SCOOTER'S COFFEE

EST. 1998 SCOOTER'S COFFEE

1816 N Reynolds Rd.
Bryant, AR 72022
4.1 Straight Prototype Kiosk - May 2022

RESPONSIBILITY SCHEDULE

Item	By	Misc Information	Vendor Company	Vendor Contact Info
Air balance	NIC	GC to coordinate based on CO needs		
Artwork / Décor	FBO	GC to coordinate delivery and provide installation	By Owner	
Awnings	NIC	GC to coordinate installation. GC to provide blocking for attachment.		
Doors & Door Hardware	GC	GC to provide per drawings and specifications	LockNet	
Drive-thru System	NIC	GC to coordinate installation, conduit by electrical contractor	Commercial Electronics	Chris Ianke, P: 314-656-4026, E: cianke@cerepairs.com
Drive-thru Window	GC	GC to provide per drawings and specifications	Quick-Serv	
Espresso Machines	FBO	GC to coordinate installation, conduit and step-down transformer by electrical contractor	Franke	Michael Vennera, P: 615-462-1334, E: michael.vennera@franke.com
Exterior Insulation Finishing System / Stucco (when shown), WP Membrane	GC	GC to provide system per drawings and Owner specs, no alternates	Sto Corp	
Flooring, Concrete	GC	GC to provide and install per drawings and specifications	Laticrete	
Flooring, Tile (when shown)	GC	GC to provide and install per drawings and specifications	Dal-Tile	
Grease Interceptor	GC	GC to provide and install per drawings and specifications	Schier Products	Sean Molen, P: 816-506-3203, E: scooters@schierproducts.com
Hardie Siding and Panel System	GC	GC to provide and install per drawings and specifications	James Hardie	
HVAC Commissioning	GC			
HVAC Equipment	GC	GC to coordinate and verify shipment		
Ice Machine	NIC	GC to coordinate delivery and provide installation. GC to provide clear access to building for delivery & supply forklift for unloading.		
Kitchen Equipment	FBO	GC to coordinate delivery and provide installation. GC to provide clear access to building for delivery & supply forklift for unloading.		
Landscape & Irrigation	GC	GC to provide and install per drawings and specifications		
Lay-in Ceilings	GC	GC to provide and install per drawings and specifications	Armstrong	
Light Fixtures	GC	GC to provide and install per drawings and specifications	FSG	Victoria Sexton, P: 800-994-1309, E: victoria.sexton@fsgi.com
Masonry, Brick (when shown)	GC	GC to provide and install per drawings and specifications	Mutual Materials	
Masonry, Stone (when shown)	GC	GC to provide and install per drawings and specifications	Eldorado Stone	
Menu Boards Exterior	NIC	GC to coordinate installation, conduit by electrical contractor		
Menu Boards Interior	NIC	GC to coordinate installation, conduit by electrical contractor	The Howard Company	Katie Christopherson, P: 262-317-7709, E: gary@howardcompany.com, katie@howardcompany.com
Millwork Package	FBO	GC to coordinate delivery and provide installation	Midwest Cabinetry	Brandon Lee (Estimator), Scott Teter, P: 785-242-8181, E: steter@midwestcabinet.com
Music System	NIC	GC to coordinate installation, conduit by electrical contractor	Carousel Industries	Pierre Guzman, P: 385-230-6260, E: pguzman@carouselindustries.com , scooterscoffee@carouselindustries.com
Networking Equipment	NIC	GC to coordinate installation, conduit by electrical contractor	Carousel Industries	Pierre Guzman, P: 385-230-6260, E: pguzman@carouselindustries.com , scooterscoffee@carouselindustries.com
Nitro System	FBO	GC to coordinate and verify shipment. GC to provide wall chase and final connections.	MicroMatic	Leah Haab, P: 352-593-2007, E: lkh@micro-matic.com
Patio Accessories (trash, bike rack, etc.)	GC	GC to provide and install per drawings and specifications		
Patio Furniture	FBO	GC to coordinate delivery and provide installation	Florida Seating	
Patio Railing (when shown)	GC	GC to provide and install per drawings and specifications		
Patio Umbrellas	FBO	GC to coordinate delivery and provide installation	Florida Seating	
Phone Lines, System and Internet	NIC	GC to assist as needed		
POS System	NIC	GC to coordinate installation, conduit by electrical contractor	Brink/Partech	James Umphrey, P: 562-735-1618, E: james_umphrey@partech.com
RO / Water Softener	FBO	GC to coordinate delivery and provide installation	Clean Water Guys	Ellee Pierce, P: 402-330-6440, E: ellee@cleanwaterguys.com
Safe for Office	FBO	GC to coordinate delivery and provide installation		
Furniture, chairs	FBO	GC to coordinate delivery and provide installation	Florida Seating	
Furniture, lounge seating	FBO	GC to coordinate delivery and provide installation	Joy Bird	
Furniture, side tables	FBO	GC to coordinate delivery and provide installation	Poly & Bark	
Security System	NIC	GC to coordinate installation, conduit by electrical contractor	Carousel Industries	Pierre Guzman, P: 385-230-6260, E: pguzman@carouselindustries.com , scooterscoffee@carouselindustries.com
Signage (exterior)	NIC	GC to coordinate installation, power by electrical contractor.		
Site Lighting (when shown)	GC	GC to provide and install per drawings and specifications	FSG	Victoria Sexton, P: 800-994-1309, E: victoria.sexton@fsgi.com
Smallwares	NIC	GC to coordinate and verify shipment		
Solid Surface	GC	GC to provide and install per drawings and specifications	Silestone	
Special Inspections	NIC	All special inspections by owner		
Stainless Fabrication	FBO	GC to coordinate delivery and provide installation. GC to provide clear access to building for delivery & supply forklift for unloading.		
Trash Containers / Services	NIC	GC to coordinate and verify shipment		
Toilet Accessories	GC	GC to provide and install per drawings and specifications		
Utilities (including temp)	GC	GC to coordinate set-up for all utilities		
Water Heater	GC	GC to provide and install per drawings and specifications		
Window Treatments	GC	GC to provide and install per drawings and specifications	Roll-A-Shade	
Wood Siding, Composite	GC	GC to provide and install per drawings and specifications	Fiberon	

CODE ANALYSIS

APPLICABLE CODES:

BUILDING CODE:	2012 INTERNATIONAL BUILDING CODE
PLUMBING CODE:	2018 INTERNATIONAL PLUMBING CODE
ELECTRIC CODE:	2017 NATIONAL ELECTRIC CODE
MECHANICAL CODE:	2021 INTERNATIONAL MECHANICAL CODE
FIRE CODE:	2012 ARKANSAS FIRE CODE
ENERGY CODE:	2009 INTERNATIONAL ENERGY CONSERVATION CODE
ACCESSIBILITY CODE:	2012 ARKANSAS ACCESSIBILITY STANDARDS
FUEL & GAS:	2018 INTERNATIONAL PLUMBING CODE

KIOSK AREA INFORMATION

BUILDING SQUARE FOOTAGE	AREA	PERCENT
NET RESTROOM AREA	60 SQ.FT	9%
NET BACK OF HOUSE / BARISTA AREA	549 SQ.FT	83%
TOTAL NET AREA	609 SQ.FT	92%
GROSS BUILDING AREA	664 SQ.FT	100%
ADDITIONAL SQUARE FOOTAGE	AREA	PERCENT
DUMPSTER ENCLOSURE	130 SQ.FT	100%

CODE SUMMARY

CODE ITEMS	PROPOSED
ZONING CLASSIFICATION	C-2 Highway Commercial
USE GROUP	B
TYPE OF CONSTRUCTION	V-B
MIXED USE	NO
NUMBER OF STORIES	SINGLE
MAXIMUM BUILDING HEIGHT	19'-0"
CLIMATE ZONE	3A

OCCUPANT LOAD FACTOR - SEE G0.2 FOR OCCUPANCY CALCULATIONS

TOTAL BUILDING OCCUPANT LOAD	DESIGN LOAD: 4, MAXIMUM LOAD: 8

INTERIOR OCCUPANT LOAD ACCESSIBLE EXIT REQUIREMENTS

INTERIOR OCCUPANT LOAD ONLY (EXCLUSIVE OF PATIO EGRESS REQUIREMENTS)

OCCUPANT LOAD	WIDTH/PER PERSON	WIDTH REQUIRED	WIDTH PROVIDED
4	.2 in.	8 in.	36 in. (CLEAR WIDTH)

DEFERRED/SEPARATE SUBMITTALS

1. BUILDING SIGNAGE (DEFERRED)
2. HEALTH (SEPARATE)
3. OTHER?

REQUIRED SPECIAL INSPECTIONS & TESTING

STRUCTURAL SPECIAL INSPECTIONS:

SPECIAL INSPECTIONS ARE REQUIRED FOR SPECIFIC BUILDING ELEMENTS. REFER TO STRUCTURAL DRAWINGS FOR THE LIST OF WORK REQUIRING SPECIAL INSPECTIONS. AN APPROVED SPECIAL INSPECTION SERVICE IS REQUIRED. THE NAME OF THE SPECIAL INSPECTION AGENCY AND CONTACT INFO SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT ONCE CONTRACTED. REPORTS SHALL BE SUBMITTED TO VERIFY CONFORMANCE WITH THE DRAWINGS.

PLUMBING FIXTURE COUNT REQUIREMENT

TOTAL OCCUPANT LOAD	4	REQUIRED			PROVIDED		
		LAVATORY	WATER CLOSET	URINAL	LAVATORY	WATER CLOSET	URINAL
UNISEX		1	1	0	1	1	0

THERMAL ENVELOPE REQUIREMENTS

BUILDING ELEMENTS	REQUIRED	PROVIDED
INSULATION ENTIRELY ABOVE DECK	R-30ci	R-30
WOOD FRAMED & OTHER	R-13 + R-3.8ci OR R-20	+R-20
UNHEATED SLABS	R-10 FOR 24" BELOW	+R-10

INTERIOR & EXTERIOR FINISHES

INTERIOR WALL & CEILING FINISH CLASSIFICATIONS:

CLASS A: FLAME SPREAD 0-25; SMOKE DEVELOPED INDEX 0-450
CLASS B: FLAME SPREAD 26-75; SMOKE DEVELOPED INDEX 0-450
CLASS C: FLAME SPREAD 76-200; SMOKE DEVELOPED INDEX 0-450

SMOKE DEVELOPED INDEXES OF INTERIOR MATERIALS: 0-450

USE GROUP	VERTICAL EXITS & EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS	ROOMS AND ENCLOSED SPACES
B	B N/A TO PROJECT	B N/A TO PROJECT	C ALL AREAS

CITY CONTACTS

BUILDING DEPARTMENT
Community Development
210 SW 3rd. St.,
Bryant, AR 72022
Contact: Joe Thomas,
Phone: 501-943-0368
Email: jthomas@cityofbryant.com

FIRE DEPARTMENT
210 SW 3rd. St.,
Bryant, AR 72022
Contact: Thomas Hammond, Fire Marshal
Phone: (501) 943-0397

PLANNING / ZONING
Community Development
210 SW 3rd. St.,
Bryant, AR 72022
Contact: Colton Leonard
Phone: (501) 943-0301
Email: cleonard@cityofbryant.com

HEALTH DEPARTMENT
Arkansas Department of Health
Protective Health Codes – Plumbing & Natural Gas
4815 West Markham/Slot #24
Little Rock, Arkansas 72205-3867
Contact: Chuck Dumas
Phone: 501-661-2163 or (501)661-2650
Email: john.dumas@arkansas.gov

PROJECT CONTACTS

ARCHITECT
GHA ARCHITECTURE / DEVELOPMENT
14901 Quorum Drive, Suite 300
Dallas, TX 75254
Phone: (972) 239-8884
Contact: Seun Olatunbosun
Email: solatunbosun@gha-architects.com

OWNER
Shawn LaMontia
Mean Bean Coffee, LLC
8818 S 193rd St.
Gretna, NE 68028
Phone: (402) 598-8314
Email: shawn@lamontiallc.com

SCOOTER'S PRE-DEVELOPMENT:
Lisa White, Pre-Development Manager
Email: lisa.white@scooterscoffee.com
10500 Sapp Brothers Dr.
Omaha, NE 68138

STRUCTURAL ENGINEER
Ronald A. Roberts, Associates, Inc.
2948 N. Stemmons Freeway
Dallas, TX 75247
Phone: (214) 637-6299
Contact: Craig Bailey
Email: cbailey@rara.net

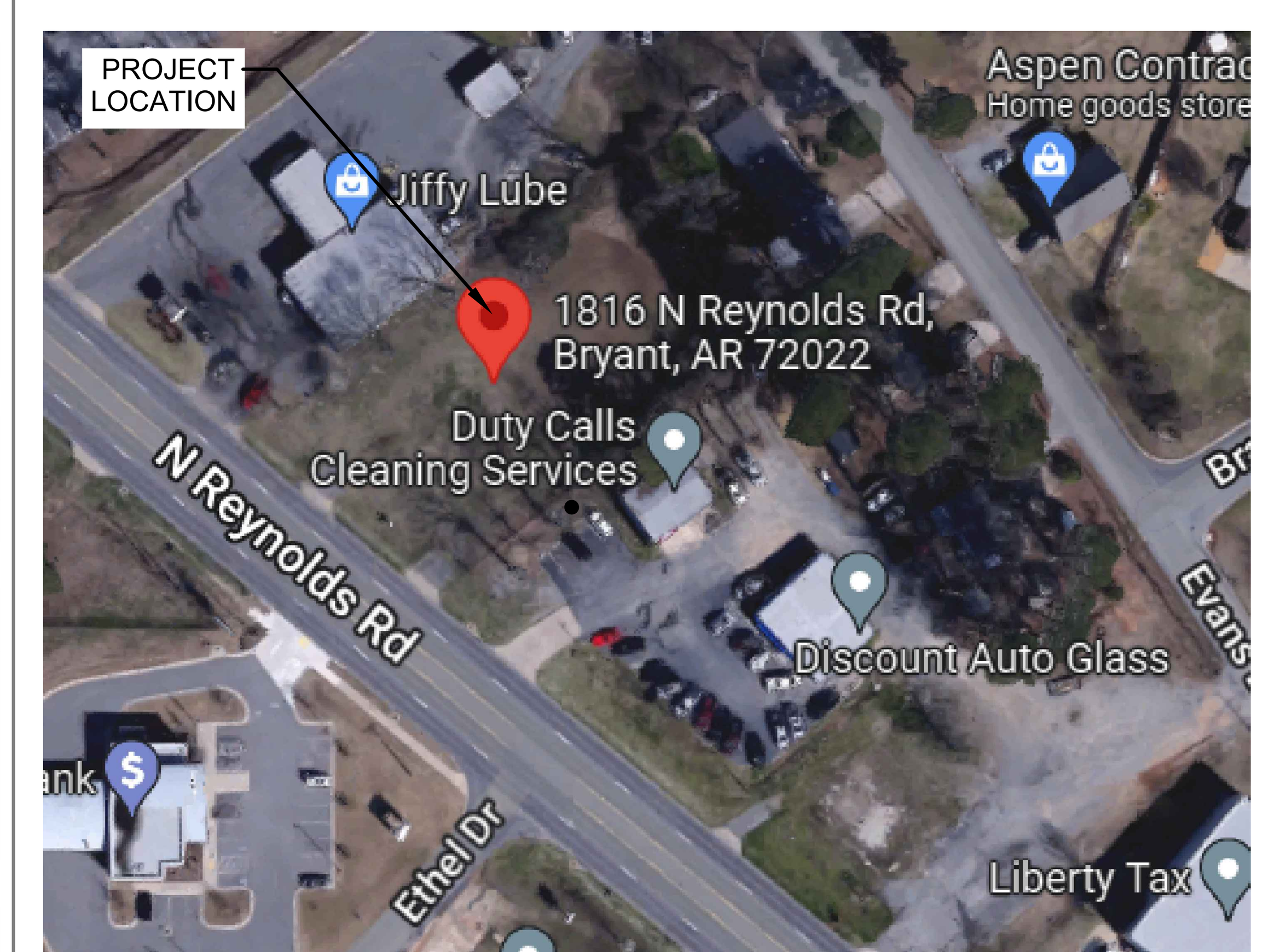
CIVIL
Sherrill Associates, INC.
316 North Main Street
Edwardsville, IL 62025
Phone: (618) 656-9251
Contact: Wilson D. Waggoner, P.E.
Email: wdw@sherrillassoc.com

Select from drop down

MEP ENGINEER
GHC ENGINEERS
14901 Quorum Drive, Suite 300
Dallas, TX 75254
Phone: (214) 915-8737
Contact: Grant Claussen
Email: iparsons@ghcengineers.com

KITCHEN DESIGNER
Trimark
4900 Osage St. Ste.400
Denver, CO80221
Phone: (402)339-8900

VICINITY MAP



1 VICINITY MAP
SCALE: N.T.S.

SHEET INDEX

SHEET #	SHEET TITLE	08/26/2022 PERMIT/BID
GENERAL		
G0.1	COVER SHEET	●
G0.2	LIFE SAFETY / OCCUPANCY PLAN	●
G0.3	ACCESSIBILITY NOTES & DETAILS	●
G0.4	BUILDING COMCHECK	●
G1.1	ARCHITECTURAL SPECIFICATIONS	●
G1.2	ARCHITECTURAL SPECIFICATIONS	●
CIVIL		
C-0.0	COVER SHEET	●
C-2.0	PROPOSED SITE PLAN	●
C-3.0	LANDSCAPE PLAN	●
C-5.0	ALTA SURVEY	●
ARCHITECTURAL		
A1.0	DIMENSION FLOOR PLAN	●
A1.1	FINISH FLOOR PLAN	●
A1.2	EQUIPMENT AND FURNISHINGS PLAN	●
A1.3	REFLECTED CEILING & LIGHTING LOCATION PLAN	●
A1.4	ROOF PLAN	●
A1.5	TRASH ENCLOSURE PLAN, ELEVATIONS & DETAILS	●
A2.1	EXTERIOR ELEVATIONS	●
A2.2	EXTERIOR ELEVATIONS	●
A3.1	BUILDING SECTIONS	●
A3.2	EXTERIOR WALL SECTIONS	●
A3.3	EXTERIOR WALL SECTIONS	●
A3.4	EXTERIOR WALL SECTIONS	●
A3.5	EXTERIOR DOOR & WINDOW DETAILS	●
A3.6	EXTERIOR DETAILS	●
A4.1	INTERIOR ELEVATIONS	●
A4.2	ENLARGED RESTROOM PLAN AND ELEVATIONS	●
A5.2	INTERIOR DETAILS	●
A6.1	DOOR AND WINDOW SCHEDULE	●
A7.1	SITE DETAILS	●
A7.2	MONUMENT SIGN	●
KITCHEN		
K1.0	EQUIPMENT PLAN & SCHEDULE	●
K2.0	EQUIPMENT PLUMBING ROUGH-IN PLAN	●
K3.0	EQUIPMENT ELECTRICAL ROUGH-IN PLAN	●
K4.0	EQUIPMENT ELEVATIONS	●
STRUCTURAL		
S0.0	STRUCTURAL NOTES AND SPECIAL INSPECTIONS	●
S0.1	DIAGRAMS & SCHEDULES	●
S1.0	FOUNDATION & ROOF FRAMING PLANS	●
S2.0	FOUNDATION SECTIONS & DETAILS	●
S2.1	FOUNDATION SECTIONS & DETAILS	●
S3.0	FRAMING SECTIONS & DETAILS	●
MECHANICAL		
M1.01	MECHANICAL SPECIFICATIONS	●
M1.02	MECHANICAL LEGENDS, NOTES, & ABBREVIATIONS	●
M1.03	MECHANICAL DETAILS	●
M1.04	MECHANICAL COMCHECK	●
M1.05	MECHANICAL COMCHECK	●
M2.01	MECHANICAL FLOOR PLAN & SCHEDULES	●
PLUMBING		
P1.01	PLUMBING SPECIFICATIONS	●
P1.02	PLUMBING LEGENDS AND SCHEDULES	●
P1.03	PLUMBING DETAILS	●
P2.01	SANITARY SEWER FLOOR PLAN & RISER DIAGRAM	●
P2.02	WATER SUPPLY FLOOR PLAN & RISER DIAGRAM	●
ELECTRICAL		
E0.01	ELECTRICAL SITE PLAN	●
E1.01	ELECTRICAL SPECIFICATIONS	●
E1.02	ELECTRICAL SPECIFICATIONS	●
E1.03	ELECTRICAL DETAILS	●
E1.04	ELECTRICAL COMCHECK	●
E2.01	LIGHTING FLOOR PLAN, NOTES, & SCHEDULES	●
E2.02	POWER FLOOR PLAN, NOTES & SCHEDULES	●

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL VISIT THE SITE, REVIEW THE DRAWINGS AND BECOME THOROUGHLY FAMILIAR WITH THE SITE CONDITIONS PRIOR TO CONSTRUCTION.
B. GENERAL CONTRACTOR SHALL CONSULT WITH THE CLIENT AND ARCHITECT TO RESOLVE ANY CHANGES, OMISSIONS OR PLAN DISCREPANCIES PRIOR TO CONSTRUCTION.
C. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH LOCAL, COUNTY, STATE AND FEDERAL CODES AND ORDINANCES.
D. GENERAL CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES.
E. GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS, INCLUDING CLEARANCES REQUIRED BY OTHER TRADES AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH WORK. ALL DIMENSIONS ARE TO THE FACE OF FRAMING UNLESS NOTED OTHERWISE.
F. GENERAL CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS, FLOORS, CEILINGS, OR OTHER SURFACES IDENTIFIED TO REMAIN THAT MAY BECOME DAMAGED DURING THE COURSE OF WORK.
G. GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMITS FOR FIRE PROTECTION, FIRE ALARM, OR SPECIALTY SYSTEMS PRIOR TO INSTALLATION OF SUCH SYSTEMS.
H. GENERAL CONTRACTOR SHALL RETAIN ONE SET OF CONSTRUCTION ISSUE PLANS ON-SITE TO DOCUMENT ALL CHANGES MADE DURING CONSTRUCTION. THE RECORD DRAWINGS SHALL BE ISSUED TO THE CLIENT AT PROJECT CLOSE-OUT AS DESCRIBED IN THE GENERAL REQUIREMENTS OF THE PROJECT MANUAL.
I. RESPONSIBILITY FOR SUPPLY AND DELIVERY OF MATERIALS AND EQUIPMENT IS IDENTIFIED IN THE DRAWING SCHEDULE SHEETS UNDER THE COLUMN LABELED "RESPONSIBILITY".
J. FOR THE PURPOSE OF THE DOCUMENTS, TO "INSTALL" SHALL MEAN TO PROVIDE ALL FASTENERS, MISCELLANEOUS HARDWARE, BLOCKING, ELECTRICAL CONNECTIONS, PLUMBING CONNECTIONS AND OTHER ITEMS REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION UNLESS OTHERWISE NOTED.
K. ALL ITEM SUBSTITUTIONS MUST BE APPROVED BY CLIENT AND ARCHITECT.
L. GC TO INCLUDE 8 HOURS OF HANGING MISC OWNER PROVIDED SHELVING AND ACCESSORIES.

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Suite 300
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Fax: (972) 239-5054

STATE OF ARKANSAS, REGISTERED ARCHITECT, License Number
09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
COVER SHEET

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
G0.1

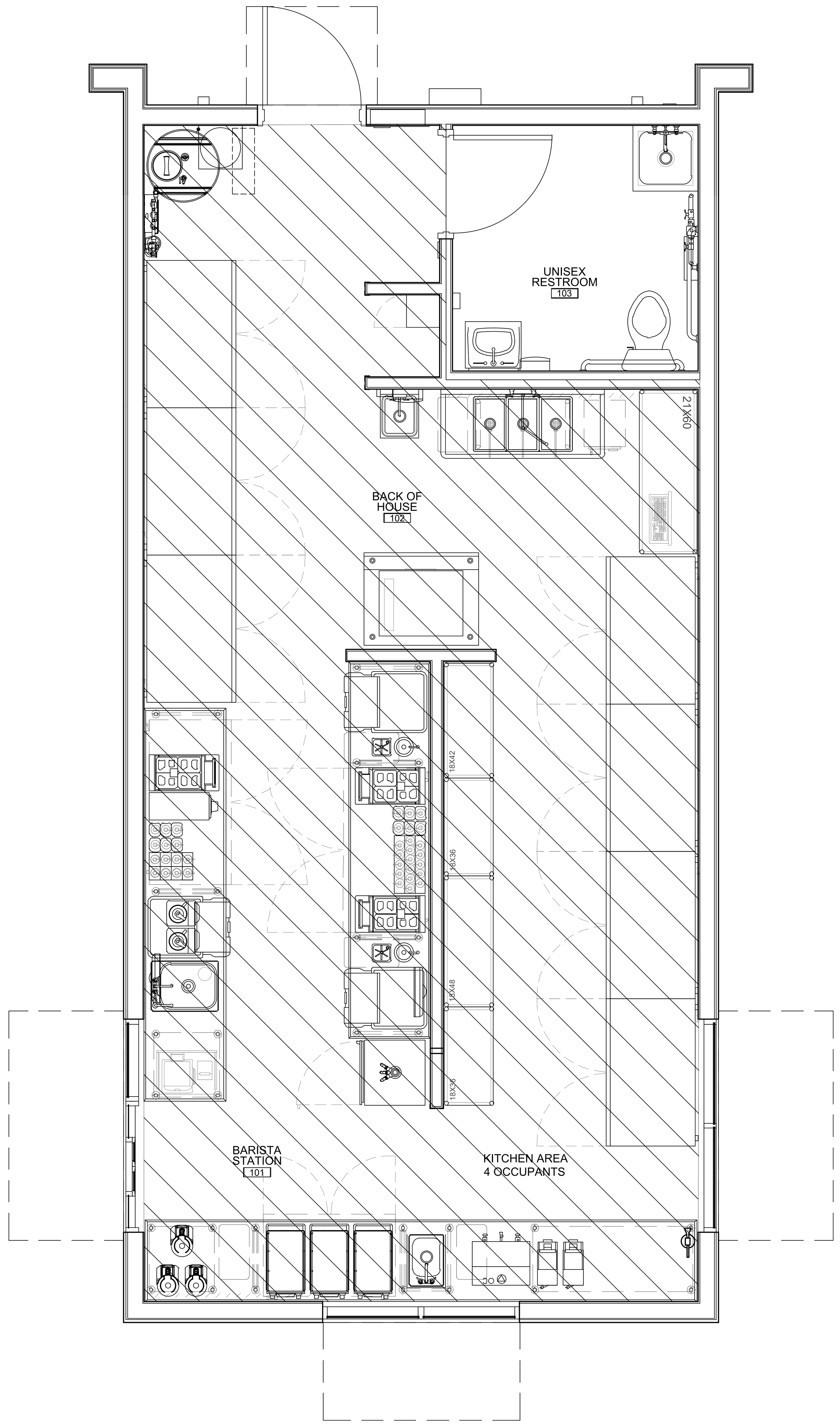
OCCUPANT LOAD AND EGRESS ANALYSIS

	USE	AREA	LOAD FACTOR	OCCUPANTS
(hatched)	FOOD PREP	549 SF	1:200	4
(blank)	RESTROOMS	60 SF		0
TOTAL OCCUPANTS:				4

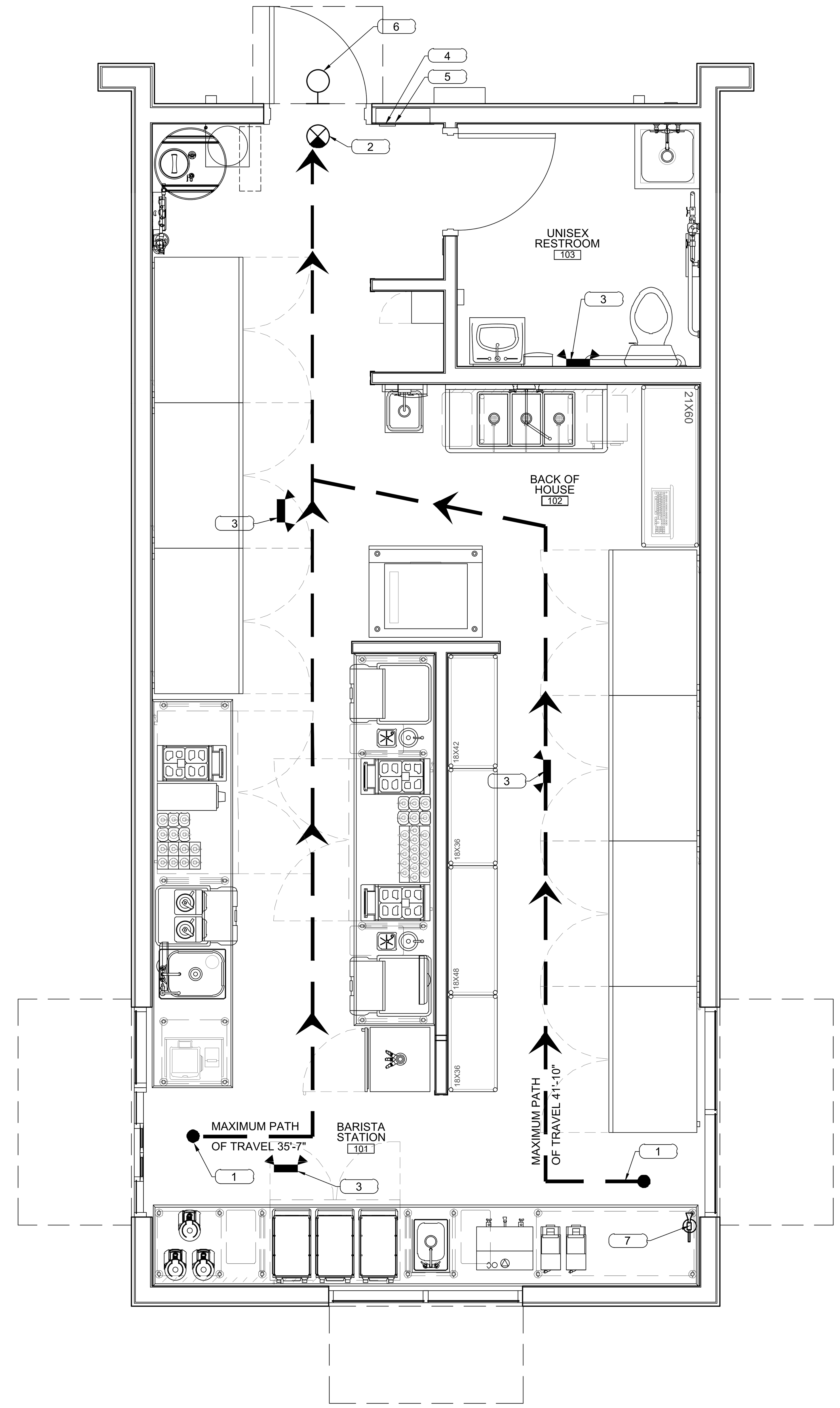
EXIT WIDTH CALCULATIONS:
4 OCCUPANTS x.2 = .8" REQUIRED - 36" PROVIDED

OCCUPANT LOAD IS 4 AND ONE EXIT IS REQUIRED, ONE IS PROVIDED.

ALLOWABLE PATH OF TRAVEL WITHOUT A SPRINKLER SYSTEM: 75'-0"
MAXIMUM PATH OF TRAVEL: 41'-10"



2 OCCUPANCY PLAN
SCALE: 3/8" = 1'-0"



1 LIFE SAFETY PLAN
SCALE: 3/8" = 1'-0"

GENERAL NOTES

1. CONTRACTOR TO PROVIDE A SUFFICIENT NUMBER OF 2A10BC RATED FIRE EXTINGUISHERS DURING CONSTRUCTION SO THAT ALL PORTIONS OF THE BUILDING ARE WITHIN 75 FT. TRAVEL DISTANCE OF SAID EXTINGUISHER & SO THAT AT LEAST ONE 2A10BC RATED FIRE EXTINGUISHER IS PROVIDED FOR EACH 3,000 SQ. FT. OF FLOOR SPACE OR PORTION THEREOF.
2. PROVIDE FIRE EXTINGUISHERS AS REQUIRED BY FIRE DEPARTMENT FIELD INSPECTOR DURING CONSTRUCTION & FOR COMPLETED PROJECT.
3. EXIT DOORS
   - 3.1. ALL EXIT DOORS SHALL SWING IN THE DIRECTION OF TRAVEL.
   - 3.2. ALL EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT SPECIAL KNOWLEDGE OR EFFORT (NO BOLTS, NO SLIDING BOLTS, ETC.).
   - 3.3. ALL EXIT DOORS & INTERVENING DOORS ON THE EXIT PATH, IF PROVIDED WITH A LOCK OR LATCH, MUST BE MARKED " THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED".
   - 3.4. PROVIDE ILLUMINATED EXIT SIGNS ABOVE EXITS WITH MIN. 3/4"x6" LETTERS LIGHTED ON CONTRASTING BACKGROUND.
4. EXIT SIGNS
   - 4.1. EXIT SIGNS SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED
   - 4.2. EXIT SIGNS ILLUMINATED BY AN EXTERNAL SOURCE SHALL HAVE AN INTENSITY OF NOT LESS THAN 5 FOOT CANDLES (54 LUX).
   - 4.3. INTERNALLY ILLUMINATED SIGNS SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SECTION 2702.
   - 4.4. EXIT SIGNS SHALL BE ILLUMINATED AT ALL TIMES. (1011.3)
   - 4.5. EXIT SIGNS SHALL BE CONNECTED TO AN EMERGENCY POWER SYSTEM THAT WILL PROVIDE AN ILLUMINATION OF NOT LESS THAN 90 MIN. IN CASE OF PRIMARY POWER LOSS (1011.6.3).
5. EGRESS EMERGENCY LIGHTING
   - 5.1. THE MEANS OF EGRESS, INCLUDING THE EXIT DISCHARGE, SHALL BE ILLUMINATED AT ALL TIMES THE BUILDING SPACE SERVED BY THE MEANS OF EGRESS IS OCCUPIED.
   - 5.2. THE MEANS OF EGRESS ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FOOT-CANDLE AT THE WALKING SURFACE.
   - 5.3. THE POWER SUPPLY FOR MEANS OF EGRESS ILLUMINATION SHALL NORMALLY BE PROVIDED BY THE PREMISES' ELECTRICAL SUPPLY IN THE EVENT OF SUPPLY; FAILURE AN EMERGENCY ELECTRICAL SYSTEM SHALL AUTOMATICALLY ILLUMINATE.
6. UNLESS ALREADY EXISTING, AN APPROVED SET OF NUMERALS, MINIMUM 6" HIGH ALUMINUM NUMBERS WITH A STROKE WIDTH NOT LESS THAN 1/2 INCH AND FONT TYPE ARIAL BOLD, SHALL BE PLACED ON THE BUILDING. THE NUMBERING SHALL BE PLAINLY VISIBLE & LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. SAID NUMERALS SHALL CONTRAST W/ THEIR BACKGROUND. IF THE ADDRESS THAT IS POSTED NEAR THE INTERSECTION OF THE DRIVEWAY & THE PUBLIC STREET OR ROAD FRONTING THE PROPERTY IS NOT VISIBLE, ADDITIONAL ADDRESSES POSTED NEAR THE INTERSECTION OF THE DRIVEWAY & THE PUBLIC STREET ARE REQUIRED. (VERIFY REQUIREMENTS.)
7. PROVIDE A KNOX BOX FOR FIRE DEPT. ACCESS & KEY ACCESS, LOCATION IF REQUIRED BY FIRE MARSHAL.
8. GENERAL CONTRACTOR SHALL SECURE PERMITS REQUIRED BY THE FIRE DEPARTMENT FROM THE FIRE DEPARTMENT PRIOR TO OCCUPYING THIS BUILDING.
9. PROVIDE ALL WEATHER ACCESS ROAD (MIN 20') TO ALL BUILDINGS & HYDRANTS FROM PUBLIC WAY DURING CONSTRUCTION.

KEYNOTES

(X)

1. EXIT PATH OF TRAVEL
2. EXIT SIGN, SEE ELECTRICAL DRAWINGS AND REFLECTED CEILING PLAN
3. CEILING MOUNTED EMERGENCY LIGHTING, SEE ELECTRICAL DRAWINGS AND REFLECTED CEILING PLAN
4. TACTILE EXIT SIGNS
5. OCCUPANT LOAD SIGN. FINAL LOCATION APPROVED BY FIRE MARSHALL
6. EXTERIOR EXIT LIGHT, SEE ELECTRICAL DRAWING AND REFLECTED CEILING PLAN
7. FIRE EXTINGUISHER PER FIRE MARSHALL APPROVAL

LEGEND

- NEW EMERGENCY LIGHT
- EXTERIOR EMERGENCY LIGHT
- NEW EXIT SIGN, CONFIRM LOCATION REQUIREMENTS WITH FIRE MARSHAL
- EGRESS PATH OF TRAVEL
- 2A - 10BC MINIMUM RATED FIRE EXTINGUISHER - WALL HUNG

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STATE OF ARKANSAS — License Number
09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
LIFE SAFETY & OCCUPANCY PLAN

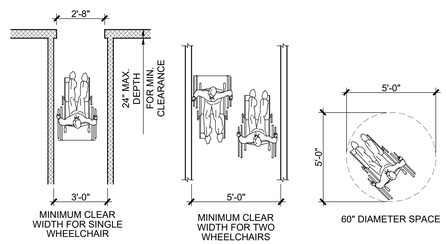
KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

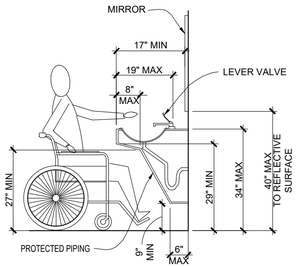
- [X] PERMIT/BID SUBMITTAL
- [ ] CONSTRUCTION ISSUE

SHEET NO.
G0.2



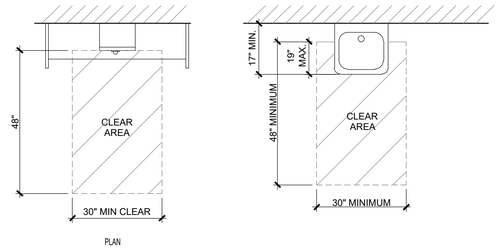
10 CLEAR FLOOR SPACE

SCALE: NTS



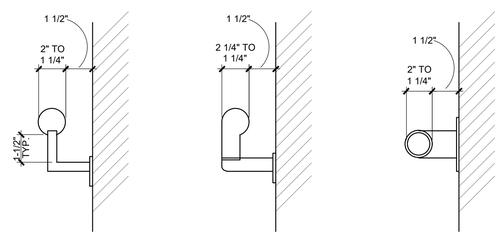
11 LAVATORY CLEARANCES

SCALE: NTS



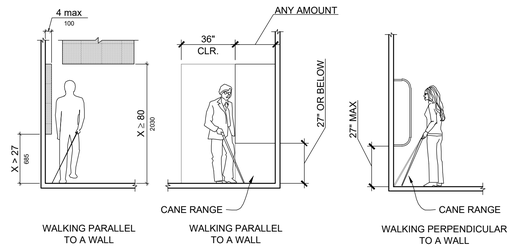
12 CLEAR FLOOR SPACE

SCALE: NTS



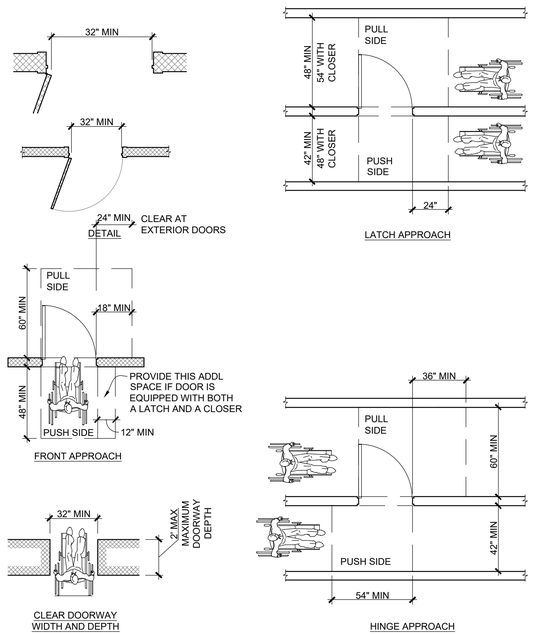
13 SIZE AND SPACING OF HANDRAILS AND GRAB BARS

SCALE: NTS



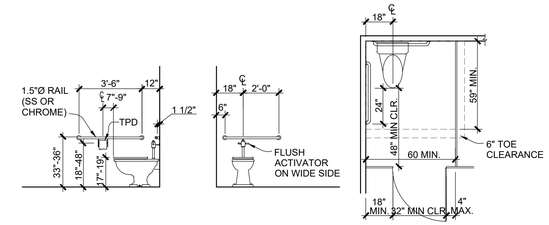
7 PROTRUDING OBJECTS

SCALE: NTS



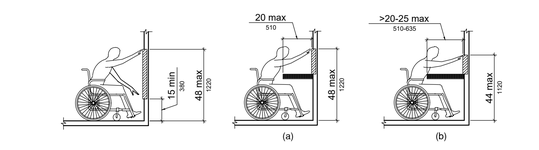
8 MANEUVERING CLEARANCES AT DOORWAY/DOORS

SCALE: NTS



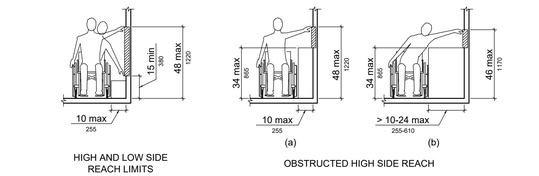
9 RESTROOM CLEARANCES

SCALE: NTS



1 FORWARD REACH

SCALE: NTS



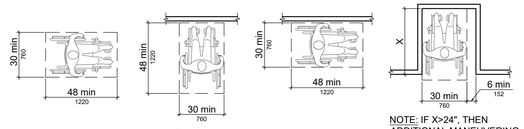
2 SIDE REACH

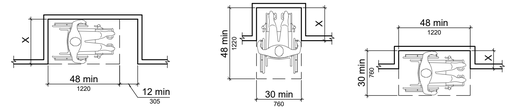
SCALE: NTS

NOTE:
CHANGES IN LEVEL GREATER THAN 1/2" SHALL BE BY MEANS OF A RAMP.

3 CHANGE IN LEVEL

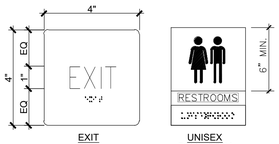
SCALE: NTS





4 MANEUVERING ACCESS

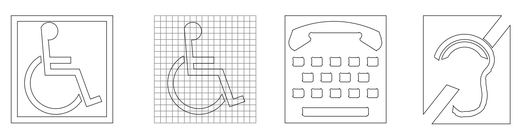
SCALE: NTS



BRAILLE SHALL BE MOUNTED 48" MINIMUM, AND 60" MAXIMUM ABOVE THE FLOOR, MEASURED TO THE BASELINE OF THE BRAILLE CELLS. RAISED CHARACTERS SHALL BE 48" MINIMUM TO THE BASELINE OF THE LOWEST RAISED CHARACTER AND 60" MAXIMUM TO THE HIGHEST RAISED CHARACTER. AN 18" X 18" CLEAR SPACE IS REQUIRED IN FRONT OF THE TACTILE SIGN, BEYOND THE ARC OF ANY DOOR SWING.

5 TACTILE SIGNAGE

SCALE: NTS



6 INTERNATIONAL SYMBOLS

SCALE: NTS

GHA
Architecture / Development
14901 Quorum Drive
Suite 300
Dallas Texas 75254
Ph: (972) 239-8884
Fax: (972) 239-5054

09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
ACCESSIBILITY NOTES & DETAILS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
G0.3

Generated by COM*check-Web* Software

Envelope Compliance Certificate

Section 1: Project Information

Energy Code: **2009 IECC**
Project Title: Proto - 4.1
Project Type: New Construction

Construction Site:	Owner/Agent:	Designer/Contractor:
1816 N Reynolds Rd. Bryant, Arkansas 72022	Kimberly Williford Scooter's Coffee LLC 10665 Bedford Ave. Omaha, Texas 68134 913.375.5256 kim.williford@scooterscoffe.com	Daryl Atwood GHA Architects 14901 Quorum Drive, Ste. 300 DALLAS, Texas 75254 972.239.8884 datwood@gha-architects.com

Building Location (for weather data): Bryant (Saline), Arkansas
Climate Zone: 3a
Vertical Glazing / Wall Area Pct.: **8%**

Building Use: Activity Type(s)	Floor Area
1-Dining: Bar Lounge/Leisure : Nonresidential	664

Section 2: Envelope Assemblies and Requirements Checklist

Envelope PASSES: Design 10% better than code.

Envelope Assemblies:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Orientation: NORTH					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Bar Lounge/Leisure]	217	20.0	0.0	0.064	0.089
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Dining: Bar Lounge/Leisure]	24	---	---	0.770	0.700
Orientation: EAST					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Bar Lounge/Leisure]	475	20.0	0.0	0.064	0.089
Window: Other Window: Fixed, Perf. Specs.: Product ID Spandrel - NA, SHGC 0.01, PF 0.56, [Bldg. Use 1 - Dining: Bar Lounge/Leisure] (c)	20	---	---	0.050	0.650
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID n/a, SHGC 0.25, PF 0.56, [Bldg. Use 1 - Dining: Bar Lounge/Leisure] (c)	19	---	---	0.280	0.650
Orientation: SOUTH					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Bar Lounge/Leisure]	230	20.0	0.0	0.064	0.089
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID n/a, SHGC 0.25, PF 0.56, [Bldg. Use 1 - Dining: Bar Lounge/Leisure] (c)	36	---	---	0.280	0.650
Orientation: WEST					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Bar Lounge/Leisure]	475	20.0	0.0	0.064	0.089
Window: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID n/a, SHGC 0.25, PF 0.56, [Bldg. Use 1 - Dining: Bar Lounge/Leisure] (c)	39	---	---	0.280	0.650
Orientation: UNSPECIFIED ORIENTATION					
Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - Dining: Bar Lounge/Leisure]	608	---	25.0	0.039	0.048
Floor: Unheated Slab-On-Grade, [Bldg. Use 1 - Dining: Bar Lounge/Leisure]	111	---	---	---	---

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

(b) 'Other' components require supporting documentation for proposed U-factors.

(c) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.

Air Leakage, Component Certification, and Vapor Retarder Requirements:

- ☐ 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- ☐ 2. Windows, doors, and skylights certified as meeting leakage requirements.
- ☐ 3. Component R-values & U-factors labeled as certified.
- ☐ 4. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- ☐ 5. 'Other' components have supporting documentation for proposed U-Factors.
- ☐ 6. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.
- ☐ 7. Stair, elevator shaft vents, and other outdoor air intake and exhaust openings in the building envelope are equipped with motorized dampers.
- ☐ 8. Cargo doors and loading dock doors are weather sealed.
- ☐ 9. Recessed lighting fixtures installed in the building envelope are Type IC rated as meeting ASTM E283, are sealed with gasket or caulk.
- ☐ 10. Building entrance doors have a vestibule equipped with self-closing devices.
  Exceptions:
  - ☐ Building entrances with revolving doors.
  - ☐ Doors not intended to be used as a building entrance.
  - ☐ Doors that open directly from a space less than 3000 sq. ft. in area.
  - ☐ Doors used primarily to facilitate vehicular movement or materials handling and adjacent personnel doors.
  - ☐ Doors opening directly from a sleeping/dwelling unit.

Section 3: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2009 IECC requirements in COM*check-Web* and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title	Signature	Date
Seun Olatunbosun - Project Manager	Seun Olatunbosun	08/18/2022

GHA
Architecture / Development
14901 Quorum Drive
Suite 300
Dallas Texas 75254
Ph: (972) 239-8884
Fax: (972) 239-5054

09/01/2022

EST. 1998
SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
BUILDING COMCHECK

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

☒ PERMIT/BID SUBMITTAL
☐ CONSTRUCTION ISSUE

SHEET NO.
G0.4

ARCHITECTURAL SPECIFICATIONS

0101 SUMMARY OF WORK

A. DESCRIPTION
1.1. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION INDICATED ON THESE CONSTRUCTION DOCUMENTS, WITH FINAL APPROVALS OF ALL WORK.
1.2. THE CONTRACTOR RESPONSIBLE FOR THE PORTION OF THE WORK REQUIRING INSPECTIONS BY GOVERNMENT AGENCIES, IS CHARGED WITH REQUESTING ALL SUCH INSPECTIONS.
1.3. CLOSE COORDINATION WILL BE REQUIRED BETWEEN GENERAL, MECHANICAL AND ELECTRICAL CONTRACTORS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE SCHEDULING AND PHASING OF CONSTRUCTION.
1.4. CLOSE COORDINATION OF FINAL EQUIPMENT CONNECTION REQUIREMENTS AND CONDITIONS WILL BE NECESSARY ON THIS PROJECT. ENGINEERING OF GAS, ELECTRIC, WATER AND SEWER AND VENTILATION SERVICES MAY VARY WITH FINAL SELECTIONS.

0108 APPLICABLE STANDARDS

A. DESCRIPTION
1.1. WORK INCLUDED: THROUGHOUT THE CONTRACT DOCUMENTS, REFERENCE IS MADE TO CODES AND STANDARDS WHICH ESTABLISH QUALITIES AND TYPES OF WORKMANSHIP AND MATERIALS, AND WHICH ESTABLISH METHODS FOR TESTING AND REPORTING ON THE PERTINENT CHARACTERISTICS.
1.2. RELATED WORK DESCRIBED ELSEWHERE: SPECIFIC NAMING OF CODES OR STANDARDS OCCURS ON THE DRAWINGS AND IN OTHER SECTIONS OF THESE SPECIFICATIONS.
B. QUALITY ASSURANCE:
1.1. FAMILIARITY WITH PERTINENT CODES AND STANDARDS: IN PROCURING ALL ITEMS USED IN THIS WORK IT IS CONTRACTOR'S RESPONSIBILITY TO VERIFY THE DETAILED REQUIREMENTS OF THE PREVAILING CODES AND STANDARDS AND TO VERIFY THAT THE ITEMS PROCURED FOR USE IN THE WORK MEET OR EXCEED THE SPECIFIED REQUIREMENTS.
1.2. REJECTION OF NON-COMPLYING ITEMS: THE OWNER RESERVES THE RIGHT TO REJECT ITEMS INCORPORATED INTO THE WORK, WHICH FAIL TO MEET THE SPECIFIED MINIMUM REQUIREMENTS. THE OWNER FURTHER RESERVES THE RIGHT, AND WITHOUT PREJUDICE TO OTHER RECOURSE THE OWNER MAY TAKE, TO ACCEPT NON-COMPLYING ITEMS SUBJECT TO AN ADJUSTMENT IN THE CONTRACT AMOUNT AS APPROVED BY THE OWNER.

1.3 APPLICABLE STANDARDS LISTED IN THESE SPECIFICATION INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, STANDARDS PROMULGATED BY THE FOLLOWING AGENCIES AND ORGANIZATION:
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC)
AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
AMERICAN PLYWOOD ASSOCIATION (APA)
AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM)
AMERICAN WELDING SOCIETY (AWS)
ARCHITECTURAL ALUMINUM MANUFACTURERS ASSOCIATION (AAMA)
ARCHITECTURAL WOODWORK INSTITUTE (AWI)
INTERNATIONAL BUILDING CODE (IBC)
COMMERCIAL SPECIFICATIONS (CS)
CONCRETE REINFORCING STANDARDS
NATIONAL ACOUSTICAL CONTRACTORS ASSOCIATION
NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMA)
NATIONAL BUILDERS HARDWARE ASSOCIATION (NBHA)
NATIONAL CONCRETE MASONRY ASSOCIATION (NFPA)
NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
NATIONAL SANITATION FOUNDATION (NSF)
NATIONAL WOODWORK MANUFACTURERS ASSOCIATION (NWMA)
TILE COUNCIL OF AMERICA (TCA)
UNDERWRITER LABORATORIES (UL)

0171 CLEANING

A. DESCRIPTION:
1.1. SCOPE OF WORK: THROUGHOUT THE CONSTRUCTION PERIOD, MAINTAIN THE BUILDING AND SITE IN A STANDARD OF CLEANLINESS AS DESCRIBED IN THIS SECTION.
1.2. RELATED WORK: IN ADDITION TO STANDARDS DESCRIBED IN THIS SECTION, COMPLY WITH ALL REQUIREMENTS FOR CLEANING UP AS DESCRIBED IN VARIOUS OTHER SECTIONS OF THESE SPECIFICATIONS.

1.3 FINAL CLEANING:
a. DEFINITION: EXCEPT AS OTHERWISE SPECIFICALLY PROVIDED, "CLEAN" (FOR THE PURPOSE OF THIS ARTICLE) SHALL BE INTERPRETED AS MEANING THE LEVEL OF CLEANLINESS GENERALLY PROVIDED BY SKILLED CLEANERS USING COMMERCIAL QUALITY BUILDING MAINTENANCE EQUIPMENT AND MATERIALS.
b. GENERAL: PRIOR TO COMPLETION OF THE WORK, REMOVE FROM THE JOB SITE ALL TOOLS, SURPLUS MATERIALS, EQUIPMENT, SCRAP, DEBRIS, AND WASTE.
c. INTERIOR: VISUALLY INSPECT ALL INTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIAL, SMUDGES, AND OTHER FOREIGN MATTER. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES. REMOVE ALL PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES. USE ONLY THE SPECIFIED CLEANING MATERIALS AND EQUIPMENT.

0550 -METAL FABRICTIONS

1. WORK INCLUDES MISCELLANEOUS SHOP FABRICATED FERROUS METAL ITEMS, INCLUDING BUT NOT LIMITED TO:
A. LOOSE STEEL LINTELS
B. MISCELLANEOUS FRAMING, SUPPORTS AND TRIM
C. ROOF LADDERS
D. STEEL DECK PANELS

2. MATERIALS
A. STEEL SECTIONS: ASTM A36.
B. STEEL TUBING: ASTM A500 OR ASTM A501.
C. STAINLESS STEEL: TYPE 304 (18-8), ASTM A269; SATIN POLISHED FINISH.
D. STEEL PIPE: ASTM A53, GRADE B, STANDARD WEIGHT (SCHEDULE 40).
E. MALLEABLE IRON CASTINGS; ASTM A47.
F. BOLTS, NUTS, AND WASHERS. ASTM A307.
G. WELDING MATERIALS: ASW D1.1; TYPE REQUIRED FOR MATERIALS BEING WELDED.
H. PRIMER SSPC-PAINT 2, FOR SHOP APPLICATION AND FIELD TOUCH-UP.
I. STEEL DECK PANELS: ASTM A446 WITH G90 GALVANIZED COATING, STEEL ASTM A611, GRADE C, SHOP PRIMED.

3. FABRICATION:
A. VERIFY DIMENSIONS IN FIELD PRIOR TO SHOP FABRICATION.
B. FABRICATE ITEMS WITH JOINTS TIGHTLY FITTED AND SECURED.
C. FIT AND SHOP ASSEMBLE IN LARGEST PRACTICAL SECTIONS, FOR DELIVERY TO SITE.
D. PRIME PAINT ITEMS SCHEDULE TO PROVIDE A UNIFORM DRY FILM THICKNESS OF 2.0 MILS.

LADDERS:

A. FABRICATE LADDERS FOR THE LOCATIONS SHOWN, WITH DIMENSIONS, SPACING, DETAILS AND ANCHORAGE AS INDICATED. COMPLY WITH THE REQUIREMENTS OF ANSI A 14.3, EXCEPT AS OTHERWISE INDICATED.
1) UNLESS OTHERWISE SHOWN, PROVIDE 1/2" X 2-1/2" CONTINUOUS STRUCTURAL STEEL FLAT BAR SIDE RAILS WITH EASED EDGES, SPACED 24" APART.
2) PROVIDE 3/4" DIAMETER SOLID STRUCTURAL STEEL BAR RANGE, SPACED 12"O.C.
B. FIT RUNGS IN CENTERLINE OF SIDE RAILS, PLUG WELD AND GRIND SMOOTH ON OUTER RAIL FACES.
C. SUPPORT EACH LADDER AT TOP AND BOTTOM AND AT INTERMEDIATE POINTS, SPACED NOT MORE THAN 5'-0" O.C. USE WELDED OR BOLTED STEEL BRACKETS, DESIGNED FOR ADEQUATE SUPPORT AND ANCHORAGE, AND TO HOLD LADDER CLEAR OF THE WALL SURFACE WITH A MINIMUM OF 7" CLEARANCE WALL TO CENTERLINE OF RUNGS. RETURN RAILS TO WALL OR STRUCTURE UNLESS OTHER SECURE HANDHOLDS ARE PROVIDED.
D. PROVIDE NON-SLIP SURFACE ON TOP OF EACH RUNG, EITHER BY COATING THE RUNG WITH ALUMINUM OXIDE GRANULES SET IN EPOXY RESIN ADHESIVE, OR BY USING A TYPE OF MANUFACTURED RUNG WHICH IS FILLED WITH ALUMINUM OXIDE GROUT.

SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIAL, SMUDGES, AND OTHER

0720 - THERMAL INSULATION

A. GENERAL: PROVIDE THERMAL INSULATION WITH ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION.
1. INSULATION INTEGRAL WITH ROOFING AND INSULATION IN EXTERIOR WALLS.
B. ACCESSORIES: PROVIDE TAPE OR PENETRATION ANCHORS WHERE REQUIRED TO ENSURE PERMANENT INSTALLATION.

A. MATERIALS:

1.1 ROOF INSULATION POLYISOCYANURATE INSULATION BOARD FIRESTONE STANDARD ISO 95+GL (OR EQUAL) COVER BOARD FIRESTONE ASTM C1289 TYPE II, CLASS 4 ISOGARD HD COMPOSITE COVER BOARD (OR EQUAL)
1.2 THERMAL BATT INSULATION: PREFORMED GLASS FIBER BATT WITH FSK-25 REFLECTIVE MEMBRANE ON ONE SIDE ASTM C665 TYPE III, CLASS A KNAUF INSULATION ECOBATT INSULATION (OR EQUAL).
1.3 TAPE: TO MATCH FOIL SCRIM KRAFT FACE; 2 INCH WIDTH.
1.4 EXTRUDED POLYSTYRENE (XPS) RIGID FOAM INSULATION UNDER GRADE. ASTM C578 TYPE IV OWENS CORNING FOAMULAR 250 (OR EQUAL).
1.5 ACOUSTICAL BATT INSULATION PERFORMED FIBER BATT UNFACED ASTM C665 TYPE I, CLASS A KNAUF INSULATION ECOBATT INSULATION (OR EQUAL).

B. INSTALLATION:

1. INSTALL INSULATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED.

2. TRIM INSULATION NEATLY TO FIT SPACES. INSTALL WITHOUT GAPS OR VOIDS.

3. INSTALLATION OF THERMAL BATT INSULATION:
3.1. INSTALL INSULATION WITH VAPOR BARRIER TOWARD WARM SIDE OF BUILDING SPACES. VAPOR BARRIER SHALL BE CONTINUOUS. TAPE SEAL TEARS OR CUTS IN VAPOR BARRIER
3.2. PACK BATT INSULATION IN SHIM SPACES AT PERIMETER OF WINDOW ASSEMBLY TO MAINTAIN CONTINUITY OF THERMAL BARRIER.

3.3. MECHANICAL FASTENING:
3.3.1. AT LOCATIONS WHERE NO FRAMING IS PRESENT TO SUPPORT THE INSULATION, PROVIDE METAL IMPALING PINS AND RETAINERS TO HOLD THE INSULATION FIRMLY IN PLACE.
3.3.2. MECHANICALLY OR ADHESIVELY BOND THE RETAINING PINS TO THE SUBSTRATE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
3.3.3. SPACE PINS AT MAXIMUM 24 INCHES ON CENTER ALONG THE EDGES AND WITHIN THE FIELD OF THE BLANKET. PLACE EDGE PINS WITHIN 6 INCHES FROM THE EDGE OF THE BATT.

4. INSTALLATION OF RIGID PERIMETER INSULATION: INSTALL INSULATION FROM TOP OF FOOTING TO UNDERSIDE OF SLAB AND BENEATH THE SLAB HORIZONTALLY 24" FROM THE INTERIOR FACE OF THE FOOTING.

C. R VALUE SCHEDULE:

1.1 PROVIDE INSULATION IN SUFFICIENT THICKNESS; REFERENCE BUILDING COMCHECK ON G0.4

7457 CEMENTITIOUS PANELS

PART 1 GENERAL

1.1. SECTION INCLUDES
A. CEMENTITIOUS EXPRESS/REVEAL JOINTED PANELS WITH ACCESSORIES. (JAMES HARDIE HZ10 HARDIE REVEAL PANELS).

PART 2 PRODUCTS

2.1 MANUFACTURERS
A. ACCEPTABLE MANUFACTURER: JAMES HARDIE BUILDING PRODUCTS, INC., WHICH IS LOCATED AT: 231 SOUTH LASALLE STREET UNIT 2000, CHICAGO, IL 60606. ASD. TOLL FREE TEL: 866-274-3464; TEL: 312-705-6000; EMAIL: INFO@JAMESHARDIE.COM; WEB: HTTP://WWW.JAMESHARDIEPROS.COM/PRODUCTS /HARDIE-REVEAL-PANEL-SYSTEM
2.2 CLADDING
A. CEMENT CLADDING PANELS: HARDIE REVEAL PANEL AS MANUFACTURED BT JAMES HARDIE BUILDING PRODUCTS, INC. 5/16 INCHES THICK, 3 FEET 11.5 INCHES (1206 MM) WIDE BY 7 FEET 11.5 INCHES (2426) MM LONG. PRODUCT SHALL BE ENGINEERED FOR CLIMATE CONDITIONS.
1. MANUFACTURER'S CLIMATE ZONE PRODUCT: HZ10 FOR HOT HUMID AND WET CLIMATES WITH A YELLOW TINT PRIMER - SMOOTH SAND FINISH.
B. CODE COMPLIANCE REQUIREMENT FOR SIDING MATERIALS:
1. FIBER-CEMENT SIDING, COMPLIES WITH ASTM C 1186 TYPE A GRADE II.
2. FIBER-CEMENT SIDING, COMPLIES WITH ASTM E 136 AS A NONCOMBUSTIBLE MATERIAL.
3. FIBER-CEMENT SIDING, COMPLIES WITH ASTM E 84 FLAME SPREAD INDEX = 0, SMOKE DEVELOPED INDEX=5.
4. FIBER-CEMENT SIDING, COMPLIES WITH ASTM E 119 1 HOUR AND 2 HOUR FIRE RESISTIVE ASSEMBLIES LISTED WITH WARNOCK HERSEY.
5. FIBER-CEMENT SIDING, TESTED TO ASTM E330 FOR TRANSVERSE LOADS.
6. INTERTEK WARNOCK HERSEY PRODUCT LISTING.
7. MANUFACTURER'S TECHNICAL DATA SHEET.
2.3 WEATHER BARRIER
A. WEATHER BARRIER: JAMES HARDIE HARDIEWRAP AND HARDIEWRAP FLASHING AND SEAM TAPES (OR EQUAL).
B. CODE COMPLIANCE REQUIREMENT FOR WEATHER BARRIER:
1. THICKNESS, 11 MIL SHEET.
2. BREATHABILITY IN ACCORDANCE WITH ASTM E96.
3. TEAR STRENGTH IN ACCORDANCE WITH ASTM D1117.
4. WATER RESISTANCE IN ACCORDANCE WITH AATCC127.
5. AIR PENETRATION IN ACCORDANCE WITH TAPPI-T460.
6. HARDIEWRAP WEATHER BARRIER ICC-ES EVALUATION REPORT ESR-2258.
2.4 ACCESSORIES
A. TRIMS: REVEAL TRIMS MANUFACTURED BY CUSTOM ALUMINUM OF ELGIN, IL IN THE FOLLOWING PROFILES SUPPLIED BY JAMES HARDIE. ALUMINUM ALLOY 6063-T5 WITH A MINIMUM THICKNESS OF 0.050 INCH. ALL REVEAL TRIMS ARE 8 FEET IN LENGTH.
B. XTEREMETRIM MANUFACTURED BY TAMLYN. ALUMINUM ALLOY 6063-T5 WITH A MINIMUM THICKNESS OF 0.050 INCH. ALL REVEAL TRIMS ARE 8 FEET IN LENGTH.
1. SURROUND HORIZONTAL TRIM.
2. SURROUND VERTICAL TRIM.
3. SURROUND HORIZONTAL END CUT TRANSITION TRIM.
4. SURROUND OUTSIDE CORNER TRIM.
5. SURROUND INSIDE CORNER TRIM.
6. SURROUND J CHANNEL TRIM.
7. SURROUND DRAINAGE FLASHING
8. RECESS HORIZONTAL TRIM.
9. RECESS VERTICAL TRIM.
10. RECESS HORIZONTAL EDGE TRIM.
11. RECESS VERTICAL F-TRIM.
12. RECESS OUTSIDE CORNER TRIM.
13. RECESS DRAINAGE FLASHING.
2.5 FASTENERS
A. FASTENERS: FOR ATTACHING HARDIE REVEAL PANEL DIRECT TO SHEATHING TO A RAIN SCREEN PROVIDE THE FOLLOWING:
1. WOOD FRAMING, COUNTERSUNK SCREWS: NO. 8 BY 0.39 INCH HEAD DIAMETER BY 1-5/8 INCH LONG.
2. FASTENERS SHALL BE OF HIGH QUALITY STAINLESS STEEL TO ENSURE RESISTANCE TO CORROSION. FOR FIELD PAINTING, FASTENERS SHALL BE TREATED TO ACCEPT PAINT ADHESION.

PART 3 EXECUTION

3.1 EXAMINATION
A. DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED.
B. IF FRAMING 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 THE METHODS RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS.
C. ENSURE THAT DRAINAGE PLANE IN INTACT AND ALL PENETRATIONS ARE SEALED.
3.3 INSTALLATION
A. WOOD FRAMING: NOMINAL 2 INCH BY 4 INCH (51 MM BY 102 MM) WOOD FRAMING SELECTED FOR MINIMAL SHRINKAGE AND COMPLYING WITH LOCAL BUILDING CODES, INCLUDING THE USE OF WATER-RESISTIVE BARRIERS OR VAPOR BARRIERS WHERE REQUIRED. MINIMUM 1-1/2 INCHES (38 MM) FACE AND STRAIGHT, TRUE, OF UNIFORM DIMENSIONS AND PROPERLY ALIGNED.
1. INSTALL WATER-RESISTIVE BARRIERS AND CLADDINGS TO DRY SURFACES.
2. REPAIR AND PUNCTURES OR TEARS IN THE WATER-RESISTIVE BARRIER PRIOR TO THE INSTALLATION OF THE SIDING.
3. PROTECT SIDING FROM OTHER TRADES.

07462 SIDING

PART 1 GENERAL

1.1. SECTION INCLUDES
A. FIBER CEMENT LAP SIDING, PANELS, SHINGLE, TRIM, FASCIA, MOULDING AND ACCESSORIES: JAMES HARDIE HZ10 ENGINEERED FOR CLIMATE SIDING.
1.2 WARRANTY
A. PRODUCT WARRANTY: LIMITED, NON-PRO-RATED PRODUCT WARRANTY.
1. HARDIEPLANK HZ10 LAP SIDING FOR 30 YEARS.
B. WORKMANSHIP WARRANTY: APPLICATION LIMITED WARRANTY FOR 2 YEARS.

PART 2 PRODUCTS

2.1 MANUFACTURERS
A. ACCEPTABLE MANUFACTURER: JAMES HARDIE BUILDING PRODUCTS, INC., WHICH IS LOCATED AT: 26300 LA ALAMEDA SUITE 400 ; MISSION VIEJO, CA 92691; TOLL FREE TEL: 866-274-3464; TEL: 949-367-4980; FAX: 949-367-4981; EMAIL: REQUEST INFO (INFO@JAMESHARDIE.COM); WEB: WWW.JAMESHARDIECOMMERCIAL.COM
2.2 SIDING
A. HARDIEPLANK HZ10 LAP SIDING:
1. FIBER-CEMENT SIDING - COMPLIES WITH STM C 1186 TYPE A GRADE II.
2. FIBER-CEMENT SIDING - COMPLIES WITH STM E 136 AS A NONCOMBUSTIBLE MATERIAL.
3. FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 84 FLAME SPREAD INDEX = 0, SMOKE DEVELOPED INDEX = 5.
4. CAL-FIRE, FIRE ENGINEERING DIVISION BUILDING MATERIALS LISTING - WILDLAND URBAN INTERFACE (WUI) LISTED PRODUCT.
5. NATIONAL EVALUATION REPORT NO. NER 405 (BOCA, ICBO, SBCCI, IBC, IRC).
6. CITY OF LOS ANGELES, RESEARCH REPORT NO. 24862.
7. MIAMI DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE 07-0418-04.
8. US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT MATERIALS RELEASE 1263D.
9. CALIFORNIE DSA PA-019.
10. CITY OF NEW YORK M EA 223-93-M.
11. FLORIDA STATE PRODUCT APPROVAL FL889.
12. TEXAS DEPARTMENT OF INSURANCE PRODUCT EVALUATION 22-23.
B. LAP SIDING: HARDIEPLANKHZ10 LAP AS MANUFACTURED BY JAMES HARDIE BUILDING PRODUCTS, INC.
1. TYPE: SELECT CEDARMILL 6-1/4 INCHES (159 MM) WITH 5 INCHES (127 MM) EXPOSURE.
C. TRIM:
1. HARDIETRIM HZ10 BOARDS AS MANUFACTURED BY JAMES HARDIE BUILDING PRODUCTS, INC.
2. HARDIETRIM HZ10 FASCIA BOARDS AS MANUFACTURED BY JAMES HARDIE BUILDING PRODUCTS, INC.

2.3 FASTENERS
A. WOOD FRAMING FASTENERS:
1. WOOD FRAMING: 4D COMMON CORROSION RESISTANT NAILS.
2. WOOD FRAMING: 6D COMMON CORROSION RESISTANT NAILS.
3. WOOD FRAMING: 8D BOX RING COMMON CORROSION RESISTANT NAILS.
4. WOOD FRAMING: 0.089 INCH (2.2 MM) SHANK BY 0.221 INCH (5.6 MM) HEAD BY 2 INCHES (51 MM) CORROSION RESISTANT SIDING NAILS.
5. WOOD FRAMING: 0.093 INCH (2.4 MM) SHANK BY 0.222 INCH (5.6 MM) HEAD BY 2 INCHES (51 MM) CORROSION RESISTANT SIDING NAILS.
6. WOOD FRAMING: 0.093 INCH (2.4 MM) SHANK BY 0.222 INCH (5.6 MM) HEAD BY 2-1/2 INCHES (64 MM) CORROSION RESISTANT NAILS.
7. WOOD FRAMING: 0.091 INCH (2.3 MM) SHANK BY 0.221 INCH (5.6 MM) HEAD BY 1-1/2 INCHES (38 MM) CORROSION RESISTANT SIDING NAILS.
8. WOOD FRAMING: 0.091 INCH (2.3 MM) SHANK BY 0.225 INCH (5.7 MM) HEAD BY 1-1/2 INCHES (38 MM) CORROSION RESISTANT SIDING NAILS.
9. WOOD FRAMING: 0.121 INCH (3 MM) SHANK BY 0.371 INCH (9.44 MM) HEAD BY 1-1/4 INCHES (32 MM) CORROSION RESISTANT ROOFING NAILS.
10. WOOD FRAMING: NO. 11 GAUGE 1-1/4 INCHES (38 MM) CORROSION RESISTANT ROOFING NAILS.
11. WOOD FRAMING: NO. 11 GAUGE 1-1/2 INCHES (38 MM) CORROSION RESISTANT ROOFING NAILS.
12. WOOD FRAMING: NO. 11 GAUGE 1-3/4 INCHES (44 MM) CORROSION RESISTANT ROOFING NAILS.
2.4 FINISHES
A. FACTORY PRIMER: PROVIDE FACTORY APPLIED UNIVERSAL PRIMER.
1. PRIMER: FACTORY PRIMED BY JAMES HARDIE.

A.
PART 3 EXECUTION

3.1 PREPARATION
A. CLEAN SURFACES THOROUGHLY PRIOR TO INSTALLATION.
B. PREPARE SURFACES USING THE METHODS RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS.
C. INSTALL A WATER-RESISTIVE BARRIER IS REQUIRED IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.
D. THE WATER-RESISTIVE BARRIER MUST BE APPROPRIATELY INSTALLED WITH PENETRATION AND JUNCTION FLASHING IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.
3.2 INSTALLATION- HARDIEPLANK HZ10 LAP SIDING
A. INSTALL MATERIALS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
B. STARTING: INSTALL A MINIMUM 1/4 INCH (6 MM) THICK LATH STARTER STRIP AT THE BOTTOM COURSE OF THE WALL. APPLY PLANKS HORIZONTALLY WITH MINIMUM 1-1/4 INCHES (32 MM) WIDE LAPS AT THE TOP. THE BOTTOM EDGE OF THE FIRST PLANK OVERLAPS THE STARTER STRIP
C. ALLOW MINIMUM VERTICAL CLEARANCE BETWEEN THE EDGE OF SIDING AND ANY OTHER MATERIAL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
D. ALIGN VERTICAL JOINTS OF THE PLANKS OVER FRAMING MEMBERS.
E. MAINTAIN CLEARANCE BETWEEN SIDING AND ADJACENT FINISHED GRADE.
F. LOCATE SPLICES AT LEAST ONE STUD CAVITY AWAY FROM WINDOW AND DOOR OPENINGS.
G. USE OFF-STUD METAL JOINER IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
H. WIND RESISTANCE: WHERE A SPECIFIED LEVEL OF WIND RESISTANCE IS REQUIRED HARDIEPLANK LAP SIDING IS INSTALLED TO FRAMING MEMBERS AND SECURED WITH FASTENERS DESCRIBED IN TABLE NO. 2 IN NATIONAL EVALUATION SERVICE REPORT NO. NER-405.
I. FACE NAIL TO SHEATHING.
J. LOCATE JOICES AT LEAST 12 INCHES (305 MM) AWAY FROM WINDOW AND DOOR OPENINGS.

0753 - ROOFING SYSTEM

2.01 MANUFACTURERS
A. ACCEPTABLE MANUFACTURER - ROOFING SYSTEM: FIRESTONE BUILDING PRODUCTS CO., CARMEL, IN WWW.FIRESTONEBPCO.COM
B. ROOFING SYSTEMS MANUFACTURED BY OTHERS MAY BE ACCEPTABLE PROVIDED THE ROOFING SYSTEM IS COMPLETELY EQUIVALENT IN MATERIALS AND WARRANTY CONDITIONS AND THE MANUFACTURER MEETS THE FOLLOWING QUALIFICATIONS:
1. SPECIALIZING IN MANUFACTURING THE ROOFING SYSTEM TO BE PROVIDED.
2. MINIMUM TEN YEARS OF EXPERIENCE MANUFACTURING THE ROOFING SYSTEM TO BE PROVIDED.
3. ABLE TO PROVIDE A NO DOLLAR LIMIT, SINGLE SOURCE ROOF SYSTEM WARRANTY THAT IS BACKED BY CORPORATE ASSETS IN EXCESS OF ONE BILLION DOLLARS.
4. ISO 9002 CERTIFIED.
5. ABLE TO PROVIDE POLYISOCYANURATE INSULATION THAT IS PRODUCED IN OWN FACILITIES
C. MANUFACTURER OF INSULATION AND COVER BOARD: SAME MANUFACTURER AS ROOF MEMBRANE.
D. MANUFACTURER OF METAL ROOF EDGING: SAME MANUFACTURER AS ROOF MEMBRANE.
1. METAL ROOF EDGING PRODUCTS BY OTHER MANUFACTURERS ARE NOT ACCEPTABLE.
2. FIELD- OR SHOP-FABRICATED METAL ROOF EDGINGS ARE NOT ACCEPTABLE.

2.02 ROOFING SYSTEM DESCRIPTION
A. ROOFING SYSTEM:
1. MEMBRANE: SELF ADHERING THERMOPLASTIC POLYOLEFIN (TPO).
2. THICKNESS: AS SPECIFIED ELSEWHERE.
3. MEMBRANE ATTACHMENT: FULLY ADHERED.
4. SLOPE: DECK IS SLOPED, BUT POSSIBLY NOT ENOUGH. PROVIDE ADDITIONAL SLOPE TO ACHEIVE 1/4 INCH PER FOOT (1:48) BY MEANS OF TAPERED INSULATION.
5. COMPLY WITH APPLICABLE LOCAL BUILDING CODE REQUIREMENTS.
6. PROVIDE ASSEMBLY HAVING UNDERWRITERS LABORATORIES, INC. (UL) CLASS A, B, C, FIRE HAZARD CLASSIFICATION.
7. PROVIDE ASSEMBLY COMPLYING WITH FACTORY MUTUAL CORPORATION (FM) ROOF ASSEMBLY CLASSIFICATION, FM DS 1-28 AND 1-29, AND MEETING MINIMUM REQUIREMENTS OF FM 1-[60, 90, 120, 160] WIND UPLIFT RATING.

B. INSULATION:
1. TOTAL SYSTEM R VALUE: 20, MINIMUM.
2. MAXIMUM BOARD THICKNESS: 2 INCHES (50 MM); USE AS MANY LAYERS AS NECESSARY; STAGGER JOINTS IN ADJACENT LAYERS.

SYSTEM R VALUE*	TOTAL ISO INSULATION THICKNESS, NOMINAL
20 R	3.5 INCHES
25 R	4.5 INCHES
30 R	5.25 INCHES
35 R	6.25 INCHES

USE OF FIRESTONE ISOGARD HD COVER BOARD CAN PROVIDE AN ADDITIONAL 2.5 R VS. GYPSUM BASED COVER BOARDS. [EXAMPLE: 1.66 INCH ISO (9.45 R) + 1.66 INCH ISO (9.45 R) + .5 INCH HD ISO COVER BOARD (2.5 R) = 21.4 R]
*LONG TERM THERMAL RESISTANCE (LTTR) VALUES PROVIDE A 15 YEAR TIME WEIGHTED AVERAGE IN ACCORDANCE WITH ASTM 1289-13.
3. BASE LAYER: POLYISOCYANURATE FOAM BOARD, NON-COMPOSITE.
a. ATTACHMENT: MECHANICAL FASTENING, CONTACT ADHESIVE OR LOW-RISE POLYURETHANE ADHESIVE.
4. TOP LAYER: POLYISOCYANURATE FOAM BOARD, NON-COMPOSITE.
a. ATTACHMENT: MECHANICAL FASTENING, CONTACT ADHESIVE OR LOW-RISE POLYURETHANE ADHESIVE.
C. COVER BOARD: HIGH DENSITY POLYISOCYANURATE COVER BOARD:
1. THICKNESS: 0.5 INCH (12.7MM).
2. R-VALUE: 2.5 BASED ON ASTM TESTS C158 AND C177.
a. ATTACHMENT: MECHANICAL FASTENING, CONTACT ADHESIVE OR LOW-RISE POLYURETHANE ADHESIVE. OR COVER BOARD: GYPSUM-BASED COVER BOARD:
1. THICKNESS: 0.25 INCH (6.4MM).
2. R-VALUE: NEGLIGIBLE.
a. ATTACHMENT: MECHANICAL FASTENING, CONTACT ADHESIVE OR LOW-RISE POLYURETHANE ADHESIVE.

2.03 TPO MEMBRANE MATERIALS
A. MEMBRANE: FLEXIBLE, HEAT WELDABLE SHEET COMPOSED OF THERMOPLASTIC POLYOLEFIN POLYMER AND ETHYLENE PROPYLENE RUBBER; COMPLYING WITH ASTM D 6878. WITH POLYESTER WEFT INSERTED REINFORCEMENT AND THE FOLLOWING ADDITIONAL CHARACTERISTICS:
1. THICKNESS: 0.060 INCH (1.15 MM) PLUS/MINUS 10 PERCENT, WITH COATING THICKNESS OVER REINFORCEMENT OF 0.021 INCH (0.54 MM) PLUS/MINUS 10 PERCENT.
2. PUNCTURE RESISTANCE: 300 LBF (1,334 N), MINIMUM, WHEN TESTED IN ACCORDANCE FTM 101C METHOD 2031.
3. SOLAR REFLECTANCE: 0.74, MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM C 1549. [WHITE]
4. COLOR: WHITE (OR TAN OR GRAY BY SPECIAL ORDER ONLY)
5. ACCEPTABLE PRODUCT: ULTRAPLY TPO SA WITH SECURE BOND TECHNOLOGY BY FIRESTONE.
B. MEMBRANE FASTENERS: TYPE AND SIZE AS REQUIRED BY ROOF MEMBRANE MANUFACTURER FOR ROOFING SYSTEM AND WARRANTY TO BE PROVIDED; USE ONLY FASTENERS FURNISHED BY ROOF MEMBRANE MANUFACTURER.
C. CURB AND PARAPET FLASHING: SAME MATERIAL AS MEMBRANE, WITH ENCAPSULATED EDGE WHICH ELIMINATES NEED FOR SEAM SEALING THE FLASHING-TO-ROOF SPLICE; PRECUT TO 18 INCHES (457 MM) WIDE.
D. FORMABLE FLASHING: NON-REINFORCED, FLEXIBLE, HEAT WELDABLE SHEET, COMPOSED OF THERMOPLASTIC POLYOLEFIN POLYMER AND ETHYLENE PROPYLENE RUBBER.
1. THICKNESS: 0.060 INCH (1.52 MM) PLUS/MINUS 10 PERCENT.
2. TENSILE STRENGTH: 1550 PSI (10.7 MPA), MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D 638 AFTER HEAT AGING.
3. ELONGATION AT BREAK: 650 PERCENT, MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D 638 AFTER HEAT AGING.
4. TEARING STRENGTH: 12 LBF (53 N), MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM D 1004 AFTER HEAT AGING.
5. COLOR: SAME AS FIELD MEMBRANE.
6. ACCEPTABLE PRODUCT: ULTRAPLY TPO FLASHING BY FIRESTONE.
E. TAPE FLASHING: 5-1/2 INCH (140 MM) NOMINAL WIDE TPO MEMBRANE LAMINATED TO CURED RUBBER POLYMER SEAMING TAPE, OVERALL THICKNESS 0.065 INCH (1.6 MM) NOMINAL; TPO QUICKSEAM FLASHING BY FIRESTONE.
F. POURABLE SEALER: TWO-PART POLYURETHANE, TWO-COLOR FOR MM). RELIABLE MIXING; POURABLE SEALER BY FIRESTONE.
G. SEAM PLATES: STEEL WITH BARBS AND GALVALUME COATING; CORROSION-RESISTANCE COMPLYING WITH FM 4470.
H. TERMINATION BARS: ALUMINUM BARS WITH INTEGRAL CAULK LEDGE; 1.3 INCHES (33 MM) WIDE BY 0.10 INCH (2.5 MM) THICK; FIRESTONE TERMINATION BAR BY FIRESTONE.
I. CUT EDGE SEALANT: SYNTHETIC RUBBER-BASED, FOR USE WHERE MEMBRANE REINFORCEMENT IS EXPOSED; ULTRAPLY TPO CUT EDGE SEALANT BY FIRESTON

ARCHITECTURAL SPECIFICATIONS - CONTINUED

2.04 ROOF INSULATION AND COVER BOARDS

A. POLYISOCYANURATE BOARD INSULATION: CLOSED CELL POLYISOCYANURATE FOAM WITH BLACK GLASS REINFORCED MAT LAMINATED TO FACES, COMPLYING WITH ASTM C 1289 TYPE II CLASS 1, WITH THE FOLLOWING ADDITIONAL CHARACTERISTICS: OWENS CORNING DENSDECK OR BETTER:
1. THICKNESS: AS INDICATED ELSEWHERE.
2. SIZE: 48 INCHES (1220 MM) BY 96 INCHES (2440 MM), NOMINAL.
3. EXCEPTION: INSULATION TO BE ATTACHED USING ADHESIVE OR ASPHALT MAY BE NO LARGER THAN 48 INCHES (1220 MM) BY 48 INCHES (1220 MM), NOMINAL.
4. R-VALUE (LTTR): 1.0 INCH (25 MM) THICKNESS: 5.7 R, MINIMUM.
5. COMPRESSIVE STRENGTH: 20 PSI (138 KPA) WHEN TESTED IN ACCORDANCE WITH ASTM C 1289.
6. OZONE DEPLETION POTENTIAL: ZERO; MADE WITHOUT CFC OR HCFC BLOWING AGENTS.
7. RECYCLED CONTENT: 19 PERCENT POST-CONSUMER AND 15 PERCENT POST-INDUSTRIAL, AVERAGE.
8. ACCEPTABLE PRODUCT: ISO 95+ POLYISO BOARD INSULATION BY FIRESTONE OR
8. ACCEPTABLE PRODUCT: RESISTA POLYISO BOARD INSULATION BY FIRESTONE (OPTIONAL MOLD RESISTANT MATERIAL PER ASTM D3273) CHOOSE ONE/ ELIMINATE ONE. MATCH WITH ROOFING SYSTEM DESCRIPTION ABOVE.

B. HIGH DENSITY POLYISOCYANURATE COVER BOARD: NON-COMBUSTIBLE, WATER RESISTANT HIGH DENSITY, CLOSED CELL POLYISOCYANURATE CORE WITH COATED GLASS MAT FACERS, COMPLYING WITH ASTM D 1623, AND WITH THE FOLLOWING ADDITIONAL CHARACTERISTICS:
1. SIZE: 48 INCHES (1220 MM) BY 96 INCHES (2440 MM), NOMINAL.
   a. EXCEPTION: BOARD TO BE ATTACHED USING ADHESIVE OR ASPHALT MAY BE NO LARGER THAN 48 INCHES (1220 MM) BY 48 INCHES (1220 MM), NOMINAL.
2. THICKNESS: 0.5 INCH (12.7MM).
3. R-VALUE: 2.5 R BASED ON ASTM TESTS C158 AND C177.
4. SURFACE WATER ABSORPTION: <3%, MAXIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM C 209.
5. COMPRESSIVE STRENGTH: 120PSI, WHEN TESTED IN ACCORDANCE WITH ASTM 1621.
6. DENSITY: 9PCF, WHEN TESTED IN ACCORDANCE WITH ASTM 1622.
7. FACTORY MUTUAL APPROVED FOR USE WITH FM 1-60 AND 1-90 RATED ROOFING ASSEMBLIES.
8. MOLD GROWTH RESISTANCE: PASSED, WHEN TESTED IN ACCORDANCE WITH ASTM D 3273.
9. ACCEPTABLE PRODUCT: ISOGARD HD COVER BOARD BY FIRESTONE.

C. INSULATION FASTENERS: TYPE AND SIZE AS REQUIRED BY ROOF MEMBRANE MANUFACTURER FOR ROOFING SYSTEM AND WARRANTY TO BE PROVIDED; USE ONLY FASTENERS FURNISHED BY ROOF MEMBRANE MANUFACTURER.

D. INSULATION ADHESIVE: TYPE AS REQUIRED BY ROOF MEMBRANE MANUFACTURER FOR ROOFING SYSTEM AND WARRANTY TO BE PROVIDED; USE ONLY ADHESIVE FURNISHED BY ROOF MEMBRANE MANUFACTURER.

2.05 METAL ACCESSORIES

INCLUDE FOLLOWING ELEMENTS AS APPLICABLE TO YOUR PROJECT, ELIMINATE OTHERS;

A. METAL ROOF EDGING AND FASCIA: CONTINUOUS METAL EDGE MEMBER SERVING AS TERMINATION OF ROOF MEMBRANE AND RETAINER FOR METAL FASCIA; WATERTIGHT WITH NO EXPOSED FASTENERS; MOUNTED TO ROOF EDGE NAILER.
1. WIND PERFORMANCE:
   a. MEMBRANE PULL-OFF RESISTANCE: 100 LBS/FT (1460 N/M), MINIMUM, WHEN TESTED IN ACCORDANCE WITH ANSI/SPRI ES-1 TEST METHOD RE-1, CURRENT EDITION.
   b. FASCIA PULL-OFF RESISTANCE: AT LEAST THE MINIMUM REQUIRED WHEN TESTED IN ACCORDANCE WITH ANSI/SPRI ES-1 TEST METHOD RE-2, CURRENT EDITION.
   c. PROVIDE PRODUCT LISTED IN CURRENT FACTORY MUTUAL RESEARCH CORPORATION APPROVAL GUIDE WITH AT LEAST FM 1-270 WIND UPLIFT RATING.
2. DESCRIPTION: TWO-PIECE; 45 DEGREE SLOPED GALVANIZED STEEL SHEET EDGE MEMBER SECURING TOP AND BOTTOM EDGES OF FORMED METAL FASCIA: FIRESTONE EDGEGARD.
3. FASCIA FACE HEIGHT: 5 INCHES (127 MM).
4. EDGE MEMBER HEIGHT ABOVE NAILER: 1-1/4 INCHES (31
5. LENGTH: 144 INCHES (3650 MM).
6. FACTORY FINISH: ASTERISTICS: FASCIA RETAINER SUPPORTS WHILE ALLOWING FOR FREE THERMAL CYCLING OF FASCIA.
7. ALUMINUM BAR: CONTINUOUS 6063-T6 ALLOY ALUMINUM EXTRUSION WITH PRE-PUNCHED SLOTTED HOLES; MITERS WELDED; INJECTION MOLDED EPDM SPLICES TO ALLOW THERMAL EXPANSION.
8. ANCHOR BAR CLEAT: 20 GAGE, 0.036 INCH (0.9 MM) G90 COATED COMMERCIAL TYPE GALVANIZED STEEL WITH PRE-PUNCHED HOLES.
9. CURVED APPLICATIONS: FACTORY MODIFIED.
10. FASTENERS: FACTORY-PROVIDED CORROSION RESISTANT FASTENERS, WITH DRIVERS; NO EXPOSED FASTENERS PERMITTED.
11. SPECIAL SHAPED COMPONENTS: PROVIDE FACTORY-FABRICATED PIECES NECESSARY FOR COMPLETE INSTALLATION, INCLUDING MITERS, SCUPPERS, AND END CAPS; MINIMUM 14 INCH (355 MM) LONG LEGS ON CORNER PIECES.
12. SCUPPERS: WELDED WATERTIGHT.
13. ACCESSORIES: PROVIDE MATCHING BRICK WALL CAP, DOWNSPOUT, EXTENDERS, AND OTHER SPECIAL FABRICATIONS AS SHOWN ON THE DRAWINGS.

B. PARAPET COPINGS: FORMED METAL COPING WITH GALVANIZED STEEL ANCHOR/SUPPORT CLEATS FOR CAPPING ANY PARAPET WALL; WATERTIGHT, MAINTENANCE FREE, WITHOUT EXPOSED FASTENERS; BUTT TYPE JOINTS WITH CONCEALED SPLICE PLATES; MECHANICALLY FASTENED AS INDICATED; FIRESTONE PTCF.
1. WIND PERFORMANCE:
   a. AT LEAST THE MINIMUM REQUIRED WHEN TESTED IN ACCORDANCE WITH ANSI/SPRI ES-1 TEST METHOD RE-3, CURRENT EDITION.
   b. PROVIDE PRODUCT LISTED IN CURRENT FACTORY MUTUAL RESEARCH CORPORATION APPROVAL GUIDE WITH AT LEAST FM 1-90 RATING.
2. DESCRIPTION: COPING SECTIONS ALLOWED TO EXPAND AND CONTRACT FREELY WHILE LOCKED IN PLACE ON ANCHOR CLEATS BY MECHANICAL PRESSURE FROM HARDENED STAINLESS STEEL SPRINGS FACTORY ATTACHED TO ANCHOR CLEATS; 8 INCH (200 MM) WIDE SPLICE PLATES WITH FACTORY APPLIED DUAL NON-CURING SEALANT STRIPS CAPABLE OF PROVIDING WATERTIGHT SEAL.
3. MATERIAL AND FINISH: 24 GAGE, 0.024 INCH (0.06 MM) THICK GALVANIZED STEEL WITH KYNAR 500 FINISH IN MANUFACTURER'S STANDARD COLOR; MATCHING CONCEALED JOINT SPLICE PLATES; FACTORY-INSTALLED PROTECTIVE PLASTIC FILM.
4. DIMENSIONS:
   a. WALL WIDTH: AS INDICATED ON THE DRAWINGS.
   b. PIECE LENGTH: MINIMUM 144 INCHES (3650 MM).
   c. CURVED APPLICATION: FACTORY FABRICATED IN TRUE RADIUS.
5. ANCHOR/SUPPORT CLEATS: 20 GAGE, 0.036 INCH (0.9 MM) THICK PREPUNCHED GALVANIZED CLEAT WITH 12 INCH (305 MM) WIDE STAINLESS STEEL SPRING MECHANICALLY LOCKED TO CLEAT AT 72 INCHES (1820 MM) ON CENTER.
6. SPECIAL SHAPED COMPONENTS: PROVIDE FACTORY-FABRICATED PIECES NECESSARY FOR COMPLETE INSTALLATION, INCLUDING MITERS, CORNERS, INTERSECTIONS, CURVES, PIER CAPS, AND END CAPS; MINIMUM 14 INCH (355 MM) LONG LEGS ON CORNER, INTERSECTION, AND END PIECES.
7. FASTENERS: FACTORY-FURNISHED; ELECTROLYTICALLY COMPATIBLE; MINIMUM PULL OUT RESISTANCE OF 240 POUNDS (109 KG) FOR ACTUAL SUBSTRATE USED; NO EXPOSED FASTENERS. 2.06 ACCESSORY MATERIALS

A. WOOD NAILERS: PS 20 DIMENSION LUMBER, STRUCTURAL GRADE NO. 2 OR BETTER SOUTHERN PINE, DOUGLAS FIR; OR PS 1, APA EXTERIOR GRADE PLYWOOD; PRESSURE PRESERVATIVE TREATED.
1. WIDTH: 3-1/2 INCHES (90 MM), NOMINAL MINIMUM, OR AS WIDE AS THE NAILING FLANGE OF THE ROOF ACCESSORY TO BE ATTACHED TO IT.
2. THICKNESS: SAME AS THICKNESS OF ROOF INSULATION.

0760 - FLASHING & SHEET METAL

A. GENERAL: PROVIDE FLASHING AND SHEET METAL, REGLETS, AND ACCESSORIES AS REQUIRED FOR ROOF REPAIRS AS REQUIRED FOR COMPLETE, WEATHERTIGHT INSTALLATION.
B. STANDARDS: CONFORM TO SMACNA "ARCHITECTURAL SHEET METAL MANUAL" REQUIREMENTS FOR FLASING AND SHEET METAL.
C. DESIGN REQUIREMENTS: ALLOW FOR MOVEMENT OF COMPONENTS WITHOUT CAUSING BUCKLING, FAILURE OF JOINT SEALS, UNDUE STRESS OF FASTENERS OR OTHER DETRIMENTAL EFFECTS WHEN SUBJECT TO 100 YEAR SEASONAL TEMPERATURE RANGES.
D. SUBMITTALS: FURNISH PRODUCT DATA FOR MANUFACTURED PRODUCTS.
E. WARRANTY: CORRECT FAILURE OF METAL FLASHING SYSTEM TO RESIST PENETRATION OF WATER AND DAMAGE FROM WIND; WARRANTY PERIOD TWO YEARS.
F. FLASHING AND SHEET METAL: MATCH EXISTING, BUT NOT LESS THAN FLOLLOWING:
1. GALVANIZED METAL FLASHING: ASTM A526 GALVANIZED STEEL WITH MINIMUM 0.02 COOPER, AND WITH MINIMUM G90 GALVANIZED COATING; MINIMUM 20 GAGE.
2. PREFINISHED METAL FLASHING: 20 GAGE GALVANIZED STEEL WITH FACTORY FINISHED KYNAR 500 TYPE FLUOROPOLYMER COATING AND STIPPABLE PROTECTIVE FILM; COLOR AS SELECTED FROM MANUFACTURER'S FULL RANGE OF COLORS.
3. ALUMINUM FLASHING: ASTM B209, ALLOY AS REQUIRED TO MATCH FINISH SPECIFIED FOR OTHER ALUMINUM COMPONENTS; THICKNESS MINIMUM 0.050" SOFT TEMPER.
4. STAINLESS STEEL SHEET METAL: ASTM A666, 2D ANNEALED FINISH, SOFT TEMPER EXCEPT WHERE HARDER TEMPER IS REQUIRED FOR FORMING OR PERFORMANCE; 20 GAGE (28 GAGE) TYPICAL.
5. COPPER SHEET METAL: ASTM B370, COLD ROLLED 16OZ. (0.0216") THICK; SOFT TEMPER WHERE REQUIRED FOR FORMING.

G. REGLETS: FIX/SPRINGLOCK OR MM SYSTEM/SNAP-TITE REGLETS; FABRICATE OF SAME METAL AS ADJACENT FLASHING AND SHEET METAL.
H. METAL TO METAL SEALANT: BUTYL TYPE; NOT-STAINING, NON-CORROSIVE, NON-SHRINKING, NON-SAGGING, UNTRA-VIOLET AND OZONE RESISTANT.
I. INSTALLATION: COMPLY WITH SMACNA MANUAL.
1. INSTALL METAL FLASHING AND SHEET METAL IN ACCORDANCE WITH SMACNA ARCHITECTURAL SHEET METAL MANUAL; TIGHT IN PLACE, WITH CORNERS SQUARE, SURFACES TRUE AND STRAIGHT IN PLANES, AND LINES ACCURATE TO PROFILES AS INDICATED ON DRAWINGS.
2. INSTALL SEALANTS WHERE REQUIRED TO PREVENT DIRECT WEATHER PENETRATION.
3. COMPLETE INSTALLATION SHALL BE FREE OF RATTLES, NOISE DUE TO THERMAL AND AIR MOVEMENT AND WIND WHISTLES.

0790 -CAULKING & SEALANTS

A. DESCRIPTION:
1.1. WORK INCLUDED: SUPPLY AND INSTALL ALL CAULKING AND SEALANTS WORK AS SHOWN ON DRAWINGS AND SPECIFIED HEREIN. THIS SHALL INCLUDE, BUT NOT IS LIMITED TO, THE FOLLOWING:
   a. ALUMINUM ENTRANCE SYSTEM & WINDOWS- SPECIFIED UNDER SECTION 0815 ALUMINUM ENTRANCE SYSTEM.
   b. TOILET FIXTURES: CAULK BY PLUMBING CONTRACTOR, COLOR- WHITE.
   c. WATER OR WASTE PENETRATIONS: CAULK BY PLUMBING CONTRACTOR, COLOR- WHITE
   d. COMPRESSION CUP MAY BE PROVIDED IN LIEU OF CAULK.
   e. TILE CORNERS CAULK BY GENERAL CONTRACTOR, COLOR - TBD
   f. TILE AT COOLER WALLS: CAULK BY GENERAL CONTRACTOR, COLOR -TBD
   g. TILE AT CEILING GRID: CAULK BY GENERAL CONTRACTOR, COLOR- TBD
   h. VANITY TOPS & WAITRESS STATION: CAULK BY GENERAL CONTRACTOR, COLOR- CLEAR.
   i. PAPER TOWEL DISPENSER: CAULK BY GENERAL CONTRACTOR, COLOR- CLEAR.
   j. HOLLOW METAL DOORS: CAULK BY GENERAL CONTRACTOR, COLOR- CLEAR
   k. HOOD WALLS: CAULK BY GENERAL CONTRACTOR, COLOR- TBD
   l. PASS THRU: CAULK BY GENERAL CONTRACTOR, COLOR- TBD
   m. EXTERIOR SEALANTS: SEALANT BY GENERAL CONTRACTOR, COLOR - TBD

B. MATERIALS
1.1. GENERAL INTERIOR CAULK: ONE PART ACRYLIC LATEX CAULK. 90% SOLIDS MINIMUM. USE AS RECOMMENDED BY MANUFACTURER (AS GENERAL PURPOSE INTERIOR SEALANT). ACCEPTABLE MANUFACTURER: DOW CORNING.
1.2. JOINT BACKING: COMPRESSIBLE ROD OF MATERIAL AS RECOMMENDED BY SEALANT MANUFACTURER FOR JOINT TYPES AND WIDTHS INDICATED ON CONSTRUCTION DRAWINGS.
1.3. JOINT CLEANER, SEALERS, AND PRIMER SHALL BE USED AS RECOMMENDED BY MANUFACTURER.

C. INSTALLATION
1.1. JOINT BACKING MATERIAL SHALL BE A WIDTH GREATER TMAN THE JOINT, AS RECOMMENDED BY THE MANUFACTURER, TO GUARANTEE A TIGHT FIT WHEN FORCED INTO PLACE.
1.2 APPLY MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS: OBSERVE MANUFACTURER'S REQUIREMENTS REGARDING TEMPERATURE CONTROL, USABILITY OF MATERIALS, AND PROTECTION OF ADJACENT SURFACES.
1.1. MAKING SEALING SURFACE SLIGHTLY CONCAVE FREE OF WRINKLES AND SKIPS: UNIFORMLY SMOOTH AND WITH PERFECT ADHESION ALONG BOTH SIDES OF JOINT. PROTECT ADJACENT SURFACES FROM EXCESS MATERIALS LEAVE JOINTS IN A CLEAN NEAT CONDITION. DEFECTIVE JOINTS SHALL BE REMOVED, CLEANED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.SET THRESHOLDS IN FULL BED OF CAULKING AND ANCHOR WITH EXPANSION ANCHORS.

0810 HOLLOW METAL DOORS & FRAMES

A. DESCRIPTION
1.1. REFER TO DOOR SCHEDULE FOR LOCATIONS AND TYPES OF DOORS REQUIRED.
B. PRODUCTS
1.1. HOLLOW METAL FRAMES- GENERAL
   a. COLD ROLLED 18 GAUGE LABELED FRAMES WHERE REQUIRED.
   b. FRAMES SHALL RECEIVE TWO COATS OF RUST INHIBITIVE PRIMER. PROVIDE THREE (3) RUBBER BUMPERS AT EACH DOOR.
   c. ALL FRAMES TO BE WELDED HOLLOW METAL
   d. APPROVED MANUFACTURERS: STEELCRAFT, CECO, TRUSSBILT, AMWELD, AND FENESTRA
1.2 HOLLOW METAL FRAMES - WELDED (INTERIOR & EXTERIOR)
   a. SAW MITER AND CONTINUOUSLY WELD CORNER JOINTS FOR FULL JAMB DEPTH AND WIDTH OF FRAME AND TRIM. CONTACT EDGES SHALL BE CLOSED TIGHT WELDS ON EXPOSED SURFACES DRESSED SMOOTH AND FLUSH. PRIME COAT PAINT.
   b. PROVIDE CHAMBER AT HINGE CUTOUTS TO ALLOW ATTACHMENT OF HINGES AFTER FRAME IS FILLED WITH GROUT.
1.3 HOLLOW METAL DOORS
   a. DOORS SHALL BE FLUSH DESIGN, OF SIZE INDICATED ON DOOR SCHEDULE
   b. CORE SHALL CONSIST OF STRUCTURAL HONEYCOMB OR SOLID POLYSTYRENE CORE BANDED TO BOTH FACES.
   c. APPROVED MANUFACTURERS: STEELCRAFT, CECO, TRUSSBILT, AMWELD, AND FENESTRA
C. INSTALLATION
1.1. FRAMES, WHICH ARE SCHEDULED FOR LABEL CONSTRUCTION, SHALL BE INSTALLED USING UL-APPROVED ANCHORING. FRAMES SHALL BE PROPERLY PREPARED TO RECEIVE UL-APPROVED HARDWARE AND SHALL HAVE PROPER LABEL ATTACHED AT THE FACTORY.
1.2. ALL FRAMES SHALL BE COMPLETED WITH JAMB ANCHORS FOR ATTACHING TO MASONRY WALLS, OR OTHER ANCHORS, AS REQUIRED BY THE PARTICULAR INSTALLATION.
1.3. AT THE TIME OF INSTALLATION, THE DOOR JAMBS SHOULD BE HELD ½ " OFF THE EXISTING CONCRETE FLOOR, BEFORE FLOOR TILE IS INSTALLED.
1.4. INSTALL ALL HOLLOW METAL DOORS AND FRAMES ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
1.5. FILL ALL WELDED FRAMES WITH MORTAR.

0815 ALUMINUM WINDOW SYSTEMS

A. DESCRIPTION
1.1. FURNISH AND INSTALL ALL GLAZING, GLASS AND DOOR FRAMES, BARRIER BARS, AND EXTERIOR WINDOW WALL SYSTEM, INCLUDING ALL HARDWARE, ACCESSORIES, AND CAULKING, REQUIRED FOR A COMPLETE WATERTIGHT INSTALLATION AS DETAILED ON THE DRAWINGS AND HEREINAFTER SPECIFIED.
B. PRODUCTS
1.1. ALUMINUM COMPONENTS: 22,000 PSI PER ULTIMATE TENSILE STRENGTH ALLOY, NOT LESS THAN 0.125 " WALL THICKNESS. 1-3/4 " X 4.5" FRAME SIZE.
1.2. FASTENING: ALUMINUM, STAINLESS STEEL OR CADMIUM PLATED CARBON STEEL
1.3. WEATHERSTOP DOOR OPENINGS WITH BLACK PLOY-PILE WEATHER-STRIPPING.
1.4. GLASS STOPS: WITHOUT VISIBLE FASTENINGS SNAP-IN TYPE BLACK, FOR PUTTY LESS GLAZING.
1.5. HARDWARE: REFER TO DOCUMENTS
1.6. FINISH: REFER TO DOCUMENTS
1.7. DOORS TO BE MEDIUM STILE TO MEET APPLICABLE AAMA REQUIREMENTS CONCERNING SILLS AND STRENGTHS.
1.8. CAULKING COLOR TO MATCH FRAME.
1.9. MANUFACTURERS:
   a. DOORS AND FRAMES: KAWNEER OR VISTAWALL.
C. INSTALLATION
1.1. FABRICATE AND INSTALL EXTERIOR UNITS TO WITHSTAND WIND PRESSURE LOAD OF 26 POUNDS PER SQUARE FOOT OVER ENTIRE FRAME, AND PANEL AREA, ACTING INWARD AND OUTWARD.

0850 - PASS-THRU WINDOW

MANUAL OPERATED, SELF-CLOSING, BI-PARTING PASS-THRU WINDOW IN ANODIZED ALUMINUM FRAME.
PRE-GLAZED WINDOW, SEE EXTERIOR ELEVATION AND DOOR AND WINDOW SCHEDULE FOR ADDITION INFORMATION. UNIT AS MANUFACTURED BY:

QUICKSERV CORP
P.O. BOX 40466
HOUSTON, TX 77240
CONTACT: WADE ARNOLD

0870 FINISH HARDWARE

A. DESCRIPTION
1.1. INSTALL ALL FINISH HARDWARE ON DOORS INDICATED ON DOOR SCHEDULE.
1.2. COORDINATION: HARDWARE TEMPLATES AND SCHEDULES SHALL BE SENT TO HOLLOW METAL MILLWORK WOOD DOOR SUPPLIER TO COORDINATE THE NECESSARY PREPARATION.
B. PRODUCTS
1.1. ALL HARDWARE TO MEET REQUIREMENTS LISTED IN THE DOOR SCHEDULE UNLESS OTHERWISE NOTED.
1.2. ALL ALUMINUM ENTRANCE SYSTEM HARDWARE ROLLING GRILLES & OVERHEAD FIRE DOORS & SHUTTER HARDWARE IS BY MANUFACTURER.
C. INSTALLATION
1.1. MOUNT ALL HARDWARE UNITS AT HEIGHTS RECOMMENDED IN "RECOMMEND LOCATIONS FOR BUILDERS HARDWARE" BY NBHA, EXCEPT AS OTHERWISE SPECIFICALLY INDICATED OR REQUIRED TO COMPLY WITH GOVERNING HANDICAPPED REGULATIONS. THESE SHALL BE AS FOLLOWS:
   a. LOCK SETS AND LATCH SETS- 40"
   b. EXIT DEVICE CROSSBAR- 37"
   c. CENTER OF DOOR PULL- 42"
   d. CENTER OF PUSH PLATE- 48"
   e. DEADLOCK- 60"
1.2 INSTALL HARDWARE ITEMS COMPLYING WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. REMOVE HARDWARE FROM SURFACES TO BE FINISHED AFTER INSTALLATION AND STORE UNTIL SURFACE FINISH IS APPLIED; THEN REINSTALL.
1.3 ADJUST EACH OPERATING ITEM OF HARDWARE TO INSURE PROPER OPERATION OF FUNCTION OF UNIT.
1.4 LUBRICATE MOVING PARTS AS RECOMMENDED BY MANUFACTURER.
1.5 INSTALL ALL WEATHER-STRIPPING IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS. FIT WEATHER-STRIPPING TIGHTLY AT CORNERS TO MAINTAIN CONTINUITY AROUND PERIPHERY OF DOOR.
1.6 CLEAN HARDWARE AS RECOMMENDED BY MANUFACTURER.

0880 GLASS & GLAZING

A. DESCRIPTION
1.1. FURNISH AND INSTALL ALL GLASS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.
B. MATERIALS
1.1. GLAZING COMPOUND:
   a. (TT-P-781), TYPE 1 OR TYPE 2 MINIMUM AND ACCESSORIES SUCH AS POINTS, SETTING BLOCKS, SHIMS, STOP BEADS, ANGLES, WIRING SPRING CLIPS SHALL BE THE TYPE RECOMMENDED BY THE GLASS MANUFACTURER.
C. TYPES:
1.1. 5/8 " TEMPERED INSULATING GLASS IN EXTERIOR ALUMINUM DOORS.
1.2. 1" TEMPERED INSULATING GLASS @ EXTERIOR LOCATIONS.
1.3. 1/4" TEMPERED GLASS @ INTERIOR LOCATIONS.
1.4. PROVIDE 35% DUAL REFLECTIVE WINDOW FILM ON 2ND SURFACE (INSIDE).
D. INSTALLATION
1.1. PERFORM ALL GLAZING WORK IN ACCORDANCE WITH THE MINIMUM STANDARDS OF THE FLAT GLASS JOBBERS ASSOCIATION (FGJA) GLAZING MANUAL.
1.2. ALL GLASS FACTORY LABELED ON EACH PANE. DIMENSIONS SHOWN ON DRAWINGS ARE GIVEN ONLY AS A GUIDE FOR ESTIMATING PURPOSES, AND ACTUAL SIZE SHALL BE DETERMINED BY MEASUREMENT OF THE ACTUAL OPENINGS. GLASS SHALL BE ACCURATELY CUT TO FIT THESE OPENINGS.
1.3. INSPECT WINDOWS AND OTHER FRAMES TO DETERMINE THAT THE FRAMES, SASH AND STOPS ARE SET TRUE AND STRAIGHT. SASH RABBETS AND STOPS SHALL BE CLEAN AND DRY AT THE TIME OF GLAZING. BEFORE GLAZING METAL SASH REMOVE ANY OIL, LACQUER, OR OTHER MATERIAL TO WHICH THE COMPOUND WILL NOT READILY ADHERE OR WHICH WILL TEND TO DELAMINATE FROM THE METAL AND CAUSE A LEAK THROUGH THE GLAZING SEAL.

0950 ACOUSTICAL TREATMENT

A. GENERAL: PROVIDE ACOUSTICAL CEILINGS INCLUDING SUSPENSION SYSTEM, TRIM AND ACCESSORIES AS REQUIRED FOR COMPLETE FINISHED INSTALLATION.
B. STANDARDS: CONFORM TO ASTM C635 FOR METAL SUSPENSION SYSTEM AND ASTM C636 FOR INSTALLATION OF ACOUSTICAL CEILINGS.
C. PERFORMANCE REQUIREMENTS: PROVIDE PRODUCTS LISTED BY UNDERWRITERS LABORATORIES (UL)
1. FLAME SPREAD/ MODE DENSITY: PROVIDE PRODUCTS MEETING CODE REQUIREMENTS FOR MAXIMUM 25 FLAME SPREAD AND SMOKE DEVELOPED INDEX 50 OR LESS.
D. SEISMIC REQUIREMENTS: COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS FOR SEISMIC BRACING OF CEILING SUSPENSION SYSTEM, AND WITH ASTM E580.
E. SUBMITTALS: SUBMIT PRODUCT DATA, SHOP DRAWINGS INDICATION LAYOUT, AND SAMPLES OF GRID, TRIM AND CEILING UNITS.
F. INSTALLER: FIRM WITH MINIMUM THREE YEARS SUCCESSFUL EXPERIENCE IN PROJECTS OF SIMILAR TYPE AND SCOPE: ACCEPTANCE TO MANUFACTURER OF ACOUSTICAL UNITS.
G. PROJECT CONDITION: DO NOT INSTALL CEILING UNTIL BUILDING IS ENCLOSED, SUFFICIENT HEAT IS PROVIDED, DUST GENERATING ACTIVITIES HAVE TERMINATED AND OVERHEAD MECHANICAL WORK IS COMPLETED, TESTED AND APPROVED: ALLOW WET WORK TO DRY PRIOR TO INSTALLATION.
H. ACOUSTICAL UNITS: TYPES AND MANUFACTURERS AS INDICTED ON DRAWINGS.
I. SUSPENSION SYSTEM: AS INDICTED ON DRAWINGS.
J. PREPARATION: MEASURE CEILING AREA AND ESTABLISH LAYOUT OF ACOUSTICAL UNITS TO BALANCE PROPER WIDTHS AT OPPOSITE EDGES OF EACH CEILING: DO NOT USE LESS THAN HALF WIDTH UNITS AT BORDERS.
1. COORDINATE WITH OTHER WORK SUPPORTED BY OR PENETRATING THROUGH CEILINGS, INCLUDING LIGHT FIXTURES, HVAC EQUIPMENT AND PARTITIONS SYSTEMS.
K. INSTALLATION: COMPLY WITH MANUFACTURER RECOMMENDATIONS, ASTM C636, AND APPLICABLE REQUIREMENTS FOR FIRE RATINGS.
1. FINISHED CEILINGS: TRUE TO LINES AND LEVELS AND FREE FROM WARPED, SOILED OR DAMAGED GRID OR ACOUSTICAL UNITS.
2. INSTALL CEILING SYSTEMS IN A MANNER CAPABLE OF SUPPORTING SUPERIMPOSED LOADS, WITH MAXIMIM PERMISSIBLE DEFLECTION OF 1/8" IN 10'-0".
3. ENSURE SUSPENSION SYSTEM IS LOCATED TO ACCOMMODATE FITTINGS AND UNITS OF EQUIPMENT WHICH IS TO BE PLACED AFTER INSTALLATION OF CEILING GRID.
4. WHERE DUCTS OR OTHER EQUIPMENT PREVENT REGULAR SPACING OF HANGERS, REINFORCE NEAREST ADJACENT HANGERS AND RELATED CHANNELS AS REQUIRED TO SPAN REQUIRED DISTANCE.
5. INSTALL EDGE MOLDINGS AT INTERSECTION OF CELING AND VERTICAL SURFACES, USING MAXIMUM LENGTHS, STRAIGHT, TRUE TO LINE AND LEVEL; MITER CORNERS.
6. FIT ACOUSTICAL UNITS IN PLACE, FREE FROM DAMAGED EDGES OR DEFLCTS DETRIMENTAL TO APPEARANCE AND FUNCTION. LAY DIRECTIONALLY PATTERNED UNITS ONE WAY WITH PATTERN AS DIRECTED. FIT BORDER UNITS NEATLY AGAINST ABUTTING SURFACES.
7. INSTALL UNITS LEVEL, IN UNIFORM PLANE AND FREE FROM TWIST, WARP AND DENTS.
8. INSTALL HOLD-DOWN CLIPS WHERE REQUIRED BY APPLICABLE CODES AND WHERE CEILING IS WITHIN 20'-0" OF AND EXTERIOR DOOR.
L. ADJUSTMENT: ADJUST SAGS OR TWISTS WHICH DEVELOP IN CEILING SYSTEM AND CEILING IS WITHIN 20'-0" OR AN EXTERIOR DOOR.

0990 PAINTING

A. DESCRIPTION
1.1. THE CONTRACTOR SHALL DO ALL INTERIOR AND EXTERIOR PAINTING INDICATED ON THE DRAWINGS, INCLUDING WOOD, MASONRY, GYPSUM BOARD FERROUS METALS, PRIME COATED METAL SURFACES, REGISTERS, AND GRILLES.
1.2. EXAMINE ALL SUBSURFACES TO RECEIVE WORK AND REPORT TO THE GENERAL CONTRACTOR WITH A COPY TO THE TENANT. ALL CONDITIONS DETRIMENTAL TO WORK. COMMENCEMENT OF WORK WILL BE CONSTRUED AS ACCEPTANCE OF ALL SUBSURFACES.
1.3. DELIVER MATERIALS AND EQUIPMENT IN ONE PLACE WHERE DIRECTED BY THE GENERAL CONTRACTOR'S FOREMAN. PROTECT FLOORS AND WALLS OF STORAGE ROOM. REMOVE OILY RAGS, WASTE ETC. FROM BUILDING EVERY NIGHT AND UNDER NO CIRCUMSTANCES ALLOW THEM TO ACCUMULATE.
B. PRODUCTS
1.1. ALL MATERIALS SHALL BE OF THE BEST GRADE; REFER TO FINISHES.
C. INSTALLATION
1.1. THE CONTRACTOR SHALL EXAMINE ALL SURFACES TO BE FINISHED AND MAKE CERTAIN THAT THINGS CAN BE PUT IN PROPER CONDITION FOR FINISHING BY CUSTOMARY CLEANING, SANDING OR PUTTYING. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR PRODUCING A SATISFACTORY JOB WITH THE MATERIALS SPECIFIED.
1.2. WORKMANSHIP SHALL BE OF THE VERY BEST, ALL MATERIALS EVENLY SPREAD AND SMOOTHLY FLOWED ON, GIVING A UNIFORM SHEEN AND COLOR WITHOUT RUNS AND SAGS. TRANSPARENT FINISHES SHALL HAVE ALL COATS BRUSHED OUT SMOOTH. SPRAYING IS ACCEPTABLE FOR PRIME COATS ONLY. ONLY SKILLED PAINTERS SHALL BE EMPLOYED AND ALL MATERIALS SHALL BE APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S DIRECTIONS. EXCEPT AS OTHERWISE SPECIFIED, ONLY ONE MANUFACTURER'S MATERIALS SHALL BE USED IN EACH OF THE FINISHES SPECIFIED.
1.3. ALL SURFACES TO BE PAINTED OR ENAMELED SHALL BE CLEANED FREE OF LOOSE DIRT AND DUST BEFORE PAINTING IS STARTED. ALL KNOTS, PITCH STREAKS, AND SAPPY SPOTS SHALL FIRST BE TOUCHED UP WITH SHELLAC WHERE FINISH CALLS FOR PAINT OR ENAMEL.
1.4. ALL NECESSARY PUTTYING OF NAIL HOLES, CRACKS ETC SHALL BE DONE AFTER THE FIRST COAT, WITH PUTTY OF A COLOR TO MATCH THAT OF THE FINISH
1.5. ALL UNDERCOATS OF PAINT AND ENAMEL SHALL BE TINTED TO THE APPROXIMATE SHADE OF THE FINAL COAT. ALL SUCTION SPOTS OR HOT SPOTS IN CEMENT, AFTER THE APPLICATION OF THE FIRST COAT, SHALL BE TOUCHED UP BEFORE APPLYING THE SECOND COAT. CONTRACTOR SHALL SECURE COLOR SCHEDULE FOR ROOMS BEFORE PRIMING WALLS.
1.6. TOPS AND BOTTOMS OF ALL DOORS SHALL BE FINISHED SAME AS BALANCE OF DOOR.
1.7. ALL PAINTING SHALL BE DONE TO CONFORM TO LOCAL HEALTH DEPARTMENT REGULATIONS.
1.8. PAINTING SCHEDULE: THE FOLLOWING SPECIFICATIONS FOR FINISHING IS NOT INTENDED TO MENTION EVERY PARTICULAR ITEM WHICH WILL RECEIVE PAINTERS FINISH, BUT IS INTENDED TO ESTABLISH TYPE AND QUALITY OF FINISH WHICH WILL BE REQUIRED ON VARIOUS MATERIALS. INTERIOR AND EXTERIOR FERROUS METAL (INCLUDING ELECTRICAL PANELS AT UTILITY AREA):
FIRST COAT- RUST INHIBITED PRIMER.
SECOND COAT- ENAMEL UNDERCOAT.
THIRD COAT- ALKYD SATIN FINISH ENAMEL.
WOOD:
FIRST COAT- POLYURETHANE VARNISH, SATIN FINISH, SANDED.
SECOND COAT- POLYURETHANE VARNISH, SATIN FINISH, SANDED.
THIRD COAT- POLYURETHANE VARNISH, SATIN FINISH, SANDED.
RECESSED

SUMMARY TABLE

JURISDICTION: CITY OF BRYANT, AR

ZONING: C-2 HIGHWAY COMMERCIAL DISTRICT (HCD)

PERMITTED USES: RESTAURANTS PERMITTED

BUILDING COVERAGE: 35% MAXIMUM

HEIGHT: THREE STORIES OR 45' MAXIMUM

FRONT SETBACK: 50' MINIMUM

SIDE SETBACK: 0' UNLESS ABUTS RESIDENTIAL DISTRICT, THENCE 25' MINIMUM

REAR SETBACK: 15' MINIMUM UNLESS ABUTS RESIDENTIAL DISTRICT, THENCE 55' MINIMUM

REQUIRED PARKING: ONE SPACE PER 300 SF OF OCCUPIED SPACE=664/300=2 SPACES

PROPOSED PARKING: 7 STALLS INCLUDING 1 HANDICAP

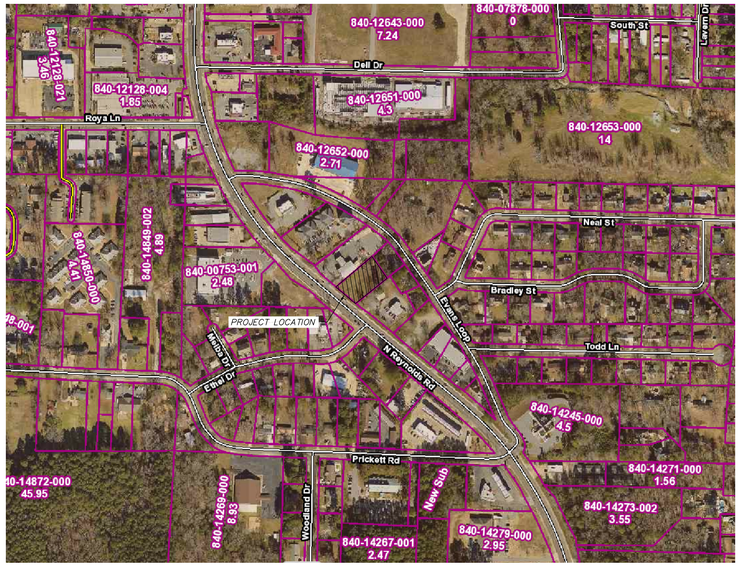
IMPERVIOUS AREA COVERAGE: 90% MAXIMUM

CONSTRUCTION DRAWINGS

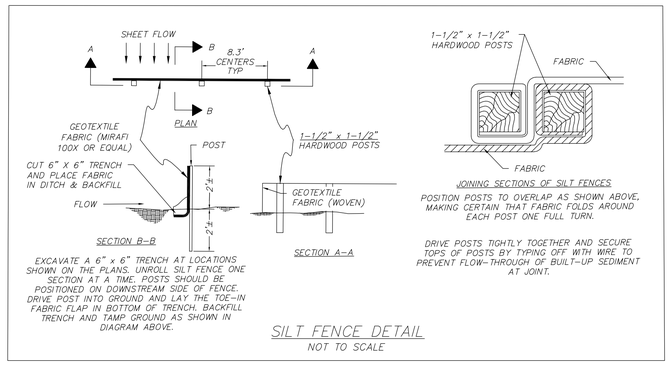
PROPOSED SCOOTER'S COFFEE
1816 N REYNOLDS ROAD
BRYANT, ARKANSAS 72022

PROPERTY DESCRIPTION

LEGAL DESCRIPTION OF RECORD SALINE COUNTY INSTRUMENT #2017-016225:
PART OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 1 SOUTH, RANGE14 WEST, SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SOUTHEAST CORNER OF SAID N 1/2 OF THE NW 1/4, SECTION 27, TOWNSHIP 1 SOUTH, RANGE 14 WEST; THENCE WEST, ALONG THE SOUTH LINE OF SAID N 1/2 OF THE NW 1/4, 662.0 FEET TO THE EAST RIGHT OF WAY LINE OF REYNOLDS ROAD (35 FEET FROM CENTERLINE OF PAVEMENT); THENCE NORTH 50 DEG. 15 MIN. WEST, ALONG SAID ROAD RIGHT OF WAY, FOR 764.5 FEET; THENCE NORTH 52 DEG. 30 MIN. WEST, ALONG SAID ROAD RIGHT OF WAY, 349.5 FEET; THENCE NORTH 50 DEG. EAST 14.1 FEET TO REYNOLDS ROAD RIGHT OF WAY AS OF JUNE 7, 1993 AND THE POINT OF BEGINNING; THENCE CONTINUE NORTH 50 DEG EAST, ALONG THE NORTH LINE OF LANDS DESCRIBED IN SALINE COUNTY DEED RECORD BOOK 205 AT PAGE 331, FOR 206.21 FEET TO THE SOUTHWEST CORNER OF LANDS DESCRIBED IN SALINE COUNTY DEED RECORDS BOOK 265 AT PAGE 704; THENCE NORTH 35 DEG. 55 MIN. WEST 121.32 FEET, ALONG THE WEST LINE OF LANDS DESCRIBED IN SALINE COUNTY DEED RECORD BOOK 265 AT PAGE 704 TO A FENCE, SAID FENCE BEING THE PROPERTY LINE AS SET FORTH IN PROPERTY LINE AGREEMENT DATED DECEMBER 8, 1978 AND FILED JANUARY 3, 1979 IN SALINE COUNTY MISCELLANEOUS RECORD BOOK 53 AT PAGE 543; THENCE SOUTH 50 DEG. 16 MIN. 31 SEC. WEST, ALONG SAID FENCE, 242.8 FEET TO THE RIGHT OF WAY OF REYNOLDS ROAD AS OF JUNE 7, 1993; THENCE SOUTH 52 DEG. 30 MIN. EAST, ALONG SAID ROAD RIGHT OF WAY, 128.28 FEET TO THE POINT OF BEGINNING, CONTAINING 0.68 ACRES, MORE OR LESS.



VICINITY MAP (NTS)



SILT FENCE DETAIL
NOT TO SCALE

UTILITIES NOTE

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT KNOWN OR SHOWN.

811 Know what's **below.** **811** before you dig.

PROJECT INFORMATION

OWNER/FRANCHISEE:
MEAN BEAN COFFEE LLC
118 VERONA CIRCLE
SHERWOOD, AR 72120

ARCHITECT:
GERDES, HENRICHSON & ASSOCIATES
14901 QUORUM DRIVE, SUITE 300
DALLAS, TX 75254

SITE INFORMATION:
PARCEL: 840-14249-000
1816 N REYNOLDS ROAD
BRYANT, ARKANSAS 72022

PREPARED BY:
SHERRILL ASSOCIATES, INC.
316 N. MAIN STREET
EDWARDSVILLE, IL 62025
618-656-9251

ENGINEER:
SHERRILL ASSOCIATES, INC.
WILSON D. WAGGONER, P.E.

SURVEYOR:
MCALISTER ENGINEERING
4508 STADIUM BLVD, SUITE D
JONESBORO, AR 72404

DRAWING INDEX

LOT AREA

27,806± SQ.FT.
0.64± AC.

UTILITIES

WATER: CITY OF BRYANT
SEWER: CITY OF BRYANT
ELECTRIC: ENTERGY

ENGINEER'S CERTIFICATE

THIS IS TO CERTIFY THAT SHERRILL ASSOCIATES, INC AT THE REQUEST OF AND FOR THE EXCLUSIVE USE OF MEAN BEAN COFFEE LLC HAS PREPARED THIS SHEET FROM RECORD SOURCES AND ACTUAL FIELD SURVEY DURING THE MONTH OF JULY 2022.

Wilson D. Waggoner 9/14/22

WILSON D. WAGGONER, P.E. 21001
IN THE STATE OF ARKANSAS
EXPIRES 12-31-2022

STATE OF ARKANSAS
WILSON D. WAGGONER
NUMBER PE-21001
PROFESSIONAL ENGINEER

Title: COVER SHEET
1612 LINWOOD DRIVE
PARAGOULD, AR 72450

Client:

EST. 1998 SCOOTER'S COFFEE

SHERRILL ASSOCIATES
Surveyors – Engineers – Planners
ILLINOIS DESIGN FIRM #184-001238
MISSOURI DESIGN FIRM #001332
316 N Main Street
Edwardsville, IL 62025
TEL: (618) 656-9251

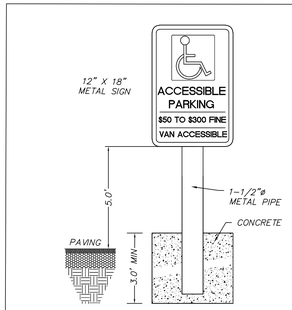
DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other Documents or instruments relating to or intended to be used for any part or parts of the engineering project or survey.

NO.	DATE	REVISION

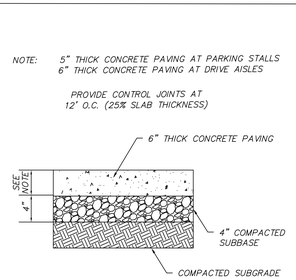
PROJECT NO. 2235801

DRAWN	SCALE
WDW	SEE PLAN
CHECKED	DATE
WDW	8/17/2022

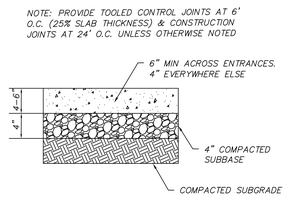
C0.0



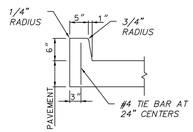
ACCESSIBLE PARKING SIGN
NOT TO SCALE



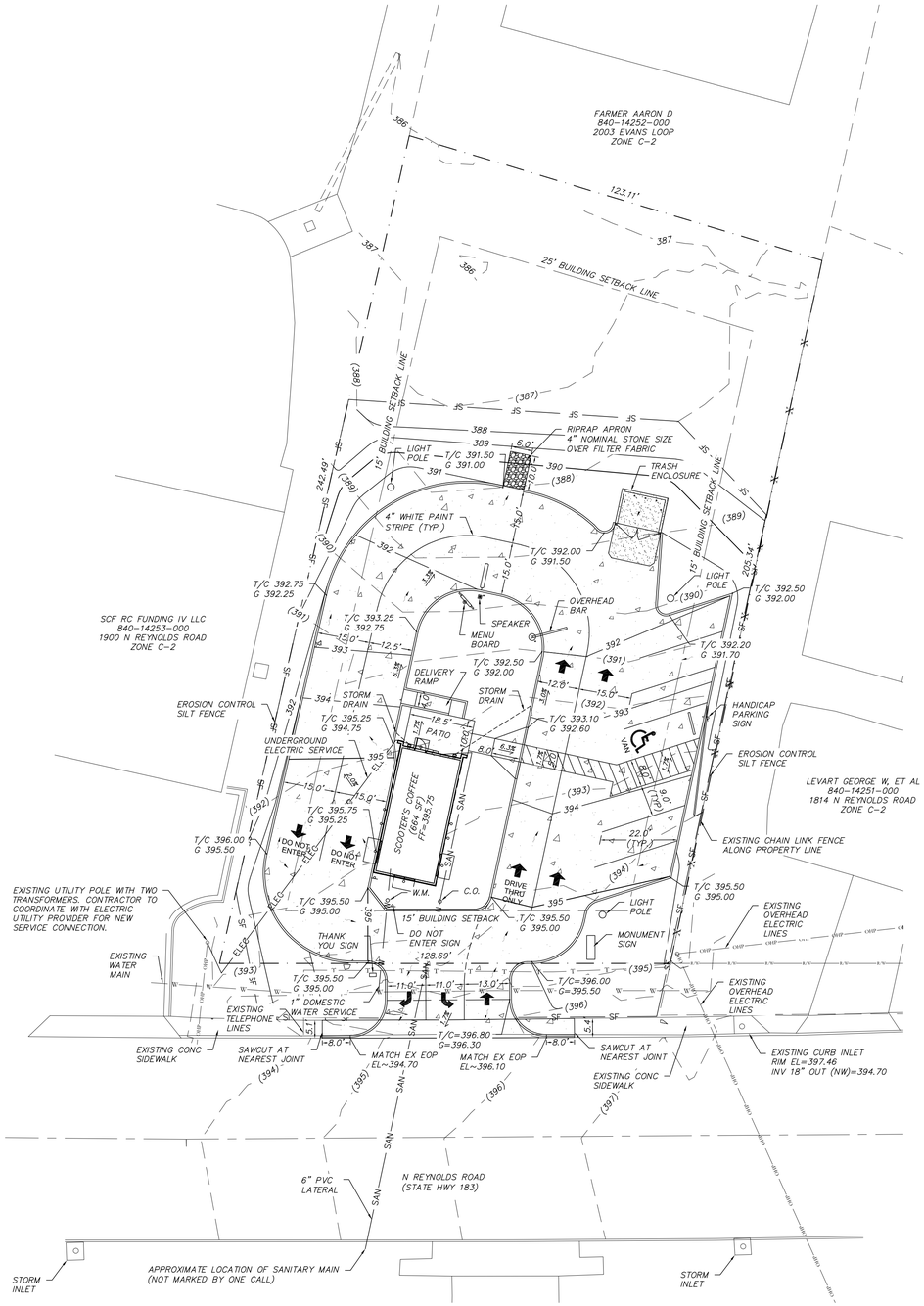
CONCRETE PAVING SECTION
NOT TO SCALE



CONCRETE SIDEWALK SECTION
NOT TO SCALE



CONCRETE BARRIER CURB SECTION
NOT TO SCALE



LEGEND

	PROPOSED CONCRETE PAVEMENT
ELEC	PROPOSED ELECTRIC SERVICE
W	PROPOSED WATER SERVICE
SAN	PROPOSED SANITARY SERVICE
ST	PROPOSED STORM DRAIN
SF	EROSION CONTROL SILT FENCE
T/C	TOP OF CURB
G	GRADE/BOTTOM OF FACE OF CURB
(XXX)	EXISTING GRADE ELEVATION
XXX	PROPOSED GRADE ELEVATION

0' 10' 20'
SCALE : 1"=20'

UTILITIES NOTE

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT KNOWN OR SHOWN.

811 Know what's **below.** **811** before you dig.

ENGINEER'S CERTIFICATE

THIS IS TO CERTIFY THAT SHERRILL ASSOCIATES, INC AT THE REQUEST OF AND FOR THE EXCLUSIVE USE OF MEAN BEAN COFFEE LLC HAS PREPARED THIS SHEET FROM RECORD SOURCES AND ACTUAL FIELD SURVEY DURING THE MONTH OF JULY 2022.

Wilson D. Waggoner 9/14/22

WILSON D. WAGGONER, P.E. 21001
IN THE STATE OF ARKANSAS
EXPIRES 12-31-2022

STATE OF ARKANSAS
WILSON D. WAGGONER
NUMBER PE-21001
PROFESSIONAL ENGINEER

Title: PROPOSED SITE PLAN
1816 N REYNOLDS RD
BRYANT, AR 72022

Client: MEAN BEAN COFFEE LLC
8118 S 193RD STREET
GRENA, NE 68028

SCOOTER'S COFFEE EST. 1998

SHERRILL ASSOCIATES
Surveyors – Engineers – Planners
ILLINOIS DESIGN FIRM #184-001238
MISSOURI DESIGN FIRM #001332
316 N Main Street
Edwardsville, IL 62025
TEL: (618) 656-9251

NO.	DATE	REVISION

PROJECT NO. 2235801

DRAWN	SCALE
WDW	SEE PLAN
CHECKED	DATE
WDW	8/17/2022

C2.0

SHEET 2 OF 4

LANDSCAPE CODE

SECTION IV: MINIMUM LANDSCAPING CRITERIA

	Residential Subdivision	C-1	C-2	PUD
Trees	N/A	1/each 1/3 acre or Fraction	1/each ½ acre or Fraction	X
Evergreens	N/A	1/2,000 SF	1/2,000 SF	X
Bedding Plants Or Ground Cover in Containment	Primary Entrance Must be Landscaped	100 Square Foot Minimum	100 Square Foot Minimum	X
Lawn (Grass)	N/A	Options	Options	X
Open Space Natural or Landscaping	100 SF/lot	N/A	N/A	X

(X=Landscape design must be approved)

No Planting within 5 foot of a fire hydrant.
Spacing will be 40' between trees.
Tree must be a minimum 3" in diameter @ the base and 12'+ tall.
Existing trees meeting the minimum size can be counted to meet the criteria.
No trees can be planted within thirty-foot (30') of a property corner or driveway.
Shrubs along street right-of-way lines cannot exceed thirty inches (30") in height.
Separations noted in the zoning regulations must be bermed or screened with landscaping and ground cover or grass.

SECTION V. PLANT MATERIAL SELECTION

A. The following list of trees are those which have been found to be best suited to the central Arkansas area. There are many more trees that are strong growth trees but the ones in the following lists require the least amount of maintenance. Additional trees may be selected for use in required landscape areas when proven to be hearty in this area.

1. Primary List:

Common Name	Scientific Name
Bald Cypress	Taxodium distichum
Chinese Elm	Ulmus parvifolia
Flowering Bradford Pear	Pyres Calleryana 'Bradford'
Shumard Oak	Quercus shumardi
Ginkgo (male)	Ginkgo biloba
Honey Locust	Gleditsia triacanthos
Loblolly Pine*	Pinus Taeda
Pin Oak	Quercus palustris
Sawtooth Oak	Quercus acutissima
Sugar Hackberry	Celtis laevigata
Willow Oak	Quercus phellos

*Evergreen trees

2. Secondary List:

Common Name	Scientific Name
American Holly*	Ilex opaca
Crab Apple	Malus spp.
Crepe Myrtle	Lagerstroemia indica
Dogwood	Comus florida
Hawthorn	Crataegus opaca
Redbud	Cercis Canadensis
River Birch	Betula nigra
Southern Magnolia*	Magnolia grandiflora
Swamp Red Maple	Acer reburm
Water Oak	Quercus nigra
Weeping Willow	Salix babylonica

*Evergreen Trees

2. The Grasses listed in subsection (1) above are the more commonly used grasses adjacent to vehicular use areas.

E. Ground Covers

1. The following primary list of ground covers are recommended for use to comply with this ordinance.

Common Name	Scientific Name
Dwarf Nandina	N. domestica "Harbour Dwarf"
Junipers	Juniperus species
Liriope	Liriope Muscari
Memorial Rose	Rosa Wichcraiana
Mondo Grass	Ophiopogon japonicus
Periwinkle	Vinca minor
Spreading Euonymus	E. fortunei "Radicans"

2. Secondary List: (This list can be used but must be confined to a bed.)

Common Name	Scientific Name
Carolina Jessamine	Gelsemium sempervirens
Dwarf Bamboo	Arundinaria pygmaea
English Ivy	Hedera Helix
Honeysuckle	Lonicera sempervirens

SECTION VI. MAINTENANCE

1. The developer, his successor and the property owner shall be responsible for regular weeding, irrigating, fertilizing, pruning and other maintenance of all planting on private property of a development. Plant materials which are installed for compliance with this ordinance, both on private property and the public right-of-way, which exhibit evidence of insect pests, disease and/or damage, shall be appropriately treated and dead plant materials shall be replaced.

2. The owner of land abutting a constructed public right-of-way shall be responsible for the tree planting strip lying between the private property line and the curbline or backslope line and shall be required to regularly weed, mow, prune and maintain plantings in compliance with good horticultural practices.

3. If the owner of land thus situated as in (2) above, neglects or refuses to maintain the areas as prescribed, after having been given ten (10) days notice in writing to maintain by the City, the owner shall be guilty of a misdemeanor.

SECTION VII. PLANNING COMMISSION APPROVAL

The City of Bryant Planning Commission will review and act on all landscaping

B. Trees/shrubs on public right-of-way

All tree/shrub species listed in A, 1-2 and C, 1-2 may be used in the public right-of-way,

C. Shrub Species

The following list of shrubs are those which have been found to be best suited to this area and yet requiring the least amount of maintenance. This list along with the secondary list are those shrubs which may be planted in the required landscape area. Additional selective shrubs may be substituted when proven to be hearty in this region.

1. Primary List:

Common Name	Scientific Name
Evergreen Hollies	Ilex species
Nandina	Nandina domestica

2. Secondary List:

Common Name	Scientific Name
Abelia	Abelia grandiflora
Boxwood	Busus sempervirens
Chinese Photinia	Photinia serrulata

Note: Secondary listed shrubs require increased maintenance

D. Grasses

1. The following grasses may be used to comply with this ordinance:

Mayer Z-52	Zoysia	Fescue
Bermuda Grass	Bermuda Grass hybrids	
Centipede	St. Augustine	

GENERAL NOTES

THE OWNER MAY CONTRACT WITH A LOCAL LANDSCAPER TO SUBSTITUTE SPECIES AND LOCATIONS OF THE PLANTINGS BUT THE CODE SHALL BE FOLLOWED FOR THE BUFFERS AND INTERNAL PLANTINGS PER CITY CODE.

LOT AREA

27,806± SQ.FT.
0.64± AC.

PLANTING SUMMARY

EVERGREEN TREES

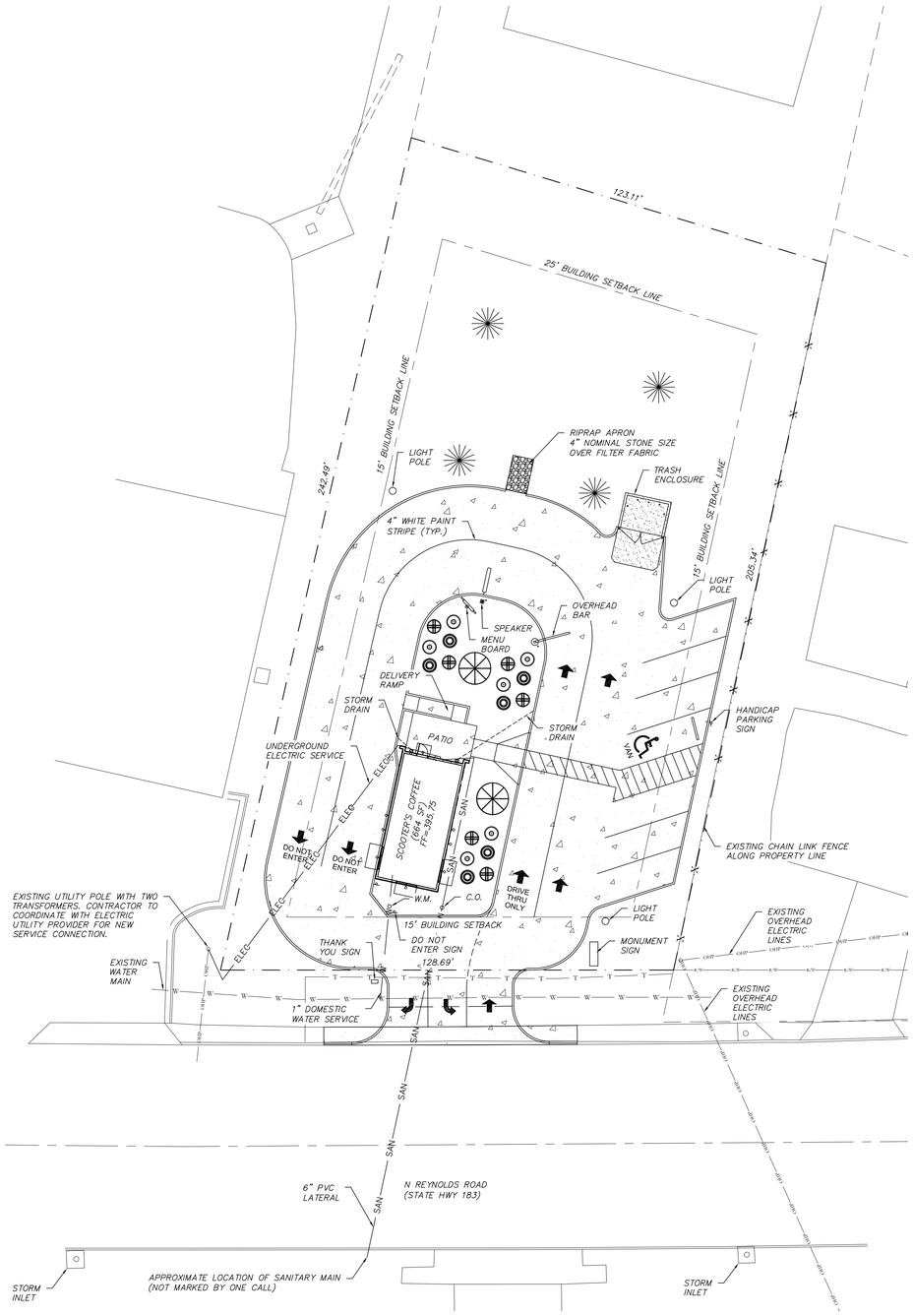
NAME	QTY.	SIZE	COMMENTS
ILEX OPACA AMERICAN HOLLY	14	24" BOX	8' HT. 2" CAL. MIN.

CANOPY TREES

NAME	QTY.	SIZE	COMMENTS
BETULA NIGRA RIVER BIRCH	2	24" BOX	8' HT. 2" CAL. MIN.

SHRUBS

NAME	QTY.	SIZE	COMMENTS
BUSUS SEMPERVIRENS BOXWOOD	6	5 GAL	24"–30" HT.
NANDINA DOMESTICA NANDINA	6	5 GAL	24"–30" HT.
ILEX SPECIES EVERGREEN HOLLY	6	5 GAL	24"–30" HT.



LEGEND

- PROPOSED CONCRETE PAVEMENT
- ELEC — PROPOSED ELECTRIC SERVICE
- W — PROPOSED WATER SERVICE
- SAN — PROPOSED SANITARY SERVICE
- ST — PROPOSED STORM DRAIN
- SF — EROSION CONTROL SILT FENCE

0' 10' 20'
SCALE : 1"=20'

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811 Know what's **below.** **811** before you dig.

Title: LANDSCAPE PLAN
1816 N REYNOLDS RD
BRYANT, AR 72022

Client: MEAN BEAN COFFEE LLC
8118 S 193RD STREET
GRENA, NE 68028

EST. 1998 SCOOTER'S COFFEE

SHERRILL ASSOCIATES
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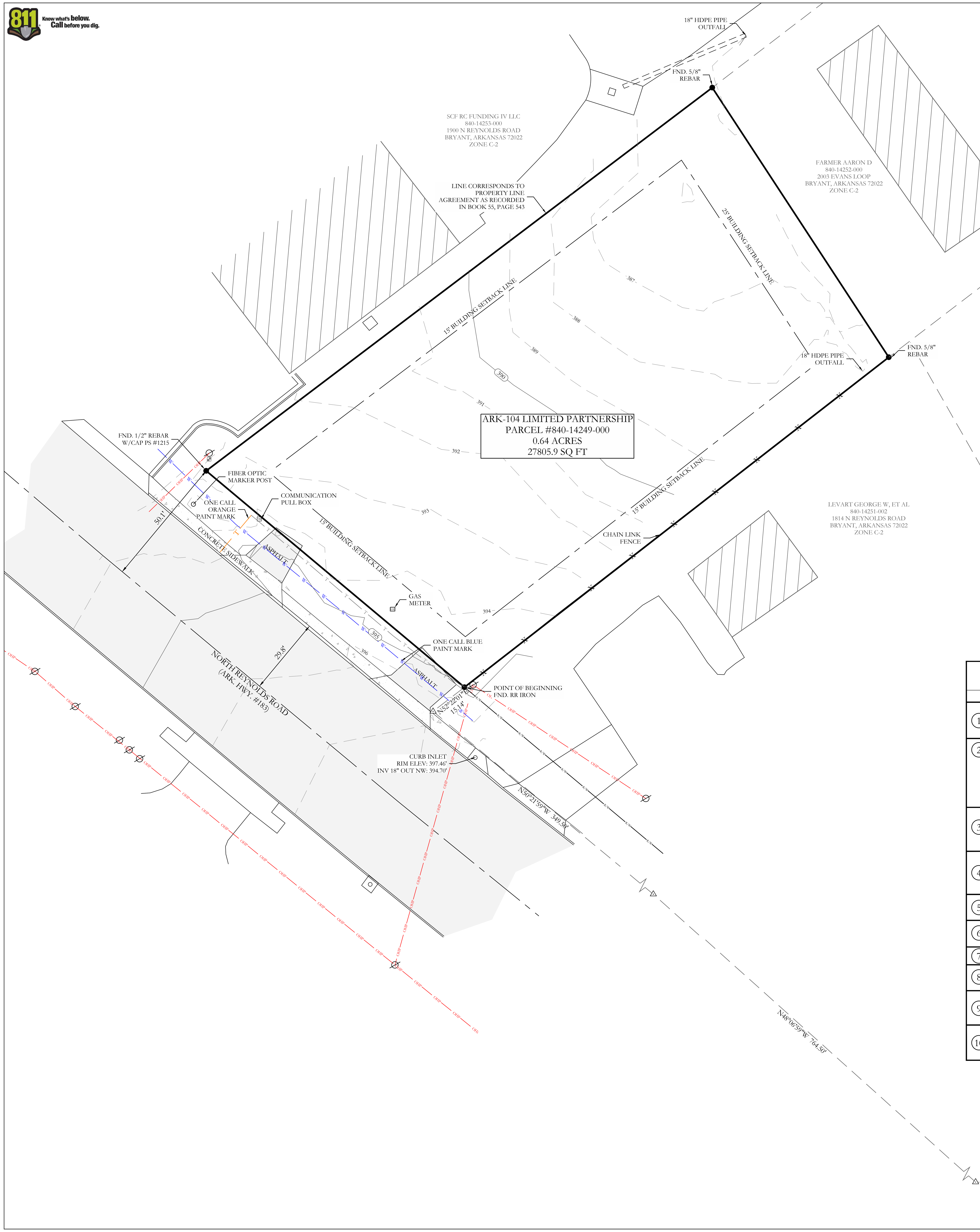
NO.	DATE	REVISION

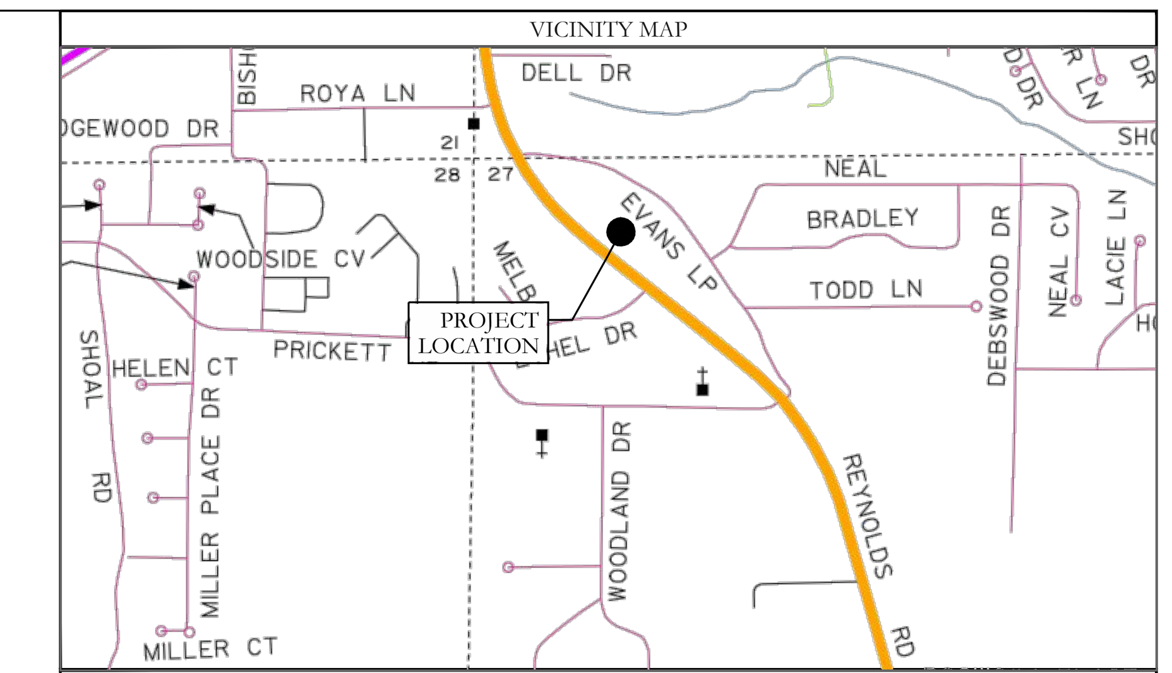
PROJECT NO. 2235801

DRAWN	SCALE
WDW	SEE PLAN
CHECKED	DATE
WDW	8/17/2022

C2.0

SHEET 3 OF 4





PROPERTY DESCRIPTION

LEGAL DESCRIPTION OF RECORD SALINE COUNTY INSTRUMENT #2017-006225:
PART OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 1 SOUTH, RANGE14 WEST, SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SOUTHEAST CORNER OF SAID N 1/2 OF THE NW 1/4, SECTION 27, TOWNSHIP 1 SOUTH, RANGE 14 WEST; THENCE WEST, ALONG THE SOUTH LINE OF SAID N 1/2 OF THE NW 1/4, 962.0 FEET TO THE EAST RIGHT OF WAY LINE OF REYNOLDS ROAD (35 FEET FROM CENTERLINE OF PAVEMENT); THENCE NORTH 50 DEG. 15 MIN. WEST, ALONG SAID ROAD RIGHT OF WAY, FOR 764.5 FEET; THENCE NORTH 52 DEG. 30 MIN. WEST, ALONG SAID ROAD RIGHT OF WAY, 349.5 FEET; THENCE NORTH 50 DEG. EAST 14.1 FEET TO REYNOLDS ROAD RIGHT OF WAY AS OF JUNE 7, 1993 AND THE POINT OF BEGINNING; THENCE CONTINUE NORTH 50 DEG EAST, ALONG THE NORTH LINE OF LANDS DESCRIBED IN SALINE COUNTY DEED RECORD BOOK 205 AT PAGE 351, FOR 206.21 FEET TO THE SOUTHWEST CORNER OF LANDS DESCRIBED IN SALINE COUNTY DEED RECORDS BOOK 265 AT PAGE 704; THENCE NORTH 35 DEG. 55 MIN. WEST 124.32 FEET, ALONG THE WEST LINE OF LANDS DESCRIBED IN SALINE COUNTY DEED RECORD BOOK 265 AT PAGE 704 TO A FENCE, SAID FENCE BEING THE PROPERTY LINE AS SET FORTH IN PROPERTY LINE AGREEMENT DATED DECEMBER 8, 1978 AND FILED JANUARY 3, 1979 IN SALINE COUNTY MISCELLANEOUS RECORD BOOK 55 AT PAGE 543; THENCE SOUTH 50 DEG. 16 MIN. 31 SEC. WEST, ALONG SAID FENCE, 242.8 FEET TO THE RIGHT OF WAY OF REYNOLDS ROAD AS OF JUNE 7, 1993; THENCE SOUTH 52 DEG. 30 MIN. EAST, ALONG SAID ROAD RIGHT OF WAY, 128.28 FEET TO THE POINT OF BEGINNING, CONTAINING 0.68 ACRES, MORE OR LESS.

TITLE COMMITMENT PROVIDED BY: CHICAGO TITLE INSURANCE COMPANY
COMMITMENT NO. 22-022518-475, EFFECTIVE DATE: JUNE 12, 2022, 8:00AM

	SCHEDULE B PART II - EXCEPTIONS	EFFECT ON SURVEY
1	ANY DEFECT, LIEN, ENCUMBRANCE, ADVERSE CLAIM, OR OTHER MATTER THAT APPEARS FOR THE FIRST TIME IN THE PUBLIC RECORDS OR IS CREATED, ATTACHES, OR IS DISCLOSED BETWEEN THE COMMITMENT DATE AND THE DATE ON WHICH ALL OF THE SCHEDULE B, PART I-REQUIREMENTS ARE MET.	NOT SURVEY RELATED
2	STANDARD EXCEPTIONS: (A)RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS. (B)EASEMENTS OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS. (C)ENCROACHMENTS, OVERLAPS, BOUNDARY LINE DISPUTES AND ANY MATTERS WHICH WOULD BE DISCLOSED BY AN ACCURATE SURVEY AND INSPECTION OF THE PREMISES. (D)ANY LIEN OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS.	AS SHOWN
3	LOSS ARISING FROM ANY OIL, GAS OR MINERAL INTERESTS, CONVEYED, RETAINED, ASSIGNED OR ANY ACTIVITY ON OR DAMAGE TO THE INSURED LAND CAUSED BY THE EXERCISE OF SUB-SURFACE RIGHTS OR OWNERSHIP, INCLUDING BUT NOT LIMITED TO THE RIGHT OF INGRESS AND EGRESS FOR SUB-SURFACE PURPOSES.	NOT SURVEY RELATED
4	LOSS ARISING FROM ANY JUDGMENT LIENS OR OTHER LIENS OF RECORD IN ANY UNITED STATES DISTRICT COURT OR BANKRUPTCY COURT IN THE STATE OF ARKANSAS AS OF THE EFFECTIVE DATE HEREOF THAT ARE NOT REFLECTED IN THE REAL PROPERTY RECORDS OF THE COUNTY IN WHICH THE PROPERTY IS LOCATED.	NOT SURVEY RELATED
5	TAXES AND ASSESSMENTS FOR THE YEAR(S) 2022 AND THEREAFTER, WHICH ARE NOT YET DUE AND PAYABLE, PLUS ANY PENALTIES AND INTEREST WHICH MAY ACCRUE.	NOT SURVEY RELATED
6	FUTURE ASSESSMENTS OF SALEM FIRE PROTECTION DISTRICT NO. 1 (AKA SALEM FIRE PROTECTIONDISTRICT NO. 59).	NOT SURVEY RELATED
7	FUTURE ASSESSMENTS OF THE SALINE WATERSHED REGIONAL WATER DISTRIBUTION DISTRICT.	NOT SURVEY RELATED
8	ANY INACCURACY IN THE AREA, SQUARE FOOTAGE, OR ACREAGE OF LAND DESCRIBED IN SCHEDULE A. THE COMPANY DOES NOT INSURE THE AREA, SQUARE FOOTAGE, OR ACREAGE OF THE LAND.	ACREAGE AS SHOWN
9	EASEMENT IN FAVOR OF SOUTHWESTERN BELL TELEPHONE AS SET FORTH IN EASEMENT DATED FEBRUARY 24, 1979, AND RECORDED ON FEBRUARY 26, 1979, IN BOOK 56 AT PAGE 353 IN THE RECORDS OF SALINE COUNTY, ARKANSAS.	EASEMENT DESCRIPTION IS AMBIGUOUS AND CANNOT BE PLOTTED ACCURATELY
10	PROPERTY LINE BY AND BETWEEN RAYMOND E EVANS AND SHIRLEY M EVANS AND JAMES ELLIOT AND LOIS A ELLIOTT, DATED DECEMBER 8, 1978, RECORDED JANUARY 3, 1979, IN BOOK 55, PAGE 543 OF THE CONVEYANCE RECORDS OF SALINE COUNTY, ARKANSAS	PERTAINS TO THE NORTH-WESTERLY PROPERTY LINE AS SHOWN

LEGEND
- Found Aliquot Corner
- Found monument
- Set ½" Rebar
- Computed point
(M)- Measured
(P) - Plat/Deed
- Fence

SITE SPECIFIC NOTES

OWNER(S) OF RECORD:
ARK-104 LIMITED PARTNERSHIP

STREET ADDRESS:
1816 NORTH REYNOLDS ROAD, BRYANT, ARKANSAS 72022

COUNTY PARCEL ID:
840-14249-000

ZONING DISTRICT:
C-2 GENERAL COMMERCIAL DISTRICT

BUILDING SETBACKS PER CITY REGULATIONS*:
FRONT: 15 FEET
REAR: 25 FEET
SIDE: 15 FEET

MAX LOT COVERAGE: 40%

MAX HEIGHT: 4 STORIES

LOCAL UTILITY PROVIDERS:

WATER SERVICE:	CITY OF BRYANT
SEWER SERVICE:	CITY OF BRYANT
ELECTRIC SERVICE:	ENTERGY
GAS SERVICE:	CENTERPOINT ENERGY

GENERAL NOTES

GENERAL SURVEYOR'S NOTES:
ALL LISTED MEASUREMENTS ARE AS MEASURED IN THE FIELD. FOR RECORD MEASUREMENTS, SEE DEED(S) OR PLAT(S) OF RECORD.

ADJACENT OWNERSHIP IS LISTED AS FILED IN THE SALINE COUNTY TAX ASSESSOR'S OFFICE AND IS SHOWN FOR REFERENCE ONLY.

THIS SURVEY IS FOR THE EXCLUSIVE USE AND BENEFIT OF PARTIES SHOWN HEREIN. USE OR DUPLICATION OF THIS DOCUMENT BY ANY OTHER PARTIES IS PROHIBITED AND VOIDS SAID DOCUMENT.

NOTE: THIS SURVEY IS BASED ON LEGAL DESCRIPTIONS AND TITLE WORK FURNISHED BY OTHERS. NO INVESTIGATION OR INDEPENDENT SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS WHICH AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. ANY LISTED EASEMENTS OR RIGHTS-OF-WAY WERE DETERMINED FROM LISTED REFERENCE DOCUMENTS AND HAVE NOT BEEN CHECKED FOR ACCURACY OR CORRECTNESS.

ONLY LISTED REFERENCE DOCUMENTS HEREON WERE USED AND CONSIDERED AS A PART OF THIS SURVEY. OTHER DOCUMENTS, IF ANY, COULD FURTHER AFFECT THIS TRACT.

LEGEND
- Found Aliquot Corner
- Found monument
- Set ½" Rebar
- Computed point
(M)- Measured
(P) - Deed/Plat
- Grate
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
OHP - Overhead Power
X - Fence

FLOOD STATEMENT

NO PORTION OF THE PROPERTY DESCRIBED HEREON LIES WITHIN A SPECIAL FLOOD HAZARD AREA, ACCORDING TO FLOOD INSURANCE RATE MAP, PANEL # 05119C0441G, DATED: 07/06/2015 .

ALTA/NSPS CERTIFICATION

TO CHICAGO TITLE INSURANCE COMPANY; LAMONTIA, LLC; ARK-104 LIMITED PARTNERSHIP, AN ARKANSAS LIMITED PARTNERSHIP

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6 (A), 6(B), 7(A), 8, 11(A), 11(B), 13, 14, 16, 17 AND 18 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON JULY 20, 2022.

WM. CORBITT R. SHOFFNER
ARKANSAS PS #1664
CORBITT@HOPECONSULTING.COM

DATE

CERTIFICATE OF AUTHORIZATION HOPE CONSULTING, INC. No. 1931 ARKANSAS

REGISTERED STATE OF ARKANSAS No. 1664 PROFESSIONAL LAND SURVEYOR WILLIAM CORBITT R. SHOFFNER SIGNATURE

ORIGINAL SIGNATURE ON FILE

HOPE CONSULTING ENGINEERS - SURVEYORS
117 S. Market Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
CHICAGO TITLE INSURANCE COMPANY; LAMONTIA, LLC; ARK-104 LIMITED PARTNERSHIP, AN ARKANSAS LIMITED PARTNERSHIP

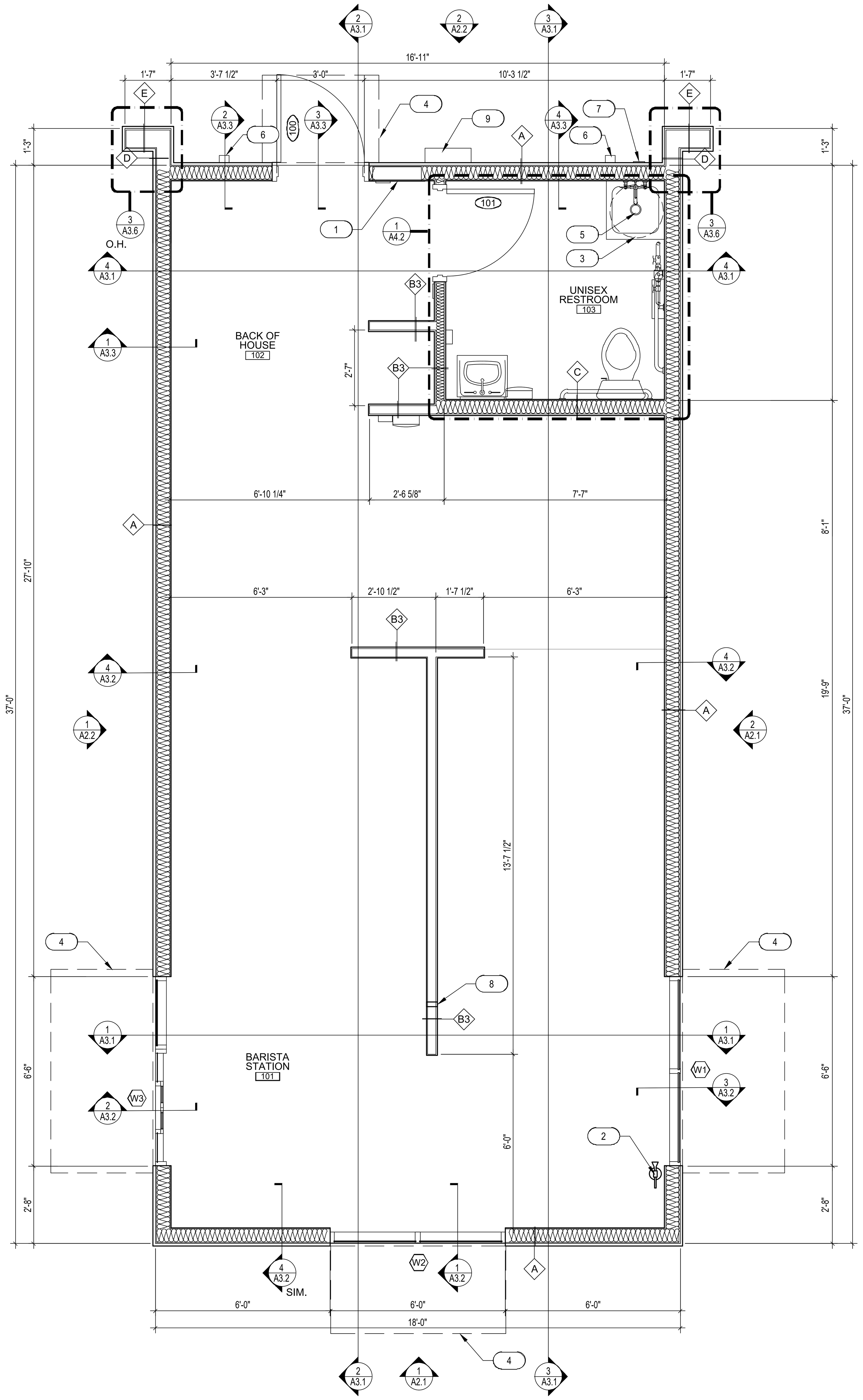
ALTA/NSPS LAND TITLE SURVEY

PART OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SECTION 27, TOWNSHIP 1 SOUTH, RANGE14 WEST, SALINE COUNTY, ARKANSAS

DATE: 07/25/2022	C.A.D. BY: JPP	DRAWING NUMBER: 22-0882
REVISED:	CHECKED BY:	
SHEET:	SCALE: 1" = 20'	

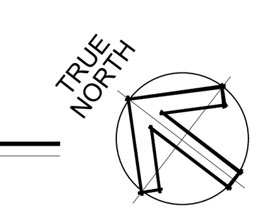
500	01S	14W	0	27	400	62	1664

K:\Land Projects 2004\Surveys\2022\22-0882 ALTA 1S-14W-27 Lamontia LLC\DWG\22-0882 ALTA S27 T1S R14W 1816 N. Reynolds Bryant.dwg



1 DIMENSION FLOOR PLAN

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



GENERAL NOTES

A. PROVIDE PAINTED METAL ACCESS PANELS IN WALLS AND CEILINGS AT CONCEALED ITEMS SUCH AS VALVES, SHOCK ABSORBERS, CONTROLS, SWITCHES, ETC. AND ANY ITEMS WHICH MAY REQUIRE ACCESS NOT OTHERWISE PROVIDED.
B. GENERAL CONTRACTOR WILL FURNISH AND INSTALL 5LB MULTIPURPOSE DRY CHEMICAL (2A/10BC) RATED FIRE EXTINGUISHERS WITH MOUNTING BRACKETS AND ACCESSORIES AT 4'-0" A.F.F. AS REQUIRED BY GOVERNMENTAL AUTHORITIES. MAXIMUM TRAVEL DISTANCE OF 75'-0" FOR PLACEMENT.
C. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE, LOCATE, AND CONFIRM ALL FLOOR SINK, UNDERGROUND / OVERHEAD PLUMBING AND ELECTRICAL STUB-UPS.
D. SEE ROOM FINISH SCHEDULE FOR ALL ROOM FINISHES, SHEET A1.1.
E. SEE KITCHEN DRAWINGS FOR EQUIPMENT INFORMATION, SHEET K1.0
F. GENERAL CONTRACTOR TO CAULK AND SEAL ALL EXPANSION AND SAW CUT JOINTS AT ALL EXTERIOR/INTERIOR CONCRETE - SEE JOINT SEALERS SPECIFICATIONS.
G. ALL ITEMS SUCH AS LIGHT SWITCHES, FIRE EXTINGUISHERS, FIRE ALARM PULLS AND OTHER ITEMS TO BE LOCATED AS CLOSE AS POSSIBLE TO THE ADJACENT DOOR FRAME.
H. AT MOP SINK AND SINKS, PROVIDE 120 CLEANING SOLUTION DISPENSER ON HOSE BIBB SIDE.
I. THERE SHALL BE A MAXIMUM 1/2" OFFSET AT ALL THRESHOLDS AND AT ANY CHANGE OF FLOORING MATERIALS. OFFSETS GREATER THAN 1/4" REQUIRE A MAXIMUM BEVELED SLOPE OF 1 UNIT VERTICAL TO 2 UNITS HORIZONTAL.
J. ALL DOORS ARE 4" OFF ADJACENT WALLS UNO.
K. ALL EXTERIOR DOOR LANDING GRADES SHALL HAVE A SMOOTH TRANSITION TO THE ADJACENT PAVED SURFACE, AND THE MAX. RUNNING AND CROSS SLOPE OF ALL LANDINGS WILL BE 2%.
L. PROVIDE THERMOMETER ACCURATE TO 2 DEGREES FAHRENHEIT IN REFRIGERATORS IF ONE IS NOT INCLUDED WITH FIXTURE.
M. ALL HAND SINKS MUST BE PROVIDED WITH A HAND WASHING SIGN, PAPER TOWEL DISPENSER AND HAND SOAP DISPENSER.
N. DOOR TAGS. REFER TO SCHEDULE ON SHEET A6.1. (#)
O. WINDOW TAG. REFER TO DETAILS ON SHEET A6.1. ⟨#⟩

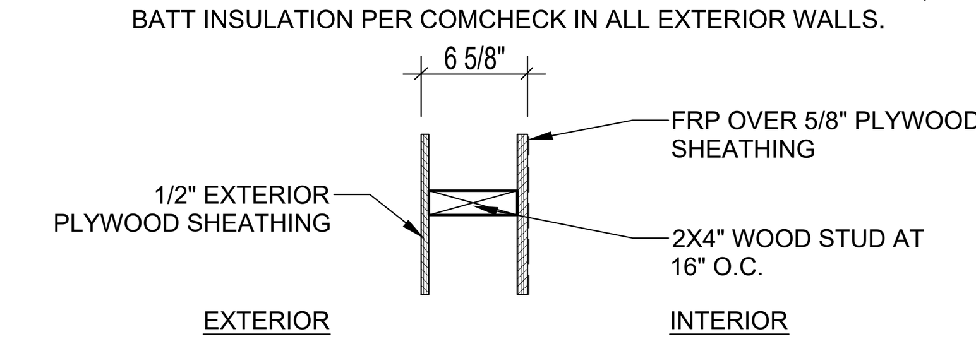
KEYNOTES - FLOOR PLAN (X)

1. NEW ELECTRICAL PANEL, SEE ELECTRICAL DRAWINGS
2. 2A-10BC MINIMUM RATED FIRE EXTINGUISHER, COORDINATE FINAL LOCATION WITH FIRE MARSHAL
3. WATER HEATER ABOVE, SEE PLUMBING DRAWINGS
4. LINE OF CANOPY ABOVE BY OTHERS
5. MOP SINK, SEE PLUMBING DRAWINGS
6. NEW 3"X4" MIN. DOWNSPOUT.
7. HOSE BIBB, SEE PLUMBING DRAWINGS.
8. CONDUIT CHASE IN WALL FOR NITRO, REF. 8/A5.2
9. MDP, REF. ELEC. - COORDINATE FINAL LOCATION TO ENSURE LOCATION DOES NOT INTERFERE WITH ROOF ACCESS BY LADDER

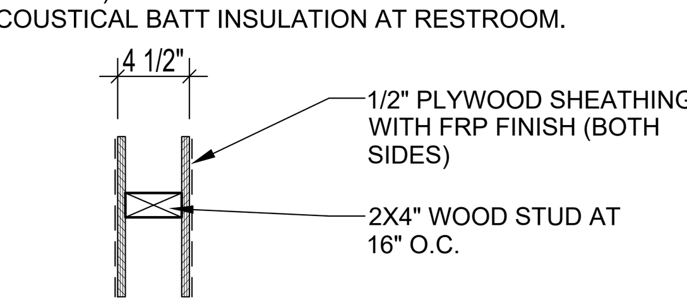
WALL LEGEND

FRAMING / DIMENSIONING NOTE:
ALL DIMENSIONS ARE TO FACE OF STUD, TYP.

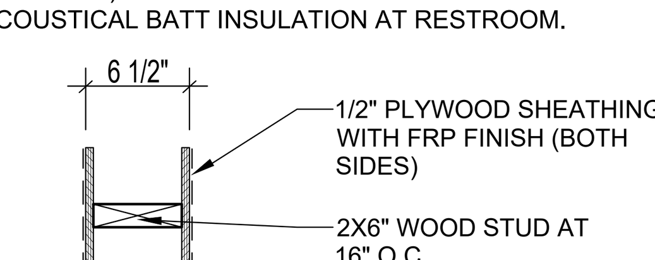
A — EXTERIOR WALL:
HARDIE BOARD OVER WEATHER RESISTANT BARRIER (WRB) OVER EXTERIOR PLYWOOD SHEATHING OVER 2x6" WOOD STUDS @ 16" O.C., INTERIOR FACE: 5/8" PLYWOOD AND FRP PANEL TO 10'-6" A.F.F., PROVIDE BATT INSULATION PER COMCHECK IN ALL EXTERIOR WALLS.



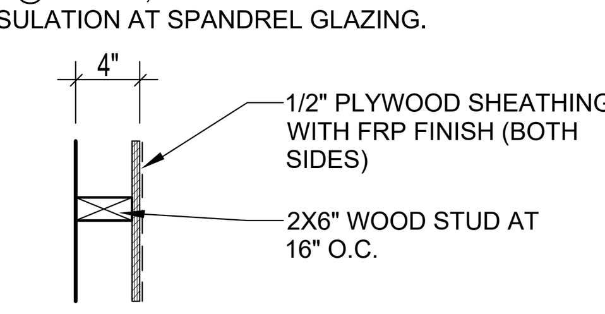
B3 — INTERIOR PARTITION WALL:
2x4" WOOD STUDS @ 16" O.C., 1/2" PLYWOOD WITH FRP PANEL FINISH TO 10'-6" A.F.F. (BOTH SIDES).
PROVIDE R-13 ACOUSTICAL BATT INSULATION AT RESTROOM.



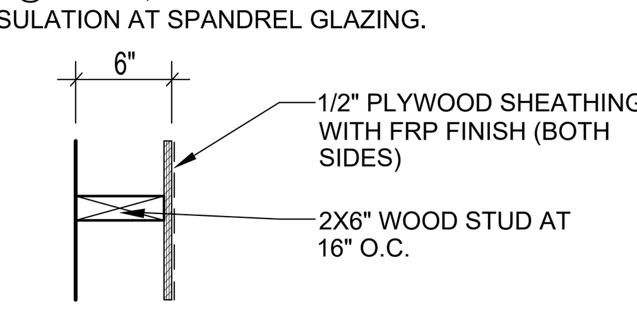
B6 — INTERIOR PARTITION WALL:
2x6" WOOD STUDS @ 16" O.C., 1/2" PLYWOOD WITH FRP PANEL FINISH TO 10'-6" A.F.F. (BOTH SIDES).
PROVIDE R-13 ACOUSTICAL BATT INSULATION AT RESTROOM.



C3 — PLUMBING PARTITION:
2x4" WOOD STUDS @ 16" O.C., 5/8" PLYWOOD AND FRP PANEL TO 10'-6" A.F.F.
PROVIDE BATT INSULATION AT SPANDREL GLAZING.



C6 — PLUMBING PARTITION:
2x6" WOOD STUDS @ 16" O.C., 5/8" PLYWOOD AND FRP PANEL TO 10'-6" A.F.F.
PROVIDE BATT INSULATION AT SPANDREL GLAZING.



D — EXTERIOR WING WALL:
HARDIE BOARD OVER WEATHER RESISTANT BARRIER (WRB) OVER SHEATHING OVER 2x6" WOOD STUDS @ 16" O.C.

E — EXTERIOR WING WALL:
HARDIE BOARD OVER WEATHER RESISTANT BARRIER (WRB) OVER SHEATHING OVER 2x8" WOOD STUDS @ 16" O.C.

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STATE OF ARKANSAS — License Number
09/01/2022

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SCOOTER'S COFFEE

PROJECT ADDRESS:
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REVISIONS:

TITLE:
DIMENSION FLOOR PLAN

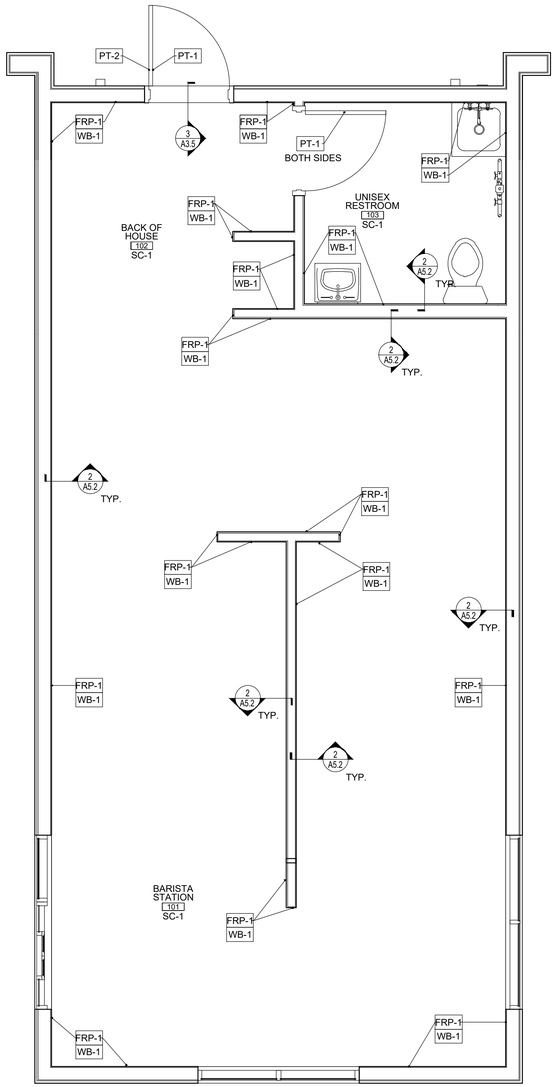
KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
A1.0



1 FINISH FLOOR PLAN

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

FINISH SCHEDULE

X

CODE	DESCRIPTION	MANUFACTURER	STYLE / PATTERN / COLOR	NOTES
FRP-1	FIBER REINFORCED PLASTIC	CRANE COMPOSITES	COLOR: SILVER (66) FINISH PEBBLE EMBOSSED	4X10 SHEETS INSTALL VERTICALLY
WB-1	VINYL WALL BASE	JOHNSONITE	40 BLACK B (4" H X .80" THICK)	PROVIDE SILICONE SEALANT AT FLOOR
WB-2	COVED	LATICRETE	SPARTACOTE COVE GEL	ALTERNATE AS REQUIRED BY JURISDICTION
SC-1	SEALED CONCRETE	LATICRETE	LEVEL 2 FINISH, RETRO SHIELD CLEAR SEALER CURCRETE	
F-1	CHIP XPL SYSTEM	LATICRETE	SPARTACOTE® CHIP XPL SYSTEM CHIP (FLAKE) BROADCAST SYSTEM	ALTERNATE AS REQUIRED BY JURISDICTION
PT-1	PAINT	SHERMAN WILLIAMS	SW7035 AESTHETIC WHITE FINISH: SEMI-GLOSS	INTERIOR DOOR AND INSIDE OF EXTERIOR DOOR
PT-2	PAINT	SHERMAN WILLIAMS	SW6992 - INKWELL FINISH: EGGSHELL	OUTSIDE OF EXTERIOR DOOR

NOTE:
NO ALTERATIONS ON FINISHES WITHOUT CORPORATE APPROVAL

GENERAL NOTES

A. REFER TO WALL SECTIONS AND ELEVATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

B. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES.

C. ALL FINISHES SHALL MEET FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS FOR THEIR USE, AS REQUIRED BY LOCAL CODES.

D. G.C SHALL CAULK JOINT BETWEEN CEILING GRID & FRP WALL PANELS IN ALL KITCHEN, JANITOR AND OFFICE AREAS.

E. ALL HOLLOW METAL DOORS AND FRAMES (U.N.O.), SHALL BE PRIMED & PAINTED

F. INSTALL MATERIAL OF THE LONGEST PRACTICAL LENGTHS & SIZES TO MINIMIZE THE NUMBER OF JOINTS

G. IF APPLICABLE, G.C. SHALL APPLY DIAMOND 35 SEALANT AND WAX TO ALL QUARRY TILE & COVE BASE. VERIFY WITH OWNER THE TIMING AND APPLICATION OF SEALER.

H. THE ARCHITECT ASSUMES THE GENERAL CONTRACTOR HAS INCLUDED IN HIS BID THE HIGHEST QUALITY AND GREATEST QUANTITY FOR THE PURPOSE OF RESOLVING ANY CONFLICTS IN THE CONSTRUCTION DOCUMENTS WHICH ARE IMPLIED OR UNDEFINED.

I. ANY DECORATIONS USED SHALL BE NON-COMBUSTIBLE OR FLAME PROOFED IN AN APPROVED MANNER.

J. THE CONTRACTOR SHALL PROTECT ALL ADJACENT MATERIALS AND EQUIPMENT AGAINST DAMAGE FROM SPILLAGE, DRIPPING AND SPATTER OF COATING MATERIALS. REPLACE DAMAGED TILE AS REQUIRED. ALL BUILDING MATERIALS AND EQUIPMENT SHALL BE LEFT CLEAN, WITH ALL DAMAGED SURFACES CORRECTED. PROVIDE "WET PAINT" SIGNS TO INDICATE NEWLY PAINTED SURFACES.

K. ALL GROUT TO CONTAIN ACRYLIC ADDITIVE SEALER.

L. ALL FINISHES SHALL BE CLASS C WITH FLAME SPREAD INDEX OF 76-200 AND SMOKE DEVELOPMENT INDEX OF 0-450.

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FINISH FLOOR PLAN

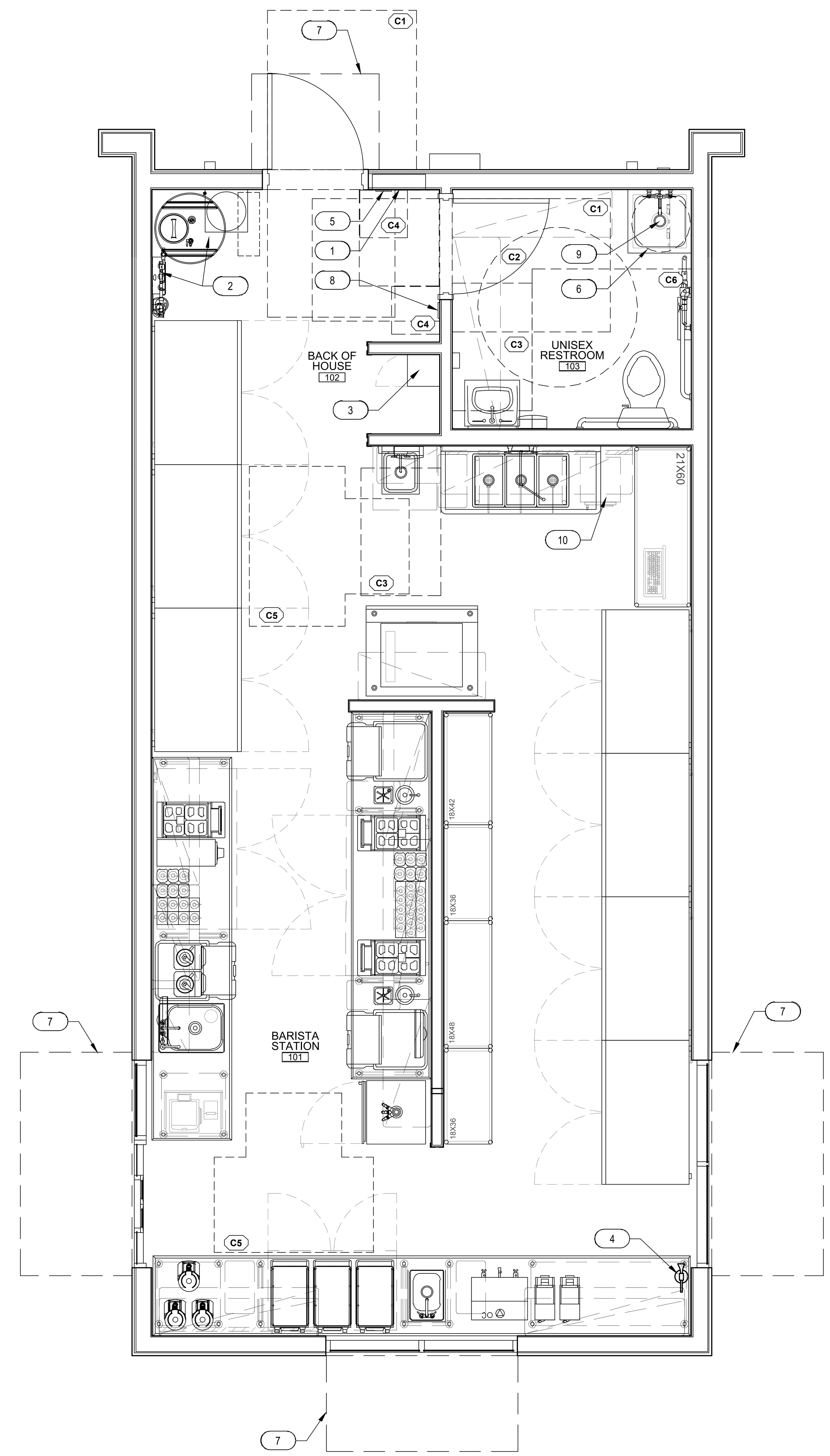
KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
A1.1



1 EQUIPMENT AND FURNISHINGS PLAN
SCALE: 3/8" = 1'-0"

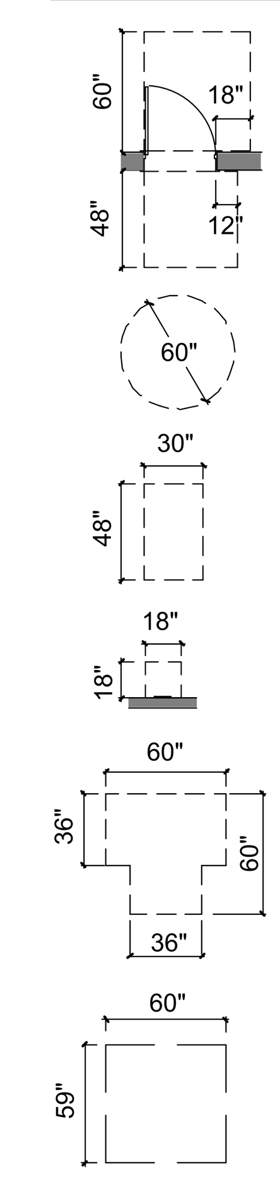
GENERAL NOTES

A. PROVIDE PAINTED METAL ACCESS PANELS IN WALLS AND CEILINGS AT CONCEALED ITEMS SUCH AS VALVES, SHOCK ABSORBERS, CONTROLS, SWITCHES, ETC. AND ANY ITEMS WHICH MAY REQUIRE ACCESS NOT OTHERWISE PROVIDED.
B. GENERAL CONTRACTOR WILL FURNISH AND INSTALL 5LB MULTIPURPOSE DRY CHEMICAL (2A/10BC) RATED FIRE EXTINGUISHERS WITH MOUNTING BRACKETS AND ACCESSORIES AT 4'-0" A.F.F. AS REQUIRED BY GOVERNMENTAL AUTHORITIES. MAXIMUM TRAVEL DISTANCE OF 75'-0" FOR PLACEMENT.
C. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE, LOCATE, AND CONFIRM ALL FLOOR SINK, UNDERGROUND / OVERHEAD PLUMBING AND ELECTRICAL STUB-UPS.
D. SEE ROOM FINISH SCHEDULE FOR ALL ROOM FINISHES, SHEET A2.2.
E. SEE KITCHEN DRAWINGS FOR EQUIPMENT INFORMATION, SHEET K1.0
F. GENERAL CONTRACTOR TO CAULK AND SEAL ALL EXPANSION AND SAW CUT JOINTS AT ALL EXTERIOR/INTERIOR CONCRETE - SEE JOINT SEALERS SPECIFICATIONS.
G. ALL ITEMS SUCH AS LIGHT SWITCHES, FIRE EXTINGUISHERS, FIRE ALARM PULLS AND OTHER ITEMS TO BE LOCATED AS CLOSE AS POSSIBLE TO THE ADJACENT DOOR FRAME.
H. AT MOP SINK AND SINKS, PROVIDE 120 CLEANING SOLUTION DISPENSER ON HOSE BIBB SIDE.
I. THERE SHALL BE A MAXIMUM 1/2" OFFSET AT ALL THRESHOLDS AND AT ANY CHANGE OF FLOORING MATERIALS. OFFSETS GREATER THAN 1/4" REQUIRE A MAXIMUM BEVELED SLOPE OF 1 UNIT VERTICAL TO 2 UNITS HORIZONTAL.
J. ALL DOORS ARE 4" OFF ADJACENT WALLS UNO.
K. ALL EXTERIOR DOOR LANDING GRADES SHALL HAVE A SMOOTH TRANSITION TO THE ADJACENT PAVED SURFACE, AND THE MAX. RUNNING AND CROSS SLOPE OF ALL LANDINGS WILL BE 2%.
L. PROVIDE THERMOMETER ACCURATE TO 2 DEGREES FAHRENHEIT IN REFRIGERATORS IF ONE IS NOT INCLUDED WITH FIXTURE.
M. ALL HAND SINKS MUST BE PROVIDED WITH A HAND WASHING SIGN, PAPER TOWEL DISPENSER AND HAND SOAP DISPENSER.

KEYNOTES - FLOOR PLAN (X)

1. NEW ELECTRICAL PANEL, SEE ELECTRICAL DRAWINGS
2. R.O. SYSTEM, SEE A5.2 AND SEE PLUMBING DRAWINGS
3. 4 DOOR EMPLOYEE LOCKERS ANCHORED TO WALL BY GC
4. 2A-10BC MINIMUM RATED FIRE EXTINGUISHER
5. PROVIDE TACTILE EXIT SIGN AT EXIT DISCHARGE
6. WATER HEATER ABOVE, SEE PLUMBING DRAWINGS
7. LINE OF CANOPY ABOVE BY OTHERS
8. ACCESSIBLE RESTROOM SIGN
9. MOP SINK, SEE PLUMBING DRAWINGS
10. FLOOR SAFE BY OWNER, BOLTED TO FLOOR BY G.C.

CLEARANCE KEYNOTE (XX)



C1 DOOR WITH A CLOSER AND A LATCH
C2 CIRCULAR TURNABOUT
C3 CLEAR FLOOR SPACE
C4 TACTILE SIGNS
C5 T-TURN
C6 WATER CLOSET

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TITLE:
EQUIPMENT AND FURNISHINGS PLAN

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

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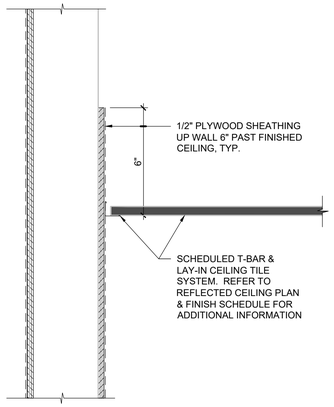
09/01/2022

PROJECT NO.
221329

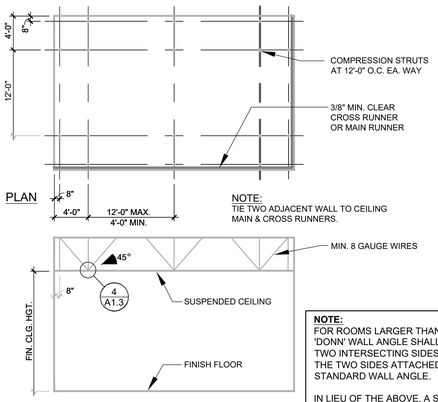
[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
A1.2



2 SUSPENDED LAY-IN CEILING AT KITCHEN

SCALE: N.T.S.

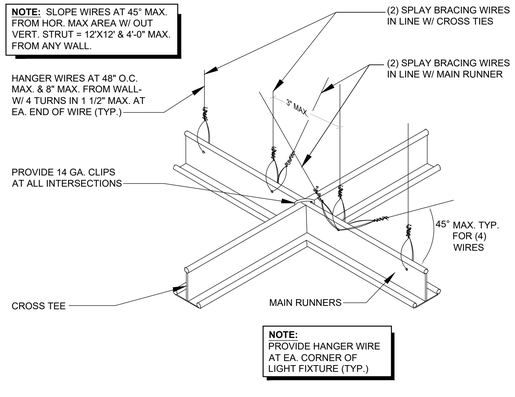


NOTE:
FOR ROOMS LARGER THAN 25' X 25', A 2" 'DONN' WALL ANGLE SHALL BE USED AT TWO INTERSECTING SIDES, OPPOSITE THE TWO SIDES ATTACHED TO STANDARD WALL ANGLE.

IN LIEU OF THE ABOVE, A STABILIZER BAR MAY BE USED ABOVE GRID OR GRID MAY BE TIED TOGETHER WITH 18 GA. WIRE FROM RUNNER TO RUNNER, CONTINUOUSLY AT THE TWO SIDES.

3 TYPICAL CEILING SUSPENSION SYSTEM

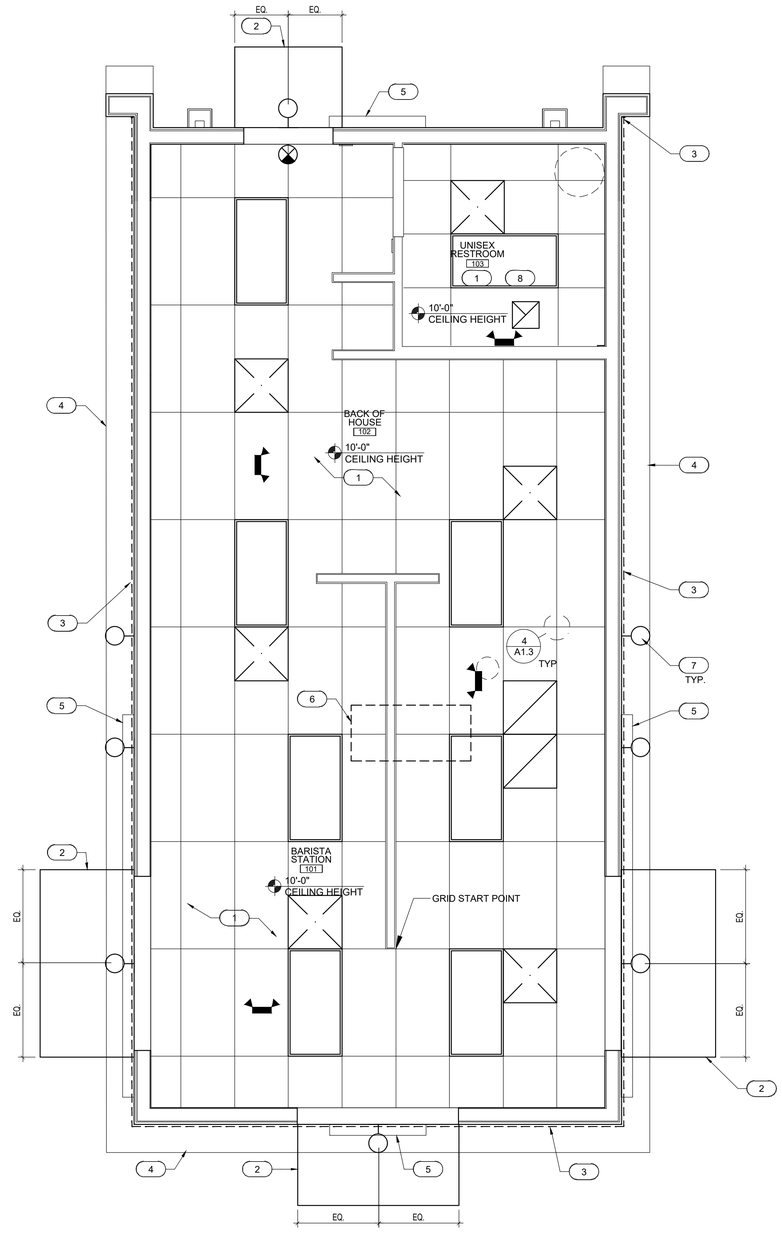
SCALE: N.T.S.



NOTE:
PROVIDE HANGER WIRE AT EA. CORNER OF LIGHT FIXTURE (TYP.)

4 SUSPENDED LAY-IN ACOUSTIC CEILING

SCALE: N.T.S.



1 REFLECTED CEILING AND LIGHTING LOCATION PLAN

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

CEILING LEGEND

SYMBOL	FIXTURE	NOTES
	2'x4' SURFACE MOUNTED LIGHT FIXTURE WITH PRISMATIC LENS	MOUNTING - LAY-IN GRID
	SUPPLY AIR GRILLE TITUS TMS 3 BLADE DIFFUSER OR SIMILAR	MOUNTING - LAY-IN GRID
	RETURN AIR RH45T COMMERCIAL T-BAR ALUMINUM GRILLE	MOUNTING - LAY-IN GRID
	TOILET ROOM EXHAUST FAN	MOUNTING - RECESSED IN CEILING 10' A.F.F
	EXTERIOR WALL SCONCE	
	EXTERIOR EMERGENCY WALL SCONCE	
	LED EXIT SIGN	
	EMERGENCY LIGHT W/BUG EYE	
	PERIMETER LED STRIP LIGHT	

NOTE: ALL LIGHTS TO BE PURCHASED BY FRANCHISEE OR GENERAL CONTRACTOR AND INSTALLED BY GENERAL CONTRACTOR.

CEILING MATERIAL LEGEND

ITEM	MFR (OR EQUAL)	MODEL NUMBER
TYPE "A"	ARMSTRONG	24" x 48" ARMSTRONG KITCHEN ZONE OR EQUAL TILES TO BE SMOOTH AND WASHABLE

GENERAL NOTES

A. WHERE LIGHT FIXTURES ARE MOUNTED IN A LAY-IN CEILING, PROVIDE A MINIMUM OF 2 SUPPORT WIRES ATTACHED DIRECTLY BETWEEN EACH LIGHT FIXTURE AND THE BUILDING STRUCTURE. SUPPORT WIRES SHALL BE A MINIMUM OF 12 GAUGE GALVANIZED STEEL WIRE, SOFT ANNEALED.

B. FIXTURES ARE REQUIRED AT ALL LIGHTING OUTLETS SHOWN ON THE DRAWINGS. APPROVED LIGHTING FIXTURE WIRE IS REQUIRED IN ALL FIXTURES AND FIXTURE RACEWAYS. WEATHERPROOF WIRING IS REQUIRED FOR EXTERIOR FIXTURES. ALL PARTS OF FIXTURES AND WIRING SHALL BE IN ACCORDANCE WITH NECESSARY REQUIREMENTS.

C. ALL FIXTURES SHALL CARRY UL AND ETL LABELS. ALL FLUORESCENT FIXTURE BALLASTS SHALL BE HIGH FREQUENCY ELECTRONIC BALLASTS WITH A "TOTAL HARMONIC DISTORTION: OF LESS THAN 20%, REGARDLESS OF THE NUMBER OF LAMPS CONNECTED TO EACH BALLAST AND SHALL HAVE CBM LABEL. ALL FLUORESCENT FIXTURES INSTALLED SHALL INCORPORATE BALLAST PROTECTION. ALL FLUORESCENT BALLASTS SHALL HAVE AN AUDIBLE NOISE RATING OF "CLASS A" OR BETTER. ALL FLUORESCENT BALLASTS SHALL HAVE A POWER FACTOR GREATER THAN 98% WHEN USED WITH PRIMARY LAMP.

D. REFER TO SPECIFICATIONS FOR ROOF ASSEMBLY.

CEILING SPECIFICATION
ACOUSTICAL CEILING SYSTEM
EXPOSED TEE GRID USG DOWN DX GRID SYSTEMS AS MANUFACTURED BY USG INTERIORS OR EQUIVALENT.

HANGER WIRE, MINIMUM 12 GA. AWG GALVANIZED SOFT ANNEALED, MILD STEEL WIRE.

HANGER CUPS, PREFABRICATED METAL CLAMPS FOR FASTENING TO STRUCTURAL STEEL MEMBERS.

KEYNOTES- REFLECTED CEILING (#)

1. NEW 2'X4' WASHABLE LAY-IN CEILING TILES. (FIRE RATING - CLASS A)
2. RED CANVAS AWNING FURNISHED AND INSTALLED BY OTHERS
3. PERIMETER LED AT EXTERIOR SOFFIT
4. BREAK METAL SOFFIT & CORNICE
5. SIGNAGE FURNISHED AND INSTALLED BY OTHERS. UNDER A SEPARATE PERMIT.
6. AIR HANDLER (STRAP MOUNTED ABOVE CEILING), REF. MEP
7. EXTERIOR LIGHTING, SEE ELEVATIONS, SEE ALSO ELECTRICAL DRAWINGS.
8. GRID TO BE CENTERED IN ROOM AS SHOWN

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REVISIONS:

TITLE:
REFLECTED CEILING & LIGHTING LOCATION PLAN

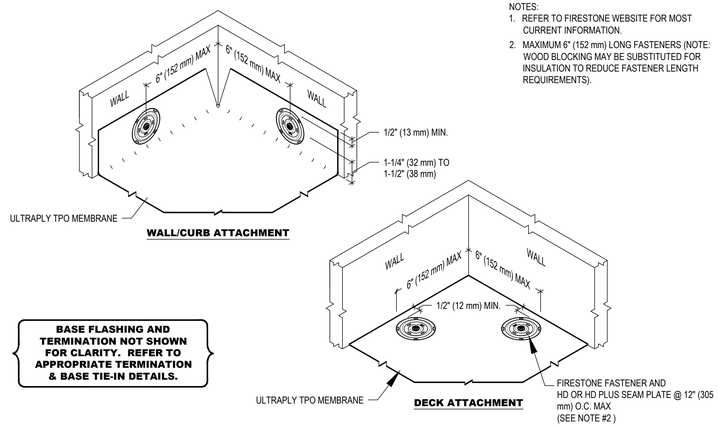
KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
A1.3

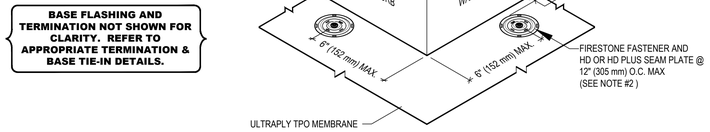


NOTES:
1. REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2. MAXIMUM 6" (152 mm) LONG FASTENERS (NOTE: WOOD BLOCKING MAY BE SUBSTITUTED FOR INSULATION TO REDUCE FASTENER LENGTH REQUIREMENTS).

BASE FLASHING AND TERMINATION NOT SHOWN FOR CLARITY. REFER TO APPROPRIATE TERMINATION & BASE TIE-IN DETAILS.

2 MEMBRANE SECUREMENT AT INSIDE CORNER

SCALE: NTS



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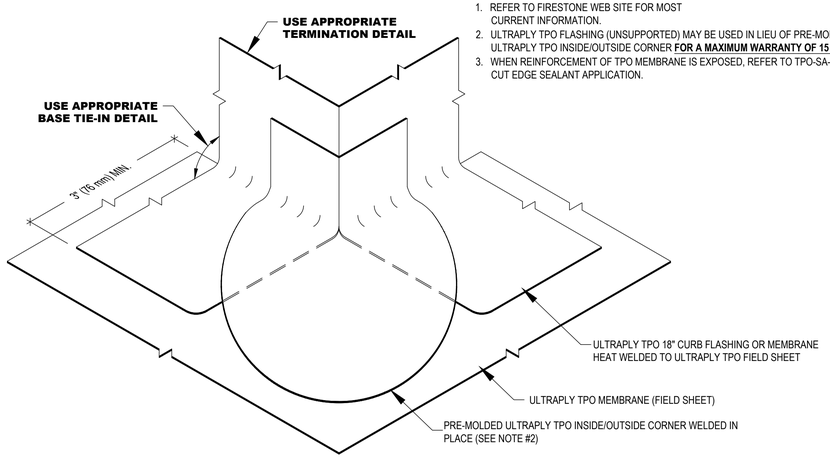
3 MEMBRANE SECUREMENT AT OUTSIDE CORNER

SCALE: NTS



NOTES:
1. REFER TO FIRESTONE WEB SITE FOR MOST CURRENT INFORMATION.
2. ULTRAPLY TPO FLASHING (UNSUPPORTED) MAY BE USED IN LIEU OF PRE-MOLDED ULTRAPLY TPO INSIDE/OUTSIDE CORNER **FOR A MAXIMUM WARRANTY OF 15 YEARS.**
3. WHEN REINFORCEMENT OF TPO MEMBRANE IS EXPOSED, REFER TO TPO-SA-LS-7 FOR CUT EDGE SEALANT APPLICATION.

4 OUTSIDE CORNER

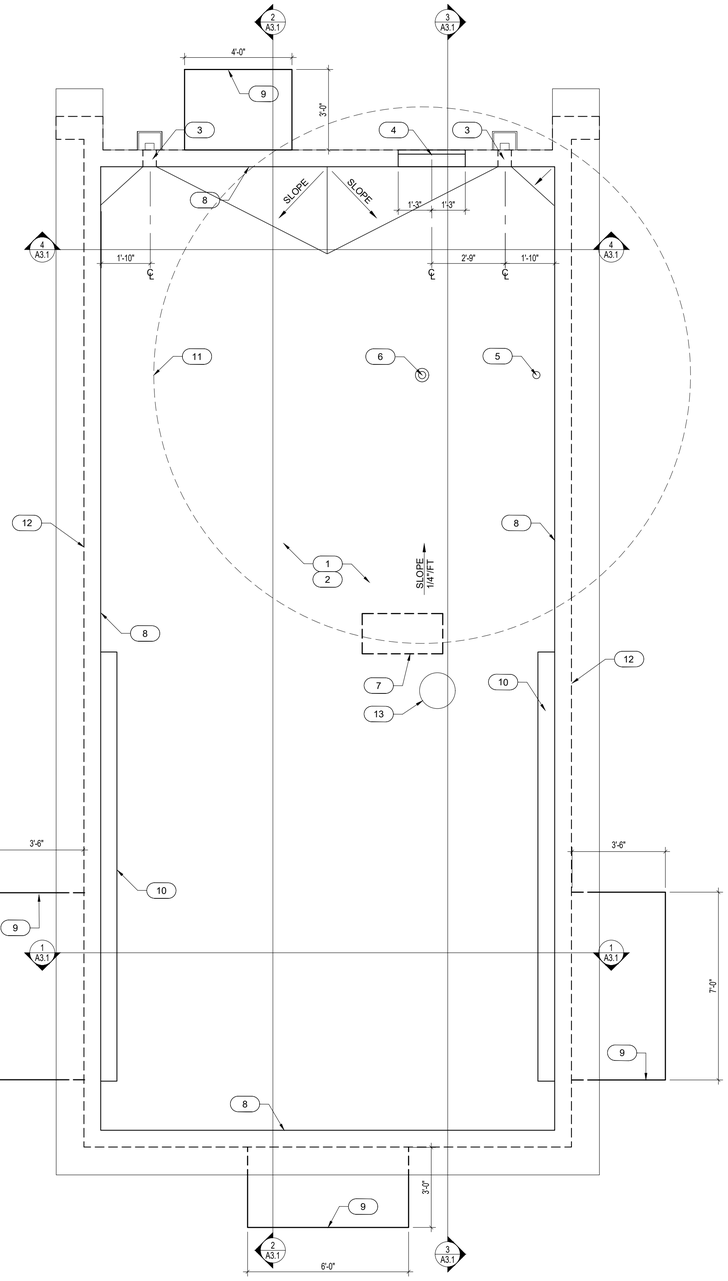
SCALE: NTS

ROOF DRAIN CALCULATIONS

ROOF AREA: 554 SQ.FT.
PARAPET AREA: 496/2 = 248 SQ.FT.
TOTAL AREA: 802 SQ.FT.

MINIMUM REQUIRED SCUPPER (WORSE CASE 6" PER HOUR): 2" X 3"
PROVIDED: (1) 4"X6" MAIN SCUPPER AND (1) 4"X6" OVERFLOW SCUPPER

NOTE: ROOF IS DESIGNED TO HOLD ANY POTENTIAL PONDING WATER IF ONE ROOF SCUPPER SHOULD BECOME CLOGGED



1 ROOF PLAN

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

GENERAL NOTES

A. REFER TO SPECIFICATIONS FOR ROOF ASSEMBLY.

KEYNOTES-ROOF

#

1. 60 MIL TPO FULLY ADHERED OVER 1/2" DENSDECK OVER POLYISOCYANURATE INSULATION (PER BUILDING COMCHECK ON G0.4) OVER SHEATHING
2. CONTRACTOR ALTERNATIVE, AS ALLOWED BY CODE: 60 MIL TPO FULLY ADHERED OVER 1/2" DENSDECK WITH BATT INSULATION APPLIED TO UNDERSIDE OF DECK
3. THRU WALL ROOF SCUPPER, SEE DETAIL 8/A3.4
4. OPENING IN PARAPET FOR ROOF ACCESS
5. VENT, SEE PLUMBING DRAWINGS, SEE ALSO DETAIL 5/A3.6
6. 6" GOOSENECK FOR EXHAUST, SEE DETAIL 5/A3.6 SIM.
7. AIR CONDENSER, SEE MECHANICAL DRAWINGS
8. PRE-FINISHED METAL PARAPET CAP
9. 30" TALL RED CANVAS AWNING BELOW, FURNISHED AND INSTALLED BY OTHERS, DEPTH AND WIDTH AS DIMENSIONED
10. ROOFER TO FLASH ELECTRICAL RACEWAY FOR SIGNAGE ON SIDE OF PARAPET WALL - SIGNAGE UNDER SEPARATE PERMIT
11. PER CODE - NO AIR INTAKES MAY BE WITHIN A 10' RADIUS OF A VENT OR EXHAUST.
12. WALL BELOW PARAPET
13. NEW ROOF MOUNTED HOOD CONNECTED TO 10" DIA. FRESH AIR INTAKE DUCT; SEE MECHANICAL DRAWINGS.

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REVISIONS:

TITLE:
ROOF PLAN

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

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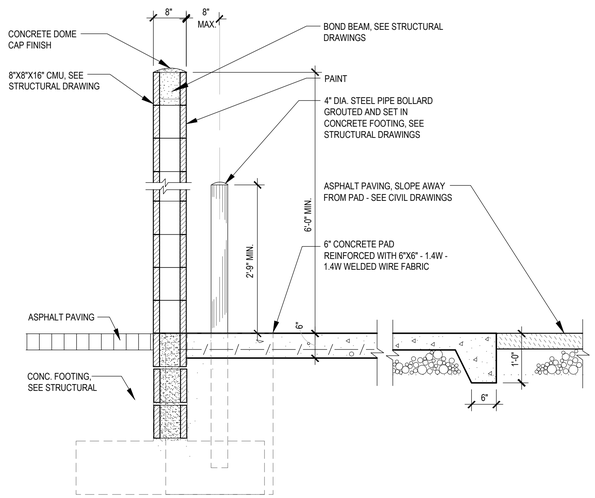
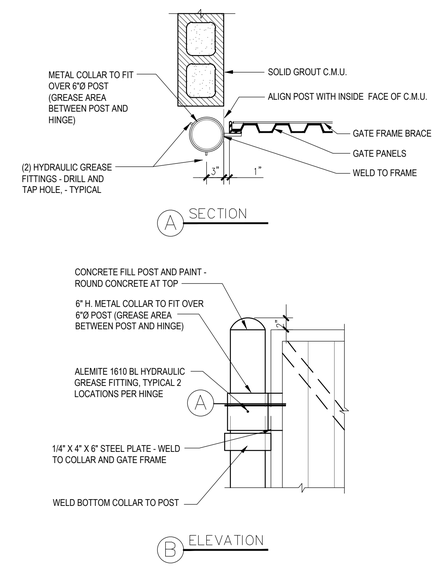
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

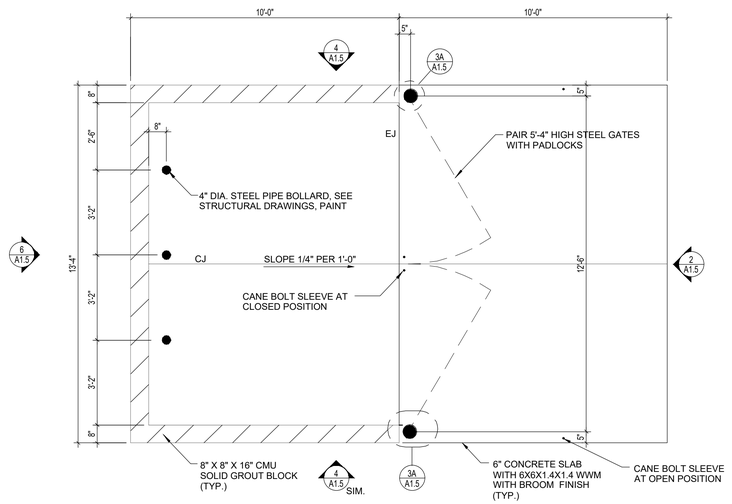
SHEET NO.
A1.4



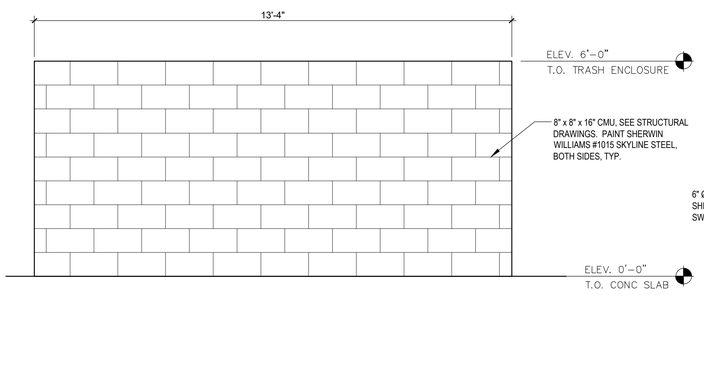
5 *SECTION AT TRASH ENCLOSURE*
SCALE: 3/4" = 1'-0"



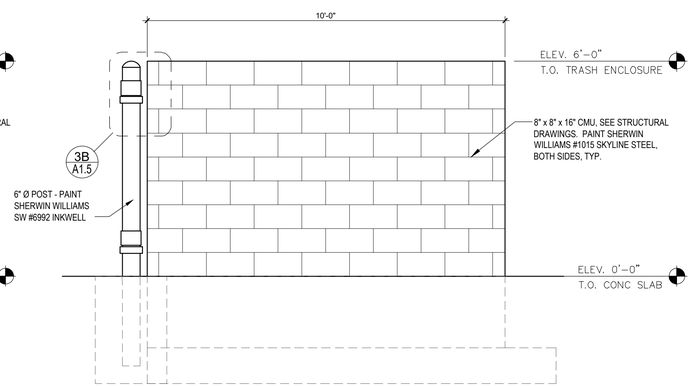
3 *HINGE AT TRASH GATE*
SCALE: NTS



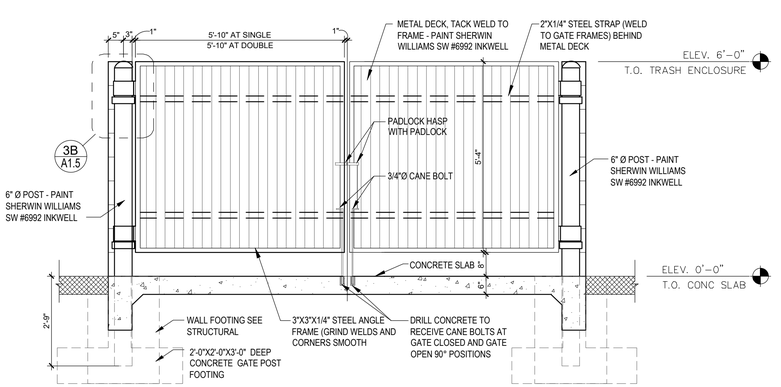
1 *TRASH ENCLOSURE*
SCALE: 3/8" = 1'-0"



6 *TRASH ENCLOSURE - BACK ELEVATION*
SCALE: 1/2" = 1'-0"



4 *TRASH ENCLOSURE - SIDE BACK ELEVATION*
SCALE: 1/2" = 1'-0"



2 *TRASH ENCLOSURE -FRONT ELEVATION*
SCALE: 1/2" = 1'-0"

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REGISTERED ARCHITECT
STATE OF ARKANSAS
License Number 2592

09/01/2022

EST. 1998
SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
TRASH ENCLOSURE PLAN, ELEVATIONS & DETAILS

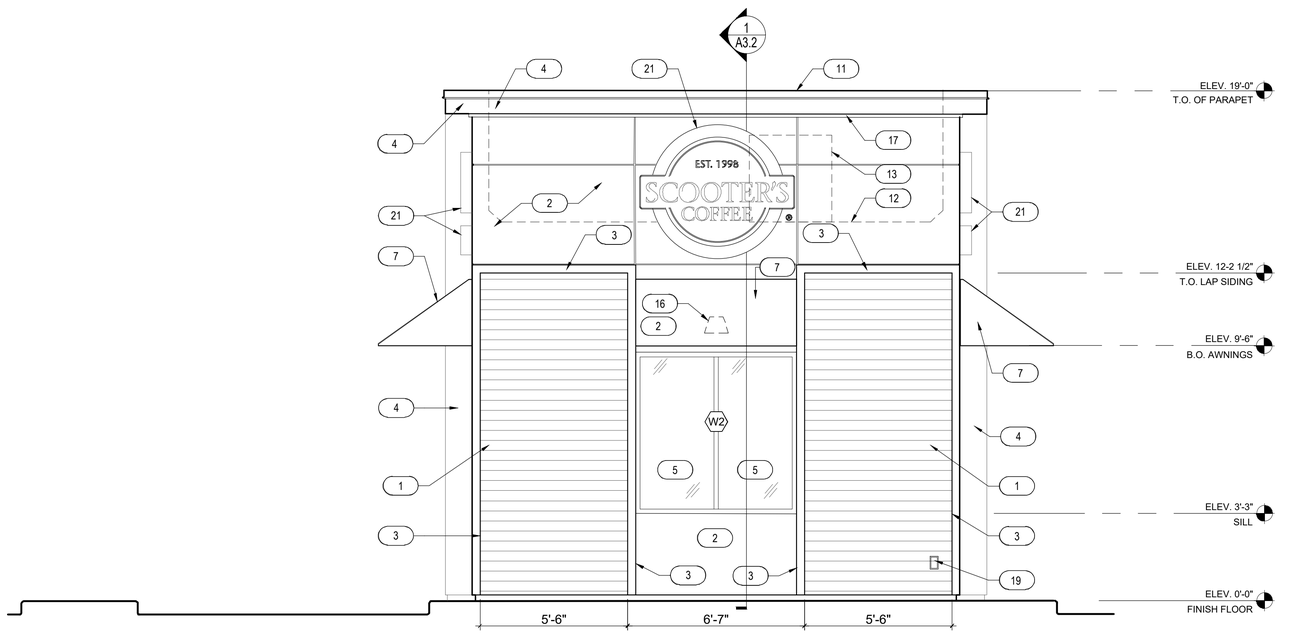
KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

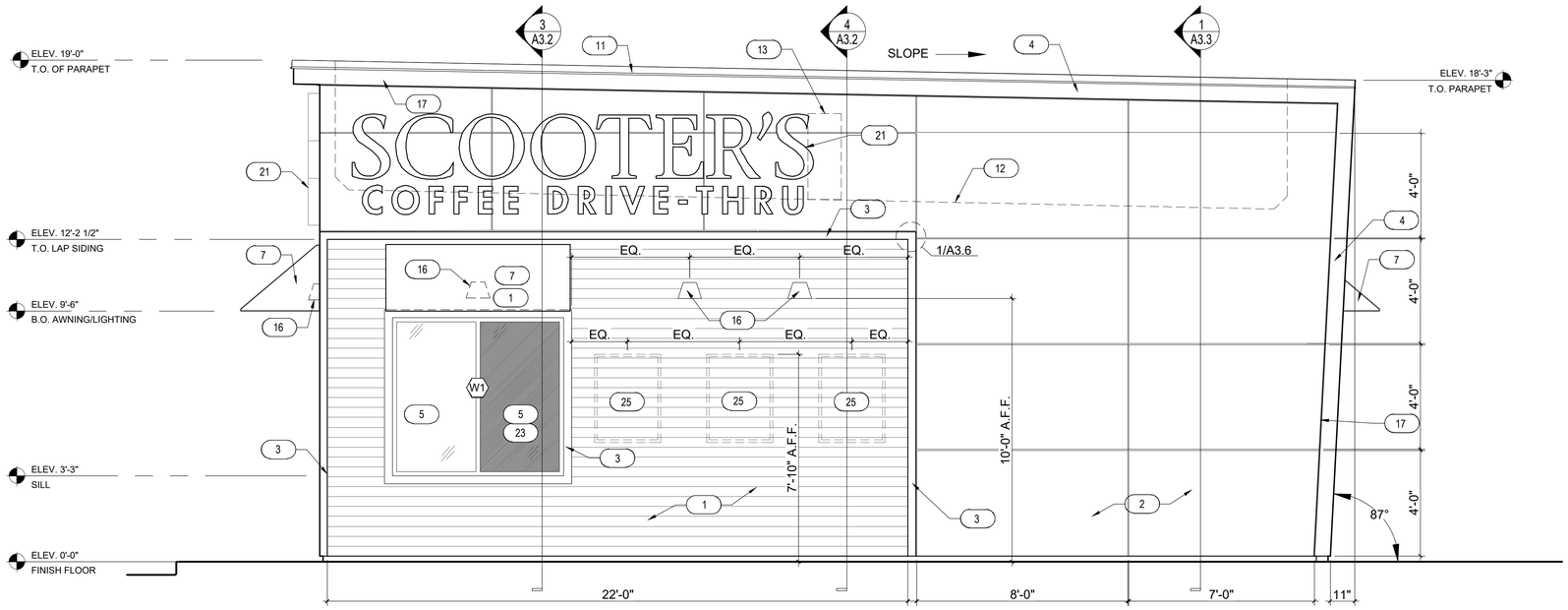
[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
A1.5



1 FRONT EXTERIOR ELEVATIONS

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



2 SIDE EXTERIOR ELEVATIONS

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

KEYNOTES

X

1. HARDIE PLANK HZ10 LAP SIDING CEDARMILL 6-1/4", SEE HARDIE DETAIL SHEET A3.6 - COLOR: SHERWIN WILLIAMS SW6992 INKWELL EGGSHELL FINISH
2. HARDIE REVEAL PANEL SYSTEM HZ10 - SMOOTH FINISH, SEE HARDIE DETAIL SHEET A3.6 - COLOR: SW 1015 SKYLINE STEEL
3. 3 1/2" HARDIE TRIM, SEE HARDIE DETAIL SHEET A3.6 - COLOR: SHERWIN WILLIAMS SW6992 INKWELL EGGSHELL FINISH
4. HARDIE BOARD TRIM ACCENTS AND SOFFITS - COLOR: BLACK
5. INSULATED DARK BRONZE ALUMINUM WINDOWS WITH DUAL PANE TEMPERED GLASS
6. QUICKSERVE 48X48 WINDOW - COLOR: DARK BRONZE
7. AWNING BY OTHERS - COLOR: RED
8. INSULATED HOLLOW METAL DOOR AND FRAME - COLOR: SHERWIN WILLIAMS SW6992 INKWELL EGGSHELL FINISH
9. WIDE ANGLE PEEP HOLE, BY DOOR MANUFACTURER
10. NOT USED
11. 22 GUAGE METAL PARAPET CAP
12. LINE OF ROOF BEYOND
13. AIR CONDENSER, SEE MECHANICAL DRAWINGS
14. ROOF SCUPPER AND DOWNSPOUT, SEE DETAIL 8/A6.3
15. MAILBOX BY GC BLACK
16. WALL MOUNTED LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS
17. LED LIGHT BAND, SEE ELECTRICAL DRAWINGS
18. SES PANEL, SEE ELECTRICAL DRAWINGS
19. ELECTRICAL OUTLETS, SEE ELECTRICAL DRAWINGS
20. HOSE BIBB, SEE PLUMBING DRAWINGS
21. PROPOSED SIGNAGE BY OTHERS, UNDER SEPARATE PERMIT
22. CONNECT DOWNSPOUTS TO UNDERGROUND PIPING, REF. CIVIL.
23. SPANDREL GLASS
24. NEW SECURITY CAMERA
25. CUSTOMER PROVIDED SIGN PANELS. PANELS TO BE MOUNTED TO FASCIA BY GC (WHEN PROVIDED) IN CUSTOMER SPECIFIED LOCATION USING PROPER HARDWARE AND FASTENERS (NON-CORROSIVE)

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PROJECT ADDRESS:
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REVISIONS:

TITLE:
EXTERIOR
ELEVATIONS

KIOSK PROTOTYPE:
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MAY 2022

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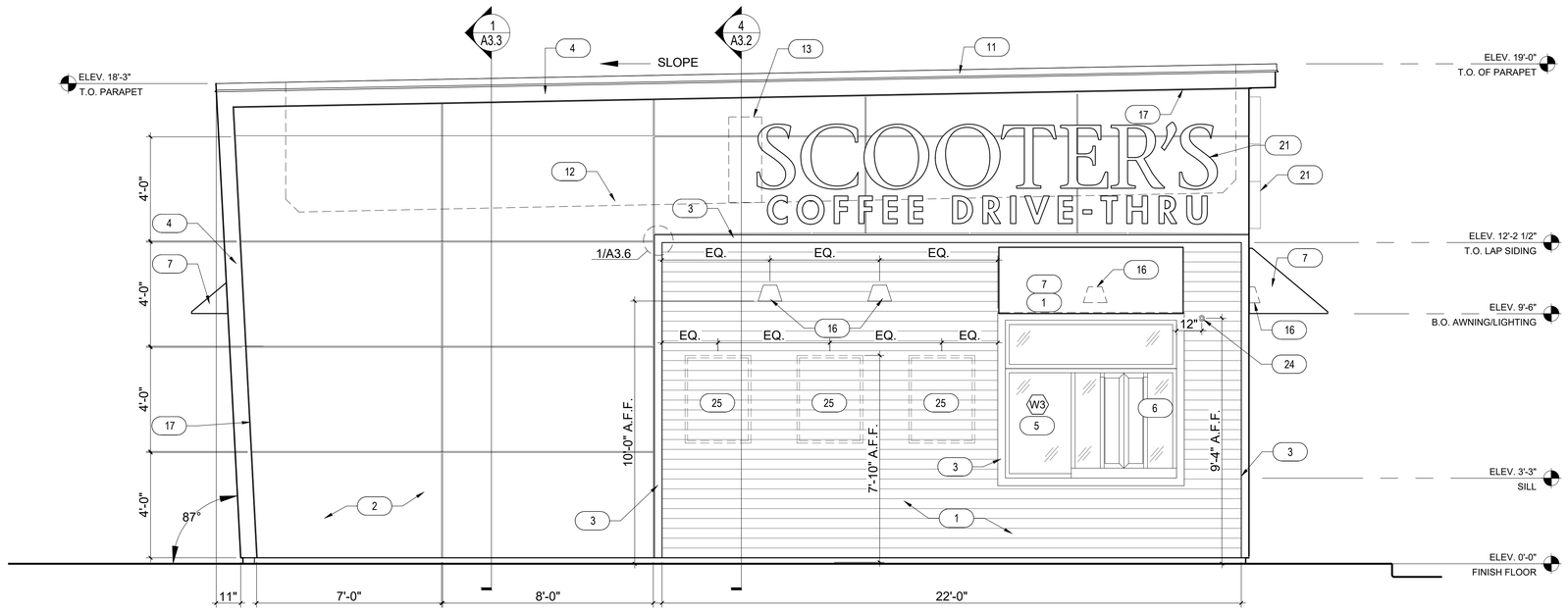
[ ] CONSTRUCTION ISSUE

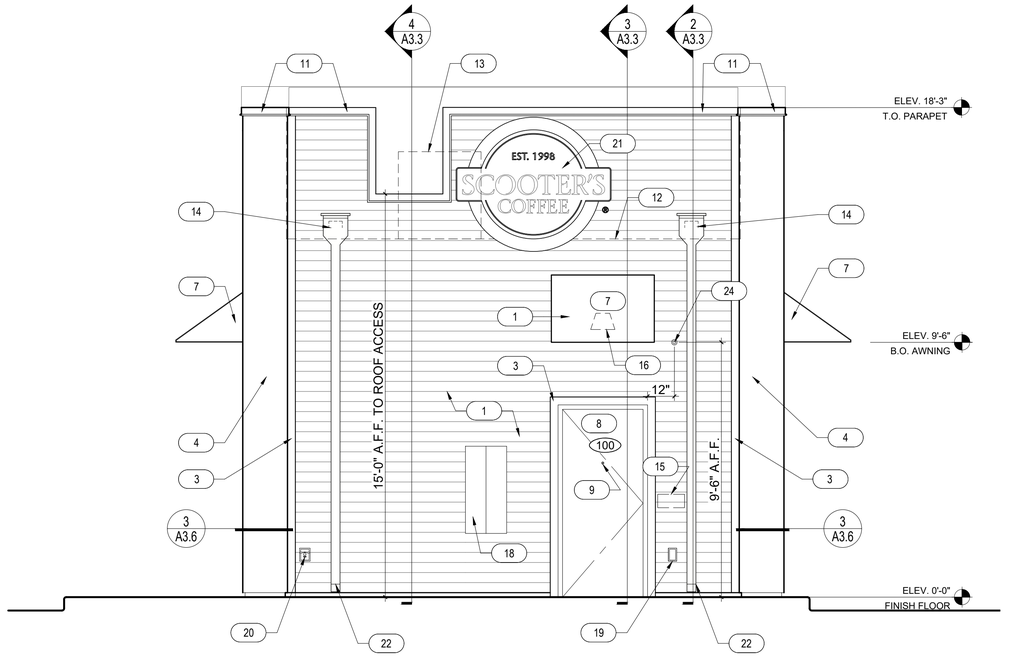
SHEET NO.

A2.1



1 EXTERIOR ELEVATIONS

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



2 EXTERIOR ELEVATIONS

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

KEYNOTES

X

1. HARDIE PLANK HZ10 LAP SIDING CEDARMILL 6-1/4", SEE HARDIE DETAIL SHEET A3.6 - COLOR: SHERWIN WILLIAMS SW6992 INKWELL EGGSHELL FINISH
2. HARDIE REVEAL PANEL SYSTEM WZ10 - SMOOTH FINISH, SEE HARDIE DETAIL SHEET A3.6 - COLOR: SW 1015 SKYLINE STEEL
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11. 22 GUAGE METAL PARAPET CAP
12. LINE OF ROOF BEYOND
13. AIR CONDENSER, SEE MECHANICAL DRAWINGS
14. ROOF SCUPPER AND DOWNSPOUT, SEE DETAIL 8/A3.4
15. MAILBOX BY GC BLACK
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GEORGE HARRIS ARCHITECT
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License Number 2092
STATE OF ARKANSAS

09/01/2022

EST. 1998 SCOOTER'S COFFEE

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REVISIONS:

TITLE:
EXTERIOR ELEVATIONS

KIOSK PROTOTYPE:
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MAY 2022

DATE:
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PROJECT NO.
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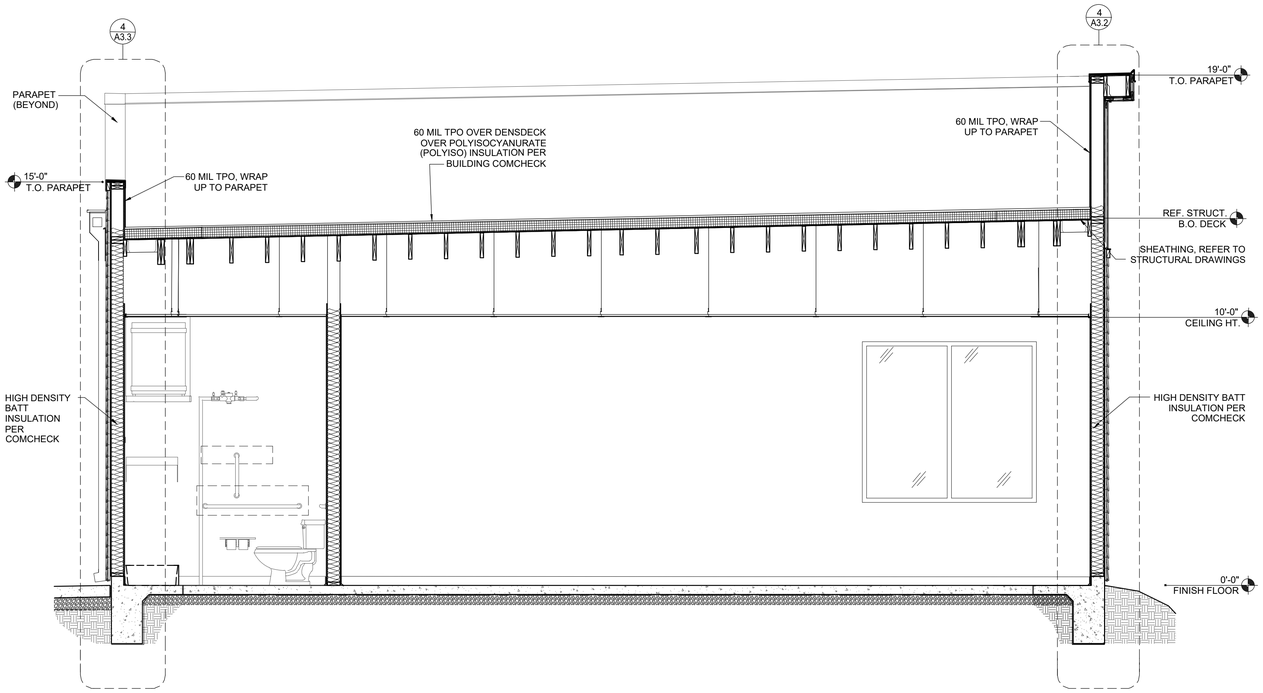
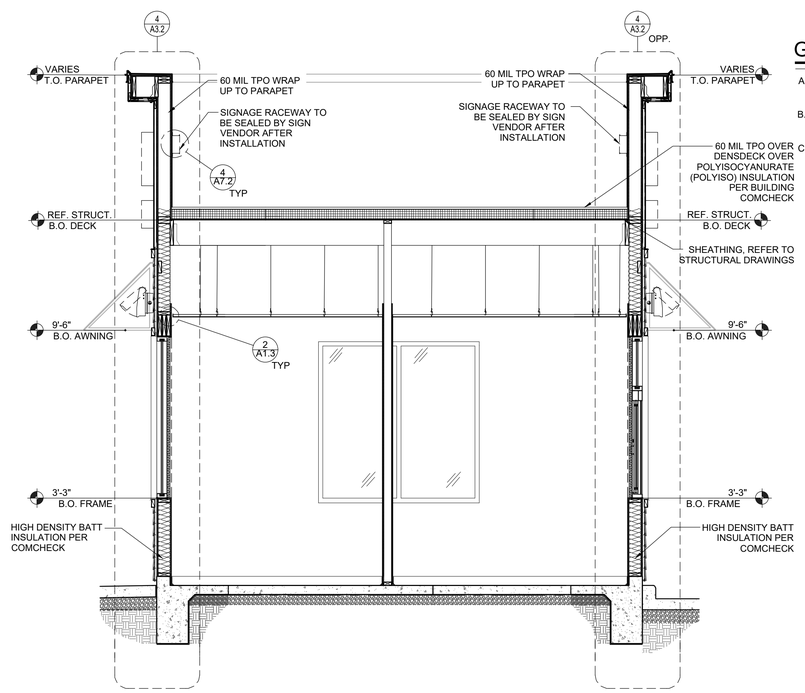
[ ] CONSTRUCTION ISSUE

SHEET NO.
A2.2



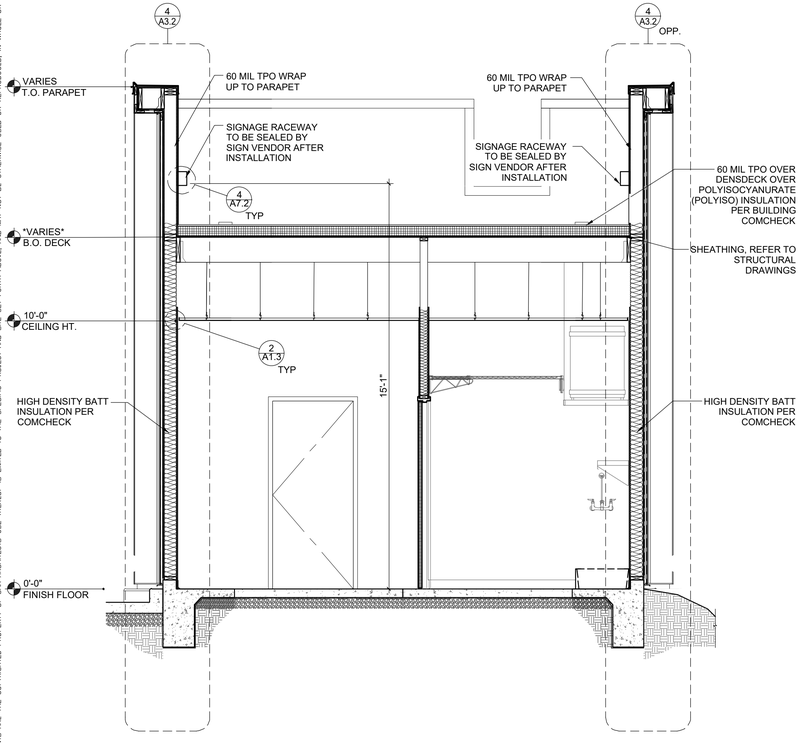
3 BUILDING SECTION AT SIDE WALL

SCALE: NTS



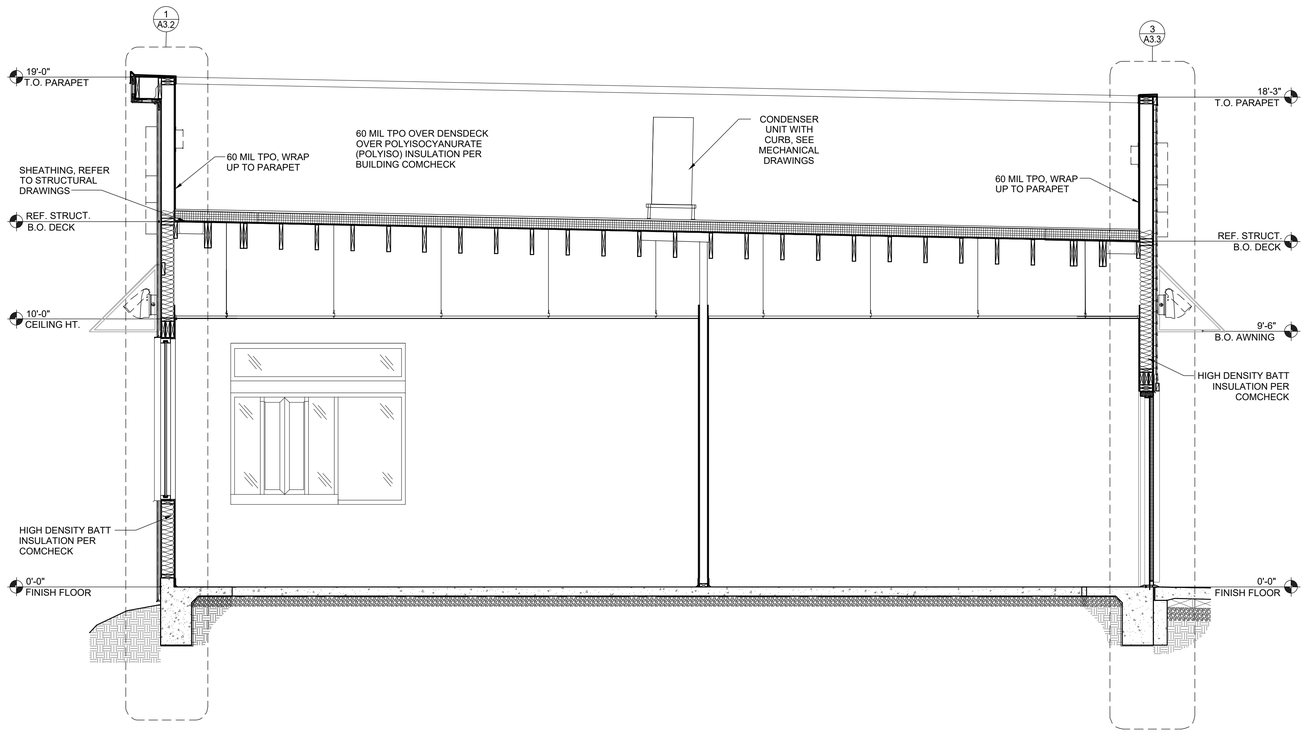
1 BUILDING SECTION AT FRONT WALL

SCALE: NTS



4 BUILDING SECTION AT REAR WALL

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



2 BUILDING SECTION AT DRIVE-THRU WALL

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

GENERAL NOTES

A. REFER TO SHEET A1.1 FOR FINISH DESIGNATION

B. REFER TO SHEET K1.0 FOR EQUIPMENT INFORMATION

C. REFER TO SHEET G0.4 FOR BUILDING ENVELOPE REQUIREMENTS; BUILDING ENVELOPE MINIMUMS MUST BE MET

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REVISIONS:

TITLE:
EXTERIOR WALL SECTIONS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
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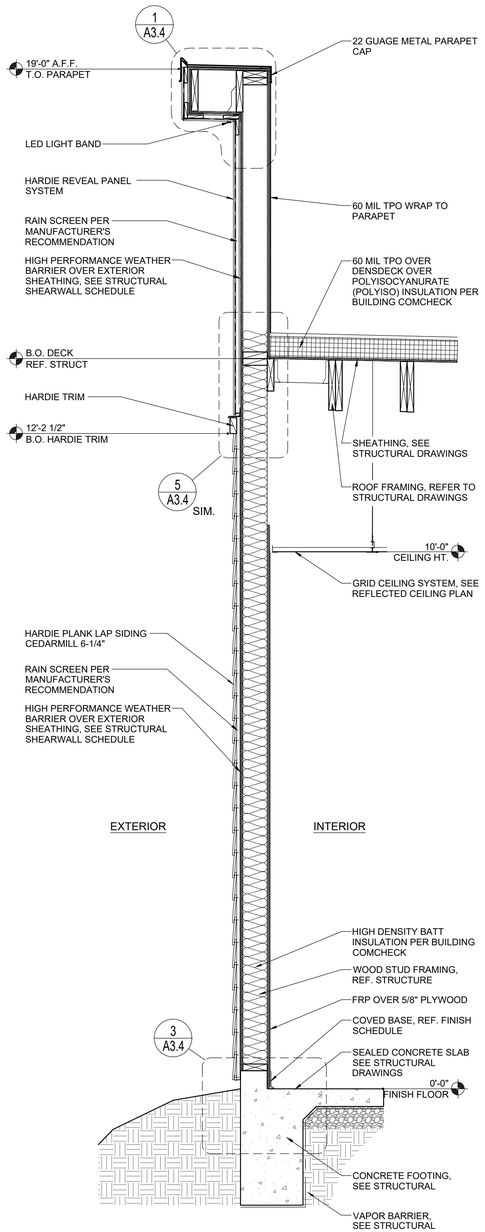
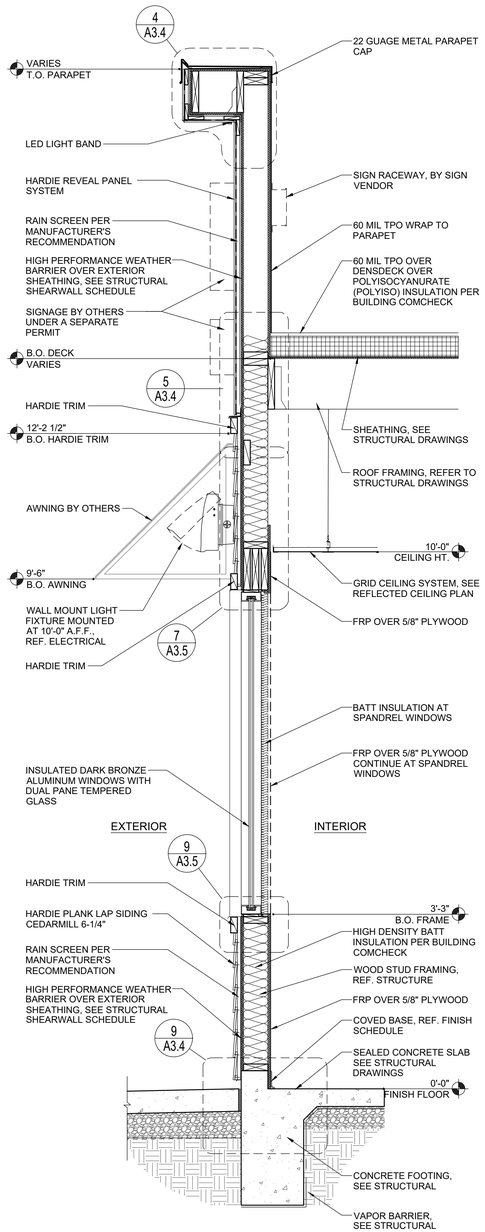
[ ] CONSTRUCTION ISSUE

SHEET NO.
A3.1



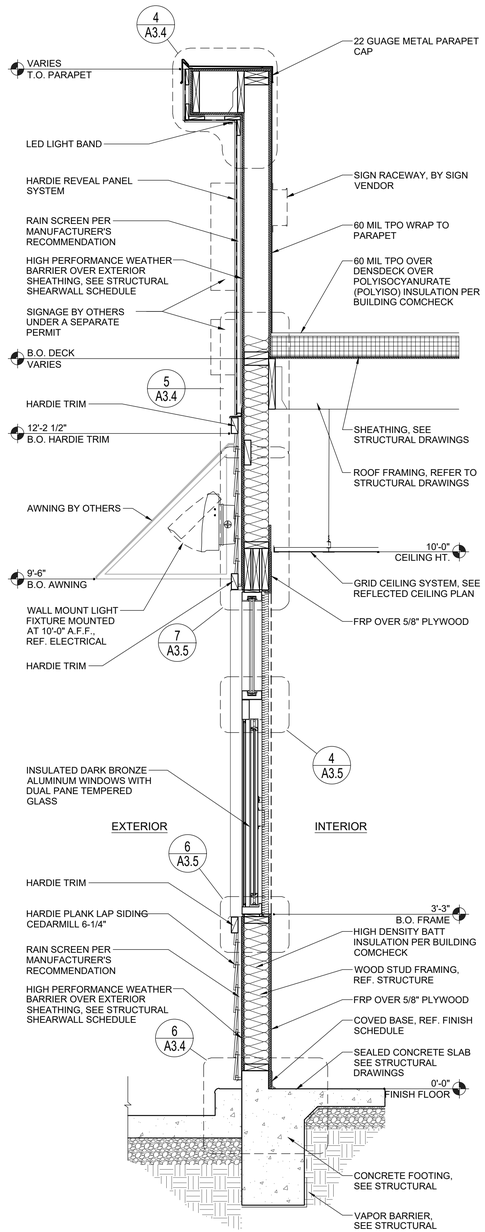
4 WALL SECTION AT HARDI-SIDING / HARDI PANEL TRANSITION

SCALE: 3/4" = 1'-0"



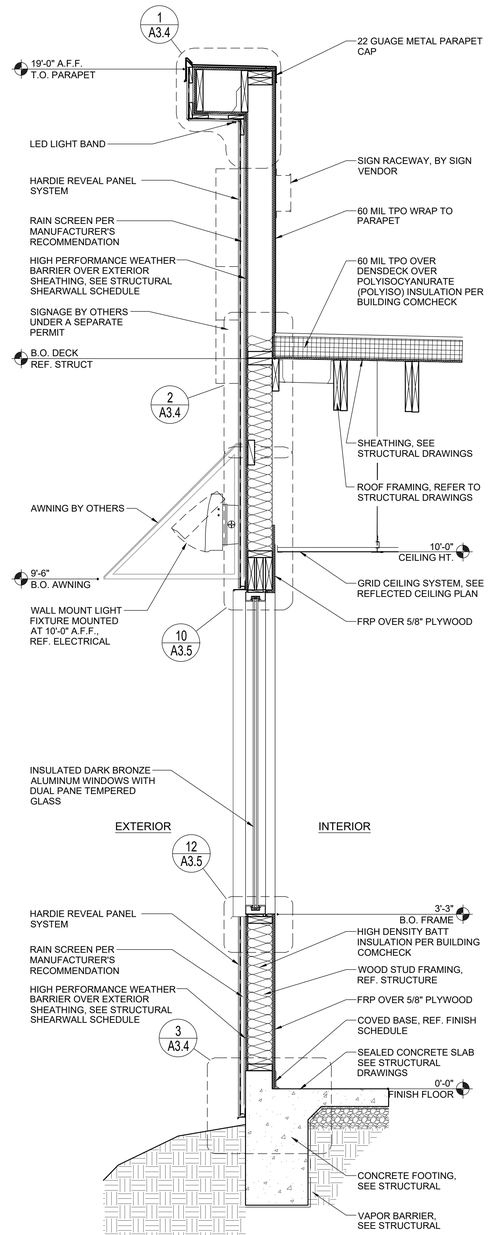
3 WALL SECTION AT SIDE WINDOW

SCALE: 3/4" = 1'-0"



2 WALL SECTION AT DRIVE-THRU WINDOW

SCALE: 3/4" = 1'-0"



1 WALL SECTION AT FRONT WINDOW

SCALE: 3/4" = 1'-0"

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PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
WALL SECTIONS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

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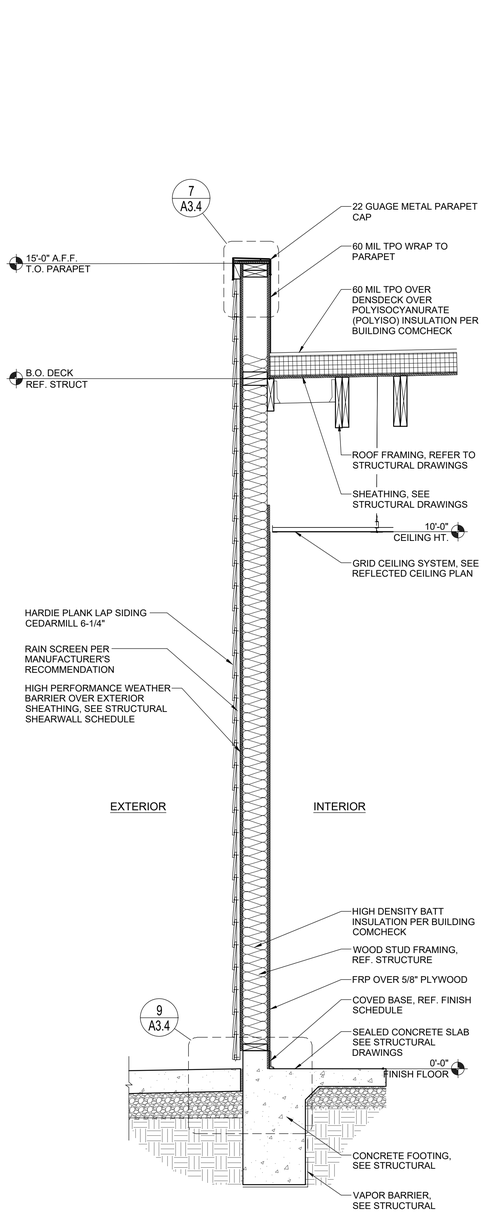
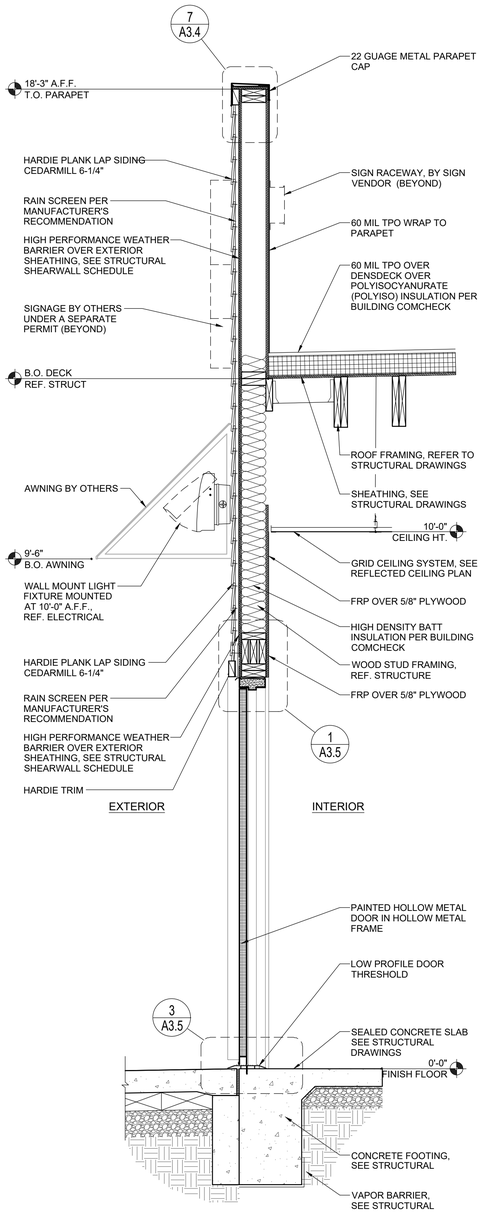
[ ] CONSTRUCTION ISSUE

SHEET NO.
A3.2



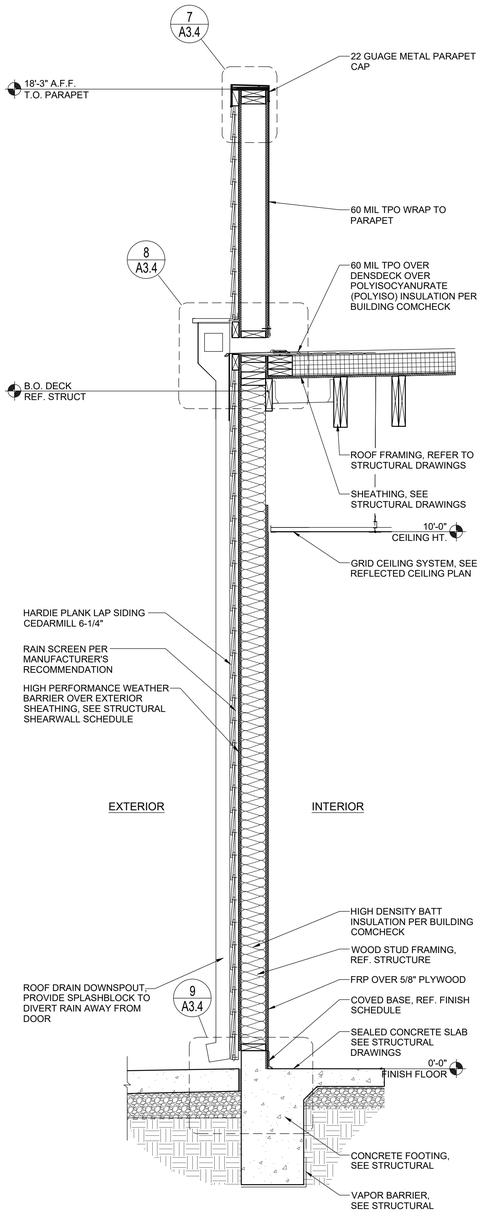
4 WALL SECTION AT ROOF ACCESS

SCALE: 3/4" = 1'-0"



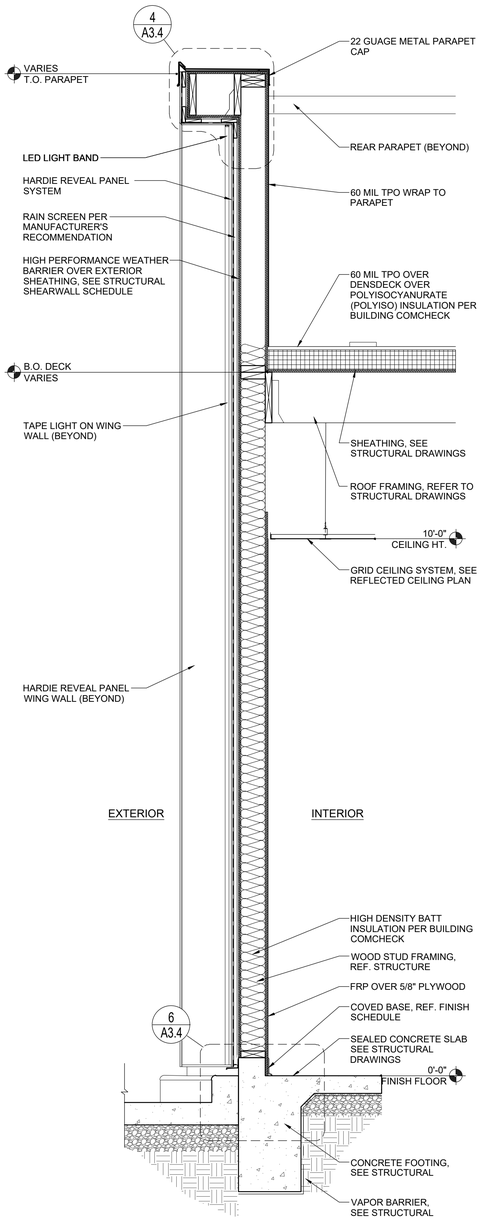
3 WALL SECTION AT REAR DOOR

SCALE: 3/4" = 1'-0"



2 WALL SECTION AT DOWNSPOUT

SCALE: 3/4" = 1'-0"



1 WALL SECTION AT HARDI-PANELS

SCALE: 3/4" = 1'-0"

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WALL SECTIONS

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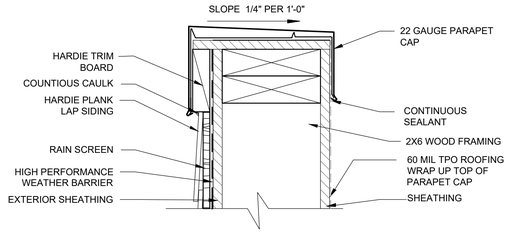
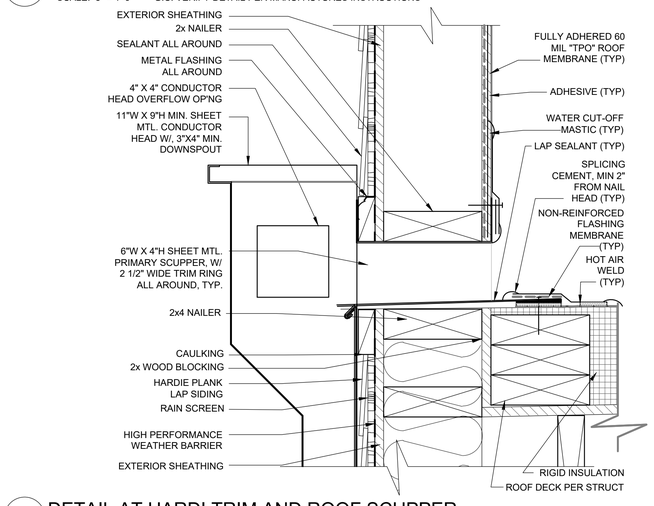
[ ] CONSTRUCTION ISSUE

SHEET NO.
A3.3



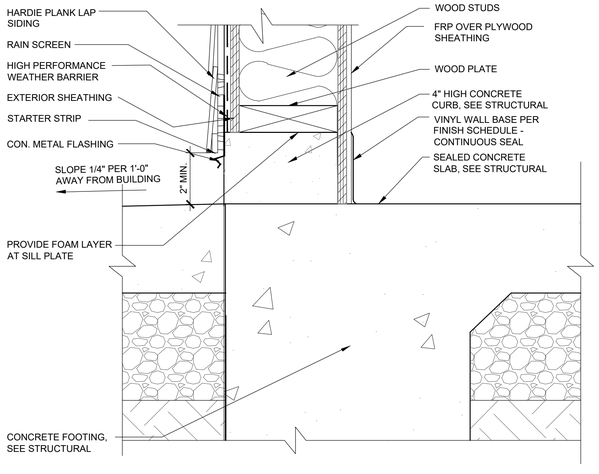
7 DETAIL AT PARAPET AND HARDI-SIDING

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



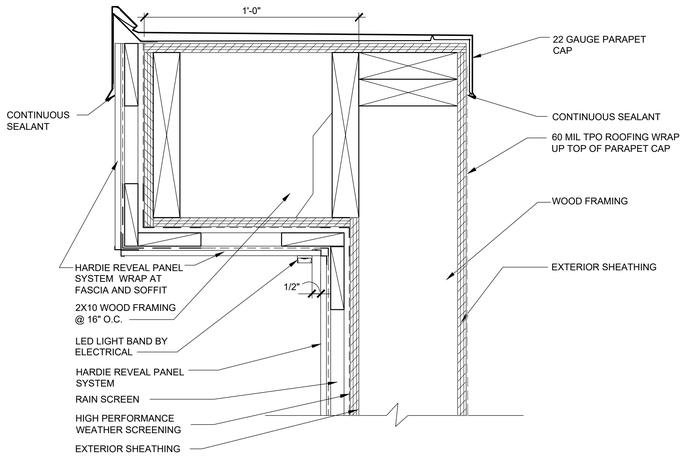
8 DETAIL AT HARDI TRIM AND ROOF SCUPPER

SCALE: 3" = 1'-0"



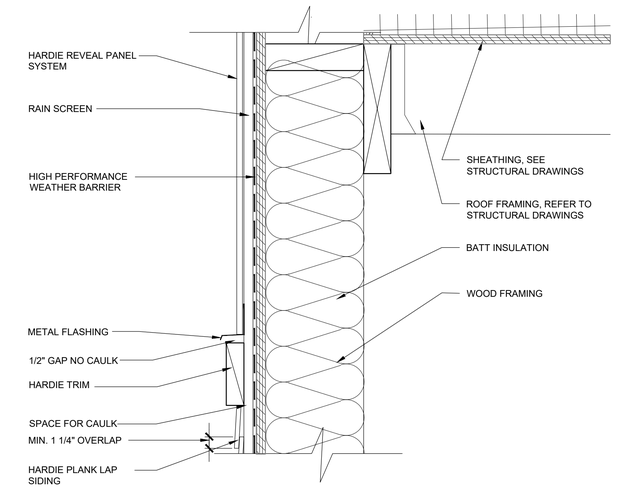
9 DETAIL AT HARDI-SIDING AND SIDEWALK

SCALE: 3" = 1'-0"



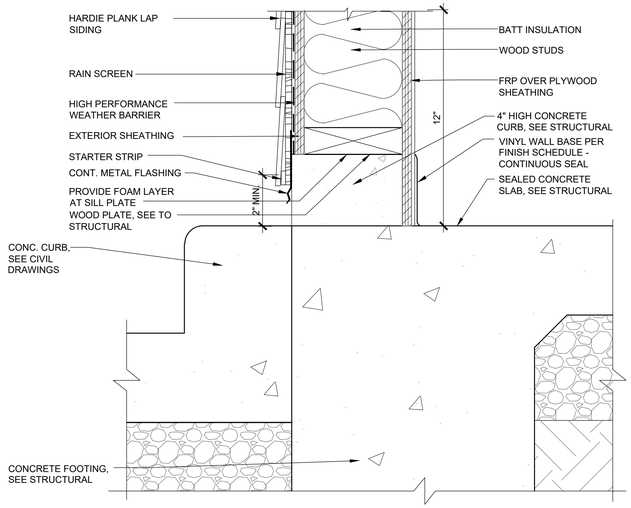
4 DETAIL AT SIDE PARAPET AND HARDI-PANEL

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



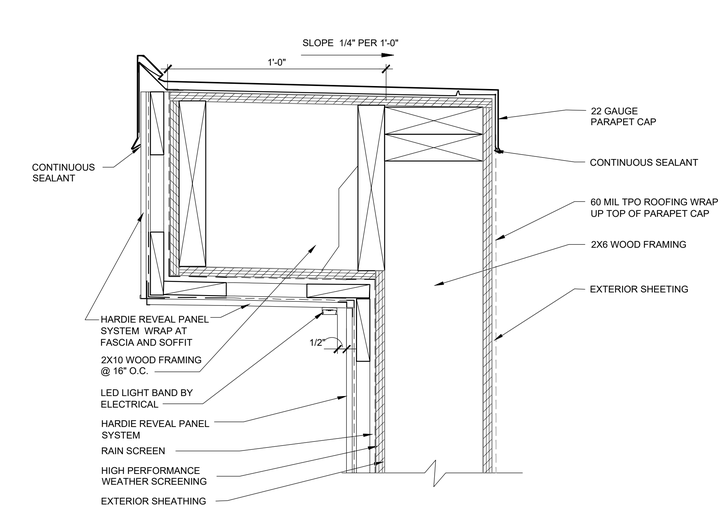
5 DETAIL AT SIDE WALL AND HARDI-PANEL / HARDI TRIM TRANSITION

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



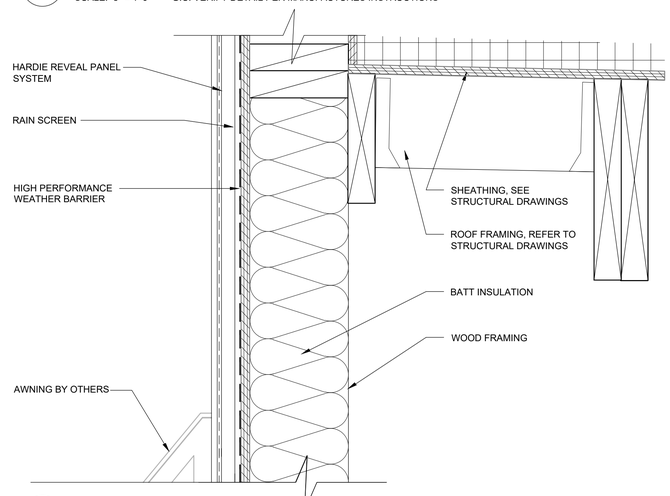
6 DETAIL AT HARDI-SIDING AND DRIVE-THRU CURB

SCALE: 3" = 1'-0"



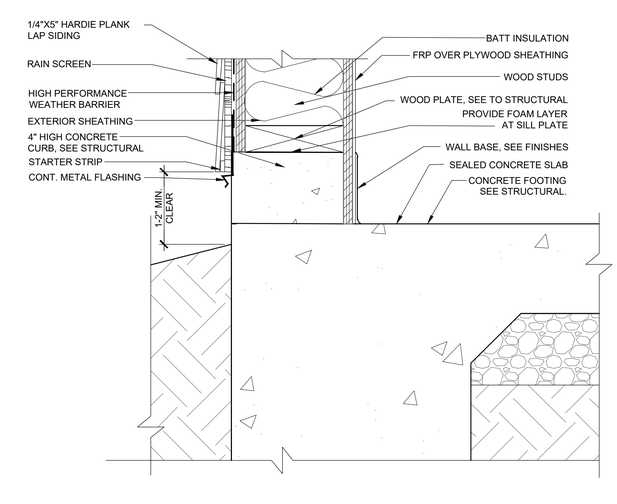
1 DETAIL AT FRONT PARAPET AND HARDI-PANEL

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



2 DETAIL AT FRONT WALL AND HARDI-PANEL

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



3 DETAIL AT HARDI-PANEL AND FINISHED GRADE

SCALE: 3" = 1'-0"

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REVISIONS:

TITLE:
EXTERIOR WALL DETAILS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

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09/01/2022

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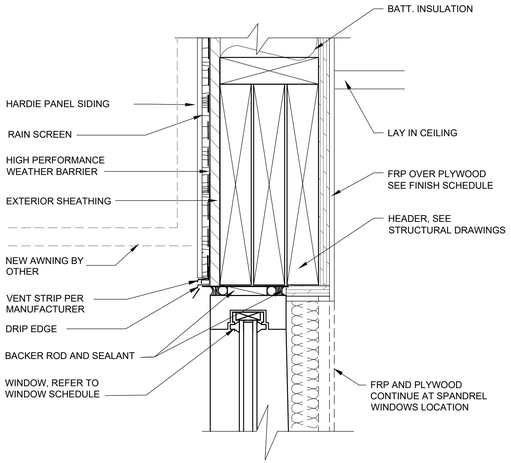
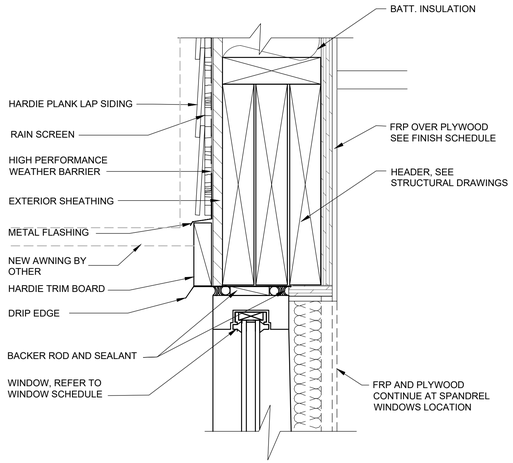
SHEET NO.
A3.4



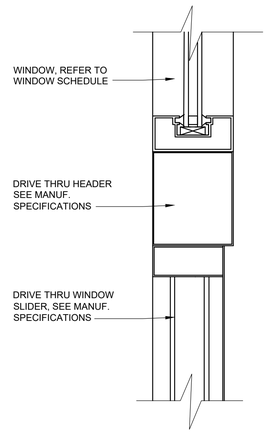
10 WINDOW HEADER DETAIL AT HARDI PANEL

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



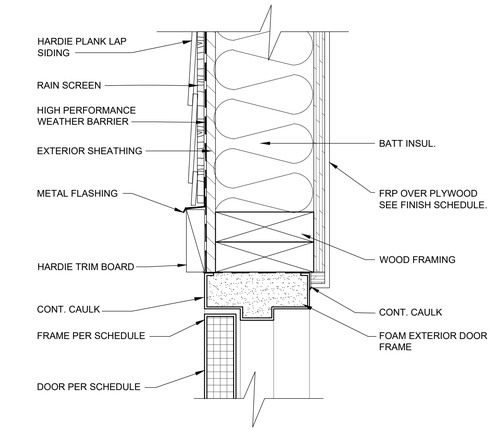
7 WINDOW HEADER DETAIL AT HARDI-SIDING

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



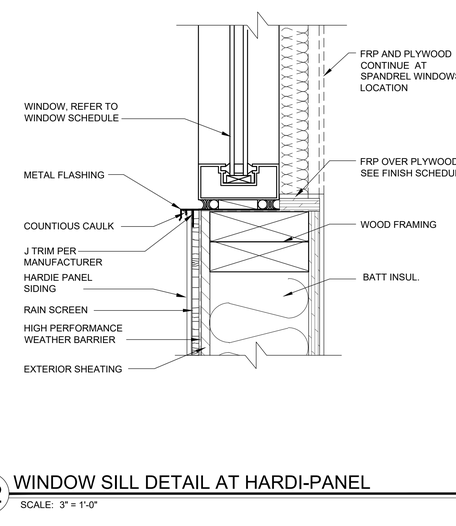
4 TRANSOM WINDOW TRANSITION AT DRIVE-THRU

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



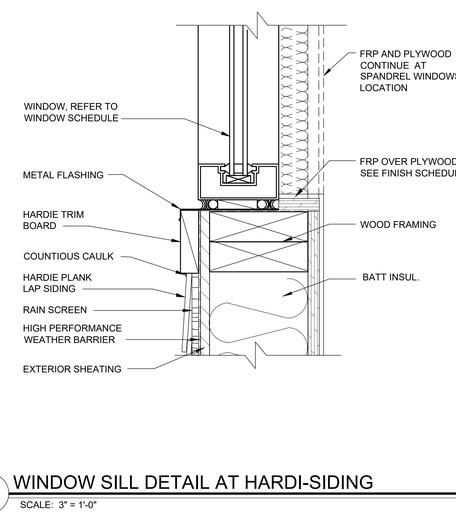
1 DOOR HEADER DETAIL AT HARDI-SIDING

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



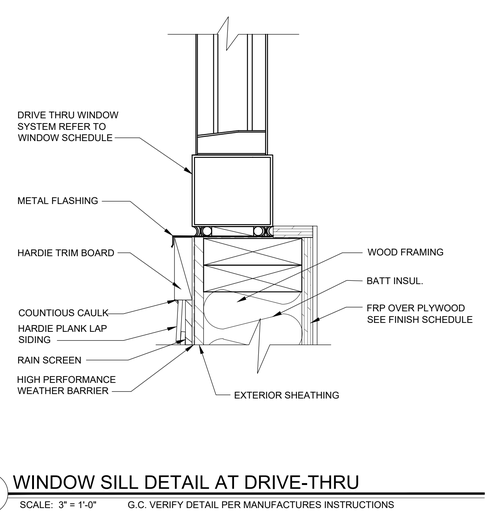
11 WINDOW JAMB DETAIL AT HARDI PANEL

SCALE: 3" = 1'-0"



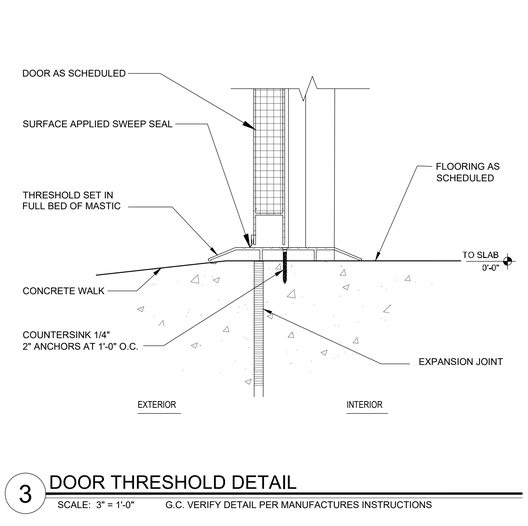
8 WINDOW JAMB DETAIL AT HARDI-SIDING

SCALE: 3" = 1'-0"



5 WINDOW JAMB DETAIL AT DRIVE-THRU

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS



2 DOOR JAMB DETAIL AT HARDI-SIDING

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS

12 WINDOW SILL DETAIL AT HARDI-PANEL

SCALE: 3" = 1'-0"

9 WINDOW SILL DETAIL AT HARDI-SIDING

SCALE: 3" = 1'-0"

6 WINDOW SILL DETAIL AT DRIVE-THRU

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS

3 DOOR THRESHOLD DETAIL

SCALE: 3" = 1'-0" G.C. VERIFY DETAIL PER MANUFACTURES INSTRUCTIONS

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09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
EXTERIOR DOOR AND WINDOW DETAILS

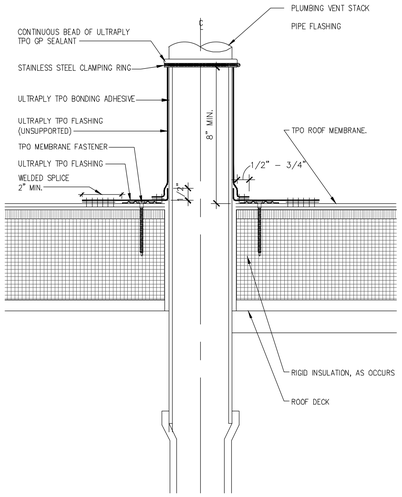
KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

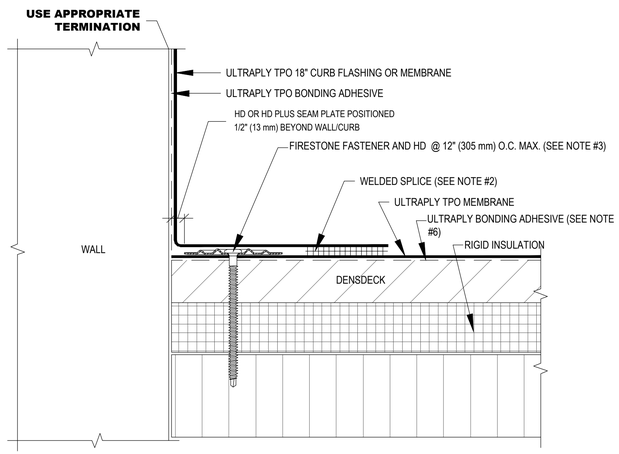
[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
A3.5



5 PLUMBING VENT STACK

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



NOTES:

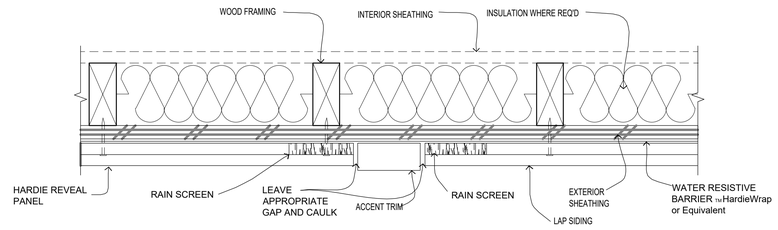
1. REFER TO FIRESTONE WEBSITE FOR MOST CURRENT INFORMATION.
2. REFER TO DETAIL UT-LS-1 OR UT-LS-2 FOR WELD WIDTH.
3. MAXIMUM 6" (152 mm) LONG FASTENERS (NOTE: WOOD BLOCKING MAY BE SUBSTITUTED FOR INSULATION TO REDUCE FASTENER LENGTH REQUIREMENTS).
4. IN CASE OF OBSTRUCTION REFER TO DETAIL UT-BT-5.
5. REFER TO UT-BT-16 & UT-BT-17 FOR MEMBRANE SECUREMENT AT CORNERS.
6. BONDING ADHESIVE REQUIRED BETWEEN MEMBRANE AND INSULATION FOR FULLY ADHERED SYSTEMS.
7. WHEN REINFORCEMENT OF TPO MEMBRANE IS EXPOSED, REFER TO UT-LS-14 FOR CUT EDGE SEALANT APPLICATION.

NOTE:

REFERENCE FIRESTONE THERMOPLASTIC POLYOELFIN (TPO) ROOFING DETAILS

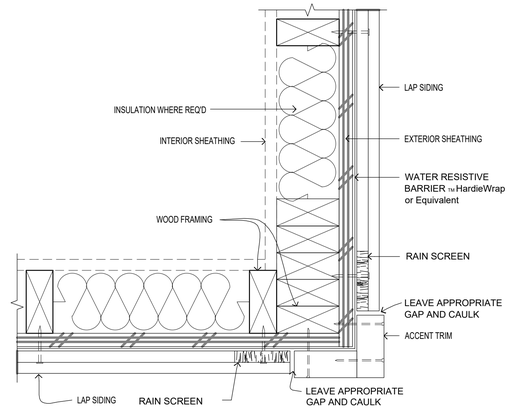
6 BASE TIE-IN WITH HD SEAM PLATES FASTENED TO DECK

SCALE: NTS



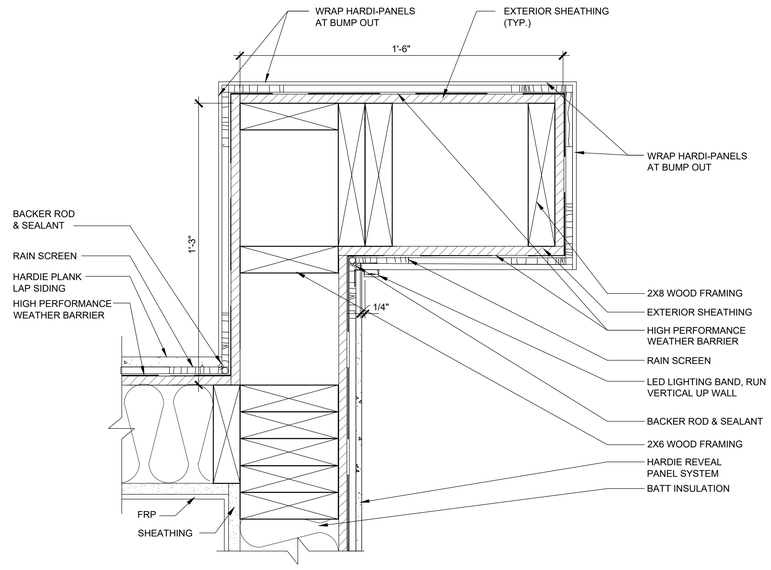
1 PLAN DETAIL AT HARDI-TRIM TRANSITION

SCALE: 3" = 1'-0"



2 PLAN DETAIL AT HARDI-SIDING OUTSIDE CORNER

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



3 PLAN DETAIL AT REAR WING WALL

SCALE: 3" = 1'-0"

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REGISTERED ARCHITECT
STATE OF ARKANSAS
License Number 2002

09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
EXTERIOR DETAILS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
A3.6

FINISH SCHEDULE

X

CODE	DESCRIPTION	MANUFACTURER	STYLE / PATTERN / COLOR	NOTES
FRP-1	FIBER REINFORCED PLASTIC	CRANE COMPOSITES	COLOR: SILVER (66) FINISH PEBBLE EMBOSSED	4X10 SHEETS INSTALL VERTICALLY
WB-1	VINYL WALL BASE	JOHNSONITE	40 BLACK B (4" H X .80" THICK)	PROVIDE SILICONE SEALANT AT FLOOR
WB-2	COVED	LATICRETE	SPARTACOTE COVE GEL	ALTERNATE AS REQUIRED BY JURISDICTION
SC-1	SEALED CONCRETE	LATICRETE	LEVEL 2 FINISH, RETRO SHIELD CLEAR SEALER CURCRETE	
F-1	CHIP XPL SYSTEM	LATICRETE	SPARTACOTE® CHIP XPL SYSTEM CHIP (FLAKE) BROADCAST SYSTEM	ALTERNATE AS REQUIRED BY JURISDICTION
PT-1	PAINT	SHERMAN WILLIAMS	SW7035 AESTHETIC WHITE FINISH: SEMI-GLOSS	INTERIOR DOOR AND INSIDE OF EXTERIOR DOOR
PT-2	PAINT	SHERMAN WILLIAMS	SW6992 - INKWELL FINISH: EGGSHELL	OUTSIDE OF EXTERIOR DOOR

NOTE:
NO ALTERATIONS ON FINISHES WITHOUT CORPORATE APPROVAL

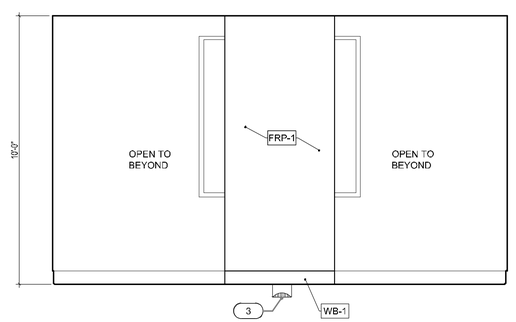
GENERAL NOTES

A. REFER TO SHEET A2.2 FOR FINISH DESIGNATION.
B. REFER TO SHEET K1.0 FOR EQUIPMENT CALLOUT INFORMATION.

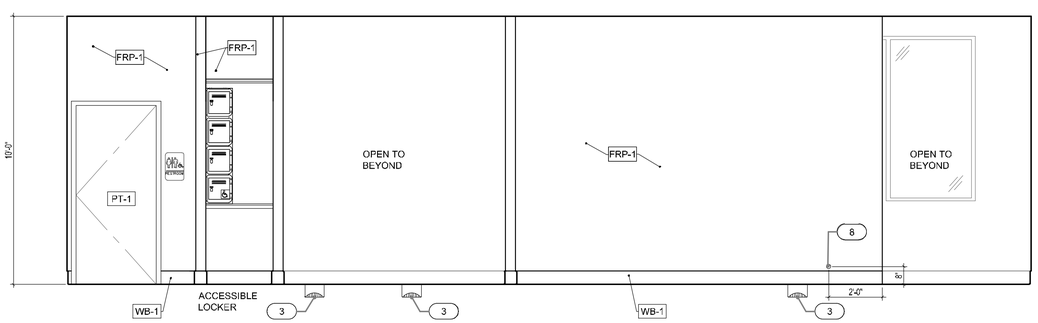
KEY NOTES

#

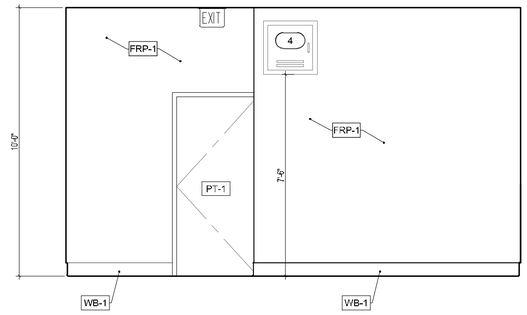
1. NEW STOREFRONT WINDOWS, SEE WINDOW SCHEDULE ON A6.1
2. NEW DRIVE-THRU WINDOW, SEE WINDOW SCHEDULE ON A6.1
3. FLOOR SINKS, SEE PLUMBING DRAWINGS
4. 24" x 24" DATA RACK, SEE ELECTRICAL DRAWINGS
5. MOP SINK, SEE PLUMBING DRAWINGS
6. HOT WATER HEATER ON PLATFORM, SEE PLUMBING AND ELECTRICAL DRAWINGS
7. SPANDREL GLASS BEHIND REACH REACH-IN FRIDGE.
8. NITRO CONDUIT CHASE



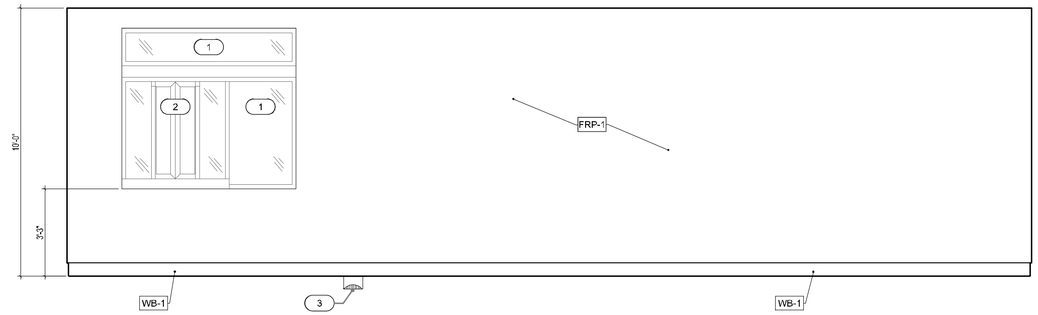
4 INTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



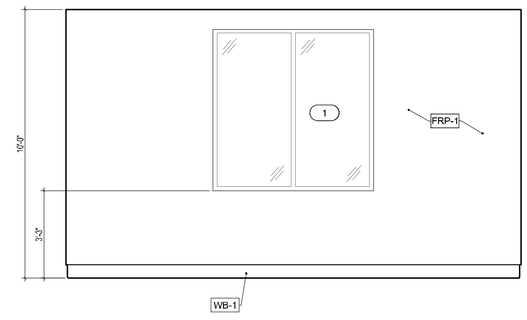
1 INTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



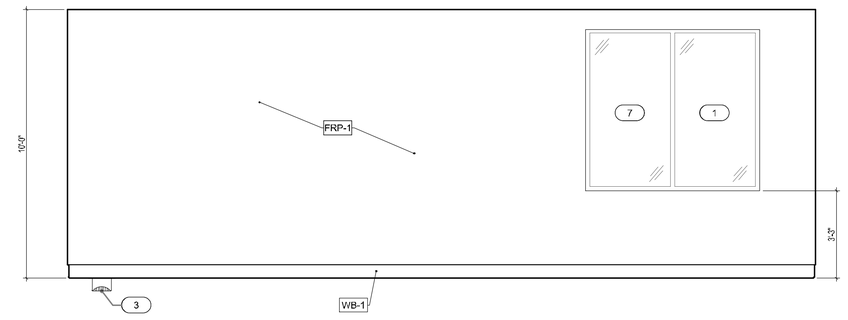
5 INTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



2 INTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



6 INTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



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

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REGISTERED ARCHITECT
STATE OF ARKANSAS
License Number 2592

09/01/2022

EST. 1998
SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
INTERIOR ELEVATIONS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
A4.1

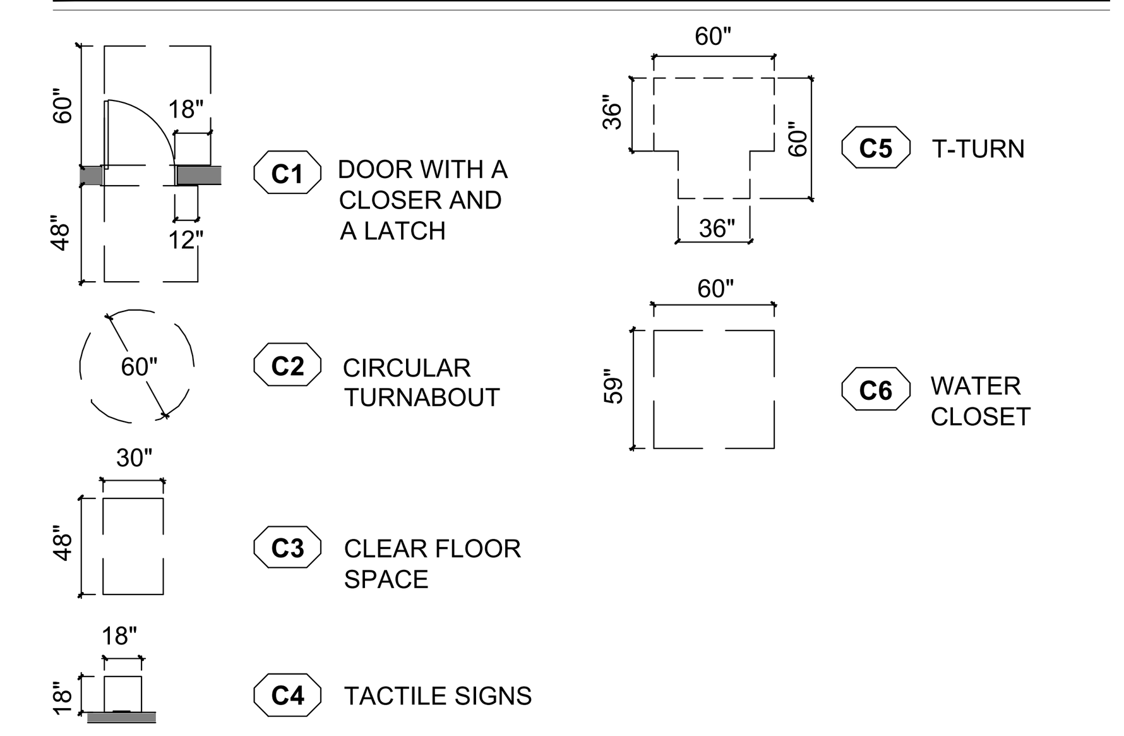
ACCESSORY FIXTURES

EQ. NO.	ITEM NAME	QTY	MANUFACTURER	MODEL #	REMARKS#
F-1	36" STAINLESS STEEL GRAB BAR	1	BOBRICK	#B-5806x36	
F-2	42" STAINLESS STEEL GRAB BAR	1	BOBRICK	#B-5806x42	
F-3	18" STAINLESS STEEL GRAB BAR	1	BOBRICK	#B-5806x18	
F-4	WALL HUNG LAVATORY	1	TOTO	#LT307	SURFACE MOUNTED
F-5	PAPER TOWEL DISPENSER	1	BOBRICK	#B-2621	SURFACE MOUNTED
F-6	TOILET TISSUE DISPENSER	1	BOBRICK	#B-2840	SURFACE MOUNTED
F-7	WATER CLOSET	1			REFER P SHEETS
F-8	SOAP DISPENSER	1			BY OWNER
F-9	WALL MOUNTED ACCESSIBLE SIGN	1	ULINE	S-15599BL	OR SIMILAR
F-10	WALL MOUNTED MIRROR	1	BOBRICK	#B-290, #B-165	24X36 SURFACE MOUNTED
F-11	QUICK STAND	1	HOLDRITE	#50-SWHP-M	SUSPENDED WATER HEATER PLATFORM

FINISH SCHEDULE

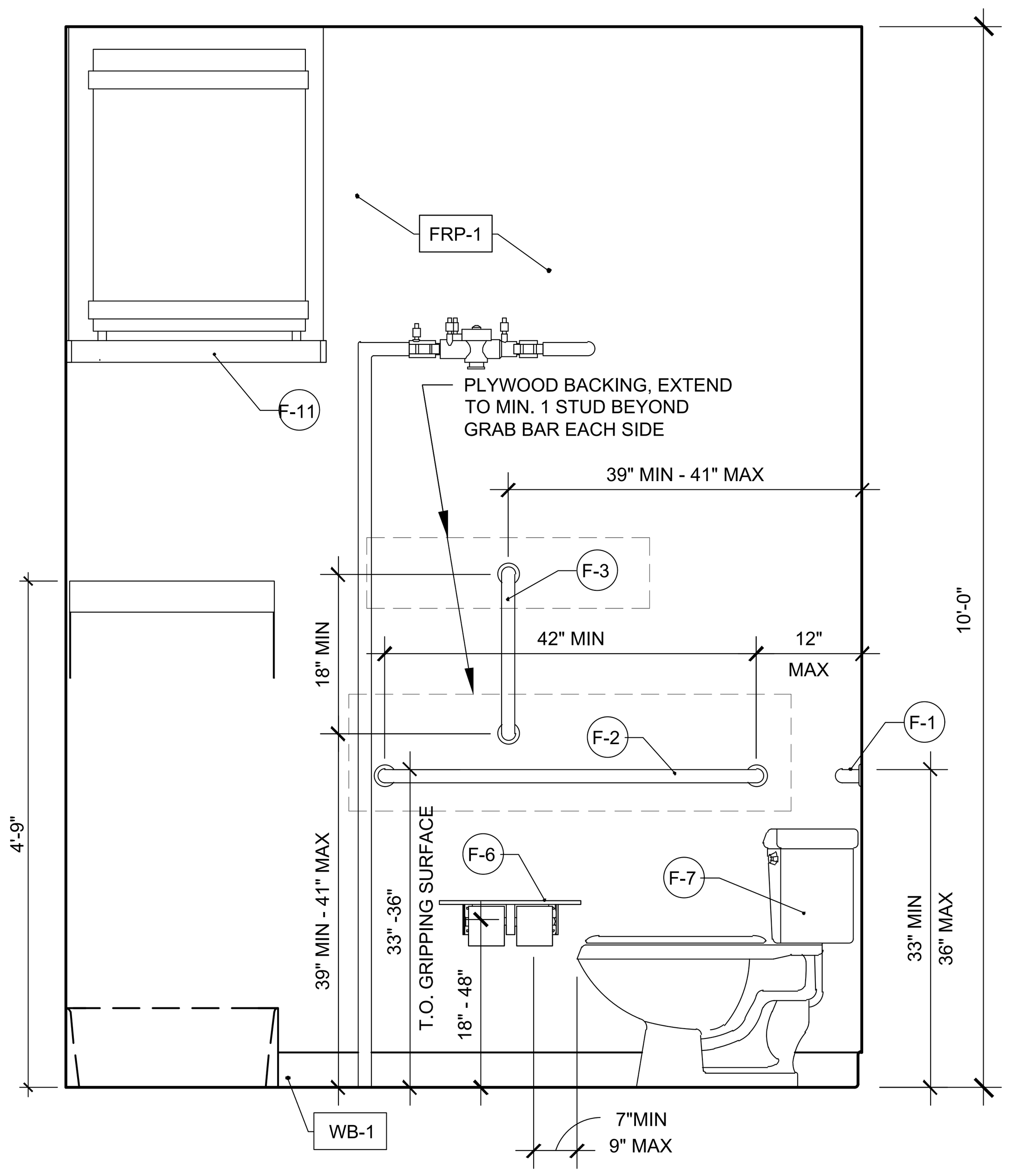
CODE	DESCRIPTION	MANUFACTURER	STYLE / PATTERN / COLOR	NOTES
FRP-1	FIBER REINFORCED PLASTIC	CRANE COMPOSITES	COLOR: SILVER (66) FINISH PEBBLE EMBOSSED	4X10 SHEETS INSTALL VERTICALLY
WB-1	VINYL WALL BASE	JOHNSONITE	40 BLACK B (4" H X .80" THICK)	PROVIDE SILICONE SEALANT AT FLOOR
WB-2	COVED	LATICRETE	SPARTACOTE COVE GEL	ALTERNATE AS REQUIRED BY JURISDICTION
SC-1	SEALED CONCRETE	LATICRETE	LEVEL 2 FINISH, RETRO SHIELD CLEAR SEALER CURCRETE	
F-1	CHIP XPL SYSTEM	LATICRETE	SPARTACOTE® CHIP XPL SYSTEM CHIP (FLAKE) BROADCAST SYSTEM	ALTERNATE AS REQUIRED BY JURISDICTION
PT-1	PAINT	SHERMAN WILLIAMS	SW7035 AESTHETIC WHITE FINISH: SEMI-GLOSS	INTERIOR DOOR AND INSIDE OF EXTERIOR DOOR
PT-2	PAINT	SHERMAN WILLIAMS	SW6992 - INKWELL FINISH: EGGSHELL	OUTSIDE OF EXTERIOR DOOR

CLEARANCE KEYNOTES

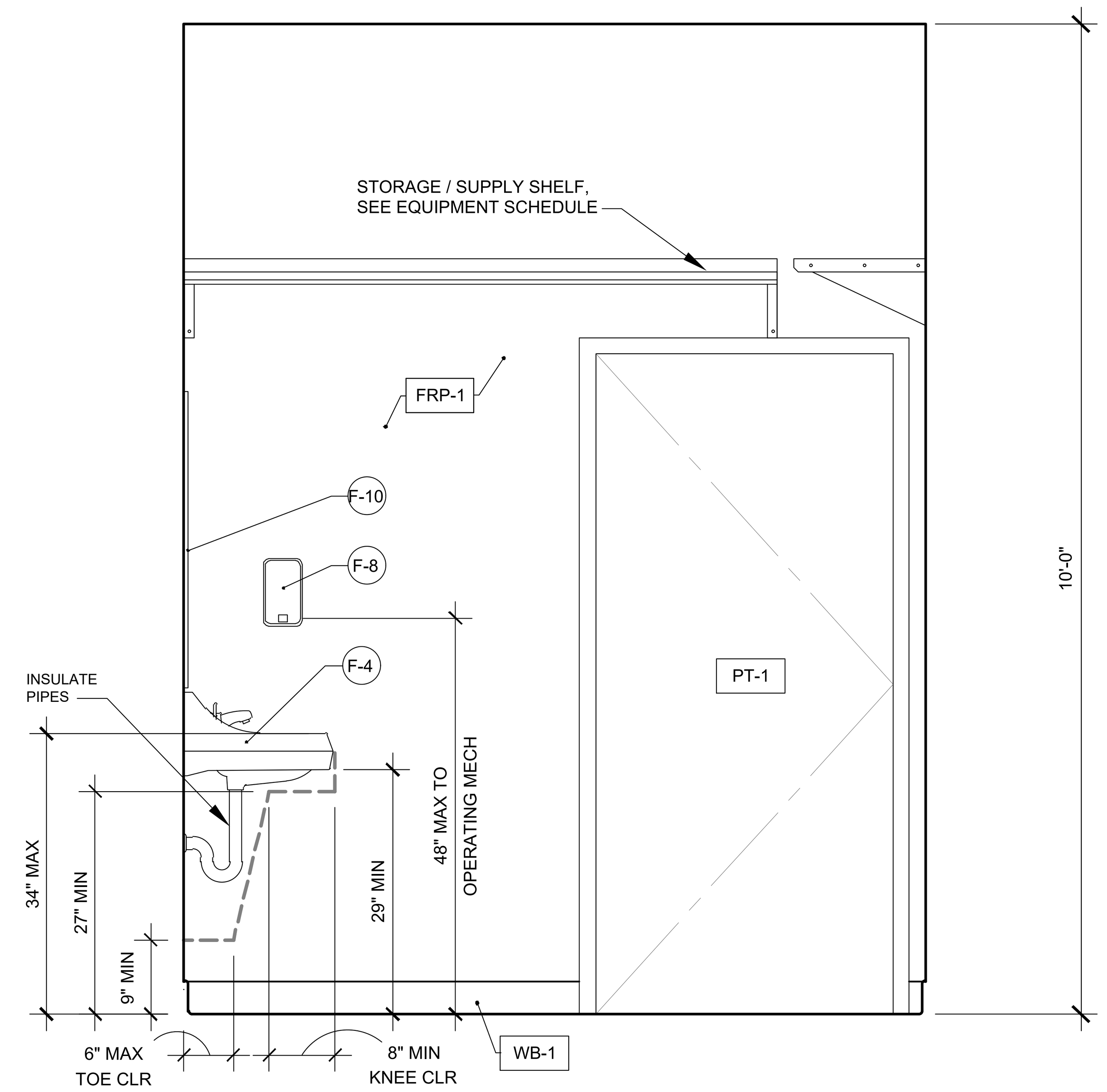


GENERAL NOTES

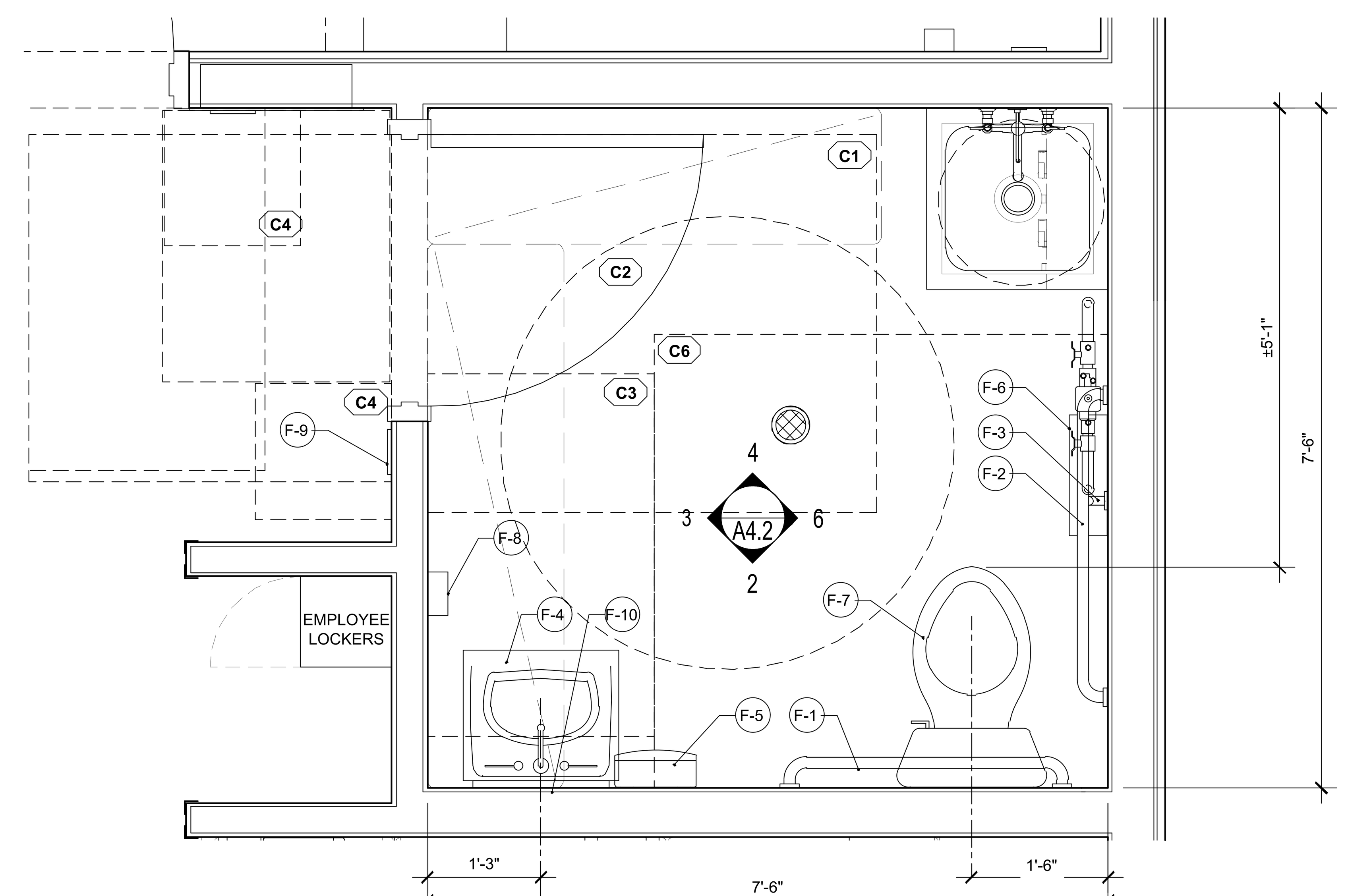
A. SEE SHEET G0.3 FOR FURTHER ACCESSIBILITY INFORMATION
B. PROVIDE WOOD BLOCKING AS REQUIRED
C. DIMENSIONS NOTED ON THIS PLAN ARE TO FINISH SURFACE U.N.O.



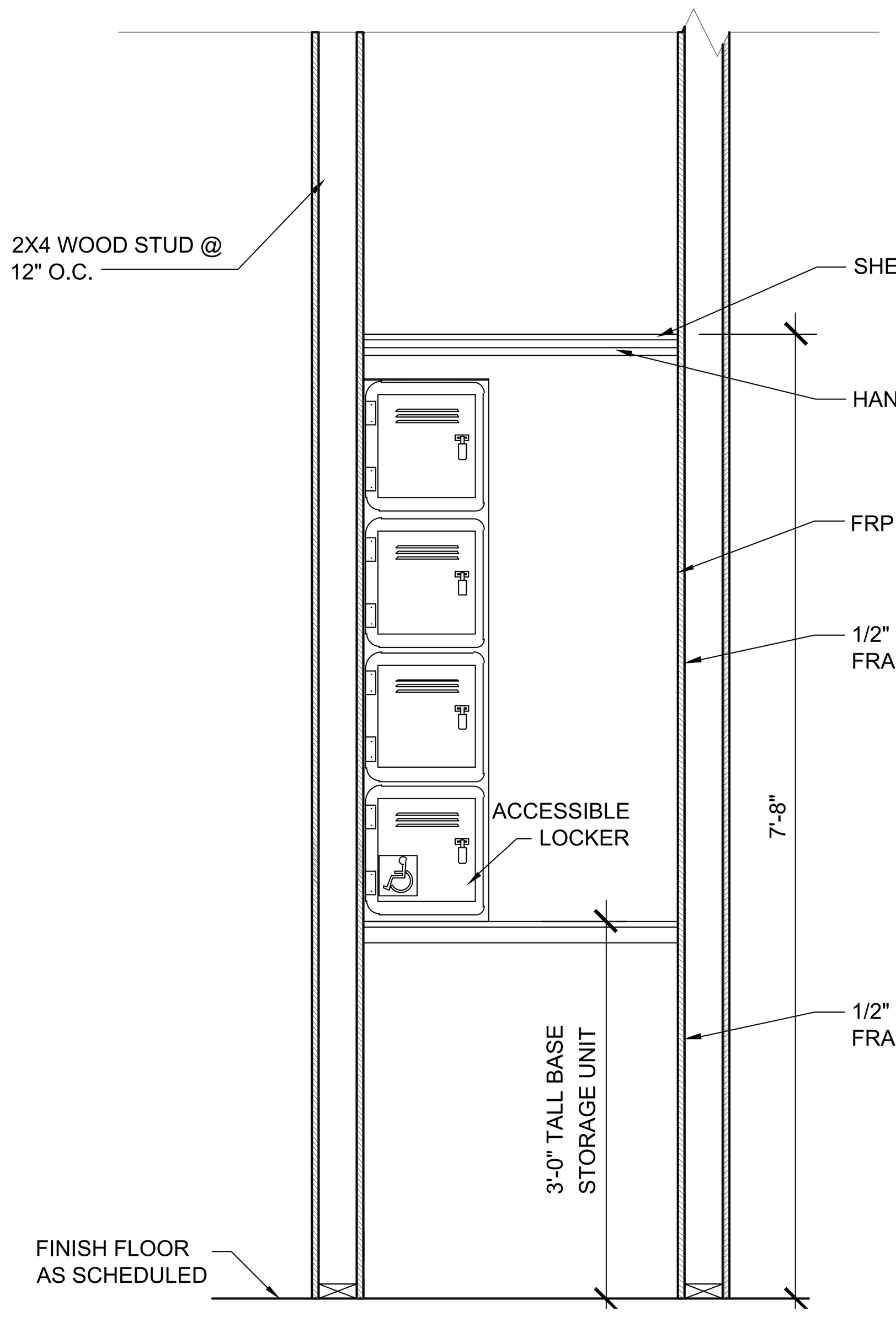
6 RESTROOM ELEVATION
SCALE: 3/4 = 1'-0"



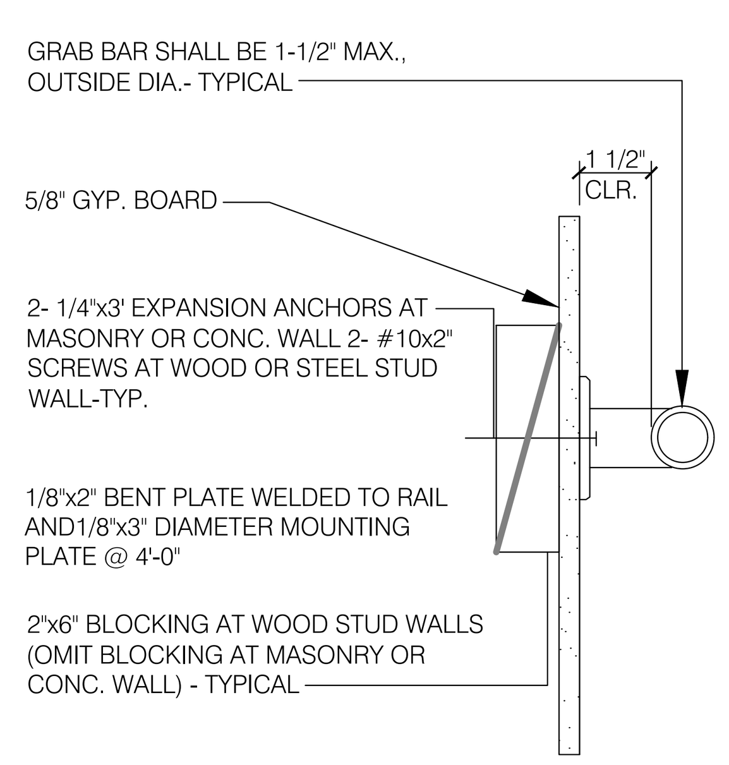
3 RESTROOM ELEVATION
SCALE: 3/4" = 1'-0"



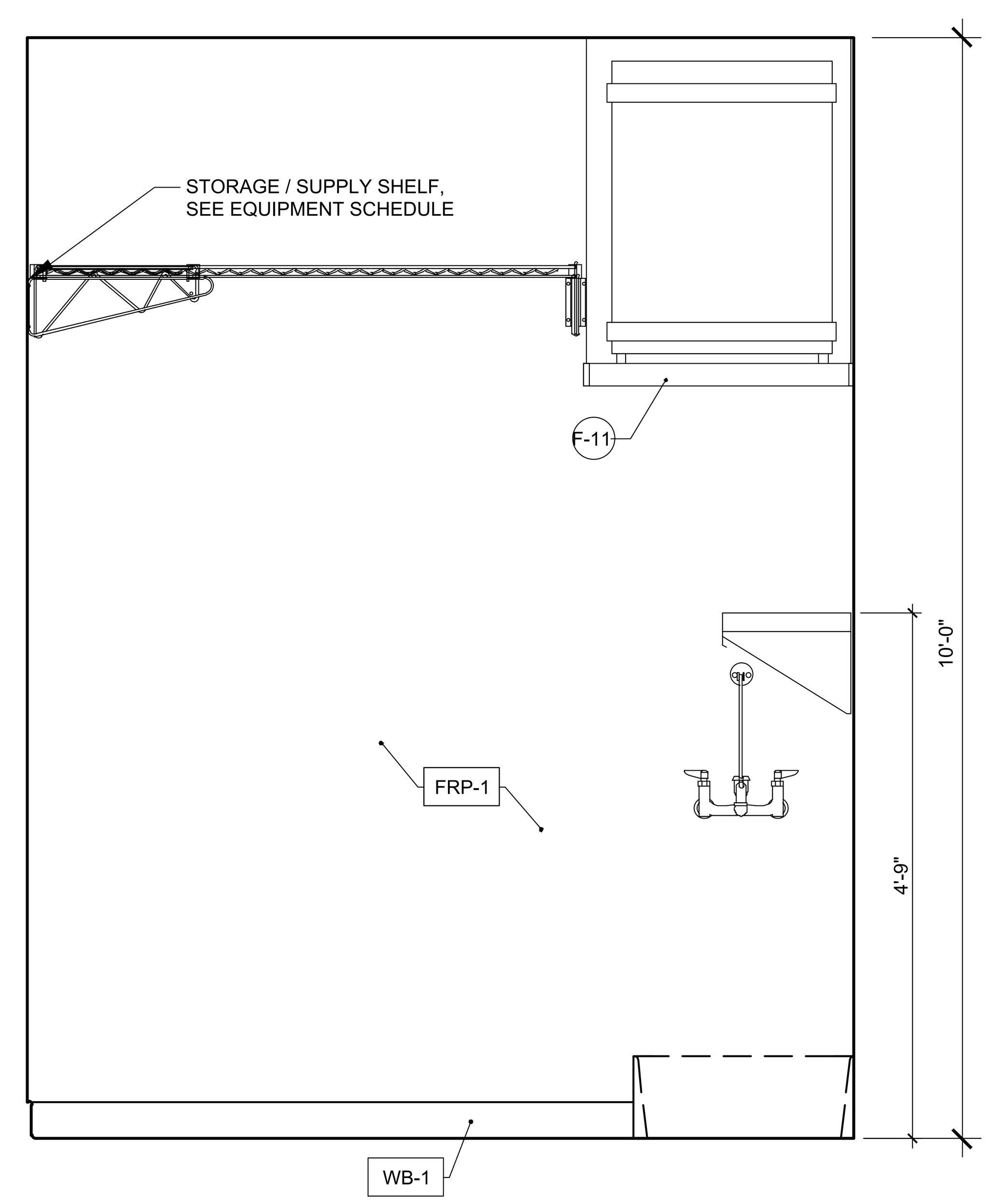
1 ENLARGED RESTROOM PLAN
SCALE: 3/4 = 1'-0"



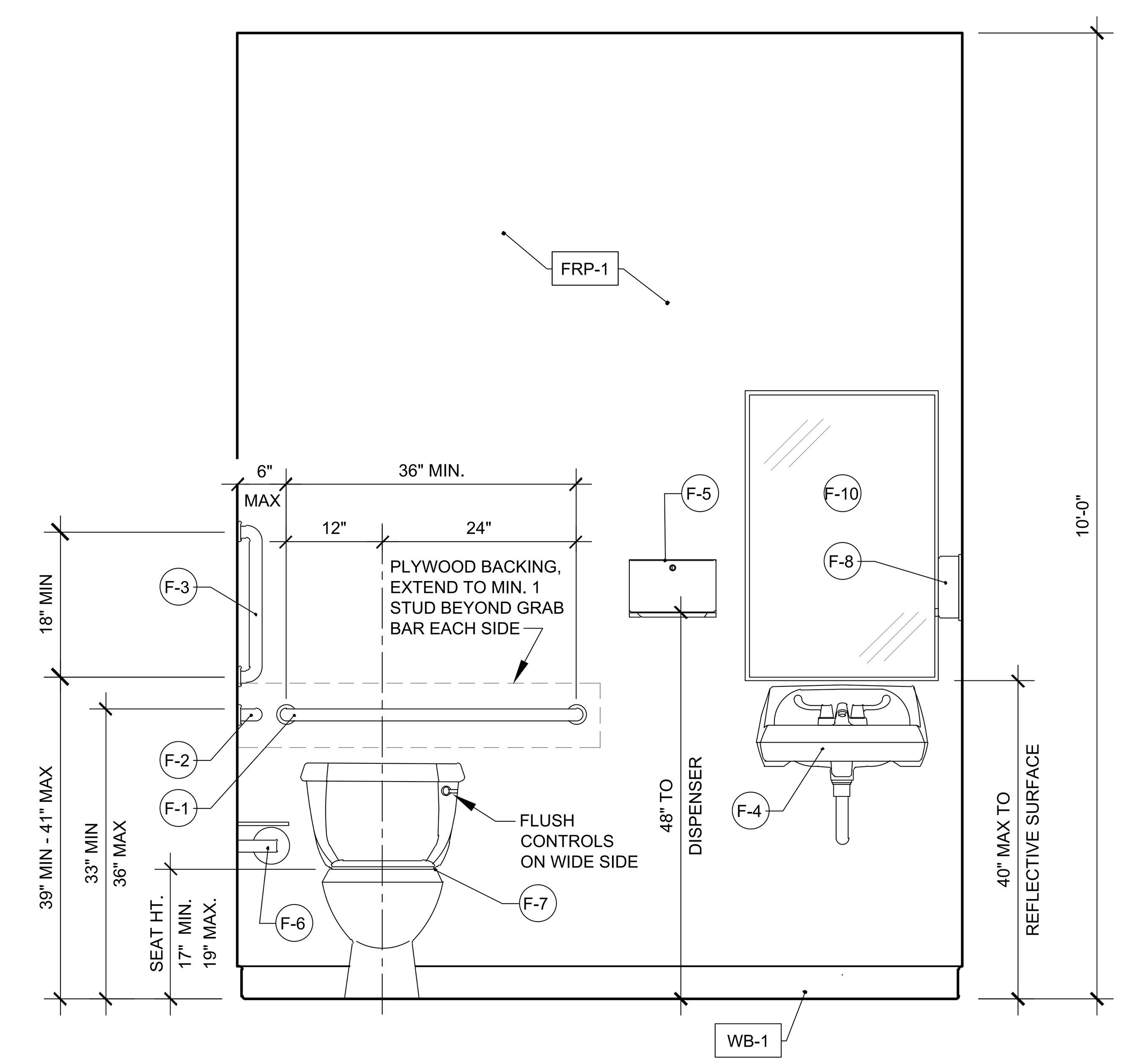
7 ELEVATION AT LOCKERS
SCALE: 3/4 = 1'-0"



5 GRAB BAR BLOCKING
SCALE: NTS



4 RESTROOM ELEVATION
SCALE: 3/4 = 1'-0"



2 RESTROOM ELEVATION
SCALE: 3/4" = 1'-0"

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09/01/2022

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
ENLARGED RESTROOM PLAN AND ELEVATIONS

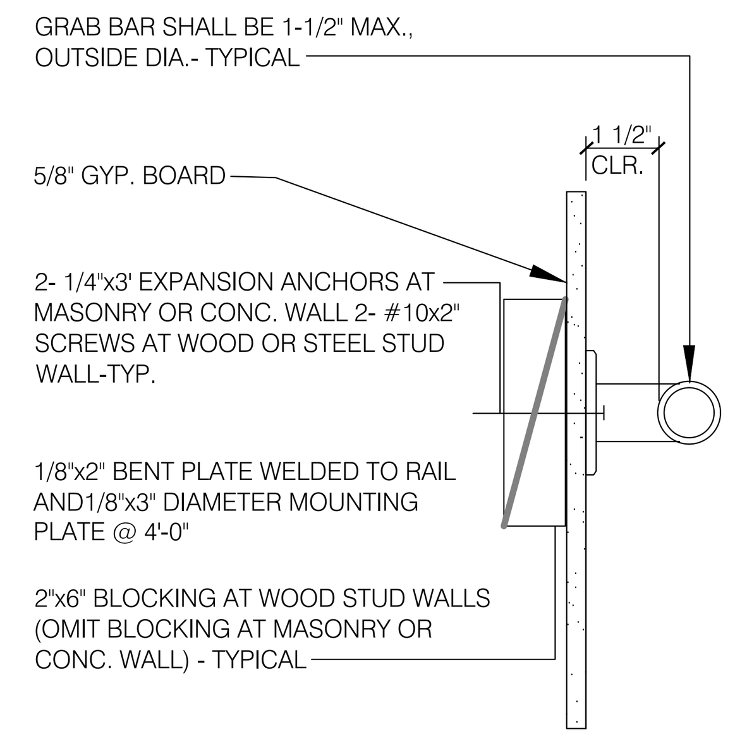
KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

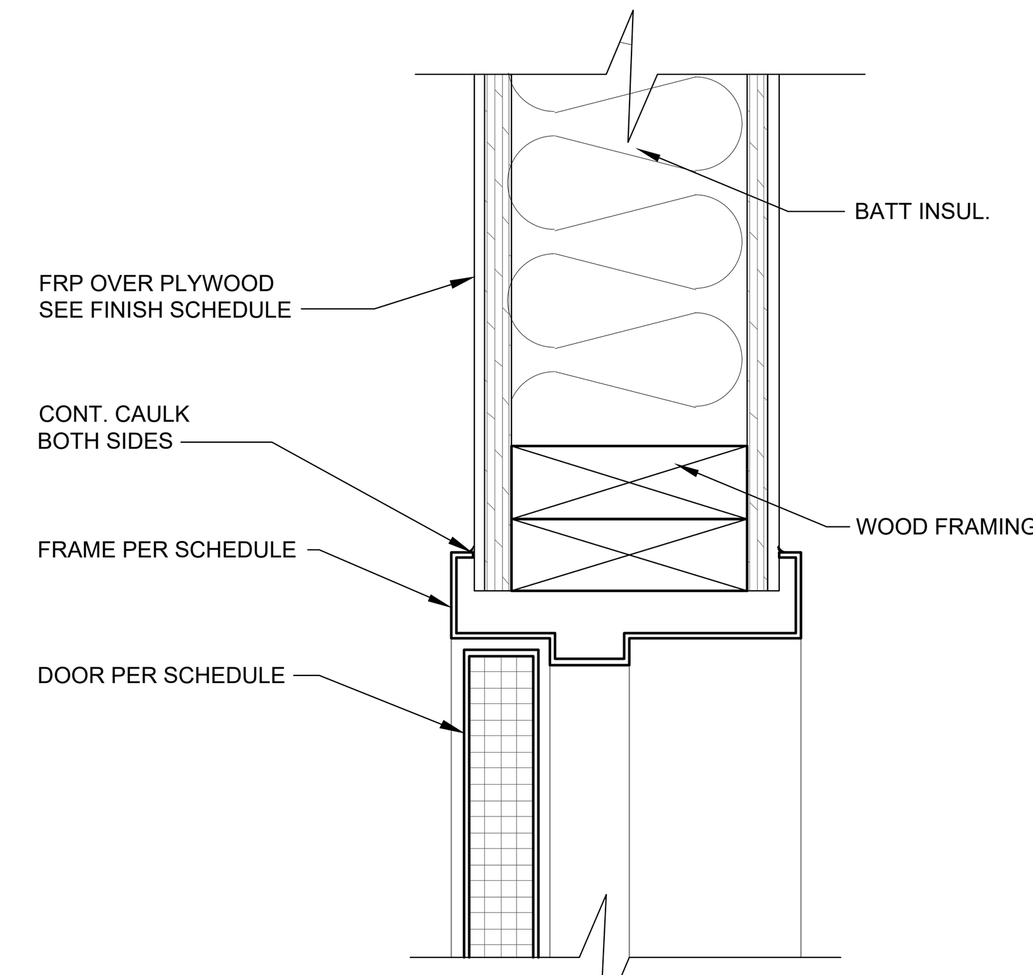
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

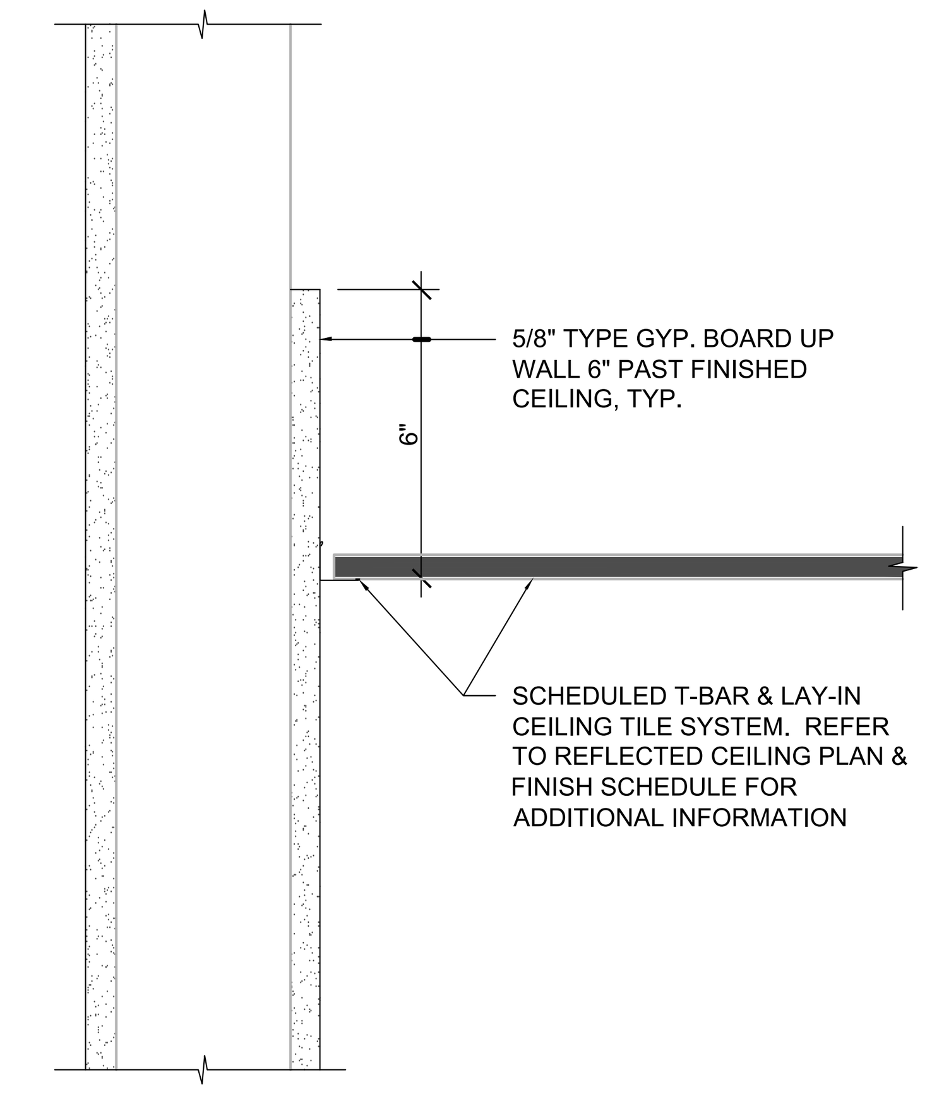
SHEET NO.
A4.2



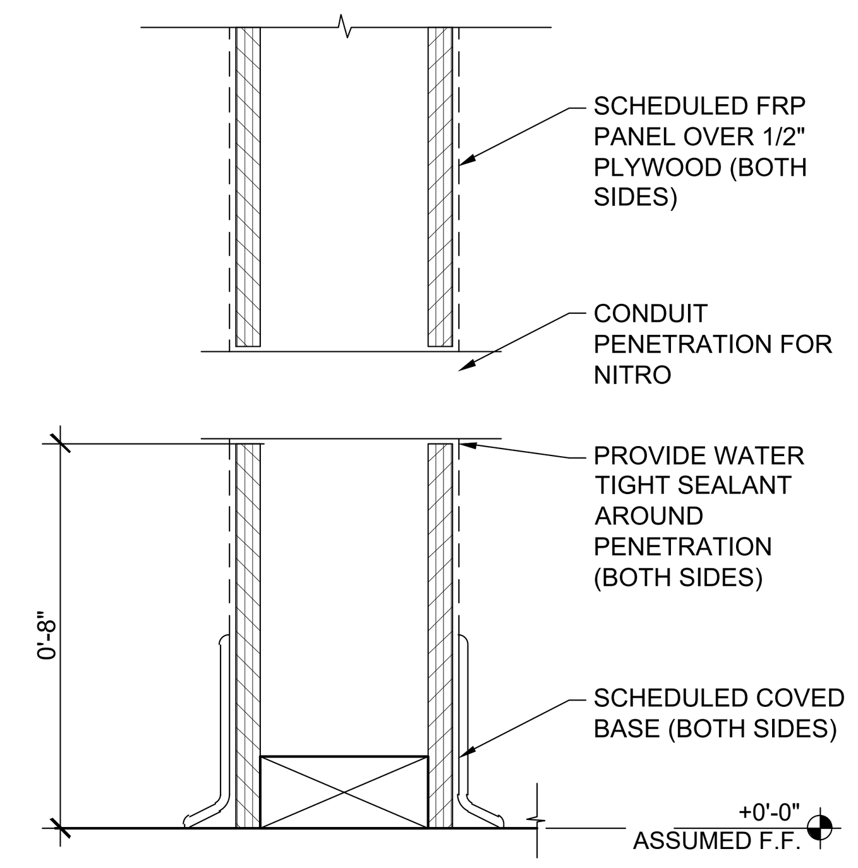
7 GRAB BAR BLOCKING
SCALE: 6"=1'-0"



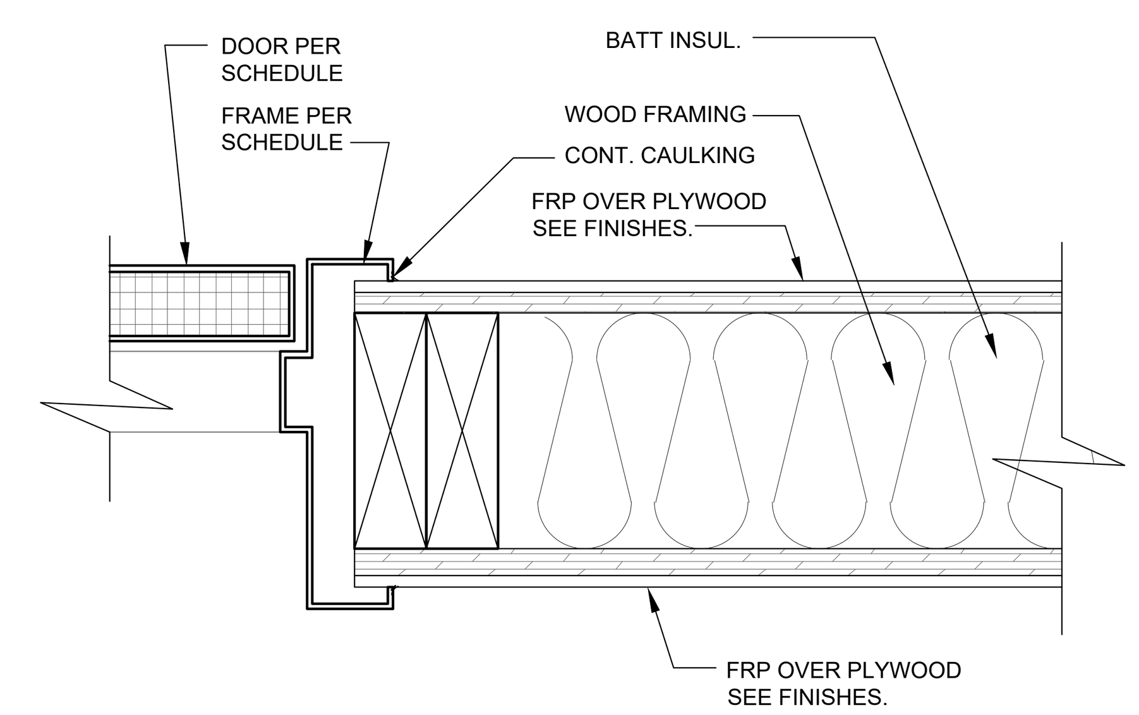
4 DOOR HEADER DETAIL AT RESTROOM
SCALE: 3" = 1'-0"



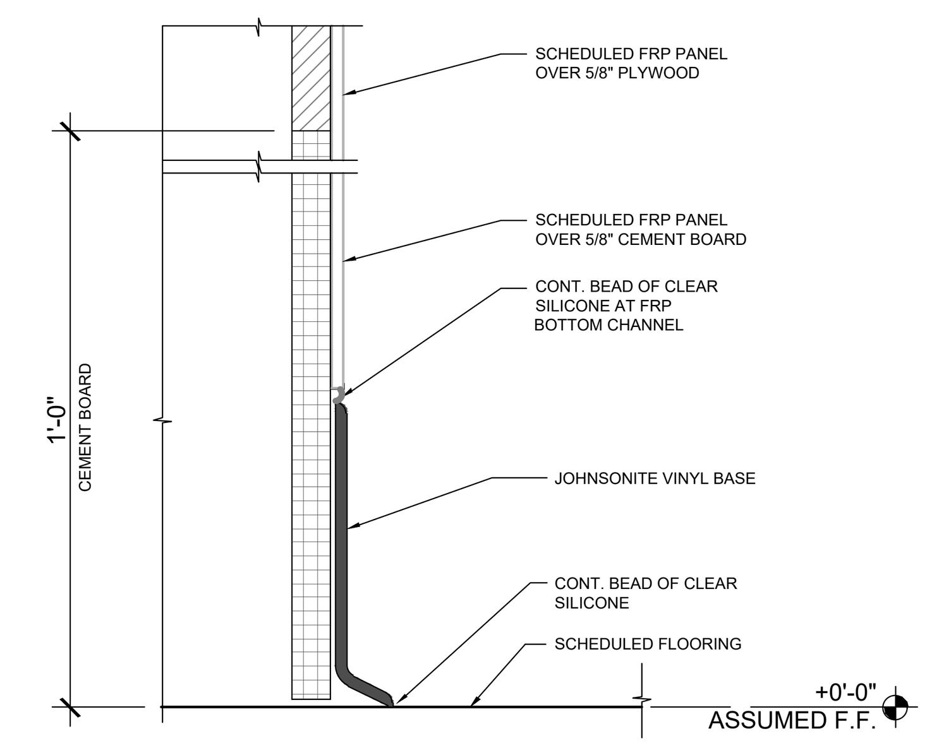
1 DETAIL AT SUSPENDED LAY-IN CEILING
SCALE: 3" = 1'-0"



8 NITRO CONDUIT DETAIL
SCALE: 3" = 1'-0"

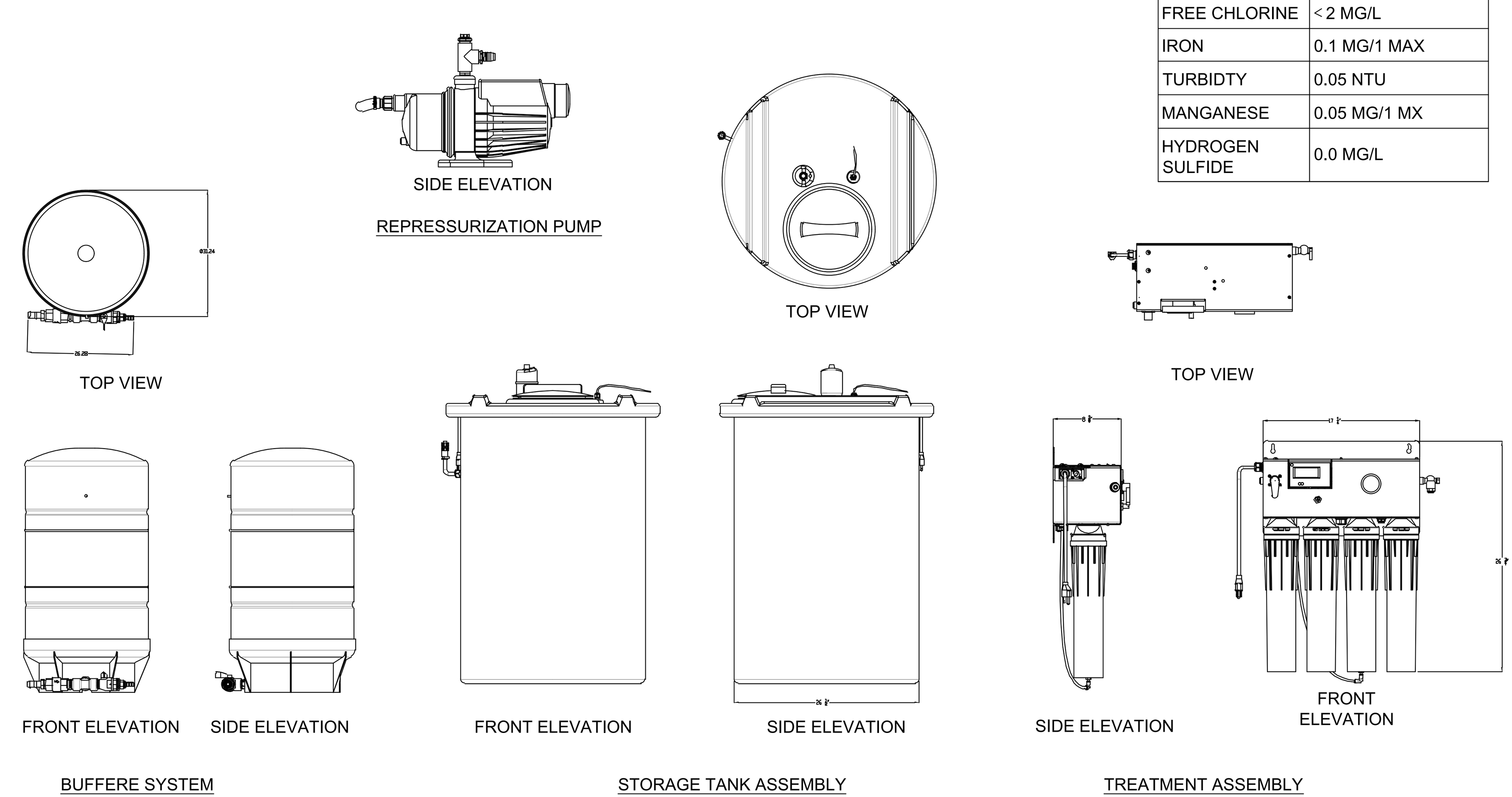


5 DOOR JAMB DETAIL AT RESTROOM
SCALE: 3" = 1'-0"

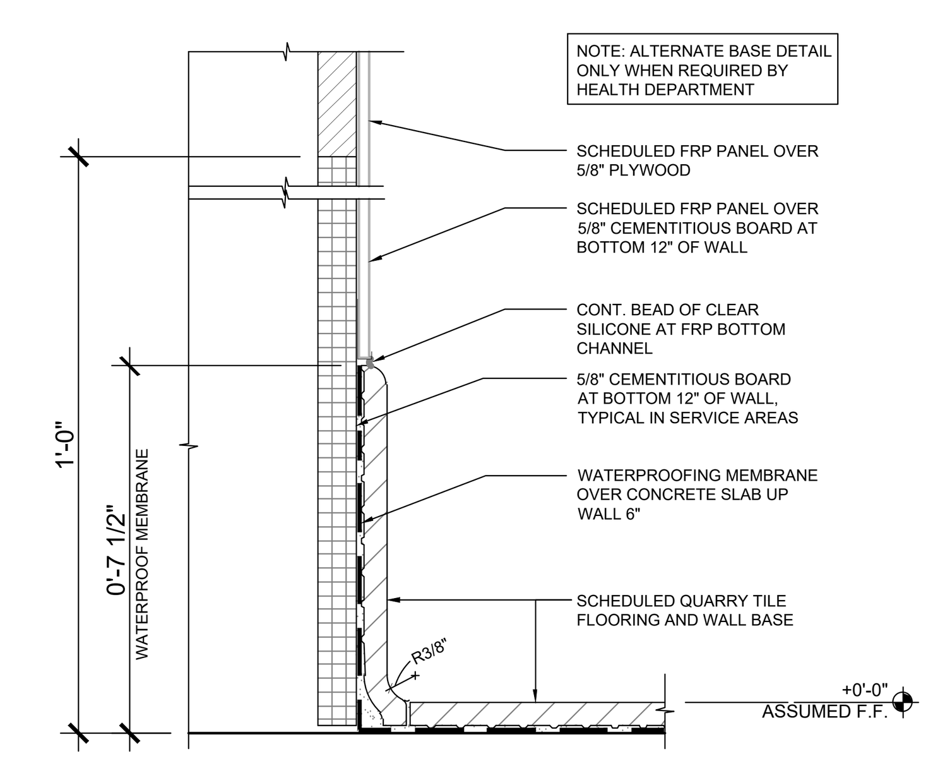


2 DETAIL AT VINYL WALL BASE
SCALE: 3" = 1'-0"

FEED TDS	UP TO 1200 PPM
FEED PH	6-10 UNITS
HARDNESS	12 GRAINS OR LESS
FREE CHLORINE	< 2 MG/L
IRON	0.1 MG/1 MAX
TURBIDTY	0.05 NTU
MANGANESE	0.05 MG/1 MX
HYDROGEN SULFIDE	0.0 MG/L



6 OPTIPURE BWS350/50 WATER TREATMENT SYSTEM
SCALE: N.T.S.



3 DETAIL AT QUARRY TILE COVE BASE (ALT)
SCALE: 3" = 1'-0"

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09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
INTERIOR DETAILS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

- [X] PERMIT/BID SUBMITTAL
- [ ] CONSTRUCTION ISSUE

SHEET NO.
A5.2

DOOR SCHEDULE

MARK	DOOR						FRAME			HARDWARE	REMARKS & DOOR NOTES
	TYPE	WIDTH	HEIGHT	THK	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	SET	
100	A	3'-0"	7'-0"	1-3/4"	INSULATED METAL U=0.70	PAINT	-	HM	PAINT	1	KEY PLATE INSIDE FACE
101	B	3'-0"	7'-0"	1-3/4"	HM	PAINT	-	HM	PAINT	2	KEY PLATE INSIDE FACE

HARDWARE SCHEDULE

SET NUMBER 1 - (ENTRY)

QTY.	PART	DESCRIPTION	MFGR.
1 1/2 PR.	BUTT HINGES	FULL MORTISE BB1279-450 4.5" x4.5", US26D/652, 5 KNUCKLE NON-REMOVABLE PIN	HAGER OR EQ.
1	CLOSER	LCN 1450 SURFACE MOUNTED, PULL SIDE, ALUM. FINISH (689)	LCN - EQ.
1	THRESHOLD	LOW PROFILE 2008_PK	PEMKO - EQ.
1	DOOR SWEEP	36" 225_V DOOR BOTTOM SWEEP	PEMKO - EQ.
1	WEATHER STRIP	AT PERIMETER OF DOOR OPENINGS	PEMKO - EQ.
1	VIEWER	698PB619 WIDE-ANGLE (190-200 DEGREES) AT 60" A.F.F. MAX	SCHLAGE OR EQ.
1	KICKPLATE	34" x 30" STAINLESS STEEL, PUSH SIDE ONLY	
1	DOOR HOLD OPEN	DOOR MOUNTED	
1	LOCK SET	LEVER TYPE, MECHANICAL PUSHBUTTON LOCK W/ FREE EGRESS, SATIN CHROME FINISH	SCHLAGE OR EQ.
1	PANIC HARDWARE	QED 300 SERIES 36" RIM LATCH EXIT DEVICE WITH STANDARD HEX KEY	STANLEY OR EQ.

SET NUMBER 2 - (RESTROOM)

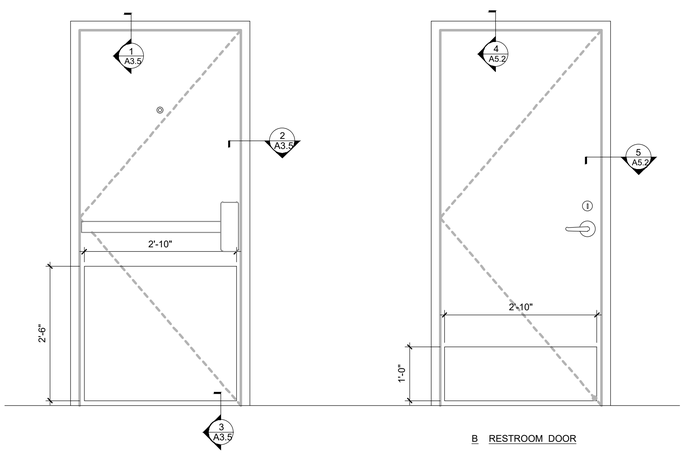
	PART	DESCRIPTION	MFGR.
1 1/2 PR.	BUTT HINGES	FULL MORTISE 4"x4" BB1191-ANSI-A2112, BRASS WITH S/S PIN, US26D	HAGER OR EQ.
1	LOCK SET	PRIVACY LEVER TYPE (626)	SCHLAGE OR EQ.
1	CLOSER	LCN 1450 SURFACE MOUNTED, PULL SIDE, ALUM. FINISH (689)	LCN - EQ.
1	KICKPLATE	34"X12" STAINLESS STEEL, PUSH SIDE ONLY	-
1	SILENCER	AT PERIMETER OF DOOR	PEMKO - EQ.
1	DOOR HOLD OPEN	DOOR MOUNTED	
1	INDICATOR LOCK	NON-HANDED MEDIUM DUTY DEAD LOCK WITH THUMB TURN (KEYLESS) NOTE: THUMBTURN MUST OPERATE WITHOUT TIGHT GRASPING, TWISTING OR EXCESSIVE WRIST MOVEMENT (FLAG TYPE)	FALCON - EQ.
1	DOOR STOP	HINGE PIN DOOR STOP	SCHLAGE - EQ.

GENERAL DOOR NOTES

1. GC TO VERIFY THAT EGRESS DOOR & HARDWARE COMPLIES WITH ACCESSIBILITY REQUIREMENTS.
2. ENTRY DOOR TO BE MARKED "THIS DOOR TO REMAIN UNLOCKED WHEN SPACE IS OCCUPIED" - TO BE MOUNTED ABOVE THE DOOR WITH 1" HIGH LETTERS, COLOR IN CONTRAST TO THE BACKGROUND.
3. ALL DOORS SHALL OPERATE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, OR PUSH PULL ACTIVATION BARS. SEE SPECIFICATIONS.
4. DOOR CLOSER, IF PRESENT MUST BE SET SO THAT IT TAKES DOOR AT LEAST 5 SECONDS TO CLOSE FROM AN OPEN POSITION OF 90 DEGREES TO WITHIN 12 DEGREES OF LATCH.
5. EFFORTS TO OPERATE DOORS WITHIN PRESSURES ALLOWED: INTERIOR DOORS 5LBS. MAXIMUM PRESSURE TO OPERATE, FIRE DOORS 15 LBS. MAXIMUM PRESSURE TO OPERATE
6. THE WIDTH OF THE OF THE LEVEL AREA ON THE SIDE OF WHICH THE DOOR SWINGS SHALL EXTEND 24" PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18" PAST THE STRIKE EDGE FOR INTERIOR WALLS.
7. PROVIDE DOOR BOTTOMS AND EXIT SADDLES ON ALL EXTERIOR DOORS.
8. ALL EXITS ARE TO BE OPENABLE FROM INSIDE WITHOUT THE USE OF KEY OR SPECIAL KNOWLEDGE.
9. ALL EGRESS/EXIT DOORS SHALL BE OF THE PIVOTED OR SIDE-HINGED SWINGING TYPE PER SECTION 1008.12.
10. G.C. TO VERIFY QUANTITY OF MASTER KEYS TO PROVIDE.
11. ALL DOOR HARDWARE (LOCKSETS, PUSH / PULLS, DEADLOCKS, ETC.) SHALL BE MOUNTED NOT LESS THAN 34" A.F.F., NOR MORE THAN 48" A.F.F.

ABBREVATIONS

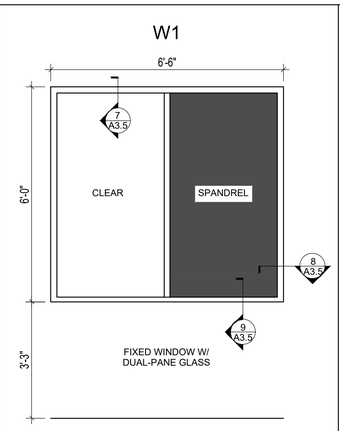
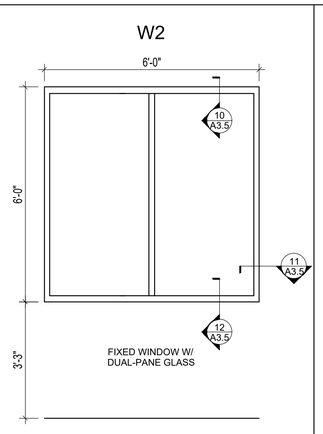
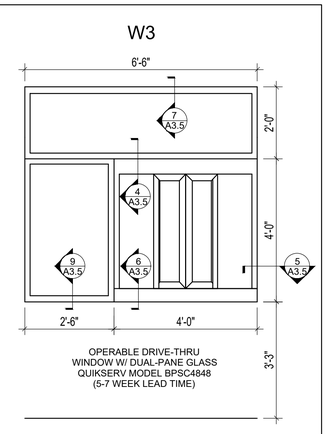
AL	ALUMINUM
SC	SOLID CORE WOOD DOOR
HM	HOLLOW METAL
GL	GLASS



B RESTROOM DOOR

2 DOOR TYPES

SCALE: NTS

WINDOW TYPES	W1	W2	W3
	 FIXED WINDOW W/ DUAL-PANE GLASS	 FIXED WINDOW W/ DUAL-PANE GLASS	 OPERABLE DRIVE-THRU WINDOW W/ DUAL-PANE GLASS QUIKSERV MODEL BPSC4848 (5-7 WEEK LEAD TIME)
MATERIAL / FINISH	AL / DARK BRONZE	AL / DARK BRONZE	DARK BRONZE
GLASS	LEFT PANEL 1" TEMPERED CLEAR GLASS RIGHT PANEL 1" SPANDREL GLASS BLACK	1" INSULATED DUAL PANE TEMPERED CLEAR GLASS	1" INSULATED DUAL PANE TEMPERED CLEAR GLASS
R.O. DIMENSIONS	6'-6" W X 6'-0" H	6'-0" W X 6'-0" H	6'-6" W X 6'-0" H
NOTES	SPANDREL GLASS BEHIND REACH-IN REFRIGERATOR	CONTRACTOR TO INSTALL 35% WINDOW TINT FILM ON 2ND SURFACE (INSIDE)	CONTRACTOR TO INSTALL 35% WINDOW TINT FILM ON 2ND SURFACE (INSIDE)

SCOOTER'S COFFEE
QUIKSERV NATIONAL ACCOUNT

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EMAIL: SALES@QUIKSERV.COM
11441 BRITTMOORE PARK DR
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WADE ARNOLD - ACCOUNT MANAGER
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EMAIL: WARNOLD@QUIKSERV.COM

BRIAN COBLE - WARRANTY
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PAULO RODRIGUEZ - PARTS
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1 WINDOW TYPES

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

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REGISTERED ARCHITECT
STATE OF ARKANSAS
License Number 2022
STATE OF ARKANSAS

09/01/2022

EST. 1998
SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
WINDOW SCHEDULE

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

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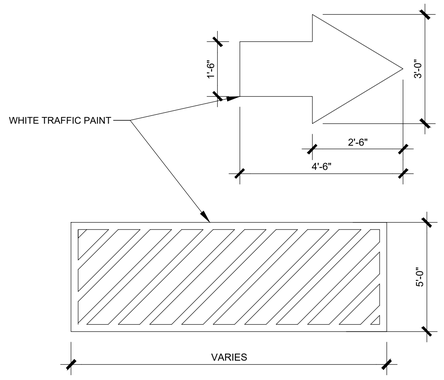
SHEET NO.
A6.1

MULTI-PIECE SHAFTS

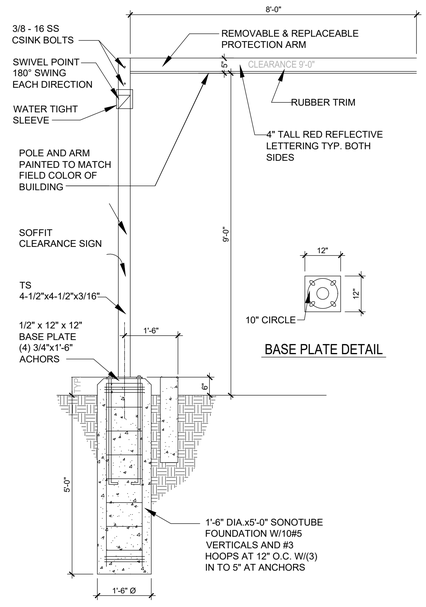
MINIMUM RECOMMENDED FOUNDATION DIMENSIONS

EXPOSED HEIGHT	A	B	C	D	E
20'	3'-0"	6"	3'-6"	24"	30"
25'	3'-0"	6"	3'-6"	24"	30"
30'	3'-0"	6"	3'-6"	24"	30"
35'	3'-6"	6"	4'-0"	30"	36"
40'	4'-0"	6"	4'-6"	36"	42"
45'	4'-6"	6"	5'-0"	42"	48"
50'	5'-0"	8"	5'-8"	42"	48"
60'	6'-0"	10"	6'-10"	42"	48"
70'	7'-0"	12"	8'-0"	48"	60"
80'	8'-0"	12"	9'-0"	48"	60"

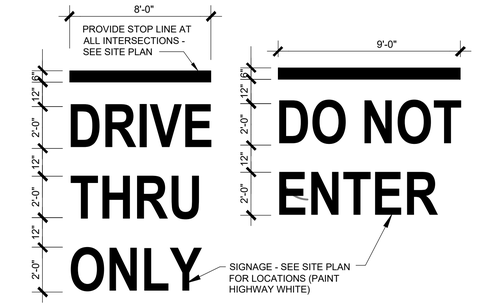
6 FLAGPOLE GROUND SET INSTALLATION
SCALE: NTS



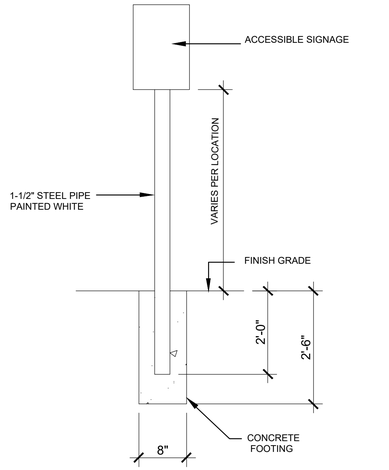
5 PAINTED TRAFFIC SYMBOLS
SCALE: NTS



4 HEIGHT CLEARANCE SIGN DETAIL
SCALE: NTS



3 PAINTED SIGNAGE AT PAVING
SCALE: NTS



2 SIGN DETAIL
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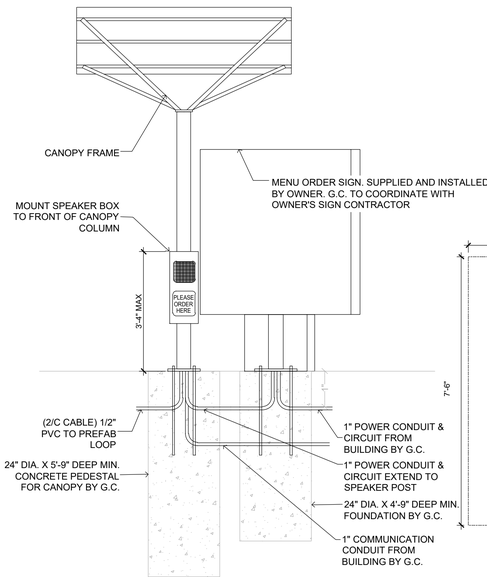

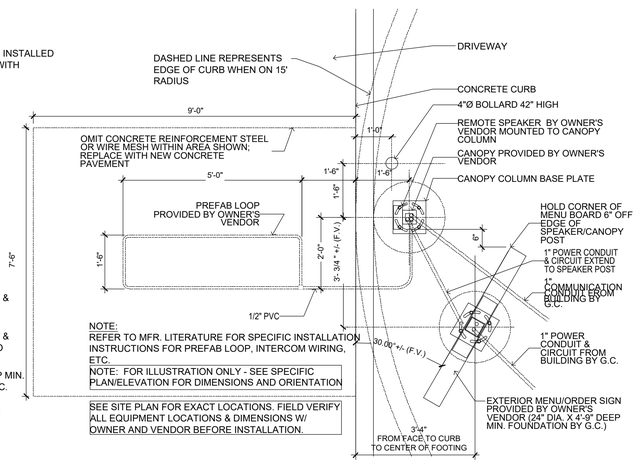

1 MENU BOARD CALLL BOX DETAIL
SCALE: NTS

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09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
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REVISIONS:

TITLE:
SITE DETAILS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

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SHEET NO.
A7.1

NOTE:
SIGNAGE UNDER A SEPARATE PERMIT

Missing or invalid reference
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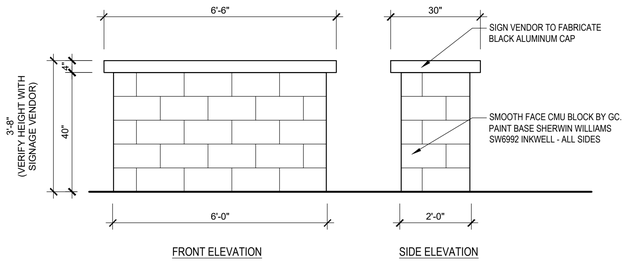
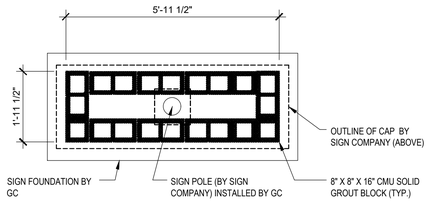
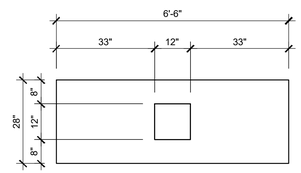
Sheet: 1



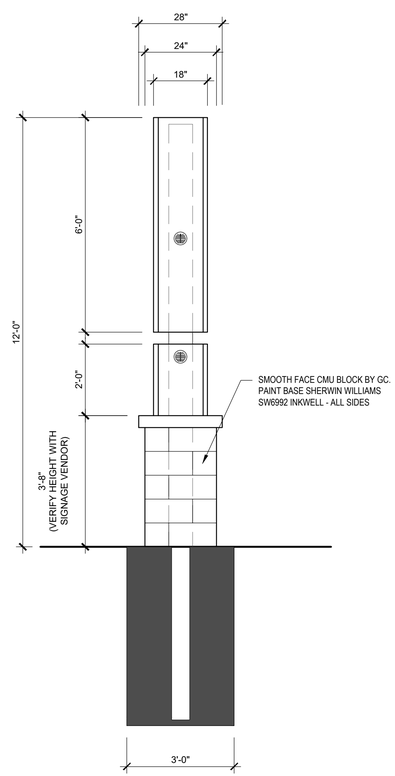
5 *MONUMENT BASE ELEVATION*
SCALE: 1/2" = 1'-0"



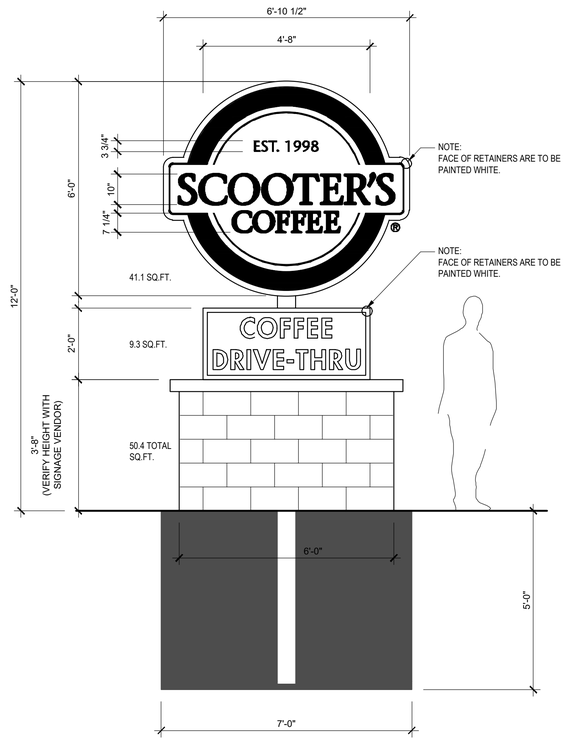
MONUMENT BASE - PLAN VIEW



3 *MONUMENT CAP - PLAN VIEW*
SCALE: 1/2" = 1'-0"



2 *MONUMENT SIGN - SECTION*
SCALE: 1/2" = 1'-0"



1 *MONUMENT SIGN - FRONT ELEVATION*
SCALE: 1/2" = 1'-0"

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09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
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REVISIONS:

TITLE:
MONUMENT SIGN DETAILS (FOR PRICING ONLY)

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

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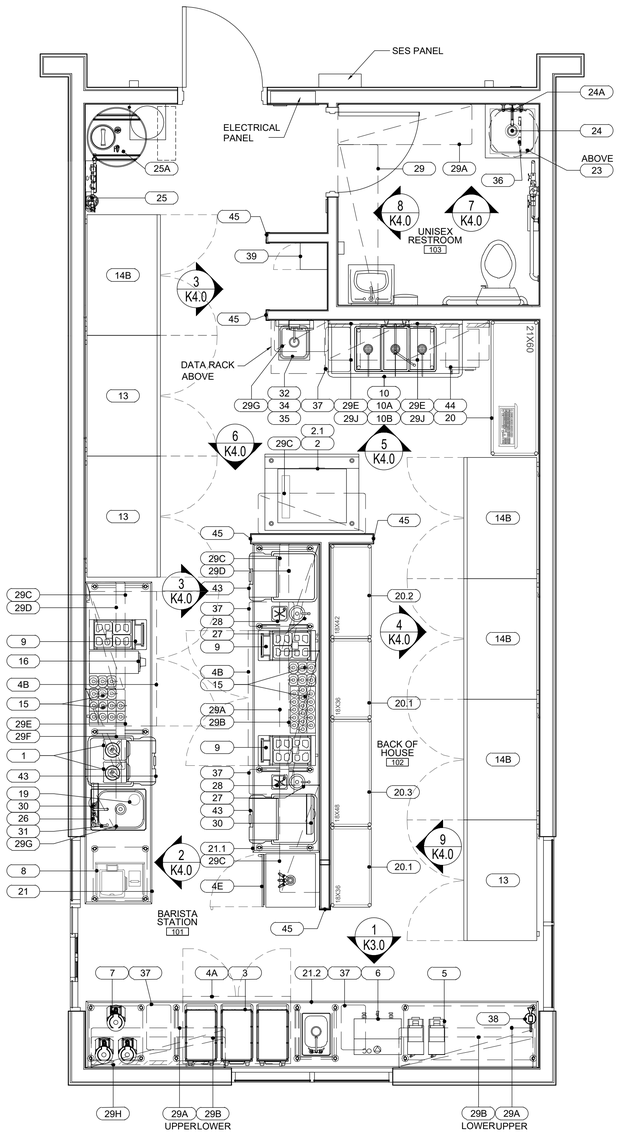
SHEET NO.
A7.2

EQUIPMENT SCHEDULE

ITEM / TAG	GENERAL DESCRIPTION	QTY	MANUFACTURER	MODEL #	CONTRACTOR		CLIENT / VENDOR		REMARKS	PROTO 4.0 UPDATED 6/28/21
					PROVIDE	INSTALL	PROVIDE	INSTALL		
1	BEVERAGE BLENDER	2	HARVEST ROASTING				X	X	120 V, 15 AMPS	
2	ICE MAKER	1	SCOTSMAN	C0530SA-1		X	X		GC SHALL PROVIDE WATER & DRAIN CONNECTIONS, WATER MUST BE FROM FILTERED LINE GC TO PROVIDE POWER CORD	
2.1	ICE STORAGE BIN	1	SCOTSMAN	B842S		X	X			
3	HIGH SPEED OVEN	3	MERRY CHEF	EIKON E2S			X	X	CLASSIC	
4A	U/C REFRIGERATOR (48")	1	ATOSA	MGF8402GR			X	X		
4B	U/C REFRIGERATOR (60")	2	ATOSA	MGF8403GR			X	X		
4C	U/C REFRIGERATOR (36")	N/A	TURBO-AIR	MUR-36-N6			X	X		
4E	U/C REFRIGERATOR (24")	1	PERLICK	HC24RS			X	X		
5	COFFEE GRINDER	2	BUNN	G2 HD 22102.0000			X	X	120 V 11 AMP CIRCUIT	
6	COFFEE BREWER	1	FETCO	CBS-2132XTS (E213252)			X	X	ELECTRICIAN SHALL PROVIDE RECEPTACLE AND END FOR WHIP	
7	COFFEE DISPENSER	3	FETCO	L4S-10 / D451			X	X	1 GALLON SATELLITE	
8	POS TERMINAL W/ PRINTER	1	CLOVER	CLOVER MINI			X	X		
9	ESPRESSO MACHINE	3	FRANKE	S700TS			X	X	30A, 220V CIRCUITS WITH TWIST LOCK NEMA L6-30R RECEPTACLES	
10	3-COMP SINK	1	JOHN BOOS	-			X	X		
13	REACH-IN REFRIGERATOR (2 DOOR)	3	KINTERA	KBM2R			X	X		
14A	REACH-IN FREEZER (1 DOOR)	N/A	KINTERA	KBM1R			X	X		
14B	REACH-IN FREEZER (2 DOOR)	4	KINTERA	KBM2F			X	X		
15	SYRUP STAND	8	HARVEST ROASTING				X	X		
16	MODULAR CUP DISPENSER	1	TRIMARK				X	X		
19	BLENDER JAR RINSER	1	HAMILTON BEACH	BCR100			X	X		
20	WIRE SHELVING (ON CASTERS)	1	OLYMPIC STORAGE	CHROME FINSIH 21"x60"			X	X	VERIFY REQUIREMENTS W/ OPERATIONS	
20.1	WIRE SHELVING	2	OLYMPIC STORAGE	CHROME FINSIH 18"x36"			X	X		
20.2	WIRE SHELVING	1	OLYMPIC STORAGE	CHROME FINSIH 18"x42"			X	X		
20.3	WIRE SHELVING	1	OLYMPIC STORAGE	CHROME FINSIH 18"x48"			X	X		
21	S/S COUNTER W/ PITCHER RINSER	1	JOHN BOOS	CUSTOM FAB			X	X		
21.1	S/S COUNTER W/ DIPPER WELLS	1	JOHN BOOS	CUSTOM FAB			X	X		
21.2	S/S COUNTER W/ HAND SINK	1	JOHN BOOS	CUSTOM FAB			X	X		
23	WATER HEATER	1	SEE PLUMB. SHEETS	TBD	X	X				
24	MOP SINK	1	SEE PLUMB. SHEETS	TBD	X	X				
25	WATER TREATMENT SYSTEM	1	OPTIPURE	BWS350		X	X		PROCESSOR 120V 6W	
25A	WATER STORAGE TANK & PUMP	1	OPTIPURE	50 GALLON		X	X		REPRESSURIZATION PUMP 120V 2A	
26	ZOOM TIMER	1	HM ELECTRONICS	NITRO		X	X			
27	BUILT-IN DIPPER WELL W/ FAUCET	2	FISHER	3041		X	X			
28	BUILT-IN FROTHING CUP RINSIER	2	ESPESSO PARTS	EPPR662		X	X			
29	WALL MOUNT WIRE SHELVING	1	OLYMPIC CHROME	18"x72"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
29A	WALL MOUNT WIRE SHELVING	4	OLYMPIC CHROME	18"x60"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
29B	WALL MOUNT WIRE SHELVING	3	OLYMPIC CHROME	14"x60"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
29C	WALL MOUNT WIRE SHELVING	4	OLYMPIC CHROME	18"x48"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
29D	WALL MOUNT WIRE SHELVING	2	OLYMPIC CHROME	14"x48"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
29E	WALL MOUNT WIRE SHELVING	3	OLYMPIC CHROME	18"x36"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
29F	WALL MOUNT WIRE SHELVING	1	OLYMPIC CHROME	14"x36"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
29G	WALL MOUNT WIRE SHELVING	2	OLYMPIC CHROME	14"x24"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
29H	SMART WALL	1	METRO METROSEAL	60"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
29J	SMART WALL	2	METRO METROSEAL	36"			X	X	PROVIDE EACH UNIT W/ WALL BRACKET HARDWARE	
30	DRIVE-THRU ORDER MONITOR	2	32" FLAT TV			X	X			
31	DECK MOUNT SINGLE FAUCET	1	T&S BRASS	B-0207		X	X		FOR BLENDER PITCHER RINSER	
32	WALL MOUNT HAND SINK	1	ADVANCE TABCO	7-PS-EC-SP-1X		X	X			
34	SOAP DISPENSER	1			X	X			SURFACE MOUNTED	
35	PAPER TOWEL DISPENSER	1			X	X			SURFACE MOUNTED	
36	MOP & BROOM RACK	1			X	X			SURFACE MOUNTED	
37	TRASH RECEPTACLE	5	TRIMARK			X	X			
38	FIRE EXTINGUISHER	1	AMEREX	2A:10B:C	X	X			SUPPLIED WITH WALL MOUNT HOOK BRACKET 888-16591	
39	EMPLOYEE LOCKERS	1	TRIMARK	DDB402			X	X	12X12X12 6 TIER G.C. TO ANCHOR TO WALL	
43	MOBILE ICE STORAGE BIN	3	CAMBRO	ICS100L110			X	X		
44	SAFE	1				X	X		BOLTED TO FLOOR BY G.C.	
45	WALL CORNER GUARD	10				X	X			

GENERAL NOTES:

1. ALL MILLWORK/STAINLESS STEEL COUNTERS/ WIRE SHELVES TO BE PROVIDED AND INSTALLED BY CONCEPT SERVICES, UNLESS OTHERWISE NOTED
2. THE WATER FILTRATION SYSTEM IS TYPICALLY TO BE INSTALLED IN BACK-OF-HOUSE AREA
3. THE REVERSE OSMOSIS SYSTEM IS TO BE INSTALLED NEXT TO THE WATER FILTRATION SYSTEM
4. G.C. TO INSTALL 12'W X 12'L X 12'D CONC. SLAB TO ACCEPT COMMUNICATION POST (PROVIDED BY OTHERS) - CONC. SLAB TO BE PLACED FROM FACE OF CURB IN LOCATION NOTED ON SCHEMATIC DRIVE-THRU MENU-BOARD & SPEAKER/INTERCOM PLAN - CONC. SLAB TO INCLUDE 2 BLANK CONDUITS LOCATED IN THE CENTER OF THE SLAB - ONE OF THESE CONDUITS TO BE RAN FROM THE CENTER OF SLAB TO INSIDE THE BUILDING TO THE LOCATION NEAR THE ELECTRICAL PANEL - THE OTHER CONDUIT WILL BE RAN FROM THE CENTER OF SLAB & CONNECTED TO THE UNDERGROUND LOOP SENSOR (PROVIDED BY OTHERS) IN DRIVE THRU LANE - NOTE: MENU BOARD LOCATION; PROVIDE A CONDUIT WITH POWER RAN TO THE OUTSIDE MENU BOARD LOCATION NOTED ON PLAN.
5. GC WILL NEED TO COORDINATE WITH COUNTERTOP FAB FOR PROPER LOCATION OF COUNTERTOP LEGS WITH FLOOR SINK LOCATION.



1 EQUIPMENT PLAN

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

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REGISTERED ARCHITECT
STATE OF ARKANSAS
License Number 2592

09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
EQUIPMENT PLAN & SCHEDULE

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
K1.0

PLUMBING ROUGH-IN NOTES:

1. ALL CONNECTIONS SHOWN ARE RELATIVE TO FOOD SERVICE EQUIPMENT ONLY.
2. THIS PLAN IS INTENDED TO SHOW EQUIPMENT PLUMBING REQUIREMENTS AND ROUGH-IN HEIGHTS ONLY.
3. GENERAL WATER PRESSURE IN KITCHEN AREA IS NOT TO EXCEED 50 PSI. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL PRESSURE REDUCING VALVES. FLOW CONTROLS, BACK FLOW PREVENTION, WATER HAMMER ARRESTOR, GATE VALVES, FOR WATER CONNECTIONS AS REQUIRED PER LOCAL CODES. NOTE: BOOSTER DISHMACHINES REQUIRE FLOW PRESSURE OF (20-25 PSI) OR AS SPECIFIED BY MANUFACTURER FOR PROPER INSTALLATION.
4. PLUMBING CONTRACTOR SHALL PROVIDE ALL ROUGH-IN AND FINAL CONNECTIONS TO ALL FOOD SERVICE FACILITIES EQUIPMENT. ALL WORK TO BE IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL CODES AS REQUIRED.
5. KITCHEN EQUIPMENT CONTRACTOR SHALL PROVIDE ALL FAUCETS AND DRAINS AS SPECIFIED. PLUMBING CONTRACTOR SHALL INSTALL AND CONNECT ALL FAUCETS WITH THE NECESSARY COMPONENTS TO MAKE FINAL CONNECTIONS PER LOCAL CODES.
6. WHEN ROUGH-IN IS OUT OF WALL, THIS INDICATES CONCEALED LINES, DO NOT RUN ANY EXPOSED LINES WHERE POSSIBLE.
7. ALL DIMENSIONS ARE TAKEN FROM FINISHED FLOORS AND FINISHED WALLS OR AS NOTED ON PLAN AND ARE BASED ON ARCHITECTURAL BACKGROUND AND OVERALL DIMENSIONS.
8. GENERAL GAS PRESSURE IN KITCHEN IS TO BE VERIFIED BY THE PLUMBING CONTRACTOR, THE PLUMBING CONTRACTOR IS REQUIRED TO FURNISH AND INSTALL GAS PRESSURE REDUCING VALVE(S) FOR ALL FOOD SERVICE EQUIPMENT AS APPLICABLE, FOR GAS PRESSURES INDICATED BY MANUFACTURER'S SPECIFIED WATER COLUMN (WC) SECONDLY, PLUMBING CONTRACTOR IS TO FURNISH AND INSTALL GAS SHUT OFF VALVE(S) AT POINT OF CONNECTION WITH EQUIPMENT AND INSTALL QUICK DISCONNECT GAS HOSE IF APPLICABLE.
9. WATER COOLED REFRIGERATION SYSTEMS ARE TO BE PROVIDED WITH A MINIMUM OF 1.5 GPM OF WATER SUPPLY AT 70 DEGREES F PER HORSEPOWER AND A MAXIMUM OF 200 CFM OF AIR EXCHANGE PER 12,000 BTU 8 TO 10 TIMES PER HOUR.
10. ANY AND ALL EXPOSED PIPING OF FITTINGS TO BE STAINLESS STEEL, CHROME PLATED OR ENCLOSED IN A STAINLESS STEEL CONCEALED, MOUNTED CHASE, OR AS SPECIFIED BY KITCHEN EQUIPMENT CONTRACTOR.
11. PLUMBING CONTRACTOR SHALL PROVIDE ALL STEAM AND CONDENSATE PIPING, AND SHALL INCLUDE PRESSURE REDUCING VALVES, STEAM TRAPS, SAFETY VALVES, SHUT-OFF VALVES, STRAINERS AS REQUIRED PER MANUFACTURER FOR PROPER INSTALLATION AND PER CODES APPLICABLE.
12. THE KITCHEN EQUIPMENT CONTRACTOR SHALL PROVIDE THE PRE-ASSEMBLED REMOTE REFRIGERATION COMPRESSOR'S) WITHOUT LINES AND REFRIGERANT, H.V.A.C. CONTRACTOR SHALL INSTALL, CONNECT AND CHARGE REFRIGERATION LINE SYSTEM'S), RUN AND CHECK FOR PROPER OPERATION UNLESS NOTED OTHERWISE.
13. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL 6" / 8" PVC CONDUIT FOR REMOTE SODA, BEER, OR LIQUOR DISPENSING SYSTEMS. PROVIDE 6" / 8" PVC CONDUIT AS INDICATED, WITH 24" MINIMUM SWEEPING BENDS.

ALL HAND WASHING SINKS SHALL BE OUTFITTED W/ OWNER FURNISHED WALL MOUNT SOAP & TOWEL DISPENSERS. DISPENSERS SHALL BE PROVIDED TO GENERAL CONTRACTOR PRIOR TO HEALTH DEPARTMENT INSPECTION.

ALL DIMENSIONED ROUGH-INS ARE BASED OFF OF SUPPLIED ARCHITECTURAL BACKGROUND. PLEASE CONFIRM ACTUAL SITE DIMENSIONS AS THIS WILL EFFECT FINAL LOCATIONS.

DIRECT ALL INDIRECT WASTES INTO FLOOR SINKS & FLOOR DRAINS PER LOCAL CODES. PLUMBING CONTRACTOR TO VERIFY THAT ALL FLOOR SINKS, FLOOR DRAINS, AND PLUMBING WASTES CONFORM TO LOCAL CODES.

GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL CORE DRILLING, ROOF PENETRATIONS, FLOOR CUTTING AND PATCHING FOR ALL BEER LINES, SODA LINES, REMOTE REFRIGERATION AND EXHAUST SYSTEMS.

PLUMBING ABBREVIATIONS

DIAM.	DIAMETER
C.W.	COLD WATER
H.W.	HOT WATER
W	WASTE
I.W.	INDIRECT WASTE
F.D.	FLOOR DRAIN
F.S.	FLOOR SINK
C.O.	CLEAN OUT
GAS	NATURAL & PROPANE
G.T.	GREASE TRAP
+DIM	HEIGHT TO CENTER LINE ABOVE FINISHED FLOOR

PLUMBING SYMBOLS

- GAS SUPPLY (NG/LP)
- WATER SUPPLY
- CONNECTION POINT
- WASTE THRU FLOOR
- FLOOR DRAIN
- SQUARE FLOOR SINK WITH 1/2 REMOVABLE COVER
- SQUARE FLOOR SINK WITH 3/4 REMOVABLE COVER
- SQUARE FLOOR SINK WITH FULL REMOVABLE COVER
- ROUND FLOOR SINK WITH 3/4 REMOVABLE COVER

PLUMBING ROUGH-IN NOTES

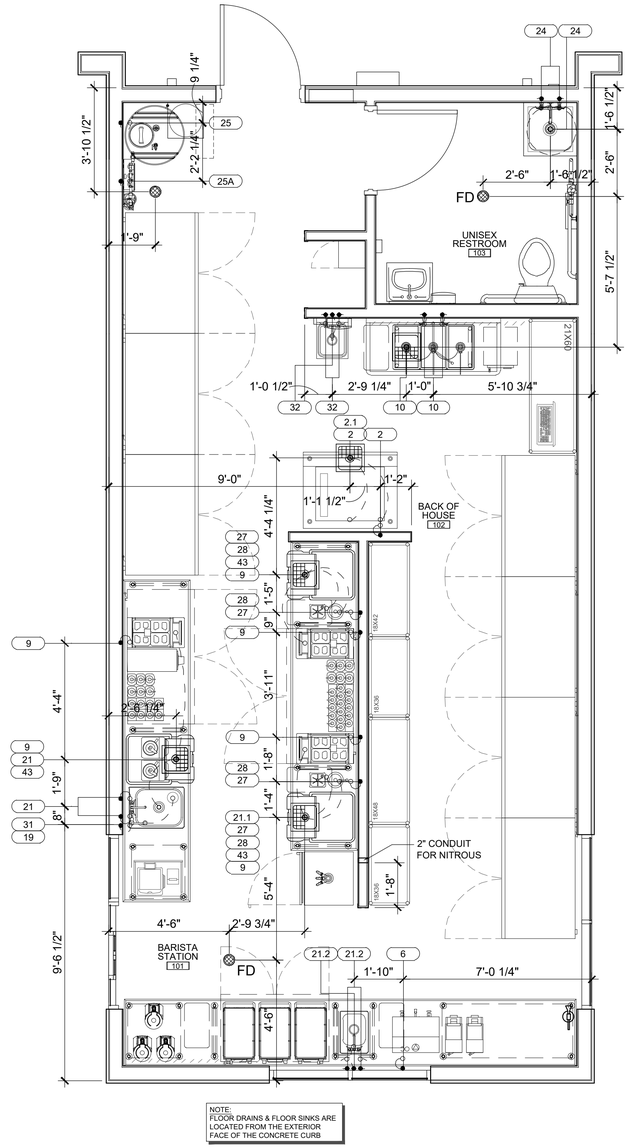
1. REQUIREMENTS SHOWN ARE FOR FOOD SERVICE EQUIPMENT ONLY. REFER TO PLUMBING PLANS FOR ADDITIONAL REQUIREMENTS.
2. SEE EQUIPMENT PLAN & SCHEDULE FOR ADDITIONAL INFORMATION.
3. THE P.C. SHALL PROVIDE ALL ROUGH-IN'S & FINAL CONNECTIONS REQUIRED.
4. DOT REPRESENTS ROUGH-IN LOCATION
   DOTTED LINE REPRESENTS FINAL CONNECTION *
   CIRCLE REPRESENTS CONNECTION ON EQUIPMENT *

* FINAL CONNECTION AND CONNECTION ON EQUIPMENT ARE SCHEMATIC ONLY. (NO ATTEMPT HAS BEEN MADE TO LOCATE THEM DIMENSIONALLY).

PLUMBING ROUGH-IN SCHEDULE

ITEM NO	QTY	EQUIPMENT CATEGORY	COLD WATER SIZE (IN)	COLD WATER AFF (IN)	HOT WATER SIZE (IN)	HOT WATER AFF (IN)	DIRECT WASTE SIZE (IN)	DIRECT WASTE AFF (IN)	INDIRECT WASTE SIZE (IN)	FILTERED WATER (REVERSE OSMOSIS)	PLUMBING REMARKS
2	1	ICE MAKER	0.375	60					0.75	0.5	INDIRECT WASTE TO FLOOR SINK
2.1	1	ICE STORAGE BIN							1		INDIRECT WASTE TO FLOOR SINK
6	1	COFFEE BREWER	0.375	48						0.5	
9	3	ESPRESSO MACHINE	0.375	48					0.375	0.5	INDIRECT WASTE TO FLOOR SINK
10	1	3-COMP SINK	0.5	12	0.5	12			2		INDIRECT WASTE TO FLOOR SINK
19	1	PITCHER RINSER	5/8"								HOSE TYPE CONNECTION TO ITEM #31
21	1	S/S COUNTER W/ PITCHER RINSER	0.5	12	0.5	12			1.5		INDIRECT WASTE TO FLOOR SINK
21.1	1	S/S COUNTER W/ DIPPER WELLS							2		INDIRECT WASTE TO FLOOR SINK
21.2	1	S/S COUNTER W/ HAND SINK	0.5	12	0.5	12	1.5	18			
24	1	MOP SINK	0.5	42	0.5	42	2				WASTE THRU FLOOR
25	1	WATER TREATMENT SYSTEM	0.375	72						0.5	
25A	1	WATER STORAGE TANK & PUMP	0.375	72							
27	2	BUILT-IN DIPPER WELL W/ FAUCET	0.375	22					1.5		INDIRECT WASTE TO FLOOR SINK
28	2	BUILT-IN FROTHING CUP RINSIER	0.5	22					0.5		INDIRECT WASTE TO FLOOR SINK
31	1	DECK MOUNT SINGLE FAUCET			0.5	22					
32	1	WALL MOUNT HAND SINK	0.5	22	0.5	22	1.5	18			
43	3	MOBILE ICE STORAGE BIN							.5		INDIRECT WASTE TO FLOOR SINK

NOTE: FLOOR SINKS DIMENSION ARE NOT DEAD SET, THEY WILL NEED TO BE LOCATED +6" OR MORE. GC WILL NEED TO COORDINATE WITH COUNTERTOP FAB FOR PROPER LOCATION OF COUNTERTOP LEGS WITH FLOOR SINK LOCATION.



NOTE:
FLOOR DRAINS & FLOOR SINKS ARE LOCATED FROM THE EXTERIOR FACE OF THE CONCRETE CURB

1 PLUMBING ROUGH-IN PLAN

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

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REGISTERED ARCHITECT
STATE OF ARKANSAS
License Number 2002

09/01/2022

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
EQUIPMENT PLUMBING ROUGH-IN PLAN & NOTES

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
K2.0

ELECTRICAL ROUGH-IN NOTES:

1. ALL FINAL CONNECTIONS SHOWN ON THIS DRAWING ARE ACTUAL REQUIREMENTS OF THE EQUIPMENT ARE SHOWN IN THEIR APPROXIMATE LOCATION.
2. LOCATION OF ROUGH-IN STUB IS INDICATED AT +DIMENSION, WHICH IS THE STUB-OUT ABOVE THE FINISHED FLOOR.
3. All DIMENSIONS ARE FROM AN ESTABLISHED BUILDING COLUMN LINE OR WALL AS INDICATED.
4. NUMBER NOT USED.
5. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ALL SWITCHES, STARTERS, DISCONNECTS, ETC. FOR ALL EQUIPMENT AND ICE MACHINES UNLESS NOTED OTHERWISE, ALL DISCONNECTS OR LOCK-OUT DEVICES, STARTERS, ETC. TO MEET N.E.C. AND O.S.H.A. STANDARDS.
6. ELECTRICAL CONTRACTOR TO PROVIDE CONTROL WIRING AND ELECTRICAL SERVICE FOR ALL REMOTE REFRIGERATION SYSTEMS. ALSO COORDINATE LOCATION FOR SERVICE WITH ELECTRICAL ENGINEER.
7. ELECTRICAL CONTRACTOR TO PROVIDE WRAP AROUND HEATER CABLE ON ALL EVAPORATOR DRAIN LINES IN WALK-IN FREEZER.
8. ELECTRICAL CONTRACTOR TO INSTALL AND WIRE EXTRA LIGHTS IN WALK-IN COOLERS AND FREEZERS AS REQUIRED, THRU DOOR SWITCH.
9. ELECTRICIAN TO BRANCH TO CONNECTION WHERE REQUIRED AND TO CONNECT ALL ELECTRICAL EQUIPMENT AND FIXTURES AND ICE MACHINES. ALSO DO ANY INTERNAL WIRING REQUIRED IN THE FIXTURES INCLUDING INTER-WIRING TO APPLIANCES AS REQUIRED BY THE SPECIFICATIONS AND/ OR DRAWINGS.
10. ALL ELECTRICAL OUTLET COVER PLATES ARE TO BE STAINLESS STEEL. THOSE REQUIRED IN BUILDING STRUCTURE ARE TO BE FURNISHED BY THE ELECTRICIAN, WITH RECEPTACLE. ALL MAIN BREAKER PANELS AND DISCONNECT SWITCHES REQUIRED BY OTHER ELECTRICAL DRAWINGS ARE TO BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AT TIME OF INSTALLATION.
11. IF ELECTRICAL COOKING EQUIPMENT IS SPECIFIED, ELECTRICAL CONTRACTOR TO PROVIDE TIE-IN WIRING BETWEEN FIRE PROTECTION BOTTLE CONTROL HEAD, MICRO-SWITCH AND COOKING EQUIPMENT TO COMPLY WITH APPLICABLE LOCAL CODE REQUIREMENTS FOR EMERGENCY SHUTDOWN OF ENTIRE COOKLINE. SHUNT TRIP CIRCUITRY MAY BE REQUIRED, SEE OTHER ELECTRICAL PLANS.
12. VERIFY WITH ARCHITECT OR OWNER'S REPRESENTATIVE, FINAL EQUIPMENT REQUIREMENTS BEFORE ORDERING MATERIAL. REVISIONS TO EQUIPMENT OR PERFORMANCE REQUIREMENTS MAY AFFECT THE ELECTRICIANS WORK.
13. ALL WORK, RELATING TO THE INSTALLATION AND HOOKUP OF THE SPECIFIED EQUIPMENT, IS TO BE PERFORMED IN FULL ACCORDANCE WITH APPLICABLE LOCAL, CITY, COUNTY, STATE AND FEDERAL CODES AND ALL OTHER GOVERNMENTAL REGULATORY REQUIREMENTS.
14. ELECTRICAL CONTRACTOR IS REQUIRED TO FURNISH AND INSTALL ALL ELECTRICAL COMPONENTS NECESSARY TO PROVIDE SERVICE TO LOCATIONS AND EQUIPMENT AS SHOWN ON THIS SHEET UNLESS NOTED OTHERWISE. ELECTRICAL CONTRACTOR IS ALSO RESPONSIBLE FOR MAKING FINAL CONNECTIONS TO EQUIPMENT AND FITTINGS SUPPLIED AND INSTALLED BY FSEC.
15. ALL ROUGH-IN'S SHOWN AT WALL LOCATIONS ARE TO BE LOCATED WITHIN INTERIOR OF WALL. COORDINATE WITH ARCHITECTURAL PLANS FOR ADDITIONAL FLOOR PLAN & BASE BUILDING ELECTRICAL REQUIREMENTS.

ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT, J BOXES AND STUB-INS FOR ALL DATA LINES TO AND FROM COMPUTERS, P.O.S. SYSTEM AND PRINTERS. PLEASE VERIFY ELECTRICAL REQUIREMENTS FROM P.O.S. PROVIDER.

ELECTRICAL CONTRACTOR TO INSTALL CONVENIENCE OUTLETS IN OFFICE AND OTHER OWNER AND ARCHITECT SPECIFIED AREAS.

ALL DIMENSIONED ROUGH-INS ARE BASED OFF OF SUPPLIED ARCHITECTURAL BACKGROUND. PLEASE CONFIRM ACTUAL SITE DIMENSIONS AS THIS WILL EFFECT FINAL LOCATIONS.

DIRECT ALL INDIRECT WASTES INTO FLOOR SINKS & FLOOR DRAINS PER LOCAL CODES. PLUMBING CONTRACTOR TO VERIFY THAT ALL FLOOR SINKS, FLOOR DRAINS, AND PLUMBING WASTES CONFORM TO LOCAL CODES.

GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL CORE DRILLING, ROOF PENETRATIONS, FLOOR CUTTING AND PATCHING FOR ALL BEER LINES, SODA LINES, REMOTE REFRIGERATION AND EXHAUST SYSTEMS.

ELECTRICAL ABBREVIATIONS

A.F.F. ABOVE FINISH FLOOR
B.F.F. BELOW FINISH FLOOR
S.U. STUB UP FROM FLOOR
D.F.A. DOWN FROM ABOVE
A AMPS
V VOLTS
PH. (ϕ) PHASE
PWR POWER
J.B. JUNCTION BOX
CONN. CONNECTION
D.R. DUPLEX RECEPTACLE
D.C.O. DUPLEX CONVENIENCE OUTLET
Q.R. QUAD RECEPTACLE
S.R. SINGLE RECEPTACLE
KW. KILOWATT
H.P. HORSEPOWER
+DIM HEIGHT TO CENTER LINE OF OUTLET BOX ABOVE FINISHED FLOOR

ELECTRICAL SYMBOLS

JB JUNCTION BOX SINGLE OR MULTI-GANG
DUPLEX RECEPTACLE SCHEDULED OR CONVENIENCE
QUAD RECEPTACLE SCHEDULED OR CONVENIENCE
SINGLE RECEPTACLE VOLTAGE & PHASE VARIES
$ SWITCH LIGHT SWITCH OR PULL STATION
EXHAUST HOOD LIGHT FIXTURE VAPOR PROOF LED OR CFL
WALK-IN LIGHT FIXTURE VAPOR PROOF LED OR CFL
PANEL BOARD OR LOAD CENTER

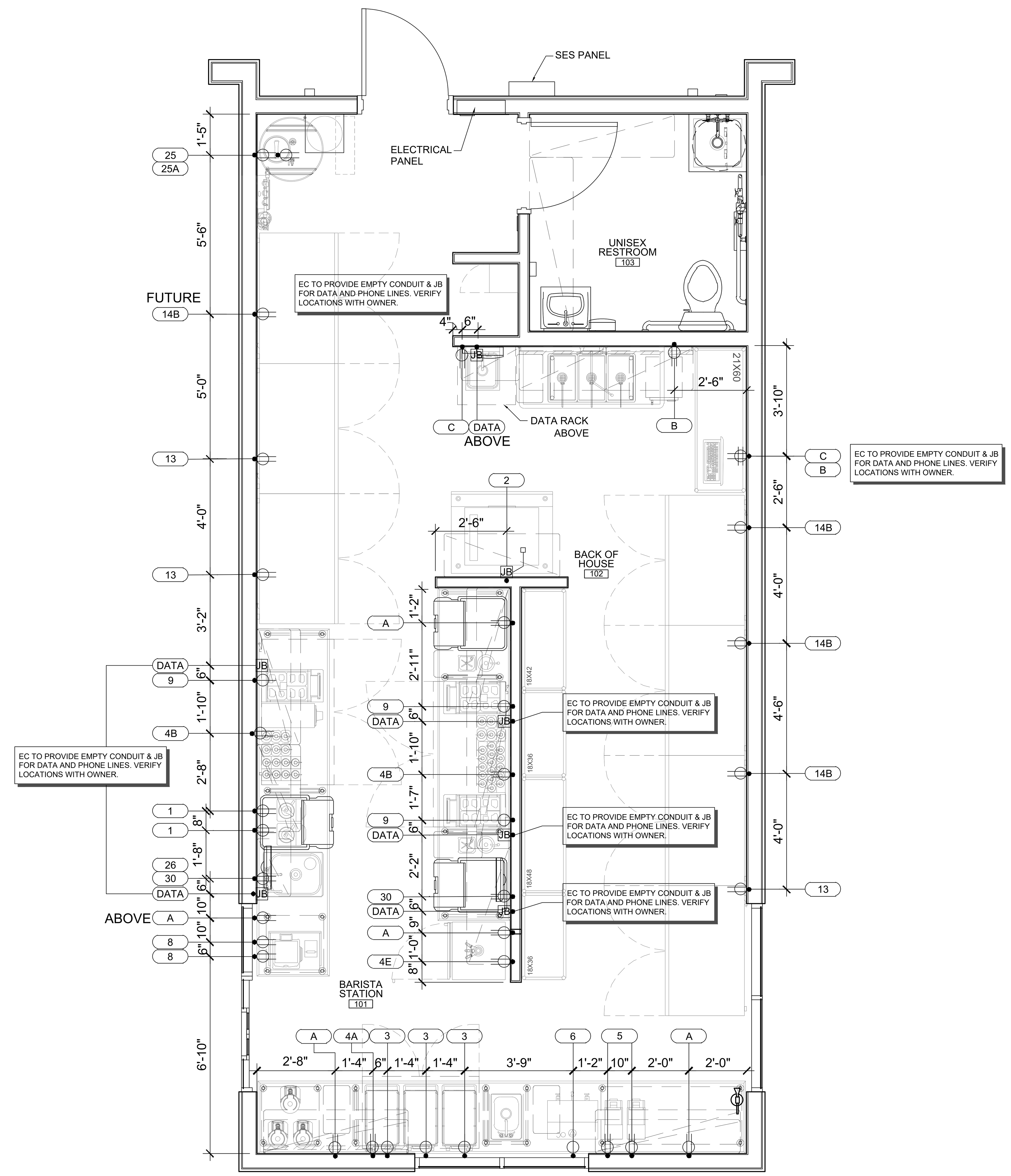
ELECTRICAL ROUGH-IN NOTES

1. REQUIREMENTS SHOWN ARE FOR FOOD SERVICE EQUIPMENT ONLY. REFER TO ELECTRICAL PLANS FOR ADDITIONAL REQUIREMENTS.
2. SEE EQUIPMENT PLAN & SCHEDULE FOR ADDITIONAL INFORMATION.
3. THE E.C. SHALL PROVIDE ALL ROUGH-IN'S & FINAL CONNECTIONS REQUIRED.
4. DOT REPRESENTS ROUGH-IN LOCATION
   DOTTED LINE REPRESENTS FINAL CONNECTION *
   SQUARE REPRESENTS CONNECTION ON EQUIPMENT *

* FINAL CONNECTION AND CONNECTION ON EQUIPMENT ARE SCHEMATIC ONLY. (NO ATTEMPT HAS BEEN MADE TO LOCATE THEM DIMENSIONALLY).

ELECTRICAL ROUGH-IN SCHEDULE

ITEM NO	QTY	EQUIPMENT CATEGORY	AMPS	KW	HP	VOLTS	PHASE	CYCLE	DIRECT	PLUG	NEMA	ELECTRICAL AFF (IN)	ELECTRICAL REMARKS
1	2	BEVERAGE BLENDER	13.0			120	1	60		X		48	EC TO PROVIDE CORD & PLUG
2	1	ICE MAKER	11.4			115	1	60	X			60	
3	3	HIGH SPEED OVEN	16.0	3.7		230	1	50		X	6-30P	48	
4A	1	U/C REFRIGERATOR (48")	3.0	0.6	0.2	115	1	60		X	5-15P	18	
4B	2	U/C REFRIGERATOR (60")	6.6		0.2	115	1	60		X	5-15P	18	
4C	N/A	U/C REFRIGERATOR (36")	6.6		0.2	115	1	60		X	5-15P	18	
4E	1	U/C REFRIGERATOR (24")	2.3		0.2	115	1	60		X	5-15P	18	
5	2	COFFEE GRINDER	11.0		0.8	120	1	60		X	5-15P	30	
6	1	COFFEE BREWER	23.7	5.2		120/220	1	60		X		30	EC TO PROVIDE CORD & PLUG
8	1	POS TERMINAL W/ PRINTER	15.0			120	1	60		X	5-15P	30	DEDICATED CIRCUIT
9	3	ESPRESSO MACHINE	30.0	6.2		208	1	60		X		48	EC TO PROVIDE CORD & PLUG
13	3	REACH-IN REFRIGERATOR (2 DOOR)	5.4	1.1	0.5	115	1	60		X	5-15P	48	
14A	N/A	REACH-IN FREEZER (1 DOOR)	9.6	1.1	1.0	115	1	60		X	5-15P	48	
14B	4	REACH-IN FREEZER (2 DOOR)	9.6	1.1	1.0	115	1	60		X	5-15P	48	
25	1	WATER TREATMENT SYSTEM				120	1	60		X	5-15P	84	
25A	1	WATER STORAGE TANK & PUMP	2.0			120	1	60		X	5-15P	18	
26	1	ZOOM TIMER	2.5			120	1	60		X	5-15P	84	
30	2	DRIVE-THRU ORDER MONITOR	15.0			120	1	60		X	5-15P	72	DEDICATED CIRCUIT
A	5	CONVENIENCE OUTLET (+48" AFF)	15.0			120	1	60		X	5-15P	48	MOUNT HORIZONTALLY AS NEEDED
B	2	CONVENIENCE OUTLET (+18" AFF)	15.0			120	1	60		X	5-15P	108	MOUNT HORIZONTALLY AS NEEDED
C	2	CONVENIENCE OUTLET (+42" AFF)	15.0			120	1	60		X	5-15P	42	MOUNT HORIZONTALLY AS NEEDED



1 ELECTRICAL ROUGH-IN PLAN
SCALE: 3/8" = 1'-0"

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09/01/2022

SCOOTER'S COFFEE EST. 1998

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
EQUIPMENT ELECTRICAL ROUGH-IN PLAN & NOTES

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
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[X] PERMIT/BID SUBMITTAL
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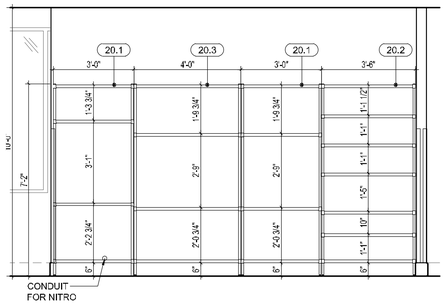
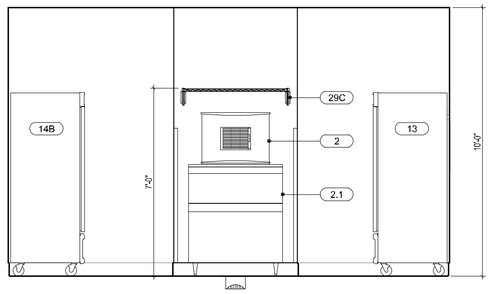
SHEET NO.
K3.0



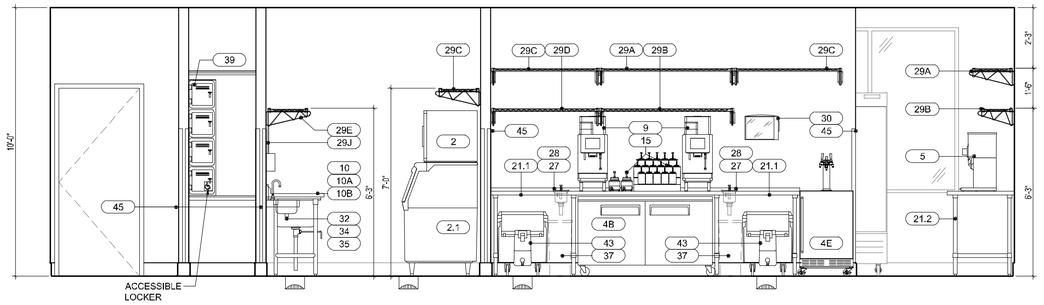
9 EQUIPMENT ELEVATION

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



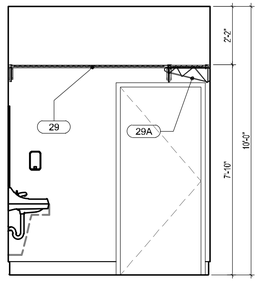
6 EQUIPMENT ELEVATION

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



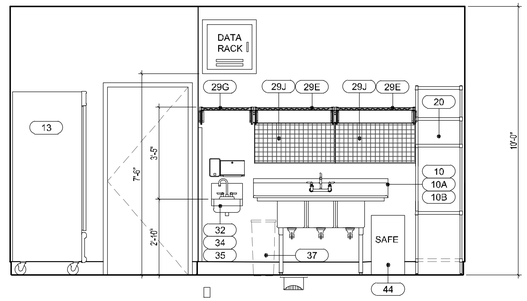
3 EQUIPMENT ELEVATION

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



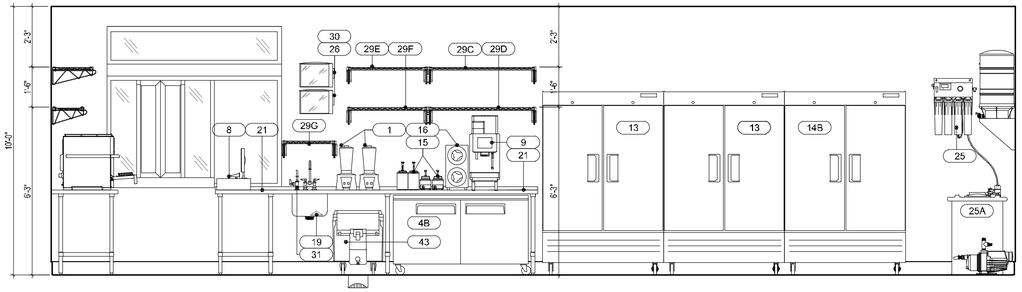
8 EQUIPMENT ELEVATION

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



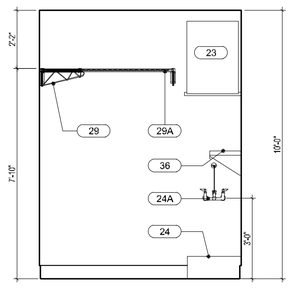
5 EQUIPMENT ELEVATION

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



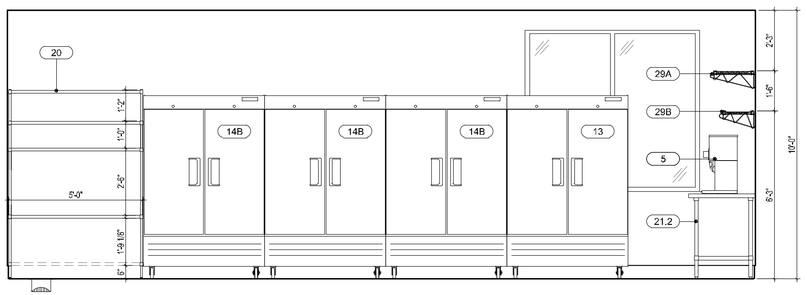
2 EQUIPMENT ELEVATION

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



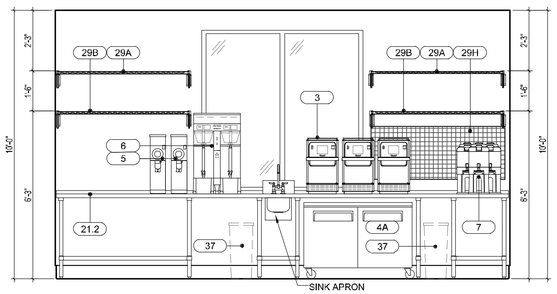
7 EQUIPMENT ELEVATION

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



4 EQUIPMENT ELEVATION

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



1 EQUIPMENT ELEVATION

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

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REGISTERED ARCHITECT
STATE OF ARKANSAS
License Number 2022

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PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
EQUIPMENT
ELEVATIONS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022

DATE:
09/01/2022

PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
K4.0

STRUCTURAL NOTES

GENERAL

1. THIS PROJECT SHALL MEET ALL REQUIREMENTS OF THE CITY OF BRYANT, ARKANSAS AND THE 2012 INTERNATIONAL BUILDING CODE.
2. THE GENERAL CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL OPENINGS (COORDINATE WITH APPLICABLE TRADES). THE CONTRACTOR SHALL PROVIDE FOR ALL OPENINGS, WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT. ANY DEVIATION FROM OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR APPROVAL PRIOR TO CONSTRUCTION.
3. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR INCONSISTENCIES BEFORE PROCEEDING WITH THE WORK.
4. COMPLETE SHOP DRAWINGS AS REQUIRED FOR THE STRUCTURAL WORK SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF CONSTRUCTION IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH REVIEW BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR CORRECT FABRICATION AND CONSTRUCTION OF THE WORK. ALLOW TEN (10) BUSINESS DAYS FOR REVIEW FROM THE TIME SUBMITTALS ARE RECEIVED IN OUR OFFICE.
5. ANY DEVIATION FROM, ADDITION TO, SUBSTITUTION FOR, OR MODIFICATION TO THE STRUCTURE OR ANY PART OF THE STRUCTURE DETAILED ON THESE DRAWINGS SHALL BE SUBMITTED IN WRITING TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW DO NOT CONSTITUTE "IN-WRITING" UNLESS IT IS CLEARLY NOTED THAT SPECIFIC CHANGES ARE BEING SUGGESTED.
6. THE STRUCTURAL DRAWINGS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.
7. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE WORKMEN AND OTHER PERSONS DURING CONSTRUCTION.

SPECIAL INSPECTION

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION:
(REFERENCE ADJACENT TABLES FOR ADDITIONAL INFORMATION.)

1. CAST-IN-PLACE CONCRETE
2. SOILS AND FOUNDATIONS

DESIGN LOADS

1. ROOF LIVE LOAD 20 PSF
2. ROOF DEAD LOAD 20 PSF
3. WIND LOAD BASED ON ASCE 7-10
   V_{ULT} = 115 MPH
   V_{ASD} = 89 MPH
   RISK CATEGORY = II
   EXPOSURE CATEGORY B
   INTERNAL PRESSURE COEFFICIENT GC_{pi}: ±0.18
   COMPONENTS AND CLADDING:
   (ROOF ANGLE 0 TO 7°)
   ULTIMATE
   +16.0 PSF (ZONE 1, EFF. AREA = 100 FT.²)
   −21.8 PSF
   +16.0 PSF (ZONE 2, EFF. AREA = 100 FT.²)
   −25.8 PSF
   +16.0 PSF (ZONE 3, EFF. AREA = 100 FT.²)
   −25.8 PSF
   +22.7 PSF (ZONE 4, EFF. AREA = 20 FT.²)
   −24.7 PSF
   +22.7 PSF (ZONE 5, EFF. AREA = 20 FT.²)
   −29.7 PSF
   43.8 PSF (PARAPETS, LOAD CASE A)
   47.8 PSF (PARAPETS, LOAD CASE B)
4. SEISMIC LOADS
   RISK CATEGORY: II
   I_e = 1.0
   S_s = 0.349g
   S_1 = 0.147g
   SITE CLASS C
   S_{DS} = 0.279g
   S_{D1} = 0.162g
   DESIGN CATEGORY: C
   BASIC SEISMIC-FORCE-RESISTING SYSTEM: LIGHT FRAME WALLS WITH SHEAR PANELS-WOOD STRUCTURAL PANELS.
   DESIGN BASE SHEAR V = 2,466 LBS
   R = 6.5
   ANALYSIS PROCEDURE: SIMPLIFIED ANALYSIS
5. SNOW LOADS
   GROUND SNOW Pg = 10 PSF
   FLAT ROOF SNOW Pf = 10 PSF
   C_e = 1.0
   I_S = 1.0
   C_t = 1.0
   REFER TO S0.1 FOR SNOW DRIFT LOADING REQUIREMENTS.
6. SEE ROOF PLAN FOR ADDITIONAL MECHANICAL LOADS.

FOUNDATION DESIGN AND SITEWORK FOR BUILDING

1. FOUNDATION DESIGN IS BASED ON RECOMMENDATIONS CONTAINED IN A GEOTECHNICAL INVESTIGATION REPORT BY: MTA ENGINEERS, INC.; DATED AUGUST 12, 2022; REPORT NO. GE022-294.
2. FOUNDATION DESIGN IS BASED ON A NET ALLOWABLE BEARING PRESSURE OF 2,500 PSF FOUNDED AT LEAST TWENTY FOUR (24) INCHES BELOW ADJACENT EXTERIOR GRADE INTO SUITABLE NEWLY PLACED SELECT FILL. CONTINUOUS STRIP FOOTINGS AND COLUMN FOOTING WIDTHS SHALL BE TWELVE (12) INCHES MINIMUM.
3. THE CONTRACTOR SHALL READ THE SOILS REPORT REFERENCED ABOVE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL SITE AND SUBGRADE PREPARATION RECOMMENDATIONS CONTAINED THEREIN. INFORMATION CONTAINED IN THE "FOUNDATION DESIGN AND SITEWORK FOR BUILDING" SECTION OF THE STRUCTURAL NOTES REPRESENTS A GENERAL OVERVIEW OF SITE WORK TO BE PERFORMED, AND SHALL NOT BE USED AS A SUBSTITUTE FOR THE SOILS REPORT REFERENCED ABOVE.
4. REMOVE ALL VEGETATION AND DEBRIS, INCLUDING PAVEMENTS, SIDEWALKS, BUILDING FOUNDATIONS, AND ABANDONED UTILITIES.
5. REMOVE EXISTING EXPANSIVE CLAY MATERIAL, 2-3 FT BELOW EXISTING GRADE, IDENTIFIED AS STRATUM 1 IN THE GEOTECHNICAL REPORT AND REPLACE WITH STRUCTURAL FILL.
6. SUBGRADES WITHIN THE PROPOSED BUILDING AREA SHOULD BE PROOFROLLED, IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER, WITH APPROPRIATE RUBBER-TIRE MOUNTED HEAVY CONSTRUCTION EQUIPMENT OR A LOADED DUMP TRUCK TO DETECT LOOSE YIELDING SOILS WHICH MUST BE REMOVED TO A STABLE SUBGRADE.
7. THE APPROVED SUBGRADE SHOULD BE SCARIFIED TO A DEPTH OF 6 TO 8 INCHES, MOISTURE CONDITIONED AND PROPERLY RECOMPACTED.
8. DURING WET WEATHER, SUBGRADE STABILITY PROBLEMS SHOULD BE EXPECTED. IN THE EVENT THE SUBGRADE IS EXPOSED TO SIGNIFICANT INCREASES IN MOISTURE AND SUBGRADE STABILITY PROBLEMS DEVELOP, OVEREXCAVATION ON THE ORDER OF 6 TO 8 INCHES SHOULD BE EXPECTED TO ACHIEVE A STABLE SUBGRADE.
9. PROVIDE POSITIVE DRAINAGE AWAY FROM EXCAVATIONS SO AS NOT TO ALLOW STANDING WATER FOR LONG PERIODS OF TIME.
10. ON SITE SOILS ARE NOT EXPECTED TO EXPERIENCE SUBSTANTIAL VOLUMETRIC CHANGES AND POTENTIAL VERTICAL MOVEMENTS DUE TO SHRINK/SWELL, ARE ESTIMATED TO BE LESS THAN 1 INCH. ANY MATERIAL REQUIRED TO LIFT SUGRADE ELEVATIONS SHALL MEET THE REQUIREMENTS OF THE GEOTECHNICAL REPORT, MOISTURE CONDITIONED AND COMPACTED ACCORDINGLY.
11. PROVIDE A VAPOR BARRIER CONSISTING OF 10 MIL POLYETHYLENE SHEETING PLACED DIRECTLY BELOW THE FLOOR SLAB.
12. DO NOT PUNCTURE THE VAPOR BARRIER. LAP AND TAPE ENDS.
13. PERFORM ALL SITEWORK UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER.
14. REFERENCE THE SOILS REPORT FOR ANY QUESTIONS CONCERNING SUBGRADE PREPARATION, SITE CONDITIONS OR FOUNDATION PLACEMENT.

CONCRETE

1. ALL CONCRETE SHALL BE NORMAL WEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS, (U.N.O.).
2. CEMENT SHALL CONFORM TO ASTM C150, AND SHALL BE TYPE I OR TYPE II MATERIAL, U.N.O.
   MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.55.
3. MINIMUM CEMENT CONTENT SHALL BE 5 SACKS PER CUBIC YARD.
4. TYPE C OR F FLY ASH MAY BE USED UP TO 20% OF TOTAL CEMENT CONTENT BY VOLUME. THIS IS ONLY FOR CONCRETE SPECIFIED IN THESE STRUCTURAL DRAWINGS. REFER TO SPECIFICATIONS BY OTHER DISCIPLINES.
5. MAXIMUM SLUMP SHALL BE 5 IN., U.N.O.
6. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE'S "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 301.
7. CONCRETE MIX SHALL NOT USE ANY ADMIXTURES WHICH CONTAIN CALCIUM CHLORIDE.
8. CONCRETE TEST REPORTS SHALL BE MADE AVAILABLE AT THE JOB SITE. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN PER SPECIFICATIONS PRIOR TO PLACEMENT CONCRETE.

REINFORCING STEEL

1. BARS SHALL BE ASTM A615, GRADE 60.
2. DETAIL, FABRICATE, AND PLACE IN CONFORMANCE WITH ACI 315 AND 318.
3. LAP ALL REINFORCING STEEL 40 BAR DIAMETERS (U.N.O.).
4. LAP CONTINUOUS BARS IN GRADE BEAMS 40 BAR DIAMETERS (U.N.O. ON DRAWINGS). TOP BARS TO BE SPLICED BETWEEN SUPPORTS AND BOTTOM BARS TO BE SPLICED AT SUPPORTS, AS APPLICABLE.
5. PROVIDE ACCESSORIES FOR SUPPORT OF ALL REINFORCING.
6. SUBMIT SHOP DRAWINGS SHOWING ALL REINFORCING FOR APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD.
7. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

	MINIMUM COVER, IN.
A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
B. CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 THROUGH #18 BAR	2
#5 BAR, W31 OR D31 WIRE, AND SMALLER	1½
C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLABS, WALLS, JOISTS:	
#14 AND #18 BARS	1½
#11 BAR AND SMALLER	¾
BEAMS, COLUMNS:	
PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS	1½

CONCRETE MASONRY UNITS

1. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, TYPE 1, WITH COMPRESSIVE STRENGTH (f'm) OF 1,500 PSI
2. GROUT FOR CONCRETE MASONRY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI
3. MORTAR SHALL BE TYPE N, U.N.O.
4. REINFORCING IN MASONRY WALLS SHALL BE GRADE 60, ASTM A615.
5. TYPICAL REINFORCING:
   VERTICAL - REF. PLAN FOR SIZE AND SPACING
   HORIZONTAL - 9 GAGE WIRE LADDER-MESH (BY HOHMANN & BARNARD INC.) OR APPROVED EQUAL AT 16" O.C. IN MASONRY WALLS, EXCEPT AT 8" O.C. FOR WALL BELOW GRADE OR STACK BOND WALLS (U.N.O. ON DRAWINGS).
6. MATERIALS AND WORKMANSHIP SHALL CONFORM TO DESIGN REQUIREMENTS BASED UPON THE AMERICAN CONCRETE INSTITUTES "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", ACI 530.

STRUCTURAL WOOD

1. WOOD FRAMING SHALL COMPLY WITH THE SOUTHERN PINE INSPECTION BUREAU, OR SHALL CONFORM TO SPECIFICATIONS AS PUBLISHED BY THE WESTERN WOODS PRODUCTS ASSOCIATION.
2. WOOD FRAMING 2 INCHES X 4 INCHES AND LARGER SHALL BE NO. 2 SOUTHERN PINE, NO. 2 DOUGLAS FIR LARCH, OR EQUIVALENT (U.N.O.).
3. ALL EXPOSED WOOD FRAMING, UNLESS NOTED OTHERWISE, SHALL BE "SELECT" GRADE LUMBER.
4. ALL PLATES IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED (USE CATEGORY 2 AS SPECIFIED BY AWPA) FOR MOISTURE PROTECTION. ALL WOOD EXPOSED TO WEATHER SHALL BE PRESSURE TREATED (USE CATEGORY 3B AS SPECIFIED BY AWPA) OR WESTERN RED CEDAR.
5. STRUCTURAL COMPOSITE LUMBER (SCL)
   A. STRUCTURAL CAPACITIES FOR STRUCTURAL COMPOSITE LUMBER SHALL BE ESTABLISHED AND MONITORED IN ACCORDANCE WITH ASTM D5456.
   B. MINIMUM DESIGN VALUES FOR SCL MEMBER SHALL CONSIST OF THE FOLLOWING:
      a. LAMINATED VENEER LUMBER (LVL); 1½" TO 7" THICK MEMBERS (BEAM/JOIST ORIENTATION)
         E = 2.0×10^6 PSI $F_{C(PERP)}$ = 750 PSI
         F_b = 2,900 PSI $F_{C(PARAL)}$ = 2,635 PSI
         F_v = 285 PSI SG = 0.50
         F_t = 1,660 PSI
6. ROOF DECK
   A. ALL ROOF DECK SHALL BE APA RATED GRADE PLYWOOD OR OSB (ORIENTED STRAND BOARD). GRADES MAY HAVE EITHER AN EXTERIOR OR EXPOSURE I DESIGNATION (U.N.O.).
   B. ROOF SHEATHING SHALL BE $^{19}/_{32}$ INCH THICK MINIMUM (40/20) U.N.O.
   C. STAGGER ENDS OF SHEETS.
   D. PROVIDE BLOCKING AT EDGES OF ALL ROOF SHEETS. PLYWOOD CLIPS MAY BE USED AT ROOF INSTEAD OF BLOCKING, UNLESS BLOCKING REQUIRED FOR NAILING.
   E. NAIL EDGES OF ROOF SHEETS AT 6 IN. O.C. MAXIMUM (U.N.O.).
   F. NAIL FACES OF ROOF SHEETS AT 12 IN. O.C. MAXIMUM.
   G. USE MINIMUM 10d COMMON NAILS (U.N.O.).
7. WALL SHEATHING
   A. ALL WALL SHEATHING SHALL BE APA RATED GRADE PLYWOOD OR OSB (ORIENTED STRAND BOARD). GRADES MAY HAVE EITHER AN EXTERIOR OR EXPOSURE I DESIGNATION (U.N.O.).
   B. WALL SHEATHING SHALL BE $^{15}/_{32}$ INCH THICK MINIMUM (32/16) U.N.O.
   C. STAGGER ENDS OF SHEETS.
   D. PROVIDE BLOCKING AT EDGES OF ALL SHEARWALL SHEETS.
   E. NAIL EDGES OF SHEARWALL SHEETS PER SCHEDULE ON PLAN (OTHER WALLS AT 6 IN. O.C. MAXIMUM).
   F. NAIL FACES OF WALL SHEETS AT 12 IN. O.C. MAXIMUM.
   G. USE MINIMUM 10d COMMON NAILS (U.N.O.).
8. CONNECTORS SHALL BE AS MANUFACTURED BY THE SIMPSON CO. OR APPROVED EQUAL. CONNECTORS USED WITH PRESSURE TREATED LUMBER OR IN UNCONDITIONED SPACE, SHALL HAVE THE ZMAX (G185) COATING. ALL NAILS USED FOR CONNECTORS SHALL MATCH THOSE SPECIFIED BY THE SUPPLIER'S PRODUCT CATALOG.
9. NAILING, UNLESS NOTED OTHERWISE, SHALL BE PER THE 2012 INTERNATIONAL BUILDING CODE.
10. ALL REFERENCES TO NAILS ON THE STRUCTURAL DRAWINGS ARE BASED ON COMMON WIRE NAILS (U.N.O.) WITH THE FOLLOWING DIMENSIONS, TYPICAL, U.N.O.
    8d COMMON: 0.131" DIA. X 2½" LONG
    10d COMMON: 0.148" DIA. X 3" LONG
    16d COMMON: 0.162" DIA. X 3½" LONG
    POWER AUTOMATED NAIL GUNS SHALL USE NAILS TO MATCH THE ABOVE NAILS AS SPECIFIED.

POST-INSTALLED ANCHORS

1. EXCEPT WHERE INDICATED ON THE DRAWINGS, THE FOLLOWING HILTI OR SIMPSON PRODUCTS MAY BE USED. CONTACT HILTI AT (800) 879-8000 OR SIMPSON AT WWW.STRONGTIE.COM FOR PRODUCT RELATED QUESTIONS.
   A. ANCHORAGE TO CONCRETE
      a. ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
         (1) HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HIT-Z ROD OR HAS -E THREADED ROD PER ICC-ES ESR-3187.
         (2) SIMPSON SET-3G SYSTEM WITH F1554 THREADED ROD PER ICC-ES ESR-4057
      b. MEDIUM DUTY MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
         (1) HILTI KWIK HUS EZ AND KWIK HUS EZ-I SCREW ANCHORS PER ICC-ES ESR-3027
         (2) SIMPSON TITEN HD SCREW ANCHORS PER ICC-ES ESR-2713
         (3) SIMPSON TITEN HD STAINLESS STEEL SCREW ANCHOR PER IAMPO UES ER-493
   B. REBAR DOWELING INTO CONCRETE
      a. ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
         (1) HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM WITH CONTINUOUSLY DEFORMED REBAR PER ICC ESR-3187.
         (2) SIMPSON SET-3G SYSTEM WITH CONTINUOUSLY DEFORMED REBAR PER ICC-ES ESR-4057.
2. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.
3. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
4. CONTRACTOR SHALL USE THE NECESSARY MEANS, AS REQUIRED BY OSHA, TO PROTECT FROM DUST DURING DRILLING OPERATIONS.
5. INSTALL ACCORDING TO MANUFACTURER'S SPECIFICATIONS. THREADED ROD AND REBAR DIAMETERS AND EMBEDMENT LENGTHS SHALL BE AS NOTED ON DRAWINGS.
6. OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING PRODUCTS WHICH HAVE SPECIFIC APPLICATIONS THAT ARE INTENDED FOR OVERHEAD USE.
7. THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.
8. ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
9. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS, BY FERROSCAN, GPR, X-RAY, CHIPPING OR OTHER MEANS.

Statement of Special Inspections

This Statement of Special Inspections / Quality Assurance Plan includes the following building systems:

- ☒ Soils and Foundations
- ☒ Cast-in-Place Concrete
- ☐ Masonry
- ☐ Structural Steel
- ☐ Wood Construction
- ☐ Special Cases

General Notes

The inspectors and testing agencies shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official, prior to commencing work.

The qualifications of all personnel performing Special Inspections and testing activities are subject to the approval of the Building Official and E.O.R. The credentials of all inspectors and testing technicians shall be provided if requested.

The special inspectors shall keep records of inspections and shall furnish inspection reports to the owner, Engineer of Record (E.O.R.) and Architect of Record (A.O.R.). Field and testing result reports shall be submitted to all designated parties as they are completed. The reports shall indicate that the work performed was done in accordance to the construction drawings. Discrepancies shall be brought to the attention of the general contractor for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the E.O.R. prior to completion of that phase of work. A final report that documents required special inspections and corrections of discrepancies shall be submitted by the General Contractor to the Owner, E.O.R. and A.O.R.

Cast-in-Place Concrete

Item	Scope	Monitoring: Periodic (P) Continuous (C)
1. Mix Design	*Review concrete batch tickets and verify compliance with approved mix design. Verify that water added at the site does not exceed that allowed by the mix design. Submit proposed mix design of each class of concrete to Structural Engineer of Record and to inspection and testing firm for review prior to commencement of work.*	*P*
2. Material Certification	*Review for conformance to contract documents. Submit to Structural Engineer of Record for review.*	*P*
3. Reinforcement Installation	*Inspect size, spacing, cover, positioning and grade of reinforcing steel. Verify that reinforcing bars are free of form oil or other deleterious materials. Inspect bar laps and mechanical splices. Verify that bars are adequately tied and supported on chairs or bolsters. Submit certified copies of mill test report of reinforcement materials analysis.*	*P*
4. Anchor Rods	*Inspect size, positioning and embedment of anchor rods. Inspect concrete placement and consolidation around anchors.*	*C*
5. Concrete Placement	*Inspect placement of concrete. Verify that concrete conveyance and depositing avoids segregation or contamination. Verify that concrete is properly consolidated.*	*C*
6. Sampling and Testing of Concrete	*Test concrete compressive strength (ASTM C31 & C39), slump (ASTM C143), air-content (ASTM C231 or C173) and temperature (ASTM C1064). Three concrete test cylinders will be taken for every 75 or less cubic yards of each class of concrete placed, or concrete placed on any given day. One additional test cylinder will be taken during cold weather concreting, cured on job site under same conditions as concrete represents.*	*C*
7 Curing and Protection	*Inspect curing, cold weather protection and hot weather protection procedures.*	*P*

Note: Special Inspection is not required for flatwork patios, driveways and sidewalks, on grade not shown on structural drawings.

Soils and Foundations

Item	Scope	Monitoring: Periodic (P) Continuous (C)
1. Shallow Foundations	*Inspect soils below footings for adequate bearing capacity and consistency with geotechnical report.*	*P*
	Inspect removal of unsuitable material and preparation of subgrade prior to placement of controlled fill.	*C*
2. Controlled Structural Fill	*Perform sieve tests (ASTM D422 & D1140) and modified Proctor tests (ASTM D1557) of each source of fill material.*	*C*
	Inspect placement, lift thickness and compaction of controlled fill.	
	Test density of each lift of fill by nuclear methods (ASTM D2922)	
	Verify extent and slope of fill placement.	

Note:
1. Special Inspection is not required during placement of controlled fill having a total depth of 12 inches or less.

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EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

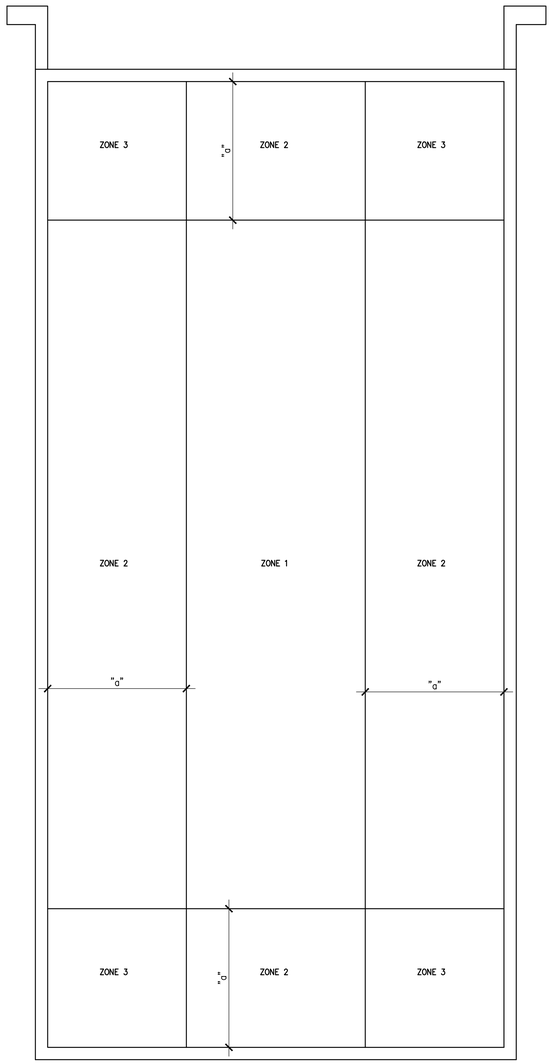
REVISIONS:

TITLE:
STRUCTURAL NOTES AND SPECIAL INSPECTIONS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

☒ PERMIT/BID SUBMITTAL
☐ CONSTRUCTION ISSUE

SHEET NO.
S0.0

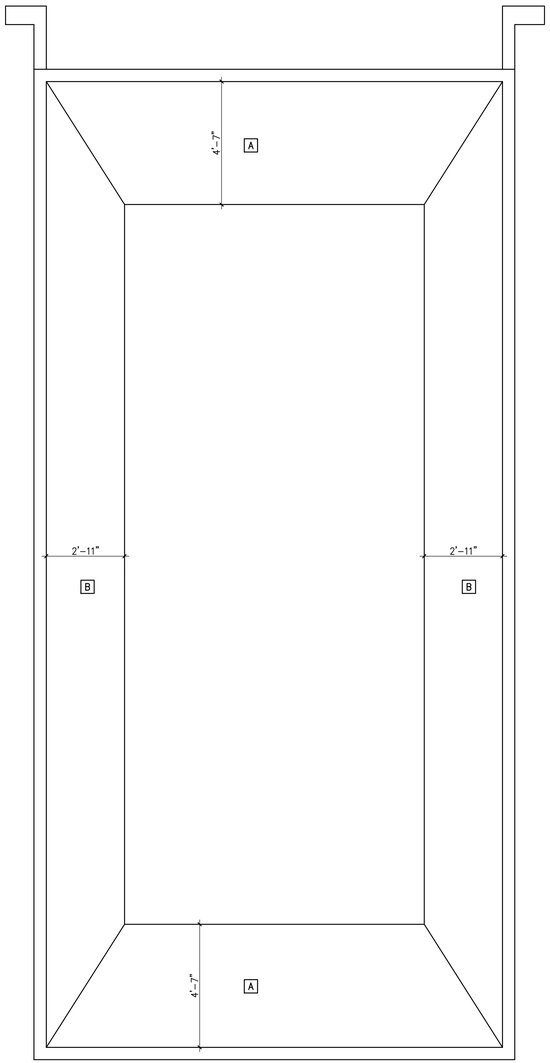


01 COMPONENTS & CLADDING WIND UPLIFT ZONES DIAGRAM

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

NOTES:

1. "a" = 5'-3" DIMENSION FROM INSIDE FACE OF WALL STUD.

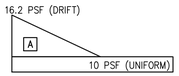


02 SNOW DRIFT DIAGRAM

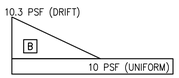
SCALE: 3/8"=1'-0"

NOTES:

1. DRIFT LOADS INDICATED ARE TO BE APPLIED ON TOP OF UNIFORM SNOW LOAD.
2. [X] – INDICATES DRIFT TYPE.



SNOW DRIFT DIAGRAM



SNOW DRIFT DIAGRAM

SHEARWALL SCHEDULE			
TYPE	NAIL SPACING	HOLDOWN	ANCHOR BOLTS
(1)	10d @ 6" O.C.	HDU8-SDS2.5	⅝"ø @ 24" O.C.
(2)	10d @ 6" O.C.	HDU5-SDS2.5	⅝"ø @ 24" O.C.
(3)	10d @ 6" O.C.	HDU2-SDS2.5	⅝"ø @ 32" O.C.
(4)	10d @ 6" O.C.	HDU2-SDS2.5	⅝"ø @ 32" O.C.

(X) – DESIGNATES SHEARWALL TYPE – REFER TO PLANS ON S1.0

NOTES:

1. USE 10d COMMON NAILS.
2. NAIL PANEL FACES @ 12" O.C.
3. USE ½" PLYWOOD ON EXTERIOR
4. STAGGER PLYWOOD JOINT AND SILL PLATE NAILING.
5. FRAMING MEMBERS OR BLOCKING SHALL BE PROVIDED AT THE EDGES OF ALL SHEETS IN SHEARWALLS.
6. REFER TO 01/S2.1 FOR HOLD DOWN ANCHOR EMBEDMENT.
7. HOLD DOWN ANCHORS MUST BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.

*8. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3 INCH NOMINAL OR THICKER AND NAILS SHALL BE STAGGERED WHERE NAILS ARE SPACED AT 2" O.C. OR ARE ON EACH FACE.

03 SHEARWALL SCHEDULE

SCALE: N.T.S.

HEADER SCHEDULE	
TYPE	SIZE
(A)	(3) 2x10 W/ (2) ½" PLYWOOD SPACERS
(B)	(3) 2x8 W/ (2) ½" PLYWOOD SPACERS
(C)	(3) 2x6 W/ (2) ½" PLYWOOD SPACERS

(X) – DESIGNATES HEADER TYPE. REFER TO PLANS ON S1.0

NOTES:

1. REFER TO 05/S3.0 FOR TYPICAL HEADER FRAMING REQUIREMENTS.

04 HEADER SCHEDULE

SCALE: N.T.S.

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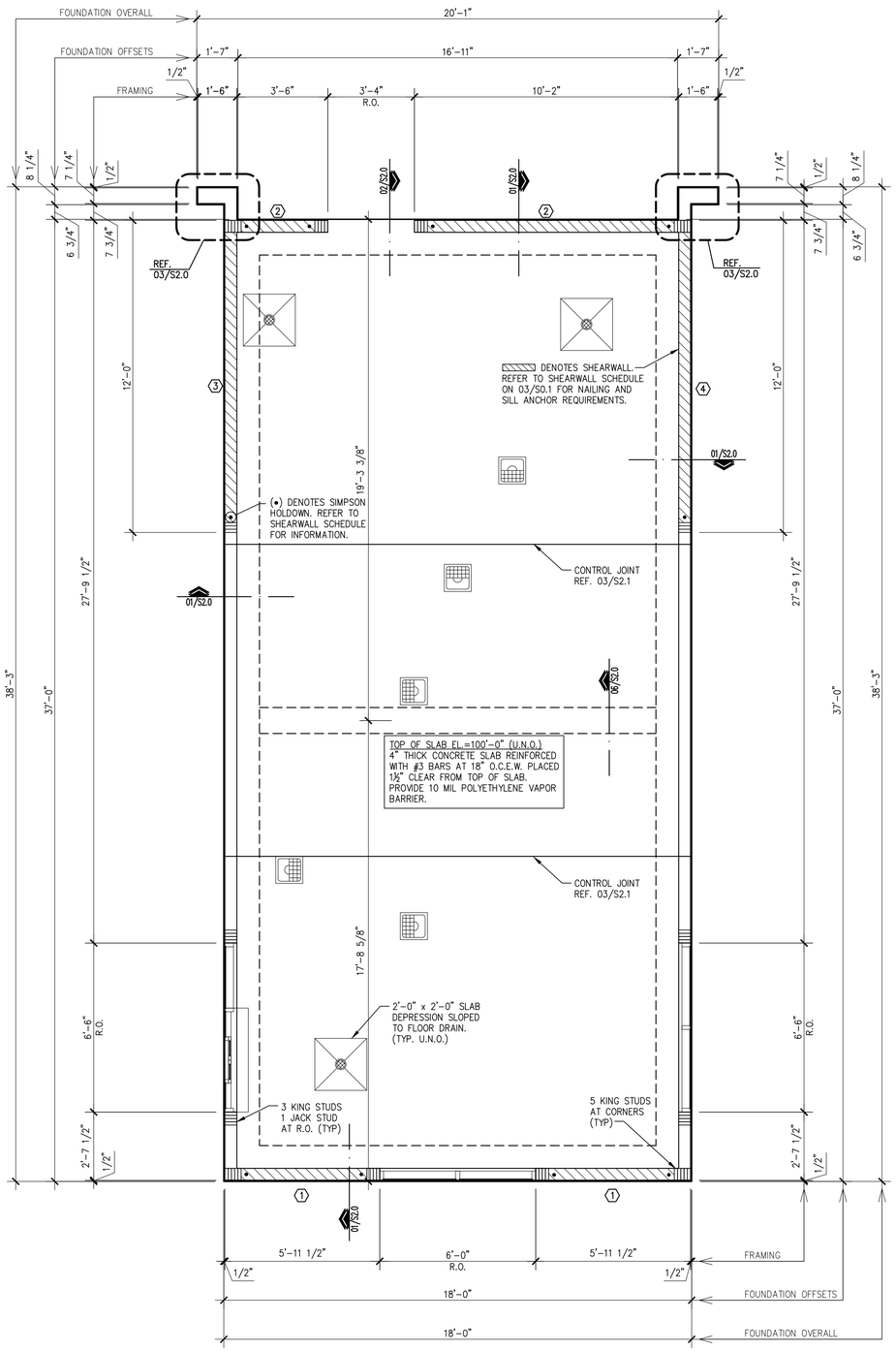
[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
S0.1



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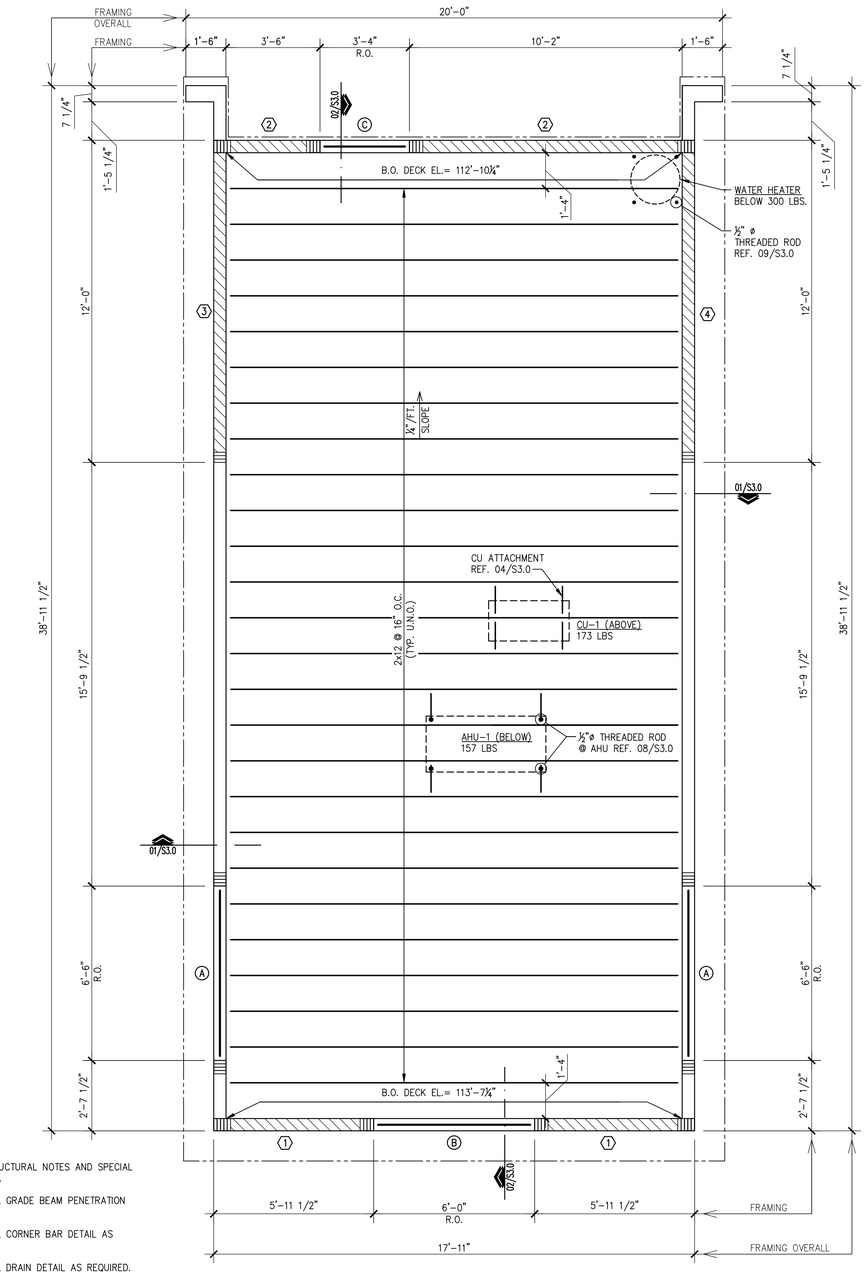
01 FOUNDATION PLAN

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



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02 ROOF FRAMING PLAN

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

PLAN NOTES:

1. REF. SHEET S0.0 FOR STRUCTURAL NOTES AND SPECIAL INSPECTION REQUIREMENTS.
2. REF. 02/S2.1 FOR TYPICAL GRADE BEAM PENETRATION DETAIL AS REQUIRED.
3. REF. 04/S2.1 FOR TYPICAL CORNER BAR DETAIL AS REQUIRED.
4. REF. 05/S2.1 FOR TYPICAL DRAIN DETAIL AS REQUIRED.
5. REF. 06/S2.1 FOR TYPICAL CURB DETAIL AS REQUIRED.
6. REF. 07/S2.1 FOR LIGHT POST DETAIL AS REQUIRED.
7. REF. 08/S2.1 FOR DUMPSTER ENCLOSURE WALL. REFER TO 10/S2.1 FOR ALTERNATE MONOLITHIC SLAB/ BEAM FOUNDATION AT DUMPSTER ENCLOSURE.
8. REF. 09/S2.1 FOR BOLLARD DETAIL AS REQUIRED.
9. (X) DENOTES HEADER TYPE. REFER TO SCHEDULE 04/S0.1 AND TYPICAL SECTION 05/S3.0.
10. REF. 06/S3.0 FOR DIAPHRAGM NAILING.

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EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
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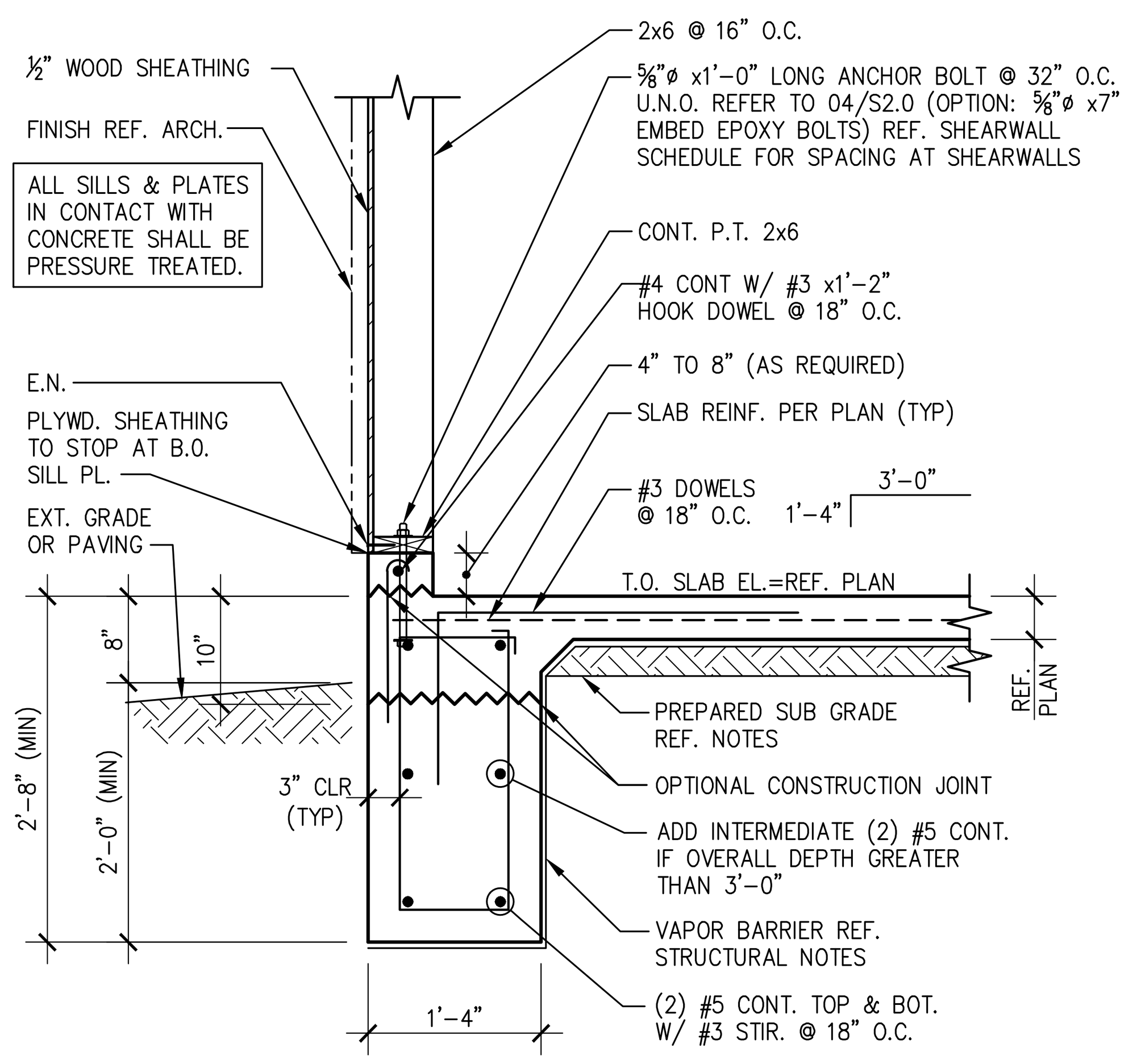
REVISIONS:

TITLE:
FOUNDATION & ROOF FRAMING PLANS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
S1.0



01 SECTION
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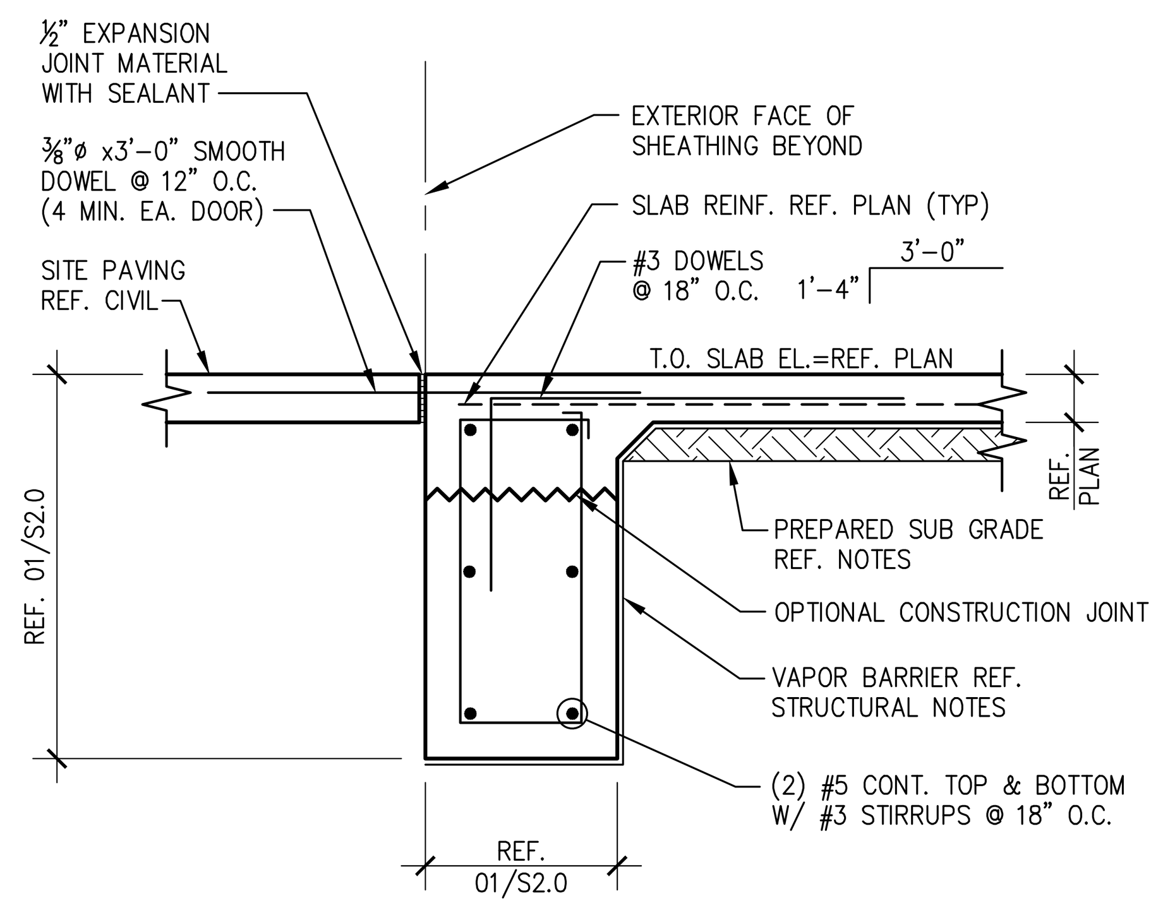

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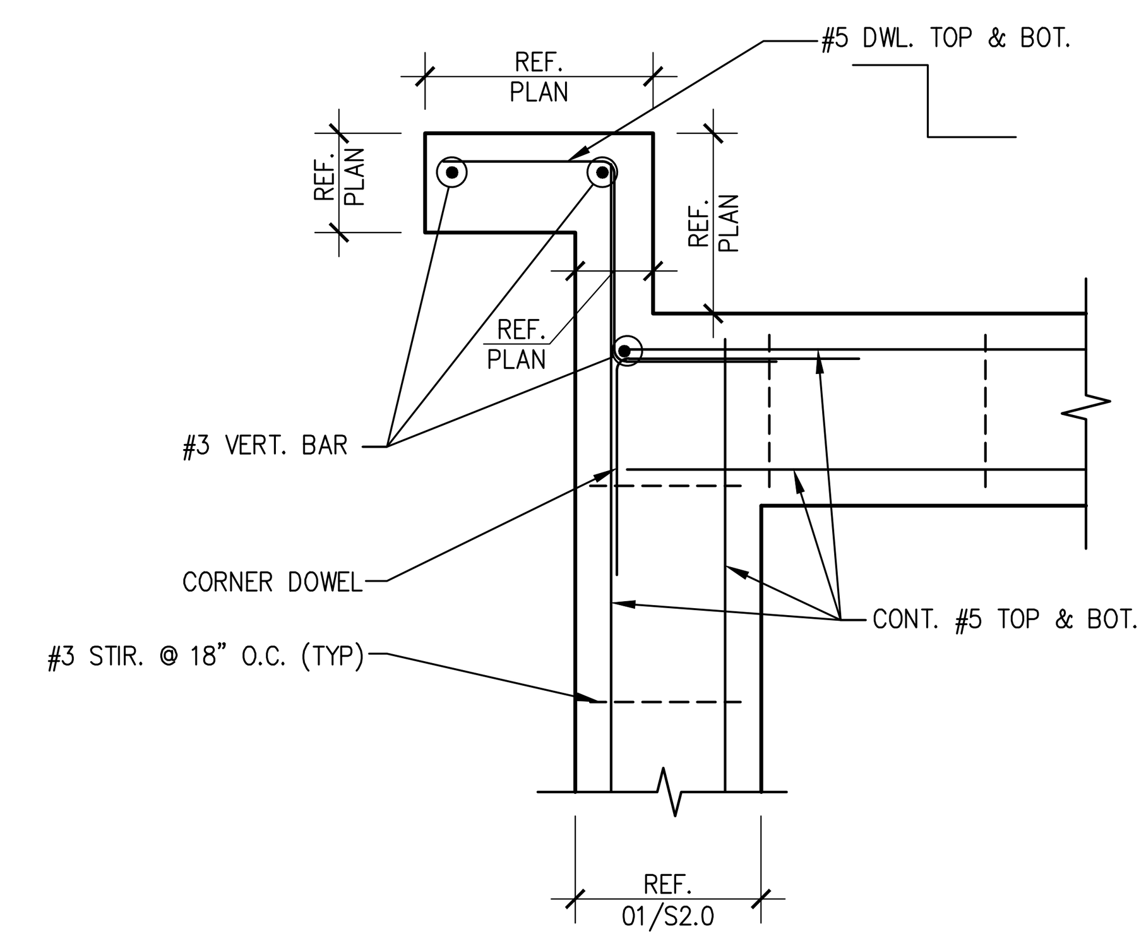
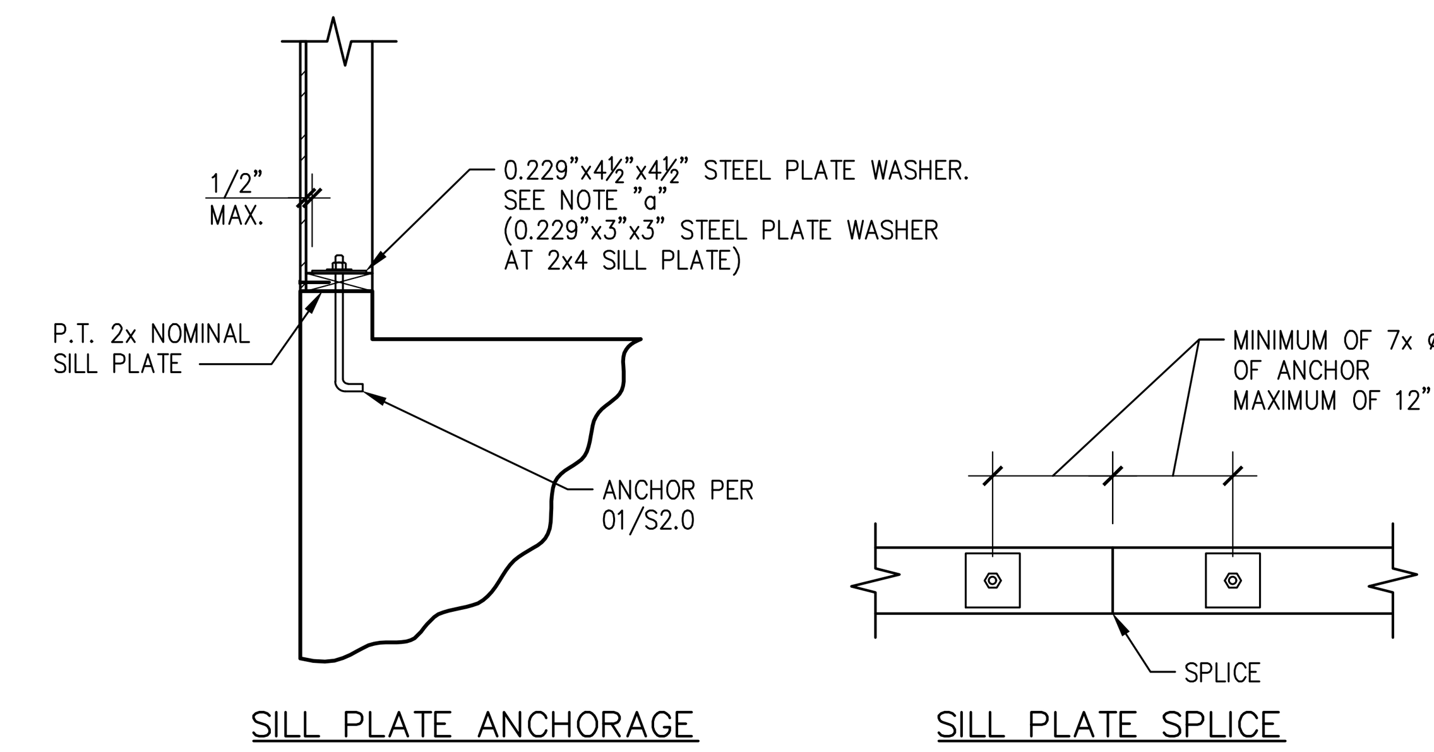


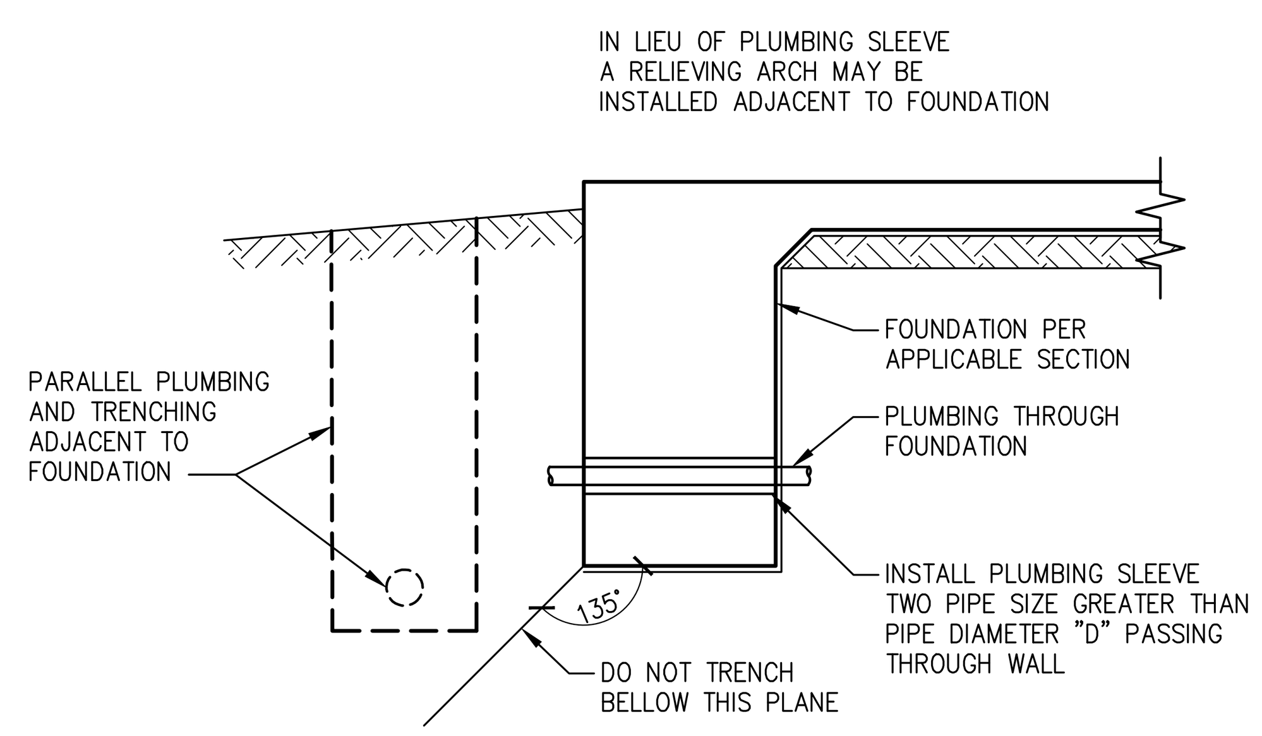
03 POPOUT CONCRETE FOOTING
SCALE: 3/4"=1'-0"



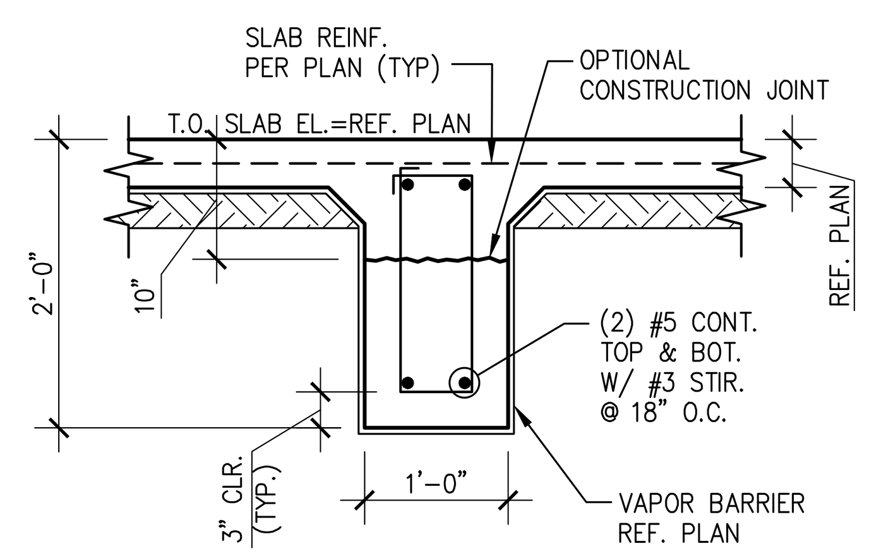
NOTES:

a. IF STANDARD CUT WASHER IS PLACED BETWEEN PLATE WASHER AND NUT, THE HOLE IN THE PLATE WASHER MAY BE DIAGONALLY SLOTTED UP TO 1¾" WITH WIDTH UP TO 3⁄16" LARGER THAN BOLT DIAMETER.

04 TYP. SILL PLATE ANCHORAGE
SCALE: 3/4"=1'-0"



05 TYPICAL PIPE PENETRATION & TRECHING
SCALE: 3/4"=1'-0"



05 INTERIOR STIFFNER DETAIL
SCALE: 3/4"=1'-0"

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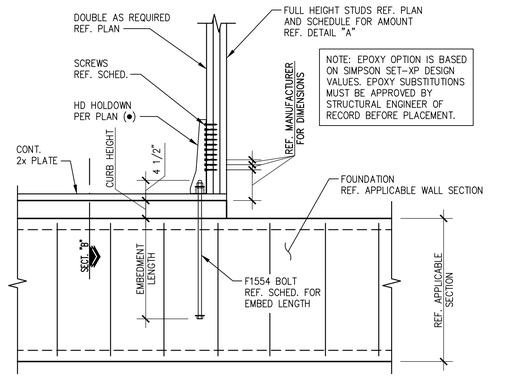
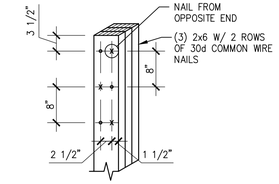
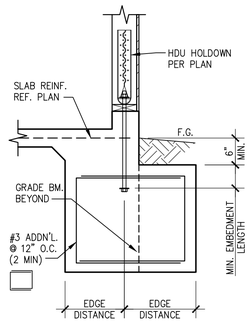




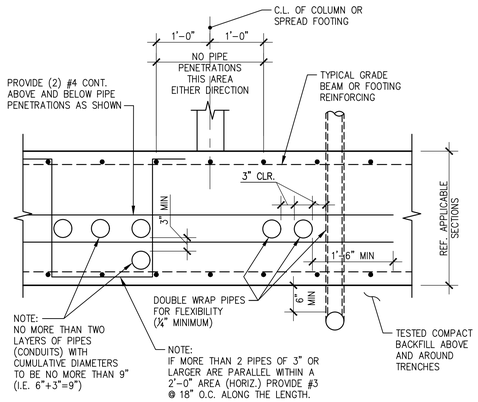
DETAIL "A"



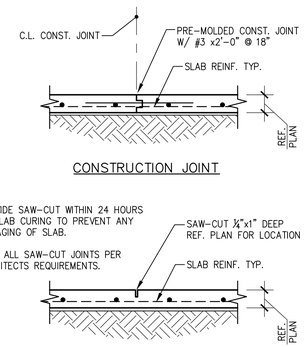
SECT. "B"

HOLDOWN	POST/2x	BOLT/SCREW #	ANCH. BOLT	EDGE DISTANCE	CAST IN PLACE REQUIREMENTS BOLT EMBED	EPOXY OPTION REQUIREMENTS BOLT EMBED
HDU2-SDS2.5	(3) 2x	(6) SDS ¼"x2½"	⅝"ø	14"	1'-0"	1'-0"
HDU4-SDS2.5	(3) 2x	(10) SDS ¼"x2½"	⅝"ø	14"	1'-0"	1'-0"
HDU5-SDS2.5	(3) 2x	(14) SDS ¼"x2½"	⅝"ø	14"	1'-0"	1'-0"
HDU8-SDS2.5	(3) 2x	(20) SDS ¼"x2½"	⅞"ø	14"	1'-0"	1'-0"
HDU11-SDS2.5	(3) 2x OR 4x6	(30) SDS ¼"x2½"	1"ø	16"	1'-2"	1'-4"
HDU14-SDS2.5	(4) 2x OR 6x6	(36) SDS ¼"x2½"	1"ø	16"	1'-2"	1'-4"

01 TYP. HOLDOWN DETAIL
SCALE: 3/4"=1'-0"

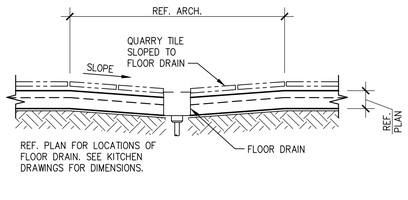


02 TYP. PENETRATION THRU FOOTINGS OR GRADE BEAMS
SCALE: 3/4"=1'-0"

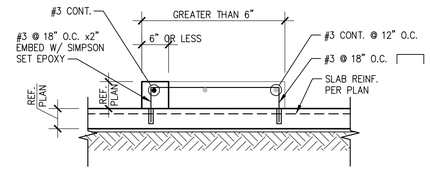


03 TYP. CONTROL JOINT
SCALE: 3/4"=1'-0"

04 TYP. CORNER BAR DETAILS
SCALE: 3/4"=1'-0"

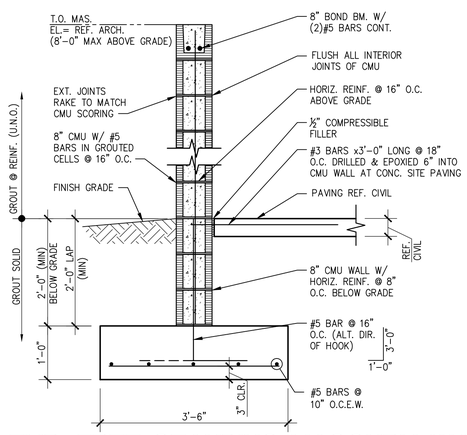


05 TYP. FLOOR DRAIN
SCALE: 3/4"=1'-0"

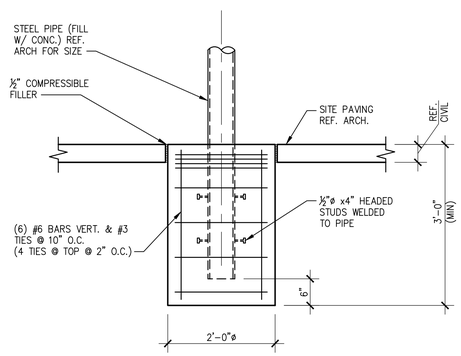


06 TYP. CURB
SCALE: 3/4"=1'-0"

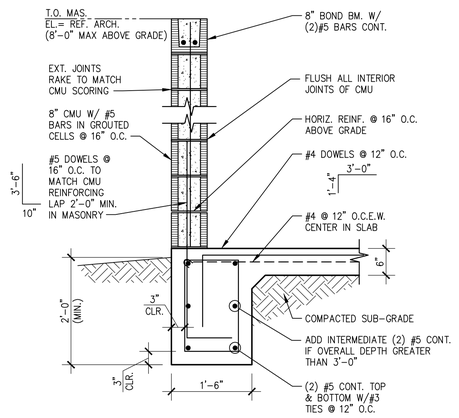
07 TYP. LIGHT POLE BASE
SCALE: 3/4"=1'-0"



08 TYP. FREE STANDING MASONRY WALL
SCALE: 3/4"=1'-0"



09 TYP. STEEL PIPE BOLLARD
SCALE: 3/4"=1'-0"



10 ALTERNATE SECTION @ DUMPSTER ENCLOSURE
SCALE: 3/4"=1'-0"

EMBEDMENT LENGTHS
CONCRETE 28-DAY COMPRESSIVE STRENGTH = 3,500 PSI

BAR SIZE	STRAIGHT BARS "TOP" BAR	STRAIGHT BARS OTHER BAR	HOOKED BARS
3	1'-10"	1'-5"	0'-9"
4	2'-5"	1'-10"	0'-11"
5	3'-0"	2'-4"	1'-2"
6	3'-7"	2'-9"	1'-5"
7	5'-3"	4'-0"	1'-8"
8	6'-0"	4'-7"	1'-10"
9	6'-8"	5'-2"	2'-1"
10	7'-5"	5'-9"	2'-4"
11	8'-2"	6'-4"	2'-6"

GRADE 60 REINFORCEMENT. MINIMUM LENGTHS SHOWN ABOVE SHALL BE USED UNLESS OTHERWISE NOTED ON THE PLANS. "TOP" BARS ARE HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.

LAP SPLICE LENGTHS
CONCRETE 28-DAY COMPRESSIVE STRENGTH = 3,500 PSI

BAR SIZE	SPACING 6" OR GREATER "TOP" BAR	SPACING 6" OR GREATER OTHER BAR	SPACING LESS THAN 6" "TOP" BAR	SPACING LESS THAN 6" OTHER BAR
3	2'-5"	1'-10"	2'-11"	2'-3"
4	3'-2"	2'-5"	3'-10"	2'-11"
5	3'-11"	3'-1"	4'-9"	3'-9"
6	4'-8"	3'-7"	5'-8"	4'-4"
7	6'-10"	5'-3"	8'-3"	6'-4"
8	7'-10"	6'-0"	9'-5"	7'-3"
9	8'-8"	6'-9"	10'-5"	8'-2"
10	9'-8"	7'-6"	11'-8"	9'-0"
11	10'-8"	8'-3"	12'-10"	9'-11"

GRADE 60 REINFORCEMENT. MINIMUM LENGTHS SHOWN ABOVE SHALL BE USED UNLESS OTHERWISE NOTED ON THE PLANS. "TOP" BARS ARE HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.

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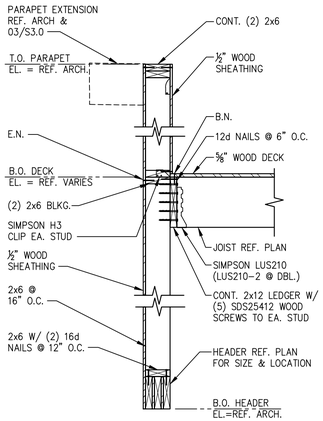

01 SECTION
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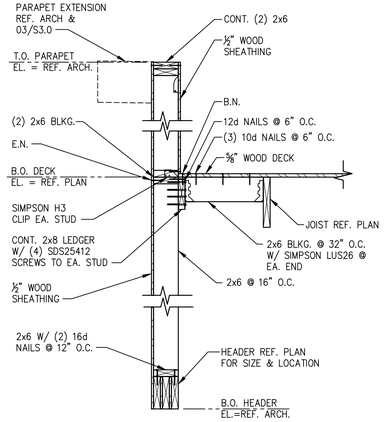

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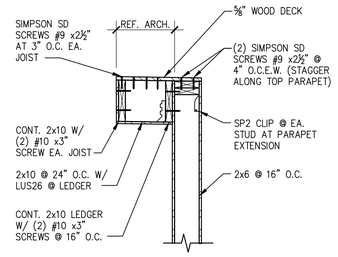
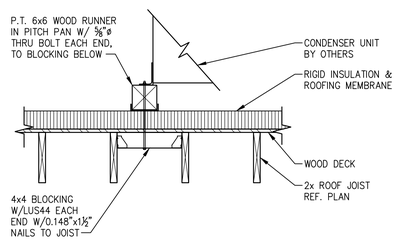
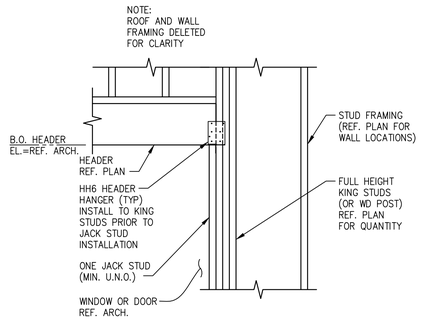


03 TYP. PARAPET EXTENSION
SCALE: 3/4"=1'-0"



04 TYP. CONDENSER TO ROOF STRUCTURE
SCALE: 3/4"=1'-0"

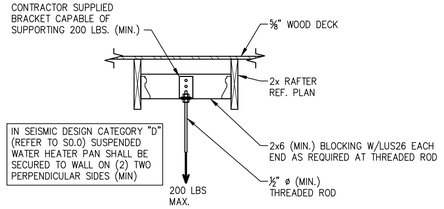


05 TYP. HEADER DETAIL
SCALE: 3/4"=1'-0"

06 ROOF DIAPHRAGM NAILING
SCALE: NONE

07 TYP. SPLICE DETAILS
SCALE: NONE

08 TYP. AHU ATTACHMENT TO ROOF STRUCTURE
SCALE: 3/4"=1'-0"



09 SECTION
SCALE: NONE

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DIVISION 23 - HVAC SPECIFICATIONS

GENERAL

1. FURNISH AND INSTALL A/C UNITS AS SHOWN ON DRAWINGS. CONTRACTOR SHALL PROVIDE ALL RELATED AND MISCELLANEOUS COMPONENTS AS REQUIRED MAKING SYSTEMS OPERATIONAL AND COMPLETE INCLUDING, BUT NOT LIMITED TO:

   A. VENTILATING, HEATING AND COOLING EQUIPMENT

A. DUCTWORK

B. INSULATION

   D. TEMPERATURE CONTROLS

   E. PIPING

   F. VALVES

2. ALL WORK SHALL BE IN ACCORDANCE WITH ALL PERTINENT CODES AND REGULATIONS, LOCAL AND STATE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF PERMITTING AND PAYMENT OF ALL UTILITY CHARGES FOR INSTALLATION/CONNECTION/ON-SITE CONSTRUCTION FOR WORK REQUIRED.

3. ALL WORK SHALL BE IN ACCORDANCE WITH ALL PERTINENT CODES AND REGULATIONS, LOCAL AND STATE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF PERMITTING AND PAYMENT OF ALL UTILITY CHARGES FOR INSTALLATION/CONNECTION/ON-SITE CONSTRUCTION FOR WORK REQUIRED.

4. MECHANICAL WORK SHALL CONFORM THE LATEST CODES.

   ALL LOCAL, CITY, COUNTY, AND STATE CODES
   AABC ASSOCIATE AIR BALANCE COUNCIL
   AGA AMERICAN GAS ASSOCIATION
   AMCA AIR MOVING AND CONTROL ASSOCIATION
   ANSI AMERICAN NATIONAL STANDARDS INSTITUTE
   ASHRAE AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS
   ASME AMERICAN SOCIETY OF MECHANICAL ENGINEERS
   ASTM AMERICAN SOCIETY OF TESTING MATERIALS
   AWWA AMERICAN WATER WORKS ASSOCIATION
   NFPA NATIONAL FIRE PROTECTION ASSOCIATION
   OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
   UL UNDERWRITERS' LABORATORIES
   SMACNA SHEET METAL AND AIR CONDITIONING NATIONAL ASSOCIATION

IN CASE OF DIFFERENCES BETWEEN BUILDING CODES, SPECIFICATIONS, STATE LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, UTILITY COMPANY REGULATIONS, AND THE CONTRACT DOCUMENTS, THE MOST STRINGENT SHALL GOVERN. SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE BUILDING CODES, SPECIFICATIONS, STATE LAWS, LOCAL ORDINANCES, AND INDUSTRY STANDARDS, AND UTILITY COMPANY REGULATIONS, THE CONTRACTOR SHALL BEAR ALL COST ARISING IN CORRECTING THESE DEFICIENCIES.

5. LOCATIONS, QUANTITIES, AND OTHER MEASUREMENTS OF THE BUILDING AND EQUIPMENT ARE OFFERED AS A GUIDE ONLY, WITHOUT GUARANTEE AS TO COMPLETE ACCURACY. THE CONTRACTOR SHALL EXAMINE THE DRAWINGS, EQUIPMENT, AND VERIFY ALL CONDITIONS TO PROVIDE A COMPLETE AND CORRECT OPERATING MECHANICAL SYSTEM.

6. ALL CONTRACTORS SHALL VISIT THE SITE, ASCERTAIN THE CONDITIONS TO BE MET THEREIN INSTALLING THE WORK AND MAKE DUE DILIGENCE FOR THEIR BID. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED AS JUSTIFICATION FOR THE OMISSION OF WORK, FACULTY WORK OR PAYMENT OF EXTRA COMPENSATION.

7. CONTRACTOR SHALL PROTECT EQUIPMENT ON SITE.

8. CONTRACTOR SHALL LOCATE ALL EQUIPMENT, FIXTURES, PIPING, DUCTWORK, ETC., APPROXIMATELY AS SHOWN ON DRAWINGS, BUT CONFIRM TO ALL STRUCTURAL AND FINISH CONDITIONS OF BUILDING. REFER TO ARCHITECTURAL/STRUCTURAL DRAWINGS AND COORDINATE WITH GENERAL CONTRACTOR PRIOR TO STARTING WORK. CONTRACTOR SHALL PROVIDE ADDITIONAL SUPPORTS, HANGARS, OPENINGS, ETC., AS REQUIRED FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL COORDINATE ALL CLEARANCES, LOCATIONS, AND REQUIREMENTS WITH OTHER TRADES A REQUIRED. ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS IN ACCORDANCE TO ALL APPLICABLE CODES HAVING JURISDICTION.

9. CONTRACTOR SHALL KEEP THE AREA CLEAN AND FREE OF UNNECESSARY MATERIAL AND DEBRIS. REMOVE ALL TOOLS, SCAFFOLDING, MACHINERY, AND DEBRIS ONCE WORK IS COMPLETE.

10. CONTRACTOR SHALL WORK WITH GENERAL CONTRACTOR TO MEET CONSTRUCTION SCHEDULES.

11. CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS ONCE PROJECT IS COMPLETE TO INCLUDE BELOW AND ABOVE GRADE WORK, INCLUDING LABELING OF ALL EQUIPMENT, DUCTWORK AND PIPE SIZES, VALVE LOCATIONS, ETC.

12. CONTRACTOR SHALL TEST ALL CONNECTIONS, OPERATION OF ALL EQUIPMENT, ETC.,

13. AFTER ACCEPTANCE BY OWNER, CONTRACTOR SHALL PROVIDE OWNER WITH (2) SETS OF AS-BUILT DRAWINGS.

14. ALL EQUIPMENT SHALL BE LABELED WITH TAG NOS. AS PER EQUIPMENT SCHEDULE. LABELS SHALL BE BY SETON OR APPROVED EQUAL AND SHALL MATCH ANSI Z535. LETTER SIZE SHALL BE A MINIMUM OF 1/2" SIZE.

15. ANY OMISSIONS OR ERRORS FOUND BY THE CONTRACTOR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT SO THAT AN ADDENDUM MAY BE ISSUED BEFORE BIDDING. ANY OMISSIONS OR ERRORS FOUND AFTER BIDDING WILL BE AT THE EXPENSE OF THE CONTRACTOR.

16. CONTRACTOR WARRANTS TO THE OWNER ALL LABOR AND MATERIALS FURNISHED UNDER THIS CONTRACT FOR ONE (1) YEAR FOLLOWING DATE OF RECEIPT OF SATISFACTORY ACCEPTANCE. CONTRACTOR SHALL WARRANT TO REPAIR ALL DEFECTS IN MATERIAL.

HEATING, AIR CONDITIONING AND VENTILATION

SCOPE OR WORK

1. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, FEES AND PERMITS, AND PAY ALL COSTS CONNECTED WITH THE INSTALLATION OF COMPLETE HEATING AND AIR CONDITIONS SYSTEMS.

2. IT IS THE INTENT OF THIS SPECIFICATION AND OF THE PLANS TO PROVIDE COMPLETE INSTALLATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH ALL ITEMS OF MATERIAL AND LABOR AND ALL OTHER COST TO COMPLETE THE CONTRACT WITHIN THE INTENT OF THIS SPECIFICATION AND THE PLANS EVEN THOUGH EACH AND EVERY ITEM IS NECESSARY IS NOT SPECIFICALLY MENTIONED OR SHOWN.

3. SUBMIT SHOP DRAWINGS AND/OR MANUFACTURER SUBMITTALS ON ALL MECHANICAL EQUIPMENT, TO INCLUDE, BUT LIMITED TO, AIR CONDITIONING EQUIPMENT, EXHAUST FANS, AIR DEVICES, LOUVERS, VENTILATORS, ETC.

4. WORK INCLUDED BUT NOT INCLUSIVE: THE MECHANICAL HVAC SYSTEM REQUIRED FOR THIS WORK AS INDICATED ON THE DRAWINGS AND INCLUDES, BUT NOT LIMITED TO:

A. PACKAGE ROOFTOP HVAC UNITS, INCLUDING PRE-FAB FACTORY CURBS, STARTERS, SMOKE DETECTORS, ETC., COMPLETE WITH ALL SPECIALTIES.

B. SPLIT-SYSTEM HVAC UNITS, INCLUDING CONDENSING UNITS, DX COILS, AIR HANDLING UNITS, REFRIGERANT PIPING, ETC., COMPLETE WITH ALL SPECIALTIES.

C. EXHAUST FANS, MAKE-UP FANS, INCLUDING PRE-FAB FACTORY CURBS, STARTERS, ETC., COMPLETE WITH ALL SPECIALTIES.

D. INSTALLATION OF ALL OWNER FURNISHED EQUIPMENT.

E. ALL SUPPLY, RETURN, MAKE-UP, VENTILATION, AND EXHAUST DUCTWORK, INCLUDING DISTRIBUTION, DAMPERS, PLENUMS, TURNING VANES, GRILLES, REGISTERS, AND DIFFUSERS.

F. TEMPERATURE CONTROL SYSTEM AND 24V WIRING.

G. THERMAL AND ACOUSTIC INSULATION OFF DUCTS.

H. VIBRATION ISOLATORS AND ADDITIONAL DEVICES.

I. INSPECTION, TESTING, AND BALANCING OF HVAC.

MATERIALS AND WORKMANSHIP

1. AIR CONDITIONING EQUIPMENT:

   AIR CONDITIONING EQUIPMENT SHALL BE OF CAPACITIES, CHARACTERISTICS, SIZE, ETC., AS INDICATED AND SCHEDULED ON THE DRAWINGS OR APPROVED EQUAL.

A. SPLIT SYSTEMS SHALL BE BY CARRIER, TRANE, JCI OR LENNOX. ALL UNITS SHALL OPERATE ON R410A REFRIGERANT.

H. PACKAGED ROOFTOP UNITS SHALL BE BY CARRIER, TRANE, JCI, LENNOX, OR APPROVED EQUAL. GAS FIRED UNITS SHALL HAVE A STAINLESS STEEL HEAT EXCHANGER. ALL UNITS SHALL HAVE CORROSION-PROOF DRAIN PAN, ROOF CURB, MOTORIZED OUTSIDE AIR DAMPER, ECONOMIZER AND SHALL OPERATE ON R410A REFRIGERANT.

2. ROOF MOUNTED FANS SHALL HAVE ROOF CURB, BACKDRAFT DAMPER, INSECT SCREEN. GREASE EXHAUST TYPE FANS SHALL EXTENDED (RAISED) CURB AS PER NFPA. FANS SHALL BE BY GREENHECK, AEROVENT, COOK, ACME, OR APPROVED EQAUL.

3. CEILING MOUNTED FANS SHALL HAVE BACKDRAFT DAMPER, ROOF OR WALL RAIN CAP WITH INSECT SCREEN. FANS SHALL BE BY GREENHECK, AEROVENT, COOK, ACME, OR APPROVED EQUAL.

4. COOLING SECTION SHALL INCLUDE REFRIGERATION COMPRESSOR, COOLING COILS, CONDENSATE COILS, CONDENSER, FAN, REFRIGERANT PIPING SYSTEM, CONTROLS, CHILLED WATER COIL, HOT WATER COIL, ETC.

5. HEATING SECTIONS AND ACCESSORIES SHALL BE AS SCHEDULED OR APPROVED EQUAL.

6. HVAC EQUIPMENT SHALL BE COMPLETE WITH THERMOSTAT OR AS INDICATED ON THE DRAWINGS. (HEAT/COOL/OFF/FAN/ON/AUTO).

EXHAUST AND PLENUMS

2. EXHAUST AND MAKE-UP FANS SHALL BE OF CAPACITIES, CHARACTERISTICS, SIZES., ETC., AS INDICATED AND SCHEDULED ON THE DRAWINGS.

3. EACH FAN SHALL BE AMCA RATED AND COMPLETE WITH MOTOR, DRIVE, AND ACCESSORIES AS SCHEDULED ON THE DRAWINGS.

DUCTWORK

1. ALL DUCTWORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA MANUAL FOR FABRICATION, INSTALLATION, AND SUPPORT OF DUCTWORK.

2. NON-GREASE EXHAUST DUCTWORK SHALL BE FABRICATED FROM GALVANIZED SHEET STEEL, MINIMUM GAUGE AS PER SMACNA. GREASE EXHAUST DUCTWORK SHALL BE STAINLESS STEEL WITH LIQUID-TIGHT WELDED JOINTS.

3. GREASE DUCT SHALL HAVE A 2-HR FIRE RATED WRAP UP TO THE EXHAUST FAN AS PER NFPA. ALL SEAMS AND JOINTS SHALL HAVE LIQUID TIGHT WELDS. PROVIDE ACCESS DOORS AT ALL ELBOWS FOR CLEANING PURPOSES, AVOID TRAPS AND SLOPE DUCTWORK TOWARD KITCHEN HOOD. ALL DISHWASHER EXHAUST DUCTWORK SHALL BE 18 GAUGE STAINLESS STEEL.

4. ALL DUCTWORK SHALL BE SUPPORTED ONLY FROM STRUCTURAL BEAMS, JOISTS OR COLUMNS. FLEX CONNECTORS SHALL BE BY DUCTMATE, DURO DYNE OR VENT FABRICS. FLEXIBLE DUCTWORK SHALL BE BY FLEXMASTER, HART & COOLEY, OR MCGILL AIRFLOW. FLEXIBLE DUCTWORK SHALL BE LIMITED TO NO MORE THAN 5' IN LENGTH.

5. PROVIDE TEMPORARY CAPS ON PORTIONS OF DUCTWORK INSTALLED WHICH ARE NOT CONNECTED TO THE SYSTEM TO PREVENT ENTRANCE OF DUST AND DEBRIS UNTIL TIME OF INSTALLATION.

6. AIR DEVICES SHALL BE AS PER SCHEDULE. ADJUST VOLUME DAMPERS AS REQUIRED TO OBTAIN AIR QUANTITIES AS SHOWN ON DRAWINGS. AIR DEVICES SHALL BE BY TITUS, PRICE, POTTORFF, TUTTLE AND BAILEY, OR APPROVED EQUAL. AIR VOLUME DAMPERS INSTALLED ABOVE HARD CEILINGS SHALL BE EQUIPPED WITH REMOTE CONTROLLED DAMPER OPERATOR BY YOUNG, GREENHECK, POTTORFF, OR APPROVED EQUAL.

7. PROTECT NEW DUCT OPENINGS FROM DUST AND DIRT. CLEAN INSIDE AND OUTSIDE OF NEW DUCTWORK IN AREA OR NEW WORK. PROVIDE TEMPORARY FILTER MEDIA FOR ALL RETURN OUTLETS AND OPENING WITHIN NEW CONSTRUCTION LIMIT LINE PER ARCHITECTURAL PLANS.

8. PROVIDE ADJUSTABLE SPLITTER, OPPOSED BLADE, OR BUTTERFLY DAMPERS FOR ALL NEW SUPPLY, RETURN, AND EXHAUST BRANCHES. BALANCING SHALL BE ACHIEVED AT DAMPER NOT DIFFUSER.

9. PROVIDE DOUBLE THICKNESS TURNING VANES AT ALL ABRUPT ELBOWS. RADIUS ELBOWS SHALL HAVE CENTERLINE RADIUS AT LEAST AS GREAT AS THE DUCT WIDTH.

CEILING DIFFUSERS, RETURN GRILLES

1. MARGIN TYPES, COLORS, FINISH AND METHODS OF ATTACHMENT FOR ALL DIFFUSERS, GRILLES, AND REGISTERS SHALL BE COORDINATED WITH ARCHITECTURAL CEILING AND WALL DETAILS AND SPECIFICATIONS.

   1.A. FRAME TYPE SUITABLE FOR MOUNTING IN CEILING OR WALL CONSTRUCTION AS INDICATED ON ARCHITECTURAL PLANS.

   1.B. EXACT LOCATION OF ALL AIR OUTLETS AS PER ARCHITECTURAL PLANS.

   1.C. SUITABLE FOR OPERATION AT +/- 20% OF NOTED CAPACITY FOR CONSTANT VOLUME SYSTEMS.

2. SIZE AS INDICATED ON DRAWINGS EQUAL TO TITUS OR APPROVED EQUAL.

3. REGISTERS AND GRILLES: UNLESS OTHERWISE NOTED, SHALL BE STEEL CONSTRUCTION AS PER MECHANICAL SCHEDULE.

4. DIFFUSERS: UNLESS OTHERWISE NOTED, SHALL BE STEEL CONSTRUCTION, PAINTED WHITE.

INSULATION AND LINING

1. INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS'S RECOMMENDATIONS. UNSIGHTLY WORK SHALL BE JUST CAUSE FOR REJECTION.

2. ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE INTERNALLY LINED FOR THE FIRST 25 FEET DOWNSTREAM AND UPSTREAM OF FAN SYSTEMS. DUCT LINING SHALL BE GLUED AND PINNED TO DUCT AND TREATED TO PREVENT EROSION. AS A MINIMUM, PROVIDE 1" THICK 1-1/2# DENSITY DUCT LINING.

3. AIR CONDITIONING SUPPLY DUCTWORK, OUTSIDE AIR DUCTWORK, AND RETURN AIR DUCTWORK ABOVE THE CEILING AND IN UNCONDITIONED SPACES, WHERE NOT LINED, SHALL BE INSULATED WITH A MIN. 2" THICK, 3/4# DENSITY FIBERGLASS WRAP WITH FIRE RETARDANT VAPOR-BARRIER COVERING TO PROVIDE A MAXIMUM INSTALL CONDUCTANCE OF 0.3. OVERLAP ALL SEAMS, JOINTS, AND SECURE WITH MANUFACTURER APPROVED ADHESIVE TO PROVIDE CONTINUITY OF VAPOR BARRIER. LINED DUCTWORK NEED NOT BE INSULATED.

4. INSULATE REFRIGERANT SUCTION LINE, COOLING COIL, CONDENSATE DRAIN AND CONDENSATE PUMP DISCHARGE PIPING WITH 1/2" FLEXIBLE ELASTOMERIC INSULATION WITH VAPOR BARRIER JACKET.

5. WHERE PENETRATING A FIRE RATED CONSTRUCTION. PROVIDE SUITABLE FIRE STOPPING INSULATION.

6. CONDENSATE PIPING SHALL BE GALVANIZED STEEL, COPPER OR PVC, 1" MINIMUM IN SIZE. PIPING INDOORS SHALL BE INSULATED WITH 3/4" THICK ARMAFLEX. PIPING SHALL BE SUPPORTED BY STRUCTURE OR FLOOR ONLY. SLOPE DRAIN AT A MINIMUM OF 1/8"/FT, TO AN INDIRECT WASTE WITH MINIMAL AIR GAP OF 2".

TEST AND BALANCE

4. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR BALANCING ENTIRE HVAC SYSTEM (DUCTS, DIFFUSERS, RETURN AIR, F.A. DAMPERS, FAN RPMS, EXHAUST AND SUPPLY FANS) PER AIR BALANCE SCHEDULE FOUND WITHIN THESE DOCUMENTS. WHEN PROPERLY BALANCED, FIX AND MARK DAMPER SETTINGS ON EACH PIECE OF EQUIPMENT. NOTIFY OWNER THAT IT WILL BE THEIR RESPONSIBILITY TO SET MANUAL HVAC FAN SWITCH ON THERMOSTAT TO "ON" POSITION WHEN HOOD EXHAUST FANS ARE TURNED ON.

5. AABC OR NEBB CERTIFIED AIR BALANCE SPECIALTY CONTRACTOR IS RECOMMENDED TO PERFORM THE BALANCE THE AIR AND WATER SYSTEMS AS REQUIRED AND CREATE A REPORT FOR ENGINEER'S REVIEW.

6. AFTER COMPLETION OF ALL REQUIRED WORK, THE CONTRACTOR SHALL OPERATE AND MAKE ANY REQUIRED ADJUSTMENTS TO EQUIPMENT. DUCTWORK, ETC., AS MAY BE NECESSARY TO PUT THE SYSTEMS IN PROPER OPERATING CONDITION. AFTER ALL ADJUSTMENTS HAVE BEEN COMPLETED, THE CONTRACTOR SHALL BALANCE EACH DEVICE TO WITHIN +/- 10% OF VALUE ON DRAWINGS.

PIPING

1. PIPING MATERIALS:

   SCHEDULE 40, STANDARD WEIGHT, SEAMLESS BLACK STEEL - ASTM A53 OR ASTM A106
   SYSTEM TYPE: CHILLED WATER 2-1/2" UP TO 10"; HEATING WATER 2-1/2" UP TO 10"; CONDENSER WATER UP TO 10"; 125 PSI AND LESS STEAM SUPPLY UP TO 6"; NATURAL GAS PIPING; PUMPED CONDENSATE, AND REFRIGERANT RELIEF VENT.

   SCHEDULE 80 SEAMLESS STEEL - ASTM A53 OR ASTM A106

   SYSTEM TYPE: STEAM CONDENSATE RETURN; PUMPED STEAM CONDENSATE RETURN UP TO 6".

   SCHEDULE 40, GALVANIZED - ASTM A104 OR A120

   SYSTEM TYPE: COLD CONDENSATE DRAIN INDOORS.

   TYPE L ACR COPPER

   SYSTEM TYPE: REFRIGERANT PIPING UP TO 2".

   TYPE L, HARD DRAWN, SEAMLESS, WROUGHT COPPER - ASTM B88

   SYSTEM TYPE: CHILLED AND HEATING WATER TO 2" AND COLD OR PUMPED CONDENSATE DRAIN

   TYPE M, HARD DRAWN, SEAMLESS, WROUGHT COPPER - ASTM B88

   SYSTEM TYPE: NON-PRESSURIZED COLD CONDENSATE DRAIN

   PVC, DRAIN WASTE VENT

   SYSTEM TYPE: UNDERGROUND SANITARY SEWER.

   CAST IRON, NO HUB

   SYSTEM TYPE: ABOVE GROUND, WASTE VENT PIPING.

2. FITTINGS AND JOINTS:

   STEEL:
   ALL SIZES AND SERVICE: MARK IN ACCORDANCE WITH MSS-SP-25 UNION UP TO 2-1/2". USE SAME MATERIAL TYPE AS FITTING, WHERE METAL; SCREWED BRASS SEAT. WHERE PLASTIC PIPE, USE SAME MATERIAL AS PIPE.

   -BRANCH CONNECTIONS FROM MAINS AND HEADERS, 2 -1/2" AND LARGER: WELDED TEES OR WELDED OUTLETS (BONNEY FORGE WELDOLETS OR THREADOLETS). USE FORGED OUTLETS ONLY IF BRANCH LINE IS AT LEAST ONE PIPE SIZE SMALLER THAN MAIN OR HEADER.

   -UP TO 2-1/2". HOT CONDENSATE WATER - CLASS 150, MALLEABLE IRON, SCREWED, ASME B16.3; STEAM 125 PSI AND LESS - CLASS 150 A53 MALLEABLE IRON, SCREWED, ASME B16.3; STEAM CONDENSATE (PUMPED OR GRAVITY) - CLASS 150 MALLEABLE IRON, SCREWED ASME B16.3 2-1/2" AND LARGER: ALL SERVICES - CLASS 150, WROUGHT STEEL, BUTT-WELDED, ASME B16.9

   GALVANIZED STEEL:
   SAME AS FOR STEEL EXCEPT GALVANIZED COATING

   COPPER:
   SIZES AND SERVICE NOTED IN PIPING MATERIALS ABOVE:

   SWEAT TYPE, WROUGHT COPPER, ASTM B62 WITH DIMENSIONS CONFORMING TO ANSI B16.22 AND SWEEP PATTERNS FOR COPPER TUBING.

   PROVIDE DIELECTRIC CONNECTIONS AT JUNCTIONS OF COPPER PIPE/EQUIPMENT CONNECTIONS AND STEEL PIPING SYSTEMS.

   PROVIDER COPPER SOLDER JOINT TO PLATED FEMALE IRON PIPE.

   UNIONS - BRASS GROUND JOINT, 250-LB WORKING PRESSURE

   NIPPLES - BRASS.

COMMISSIONING

A. PER THE REQUIREMENTS OF THE 2018 IECC SECTION C408.2, THE OWNER OR CONTRACTOR SHALL HAVE A COMMISSIONING PLAN DEVELOPED BY A REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY RESPONSIBLE FOR THE TESTING AND/OR CALIBRATION OF THE BUILDING SYSTEMS DEFINED IN THIS SECTION.

B. PRIOR TO FINAL INSPECTION, THE REGISTERED DESIGN PROFESSIONAL SHALL PROVIDE EVIDENCE THAT THE MECHANICAL SYSTEMS HAVE BEEN TESTED TO ENSURE THAT ALL EQUIPMENT INSTALLATION, SEQUENCE OF OPERATIONS AND ARE IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND THE MANUFACTURER'S INSTRUCTIONS. FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH SECTIONS C408.2.3 THROUGH C408.2.5 FOR THE APPLICABLE CONTROL TYPE.

C. A FULL REPORT OF TEST RESULTS SHALL BE PROVIDED TO THE OWNER ALONG WITH MANUALS AND AS-BUILT CONSTRUCTION DOCUMENTS OF THESE SYSTEMS.

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
JAY REID CLASS
08/31/22

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:

MECHANICAL SPECIFICATIONS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.

M1.01

HVAC GENERAL NOTES

INTENT OF DRAWINGS

1. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL LOCATION OF DUCTWORK, PIPING AND EQUIPMENT. THE DRAWINGS DO NOT SHOW ALL NECESSARY OFFSETS, TRANSITIONS, AND ADJUSTMENTS NECESSITATED BY COORDINATION WITH OTHER TRADES. THE CONTRACTOR SHALL COORDINATE ALL WORK, TRANSITIONS, AND ADJUSTMENTS WITH THE CONDITIONS OF THE JOB SITE AND ALL OTHER TRADES.

2. THESE DRAWINGS DO NOT INDICATE OR SHOW ALL EXISTING PIPING, EQUIPMENT, DUCTWORK, ETC. THESE DRAWINGS ARE NOT A SUBSTITUTE FOR FIELD VERIFICATION.

3. HVAC WORK SHALL INCLUDE FURNISHING (EXCEPT WHERE NOTED), INSTALLING AND TESTING ALL HVAC SYSTEMS FOR A COMPLETE,, FULLY OPERATIONAL, AND CODE COMPLIANT INSTALLATION INCLUDING, BUT NOT LIMITED TO:

3.1. MANUFACTURERS' STANDARD ROOF CURBS OR AS SPECIFIED.

3.2. ROOF OPENINGS,

3.3. COPPER CONDENSATE DRAINS WITH 3" TRAP DEPTH, UNLESS NOTED OTHERWISE AND PROPER SLOPE. GAS PIPING SUPPORTED EVERY 10 FEET AND OTHER PIPING AND FITTINGS.

3.4. DUCTWORK, TURNING VANES, SPLITTERS, DAMPERS, SPIN-INS, ETC. IN ACCORDANCE WITH SMACNA STANDARDS FOR LOCATION, THICKNESS, AND CONSTRUCTION.

3.5. DIFFUSERS, SUPPLY AND RETURN GRILLES,

3.6. LINE SETS, AUXILIARY DRAIN PANS AND PIPING, AND FRESH AIR INTAKE AIR HANDLER(S),

3.7. CONTROLS, SENSORS, AND LOW VOLTAGE WIRING (I.E. 8-STRAND, 18 AWG. NON-SHIELDED CABLE),

3.8. SHIMS AND MISCELLANEOUS STEEL FOR LEVEL INSTALLATION AND PROPER CONDENSATE DRAINAGE.

3.9. SMOKE DETECTORS IN RETURN AIR DUCT OR SUPPLY DUCTS AS REQUIRED BY LOCAL CODE OFFICIALS.

3.10. WEATHER-PROOF ROOF AND WALL PENETRATIONS FOR COPPER PIPING, MAKE-UP AIR, GAS PIPING, PADS.

COORDINATION WITH OTHER TRADES

4. EXAMINE AND REVIEW THE CONTRACT DOCUMENTS OF ALL DIVISIONS IN ORDER TO COORDINATE THE INSTALLATION OF WORK.

5. USE FIELD MEASUREMENTS TO VERIFY DIMENSIONS WHERE AREAS ARE CONGESTED, AND EXACT LOCATION IS CRITICAL TO ASSURE PROPER INSTALLATION.

6. COORDINATION SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, VERIFYING THE LOCATION AND SIZE OF OPENINGS IN FLOORS, WALLS, PARTITIONS, CEILINGS, AND ROOFS WITH THE INSTALLING TRADES; ALLOCATION OF SPACE WITH OTHER TRADES INSTALLING WORK IN CHASES, SHAFTS, CEILING INTERSTITIAL SPACES, AND EQUIPMENT SPACES, AND THE PHASING OF INSTALLATION WORK WITH THAT OF OTHER TRADES.

6. COORDINATE LOCATION OF AIR DEVICES WITH ARCHITECTURAL REFLECTED CEILING PLAN.

7. ALL NEW ROOF PENETRATIONS SHALL BE PER THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

8. ALL NEW EQUIPMENT SUPPORTS SHALL BE INSTALLED PER THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

9. ALL ROOF MOUNTED EQUIPMENT LOCATIONS SHALL BE VERIFIED AND APPROVED BY A REGISTERED STRUCTURAL ENGINEER LICENSED IN THE STATE WHERE WORK IS BEING.

10. THE CONTRACTOR SHALL COORDINATE ALL THE FLOOR AND PARTITION PENETRATIONS WITH THE FIELD CONDITIONS AND STRUCTURAL DESIGN BEFORE DRILLING OR CORE-BORING.

11. THE CONTRACTOR SHALL SEAL ALL PENETRATIONS WITH A CODE APPROVED FIRE RATED MATERIAL AS REQUIRED TO MAINTAIN THE FIRE SEPARATION BETWEEN FLOORS/ROOF REQUIRED BY THE ARCHITECTURAL DRAWINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND FIRE BARRIER LOCATIONS.

12. ALL ROOF MOUNTED EQUIPMENT LOCATIONS SHALL BE VERIFIED AND APPROVED BY A REGISTERED STRUCTURAL ENGINEER.

13. ALL EQUIPMENT SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS. NO WEIGHT CAN BE PLACED ON THE ROOFING MATERIALS OR INSULATION.

WORKMANSHIP

14. ALL WORK AND INSTALLATION SHALL BE DONE BY A LICENSED CONTRACTOR WITH EXPERIENCE IN THE WORK REQUIRED FOR THIS PROJECT.

15. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER ANY CODE ISSUES NOT ALREADY ADDRESSED.

16. INSTALL ALL WORK IN A WORKMANLIKE MANNER THAT PROVIDES A FIRST CLASS COMPLETED INSTALLATION. REMOVE, CORRECT AND REPLACE ANY WORK DEEMED UNACCEPTABLE AT THE DISCRETION OF THE ARCHITECT/ENGINEER.

17. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES. NOTHING SHOWN ON THE PLANS IS INTENDED TO INDICATE THAT THE INSTALLATIONS OR CONNECTIONS OF ANY ITEM OR DEVICE SHOULD BE DONE CONTRARY TO MANUFACTURERS INSTRUCTIONS AND ALL APPLICABLE CODES AND REGULATIONS. THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT THE INSTALLATIONS AND CONNECTIONS OF ALL ITEMS AND DEVICES CONFORMS TO MANUFACTURERS INSTRUCTIONS AND TO ALL APPLICABLE CODES AND REGULATIONS.

18. UPON COMPLETION OF INSTALLATION. THE CONTRACTOR SHALL FURNISH TO THE ARCHITECT A SET OF DRAWINGS, MARKED TO SCALE, INDICATING THE SIZE AND LOCATION OF PIPING, AND NOTING ALL MAJOR CHANGES MADE DURING CONSTRUCTION.

19. THE CONTRACTOR SHALL TEST ALL NEW PIPING AND NEW EQUIPMENT FOR PROPER OPERATION AND SHALL MAKE ALL NECESSARY REPAIRS AS REQUIRED TO PROVIDE A COMPLETE WORKING SYSTEM.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL THE AREAS AFFECTED BY THE WORK REQUIRED IN THESE DRAWINGS TO THEIR ORIGINAL CONDITION AS REQUIRED BY THE OWNER/ARCHITECT.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE JOB-SITE AS REQUIRED BY THIS CONTRACT IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING, PERMITTING, AND CONDUCTING ALL THE INSPECTIONS AND TESTS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION. CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE OF COMMISSIONING INSPECTION TO THE ENGINEER.

EQUIPMENT

24. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, THE SPECIFICATIONS, AND APPROVED SHOP DRAWINGS.

25. PROVIDE SERVICE AND OPERATING CLEARANCES AROUND ALL SIDES OF EACH PIECE OF EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED REQUIREMENTS AND RECOMMENDATIONS.

26. EQUIPMENT WITH ROTATING APPARATUS SHALL HAVE FLEXIBLE DUCTWORK AT ALL CONNECTIONS. DOES NOT INCLUDE TERMINAL BOXES.

27. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE NECESSARY PIPING, FITTINGS, VALVES, HARDWARE, SUPPORTS AND ACCESSORIES REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE NEW MECHANICAL SYSTEM(S).

DUCTWORK

28. DUCTWORK SHOP DRAWINGS SHALL BE PROVIDED TO, REVIEWED BY, AND APPROVED BY THE ENGINEER PRIOR TO ANY DUCTWORK FABRICATION AND OR INSTALLATION. DUCTWORK SHOP DRAWINGS SHALL INDICATE THE ACTUAL SIZE OF EACH SECTION OF DUCT AND ALL REQUIRED FITTINGS AND TRANSITIONS.

29. DUCTWORK SHALL BE GALVANIZED SHEETMETAL CONSTRUCTION AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF LOCAL BUILDING CODES AND SMACNA.

30. DUCTWORK SIZES INDICATED ON CONTRACT DOCUMENTS ARE AIRSIZE ONLY AND DO NOT INCLUDE AN ALLOWANCE FOR LINER.

31. FABRICATE AND INSTALL ALL DUCTWORK IN ACCORDANCE WITH THE SPECIFICATIONS, THE PLANS AND DETAILS, AND THE DUCT CONSTRUCTION AND INSULATION SCHEDULE.

32. SEAL ALL DUCTWORK JOINTS AND SEAMS WITH THE APPROVED MASTICS OR TAPES LABELED IN ACCORDANCE WITH UL181A. FOR FLEXIBLE DUCT ALL CONNECTIONS SHALL USE APPROVED MASTICS OR TAPES LABELED IN ACCORDANCE WITH 181B.

33. CENTER ALL DIFFUSERS WITHIN SQUARE CEILING TILES, AND CENTER IN EITHER THE RIGHT OR LEFT HALF OF 24"x48" RECTANGULAR CEILING TILES.

34. PROVIDE DUCT RUNOUTS TO REGISTERS, GRILLES & DIFFUSERS SAME SIZE AS THE DEVICE NECK UNLESS NOTED OTHERWISE ON THE DRAWINGS. PROVIDE A MANUAL BALANCE DAMPER AT EACH BRANCH DUCT TAP FROM MAIN DUCT.

35. PROVIDE ALL SQUARE, 90° DUCT ELBOWS WITH SINGLE THICKNESS TURNING VANES SPACED 1.5" APART WHETHER SHOWN ON PLANS OR NOT UNLESSSPECIFICALLY NOTED OTHERWISE.

36. PAINT ALL DUCT VOLUME DAMPER HANDLES FLORESCENT ORANGE UNLESS EXPOSED IN FINISHED AREAS.

37. PROVIDE FLEXIBLE DUCT CONNECTORS AT ALL DUCTWORK CONNECTIONS TO HVAC EQUIPMENT. FLEXIBLE DUCTWORK SHALL NOT EXCEED 5'-0" IN LENGTH. BENDS SHALL BE MINIMIZED AND WHERE NEEDED BE A FULL RADIUS BEND. SUPPORT BANDS SHALL BE INSTALLED SO AS TO NOT CRIMP THE FLEX DUCT. FLEXIBLE DUCTWORK SHALL BE UL 181 LISTED AS A CLASS 1 AIR DUCT.

38. FIRE/SMOKE DAMPERS SHALL BE UL LISTED, CLASS I LEAKAGE AT ALL FIRE WALL PENETRATIONS. REFER TO ARCHITECTURAL FOR FIRE WALL RATING. REFER TO MECHANICAL FLOOR PLANS FOR DAMPER SIZING.

39. PROVIDE SMOKE DETECTORS IN THE RETURN DUCTS AT EACH AIR UNIT. PROVIDE SMOKE DETECTORS IN THE SUPPLY DUCTS AT AIR UNITS WITH SUPPLY OVER 2000 CFM. INTERLOCK FANS WITH SMOKE DETECTORS TO SHUT OFF UNIT IF SMOKE DETECTORS ARE ACTIVATED. PROVIDE ADDITIONAL DUCT SMOKE DETECTORS REQUIRED BY LOCAL CODE AUTHORITIES.

DUCT SEALANT

40. SEAL ALL LONGITUDINAL AND TRANSVERSE JOINTS WITH A NON-HARDENING, NON-MIGRATING MASTIC OR LIQUID ELASTIC SEALANT, WITH VOC CONTENT NO GREATER THAN 250 G/L AND OF A TYPE RECOMMENDED BY THE MANUFACTURER FOR SEALING JOINTS AND SEAMS IN SHEET METAL DUCTWORK. COVER ALL FIELD JOINTS, JOINTS AROUND SPIN-IN FITTINGS, AND FASTENING SCREWS WITH MASTIC.

GRILLES, REGISTERS, AND DIFFUSERS

41. GRILLES, REGISTERS, DIFFUSERS SHALL BE AS SPECIFIED AND SHALL BE MECHANICAL CONTRACTOR SUPPLIED, UNLESS OTHERWISE NOTED. DIFFUSERS SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS AND SCHEDULES. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS ITEMS NECESSARY FOR A COMPLETE AND PROPER INSTALLATION IN THE TYPE OF CEILING AND WALLS USED.

PIPING

42. UNLESS OTHERWISE NOTED, THE PIPE DIAMETERS INDICATED ON THE DRAWING REFER TO NOMINAL CARBON STEEL PIPE SIZES. FOR HYDRONIC SERVICE,WHERE THE USE OF COPPER TUBING IS PERMITTED BY THE SPECIFICATIONS,THE DIAMETER INDICATED ON THE DRAWING REFERS TO THE NOMINAL TUBING SIZE FOR COPPER TUBING USED IN REFRIGERANT SERVICE, THE DIAMETER INDICATED ON THE DRAWINGS REFERS TO THE ACTUAL O.D. OF THE TUBING.

43. MINIMUM CONDENSATE DRAIN PIPE SIZE SHALL BE 3/4". INSULATE ALL INTERIOR CONDENSATE DRAIN PIPING.

44. CONDENSATE DRAIN PIPING SHALL BE TYPE 'L' OR 'K' HARD-DRAWN COPPER WITH WROUGHT COPPER FITTINGS. PROVIDE OWENS CORNING FIBERGLASS ASJ INSULATION, OR APPROVED EQUAL. MINIMUM CONDENSATE DRAIN INSULATION THICKNESS SHALL BE 1".

WALL MOUNTED THERMOSTATS

45. WALL MOUNTED THERMOSTAT SHALL BE LOCATED APPROX. 48" AFF. THERMOSTATS LOCATED ON EXTERIOR WALLS SHALL BE INSTALLED WITH THERMAL INSULATION BACKING.

TEST AND BALANCING

46. PROVIDE TEST, ADJUST, AND BALANCING SERVICES PREFORMED BY AN INDEPENDENT AIR BALANCE AGENCY CERTIFIED BY THE AABC.

51. TESTING, ADJUSTING, AND BALANCING OF THE HVAC SYSTEMS:
1. ADJUST FAN DRIVES TO ACHIEVE AIR QUANTITIES INDICATED ON PLANS.
2. ADJUST AIR DEVICES AT MANUAL BALANCING DAMPERS TO ACHIEVE AIR QUANTITIES ON PLANS.
3. ADJUST CONTROL ELEMENT SETTINGS AND VERIFY CONTROL SYSTEM OPERATION.
4. PROVIDE TWO COPIES OF TAB WITH THE FOLLOWING:
A. FLOWS BY AIR DEVICE.
B. FLOWS BY EQUIPMENT.

52. PROVIDE COPIES OF THE MANUFACTURER'S OPERATION AND MAINTENANCE MANUALS AT THE COMPLETION OF THE PROJECT.

EQUIPMENT SUBMITTALS

53. THE CONTRACTOR SHALL SUBMIT MANUFACTURER'S SPECIFICATIONS AND CUT-SHEETS FOR ALL THE EQUIPMENT, FITTINGS AND COMPONENTS AS REQUIRED FOR FINAL APPROVAL BY THE ENGINEER BEFORE PURCHASING OR INSTALLING THEM. REFER TO SPECIFICATIONS FOR MORE COMPLETE INFORMATION ABOUT THE EQUIPMENT SCHEDULED.

REMOVAL OF EXISTING AND ITEMS TO REMAIN

53. DETACH ITEMS FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSE OF THEM OFF-SITE, UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.

54. REMOVE AND SALVAGE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND DELIVER THEM TO OWNER OR OWNER'S REPRESENTATIVE READY FOR REUSE.

55. REMOVE AND REINSTALL: DETACH ITEMS FROM EXISTING CONSTRUCTION, PREPARE THEM FOR REUSE, AND REINSTALL THEM WHERE INDICATED.

56. EXISTING TO REMAIN: EXISTING ITEMS OF CONSTRUCTION THAT ARE NOT TO BE REMOVED AND THAT ARE NOT OTHERWISE INDICATED TO BE REMOVED, REMOVED AND SALVAGED, OR REMOVED AND REINSTALLED.

ACCESS DOORS

57. PROVIDE MILCOR OR APPROVED EQUAL AS REQUIRED FOR ACCESS TO ALL VALVES, FILTERS, CONTROLS, DAMPERS OR OTHER DEVICES REQUIRING ATTENTION. DOORS SHALL MATCH WALL OR CEILING RATING. ARCHITECT MUST APPROVE LOCATION AND APPEARANCE OF ALL ACCESS DOORS. ACCESS PANELS FOR FIRE OR SMOKE DAMPERS SHALL BE OPENABLE WITHOUT THE USE OF TOOLS.

ACCESS AND SERVICE SPACE

58. CLEARANCE AROUND ALL HVAC EQUIPMENT SHALL CONFORM TO MANUFACTURER'S MINIMUM RECOMMENDED SPACE FOR MAINTENANCE AND/OR AR FLOW AND SHALL BE SUFFICIENT TO ALLOW DISABLING THE FUNCTION OF THE FIRE RESISTANCE RATED ASSEMBLIES.

OVERFLOW DRAIN PANS

59. PROVIDE UNDER ALL FURRED IN UNITS. PANS TO BE MINIMUM 24 GAUGE GALVANIZED SHEET STEEL; MINIMUM 1-1/2" DEEP AND NOT LESS THAN 3" LARGER THAN UNIT OR COIL DIMENSIONS. PROVIDE SEPARATE 3/4" DRAIN FROM PAN TO CONSPICUOUS LOCATION. PROVIDE ESCUTCHEON PLATES AT CEILING PENETRATIONS. WHEN ALLOWED BY LOCAL AUTHORITY: CONTRACTOR MAY PROVIDE FLOAT SWITCH IN OVERFLOW PAN INSTEAD OF DISCHARGE PIPING. FLOAT SWITCH SHALL SHUT UNIT OFF IF WATER IS DETECTED. PANS EQUIPPED WITH FLOAT SWITCH SHALL HAVE A SCREW CAP NIPPLE ON BOTTOM OF SIDE OF PAN TO ALLOW WATER TO BE DRAINED FROM PAN.

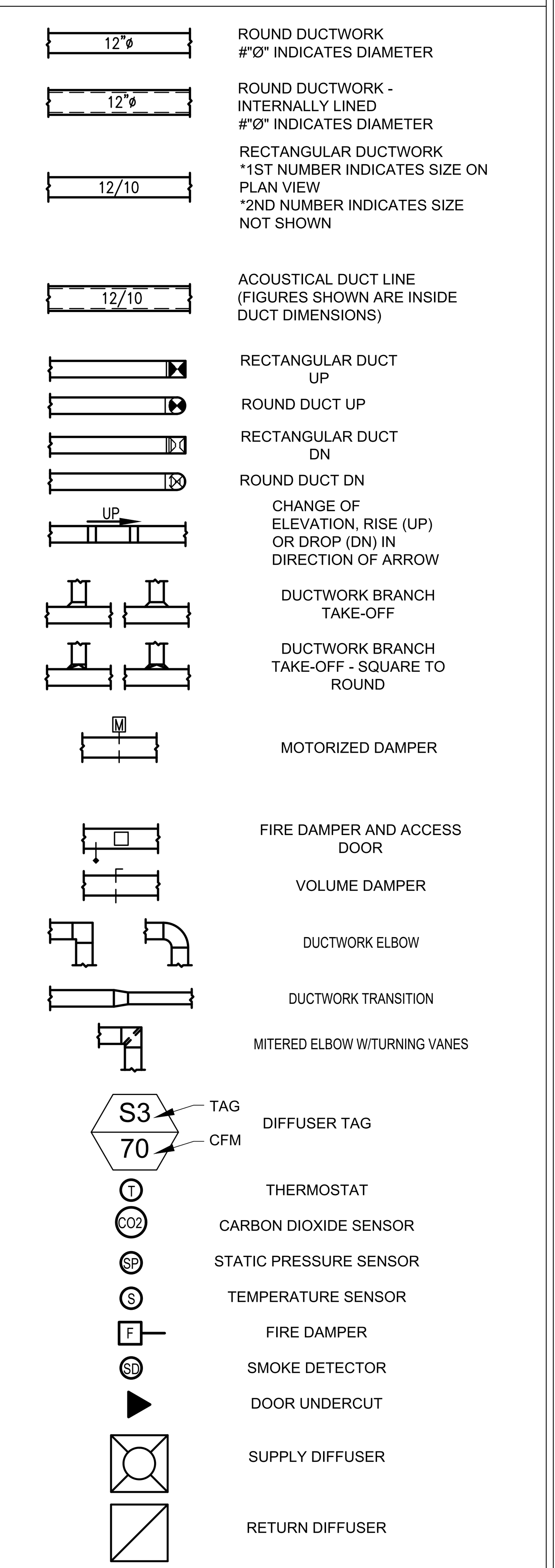
ALL HVAC UNITS SHALL BE AUTOMATICALLY SHUT DOWN BY SMOKE DETECTORS (PROVIDED AS PART OF THE FIRE ALARM SYSTEM, UNLESS SPECIFICALLY NOTED IN THE MECHANICAL DOCUMENTS) IN RETURN AIR SYSTEMS OF 2000 CFM OR GREATER (AND IN MULTIPLE SYSTEMS SERVING COMMON AREAS AND HAVING TOTAL CAPACITIES MORE THAN 2000 CFM). SMOKE DETECTORS SHALL BE UPSTREAM ON ANY FILTERS, EXHAUST CONNECTIONS OR OUTSIDE AIR CONNECTIONS.

ABBREVIATIONS

A/C	AIR CONDITIONING UNIT	LL	LANDLORD
A/E	ARCHITECT/ENGINEER	LB	POUNDS
AFF	ABOVE FINISHED FLOOR	LRA	LOCKED ROTOR AMPS
AHU	AIR HANDLING UNIT	MAX	MAXIMUM
APPROX.	APPROXIMATE	MBH	1000 BRITISH THERMAL UNIT PER HOUR
BAS	BUILDING AUTOMATION SYSTEM	MCA	MINIMUM CIRCUIT AMPACITY
BHP	BRAKE HORSE POWER	MD	MOTORIZED DAMPER
BTU	BRITISH THERMAL UNIT PER HOUR	MFR	MANUFACTURER
CC	COOLING COIL	MIN	MINIMUM
CD	CONDENSATE DRAIN	MOCP	MAXIMUM OVER CURRENT PROTECTION
CFH	CUBIC FEET PER HOUR	N/A	NOT APPLICABLE
CFM	CUBIC FEET PER MINUTE	NC	NORMALLY CLOSED
CLG	CEILING	NIC	NOT IN CONTRACT
CU	CONDENSING UNIT	NO	NORMALLY OPEN
D	EQUIPMENT DRAIN	NTS	NOT TO SCALE
DEG	DEGREES	O/A	OUTSIDE AIR
DB	DRY-BULB	OBD	OPPOSED BLADE DAMPER
DN	DOWN	OC	ON CENTER
(E)	EXISTING	PH	PHASE
EAT	ENTERING AIR TEMPERATURE	PROVIDE	FURNISH AND INSTALL
E/A	EXHAUST AIR	PRV	PRESSURE REDUCING VALVE
EDH	ELECTRIC DUCT HEATER	PSI	POUNDS PER SQUARE INCH
EF	EXHAUST FAN	R/A	RETURN AIR
ESP	EXTERNAL STATIC PRESSURE	RE:	REFER TO, REFERENCE
EWT	ENTERING WATER TEMPERATURE	RL	REFRIGERANT LIQUID
° F	DEGREES FAHRENHEIT	RLA	RUNNING LOAD AMPS
FCU	FAN COIL UNIT	RM	ROOM
FD	FIRE DAMPER	RPM	REVOLUTIONS PER MINUTE
FLA	FULL LOAD AMPS	RS	REFRIGERANT SUCTION
FLR	FLOOR	S/A	SUPPLY AIR
FPVAV	FAN-POWERED VARIABLE AIR VOLUME	SD	SMOKE DETECTOR
FSD	COMBINATION FIRE-SMOKE DAMPER	SF	SUPPLY FAN
FT.	FEET	SPECS	SPECIFICATIONS
FT. W.G.	FEET WATER GAUGE	T, T-STAT	THERMOSTAT
GA	U.S. GAUGE	T/A	TRANSFER AIR
GPM	GALLONS PER MINUTE	TEN	TENANT
H	HEIGHT	THRU	THROUGH
HP	HORSEPOWER	TSP	TOTAL STATIC PRESSURE
HPS	HIGH PRESSURE STEAM	TYP	TYPICAL
HWR	HEATING WATER RETURN	UL	UNDERWRITERS LABORATORIES, INC.
HWS	HEATING WATER SUPPLY	UH	UNIT HEATER
HZ	HERTZ	UON	UNLESS OTHERWISE NOTED
IN.	INCH(ES)	V	VOLTS
IN. W.G.	INCHES WATER GAUGE	VAV	VARIABLE AIR VOLUME
IOM	INSTALLATION AND OPERATION MANUAL	VFD	VARIABLE FREQUENCY DRIVE
J-BOX	JUNCTION BOX	VIF	VERIFY IN FIELD
kW	KILOWATT	W/	WITH
L	LENGTH	WB	WET-BULB
LAT	LEAVING AIR TEMPERATURE	W/O	WITHOUT

NOTE: NOT ALL SYMBOLS OR ABBREVIATIONS MAY APPEAR ON PLANS.

HVAC LEGEND



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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 15661
GRANT REID CLAUSSEN
08/31/22

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:

MECHANICAL LEGENDS, NOTES, ABBRV.

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

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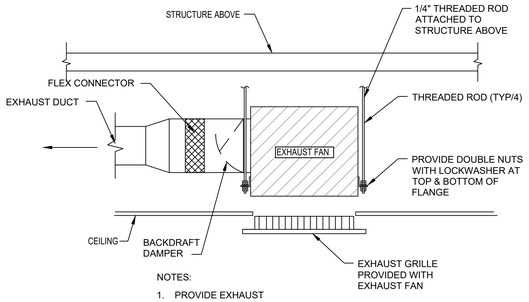
M1.02

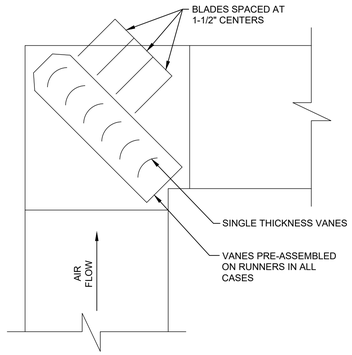


NOTES:

1. PROVIDE EXHAUST FAN WITH INTEGRAL BACKDRAFT DAMPER.

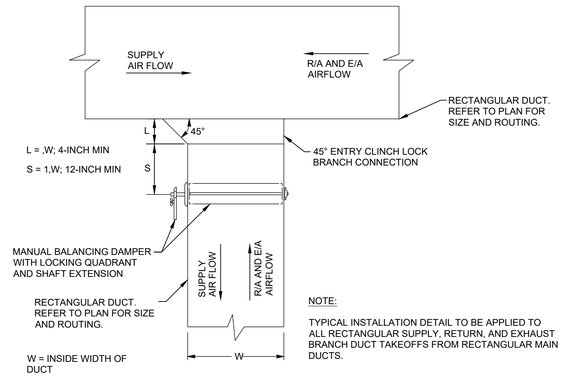
8 CEILING EXHAUST FAN DETAIL

SCALE: N.T.S.



7 TYP SQUARE ELBOW DETAIL

SCALE: N.T.S.

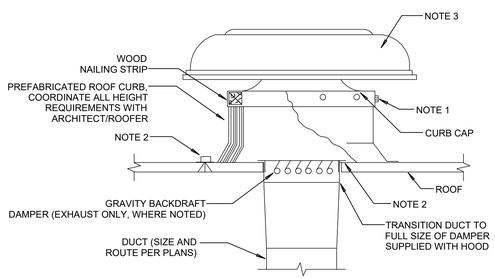


NOTE:

TYPICAL INSTALLATION DETAIL TO BE APPLIED TO ALL RECTANGULAR SUPPLY, RETURN, AND EXHAUST BRANCH DUCT TAKEOFFS FROM RECTANGULAR MAIN DUCTS.

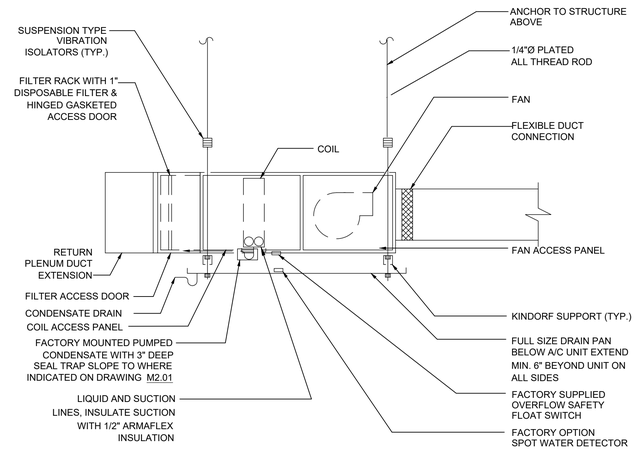
6 TYP RECTANGULAR BRANCH TAKEOFF DETAIL

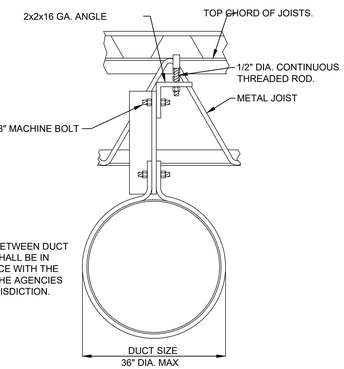
SCALE: N.T.S.



NOTE:

1. SECURE HOOD TO WOOD NAILING STRIP WITH 3/8" CADMIUM PLATED LAG BOLTS NOT OVER 12" ON CENTER.
2. SECURE ROOF CURB, DUCTWORK AND DAMPER TO ROOF WITH EXPANSION BOLTS (CONCRETE ROOF) OR RUST RESISTANT BOLTS (METAL DECK & BAR JOIST ROOF).
3. FACTORY ASSEMBLED HINGED HOOD WITH LATCH AND BIRD SCREEN LOREN COOK PR OR EQUAL. THE SPUN ALUMINUM STRUCTURAL COMPONENTS SHALL BE CONSTRUCTED OF MINIMUM 16 GAUGE MARINE ALLOY ALUMINUM BOLTED TO A RIGID ALUMINUM SUPPORT STRUCTURE.





NOTE:

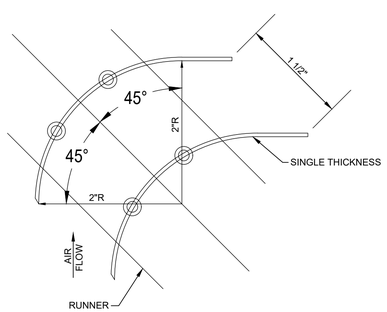
DISTANCE BETWEEN DUCT HANGERS SHALL BE IN ACCORDANCE WITH THE RULES OF THE AGENCIES HAVING JURISDICTION.

MAX WEIGHT PER FOOT = 16 LBS.

DIAMETER INCHES	SPIRAL SEAM DUCT STEEL MIN. GALV. SHT. GAUGE	ROUND DUCTS LONGITUDINAL SEAM DUCT STEEL MIN. GALV. SHT. GAUGE	FITTINGS STEEL MIN. GALV. SHT. GAUGE
THROUGH 12"Ø	28 (0.019 IN.)	26 (0.022 IN.)	26 (0.022 IN.)
13"Ø THROUGH 18"Ø	26 (0.022 IN.)	24 (0.028 IN.)	24 (0.028 IN.)
19"Ø THROUGH 28"Ø	24 (0.028 IN.)	22 (0.034 IN.)	22 (0.034 IN.)
29"Ø THROUGH 36"Ø	22 (0.034 IN.)	20 (0.040 IN.)	20 (0.040 IN.)
37"Ø THROUGH 52"Ø	20 (0.040 IN.)	18 (0.052 IN.)	18 (0.052 IN.)

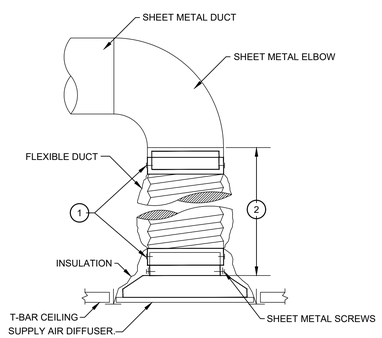
5 LOW SILHOUETTE EXHAUST OR INTAKE HOOD DETAIL

SCALE: N.T.S.



4 AIR HANDLING DETAIL

SCALE: N.T.S.

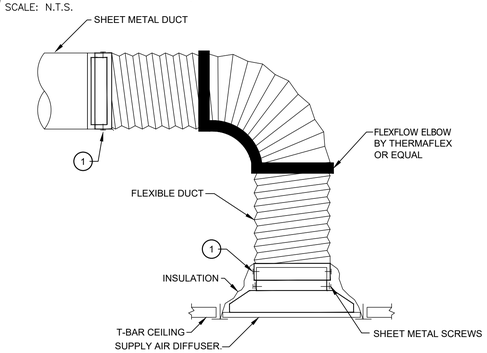


NOTES:

1. USE PLENUM COLLARS TO ATTACH FLEXIBLE DUCT . USE SHEET METAL SCREWS AND (2) WRAPS OF TAPE TO SECURE PLENUM COLLARS. ALTERNATE METHOD: BANDING DEVICE OR PANDUIT STRAP, IN LIEU OF SHEET METAL SCREWS. ALL TAPES AND SEALING MATERIALS SHALL COMPLY WITH UL181A FOR RIGID DUCT AND UL181B FOR FLEXIBLE DUCT.
2. SECURE SHEET METAL DROP TO DIFFUSER NECK WITH A MIN. OF (3) SHEET METAL SCREWS AND (2) FULL WRAPS OF TAPE PER UL REQUIREMENTS LISTED IN NOTE 1.
3. ALL FLEX DUCT SHALL BE INSTALLED WITHOUT KINKS, SAGGING, OR SHORT-RADIUS BENDS.

3 TYP SPIRAL SEAM/ROUND DUCTWORK SUPPORT DETAIL

SCALE: N.T.S.



NOTES:

1. USE PLENUM COLLARS TO ATTACH FLEXIBLE DUCT . USE SHEET METAL SCREWS AND (2) WRAPS OF TAPE TO SECURE PLENUM COLLARS. ALTERNATE METHOD: BANDING DEVICE OR PANDUIT STRAP, IN LIEU OF SHEET METAL SCREWS. ALL TAPES AND SEALING MATERIALS SHALL COMPLY WITH UL181A FOR RIGID DUCT AND UL181B FOR FLEXIBLE DUCT.
2. IF A MINIMUM OF 2 DIAMETERS OF STRAIGHT RUN IS NOT AVAILABLE ABOVE THE REGISTER USE HARD DUCT SHORT RADIUS CONNECTION.
3. ALL FLEX DUCT SHALL BE INSTALLED WITHOUT KINKS, SAGGING, OR SHORT-RADIUS BENDS.

2 TYP TURNING VANE DETAIL

SCALE: N.T.S.

1 TYP FLEXDUCT CONNECTION DETAIL

SCALE: N.T.S.

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STATE OF ARKANSAS
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MATTHEW REID CLAUSEN
08/31/22

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:

MECHANICAL DETAILS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
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M1.03

COMcheck Software Version COMcheckWeb

Mechanical Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Scooter's Bryant, AR
Location: Bryant (Saline), Arkansas
Climate Zone: 3a
Project Type: New Construction

Construction Site:
1816 N Reynolds Rd.
Bryant, Arkansas 72022

Owner/Agent:
Scooters Coffee

Designer/Contractor:
GRANT CLAUSSEN
GHC ENGINEERS
14901 QUORUM DR.
DALLAS, Texas 75254
972239884
gclaussen@ghcengineers.com

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Mechanical Systems List

Quantity **System Type & Description**

1 HVAC System (Single Zone):
Split System Heat Pump
Heating Mode: Capacity = 40 kBtu/h,
Proposed Efficiency = 10.50 HSPF, Required Efficiency = 8.20 HSPF
Cooling Mode: Capacity = 43 kBtu/h,
Proposed Efficiency = 16.00 SEER, Required Efficiency = 14.00 SEER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00

1 Water Heater:
Electric Storage Water Heater, Capacity: 40 gallons
Proposed Efficiency: 0.80 SL, %/h (if > 12 kW), Required Efficiency: 0.98 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 COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Grant Claussen — Name - Title
Signature
08/31/22 — Date

COMcheck Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COMcheck 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.
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	

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][1]	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	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	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6][1]	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][1]	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.
C404.6.3 [PL7][1]	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][1]	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][1]	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][1]	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][1]	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	**Exception:** Factory-installed piping within room fan-coils and unit ventilators tested under AHRI 440.
C403.8.1 [ME65][1]	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	**Exception:** Fans integral to equipment listed under Section C403.2.3.
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.
C403.2.2 [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.
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	Requirement will be met.
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	Requirement will be met.
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][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.

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
C403.11.1 , 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.
C403.4.3.3.2 [ME121][1]	Closed-circuit cooling tower within heat pump loop have either automatic bypass valve or lower leakage positive closure dampers. Open-circuit tower within heat pump loop have automatic valve to bypass all heat pump water flow around the tower. Open- or closed-circuit cooling towers used in conjunction with a separate heat exchanger have heat loss by shutting down the circulation pump on the cooling tower loop. Open- or closed circuit cooling towers have a separate heat exchanger to isolate the cooling tower from the heat pump loop, and heat loss is controlled by shutting down the circulation pump on the cooling tower loop.	☐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.
C408.2.2.1 [ME53][1]	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.5, C403.5.1, C403.5.2 [ME123][1]	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)

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STATE OF ARKANSAS
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EST. 1998 SCOOTER'S COFFEE

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REVISIONS:

TITLE:

MECHANICAL COMCHECK

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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
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	
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	
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	
C405.9 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

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, C408.2.5.3 [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.
C403.2.4.1.1 [FI42][3]	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.	☐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.
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	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.1 [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][1]	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.3 [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.
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.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
JAY REID CLAUSEN
08/31/22

EST. 1998
SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
MECHANICAL COMCHECK

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
M1.05

SPLIT SYSTEM HEAT PUMP AIR HANDLING UNIT

MARK	NOMINAL TONNAGE	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	ESP	REFRIGERANT	COOLING CAPACITY		HEAT CAPACITY		ELECTRICAL HEAT & DATA					MOTOR (HP)	WEIGHT (LBS.)	MANUFACTURER	MODEL NUMBER	REMARKS
						SENSIBLE (MBH)	TOTAL (MBH)	(MBH)	COP	VOLTAGE	PHASE	HZ	MCA	MOCP					
AHU-1	3.5	1380	265	.50	R-410A	32.3	44.3	40.3	3.10	208	1	60	6.5	15	3/4	157	DAIKIN	DV48FECD14	1-3

CONDENSING UNIT SCHEDULE

MARK	NOMINAL TONNAGE	REFRIGERANT	COOLING CAPACITY	HEATING CAPACITY	ELECTRICAL DATA					EER	SEER	WEIGHT (LBS.)	MANUFACTURER	MODEL NUMBER	REMARKS
			(MBH)	(MBH)	VOLTAGE	PHASE	HERTZ	MCA	MOCP						
CU-1	3.5	R-410A	--	--	208	1	60	34.5	35	8.3	16	173	DAIKIN	DZ17VSA481A	1-4

1. PROVIDE WITH UNIT MANUFACTURE'S ELECTRONIC PROGRAMMABLE THERMOSTAT.
2. PROVIDE WITH SINGLE SOURCE ELECTRICAL POWER.
3. CONTRACTOR SHALL FIELD VERIFY EXISTING EQUIPMENT INFORMATION.
4. PROVIDE FACTORY INSTALLED HAIL GUARDS.

FAN SCHEDULE

MARK	LOCATION	CFM	EXT. SP IN W.G.	VOLTAGE	PHASE	WATTS	DRIVE	MAX SONES	MANUFACTURER	MODEL NUMBER	WEIGHT (LBS)	REMARKS
EF-1	CEILING	75	0.25	120	1	59	DIRECT	5.0	COOK	GEMINI GC-128	15	1,3,5,6,8

NOTES:
1. OR APPROVED EQUAL
2. FAN TO RUN CONTINUOUSLY DURING OCCUPIED HOURS. PROVIDE WITH 7-DAY PROGRAMMABLE TIMECLOCK: PARAGON MODEL EL 78 OR APPROVED EQUAL
3. INTERLOCK FAN WITH LIGHT SWITCH. REFER TO POWER AND LIGHTING DRAWINGS.
4. PROVIDE PRE-WIRED FAN SPEED CONTROLLER
5. PROVIDE A GRAVITY BACKDRAFT DAMPER
6. SUSPEND FROM STRUCTURE ABOVE. USE MANUFACTURER'S HANGING VIBRATION ISOLATOR KIT. DO NOT SUPPORT FAN FROM CEILING.
7. PROVIDE FAN WITH INTEGRAL DISCONNECT
8. PROVIDE WHITE, ALUMINUM GRILLE

AIR DEVICE SCHEDULE

TAG	MANUFACTURER	MODEL	FACE SIZE	NECK SIZE	DESCRIPTION	REMARKS
S1	TITUS	TMS	24x24	SEE PLAN	WHITE, STEEL	1,2,3
S2	TITUS	TDC-44	12x12		WHITE, ALUMINMUM	1,2,3
R1	TITUS	350RL	24x24		WHITE, STEEL	1,2,3

1. 4-WAY UNLESS NOTED OTHERWISE.
2. PROVIDE OPP BLADE DAMPER AT EACH SUPPLY UNLESS BALANCING DAMPER IS PROVIDED AT RUNOUT TAKEOFF.
3. LAY-IN OR SURFACE MOUNTING FRAME TO MATCH ARCHITECTURAL CEILING TYPE.

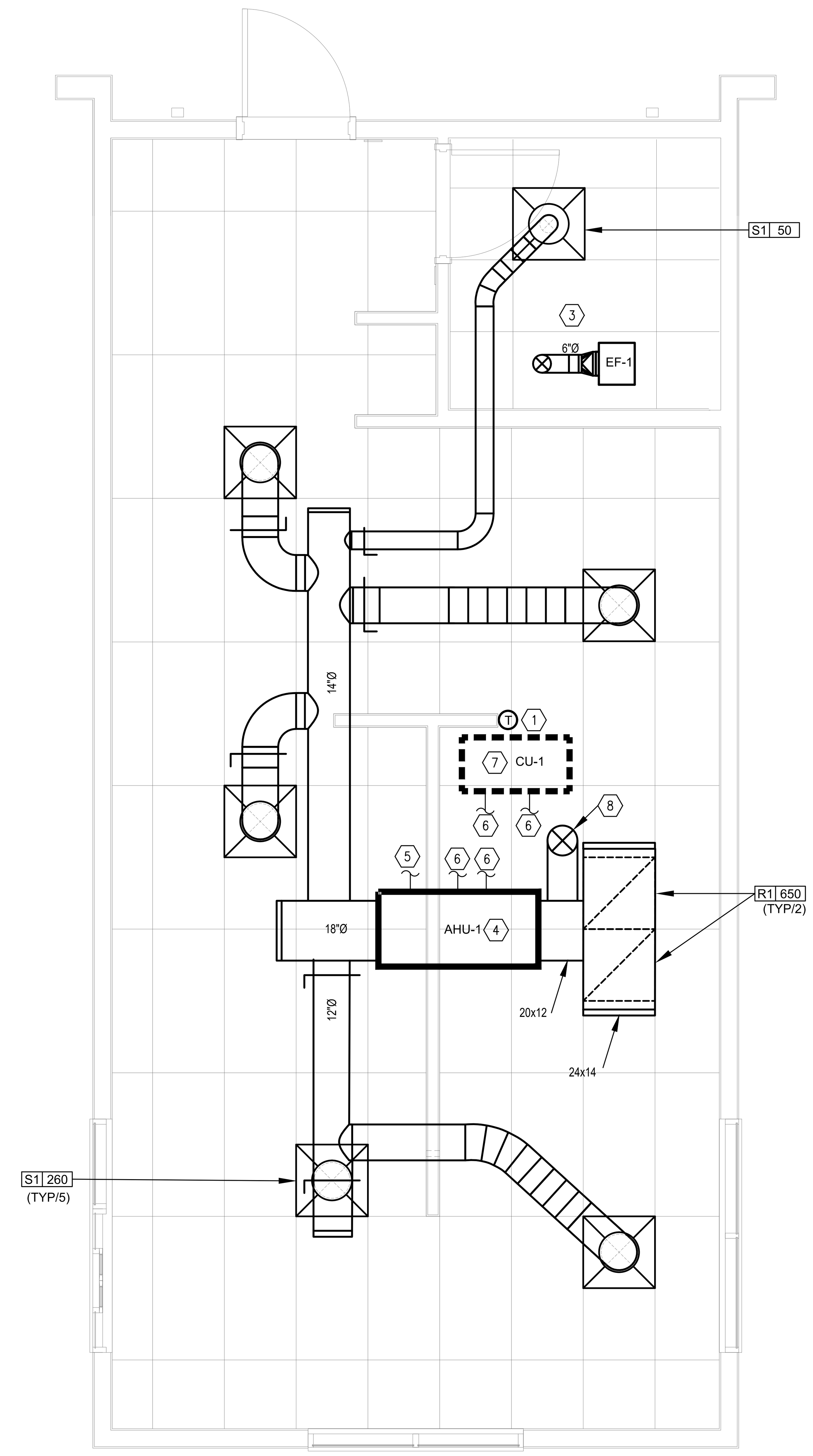
AIR DEVICE RUN-OUT SIZING

SUPPLY DUCTWORK		RETURN/EXHAUST DUCTWORK	
RUNOUT CFM	RUNOUT Ø	RUNOUT CFM	RUNOUT Ø
0-100	6"	0-75	6"
101-210	8"	76-170	8"
211-380	10"	171-310	10"
381-630	12"	311-500	12"
631-950	14"	501-770	14"
951-1400	16"	771-1100	16"
1401-1800	18"	1101-1500	18"

1. NECK SIZE SHALL BE THE SAME AS THE RUN-OUT SIZE.

NOTES BY SYMBOL (X)

1. PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT, MOUNT T-STAT AT 48" AFF. FURNISH THERMOSTAT IN APPROXIMATELY THIS LOCATION. COORDINATE EXACT LOCATION OF T-STAT AND TEMPERATURE/HUMIDITY SENSOR WITH ARCHITECT PRIOR TO INSTALLATION. THERMOSTAT TO BE INSTALLED AT 48" A.F.F. AND TEMPERATURE/HUMIDITY SENSOR AT 60" A.F.F.
2. PROVIDE 3/4" CONDENSATE FROM ROOFTOP UNIT TO APPROVED RECEPTOR. PROVIDE CONDENSATE PUMP PER SCHEDULE.
3. PROVIDE 6"Ø EXHAUST DUCT UP THROUGH ROOF AND TERMINATE WITH ROOF CAP. COORDINATE LOCATION OF ROOF PENETRATION AND RAIN CAP TO MAINTAIN 10'-0" CLEARANCE FROM FRESH AIR INTAKES.
4. PROVIDE AND INSTALL NEW AIR HANDLING.
5. DISCHARGE 1" PRIMARY CONDENSATE VIA INDIRECT WASTE (MINIMUM 3" AIR GAP) TO MOP SINK, OR TAIL PIECE OF NEAREST HAND SINK.
6. PROVIDE AND INSTALL REFRIGERANT LINES PER MANUFACTURER'S IOM.
7. PROVIDE AND INSTALL NEW CONDENSING UNIT ON ROOF.
8. PROVIDE 10" DIA. FRESH AIR INTAKE DUCT UP TO ROOF. CONNECT TO NEW ROOF MOUNTED VENITLATOR. REF. TO MECHANICAL DETAILS FOR MORE INFORMATION.



1 MECHANICAL FLOOR PLAN
SCALE: 3/8" = 1'-0"

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STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 19651 GRANT REID CLAUSSEN 08/31/22

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
MECHANICAL FLOOR PLAN

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
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PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
M2.01

GENERAL

1. ALL ABOVE GROUND PIPING SHALL BE SUPPORTED FROM THE BUILDING'S STRUCTURE ONLY. PIPING SHALL BE ROUTED PARALLEL WITH THE BUILDING'S LINES.
2. ALL NEW WATER SERVICE TO THE BUILDING SHALL BE EQUIPPED WITH BACKFLOW PREVENTER. BACKFLOW PREVENTER TYPE AND ORIENTATION AS NOTED ON DRAWINGS.
3. VALVES SHALL BE BY AMERICAN, CRANE, GRINNELL, HAMMOND, NIBCO, OR APPROVED EQUAL. HORIZONTAL VALVES SHALL BE INSTALLED WITH VALVE STEM UPRIGHT OR AT A MAXIMUM OF 45 DEGREES FROM VERTICAL LINE.
4. CONTRACTOR SHALL PROVIDE (4) COPIES OF SUBMITTALS FOR ALL FIXTURES AND EQUIPMENT INSTALLED ON THE PROJECT, INCLUDING BUT NOT LIMITED TO: PLUMBING FIXTURES, VALVES, PIPING, VALVES, HANGERS, INSULATION AND FITTINGS.
5. ALL WORK SHALL BE IN ACCORDANCE WITH ALL PERTINENT CODES AND REGULATIONS, LOCAL AND STATE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF PERMITTING AND PAYMENT OF ALL UTILITY CHARGES FOR INSTALLATION/CONNECTION/ON-SITE CONSTRUCTION FOR WORK REQUIRED.
6. NEW PLUMBING FIXTURES SHALL BE AS SCHEDULED OR AN EQUIVALENT BY ONE OF THE FOLLOWING MANUFACTURERS: AMERICAN STANDARD, KOHLER, ELKAY, CRANE, ZURN, JOSAM, WADE OR FIAT. ALL FIXTURES SHALL BE FURNISHED WITH ALL HARDWARE REQUIRED FOR WALL OR FLOOR MOUNTING.
7. ALL INDIRECT WASTE SHALL TERMINATE WITH AN AIR GAP OF TWICE THE PIPE DIAMETER ABOVE THE FLOOD LEVEL OF THE FIXTURE.
8. PIPING FROM WATER HEATER TEMPERATURE AND PRESSURE RELIEF SHALL TERMINATE AS INDIRECT WASTE OR OUTSIDE AS SHOWN WITH ELBOW DOWN. PIPING SHALL BE SAME SIZE AS P & T VALVE AND SHALL BE GALVANIZED STEEL OR COPPER. LOCATE TERMINATION AWAY FROM PERSONNEL.
9. ALL PLUMBING EQUIPMENT SUCH AS WATER HEATERS, PUMPS, STORAGE TANKS, OR MIXING VALVES SHALL BE PROVIDED WITH A NAMEPLATE, MATCHING THE TAG ON THE DRAWINGS. NAME PLATE SHALL BE CORROSION-PROOF AND WITH LETTERS MINIMUM OF 1/2" TALL. LABELS SHALL BE BY SETON, OR APPROVED EQUAL AND SHALL MATCH ANSI Z535.
10. ALL PIPING AND EQUIPMENT SHALL BE SUPPORTED BY STRUCTURAL BEAMS, JOISTS AND/OR COLUMNS ONLY.
11. CONDENSATE DRAINS WITHIN BUILDING SHALL BE INSULATED WITH 3/4" THICK ARMAFLEX, CONTINUOUSLY FROM AIR CONDITIONING UNIT TO TERMINATION POINT.
12. ALL EQUIPMENT AND DEVICES INSTALLED ABOVE A HARD CEILING OR WITHIN WALL SHALL HAVE AN ACCESS PANEL LARGE ENOUGH TO REMOVE AND REPLACE EQUIPMENT OR DEVICE. PANEL SHALL BE SUBJECT TO APPROVAL BY ARCHITECT.
13. ALL NON-METALLIC PIPE BELOW GRADE SHALL BE INSTALLED WITH DETECTABLE TYPE TAPE 6" ABOVE IT.
14. CONTRACTOR SHALL PROVIDE (2) COPIES OF AS-BUILT DRAWINGS TO OWNER AFTER ACCEPTANCE OF PROJECT.

DOMESTIC WATER PIPING AND FITTINGS

1. DOMESTIC (POTABLE) COLD WATER PIPING BELOW GROUND/SLAB SHALL BE SOFT COPPER TUBE, ASTM B 88, TYPE "K" COPPER WATER TUBE, LEAD FREE SOLDER JOINTS, ANNEALED TEMPER. FITTINGS SHALL BE ASME B16.18, CAST COPPER ALLOY OR ASME B16.22, WROUGHT-COPPER, SOLDER JOINT FITTINGS. FITTINGS SHALL NOT BE USED UNDER THE BUILDING SLAB. 314 STAINLESS STEEL IS ALLOWED AS A TYPE OF PIPE MATERIAL WITH WELDED OR MECHANICAL JOINTS. PIPING SHALL BE PRESSURE TESTED 50 PSIG ABOVE OPERATING PRESSURE WITHOUT EXCEEDING THE PRESSURE RATINGS OF THE PIPING SYSTEM MATERIALS. TEST SOURCE SHALL BE ISOLATED AND ALLOWED TO STAND FOR FOUR HOURS. ANY LEAKS AND LOSS IN TEST PRESSURE CONSTITUTE DEFECTS THAT MUST BE REPAIRED.

   CONTRACTOR SHALL PURGE NEW PIPING AND PARTS OF EXISTING DOMESTIC WATER PIPING THAT HAVE BEEN ALTERED, EXTENDED, OR REPAIRED BEFORE USING. USE PURGE AND DISINFECTING PROCEDURES PRESCRIBED BY AUTHORITIES HAVING JURISDICTION (AHJ) OR, IF METHODS ARE NOT PRESCRIBED, PROCEDURES DESCRIBED IN EITHER AWWA C651 OR AWWA C652.

   VALVES FOR POTABLE WATER SHALL BE BRONZE OR STAINLESS STEEL BY WATTS, WOODFORD, STOCKHAM, KITZ OR APPROVED EQUAL. PROVIDE WATER HAMMER ARRESTORS BY WADE, PPS, ZURN, OR APPROVED EQUAL. LOCATE WATER HAMMER ARRESTORS IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. HARD DRAWN COPPER TUBE, ASTM B88, TYPE "L" WATER TUBE, DRAWN TEMPER. FITTINGS SHALL BE CAST COPPER ALLOY, ASTM B16.18 OR WROUGHT COPPER, ASTM B16.22 SOLDER FITTINGS. PROVIDE SHUTOFF VALVE ON EACH WATER SUPPLY TO EQUIPMENT AND ON EACH WATER SUPPLY TO PLUMBING FIXTURES WITHOUT SUPPLY STOPS. USE BAL VALVES FOR PIPING NPS 2" AND SMALLER.
3. POTABLE HOT WATER PIPING SHALL BE INSULATED WITH A MINIMUM 1" OF FIBERGLASS. POTABLE COLD WATER SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX OR FIBERGLASS INSULATION. IF THE INSULATED PIPING PASSES THROUGH A WALL, CEILING OR FLOOR, THE INSULATION SHALL BE CONTINUOUS THROUGHOUT THE PENETRATION. PIPING INSULATED INDOORS SHALL HAVE A WHITE, ALL-SERVICE JACKET. PIPING INSULATED OUTDOORS SHALL HAVE AN EMBOSSED ALUMINUM JACKET. HORIZONTAL PORTIONS OF RAIN LEADERS SHALL BE INSULATED WITH 1" THICK ARMAFLEX OR 1-1/2" THICK FOAM GLASS. EXPOSED WASTE LINES BELOW HANDICAPPED FIXTURES SHALL BE INSULATED WITH 3/4" THICK ARMAFLEX.
4. ALL HANDSINKS IN KITCHENS AND LAVATORIES IN RESTROOMS SHALL BE PROVIDED WITH A THERMOSTATIC MIXING VALVE CONFORMING TO ASSE 1016, ASSE 1062, OR ASSE 1070 (AS REQUIRED BY APPLICATION) SET TO SUPPLY TEMPERED WATER AT 110f, U.N.O.
5. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) CONFORMING TO ASSE 1013 ON MAIN WATER SERVICE. (TESTING SHALL BE PERFORMED BY BACKFLOW PREVENTION ASSEMBLY TESTER REGISTERED/LICENSED BY CITY.)
6. PROVIDE RPZ AT SUPPLY OF WATER FILTERS, COFFEE & TEA BREWERS, CARBONATED DRINK DISPENSERS CONFORMING TO ASSE 1022. STAINLESS STEEL RPZ SHALL BE USED ON CARBONATED AND OTHER CORROSIVE LIQUIDS. DO NOT USE COPPER PIPE DOWNSTREAM OF SS RPZ FOR CARBONATED LIQUIDS. PROVIDE RZ (OR ATMOSPHERIC VACUUM BREAKER ON HOSE BIBB IF ACCEPTABLE BY A.H.J.) ON WATER INJECTED SOAP DISPENSERS. ROUTE DRAIN FROM RPZ'S TO NEAREST FLOOR SINK OR APPROVED LOCATION.
7. PROVIDE PRESSURE REDUCING VALVES CONFORMING TO ASSE 1003 FOR ALL HOT AND COLD WATER PIPES SERVING EQUIPMENT IF PRESSURE EXCEEDS 80 PSI DOWNSTREAM OF RPZ ON MAIN.

WASTE AND VENT PIPING SYSTEMS

1. ALL WASTE AND VENT PIPING ABOVE GRADE/SLAB SHALL BE CAST IRON HUB AND SPIGOT (ASTM A 888, ASTM C 1277, ASTM C 564), CAST IRON NO-HUB WITH STAINLESS STEEL COUPLINGS, OR SOLID WALL SCHEDULE 40 PVC. WHERE NOT OTHERWISE SPECIFIED THROUGHOUT THE DRAWING SET, WASTE DRAIN AND VENT PIPING SHALL BE PER LOCAL CODE AND AUTHORITY HAVING JURISDICTION. PLASTIC PIPING IS NOT ALLOWED IN A RETURN AIR PLENUM. PIPING BELOW GRADE SHALL BE CAST IRON HUB AND SPIGOT, NO-HUB (LISTED FOR UNDERGROUND USE), OR DWV PVC. ROUGHING-IN PLUMBING TEST PROCEDURE: TEST DRAINAGE AND VENT PIPING, EXCEPT OUTSIDE LEADERS, ON COMPLETION OF ROUGHING-IN. CLOSE OPENINGS IN PIPING SYSTEM AND FILL WITH WATER TO POINT OF OVERFLOW, BUT NOT LESS THAN 10-FOOT HEAD OF WATER. FROM 15 MINUTES BEFORE INSPECTION STARTS TO COMPLETION OF INSPECTION, WATER LEVEL SHALL NOT DROP. INSPECT JOINTS FOR LEAKS. REPAIR ALL LEAKS AND TEST AGAIN. MINIMUM SLOPE OF SANITARY WASTE PIPING = 1/8" PER FOOT.
2. WASTE PIPE BELOW GROUND/SLAB WITHIN 5'-0" OF THE BUILDING SHALL BE PVC PIPE, ASTM D 2665, SOLID WALL DRAIN, WASTE, AND VENT PATTERNS.
3. TEST SANITARY DRAINAGE AND VENT PIPING ACCORDING TO PROCEDURES OF AUTHORITIES HAVING JURISDICTION.
4. EACH PLUMBING VENT AND/OR SOIL STACK PROJECTING ABOVE THE ROOF SHALL BE FLASHED WITH STANDARD MANUFACTURED FLASHINGS. FLASHING SHALL BE SHEET METAL WITH RUBBER GASKETS. FLASHING SHALL EXTEND INTO ROOFING A MINIMUM OF 12" OR DISTANCE SPECIFIED BY LOCAL CODE. PAINT VENT PIPING EXPOSED ON ROOF BLACK OR AS DIRECTED BY THE ARCHITECT.

CONDENSATE DRAINAGE PIPING

1. ABOVE GROUND, CONDENSATE DRAINAGE PIPING AND COPPER DWV TUBE: ASTM B 306, DRAINAGE TUBE, DRAWN TEMPER, COPPER DRAINAGE FITTINGS: ASME B16.23, CAST COPPER OR ASME B16.29, WROUGHT COPPER, SOLDER JOINT FITTING.

GAS PIPING

1. GAS PIPING OUTSIDE ABOVE GRADE, SHALL BE BLACK STEEL, SCHEDULE 40, ASTM A53, WITH MALLEABLE THREADED FITTINGS FOR 2" AND SMALLER, AND WITH WELDED JOINTS FOR 2-1/2" AND LARGER.
2. BELOW GRADE OUTSIDE BUILDING, GAS PIPING MAY BE HIGH DENSITY POLYETHYLENE (HDPE) PIPE WITH HEAT FUSION FITTINGS CONFORMING TO ASTM D2513 IF PERMITTED BY A.H.J.. INSTALLATION SHALL CONFORM TO LOCAL CODE AND UTILITY COMPANY REQUIREMENTS. PROVIDE PLASTIC PIPE W/ TRACER WIRE.
3. CONNECTION, FITTINGS, ETC. SHALL BE SAME WEIGHT AS PIPE AND EQUAL TO PRODUCTS OF CRANE COMPANY. VALVES SHALL CONFORM TO ASME B16.33. ONE INCH AND SMALLER VALVES SHALL BE LEVER HANDLE. LARGER VALVES SHALL BE RON BODY WITH BRONZE SQUARE HEAD PLUG. PROVIDE OPERATING WRENCH WITH EACH VALVE. PROVIDE UNIONS AT EACH CONNECTION TO EQUIPMENT. DO NOT INSTALL UNIONS ELSEWHERE.
4. PROVIDE UL LISTED CORRUGATED, FLEXIBLE GAS CONNECTIONS TO WATER HEATERS AND COOKING EQUIPMENT CONFORMING TO ANSI Z21.24. PROVIDE RIGID CONNECTIONS TO ALL OTHER EQUIPMENT AND APPLIANCES AND WHERE LOCAL CODE PROHIBITS THE USE OF FLEXIBLE CONNECTIONS. OUTDOOR CONNECTORS SHALL BE LISTED FOR OUTDOOR USE.
5. INSTALL HANGERS FOR HORIZONTAL STEEL PIPING WITH THE FOLLOWING MAXIMUM SPACING AND MINIMUM ROD SIZES:
   A. 1/2 INCH NPS: MAXIMUM SPAN, 72 INCHES; MINIMUM ROD SIZE, 3/8 INCH.
   B. 3/4 INCH TO 1 INCH NPS: MAXIMUM SPAN OF 96 INCHES; MINIMUM ROD SIZE OF 3/8 INCH.
   C. 1-1/4 INCH TO 2 INCH NPS: MAXIMUM SPAN OF 108 INCHES; MINIMUM ROD SIZE OF 3/8 INCH.
   D. 2-1/2 INCH TO 3-1/2 INCH NPS: MAXIMUM SPAN OF 10 FEET; MINIMUM ROD SIZE OF 1/2 INCH.
6. GAS VALVE STOPS 2 INCH NPS AND SMALLER SHALL BE AGA-CERTIFIED, BALL TYPE WITH CHROME-PLATED BRASS BALL, FOR 2 PSIG OR LESS NATURAL GAS. INCLUDE AGA STAMP, FLAT OR SQUARE HEAD OR LEVEL HANDLE, AND THREADED ENDS CONFORMING TO ASME B1.201
7. SOLENOID VALVES: BRONZE, ALUMINUM, OR CAST-IRON BODY; 120 VAC, 60 HZ, CLASS B CONTINUOUS DUTY MOLDED COIL; UL LABELED AND FM APPROVED. INCLUDE NEMA ISC 6, TYPE 4, COIL ENCLOSURE AND ELECTRICALLY OPENED AND CLOSED DUAL COILS. VALVE POSITION IS NORMALLY CLOSED. INCLUDE THREADED ENDS CONFORMING TO ASME B1.20.1 FOR 2 INCH NPS AND SMALLER AND FLANGED ENDS FOR 2-1/2 INCH NPS AND LARGER.
8. EXTEND NATURAL GAS PIPING AND CONNECT TO GAS DISTRIBUTION SYSTEM (GAS SERVICE) PIPING IN LOCATION AND SIZE INDICATED FOR GAS SERVICE ENTRANCE TO BUILDING. GAS DISTRIBUTION SYSTEM PIPING, SERVICE PRESSURE REGULATOR, AND GAS METER WILL BE PROVIDED BY GAS UTILITY.
9. INSTALL SHUTOFF VALVE DOWNSTREAM FROM GAS METER, OUTSIDE BUILDING AT GAS SERVICE ENTRANCE.
10. INSTALL DRIPS AT POINTS WHERE CONDENSATE MAY COLLECT. INCLUDE OUTLETS OF GAS METERS. LOCATE WHERE READILY ACCESSIBLE TO PERMIT CLEANING AND EMPTYING. DO NOT INSTALL WHERE CONDENSATE WOULD BE SUBJECT TO FREEZING.
11. ALL EQUIPMENT CONNECTIONS SHALL BE PRECEDED BY A MANUAL STOP COCK.
12. PROVIDE SWING CONNECTIONS THROUGHOUT THE SYSTEM TO ALLOW FOR ADEQUATE HORIZONTAL AND VERTICAL EXPANSION AND CONTRACTION. UNIONS OF COMPANION FLANGES SHALL BE PROVIDED FOR REMOVAL OF EQUIPMENT.
13. INSTALL UNIONS IN PIPES 2" NPS AND SMALLER, ADJACENT TO EACH VALVE AT FINAL CONNECTION TO EACH PIECE OF EQUIPMENT AND ELSEWHERE AS INDICATED. UNIONS ARE NOT REQUIRED ON FLANGED DEVICES.
14. INSTALL STRAINERS ON SUPPLY SIDE OF EACH CONTROL VALVE, GAS PRESSURE REGULATOR, SOLENOID VALVE, AND WHERE INDICATED ON THE DRAWINGS.
15. INSTALL DIELECTRIC FITTINGS (UNIONS AND FLANGES) WITH FERROUS AND BRASS OR BRONZE END CONNECTIONS, SEPARATED BY INSULATING MATERIAL, WHERE PIPING OF DISSIMILAR METALS ARE JOINED.
16. INSTALL VENT PIPING FOR GAS PRESSURE REGULATORS AND GAS TRAINS. EXTEND OUTSIDE BUILDING AND VENT TO ATMOSPHERE TERMINATE VENTS WITH TURNED-DOWN REDUCING ELBOW FITTINGS WITH CORROSION RESISTANT INSECT SCREENS IN LARGE END.
17. INSTALL GAS VALVE UPSTREAM FROM AND WITHIN 72 INCHES OF EACH APPLIANCE USING GAS. INSTALL UNION OR FLANGED CONNECTION DOWNSTREAM FROM VALVE. INCLUDE FLEXIBLE CONNECTORS WHEN INDICATED.
18. GAS PIPING EXPOSED ON THE ROOF MUST BE PAINTED WITH RUST-INHIBITING PAINT.
19. GAS PIPING PENETRATING ANY EXTERIOR WALL OR ROOF SHALL BE ROUTED WITHIN A VENTED STEEL SLEEVE. WHERE GAS PIPING CONNECTS TO APPLIANCE, PROVIDE A MINIMUM 6" LONG DIRT LEG. OTHER PIPING PENETRATING EXTERIOR WALLS SHALL BE PROVIDED WITH STEEL SLEEVES BUT NOT VENTED.
20. ALL GAS PIPING WITHIN THE BUILDING SHALL HAVE WELDED OR BRAZED JOINTS. PIPING SHALL BE IN ACCORDANCE WITH ALL PERTINENT CODES AND REGULATIONS, LOCAL AND STATE.
21. ALL EXPOSED GAS PIPING SHALL BE PAINTED WITH TWO (2) COATS (MINIMUM) OF YELLOW EPOXY PAINT. AFTER PAINTING, PROVIDE LABELS AS PER ANSI.

WATER HEATERS

1. ELECTRIC WATER HEATERS, THERMOSTAT CONTROL: COMPLY WITH UL 1453 FOR TANK TYPE ELECTRIC WATER HEATER HEATING APPLIANCE, CONSTRUCTION SHALL INCLUDE COPPER PIPING OR TUBING COMPLYING WITH NSF 61 BARRIER MATERIALS FOR POTABLE WATER, WITHOUT STORAGE CAPACITY, PRESSURE RATING OF 150 PSIG, ELECTRICAL RESISTANCE HEATING SYSTEM. TEMPERATURE CONTROL SHALL BE THERMOSTATIC. PROVIDE WITH HIGH TEMPERATURE LIMIT CUTOFF DEVICE OR SYSTEM.
   A. RELIEF VALVE: ASME RATED AND STAMPED AND COMPLYING WITH ASME PTC 25.3 FOR COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVES. INCLUDE RELIEVING CAPACITY AT LEAST AS GREAT AS HEAT INPUT, AND INCLUDE PRESSURE SETTING LESS THAN WATER HEATER WORKING PRESSURE RATING. SELECT RELIEF VALVE WITH SENSING ELEMENT THAT EXTENDS INTO STORAGE TANK.

1. WATER HEATER SHALL BE BY UNIT SPECIFIED OR BY A.O. SMITH, BRADFORD WHITE, CHRONOMITE, EEMAX, LOCHINVAR, RINNAI, RHEEM, OR RUDD.

INSULATION

1. PIPE INSULATION SHALL BE EQUAL TO OWENS CORNING FIBERGLASS "ASJ/SSL" OR JOHNS MANVILLE "MICRO-LOK" HAVING ALL SERVICE JACKET. PROVIDE PLASTIC JACKET OUTDOORS AND WHERE EXPOSED TO PHYSICAL DAMAGE.
2. MINERAL FIBER, PIPE INSULATION: PREFORMED PIPE INSULATION COMPLYING WITH ASTM C 547, TYPE I, GRADE A, WITH ABSORBENT CLOTH FACTORY APPLIED TO THE ENTIRE INSIDE SURFACE OF PREFORMED PIPE INSULATION AND EXTENDED THROUGH LONGITUDINAL JOINT TO OUTSIDE SURFACE OF INSULATION UNDER INSULATION JACKET. FACTORY APPLY A WHITE, POLYMER, VAPOR RETARDER JACKET WITH SELF SEALING ADHESIVE TAPE SEAM AND EVAPORATION HOLES RUNNING CONTINUOUSLY ALONG THE LONGITUDINAL SEAM, EXPOSING THE ABSORBENT CLOTH.
3. INSULATE ALL HOT AND COLD WATER PIPING WITH 1" THICK PIPE INSULATION. ALL WATER PIPING INSTALLED IN EXTERIOR WALLS OR IN ATTIC SPACES SHALL BE INSTALLED TO THE HEATED SIDE OF THE WALL OR ATTIC INSULATION. ALL WATER PIPING SUBJECT TO FREEZING TEMPERATURES SHALL BE INSULATED SUFFICIENTLY TO PREVENT FREEZING OF PIPING AS INDICATED PER DETAILS.
4. ALL DOMESTIC COLD WATER PIPING AND CONDENSATE DRAINS SHALL BE INSULATED WITH 1/2" FIBERGLASS. ALL HOT WATER PIPING SHALL BE INSULATED WITH 1" FIBERGLASS (CONDUCTIVITY LESS THAN 0.27 BTU/(IN*HR*FT2*F)). COMPLY WITH APPLICABLE ENERGY CODE.
5. INTERIOR HORIZONTAL ROOF DRAINS AND LEADERS SHALL BE INSULATED WITH 1/2" FIBERGLASS.

MISCELLANEOUS

1. HEAT TRACE SHALL BE EQUAL TO RAYCHEM/TYCO #5XL-1-CR, 5 W/FT AT 120V AND 40F START-UP. PROVIDE INSULATION AS SPECIFIED ELSEWHERE, OR A MINIMUM OF $\frac{1}{2}$" (FIBERGLASS WITH ASJ) OVER HEAT TRACE AND DRAIN LINE.
2. CONTRACTOR SHALL SNAKE ALL DRAIN LINES AND SANITARY SEWER LINES PRIOR TO APPLYING FOR FINAL PAYMENT.
3. PROVIDE DIELECTRIC UNIONS TO SEPARATE DISSIMILAR MATERIAL PIPES AND WHERE SHOWN FOR EQUIPMENT REMOVAL.
4. ALL WATER PIPING AND SEWERS SHALL BE PROPERLY TESTED TO THE SATISFACTION OF THE A.H.J.
5. TRENCHES SHALL BE BACK-FILLED WITH CLEAN SOIL BY TAMPING OR PUDDING IN 6" INCREMENTS. NO PIPE SHALL BE LESS THAN 12" BELOW GRADE.

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LICENSED PROFESSIONAL ENGINEER
JAMES REID CLAUSEN
08/31/22

EST. 1998 SCOOTER'S COFFEE

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REVISIONS:

TITLE:

PLUMBING SPECS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

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P1.01

PIPING SYMBOLS

SANITARY

- GRADE CLEANOUT (GCO)
- FLOOR CLEANOUT (FCO)
- DOUBLE YARD CLEANOUT (DYCO)
- FLOOR DRAIN (FD)
- FLOOR SINK (FS)
- WALL CLEANOUT (WCO)
- PIPE CLEANOUT (CO)
- SANITARY WYE
- SANITARY CROSS

DRAWINGS SYMBOLS

- FLOW ARROW
- 1% SLOPE DIRECTION AND DEGREE
- CONNECT TO EXISTING
- KITCHEN EQUIPMENT TAG

PIPING

- 90° ELBOW DOWN
- 90° ELBOW UP
- TEE DOWN
- TEE UP
- UNION
- CAP
- CONTINUATION

ACCESSORIES

- GAS METER
- GAS PRESSURE REGULATOR
- NON-FREEZE WALL HYDRANT
- NON-FREEZE ROOF HYDRANT
- ROOF DRAIN (RD)
- OVERFLOW ROOF DRAIN (ORD)
- ROOF DRAIN NOZZLE
- PUMP

VALVES

- BALL VALVE
- PLUG VALVE
- THERMOSTATIC MIXING VALVE
- GATE VALVE
- GLOBE VALVE
- GAS STOP
- ANGLE VALVE
- BUTTERFLY VALVE (HORIZONTAL)
- BUTTERFLY VALVE (VERTICAL)
- SOLENOID VALVE
- PRESSURE REDUCING VALVE
- VALVE BOX
- CHECK VALVE

ABBREVIATIONS

CD	CONDENSATE	MS	MOP SINK
CO	CLEANOUT	MV	MIXING VALVE
CP	CIRCULATION PUMP	NFRH	NON FREEZE ROOF HYDRANT
CW	COLD WATER	NFWH	NON FREEZE WALL HYDRANT
CWF	COLD WATER FILTERED	ORD	OVERFLOW ROOF DRAIN
DB	DRYER BOX	PT	PLASTER TRAP
ES	EMERGENCY SHOWER	RD	ROOF DRAIN
EW	EYE WASH	RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
EWC	ELECTRIC WATER COOLER	SHWR	SHOWER
FCO	FLOOR CLEANOUT	SP	SUMP PUMP
FD	FLOOR DRAIN	SS	SANITARY SEWER
FS	FLOOR SINK	TW	TEMPERED WATER
GCO	GRADE CLEANOUT	TWCO	TWO WAY CLEANOUT
GW	GREASE WASTE	TWR	TEMPERED WATER RETURN
HW	HOT WATER	UR	URINAL
HWR	HOT WATER RETURN	WC	WATER CLOSET
IMB	ICE MACHINE BOX	WCO	WALL CLEANOUT
LAV	LAVATORY	WH	WATER HEATER
HB	HOSE BIBB	WMB	WASHING MACHINE BOX

PIPING LEGEND

- COLD WATER (CW)
- HOT WATER (HW)
- WASTE PIPING (W)
- VENT (V)
- GW — GREASE WASTE (GW)
- CD — CONDENSATE DRAIN (CD)
- G — GAS PIPING (G)
- RD — ROOF DRAIN PIPING (RD)
- (E) — EXISTING PIPING (E)

PLUMBING PIPE MATERIAL SCHEDULE

PIPING SYSTEM	ABBREVIATION	PIPING MATERIAL
SANITARY WASTE AND VENT PIPING BELOW GRADE	SW OR V	HUBLESS CAST IRON (PVC DWV OPTIONAL)
SANITARY WASTE AND VENT ABOVE GRADE	SW OR V	SERVICE WEIGHT CAST IRON (PVC DWV OPTIONAL)
WATER PIPING BELOW GRADE	CW, HW, OR HWR	TYPE L HARD DRAWN COPPER WITH SOLDERED JOINTS
WATER PIPING ABOVE GRADE	CW, HW, OR HWR	TYPE K SOFT ANNEALED COPPER
CONDENSATE DRAIN PIPING - 1" AND SMALLER	CD	TYPE M HARD DRAWN COPPER (PVC DWV OPTIONAL)
CONDENSATE DRAIN PIPING - 1-1/4" AND LARGER	CD	TYPE DWV HARD DRAWN COPPER (PVC DWV OPTIONAL)
INDIRECT DRAIN - 1" AND SMALLER	ID	TYPE M HARD DRAWN COPPER
INDIRECT DRAIN - 1-1/4" AND LARGER	ID	TYPE DWV HARD DRAWN COPPER

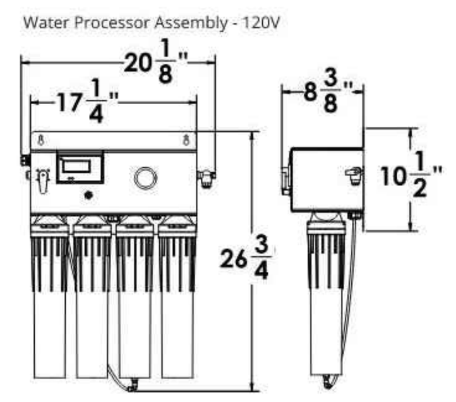
KITCHEN FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE/ EQUIPMENT	FILTERED WATER (RO SYSTEM) (IN)	COLD WATER (IN)	HOT WATER (IN)	WASTE	
					INDIRECT	DIRECT
2	ICE MAKER	1/2"			1-1/2"	
6	COFFEE MAKER	1/2"				
9	ESPRESSO MACHINE	1/2"				
10	3-COMPARTMENT SINK		3/4"	3/4"	3"	
24	MOP SINK		3/4"	3/4"		3"
27	DIPPER WELL		3/8"			
28	RINSE SINK		3/8"		2"	
21	DUMP SINK		1/2"	1/2"		2"
21.1	S/S COUNTER W/ DIPPER WELLS		1/2"	1/2"		2"
21.2	HAND SINK		1/2"	1/2"		2"
25	WATER TREATMENT SYSTEM	1/2"			2"	
32	WALL MOUNTED HAND SINK		1/2"	1/2"		2"

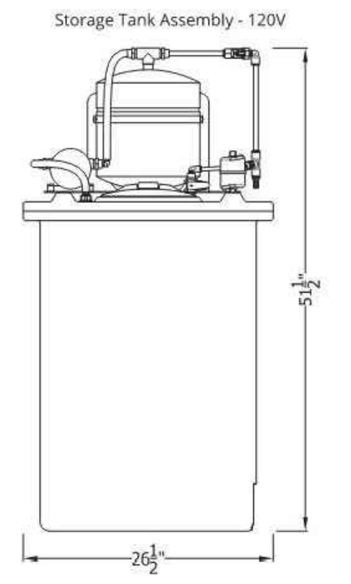
NOTES:
1. COORDINATE WITH KITCHEN DRAWINGS PRIOR TO INSTALLATION

OptiPure

Water Processor Assembly - 120V



Storage Tank Assembly - 120V



Feed-Water Chemistry

Feed TDS	Up to 1200 ppm
Feed pH	6-10 units
Hardness*	12 grains or less
Free Chlorine	<2 mg/l
Iron	0.1 mg/l max
Turbidity	0.05 NTU
Manganese	0.05 mg/l max
Hydrogen Sulfide	0.0 mg/l

*For water outside of these parameters call OptiPure technical service.

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

Model: BWS350/50
Part #: 164-14375

Specifications

System	
Dimensions - Processor	26.8"h x 20.1"w x 8.4"d
Dimensions - Tank	51.5"h x 26.5"w
Connection - Feedwater	3/8" Push Fit Tubing
Operating Pressure Range	60 - 85 psi at 1.0 gpm (4.1 - 5.9 bar)
Inlet Water Temperature Range	40° - 100°F (4° - 38°C)
Shipping Weight	100 lbs.
Drain Connection	2.0 gpm Minimum Flow
Power - Water Processor	120V 60Hz 6W
Power - Repressurization Pump	120V 60Hz 2 Amps
Performance	
Typical TDS Rejection	>97%
Product Water Production (at 77°F, 60 psi Net Operating Pressure) Production rate is strictly dependent on feed water temperature and pressure.	350.0 gals./day 14.6 gals./hr 0.25 gpm
Blended Water Production	Up to 400 gpd

Replacement Media

Model	Description	Part Number	Qty
CTO-Q	Pre-Filter	300-05830	2
AMS-QT	Membrane	204-53040	1
MA-Q15	Post-Filter	300-05855	1

Options

Model	Description	Part Number
Air-Gap Kit	Approved Air-Gap Kit for Drain Line	164-89905
QTPT-1	CTO Post-Treatment	160-52120
BPS-QT	Feed Water Booster Pump	164-85020
FXPT-11CR	Chloramine Reduction System	160-50011
PRV	Pressure Reducing Valve	164-89938
Remote Kit	Repressurization/Storage Tank Assembly remote kit	164-89116

It is recommended that pre/post-filters and mineral addition cartridges are changed every 6 months, when capacity is reached or when feedwater pressure or flow becomes inadequate.

Membrane life varies depending on feedwater conditions and pre-filter maintenance. It is 12-18 months under typical conditions, but it can be as long as 3-5 years.

This product is for commercial use only and must be installed and maintained according to manufacturer's guidelines.

Do not use on water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Warranty

All system components and assembly except for filter cartridges, separation membranes, permeate pumps, electric motors, diaphragm pumps, and rotary vane pumps shall be warranted against defects in workmanship for a period of 60 months from the date of original shipment. For complete warranty information, contact OptiPure customer service or go to www.optipurewater.com.

Dealer/Distributor Info:

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www.optipurewater.com

BWS350/50_Spec_R7
011319

PLUMBING SCHEDULE

MARK	FIXTURE	MAX GPM/GPF	CW	HW/TW	WASTE	VENT	DESCRIPTION
LAV	WALL-HUNG LAVATORY	0.5	1/2"	1/2"	3"	2"	FIXTURE: TOTO: #LT307 21"x18-1/4" WALL HUNG LAVATORY, WHITE VITREOUS CHINA FIXTURE WITH FAUCET LEDGE AND FRONT OVERFLOW. SINGLE HOLE FAUCET: CHICAGO FAUCET: #802-VE2805XKCP, 4" CENTERSET, VANDAL RESISTANT FAUCET WITH #390 LEVER HANDLES, CERAMIC QUARTER TURN CARTRIDGES AND #E2805 0.5 GPM AERATOR
WC	WATER CLOSET	1.5	1"		4"	2"	TBD
FS-1	FLOOR SINK				3"	2"	SIOUX CHIEF 861, PVC BODY WITH SCH 40 HUB CONNECTION, PVC STRAINER
FD-1	FLOOR DRAIN				3"	2"	ZURN # FD2210, PVC OR ABS BODY, ADJUSTABLE NICKEL BRONZE HEAD AND SECURED GRATE
TP	TRAP PRIMER						FIXTURE: McGUIRE *8902 / SUPPLIES: McGUIRE *2165CC.
WHA	WATER HAMMER ARRESTOR				1/2"	2"	PROVIDE AND INSTALL AT ALL FAST CLOSING VALVES, INCLUDING FLUSH VALVES, AND AT ENDS OF FIXTURE RUNS.
GI	GREASE INTERCEPTOR					3"	SCHIER: GB2 50 GPM 127.6 LBS
TS	TRAP SEAL						ProSet SYSTEMS 'GRAP GUARD" INSERT FOR ACTUAL FLOOR DRAIN MODEL AND SIZE PROVIDED, FLEXIBLE ELASTOMERIC PVC MATERIAL MOLDED INTO SHAPE OF DUCK'S BILL, OPEN ON TOP WITH CURL CLOSURE AT BOTTOM. ALLOWS WASTEWATER TO OPEN AND ADEQUATELY DISCHARGE FLOOR DRAIN THROUGH ITS INTERIOR. CLOSES AND RETURNS TO ORIGINAL MOLDED SHAPE AFTER WASTEWATER DISCHARGE IS COMPLETE.
WCO	WALL CLEANOUT						SIOUX CHIEF (873 SERIES, BRASS COUNTERSUNK PLUG, 20 GAUGE STAINLESS STEEL COVER AND SCREW. CLEANOUT TEE TO BE PROVIDED SEPARATELY. REFER TO SPECIFICATIONS FOR INSTALLATION
FC	FLOOR CLEANOUT						ZURN CO2450--AB3 ADJUSTABLE FLOOR CLEANOUT, 3 INCH ABS HUB CONNECTION, 4" SIZE AVAILABLE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS
RP	HOT WATER RE-CIRCULATION PUMP						REFER TO RE-CIRCULATION PUMP SCHEDULE
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER						WATTS: #LF009QT-S, LEAD FREE CAST BRONZE BODY, QUARTER TURN TEST COCKS, QUARTER TURN BALL VALVES, BRONZE STRAINER, AND #909AG AIR GAP FITTING

NOTES:
1. ALL FIXTURES MAY BE SUBSTITUTED FOR APPROVED EQUALS.
2. NOT ALL FIXTURES USED ON ALL JOBS.
3. ALL FIXTURES - PROVIDE TRAP GUARDS OR TRAP PRIMERS WHERE REQUIRED BY LOCAL CODES AND/OR AHJ
4. G.C. SHALL VERIFY FIXTURE SPECIFICATIONS WITH ARCHITECT PRIOR TO ORDERING

TYP HOT WATER MAXIMUM PIPING LENGTHS

FIXTURE TYPE	HW/TW	MAXIMUM HOT WATER PIPING LENGTH FROM HEATING SOURCE
LAVATORY	1/2"	2'
MOP SINK	3/4"	21'
SINK	1/2"	43'
SHOWER	1/2"	43'
WASHING MACHINE BOX	1/2"	43'
EXTRACTOR	3/4"	43'

NOTES:
1. REFER TO 2012 INTERNATIONAL ENERGY CONSERVATION CODE TABLE C404.5.1 FOR MORE INFORMATION. SYSTEM SHALL COMPLY.
2. HEATING SOURCE REFERS TO CIRCULATING HOT WATER LOOP, TANK WATER HEATER OR INSTANTANEOUS WATER HEATER.

EXPANSION TANK

MARK	TANK VOLUME	MANUFACTURER	MODEL NUMBER	HEIGHT	DIA.	ASTME CONST
ET	2GAL	AMTROL	ST-5	13"	8"	NO

WATER HAMMER ARRESTOR

FIXTURE	#100	#200	#300	#400	#500
PDI UNITS	A	B	C	D	E
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154

1. WATER HAMMER ARRESTORS SHALL BE FURNISHED AND INSTALLED WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010
2. FLUSH-VALVE WATER CLOSETS = 10 FIXTURE UNITS.
3. FLUSH-VALVE URINAL = 5 FIXTURE UNITS.
4. LOCATE WATER HAMMER ARRESTOR BETWEEN LAST TWO FLUSH-VALVE FIXTURES.
5. WATER HAMMER ARRESTORS SHALL COMPLY WITH PDI-WH-201.
6. WATER HAMMER ARRESTORS SHALL BE PROVIDED WITH AN ACCESS DOOR UNLESS PROVIDED WITH A LIFETIME WARRANTY.

TANK-TYPE ELECTRIC WATER HEATER SCHEDULE

MARK	LOCATION	STORAGE CAPACITY (GALLON)	ELECTRICAL DATA			MANUFACTURER	MODEL NUMBER
			VOLTAGE	PHASE	MAX KW		
WH	ABOVE MOP SINK	40	208	1	8	AO SMITH	DEL-40

1. PROVIDE SHUT OFF VALVES ON HOT AND COLD WATER CONNECTIONS.
2. SET HEATER TO DELIVER WATER AT 140°F.
3. WATER HEATER SHALL BE WALL MOUNTED.

THERMOSTATIC MIXING VALVE SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	PRESSURE DROP	INLET HOT WATER		INLET COLD WATER		OUTLET TEMPERED WATER	
				TEMP	FLOW	TEMP	FLOW	TEMP	FLOW
TMV	WATTS	LFMMV-UT-M1	10 PSI	140 °F	.5 GPM	60 °F	.5 GPM	110 °F	1.0 GPM

1. BRONZE BODY THERMOSTATIC MIXING VALVE WITH INTEGRAL FILTER WASHERS AND CHECK VALVES AND ADJUSTMENT CAP WITH LOCKING FEATURE.
2. VALVE SHALL BE ASSEE 1016, 1017 AND1070 LISTED
3. IF VALVE SERVES WALL HUNG LAVATORY OR HAND SINK, LOCATE VALVE IN WALL DIRECTLY BEHIND A 12"X12" ACCESS PANEL WITH LOCKING COVER. COORDINATE LOCATION WITH ARCHITECT.
4. IF VALVE SERVES A COUNTERTOP LAVATORY, LOCATE VALVE BELOW LAVATORY WITHIN CABINET.
5. IF VALVE SERVES MULTIPLE LAVATORIES OR HAND SINKS, VALVE SIZE SHALL BE AS FOLLOWS: 1-2 LAVATORIES (1/2"), 3-4 LAVATORIES (3/4"), AND 5-6 LAVATORIES (1").

RECIRCULATION PUMP SCHEDULE

MARK	SERVICES	GPM	TOTAL HEAD FT	MOTOR HP	ELECTRICAL DATA		
					VOLTAGE	PHASE	HERTZ
RP	120° HOT WATER	5	5	1/12	115	1	60

REMARKS:

BELL AND GOSSETT SERIES 100, BRONZE BODY W/ JOHNSON CONTROLS AQUASTAT MODEL A19DAC-1C, PLACE ABOVE WATER HEATER OR IN UTILITY ROOM WHER SPACE ALLOWS.

KITCHEN GREASE TRAP FLOW CALCULATION

NAME/TAG	TYPE	QTY	FLOW RATE (2 MIN/1 MIN)	DFU	DIMENSIONS	CAPACITY
#10	3 COMP SINK	1	7.36 GPM/14.73 GPM	6	6" X 18" X 14"	19.64 GPM
#24	MOP BASIN	1	3.12 GPM/6.23 GPM	3	20" X 16" X 6"	8.31 GPM
#21.2	HAND SINK	1	2.05 GPM/4.09 GPM	3	10" X 14" X 9"	5.46 GPM
#21	DUMP SINK	1	1.82 GPM/3.64 GPM	3	10" X 14" X 6"	3.64 GPM
					TOTAL:	37.05 GPM

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STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 19667 GRANT REID CLAUSSEN 08/31/22

SCOOTER'S COFFEE EST. 1998

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PLUMBING NOTES & SCHEDULES

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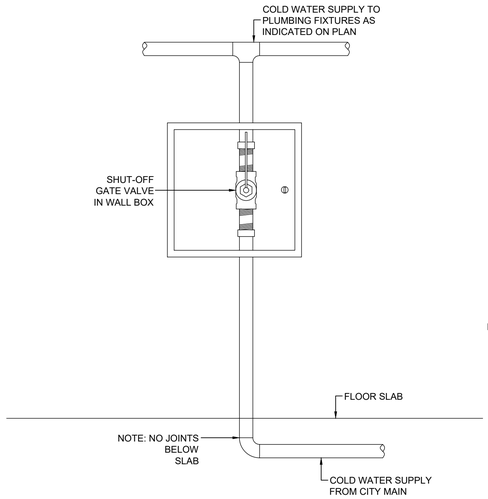
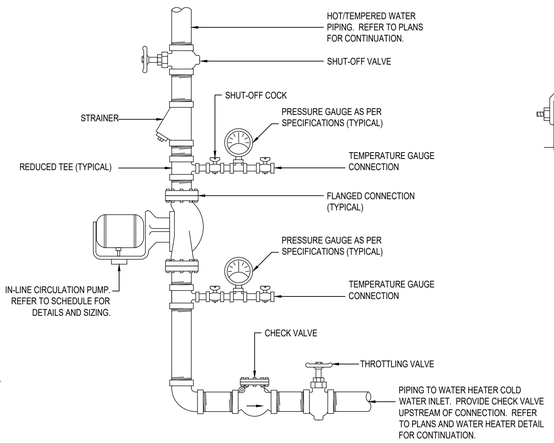
SHEET NO.

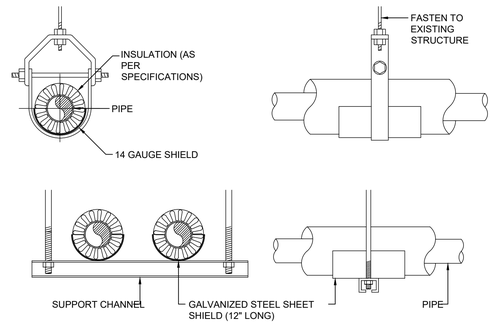
P1.02



12 TYP WALL MOUNT ACCESS PANEL DETAIL
SCALE: N.T.S.

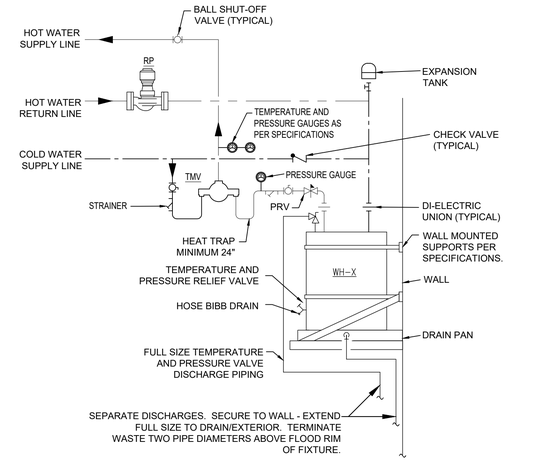


11 TYP IN-LINE CIRCULATING DETAIL
SCALE: N.T.S.



NOTES:
1. ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM THE STEEL STRUCTURE.
2. VAPOR BARRIER SHALL BE CONTINUOUS AT ALL JOINTS.

10 TYP PIPE HANGER SUPPORT DETAIL
SCALE: N.T.S.



NOTES:
1. REFER TO PLUMBING SCHEDULE SHEET AND PLUMBING FLOOR PLANS FOR SIZING.
2. REFER TO MANUFACTURER FOR ADDITIONAL REQUIREMENTS.
3. REFER TO IN-LINE CIRCULATION PUMP DETAIL FOR ALL VALVE, STRAINER, AND GAUGE REQUIREMENTS.
4. PRESSURE REDUCING VALVE (PRV) ON THE OUTLET OF WATER HEATER SHALL BE SET AT 25 PSI.

9 ELECTRIC WATER HEATER DETAIL
SCALE: N.T.S.

8 TYP WALL CLEANOUT DETAIL
SCALE: N.T.S.

NOTES:
1. SPACE PIPE SUPPORTS AT 8'-0" MAXIMUM SPACING OR AS SPECIFIED.
2. PROVIDE RUBBER ISOLATION PAD AT CLAMP.

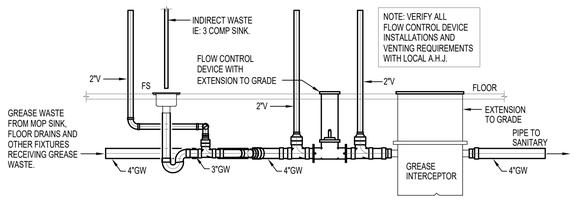
7 TYP ROOF PIPE SUPPORT DETAIL
SCALE: N.T.S.

6 TYP REDUCED PRESSURE ZONE BACKFLOW PREVENTOR DETAIL (IF REQURED)
SCALE: N.T.S.

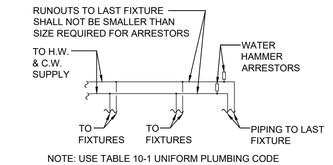
5 TYP FLOOR DRAIN DETAIL
SCALE: N.T.S.

REFER TO PLANS FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR MINIMUM TEN FEET HORIZONTAL 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.

4 TYP VENT THRU ROOF DETAIL
SCALE: N.T.S.

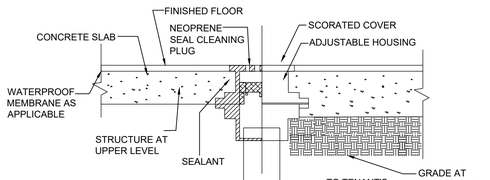


3 GREASE TRAP DETAIL
SCALE: N.T.S.



NOTE: USE TABLE 10-1 UNIFORM PLUMBING CODE FOR FIXTURE UNITS, FOR SIZING WATER HAMMER ARRESTORS. TABLE APPLIES TO BOTH UPC & IPC.

2 TYP WATER HAMMER ARRESTOR DETAIL
SCALE: N.T.S.



1 TYP FLOOR CLEAN-OUT DETAIL
SCALE: N.T.S.

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
MATTHEW REID CLAUSEN
08/31/22

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
PLUMBING DETAILS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
P1.03

GENERAL NOTES

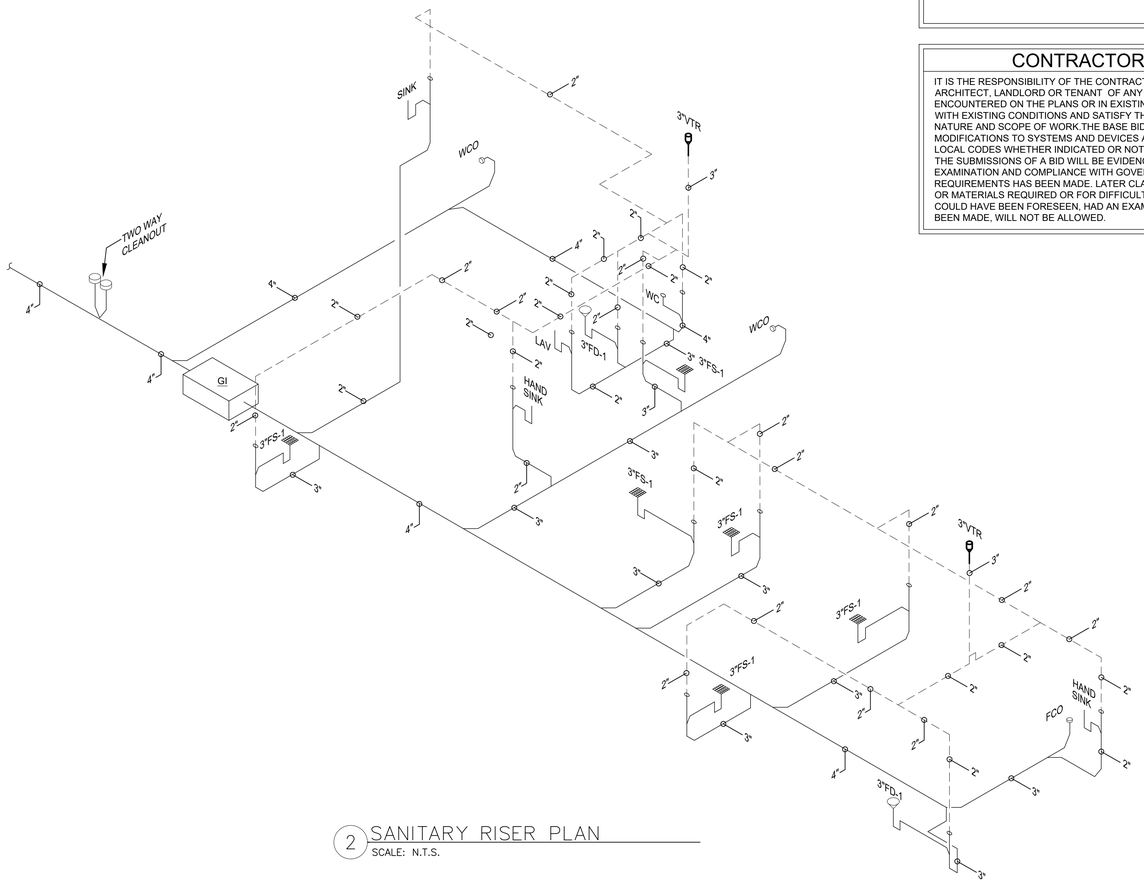
1. WHEN REQUIRED, IT IS THE OWNER'S RESPONSIBILITY TO CONTRACT WITH A COMMISSIONING AUTHORITY TO COMPLY WITH LOCAL CODES.
2. PROVIDE CLEANOUT LOW UNDER COUNTER AT EACH SINK/LAVATORY LOCATION IN ACCESSIBLE MANNER. PROVIDE CLEANOUT 12" - 18" A.F.F. AT THE MOP SINK AND FLOOR SINK.
3. SCOOTERS COFFEE PROTOTYPE OPERATES UNDER THE ASSUMPTION THAT NO GREASE INTERCEPTOR IS REQUIRED FOR THESE SPACES UNLESS REQUESTED BY LOCAL AUTHORITIES. REFER TO PLAN DRAWINGS AND KEY NOTES FOR PROPOSED SCHEMATIC ADDRESSING INTERCEPTOR REQUIREMENTS ON SITE.
4. PROVIDE AND INSTALL PIPE CLAMPS AND HANGERS AS REQUIRED BELOW SLAB TO ROUTE PIPE SUPRORTED FROM ELEVATED SLABS. FURNISH EXPANSION JOINTS WHERE PIPES ENTER THE SOIL.

NOTES BY SYMBOL (X)

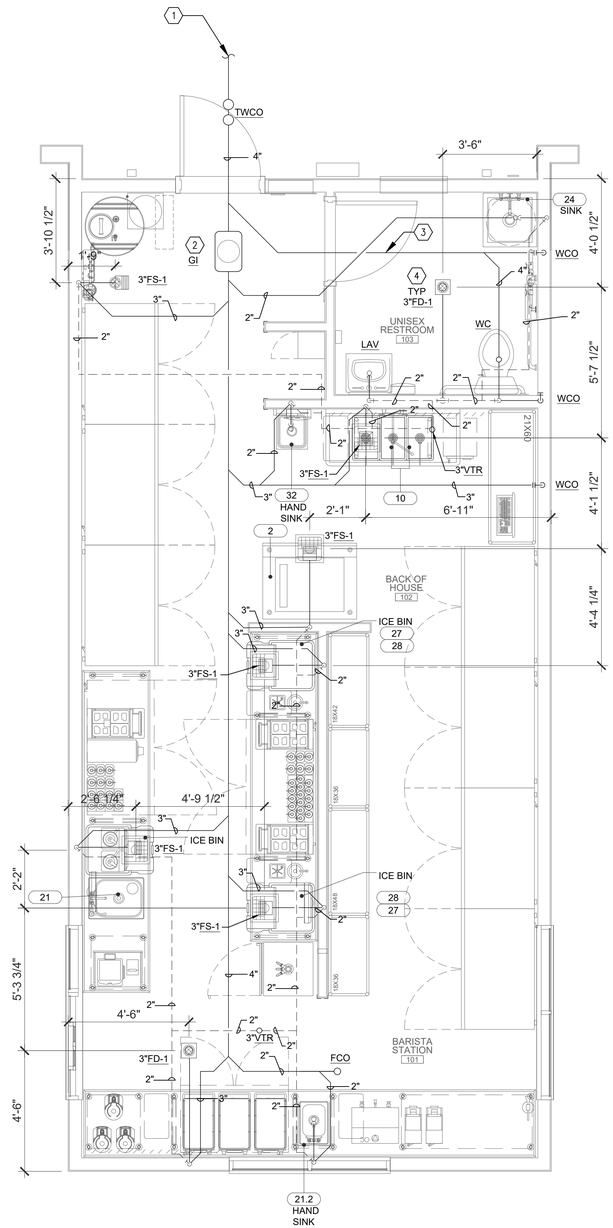
1. REFER TO CIVIL UTILITY DRAWINGS FOR CONTINUATION.
2. PROVIDE AND INSTALL GREASE INTERCEPTORS SERVING KITCHEN WASTE. EXTEND GREASE WASTE PIPING FROM KITCHEN GREASE INTERCEPTOR.
3. EXTEND SANITARY WASTE FROM RESTROOMS TO EXTERIOR AND TIE IN ON THE EFFLUENT SIDE OF THE INTERCEPTOR ONLY FOR SPACES REQUIRING GREASE TRAP. DO NOT TIE SANITARY WASTE FROM RESTROOMS INTO THE GREASE WASTE LINE FROM THE KITCHEN WHEN LOCAL AUTHORITIES REQUIRE AN INTERCEPTOR.
4. PROVIDE TRAP SEALS (TS) AT FLOOR DRAINS

CONTRACTOR NOTE

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT, LANDLORD OR TENANT OF ANY DISCREPANCIES ENCOUNTERED ON THE PLANS OR IN EXISTING FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND SATISFY THEMSELVES AS TO THE NATURE AND SCOPE OF WORK.THE BASE BID SHALL REFLECT MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE AND LOCAL CODES WHETHER INDICATED OR NOT ON CONTRACT DOCUMENTS. THE SUBMISSIONS OF A BID WILL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES / REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED OR FOR DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN, HAD AN EXAMINATION AND CODE REVIEW BEEN MADE, WILL NOT BE ALLOWED.



2 SANITARY RISER PLAN
SCALE: N.T.S.



1 SANITARY SEWER FLOOR PLAN
SCALE: 3/8" = 1''-0"

NORTH

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PROJECT ADDRESS:
1816 N Reynolds Rd.
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REVISIONS:

TITLE:
SANITARY SEWER FLOOR PLAN & RISER DIAGRAM

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

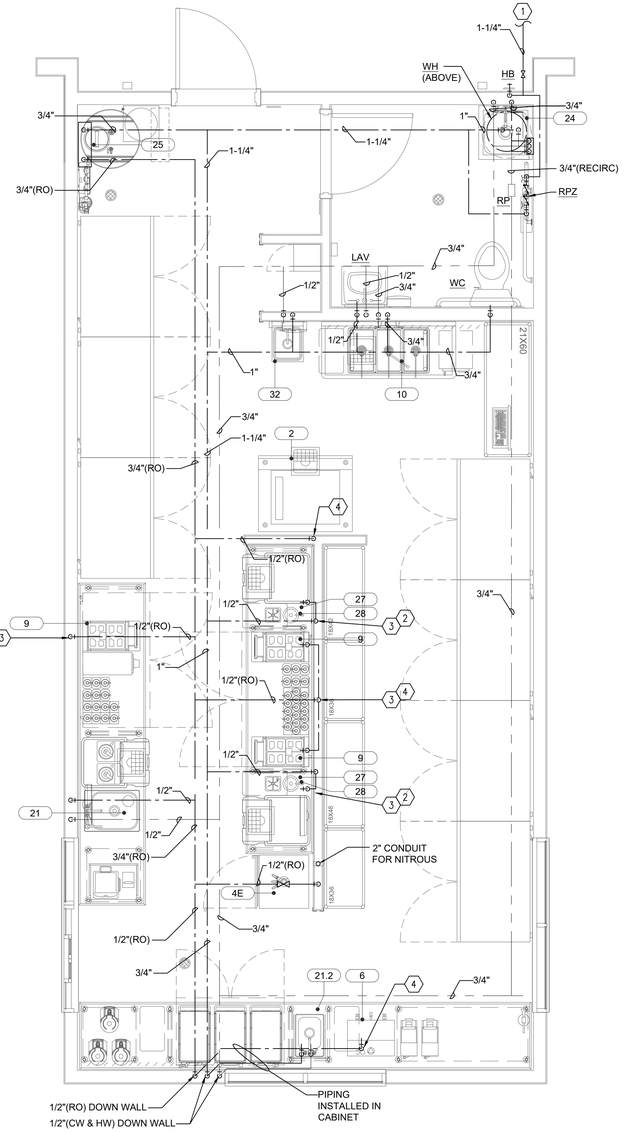
SHEET NO.
P2.01

GENERAL NOTES

1. CONTRACTOR TO COORDINATE METER REQUIREMENTS WITH LANDLORD/ CITY AT START OF PROJECT
2. CONTRACTOR TO PROVIDE/INSTALL BACKFLOW PREVENTION AS NEEDED IF NONE IS FOUND ON SITE PER CITY REQUIREMENTS.
3. ALL PLUMBING AND ELECTRICAL SHALL BE CONCEALED WITHIN WALLS OR ABOVE CEILING. SOME LINES MAY BE OFFSET TO SHOW DIAGRAMMATIC CONNECTIONS.
4. PLUMBING CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS, FOR PLACEMENT OF HOT AND COLD WATER SUPPLY TAPS PRIOR TO INSTALLATION. WATER SUPPLY LOCATIONS ON THIS SHEET ARE DIAGRAMMATIC.
5. ROUTING OF WATER LINES SHOWN ON PLANS IN VICINITY OF PANELS IS DIAGRAMMATIC. DO NOT ROUTE WATER LINES DIRECTLY ABOVE PANELS.
6. PROVIDE PRESSURE REDUCING VALVE ON MAIN TAP IF SERVICE PRESSURE EXCEEDS 80PSI, REDUCE TO 65 PSI. NOTIFY ENGINEER IF WATER PRESSURE IS BELOW 45 PSI ON SITE (STATIC OR DYNAMIC). MEASURE BEFORE BEGINNING CONSTRUCTION.

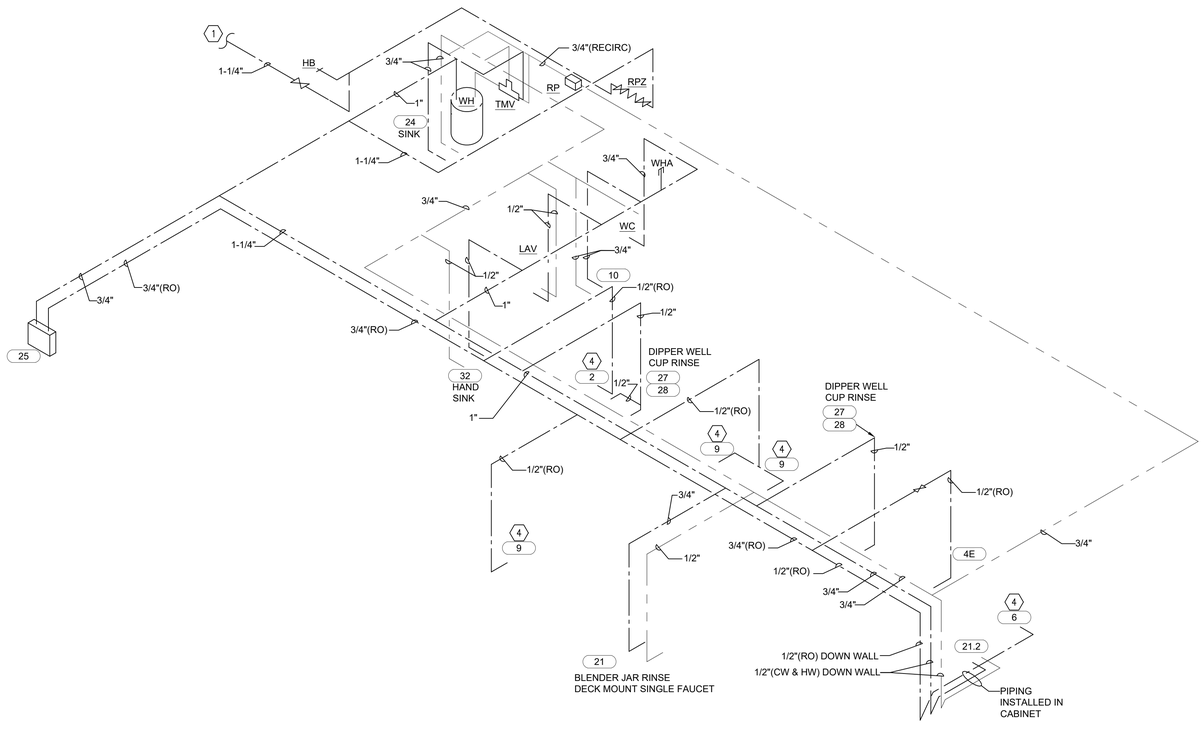
NOTES BY SYMBOL (X)

1. SEE CIVIL DRAWINGS FOR CONTINUATION OF WATER SUPPLY. CONTRACTOR TO VERIFY LOCATION PRIOR TO INSTALLATION.
2. 3/4" COLD WATER DOWN IN WALL FOR 1/2" COLD WATER CONNECTION TO DIPPER WELL AND RINSE SINK
3. PROVIDE 3/8" SHUT-OFF VALVE. FINAL CONNECTION TO MACHINE BY OTHERS.
4. PROVIDE DOUBLE CHECK VALVE RPZ ON WATER LINE AT POINT-OF-USE AT KITCHEN FIXTURE



1 WATER SUPPLY FLOOR PLAN
SCALE: 3/8" = 1'-0"

NORTH



2 WATER SUPPLY RISER
SCALE: N.T.S.

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EST. 1998
SCOOTER'S COFFEE

PROJECT ADDRESS:
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REVISIONS:

TITLE:
WATER SUPPLY FLOOR PLAN & RISER DIAGRAM

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
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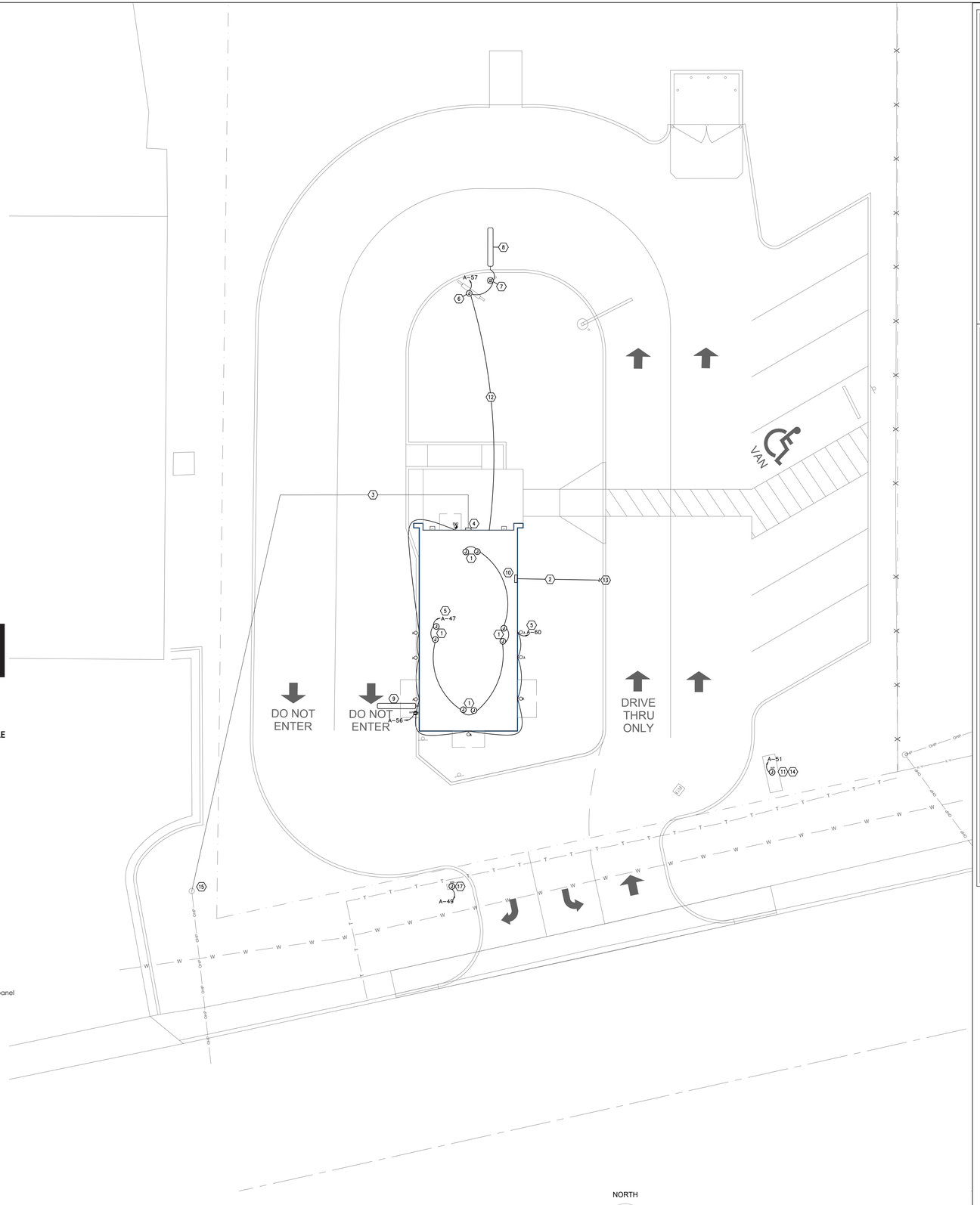
SHEET NO.
P2.02



GENERAL NOTES

A. ALL EXTERIOR LIGHT FIXTURES TO COMPLY WITH LOCAL NIGHT SKY ORDINANCE.

B. ALL EXTERIOR LIGHTING AND SIGNACE TO BE FED WITH #10 CU. U.N.O.

C. ALL EXTERIOR ELECTRICAL EQUIPMENT TO BE NEMA-3R RATED.

D. CONTRACTOR TO COORDINATE EXACT SITE LIGHTING FIXTURE LOCATIONS WITH LANDSCAPE DRAWINGS.

E. ALL FIXTURES INSTALLED OUTDOORS SHALL BE RATED FOR DAMP/WET LOCATIONS AS REQUIRED. THE CONTRACTOR SHALL COORDINATE DAMP/WET LOCATION RATING PER NEC ARTICLE 410-0. ALL INSTALLATIONS SHALL CONFORM TO NEC ARTICLE 410, ALL SUB ARTICLES.

F. FIRE ALARM EQUIPMENT SHALL BE COORDINATED FOR EXACT LOCATION AND REQUIREMENTS WITH FIRE MARSHALL .

G. ALL PVC CONDUIT MUST HAVE A MINIMUM OF #12 CU. GROUND CONDUCTOR.

H. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATE AND SCHEDULING WITH POWER AND TELEPHONE UTILITY COMPANIES INCLUDING (2) COMPLETE SETS OF DRAWINGS TO EACH COMPANY. ALL WORK SHALL BE INSTALLED PER EACH UTILITY COMPANIES FINAL DESIGN DRAWINGS.

I. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATE EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL EXTERIOR LIGHT FIXTURES WITH ARCHITECTURAL DRAWINGS.

NOTES BY SYMBOL (X)

1. PROVIDE W.P. J-BOX FOR EXTERIOR SIGNAGE PER NEC. COORDINATE EXACT PRIOR TO INSTALLATION. EXTEND CIRCUIT THROUGH WALL SWITCH. REFER TO SHEET E1.0 FOR MORE INFORMATION. VERIFY EXACT REQUIREMENTS W/ OWNER.
2. 4" UNDERGROUND PVC CONDUIT WITH PULL WIRE AND RIGID STEEL BENDS PER TELEPHONE COMPANY REQUIREMENTS. TRENCH AND BACKFILL AS REQUIRED. REFER TO TABLE 300.5 FOR ADDITIONAL REQUIREMENTS .
3. NEW SECONDARY FEEDERS FROM TRANSFORMER PER POWER COMPANY REQUIREMENTS. ROUTING SHOWN FOR REFERENCE ONLY. REFER TO ONE-LINE DIAGRAM.
4. PROPOSED LOCATION OF NEW SERVICE ENTRANCE SECTION IN NEMA-3R ENCLOSURE. REFER TO ONE-LINE DIAGRAM AND LOAD CALCULATIONS.
5. CIRCUIT ROUTED TO WALL SWITCH. REFER TO SHEET E1.0 FOR LOCATION.
6. PROVIDE STUB-UP FOR DRIVE THRU DIGITAL MENU BOARD. COORDINATE EXACT POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION. SEE DIGITAL MENU BOARD SCHEMATIC.
7. PROVIDE W.P. J-BOX FOR DRIVE THRU SPEAKER. COORDINATE EXACT POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION. SEE DRIVE-THRU CONDUIT SCHEMATIC.
8. CONNECT SPEAKER PEDESTAL TO DETECTION LOOP, COORDINATE EXACT REQUIREMENT WITH MANUFACTURER PRIOR TO ROUGH-IN. SEE DRIVE-THRU CONDUIT SCHEMATIC.
9. PROVIDE STUB UP FOR DETECTION LOOP. COORDINATE EXACT REQUIREMENT WITH MANUFACTURER PRIOR TO ROUGH-IN. SEE DRIVE-THRU CONDUIT SCHEMATIC.
10. PROPOSED LOCATION OF MAIN POINT OF PRESENCE FOR TELEPHONE COMPANY DEMARCATION AND TERMINATION.
11. PROVIDE W.P. J-BOX FOR MONUMENT SIGN. COORDINATE EXACT LOCATION WITH ARCHITECT OR OWNER AND ELECTRICAL REQUIREMENT S WITH VENDER.
12. PROVIDE (4) ELECTRICAL NON METALLIC CONDUITS FOR DRIVE THRU DIGITAL MENU BOARD. REFER TO DRIVE THRU SCHEMATIC ON THIS SHEET FOR FURTHER INFORMATION. (1) 2" CONDUIT TO IT RACK FOR DIGITAL CABLE, (1) 1-1/2" CONDUIT TO IT RACK FOR COMMUNICATIONS, (1) 1" CONDUIT FOR BRANCH POWER (TWO 20A/1P BRANCH CIRCUITS REQUIRED) TO ELECTRICAL PANELBOARD AND (1) 1" CONDUIT FOR LOOP DETECTION ROUTED TO DRIVE-THROUGH AREA LOOP DETECTION SYSTEM.
13. TERMINATE AND STUB CONDUIT TO PROPERTY LINE OR EXISTING CABINET PER TELEPHONE COMPANY REQUIREMENT.
14. PROVIDE (3) #10" IN 3/4" NON METALLIC CONDUIT AT 24" BELOW FINISHED GRADE, PER NEC 300.5 VERIFY EXACT ROUTING PRIOR TO INSTALLATION. TRENCH, BACKFILL, AND REPAIR LANDSCAPE/ HARDSCAPE AS REQUIRED.
15. PROPOSED POWER COMPANY TRANSFORMER LOCATION. COORDINATE WITH UTILITY OWNER FOR EXACT LOCATION.
16. PROVIDE AND INSTALL FLAG POLE LIGHT REFER TO SHEET E2.01 FOR LIGHTING SCHEDULE.
17. PROVIDE W.P. J-BOX FOR INTERNALLY ILLUMINATED DIRECTIONAL SIGN.

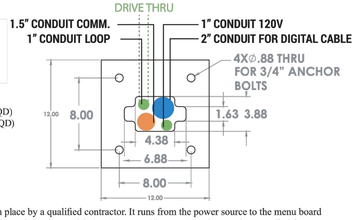
DIGITAL

DT FLEX

FOUNDATION INSTRUCTIONS

DIAGRAM CC Template & Foundation

Mounting Template

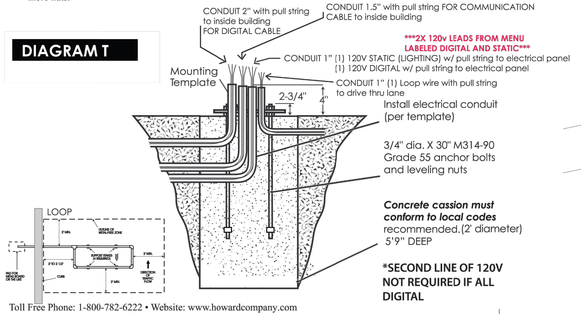


HOLE SIZES:
A: 0.813" DIA. HOLE.....(4 REQD)
B: SEE TEMPLATE DRAWING.....(1 REQD)

Foundation

The high voltage conduit must be installed in place by a qualified contractor. It runs from the power source to the menu board location. A conduit stub should protrude 4" above the concrete slab **(see Diagram T)** Use the template supplied for the correct relation between the mounting bolts and the conduit location. Power and ground leads should be pulled through the conduit approximately 12" beyond the conduit stub, and be accessible at the time of final wiring. **Note: The 120VAC power lines run up the inside back of the pedestal base (see Diagram CC, Mounting Template)**
After the location is established, pour the concrete footing per local codes. While the concrete is still soft, insert the four (4) anchor bolts. Use the supplied template as a bolt and conduit locator. Anchor bolts should be 2-3/4" above grade (see Diagram F Foundation. **Note: Prior to placing the template down, one (1) nut must be threaded onto each anchor bolt and sunk into the concrete, flush with the top of the nut.** Place the template over the eight (4) anchor bolts and secure in place with four (4) more nuts.

DIAGRAM T



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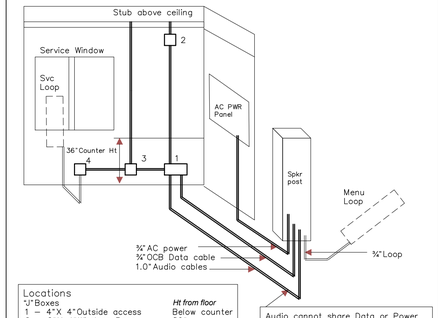
DIGITAL MENU BOARD SCHEMATIC

1 ELECTRICAL SITE PLAN
SCALE: 1" = 10'-0"

NORTH



DRIVE THRU CONDUIT SCHEMATIC

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STATE OF ARKANSAS
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08/31/22

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
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REVISIONS:

TITLE:
ELECTRICAL SITE PLAN

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
E0.01

26000 COMMON WORKS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.0 DESCRIPTION

A. THE GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND GENERAL REQUIREMENTS, APPLY TO THE WORK SPECIFIED IN THIS DIVISION.

B. CONTRACTOR SHALL VISIT THE SITE TO CONFIRM ITEMS LISTED AS EXISTING BY LANDLORD. ITEMIZED BIDS SHALL BE PROVIDED TO COMPLETE ANY SCOPE GAP ITEMS TO ENSURE ALL WORK REQUIRED BY THE CONTRACTOR IS INCLUDED IN THE SCOPE.

C. PRIOR TO FINAL BID, REFER DISCREPANCIES, ERRORS, OMISSIONS AND AMBIGUITIES IN THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE IN WRITING. PROVIDE RESOLVED MATERIALS AND LABOR APPROVED BY THE OWNER'S REPRESENTATIVE AS PART OF THE FINAL BID.

D. THE INTENT OF THE CONTRACT DOCUMENTS IS TO PROVIDE COMPLETE SYSTEMS. PROVIDE MISCELLANEOUS ITEMS AND ACCESSORIES FOR COMPLETE SYSTEMS.

1.1 WORK INCLUDED

A. FURNISH LABOR, SUPPLIES, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY FOR INSTALLATION OF A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM, AS SPECIFIED HEREIN. THIS SECTION, AS WELL AS THE REST OF THE CONTRACT DOCUMENTS APPLY TO THE PROJECT.

B. COORDINATE WITH ALL OTHER TRADES FOR ELECTRICAL EQUIPMENT CONNECTIONS AND INSTALLATIONS.

C. THE CONTRACT DOCUMENTS ARE A COMPLETE SCOPE OF WORK INCLUDING, BUT NOT LIMITED TO, ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SPECIFICATIONS. CONTRACTOR TO REVIEW THE ENTIRE SET OF CONTRACT DOCUMENTS.

1.2 QUALITY ASSURANCE

A. ELECTRICAL WORK SHALL BE EXECUTED IN ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS OF LOCAL AUTHORITIES HAVING JURISDICTION OVER THE WORK. IF THE STANDARDS AND CODES CONFLICT WITH EACH OTHER, THE MOST STRINGENT SHALL APPLY.

B. PRODUCTS SPECIFIED IN DIVISION 16 FOR WHICH MANUFACTURERS ARE NOTED MUST STILL COMPLY WITH ALL CONTRACT DOCUMENTS. MENTION OF MANUFACTURER BY NAME, OR A SPECIFIC PRODUCT IS NOT INTENDED TO LIMIT OTHER MANUFACTURERS FROM THE PROJECT.

C. PERFORM ALL WORK IN ACCORDANCE WITH THE REGULATIONS AND ORDINANCES OF LOCAL MUNICIPAL AND STATE AGENCIES WHO HAVE LAWFUL JURISDICTION OVER THE PROJECT.

D. PROTECT ALL PRODUCTS DURING DELIVERY AND HANDLING AT THE SITE.

1.3 GOVERNING CODES

A. LOCAL MUNICIPALITY ELECTRICAL CODES AND ORDINANCES.

B. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), 70-NATIONAL ELECTRICAL CODE.

C. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), 29 CFR 1910.

D. AMERICANS WITH DISABILITIES ACT OF 1990 (ADA).

E. AMERICAN NATIONAL STANDARD INSTITUTE (ANSI).

F. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA) STANDARDS.

G. UNDERWRITER LABORATORIES INCORPORATED STANDARDS (UL).

H. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE).

I. NATIONAL ELECTRICAL SAFETY CODE (NESC).

J. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).

K. MANUFACTURER'S RECOMMENDATIONS.

1.5 JOB REQUIREMENTS AND CONDITIONS:

A. PERMITS, LICENSES AND INSPECTIONS SHALL BE SECURED AND PAID FOR AS REQUIRED BY LAW FOR THE COMPLETION OF THE WORK. CERTIFICATES OF APPROVAL SHALL BE SECURED, PAID FOR, AND DELIVERED TO THE OWNER BEFORE THE FINAL ACCEPTANCE OF THE WORK.

B. COORDINATE WITH ALL TRADES TO AVOID CONFLICTS IN THE INSTALLATION OF WORK. COORDINATE EQUIPMENT, PIPING, CONDUITS AND RACEWAYS TO ALLOW FOR SPACE FOR OTHER TRADES.

C. NOTIFY PROPER AUTHORITIES HAVING JURISDICTION FOR FOR INSPECTIONS AS REQUIRED BY THE LOCAL MUNICIPALITY.

1.6 SUBMITTALS

A. PRODUCT DATA: PROVIDE MANUFACTURERS' PUBLISHED ENGINEERING DATA AND MATERIALS. ANY SUBMITTED PRODUCTS DIFFERENT THAN THE SPECIFIED PRODUCTS SHALL BE CLEARLY IDENTIFIED IN THE SUBMITTAL.
B. PROVIDE TEST REPORTS, MATERIAL LISTINGS AND ANY REQUIRED CERTIFICATES.
C. OPERATION AND MAINTENANCE DATA TO BE PROVIDED TO THE OWNER AT THE COMPLETION OF THE PROJECT WITH OWNER TRAINING.

1.7 WARRANTY

A. FURNISH THE MANUFACTURER'S PRINTED WARRANTY FOR EACH SEPARATE ITEM, ALONG WITH CONTRACTOR'S WRITTEN ONE (1) YEAR GUARANTEE. WARRANTY SHALL INCLUDE LABOR NECESSARY TO REPLACE DEFECTIVE PARTS DURING THE WARRANTY PERIOD.

PART 2 - PRODUCTS

2.0 MATERIALS

A. NEW, FREE FROM DEFECTS AND OF COMMERCIAL GRADE STANDARD MANUFACTURING BY REPUTABLE MANUFACTURERS.

B. ALL ELECTRICAL EQUIPMENT SHALL HAVE IDENTIFICATION TAGS. INSTALL NAMEPLATES ON ELECTRICAL DEVICES. TEXT SHALL INDICATE THE COMPONENT AS IDENTIFIED IN THE CONSTRUCTION DOCUMENTS.

C. PROVIDE TYPE WRITTEN PANEL SCHEDULES FOR ALL PANELBOARDS AFTER FINAL INSTALLATION IS COMPLETE, IDENTIFYING THE BRANCH CIRCUITS AND AREAS SERVED.

D. ALL SIMILAR MATERIALS SHALL BE BY THE SAME MANUFACTURER.

2.1 SUBSTITUTIONS

A. PROJECT TO BE BID PER CONTACT DOCUMENTS EXCLUDING ANY SUBSTITUTIONS AND SUBSTITUTION REQUESTS TO BE PROVIDED PER DIVISION 1 REQUIREMENTS.

B. REQUESTS IMPLY NO OBLIGATION ON THE OWNER.

C. APPROVED SUBSTITUTIONS THAT REQUIRE CHANGES, INCLUDING WORK IN OTHER DIVISIONS, SHALL HAVE NO ADDITIONAL COSTS TO THE OWNER.

D. SUBSTITUTIONS DURING ANY VALUE ENGINEERING WILL PROVIDE CREDIT TO THE OWNER FROM THE ORIGINAL CONSTRUCTION BID.

PART 3 - EXECUTION

3.0 INSPECTION

A. ANY MATERIALS DAMAGED UPON RECEIPT SHALL BE REPLACED. ANY MATERIALS DAMAGED WHILE ON SITE SHALL BE REPLACED AT NO COST TO OWNER.

B. BEFORE STARTING WORK, REPORT ANY STRUCTURAL DEFECTS THAT WILL ADVERSELY AFFECT THE QUALITY AND EXECUTION OF WORK TO OWNER'S REPRESENTATIVE.

C. ANY OBSERVED ITEMS IN THE BUILDING AND SITE THAT MIGHT POSE A SAFETY HAZARD TO THE OWNER, CONTRACTOR, BUILDING USERS OR MAINTENANCE PERSONNEL THAT WILL BE INVOLVED WITH THE UPKEEP OF THE BUILDING'S ELECTRICAL AND MECHANICAL SYSTEMS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.

3.1 INSTALLATION

A. CLEAN AND MODIFY ALL SURFACES AND STRUCTURES FOR WHICH MATERIALS ARE TO BE INSTALLED FOR A PROPER AND SECURE INSTALLATION.

B. CONSTRUCTION DOCUMENTS ARE DIAGRAMMATIC AND CONTRACTOR IS TO FIELD VERIFY ALL ROUTING, LOCATIONS AND CONFLICTS WITH OTHER TRADES AT NO COST TO OWNER. ENGINEER DOES NOT VERIFY QUANTITY OF MATERIALS NEEDED FOR A COMPLETE INSTALLATION.

C. INSTALL ALL MATERIALS PER THE GOVERNING CODES.

D. EXTERIOR TRENCHING TO FOLLOW DIVISION 2 SITE WORK FOR EXCAVATION AND BACKFILL.

E. WHERE CUTTING AND PATCHING IS REQUIRED, RESTORE DISTURBED WORK TO MATCH ADJACENT FINISHES. WHERE WORK INVOLVES STRUCTURAL MEMBERS OR WALLS, CONSULT OWNER'S REPRESENTATIVE IN WRITING FOR STRUCTURAL ENGINEER TO VERIFY ACCEPTANCE.

F. PAINTING TO BE PROVIDED PER MANUFACTURER'S RECOMMENDATIONS. MARRED EQUIPMENT SHALL BE FINISHED WITH TOUGH-UP PAINT FOR EQUIPMENT TO LOOK NEW AND FREE OF DAMAGE.

G. PROVIDE FIRE RATED SLEEVES WHERE PENETRATING FIRE RATED WALLS WITH RATED ASSEMBLIES OR RACEWAY WITH FIRE SEALING.

H. EXTERIOR WALL PENETRATIONS TO BE WATER TIGHT. PROVIDE FLASHINGS, SEALANTS AND CAULKS TO PREVENT WATER INTRUSION.

I. MAINTAIN RECORD 'AS-BUILT' DRAWINGS THROUGHOUT THE CONSTRUCTION PROCESS.

26100 ELECTRICAL

PART 1 - GENERAL

1.0 INSPECTION

A. FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEMS. MINIMUM MATERIAL AND EQUIPMENT SPECIFICATIONS PROVIDED IN THIS SECTION.

PART 2 - PRODUCTS

2.0 MATERIALS

A. PRODUCTS FROM MANUFACTURERS SHALL BE UL LABELED AND LISTED FOR THE APPLICATION USED.

2.1 CONDUCTORS AND CABLES

A. COPPER BUILDING WIRE: FLEXIBLE, INSULATED AND UNINSULATED, DRAWN COPPER CURRENT-CARRYING CONDUCTOR WITH AN OVERALL INSULATION LAYER OR JACKET, OR BOTH, RATED 600V OR LESS. COMPLY WITH UL 83.

1. FEEDERS: TYPE XHHW, THHN/THWN, 600V, COPPER, 75°C RATING.
2. BRANCH CIRCUITS: TYPE THHN/THWN, 600V, COPPER, 75°C RATING. ALL BRANCH CIRCUITS TO HAVE A DEDICATED NEUTRAL. NO COMMON NEUTRAL WITH TANDEM BREAKERS ALLOWED.
3. MINIMUM WIRE SIZE SHALL BE #12 AWG.
4. CONDUCTORS TO BE SOFT DRAWN, ANNEALED COPPER WITH A CONDUCTIVITY OF NOT LESS THAN 98% PURE COPPER AND UL LISTED.
5. CONDUCTORS #10 AWG AND SMALLER TO BE SOLID.
6. CONDUCTORS #8 AWG AND LARGER TO BE STRANDED.
7. 480Y/277V SYSTEMS:
   a. PHASE A - BROWN
   b. PHASE B - ORANGE
   c. PHASE C - YELLOW
   d. NEUTRAL - GRAY
   e. GROUND - GREEN WITH YELLOW STRIPE
8. 208Y/120V SYSTEMS:
   a. PHASE A - BLACK
   b. PHASE B - RED
   c. PHASE C - BLUE
   d. NEUTRAL - WHITE
   e. GROUND - GREEN

B. WIRING CONNECTORS:

1. TWIST-ON CONNECTORS TO BE SPRING INSULATED TYPE.
2. COMPRESSION CONNECTORS TO BE LONG BARREL TYPE FOR DOUBLE FOR 600V WIRING FOR 250 KCMIL AND LARGER.
3. INSULATED SPLIT BOLTS FOR FOR 600V WIRING SMALLER THAN 250 KCMIL.

2.2 GROUNDING AND BONDING

A. SYSTEM

1. GROUND UP BUILDINGS - COMPLETE GROUNDING ELECTRODE SYSTEM CONFORMING WITH ALL REQUIREMENTS OF NEC 250.52(A)(1) THROUGH (A)(7) THAT ARE PRESENT AT THE BUILDING SHALL BE BONDED TOGETHER. PROVIDE ISOLATED BUS BAR IN MAIN ELECTRICAL ROOM AND TELECOM ROOMS. RESISTANCE TO EARTH TO BE 5 OHMS OR LESS. ADD GROUNDING ELECTRODE SYSTEMS AS NECESSARY TO REACH RESISTANCE LEVELS
   a. METAL UNDERGROUND WATER PIPE.
   b. METAL FRAME OF BUILDING OR STRUCTURE.
   c. CONCRETE-ENCASED ELECTRODE (UFER).
   d. GROUND RING (WHERE APPLICABLE).
   e. GROUND RODS.
   f. PLATE ELECTRODE.
   g. OTHER LISTED SYSTEMS.
2. FOR EXISTING BUILDING - TEST EXISTING RESISTANCE TO EARTH OF THE EXISTING GROUNDING ELECTRODE SYSTEM. PROVIDE ADDITIONAL GROUNDING ELECTRODES AS NECESSARY TO REACH A MINIMUM RESISTANCE TO EARTH OF 5 OHMS. PROVIDE GROUNDING BUS BARS IN ELECTRICAL ROOMS AND TELECOM ROOMS CONNECTED TO THE EXISTING GROUNDING ELECTRODE SYSTEM.

B. MATERIALS

1. SEE SINGLE LINE POWER DIAGRAM FORM GROUNDING CONDUCTOR SIZE. MINIMUM TO BE #2/0 AWG BARE COPPER 30" BELOW GRADE. ABOVE GROUND TO BE GREEN-COLORED INSULATION WITH CONTINUOUS YELLOW STRIP.
2. GROUND BUS - HORIZONTALLY ON INSULATED SPACERS 2" FROM WALL AND 6" AFF. PREDRILLED RECTANGULAR BARS ON ANNEALED COPPER, 1/4" X 4" IN CROSS SECTION AND LENGTH AS NEEDED. CONNECTORS TO BE MECHANICAL, CAST SILICON BRONZE, SOLDERLESS COMPRESSION-TYPE, LONG-BARREL WITH TWO-BOLT CONNECTION TO BUS BAR.
3. TERMINATIONS:
   a. PIPE AND EQUIPMENT - BOLTED CONNECTORS.
   b. UNDERGROUND CONNECTIONS - EXOTHERMIC WELD.
   c. STRUCTURAL STEEL - WELDED CONNECTORS.

2.3 RACEWAYS AND BOXES

A. CONDUIT

1. ELECTRICAL METALLIC TUBING (EMT): ZINC COATED GALVANIZED THIN-WALL STEEL TUBING. ANSI C80.3 AND UL 797.
2. RIGID METAL CONDUIT (RMC): HEAVY WALL, ZINC COATED GALVANIZED STEEL. ANSI C80.1 AND UL 65.
3. INTERMEDIATE METAL CONDUIT (IMC): HIT-DIPPED GALVANIZED STEEL WITH A COUPLING AND END THREAD PROTECTOR FOR EACH SECTION. ANSI C80.6 AND UL 1242 WITH AN INTERIOR COATING OF SILICON EPOXY ESTER LUBRICANT.
4. FLEXIBLE METAL CONDUIT (FMC): HOT-DIPPED GALVANIZED STEEL STRIP CORE WITH INTEGRAL COPPER GROUND WIRE AND UL 1.
5. LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC): HOT-DIPPED GALVANIZED STEEL STRIP CORE WITH EXTRUDED POLYVINYL JACKET, SUN-LIGHT-RESISTANT AND NON-WRINKLING WITH INTEGRAL COPPER GROUND WIRE AND UL 360 AND SUITABLE FOR 90°C CONDUCTORS.
6. RIGID NONMETALLIC CONDUIT (RNC): SCHEDULE 40 POLYVINYLCHLORIDE (PVC), NEMA TC 2 AND UL 651. PROVIDE SCHEDULE 80 WHERE NOTED. SWITCH TO IMC OR RMC WHERE CONDUIT TURNS UP INTO BUILDING.
7. MINIMUM RACEWAY SIZE TO BE 3/4"C.

B. CONDUIT FITTINGS

1. RIGID CONDUIT TO HAVE THREADED FITTINGS.
2. EMT TO HAVE COMPRESSION TYPE FITTINGS.
3. METAL FITTINGS TO COMPLY WITH NEMA FB 1 AND UL 514B.
4. NONMETALLIC FITTINGS TO COMPLY WITH NEMA TC 3. MATCH TO CONDUIT OR TUBING TYPE AND MATERIAL.

C. WIREWAYS

1. SHEET METAL COMPLYING WITH UL 870 AND NEMA 250. PROVIDE NEMA 1, 3R, OR 4 AS NOTED. SIZED AS NOTED, BUT MUST MEET MINIMUM FILL AND BENDING RADIUSES PER NEC WITH HINGED TYPE COVERS.

D. BOXES, ENCLOSURES AND CABINETS

1. RATED FOR ENVIRONMENT.
2. SHEET METAL OUTLET AND DEVICE BOXES: COMPLY WITH NEMA 0S 1 AND UL 514A
3. CAST-METAL OUTLET AND DEVICE BOXES: COMPLY WITH NEMA FB1, ALUMINUM, TYPE FD, WITH GASKETED COVER.
4. FLOOR BOXES EQUAL TO WIREMOLD EVOLUTION SERIES FOR POKE-THRU AND IN GRADE TYPES. MINIMUM OF TWO DUPLEX OUTLETS AND DATA OUTLETS WHERE SHOWN.
5. ALL CEILING LUMINAIRE AND FAN OUTLET BOXES TO BE NONADJUSTABLE. LUMINAIRE BOXES RATED TO 50 LB AND LUMINAIRES WEIGHING MORE THAN 50 LB SHALL BE LISTED AND MARKED FOR THE MAXIMUM ALLOWABLE WEIGHT. PADDLE FAN OUTLET BOXES MIMINUM 70 LB RATING.
6. CABINETS TO BE NEMA 250. PROVIDE NEMA 1, 3R, OR 4 AS NOTED. GALVANIZED-STEEL BOX WITH REMOVABLE INTERIOR PANEL AND REMOVABLE FRONT. HINGED DOOR IN FRONT COVERT WITH FLUSH LATCH AND CONCEALED HINGE. KEYED TO MATCH PANELBOARDS.
7. JUNCTION AND PULL BOXES: CODE GAUGE GALVANIZED STEEL WITH GALVANIZED STEEL COVERS. PULL BOXES INSTALLED ON THE EXTERIOR OR IN WET LOCATIONS SHALL BE WEATHERPROOF IN ACCORDANCE WITH NEMA 250.
8. LOCKNUTS TO BE ZINC-PLATED OR CADMIUM PLATED MALLEABLE IRON.

2.4 WIRING DEVICES AND OUTLETS

A. SPECIFICATION GRADE.

B. SWITCHES: 20A, 120-277V RATING.

C. RECEPTACLES: 20A, 125V, 3-WIRE, DUPLEX GROUNDING. PROVIDE GFCI, AFCI, AND TAMPER PROOF RECEPTACLES WHERE REQUIRED BY NEC. GFCI RATED RECEPTACLES REQUIRED IN KITCHENS, BARS, RESTROOMS, EXTERIOR, AS WELL AS OTHER AREAS. TAMPER-PROOF RECEPTACLES ARE NOW REQUIRED IN COMMON AREAS.

D. COVER PLATES: STAINLESS STEEL IN KITCHENS, CAST ALUMINUM IN EXTERIOR LOCATIONS AND SMOOTH, HIGH-IMPACT THERMOPLASTIC IN INTERIOR SPACES UNLESS OTHERWISE NOTED.
1. ALL STAINLESS STEEL COVER PLATES TO BE ETCHED WITH CIRCUIT IDENTIFICATIONS. THERMOPLASTIC PLATES TO BE PROVIDED WITH IDENTIFICATION STICKERS.

E. OUTLET BOX CONNECTIONS:
1. BUSHINGS: HIGH IMPACT, THERMOSETTING PHENOLIC INSTULATED, RATED AT 150°C.
2. THREADED NIPPLES: CONDUIT NIPPLES WITH TWO SETS OF THREADS.
3. PLASTIC ELECTRICAL TAPE RATED AT 600V; 3M #35+ OR EQUAL.

2.5 PANELBOARDS

1. DISTRIBUTION PANELBOARDS:
   a. BASIS OF DESIGN TO BE SQUARE D 'I-LINE' SERIES. ALL PANELBOARDS TO BE OF THE SAME MANUFACTURER.
   b. NEMA RATING AS SHOWN ON PANEL SCHEDULES.
   c. THREE PHASE, 4 WIRE, SOLID NEUTRAL DESIGN WITH SEQUENCE BUSSING, FULL CAPACITY NEUTRAL AND SEPARATE GROUND BUS.
   d. MAIN CIRCUIT BREAKER (MCB) OR MAIN LUGS ONLY (MLO) AS NOTED ON PANEL SCHEDULES.
   e. PROVIDE TYPEWRITTEN PANEL SCHEDULE IN INSIDE OF DOOR.
   f. CABINET TO HAVE DOOR IN DOOR STYLE FRONT COVER.
   g. COPPER BUSSING, FULLY RATED TO A.I.C. RATING SHOWN ON PANEL SCHEDULE. MINIMUM OF 22 KAIC.
   h. CIRCUIT BREAKER TO BE BOLT-ON TYPE. QUICK-MAKE, QUICK BREAK WITH SEPARATE TRIP POSITION.
   i. NO 20A/1P TANDEM CIRCUIT BREAKERS ALLOWED. EACH CIRCUIT TO HAVE A DEDICATED NEUTRAL.
   j. PROVIDE PREPARED SPACES AND SPARES AS SHOWN ON PANEL SCHEDULES.
   k. PROVIDE 60A/3P CIRCUIT BREAKER FOR EXTERNAL SURGE PROTECTIVE DEVICE (SPD)
2. BRANCH PANELBOARDS:
   a. BASIS OF DESIGN TO BE SQUARE D 'NQ' AND 'NF' SERIES DEPENDING ON VOLTAGE. ALL PANELBOARDS TO BE OF THE SAME MANUFACTURER.
   b. NEMA RATING AS SHOWN ON PANEL SCHEDULES.
   c. THREE PHASE, 4 WIRE, SOLID NEUTRAL DESIGN WITH SEQUENCE BUSSING, FULL CAPACITY NEUTRAL AND SEPARATE GROUND BUS.
   d. MAIN CIRCUIT BREAKER (MCB) OR MAIN LUGS ONLY (MLO) AS NOTED ON PANEL SCHEDULES.
   e. PROVIDE TYPEWRITTEN PANEL SCHEDULE IN INSIDE OF DOOR.
   f. CABINET TO HAVE DOOR IN DOOR STYLE FRONT COVER.
   g. COPPER BUSSING, FULLY RATED TO A.I.C. RATING SHOWN ON PANEL SCHEDULE. MINIMUM OF 22 KAIC.
   h. CIRCUIT BREAKER TO BE BOLT-ON TYPE. QUICK-MAKE, QUICK BREAK WITH SEPARATE TRIP POSITION.
   i. NO 20A/1P TANDEM CIRCUIT BREAKERS ALLOWED. EACH CIRCUIT TO HAVE A DEDICATED NEUTRAL.
   j. ALL SPACES NOT DESIGNATED WITH A CIRCUIT AND LOAD TO BE PROVIDED WITH SPARE 20A/1P CIRCUIT BREAKERS.

2.6 SAFETY SWITCH / DISCONNECTS

A. DISCONNECTS TO BE OF THE SAME MANUFACTURER AS THE PANELBOARDS.

B. HEAVY DUTY RATED WITH QUICK-MAKE, QUICK-BREAK AND HORSEPOWER RATED.

C. FUSED AND NON-FUSED DISCONNECTS AS SHOWN ON DRAWINGS. FUSES TO BE RK-5.

2.7 LOW-VOLTAGE DRY-TYPE TRANSFORMERS

A. PRIMARY AND SECONDARY RATING OF 600V AND LESS, WITH CAPACITIES UP TO 300 kVA.

B. MANUFACTURER TO BE THE SAME AS THE PANELBOARDS.

C. QUALIFICATIONS:

1. LISTED AND LABELED AS DEFINED IN NFPA 70 BY QUALIFIED TESTING AGENCY AND MARKED FOR INTENDED LOCATION AND USE.
2. COMPLY WITH 10 CFR 431 (DOE 2016) EFFICIENCY LEVELS AND MARKED AS COMPLIANT BY AN NRTL.

D. MATERIALS

1. CORES: ELECTRICAL GRADE, NON-AGING SILICON STEEL WITH HIGH PERMEABILITY AND LOW HYSTERESIS LOSES.
   a. ONE LEG PER PHASE,
   b. CORE VOLUME SHALL ALLOW EFFICIENT TRANSFORMER OPERATION AT 10 PERCENT ABOVE THE NOMINAL TAP VOLTAGE.
   c. GROUNDED TO ENCLOSURE, SEE GROUNDING DETAIL FOR SEPARATELY DERIVED GROUNDING SYSTEM.
2. COILS: CONTINUOUS WINDINGS WITHOUT SPLICES EXCEPT FOR TAPS.
   a. COIL MATERIAL: COPPER.
   b. INTERNAL COIL CONNECTIONS: BRAZED OR PRESSURE TYPE.
3. ENCLOSURE: VENTILATED. COMPLY WITH NEMA 250.
4. TAPS: TWO 2.5% TAPS ABOVE AND TWO 2.5% TAPS BELOW NORMAL FULL CAPACITY.
5. INSULATION CLASS: 220°C, UL-COMPONENT-RECOGNIZED INSTULATION SYSTEM WITH A MAXIMUM OF 150°C RISE ABOVE 40°C AMBIENT TEMPERATURE.
6. PROVIDE GROUND-BAR KIT OR A GROUND BAR INSTALLED ON THE INSIDE OF THE TRANSFORMER ENCLOSURE.
7. ELECTROSTATIC SHIELDING: EACH WINDING SHALL HAVE AN INDEPENDENT, SINGLE, FULL-WIDTH COPPER ELECTROSTATIC SHIELD ARRANGED TO MINIMIZE INTERWINDING CAPACITY.
8. LOW-SOUND-LEVEL REQUIREMENTS: MAXIMUM SOUND LEVELS WHEN FACTORY TESTED ACCORDING TO IEEE C57.12.91.
9. PROVIDE ENGRAVED, LAMINATED-ACRYLIC OR MELAMINE PLASTIC SIGNS FOR EACH PIECE OF EQUIPMENT, MOUNTED WITH CORROSION-RESISTANT SCREWS.

2.8 LOW-VOLTAGE EXTERNAL SURGE PROTECTIVE DEVICES

A. TYPE 1 SURGE PROTECTIVE DEVICES (SPD):

1. LISTED AND LABELED BY AN NRTL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION AS COMPLYING WITH UL 1449, TYPE 1.
2. OPTIONS TO INCLUDE:
   a. INTEGRAL DISCONNECT SWITCH.
   b. INTERNAL THERMAL PROTECTION THAT DISCONNECTS THE SPD BEFORE DAMAGING INTERNAL SUPPRESSOR COMPONENTS.
   c. LED INDICATOR LIGHTING DISPLAY FOR PROTECTION STATUS.
   d. AUDIBLE ALARM.
   e. NEMA ICS 5, DRY FORM C CONTACTS RATED AT 2A AND 24V AC FOR REMOTE MONITORING OF PROTECTION STATUS.
   f. SURGE COUNTER.
3. PERFORMANCE CRITERIA:
   a. MCOV: NOT LESS THAN 125% OF NOMINAL SYSTEM VOLTAGE FOR 208Y/120V, AND NOT LESS THAN 115% OF NOMINAL SYSTEM VOLTAGE FOR 480Y/277V.
   b. PEAK SURGE CURRENT RATING: MINIMUM SINGLE-PULSE SURGE CURRENT WITHSTAND RATING PER PHASE MUST NOT BE LESS THAN 200 kA. PEAK SURGE CURRENT RATING MUST BE ARITHMETIC SUM OF THE RATINGS OF INDIVIDUAL MOVs IN A GIVEN MODE.
   c. PROTECTION MODES AND UL 1449 VPR FOR GROUNDED WYE CIRCUITS WITH480Y/277V OR 208Y/120V, THREE-PHASE, FOUR-WIRE CIRCUITS MUST NOT EXCEED THE FOLLOWING: LINE TO NEUTRAL: 1200V FOR 480Y/277V AND 700V FOR 208Y/120V. LINE TO LINE: 2000V FOR 480Y/277V AND 1200V FOR 208Y/120V.
4. SCCR: NOT LESS THAN 200 kA.
5. INOMINAL RATING: 20 kA.

B. TYPE 2 SURGE PROTECTIVE DEVICES (SPDs)

1. LISTED AND LABELED BY AN NRTL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION AS COMPLYING WITH UL 1449, TYPE 2. COMPLY WITH UL 1283.
2. OPTIONS TO INCLUDE:
   a. LED INDICATOR LIGHTING DISPLAY FOR PROTECTION STATUS.
   b. INTERNAL THERMAL PROTECTION THAT DISCONNECTS THE SPD BEFORE DAMAGING INTERNAL SUPPRESSOR COMPONENTS.
   c. NEMA ICS 5, DRY FORM C CONTACTS RATED AT 2A AND 24V AC FOR REMOTE MONITORING OF PROTECTION STATUS.
   d. SURGE COUNTER.
3. PERFORMANCE CRITERIA:
   a. MCOV: NOT LESS THAN 125% OF NOMINAL SYSTEM VOLTAGE FOR 208Y/120V, AND NOT LESS THAN 115% OF NOMINAL SYSTEM VOLTAGE FOR 480Y/277V.
   b. PEAK SURGE CURRENT RATING: MINIMUM SINGLE-PULSE SURGE CURRENT WITHSTAND RATING PER PHASE MUST NOT BE LESS THAN 100 kA. PEAK SURGE CURRENT RATING MUST BE ARITHMETIC SUM OF THE RATINGS OF INDIVIDUAL MOVs IN A GIVEN MODE.
   c. PROTECTION MODES AND UL 1449 VPR FOR GROUNDED WYE CIRCUITS WITH480Y/277V OR 208Y/120V, THREE-PHASE, FOUR-WIRE CIRCUITS MUST NOT EXCEED THE FOLLOWING: LINE TO NEUTRAL: 1200V FOR 480Y/277V AND 700V FOR 208Y/120V. LINE TO GROUND: 1200V FOR 480Y/277V AND 700V FOR 208Y/120V. NEUTRAL TO GROUND: 1200V FOR 480Y/277V AND 700V FOR 208Y/120V. LINE TO LINE: 2000V FOR 480Y/277V AND 1200V FOR 208Y/120V.
4. SCCR: EQUAL OR EXCEED 100 kA.
5. INOMINAL RATING: 20 kA.

PART 3 - EXECUTION

3.1 WIRING

A. DO NOT PULL CONDUCTORS UNTIL THE RACEWAY SYSTEM HAS BEEN COMPLETELY INSTALLED. INSTALL CONDUCTORS AT ONE TIME. USING ONLY LUBRICANTS APPROVED FOR THIS PURPOSE. FOR WIRE SIZES #12 THROUGH #10, PRE-INSULATED, TWIST-ON CONNECTORS MAY BE USED TO SPLICE WIRE. USE COMPRESSION CONNECTORS FOR SPLICES OF STRANDED CONDUCTORS. USE RING-TONGUE TYPE CONNECTORS FOR CONTROL WIRING.

B. ALL WIRING SHALL BE COLOR CODED IN ACCORDANCE WITH THE NEC. SPLICES SHALL OCCUR ONLY WITHIN OUTLET BOXES. ENDS OF POWER WIRING SHALL BE MARKED WITH A 1 INCH BAND OF COLOR CODED TAPE. INSTALL A GREEN GROUNDING CONDUCTOR FOR ALL SYSTEMS.

C. PHASING SHALL BE MAINTAINED CONSISTENT THROUGHOUT THE DISTRIBUTION SYSTEM.

D. WIRING CONNECTIONS MADE WITHOUT TWIST-ON CONNECTORS SHALL BE WRAPPED WITH THREE LAYERS OF PLASTIC TAPE. EACH LAP SHALL EXTEND OVER THE PREVIOUS LAYER BY 1/2 THE TAPE DIMENSION.

E. THE ELECTRICAL DISTRIBUTION SYSTEM SHALL MATCH THE EXISTING SYSTEM. PHASING OF THE SYSTEM THROUGHOUT THE DISTRIBUTION SYSTEM SHALL BE A/B/C IN A CLOCKWISE ROTATION. SAFETY SWITCHES AND POWER RECEPTACLES SHALL HAVE THE SAME PHASE ARRANGEMENT THROUGHOUT THE SYSTEM.

3.2 WIRING DEVICE BOXES

A. PROVIDE AN OUTLET BOX FOR EACH WIRING DEVICE AND LIGHT FIXTURE AND AS REQUIRED BY THE NEC. DEVICE BOXES SHALL BE LOCATED AS INDICATED ON THE DRAWINGS. LOCATIONS ARE APPROXIMATE ONLY AND SHALL BE LOCATED IN THE FIELD TO CONFORM TO FIELD CONDITIONS. IN CASE OF CONFLICTS OR UNUSUAL CONDITIONS, NOTIFY OWNER FOR INSTRUCTIONS. BOXES SHALL BE SECURED FIRMLY IN POSITION USING PROPER ANCHORING DEVICES.

B. WHERE MULTIPLE SWITCHES OR RECEPTACLES ARE NOTED IN A COMMON LOCATION, PROVIDE MULTIPLE GANG BOXES. BOXES SHALL BE MOUNTED TRUE AND LEVEL.

3.3 WIRING DEVICES

A. SWITCHES SHALL BE QUIET TYPE, RATED 20 AMPERES, 120 VOLTS AC ONLY. SWITCHES SHALL BE FLUSH TYPE AND BE CAPABLE OF BACK AND SIDE WIRING. THE BRIDGE MOUNTING STRAP SHALL BE OF ONE-PIECE CONSTRUCTION WITH ASSURED GROUNDING MEANS IN ACCORDANCE WITH NEC ARTICLE 250-74, EXCEPTION NO. 2 LIGHT SWITCHES SHALL BE AS MANUFACTURED BY HUBBELL, ARROW HART, IDEAL, OR PASS & SEYMOUR.

B. DUPLEX RECEPTACLES SHALL BE SPECIFICATIONS GRADE, GROUNDING TYPE, 20 AMP, 125 VOLT WITH BRASS TERMINAL SCREWS, COLOR CODED AND EQUAL TO HUBBELL 5362.

3.4 JUNCTION AND PULL BOXES

A. UNLESS NOTED, PROVIDE JUNCTION AND PULL BOXES IN ACCORDANCE WITH THE NEC REQUIREMENTS, OR WHERE NEEDED BY JOB CONDITIONS. PROVIDE SEPARATE BOXES FOR ELECTRICAL POWER AND CONTROL OR COMMUNICATIONS CIRCUITS.

3.5 CONDUIT

A. CONDUITS SHALL BE SIZED IN ACCORDANCE WITH THE NEC FOR NUMBER AND SIZE OF WIRES INSTALLED. MINIMUM CONDUIT SIZE SHALL BE 3/4".

B. CONDUITS SHALL BE RUN PARALLEL TO THE LINES OF THE BUILDING AT ELEVATIONS IN TRUSS. CONDUIT LOCATIONS SHALL BE COORDINATED AND INSTALLED IN A MANNER TO AVOID CONFLICTS WITH OTHER TRADES. CONDUIT SHALL BE SECURELY ANCHORED OR SUPPORTED FROM THE STRUCTURE IN A MANNER TO PREVENT DISPLACEMENT. WHERE EVER POSSIBLE INSTALL RUNS OF CONDUIT IN PARALLEL LINES, SUPPORTED FROM COMMON TRAPEZE HANGERS.

C. INSTALLATION OF CONDUIT SHALL BE IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS AND ACCEPTED PRACTICE.

PANEL 'A'

DESIGNATION	REMARKS	POLES & AMPS	LOAD (VA) LIGHTING	LOAD (VA) RECEPT.	LOAD (VA) OTHER	OTHER TYPE	C K	P H	C K	LOAD (VA) LIGHTING	LOAD (VA) RECEPT.	LOAD (VA) OTHER	OTHER TYPE	POLES & AMPS	REMARKS	DESIGNATION
AHU-1	1	15A/2P			1352	H	1	A	2			1920	K	30A/2P	2	3 - HIGH SPEED OVEN
					1352	H	3	B	4			1920	K			
CU-1	4	35A/1P			7176	H	5	A	6			1920	K	30A/2P	2	3 - HIGH SPEED OVEN
					7176	H	7	B	8			1920	K			
WATER HEATER	4	50A/2P			4000	W	9	A	10				K	30A/2P	2	FUTURE E3 - HIGH SPEED OVEN
					4000	W	11	B	12				K			
2 - ICE CUBE MACHINE W/ BIN	1,6	20A/2P			1600	K	13	A	14			3600	K	30A/2P	2	9 - ESPRESSO MACHINE
					1600	K	15	B	16			3600	K			
DUCT DETECTOR	1	20A/1P		360			17	A	18			3600	K	30A/2P	2	9 - ESPRESSO MACHINE
25 - WATER FILTRATION	1	20A/1P			240	K	19	B	20			3600	K			
13 - REFRIGERATOR	1	20A/1P			650	K	21	A	22			3600	K	30A/2P	2	9 - ESPRESSO MACHINE
13 - REFRIGERATOR	1	20A/1P			650	K	23	B	24			3600	K			
13 - REFRIGERATOR	1	20A/1P			650	K	25	A	26			2850	K	40A/2P	4	6 - COFFEE BREWER
14B - FREEZER	1	20A/1P			1160	K	27	B	28			2850	K			
14B - FREEZER	1	20A/1P			1160	K	29	A	30			1320	K	20A/1P	1	5 - COFFEE GRINDER
14B - FREEZER	1	20A/1P			1160	K	31	B	32			1320	K	20A/1P	1	5 - COFFEE GRINDER
14B - FREEZER	1	20A/1P			1160	K	33	A	34			1560	K	20A/1P	1	1 - SMOOTHIE BLENDER
DATA RACK	1	20A/1P		360			35	B	36			1560	K	20A/1P	1	1 - SMOOTHIE BLENDER
SECURITY	1	20A/1P		1080			37	A	38			280	K	20A/1P	1	4E WORKTOP REFRIGERATOR
8,8A - POS SYSTEM	1	20A/1P	600				39	B	40			600	K	20A/1P	1	4A - U/C REFRIGERATOR (48")
26 - ZOOMTIMER	1	20A/1P			300	M	41	A	42			792	K	20A/1P	1	4B- U/C REFRIGERATOR (60")
30 - DRIVE THRU TIME	1	20A/1P		960			43	B	44			792	K	20A/1P	1	4B- U/C REFRIGERATOR (60")
30 - DRIVE THRU TIME	1	20A/1P		960			45	A	46		540			20A/1P	1	FRONT COUNTER RECEPTACLE
SIGNAGE	1	20A/1P		1200			47	B	48		360			20A/1P	1	PANEL CONV. RECEPTACLE
SIGNAGE	1	20A/1P		1200			49	A	50		360			20A/1P	1	ISLAND CONV. RECEPTACLE
SIGNAGE	1	20A/1P		1200			51	B	52		180			20A/1P	1	COMPUTER RECEPTACLE
SIGNAGE	1	20A/1P		1200			53	A	54		360			20A/1P	1	RR RECEPT & RECIRC PP
SIGNAGE	1	20A/1P		1200			55	B	56		360			20A/1P	1	EXTERIOR RECEPTACLE
DRIVE THRU MENU BOARD	1	20A/1P	400				57	A	58		180			20A/1P	1	ROOFTOP RECEPTACLE
AHU-1 HEAT KIT (NORTHERN LOC.)	2	30A/2P			2250	M	59	B	60	429				20A/1P	1	EF-1, LIGHTING
					2250	M	61	A	62	240				20A/1P	1	LED STRIP & WINDOW LIGHTING
SPD (TVSS)	5	30A/2P			0		63	B	64	835				20A/1P	1	LIGHT POLE FLAG & SITE LIGHTING
					0		65	A	66					20A/1P		SPARE
			1000	9720	39886					1504	2340	43204				

CATEGORY		CONN. LOAD VA	CONN. LOAD AMPS	DESIGN LOAD DIV.	DESIGN LOAD VA	DESIGN LOAD AMPS
LIGHTING:		2504	10	1	2504	10
RECEPTACLE:		12060	50	NOTE 2	11030	46
OTHER-MOTORS	(M):	4800	20	1	4800	20
OTHER-KITCHEN EQUIP	(K):	50754	211	1	32990	137
OTHER-ELECTRIC HEATING	(H):	17056	71	1	17056	71
OTHER-WATER HEATING	(W):	8000	33	1	8000	33
OTHER - MISCELLANEOUS	(X)	0	0	1	0	0
OTHER - SUB PANELS	(S)	0	0	1	0	0
TOTAL:		95174	397		76380	318

MOUNTING:	RECESSED	
VOLTS:	120/240	WYE
PHASE / WIRE:	1/3	
MAINS SIZE:	400 AMPS	
MAINS TYPE:	MLO	
BUSS TYPE:	COPPER	
BRKR TYPE:	BOLT-ON	
A.I.C. (RMS):	22K	
A Phase	48620	Connected kVA
B Phase	49034	Connected KVA

REMARKS:
FEEDER:
1= 2#12, 1#12G, 3/4"C
2= 2#10, 1#10G, 3/4"C
3= 3#4, 1#6G, 1"C
4= 2#8, 1#10G,3/4"C
5= 2#10, 1#10 Neutral, #10G
6= COORDINATE WITH EQ PURCHASED OPTIONAL UNITS 15A/2P, AND 20A/1P
FEEDERS: REFER TO FEEDER SCHEDULE ON THIS PAGE

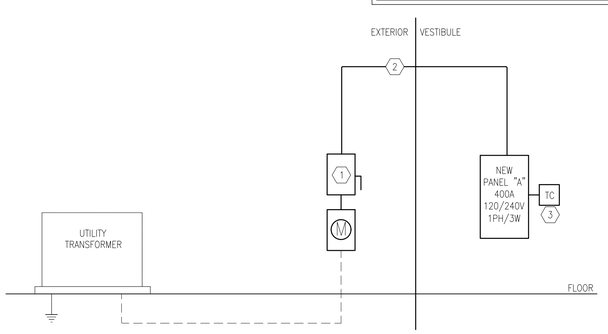
3 PANEL SCHEDULE
SCALE: NOT TO SCALE

LINETYPE LEGEND:

- EXISTING EQUIPMENT/FEEDER TO REMAIN
- NEW FEEDER

NOTES BY SYMBOL: (#)

1. PROVIDE AND INSTALL NEW 400A SERVICE ENTRANCE MAIN DISCONNECT. MOUNT DISCONNECT ABOVE FLOOD PLAN LEVEL
2. PROVIDE AND INSTALL 2 SETS OF (3) #3/0 (THWN), 1 #1/0 GND, IN 2"C
3. PROVIDE AND INSTALL NEW TIME CLOCK.



2 SINGLE LINE DIAGRAM
SCALE: NOT TO SCALE

HOMERUNS AND BRANCH WIRING FOR 20 AMPS CIRCUITS SHALL BE AS FOLLOWS:

LENGTH	CIRCUIT WIRE SIZE	HOMERUN WIRE SIZE
1FT TO 50FT	N0.12 AWG	N0.12 AWG
51FT TO 75FT	N0.12 AWG	N0.10 AWG
76FT TO 120FT	N0.10 AWG	N0.8 AWG
121FT TO 190FT	N0.10 AWG	N0.6 AWG
191FT TO 300FT	N0.10 AWG	N0.4 AWG

Branch Circuit Fault from From Panel to Outlet — Copper in Metal Raceway — Single Phase

Single Phase Branch — 2 x L x I / N x C x E L-N — 'f ' factor =

Length (distance) (ASC)	L	=	15
	Isca	=	6,882 Phase — 4,319 Neutral
# conductors per phase	N	=	1
Phase conductor constant	C	=	617 Phase Conductor 12
Volt Line to Line	E L - L	=	208 Volt
	f	=	1.609
Neutral conductor constant	C	=	617 Neutral Conductor 12
Volt Line to Neutral	E L - N	=	120 Volt
	f	=	1.750

Multiplier: M = 1 / (1 + f)

Line to Line	M	= 0.383
Line to Neutral	M	= 0.364

Isca x M = fault current at terminal of the panel L- L = 2,638 amperes
Isca x M = fault current at terminal of the panel L- N = 1,571 amperes

Calculation does not include motor contribution

ELECTRICAL GENERAL NOTES

1. THESE PLANS ARE SCHEMATIC. DRAWINGS HAVE BEEN CREATED FROM AS-BUILT DOCUMENTS BELONGING TO THE OWNER. THE CONTRACT DOCUMENTS CREATED BY THIS OFFICE ARE DIAGRAMMATIC AND SHOW THE INTENTION OF THIS FACILITY TO RENOVATE AND INSTALL NEW EQUIPMENT AND ASSOCIATED MATERIALS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITION PRIOR TO BID
2. ALL ELECTRICAL WORK IS REQUIRED TO BE PERFORMED BY A CERTIFIED ELECTRICAL CONTRACTOR. ALL WIRING, EQUIPMENT, DEVICES AND INSTALLATIONS SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES.
3. PROVIDE ALL WIRING, CONDUIT, LABOR AND MATERIALS NOT SHOWN ON PLAN, BUT NECESSARY FOR COMPLETE AND PROPER OPERATION OF THE ELECTRICAL SYSTEM.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES AND PERMITS AS NECESSARY TO COMPLETE THIS JOB. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO ENSURE A COMPLETE WORKING SYSTEM.
5. ALL ELECTRICAL WORK MUST COMPLY WITH THE REQUIREMENTS OF NFPA 70 (NATIONAL ELECTRICAL CODE), NFPA 70B, NFPA 70E, IECC, OSHA IN ADDITION TO OTHER REFERENCES REQUIRED BY CONTRACT.
6. INSTALLATION OF SWITCHES, OUTLETS AND CONTROL DEVICES SHALL COMPLY WITH LOCAL CODES AND STATE ADA REQUIREMENTS.
7. REFER TO MECHANICAL AND PLUMBING SHEETS FOR EXACT LOCATION OF ALL MECHANICAL AND PLUMBING EQUIPMENT. PROVIDE ALL LABOR AND MATERIALS REQUIRED TO CONNECT ELECTRICAL POWER TO ALL MECHANICAL AND PLUMBING EQUIPMENT.
8. ALL ELECTRICAL EQUIPMENT, DEVICES AND CIRCUITS SHALL CONTAIN A GROUNDING CONDUCTOR. CONDUIT SYSTEM SHALL NOT BE USED AS GROUNDING NETWORK. ALL GROUNDING SHALL BE IN STRICT COMPLIANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
9. COORDINATE LOCATION AND VERIFY REQUIREMENTS OF ALL EXTERIOR UTILITY EQUIPMENT AND METER BASE WITH OWNER AND UTILITY COMPANY.
10. TRANSFORMER PAD, TRENCH REQUIREMENTS AND INTERMEDIATE BOX SHALL BE IN ACCORDANCE WITH THE UTILITY COMPANY SPECIFICATIONS. COORDINATE WITH UTILITY COMPANY. PROVIDE AND INSTALL ALL MATERIAL AND EQUIPMENT AS REQUIRED FOR COMPLETE JOB INSTALLATION.
11. ALL SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, DISCONNECT SWITCHES AND OTHER ELECTRICAL DEVICES AND EQUIPMENT SHALL HAVE ENGRAVED NAMEPLATES INDICATING EQUIPMENT IDENTIFICATION TAG AND VOLTAGE, AS WELL AS WHERE DEVICE IS FED FROM. ALL SWITCHBOARDS AND PANELBOARDS SHALL HAVE TYPED DIRECTORIES INDICATING DISTRIBUTION AND BRANCH CIRCUIT FEEDERS.
12. CONTRACTOR IS RESPONSIBLE FOR NATIONAL ELECTRICAL CODE REQUIRED CLEARANCES AROUND AND ABOVE ALL ELECTRICAL EQUIPMENT AND DEVICES.
13. SHORT CIRCUIT AMPERE INTERRUPTING CAPACITY (A.I.C.) RATING OF ALL ELECTRICAL PRODUCTS SHALL BE GREATER THAN THE MAXIMUM AVAILABLE SHORT CIRCUIT CURRENT.
14. PROVIDE AT LEAST ONE SPARE CONDUIT (MINIMUM 2") FOR ALL RECESSED PANELS INTO THE SPACE ABOVE AND BELOW THE CEILING AND FLOOR FOR THE REMAINING CIRCUITS AVAILABLE IN THE PANEL.
15. DO NOT RUN RACEWAYS ON BUILDING EXTERIOR WALLS.
16. WIRE AND CONDUIT SIZES SHALL BE INSTALLED AND SIZED TO COMPENSATE FOR VOLTAGE DROP PER THE NATIONAL ELECTRICAL CODE.
17. FLEXIBLE CONDUIT MAY BE USED ONLY FOR FINAL CONNECTION TO EQUIPMENT (MAXIMUM LENGTH 6'-0").
18. ANY LOOSE FLEXIBLE CONDUIT TO BE STRAPPED DOWN IN A PROFESSIONAL MANNER.
19. ALL ELECTRICAL WIRING, VOICE/COMMUNICATION WIRING AND COAXIAL CABLES SHALL BE INSTALLED IN CONDUIT, WIRE WAY OR OTHER PROTECTIVE COVER AS REQUIRED TO COMPLY WITH GOVERNING CODE.
20. WALL RECEPTACLE CONDUIT SHALL RUN VERTICALLY TO JUNCTION BOX ABOVE CEILING AND NOT HORIZONTALLY THROUGH STUD WALLS, IN ORDER TO FACILITATE FUTURE ACCESS.
21. CONDUCTORS IN UNINSULATED CEILING SPACE AND OUTDOORS SHALL BE DERATED USING A 122 DEGREE (FAHRENHEIT) TEMPERATURE. CONTRACTOR IS RESPONSIBLE FOR REVISING CONDUCTOR SIZES BASED ON CONDUIT RATING.
22. ALL OUTDOOR EQUIPMENT SHALL BE WEATHER PROTECTED, NEMA 3R UNLESS OTHERWISE NOTED.
23. CONTRACTOR SHALL PROVIDE FIRE PROOFING FOR ANY PIPES OR CONDUITS THAT PENETRATE THROUGH ANY FIRE/SMOKE RATED FLOORS, WALLS, CEILINGS, ROOFS OR RUNS INSIDE OF CHASES. FIRE PROOFING METHODS AND MATERIALS SHALL BE AS REQUIRED TO MAINTAIN FIRE/SMOKE RATING OF PARTITION.
24. IF A PROTECTIVE DEVICE RATING IS MARKED ON AN APPLIANCE OR EQUIPMENT, THE BRANCH-CIRCUIT OVERCURRENT DEVICE RATING SHALL NOT EXCEED THE PROTECTIVE DEVICE RATING MARKED ON THE APPLIANCE OR EQUIPMENT.
25. ALL EMERGENCY LIGHTS, NIGHT LIGHTS AND EXIT LIGHTS ARE UNSWITCHED UNLESS OTHERWISE NOTED OR SHOWN.
26. ALL SWITCHES SHALL BE 3" AWAY FROM DOOR TRIM. ALL OCCUPANCY SENSORS SHALL BE PASSIVE INFRARED AND ULTRASONIC TECHNOLOGY TO SENSE OCCUPANCY.
27. PROVIDE 3/4" CONDUIT WITH 200LB TEST NYLON PULL WIRE FROM DATA/TELEPHONE OUTLET BOXES TO 6" ABOVE ACCESSIBLE CEILING.
28. ANY FIRE ALARM COMPONENTS SHOWN ON PLANS ARE FOR REFERENCE ONLY AND MAY BE MINIMAL. PROVIDE AND INSTALL ALL DEVICES AND MATERIALS NECESSARY FOR A COMPLETE FIRE ALARM SYSTEM AS REQUIRED BY THE LOCAL CODES, NFPA AND REGULATIONS.
29. ALL MECHANICAL EQUIPMENT CONTROLS SHALL BE POWERED FROM UNIT.
30. CONTRACTOR SHALL PROVIDE AND INSTALL TWO EMPTY 4" CONDUITS WITH PULL STRING FROM UTILITY TRANSFORMER TO SERVICE ENTRANCE PANEL, IN ADDITION TO SERVICE ENTRANCE CONDUITS SPECIFIED ON PLANS.

SCOOTER'S COFFEE
GHC Engineers, LLC

Available Fault Current Calculation

Utility Fault Current ____ amperes — kVA = 225; E = 208; trans. FLA = 1082

I = kVA x 1000 / E = trans. FLA

Isca = trans. FLA x 100 / transformer Z = 1082 / 3 %

Isca = ampere short-circuit current RMS symmetrical. Isca = 36,058 amperes

Point to Point Method — Single Phase 208/120

'f ' factor = 2 x L x I / N x C x E L-N — Copper in Nonmetallic Raceway

Length (distance) (ASC)	L	=	80
	Isca	=	36,058
# conductors per phase	N	=	1
Phase conductor constant	C	=	13,923 Phase Conductor 3/0
Volt Line to Line	E L - L	=	208 Volt
	f	=	0.498
Neutral conductor constant	C	=	13,923 Neutral Conductor 3/0
Volt Line to Neutral	E L - N	=	120 Volt
	f	=	0.863

Multiplier: M = 1 / (1 + f)

Line to Line	M	= 0.668
Line to Neutral	M	= 0.537

Fault Current at Service Equipment

Isca x M = fault current at terminals of main disconnect L- L = 24,070 amperes
Isca x M = fault current at terminals of main disconnect L- N = 19,352 amperes

Fault Current from From Service Entrance Disconnect to Panelboard — Copper in Metal Raceway — Single Phase

Single Phase Feeder — 2 x L x I / N x C x E L-N — 'f ' factor =

Length (distance) (ASC)	L	=	50
	Isca	=	24,070 Phase — 19,352 Neutral
# conductors per phase	N	=	1
Phase conductor constant	C	=	4,633 Phase Conductor 3
Volt Line to Line	E L - L	=	208 Volt
	f	=	2.498
Neutral conductor constant	C	=	4,633 Neutral Conductor 3
Volt Line to Neutral	E L - N	=	120 Volt
	f	=	3.481

Multiplier: M = 1 / (1 + f)

Line to Line	M	= 0.286
Line to Neutral	M	= 0.223

Isca x M = fault current at terminal of the panel L- L = 6,882 amperes
Isca x M = fault current at terminal of the panel L- N = 4,319 amperes

Calculation does not include motor contribution

ONE LINE GENERAL NOTES

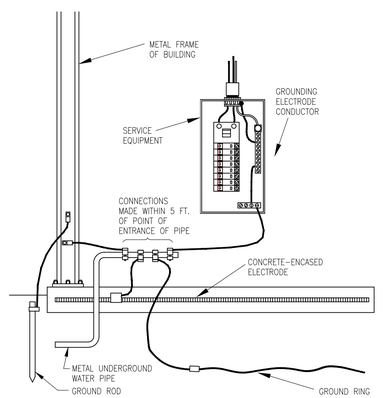
A. SES COMPONENTS, INCLUDING OVERCURRENT PROTECTIVE DEVICES SHALL BE FULLY RATED FOR THE AVAILABLE FAULT CURRENT SHOWN.
B. A 42K/10K SERIES RATED SYSTEM IS INTENDED, BASED ON WORST CASE AVAILABLE FAULT FROM THE SES SIZE.
C. PER NEC ARTICLE 240.86(A), PROVIDE IDENTIFICATION AT EACH DISCONNECT MEANS FEEDING DOWNSTREAM DEVICES APPLIED IN SERIES COMBINATION. PROVIDE NOTE INDICATING: "CAUTION - SERIES RATED DEVICES ARE FED FROM THE REMOTE MAIN----AMPS AVAILABLE. IDENTIFIED REPLACEMENT COMPONENT REQUIRED." CONTRACTOR TO FILL IN BLANK WITH AVAILABLE FAULT CURRENT OBTAINED FROM UTILITY COMPANY, OR AS SHOWN ON THE FAULT CURRENT SCHEDULE.
D. PER NEC ARTICLE 110.22, PROVIDE IDENTIFICATION AT ENCLOSURE OF PANELBOARD WHERE BREAKERS ARE APPLIED IN SERIES COMBINATION, STATING: "CAUTION - SERIES COMBINATION SYSTEM RATED ----AMPS AVAILABLE. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED. "CONTRACTOR TO FILL IN BLANK WITH AVAILABLE FAULT CURRENT FROM FAULT CURRENT SCHEDULE OR AS CALCULATED BY A QUALIFIED PERSON APPROVED BY THE AUTHORITY HAVING JURISDICTION USING ACTUAL AVAILABLE FAULT FROM UTILITY COMPANY.
E. PROVIDE ARC FLASH AND SHOCK HAZARD WARMING IDENTIFICATION PER NEC ARTICLE 110.16
F. "NO DESIGN CHANGES MAY BE MADE TO THE SYSTEM WITHOUT THE PRIOR APPROVAL OF THE DESIGN ENGINEER AND THE ELECTRICAL INSPECTOR."
G. THE FEEDER LENGTHS SHOWN IN THE INPUT DATA IS FOR CALCULATIONS ONLY. IT IS NOT THE INTENT TO USE THESE ENTERED LENGTHS FOR USAGE OF ACTUAL FIELD FEEDER LENGTH MEASUREMENTS

PANEL SCHEDULE GENERAL NOTES

A. A.I.C. RATING SHOWN ON PANEL SCHEDULES ARE THE MINIMUM RATING FOR NEW AND REPLACEMENT OVERCURRENT PROTECTIVE DEVICES.
B. ALL PANEL BOARD HAVE A TYPE WRITTEN DIRECTORY IDENTIFYING EACH NUMBERED CIRCUIT PLACED IN A DIRECTORY HOLDER INSIDE THE DOOR.
C. THE CONTRACTOR SHALL PERMANENTLY MARK WITH PERMANENT MARKER THE CIRCUIT IDENTIFICATIONS ON THE COVERPLATES OF RECEPTACLES, EQUIPMENT, AND LIGHTING JUNCTION BOXES. (STICK ON LABELS NOT ACCEPTABLE)
D. PER NEC 210.4(B) ALL MULTIWIRE BRANCH CIRCUITS ARE TO BE PROVIDED WITH A DEVICE THAT WILL DISCONNECT POWER TO ALL UNGROUNDED CONDUCTORS SIMULTANEOUSLY AT THE POINT OF ORIGIN.

SERIES RATING NOTES

A. THE SWITCHGEAR MANUFACTURER SHALL PROVIDE A UL LISTED SERIES-RATED DISTRIBUTION SYSTEM BASED ON THE SHORT-CIRCUIT INFORMATION CONTAINED WITHIN THIS SINGLE-LINE DIAGRAM. IN LIEU OF A LISTED SERIES-RATED DISTRIBUTION SYSTEM THE SWITCHGEAR MANUFACTURER MAY PROVIDE A FULLY RATED SYSTEM BASED ON THE AVAILABLE UTILITY FAULT CURRENT INDICATED ON THE SINGLE-LINE DIAGRAM.
B. THE SERIES-RATED SYSTEM SHALL BE AS NOTED ON SINGLE-LINE DIAGRAM. MOTOR CONTRIBUTION IS LESS THAN 1% ON ALL SERIES-RATED PANELS (U.N.O). NO DESIGN CHANGES MAY BE MADE TO THE SYSTEM WITHOUT THE PRIOR APPROVAL OF THE ELECTRICAL DESIGN CHANGES ENGINEER AND THE ELECTRICAL INSPECTOR. THE MANUFACTURER SHALL PROVIDE THE APPROPRIATE TAGS AND LABELS ON ALL SWITCHBOARDS AND PANELBOARDS AS REQUIRED PER N.E.C. ARCTICLES 110 AND 240, TO IDENTIFY THIS AS A SERIES-RATED system.



1 GROUNDING ELECTRODE SYSTEM DETAIL
SCALE: NOT TO SCALE

GHA
Architecture / Development
14901 Quorum Drive
Suite 300
Dallas Texas 75254
Ph: (972) 239-8884
Fax: (972) 239-5054

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
BRENT REID CLAUSS
08/31/22

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

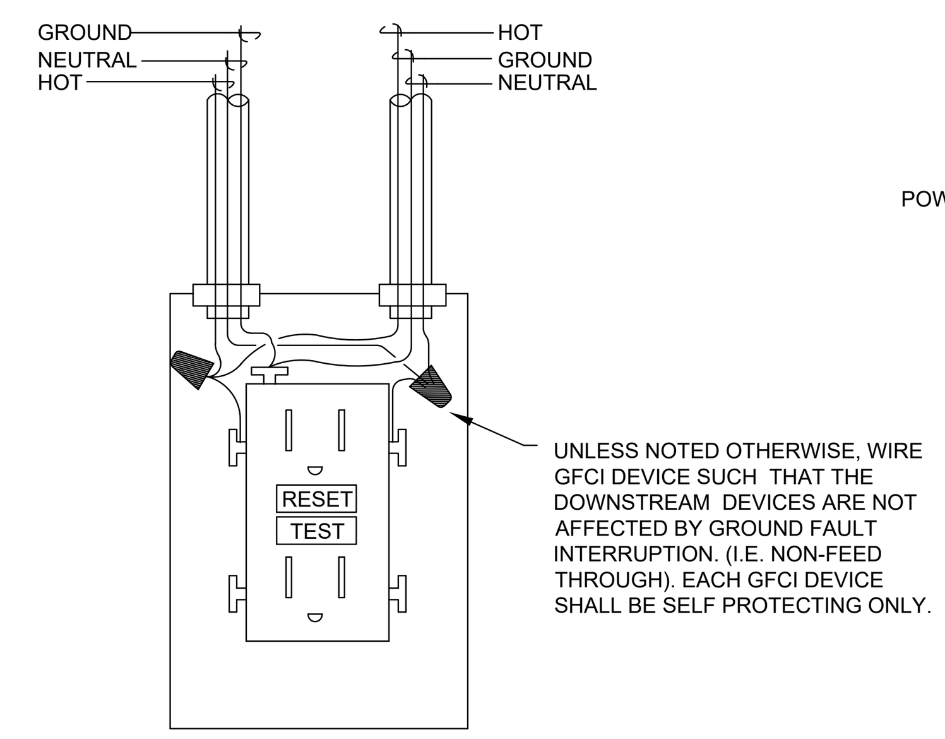
REVISIONS:

TITLE:
ELECTRICAL SPECIFICATIONS

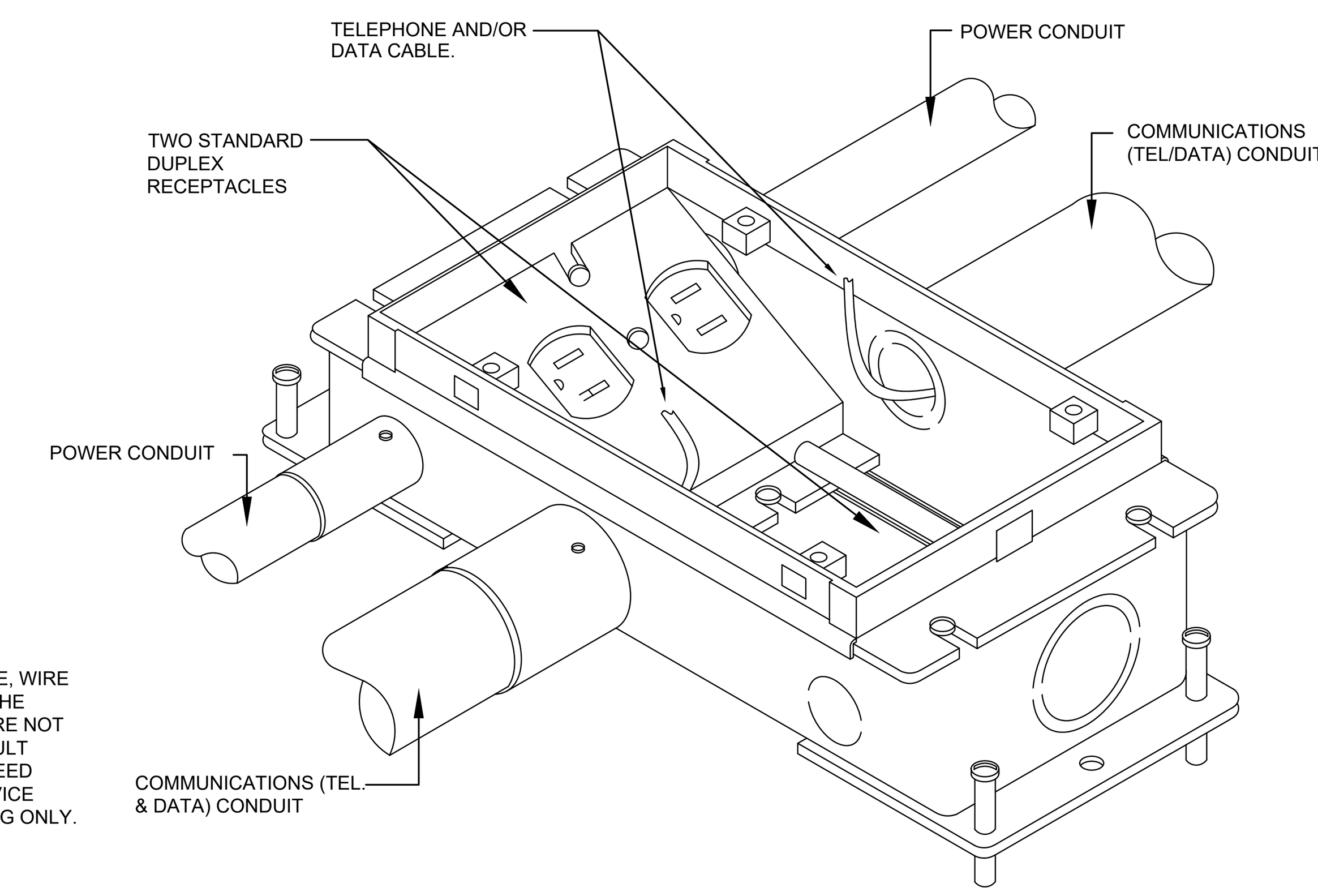
KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

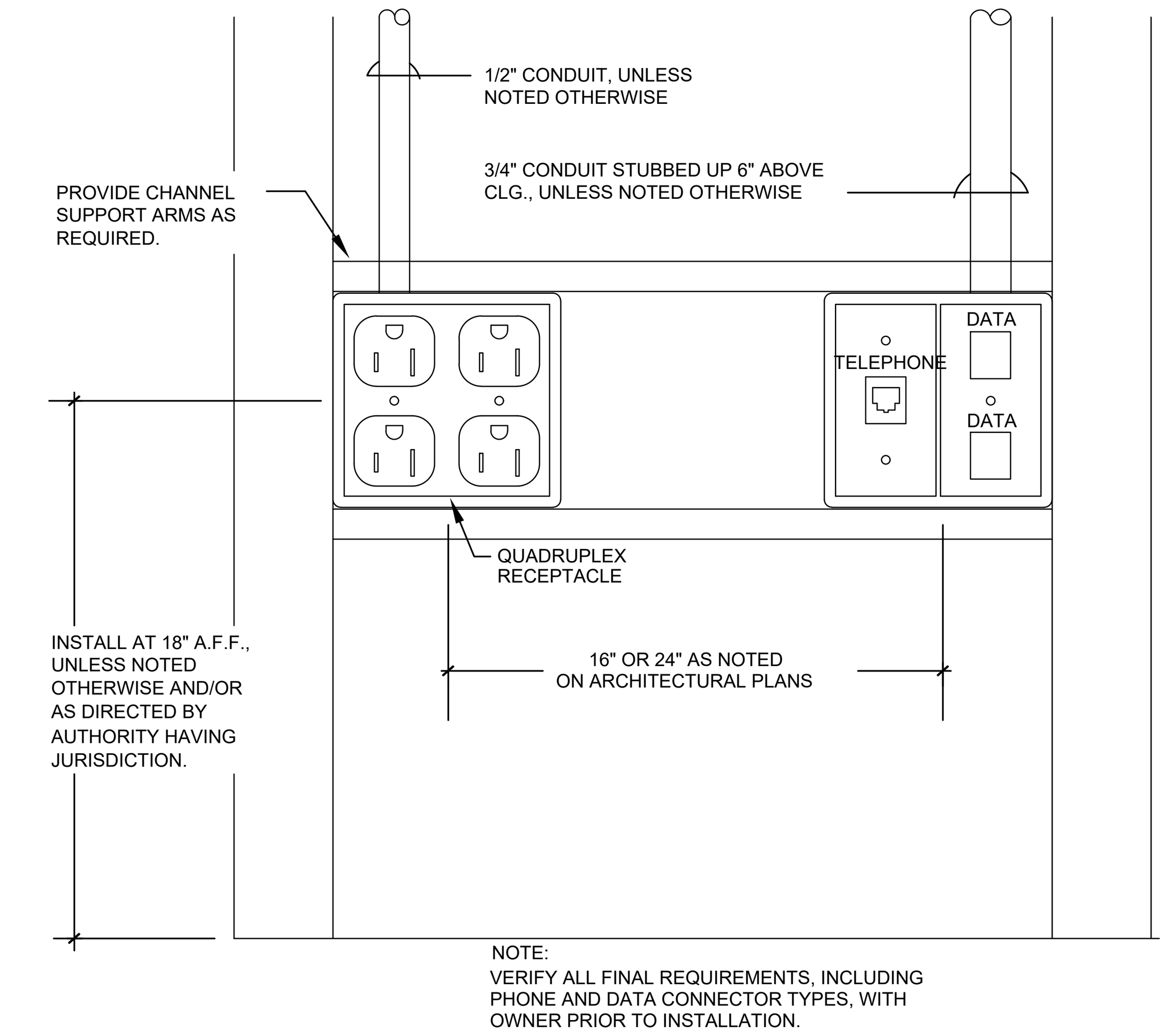
SHEET NO.
E1.02



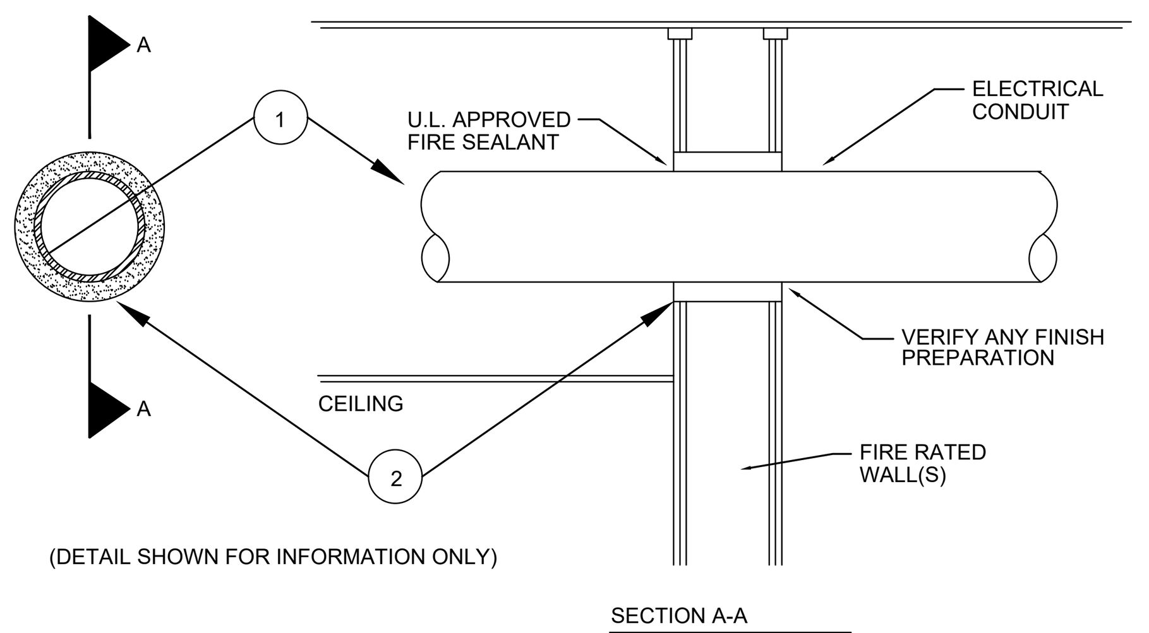
10 GFCI RECEPTACLE DETAIL
SCALE: N.T.S.



9 RECEPTACLE/TELE/DATA FLOOR BOX DETAIL
SCALE: N.T.S.



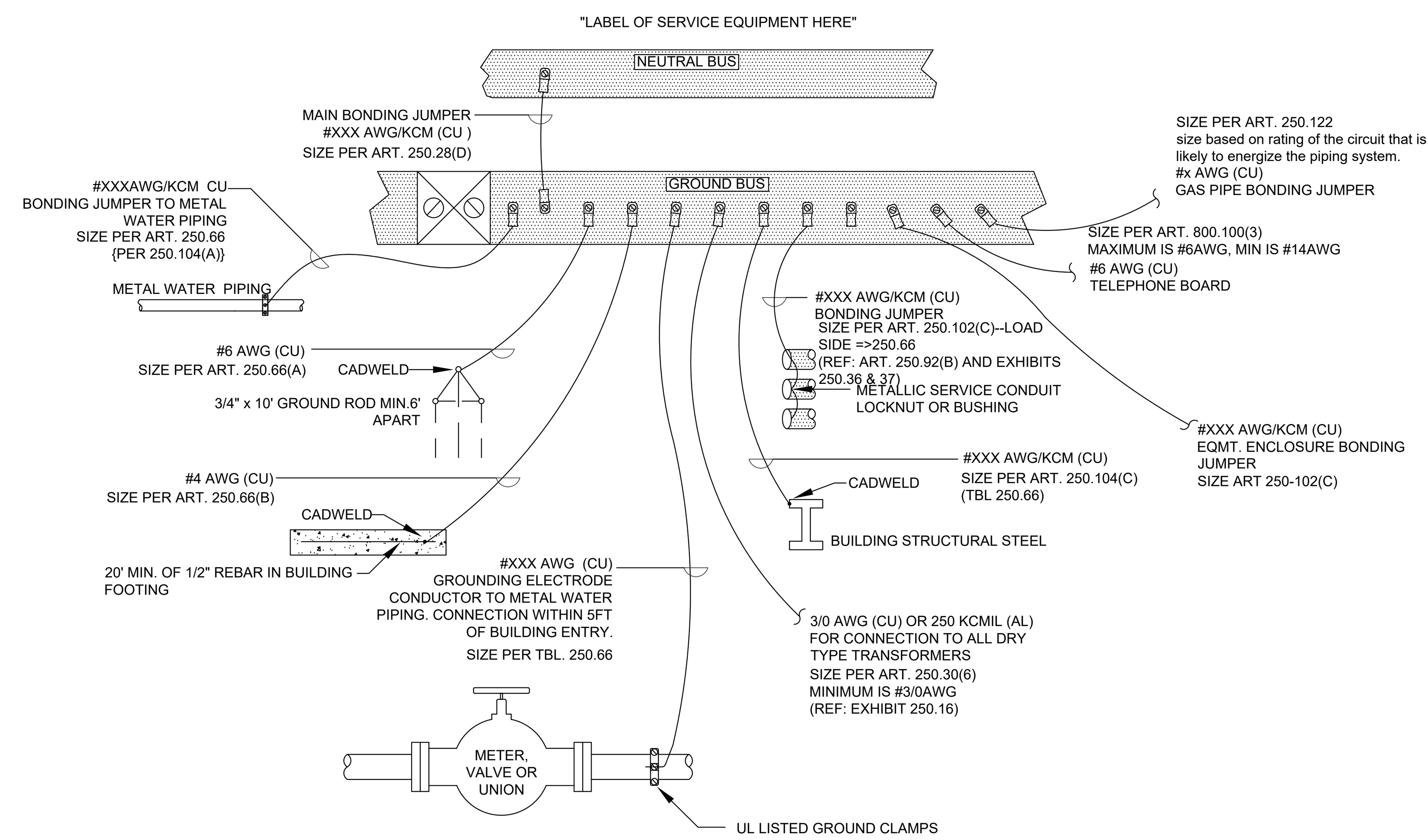
8 RECEPTACLE/TELE/DATA OUTLETS DETAIL
SCALE: N.T.S.



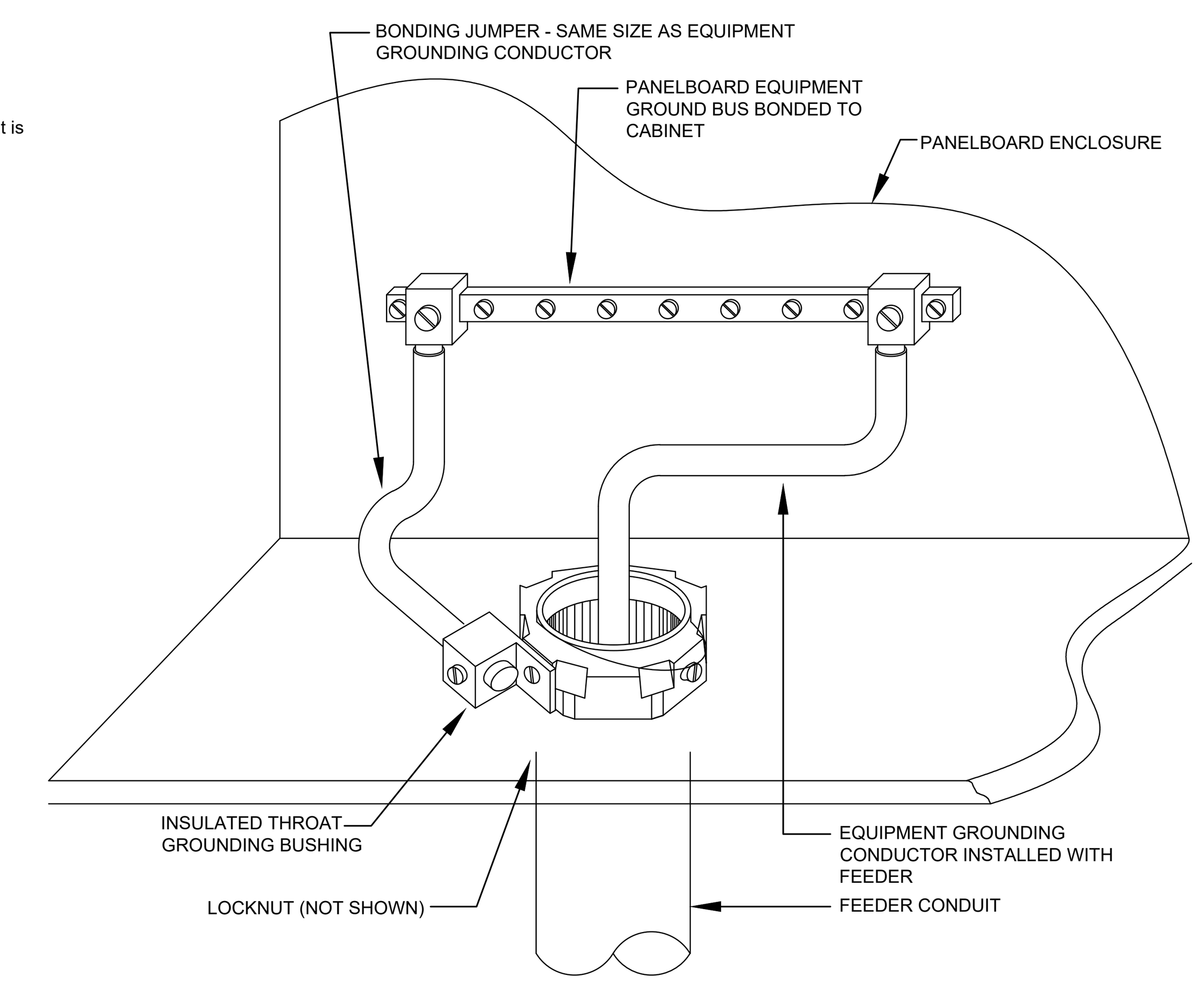
1. THROUGH PENETRANTS - ONE METALLIC PIPE, CONDUIT OR TUBING TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
   A. STEEL PIPE - NOM 4 IN. DIAM (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.
   B. CONDUIT - NOM 4 IN. DIAM. (OR SMALLER) ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.
   C. COPPER TUBING - NOM 4 IN. DIAM. (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
   D. COPPER PIPE - NOM 4 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
2. FILL, VOID OR CAVITY MATERIAL SHALL BE OF NO LESS QUALITY THAN HILTI CONSTRUCTION CHEMICALS, INC. #FS601 SEALANT BEARING THE U.L. CLASSIFICATION MARKING. SEALANT SHALL BE APPLIED A MINIMUM OF 5/8 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL.

7 PIPE PENETRATION OF FIRE RATED WALLS
SCALE: N.T.S.

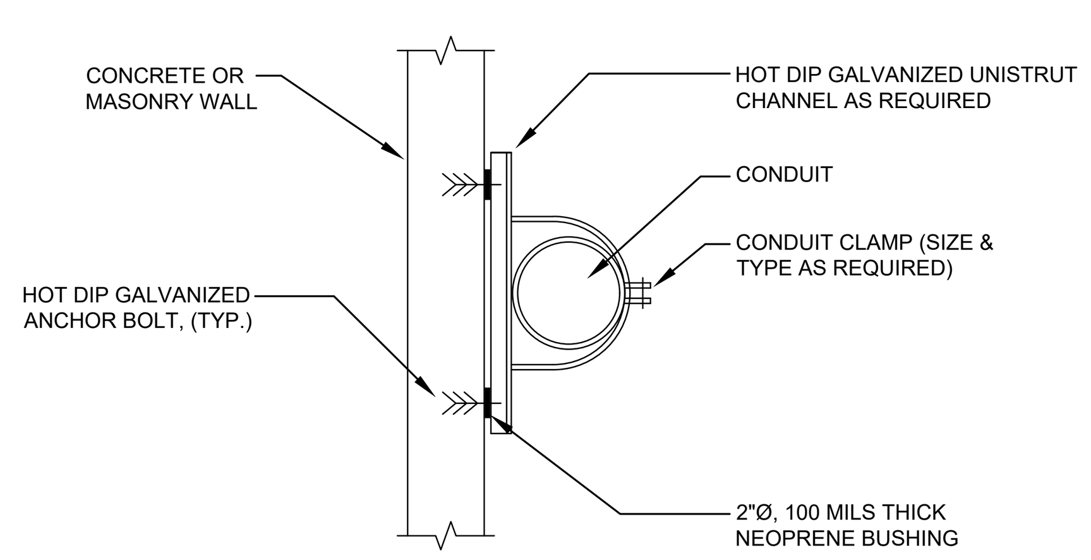
NOTE:
WHERE "#XXX AWG/KCM CU" IS DESIGNATED, USE TABLE 250.66 UNLESS NOTED OTHERWISE



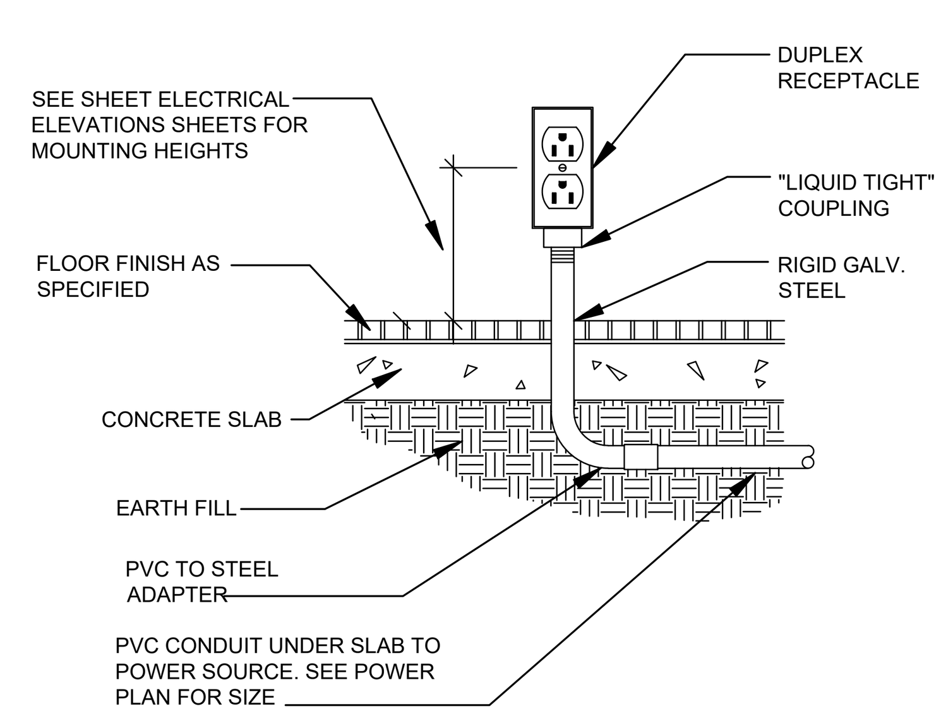
6 SERVICE GROUNDING/ BONDING DETAIL
SCALE: N.T.S.



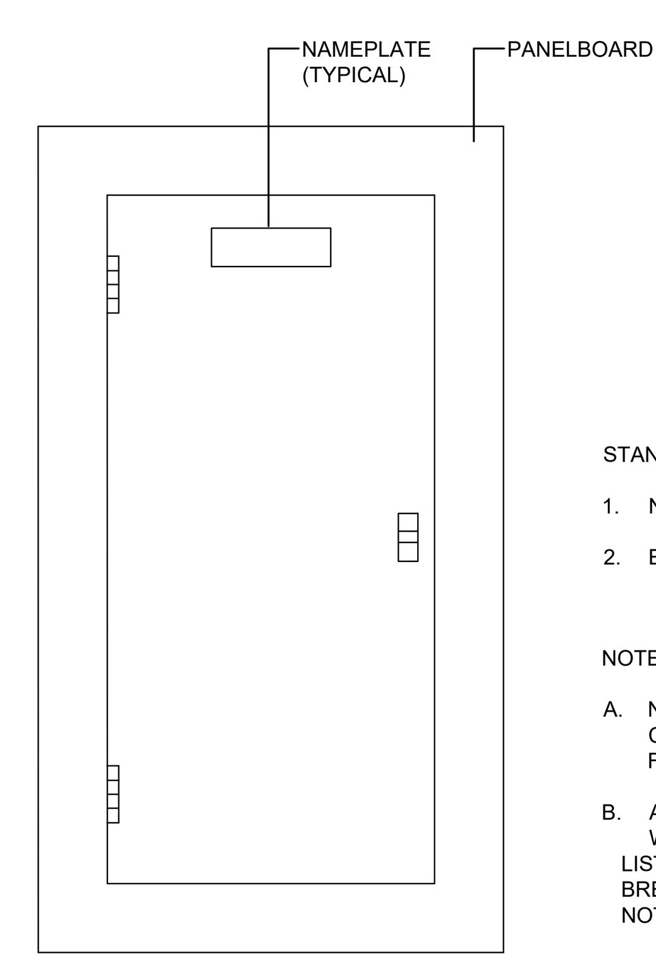
5 PANEL BOARD BONDING DETAIL
SCALE: N.T.S.

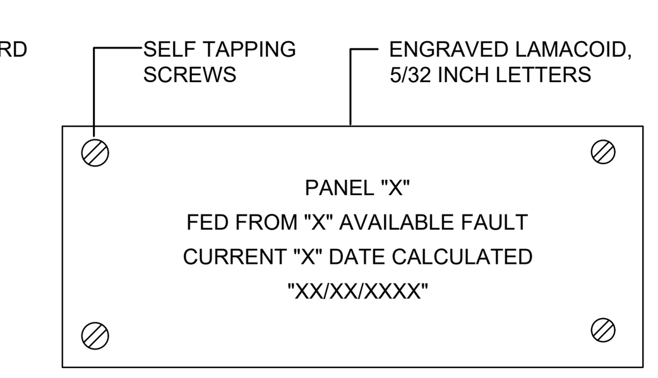


4 TYP CONDUIT SUPPORT DETAIL
SCALE: N.T.S.



3 TYP CONDUIT STUB-UP DETAIL
SCALE: N.T.S.





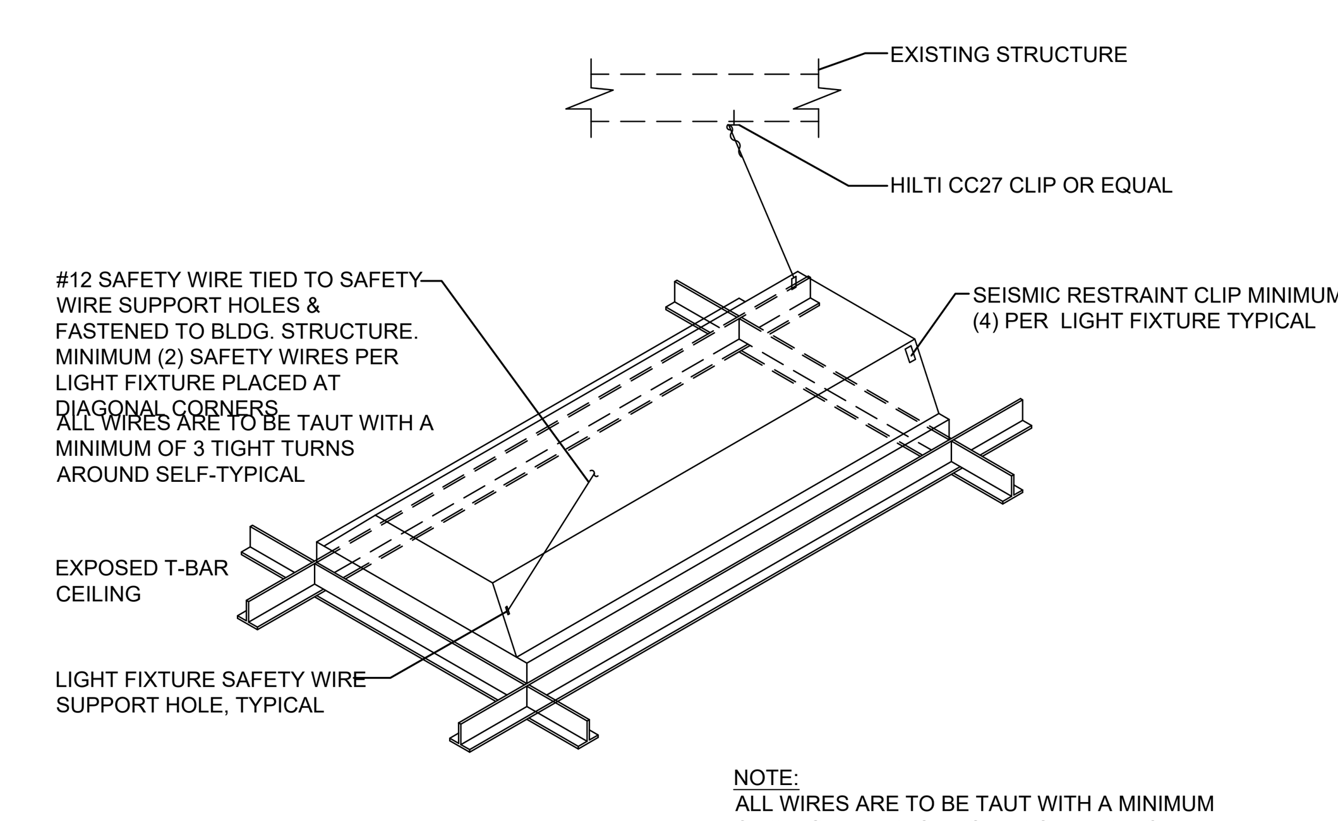
STANDARD LABEL COLORS:

1. NORMAL POWER - BLACK BACKGROUND, WHITE LETTERS
2. EMERGENCY POWER - RED BACKGROUND, WHITE LETTERING

NOTES:

A. NAMEPLATES ARE REQUIRED ON ALL PANELBOARDS, AND MOTOR CONTROL CENTERS. LABEL SHALL INCLUDE PANEL NAME, AVAILABLE FAULT CURRENT RATING AND 'FED FROM' LABEL PER DETAIL ABOVE.
B. ALL PANELS SHALL BE PROVIDED WITH PLASTIC SLEEVED TYPE WRITTEN DIRECTORY AFFIXED ON INSIDE OF DOOR WITH LIST OF CIRCUITS AND THE ITEM(S) SERVED BY EACH BREAKER. HAND LETTERING WITH PERMANENT MARKER IS NOT ACCEPTABLE

2 PANEL BOARD NAMEPLATE DETAIL
SCALE: N.T.S.



1 TYP RECESSED FIXTURE SUPPORT DETAIL
SCALE: N.T.S.

GHA
Architecture / Development
14901 Quorum Drive
Suite 300
Dallas Texas 75254
Ph: (972) 239-8884
Fax: (972) 239-5054

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 19651 GRANT REID CLAUSSEN 08/31/22

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:

ELECTRICAL DETAILS

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

- [X] PERMIT/BID SUBMITTAL
- [ ] CONSTRUCTION ISSUE

SHEET NO.
E1.03

COMcheck Software Version COMcheckWeb
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Scooter's Bryant, AR
Project Type: New Construction

Construction Site:
1816 N Reynolds Rd.
Bryant, Arkansas 72022

Owner/Agent:
Scooters Coffee

Designer/Contractor:
GRANT CLAUSSEN
GHC ENGINEERS
14901 QUORUM DR.
DALLAS, Texas 75254
972239884
gclaussen@ghcengineers.com

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Common Space Types:Food Preparation	762	0.95	724
		Total Allowed Watts =	724

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Common Space Types:Food Preparation				
LED: LED 1: T1: 2x4 LED Panel Lighting: LED Panel 40W:	1	8	40	320
LED: LED 2: B: LED Strip Light: Other:	1	120	3	360
			Total Proposed Watts =	680

Interior Lighting PASSES: Design 6% 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 COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Grant Claussen — Name - Title
Signature
08/31/22 — Date

COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Scooter's Bryant, AR
Project Type: New Construction
Exterior Lighting Zone: 4 (High activity metropolitan commercial district (LZ4))

Construction Site:
1816 N Reynolds Rd.
Bryant, Arkansas 72022

Owner/Agent:
Scooters Coffee

Designer/Contractor:
GRANT CLAUSSEN
GHC ENGINEERS
14901 QUORUM DR.
DALLAS, Texas 75254
972239884
gclaussen@ghcengineers.com

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Illuminated area of facade wall or surface	2501 ft2	0.15	No	375
			Total Tradable Watts (a) =	0
			Total Allowed Watts =	375
			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 Fixture	D Fixture Watt.	E (C X D)
Illuminated area of facade wall or surface (2501 ft2): Non-tradable Wattage				
LED: LED 3: Exterior Wall Sconce: Other:	1	7	28	196
LED: LED 4: Linear Light: Other:	1	1	371	371
			Total Tradable Proposed Watts =	0

Exterior Lighting PASSES: Design 0.0% 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 COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Grant Claussen — Name - Title
Signature
08/31/22 — Date

COMcheck Software Version COMcheckWeb
Inspection Checklist

Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COMcheck 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 [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	Requirement will be met.
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	

Additional Comments/Assumptions:

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	Requirement will be met.
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	Requirement will be met.
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	Requirement will be met.
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	Requirement will be met.
C405.2.6 [EL30][null]	Automatic ligting 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	Requirement will be met.
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	
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	
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	
C405.9 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

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.
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	
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.
C408.3 [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)

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
GRANT REID CLAUSSEN
08/31/22

EST. 1998
SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
ELECTRICAL COMCHECK

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
E1.04

LIGHTING SCHEDULE

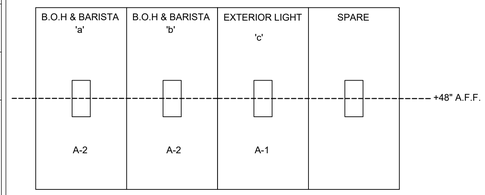
CALLOUT	SYMBOL	LAMP	MANUFACTURE MODEL NUMBER	DESCRIPTION	BALLAST	MOUNTING	WATTAGE VOLTAGE
A		(1) 11.8W LED	BEST LIGHTING LED WPCA 12W-3K	EXTERIOR WALL SCONCE	ELECTRONIC	WALL	120 1P 2W
A2		(1) 27.8W LED	BEST LIGHTING LED WPCA 30W-3K	EXTERIOR WALL SCONCE	ELECTRONIC	WALL	120 1P 2W
B		2.9W/ FT LED	NOVA FLEX NF/SP-PROW-120-24V-3000K	PRO 120 SERIES - IP68 LED STRIP LIGHT, VERIFY LENGTH AND HARDWIRE CONNECTIONS PRIOR TO ORDERING, TO BE PLACED ON DIMMER SWITCH	LED	SURFACE	120 1P 2W
EM1		(2) 3.3W INCLUDED	BEST LIGHTING RMR-16-LED	MR-16 SEMI-RECESSED THERMOPLASTIC EMERGENCY UNIT.	N/A	WALL	120 1P 2W
EM2		(2) 6W LED	BEST LIGHTING DBEL-ACEM-HL-B-SDI-CW-PC	LED DECORATIVE OUTDOOR DIE-CAST AC/EMERGENCY UNIT.	N/A	WALL	120 1P 2W
T1		(1) 40W LED	AEL C2435MM	LED 2X4 PANEL LIGHTING, DIMMABLE.	ELECTRONIC	RECESSED	120 1P 2W
X1		(2) 1W INCLUDED	BEST LIGHTING LEDCXTEU-2-R-W	LED EXIT SIGN/ EMERGENCY UNIT COMBO.	N/A	CEILING	120 1P 2W
FL		(1) 35W LED	KITCHLER NSP 10 TO 15 - 16209	GROUND MOUNT LED FLAG POLE LIGHT FIXTURE	LED	STANCHION GROUNG	120 1P 2W

NOTES:

1. ALL FIXTURE FINISHES AND OPTIONS MUST BE APPROVED BY OWNER OR ARCHITECT.
2. ADDITIONAL LIGHT SWITCHES MAY BE INSTALLED IF APPROVED BY OWNER OR ARCHITECT.
3. ALL EMERGENCY LIGHTING SHALL BE POWERED WITH CIRCUIT "XXX".
4. LIGHTING SUPPLIER AND CONTRACTOR ENSURE ALL LIGHTING CONTROLS INCLUDING EXPOSED TO PLENUM EXPOSED TO PLENUM IS PLENUM RATED.
5. CONTRACTOR TO COORDINATE ALL LIGHTING/DIMING CONTROLS AND LIGHTING SPECIFICATIONS WITH CONTROLS VENDOR PRIOR TO TO ORDERING TO ENSURE CORRECT COMPONENTS.
6. GENERAL CONTRACTOR TO CONTACT NATIONAL LIGHTING SUPPLIER @ SCOOTERS@FSGI.COM

NOTES BY SYMBOL (X)

1. PROVIDE DIMMING SWITCH ON WALL FOR EXTERIOR LED STRIP LIGHTING. COORDINATE EXACT LOCATION WITH OWNER/ ARCHITECT PRIOR TO INSTALLATION.
2. EMERGENCY EGRESS LIGHT SHALL BE CIRCUITED TO UNSWITCHED LEG OF LOCAL LIGHT CIRCUIT.
3. PROVIDE LIGHT SWITCH ON WALL FOR EXTERIOR WALL/ SITE FIXTURE. COORDINATE EXACT LOCATION WITH OWNER/ ARCHITECT PRIOR TO INSTALLATION
4. PROVIDE SWITCH ON WALL FOR ILLUMINATED MONUMENT SIGN AND BUILDING SIGNS COORDINATE EXACT LOCATION WITH OWNER/ ARCHITECT PRIOR TO INSTALLATION.
5. PROVIDE SWITCH ON WALL FOR ILLUMINATED MENU BOARD/ SPEAKER. COORDINATE EXACT LOCATION WITH OWNER/ ARCHITECT PRIOR TO INSTALLATION. VERIFY EXACT POWER REQUIREMENTS PRIOR TO ROUGH-IN.
6. EXIT LIGHT SHALL BE CIRCUITED TO UNSWITCHED LEG OF LOCAL LIGHT CIRCUIT. PROVIDE CHEVRONS AS NEEDED.



3 SWITCHBANK DETAIL
SCALE: NOT TO SCALE

TIMECLOCK SEQUENCE OF OPERATION

1. EXTERIOR SIGN SHALL TURN ON AT 4:30AM.
2. TOILET EXHAUST SHALL ENERGIXE AT 5AM.
3. EXTERIOR SIGN SHALL TURN OFF 30- MINUTES AFTER SUNRISE.
4. EXTERIOR SIGNAGE SHALL TURN ON 30-MINUTES BEFORE SUNSET.
5. TOILET EXHAUST SHALL SHUT OFF AT 10PM.
6. EXTERIOR SIGNAGE SHALL TURN OFF AT 10:30PM.

ALL TIMES ARE ADJUSTABLE.

LIGHTING CONTROL DEVICE SCHEDULE

CALLOUT	SYMBOL	MANUFACTURE MODEL NUMBER	UNOBSTRUCTED RATED COVERAGE	MOUNTING	WATTAGE VOLTAGE	TIME DELAY	DESCRIPTION
OCCUPANCY SENSOR SWITCH	$OS	nLIGHT WSX-PDT	--	CEILING	--	--	LINE VOLTAGE SWITCH DUAL TECHNOLOGY SENSOR
DIMMER SWITCH	$D	ACUITY CONTROLS sPODMRD	--	WALL	LINE	--	LINE VOLTAGE PUSH BUTTON SWITCH POD ON/OFF
TOGGLE SWITCH	$	HUBBEL #1221	--	WALL	LOW	--	

NOTES:

1. SENSOR REQUIRES POWER PACK (INSTALL IN ACCESSIBLE LOCATION)
2. SWIVEL MOUNTING BRACKET INCLUDED
3. ELECTRICAL CONTRACTOR SHALL COORDINATE COMPATIBILITY OF LIGHT FIXTURES AND LIGHTING CONTROL DEVICES/ SYSTEM WITH CONTROL SYSTEM SUPPLIER PRIOR TO ORDERING/ ROUGH-IN
4. VERIFY POWER REQUIREMENT FOR CEILING SENSOR. IF IT REQUIRES CONTINUOUS HOT, PULL UNDIMMED WIRE FROM AHEAD OF DIMMER SWITCH TO CEILING SENSOR FOR SENSOR OPERATING, AND RUN DIMMED LINE THROUGH SENSOR FOR ON/OFF CONTROL. CONFIRM WITH VENDOR PRIOR TO ORDERING SENSOR TO ENSURE COMPATIBILITY.

LIGHTING GENERAL NOTES

A. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BASE BID. IN CASE OF ANY DISCREPANCIES WITH EXISTING FIELD CONDITIONS, ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT DIFFERENCE FOR POSSIBLE REVISIONS TO THIS DOCUMENT.

B. INSTALL RECESSED LUMINAIRES USING ACCESSORIES AND FIRE STOPPING MATERIALS TO MEET REGULATORY REQUIREMENTS FOR FIRE RATING.

C. ALL FLUORESCENT LIGHT FIXTURES THAT UTILIZE DOUBLE ENDED LAMPS AND CONTAIN BALLAST(S) THAT CAN BE SERVICED IN PLACE SHALL BE CODE COMPLIANT WITH N.E.C 410.130(G)

D. COORDINATE ALL EXTERIOR BUILDING MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL BUILDING ELEVATIONS FOR HEIGHTS AND LOCATIONS.

E. PROVIDE EXIT SIGNS FOR ALL EXISTS DESIGNATED BY THE CODE STUDY PLAN. REFER TO ARCHITECTURAL CODE PLANS FOR LOCATIONS AND REQUIREMENTS.

F. CONDUIT AND WIRING SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE THE NUMBER OF CONDUCTOR REQUIRED FOR HOT-LEGS, NEUTRAL AND GROUNDING AT EACH DEVICE FOR PROPER BRANCH CIRCUITING SHOWN FOR EACH AREA OR ROOM.

G. ALL EMERGENCY/EXIT FIXTURES AND ARE TO BE PROVIDED WITH MINIMUM 90 MIN EMERGENCY BATTERY BACK-UP. BYPASS ENERGY MANAGEMENT SYSTEM WHERE REQUIRED.

H. WHEN REQUIRED, IT IS THE OWNER'S RESPONSIBILITY TO CONTRACT WITH A COMMISSIONING AUTHORITY TO COMPLY WITH LOCAL CODES.

I. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DISCIPLINES DRAWINGS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS AND ENGINEERS PRIOR TO FINAL BID CLOSING.

GENERAL NOTE

PROVIDE STRUCTURE ENGINEERING LETTER OF APPROVAL FOR SEISMIC INSTALLATION SUPPORT PRIOR TO INSTALLATION AND AT COMMISSIONING STAGE. ALL EQUIPMENT SEISMIC SUPPORT AND INSTALLATION METHOD MUST BE SUBMITTED TO STRUCTURE ENGINEERING APPROVAL PRIOR TO INSTALLATION.

IECC 2012

IECC 2012 APPLIANCE NOTES:

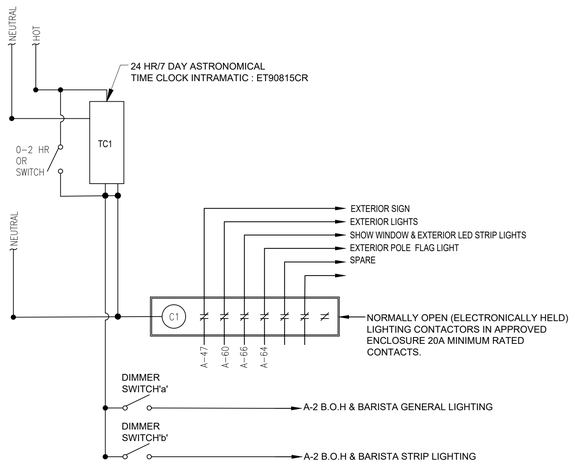
1. THE UNDER-COUNTER REFRIGERATION SHALL MEET THE STANDARDS FOR EFFICIENCY, PER IECC 2012, TABLE C4033.2.14. NOTE THAT THE ENERGY STAR REFRIGERATORS AND FREEZERS ARE 10% MORE EFFICIENT THAN MINIMUM FEDERAL EFFICIENCY STANDARDS FOR SUCH PRODUCTS. THEREBY THEY SHOULD MEET THIS REQUIREMENT.

IECC 2012 ELECTRICAL NOTES:

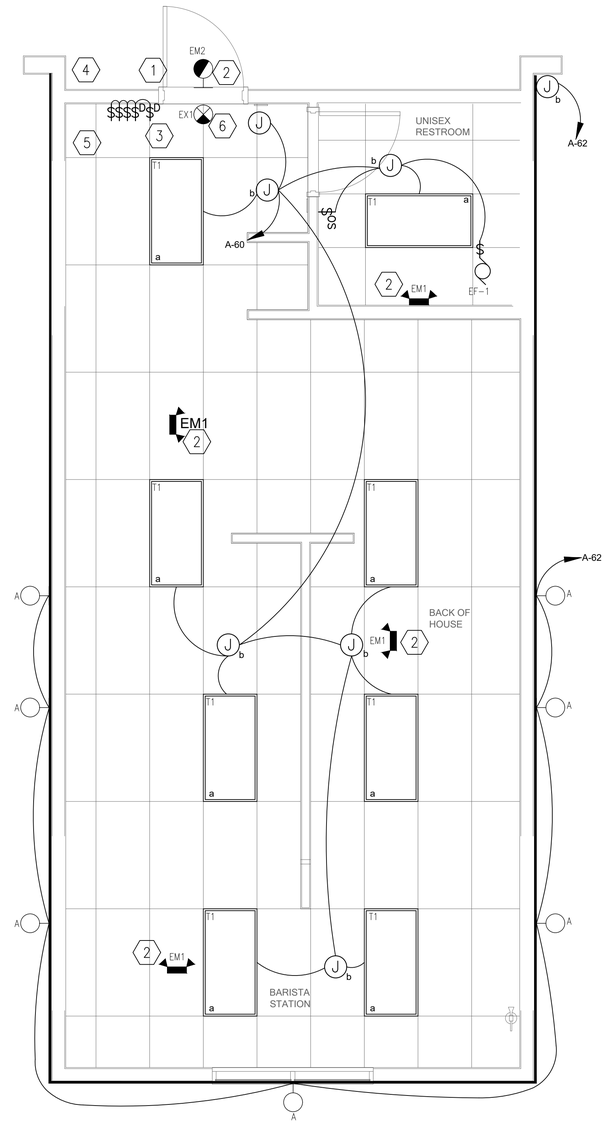
1. DAYLIGHTING REQUIRED FOR ROOMS WITH EXTERNAL WINDOWS AND 150 WATTS OR MORE OF INSTALLED LIGHTING. DAYLIGHT ZONE SHALL REACH INTO SPACE AS FAR AS THE HEIGHT OF THE TOP OF THE WINDOW SILL.
2. ALL BUILDING LIGHTING NOT CONTROLLED BY AN OCCUPANCY SENSOR (AND NOT IN AN EQUIPMENT ROOM) SHALL BE CONTROLLED BY THE BUILDING LIGHTING TIMER, AND IT SHALL BE SET AND LABELED TO BE OFF DURING NON-OCCUPIED HOURS.

IECC 2012 ELECTRICAL COMMISSIONING NOTES:

1. ELECTRICAL COMMISSIONING IS REQUIRED. COMMISSIONING SHALL BE PER IECC 2012 C408.3 (LIGHTING SYSTEMS).



2 TIME CLOCK DIAGRAM
SCALE: NOT TO SCALE



1 LIGHTING FLOOR PLAN
SCALE: 3/8" = 1'-0"

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STATE OF ARKANSAS
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CLAUSEN
08/31/22

EST. 1998 SCOOTER'S COFFEE

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REVISIONS:

TITLE:
LIGHTING FLOOR PLAN & SCHEDULE

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
E2.01

KITCHEN EQUIPMENT SCHEDULE

CALLOUT	DESCRIPTION	SYMBOL	VOLTS	AMPS	MOCP	WIRE CALLOUT	NOTES
1	BEVERAGE BLENDER		120 1P 2W	15.0	20	2#12, #12G, 3/4"C	+48" A.F.F.
2	ICE MAKER		120 1P 2W	15.2	20	2#12, #12G, 3/4"C	+60" A.F.F.
3	HIGH SPEED OVEN		240 2P 2W	16.0	30	2#10, #10G, 3/4"C	+48" A.F.F. NEMA 6-30P
4A	U/C REFRIGERATOR (48")		120 1P 2W	5.0	20	2#12, #12G, 3/4"C	+18" A.F.F. NEMA 5-15P
4B	U/C REFRIGERATOR (60")		120 1P 2W	6.6	20	2#12, #12G, 3/4"C	+18" A.F.F. NEMA 5-15P
4C	U/C REFRIGERATOR (36")		120 1P 2W	6.6	20	2#12, #12G, 3/4"C	+18" A.F.F. NEMA 5-15P
4E	U/C REFRIGERATOR (24")		120 1P 2W	2.3	20	2#12, #12G, 3/4"C	+18" A.F.F. NEMA 5-15P
5	COFFEE GRINDER		120 1P 2W	11.0	20	2#12, #12G, 3/4"C	+30" A.F.F. NEMA 5-15P
6	COFFEE BREWER		240 2P 2W	24.0	30	2#10, #10G, 3/4"C	+24" A.F.F. NEMA 5-15P, 6-30P/R. ELECTRICAN SHALL PROVIDE RECEPTACLE AND END WHIP.
8	POS TERMINAL W/ PRINTER		120 1P 2W	15.0	20	2#12, #12G, 3/4"C	+30" A.F.F. NEMA 5-15P, PROVIDE (2) CAT5 DATA LINES PER POS AND ONE CAT DATA LINE AT ORDER SCREEN.
9	ESPRESSO MACHINE		240 2P 2W	30.0	30	2#10, #10G, 3/4"C	+48" A.F.F. GC TO PROVIDE BUCK BOOST TRANSFORMER WHERE APPLICABLE TO ACHIEVE 208 VOLTAGE FOR EQUIPMENT USE.
13	REACH-IN REFRIGERATOR (2 DOOR)		120 1P 2W	7.0	20	2#12, #12G, 3/4"C	+48" A.F.F. NEMA 5-15P
14A	REACH-IN FREEZER (1 DOOR)		120 1P 2W	9.6	20	2#12, #12G, 3/4"C	+18" A.F.F. NEMA 5-15P
14B	REACH-IN FREEZER (2 DOOR)		120 1P 2W	12	20	2#12, #12G, 3/4"C	+48" A.F.F. NEMA 5-15P
25	WATER TREATMENT SYSTEM		120 1P 2W	5.0	20	2#12, #12G, 3/4"C	VERIFY PROCESSOR 120V, 6W, RP 120V, 2W
25A	WATER STORAGE TANK & PUMP	J	120 1P 2W	2.0	20	2#12, #12G, 3/4"C	+84" A.F.F.
26	ZOOM TIMER		120 1P 2W	2.5	20	2#12, #12G, 3/4"C	+84" A.F.F.
30	DRIVE-THRU ORDER MONITOR		120 1P 2W	8.0	20	2#12, #12G, 3/4"C	72" A.F.F. DEDICATED CIRCUIT
A	CONVENIENCE OUTLET (+48" AFF)		120 1P 2W	15.0	20	2#12, #12G, 3/4"C	MOUNT HORIZONTALLY AS NEEDED
B	CONVENIENCE OUTLET (+18" AFF)		120 1P 2W	15.0	20	2#12, #12G, 3/4"C	MOUNT HORIZONTALLY AS NEEDED
C	CONVENIENCE OUTLET (+42" AFF)		120 1P 2W	15.0	20	2#12, #12G, 3/4"C	MOUNT HORIZONTALLY AS NEEDED

NOTES:

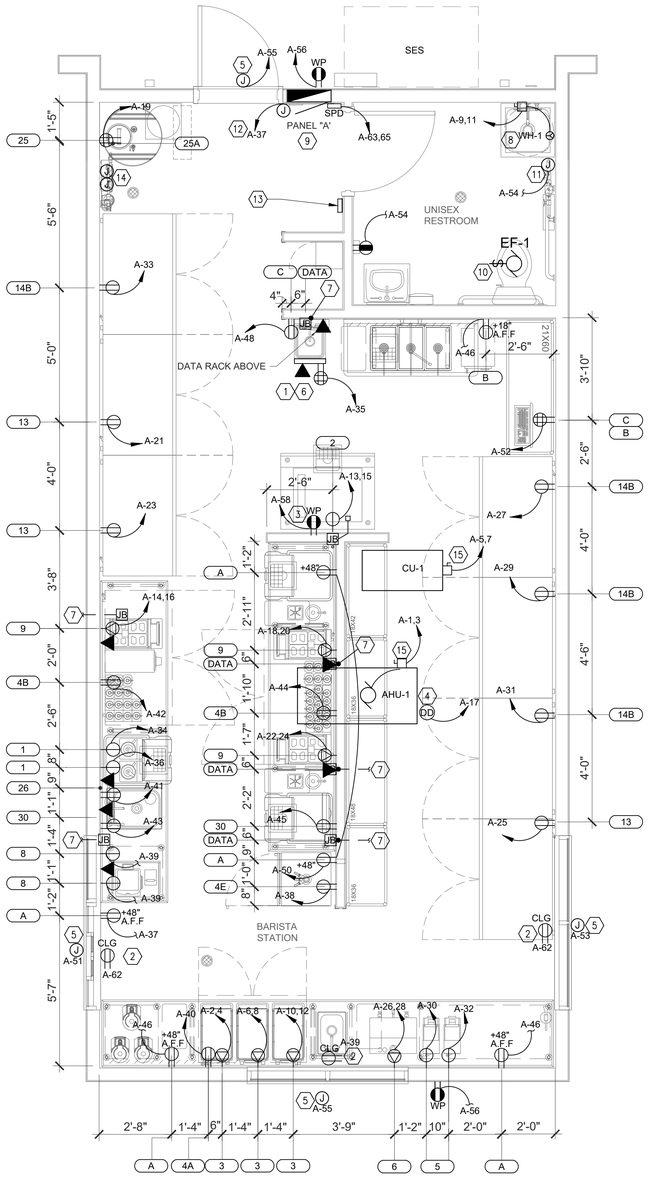
THE ELECTRICAL CONTRACTOR SHALL VERIFY ROUGH-IN REQUIREMENTS, LOCATIONS, MOUNTING HEIGHTS, VOLTAGE, PHASE, AMPS, HP, KW, ETC. FOR ALL EQUIPMENT.

MECHANICAL EQUIPMENT SCHEDULE

CALLOUT	DESCRIPTION	SYMBOL	VOLTS	FLA	MCA	MOCP	WIRE CALLOUT	NOTES
EF-1	EXHAUST FAN	M	120 1P 2W	0.67		20	2#12, #12G, 3/4"C	PROVIDE MANUAL, MOTOR RATED, NEMA-3R, TOGGLE SWITCH FOR DISCONNECTING MEANS. INTERLOCK FAN WITH RESTROOM LIGHT SWITCH
RTU-1	ROOF TOP UNIT		240 1P 2W		66	70	3#4, #8G, 1"C	PROVIDE 100A/3P NEMA 3R DISCONNECT SWITCH FUSED PER UNIT NAMEPLATE.
WH-1	WATER HEATER		240 1P 2W	39		50	2#8, #10G, 3/4"C	PROVIDE 60A/2P NEMA 3R NON-FUSED DISCONNECT SWITCH

NOTES BY SYMBOL (X)

1. PROVIDE DATA RACK RECEPTACLE MOUNTED ABOVE PANEL AT 108" A.F.F. COORDINATE EXACT LOCATION WITH OWNER/ ARCHITECT PRIOR TO INSTALLATION. PANEL MAINTAIN 3'-0" FRONT WORKING CLEARANCE.
2. SHOW WINDOWS RECEPTACLE TO BE INSTALLED PER N.E.C. 210.62 & 220.14(G).
3. HVAC CONVENIENCE OUTLET(S) AND DISCONNECT(S) SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR, SIZE TO MATCH BREAKERS ON PANEL AND/OR NAMEPLATE PROVIDE.
4. PROVIDE 120V CONNECTION TO DUCT SMOKE DETECTORS INTERLOCK FOR SIMULTANEOUS UNIT SHOUT-DOWN WITHIN 30 SECONDS OR LESS. VERIFY FINAL CONNECTION LOCATION AND REQUIREMENTS WITH MECHANICAL CONTRACTOR..
5. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS AND QUANTITY FOR ELECTRICAL AND BLOCKING/ MOUNTING WITH SIGN PROVIDER AND PROVIDE AS NECESSARY PRIOR TO ROUGH-IN. CONTRACTOR SHALL FIELD VERIFY SIGN CIRCUIT COMPLIES WITH ALL LOCAL AND NATIONAL CODES AND IS PROVIDED WITH ALL REQUIRED DISCONNECTING MEANS PER N.E.C. PROVIDE INTERIOR ACCESS PANELS FOR SIGN CIRCUIT AS NECESSARY. .
6. DATA WIRING BY OWNER. ELECTRICAL CONTRACTOR TO PROVIDE SINGLE GANG JUNCTION BOX W/ PULL STRING AT EACH DATA LOCATION WITH 3/4" CONDUIT CONCEALED IN WALL TO ABOVE ACCESSIBLE CEILING..
7. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER'S REP TO VERIFY LOCATION OF TELEPHONE CONNECTION POINT AND RUN CONDUIT AND PHONE/DATA LINES FROM TENANT SPACE TO BASE BUILDING CONNECTION POINT. VERIFY LOCATION IN FIELD.
8. PROVIDE AND INSTALL NEW 60A/2P DISCONNECT FOR THANK WATER HEATER.
9. PANEL "A" SHALL BE RECESSED-MOUNT, AND FACE OPEN INTO ROOM FURROUT WALLS AS NECESSARY.
10. CIRCUIT EXHAUST FAN TO LOCAL LIGHTING CIRCUIT. PROVIDE ALL NECESSARY RELAYS, CONTACTORS, ETC.., TO CONNECT ROOM'S OCCUPANCY SENSOR.
11. PLACE RECIRCULATION PUMP OUTLET/J-BOX ABOVE WATER HEATER IN UTILITY ROOM WHERE SPACE ALLOWS.
12. PROVIDE AND INSTALL (1) EMPTY JUNCTION BOX FOR SECURITY PANEL +48 A.F.F.
13. PROVIDE AND INSTALL NEW TIME CLOCK.
14. PROVIDE (2) EMPTY JUNCTION BOXES FOR VOLUME CONTROL W/ CONDUIT ABOVE CEILING. COORDINATE EXACT LOCATION PRIOR TO INSTALLATION.
15. PROVIDE AND INSTALL NEW 100A/3P DISCONNECT FOR ROOFTOP UNIT.



1 POWER FLOOR PLAN

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

NORTH

GENERAL NOTES

1. REFER TO MECHANICAL AND PLUMBING PLANS FOR EXACT SIZE, LOCATION, AND ELECTRICAL REQUIREMENTS FOR ALL MECHANICAL AND PLUMBING EQUIPMENT.
2. ALL EXTERIOR DISCONNECTS SHALL BE W.P. TYPE.
3. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL CONNECTION REQUIREMENTS (HP, AMPS, VOLTAGE, PHASE, MOUNTING HEIGHT, AND DISCONNECTING MEANS) FOR ALL EQUIPMENT SUPPLIED BY OTHERS BEFORE ROUGH-IN. DISCONNECT SWITCHES SHALL BE LOCATED WITH N.E.C. CODE CLEARANCE OR PROVIDE LOCKOUT TYPE C/B.
4. ALL EQUIPMENT SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY.
5. ALL EXTERIOR RECEPTACLE SHALL BE W.P/ GFCI. TYPE.

A. ALL ELECTRICAL PANEL BOARDS SHALL MAINTAIN 3'-0" IN FRONT WORKING CLEARANCE REFER TO ONE-LINE DIAGRAM FOR DETAIL.

B. WHEN REQUIRED, IT IS THE OWNER'S RESPONSIBILITY TO CONTRACT WITH A COMMISSIONING AUTHORITY TO COMPLY WITH LOCAL CODES.

C. VERIFY GFI REQUIREMENTS PRIOR TO BID. ALL RECEPTACLES WITHIN 6'-0" OF A SINK OR WASH BASIN SHALL BE GFI RATED.

D. ELECTRICAL CONTRACTOR RESPONSIBLE FOR COORDINATING EXACT LOCATION, QUANTITIES AND INSTALLATION REQUIREMENTS OF ELECTRICAL EQUIPMENT IN MILL WORK.

E. CONDUITS & WIRING SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE THE NUMBER OF CONDUCTORS REQUIRED FOR HOT-LEGS, NEUTRAL, AND GROUNDING AT EACH DEVICE FOR PROPER BRANCH CIRCUITING SHOWN FOR EACH AREA OR ROOM.

F. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DISCIPLINES DRAWINGS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS AND ENGINEERS PRIOR TO FINAL BID CLOSING.

G. ALL RECEPTACLES INSTALLED AT 16" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED.

H. GENERAL CONTRACTOR TO VERIFY WITH COUNTER FAB VENDER PRIOR TO OUTLET LOCATION.

I. PROVIDE GFCI PROTECTION FOR ALL BACK OF HOUSE/ DRIVE THRU WINDOW AREA RECEPTACLES PER NEC 210.8 (B)(2). MUST BE READILY ACCESSIBLE OR USE GFI BREAKER.

KITCHEN EQUIPMENT NOTES

A. FINAL CONNECTION TO ALL HARD-WIRED EQUIPMENT SHALL BE MADE WITH "SEAL-TITE" FLEXIBLE CONDUIT.

B. THE ELECTRICAL CONTRACTOR SHALL MAKE FINAL ELECTRICAL CONNECTIONS TO ALL RELATED EQUIPMENT.

C. "CALL OUT" - INDICATES EQUIPMENT IDENTIFICATION NUMBER, REFER TO EQUIPMENT SCHEDULE. COORDINATE WITH EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.

D. THE ELECTRICAL CONTRACTOR SHALL VERIFY ROUGH-IN REQUIREMENTS, LOCATIONS, MOUNTING HEIGHTS, VOLTAGE, PHASE, AMPS, HP, KW, ETC. FOR ALL EQUIPMENT PRIOR TO ROUGH-IN.

E. PROVIDE SEAL-OFF'S FOR ALL CONDUITS ENTERING OR LEAVING WALK-IN BOXES.

F. ALL CIRCUITS SHALL HAVE AN INSULATED GROUND WIRE (BOND) SIZED PER N.E.C. #250.122, #12 MINIMUM GROUND, WIRE NOT SHOWN ON DRAWINGS.

G. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECT SWITCHES, CONDUIT, WIRE AND INSTALL UNDER SUPERVISION OF THE EQUIPMENT SUPPLIER.

H. THE ELECTRICAL CONTRACTOR SHALL VERIFY PLUG CONFIGURATIONS FOR APPLIVABLE EQUIPMENT WITH SUPPLIER PRIOR TO ROUGH-IN.

I. PROVIDE GFCI PROTECTION FOR ALL EQUIPMENT/ KITCHEN RECEPTACLES PER N.E.C. 210.8 (B)(2).

MECHANICAL GENERAL NOTES

A. VERIFY ALL MECHANICAL UNIT LOCATIONS WITH MECHANICAL PLANS.

B. THE ELECTRICAL CONTRACTOR SHALL NOT MOUNT DISCONNECT EQUIPMENT DIRECTLY TO MECHANICAL UNITS FOR DISCONNECT 200A AND LARGER. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A SELF-SUPPORTING SYSTEM FOR DISCONNECT EQUIPMENT.

C. PROVIDE WEATHERPROOF, HEAVY DUTY, NEMA 3R FUSIBLE DISCONNECT SWITCHES FOR ALL MECHANICAL UNITS LOCATED OUTSIDE.

D. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT GFCI (PASS & SEYMOUR 2095DSWRBK OR EQUAL). INSTALLED IN A WEATHERPROOF ENCLOSURE WITH A WHILE IN USE COVERPLATE (PASS & SEYMOUR #WIUC10DCL OR EQUAL).

E. EXHAUST FANS MOUNTED OUTSIDE SHALL HAVE A WEATHERPROOF DISCONNECT MOUNTED EXTERIOR TO THE UNIT. INTERNAL DISCONNECT SWITCHES SHALL NOT BE ALLOWED.

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
JAMES REID CLAUSEN
08/31/22

EST. 1998 SCOOTER'S COFFEE

PROJECT ADDRESS:
1816 N Reynolds Rd.
Bryant, AR 72022

REVISIONS:

TITLE:
POWER
FLOOR PLAN

KIOSK PROTOTYPE:
4.1 PROTOTYPE
MAY 2022
DATE:
09/01/2022
PROJECT NO.
221329

[X] PERMIT/BID SUBMITTAL
[ ] CONSTRUCTION ISSUE

SHEET NO.
E2.02