIPPING INFORMATION.

888.811.PARK
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PARK USA
DESIGN FOR WATER

GREASE INTERCEPTOR SERIES GT
500 THRU 4000 GALLON CAPACITY

PM	DRN	ENG	DWG. NO.	REV.
DATE 06/18			GT–1	A

HOT WATER DEMAND CALCULATIONS

FIXTURE	QTY	LENGTH (IN)	WIDTH (IN)	DEPTH (IN)	VOLUME (IN^3)	GPH (@37.5%)
3-COMPARTMENT SINK	1	20	15	14	12600	20.45
		MNF. RATE (GPM)	WATER USAGE (GPH)	STD. RATE (GPM)	GPH	COMBINED GPH
PRE-RINSE SPRAYER	2	1.15	32	2.5	14.72	29.44
LAVATORY	1	0.5	5	2.2	1.14	1.14
HAND SINK	3	2.2	5	2.2	5.0	15.0
PREP SINK	1	2.2	5	2.2	5.0	5.0
MOP SINK	1	---	---	---	15.0	15.0
DISHWASHER	0	---	---	---	29.6	0.0
					TOTAL GPH	86.03

*HOT WATER USE REDUCTION CALCULATIONS: GPH = (MNF. RATE x WATER USAGE VALUE) / STD. RATE

TOTAL GPH	TEMP RISE (°F)	BTU/(LB · °F)	LB/GAL	ELEC EFFICIENCY	BTU/kW·H	MINIMUM kW
86.03	70	1.002	8.33	98%	3412	15.0

ISSUE TABLE

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3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHAN HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

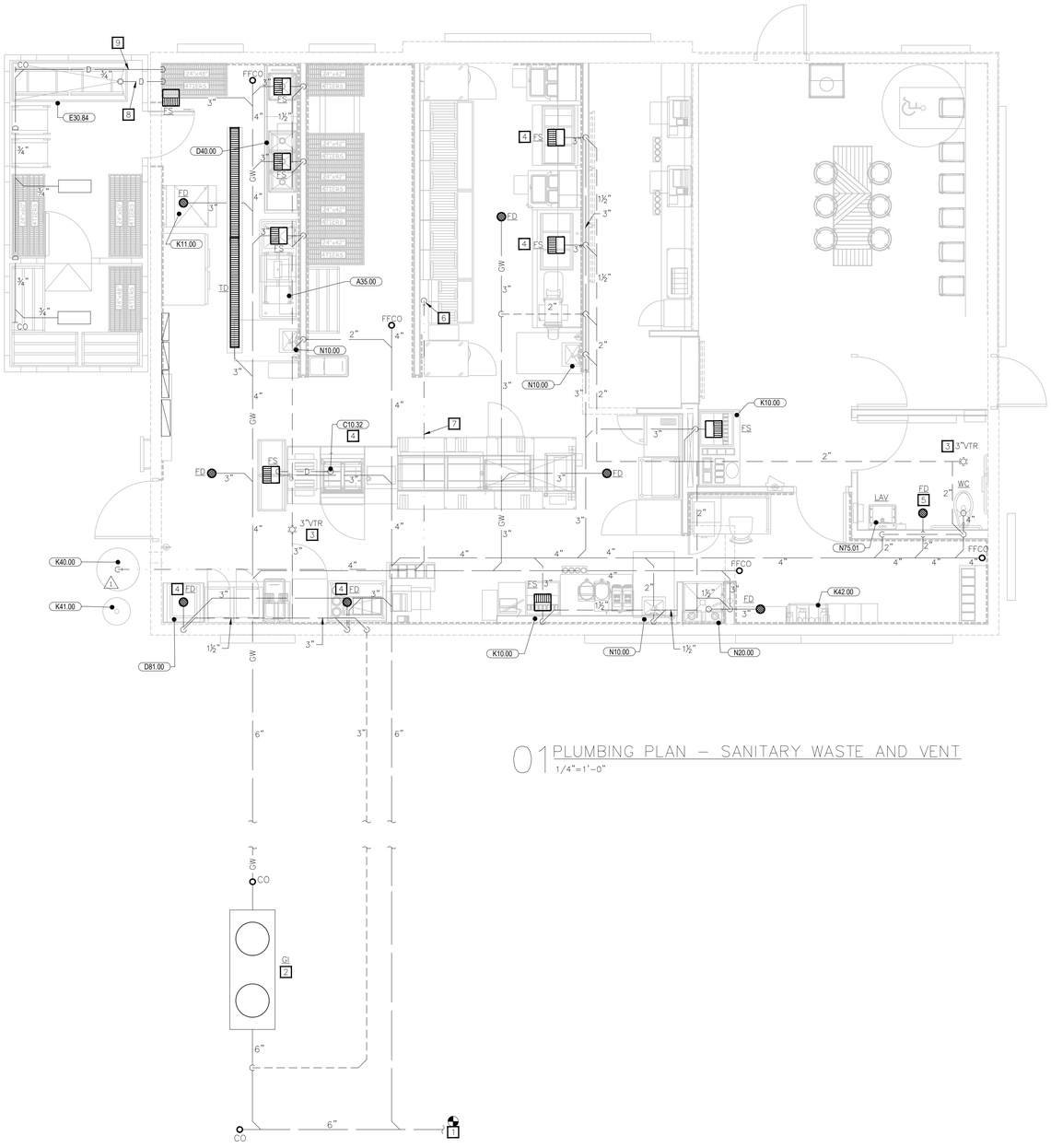
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
PLUMBING SCHEDULES & NOTES

Drawn	Checked
NI	AH
Scale: 1/4" = 1'-0"	Date: JUNE 2023
Project No.: C22-129	Drawing No.: P1.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



01 PLUMBING PLAN – SANITARY WASTE AND VENT
1/4"=1'-0"

PLUMBING KEY NOTES

1. CONNECT TO SANITARY WASTE LINE ON EXTERIRO OF BUILDING PROVIDED BY OTHERS. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
2. PROVIDE 1500 GALLON GREASE INTERCEPTOR AS SHOWN PER PLANS. REFER TO "GREASE INTERCEPTOR" DETAIL. LOCATE INTERCEPTOR OUTSIDE OF DRIVE LANES. COORDINATE WITH CIVIL DRAWINGS FOR FINAL LOCATION.
3. PROVIDE SANITARY VENT THROUGH ROOF AS SHOWN PER PLAN PER "VENT THRU ROOF (VTR)" DETAIL. LOCATE VENT MINIMUM OF 10'-0" AWAY FROM AIR INTAKES ON ROOF, UNLESS APPROVED BY ENGINEER PRIOR TO INSTALLATION.
4. PROVIDE DRAIN LINE FROM KITCHEN EQUIPMENT TO FLOOR SINK. REFER TO KITCHEN EQUIPMENT PLANS.
5. EMERGENCY DRAIN IN RESTROOM SHALL BE INSTALLED FLUSH TO GRADE WITH NO SLOPE. COORDINATE INSTALLATION HEIGHT WITH GENERAL CONTRACTOR TO ENSURE PROPER INSTALLATION.
6. USED COOKING OIL LINE MOUNTED FLUSH AGAINST WALL @ 3'-0" AFF. REFER TO "USED COOKING OIL RECOVERY" DETAIL. G.C. SHALL PROVIDE STAINLESS STEEL COVER TO CEILING.
7. PROVIDE HC HEAT TRACE TAPE ON USED COOKING OIL LINE FROM BUILDING TO TANK. INSTALL HEAT TRACE PER MANUFACTURER'S RECOMMENDATIONS. REFER TO PLUMBING FIXTURE SCHEDULE FOR MORE INFORMATION.
8. EXTEND CHICKEN VAT'S 2" COPPER INDIRECT WASTE LINE THROUGH COOLER WALL TO DISCHARGE INTO FLOOR SINK.
9. ROUTE FREEZER/COOLER CONDENSATE DRAIN TO FLOOR SINK PER "WALK-IN COOLER/FREEZER DRAIN" DETAIL.

DFU CALCULATIONS

FIXTURE	QTY.	DFU	TOTAL
WATER CLOSET	1	4	4
LAVATORY	1	1	1
MOP BASIN	1	3	3
HAND SINK	3	1	3
3" FLOOR SINK	9	5	45
3" TRENCH DRAIN (EMERGENCY)	1	–	–
2"/3" FLOOR DRAIN (EMERGENCY)	7	–	–
DFU VALUES PER IPC		DFU TOTAL	56.0

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No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ABDUL HASAN

9.13.2023

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Project

LOUISIANA KITCHEN 19 72 POPEYES

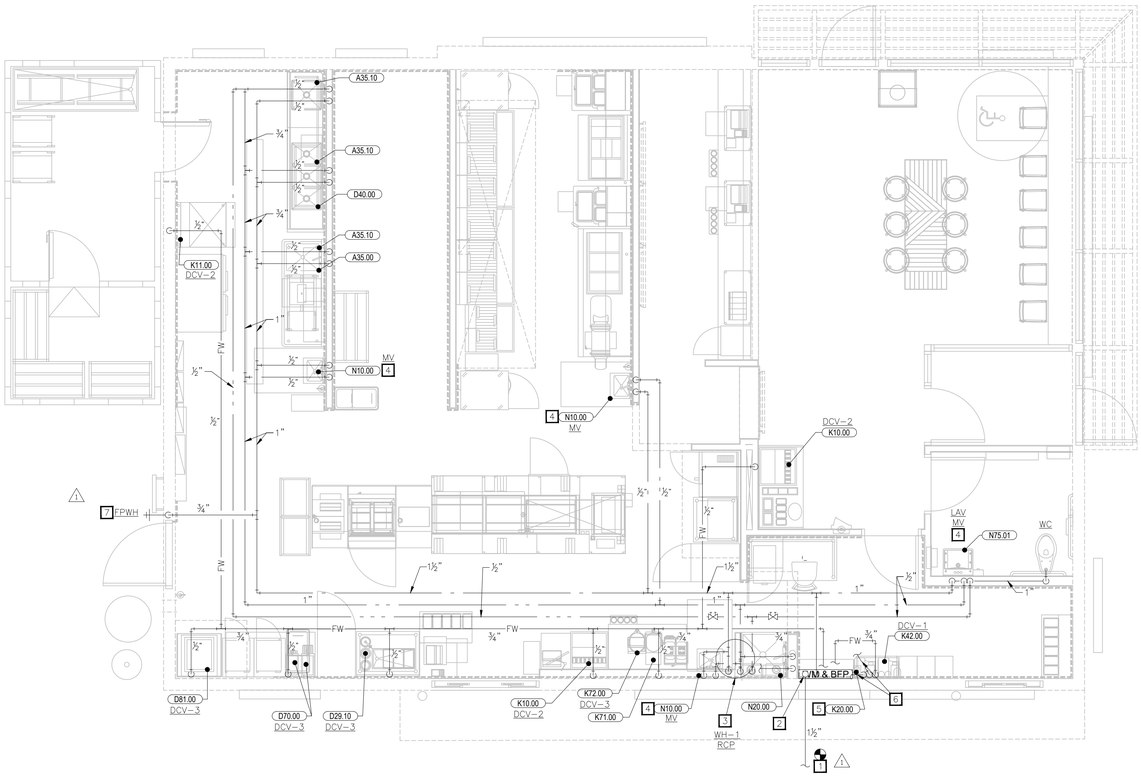
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
PLUMBING PLAN - SANITARY WASTE AND VENT

Drawn	Checked
NI	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	P2.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



01 PLUMBING PLAN – DOMESTIC WATER
1/4"=1'-0"

PLUMBING KEY NOTES

1. CONNECT TO DOMESTIC WATER SERVICE 5'–0" OUTSIDE BUILDING PROVIDED BY OTHERS. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
2. PROVIDE WATER SERVICE ENTRANCE AS SHOWN PER PLANS. REFER TO "DOMESTIC WATER SERVICE ENTRY" DETAIL.
3. ROUTE 1" HW, 1" CW AND ¾" HWR LINES TO WATER HEATER, EXPANSION TANK, AND RECIRCULATING PUMP AS SHOW PER PLANS AND PER "TANK ELECTRIC WATER HEATER", "RECIRCULATION PUMP", AND "SMALL EXPANSION TANK" DETAILS. DISCHARGE T&P RELIEF VALVE AND OVERFLOW TO FLOOR DRAIN PER "INDIRECT DRAIN" DETAIL. PROVIDE VALVE AND UNION ON INLET AND OUTLET. PROVIDE BALANCING VALVES AS REQUIRED FOR RECIRCULATING SYSTEM.
4. PROVIDE INDIVIDUAL MIXING VALVE FOR ALL HAND SINKS AND LAVATORIES IN AN ACCESSIBLE LOCATION.
5. WATER FILTER MOUNTED ON WALL. STUB–OUT WATER SUPPLY @ 8'–4" A.F.F. REFER TO "WATER FILTER" DETAIL.
6. BEVERAGE CONDUIT ABOVE CEILING TO DRINK STATION. REFER TO "BEVERAGE CONDUIT – ABOVE SLAB" DETAIL.
7. MOUNT FREEZE–PROOF WALL HYDRANT 18" ABOVE FINISHED GRADE. VERIFY EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS.

WSFU CALCULATIONS

FIXTURE	QTY.	WSFU	TOTAL
WATER CLOSET (FLUSH)	1	10	10
LAVATORY	1	2	2
MOP BASIN	1	3	3
HAND SINK	3	2	6
1–COMP SINK	1	3	3
3–COMP SINK	1	3	3
WAREWASH	1	3	3
BEVERAGE STATION	2	2	4
ICE MAKER	3	1	3
HOT WATER DISPENSER	2	1	2.0
TEA BREWER	1	1	1.0
WSFU VALUES PER IPC		WSFU TOTAL	40.00

WATER CALCULATION

CRITICAL ELEVATIONS AND DISTANCES:	FEET
ELEVATION OF CONTROLLING FIXTURE (WH–1,2,3)	6.0
ELEVATION OF FINISHED FLOOR	0.0
ELEVATION OF WATER MAIN CONNECTION	–4.0
VERTICAL DIST. FROM WATER MAIN CONNECTION TO CONTROLLING FIXTURE	10.0
SYSTEM PRESSURE REQUIREMENTS:	PSI
ELEVATION (VERTICAL DISTANCE) X 0.434 PSI/FT	4.3
PRESSURE NEEDED AT CONTROLLING FIXTURE	35
BACKFLOW PREVENTER: 1–1/2" (INTERIOR**)	10.0
WATER METER: 1–1/2" (INTERIOR**)	8.0
TOTAL	39.3
PIPE RUNS:	FEET
EXTERIOR, MAIN TO BUILDING ENTRY (VERIFY**)	200
INTERIOR, ENTRY TO CONTROLLING FIXTURE	42
INTERIOR, VERTICAL RISE	10.0
ALLOWANCE FOR FITTINGS, ETC. (LENGTH X 0.25)	13.0
TOTAL	265.0
SYSTEM PRESSURE DATA:	PSI
MINIMUM SYSTEM PRESSURE REQUIRED AT MAIN (VERIFY**)	65.0
SYSTEM PRESSURE REQUIRED FOR SYSTEM	39.3
PRESSURE AVAILABLE FOR (PIPING) FRICTION LOSS	25.7
PIPE SIZING:	PSI/100'
PRESSURE AVAILABLE X 100 / (TOTAL PIPE RUN)	9.7

* NOTE: ALL PIPING IS SIZED FOR 5 PSI/100' PRESSURE LOSS
** NOTE: FIELD VERIFY SYSTEM PRESSURE, LINE SIZES, BACKFLOW LOCATION, AND METER LOCATION PRIOR TO STARTING WORK. NOTIFY ENGINEER IMMEDIATELY IF SYSTEM PRESSURE IS LOWER THAN REQUIRED PRESSURE OR ANY CONDITIONS EXIST THAT CONFLICT WITH INFORMATION SHOWN ABOVE.

ISSUE TABLE

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3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ASAD HASAN

9.13.2023

Company Logo

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10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA 19 72 KITCHEN
POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

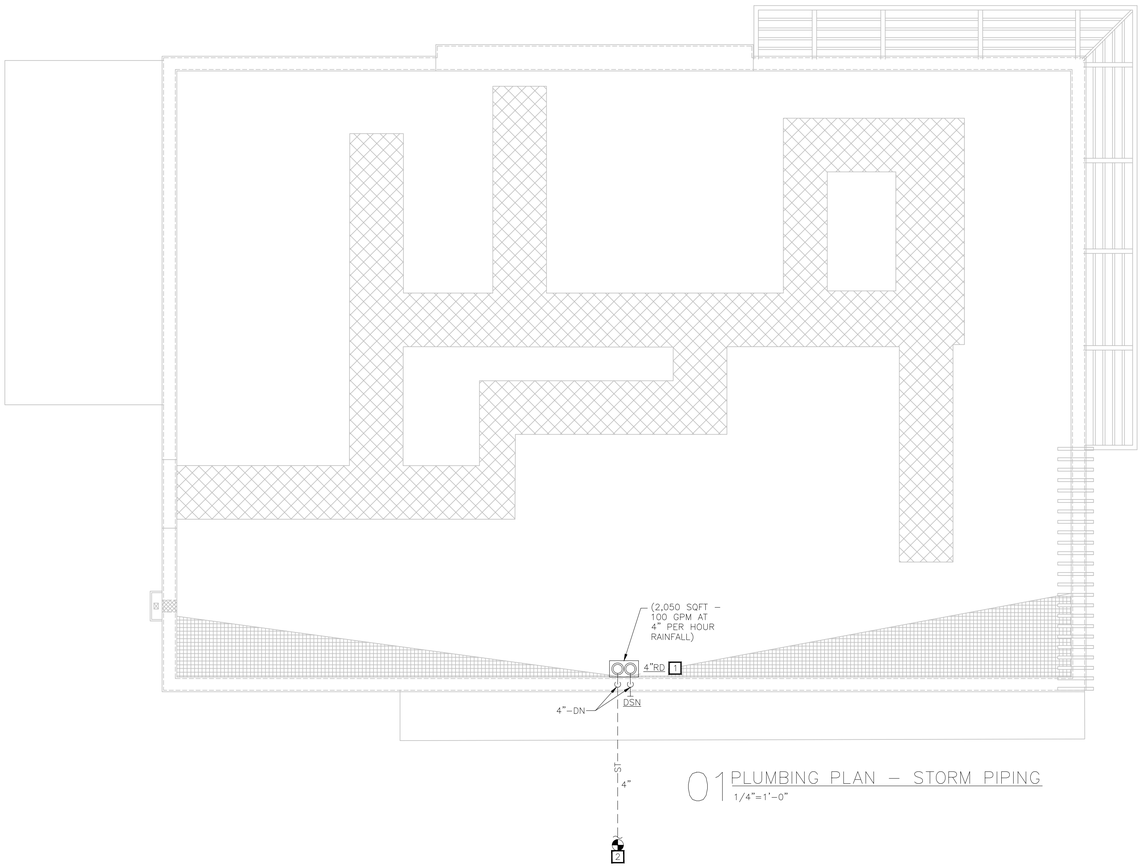
Drawing Title
PLUMBING PLAN - DOMESTIC WATER

Drawn	Checked
NI	AH
Scale	Date
1/4" = 1'-0"	JUNE 2023
Project No.	Drawing No.
C22-129	P2.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

PLUMBING KEY NOTES

1. PROVIDE ROOF DRAIN AS SHOWN PER PLANS PER "ROOF DRAIN" DETAIL. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION.
2. EXTEND STORM LINE OUT 5' 0" FOR CONNECTION BY OTHERS. REFER TO CIVIL DRAWINGS FOR CONENCTION LOCATION.



01 PLUMBING PLAN – STORM PIPING
1/4"=1'-0"

ISSUE TABLE

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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHAD HASAN

9.13.2023

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Project

LOUISIANA KITCHEN 19 72
Popeyes

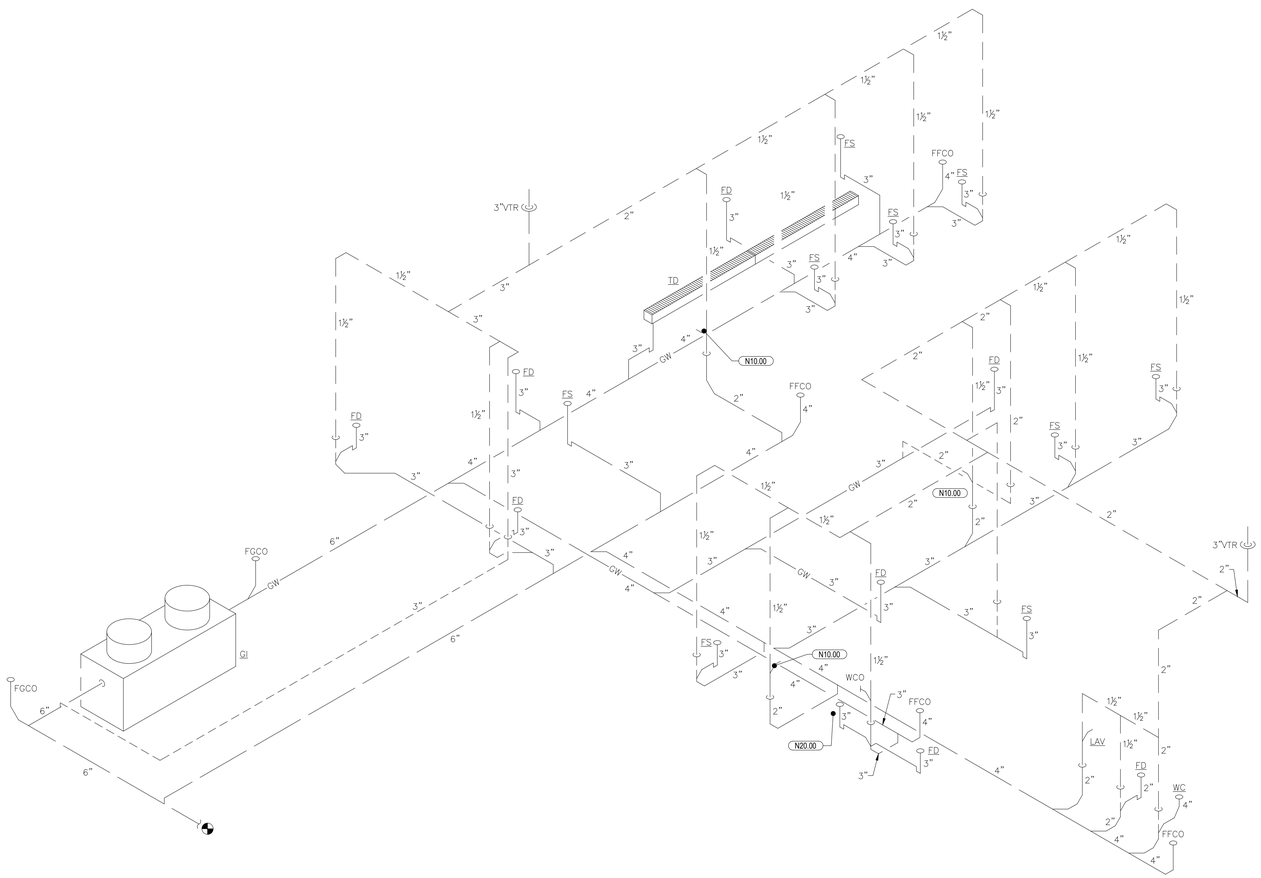
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

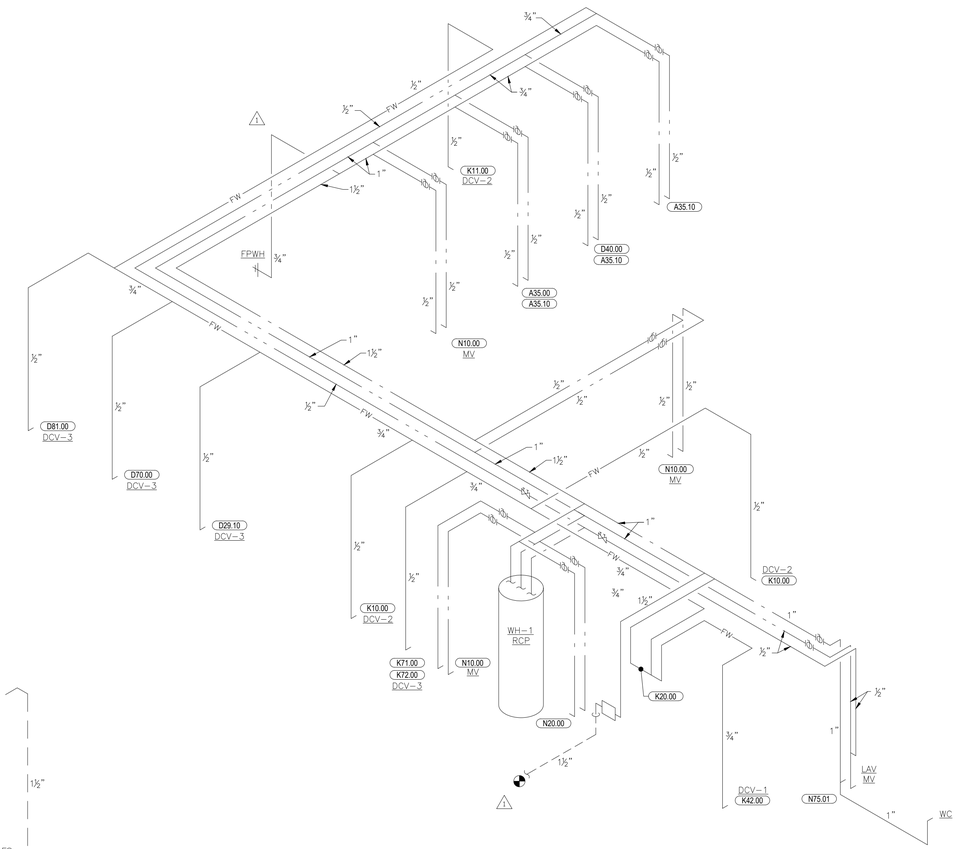
Drawing Title
PLUMBING PLAN - STORM PIPING

Drawn	Checked
NI	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	P2.3

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87 CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



01 SANITARY WASTE AND VENT RISER
1/4"=1'-0"



02 DOMESTIC WATER RISER
1/4"=1'-0"

ISSUE TABLE		
No.	Date (mm/dd/yy)	Description

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No.	Date	Description
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DRAWINGS REVISED AS PER DESIGN BULLETIN		
No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ASHRAF HASAN

9.13.2023

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Project

LOUISIANA 19 72 KITCHEN
POPEYES

Store Type	
US 2112 PROTOTYPE 2112-21	

Location

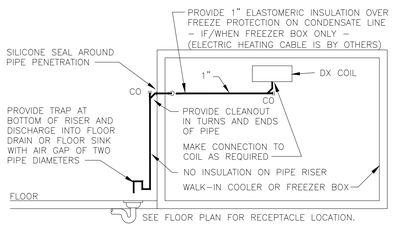
1517 NC 24-87
CAMERON, NC

Drawing Title

PLUMBING RISERS

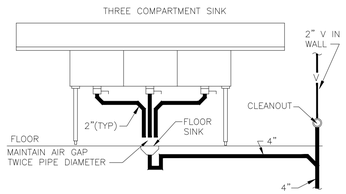
Drawn	Checked
NI	AH
Scale	Date
	JUNE 2023
Project No.	Drawing No.
C22-129	P3.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



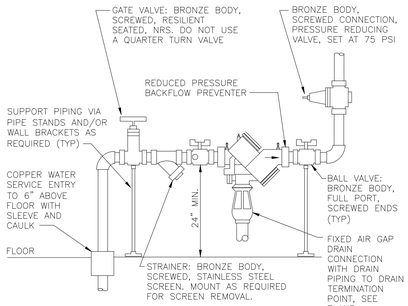
INSTALL PIPE HIGH AS POSSIBLE, ANCHORED TO WALL OF BOX WITH SUPPORTS AT MAXIMUM SIX FOOT CENTERS. USE TYPE "M" HARD COPPER TUBE AND FITTINGS WITH LEAD-FREE SOLDER JOINTS. SLOPE HORIZONTAL PIPE AT MINIMUM TWO PERCENT. REFER TO LOCAL CODE FOR INDIRECT DRAIN REQUIREMENTS.

11 WALK-IN COOLER/FREEZER DRAIN
NOT TO SCALE



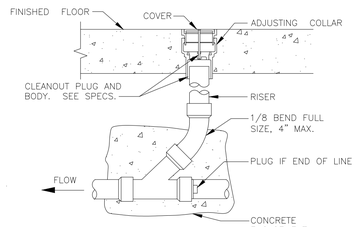
ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS OR MEET LOCAL CODE REQUIREMENTS. UTILIZE HUBLESS CAST IRON PIPE, FITTINGS AND CONNECTORS FOR SINK CONNECTIONS.

15 3-COMP SINK
NOT TO SCALE



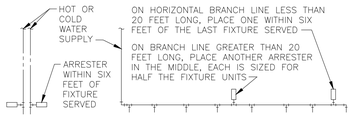
DETAIL SHOWS GENERAL SCHEMATIC REQUIREMENTS. PROVIDE BACKFLOW PREVENTER OF TYPE AND MANUFACTURER APPROVED BY LOCAL AUTHORITIES. PROVIDE PRESSURE REDUCING VALVE ONLY IF PRESSURE EXCEEDS 80 PSI – VERIFY. STRAINER AND REDUCING VALVE MAY BE INSTALLED IN VERTICAL PIPE IF SPACE LIMITATIONS REQUIRE IT. CLEAN STRAINER BEFORE TURNING BUILDING OVER TO OWNER. PROVIDE ANY REQUIRED CERTIFICATION OF TEST OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES.

13 DOMESTIC WATER SERVICE ENTRY
NOT TO SCALE



NOTE:
CLEANOUT COVER FLUSH WITH TILE OR FLUSH WITH CONCRETE FLOOR IN AREA WITH NO TILE.

14 FLOOR CLEAN-OUT
NOT TO SCALE

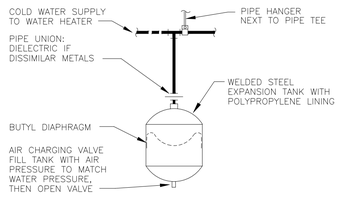


PDI SIZE	FIXTURE UNIT LOAD
AA	1–3
A	4–11
B	12–32
C	33–60
D	61–113
E	114–154
F	155–330

FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
VALVE WATER CLOSET	10	–
TANK WATER CLOSET	5	–
URINAL	5	–
LAVATORY	1.5	1.5
SINK	2	2
MOP BASIN	3	3
SHOWER/BATHTUB	2	3
DRINKING FOUNTAIN	0.5	–

PC TO PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 OR ANSI #A112.26.1M CERTIFICATION. SIZE AND INSTALL PER PDI #WH-201 STANDARD OR MANUFACTURER'S INSTRUCTION. THE TABLES ABOVE ARE BASED ON THE SIOUX CHIEF PRODUCT LINE. IF PRESSURE IS IN EXCESS OF 65 PSIG THEN UPSIZE THE ARRESTER BY ONE (EXAMPLE: AN 'A' ARRESTER WOULD BECOME A 'B' ARRESTER.)

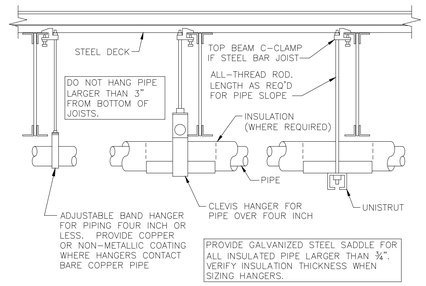
09 WATER HAMMER ARRESTERS
NOT TO SCALE



PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. MAKE PIPE SAME SIZE AS TANK FITTING. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION PROCEDURE. VERIFY PROPER OPERATION WHEN INSTALLED.

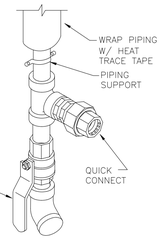
EXPANSION TANK INSTALLATION SHALL OCCUR ONLY WHEN THERE IS A BACKFLOW PREVENTION DEVICE INSTALLED WITHIN THE TENANT SPACE WATER SYSTEM OR BUILDING WATER SYSTEM.

10 SMALL EXPANSION TANK
NOT TO SCALE

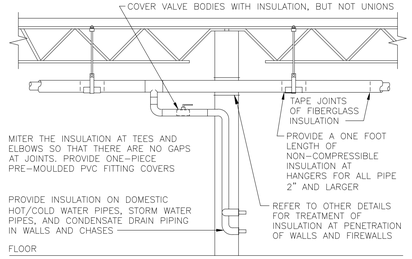


PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN HERE. DO NOT INSTALL HANGER INSIDE INSULATION OR OTHERWISE PENETRATE VAPOR BARRIER. DO NOT HANG ONE PIPE FROM ANOTHER EXCEPT IN CHASES. TRAPEZE HANGERS MAY BE USED FOR MULTIPLE PARALLEL PIPES. HANGER SPACING FOR PIPE SIZE: COPPER: 4"=12'-0"; 3"=11'-0"; 2½"=10'-0"; 2"=9'-0"; 1½"=8'-0"; 1¼"=7'-0"; 1" & ¾"=6'-0"; ½"=5'-0". CAST IRON: 10'-0" AND ONE NEAR ALL JOINTS. STEEL: 4"=14'-0"; 3"=12'-0"; 2½"=11'-0"; 2"=10'-0"; 1½"=9'-0"; 1"=7'-0"; ¾"=6'-0"; ½"=5'-0" LOCATE HANGERS AS CLOSE AS POSSIBLE TO TURNS AND TEES OF PIPE. PROVIDE SUPPLEMENTARY STEEL STRUTS BETWEEN JOISTS IF REQUIRED. LOCATE HANGERS TO TAKE LOAD OFF OF EQUIPMENT CONNECTIONS. ANCHOR WATER PIPE AGAINST SWAYING DUE TO CHANGES IN WATER VELOCITY. PROVIDE SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES. CHAINS OR PERFORATED STRAP IRON OR STEEL IS NOT ACCEPTABLE. REFER TO CODES FOR FURTHER INFORMATION.

05 PIPE HANGERS
NOT TO SCALE

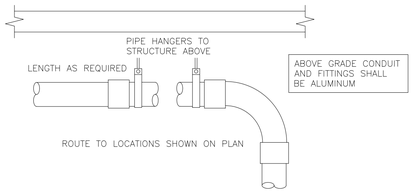


06 USED COOKING OIL RECOVERY
NOT TO SCALE



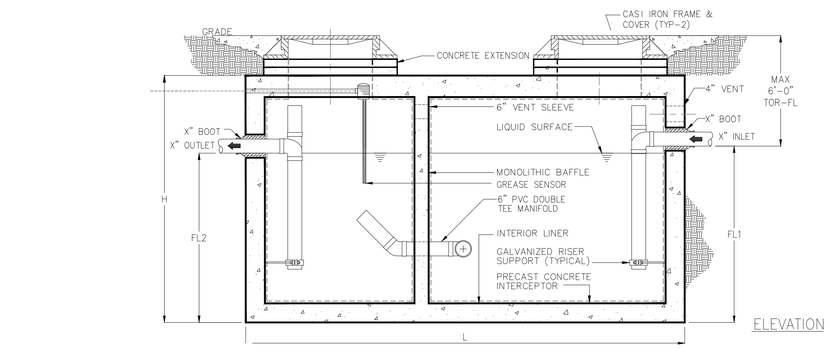
PROVIDE FIBERGLASS INSULATION WITH ALL-SERVICE JACKET WITH VAPOR BARRIER ON ALL COLD/HOT WATER PIPING AND CONDENSATE DRAIN PIPE. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION REGARDING INSULATION. INSTALL ALL ITEMS PER SPECIFICATIONS AND MANUFACTURERS INSTRUCTIONS. MAINTAIN VAPOR BARRIER ON COLD PIPING BY MEANS OF SEALANT AND TAPE. FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES SHALL NOT EXCEED 25/50. SEAL EXPOSED ENDS OF FIBERGLASS INSULATION WITH ADHESIVE MASTIC.

01 PIPE INSULATION
NOT TO SCALE

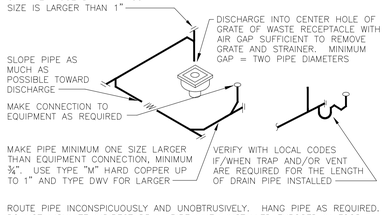


PROVIDE ALUMINUM BEVERAGE CONDUIT AND FITTINGS EQUAL TO BEVSTREAM SYSTEM (WWW.BEVSTREAM.COM). USE MINIMUM QUANTITY OF FITTINGS WITH LONG SWEEP ELBOWS AT BOTH ENDS WITH A MINIMUM RADIUS OF 30" ON 6" OR SMALLER AND 48" ON 8" OR LARGER. AVOID ELBOWS IN HORIZONTAL RUN IF AT ALL POSSIBLE. GENERAL CONTRACTOR SHALL SEAL ENDS OF CONDUIT WITH FOAM AFTER BEVERAGE LINES ARE INSTALL IN CONDUIT. COORDINATE WITH FOOD SERVICE DRAWING FOR EXACT SIZE AND LOCATION OF CONDUIT. CUT CONCRETE FLOOR SLAB, BACKFILL, REPAIR VAPOR BARRIER AND PATCH SLAB PER ARCHITECT'S REQUIREMENTS.

02 BEVERAGE CONDUIT – ABOVE SLAB
NOT TO SCALE

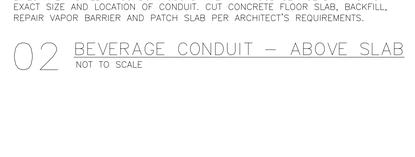


12 GREASE INTERCEPTOR
NOT TO SCALE



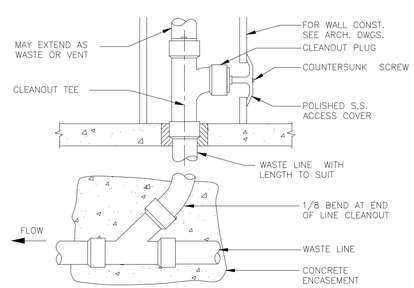
ROUTE PIPE INCONSPICUOUSLY AND UNOBTRUSIVELY. HANG PIPE AS REQUIRED. DO NOT INSULATE INDIRECT DRAIN PIPE WHEN INSTALLED EXPOSED IN FOOD SERVICE FACILITY. REFER TO LOCAL CODES FOR FURTHER INFORMATION.

07 INDIRECT DRAIN
NOT TO SCALE

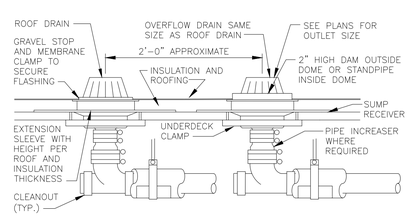


REFER TO KITCHEN EQUIPMENT DRAWINGS FOR FILTER REQUIREMENTS.

03 WATER FILTER
NOT TO SCALE



08 WALL CLEAN-OUT
NOT TO SCALE



INSTALL ROOF DRAINS PER MANUFACTURER'S RECOMMENDATIONS. REFER TO SPECIFICATIONS FOR PIPING MATERIAL. INSULATE ROOF DRAIN BODIES AND PIPE PER SPECIFICATIONS. LOCATE DRAINS WHERE SHOWN ON ARCHITECTURAL PLANS – VERIFY WITH STRUCTURAL PLANS FOR ROOF LOW POINTS. COORDINATE WITH ROOFING CONTRACTOR. REFER TO STRUCTURAL DRAWINGS AND COORDINATE THEREWITH IF REQUIRED FOR SUPPLEMENTARY STEEL AROUND ROOF OPENING. ARRANGEMENT SHOWN IS SCHEMATIC -- ADJUST TO SUIT ACTUAL CONDITIONS.

04 ROOF DRAIN AND OVERFLOW
NOT TO SCALE

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER AFSHIN HASHEMI

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

Store Type	
US 2112 PROTOTYPE 2112-21	

Location

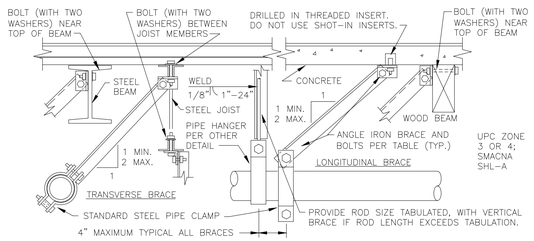
1517 NC 24-87
CAMERON, NC

Drawing Title

PLUMBING DETAILS

Drawn	Checked
NI	AH
Scale	Date
	JUNE 2023
Project No.	Drawing No.
C22-129	P4.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

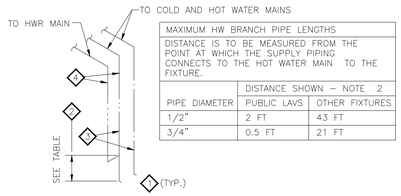


PIPE SIZE	SPACING TR.	SPACING LO.	TRANSVERSE BRACE	LONGITUDINAL BRACE	BOLT SIZE	ROD SIZE	MAX ROD LENGTH	VERTICAL BRACE
1" TO 2"	20'	20'	2"x2"x18GA	2"x2"x18GA	1/4"	3/8"	20"	2"x2"x18GA
2-1/2" TO 3"	40'	40'	2-1/2x2-1/2x16GA	2-1/2x2-1/2x16GA	3/8"	1/2"	25"	2"x2"x16GA
4" TO 5"	40'	40'	2-1/2x2-1/2x16GA	2-1/2x2-1/2x12GA	1/2"	5/8"	31"	2"x2"x16GA
6"	40'	40'	2-1/2x2-1/2x12GA	2-1/2x2-1/2x12GA	1/2"	3/4"	37"	2-1/2x2-1/2x16GA
8"	40'	40'	2-1/2x2-1/2x12GA	2-1/2x2-1/2x12GA	5/8"	7/8"	43"	2-1/2x2-1/2x12GA
10"	20'	20'	2-1/2x2-1/2x12GA	2-1/2x2-1/2x12GA	3/4"	7/8"	43"	2-1/2x2-1/2x12GA
12"	20'	20'	3"x3"x12GA	3"x3"x12GA	3/4"	7/8"	43"	2-1/2x2-1/2x12GA
14"	20'	20'	3"x3"x12GA	3"x3"x12GA	3/4"	1"	50"	2-1/2x2-1/2x12GA

DO NOT BRACE ANY PIPES WHERE TOP OF PIPE TO BOTTOM OF UPPER ATTACHMENT IS LESS THAN 12". BRACE GAS, OIL AND AIR PIPES 1" AND LARGER. BRACE ALL PIPES IN EQUIPMENT ROOMS 1-1/4" AND LARGER. BRACE ALL OTHER PIPE 2-1/2" AND LARGER. BRACE HUBLESS CAST IRON PIPE ON EACH SIDE OF ANY CHANGE IN DIRECTION OF 90 DEGREES OR MORE. MAXIMUM HANGER ROD LENGTH IS 6 FEET. WHERE LENGTH OF RUN EXCEEDS LONGITUDINAL BRACE SPACING, PROVIDE 2 FEET OFFSET IN PIPE AND LOCATE BRACE AT MID RUNS. REFER TO CURRENT EDITION OF SMACNA "SEISMIC RESTRAINT MANUAL" FOR ALTERNATIVE ATTACHMENTS AND ADDITIONAL INFORMATION AND REQUIREMENTS. (THIS DETAIL APPLIES IN THE ABSENCE OF OTHER LOCAL CODE REQUIREMENTS.)

13 SEISMIC BRACING FOR PIPE
NOT TO SCALE

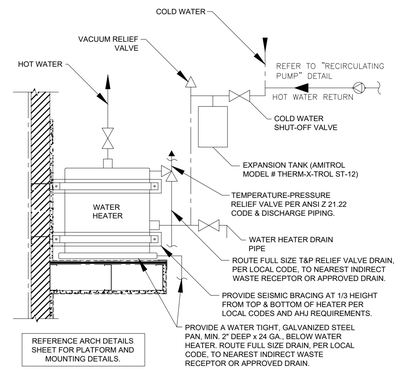
14 NOT USED
NOT TO SCALE



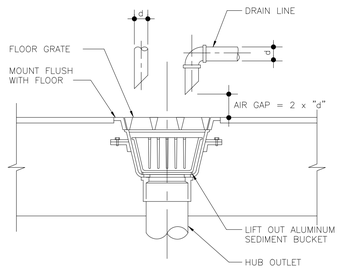
MAXIMUM HW BRANCH PIPE LENGTHS		
DISTANCE IS TO BE MEASURED FROM THE POINT AT WHICH THE SUPPLY PIPING CONNECTS TO THE HOT WATER MAIN TO THE FIXTURE.		
	DISTANCE SHOWN – NOTE 2	
PIPE DIAMETER	PUBLIC LAVS	OTHER FIXTURES
1/2"	2 FT	43 FT
3/4"	0.5 FT	21 FT

KEY NOTES
1. HOT WATER PIPING SHOWN ON FLOOR PLANS AND ISOMETRIC IS SHOWN FOR PLAN CLARITY. HOT WATER PIPING SHALL LOOP DOWN INTO WALL AS SHOWN.
2. SEE TABLE FOR MAXIMUM ALLOWED DISTANCE OF PIPING FROM HOT WATER MAIN TO FIXTURE.
3. PIPE SIZE TO FIXTURE PER PLANS.
4. PIPE SIZE FOR HOT WATER DISTRIBUTION PIPING PER PLANS.

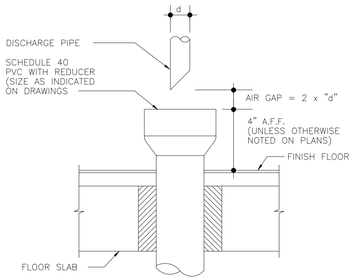
15 PUBLIC HANDWASHING RECIRC.
NOT TO SCALE



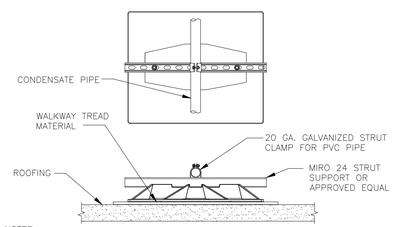
09 TANK ELECTRIC WATER HEATER
NOT TO SCALE



10 FLOOR SINK
NOT TO SCALE

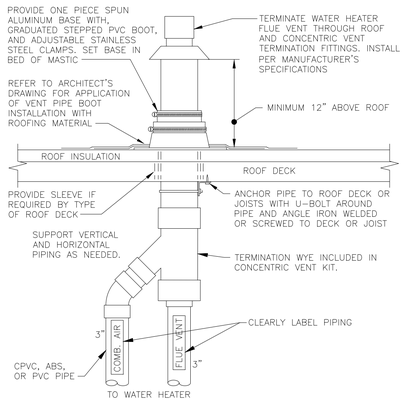


11 HUB DRAIN
NOT TO SCALE



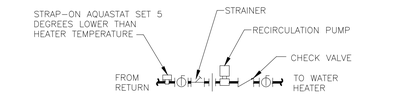
NOTES
1. SUPPORT REQUIRED 10'-0" O.C. AND AT ALL CHANGES IN DIRECTION.
2. INCREASE IN HEIGHT AS REQUIRED FOR ROUTING ABOVE ROOF MOUNTED ACCESSORIES SUCH AS EXPANSION JOINTS AND TO ACCOMMODATE SLOPE.

12 ROOF CONDENSATE PIPE SUPPORT
NOT TO SCALE



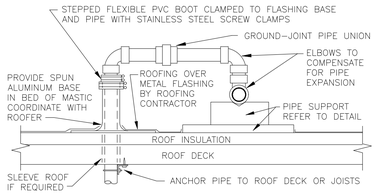
REFER TO PLANS FOR WATER HEATER FLUE VENT PIPE SIZES AND LOCATIONS. LOCATE CONCENTRIC VENT A MINIMUM OF 10 FEET HORIZONTAL (UNLESS APPROVED BY ENGINEER PRIOR TO INSTALLATION) AND ONE FOOT FROM ANY VERTICAL SURFACE. VERIFY FLASHING AND COUNTERFLASHING WITH ROOFING CONTRACTOR.

05 CONCENTRIC VENT
NOT TO SCALE



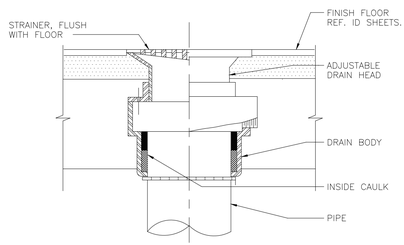
PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO WATER HEATER DETAIL FOR MORE INFORMATION.

06 RECIRCULATION PUMP
NOT TO SCALE

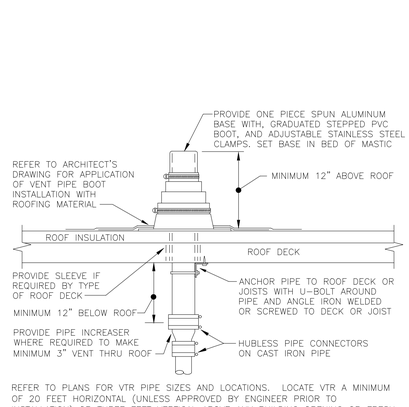


REFER TO PLANS FOR PIPE SIZE(S) AND LOCATION(S). USE WELDED OR SCREWED FITTINGS AS SPECIFIED FOR PIPE SIZE. LOCATE PENETRATION MINIMUM 18" FROM ADJACENT WALLS.

07 ROOF PENETRATION
NOT TO SCALE



08 FLOOR DRAIN
NOT TO SCALE

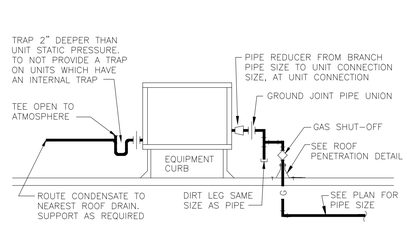


REFER TO PLANS FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR A MINIMUM OF 20 FEET HORIZONTAL (UNLESS APPROVED BY ENGINEER PRIOR TO INSTALLATION) OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. PROVIDE 1" FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON VENT PIPE INSIDE BUILDING WITHIN SIX FEET OF VENT THRU ROOF LOCATION. VERIFY FLASHING AND COUNTERFLASHING WITH ROOFING CONTRACTOR.

01 VENT THRU ROOF (VTR)
NOT TO SCALE

02 NOT USED
NOT TO SCALE

03 NOT USED
NOT TO SCALE



PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED TO SUIT ACTUAL CONDITIONS

04 ROOFTOP UNIT CONNECTIONS
NOT TO SCALE

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

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3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHI HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type	
US 2112 PROTOTYPE 2112-21	

Location

1517 NC 24-87
CAMERON, NC

Drawing Title

PLUMBING DETAILS

Drawn	Checked
NI	AH
Scale	**Date**
	JUNE 2023
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POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

PLUMBING SPECIFICATION

GENERAL PROVISIONS

A. WORK INCLUDES MODIFICATION TO EXISTING PLUMBING SYSTEM AND PROVIDING NEW MATERIALS, FITTINGS AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING PLUMBING SYSTEM. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND/OR ORDINANCES AND IS SUBJECT TO INSPECTION.

B. HOOK–UP CHARGES, PERMITS AND ALL OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING PLUMBING SYSTEM ARE INCLUDED AS A PART OF THIS SECTION.

C. INTENT OF THE DRAWINGS IS TO INDICATE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING GENERAL LOCATION, TYPE, FIXTURES AND EQUIPMENT REQUIRED. DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD ROUGH–IN DRAWINGS FOR PLUMBING FIXTURE INSTALLATION REQUIREMENTS AND COMPLY WITH ALL APPLICABLE ADA INSTALLATION REQUIREMENTS.

D. COORDINATE WITH WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS AND WITH THE CONSTRAINTS OF EXISTING CONDITIONS OF THE PROJECT SITE.

E. ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED, IS TO PROVIDE POWER WIRING FOR EACH ITEM OF ELECTRICAL EQUIPMENT AND MAKE FINAL CONNECTIONS TO MOTORS.

F. ALL FINISH PAINTING IS TO BE PERFORMED BY GENERAL CONTRACTOR, EXCEPT AS NOTED ELSEWHERE. CONTRACTOR SHALL RESTORE TO ORIGINAL CONDITION ANY PAINTING DEFACED BY CONTRACTOR AFTER ORIGINAL PAINTING.

G. ALL WORK SHALL CONFORM TO CODES, RULES, AND REGULATIONS:

1. STATE PLUMBING CODE.
2. LOCAL BUILDING CODE.
3. NATIONAL FIRE PROTECTION ASSOCIATION.
4. CERTAIN CODES AND STANDARDS AS SET UP BY VARIOUS TECHNICAL SOCIETIES SUCH AS ASME, ASHRAE, ASTM, SMACNA, ARI, AABC, OR IEEE.
5. FEDERAL OCCUPATIONAL SAFETY AND HEALTH STANDARDS.
6. LOCAL INSPECTOR'S REQUIREMENTS.
7. STATE INDUSTRIAL COMMISSION REQUIREMENTS.
8. BUILDING INSURING AGENCY REQUIREMENTS.

F. ALL PERMITS REQUIRED BY LAWS, ORDINANCES AND BUILDING CODES HAVING JURISDICTION SHALL BE OBTAINED AT THE PROPER TIME BY AND AT THE EXPENSE OF THIS CONTRACTOR.

G. THIS CONTRACTOR SHALL OBTAIN ALL INSPECTIONS REQUIRED BY ALL LAWS, ORDINANCES AND PUBLIC AUTHORITY HAVING JURISDICTION AND SHALL OBTAIN CERTIFICATES OF SUCH INSPECTIONS AND SUBMIT SAME TO THE ARCHITECT AND SHALL PAY ALL FEES, CHARGES, ASSESSMENTS AND OTHER EXPENSES IN CONNECTION THEREWITH.

H. PIPING AND EQUIPMENT LAYOUT IS SCHEMATIC. EXACT LOCATIONS ARE DETERMINED BY STRUCTURAL AND OTHER CONDITIONS. DESIGN OF SYSTEM MAY NOT BE CHANGED. ONLY EXACT LOCATION OF PIPING MAY BE REVISED TO SUIT CONSTRUCTION CONDITIONS AND AID IN COORDINATION WITH WORK OF OTHER CONTRACTORS.

I. MATERIALS AND EQUIPMENT INSTALLED IN THE WORK SHALL MEET REQUIREMENTS OF THE CONTRACT DOCUMENTS AND NO MATERIALS OR EQUIPMENT SHALL BE ORDERED UNTIL REVIEWED BY ENGINEER AND/OR ARCHITECT.

J. THIS CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER DOCUMENTS PROVIDED BY THE OWNER/ARCHITECT/CONTRACTOR.

1. EXPANSION TANK
2. DRAINS AND CLEANOUTS
3. VALVES
4. ALL PLUMBING FIXTURES, FAUCETS AND FITTINGS
5. WATER HEATER
6. PIPE INSULATION
7. GREASE INTERCEPTOR

K. CATALOG DATA FOR EQUIPMENT REVIEWED BY THE ARCHITECT SHALL NOT SUPERSEDE THE ENGINEER'S CONTRACT DOCUMENTS. REVIEW OF THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR DEVIATIONS FROM DRAWINGS OR SPECIFICATIONS, PROVIDING PROPER CLEARANCE FABRICATION PROCESS AND COORDINATION WITH OTHER TRADES.

L. WHEN SUBMITTED FOR ARCHITECT'S REVIEW, SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S CERTIFICATION THAT:

1. SHOP DRAWINGS HAVE BEEN REVIEWED, CHECKED, AND APPROVED.
2. CONTRACTOR'S WORK IS IN HARMONY WITH THE REQUIREMENTS OF THE PROJECT AND WITH THE PROVISIONS OF THE CONTRACT DOCUMENTS.
3. CONTRACTOR HAS VERIFIED ALL FIELD MEASUREMENTS AND CONSTRUCTION CRITERIA, MATERIALS, CATALOG NUMBERS AND SIMILAR DATA.

M. CONTRACTOR SHALL ALSO CERTIFY THAT THE WORK REPRESENTED BY THE SHOP DRAWINGS IS RECOMMENDED BY THE CONTRACTOR AND THE CONTRACTOR'S GUARANTEE WILL FULLY APPLY.

N. ALL CONTRACTORS SUBMITTING PROPOSALS FOR THIS WORK SHALL FIRST EXAMINE SITE AND ALL CONDITIONS THEREIN. ALL PROPOSALS SHALL TAKE INTO CONSIDERATION ALL SUCH CONDITIONS AS MAY AFFECT THE WORK UNDER THIS CONTRACT. THE SUBMITTING OF A BID AUTOMATICALLY IMPLIES THAT THIS EXAMINATION OF SITE HAS BEEN DONE.

O. CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES AND NOTE CONDITIONS WHICH WOULD AFFECT THE WORK. ALL DISCREPANCIES SHALL THEN BE REPORTED PRIOR TO THE BID AWARD.

P. PROVIDE INSTRUCTION TO OWNER'S OPERATING PERSONNEL AS NECESSARY, SHOWING LOCATIONS AND PROPER OPERATION OF MAJOR ITEMS OF EQUIPMENT AND SYSTEM COMPONENTS AND REFERRING TO THE OPERATING INSTRUCTION MANUAL DESCRIBED BELOW AS A GUIDE.

Q. COMPILE A WRITTEN MANUAL OF OPERATING INSTRUCTIONS INCLUDING COPIES OF SHOP DRAWINGS AND A LISTING OF EQUIPMENT SUPPLIERS. ASSEMBLE IN 8–1/2" X 11" HARD BACKED INDEXED BINDER. MATERIAL SHALL BE AS FOLLOWS:

1. TITLE PAGE: TITLE OF JOB, TENANT, ADDRESS, DATE OF SUBMISSION, CONTRACTOR AND ENGINEER.
2. INDEX.
3. ST OF MAJOR EQUIPMENT USED IN PROJECT ACCOMPANIED BY CONTRACTOR PURCHASE ORDER NUMBERS AND SUPPLIERS NAMES AND ADDRESSES.
4. ONE COPY OF EACH SHOP DRAWING GROUPED BY TYPES OF EQUIPMENT, I.E., PLUMBING FIXTURES, VALVES, ETC.
5. SECTION FOR EACH SYSTEM INCLUDING A BRIEF DESCRIPTION OF SYSTEM OPERATION WITH LOCATION OF MAJOR COMPONENTS AND A LIST OF ITEMS IN SYSTEM REQUIRING PERIODIC SERVICE.

R. SUBMIT A COMPLETED COPY TITLED "PLUMBING OPERATING INSTRUCTION MANUAL" ON BINDING EDGE OF BINDER TO ARCHITECT FOR APPROVAL. AFTER ARCHITECT'S REVIEW AND ANY CORRECTIONS REQUIRED ARE COMPLETED, SUBMIT A COPY OF MANUAL, TO OWNER.

FIRESTOPPING

A. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR FIRESTOPPING AROUND ALL OPENINGS FOR PIPES, DUCTS, CONDUITS ETC., INSTALLED BY CONTRACTOR AT ALL FIRE WALLS. FIRESTOPPING SHALL BE PERFORMED BY AN INSTALLER WHO HAS BEEN TRAINED BY MANUFACTURER, OR MANUFACTURER'S REPRESENTATIVE, IN THE INSTALLATION PROCEDURES BASED ON PUBLISHED UL TESTED FIRE STOP SYSTEMS.

B. FIRESTOPPING SHALL MEET THE REQUIREMENTS OF ASTM E–814 OR UL 1479 FIRE TESTS BY A RECOGNIZED TESTING AGENCY. FIRESTOPPING SHALL ALSO CONFORM TO GOVERNING CODES AS FOLLOWS: INTERNATIONAL BUILDING CODE, NFPA 101– LIFE SAFETY CODE & NFPA 70 – NATIONAL ELECTRIC CODE.

C. PENETRATION

1. CLEAN PENETRATION HOLES OF DIRT, LOOSE MATERIALS AND FOREIGN MATTER WHICH MAY AFFECT BOND OR INSTALLATION.
2. REMOVE COATINGS SUCH AS PAINT, CURING COMPOUNDS, WATER REPELLENT & SEALERS AS REQUIRED.
3. INSTALL BACKING MATERIALS TO PREVENT LIQUID MATERIAL LEAKAGE.

D. APPLICATION

1. PREPARE AND APPLY PENETRATION SEALING SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.
2. EMPLOY INSTALLATION TECHNIQUES WHICH WILL ENSURE THAT FIRESTOPPING IS DEPOSITED TO FILL AND SEAL HOLES AND OPENINGS.
3. TOOL EXPOSED SURFACES OF APPLIED SEALANT TO SMOOTH FINISH.
4. PROTECT MATERIALS FROM DAMAGE ON SURFACES SUBJECTED TO TRAFFIC.

E. PROVIDE INTUMESCENT SEALANTS AND COLLARS AT OPENINGS INVOLVING PLASTIC OR INSULATED PIPE SIMILAR TO METACAULK SERIES 880 AND 950.

F. FIRESTOPPING BY DOW CORNING, 3M, HILTI OR METACAULK MAY FURNISHED AT CONTRACTOR'S OPTION.

PIPE ANCHORS, HANGERS AND SUPPORTS

A. ALL PIPING SHALL BE SEPARATELY HUNG AND SUPPORTED FROM APPROVED STRUCTURAL MEMBERS OR CONCRETE OVERHEAD STRUCTURE ONLY. NO PIPE SHALL BE HUNG FROM ROOF DECK, PIPE, DUCTS OR OTHER COMPONENTS OR EQUIPMENT OF OTHER TRADES.

B. PROVIDE LISTED/APPROVED ADJUSTABLE HANGERS, INSERTS, BRACKETS, CLAMPS, SUPPLEMENTARY STEEL AND OTHER DEVICES REQUIRED FOR PROPER SUPPORT OF ALL PIPE LINES.

C. HANGERS SHALL BE DESIGNED TO ALLOW FOR EXPANSION AND CONTRACTION AND TO ALLOW INSULATION (WHERE APPLICABLE) TO RUN CONTINUOUSLY THROUGH HANGERS.

D. WIRE OR STRAP HANGERS ARE NOT PERMITTED. ADJUST HANGERS SO AS TO DISTRIBUTE WEIGHT LOAD EQUALLY ON ATTACHMENTS.

PLUMBING SYSTEM TESTING

A. SYSTEM TESTING SHALL BE PROVIDED AS FOLLOWS:

1. ALL SYSTEMS SHALL BE TESTED PRIOR TO BEING CONCEALED BY ADDITIONAL WORK, FLOOR SLABS, WALLS, OR MECHANICAL SYSTEMS.
2. FURNISH ALL PUMPS FOR AIR AND WATER PRESSURE TESTS ALONG WITH GAUGES AND ANY OTHER REQUIRED TEST EQUIPMENT.
3. TEST SANITARY DRAINAGE AND VENT SYSTEM BY FILLING WITH WATER WITH ALL POINTS IN THE SYSTEM BEING SUBJECT TO PRESSURE OF AT LEAST 10' OF WATER. WATER LEVEL SHALL REMAIN STATIONARY FOR A PERIOD OF ONE HOUR, WITHOUT ANY PIPE OR JOINT LEAKAGE. IF TESTING INDICATES DEFICIENCIES, REPLACE OR REPAIR AS REQUIRED AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.
4. TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE, FOR FOUR (4) HOURS MINIMUM. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.

B. REPAIR ANY LEAKING JOINTS AND DEMONSTRATE ACCEPTABLE LEAKAGE TO SATISFACTION OF OWNER'S REPRESENTATIVE AND APPROVING AUTHORITY. FLUSH ALL PIPING BEFORE PLACING INTO OPERATION.

STERILIZATION

A. STERILIZE NEW DOMESTIC WATER LINES AFTER INSTALLATION.

B. FURNISH A CERTIFICATE OF STERILIZATION AND APPROVAL FOR HUMAN CONSUMPTION TO BE SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THIS STATE, REGULARLY EMPLOYED BY TESTING LABORATORY. CERTIFICATE MUST BE GIVEN TO THE ARCHITECT AND OWNER BEFORE FINAL PAYMENT WILL BE MADE.

C. STERILIZATION SHALL BE BY MEANS OF CHLORINE INJECTED INTO WATER SYSTEM NEAR THE SOURCE AND OUTLETS THROUGHOUT THE SYSTEM SHALL BE TESTED TO PROVE PRESENCE OF MINIMUM REQUIREMENTS. LEAVE CHLORINE IN FOR 24 HOURS AND FLUSH OUT SYSTEM UPON COMPLETION OF WORK. STERILIZATION PROCEDURE SHALL BE WITNESSED BY THE OWNER'S REPRESENTATIVE.

D. STERILIZATION SHALL BE PERFORMED UNDER THE IMMEDIATE SUPERVISION OF A WATER TESTING LABORATORY REGULARLY ENGAGED IN THE SERVICE AND SHALL BE DONE ACCORDING TO THEIR INSTRUCTIONS.

IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT

A. STENCILS, LABELS, TAGS, AND COLOR CODES SHALL CONFORM TO ANSI A13.

B. PRODUCTS SHALL BE SETON. EQUAL PRODUCTS BY BRADY MAY BE FURNISHED AT CONTRACTOR'S OPTION.

C. STENCILS FOR EQUIPMENT SHALL BE REUSABLE AND HAVE 1" HIGH CHARACTERS. CHARACTERS SHALL BE PAINTED WHITE OVER A BLACK BACKGROUND. STENCIL ONLY AFTER FINAL PAINTING IS COMPLETE. CHARACTERS SHALL BE LEGIBLE FROM FLOOR. APPLY CLEAR ACRYLIC, LACQUER, OR VARNISH OVER FINISHED STENCIL.

D. FOR PIPING PROVIDE ANSI STANDARD COLOR FLEXIBLE VINYL LABELS WITH PERMANENT PRESSURE SENSITIVE ADHESIVE BACK. LABEL SHALL BE OF SUFFICIENT LENGTH TO ENCIRCLE PIPE (AND INSULATION WHEN APPLICABLE) AND OVERLAP ON ITSELF. EACH LABEL SHALL HAVE AT LEAST ONE FLOW DIRECTION ARROW AND SHALL BE PERMANENTLY LABELED WITH PIPE CONTENT.

E. SYSTEM PIPING TO LABELED SHALL INCLUDE THE FOLLOWING:

1. SANITARY WASTE AND VENT (ABOVE GRADE ONLY)
2. STORM AND OVERFLOW PIPING (ABOVE GRADE ONLY)
3. DOMESTIC WATER (INCLUDING COLD, HOT, RECIRCULATING, FILTERED, AND REVERSE OSMOSIS)
4. NATURAL GAS
5. USED COOKING OIL

F. DOMESTIC WATER PIPING SHALL BE LABELED ON EXTERIOR OF INSULATION IN ACCORDANCE WITH ANSI A13.

G. PIPING, VALVES, DRAINS, CONTROL PANELS AND SIMILAR EQUIPMENT SHALL BE IDENTIFIED AS TO FUNCTION AND SYSTEM NUMBER AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND AS LISTED BELOW:

IDENTIFICATION ITEM : TYPE
PIPING : STENCIL OR PIPE LABEL
VALVES : TAG
PIPING SPECIALTY : TAG
WATER HEATER AND OTHER EQUIPMENT : STENCIL

H. IDENTIFY PIPE LINES WITH STENCIL OR PIPE LABEL WITH COLOR CODED BANDS AT THE FOLLOWING LOCATIONS:

1. AT EQUIPMENT CONNECTION AT EACH VALVE.
2. AT BOTH SIDES OF WALLS THROUGH WHICH PIPE PASSES.
3. AT EVERY 20 FT. INTERVAL ON CONTINUOUS PIPE LINES.
4. AT EACH BRANCH CONNECTION.
5. SHOW FLOW DIRECTION ARROWS AT EACH IDENTIFICATION POINT.

INSULATION

A. PIPE INSULATION AND APPURTENANCES AND COVERINGS ON PIPES USED IN CHASES, SHAFTS OR OTHER CONCEALED SPACES IN TYPES 1 AND 2 CONSTRUCTION SHALL HAVE A FLAME SPREAD RATING NOT EXCEEDING TWENTY–FIVE (25) AND IN TYPE 3 AND 4 CONSTRUCTION NOT EXCEEDING SEVENTY–FIVE (75) AND A SMOKE DEVELOPED RATING NOT EXCEEDING FIFTY (50).

B. INSULATION SHALL BE RIDGE ONE–PIECE FIBERGLASS PIPE INSULATION WITH REQUIREMENTS COMPLYING WITH ASTM C 547, SELF–SEALING ADHESIVE LAP LONGITUDINAL JOINTS AND BUTT STRIPS FOR TRANSVERSE JOINTS. JACKETING SHALL CONFORM TO ASTM C 1136, TYPE I, MAXIMUM VAPOR TRANSMISSION RATING OF 0.02 PERM WHEN TESTED ACCORDING TO ASTM E 96, PROCEDURE A. (K VALVE) 0.25 BTU/IN./HR. * FT2 * °F AT 75°F MEAN TEMPERATURE WITH A MINIMUM R–VALVE OF R4.

C. PROVIDE INSULATION THICKNESS AS INDICATED:

DOMESTIC COLD WATER PIPING 1" AND SMALLER: 1/2" THICK
DOMESTIC COLD WATER PIPING 1–1/4" – 1–1/2": 3/4" THICK
DOMESTIC COLD WATER 2" AND LARGER: 1" THICK
DOMESTIC HOT WATER PIPING 3/4" AND SMALLER: 1" THICK
DOMESTIC HOT WATER PIPING 1" – 1–1/2: 1–1/2" THICK
PLUMBING VENT PIPING WITHIN 6 FEET OF ROOF OUTLET: 1" THICK
CONDENSATE PIPING: 1/2" THICK
USED COOKING OIL: 1" THICK
STORM DRAIN PIPING: 1" THICK
OVERFLOW STORM DRAIN PIPING: 1" THICK

D. GLUE IN PLACE WITH SCHULLER U–GLUE.

E. THE FITTINGS SHALL BE INSULATED WITH SCHULLER ZESTON INSULATION AND HAVE FACTORY PRE–MOLDED PVC COVERS. BUTT JOINTS TOGETHER AND WRAP WITH 3" WIDE STRIP TAPE, SEAL IN PLACE WITH SCHULLER U–GLUE.

F. INSULATION SHALL NOT BE APPLIED UNTIL THE GENERAL CONSTRUCTION HAS PROGRESSED SUFFICIENTLY TO INSURE AGAINST PHYSICAL OR MOISTURE DAMAGE TO THE INSULATION. ALL INSULATION DAMAGED THROUGH FAILURE TO OBSERVE THIS DIRECTIVE SHALL BE REPLACED AT PLUMBING CONTRACTOR'S EXPENSE.

G. INSTALL ALL INSULATION ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

H. INSULATION SHALL NOT BE APPLIED OVER FLANGES, JOINTS AND SEAMS IN PIPING.

I. INSULATION SHALL BE SCHULLER. EQUAL PRODUCT BY ARMSTRONG, CERTAINTEED, OWENS–CORNING OR KNAUF MAY BE FURNISHED AT THE CONTRACTOR'S OPTION.

J. PROVIDE INSULATION FOR WATER AND WASTE PIPING BELOW HANDICAP LAVATORIES/SINKS AS FOLLOWS:

PROVIDE TRUBRO "LAVGUARD 2" ADA TRAP AND SUPPLY PROTECTION OR EQUAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

PLUMBING BASIC MATERIALS AND METHODS

A. PIPING SYSTEMS – GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK SUCH AS DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING PROVIDE AN ISOLATING DIELECTRIC UNION. ALL HANGERS SHALL BE COMPATIBLE WITH PIPING MATERIAL TO PREVENT CORROSION.

B. PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PLUMBING SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND EQUIPMENT INDICATED.

C. FIXTURES/EQUIPMENT FURNISHED BY OTHERS: PLUMBING CONTRACTOR SHALL PROVIDE UTILITY CONNECTIONS REQUIRED SUCH AS WATER, GAS, SUPPLIES, WASTE OUTLET AND TRAPS AT ALL PLUMBING FIXTURES OR EQUIPMENT FURNISHED BY OWNER, GENERAL CONTRACTOR, AND EQUIPMENT SUPPLIER. INCLUDED ARE STOP VALVES, ESCUTCHEONS, AND CHROME PLATED BRASS TUBING WITH COMPRESSION FITTINGS. THIS CONTRACTOR IS TO BECOME INFORMED OF THE EXACT DIMENSIONS OF FINISHED WORK WHERE PIPES ARE TO BE PLACED AND SHALL ARRANGE THE WORK ACCORDINGLY, ASSUMING ALL RESPONSIBILITY FOR PROPER LOCATION. MAINS SHALL BE ERECTED WITH SPECIAL CARE TO PROVIDE SUPPORT AND PROPER ALLOWANCES FOR EXPANSION.

D. ALL PIPE LINES MUST BE PROVIDED WITH A SUFFICIENT NUMBER OF FITTINGS OR UNIONS TO MAKE POSSIBLE DISASSEMBLY WITHOUT BREAKAGE OF FITTINGS.

E. ALL EXPOSED PIPING SHALL BE NEAT AND CAREFULLY ALIGNED WITH THE STRUCTURAL ELEMENTS OF THE BUILDING.

F. DRAWINGS ARE DIAGRAMMATIC AND SHOULD NOT BE USED FOR LAYOUT WORK.

G. ALL LOW POINTS IN WATER PIPING SHALL HAVE DRAIN VALVES WITH STANDARD HOSE ATTACHMENTS. HOT AND COLD WATER PIPING SHALL PITCH TOWARD NEAREST DRAIN VALVE.

H. ALL PIPES TO BE INSTALLED SHALL BE LOCATED AT SUFFICIENT DISTANCE FROM WALLS, OTHER PIPES, CONDUIT, DUCTWORK AND OTHER OBSTACLES TO AVOID INTERFERENCE AND TO PERMIT THE APPLICATION OF FULL THICKNESS OF INSULATION SPECIFIED.

I. MECHANICAL JOINT TYPE PIPING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. THERMOMETERS BY TRERICE, ASHCROFT, MARSHALLTOWN, AND WEISS ARE ACCEPTABLE.

J. ACCESS PANELS SHALL BE PROVIDED WHERE CONCEALED CONTROL DEVICES AND VALVES ARE CONCEALED WITHIN WALLS. WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH LAY–IN SUSPENDED CEILINGS ACCESS PANELS ARE NOT REQUIRED.

K. SHUTOFF VALVES WITH UNIONS SHALL BE PROVIDED FOR SERVICE TO EACH PLUMBING FIXTURE, OR OTHER EQUIPMENT ITEMS TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. PIPE LINE VALVES SHALL BE EQUAL TO CRANE SERIES #9202, QUARTER TURN BALL VALVE. CONSTRUCTION – TWO PIECE, BRONZE BODY, FULL PORTED, CHROME PLATED BRASS BALL, REPLACEABLE "TEFLON OR TFE" SEATS AND SEALS. RATING – 150 PSI WSP, 600 PSI WOG. CONNECTIONS – SOLDER OR THREADED ENDS TO MATCH PIPING. STANDARDS COMPLIANCE – BRONZE OR BRASS VALVES: MSS–SP–110. WHEN SHUTOFF VALVE ARE PLACE IN THE CEILING THE VALVES WILL BE LOCATED AT A MAXIMUM OF 12" ABOVE THE CEILING, AND NOTHING SHALL BE PLACE BETWEEN THE CEILING ACCESS AND THE VALVES.

PLUMBING SYSTEMS

A. SANITARY WASTE AND VENT PIPING SHALL BE PROVIDED AS FOLLOWS:

1. PROVIDE ALL SANITARY DRAINS AND PIPING WITHIN THE PROJECT SPACE WITH CONNECTION TO EXISTING DRAINAGE SYSTEMS ON–SITE.
2. SANITARY DRAINAGE PIPING ABOVE FLOOR SHALL BE ABS/PVC PLASTIC PIPE, WITH SOLVENT WELD FITTINGS, OR HUBLESS CAST–IRON PIPE AND FITTINGS AND CONNECTIONS. SANITARY DRAINAGE PIPING BELOW GRADE SHALL BE ABS/PVC PLASTIC PIPE WITH SOLVENT WELD FITTINGS, OR SERVICE–WEIGHT HUB AND SPIGOT TYPE CAST–IRON WITH NEOPRENE GASKET JOINT SYSTEM.
3. ALL SANITARY WASTE PIPING SHALL BE UNIFORMLY PITCHED AT 1/4" PER FOOT FOR PIPE SIZES 3" AND SMALLER, 1/8" PER FOOT FOR PIPE SIZES 4"–6", AND 1/16" PER FOOT FOR PIPE SIZES 8" OR LARGER UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS, OR INDICATED ON DRAWINGS. GREASE LADEN WASTE LINES AND SAND/OIL WASTE LINES SHALL BE INSTALLED AT NO LESS THAN AT 1/4" PER FOOT FALL.
4. SANITARY VENT PIPING: PROVIDE A COMPLETE SYSTEM OF ABS/PVC PLASTIC PIPE, WITH SOLVENT WELD FITTINGS, OR STANDARD WEIGHT CAST IRON NO–HUB PIPE AND FITTINGS. THE VENT SYSTEM SHALL BE CARRIED THROUGH THE ROOF WITH APPROPRIATE FLASHING.
5. CLEANOUTS: PROVIDE CLEANOUTS AT THE END OF EACH HORIZONTAL RUN, AND AT THE BASE OF ALL VERTICAL STORM, WASTE AND DRAIN PIPES. CLEANOUTS SHALL BE OF SAME SIZE AS THE PIPES THEY SERVE, CONFORMING TO CODE REQUIREMENTS. PROVIDE SUITABLE WALL OR FLOOR CLEANOUTS WITH ACCESSORIES TO OBSCURE FROM VIEW. PROVIDE FLOOR MAKER IF BELOW RAISED FLOOR.

B. HOT AND COLD WATER PIPING SHALL BE PROVIDED AS FOLLOWS:

1. LAYOUT WATER PIPING SO THAT ENTIRE SYSTEM CAN BE DRAINED.
2. TYPE "L" HARD COPPER TUBE WITH SOLDER FITTINGS: COPPER TUBING SHALL HAVE SWEAT JOINTS AND BE CLEAN OF SCALE AND FOREIGN MATTER BEFORE INSTALLATION. ALL ENDS OF TUBING TO BE SWEATED SHALL BE REAMED, CLEANED AND BURNISHED TO REMOVE DIRT AND OXIDE. HARD 95–5 LEAD–FREE SOLDER SHALL BE USED AND APPLIED TO THE JOINTS ACCORDING TO STANDARD PRACTICE AND/OR MANUFACTURER'S RECOMMENDATIONS. COMPRESSION STOPS AND BRAIDED SUPPLIES SHALL BE USED AT CONNECTION TO EQUIPMENT.
3. PEX–A TUBING WITH ASTM F1960 FITTINGS: PEX TUBING SHALL BE SUPPORTED WITH ADDITIONAL PEX–A PIPE CHANNEL PER MANUFACTURER'S RECOMMENDATIONS. PEX PIPING SHALL BE TERMINATED AT FIXTURES WITH PRE–MANUFACTURED COPPER STUB–OUTS. COMPRESSION STOPS, AND BRAIDED SUPPLIES SHALL BE USED AT CONNECTION TO EQUIPMENT. PROVIDE RED TUBING FOR HOT WATER, BLUE TUBING FOR COLD WATER, AND WHITE/TRANSLUCENT TUBING FOR ALL OTHER DOMESTIC WATER.
4. EACH HOT AND COLD WATER BRANCH SHALL BE PROVIDED WITH A BALL VALVE SHUT–OFF.

C. CONDENSATE PIPING SHALL BE PROVIDED AS FOLLOWS:

1. TYPE M COPPER TUBING UP TO 1" ID, TYPE DWV COPPER TUBING AND FITTINGS FOR 1–1/4" AND LARGER SIZES.
2. HEAT TRACE ALL CONDENSATE DRAIN LINES INSIDE COOLERS AND FREEZERS AT 5 WATTS/LINEAR FOOT (MINIMUM).

D. STORM AND OVERFLOW PIPING SHALL BE PROVIDED AS FOLLOWS:

1. PROVIDE ALL STORM DRAINS AND PIPING WITHIN THE PROJECT SPACE WITH CONNECTION TO EXISTING STORM DRAINAGE SYSTEMS ON–SITE.
2. STORM DRAINAGE PIPING ABOVE FLOOR SHALL BE ABS/PVC PLASTIC PIPE, WITH SOLVENT WELD FITTINGS, OR HUBLESS CAST–IRON PIPE AND FITTINGS AND CONNECTIONS. STORM DRAINAGE PIPING BELOW GRADE SHALL BE ABS/PVC PLASTIC PIPE WITH SOLVENT WELD FITTINGS, OR SERVICE–WEIGHT HUB AND SPIGOT TYPE CAST–IRON WITH NEOPRENE GASKET JOINT SYSTEM.
3. ALL STORM PIPING SHALL BE UNIFORMLY PITCHED AT 1/4" PER FOOT FOR PIPE SIZES 3" AND SMALLER, 1/8" PER FOOT FOR PIPE SIZES 4"–6", AND 1/16" PER FOOT FOR PIPE SIZES 8" OR LARGER UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS, OR INDICATED ON DRAWINGS.

GAS PIPING

A. PROVIDE A COMPLETE GAS PIPING SYSTEM TO SERVE GAS FIRED HVAC EQUIPMENT, DOMESTIC WATER HEATERS AND EQUIPMENT FURNISHED BY OTHERS, AS NOTED ON DRAWINGS.

C. NATURAL GAS PIPING SHALL BE AS FOLLOWS:

1. ASTM A–53 SCHEDULE 40 STEEL PIPE PAINTED WITH YELLOW ANTI–CORROSIVE PAINT, SCREWED OR WELDED IN ACCORDANCE WITH CODE REQUIREMENT (FITTINGS FOR LINES LARGER THAN 2" SHALL BE WELDED STEEL. FITTINGS FOR LINES 2" AND SMALLER, EXCEPT WHEN LOCATED IN AIR PLENUMS, SHALL BE SCREWED. STANDARD WEIGHT BLACK MALLEABLE).

D. PROVIDE ALL UNIONS, SHUT–OFF VALVES AND DIRT LEGS REQUIRED BY NFPA–54 AND GOVERNING LOCAL CODES AND AT EACH GAS APPLIANCE CONNECTION.

E. PROVIDE ALL TESTS, METERS, INSPECTIONS, HANGERS AND EQUIPMENT CONNECTIONS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.

F. PAINT ALL GAS PIPING EXPOSED TO WEATHER WITH ONE COAT OF PRIMER, AND TWO COATS OF RUST–PROOF PAINT. COLOR OF PIPE ON ROOF SHALL BE YELLOW. COORDINATE COLOR OF PIPE ON EXTERIOR OF BUILDING WITH GC TO MATCH BUILDING COLORS.

G. GAS COCKS 1–1/2" AND SMALLER SHALL BE ALL BRONZE, SCREWED, FLAT HEAD, BRASS PLUG AND WASHER 200 LB. NOG. PROVIDE LINE SIZE 6" LONG DIRT LEG DOWN STREAM OF GAS COCK AT ALL EQUIPMENT CONNECTIONS.

H. NO VALVES ARE TO BE LOCATED IN AIR PLENUMS.

I. PROVIDE GAS PIPE SUPPORTS IN ACCORDANCE WITH CODE REQUIREMENTS.

PLUMBING PIPING SPECIALTIES – USED COOKING OIL

A. ASTM A–53 SCHEDULE 40 STEEL PIPE THREADED AND SCREWED OR WELDED WITH STANDARD WEIGHT BLACK MALLEABLE FITTINGS.

B. PROVIDE UNION AT ALL EQUIPMENT CONNECTIONS.

C. PROVIDE PIPE SUPPORTS AND STANDOFF HANGERS IN ACCORDANCE WITH CODE REQUIREMENTS.

D. EXTERIOR UCO PIPING WITH INSULATION TO EXTERIOR TANK REQUIRES A STAINLESS STEEL INSULATION JACKET WITH ALL JOINTS AND SEAMS SEALED WATER TIGHT USING WATERPROOF UV RESISTANT CLEAR SEALANT (3M CLEAR HYBRID 730 UV OR EQUAL RATED TO 194 DEGREE F) WITH THE ENDS COVERED TO PREVENT WATER INTRUSION AND SEAL. PROVIDE A PIPE ESCUTCHEON AT WALL.

WATER HEATER

A. ELECTRIC WATER HEATERS:

1. PROVIDE WATER HEATER, SIZE, LOCATION AND CAPACITY AND MANUFACTURER AS INDICATED ON DRAWINGS.
2. TANK TYPE ELECTRIC WATER HEATER WITH GLASS–LINED TANK RATED AT 150 PSI WORKING PRESSURE, MAGNESIUM ANODE PROTECTION, BRONZE DRAIN VALVE, HIGH TEMPERATURE CUT–OFF SWITCH AND IMMERSION THERMOSTAT. TANK TO HAVE A MINIMUM R–VALUE OF 10.
3. FURNISH AND INSTALL A WATTS NO. 40L, 3/4" TEMPERATURE AND PRESSURE RELIEF VALVE AND EXTEND DISCHARGE PIPE, FULL SIZE, TO WITHIN 6" ABOVE MOP SINK OR FLOOR DRAIN.
4. PROVIDE POTABLE WATER EXPANSION TANK AS SPECIFIED. EQUAL PRODUCTS BY WATTS, AMTROL, OR BELL & GOSSETT MAY BE PROVIDED AT THE CONTRACTOR'S OPTION.

B. FUEL FIRED INSTANTANEOUS WATER HEATERS

1. PROVIDE HIGH EFFICIENCY GAS FIRED, INSTANTANEOUS WATER HEATERS. SIZE, LOCATION AND CAPACITY SHALL BE AS AS INDICATED ON THE DRAWINGS.
2. FACTORY–INSTALLED TEMPERATURE AND PRESSURE RELIEF VALVE. EXTEND DISCHARGE PIPE, FULL SIZE, TO WITHIN 6" ABOVE THE MOP SINK OR FLOOR DRAIN.
3. PROVIDE POTABLE WATER EXPANSION TANK AS SPECIFIED. EQUAL PRODUCTS BY WATTS, AMTROL, OR BELL & GOSSETT MAY BE PROVIDED AT THE CONTRACTOR'S OPTION.

PLUMBING FIXTURES AND EQUIPMENT

A. WATER CLOSETS AND LAVATORIES SHALL BE VITREOUS CHINA AND SHALL ALL BE BY SAME MANUFACTURER.

B. INSTALLATION: THOROUGHLY CLEAN ITEMS BEFORE INSTALLATION. CAP PIPE OPENINGS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION WILL PERMIT. SET FIXTURES LEVEL AND IN PROPER ALIGNMENT. INSTALL SUPPLIES IN PROPER ALIGNMENT WITH FIXTURES. INSTALL SILICONE SEALANT BETWEEN FIXTURES AND ADJACENT MATERIAL, FOR SANITARY JOINT, AND OMIT ESCUTCHEONS

C. ALL WALL HUNG LAVATORIES, FLUSH VALVES, ETC., SHALL BE PER DRAWINGS AND MOUNTED AT THE MANUFACTURER'S RECOMMENDED ROUGHING IN MEASUREMENTS, UNLESS NOTED OTHERWISE.

D. GREASE INTERCEPTOR – SHALL BE AS SPECIFIED ON DRAWINGS.

E. VALVES TO BE AS FOLLOWS:

125 LB. S.W.P. GATE, GLOBE AND CHECK VALVES:

2. GATE (2–1/2" AND SMALLER) – ALL BRONZE, SCREWED, TAPERED, SOLID WEDGE DISC, SCREWED BONNET, RISING STEM.
3. BALL (2–1/2" AND SMALLER) – ALL BRONZE, TEFLON STEM SEALS AND SEAT, 1/4 TURN SHUT–OFF, VINYL COVERED HANDLES.
4. GLOBE (2–1/2" AND SMALLER) – ALL BRONZE, SCREWED, TAPERED, SOLID WEDGE DISC, SCREWED BONNET, RISING STEM.
5. CHECK (2–1/2" AND SMALLER) – ALL BRONZE, SCREWED, HORIZONTAL SWING CHECK WITH BRONZE DISC.

F. VALVES SHALL BE MILWAUKEE. EQUAL PRODUCTS BY CRANE, HAMMOND, POWELL, WALWORTH, NORTHERN INDIANA BRASS COMPANY OR STOCKHAM MAY BE FURNISHED AT CONTRACTOR'S OPTION.

G. UNIONS TO BE AS FOLLOWS:

1. UNIONS FOR COPPER PIPE TO BE 150LB., ALL BRONZE, SOLDER END TYPE BY CHASE. EQUAL PRODUCTS BY CRANE, MUELLER OR NORTHERN INDIANA BRASS COMPANY MAY BE FURNISHED AT CONTRACTOR'S OPTION.
2. DIELECTRIC UNIONS BETWEEN FERROUS AND COPPER SHALL BE INSULATED TO PREVENT METAL–TO–METAL CONTACT AND SHALL BE MANUFACTURED BY CAPITAL MANUFACTURING COMPANY OF COLUMBUS, OHIO. EQUAL PRODUCTS BY PATROL OR PECO SALES COMPANY.

E. CLEANOUTS TO BE AS FOLLOWS:

1. FLOOR TYPE TO BE ADJUSTABLE CAST IRON WITH NICKEL BRONZE TOP. TOP TO BE FLUSH WITH FLOOR. SEE DRAWINGS FOR MODEL AND MANUFACTURER.
2. WALL TYPE TO BE CAST IRON TEE WITH ROUND POLISHED STAINLESS STEEL ACCESS COVER AND THREADED PLUG. SEE DRAWINGS FOR MODEL AND MANUFACTURER.

F. FLOOR DRAINS TO BE AS FOLLOWS:

1. CAST IRON BODY SHALLOW SUMP DRAIN WITH DOUBLE DRAINAGE FLANGE AND WEEPHOLES, FLASHING CLAMP, BOTTOM OUTLET WITH NEOPRENE GASKET INSIDE CONNECTOR, 6" DIAMETER ADJUSTABLE GRATE. FRAME AND GRATE TO HAVE POLISHED NICKEL–BRONZE FINISH. SEE DRAWINGS FOR MODEL AND MANUFACTURER. EQUAL PRODUCT MAY BE SUPPLIED AT THE CONTRACTOR'S OPTION.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 41082 AFSAR HASAN

9.13.2023

Company Logo

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Project

LOUISIANA 1972 KITCHEN
POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
PLUMBING SPECIFICATIONS

Drawn	Checked
NI	AH

Scale	Date
	JUNE 2023

Project No.	Drawing No.
C22-129	PS1.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

SECURITY INSTALLATION NOTES

A. PROGRAMMING SEQUENCE SET–UP AT THE NCCC

B. OUTDOOR CAMERAS (WHERE PRESENT):
- B.A. OUTDOOR POLE MOUNT 15' ABOVE FINISHED PAVEMENT
- B.B. GROUND ISOLATION TRANSFORMERS
- B.C. SECURITY VENDOR TO RUN FLEX CONDUIT INSIDE LIGHT POLES. EC TO RUN CONDUIT FROM RESTAURANT TO BASE OF LIGHT POLE AND MOUNT JUNCTION BOX 15' ABOVE FINISHED PAVEMENT ON POLE. ORIENT VIEW TO DRIVE–UP AND SIDE DOOR.
- B.D. CAMERA ORIENTATIONS:
  - A–1: VIEW BACK DOOR, MENU BOARD & REAR AREA
  - A–2: VIEW OF FRONT ENTRY DOOR
  - A–3: VIEW OF SIDE ENTRY DOOR
  - A–4: VIEW OF DRIVE–THRU MENU BOARD
  - A–5: VIEW OF DRIVE–THRU AREA

C. INDOOR CAMERAS
- C.A. INDOOR CEILING MOUNT IN TINTED DOME
- C.B. FASTEN SCREW IN CEILING FOR DOMES SO NOT EASILY DROPPED OUT OF TILE
- C.C. CAMERA ORIENTATIONS:
  - B–1 : VIEW OF SIDE CUSTOMER ENTRANCE, AND SALES COUNTER
  - B–2 : VIEW SALES COUNTER AND RESTROOM AREA
  - B–3 : VIEW SALES COUNTER & SAFE AREA
  - B–4 : VIEW FRONT CUSTOMER ENTRANCE AND RESTROOM AREA
  - B–5 : VIEW OF SAFE AND SALES AREA
  - B–6 : VIEW OF BACK ENTRANCE
  - B–7 : VIEW OF PREP AREA
  - B–8 : VIEW OF OFFICE AREA
  - B–9 : VIEW OF COOK LINE
  - B–10: VIEW OF KITCHEN
  - B–11: VIEW OF WALK–IN BOX AND STORAGE AREA

D. OFFICE AREA
- D.A. BAC– BURGLAR ALARM CONTROL–VISTA 20SEUL
- D.B. D–VCR
- D.C. E–VCR:
- D.D. F–MONITOR:

E. QUICK REFERENCE SHEETS
- E.A. ALARM INSTRUCTION SHEET TO BE MOUNTED ON WALL IN EMPLOYEE ONLY AREA CLOSEST TO KEYPAD OR IN OFFICE AREA PER CUSTOMER INSTRUCTION

F. FOR LOCATIONS WITH 6 OR MORE CAMERAS: ADD MULTIPLEXER

G. LTC 2641/60–PLACE ON SECURITY LOCK FOR NO TAMPER

H. FOR LOCATIONS WITH 4 CAMERAS OR LESS:

I. ADD VIDQUAD 4 CHANNEL LTC 2272/60

J. HOLD UP BUTTON 441494 SERIES LATCHING HUB

K. MANAGER AREA–36" AFF OUT OF SITE FROM FRONT COUNTER

L. DRIVE–THRU WINDOW–18" AFF & OUT OF SITE FROM OUTSIDE

M. FRYER/PREP AREA
- M.A. STROBE LIGHT–AS SL–401B–BLUE STROBE MOUNT BEHIND MENU BOARD.
  - M.A.A. STROBE LIGHT WILL FLASH CONTINUOUSLY WHILE BACK DOOR IS OPEN
- M.B. SOUNDER–AS–PAL328N–LOW TONE SOUNDER MOUNT WITH STROBE BEHIND MENU BOARD.
  - M.B.A. SOUNDER WILL SOUND WHEN BACK DOOR IS OPENED.
  - M.B.B. MANAGER WILL SILENCE ST SOUNDER AT KEYPAD AFTER 1ST TONE
- M.C. MOTION DETECTOR–AP 669 PIR–360 MOTION MOUNT IN STOVE AREA.
  - M.C.A. N.A.MOTION DETECTOR RADIUS TO INCLUDE DRIVE–UP WINDOW AREA AND GENERAL REAR AREA.

N. LOBBY/PERIMETER AREA/BACK OF HOUSE
- N.A. KEYPAD
  - N.A.A. MOUNT 40" AFF WALL ENTERING KITCHEN AREA FROM LOBBY
- N.B. FG 1025 GLASS BREAK
  - N.B.A. GLASS BREAK FOR LOBBY GLAZING. PROVIDE ONE ON EACH SIDE OF BUILDING. COORDINATE EXACT DEVICE LOCATION AND INSTALLATION.
- N.C. B4039 DOOR CONTACT
  - N.C.A. PROVIDE FOR ALL EXTERIOR DOORS. BACK DOOR CONTACT TO ACT AS ALARM POINT FOR REAR "OPEN DOOR" ALARM. SOUNDER AND BLUE STROBE TO ACTIVATE WHEN BACK DOOR IS OPEN.
- N.D. 3050CT SERIES HOLD–UP PANIC BUTTON
  - N.D.A. LATCHING HUB IN COOLER/FREEZER. MOUNT 18" AFF ON HINGE SIDE OF DOOR SUB UP IN CONDUIT
- N.E. POINT OF CONNECTION TO NKL SAFE
  - N.E.A. PIGTAIL PROVIDED BY NKL SAFE

O. POPEYES ADD ON MODIFICATION NAMES AND PHONE NUMBERS
- O.A. INSTALLER PLEASE CONTACT POPEYES CONSTRUCTION MANAGER FOR ANY ADD–ONS OR MODIFICATIONS TO YOUR JOB. THEY WILL CONTACT THE NATIONAL ACCOUNT MANAGER FOR APPROVALS/PAPERWORK.

POWER GENERAL NOTES

A. VERIFY EXACT LOCATIONS OF HVAC AND PLUMBING EQUIPMENT, CONDUIT STUB–UPS AND POWER CONNECTIONS PRIOR TO ROUGH–IN.

B. VERIFY EXACT LOCATION, MOUNTING HEIGHTS AND CONDUIT ROUTING FOR ALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS AND CO_2 SENSORS PRIOR TO ROUGH–IN.

C. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS. COORDINATE PROVISIONS FOR CONTROL CONDUIT AND WIRING AS REQUIRED FOR INTERLOCKING OF FANS, MOTORS, ETC. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

D. MOUNT DEVICES INSTALLED ON EQUIPMENT ON NON–REMOVABLE PANEL. COORDINATE LOCATION PRIOR TO COMMENCING ROUGH–IN WORK.

E. REFER TO FOOD SERVICE DRAWINGS SHEET K1 FOR TAG LOCATIONS NOT SHOWN THIS SET.

F. REFER TO EQUIPMENT SPECIFICATIONS FOR DATA AND POWER REQUIREMENTS AND LOCATIONS OF ALL MENU BOARDS AND SIGNS.

G. VERIFY MOUNTING HEIGHTS OF ALL RECEPTACLES WITH EQUIPMENT SUPPLIED PRIOR TO INSTALLATION.

H. ALL EQUIPMENT ELECTRICAL OUTLETS ARE DIMENSIONED TO CENTERLINE OF BOX FROM ABOVE FINISHED FLOOR.

I. ELECTRICAL CONTRACTOR TO PROVIDE CORD & PLUG CONNECTIONS FOR EQUIPMENT AS REQUIRED.

J. ALL 120V, 20A OUTLETS IN THE FOOD PREP AREA SHALL BE GROUND FAULT INTERRUPT TYPE.

K. BEFORE PHONE IS INSTALLED THE FOLLOWING NEED TO BE IN PLACE – CONDUIT AND PULL STRING AND BACK BOARD (GROUNDED) ON FIRE RETARDANT WALL.

L. KVS 3 ON BACK LINE NEEDS TO BE A POLE MOUNT.

M. PROVIDE "UP" OUTLET AT ROOFTOP EQUIPMENT.

N. ROUTE ALL CONDUIT ROOF PENETRATIONS OUTSIDE OF CURB. DO NOT PENETRATE BOTTOM OF RTU UNITS AND EXHAUST FAN CURBS.

LOW VOLTAGE GENERAL NOTES

A. ALL P.O.S. (POINT OF SALE) CIRCUITS SHALL HAVE AN ISOLATED GROUND WIRE BACK TO THE PANEL. ALL P.O.S. EQUIPMENT SHALL BE WIRED INDEPENDENTLY OF ANY NON–P.O.S. EQUIPMENT.

B. ALL RECEPTACLES FOR P.O.S. EQUIPMENT SHALL BE ISOLATED GROUND WITH SURGE SUPPRESSOR TYPE. ALL RECEPTACLES FOR P.O.S. EQUIPMENT SHALL BE SINGLE UNIT, UNLESS A DUPLEX RECEPTACLE CAN BE USED TO SUPPLY TWO P.O.S. UNITS. DUPLEX RECEPTACLES MAY BE USED IN THE MANAGER'S OFFICE FOR NON–P.O.S. EQUIPMENT (COMPUTER, MUSIC, FIRE ALARM, SECURITY, ETC.).

C. ALL CIRCUITS FOR P.O.S EQUIPMENT SHALL BE CONNECTED TO THE SAME PHASE OF POWER IN THE PANEL. ALL BRANCH CIRCUIT BREAKERS SUPPLYING P.O.S. EQUIPMENT SHALL HAVE LOCKING HANDLE DEVICES.

D. EACH RECEPTACLE TYPE (LOCKING OR STRAIGHT BLADE) SHALL MATCH THAT OF THE EQUIPMENT FURNISHED. WHERE P.O.S. EQUIPMENT IS FURNISHED WITHOUT A PLUG THE RECEPTACLE SHALL BE LOCKING TYPE. COORDINATE RECEPTACLE TYPES WITH THE P.O.S. EQUIPMENT SUPPLIER.

GENERAL ELECTRICAL NOTES

A. INCLUDE ALLOWANCE FOR UNFORESEEN CONDITIONS THAT MAY AFFECT THE SCOPE OF WORK. MINOR DEVIATIONS REQUIRED FOR ACCOMPLISHING THE INTENT OF THIS DESIGN SHALL BE INCLUDED IN THE ALLOWANCE.

B. SWITCHBOARDS, PANELBOARDS, DISCONNECT SWITCHES, TRANSFORMERS AND CONTACTORS SHALL BE "LISTED" AND "IDENTIFIED" AS RATED FOR MINIMUM OF 75°C CONDUCTOR TERMINATION.

C. ELECTRICAL DESIGN IS BASED ON INSTALLATION OF 75°C CONDUCTORS CONNECTED TO TERMINAL LUGS AND EQUIPMENT U.L. LISTED FOR MINIMUM 75°C. CONDUCTORS TERMINATED ON EQUIPMENT WITH LOWER RATING (60°C) OR NO RATING SHOWN SHALL HAVE CONDUCTOR SIZE INCREASED TO CONFORM TO ADOPTED ELECTRICAL CODE AND UL/CUL NO. 489 REQUIREMENTS.

D. CONDUIT INSTALLED INDOORS SHALL BE ELECTRICAL METALLIC TUBING (EMT), MINIMUM 1/2" OR AS NOTED.

E. CONDUIT INSTALLED BELOW SLAB SHALL BE RIGID STEEL, IMC, PVC OR HDPE, MINIMUM 3/4". IF PVC OR HDPE IS USED, TRANSITION TO RIGID STEEL BEFORE TURNING UP AND PENETRATING FLOOR SLAB.

F. CONDUCTORS SHALL BE MINIMUM #12 THHN/THWN COPPER UNLESS NOTED OTHERWISE ON PLANS OR IN SPECIFICATIONS. BRANCH CIRCUITS SHALL BE PROVIDED WITH (2) #12 CONDUCTORS AND (1) #12 EQUIPMENT GROUND CONDUCTOR UNLESS NOTED OTHERWISE.

G. BRANCH CIRCUITS SHOWN WITH TWO GROUNDING CONDUCTORS SHALL HAVE ONE EQUIPMENT GROUND CONDUCTOR (GREEN) AND ONE ISOLATED GROUND CONDUCTOR (GREEN W/YELLOW STRIP) INSTALLED IN RACEWAY.

H. DIRECT CURRENT WIRING SHALL BE (2) #10 IN 1/2" CONDUIT UNLESS NOTED OTHERWISE.

I. CONTROL VOLTAGE WIRING SHALL BE PLENUM RATED OR INSTALLED IN CONDUIT.

J. THERMOSTATS, TEMPERATURE SENSORS, CARBON DIOXIDE SENSORS AND HUMIDISTATS: UNLESS NOTED OTHERWISE, PROVIDE WALL BOX AT +3'–10" AFF WITH 1/2" CONDUIT STUBBED OUT TO ABOVE ACCESSIBLE CEILING WITH NYLON BUSHINGS AND PULLSTRING.

K. PROVIDE FLEXIBLE CONNECTIONS ONLY FOR FINAL CONNECTION TO EQUIPMENT, 6'–0" MAXIMUM LENGTH. PROVIDE LIQUID TIGHT FLEXIBLE CONNECTION AT EXTERIOR LOCATIONS AND WHERE EXPOSURE TO MOISTURE IS POSSIBLE.

L. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL WIRE.

M. ALL RACEWAYS SHALL CONTAIN A GROUNDING ELECTRODE SIZED PER THE ADOPTED ELECTRICAL CODE.

N. COORDINATE WORK ABOVE THE CEILING WITH OTHER TRADES TO PROVIDE THE GREATEST POSSIBLE CLEARANCE. CONDUIT RUNS SHALL BE RUN THROUGH TRUSSES WHERE POSSIBLE.

O. VERIFY EXACT PLACEMENT OF ALL DEVICES SHOWN ON CONSTRUCTION DOCUMENTS PRIOR TO FINAL PLACEMENT.

P. ALL RECESSED PANELBOARDS SHALL BE INSTALLED WITH MINIMUM OF (3) 3/4" CONDUITS STUBBED UP TO ACCESSIBLE CEILING SPACE FOR FUTURE USE.

Q. ALL PANELBOARDS, SWITCHBOARDS AND LINE VOLTAGE CONTROL EQUIPMENT SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTING, SERVICING OR MAINTENANCE OF EQUIPMENT. MARKING SHALL BE SELF ADHESIVE, COMMERCIAL LABEL CONFORMING TO ADOPTED CODES.

R. LIGHT SWITCHES, ELECTRICAL OUTLETS, THERMOSTATS AND OTHER ENVIRONMENTAL CONTROLS SHALL HAVE OPERABLE PARTS OF THE CONTROLS LOCATED NO HIGHER THAN 48" AND NO LOWER THAN 15" ABOVE THE FLOOR. IF THE REACH IS OVER AN OBSTRUCTION BETWEEN 20" AND 25" IN DEPTH, THE MAXIMUM HEIGHT IS REDUCED TO 44" FOR FORWARD APPROACH OR 46" FOR SIDE APPROACH, PROVIDED THE OBSTRUCTION IS NO MORE THAN 24" IN DEPTH. OBSTRUCTIONS SHALL NOT EXTEND MORE THAN 25" FROM THE WALL BENEATH A CONTROL

S. TERMS:

SHALL – ACTION THAT IS REQUIRED WITHOUT OPTION OR QUALIFICATION.

FURNISH – CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING.

INSTALL – CONTRACTOR SHALL BE RESPONSIBLE FOR LABOR AND CONSTRUCTION EQUIPMENT NECESSARY TO SET IN PLACE, CONNECT, CALIBRATE AND/OR TEST EQUIPMENT FURNISHED BY HIM OR OTHERS.

PROVIDE – CONTRACTOR SHALL FURNISH AND INSTALL.

LIGHTING GENERAL NOTES

A. CONNECT EXIT SIGNS, EMERGENCY AND NIGHT LIGHTS TO UNSWITCHED LIGHTING CIRCUIT, NOT CONTROLLED BY OCCUPANCY SENSORS, SWITCHES OR CONTACTORS.

B. PROVIDE DEDICATED NEUTRAL WITH ALL DIMMING SYSTEM CIRCUITS. NO COMMON NEUTRALS SHALL BE ALLOWED.

C. REFER TO "RECESSED LIGHTING FIXTURE SUPPORT DETAIL" FOR INFORMATION ON SUPPORT OF ALL RECESSED LIGHT FIXTURES.

D. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND DETAILS FOR LOCATION OF ALL LIGHTING FIXTURES AND ALL OTHER EQUIPMENT INSTALLED IN THE CEILING SYSTEM. VERIFY MOUNTING HEIGHTS AND FINISHES WITH ARCHITECT PRIOR TO ROUGH–IN.

E. REFER TO POWER PLANS FOR LOCATIONS OF ELECTRICAL EQUIPMENT.

F. PROVIDE (2) ADDITIONAL #12 CONDUCTORS FOR ALL 0–10V DIMMING CIRCUITS.

SECURITY SYSTEM GENERAL NOTES

A. PROVIDE 120V CONNECTIONS TO THE FOLLOWING SYSTEMS:
- A.A. CCTV HEAD END EQUIPMENT
- A.B. BURGLAR ALARM PANEL & SYSTEM
- A.C. SECURITY SYSTEM (INCLUDING SECURITY CAMERAS)

B. PROVIDE EXTERIOR TRENCHING AND CONDUIT WITH PULL STRINGS AS REQUIRED FOR OUTDOOR SECURITY CAMERA INSTALLATIONS. PROVIDE BACK BOX MOUNTED ON NEARBY SITE POLE OR BUILDING SURFACE WITH PROVISIONS FOR POWER AND LOW VOLTAGE (COAXIAL) CONNECTIONS.

C. SECURITY VENDOR TO FURNISH ALL SECURITY EQUIPMENT AND LOW VOLTAGE CABLING. COORDINATE EXACT SCOPE OF INSTALLATION IN FIELD.

D. SECURITY VENDOR TO SET UP, TEST, AND TRAIN RESTAURANT MANAGEMENT/ PERSONNEL ON CCTV AND BURGLAR ALARM SYSTEMS.

E. CONFIRM EXACT QUANTITIES AND LOCATIONS OF ALL DEVICES PRIOR TO SECURITY EQUIPMENT ROUGH–IN WITH SECURITY VENDOR AND POPEYES CONSTRUCTION MANAGER.

ELECTRICAL SYMBOLS LEGEND

3 2 1	HOME RUN TO PANEL. CIRCUIT NUMBERS, PHASE, NEUTRAL AND GROUND CONDUCTORS INDICATED ALONG WITH ISOLATED GROUND CONDUCTOR IF APPLICABLE.
	PARTIAL CIRCUIT
	CONDUIT INSTALLED CONCEALED ABOVE CEILING OR IN WALL
— — —	CONDUIT INSTALLED CONCEALED BELOW FLOOR SLAB OR UNDERGROUND
----DC----	CONDUIT INSTALLED WITH DIRECT CURRENT POWER WIRING
	CONDUIT TURNED UP OR DOWN AS NOTED
$	SINGLE POLE SWITCH, +3'–10" OR AS NOTED
$3	THREE–WAY SWITCH, +3'–10" OR AS NOTED
$WP	WEATHERPROOF TOGGLE SWITCH, +3'–10" OR AS NOTED
$K	KEYED SWITCH, +3'–10" OR AS NOTED
WOS	WALL MOUNTED OCCUPANCY SENSOR, +3'–10" OR AS NOTED
OS	CEILING MOUNTED OCCUPANCY SENSOR
WVS	WALL MOUNTED VACANCY SENSOR, +3'–10" OR AS NOTED
VS	CEILING MOUNTED VACANCY SENSOR
PS	CEILING MOUNTED INTERIOR DAYLIGHT HARVESTING PHOTOCELL SENSOR
PP	POWER PACK, INSTALLED ABOVE ACCESSIBLE CEILING
	SIMPLEX RECEPTACLE, +18" OR AS NOTED
IG	ISOLATED GROUND SIMPLEX RECEPTACLE, +18" OR AS NOTED
	DUPLEX RECEPTACLE, +18" OR AS NOTED
	ISOLATED GROUND DUPLEX RECEPTACLE, +18" OR AS NOTED
	CONTROLLED DUPLEX RECEPTACLE, +18" OR AS NOTED
	QUADRUPLEX RECEPTACLE, +18" OR AS NOTED
	ISOLATED GROUND QUADRUPLEX RECEPTACLE, +18" OR AS NOTED
	QUADRUPLEX RECEPTACLE WITH ONE OUTLET CONTROLLED, +18" OR AS NOTED
G G G	GROUND FAULT INTERRUPTING RECEPTACLE, +18" OR AS NOTED
TR TR TR	TAMPER RESISTANT RECEPTACLE, +18" OR AS NOTED
WP WP WP	WEATHERPROOF GROUND FAULT INTERRUPTING RECEPTACLE, +18" OR AS NOTED
	RECEPTACLE INSTALLED HORIZONTALLY, BOTTOM AT +6" ABOVE COUNTER TOP
	RECEPTACLE INSTALLED FLUSH IN CEILING
	ISOLATED GROUND RECEPTACLE INSTALLED FLUSH IN CEILING
	SPECIAL RECEPTACLE, NEMA STYLE AS NOTED, +18" OR AS NOTED
J	JUNCTION BOX
	DISCONNECT SWITCH, TOP AT +6'–0" OR AS NOTED
	DISCONNECT SWITCH PROVIDED WITH EQUIPMENT.
	COMBINATION MOTOR STARTER/DISCONNECT SWITCH FURNISHED BY MECHANICAL CONTRACTOR, INSTALLED BY ELECTRICAL CONTRACTOR
	MOTOR CONNECTION
C	LIGHTING CONTACTOR, INSTALLED AS NOTED
T	TIME CLOCK, +6'–2" OR AS NOTED
R	CONTROL OR POWER RELAY, INSTALLED AS NOTED
	PUSHBUTTON, TOP AT +4'–6" OR AS NOTED
CH	DOOR BELL CHIME, +8'–0" OR AS NOTED
TR	CONTROL TRANSFORMER, INSTALLED AS NOTED
T T/SW/H	THERMOSTAT, TEMPERATURE SENSOR, CARBON DIOXIDE SENSOR AND HUMIDISTAT PROVIDED BY MECHANICAL CONTRACTOR, +3'–10" OR AS NOTED
EOD	ELECTRICALLY OPERATED DAMPER, PROVIDED BY MECHANICAL CONTRACTOR
	DATA OUTLET, +18" WITH 3/4" CONDUIT TO ABOVE CEILING
	DATA OUTLET, +6" ABOVE COUNTER WITH 3/4" CONDUIT TO ABOVE CEILING
	TELEPHONE/DATA OUTLET, +18" WITH 1" CONDUIT TO ABOVE CEILING
	TELEPHONE/DATA OUTLET, +6" ABOVE COUNTER WITH 1" CONDUIT TO ABOVE CEILING
FCP	FIRE ALARM CONTROL PANEL, FLUSH MOUNTED, TOP AT +6'–0"
F	MANUAL FIRE ALARM PULL STATION, +3'–10" PER ADA
	FIRE ALARM HORN AND 75cd STROBE, +80" TO BOTTOM OF DEVICE PER ADA
S	STROBE ONLY (75cd UNO), +80" TO BOTTOM OF DEVICE PER ADA
	FIRE ALARM HORN AND 115cd STROBE, CEILING MOUNTED
	STROBE ONLY (115cd UNO), CEILING MOUNTED
	AREA TYPE PHOTOELECTRIC SMOKE DETECTOR, CEILING MOUNTED, OR AS NOTED
	DUCT TYPE PHOTOELECTRIC SMOKE DETECTOR WITH SAMPLING TUBES AND REMOTE INDICATOR LIGHT MOUNTED FLUSH IN CEILING BELOW DETECTOR
R	FIRE ALARM SYSTEM RELAY
FS	SPRINKLER FLOW SWITCH, PROVIDED BY PLUMBING CONTRACTOR
TS	SPRINKLER TAMPER SWITCH, PROVIDED BY PLUMBING CONTRACTOR
	FIRE SPRINKLER SYSTEM BELL (GONG), +10'–0" AFG
FSD	COMBINATION FIRE/SMOKE DAMPER PROVIDED BY MECHANICAL CONTRACTOR
AFF/AFG	ABOVE FINISHED FLOOR/GRADE
AHJ	AUTHORITY HAVING JURISDICTION
BAS	BUILDING AUTOMATION SYSTEM
EC	ELECTRICAL CONTRACTOR
FA	FIRE ALARM
GC	GENERAL CONTRACTOR
MC	MECHANICAL CONTRACTOR
NL	NIGHT LIGHT
NF	NON–FUSED
PC	PLUMBING CONTRACTOR
TYP	TYPICAL
WP	WEATHERPROOF

SYMBOLS LEGEND NOTES:
MOUNTING HEIGHTS INDICATED ARE MEASURED FROM FINISHED FLOOR TO THE CENTERLINE OF THE DEVICE UNLESS NOTED OTHERWISE.

SECURITY INSTALLATION ACCEPTANCE FORM/ CHECKLIST

FOR INSTALL SITE MODIFICATIONS (SUCH AS DEVICE PLACEMENT CHANGES FROM DRAWINGS), CUSTOMER MUST INITIAL BELOW TO SHOW APPROVAL OF SITE MODIFICATION.

CAMERAS

A–CAMERA : FOR LOCATIONS WITH OUTDOOR CAMERAS

OUTDOOR POLE MOUNT 15' ABOVE FINISHED PAVEMENT

YES_____N/A_____MODIFY PER SITE_____

GROUND ISOLATION TRANSFORMERS

YES_____N/A_____MODIFY PER SITE_____

ADT TO RUN CONDUIT INSIDE LIGHT POLES–EC TO RUN CONDUIT FROM RESTAURANT TO BASE OF LIGHT POLE & MOUNT JUNCTION BOX 15' ABOVE FINISHED PAVEMENT ON POLE

YES_____N/A_____MODIFY PER SITE_____

A–1: VIEW DRIVE–UP AND SIDE DOOR

YES_____N/A_____MODIFY PER SITE_____

A–2: VIEW BACK DOOR, MENU BOARD & REAR AREA

YES_____N/A_____MODIFY PER SITE_____

A–3: VIEW SIDE DOOR AREA OPPOSITE SIDE OF BUILDING FROM DRIVE–THRU

YES_____N/A_____MODIFY PER SITE_____

B–CAMERA: FOR LOCATIONS WITH INDOOR CAMERAS INDOOR CEILING MOUNT IN TINTED DOME

YES_____N/A_____MODIFY PER SITE_____

FASTEN SCREW IN CEILING FOR DOMES SO NOT EASILY DROPPED OUT OF TILE

YES_____N/A_____MODIFY PER SITE_____

B–1: VIEW FRONT DOORS, RESTROOM AREA & SALES COUNTER

YES_____N/A_____MODIFY PER SITE_____

B–2: VIEW DRIVE–THRU REGISTER & WINDOW AREA

YES_____N/A_____MODIFY PER SITE_____

B–3: VIEW SALES COUNTER & SAFE AREA

YES_____N/A_____MODIFY PER SITE_____

B–4: VIEW BACK DOOR & COOLER/FREEZER AREA

YES_____N/A_____MODIFY PER SITE_____

B–5: 360 VIEW

YES_____N/A_____MODIFY PER SITE_____

OFFICE AREA

D–VCR LOCK BOX: TC3922 SERIES

YES_____N/A_____MODIFY PER SITE_____

E–VCR: LTC 3924 SERIES PLACE ON SECURITY LOCK FOR NO TAMPER

YES_____N/A_____MODIFY PER SITE_____

QUICK REFERENCE SHEETS

ALARM INSTRUCTION SHEET TO BE MOUNTED ON WALL IN EMPLOYEE ONLY AREA CLOSEST TO KEYPAD OR IN OFFICE AREA PER CUSTOMER INSTRUCTION

YES_____N/A_____MODIFY PER SITE_____

VCR INSTRUCTION SHEET(2) 1–REVIEW & 1–RECORD–TO BE MOUNTED ON WALL CLOSEST TO VCR

YES_____N/A_____MODIFY PER SITE_____

FOR LOCATIONS WITH 6 OR MORE CAMERAS: ADD MULTIPLEXER

LTC 2641/60–PLACE ON SECURITY LOCK FOR NO TAMPER

YES_____N/A_____MODIFY PER SITE_____

FOR LOCATIONS WITH 4 CAMERAS OR LESS:

ADD VIDQUAD 4 CHANNEL LTC 2272/60

YES_____N/A_____MODIFY PER SITE_____

HUB: HOLD UP BUTTON 441494 SERIES LATCHING HUB

MANAGER AREA–36" AFF OUT OF SITE FROM FRONT COUNTER

YES_____N/A_____MODIFY PER SITE_____

DRIVE–THRU WINDOW–18" AFF & OUT OF SITE FROM OUTSIDE

YES_____N/A_____MODIFY PER SITE_____

LOBBY/PERIMETER AREA/BACK OF HOUSE

KP: KEYPAD–MOUNT 40" AFF WALL ENTERING KITCHEN AREA FROM LOBBY

YES_____N/A_____MODIFY PER SITE_____

GB: FG 1025 GLASS BREAK– LOBBY GLASS ONE EACH SIDE OF BUILDING SEE DRAWING FOR DEVICE PLACEMENT

YES_____N/A_____MODIFY PER SITE_____

C: B4039 CONTACT–ALL EXTERIOR DOORS

YES_____N/A_____MODIFY PER SITE_____

BACK DOOR CONTACT TO ACT AS ALARM POINT FOR BACK DOOR ALARM–24 HOUR LOCATION POINT–SOUNDER & BLUE STROBE TO ACTIVATE WHEN BACK DOOR IS OPEN

YES_____N/A_____MODIFY PER SITE_____

POC: POINT OF CONNECTION TO NKL SAFE–PIGTAIL PROVIDED BY NKL SAFE

YES_____N/A_____MODIFY PER SITE_____

FRYER/PREP AREA

SL: STROBE LIGHT–AS SL–401B–BLUE STROBE MOUNT BEHIND MENU BOARD, IT WILL FLASH CONTINUOUSLY WHILE BACK DOOR IS OPEN

YES_____N/A_____MODIFY PER SITE_____

S: SOUNDER–AS–PAL328N–LOW TONE SOUNDER MOUNT WITH STROBE BEHIND MENU BOARD, IT WILL SOUND WHEN BACK DOOR IS OPENED, MANAGER WILL TONE SILENCE SOUNDER AT KEYPAD AFTER 1

YES_____N/A_____MODIFY PER SITE_____

MD: MOTION DETECTOR–AP 669 PIR – 360 MOTION MOUNT IN STOVE AREA TO GET ARE FROM DRIVE–UP WINDOW AND GENERAL REAR AREA

YES_____N/A_____MODIFY PER SITE_____

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHI HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE–CIVIL ENGINEERING–MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-8400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

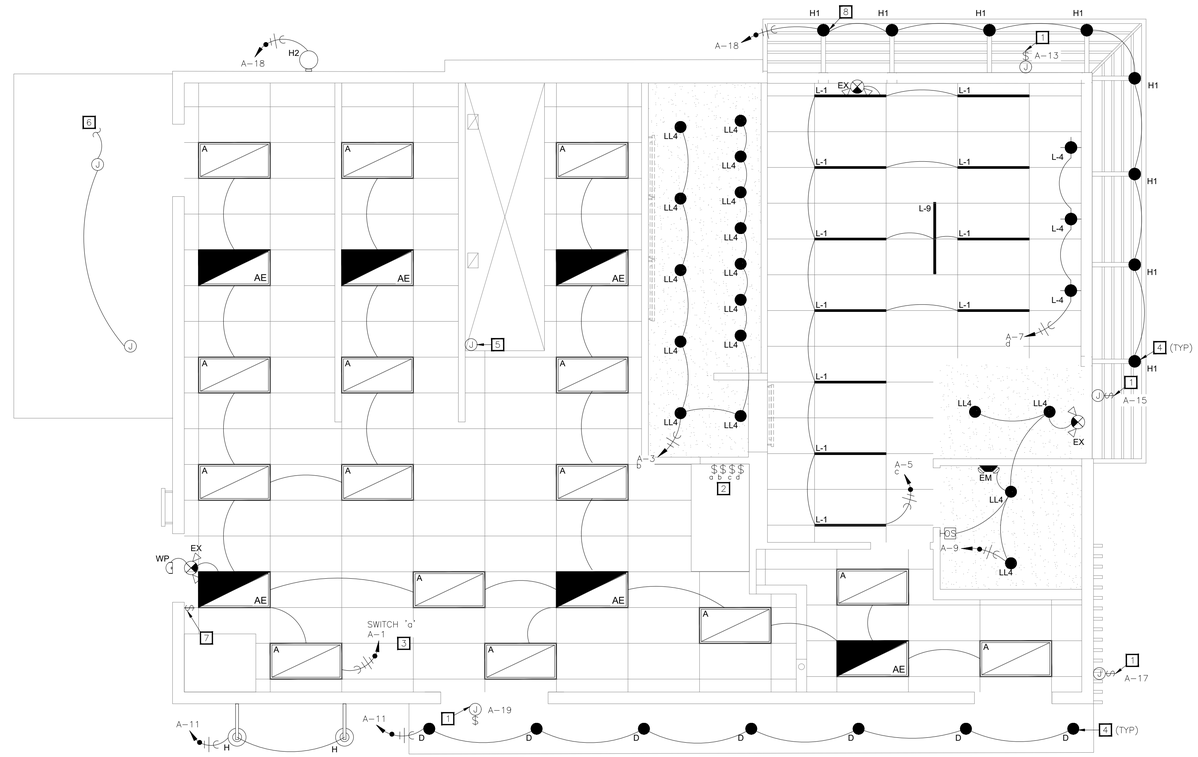
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ELECTRICAL GENERAL NTOES AND LEGEND

Drawn	Checked
JP	AH
Scale	**Date**
NOT TO SCALE	JUNE 2023
Project No.	**Drawing No.**
C22-129	E1.0

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



01 LIGHTING PLAN
1/4"=1'-0"

ELECTRICAL KEYNOTES

1. PROVIDE WEATHERPROOF JUNCTION BOX AND TOGGLE TYPE 20A-1P DISCONNECT SWITCH IN AN ACCESSIBLE LOCATION FOR SIGNAGE. COORDINATE EXACT REQUIREMENTS WITH SIGN CONTRACTOR. VERIFY LOCATION PRIOR TO ROUGH-IN. CONNECTED TO TIMECLOCK.
2. LOCATION OF LIGHTING SWITCH BANK. REFER TO SWITCH BANK ELEVATION ON SHEET E3.1 FOR ADDITIONAL INFORMATION.
3. RECIRCULATION PUMP WILL BE POWERED FROM KITCHEN LIGHTING CIRCUIT.
4. VERIFY ELECTRICAL CONNECTION REQUIREMENTS FOR CANOPY LIGHTING WITH CANOPY SUPPLIER AND EXTERIOR LIGHTING SPECIFICATIONS.
5. JUNCTION BOX ON HOOD FOR CONNECTION TO PRE-WIRED HOOD LIGHTS. CONNECT TO KITCHEN LIGHTING CIRCUIT.
6. PROVIDE POWER TO WALK-IN-COOLER/FREEZER LIGHTING.
7. TIME CLOCK OVERRIDE SWITCH.
8. FIXTURES IN ENTRANCE CANOPY TO BE WIRED THROUGH WOOD SUPPORT HOLDING PENDANT LIGHT. EACH FIXTURE TO HAVE JUNCTION BOX ON INTERIOR OF WALL.

NOTES TO ARCHITECT:
- FIXTURES IN THE KITCHEN HAVE REDUCED LUMEN OUTPUT/WATTAGE TO MEET COMCHECK.

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER & CATALOG NUMBER	LAMPS & BALLAST	MOUNTING	VOLTS	WATTS	REMARKS
A	2X4 LED TROFFER	BOH LIGHTING: 24-FPL1-LED-4000L-DIM10-MVOLT-35-85	3500K LED	SURFACE	120	52	
AE	2X4 LED TROFFER W/ BATTERY BACKUP	BOH LIGHTING: 24-FPL1-LED-4000L-DIM10-MVOLT-35-85-0-EMG-LED-20W	3500K LED	SURFACE	120	52	
L-1	LED SUSPENDED LIGHT	COMMERCIAL LIGHTING: BAS-SPWDL48-OAK-SPCC-LED-18W-35K-010V	3500K LED	SURFACE	120	18	
L-4	LED ACCENT LIGHT	NOLA MAKERS: BAS-PPC-10-RAL5018-OB6ST-48LST	3500K LED	PENDANT	120	12	
LL4	6" RECESSED DOWNLIGHT	HERMITAGE: LD6IC-AT-DIMTR-120	3500K LED	RECESSED	120	11.5	
LL4	6" RECESSED DOWNLIGHT	COMMERCIAL LIGHTING: LD6IC-AT-DIMTR-120	3500K LED	RECESSED	120	11.5	ALTERNATE VENDOR
L-9	LED SUSPENDED LIGHT	TBD	TBD	SURFACE	120	TBD	
EX	LED EMERGENCY LIGHT	EXITRONICS: VLED-U-WH-EL90R	N/A	WALL	120	5	
EM	LED EMERGENCY LIGHT	EXITRONICS: LED-90	N/A	WALL	120	5	
WP	WALL PACK W/ PHOTOCELL	WESTGATE: WES-LESW20W50KP	LED EM LIGHT	WALL	120	20	
D	RECESSED DOWNLIGHT	COMMERCIAL LIGHTING: DAL-RGR4-CC-BK	5000K LED	RECESSED	120	14	
H	LED GOOSENECKS	HERMITAGE: 93102318	3000K LED	WALL MOUNT	120	38	
H1	LED OUTDOOR SCONCE	COMMERCIAL LIGHTING: OUTDOOR SCONCE 1	LED	PENDANT	120	100	
P1	LED POLE LIGHT	HUBBELL LIGHTING: RAR2-320L-165-5K7-4W-UNV-ASQ-DBS	5000K LED	POLE MOUNT	UNV	165	

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3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ABDUL SAIF HASAN

9.13.2023

Company Logo

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10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

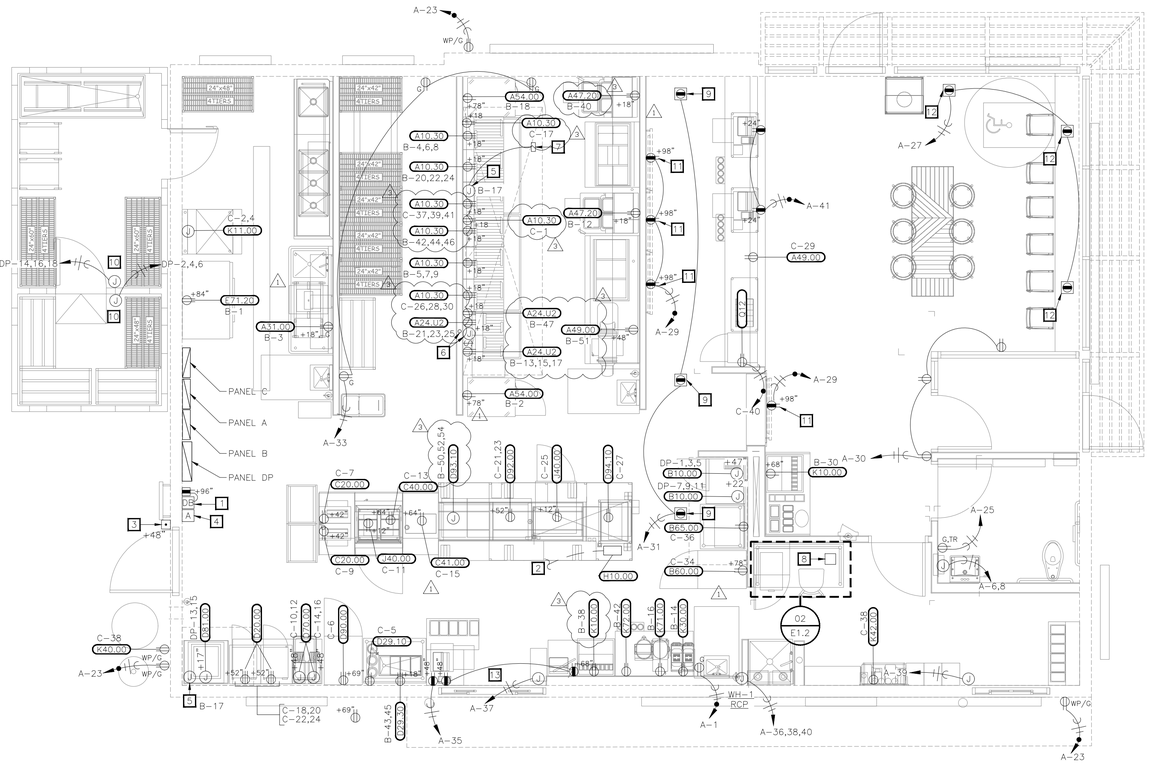
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

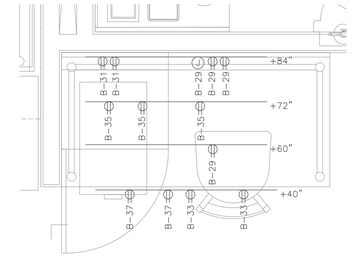
Drawing Title
ELECTRICAL LIGHTING PLAN

Drawn	Checked
JP	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	E1.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



01 POWER PLAN
1/4"=1'-0"



02 MANAGER'S DESK POWER PLAN
3/4"=1'-0"

ELECTRICAL KEYNOTES

1. PROVIDE DOUBLE DUPLEX RECEPTACLE ADJACENT TO TELEPHONE BOARD. PROVIDE #6 CU GROUND TO SERVICE ENTRANCE GROUND. SEE ARCHITECTURAL ELEVATIONS.
2. ALL POWER FOR ISLAND KITCHEN EQUIPMENT TO RUN THROUGH LOAD CENTER H10.00. CONDUIT TO RUN UNDER SLAB AND STUB AT H10.00.
3. SERVICE SIGN AND PUSHBUTTON FOR DOORBELL.
4. E.C. TO WIRE AND CONNECT REMOTE ANSUL PULLSTATION.
5. E.C. TO INSTALL AND WIRE RELAY CONTROL PANEL PACKAGE FOR HOOD EXHAUST FANS HEF-1 AND HEF-2. PROVIDE POWER AND INTERLOCK CONTROL WIRING FOR HP1-F CONTROL PANEL AND HOOD FIRE SUPPRESSION SYSTEM. SEE EXHAUST HOOD WIRING DETAIL SHEET E3.2.
6. HOOD ANSUL FIRE SUPPRESSION SYSTEM. PROVIDE 3/4" CONDUIT STUBBED ABOVE CEILING.
7. "ON/OFF" SELECTOR SWITCH AND PILOT LIGHT IN NEMA 4X STAINLESS STEEL ENCLOSURE MOUNTED ON THE FACE OF THE HOOD. PROVIDED BY HOOD MANUFACTURER.
8. OFFICE EXHAUST FAN SHALL BE CONNECTED TO OPERATE WITH AREA LIGHTING. INTERLOCK EXHAUST FAN WITH LIGHTS.
9. PROVIDE CEILING OUTLET WITH ISOLATED GROUND RECEPTACLES SUPPORTED FROM BUILDING STRUCTURE FOR VIDEO MONITOR, PRINTER, AND/OR HEADSET. VERIFY EXACT REQUIREMENTS AND LOCATION.
10. POWER CONNECTION TO WALK-IN FREEZER, EVAP, DEFROSTER, HEAT TAPE, AND DOOR HEATER.
11. POWER FOR MENUBOARDS. REFER TO "MONITOR BRACKET DETAIL" ON SHEET E3.1 FOR MORE INFORMATION.
12. CEILING MOUNTED SHOW WINDOW RECEPTACLE.
13. SEE DETAIL 07, E3.1 FOR DRIVE-THRU AUDIO AND TIMERS DIAGRAM.

ISSUE TABLE

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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ASIM HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
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10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA 19 72 KITCHEN
POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

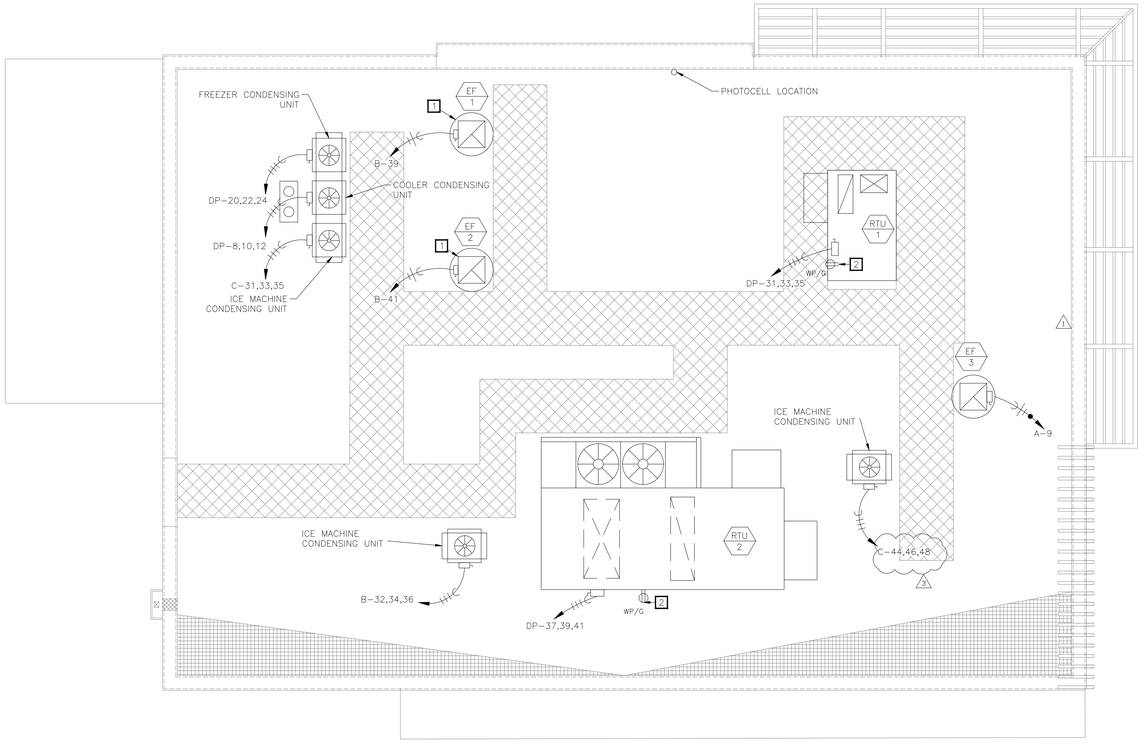
Drawing Title
ELECTRICAL POWER PLAN

Drawn	Checked
JP	AH
Scale	**Date**
AS SHOWN	JUNE 2023
Project No.	**Drawing No.**
C22-129	E1.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

ELECTRICAL KEYNOTES

1. PROVIDE CONNECTION TO ASSOCIATED SWITCH ON HOOD. COORDINATE ALL REQUIREMENTS WITH MECHANICAL DRAWINGS AND HOOD WIRING DIAGRAM PRIOR TO ROUGH-IN.
2. UNIT IS PROVIDED WITH UNIT MOUNTED UNIT POWERED CONVENIENCE RECEPTACLE.



01 ROOF POWER PLAN
1/4"=1'-0"

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

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2	9/04/2023	HEALTH COMMENTS
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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHI HASAN

9.13.2023

Company Logo

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TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
popeyes

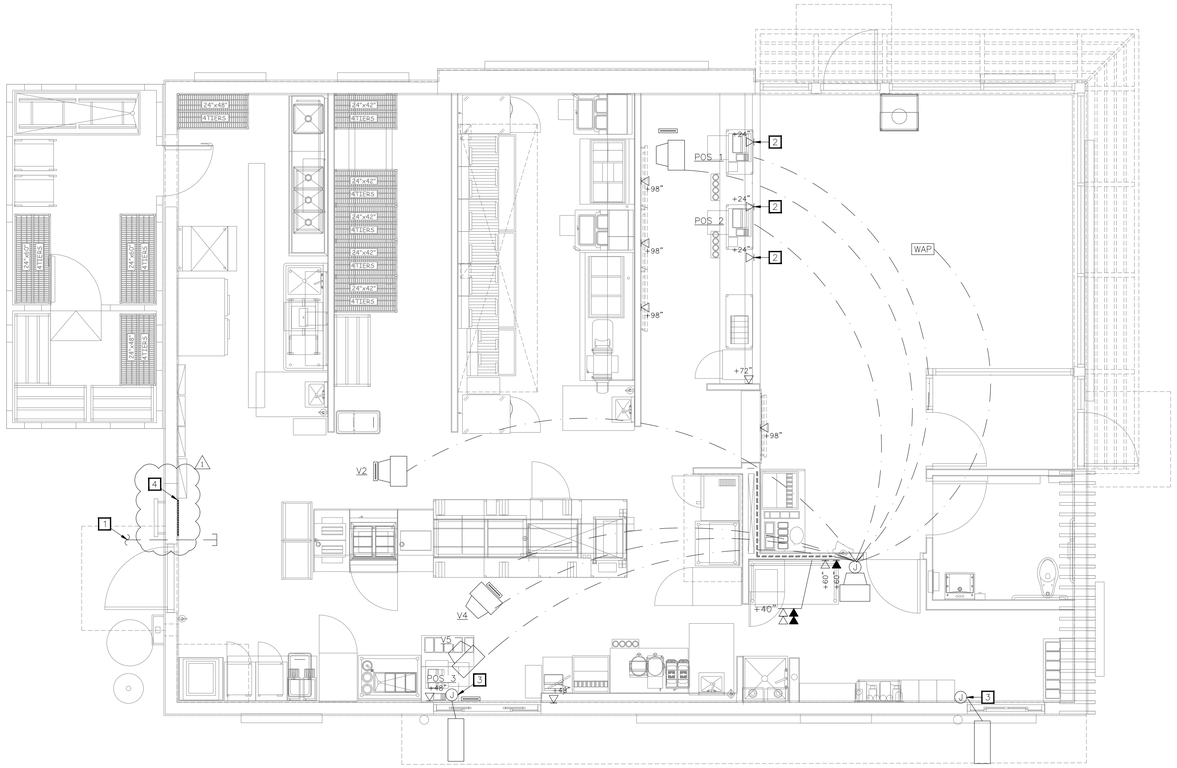
Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ELECTRICAL ROOF PLAN

Drawn	Checked
JP	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	E1.3

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



01 LOW VOLTAGE PLAN
1/4"=1'-0"

ELECTRICAL KEYNOTES

1. (2) 2" CONDUITS FROM TELEPHONE BOARD TO A LOCATION COORDINATED WITH LOCAL TELEPHONE COMPANY. OWNER REQUIRED SERVICE CONDUITS SHALL BE SIZED FOR 25 PAIR (MINIMUM). TELEPHONE SERVICE CONDUITS SHALL BE INSTALLED WITH PULL WIRE. CONDUITS RISE FROM U.G. INSIDE EXTERIOR WALL, TURN 90 DEGREES, AND TERMINATE IN BUILDING. SEE ARCHITECTURAL ELEVATIONS.
2. FRONT COUNTER REGISTER DATA OUTLETS MOUNTED ON INSIDE OF MILLWORK. PROVIDE 1" CONDUIT WITH PULL STRING FOR POS DATA BOXES.
3. PROVIDE JUNCTION BOX WITH 1" CONDUIT WITH PULL STRING THROUGH CURB TO 2" BELOW PAVEMENT LINE FOR CAR SENSOR DETECTOR LOOP. COORDINATE WITH CIVIL PLANS AND COORDINATE INSTALLATION IN FIELD WITH SUPPLIER.
4. PROVIDE 3/4" X 18" X 24" W PLYWOOD TELEPHONE BOARD PAINTED WITH 2 COATS OF "LISTED" FIRE RETARDANT LIGHT GRAY COLOR PAINT.

REGISTER CONNECTION NOTES

A. CABLES SHALL BE CAT6.

B. BUMP BARS SHALL BE MOUNTED TO DELIVER SYSTEM AT AREAS MARKED "BB".

C. BUMP BAR CABLES SHALL BE RUN THROUGH DELIVERY SYSTEM FROM MOUNT UP THROUGH WALLS TO ABOVE THE CEILING AND BACK TO THE MANAGER STATION.

D. CRT MONITORS SHALL BE MOUNTED ON CEILING BRACKETS PROVIDED BY REGISTER SYSTEM.

E. WHERE CABLING IS INSTALLED IN WALLS, IT SHALL BE ROUTED IN 1" CONDUIT THROUGH THE WALL TO ABOVE ACCESSIBLE CEILING.

POS LEGEND

- BUMP BAR WIRING
- VIDEO MONITOR AND POS WIRING
- SECURITY WIRING (CAT6)
- BB – BUMP BARS
- V1 = VIDEO 1
  V2 = VIDEO 2
  V3 = VIDEO 3
  V4 = VIDEO 4
  V5 = VIDEO 5
- POS – POINT OF SALE TERMINAL
- MONITOR
- WAP – WIRELESS APPLICATION PROTOCOL

NOTES TO ARCHITECT:
• ENGINEER NEEDS LOCATIONS FOR ALL SPEAKERS

SYMBOLS LEGEND NOTES:
MOUNTING HEIGHTS INDICATED ARE MEASURED FROM FINISHED FLOOR TO THE CENTERLINE OF THE DEVICE UNLESS NOTED OTHERWISE.

POPEYES RADIO SYSTEM
PROVIDED BY OWNER

DESCRIPTION	MAKE	MODEL	QUANTITY
RECESSED SPEAKERS*(DINING)	BOSE	MODEL #16, BLACK	4
RECESSED SPEAKERS*(KITCHEN)	MUZAK	MBS 8-ST3, BLACK	2
OUTDOOR BOX SPEAKERS*	OWI	701	4
AMPLIFIER	PASO	MU 3130 BGM	1
SPEAKER SUPPORT	QUAM	SSB-2	2
SPEAKER BACKCAN	QUAM	ERD-8	2
CABLE, CONNECTORS, HARDWARE AND SHELF	VARIOUS	VARIOUS	1
AREA VOLUME CONTROL	QUAM	QC-10	3
RECEIVER	ECOHO STAR	3000	1
DISH	CH MASTER	1.0 ANTENNA	1

* NUMBER OF SPEAKERS MAY VARY DUE TO DESIGN CONSIDERATIONS
* * LABOR INCLUDES INSTALLATION OF 150' OF 12 GAUGE SPEAKER WIRE. SEE THE NATIONAL ACCOUNT VENDOR LIST FOR EQUIPMENT SUPPLIER.

ISSUE TABLE

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3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER AFSHIN HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE•CIVIL ENGINEERING•MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

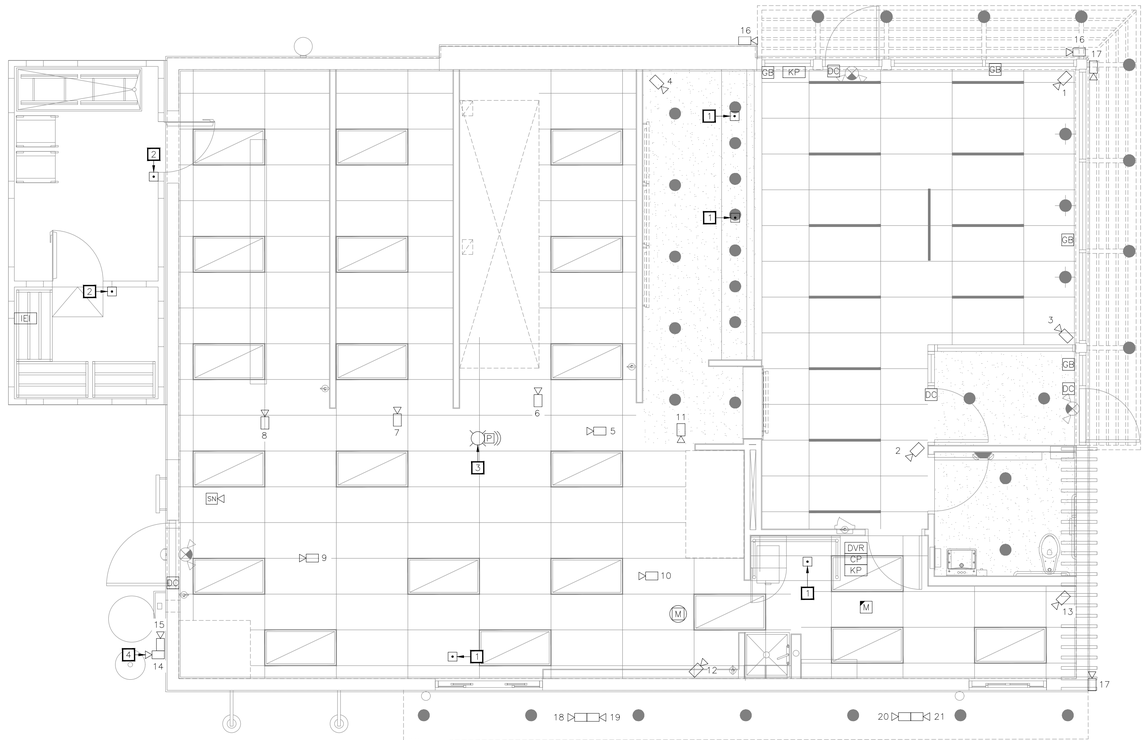
Store Type: US 2112 PROTOTYPE 2112-21

Location: 1517 NC 24-87 CAMERON, NC

Drawing Title: ELECTRICAL POS PLAN

Drawn	Checked
JP	AH
Scale	**Date**
1/4" = 1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	E1.4

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



01 SECURITY PLAN
1/4"=1'-0"

ELECTRICAL KEYNOTES

1. PROVIDE PANIC BUTTON INSTALLED ON UNDERSIDE OF COUNTER/ DESK.
2. PROVIDE WEATHERPROOF/ COLD-PROOF HOLD-UP PANIC BUTTON INSIDE WALK-IN COOLER/ FREEZER. COORDINATE EXACT INSTALLATION AND LOCATION WITH POPEYES CONSTRUCTION MANAGER.
3. STROBE LIGHT -AS SL-401B-BLUE STROBE LIGHT MOUNTED IN KITCHEN. LIGHT WILL FLASH CONTINUOUSLY WHILE BACK DOOR IS OPEN.
4. MOUNT CAMERA ON BUILDING CORNER AND ORIENT TO FACE DRIVE-THRU MENU BOARD.

POPEYES MATERIAL LIST

CAMERAS

A. CAMERA ACCESSORIES AND DETAILS:
- A.A. 6 OR 7 LOCATIONS (LOCATIONS W/OUTDOOR CAMERAS)
- A.B. 2 OR 3 GIT100-GROUND ISOLATION TRANSFORMERS
- A.C. LTC 0430/20-38 SERIES CAMERA W/ 3.5-8MM VARIFOCAL AUTOIRIS LENS
- A.D. TC 9340A SERIES OUTDOOR HOUSING
- A.E. TC9211PM POLE MOUNT ADAPTER
- A.F. NC CONNECTORS FOR PLENUM CABLE
- A.G. LEX CONDUIT FOR OUTDOOR CAMERAS RUN INSIDE POLE FOR CABLING

B. INDOOR CEILING MOUNT IN TINTED DOME:
- B.A. FASTEN SCREW IN CEILING FOR DOMES SO NOT EASILY DROPPED OUT OF TILE
- B.B. LTC 0430/20-38 SERIES CAMERA W/ 3.5MM-8MM VARIFOCAL AUTOIRIS LENS
- B.C. TC 9345MT7 INDOOR TINTED DOME
- B.D. BNC CONNECTORS FOR PLENUM CABLE

OFFICE AREA

C. AC-BURGLAR ALARM CONTROL: VISTA 20SEUL
D. VCR LOCK BOX : TC3922 SERIES
E. VCR: LTC 3924 SERIES PLACE ON SECURITY LOCK FOR NO TAMPER
F. MONITOR: LTC 2813/60 SERIES
G. ALTV248: 8 POSITION POWER SUPPLY
H. QUICK REFERENCE SHEETS
I. ALARM INSTRUCTION SHEET TO BE MOUNTED ON WALL IN EMPLOYEE ONLY AREA CLOSEST TO KEYPAD OR IN OFFICE AREA PER CUSTOMER INSTRUCTION
J. VCR INSTRUCTION SHEETS (2) 1-REVIEW & 1-RECORD-TO BE MOUNTED ON WALL CLOSEST TO VCR
K. 2-HUB: HOLD UP BUTTON 441494 SERIES LATCHING HUB

FOR LOCATIONS WITH 6 OR MORE CAMERAS: ADD MULTIPLEXER LTC 2641/60. PLACE ON NO-TAMPER SECURITY LOCK.

FOR LOCATIONS WITH 4 CAMERAS OR LESS: ADD VIDQUAD 4 CHANNEL LTC 2272/60

STOVE/ PREP AREA

L. STROBE LIGHT-AS SL-401B-BLUE STROBE MOUNT BEHIND MENU BOARD.
- L.A. STROBE LIGHT WILL FLASH CONTINUOUSLY WHILE BACK DOOR IS OPEN

M. SOUNDER-AS-PAL328N-LOW TONE SOUNDER MOUNT WITH STROBE BEHIND MENU BOARD.
- M.A. SOUNDER WILL SOUND WHEN BACK DOOR IS OPENED.
- M.B. MANAGER WILL SILENCE ST SOUNDER AT KEYPAD AFTER 1ST TONE

N. MOTION DETECTOR-AP 669 PIR-360 MOTION MOUNT IN STOVE AREA.
- N.A. MOTION DETECTOR RADIUS TO INCLUDE DRIVE-UP WINDOW AREA AND GENERAL REAR AREA.

LOBBY/ PERIMETER AREA/ BACK OF HOUSE

O. KEYPAD
- O.A. MOUNT 40" AFF WALL ENTERING KITCHEN AREA FROM LOBBY

P. FG 1025 GLASS BREAK
- P.A. GLASS BREAK FOR LOBBY GLAZING. PROVIDE ONE ON EACH SIDE OF BUILDING. COORDINATE EXACT DEVICE LOCATION AND INSTALLATION.

Q. B4039 DOOR CONTACT
- Q.A. PROVIDE FOR ALL EXTERIOR DOORS. BACK DOOR CONTACT TO ACT AS ALARM POINT FOR REAR "OPEN DOOR" ALARM. SOUNDER AND BLUE STROBE TO ACTIVATE WHEN BACK DOOR IS OPEN.

R. 3050CT SERIES HOLD-UP PANIC BUTTON
- R.A. LATCHING HUB IN COOLER/FREEZER. MOUNT 18" AFF ON HINGE SIDE OF DOOR SUB UP IN CONDUIT

S. POINT OF CONNECTION TO NKL SAFE
- S.A. PIGTAIL PROVIDED BY NKL SAFE

T. RELAYS FOR BACK DOOR/POC/ZONE EXPANSION
U. TELCO JACK
V. WATTS LINE

REFERENCE ONLY

SECURITY SYMBOL LEGEND

DEVICE	SYMBOL	QTY.	DEVICE	SYMBOL	QTY.
DOOR CONTACT	DC	4	DOME CAMERA (PROVIDE EXTERIOR RATINGS WHERE REQUIRED)	▷□◁	21
HORN/ SOUNDER	SN	1	14 INCH MONITOR	M	1
CONTROL PANEL	CP	1	DIGITAL VIDEO RECORDER	DVR	1
SECURITY KEYPAD	KP	2	IEI KEYPAD	IEI	1
MOTION DETECTOR (CEILING MOUNT)	(M)	1	STROBE LIGHT		1
GLASS BREAK	GB	4	PIEZO	P	1
HOLD-UP PANIC BUTTON	⊡	6			

SECURITY ACCEPTANCE FORM NOTE

CONTRACTOR TO FILL OUT "SECURITY INSTALLATION ACCEPTANCE FORM/CHECKLIST" ON SHEET E1.0 TO FINALIZE INSTALLATION OF SECURITY SYSTEM.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHAD HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

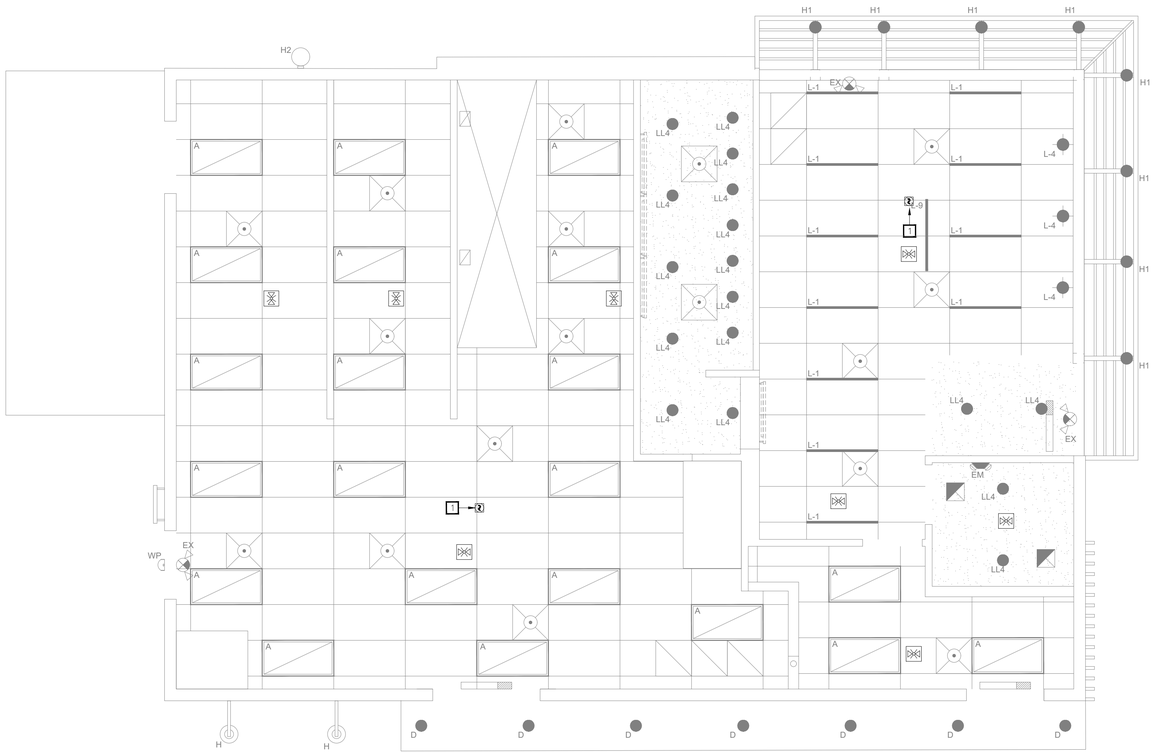
Drawing Title
ELECTRICAL SECURITY PLAN

Drawn	Checked
JP	AH
Scale	Date
1/4" = 1'-0"	JUNE 2023
Project No.	Drawing No.
C22-129	E1.5

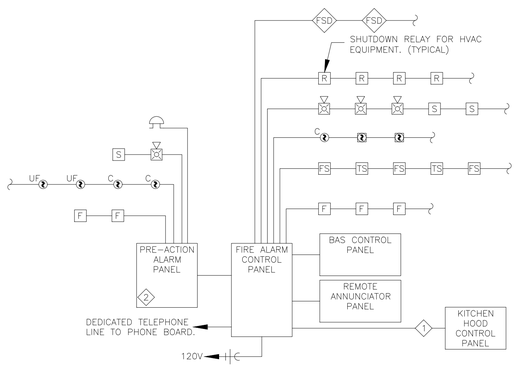
POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

ELECTRICAL KEYNOTES

1 PROVIDE 120V WIRING TO DUCT MOUNTED SMOKE DETECTORS AND REMOTE TEST INDICATORS.



01 FIRE ALARM PLAN
1/4"=1'-0"



FIRE ALARM CONTRACTOR SHALL VERIFY EXACT NUMBER OF CIRCUITS REQUIRED FOR ALL DEVICES, INCLUDING VOLTAGE DROPS AND BATTERY CALCULATIONS.

1 ELECTRICAL CONTRACTOR SHALL PROVIDE RELAY CONNECTION BETWEEN KITCHEN EXHAUST HOODS AND FIRE ALARM SYSTEM.

2 DATA ROOM SHALL BE MONITORED AND SIGNALED INDEPENDENTLY.

02 FIRE ALARM RISER DIAGRAM
NOT TO SCALE

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHAD HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-8400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ELECTRICAL FIRE ALARM PLAN

Drawn	Checked
JP	AH
Scale	**Date**
AS SHOWN	JUNE 2023
Project No.	**Drawing No.**
C22-129	E1.6

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

KITCHEN EQUIPMENT SCHEDULE

				FEEDER			CONNECTION						
EQUIPMENT MARK	ITEM DESCRIPTION	VOLTAGE-PHASE	MOCP	CONDUCTOR & GROUND	PIPE	MATERIAL	TYPE	AMPERAGE	POLES	FUSES	NEMA	HEIGHT	REMARKS
A10.30	MULTIPLE LE FRYER SYSTEM, ELECTRIC	120V-3P	70A	1 SET(6)#6,#10G	1"	COPPER	RECEPTACLE	56A	3		5-15	18"	Amperage per vat. Needs power for controls
A24.U2	MULTIPLE LE FRYER SYSTEM, ELECTRIC	208V-3P	60A	1 SET(4)#10,#8G	3/4"	COPPER	RECEPTACLE	47A	3		5-15	18"	Amperage per vat. Needs power for controls
A31.00	MARINATOR	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15	18"	
A47.10	BATTER CART	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15	18"	
A47.20	BATTER CART	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15		
A47.30	BATTER CART	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15	18"	
A49.00	DRUMROLL	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15		
A54.00	REACH-IN-FREEZER	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15	78"	
AB54.00	REACH-IN-FREEZER	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15		
B10.00	CONVECTION OVEN	120/208-3P	40A	1 SET(4)#8,#10G	3/4"	COPPER	HARDWIRE	24A	2			22"-47"	
B20.00	COUNTERTOP MIXER	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15		
B60.00	REACH-IN-REFRIGERATOR	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15	78"	
B65.00	BISCUIT HOLDING UNIT	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15		
C20.00	TOASTER	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15	42"	
C40.00	PRODUCT HOLDING BIN	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15		
C41.00	PRODUCT HOLDING BIN	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	20A	1		5-20	64"	
D20.00	MICROWAVE OVEN	208V-1P		1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	2		6-15	40"-52"	
D29.00	DIPPER WELL	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15		
D20.10	UTENSIL HOLDER	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1				
D29.30	HOT WELLS	208V-1P	20A	1 SET(3)#12,#12G	1/2"	COPPER	RECEPTACLE	5A	2				
D29.80	HOT WELLS	208V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	HARDWIRE		1				PROVIDE FOR (2) HOT WELLS
D50.00	ELECTRIC BOOSTER HEATER	208V-3P	30A	1 SET(3)#10,#10G	1/2"	COPPER	HARDWIRE		3				
D70.00	HOT WATER DISPENSER	208V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	HARDWIRE		2			48"	
D81.00	RETHERMALIZER, WATER TANK, ELECTRIC	208V-1P	60A	1 SET(2)#6,#10G	3/4"	COPPER	HARDWIRE		2			17"	
D90.00	COOK & HOLD OVEN	120V-1P	20A	1 SET(2)#10,#10G	1/2"	COPPER	RECEPTACLE	19A	1		6-30	69"	
D92.00	SIDE HOLDING BINS	208V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	2		6-15	LOADCNTR	INCLUDED IN #H10
D92.00DM	HOT HOLDING CABINET	208V-1P	30A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	30A	2		6-30		
D93.10	HOLDING BIN	208V-1P	35A	1 SET(2)#8,#10G	1/2"	COPPER	HARDWIRE						
D94.00DM	HOT HOLDING CABINET	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	20A	1		5-20		
D94.00PC	PROTEIN HOLDING BIN	208V-1P	30A	1 SET(2)#10,#10G	1/2"	COPPER	RECEPTACLE	30A	2		6-30		
D94.10PC	BISCUIT HOLDING UNIT	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15		
E10.00	WALK-IN COOLER/FREEZER	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	HARDWIRE		1				SEE SPECS
E71.00	EVEN-THAW REFRIGERATOR	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15	84"	
E71.20	THAWING CABINET	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	20A	1		5-20		
F15.10	FAB ELECTRICAL	208V-1P	15A	1 SET(2)#12,#12G	1-1/4"	COPPER	HARDWIRE		2				SEE SPECS
GR10.00	CONTACT GRILL	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	20A	1		5-20		
H10.00	FAB ELECTRICAL	120/208V-3P	15A	1 SET(4),#4,#8G	1/2"	COPPER	HARDWIRE		3				LOAD CENTER
H90.00	HOLDING CABINET	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	20A	1		5-20		
J40.00	UNDERCOUNTER REFRIGETATOR	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15	12"	
K10.00	ICE MAKER, CUBE-STYLTE	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15	68"	
K30.00	DRINK MACHINE	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	HARDWIRE		1			50"	
K11.00	ICE MAKER, CUBE-STYLE	208V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	HARDWIRE		2			66"	
K30.00	DRINK MACHINE	120V-1P	15A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	15A	1		5-15		
K42.00	BAG N BOX	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	20A	1		5-15		
K40.00	OIL MANAGEMENT SYSTEM	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	20A	1		5-20		
K71.00	TEA BREWER	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	RECEPTACLE	20A	1		5-20		

NOTES 1. VERIFY ALL ELECTRICAL CONNECTIONS PRIOR TO ROUGH-IN.

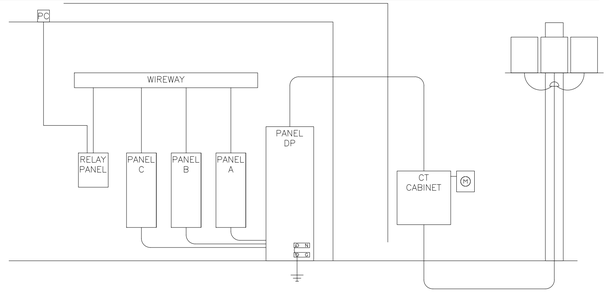
EQUIPMENT FEEDER SCHEDULE

			FEEDER			CONNECTION					
EQUIPMENT MARK	VOLTAGE-PHASE	MOCP	CONDUCTOR & GROUND	PIPE	MATERIAL	TYPE	AMPERAGE	POLES	FUSE	NEMA	REMARKS
RTU-1	208V-3P	90A	1 SET(3)#3, #8G	1-1/4"	COPPER	INTEGRAL DISCONNECT			NF		
RTU-2	208V-3P	175A	1 SET(4)#2/0,#6G	2"	COPPER	INTEGRAL DISCONNECT			NF		
EF-1	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	PROVIDE DISCONNECT	20A	1	NF	3R	1
EF-2	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	PROVIDE DISCONNECT	20A	1	NF	3R	
EF-3	120V-1P	20A	1 SET(2)#12,#12G	1/2"	COPPER	PROVIDE DISCONNECT	20A	1		3R	
ICE CONDENSER	208V-3P	20A	1 SET(3)#12,#12G	3/4"	COPPER	PROVIDE DISCONNECT	20A	3		3R	
ICE CONDENSER	208V-3P	20A	1 SET(3)#12,#12G	3/4"	COPPER	PROVIDE DISCONNECT	20A	3		3R	
ICE CONDENSER	208V-3P	20A	1 SET(3)#12,#12G	3/4"	COPPER	PROVIDE DISCONNECT	20A	3		3R	
COOLER CONDENSER	208V-3P	20A	1 SET(3)#12,#12G	3/4"	COPPER	PROVIDE DISCONNECT	20A	3		3R	
FREEZER CONDENSER	208V-3P	30A	1 SET(3)#12,#12G	3/4"	COPPER	PROVIDE DISCONNECT	30A	3		3R	

NOTES:
1 CIRCUIT THROUGH RELAY PANEL FOR CONTROL. SEE SCHEDULE FOR ADDITIONAL INFORMATION

FEEDER SCHEDULE

			FEEDER					
EQUIPMENT MARK	VOLTAGE-PHASE	MOCP	CONDUCTOR & GROUND	PIPE	MATERIAL	REMARKS	FAULT CURRENT	VOLTAGE DROP
UTILITY	500KVA 120/208V-3P INFINITE						111935	
DP	120/208V-3P	1000A	4 SETS(4)#250	3"	COPPER		36392	
A	120/208V-3P	225A	4 #4/0 & 1#4G	2-1/2"	COPPER		30819	0.10%
B	120/208V-3P	400A	2 SETS(4)#3/0 & 1#3G	2-1/2"	COPPER		33616	0.10%
C	120/208V-3P	225A	4 #4/0 & 1#4G	2-1/2"	COPPER		29805	0.10%



01 ELECTRICAL RISER DIAGRAM

NO SCALE

PANELBOARD: C
PANEL TYPE : NQ
LOCATION: B.O.H.
MAIN SIZE: 225 A
MAIN TYPE: MLO
BUS TYPE: COPPER
VOLTS: 120/208
PHASE/WIRE: 3/4
MOUNTING: SURFACE
PANEL IC RATING: 42,000 AIC

LOAD CLS	CKT	DESIGNATION	WIRE SIZE	LOAD VA	PL	AMPS	PHASE A	PHASE B	PHASE C	AMPS	PL	LOAD VA	WIRE SIZE	DESIGNATION	CKT	LOAD CLS
O	1	A10.30 - FRYER CONTROLS	2 #12,1#12G,3/4"C	1020	1	20	2164			15	2	1144	2 #12,1#12G,3/4"C	K11.00 - ICE MAKER **	2	O
	3	SHUNT TRIP			-	-		1144		-	-	1144	-	-	4	O
K	5	D29.10 - UTENSIL HOLDER **	2 #12,1#12G,3/4"C	100	1	15			2392	20	1	2292	2 #12,1#12G,3/4"C	D90.00 - COOK & HOLD OVEN **	6	K
K	7	C20.00 - TOASTER **	2 #12,1#12G,3/4"C	1800	1	20	1800			20	1			SPARE	8	
K	9	C20.00 - TOASTER **	2 #12,1#12G,3/4"C	1800	1	20		3360		20	2	1560	2 #12,1#12G,3/4"C	D70.00 HOT WATER DISPENSER **	10	K
K	11	J40.00 - U/C FRIDGE **	2 #12,1#12G,3/4"C	300	1	15			1860	-	-	1560	-	-	12	K
K	13	C40.00 HOLDING BIN **	2 #12,1#12G,3/4"C	1386	1	15	2946			20	2	1560	2 #12,1#12G,3/4"C	D70.00 HOT WATER DISPENSER **	14	K
K	15	C41.00 HOLDING BIN **	2 #12,1#12G,3/4"C	1000	1	20		2560		-	-	1560	-	-	16	K
O	17	A10.30 - FRYER CONTROLS	2 #12,1#12G,3/4"C	1020	1	20			2434	20	2	1414	2 #12,1#12G,3/4"C	D20.00 MICROWAVE OVEN **	18	K
	19	SHUNT TRIP			-	-	1414			-	-	1414	-	-	20	K
K	21	D92.00 - SIDE HOLDING BINS **	2 #12,1#12G,3/4"C	1670	2	20		3084		20	2	1414	2 #12,1#12G,3/4"C	D20.00 MICROWAVE OVEN **	22	K
K	23	-	-	1670	-	-			3084	-	-	1414	-	-	24	K
O	25	J40.00 - U/C FRIDGE **	2 #12,1#12G,3/4"C	300	1	15	7024			70	3	6724	3 #4,1#8G.1 1/4"C	A10.30 - FRYER (ELECTRIC) **	26	K
K	27	D94.10 - BISCUIT HOLDING UNIT **	2 #12,1#12G,3/4"C	1380	1	15		8104		--	--	6724	--	--	28	K
K	29	A49.00 DRUMROLL	2 #12,1#12G,3/4"C	1800	1	20			8524	--	--	6724	--	--	30	K
O	31	ICE MACHINE CONDENSER	3 #12,1#12G,3/4"C	458	3	15	458			-	-			SHUNT TRIP	32	
O	33	--	-- --	458	-	-		1178		15	1	720	2 #12,1#12G,3/4"C	B60.00 REACH-IN FRIDGE **	34	O
O	35	--	-- --	458	-	-			1458	15	1	1000	2 #12,1#12G,3/4"C	B65.00 BISQUIT HOLDING UNIT **	36	K
K	37	A10.30 - FRYER (ELECTRIC) **	3 #4,1#8G.1 1/4"C	6724	3	70	6904			20	1	180	2 #12,1#12G,3/4"C	K40.00 - OIL MGMT SYSTEM	38	O
K	39	--		6724	--	--		7084		20	1	360	2 #12,1#12G,3/4"C	Q12	40	R
K	41	--		6724	--	--			7224	20	1	500	2 #12,1#12G,3/4"C	HOOD CONTROLS	42	O
	43	SHUNT TRIP			-	-	458			15	3	458	3 #12,1#12G,3/4"C	ICE MACHINE CONDENSER	44	O
	45	SPARE			1	20		458		--	--	458		-	46	O
	47	SPARE			1	20			458	--	--	458		-	48	O
	49	SPARE			1	20				20	1			SPARE	50	
	51	SPARE			1	20				20	1			SPARE	52	
	53	SPARE			1	20				20	1			SPARE	54	
				36792			23168	26972	27434			40782				

LOAD SUMMARY

NEC CODE REFERENCE	LOAD ID	LOAD CATEGORY	CON LOAD TOT KVA	DEMAND FACTOR	DEMAND LOAD(KVA) PER PHASE: PHASE A	PHASE B	PHASE C	BALANCED 3P LOAD: KVA	AMP
220.12/220.42/220.43/220.14(F)	L	LIGHTING	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.14(I)(H), 220.44	R	RECEPTACLE:	0.36	1	0.00	0.36	0.00	0.36	1.00
220.14(C)/430.24	M	MOTORS:	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.56	K	KITCHEN EQUIPMENT:	68.44	0.65	12.75	15.49	16.25	44.48	123.48
220.60/440.6/440.7	A	AIR CONDITION:	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.51/220.60	H	HEAT (ELECTRIC):	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.14(A)	O	OTHER LOAD:	8.78	1.00	3.56	2.78	2.44	8.78	24.36
		SUB TOTAL	77.57		16.31	18.63	18.68	53.62	148.84
		SPARE		10%	1.63	1.86	1.87	5.36	14.88
210.20(A)/215.2(A)(1)/230.42(A)			0.00		0.00	0.00	0.00	0.00	0.00
220.14(C)/430.24			0.00		0.00	0.00	0.00	0.00	0.00
		TOTAL:			17.94	20.49	20.55	58.98	163.72

MARK	REMARKS
*	PROVIDE HACR BREAKER
**	GROUND
^	CONNECTED TO FIRE SUPPRESSION SYSTEM
#	IG GROUND/GFCI BREAKER
***	VIA LIGHTING CONTROL PANEL

PHASE DEMAND LOAD	KVA	AMPS	% UNBALANCE
PH A	17.94	149	0.08
PH B	20.49	171	0.04
PH C	20.55	171	0.04

PROVIDE: GROUND BUS
ISOLATED GROUND BUS
100% NEUTRAL BUS

\\\\Tdp-fs01\\dg\\Popeye's\\C22-129 - Cameron, NC (1517 NC 24-87)\\06 MEP\\Current CD's\\Panels\\[PANEL. - popeye'S 2124 PROTO.xlsx]PANEL C Wed Sep 13, 2023 11:17 71

PANELBOARD: DP
PANEL TYPE : I-LINE
LOCATION: B.O.H.
MAIN SIZE: 1000 A
MAIN TYPE: MCB
BUS TYPE: COPPER
VOLTS: 120/208
PHASE/WIRE: 3/4
MOUNTING: SURFACE
PANEL IC RATING: 42,000 AIC

LOAD CLS	CKT	DESIGNATION	WIRE SIZE	LOAD VA	PL	AMPS	PHASE A	PHASE B	PHASE C	AMPS	PL	LOAD VA	WIRE SIZE	DESIGNATION	CKT	LOAD CLS
K	1	B10.00 - CONVECTION OVEN	3 #8,1#10G,3/4"C	2880	3	40	3500			20	3	620	3 #12,1#12G,3/4"C	WALK IN COOLER	2	O
K	3	--	--	1440	--	--		2060		--	--	620	--	--	4	O
K	5	--	--	1800	--	--			2420	--	--	620	--	--	6	O
K	7	B10.00 - CONVECTION OVEN	3 #8,1#10G,3/4"C	2880	3	40	3040			20	3	160	3 #12,1#12G,3/4"C	COOLER CONDENSER	8	O
K	9	--	--	1440	--	--		1600		--	--	160	--	--	10	O
K	11	--	--	1800	--	--			1960	--	--	160	--	--	12	O
K	13	B81.00 - RETHERMALIZER	3 #6,1#10G,1"C	4950	3	60	5600			30	3	650	3 #10,1#10G,3/4"C	WALK IN FREEZER	14	O
K	15	--		4950	--	--		5600		--	--	650	--	--	16	O
	17	SPARE			1	20			650	--	--	650	--	--	18	O
	19	SPARE			1	20	530			20	3	530	3 #12,1#12G,3/4"C	FREEZER CONDENSER	20	O
	21	SPARE			1	20		530		--	--	530	--	--	22	O
	23	SPARE			1	20			530	--	--	530	--	--	24	O
	25	SPARE			3	20	16469.867			225	3	16470	3 #4/0,1#4G,2-1/2"C	PANEL A	26	X
	27	SPARE			--	--		13731.967		--	--	13732	--	--	28	X
	29	SPARE			--	--			13491.17	--	--	13491	--	--	30	X
A	31	RTU-1	3 #3,1#8G,1 1/4"C	9967	3	90	44909.135			400	3	34942	3 (2) #3/0,1#3G,2-1/2"C	PANEL B	32	X
A	33	-	-	9967	--	--		44012.47		--	--	34045	--	--	34	X
A	35	-	-	9967	--	--			44332.35	--	--	34365	--	--	36	X
A	37	RTU-2	3 #3/0,1#6G,2"C	21771	3	200	39706.72			225	3	17936	3 #4/0,1#4G,2-1/2"C	PANEL C	38	X
A	39	-	-	21771	--	--		42264.88		--	--	20494	--	--	40	X
A	41	-	-	21771	--	--			42324.17	--	--	20553	--	--	42	X
				117354			113755.72	109799.32	105707.7			211908.73				

LOAD SUMMARY

NEC CODE REFERENCE	LOAD ID	LOAD CATEGORY	CON LOAD TOT KVA	DEMAND FACTOR	DEMAND LOAD(KVA) PER PHASE: PHASE A	PHASE B	PHASE C	BALANCED 3P LOAD: KVA	AMP
220.12/220.42/220.43/220.14(F)	L	LIGHTING	8.74	1.00	4.35	2.00	2.39	8.74	24.26
220.14(I)(H), 220.44	R	RECEPTACLE:	9.24	1	1.94	3.20	4.10	9.24	25.65
220.14(C)/430.24	M	MOTORS:	1.74	1.00	0.50	0.37	0.87	1.74	4.84
220.56	K	KITCHEN EQUIPMENT:	222.40	0.65	49.13	49.87	45.56	144.56	401.25
220.60/440.6/440.7	A	AIR CONDITION:	95.21	1.00	31.74	31.74	31.74	95.21	264.29
220.51/220.60	H	HEAT (ELECTRIC):	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.14(A)	O	OTHER LOAD:	40.51	1.00	14.79	12.96	12.76	40.51	112.44
		SUB TOTAL	377.84		102.45	100.13	97.42	300.00	832.73
		SPARE		10%	10.24	10.01	9.74	30.00	83.27
210.20(A)/215.2(A)(1)/230.42(A)		CONTINUOUS (ADD 25%):	8.74	0.25	1.09	0.50	0.60	2.19	6.06
220.14(C)/430.24		LARGEST MOTOR (ADD 25%):	0.00		0.00	0.00	0.00	0.00	0.00
		TOTAL:			113.78	110.65	107.76	332.19	922.07

MARK	REMARKS
*	PROVIDE HACR BREAKER
**	SHUNT TRIP BREAKER
^	CONNECTED TO FIRE SUPPRESSION SYSTEM
#	IG GROUND/GFCI BREAKER
***	VIA LIGHTING CONTROL PANEL

PHASE DEMAND LOAD	KVA	AMPS	% UNBALANCE
PH A	113.78	948	0.02
PH B	110.65	922	0
PH C	107.76	898	0.02

PROVIDE: GROUND BUS
ISOLATED GROUND BUS
100% NEUTRAL BUS

\\\\Tdp-fs01\\dg\\Popeye's\\C22-129 - Cameron, NC (1517 NC 24-87)\\06 MEP\\Current CD's\\Panels\\[PANEL. - popeye'S 2124 PROTO.xlsx]DP Wed Sep 13, 2023 11:17 71

PANELBOARD: A
PANEL TYPE : NQ
LOCATION: B.O.H.
MAIN SIZE: 225 A
MAIN TYPE: MLO
BUS TYPE: COPPER
VOLTS: 120/208
PHASE/WIRE: 3/4
MOUNTING: RECESSED
PANEL IC RATING: 42,000

LOAD CLS	CKT	DESIGNATION	WIRE SIZE	LOAD VA	PL	AMPS	PHASE A	PHASE B	PHASE C	AMPS	PL	LOAD VA	WIRE SIZE	DESIGNATION	CKT	LOAD CLS
L	1	KITCHEN LTG / RECIRC PUMP	2 #12,1#12G,3/4"C	1092	1	20	1917			20	1	825	2 #12,1#12G,3/4"C	SITE LIGHTING	2	L
L	3	SERVICE AREA LTG	2 #12,1#12G,3/4"C	150	1	20		650		20	1	500	2 #12,1#12G,3/4"C	MONUMENT SIGN	4	L
L	5	DINING LTG	2 #12,1#12G,3/4"C	216	1	20			716	20	2	500	2 #12,1#12G,3/4"C	HAND DRYER **	6	M
L	7	DINING ACCENT LTG	2 #12,1#12G,3/4"C	35	1	20	535			--	--	500		-	8	M
L	9	RESTROOM LTG & EF-3	2 #12,1#12G,3/4"C	148	1	20		1348		20	1	1200	2 #12,1#12G,3/4"C	DT MENUBOARD	10	O
L	11	EXTERIOR BLDG LTG	2 #12,1#12G,3/4"C	174	1	20			534	20	1	360	2 #12,1#12G,3/4"C	DT ORDER PEDESTAL	12	O
L	13	BUILDING SIGNAGE	2 #12,1#12G,3/4"C	1200	1	20	1560			20	1	360	2 #12,1#12G,3/4"C	DT UG DETECTOR	14	O
L	15	BUILDING SIGNAGE	2 #12,1#12G,3/4"C	1200	1	20		2400		20	1	1200	2 #12,1#12G,3/4"C	DT PRE ORDER MENUBOARD	16	O
L	17	BUILDING SIGNAGE	2 #12,1#12G,3/4"C	1200	1	20			2000	20	1	800	2 #12,1#12G,3/4"C	EXTERIOR BLDG LTG	18	L
L	19	BUILDING SIGNAGE	2 #12,1#12G,3/4"C	1200	1	20	2400			20	1	1200	2 #12,1#12G,3/4"C	DT MENUBOARD	20	O
	21	SPARE			1	20		360		20	1	360	2 #12,1#12G,3/4"C	DT ORDER PEDESTAL	22	O
R	23	EXTERIOR RECEPTACLES	2 #12,1#12G,3/4"C	540	1	20			1020	20	1	480	2 #12,1#12G,3/4"C	DT UG DETECTOR	24	O
R	25	RESTROOM RECEPTACLES	2 #12,1#12G,3/4"C	180	1	20	1380			20	1	1200	2 #12,1#12G,3/4"C	DT PRE ORDER MENUBOARD	26	O
R	27	DINING ROOM RECEPTACLES	2 #12,1#12G,3/4"C	1080	1	20		1080		20	1			SPARE	28	
R	29	MENUBOARDS **	2 #12,1#12G,3/4"C	500	1	20			1040	20	1	540	2 #12,1#12G,3/4"C	DINING ROOM RECEPTACLES	30	R
R	31	KITCHEN CONV. RECEPTACLES	2 #12,1#12G,3/4"C	540	1	20	540			20	1			SPARE	32	
R	33	KITCHEN CONV. RECEPTACLES	2 #12,1#12G,3/4"C	540	1	20		540		20	1			SPARE	34	
R	35	KITCHEN CONV. RECEPTACLES	2 #12,1#12G,3/4"C	540	1	20			5540	60	3	5000	3 #6,1#10G,1"C	WH-1	36	O
R	37	DT WINDOW **	2 #12,1#12G,3/4"C	500	1	20	5500			-	-	5000	-- --	-	38	O
R	39	DT WINDOW **	2 #12,1#12G,3/4"C	500	1	20		5500		--	--	5000	-- --	--	40	O
R	41	POS SYSTEM **	2 #12,1#12G,3/4"C	720	1	20			720	20	1			SPARE	42	
				12255			13832	11878	11570			25025				

LOAD SUMMARY TABLE

NEC CODE REFERENCE	LOAD ID	LOAD CATEGORY	CON LOAD TOT KVA	DEMAND FACTOR	DEMAND LOAD(KVA) PER PHASE: PHASE A	PHASE B	PHASE C	BALANCED 3P LOAD: KVA	AMP
220.12/220.42/220.43/220.14(F)	L	LIGHTING	8.74	1.00	4.35	2.00	2.39	8.74	24.26
220.14(I)(H), 220.44	R	RECEPTACLE:	6.18	1	1.22	2.12	2.84	6.18	17.15
220.14(C)/430.24	M	MOTORS:	1.00	1.00	0.50	0.00	0.50	1.00	2.78
220.56	K	KITCHEN EQUIPMENT:	0.00	0.65	0.00	0.00	0.00	0.00	0.00
220.60/440.6/440.7	A	AIR CONDITION:	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.51/220.60	H	HEAT (ELECTRIC):	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.14(A)	O	OTHER LOAD:	21.36	1.00	7.76	7.76	5.84	21.36	59.29
		SUB TOTAL	37.28		13.83	11.88	11.57	37.28	103.48
		SPARE		10%	1.38	1.19	1.16	3.73	10.35
210.20(A)/215.2(A)(1)/230.42(A)		CONTINUOUS (ADD 25%):	8.74	25%	1.09	0.50	0.60	2.19	6.06
220.14(C)/430.24		LARGEST MOTOR (ADD 25%):	0.50	25%	0.17	0.17	0.17	0.50	1.39
		TOTAL:			16.47	13.73	13.49	43.69	121.28

MARK	REMARKS
*	PROVIDE HACR BREAKER
**	GROUND
^	PROVIDE LOCK-OFF DECIE PER 422.31(B):
***	VIA LIGHTING CONTROL PANEL

PHASE DEMAND LOAD	KVA	AMPS	% UNBALANCE
PH A	16.47	137	0.13
PH B	13.73	114	0.05
PH C	13.49	112	0.07

PROVIDE: GROUND BUS
ISOLATED GROUND BUS
100% NEUTRAL BUS

\\\\Tdp-fs01\\dg\\Popeye's\\C22-129 - Cameron, NC (1517 NC 24-87)\\06 MEP\\Current CD's\\Panels\\[PANEL. - popeye'S 2124 PROTO.xlsx]PANEL A Wed Sep 13, 2023 11:17 71

PANELBOARD: B
PANEL TYPE : NQ
LOCATION: B.O.H.
MAIN SIZE: 400 A
MAIN TYPE: MLO
BUS TYPE: COPPER
VOLTS: 120/208
PHASE/WIRE: 3/4
MOUNTING: SURFACE
PANEL IC RATING: 42,000 AIC

LOAD CLS	CKT	DESIGNATION	WIRE SIZE	LOAD VA	PL	AMPS	PHASE A	PHASE B	PHASE C	AMPS	PL	LOAD VA	WIRE SIZE	DESIGNATION	CKT	LOAD CLS
K	1	E71.20 - THAWING FRIDGE **	2 #12,1#12G,3/4"C	1920	1	20	2610			15	1	690	2 #12,1#12G,3/4"C	A54.00 - REACH IN FREEZER **	2	O
K	3	A31.00 - MARINATOR **	2 #12,1#12G,3/4"C	1073	1	20		7797		70	3	6724	3 #4,1#8G.1 1/4"C	A10.30 - FRYER (ELECTRIC) **	4	K
K	5	A10.30 - FRYER (ELECTRIC) **	3 #4,1#8G.1 1/4"C	6724	3	70			13448	--	--	6724	-- --	--	6	K
K	7	--	--	6724	--	--	13448			--	--	6724	-- --	--	8	K
K	9	--	--	6724	--	--		6724		-	-			SHUNT TRIP	10	
	11	SHUNT TRIP							184	15	1	184	2 #12,1#12G,3/4"C	A47.20 - BATTER CART **	12	K
K	13	A24.U2 - FRYER (ELECTRIC) **	3 #6,1#10G,1"C	5644	3	60	7084			15	1	1440	2 #12,1#12G,3/4"C	K30.00 - DRINK MACHINE **	14	K
K	15	--	--	5644	--	--		7344		20	1	1700	2 #12,1#12G,3/4"C	K71.00 - TEA BREWER **	16	K
K	17	--	--	5644	--	--			6334	20	1	690	2 #12,1#12G,3/4"C	A54.00 - REACH IN FREEZER **	18	O
	19	SHUNT TRIP					6724			70	3	6724	3 #4,1#8G.1 1/4"C	A10.30 - FRYER (ELECTRIC) **	20	K
K	21	A24.U2 - FRYER (ELECTRIC) **	3 #6,1#10G,1"C	5644	3	60		12368		--	--	6724		--	22	K
K	23	--	--	5644	--	--			12368	--	--	6724		--	24	K
K	25	--	--	5644	--	--	5644			-	-			SHUNT TRIP	26	
	27	SHUNT TRIP			-	-		360		20	1	360	2 #12,1#12G,3/4"C	K42.00 BAG-N-BOX RECEPTACLE **	28	R
R	29	MANAGERS DESK	2 #12,1#12G,3/4"C	720	1	20			1080	15	1	360	2 #12,1#12G,3/4"C	K10.00 ICE/BEVERAGE MACHINE **	30	O
R	31	MANAGERS DESK	2 #12,1#12G,3/4"C	360	1	20	818			15	3	458	3 #12,1#12G,3/4"C	ICE MACHINE CONDENSER	32	O
R	33	MANAGERS DESK	2 #12,1#12G,3/4"C	360	1	20		818		-	-	458	-	-	34	O
R	35	MANAGERS DESK	2 #12,1#12G,3/4"C	540	1	20			998	-	-	458	-	-	36	O
R	37	MANAGERS DESK	2 #12,1#12G,3/4"C	360	1	20	720			15	1	360	2 #12,1#12G,3/4"C	K10.00 - ICE MAKER **	38	O
M	39	EF-1	2 #12,1#12G,3/4"C	372	1	20		556		20	1	184	2 #12,1#12G,3/4"C	A47.20 - BATTER CART **	40	K
M	41	EF-2	2 #12,1#12G,3/4"C	372	1	20			7096	70	3	6724	3 #4,1#8G.1 1/4"C	A10.30 - FRYER (ELECTRIC) **	42	K
K	43	D29.30 HOT FOOD WELL	2 #12,1#12G,3/4"C	603	2	20	7327			--	--	6724			44	K
K	45	--		603	--	--		7327		--	--	6724	--		46	K
O	47	A24.U2 - FRYER CONTROL	2 #12,1#12G,3/4"C	1020	1	20			1020	--	--		--	SHUNT TRIP	48	
	49	SHUNT TRIP			-	-	3122			35	3	3122	3 #8,1#10G,3/4"C	D93.1 - HOLDING BIN **	50	K
K	51	A49.00 DRUMROLL **	2 #12,1#12G,3/4"C	192	1	20		3314		--	--	3122	--	--	52	K
	53	SPARE			1	20			3122	--	--	3122	--	--	54	K
				62531			47497	46608	45650			77224				

LOAD SUMMARY

NEC CODE REFERENCE	LOAD ID	LOAD CATEGORY	CON LOAD TOT KVA	DEMAND FACTOR	DEMAND LOAD(KVA) PER PHASE: PHASE A	PHASE B	PHASE C	BALANCED 3P LOAD: KVA	AMP
220.12/220.42/220.43/220.14(F)	L	LIGHTING	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.14(I)(H), 220.44	R	RECEPTACLE:	2.70	1	0.72	0.72	1.26	2.70	7.49
220.14(C)/430.24	M	MOTORS:	0.74	1.00	0.00	0.37	0.37	0.74	2.07
220.56	K	KITCHEN EQUIPMENT:	131.82	0.65	29.42	29.29	26.97	85.68	237.83
220.60/440.6/440.7	A	AIR CONDITION:	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.51/220.60	H	HEAT (ELECTRIC):	0.00	1.00	0.00	0.00	0.00	0.00	0.00
220.14(A)	O	OTHER LOAD:	4.49	1.00	1.51	0.46	2.53	4.49	12.47
		SUB TOTAL	139.76		31.65	30.84	31.13	93.62	259.86
		SPARE		10%	3.17	3.08	3.11	9.36	25.99
210.20(A)/215.2(A)(1)/230.42(A)			0.00		0.00	0.00	0.00	0.00	0.00
220.14(C)/430.24		LARGEST MOTOR (ADD 25%):	0.37	25%	0.12	0.12	0.12	0.37	1.03
		TOTAL:			34.94	34.05	34.37	103.35	286.88

MARK	REMARKS
*	PROVIDE HACR BREAKER
**	GROUND
^	CONNECTED TO FIRE SUPPRESSION SYSTEM
#	IG GROUND/GFCI BREAKER
***	VIA LIGHTING CONTROL PANEL

PHASE DEMAND LOAD	KVA	AMPS	% UNBALANCE
PH A	34.94	291	0.01
PH B	34.05	284	0.01
PH C	34.37	286	0

PROVIDE: GROUND BUS
ISOLATED GROUND BUS
100% NEUTRAL BUS

\\\\Tdp-fs01\\dg\\Popeye's\\C22-129 - Cameron, NC (1517 NC 24-87)\\06 MEP\\Current CD's\\Panels\\[PANEL. - popeye'S 2124 PROTO.xlsx]PANEL B Wed Sep 13, 2023 11:17 71

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

SEAL 41082
AFSAR HASAN
9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE • CIVIL ENGINEERING • MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
Popeyes

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

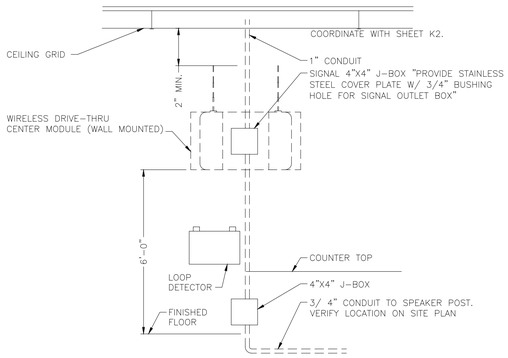
Drawing Title
ELECTRICAL SCHEDULES

Drawn	Checked
JP	AH

Scale	Date
NOT TO SCALE	JUNE 2023

Project No.	Drawing No.
C22-129	E2.1

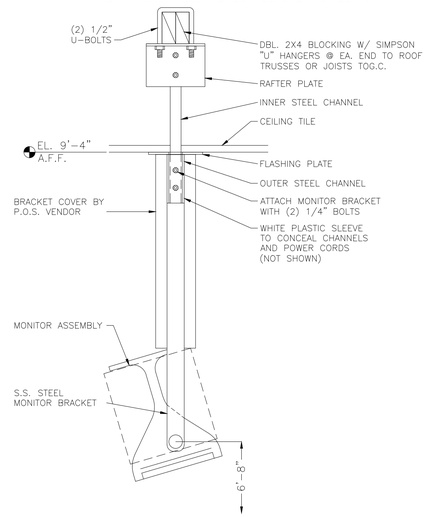
POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129



07 DRIVE-THRU AUDIO/TIMERS

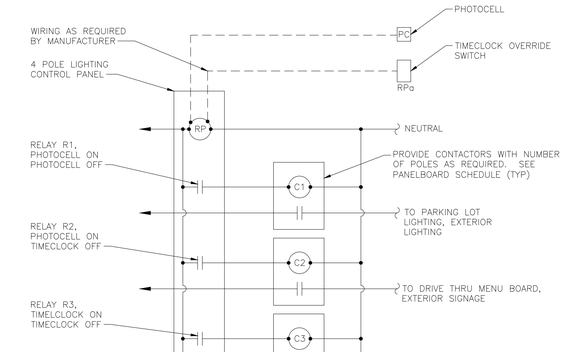
NOT TO SCALE

NOTES:
1. MONITOR BRACKETS TO BE SUPPLIED AND INSTALLED BY P.O.S. VENDOR.
2. G.C. TO SUPPLY 2X4 BLOCKING AND TO SECURE BLOCKING AT LOCATION PER P.O.S. VENDOR DIRECTION. VERIFY WITH P.O.S. VENDOR BEFORE INSTALLATION



04 MONITOR BRACKET DETAIL

NOT TO SCALE

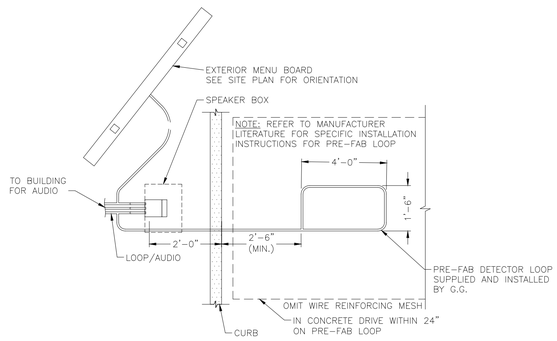


NOTES

1. NOT ALL LOADS AND CONTROLS ARE SHOWN. THIS DIAGRAM IS INTENDED TO PROVIDE GENERAL WIRING AND CONTROL INTENT ONLY.
2. PROGRAM LIGHTING CONTROL PANEL AS DIRECTED BY OWNER.
3. MINIMUM INTERRUPTING RATING FOR ALL RELAYS AND CONTACTORS SHALL BE 10,000 A.I.C.

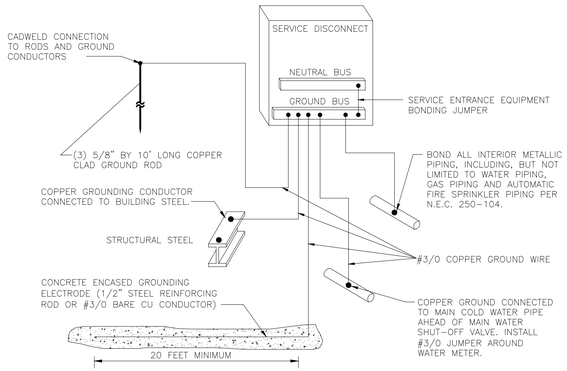
01 LIGHTING CONTROL DIAGRAM

NOT TO SCALE



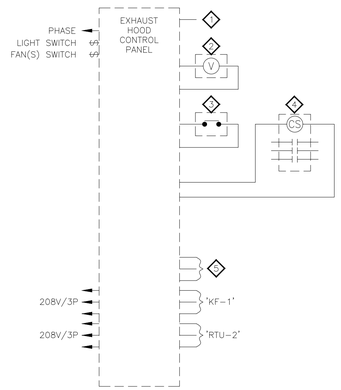
08 DRIVE-THRU LOOP DETECTOR

NOT TO SCALE



05 SERVICE ENTRANCE GROUNDING

NOT TO SCALE



DETAIL CODED NOTES:

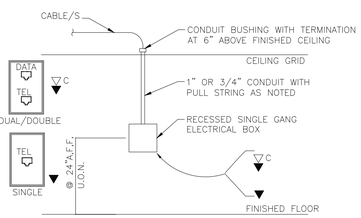
1. PROVIDE FIELD WIRING TO HOOD TEMPERATURE SENSORS PER MANUFACTURER'S SPECIFICATIONS.
2. ELECTRICALLY OPERATED GAS VALVE FOR COOKING EQUIPMENT BY OTHERS (IF REQUIRED).
3. FIRE SYSTEM MICRO SWITCH, OPENS WHEN FIRE SYSTEM DISCHARGES.
4. 60A/8P CONTACTOR WITH 120V COIL FOR ELECTRICAL EQUIPMENT UNDER HOOD (VERIFY LOCATIONS IN FIELD WITH OWNER)
5. PROVIDE ALL 120V AND LOW VOLTAGE CONNECTIONS BETWEEN HOOD CONTROL PANEL AND FANS. SEE CAPTIVE AIRE WIRING DIAGRAMS FOR WIRING REQUIREMENTS.

DETAIL GENERAL NOTES:

A. REFERENCE MECHANICAL DRAWINGS FOR CAPTIVE AIRE DETAILS AND WIRING DIAGRAMS.
B. INTERLOCK WIRING FOR MOTOR STARTER FURNISHED WITH HOOD.
C. INTERLOCK WIRING FOR GAS VALVE BY ELECTRICAL CONTRACTOR.
D. COORDINATE EXACT QUANTITY OF CONTACTOR POLES WITH PANEL SCHEDULES.
E. MAKE FINAL CONNECTIONS BETWEEN TEMPERATURE SENSOR INSTALLED IN HOOD AND HOOD CONTROL PANEL. REFER TO HOOD DRAWING FOR ADDITIONAL INFORMATION.
F. REFER TO ELECTRICAL PANEL SCHEDULES FOR PANEL CONNECTIONS.

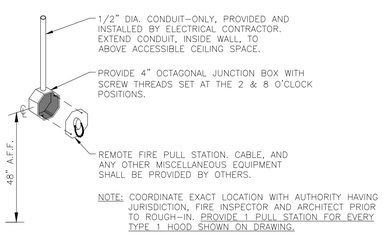
02 EXHAUST HOOD SHUT-DOWN WIRING DIAGRAM (HCP)

NOT TO SCALE



09 TYP. COMM. STUB UP

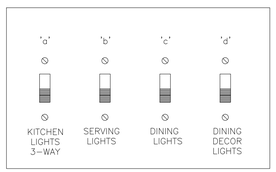
NOT TO SCALE



NOTE: COORDINATE EXACT LOCATION WITH AUTHORITY HAVING JURISDICTION, FIRE INSPECTOR AND ARCHITECT PRIOR TO ROUGH-IN. PROVIDE 1 PULL STATION FOR EVERY TYPE 1 HOOD SHOWN ON DRAWING.

06 REMOTE HOOD FIRE PULL STATION

NOT TO SCALE



SWITCHES SHALL BE PILOT LIT SWITCHES PER CODE AND LABELED AS SHOWN ABOVE

NOTES

1. PROGRAM SWITCH TO OVERRIDE ASSOCIATED RELAY ON FOR 1 HOUR.
2. SWITCHES SHALL BE PILOT LIT PER CODE.
3. PROVIDE MACHINE MADE LABELS AS SHOWN.

03 SWITCH BANK DETAIL

NOT TO SCALE

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL 214-343-9400 www.dimensionpg.com

Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type	
US 2112 PROTOTYPE 2112-21	

Location

1517 NC 24-87
CAMERON, NC

Drawing Title

ELECTRICAL DETAILS

Drawn	Checked
JP	AH
Scale	**Date**
NOT TO SCALE	JUNE 2023
Project No.	**Drawing No.**
C22-129	E3.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

"MORNING ARRIVAL"

STEP 1

TURN THE KITCHEN UNOCCUPIED-OCCUPIED SWITCH TO THE THE OCCUPIED POSITION. THE KITCHENS AIR CONDITIONING SYSTEM WILL GO FROM NIGHT SETBACK MODE TO THE THERMOSTAT SET POINT.

NOTE: THE AIR CONDITIONING FAN WILL START AND RUN CONTINUOUSLY. EXHAUST FAN WILL NOT RUN UNTIL THIS SWITCH IS IN THE OCCUPIED POSITION.

STEP 2

TURN ON THE EXHAUST FAN SWITCH TO THE ON POSITION THIS WILL ALLOW YOU TO TURN ON THE FRYERS.

"RESTAURANT OPEN FOR BUSINESS"

STEP 1

TURN THE DINING UNOCCUPIED-OCCUPIED SWITCH TO THE THE OCCUPIED POSITION. THE DINING AIR CONDITIONING SYSTEM WILL GO FROM NIGHT SETBACK MODE TO THE THERMOSTAT SET POINT.

STEP 2

TURN THE SIGN AND PARKING LOT LIGHTING SWITCHES TO THE AUTO POSITION, THIS WILL ENGAGE THE LIGHTING PHOTOCELLS SO THAT THE LIGHTS WILL AUTOMATICALLY COME ON AFTER DARK. TURN THE SWITCH TO THE ON POSITION TO OVER RIDE THE PHOTOCELLS AT ANY TIME THE LIGHTING MUST REMAIN ON.

"RESTAURANT CLOSE FOR BUSINESS"

STEP 1

TURN THE DINING UNOCCUPIED-OCCUPIED SWITCH TO THE UNOCCUPIED POSITION. THE DINING AIR CONDITIONING SYSTEM WILL GO FROM THE THERMOSTAT SET POINT TO THE NIGHT SET BACK MODE.

STEP 2

TURN THE SIGN AND PARKING LOT LIGHTING SWITCHES TO THE OFF POSITION, THIS WILL DISENGAGE THE LIGHTING PHOTOCELLS.

STEP 3

TURN THE EXHAUST FAN SWITCH TO THE OFF POSITION. THE UNDER HOOD COOKING EQUIPMENT WILL TURN OFF AND THE EXHAUST FAN WILL CONTINUE TO RUN FOR 15 MINUTES FOR A COOL DOWN CYCLE, AND THEN SHUT OFF AUTOMATICALLY.

NOTE: TO PREVENT ACCIDENTAL ANSUL DISCHARGE, ONE OF THE HOODS EXHAUST FANS WILL RUN 15 MINUTES AFTER THE EXHAUST FAN SWITCH IS TURNED TO THE OFF POSITION.

"EMPLOYEES LEAVING THE BUILDING"

STEP 1

WHEN READY TO EXIT THE BUILDING PUSH THE SECURITY DEPARTURES SWITCH. THE PARKING LOT LIGHTS WILL COME BACK ON FOR 15 MINUTES THEN SHUT OFF AUTOMATICALLY.

"MANAGER/LAST PERSON LEAVING THE BUILDING"

STEP 1

TURN THE KITCHEN UNOCCUPIED-OCCUPIED SWITCH TO THE UNOCCUPIED POSITION. THE KITCHENS AIR CONDITIONING SYSTEM WILL GO FROM THE THERMOSTAT SET POINT TO THE NIGHT SET BACK MODE.

STEP 2

WHEN READY TO EXIT THE BUILDING PUSH THE SECURITY DEPARTURE SWITCH. THE PARKING LOT LIGHTS WILL COME BACK ON FOR 15 MINUTES THEN SHUT OFF AUTOMATICALLY.

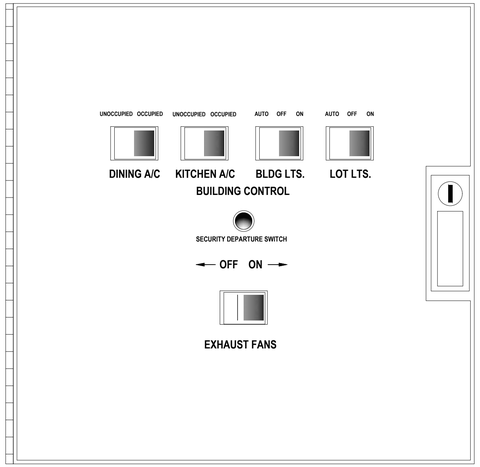
"HOOD VENTILATION SYSTEM NOTE"

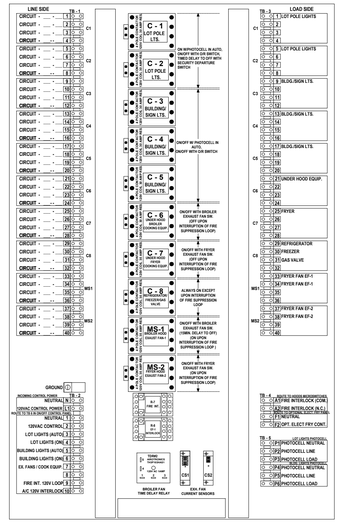
WHEN THE HOOD EXHAUST FAN CURRENT SENSOR DETECTS A DROP IN AMPERAGE (SUCH AS A BELT BREAKING) IT WILL DISABLE THE LINE VOLTAGE TO THE COOKING EQUIPMENT UNDER THE HOOD. THE EXHAUST FAN SWITCH SHOULD BE PLACED IN THE OFF POSITION AND THE FAN SHOULD BE CHECKED AND/OR REPAIRED BEFORE TURNING THE SWITCH TO THE ON POSITION.

"PARKING LOT LIGHTING NOTE"

WHEN THE PARKING LOT LIGHTS ARE TURNED OFF, THEY MUST COOL DOWN FOR ABOUT 10 MINUTES BEFORE THEY WILL COME BACK ON.

*NOTE: Current sensors are factory wired but must be field adjusted for proper operation. With the hood exhaust fans running, spin the potentiometer dials counterclockwise until the status "OFF" green LED lights and cooking equipment contactors de-energize. Then turn dials back clockwise one full turn. If the current sensors are improperly adjusted, cooking equipment may not shut off should a hoods exhaust fan fail. If the cooking equipment fails to operate while the hood switches are on and the exhaust fans are running, spin the appropriate setpoint dial clockwise until the status "ON" red LED lights.





POPEYES
SEQUENCE OF OPERATION

MANUAL CONTROL SYSTEM

THE A/C UNITS UNOCCUPIED-OCCUPIED SWITCH IS USED TO: TURN THE STORE ON IN THE MORNING AND OFF IN THE EVENING.

WHEN A/C UNIT UNOCCUPIED-OCCUPIED SWITCH IS TURNED TO THE ON POSITION:
THE AIR CONDITIONING SYSTEM WILL GO FROM NIGHT MODE TO SYSTEM ON.

THE AIR CONDITIONING FANS WILL START AND RUN CONTINUOUSLY.

THE OUTDOOR DAMPERS WILL OPEN TO A PRESET POSITION. (OPTIONAL)

DAMPERS WILL NOT OPEN DURING NIGHT SET BACK MODE. (OPTIONAL)

THE AIR CONDITIONERS WILL BEGIN TO COOL OR HEAT AT THE OCCUPIED TEMPERATURE SETPOINT.

THE COOKING EQUIPMENT AND EXHAUST FANS CAN NOW BE TURNED ON WHEN NEEDED.

WHEN A/C UNOCCUPIED-OCCUPIED SWITCH IS TURNED TO THE OFF POSITION:
EXHAUST FANS, SUPPLY FANS, AND EVAPORATOR BLOWERS WILL SHUT DOWN.

THE HEATING AND COOLING OPERATION SHALL REVERT TO SYSTEM NIGHT SET BACK MODE.

THE COOKING EQUIPMENT SHALL BE DISABLED.

THE SIGNAGE LIGHTING & LOT LIGHTING SHALL BE DISABLED IF SWITCHES ARE IN THE OFF POSITION.

THE PARKING LOT POLE LIGHTS & SECURITY LIGHTS SHALL REMAIN ON FOR 15 MIN AFTER THE SECURITY DEPARTURE SWITCH IS ACTIVATED.

WHEN THE HOOD EXHAUST FAN CURRENT SENSOR DETECTS A DROP IN AMPERAGE IT WILL DISABLE THE LINE VOLTAGE TO THE COOKING EQUIPMENT UNDER THE HOOD.

HOOD VENTILATION SYSTEM

IF THE KITCHEN A/C SWITCH IS IN THE OCCUPIED POSITION, THE HOOD VENTILATION SYSTEM CAN BE STARTED.

THE UNDER HOOD EQUIPEMENT SHALL BE STARTED BY MOVING THE EXHAUST FANS ON/OFF SWITCH TO THE ON POSITION. IF THE THE EXHAUST FAN SWITCH IS IN THE ON POSITION, THE MAKE-UP AIR UNIT (IF APPLICABLE) SHALL START AUTOMATICALLY.

ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM SHALL DE-ENERGIZE THE MAKE UP AIR UNIT, ALL A/C UNITS, AND THE CONTROLLED COOKING EQUIPMENT. THE HOODS EXHAUST SYSTEM SHALL CONTINUE TO OPERATE TO DRAW OUT SMOKE. THE FIRE SUPPRESSION SYSTEM SHALL BE MANUALLY RESET.

EXTERIOR LIGHTING CONTROL

ALL OF THE EXTERIOR LIGHTING SHALL BE CONTROLLED, WITH THE EXCEPTION OF THE SECURITY LIGHTS WHICH SHALL BE OPERATED BY ITS OWN PHOTOCELL. SECURITY LIGHTING IS OPTIONAL.

THE SIGNAGE SELECTOR SWITCH (3-POS.) CONTROLS THE PRIME SIGN, ALL MARQUEE SIGNS, AND BULUIDING ACCENT LIGHTING.

ON POSITION: LIGHTING SHALL BE ON PERMANENTLY.

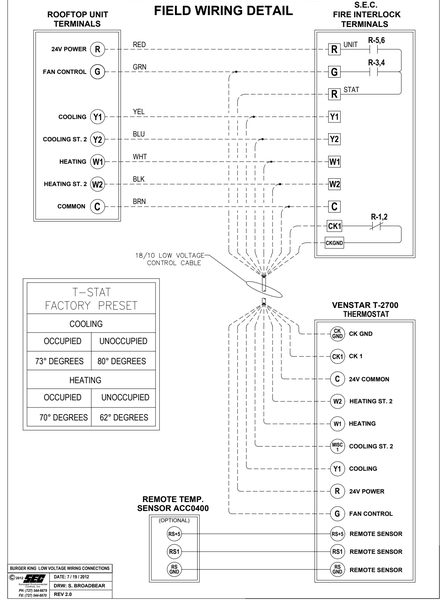
OFF POSITION: LIGHTING SHALL BE OFF PERMANENTLY.

AUTO POSITION: LIGHTING SHALL BE CONTROLLED BY THE PHOTO CELL.

THE LOT LIGHTS THREE POSITION SWITCH WORKS THE SAME AS THE SIGNAGE SWITCH.

NOTE: UNOCCUPIED-OCCUPIED / MASTER RELAY PANEL SHALL BE COMPLETE WHEN SHIPPED TO THE JOB SITE. NO INTERNAL WIRING SHALL BE REQUIRED. MAKE ALL EXTERNAL WIRING CONNECTIONS AS REQUIRED.

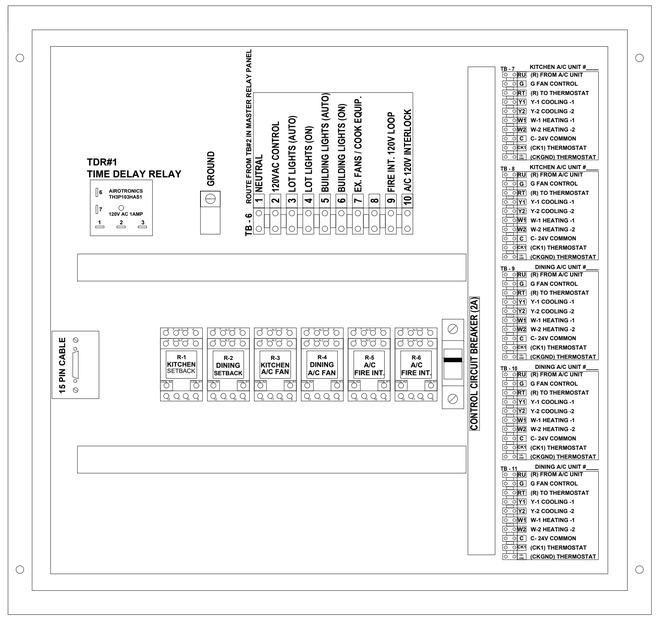
LOW VOLTAGE A/C CONTROL FIELD WIRING DETAIL

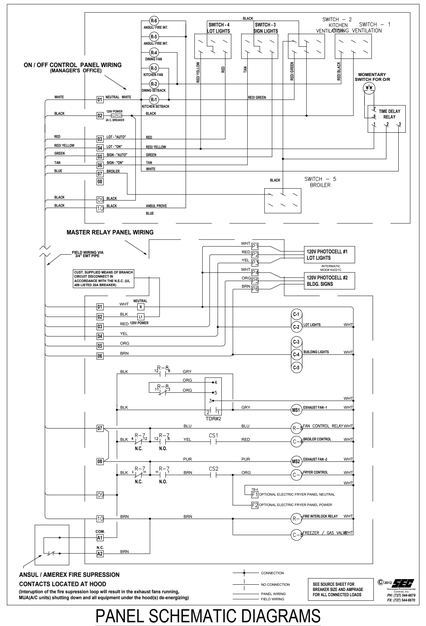


ELECTRICAL CONTRACTOR NOTES:

1. RUN ONE (10) CONDUCTOR 18 GAUGE THERMOSTAT CABLE FROM THE ROOFTOP AIR CONDITIONING UNIT TO THE "UNOCCUPIED-OCCUPIED" PANEL.
2. RUN ONE (10) CONDUCTOR 18 GAUGE THERMOSTAT CABLE FROM THE "UNOCCUPIED-OCCUPIED" PANEL TO THE THERMOSTAT LOCATION.
3. RUN ONE (10) CONDUCTOR 18 GAUGE THERMOSTAT CABLE FROM THE ROOFTOP AIR CONDITIONING UNIT TO THE NIGHT SETBACK THERMOSTAT LOCATION, IF NOT CONTROLLED WITH P-374-2700 T-STAT. REFER TO SHEET M-1
4. TERMINATION OF ALL 24 VOLT AIR CONDITIONING CONTROL WIRING SHALL BE DONE BY THE MECHANICAL CONTRACTOR.
5. ELECTRICAL CONTRACTOR SHALL RUN LINE VOLTAGE FROM THE CURRENT SENSOR LOCATED IN THE BROILER HOOD EXHAUST FAN TO THE CONTACTOR PANEL LOCATED BY THE SWITCHGEAR.

HVAC INTERLOCK PANEL
NFPA-96 COMPLIANT





PANEL SCHEMATIC DIAGRAMS

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHAD HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

Store Type	US 2112 PROTOTYPE 2112-21
Location	1517 NC 24-87 CAMERON, NC
Drawing Title	ELECTRICAL DETAILS
Drawn: JP	Checked: AH
Scale: NOT TO SCALE	Date: JUNE 2023
Project No.: C22-129	Drawing No.: E3.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

COM*check* Software Version 4.1.5.5
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Popeye's
Project Type: New Construction

Construction Site:
1517 NC 24-87
Cameron, NC

Owner/Agent:

Designer/Contractor:
The Dimension Group
10755 Sandhill Road
Dallas, TX 75238
214 343 9400

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
High Performance HVAC, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Dining: Cafeteria/Fast Food	6000	0.79	4740
		Total Allowed Watts =	4740

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Dining: Cafeteria/Fast Food				
LED 1: A/AE: 2X4 LED TROFFER: LED Panel 54W:	1	23	52	1196
LED 2: L-1: LED SUSPENDED: LED Linear 20W:	1	11	18	198
LED 3: L-9: LED SUSPENDED: LED Linear 22W:	1	1	30	30
LED 4: LL4: 6" RECESSED LED DOWNLIGHT: LED A Lamp 12W:	1	17	12	196
LED 5: L-4: LED ACCENT LIGHT: LED A Lamp 12W:	1	3	12	36
			Total Proposed Watts =	1656

Interior Lighting PASSES: Design 65% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jennifer Pfankuch - MEP Designer | Jennifer Pfankuch | 25 May 2023
Name - Title | Signature | Date

COM*check* Software Version 4.1.5.5
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Popeye's
Project Type: New Construction
Exterior Lighting Zone: 4 (High activity metropolitan commercial district (LZ4))

Construction Site:
1517 NC 24-87
Cameron, NC

Owner/Agent:

Designer/Contractor:
The Dimension Group
10755 Sandhill Road
Dallas, TX 75238
214 343 9400

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Walkway < 10 feet wide	57 ft of	0.7	Yes	40
Entry canopy	107 ft2	0.4	Yes	43
Parking area	20546 ft2	0.08	Yes	1644
Illuminated area of facade wall or surface	168 ft2	0.15	No	25
			Total Tradable Watts (a) =	1726
			Total Allowed Watts =	2152
			Total Allowed Supplemental Watts (b) =	900

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 900 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Walkway < 10 feet wide (57 ft of walkway length): Tradable Wattage				
LED 2: H1: LED SCONCE: LED Other Fixture Unit 103W:	1	8	100	800
Drive-up windows/doors (2 windows or doors): Non-tradable Wattage				
Entry canopy (107 ft2): Tradable Wattage				
LED 3: D: RECESSED DOWNLIGHT: LED A Lamp 13W:	1	7	14	98
Parking area (20546 ft2): Tradable Wattage				
LED 4: P1: LED POLE LIGHT: LED Roadway-Parking Unit 220W:	1	5	165	825
Illuminated area of facade wall or surface (168 ft2): Non-tradable Wattage				
LED 5: H: LED GOOSENECK: LED Other Fixture Unit 36W:	1	2	38	76
			Total Tradable Proposed Watts =	1723

Exterior Lighting PASSES: Design 33% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jennifer Pfankuch - MEP Designer | Jennifer Pfankuch | 25 May 2023
Name - Title | Signature | Date

COM*check* Software Version 4.1.5.5
Mechanical Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Popeye's
Location: Cameron, North Carolina
Climate Zone: 4a
Project Type: New Construction

Construction Site:
1517 NC 24-87
Cameron, NC

Owner/Agent:

Designer/Contractor:
The Dimension Group
10755 Sandhill Road
Dallas, TX 75238
214 343 9400

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
High Performance HVAC, 1.0 credit

Mechanical Systems List

Quantity	System Type & Description
1	HVAC System 2 (Single Zone): Heating: 1 each - Central Furnace, Electric, Capacity = 11 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 60 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: None
1	HVAC System 3 (Single Zone): Heating: 1 each - Central Furnace, Electric, Capacity = 44 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 151 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: None
1	Water Heater 1: Electric Storage Water Heater, Capacity: 50 gallons w/ Circulation Pump Proposed Efficiency: 0.84 SL, %/h (if > 12 kW), Required Efficiency: 0.84 SL, %/h (if > 12 kW)

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jennifer Pfankuch - MEP Designer | Jennifer Pfankuch | 25 May 2023
Name - Title | Signature | Date

COM*check* Software Version 4.1.5.5
Inspection Checklist

Energy Code: 2018 IECC

Requirements: 96.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR3][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C403.12.2, C403.12.3 [FO9][3]	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature and outdoor temperature. future connection to controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.1, C404.6.2 [PL3][1]	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41][3]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.11.3 [ME61][2]	HVAC piping insulation insulated in accordance with Table C403.11.3. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.11.3 [ME61][2]	HVAC piping insulation insulated in accordance with Table C403.11.3. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.8.1 [ME65][3]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. *See the Mechanical Systems list for values.*
C403.8.1 [ME65][3]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. *See the Mechanical Systems list for values.*
C403.8.3 [ME117][2]	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.8.3 [ME117][2]	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.12.1 [ME71][2]	Systems that heat outside the building envelope are radiant heat systems controlled by an occupancy sensing device or timer switch.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.3 [ME55][2]	HVAC equipment efficiency verified.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.2.2 [ME59][1]	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.7.1 [ME59][1]	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

N
PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER AFSAR HASAN

9.13.2023

Company Logo

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Project

LOUISIANA 19 72 KITCHEN
POPEYES

Store Type: US 2112 PROTOTYPE 2112-21

Location: 1517 NC 24-87 CAMERON, NC

Drawing Title: ELECTRICAL ENERGY CALCS

Drawn	Checked
JP	AH
Scale	**Date**
NOT TO SCALE	JUNE 2023
Project No.	**Drawing No.**
C22-129	E4.1

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87. CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.7.2 [ME115]¹	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.7.6 [ME141]¹	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.7.4 [ME57]²	Exhaust air energy recovery on systems meeting Table C403.7.4(1) and C403.7.4(2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.7.5 [ME116]¹	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.11.1 C403.11.2 [ME60]²	HVAC ducts and plenums insulated in accordance with C403.11.1 and constructed in accordance with C403.11.2, verification may need to occur during Foundation Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.3.1 [ME50]²	Three-pipe hydronic systems using a common return for hot and chilled water are not used.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.3.1 [ME50]²	Three-pipe hydronic systems using a common return for hot and chilled water are not used.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.5 [ME26]¹	Chilled water plants with multiple chillers have capability to reduce flow automatically through the chiller plant when a chiller is shut down. Boiler plants with multiple boilers have the capability to reduce flow automatically through the boiler plant when a boiler is shut down.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.5 [ME26]¹	Chilled water plants with multiple chillers have capability to reduce flow automatically through the chiller plant when a chiller is shut down. Boiler plants with multiple boilers have the capability to reduce flow automatically through the boiler plant when a boiler is shut down.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.1.4 [ME63]²	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60F and cooling setpoint >= 80F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.9.5 [ME31]³	Condenser heat recovery system that can heat water to 85 °F or provide 60% of peak heat rejection is installed for preheating of service hot water.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.9.5 [ME31]³	Condenser heat recovery system that can heat water to 85 °F or provide 60% of peak heat rejection is installed for preheating of service hot water.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.2.1 [ME53]³	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.2.2 [ME54]³	HVAC hydronic heating and cooling coils have means to balance and have pressure test connections.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.2.2 [ME54]³	HVAC hydronic heating and cooling coils have means to balance and have pressure test connections.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.5, C403.5.1, C403.5.2 [ME123]³	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22]¹	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1, C405.2.1.1 [EL18]¹	Occupancy sensors installed in classrooms/lecture/training rooms, conforenco/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1.2 [EL19]¹	Occupancy sensors control function in warehouses; In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.1.3 [EL20]¹	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.2, C405.2.2.1, C405.2.2.2 [EL21]²	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23]²	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.4 [EL26]¹	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL27]¹	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.5 [EL28]²ⁿᵈ	Manual controls required by the energy code are in a location with ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.6 [EL30]²ⁿᵈ	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.3 [EL6]¹	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.6 [EL26]²	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.7 [EL27]²	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28]²	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.9 [EL29]²	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17]³	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C303.3, C408.2.5.3 [FI8]³	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.2 [FI27]³	HVAC systems and equipment capacity does not exceed calculated loads.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1 [FI47]³	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1 [FI47]³	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.1.2 [FI38]³	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1.3 [FI20]³	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.2 [FI39]³	Each zone equipped with setback controls using automatic time clock or programmable control system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.2.1, C403.2.4.2.2 [FI40]³	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.3 [FI11]³	Heat traps installed on supply and discharge piping of non-circulating systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.4 [FI25]³	All piping insulated in accordance with section details and Table C403.11.3.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C404.6.1 [FI12]³	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.4.1 [FI18]³	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C405.5.1 [FI19]³	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C408.1.1 [FI57]³	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.1 [FI28]³	Commissioning plan developed by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.1 [FI31]³	HVAC equipment has been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.2 [FI10]³	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.4 [FI29]³	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI7]³	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI16]³	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.3 [FI43]³	An air and/or hydronic system balancing report is provided for HVAC systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.5.4 [FI30]³	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.3 [FI33]³	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

ISSUE TABLE

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DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHAD HASAN

9.13.2023

Company Logo

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Project

LOUISIANA KITCHEN 19 72 POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ELECTRICAL ENERGY CALCS

Drawn	Checked
JP	AH
Scale	**Date**
NOT TO SCALE	JUNE 2023
Project No.	**Drawing No.**
C22-129	E4.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

SECTION 16000 — BASIC ELECTRICAL

1. THE WORK COVERED BY DIVISION 16 CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, SUPPLIES, AND MATERIALS (EXCEPT AS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS) REQUIRED TO PERFORM ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF COMPLETE ELECTRICAL SYSTEMS. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.

2. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS TO PREVENT CONFLICTS CAUSING UNNECESSARY EXPENSE OR DELAYS IN THE INSTALLATION OF WORK. WHEN CONFLICTS ARISE, REMOVE AND RELOCATE ITEMS CAUSING SUCH CONFLICTS AT NO ADDITIONAL COST TO THE OWNER. REFER TO OTHER DISCIPLINE'S DRAWINGS, RELEVANT EQUIPMENT DRAWINGS, AND SHOP DRAWINGS TO DETERMINE AVAILABLE CLEARANCES AND POSSIBLE OBSTRUCTIONS. MAKE ANY NECESSARY OFFSETS OR TRANSITIONS AS REQUIRED TO CLEAR STRUCTURAL MEMBERS, EXISTING EQUIPMENT, ETC. TO FACILITATE INSTALLATION OF THE WORK IN THE MANNER INDICATED.

3. ALL WORK SHALL COMPLY WITH THE LOCALLY ADOPTED ELECTRICAL CODE AND ALL APPLICABLE LAWS, CODES, RECOMMENDATIONS, REGULATIONS, AND INTERIM AMENDMENTS, OF THE GOVERNMENTAL BODIES HAVING JURISDICTION INCLUDING ADA COMPLIANCE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE GOVERNING SAFETY REGULATIONS, INCLUDING OSHA REGULATIONS. ALL SAFETY LIGHTS, GUARDS AND SIGNS REQUIRED FOR THE PERFORMANCE OF THE ELECTRICAL WORK SHALL BE PROVIDED BY AND OPERATED BY THE ELECTRICAL CONTRACTOR.

4. THE INTENT OF THE DRAWINGS IS TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS FOR ELECTRICAL WORK ARE DIAGRAMMATIC, SHOWING THE LOCATION, TYPE, DEVICES AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. PROVIDE ALL FIXTURES, DEVICES, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT FURNISHED BY OTHERS.

5. ELECTRICAL DESIGN FOR THIS INSTALLATION IS BASED ON FIELD INSPECTIONS AND PREVIOUS DESIGN DRAWINGS FOR THE EXISTING BUILDING. ELECTRICAL CONTRACTOR IS TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING. ALLOWANCES ARE TO BE INCLUDED FOR UNFORESEEN EXISTING CONDITIONS THAT MAY EFFECT THE CONTRACTOR'S SCOPE OF WORK. MINOR DEVIATIONS REQUIRED FOR ACCOMPLISHING THE INTENT OF THIS DESIGN IS TO BE INCLUDED IN THIS ALLOWANCE.

6. ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES. ANY ITEM DAMAGED BY THIS CONTRACTOR IS TO BE REPAIRED IMMEDIATELY AND AT NO COST TO THE OWNER.

7. ROOF PENETRATIONS SHALL COMPLY WITH "SMACNA" AND "NRCA" STANDARDS, AND WITH THE REQUIREMENTS OF THE EXISTING ROOFING WARRANTY, IF APPLICABLE. DO NOT PERFORM ROOFING PENETRATIONS IN A MANNER WHICH WOULD VOID OR OTHERWISE LIMIT THE EXISTING ROOFING WARRANTY.

8. ALL EQUIPMENT AND COMPONENTS FURNISHED AND/OR INSTALLED SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).

9. TEMPORARY ELECTRICAL SERVICE:

   A. PROVIDE TEMPORARY ELECTRICAL SERVICE FOR POWER AND LIGHTING DURING CONSTRUCTION. MAINTAIN DURING CONSTRUCTION AND REMOVE SERVICE AFTER CONSTRUCTION IS COMPLETED. THE TEMPORARY SYSTEM SHALL CONSIST OF AN ELECTRICAL SERVICE, DISTRIBUTION SYSTEM, LOAD-CENTER PANEL, GROUNDING, 15 AMP AND/OR 20 AMP BRANCH CIRCUITS, GROUNDED TYPE RECEPTACLES AND LIGHTING FIXTURES.

   B. PROVIDE AND INSTALL SUFFICIENT NUMBER OF TEMPORARY LIGHT FIXTURES FOR A SAFE INSTALLATION FOR ALL TRADES THROUGHOUT THE BUILDING. ALL LAMPS FOR GENERAL ILLUMINATION SHALL BE PROTECTED FROM ACCIDENTAL CONTACT OR BREAKAGE BY SUITABLE FIXTURE OR LAMPHOLDER WITH A GUARD. (NO EXCEPTIONS.)

10. WARRANTIES:

   A. CONTRACTOR SHALL WARRANT ALL WORK PERFORMED AND MATERIAL & LABOR PROVIDED UNDER THE CONTRACT AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR ONE YEAR FROM SUBSTANTIAL COMPLETION. PROVIDE ALL SERVICES AS REQUIRED TO IMMEDIATELY REPAIR OR REPLACE, AT NO ADDITIONAL COST, ANY DEFECTIVE PART OF THE INSTALLATION RESULTING FROM THE SUPPLY OF FAULTY WORKMANSHIP OR MATERIAL. LACK OF MAINTENANCE, ACCIDENTS, OR CARELESSNESS ON THE PART OF THE OWNER SHALL NOT BE INCLUDED IN THIS WARRANTY.

   B. ALL LAMPS ARE TO BE WARRANTED ACCORDING TO LAMP MANUFACTURER, WHICH IS ALSO BASED ON AVERAGE LIFE DATA FOR EACH SPECIFIC TYPE OF LAMP. PROVIDE LABOR TO REPLACE ALL DEFECTIVE LAMPS THAT ARE WITHIN LAMP MANUFACTURER'S WARRANTY PERIOD.

   C. ALL EQUIPMENT, APPARATUS AND APPLIANCES WHICH ARE SPECIFIED AND/OR COME WITH WARRANTIES LONGER THAN ONE YEAR SHALL BE REGISTERED WITH THE MANUFACTURER IN THE OWNER'S NAME.

11. EXCAVATION:

   A. PROVIDE ALL EXCAVATION AND BACKFILL AS NECESSARY TO INSTALL THE CONDUIT SYSTEMS AS SHOWN ON THE DRAWINGS.

   B. CARE SHALL BE TAKEN IN EXCAVATING THAT WALLS AND FOOTINGS AND ADJACENT LOAD BEARING SOILS ARE NOT DISTURBED IN ANY WAY. WHERE RACEWAYS MUST CROSS UNDER A WALL FOOTING, THE EXCAVATION SHALL BE KEPT AT A MINIMUM.

   C. CONDUIT SHALL BE SUPPORTED DIRECTLY ON UNDISTURBED SOIL, DO NOT EXCAVATE BEYOND INDICATED DEPTH. IF EXISTING SOIL IS UNSUITABLE (SOFT SPOT OR ROCK), EXCAVATE TO SOLID SUBGRADE, OR 6" FOR ROCK, BELOW BOTTOM OF WORK AND PROVIDE SUB-BASE MATERIAL AS REQUIRED.

   D. IMMEDIATELY AFTER INSTALLATION, THE TRENCH SHALL BE CAREFULLY BACKFILLED WITH EARTH FREE FROM CLODS, BRICK, ETC. TO A DEPTH ONE-HALF THE RACEWAY DIAMETER AND THEN FIRMLY TAMPED IN SUCH A MANNER AS NOT TO DISTURB ALIGNMENT OR JOINTS OF THE CONDUIT. THEREAFTER THE BACKFILL SHALL BE TAMPED EVERY VERTICAL FOOT.

12. CUTTING AND PATCHING:

   A. NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED, OR PENETRATED WITHOUT PRIOR APPROVAL FROM THE ARCHITECT.

   B. PROVIDE CUTTING, PATCHING, AND PATCH PAINTING IN EXISTING STRUCTURES, AS REQUIRED FOR THE INSTALLATION OF WORK OF THIS SECTION. EXTENT OF CUTTING SHALL BE MINIMIZED. USE CORE DRILLS, POWER SAWS, AND OTHER MACHINES WHICH WILL PROVIDE NEAT, MINIMUM OPENINGS. REFER TO STRUCTURAL DRAWINGS FOR LINTELS AND SUPPORTS TO BE FURNISHED BY OTHERS FOR THE ELECTRICAL WORK. ALL OTHER LINTELS AND SUPPORTS REQUIRED FOR THE ELECTRICAL WORK SHALL BE FURNISHED BY DIVISION 16. PATCHING SHALL MATCH AND EQUAL ADJACENT MATERIALS AND SURFACES AND SHALL BE PERFORMED BY CRAFTSMAN SKILLED IN THE RESPECTIVE CRAFT REQUIRED. PATCHED FINISHES SHALL BE APPROVED BY THE ARCHITECT.

   C. ALL PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT SHALL BE REPAIRED AND REPLACED BY THIS CONTRACTOR, TO THE SATISFACTION OF THE AUTHORITIES HAVING REGULATORY JURISDICTION AND BUILDING OWNER.

SECTION 16060 — GROUNDING

1. EXTENT OF ELECTRICAL GROUNDING AND BONDING WORK IS INDICATED BY DRAWINGS AND AS SPECIFIED HEREIN. GROUNDING AND BONDING WORK IS DEFINED TO ENCOMPASS SYSTEMS, CIRCUITS, AND EQUIPMENT.

2. EXCEPT AS OTHERWISE INDICATED, PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEMS INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING, BUT NOT LIMITED TO, CABLES/WIRES, CONNECTORS, SOLDERLESS LUG TERMINALS, GROUNDING ELECTRODES AND PLATE ELECTRODES, BONDING JUMPER BRAID, AND ADDITIONAL ACCESSORIES NEEDED FOR A COMPLETE INSTALLATION. WHERE MORE THAN ONE TYPE COMPONENT PRODUCT MEETS INDICATED REQUIREMENTS, SELECTION IS INSTALLER'S OPTION. WHERE MATERIALS OR COMPONENTS ARE NOT INDICATED, PROVIDE PRODUCTS WHICH COMPLY WITH BUILDING CODES, UL, AND IEEE REQUIREMENTS AND WITH ESTABLISHED INDUSTRY STANDARDS FOR THOSE APPLICATIONS INDICATED.

3. INSTALL ELECTRICAL GROUNDING AND BONDING SYSTEMS AS INDICATED, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPLICABLE PORTIONS OF THE BUILDING CODES, NECA'S "STANDARD OF INSTALLATION", AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS.

4. RACEWAY SYSTEMS SHALL NOT BE USED AS GROUNDING METHOD. ALL BRANCH AND FEEDER CONDUITS TO HAVE A GROUNDING CONDUCTOR INSTALLED WITH PHASE AND NEUTRAL CONDUCTORS. SIZE OF GROUND CONDUCTOR TO BE IN ACCORDANCE WITH THE ADOPTED ELECTRICAL CODE. TERMINATE FEEDER AND BRANCH CIRCUIT INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH GROUNDING LUG, BUS, OR BUSHING.

5. INSTALLATION OF ELECTRICAL GROUNDING AND BONDING SYSTEMS:

   A. GROUNDING ELECTRODE CONDUCTORS, WHERE NOT INSTALLED AS PART OF A BRANCH CIRCUIT OR FEEDER, SHALL BE INSTALLED IN PVC CONDUIT, TO PROTECT THE WIRING FROM PHYSICAL DAMAGE.

   B. CONNECT GROUNDING ELECTRODE CONDUCTORS TO METAL COLD WATER PIPE AND ALL OTHER TYPES OF METAL PIPING WITHIN THE BUILDING USING A SUITABLY SIZED GROUND CLAMP. PROVIDE CONNECTIONS TO FLANGED PIPING TO STREET SIDE OF FLANGE. PROVIDE BONDING AS DESCRIBED IN ADOPTED ELECTRICAL CODE INCLUDING BONDING JUMPER AROUND WATER METER.

   C. CONNECT TOGETHER SYSTEM NEUTRAL, SERVICE EQUIPMENT ENCLOSURES, EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT, METAL RACEWAY SYSTEMS, GROUNDING CONDUCTOR IN RACEWAYS AND CABLES, RECEPTACLE GROUND CONNECTORS, AND PLUMBING SYSTEMS.

   D. THE UTILITY COMPANY METER SOCKET SHALL BE GROUNDED TO A 1/2" X 10' COPPER CLAD STEEL GROUND ROD WITH COPPER WIRE INSTALLED IN P.V.C. CONDUIT. THE GROUND ROD SHALL BE DRIVEN INTO THE EARTH WITH THE TOP 1'-0" BELOW GRADE, AS NEAR AS POSSIBLE TO THE LOCATION OF THE METER SOCKET WITH THE TOP 1'-0" BELOW FINISHED GRADE.

SECTION 16075 — IDENTIFICATION

1. ENGRAVED, PLASTIC-LAMINATED LABELS, SIGNS, AND INSTRUCTION PLATES: ENGRAVING STOCK MELAMINE PLASTIC LAMINATE, 1/16-INCH MINIMUM THICK FOR SIGNS UP TO 20 SQUARE INCHES, OR 8 INCHES IN LENGTH; 1/8-INCH THICK FOR LARGER SIZES. ENGRAVED LEGEND IN WHITE LETTERS ON BLACK FACE AND PUNCHED FOR MECHANICAL FASTENERS.

2. CABLE TIES: FUNGUS-INERT, SELF-EXTINGUISHING, ONE-PIECE, SELF-LOCKING NYLON CABLE TIES, 0.18-INCH MINIMUM WIDTH, 50-LB MINIMUM TENSILE STRENGTH, AND SUITABLE FOR A TEMPERATURE RANGE FROM MINUS 50 F TO 350 F. PROVIDE TIES IN SPECIFIED COLORS WHEN USED FOR COLOR-CODING.

3. SELF ADHESIVE, COMMERCIALLY AVAILABLE ARC FLASH HAZARD LABELS. LABELS TO CONFORM TO THE ADOPTED ELECTRICAL CODE AND A.N.S.I. Z535.4.

4. CONDUCTOR COLOR CODING: PROVIDE COLOR CODING FOR SECONDARY SERVICE, FEEDER, AND BRANCH CIRCUIT CONDUCTORS THROUGHOUT THE PROJECT SECONDARY ELECTRICAL SYSTEM PER WIRES AND CABLING SECTION.

5. APPLY EQUIPMENT IDENTIFICATION LABELS OF ENGRAVED PLASTIC- LAMINATE ON EACH MAJOR UNIT OF ELECTRICAL EQUIPMENT IN BUILDING, INCLUDING CENTRAL OR MASTER UNIT OF EACH ELECTRICAL SYSTEM. THIS INCLUDES COMMUNICATION/SIGNAL/ALARM SYSTEMS, UNLESS UNIT IS SPECIFIED WITH ITS OWN SELF-EXPLANATORY IDENTIFICATION. EXCEPT AS OTHERWISE INDICATED, PROVIDE SINGLE LINE OF TEXT, WITH 1/4-INCH-HIGH LETTERING ON 1-INCH-HIGH LABEL (1-1/2-INCH-HIGH WHERE TWO LINES ARE REQUIRED), WHITE LETTERING IN BLACK FIELD. TEXT SHALL MATCH TERMINOLOGY AND NUMBERING OF THE CONTRACT DOCUMENTS AND SHOP DRAWINGS. APPLY LABELS FOR EACH UNIT OF THE FOLLOWING CATEGORIES OF ELECTRICAL EQUIPMENT.

   A. PANELBOARDS, ELECTRICAL CABINETS, AND ENCLOSURES
   B. ELECTRICAL SWITCHGEAR AND SWITCHBOARDS
   C. MOTOR STARTERS AND/OR VFDs FURNISHED BY THIS CONTRACTOR
   D. DISCONNECT SWITCHES
   E. CONTACTORS

SECTION 16075 — IDENTIFICATION

1. ENGRAVED, PLASTIC-LAMINATED LABELS, SIGNS, AND INSTRUCTION PLATES: ENGRAVING STOCK MELAMINE PLASTIC LAMINATE, 1/16-INCH MINIMUM THICK FOR SIGNS UP TO 20 SQUARE INCHES, OR 8 INCHES IN LENGTH; 1/8-INCH THICK FOR LARGER SIZES. ENGRAVED LEGEND IN WHITE LETTERS ON BLACK FACE AND PUNCHED FOR MECHANICAL FASTENERS.

2. CABLE TIES: FUNGUS-INERT, SELF-EXTINGUISHING, ONE-PIECE, SELF-LOCKING NYLON CABLE TIES, 0.18-INCH MINIMUM WIDTH, 50-LB MINIMUM TENSILE STRENGTH, AND SUITABLE FOR A TEMPERATURE RANGE FROM MINUS 50 F TO 350 F. PROVIDE TIES IN SPECIFIED COLORS WHEN USED FOR COLOR-CODING.

3. SELF ADHESIVE, COMMERCIALLY AVAILABLE ARC FLASH HAZARD LABELS. LABELS TO CONFORM TO THE ADOPTED ELECTRICAL CODE AND A.N.S.I. Z535.4.

4. CONDUCTOR COLOR CODING: PROVIDE COLOR CODING FOR SECONDARY SERVICE, FEEDER, AND BRANCH CIRCUIT CONDUCTORS THROUGHOUT THE PROJECT SECONDARY ELECTRICAL SYSTEM PER WIRES AND CABLING SECTION.

5. APPLY EQUIPMENT IDENTIFICATION LABELS OF ENGRAVED PLASTIC- LAMINATE ON EACH MAJOR UNIT OF ELECTRICAL EQUIPMENT IN BUILDING, INCLUDING CENTRAL OR MASTER UNIT OF EACH ELECTRICAL SYSTEM. THIS INCLUDES COMMUNICATION/SIGNAL/ALARM SYSTEMS, UNLESS UNIT IS SPECIFIED WITH ITS OWN SELF-EXPLANATORY IDENTIFICATION. EXCEPT AS OTHERWISE INDICATED, PROVIDE SINGLE LINE OF TEXT, WITH 1/4-INCH-HIGH LETTERING ON 1-INCH-HIGH LABEL (1-1/2-INCH-HIGH WHERE TWO LINES ARE REQUIRED), WHITE LETTERING IN BLACK FIELD. TEXT SHALL MATCH TERMINOLOGY AND NUMBERING OF THE CONTRACT DOCUMENTS AND SHOP DRAWINGS. APPLY LABELS FOR EACH UNIT OF THE FOLLOWING CATEGORIES OF ELECTRICAL EQUIPMENT.

   A. PANELBOARDS, ELECTRICAL CABINETS, AND ENCLOSURES
   B. ELECTRICAL SWITCHGEAR AND SWITCHBOARDS
   C. MOTOR STARTERS AND/OR VFDs FURNISHED BY THIS CONTRACTOR
   D. DISCONNECT SWITCHES
   E. CONTACTORS

SECTION 16120 — WIRES AND CABLES

1. CONDUCTORS: PROVIDE SOLID CONDUCTORS FOR POWER AND LIGHTING CIRCUITS NO. 10 AWG AND SMALLER. PROVIDE STRANDED CONDUCTORS FOR SIZES NO. 8 AWG AND LARGER.

2. CONDUCTOR MATERIAL: COPPER FOR ALL WIRES AND CABLES.

3. INSULATION: PROVIDE THHN/THWN INSULATION FOR ALL CONDUCTORS NO. 14 AWG THRU NO. 10 AWG. FOR ALL OTHER SIZES PROVIDE THHN/THWN OR XHHW INSULATION AS APPROPRIATE FOR THE LOCATION WHERE INSTALLED.

4. ALUMINUM CONDUCTORS ARE NOT APPROVED OR ACCEPTABLE.

5. ALUMINUM CONDUCTORS:

   A. AT THE CONTRACTOR'S OPTION, ALUMINUM CONDUCTORS WILL BE ALLOWED FOR COPPER SIZES RATED FOR 100 AMPERES AND LARGER BUT, SIZE MUST BE INCREASED TO EQUAL OR EXCEED THE COPPER AMPACITY IN ACCORDANCE WITH ADOPTED ELECTRICAL CODE. RACEWAY AND PULL BOXES MUST BE INCREASED TO CONFORM TO ADOPTED ELECTRICAL CODE. ALL ALUMINUM CONDUCTORS MUST BE MADE BASED ON COMPACT STRANDED, AA-8000 SERIES ALUMINUM ALLOY MATERIAL EQUAL TO "STABILOY" ALCAN CABLE.

   B. IF ALUMINUM CABLE IS TO BE INSTALLED ON THIS PROJECT, CONTRACTOR IS TO NOTIFY ENGINEER IN WRITING, AT TIME OF SUBMITTAL DRAWINGS. CONTRACTOR IS TO LIST ALL FEEDERS THAT WILL BE CHANGED TO ALUMINUM, AND INDICATE THE REVISED ALUMINUM CONDUCTOR SIZE.

   C. CONNECTORS AND TERMINATIONS INSTALLED WITH ALUMINUM-ALLOY CONDUCTORS SHALL BE COMPRESSION TYPE ONLY, AND ONLY THOSE LISTED BY UNDERWRITER'S LABORATORIES STRANDED 486-B AND MARKED "AL7CU" FOR 75C RATED CIRCUITS.

   D. IF THE CONTRACTOR DECIDES TO EXERCISE THE OPTION OF ALUMINUM CONDUCTORS FOR CONNECTIONS TO EQUIPMENT PROVIDED AND/OR INSTALLED BY OTHER TRADES, THEN THIS CONTRACTOR SHALL REIMBURSE THE EQUIPMENT SUPPLIER FOR ANY COST ASSOCIATED WITH THE MODIFICATIONS REQUIRED TO THAT EQUIPMENT.

   E. ENDS OF ALL CONDUCTORS ARE TO BE BRUSHED CLEAN AND PRIOR TO FINAL CONNECTION, EXPOSED PORTION OF CONDUCTOR TO BE COVERED WITH ALUMINUM OXIDE INHIBITOR. CONDUCTOR TERMINATION MADE WITH SET-SCREW TERMINAL LUGS ARE TO BE TORQUED, USING A TORQUE WRENCH, IN ACCORDANCE WITH LUG MANUFACTURER SPECIFICATIONS OR ACCORDING TO UL STANDARD 486B. AT THE COMPLETION OF THE PROJECT CONTRACTOR IS TO CHECK TORQUE VALUES ON ALL ALUMINUM TERMINATIONS. CONTRACTOR IS TO SUBMIT IN WRITING, AT TIME OF RECORD DRAWINGS, A COMPLETE LIST OF APPLIED TORQUE VALUES FOR ALL ALUMINUM TERMINATIONS.

6. VARIABLE FREQUENCY DRIVE CABLES: WHERE A VFD IS INSTALLED, PROVIDE A VFD CABLING SYSTEM FROM THE VFD TO THE CONTROLLED EQUIPMENT MANUFACTURED MEETING THE FOLLOWING SPECIFICATIONS:
   6.1. ASTM B3 AND B8
   6.2. UL 44, UL 1277
   6.3. COLOR CODE PER ICEA S-58-679 METHOD 4
   6.4. IEEE 1202/FT4 FLAME TEST
   6.5. CONDUCTORS SHALL BE CLASS B STRANDED, UNCOATED ANNEALED COPPER; EACH CONDUCTOR SHALL BE INSULATED WITH BLACK POLYETHYLENE. A 5 MIL UNCOATED COPPER TAPE SHIELD, HELICALLY WRAPPED OVER THE TWISTED ASSEMBLY WITH A 50% OVERLAP AND IN CONTACT WITH THE GROUND WIRE. WITH A FLAME RETARDANT PVC JACKET OUTER JACKET.

1. INSTALLATION OF WIRES AND CABLES:

   A. ALL BRANCH CIRCUIT WIRES, FEEDER CABLES, ETC., SHALL BE CONTINUOUS FROM OUTLET TO OUTLET. NO JOINTS SHALL BE MADE EXCEPT IN OUTLET, JUNCTION OR PULL BOXES, PANELBOARD AND SWITCHBOARD GUTTERS. FOR THE SPLICING OF EXISTING FEEDER CONDUCTORS, COMPRESSION TYPE BUTT SPLICES WITH COLD SHRINK INSULATION KITS ARE TO BE USED.

   B. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES. WHERE MANUFACTURER'S TORQUE REQUIREMENTS ARE NOT INDICATED, TIGHTEN CONNECTORS AND TERMINALS TO COMPLY WITH TIGHTENING TORQUE'S SPECIFIED IN UL 486A AND UL 486B.

   C. TERMINALS ON SWITCHES AND CONVENIENCE OUTLETS SHALL NOT BE USED TO "FEED THROUGH" TO THE NEXT SWITCH OR OUTLET. WHERE MORE THAN ONE GROUND, COMMON NEUTRAL, OR COMMON PHASE CONDUCTOR ENTERS A BOX, ALL LIKE CONDUCTORS SHALL BE IN GOOD ELECTRICAL CONTACT WITH EACH OTHER AND THE ARRANGEMENT SHALL BE SUCH, THAT THE DISCONNECTING OR REMOVAL OF A DEVICE FED FROM THE BOX, WILL NOT INTERFERE WITH OR INTERRUPT SERVICE TO THE REMAINDER OF THE BRANCH CIRCUIT WIRING.

208Y/120 VOLTS NORMAL	PHASE
BLACK	A
RED	B
BLUE	C
WHITE	NEUTRAL
GREEN	GROUND
GREEN W/ YELLOW STRIP	ISOLATED GROUND

SECTION 16130 — RACEWAYS

1. THIS SECTION INCLUDES RACEWAYS FOR ELECTRICAL WIRING. TYPES OF RACEWAYS IN THIS SECTION INCLUDE THE FOLLOWING:

   A. ELECTRICAL METALLIC TUBING (EMT)
   B. INTERMEDIATE METAL CONDUIT (IMC)
   C. FLEXIBLE METAL CONDUIT
   D. LIQUID-TIGHT FLEXIBLE CONDUIT
   E. RIGID METAL CONDUIT
   F. RIGID NONMETALLIC CONDUIT (PVC)
   G. SURFACE RACEWAYS
   H. WIREWAY
   I. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLE

2. WIREWAYS:

   A. ELECTRICAL WIREWAYS SHALL BE OF TYPES, SIZES, AND NUMBER OF CHANNELS AS INDICATED. FITTINGS AND ACCESSORIES INCLUDING BUT NOT LIMITED TO COUPLINGS, OFFSETS, ELBOWS, EXPANSION JOINTS, ADAPTERS, HOLD-DOWN STRAPS, AND END CAPS SHALL MATCH AND MATE WITH WIREWAY AS REQUIRED FOR A COMPLETE SYSTEM. WHERE FEATURES ARE NOT INDICATED, SELECT TO FULFILL WIRING REQUIREMENTS AND COMPLY WITH APPLICABLE PROVISIONS OF ADOPTED ELECTRICAL CODE.

4. SURFACE RACEWAYS:

   A. SIZES AND CHANNELS AS INDICATED, MINIMUM SIZE TO BE EQUAL TO WIREMOLD #500 SERIES. PROVIDE FITTINGS THAT MATCH AND MATE WITH RACEWAY. CONSTRUCT OF GALVANIZED STEEL WITH SNAP-ON COVERS, WITH 1/8-INCH MOUNTING SCREW KNOCKOUTS IN BASE APPROXIMATELY 8 INCHES ON-CENTER. FINISH WITH MANUFACTURER'S STANDARD PRIME COATING SUITABLE FOR PAINTING. PROVIDE RACEWAYS OF TYPE SUITABLE FOR EACH APPLICATION REQUIRED.

5. WIRING METHOD:

   A. OUTDOORS: USE THE FOLLOWING WIRING METHODS:
      A.1. EXPOSED: INTERMEDIATE METAL CONDUIT.
      A.2. CONCEALED: INTERMEDIATE METAL CONDUIT.
      A.3. UNDERGROUND, RIGID NONMETAL CONDUIT.
      A.4. CONNECTION TO VIBRATING EQUIPMENT: INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC OR ELECTRIC SOLENOID OR MOTOR-DRIVEN EQUIPMENT: LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
      A.5. INDOORS OR OUTDOORS: CONNECTION TO VIBRATING EQUIPMENT AND HYDRAULIC, PNEUMATIC, OR ELECTRIC SOLENOID OR MOTOR-DRIVEN EQUIPMENT IN MOIST OR HUMID LOCATION OR CORROSIVE ATMOSPHERE, OR WHERE SUBJECT TO WATER SPRAY OR DRIPPING OIL, GREASE, OR WATER: LIQUID-TIGHT FLEXIBLE METAL CONDUIT.

   B. INDOORS: USE THE FOLLOWING WIRING METHODS:
      B.1. CONNECTION TO VIBRATING EQUIPMENT: INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC OR ELECTRIC SOLENOID OR MOTOR-OPERATED EQUIPMENT: FLEXIBLE METAL CONDUIT.
      B.2. EXPOSED: ELECTRICAL METALLIC TUBING CONDUIT.
      B.3. CONCEALED: ELECTRICAL METALLIC TUBING.
      B.4. CONCEALED, IN CONCRETE EMBEDDED, STRUCTURAL INTERIOR WALLS, OR ROOF DECK PENETRATIONS: INTERMEDIATE METAL OR RIGID METAL CONDUIT.
      B.5. UNDER CONCRETE FLOOR (SLAB ON GRADE): INTERMEDIATE METAL OR RIGID METAL CONDUIT.

   C. P.V.C. CONDUIT CAN BE INSTALLED BELOW FLOOR SLAB INDOORS, ONLY IF RIGID STEEL ELBOWS ARE USED WHEN PASSING THRU FLOOR SLAB. MINIMUM SIZE P.V.C. CONDUIT THAT CAN BE INSTALLED IS 3/4" UNLESS NOTED OTHERWISE. ALL P.V.C. CONDUIT JOINTS ARE TO BE GLUED AND SEALED TO PREVENT MOISTURE FROM ENTERING RACEWAY SYSTEM. CONDUITS FOUND TO CONTAIN MOISTURE WILL BE REPAIRED OR REPLACED AS REQUIRED PRIOR TO INSTALLATION OF CONDUCTORS.

   D. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLE
      D.1. MC AND AC CABLE MAY BE USED IN LIEU OF E.M.T. CONDUIT IF ACCEPTABLE TO LOCAL AUTHORITIES AND INSTALLED PER ELECTRICAL CODE REGARDING SUPPORT, GROUNDING AND CABLE TERMINATIONS. ALL MC AND AC CABLE NOT INSTALLED PER THE ADOPTED CODE SHALL BE REMOVED, REINSTALLED AND CORRECTED AT CONTRACTOR'S EXPENSE WITH NO EXTENSION IN THE CONSTRUCTION SCHEDULE.
      D.2. MC AND AC CABLE MUST BE SUPPORTED AND SECURED BY STAPLES, CABLE TIES, STRAPS, HANGERS, OR SIMILAR FITTINGS, DESIGNED AND INSTALLED SO AS NOT TO DAMAGE THE CABLE.
      D.3. MC AND AC CABLE, WITH FOUR OR LESS CONDUCTORS SIZED NO LARGER THAN 10 AWG, MUST BE SECURED WITHIN 12 IN. OF EVERY OUTLET BOX, JUNCTION BOX, CABINET, OR FITTING AND AT INTERVALS NOT EXCEEDING 6 FT.
      D.4. MC AND AC CABLE MUST BE SUPPORTED AT INTERVALS NOT EXCEEDING 6 FT. CABLES INSTALLED HORIZONTALLY THROUGH WOODEN OR METAL FRAMING MEMBERS ARE CONSIDERED SECURED AND SUPPORTED WHERE SUCH SUPPORT DOESN'T EXCEED 6 FT INTERVALS.
      D.5. MAY NOT BE USED IN EXTERIOR APPLICATIONS

6. CONDUIT SHALL BE INSTALLED AS A COMPLETE SYSTEM, CONTINUOUS FROM OUTLET TO OUTLET, CABINET OR FITTING, AND BE SO MECHANICALLY AND ELECTRICALLY CONNECTED THAT ADEQUATE ELECTRICAL CONTINUITY FROM ONE CONDUIT TO ANOTHER IS SECURED. THE ENTIRE SYSTEMS SHALL BE SECURELY FASTENED IN PLACE WITHIN 3' OF EACH OUTLET OR JUNCTION BOX, CABINET OR FITTING, AND AT INTERVALS NOT EXCEEDING 10', EXCEPT AS OTHERWISE SPECIFIED OR SHOWN. SINGLE CONDUITS FOR FEEDERS SHALL BE HUNG WITH GRINNEL, CRANE, OR EQUAL, MALLEABLE SPLIT RING HANGERS WITH ROD SUSPENSION SPACED NOT OVER 10' APART FROM CONSTRUCTION ABOVE. GROUPS OF HORIZONTAL FEEDER AND BRANCH CIRCUIT CONDUITS SHALL BE CLAMPED TO UNISTRUT, OR EQUAL, STEEL CHANNELS AND SUSPENDED FROM RODS SUPPORTED FROM STRUCTURE, SPACED NOT OVER 10' APART FROM CONSTRUCTION ABOVE. WHERE POSSIBLE CONDUITS MAY BE CLAMPED DIRECTLY TO THE STEEL JOISTS.

7. USE RACEWAY FITTINGS THAT ARE OF TYPES COMPATIBLE WITH THE ASSOCIATED RACEWAY AND SUITABLE FOR THE USE AND LOCATION. FOR INTERMEDIATE METAL CONDUIT, USE THREADED RIGID STEEL CONDUIT FITTINGS. FOR EMT CONDUITS: FITTINGS ARE TO BE COMPRESSION OR SET SCREW TYPE.

8. INSTALL PULL WIRES IN EMPTY RACEWAYS. USE NO. 14 AWG ZINC-COATED STEEL OR MONOFILAMENT PLASTIC LINE HAVING NOT LESS THAN 200-LB TENSILE STRENGTH. LEAVE NOT LESS THAN 12 INCHES OF SLACK AT EACH END OF THE PULL WIRE.

9. TELEPHONE AND SIGNAL SYSTEM RACEWAYS 2-INCH TRADE SIZE AND SMALLER: IN ADDITION TO THE ABOVE REQUIREMENTS, INSTALL RACEWAYS IN MAXIMUM LENGTHS OF 150 FEET AND WITH A MAXIMUM OF TWO, 90 BENDS OR EQUIVALENT. INSTALL PULL OR JUNCTION BOXES WHERE NECESSARY TO COMPLY WITH THESE REQUIREMENTS.

10. ALL CONDUITS ABOVE LAY-IN CEILING SYSTEM SHALL NOT BE SUPPORTED FROM CEILING SUSPENSION WIRES.

11. PROVIDE 36" MINIMUM RADIUS RIGID STEEL CONDUIT ELBOWS FOR PRIMARY SERVICE CONDUITS UNDER THE TRANSFORMER PAD.

12. CONDUITS CAPPED OUTSIDE OF BUILDING FOR FUTURE ADDITION SHALL BE A MINIMUM OF 1'-6" BELOW FINISH GRADE, CAPPED AND PAINTED WITH BITUMINOUS PAINT, WHICH SHALL BE THOROUGHLY DRY, BEFORE BACKFILL IS INSTALLED.

13. METAL CLAD (MC) AND ALUMINUM CLAD (AC) CABLES:

   A. ALL HOMERUNS TO PANELBOARDS SHALL REMAIN IN E.M.T. CONDUIT.
   B. MC AND AC CABLES SHALL NOT BE USED IN EXPOSED AREAS.
   C. ALL FITTINGS SHALL BE LISTED FOR USE WITH MC AND AC CABLE USED.
   D. CONDUCTORS IN MC AND AC CABLE SHALL COMPLY WITH SECTION "WIRES & CABLES".

SECTION 16135 — CABINETS, BOXES AND FITTINGS

1. THIS SECTION INCLUDES CABINETS, BOXES, AND FITTINGS FOR ELECTRICAL INSTALLATIONS AND CERTAIN TYPES OF ELECTRICAL FITTINGS NOT COVERED IN OTHER SECTIONS

2. METAL OUTLET, DEVICE, AND SMALL WIRING BOXES:

   A. GENERAL: CONFORM TO UL 514A, "METALLIC OUTLET BOXES, ELECTRICAL," AND UL 514B, "FITTINGS FOR CONDUIT AND OUTLET BOXES." BOXES SHALL BE OF TYPE, SHAPE, SIZE, AND DEPTH TO SUIT EACH LOCATION AND APPLICATION.

   B. STEEL BOXES: CONFORM TO NEMA OS 1, "SHEET STEEL OUTLET BOXES, DEVICE BOXES, COVERS, AND BOX SUPPORTS." BOXES SHALL BE SHEET STEEL WITH STAMPED KNOCKOUTS, THREADED SCREW HOLES AND ACCESSORIES SUITABLE FOR EACH LOCATION INCLUDING MOUNTING BRACKETS AND STRAPS, CABLE CLAMPS, EXTERIOR RINGS AND FIXTURE STUDS.

   C. CAST-IRON FLOOR BOXES: FULLY ADJUSTABLE, WATERPROOF, WITH THREADED RACEWAY ENTRANCES, RECTANGULAR BOX OPENING, ADJUSTING RINGS, GASKETS, BRASS FLOOR PLATES, AND POLYCARBONATE CARPET FLANGE. WHERE INDICATED, PROVIDE MULTI-SECTION BOXES WITH INDIVIDUAL HINGED SECTION COVERS AND PROVIDE FOR A DUPLEX RECEPTACLE UNDER ONE OR MORE OF THE COVERS.

3. PULL AND JUNCTION BOXES:

   A. COMPLY WITH UL 50, "ELECTRICAL CABINETS AND BOXES", FOR BOXES OVER 100 CUBIC INCHES VOLUME. BOXES SHALL HAVE SCREWED OR BOLTED ON COVERS OF MATERIAL SAME AS BOXES AND SHALL BE OF SIZE AND SHAPE TO SUIT APPLICATION.

   B. STEEL BOXES: SHEET STEEL WITH WELDED SEAMS. WHERE NECESSARY TO PROVIDE A RIGID ASSEMBLY, CONSTRUCT WITH INTERNAL STRUCTURAL STEEL BRACING.

   C. HOT-DIPPED GALVANIZED STEEL BOXES: SHEET STEEL WITH WELDED SEAMS. WHERE NECESSARY TO PROVIDE A RIGID ASSEMBLY, CONSTRUCT WITH INTERNAL STRUCTURAL STEEL BRACING. HOT-DIP GALVANIZED AFTER FABRICATION.

4. CABINETS:

   A. COMPLY WITH UL 50, "ELECTRICAL CABINETS AND BOXES." SHEET STEEL, NEMA 1 CLASS EXCEPT AS OTHERWISE INDICATED. CABINET SHALL CONSIST OF A BOX AND A FRONT CONSISTING OF A ONE-PIECE FRAME AND A HINGED DOOR. ARRANGE DOOR TO CLOSE AGAINST A RABBET PLACED ALL AROUND THE INSIDE EDGE OF THE FRAME, WITH A UNIFORMLY CLOSE FIT BETWEEN DOOR AND FRAME. PROVIDE CONCEALED FASTENERS, NOT OVER 24-INCHES APART, TO HOLD FRONTS TO CABINET BOXES AND PROVIDE FOR ADJUSTMENT. PROVIDE FLUSH OR CONCEALED DOOR HINGES NOT OVER 24-INCHES APART AND NOT OVER 6-INCHES FROM TOP AND BOTTOM OF DOOR. FOR FLUSH CABINETS, MAKE THE FRONT APPROXIMATELY 3/4 INCH LARGER THAN THE BOX ALL AROUND. FOR SURFACE MOUNTED CABINETS MAKE FRONT SAME HEIGHT AND WIDTH AS BOX.

   B. DOORS: DOUBLE DOORS FOR CABINETS WIDER THAN 24-INCHES. TELEPHONE CABINETS WIDER THAN 48-INCHES MAY HAVE SLIDING OR REMOVABLE DOORS.

   C. LOCKS: COMBINATION SPRING CATCH AND KEY LOCK, WITH ALL LOCKS FOR CABINETS OF THE SAME SYSTEM KEYED ALIKE. LOCKS MAY BE OMITTED ON SIGNAL, POWER, AND LIGHTING CABINETS LOCATED WITHIN WIRE CLOSETS AND MECHANICAL-ELECTRICAL ROOMS. LOCKS SHALL BE OF A TYPE TO PERMIT DOORS TO LATCH CLOSED WITHOUT LOCKING.

5. STEEL ENCLOSURES WITH HINGED DOORS:

   A. COMPLY WITH UL 50, "CABINETS AND ENCLOSURES" AND NEMA ICS 6, "ENCLOSURES FOR INDUSTRIAL CONTROLS AND SYSTEMS." SHEET STEEL, 16 GAGE MINIMUM, WITH CONTINUOUS WELDED SEAMS. NEMA CLASS AS INDICATED ARRANGED FOR SURFACE MOUNTING.

   B. DOORS: HINGED DIRECTLY TO CABINET AND REMOVABLE, WITH APPROXIMATELY 3/4-INCH FLANGE AROUND ALL EDGES, SHAPED TO COVER EDGE OF BOX. PROVIDE HANDLE OPERATED, KEY LOCKING LATCH. INDIVIDUAL DOOR WIDTH SHALL BE NO GREATER THAN 24-INCHES. PROVIDE MULTIPLE DOORS WHERE REQUIRED.

   C. ENCLOSURE: WHERE DOOR GASKETING IS REQUIRED, PROVIDE NEOPRENE GASKET ATTACHED WITH OIL-RESISTANT ADHESIVE, AND HELD IN PLACE WITH STEEL RETAINING STRIPS. FOR ALL ENCLOSURES OF CLASS HIGHER THAN NEMA 1, USE HUBBED RACEWAY ENTRANCES.

6. WEATHERPROOF PULL AND SPLICE BOXES:

   A. BOXES TO BE NEMA 12 AND 13 RATED, ALL STEEL CONSTRUCTION CONFORMING TO J.I.C. STANDARD EGP-1-1997. EXTERNAL MOUNTING FEET FOR SURFACE MOUNTING. OIL-RESISTANT GASKET ATTACHED TO INSIDE OF DOOR COVER. CONTINUOUS HINGE AND EXTERNAL SCREW CLAMP FOR QUICK OPENING AND CLOSING.

7. FIRESTOP FOR RECESSED WALL BOXES:

   A. INSTALLATIONS OF MULTIPLE BOXES (LESS THAN 24" APART) WITH MAXIMUM 4-11/16" BY 4-11/16" FLUSH DEVICE UL LISTED METAL OUTLET BOXES IN FIRE RATED GYPSUM WALL BOARD WALL ASSEMBLIES FRAMED WITH MINIMUM 3-1/2" WIDE WOOD OR STEEL STUDS AND CONSTRUCTED AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE FIRE RESISTANCE DIRECTORY. 3M #MPP-4S MOLDABLE PUTTY PADS ARE TO BE INSTALLED ON THE EXTERIOR SURFACES OF THE FLUSH DEVICE BOX IN 1 AND 2 HOUR FIRE RATED WALLS AND PARTITIONS.

8. FLOOR BOXES IN SLABS ON GRADE AND WET LOCATIONS TO BE NEMA TYPE 4, CAST-IRON BOXES WITH THREADED HUBS. FLOOR BOXES LOCATED IN SLABS ABOVE GRADE CAN BE STAMPED STEEL. PLASTIC FLOOR BOXES ARE NOT APPROVED.

   A. INSTALL IN CONCRETE FLOOR SLABS SO THEY ARE COMPLETELY ENVELOPED IN CONCRETE EXCEPT FOR THE TOP. WHERE NORMAL SLAB THICKNESS WILL NOT ENVELOP BOX AS SPECIFIED ABOVE, PROVIDE INCREASED THICKNESS OF THE SLAB. PROVIDE EACH COMPARTMENT OF EACH FLOOR BOX WITH GROUNDING TERMINAL CONSISTING OF A WASHER-IN-HEAD MACHINE SCREW, NOT SMALLER THAN NO. 10-32, SCREWED INTO A TAPPED HOLE IN THE BOX. ADJUST COVERS OF FLOOR BOXES FLUSH WITH FINISHED FLOOR.

9. PULL AND SPLICE BOXES LOCATED OUTDOORS OR WHERE INDICATED ON DRAWINGS ARE TO BE WEATHERPROOF TYPE J.I.C. BOXES. CONDUIT TERMINATIONS ARE TO BE ACCOMPLISHED BY USING MEYER HUBS.

10. ELECTRICALLY GROUND METALLIC CABINETS, BOXES, AND ENCLOSURES. WHERE WIRING TO ITEM INCLUDES A GROUNDING CONDUCTOR, PROVIDE A GROUNDING TERMINAL IN THE INTERIOR OF THE CABINET, BOX OR ENCLOSURE.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND TO REPORT ANY DISCREPANCIES TO THE POPEYES LOUISIANA KITCHEN REPRESENTATIVE PRIOR TO COMMENCING WORK. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS INDICATED BY POPEYES LOUISIANA KITCHEN AS "ISSUED FOR CONSTRUCTION".

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 41082 AFSAR HASAN

9.13.2023

Company Logo
THE DIMENSION GROUP
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Project
LOUISIANA KITCHEN 1972
POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ELECTRICAL SPECIFICATIONS

Drawn	Checked
DW	AH
Scale	Date
	JUNE 2023
Project No.	Drawing No.
C22-129	ES.1

SECTION 16140 – WIRING DEVICES

1. THIS SECTION INCLUDES THE FOLLOWING:

   A. RECEPTACLES
   B. LIGHTING AND EQUIPMENT SWITCHES
   C. WALL PLATES
   D. FLOOR SERVICE OUTLETS
   E. OCCUPANCY SENSORS
   F. MANUAL DIMMERS

2. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:

   A. WIRING DEVICES & ACCESSORIES:
      A.1. COPPER WIRING DEVICES
      A.2. CROUSE-HINDS CO.
      A.3. HUBBELL INC.
      A.4. LEVITON
      A.5. PASS AND SEYMOUR INC.

   B. FLOOR BOXES:
      B.1. AMERICAN ELECTRIC, STEEL CITY
      B.2. WALKER / WIREMOLD COMPANY
      B.3. RACO, INC., HUBBELL INC.
      B.4. RACEWAY COMPONENTS, INC.

   C. DIMMERS:
      C.1. HUBBELL INC.
      C.5. LEVITON LIGHTING CONTROLS
      C.6. LUTRON LIGHTING

   D. OCCUPANCY SENSOR LIGHTING CONTROL:
      D.1. HUBBELL INC.
      D.2. LEVITON MANUFACTURING INC.
      D.3. WATT STOPPER INC.
      D.4. SENSOR SWITCH
      D.5. GREENGATE

3. WIRING DEVICES:
   A. PROVIDE WIRING DEVICES, IN TYPES, CHARACTERISTICS, GRADES, COLORS, AND ELECTRICAL RATINGS FOR APPLICATIONS INDICATED WHICH ARE UL LISTED AND WHICH COMPLY WITH NEMA WD 1 AND OTHER APPLICABLE UL AND NEMA STANDARDS. ALL DEVICES TO BE SPECIFICATION GRADE (HEAVY DUTY U.L. GRADE), WITH GREEN HEXAGONAL EQUIPMENT GROUND SCREW, METAL PLASTER EARS AND SIDE TERMINAL SCREWS FOR BACK AND SIDE WIRING.

   B. ALL WIRING DEVICES ARE TO BE PROVIDED BY THE SAME MANUFACTURER UNLESS NOTED OTHERWISE.

   C. ALL WIRING DEVICES AND COVERPLATES SHALL BE:
      C.1. WHITE.
      C.2. WHITE – WHERE INSTALLED IN WHITE CEILINGS.
      C.3. BLACK – WHERE INSTALLED IN DARK CEILINGS.
      C.4. ORANGE – WHERE SUPPLYING A UPS CIRCUIT. (DEVICE ONLY, COVERPLATE SHALL BE AS ABOVE).

   D. RECEPTACLES:
      D.1. DUPLEX RECEPTACLE, 15 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-15R, MEETS FEDERAL SPEC. WC-596-F. LEVITON #5252.

      D.2. SINGLE RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, MEETS FEDERAL SPEC. WC-596-F. LEVITON #5351.

      D.3. DUPLEX RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, MEETS FEDERAL SPEC. WC-596-F. LEVITON #5352.

      D.4. GROUND FAULT INTERRUPTER RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R. UL943 APPROVED, SELF-TESTING, SOLID STATE GROUND FAULT SENSING LEVEL WITH 5 MILLIAMPERES GROUND FAULT TRIP LEVEL. LED INDICATOR LIGHT WITH TEST/RESET BUTTONS THAT MATCH THE COLOR OF THE FACE. LEVITON #GF5362-WT*.

      D.5. USB RECEPTACLE, 20A, 125V, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, (2) VERTICAL USB PORTS WITH 3.6A CHARGING CAPACITY (MINIMUM), MEETS FEDERAL SPEC. WC-596-F. LEVITON #T5832
      D.5.1. WHERE SHOWN AS A QUAD RECEPTACLE ON PLANS, PROVIDE (2) USB RECEPTACLES AS SPECIFIED ABOVE.

      D.6. WEATHERPROOF RECEPTACLE SHALL BE A GROUND-FAULT INTERRUPTER WITH THOMAS & BETTS #CKSUV DIE-CAST ALUMINUM "SMALL" COVER PLATE. LOCATE BOX VERTICAL IN WALL. PLATE TO BE LISTED AND LABELED "SUITABLE FOR WET LOCATIONS WHILE IN USE.

      D.7. ISOLATED GROUND DUPLEX RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, FACE WITH ORANGE TRIANGLE, GROUND SCREW ISOLATED FROM MOUNTING YOKE, NEMA CONFIGURATION 5-20RIG. LEVITON #5362-IG.

      D.8. CONTROLLED DUPLEX RECEPTACLE, 20 AMP, 125 VOLT, 2-POLE, 3-WIRE, GROUNDING TYPE WITH NEMA CONFIGURATION 5-20R, PERMANENTLY LABELED WITH CONTROLLED SYMBOL, MEETS FEDERAL SPEC. WC-596-F. LEVITON #5362-2.
      D.8.1. WHERE SHOWN AS A QUAD RECEPTACLE ON PLANS, PROVIDE (1) CONTROLLED RECEPTACLE AND (1) DUPLEX RECEPTACLE AS SPECIFIED ABOVE.

      D.9. HEAVY DUTY RECEPTACLES SHALL BE OF THE SAME MANUFACTURER AS THE CONVENIENCE OUTLETS AND HAVE THE RATINGS AND CHARACTERISTICS (VOLTAGE, AMPS, POLES, WIRES) AS SHOWN ON DRAWINGS.

   E. SWITCHES:
      E.1. TOGGLE TYPE SWITCH, 20 AMP, 120/277 VOLT AC SINGLE-POLE, QUITE TYPE, WITH MOUNTING YOKE INSULATED FROM MECHANISM, EQUIPPED WITH PLASTER EARS, SIDE-WIRED SCREW TERMINALS, MEETS FEDERAL SPEC WS-896. LEVITON #1121-2.
      E.1.1. DOUBLE-POLE, 3-WAY, AND 4-WAY SWITCHES SHALL BE OF THE SAME MAKE AS FOR SINGLE-POLE.

      E.2. KEY TYPE SWITCH, 20 AMP, 120/277 VOLT AC SINGLE-POLE, WITH MOUNTING YOKE INSULATED FROM MECHANISM, EQUIPPED WITH PLASTER EARS, SIDE-WIRED SCREW TERMINALS, POLISHED METAL TOP AND PROVIDE WITH ONE STEEL KEY. LEVITON #1121-2L.
      E.2.1. DOUBLE-POLE, 3-WAY, AND 4-WAY SWITCHES SHALL BE OF THE SAME MAKE AS FOR SINGLE-POLE.

      E.3. WHEN A LIGHTED HANDLE IS INDICATED WITH SWITCHING DEVICE, PROVIDE SWITCH DEVICE WITH 1/25 WATT NEON PILOT INTEGRAL WITH TOGGLE HANDLE, RATED 120/277 VOLT. GLOWS WHEN SWITCH IS "OFF". PASS & SEYMOUR #20AC1-CSL.

      E.4. WHEN A PILOT LIGHT IS INDICATED WITH SWITCHING DEVICE, PROVIDE SWITCH DEVICE WITH 1/25 WATT NEON PILOT INTEGRAL WITH TOGGLE HANDLE, RATED 120/277 VOLT. GLOWS WHEN SWITCH IS "ON". PASS & SEYMOUR #20AC1-RPL.

   F. FLOOR RECEPTACLES:
      F.1. TYPE 'A': HUBBELL #B-2436, RECTANGULAR SINGLE-GANG, WATERTIGHT BOX WITH ONE S-3825 DUPLEX FLAP COVER. BOX COVER PLATE SHALL BE BRASS. COVER TO BE PROVIDED WITH BRASS CARPET FLANGE FOR FLUSH INSTALLATION IN LINOLEUM, WOOD OR CARPET FLOORS. EACH FLOOR OUTLET SHALL BE COMPLETE WITH ONE 20 AMP, 125 VOLT DUPLEX BROWN RECEPTACLE AS SPECIFIED UNDER "RECEPTACLES".

      F.2. TYPE 'B': HUBBELL #B-4233, RECTANGULAR DOUBLE-GANG, FULLY ADJUSTABLE, WATERTIGHT BOX WITH ONE S-3825 DUPLEX FLAP COVER COMPLETE WITH ONE 20 AMP, 125 VOLT DUPLEX BROWN RECEPTACLE AS SPECIFIED UNDER "RECEPTACLES". ALSO PROVIDE ONE #S-2625 COVER PLATE WITH ONE #S-3067 SPLIT NOZZLE FOR PROTECTION OF TELEPHONE/COMPUTER CABLES. BOX COVER PLATES SHALL BE BRASS. COVER TO BE PROVIDED WITH BRASS CARPET FLANGE FOR FLUSH INSTALLATION IN LINOLEUM, WOOD OR CARPET FLOORS.

      F.3. TYPE 'C': HUBBELL #B-2436, RECTANGULAR SINGLE-GANG BOX, BRASS PLATE #S2425 WITH 3/4 PLUG OPENING FOR CONNECTION OF FLEXIBLE CONDUIT FROM EQUIPMENT. COVER TO BE PROVIDED WITH BRASS CARPET FLANGE FOR FLUSH INSTALLATION IN LINOLEUM, WOOD OR CARPET FLOORS.

   G. WALL PLATES: SINGLE AND COMBINATION, OF TYPES, SIZES, AND WITH GANGING AND CUTOUTS AS INDICATED. PROVIDE PLATES WHICH MATE WITH WIRING DEVICES TO WHICH ATTACHED. PROVIDE METAL SCREWS FOR SECURING PLATES TO DEVICES WITH SCREW HEADS TO MATCH FINISH OF PLATES. PROVIDE WALL PLATES WITH ENGRAVED LEGEND WHERE INDICATED. CONFORM TO REQUIREMENTS

SECTION 16140 – WIRING DEVICES

OF SECTION "ELECTRICAL IDENTIFICATION."

   H. OCCUPANCY SENSOR LIGHTING CONTROL:
      H.1. WALL MOUNTED OCCUPANCY SENSOR TO BE PASSIVE INFRARED COVERING 1200 (OR 900) SQUARE FEET, RATED FOR 120/277 VOLT, 1500 WATTS MAXIMUM LOAD OF INCANDESCENT OR FLUORESCENT LIGHT. SENSOR TO HAVE 180° FIELD OF VIEW, OFF/AUTO/ON SLIDE SWITCH, ADJUSTABLE TIME-OUT FROM 1 TO 20 MINUTES, AND LED MOVEMENT INDICATOR PILOT. SENSOR TO BE MOUNTED IN A SINGLE-GANG WALL BOX AT SAME ELEVATION AS STANDARD WALL SWITCHES.
      H.1.1. WATT STOPPER #PW-100 SINGLE REALY (OR #PW-200 DUAL RELAY).

      H.2. CEILING MOUNTED OCCUPANCY SENSOR TO BE DUAL TECHNOLOGY WITH ULTRASONIC & PASSIVE INFRARED TYPE SENSORS. SENSORS TO HAVE TWO-WAY OR ONE-WAY DISTRIBUTION DEPENDING ON MOUNTING LOCATION CAPABLE OF ADJUSTING THE SENSITIVITY AND LENGTH OF OPERATION BASED ON PAST ACTIVITY LEVEL OF THE AREA'S OCCUPANTS. CUSTOM PERFORMANCE CONTROLS TO BE LOCATED BEHIND THE SENSOR LENS FOR FIELD MODIFICATION OF SENSOR DESIGN. UNIT TO BE MOUNTED TO RECESSED JUNCTION BOX.
      H.2.1. WATT STOPPER #DT-355, 800W @ 120V (1200W @ 277V)

   I. MANUAL DIMMERS:
      I.1. PROVIDE AND INSTALL AC DIMMER CONTROLS FOR LIGHTING FIXTURES; WATTAGE AS INDICATED BELOW, 120 VOLT, 60 HERTZ, WITH PRESET SLIDE CONTROLS AND PUSHBUTTON FOR ON/OFF CONTROLS, SINGLE-POLE.:
      I.1.1. ID1 = 1000 WATTS, LEVITON #IP110-1LX (120/277V INCANDESCENT)
      I.1.2. D1 = 1200/1500 VA, LEVITON #IP710-LFZ (120/277V LED)
      I.1.3. LD2 = 400 VA, LEVITON #IPE04-1LX (ELECTRONIC LOW VOLTAGE)
      I.1.4. LD3 = 1000 VA, LEVITON #IPM10-1LX (MAGNETIC LOW VOLTAGE)
      I.1.5. FD1 = 1200/1500 VA, LEVITON #IP710-DLX (120/277V FLUORESCENT 0-10V)
      I.1.6. FD2 = 1000 VA, LEVITON #IPX10-10 (120V FLUORESCENT LINE VOLTAGE)
      I.1.7. FD3 = 1200 VA, LEVITON #IPX12-70 (277V FLUORESCENT LINE VOLTAGE)

4. INSTALLATION OF WIRING DEVICES AND ACCESSORIES:

   A. GROUPS OF SWITCHES OR SWITCH AND OUTLET COMBINATIONS SHALL BE MOUNTED UNDER ONE COVER PLATE. COVER PLATES SHALL FIT THE DEVICES SECURELY AND SHALL COVER THE WALL OPENING COMPLETELY TO PROVIDE A NEAT AND FINISHED APPEARANCE FLUSH WITH SURROUNDING SURFACES.

   B. TERMINALS ON ALL WIRING DEVICES SHALL NOT BE USED TO FEED-THROUGH TO THE NEXT DEVICES.

   C. INSTALL WALL-MOUNTED RECEPTACLES WITH GROUND SLOT UP.

   D. RECEPTACLE MOUNTED ABOVE COUNTER-TOP TO BE INSTALLED HORIZONTAL, WITH LONG DIMENSION PARALLEL TO FLOOR AND COUNTER-TOP.

SECTION 16180 – FUSES

1. MANUFACTURER: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS OF ONE OF THE FOLLOWING (FOR EACH TYPE AND RATING OF OVERCURRENT PROTECTIVE DEVICE):

   A. BUSSMANN DIV; MCGRAW_EDISON CO.
   B. FERRAZ SHAWMUT, INC.
   C. LITTELFUSE, INC.

2. EXCEPT AS OTHERWISE INDICATED, PROVIDE FUSES OF TYPES, SIZES, RATINGS, AND AVERAGE TIME/CURRENT AND PEAK LET-THROUGH CURRENT CHARACTERISTICS INDICATED, WHICH COMPLY WITH MANUFACTURER'S STANDARD DESIGN, MATERIALS, AND CONSTRUCTION IN ACCORDANCE WITH PUBLISHED PRODUCT INFORMATION, AND WITH INDUSTRY STANDARDS AND CONFIGURATIONS. ALL FUSES TO BE FOR USE WITH FUSE REJECTION CLIPS.

3. ALL FUSES FOR THIS PROJECT SHALL BE OF THE SAME MANUFACTURER TO INSURE SELECTIVE COORDINATION.

4. EXCEPT WHERE NOTED OTHERWISE, THREE (3) SPARE FUSES OF EACH SIZE INSTALLED SHALL BE PROVIDED TO THE OWNER.

5. INSTALL FUSES WITH MANUFACTURER'S NAMETAG FACING OUTWARD.

6. SERVICE ENTRANCE AND FEEDER CIRCUITS 601 AMPERES AND LARGER, FUSES SHALL BE BOLT-ON U.L. LISTED CLASS L, CURRENT-LIMITING WITH 200,000 AMPERES R.M.S. SYMMETRICAL INTERRUPTING RATING.

7. FEEDER CIRCUITS, EXCEPT MOTOR CIRCUITS, 600 AMPERES AND SMALLER SHALL BE PLUG-IN CARTRIDGE U.L. CLASS RK-1, CURRENT-LIMITING WITH 200,000 AMPERES R.M.S. SYMMETRICAL INTERRUPTING RATING.

8. MOTOR, TRANSFORMERS, AND INDUCTIVE TYPE CIRCUITS 600 AMPERES AND SMALLER SHALL BE PLUG-IN CARTRIDGE U.L. CLASS RK-5 DUAL-ELEMENT WITH TIME DELAY. THEY SHALL ALSO HAVE CURRENT-LIMITING LINKS AND 200,000 AMPERES INTERRUPTING RATING. FUSE REDUCERS SHALL BE USED WHERE SWITCH FUSE CLIPS ARE SPACED LARGER THAN FUSE SIZE SHOWN ON DRAWING.

9. PLUG FUSES FOR INDIVIDUAL MOTOR PROTECTION SHALL BE BUSSMANN FUSTAT, DUAL-ELEMENT, 10,000 AMPERES R.M.S. SYMMETRICAL INTERRUPTING RATING, TYPE "S" WITH FUSTAT ADAPTER SIZED FOR PLUG-FUSE INSTALLED. SIZE OF FUSE TO BE ACCORDING TO SPECIFICATIONS FOR "DISCONNECT SWITCHES".

SECTION 16190 – SUPPORTING DEVICES

1. THIS SECTION INCLUDES SECURE SUPPORT FROM THE BUILDING STRUCTURE FOR ELECTRICAL ITEMS BY MEANS OF HANGERS, SUPPORTS, ANCHORS, SLEEVES, INSERTS, SEALS, AND ASSOCIATED FASTENINGS.

2. COATING: SUPPORTS, SUPPORT HARDWARE, AND FASTENERS SHALL BE PROTECTED WITH ZINC COATING OR WITH TREATMENT OF EQUIVALENT CORROSION RESISTANCE USING APPROVED ALTERNATIVE TREATMENT, FINISH, OR INHERENT MATERIAL CHARACTERISTIC. PRODUCTS FOR USE OUTDOORS SHALL BE HOT-DIP GALVANIZED.

3. INSTALL SUPPORTING DEVICES TO FASTEN ELECTRICAL COMPONENTS SECURELY AND PERMANENTLY IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.

4. SUPPORT INDIVIDUAL HORIZONTAL RACEWAYS BY SEPARATE PIPE HANGERS. SPRING STEEL FASTENERS MAY BE USED IN LIEU OF HANGERS ONLY FOR 3/4-INCH AND SMALLER RACEWAYS SERVING LIGHTING AND RECEPTACLE BRANCH CIRCUITS ABOVE SUSPENDED CEILINGS ONLY. FOR HANGER RODS WITH SPRING STEEL FASTENERS, USE 1/4-INCH-DIAMETER OR LARGER THREADED STEEL. USE SPRING STEEL FASTENERS THAT ARE SPECIFICALLY DESIGNED FOR SUPPORTING SINGLE CONDUITS OR TUBING. CONDUITS ABOVE LAY-IN CEILING SYSTEM SHALL NOT BE SUPPORTED FROM CEILING SUSPENSION WIRES.

5. INSTALL INDIVIDUAL AND MULTIPLE (TRAPEZE) RACEWAY HANGERS AND RISER CLAMPS AS NECESSARY TO SUPPORT RACEWAYS. PROVIDE U-BOLTS, CLAMPS, ATTACHMENTS AND OTHER HARDWARE NECESSARY FOR HANGER ASSEMBLY AND FOR SECURING HANGER RODS AND CONDUITS.

6. SUPPORT PARALLEL RUNS OF HORIZONTAL RACEWAYS TOGETHER ON TRAPEZE-TYPE HANGERS

7. DO NOT CUT HOLES IN REINFORCED CONCRETE BEAMS OR CUT REINFORCING BARS IN CONCRETE WITH OUT WRITTEN APPROVAL OF STRUCTURAL ENGINEER.

8. UNLESS OTHERWISE INDICATED, FASTEN ELECTRICAL ITEMS AND THEIR SUPPORTING HARDWARE SECURELY TO THE BUILDING STRUCTURE, INCLUDING BUT NOT LIMITED TO CONDUITS, RACEWAYS, CABLES, CABLE TRAYS, BUSWAYS, CABINETS, PANELBOARDS, TRANSFORMERS, BOXES, DISCONNECT SWITCHES, AND CONTROL COMPONENTS.

SECTION 16410 – DISCONNECTS, CONTACTORS

1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:

   A. GENERAL ELECTRIC CO.
   B. SQUARE D COMPANY.
   C. EATON CORPORATION
   D. SIEMENS, I.T.E.
   E. ALLEN-BRADLEY CO.
   F. FURNAS CO.

2. TEMPERATURE RATINGS: ALL CONDUCTOR TERMINALS AND EQUIPMENT ENCLOSURES TO BE U.L. LISTED FOR USE WITH MINIMUM 75C RATED CONDUCTORS.

3. DISCONNECT SWITCHES:

   A. PROVIDE CIRCUIT AND MOTOR DISCONNECT SWITCHES OF TYPES, SIZES AND ELECTRICAL CHARACTERISTICS INDICATED ON DRAWING. FUSIBLE OR NON-FUSED TYPE, RATED 250 OR 600 VOLTS, 60 HZ, 2- OR 3-POLES, SOLID NEUTRAL; AND INCORPORATING QUICK-MAKE, QUICK-BREAK TYPE SWITCHES; CONSTRUCT SO THAT SWITCH BLADES ARE VISIBLE IN OFF POSITION WITH DOOR OPEN. SWITCH SHALL HAVE A DUAL COVER INTERLOCK TO PREVENT UNAUTHORIZED OPENING OF THE SWITCH DOOR WHEN HANDLE IS IN THE "ON" POSITION, AND TO PREVENT CLOSING OF THE SWITCH MECHANISM WITH THE DOOR OPEN. EQUIP WITH OPERATING HANDLE WHICH IS INTEGRAL PART OF ENCLOSURE BASE AND WHOSE POSITION IS EASILY RECOGNIZABLE, AND IS PADLOCKABLE IN OFF POSITION; CONSTRUCT CURRENT CARRYING PARTS OF HIGH-CONDUCTIVITY COPPER, WITH SILVER-TUNGSTEN TYPE SWITCH CONTACTS, AND POSITIVE PRESSURE TYPE REINFORCED FUSE CLIPS. PROVIDE SWITCH IN NEMA 1 OR NEMA TYPE 3R ENCLOSURE AS INDICATED OR REQUIRED. INSTALL ENGRAVED PLASTIC PLATE AS TO WHAT EACH SWITCH CONTROLS.

   B. EQUIPMENT REQUIRING A DISCONNECTING MEANS, RATED FOR 120 OR 208 VOLT SINGLE PHASE, UP TO 30 AMPERES MAY BE PROVIDED WITH A SNAP-SWITCH TYPE TOGGLE DEVICE AT THE EQUIPMENT. THE DEVICE IS TO HAVE AN AMPERE AND VOLTAGE RATING EQUAL TO OR GREATER THAN THE BRANCH CIRCUIT FEEDING THE EQUIPMENT. IF EQUIPMENT IS MOTOR RELATED, THEN THE SWITCH MUST BE HORSEPOWER RATED. REFER TO SECTION 16140 FOR MINIMUM SPECIFICATIONS FOR TOGGLE SWITCHES. SWITCHES LOCATED OUTDOORS OR IN COOLER/FREEZER APPLICATIONS ARE TO BE MOUNTED IN A DIE-CAST ALUMINUM DEVICE BOX WITH GASKETED WEATHERPROOF COVER PLATE.

4. RELAYS AND CONTACTORS:

   A. GENERAL POWER PURPOSE RELAYS, FOR CONTROL OF MISCELLANEOUS MOTORS, TO BE PROVIDED AND INSTALLED WITH NUMBER OF POLES AND COIL VOLTAGE AS SHOWN ON DRAWINGS. RELAY TO BE HORSEPOWER RATED FOR THE MOTOR LOAD TO WHICH IT CONTROLS. RELAY TO BE MOUNTED IN A NEMA TYPE 1 ENCLOSURE.

   B. LIGHTING CONTACTORS TO BE PROVIDED AND INSTALLED WITH THE NUMBER OF POLES, COIL VOLTAGE, AND LOAD CONTACT RATINGS AS SHOWN ON DRAWINGS. CONTACTORS TO BE PROVIDED WITH SILVER ALLOY DOUBLE BREAK CONTACTS RATED FOR TUNGSTEN AND BALLAST LIGHTING LOADS. CONTACTS TO BE CONVERTIBLE WITH NORMALLY OPEN AND NORMALLY CLOSED INDICATORS. RELAY TO BE MOUNTED IN A NEMA TYPE 1 ENCLOSURE.

6. INSTALLATION OF DISCONNECTS AND STARTERS:

   A. SURFACE MOUNT ON WALLS OR COLUMNS APPROXIMATELY 5'-0" TO CENTERLINE ABOVE THE FLOOR WHERE POSSIBLE.

   B. DISCONNECT SWITCHES MOUNTED ON ROOFTOP AIR CONDITIONING UNITS TO BE CAULKED BETWEEN SWITCH AND UNIT TO PROVIDE WEATHERPROOF SEAL. ELECTRICAL CONTRACTOR TO VERIFY EXACT MOUNTING LOCATION ON UNIT SO AS NOT TO COVER UP ANY REMOVABLE PANELS.

   C. WHEN RELAYS OR CONTACTORS ARE INDICATED TO BE LOCATED ABOVE THE CEILING, THE EQUIPMENT IS TO BE READILY ACCESSIBLE AND SOUND INSULATED FROM THE MOUNTING SUPPORTS.

SECTION 16470 – PANELBOARDS

1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PANELBOARD PRODUCTS OF ONE OF THE FOLLOWING (FOR EACH TYPE AND RATING OF PANELBOARD AND ENCLOSURE):

   A. GENERAL ELECTRIC COMPANY
   B. SQUARE D COMPANY
   C. EATON CORPORATION
   D. SIEMEN'S, I.T.E.

2. POWER DISTRIBUTION PANELS: PROVIDE DEAD-FRONT SAFETY-TYPE DISTRIBUTION PANELBOARDS RATED 208/120, 3-PHASE, 4-WIRE. SHORT CIRCUIT RATING OF PANEL AND DEVICES TO BE 22,000 RMS MINIMUM UNLESS NOTED OTHERWISE ON THE DRAWINGS. PANELBOARDS SWITCHING AND PROTECTIVE DEVICES IN SOLDERLESS PRESSURE-TYPE LINE SIDE CONNECTORS APPROVED FOR COPPER CONDUCTORS.

3. 120/208 VOLT LIGHTING AND APPLIANCE PANELBOARDS: PROVIDE DEAD-FRONT SAFETY TYPE LIGHTING AND APPLIANCE PANELBOARDS AS INDICATED, WITH SWITCHING AND PROTECTIVE DEVICES IN QUANTITIES. RATINGS, TYPES AND ARRANGEMENTS SHOWN, WITH ANTI-TURN SOLDERLESS PRESSURE TYPE LUG CONNECTORS. APPROVED FOR USE WITH COPPER CONDUCTORS; CONSTRUCT UNIT FOR CONNECTING FEEDERS TO PANEL; EQUIP WITH COPPER, COPPER PLATED OR ALUMINUM BUS BARS, FULL-SIZED NEUTRAL BAR, WITH BOLT-IN TYPE HEAVY-DUTY, QUICK-MAKE, QUICK-BREAK, SINGLE-POLE CIRCUIT-BREAKERS, WITH TOGGLE HANDLES THAT INDICATE WHEN TRIPPED. PROVIDE SUITABLE LUGS ON NEUTRAL BUS FOR EACH OUTGOING FEEDER REQUIRED; AND PROVIDE BARE UNINSULATED GROUNDING BARS SUITABLE FOR BOLTING TO ENCLOSURES. SELECT ENCLOSURES FABRICATED BY SAME MANUFACTURER AS PANELBOARDS, WHICH MATE AND MATCH PROPERLY WITH PANELBOARDS. MINIMUM INTERRUPTING CAPACITY OF MANUFACTURED PANELBOARDS TO BE 10,000 A.I.C, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

4. MOLDED-CASE CIRCUIT BREAKERS: PROVIDE FACTORY ASSEMBLED, MOLDED CASE CIRCUIT BREAKERS OF FRAME SIZE INDICATED. PROVIDE BREAKERS WITH PERMANENT THERMAL AND INSTANTANEOUS MAGNETIC TRIPS IN EACH POLE AND AMPERE RATING AS INDICATED. CONSTRUCT WITH OVER CENTER, TRIP-FREE, TOGGLE TYPE OPERATING MECHANISMS WITH QUICK-MAKE, QUICK-BREAK ACTION AND POSITIVE HANDLE INDICATION. CONSTRUCT BREAKERS FOR MOUNTING AND OPERATING IN ANY PHYSICAL POSITION AND OPERATING IN AN AMBIENT TEMPERATURE OF 40C. PROVIDE BREAKERS WITH MECHANICAL SCREW TYPE REMOVABLE CONNECTOR LUGS, AL/CU RATED. ALL BREAKERS TO BE BOLT-IN TYPE CONSTRUCTION. ALL BREAKERS TO BE UL489 LISTED.

   A. ALL SINGLE POLE BREAKERS TO BE RATED FOR "SWITCHING DUTY" (SWD) AND FOR OPERATION ON FLUORESCENT LIGHTING SOURCES.

   B. ALL CIRCUIT BREAKERS PROTECTING HIGH INTENSITY DISCHARGE (HID) LIGHTING TO BE RATED AND LABELED "HID" FOR OPERATION ON H.I.D. LIGHTING SOURCES

   C. CIRCUIT BREAKERS USED ON HEATING, AIR CONDITIONING, OR REFRIGERATION EQUIPMENT SHALL BE TYPE "HACR" AND U.L. LISTED FOR SUCH USE.

5. PANELBOARD MANUFACTURER TO PROVIDE A COMPLETE "ARC FLASH STUDY". ALL SUBMITTALS WILL BE REJECTED UNLESS THIS STUDY IS PROVIDED AT THE TIME OF SHOP DRAWING REVIEW.

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHI HASAN

9.13.2023

Company Logo

THE DIMENSION GROUP
ARCHITECTURE-CIVIL ENGINEERING-MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensiongrp.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

Store Type: US 2112 PROTOTYPE 2112-21

Location: 1517 NC 24-87 CAMERON, NC

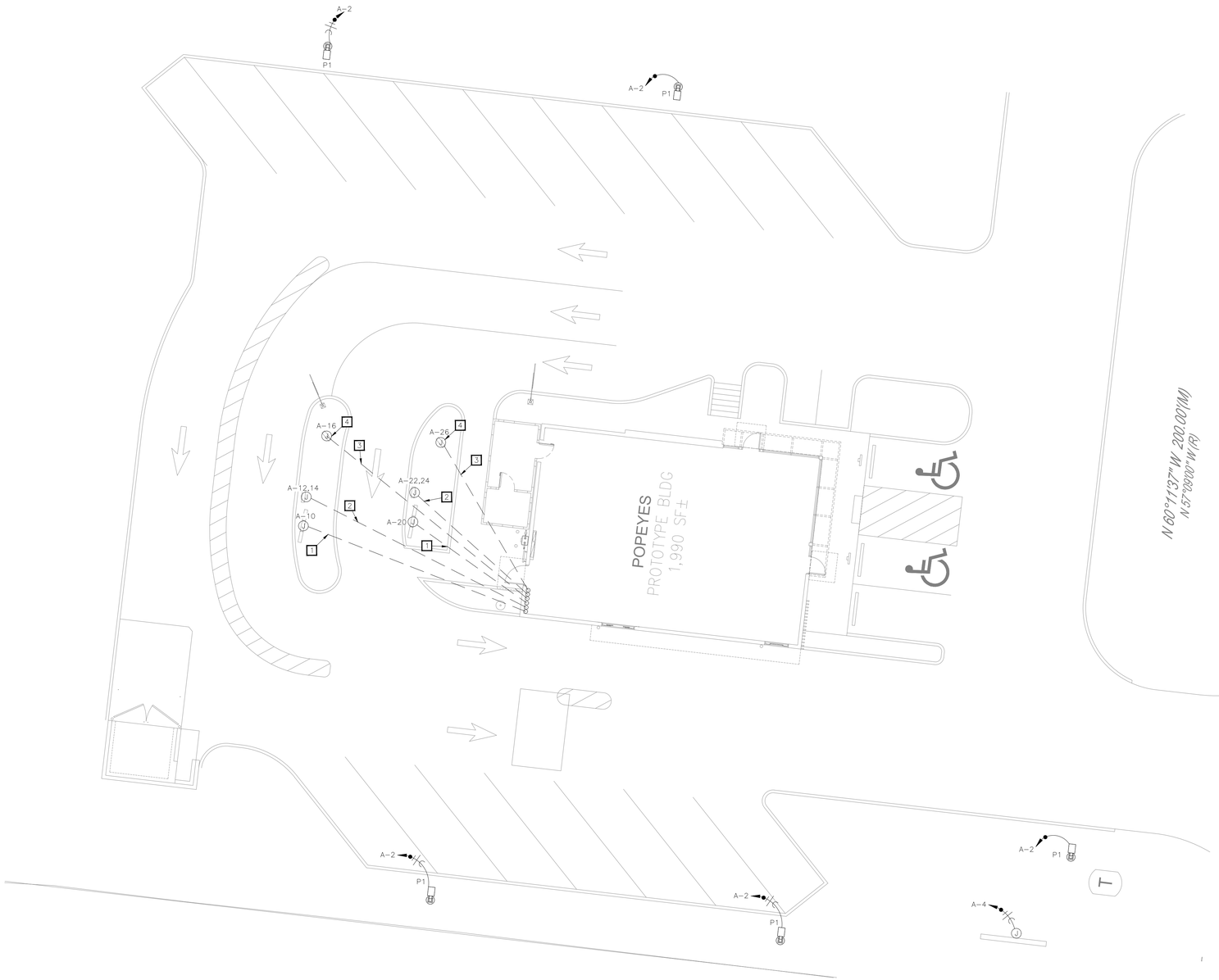
Drawing Title: ELECTRICAL SPECIFICATIONS

Drawn	Checked
DW	AH
Scale	Date
	JUNE 2023
Project No.	Drawing No.
C22-129	ES.2

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

ELECTRICAL KEYNOTES

1. PROVIDE (1) 3/4" PVC CONDUIT FOR POWER AND (1) 1/ 2" PVC CONDUIT FOR DATA TO OUTDOOR MENUBOARD.
2. PROVIDE (1) 3/4" PVC CONDUIT FOR POWER AND (1) 1/ 2" PVC CONDUIT FOR DATA TO ORDER PEDESTAL AND DETECTOR LOOP.
3. PROVIDE (1) 3/4" PVC CONDUIT FOR POWER AND (1) 1/ 2" PVC CONDUIT FOR DATA TO PRE ORDER MENUBOARD.
4. PROVIDE POWER TO INDEPENDENT STANDING DRIVE THRU LIGHT POSTS. CONFIRM CONNECTION WITH LIGHT POST MANUFACTURER (ENTERA BRANDING).



01 ELECTRICAL SITE PLAN
3/32"=1'-0"

ISSUE TABLE

No.	Date (mm/dd/yy)	Description

REVISIONS

No.	Date	Description
1	8/01/2023	RESPONSE TO CITY
2	9/04/2023	HEALTH COMMENTS
3	9/12/2023	RESPONSE TO CITY

DRAWINGS REVISED AS PER DESIGN BULLETIN

No.	Date	Description

PROJECT NORTH

NORTH CAROLINA PROFESSIONAL SEAL 41082 ENGINEER ARSHI HASAN

9.13.2023

Company Logo

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10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214-343-9400 www.dimensionge.com

Project

LOUISIANA KITCHEN 19 72
POPEYES

Store Type
US 2112 PROTOTYPE
2112-21

Location
1517 NC 24-87
CAMERON, NC

Drawing Title
ELECTRICAL SITE PLAN

Drawn	Checked
JP	AH
Scale	**Date**
3/32"=1'-0"	JUNE 2023
Project No.	**Drawing No.**
C22-129	ES1.0

POPEYES LOUISIANA KITCHEN MODEL 2112, 1517 NC 24-87, CAMERON, NC (JUNE 01, 2023) STORE NO. C22-129

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Popeye's

Address: 1517 NC 24-87 , Cameron, NC Zip Code 28326

Owner/Authorized Agent: Alec Ashley Phone # (917) 280 - 2181 E-Mail alec.ashley@icloud.com

Owned By: ☐ City/County ☒ Private ☐ State

Code Enforcement Jurisdiction: ☐ City_____ ☐ County_____ ☐ State

CONTACT: _____

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	The Dimension Group	Tanner Edwards Kinde	15704	(720)244.5592	tkinde@dimensiongroup.com
Civil	Ceso NC, Co	Jeffrey E. Tibbitts	029683	(937)435.8584	teyber@cesoinc.com
Electrical	The Dimension Group	Asfar Hasan	41082	(214)801.6137	ahasan@dimensiongroup.com
Fire Alarm				( )	
Plumbing	The Dimension Group	Asfar Hasan	41082	(214)801.6137	ahasan@dimensiongroup.com
Mechanical	The Dimension Group	Asfar Hasan	41082	(214)801.6137	ahasan@dimensiongroup.com
Sprinkler-Standpipe				( )	
Structural	Lalonde Engineering Inc.	Philippe Lalonde	030371	(817) 307.8266	plalonde@lalonde-eng.com
Retaining Walls >5' High				( )	
Other				( )	

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: ☒ New Building ☐ Addition ☐ Renovation
☐ 1st Time Interior Completion
☐ Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements
☐ Phased Construction - Shell/Core- Contact the local inspection jurisdiction for possible additional procedures and requirements

2018 NC EXISTING BUILDING CODE: EXISTING: ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) N/A **CURRENT OCCUPANCY(S)** (Ch. 3): N/A

RENOVATED: (date) N/A **PROPOSED OCCUPANCY(S)** (Ch. 3): B & A-2

RISK CATEGORY (Table 1604.5): **Current:** ☐ I ☐ II ☐ III ☐ IV
Proposed: ☐ I ☒ II ☐ III ☐ IV

BASIC BUILDING DATA

Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☒ V-B

Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

Standpipes: ☒ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry

Fire District: ☒ No ☐ Yes **Flood Hazard Area:** ☒ No ☐ Yes

Special Inspections Required: ☒ No ☐ Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor	N/A	N/A	N/A
2nd Floor	N/A	N/A	N/A
Mezzanine	N/A	N/A	N/A
1st Floor	N/A	1,965	1,965
Basement	N/A	N/A	N/A
TOTAL			**1,965**

ALLOWABLE AREA

Primary Occupancy Classification(s):

Assembly ☐ A-1 ☒ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ☒
Educational ☐
Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 Condition ☐ 1 ☐ 2
☐ I-2 Condition ☐ 1 ☐ 2
☐ I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ I-4
Mercantile ☐
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☐

Accessory Occupancy Classification(s): N/A

Incidental Uses (Table 509): N/A

Special Uses (Chapter 4 – List Code Sections): N/A

Special Provisions: (Chapter 5 – List Code Sections): N/A

Mixed Occupancy: ☐ No ☒ Yes Separation: _____ Hr. Exception: yes

☐ Non-Separated Use (508.3) - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☒ Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\textit{Actual Area of Occupancy A}}{\textit{Allowable Area of Occupancy A}} + \frac{\textit{Actual Area of Occupancy B}}{\textit{Allowable Area of Occupancy B}} \leq 1$$

0.057 + 0.180 + …… = 0.237 ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
1	DINING,KITCHEN, UNOCCUPIED AREAS	1,965	6,000	n/a	n/a

[1] Frontage area increases from Section 506.3 are computed thus:

a. Perimeter which fronts a public way or open space having 20 feet minimum width = 147' (F)
b. Total Building Perimeter = 192' (P)
c. Ratio (F/P) = 0.76 (F/P)
d. W = Minimum width of public way = 21 (W)
e. Percent of frontage increase I_f = 100[F/P – 0.25] x W/30 = 35 (%)

[2] Unlimited area applicable under conditions of Section 507.
[3] Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).
[4] The maximum area of open parking garages must comply with Table 406.5.4.
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE [1]
Building Height in Feet (Table 504.3) [2]	40	19	
Building Height in Stories (Table 504.4) [3]	1	1	

[1] Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.
[2] The maximum height of air traffic control towers must comply with Table 412.3.1.
[3] The maximum height of open parking garages must comply with Table 406.5.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (W/_____* REDUCTION)				
Structural Frame, including columns, girders, trusses							
Bearing Walls							
Exterior				A1 1/A6.1, 1/A6.2,			
North	170	0	N/A	A1 1/A6.3	N/A	N/A	N/A
East	205	0	N/A	A1 1/A6.3	N/A	N/A	N/A
West	84	0	N/A	A1 2/A6.0	N/A	N/A	N/A
South	123	0	N/A	A1 1/A6.0	N/A	N/A	N/A
Interior							
Nonbearing Walls and Partitions Exterior walls							
North		N/A	N/A		N/A	N/A	N/A
East		N/A	N/A		N/A	N/A	N/A
West		N/A	N/A		N/A	N/A	N/A
South		N/A	N/A		N/A	N/A	N/A
Interior walls and partitions				A1			
Floor Construction Including supporting beams and joists		N/A		7/S1.2, S1.1			
Floor Ceiling Assembly		N/A					
Columns Supporting Floors		N/A	N/A		N/A	N/A	N/A
Roof Construction, including supporting beams and joists		0	N/A	S2.1,S2.2	N/A	N/A	N/A
Roof Ceiling Assembly		0	N/A	S2.1,S2.2	N/A	N/A	N/A
Columns Supporting Roof		0	N/A	S2.1,S2.2	N/A	N/A	N/A
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation		N/A					
Occupancy/Fire Barrier Separation		N/A					
Party/Fire Wall Separation		N/A					
Smoke Barrier Separation		N/A					
Smoke Partition		N/A					
Tenant/Dwelling Unit/ Sleeping Unit Separation		N/A					
Incidental Use Separation		N/A					

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
158', 71', 180', 59'	*UP, NS*	*NO LIMIT*	*N/A*

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ☒ Yes
Exit Signs: ☐ No ☒ Yes
Fire Alarm: ☐ No ☒ Yes
Smoke Detection Systems: ☐ No ☒ Yes ☐ Partial _____
Carbon Monoxide Detection: ☒ No ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: **AS2.4**

- ☒ Fire and/or smoke rated wall locations (Chapter 7)
- ☐ Assumed and real property line locations (if not on the site plan)
- n/a ☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
- ☒ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
- ☒ Occupant loads for each area
- ☐ Exit sign locations (1013)
- ☒ Exit access travel distances (1017)
- ☒ Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
- n/a ☐ Dead end lengths (1020.4)
- ☒ Clear exit widths for each exit door
- ☒ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- ☒ Actual occupant load for each exit door
- n/a ☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- n/a ☐ Location of doors with panic hardware (1010.1.10)
- n/a ☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- n/a ☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
- n/a ☐ Location of doors equipped with hold-open devices
- n/a ☐ Location of emergency escape windows (1030)
- n/a ☐ The square footage of each fire area (202)
- n/a ☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- ☒ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

UNIT CLASSIFICATION	TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	96" SPACES	132" SPACES	
YES	11	20	3		23
TOTAL	11	20	3	0	23

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATER CLOSETS			URINALS	LAVATORIES			SHOWERS /TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
SPACE	EXIST'G	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	NEW	1	1	0	0	1	1	0	0	0	0
	REQ'D	1	1	0	0	1	1	0	0	0	0

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

DHHS - Food Establishment Permit

ENERGY SUMMARY

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: ☒ No ☐ Yes (The remainder of this section is not applicable)

Exempt Building: ☒ No ☐ Yes (Provide code or statutory reference): _____

Climate Zone: ☐ 3A ☒ 4A ☐ 5A

Method of Compliance: Energy Code ☐ Performance ☒ Prescriptive
ASHRAE 90.1 ☐ Performance ☒ Prescriptive
(If "Other" specify source here)_____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)

Description of assembly: *WOOD ROOF DECK, WOOD TRUSS, MAS 60mil WHITE ULTRAPLY TPO MEMBRANE W/(2) LAYERS OF RIGID INSULATION*
U-Value of total assembly: *0.03*
R-Value of insulation: *R-33 MIN*
Skylights in each assembly: *NONE*
U-Value of skylight: *N/A*
total square footage of skylights in each assembly: *0*

Exterior Walls (each assembly)

Description of assembly: *2x6 WOOD STUDS AT 16" O.C., BATT INSULATION, PLYWOOD AND CEMENT BOARD SHEATHING*
U-Value of total assembly: *0.061*
R-Value of insulation: *R-20*
Openings (windows or doors with glazing)
U-Value of assembly: *max -0.38*
Solar heat gain coefficient: *N/A*
projection factor: *N/A*
Door R-Values: *N/A*

Walls below grade (each assembly)

Description of assembly: *N/A*
U-Value of total assembly: *N/A*
R-Value of insulation: *N/A*

Floors over unconditioned space (each assembly)

Description of assembly: *N/A*
U-Value of total assembly: *N/A*
R-Value of insulation: *N/A*

Floors slab on grade

Description of assembly: *4" CONC SLAB ON GRADE OVER VAPOR RETARDER AND 6" COMPACTED GRAVEL*
U-Value of total assembly: *0.04*
R-Value of insulation: *R-15*
Horizontal/vertical requirement: *N/A*
slab heated: *N/A*

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (I_S) 1
Seismic (I_E) 1

Live Loads: Roof 25 psf
Mezzanine N/A psf
Floor 125 psf

Ground Snow Load: 10 psf

Wind Load: Ultimate Wind Speed 118 mph (ASCE-7)
Exposure Category C

SEISMIC DESIGN CATEGORY: ☐ A ☒ B ☐ C ☐ D

Provide the following Seismic Design Parameters:

Risk Category (Table 1604.5) ☐ I ☒ II ☐ III ☐ IV

Spectral Response Acceleration S_S 0.148 %g S_1 0.07 %g

Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F

Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data

Basic structural system
☐ Bearing Wall ☐ Dual w/Special Moment Frame
☒ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum

Analysis Procedure: ☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic

Architectural, Mechanical, Components anchored? ☒ Yes ☐ No

LATERAL DESIGN CONTROL: Earthquake ☒ Wind ☒

SOIL BEARING CAPACITIES:

Field Test (provide copy of test report) 2,000 psf
Presumptive Bearing capacity _____ psf
Pile size, type, and capacity _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone

winter dry bulb: 22°F
summer dry bulb: 96°F

Interior design conditions

winter dry bulb: 70°F
summer dry bulb: 75°F
relative humidity: 50%

Building heating load: 240,000 Btuh

Building cooling load: 250,000 Btuh

Mechanical Spacing Conditioning System

Unitary
description of unit: RTU & Dedicated Outdoor Air System
heating efficiency: 82%
cooling efficiency: (energy ` ratio) 12.8
size category of unit: 5t + 15t

Boiler
Size category. If oversized, state reason.: N/A

Chiller
Size category. If oversized, state reason.: N/A

List equipment efficiencies: Water Heater: 0.84 SL

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code ☒ Performance ☐ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive

Lighting schedule (each fixture type)

lamp type required in fixture *A, AE, L-1, L-4, LL4, L-9, EX, EM, WP, D, H, H1, P1*
number of lamps in fixture *1*
ballast type used in the fixture *A-LL4:3500K LED, D:5000K LED, H:3000K LED, P1:5000K LED*
number of ballasts in fixture
total wattage per fixture *A/AE: 52W, L-1: 18W, L-9: 30W, LL4: 12W, L-4: 12W, H1: 100W, D: 14W, P1: 165W, H: 38W*
total interior wattage specified vs. allowed (whole building or space by space) *1656 vs. 4740*
total exterior wattage specified vs. allowed *2152 vs. 1723*

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)

☒ C406.2 More Efficient HVAC Equipment Performance
☐ C406.3 Reduced Lighting Power Density
☐ C406.4 Enhanced Digital Lighting Controls
☐ C406.5 On-Site Renewable Energy
☐ C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating

COM*check* Software Version 4.1.5.5

Interior Lighting Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Popeye's
Project Type:	New Construction

Construction Site:
1517 NC 24-87
Cameron, NC

Owner/Agent:

Designer/Contractor:
The Dimension Group
10755 Sandhill Road
Dallas, TX 75238
214 343 9400

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
High Performance HVAC, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Dining: Cafeteria/Fast Food	6000	0.79	4740
		Total Allowed Watts =	4740

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Dining: Cafeteria/Fast Food				
LED 1: A/AE: 2X4 LED TROFFER: LED Panel 54W:	1	23	52	1196
LED 2: L-1: LED SUSPENDED: LED Linear 20W:	1	11	18	198
LED 3: L-9: LED SUSPENDED: LED Linear 22W:	1	1	30	30
LED 4: LL4: 6" RECESSED LED DOWNLIGHT: LED A Lamp 12W:	1	17	12	196
LED 5: L-4: LED ACCENT LIGHT: LED A Lamp 12W:	1	3	12	36
			Total Proposed Watts =	1656

Interior Lighting PASSES: Design 65% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jennifer Pfankuch - MEP Designer	Jennifer Pfankuch	25 May 2023
Name - Title	Signature	Date

COMcheck Software Version 4.1.5.5

Exterior Lighting Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Popeye's
Project Type:	New Construction
Exterior Lighting Zone	4 (High activity metropolitan commercial district (LZ4))

Construction Site:
1517 NC 24-87
Cameron, NC

Owner/Agent:

Designer/Contractor:
The Dimension Group
10755 Sandhill Road
Dallas, TX 75238
214 343 9400

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Walkway < 10 feet wide	57 ft of	0.7	Yes	40
Entry canopy	107 ft2	0.4	Yes	43
Parking area	20546 ft2	0.08	Yes	1644
Illuminated area of facade wall or surface	168 ft2	0.15	No	25
			Total Tradable Watts (a) =	1726
			Total Allowed Watts =	2152
			Total Allowed Supplemental Watts (b) =	900

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.

(b) A supplemental allowance equal to 900 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Walkway < 10 feet wide (57 ft of walkway length): Tradable Wattage				
LED 2: H1: LED SCONCE: LED Other Fixture Unit 103W:	1	8	100	800
Drive-up windows/doors (2 windows or doors): Non-tradable Wattage				
Entry canopy (107 ft2): Tradable Wattage				
LED 3: D: RECESSED DOWNLIGHT: LED A Lamp 13W:	1	7	14	98
Parking area (20546 ft2): Tradable Wattage				
LED 4: P1: LED POLE LIGHT: LED Roadway-Parking Unit 220W:	1	5	165	825
Illuminated area of facade wall or surface (168 ft2): Non-tradable Wattage				
LED 5: H: LED GOOSENECK: LED Other Fixture Unit 36W:	1	2	38	76
			Total Tradable Proposed Watts =	1723

Exterior Lighting PASSES: Design 33% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jennifer Pfankuch - MEP Designer	Jennifer Pfankuch	25 May 2023
Name - Title	Signature	Date

COM*check* Software Version 4.1.5.5

Mechanical Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Popeye's
Location:	Cameron, North Carolina
Climate Zone:	4a
Project Type:	New Construction

Construction Site:
1517 NC 24-87
Cameron, NC

Owner/Agent:

Designer/Contractor:
The Dimension Group
10755 Sandhill Road
Dallas, TX 75238
214 343 9400

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
High Performance HVAC, 1.0 credit

Mechanical Systems List

Quantity	System Type & Description
1	HVAC System 2 (Single Zone): Heating: 1 each - Central Furnace, Electric, Capacity = 11 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 60 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: None
1	HVAC System 3 (Single Zone): Heating: 1 each - Central Furnace, Electric, Capacity = 44 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Hydronic Coil, Capacity = 151 kBtu/h, Air Economizer No minimum efficiency requirement applies Fan System: None
1	Water Heater 1: Electric Storage Water Heater, Capacity: 50 gallons w/ Circulation Pump Proposed Efficiency: 0.84 SL, %/h (if > 12 kW), Required Efficiency: 0.84 SL, %/h (if > 12 kW)

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jennifer Pfankuch - MEP Designer	Jennifer Pfankuch	25 May 2023
Name - Title	Signature	Date

COM*check* Software Version 4.1.5.5

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 96.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR3][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C403.12.2, C403.12.3 [FO9][3]	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature and outdoor temperature. future connection to controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.1, C404.6.2 [PL3][1]	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41][3]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.11.3 [ME61][2]	HVAC piping insulation insulated in accordance with Table C403.11.3. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.11.3 [ME61][2]	HVAC piping insulation insulated in accordance with Table C403.11.3. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.8.1 [ME65][3]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. *See the Mechanical Systems list for values.*
C403.8.1 [ME65][3]	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp or fan system bhp.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met. *See the Mechanical Systems list for values.*
C403.8.3 [ME117][2]	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.8.3 [ME117][2]	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of the fan.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.12.1 [ME71][2]	Systems that heat outside the building envelope are radiant heat systems controlled by an occupancy sensing device or timer switch.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.3 [ME55][2]	HVAC equipment efficiency verified.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.2.2 [ME59][1]	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.7.1 [ME59][1]	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.7.2 [ME115][3]	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.7.6 [ME141][3]	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.7.4 [ME57][1]	Exhaust air energy recovery on systems meeting Table C403.7.4(1) and C403.7.4(2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.7.5 [ME116][3]	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.11.1, C403.11.2 [ME60][2]	HVAC ducts and plenums insulated in accordance with C403.11.1 and constructed in accordance with C403.11.2, verification may need to occur during Foundation Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.3.1 [ME50][2]	Three-pipe hydronic systems using a common return for hot and chilled water are not used.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.3.1 [ME50][2]	Three-pipe hydronic systems using a common return for hot and chilled water are not used.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.5 [ME26][3]	Chilled water plants with multiple chillers have capability to reduce flow automatically through the chiller plant when a chiller is shut down. Boiler plants with multiple boilers have the capability to reduce flow automatically through the boiler plant when a boiler is shut down.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.5 [ME26][3]	Chilled water plants with multiple chillers have capability to reduce flow automatically through the chiller plant when a chiller is shut down. Boiler plants with multiple boilers have the capability to reduce flow automatically through the boiler plant when a boiler is shut down.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.1.4 [ME63][2]	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60F and cooling setpoint >= 80F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.9.5 [ME31][3]	Condenser heat recovery system that can heat water to 85 ºF or provide 60% of peak heat rejection is installed for preheating of service hot water.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.9.5 [ME31][3]	Condenser heat recovery system that can heat water to 85 ºF or provide 60% of peak heat rejection is installed for preheating of service hot water.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.2.1 [ME53][3]	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.2.2 [ME54][3]	HVAC hydronic heating and cooling coils have means to balance and have pressure test connections.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.2.2 [ME54][3]	HVAC hydronic heating and cooling coils have means to balance and have pressure test connections.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.5, C403.5.1, C403.5.2 [ME123][3]	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2..	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22][1]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1, C405.2.1.1 [EL18][1]	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1.2 [EL19][1]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.1.3 [EL20][1]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.2, C405.2.2.1, C405.2.2.2 [EL21][2]	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.4 [EL26][1]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL27][1]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.5 [EL28][null]	Manual controls required by the energy code are in a location with ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.6 [EL30][null]	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.3 [EL6][1]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.6 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.7 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.9 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C303.3, C408.2.5.3 [FI8][3]	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.2 [FI27][3]	HVAC systems and equipment capacity does not exceed calculated loads.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1 [FI47][3]	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1 [FI47][3]	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.1.2 [FI38][3]	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1.3 [FI20][3]	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.2 [FI39][3]	Each zone equipped with setback controls using automatic time clock or programmable control system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.2.1, C403.2.4.2.2 [FI40][3]	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.3 [FI11][3]	Heat traps installed on supply and discharge piping of non-circulating systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.4 [FI25][2]	All piping insulated in accordance with section details and Table C403.11.3.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C404.6.1 [FI12][3]	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.4.1 [FI18][1]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C405.5.1 [FI19][1]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C408.1.1 [FI57][1]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.1 [FI28][1]	Commissioning plan developed by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.1 [FI31][1]	HVAC equipment has been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.2 [FI10][1]	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.4 [FI29][1]	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI7][3]	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI16][3]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.3 [FI43][1]	An air and/or hydronic system balancing report is provided for HVAC systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.5.4 [FI30][1]	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.3 [FI33][1]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)