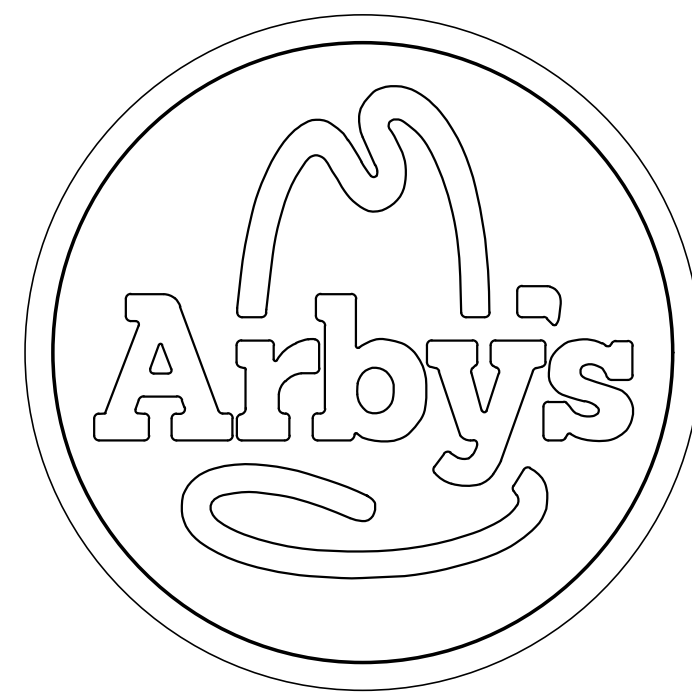


# Arby's



NEW RESTAURANT CONVERSION FOR: 1632 AR-25 BYPASS

HEBER SPRINGS, AR 72543

## Sheet Index

G101 SHEET INDEX, CODE INFORMATION, GENERAL NOTES, VICINITY MAP, RESPONSIBILITY SCHEDULE

### CIVIL

- C-001 COVER SHEET
- C-002 GENERAL NOTES
- 1 OF 2 ALTAN&S LAND TITLE SURVEY
- 2 OF 2 ALTAN&S LAND TITLE SURVEY
- CD-101 DEMOLITION PLAN
- CS-101 SITE PLAN
- CS-501 SITE DETAILS
- CS-502 SITE DETAILS
- CG-101 GRADING PLAN
- CG-501 GRADING DETAILS
- CU-101 UTILITY PLAN
- CU-501 UTILITY DETAILS
- CE-101 STORMWATER POLLUTION PREVENTION PLAN
- CE-501 STORMWATER POLLUTION PREVENTION DETAILS
- LP-101 LANDSCAPE PLAN
- LP-501 LANDSCAPE DETAILS

### ARCHITECTURAL

- A101 DUMPSTER DETAILS, SECTION, SITE PLAN DETAILS, GENERAL NOTES
- A102 DRIVE-THRU PLAN, CANOPY DETAIL, GENERAL NOTES, DRIVE-THRU MENU SYSTEM NOTES
- DEMO DEMOLITION PLAN, DEMOLITION NOTES
- A101 FLOOR PLAN, DOOR SCHEDULE, DOOR NOTES, ADA GUIDELINES FOR DOORS, GENERAL NOTES, INTERIOR FINISH NOTES, FIELD VERIFICATION NOTE, ACCESSIBILITY REQUIREMENTS
- A102 FRAMING FLOOR PLAN, FLOOR PLAN DETAILS, WALL TYPES, GENERAL CONSTRUCTION NOTES
- A103 REFLECTED CEILING PLAN, LIGHT FIXTURE SCHEDULE, SECTION, FIELD VERIFICATION NOTE
- A104 ROOF PLAN, DETAILS, PREFABRICATED CANOPY NOTES, ROOF PLAN NOTES
- A105 RESTROOM PLAN DETAIL, INTERIOR ELEVATIONS, TYP. ACCESSIBLE CLEARANCE REQ'TS, NOTES
- A106 FLOOR FINISH PLAN, FLOOR FINISH SCHEDULE, NOTES

## Sheet Index

### ARCHITECTURAL CONT'D

- A101 BUILDING ELEVATIONS, EXTERIOR FINISH NOTES, SIGNAGE NOTE, GENERAL NOTES
- A102 BUILDING ELEVATION, EXTERIOR FINISH NOTES, SIGNAGE NOTE, EXTERIOR PAINT SPECIFICATIONS, GENERAL NOTES
- A301 SECTIONS, GENERAL NOTES, FIELD VERIFICATION NOTE, PREFABRICATED CANOPY NOTES
- A302 SECTIONS
- A303 SECTIONS
- A304 SECTIONS, GENERAL NOTES, FIELD VERIFICATION NOTE, PREFABRICATED CANOPY NOTES
- A401 INTERIOR ELEVATIONS, INTERIOR FINISH NOTES
- A402 KITCHEN ELEVATIONS, HOP SINK DETAILS
- A403 SECTIONS, WALL, CAP DETAILS, WAINSCOT DETAIL, WALL FINISH PLAN, DOOR TYPES, FINISH NOTES, INTERIOR FINISH SCHEDULE, TYPICAL, HARDWARE SCHEDULE, HARDWARE NOTES, MILLWORK, GENERAL NOTES

- EQ-1 EQUIPMENT PLAN, NOTES
- EQ-2 EQUIPMENT SCHEDULE

### STRUCTURAL

- S101 FOUNDATION PLAN, FOOTING DETAILS, COLUMN BASE DETAILS
- S102 ROOF FRAMING PLAN, TYP. NAILING DETAIL FOR BUILT-UP COLLUMS, TYP. TOP PLATE SPLICE DETAIL, TYP. FRAMED OPENING ELEVATION, GENERAL STRUCTURAL NOTES, GENERAL FRAMING NOTES, DESIGN LOADS

### MECHANICAL

- M100 GENERAL INFORMATION - MECHANICAL
- M11 FLOOR PLAN - MECHANICAL
- M51 ROOF PLAN - MECHANICAL
- M51 SCHEDULES - MECHANICAL
- M11 SPECIFICATIONS - MECHANICAL
- M12 SPECIFICATIONS - MECHANICAL
- H1 CAPTIVEAIRE DRAWINGS
- H2 CAPTIVEAIRE DRAWINGS
- H3 CAPTIVEAIRE DRAWINGS

"I Herely Certify That These Plans And Specifications Have Been Prepared By Me, Or Under My Supervision. I Further Certify That To The Best Of My Knowledge These Plans And Specifications Are As Required By Law And In Compliance With The Arkansas Fire Prevention Code For The State Of Arkansas".

Christopher W. White, AIA

## Sheet Index

### PLUMBING

- P00 GENERAL INFORMATION - PLUMBING
- P1 WASTE AND VENT PLAN - PLUMBING
- P2 DOMESTIC WATER AND GAS PLAN - PLUMBING
- P3 ISOMETRICS - PLUMBING
- P4 DETAILS - PLUMBING
- P42 DETAILS - PLUMBING
- P51 SCHEDULES - PLUMBING
- P11 SPECIFICATIONS - PLUMBING
- P12 SPECIFICATIONS - PLUMBING
- P13 SPECIFICATIONS - PLUMBING

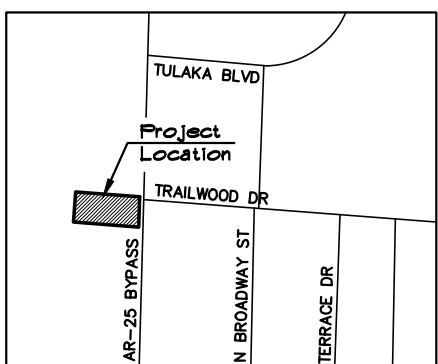
### ELECTRICAL

- E00 GENERAL INFORMATION - ELECTRICAL
- E10 SITE LIGHTING ELECTRICAL PLAN
- E11 LIGHTING PLAN - ELECTRICAL
- E21 POWER PLAN - ELECTRICAL
- E22 P.O.S. SYSTEMS PLAN - ELECTRICAL
- E31 ROOF PLAN - ELECTRICAL
- E41 DIAGRAMS AND DETAILS - ELECTRICAL
- E51 SCHEDULES - ELECTRICAL
- E11 SPECIFICATIONS - ELECTRICAL
- E12 SPECIFICATIONS - ELECTRICAL
- E13 SPECIFICATIONS - ELECTRICAL

### SPECIFICATIONS

- SP-1 SPECIFICATIONS
- SP-2 SPECIFICATIONS
- SP-3 SPECIFICATIONS
- SP-4 SPECIFICATIONS
- SP-5 SPECIFICATIONS
- SP-6 SPECIFICATIONS
- SP-7 SPECIFICATIONS
- SP-8 SPECIFICATIONS
- SP-9 SPECIFICATIONS

## Vicinity Map



Vicinity Map  
Heber Springs, AR  
Not To Scale

## Code Information

### BUILDING CODE REVIEWED:

2012 ARKANSAS FIRE PREVENTION CODE

NOTE TO BUILDING OFFICIAL:  
THE SCOPE OF THIS PROJECT IS LIMITED TO MINOR EXTERIOR REFINISHING/ REMODEL AND NON-STRUCTURAL INTERIOR REMODEL ONLY. THE BUILDING USE AREAS HAVE NOT CHANGED.

- A. OCCUPANCY CLASSIFICATION: ASSEMBLY - GROUP A-2 SECTION 303
- B. OCCUPANT LOAD CALCULATIONS: TABLE 1004.1  
SQUARE FOOTAGE PER PERSON OCCUPANT LOAD  
INTERIOR DINING 120 46  
VESTIBULE/WAITING AREA 5 24  
KITCHEN 1368 1  
TOTAL OCCUPANT LOAD FOR EGRESS: 11
- C. BUILDING SQUARE FOOTAGE BREAK DOWN:  
BUILDING AREA + GROSS SQUARE FOOTAGE (INSIDE OF PERIMETER WALL) = 2,622 SF.
- D. CONSTRUCTION TYPE: 5-B TABLE 503
- E. HEIGHT/AREA CALCULATIONS:  
ALLOWED HEIGHT: 1 STORY, 40' TABLE 503  
ACTUAL HEIGHT: 32' SECTION 1010.11  
ALLOWED AREA: 6,000 SF. TABLE 503  
ACTUAL BUILDING AREA: 2,622 SF.
- F. EGRESS:  
OCCUPANT LOAD: 11 OCCUPANTS SECTION 1004.1  
EGRESS WIDTH REQUIRED: 2' PER PERSON = 15.4' TABLE 1005.3.2  
MINIMUM DOOR WIDTH: 32" SECTION 1010.11  
EGRESS WIDTH PROVIDED: (2) \* 36", (1) \* 42" = 114" PROVIDED  
MAX. TRAVEL DISTANCE ALLOWED: 200' TABLE 1011.2

## General Notes

- ALL WORK DONE BY THIS CONTRACTOR AND/OR HIS SUBCONTRACTORS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL EXISTING CITY, STATE AND NATIONAL BUILDING CODES, LAWS, SPECIAL ORDINANCES, AND/OR REGULATIONS.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO STARTING ANY CONSTRUCTION. STARTING OF CONSTRUCTION MEANS APPROVAL OF CONDITIONS.
- THE CONTRACTOR SHALL VERIFY ALL EQUIPMENT REQUIREMENTS PRIOR TO START OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL INSTALL OWNER PROVIDED OCCUPANT LOAD SIGN IN THE DINING AREA BY THE MAIN EXIT STATING THE MAXIMUM OCCUPANT LOAD.
- THE GENERAL CONTRACTOR SHALL MOUNT OWNER PROVIDED ACCESSIBILITY RESTROOM SIGNS ON THE LATCH SIDE OF RESTROOM DOORS, MOUNTED 60 INCHES TO THE CENTER OF THE SIGNS FROM THE FINISHED FLOOR.
- SELF SERVICE SHELVES AND DISPENSING DEVICES FOR TABLEWARE, DISHWARE, CONDIMENTS, FOOD AND BEVERAGES SHALL BE INSTALLED TO COMPLY WITH ADA 42 AND FIGURE 5.4.
- CONTRACTOR TO VERIFY ALL OWNER PROVIDED ITEMS AND INSTALLATION WORK REQUIRED OF CONTRACTOR PRIOR TO PURCHASING OF MATERIALS OR STARTING OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS UPON DELIVERY AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
- CONTRACTOR TO INSPECT AND INVENTORY ALL 'OWNER SUPPLIED' MATERIALS UPON DELIVERY AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.

## Responsibility Schedule

CATEGORY / TASK	OWNER PROVIDED	OWNER INSTALLED	CONTRACTOR PROVIDED	CONTRACTOR INSTALLED	UNOWNER PROVIDED	UNOWNER INSTALLED	COMMENTS/REMARKS
DINING ROOM DIVIDER OR LOW WALLS							
DINING ROOM FINISHES - OAK TRIM							
DINING ROOM FINISHES - WALL VINYL							
DINING ROOM FINISHES - FAUX TILE							
DINING ROOM FINISHES - WOOD PLANKS (WALL)							
DINING ROOM FINISHES - FLOOR TILE							CONTRACTOR TO PROVIDE GROUT AND SEALER
SOLID SURFACE WINDOW SILLS							
METAL CORNER TRIMS							
SERVICE COUNTER COUNTERTOP							
CONDIMENT COUNTER COUNTERTOP							
CONDIMENT COUNTER PLASTIC LAMINATE							
NEW CONDIMENT COUNTER (IF REQUIRED)							
WALL MOUNTED PICTURES							
ADA SIGNAGE							
MISCELLANEOUS INTERIOR SIGNAGE							
BOOTHS AND BENCHES							
TABLES (TOPS AND BASES)							
CHAIRS AND STOOLS							
HIGH CHAIRS							
TRASH RECEPTACLES							
PREFABRICATED SOFFITS							
INTERIOR DOORS							
DRIVE THRU WINDOW (IF REQUIRED)							
RESTROOM PLUMBING FIXTURES							
RESTROOM PLUMBING ACCESSORIES							
PREFABRICATED CANOPIES							REQUIRES ENGINEERED SHOP DRAWINGS
DRIVE THRU MENU & PREVIEW BOARDS							
INTERIOR MENU BOARD							
PREFABRICATED RED SIGNAGE BAND							REQUIRES ENGINEERED SHOP DRAWINGS
POINT OF SALE, CONDUITS & PULL STRINGS							
CABLING							
SPEAKERS							
ARBY'S CAROUSEL 'A' SIGN							
EXTERIOR BACKLIT SIGNAGE							REQUIRES SHOP DRAWINGS
ALL BUILDING LIGHT FIXTURES							
PARKING LOT LIGHTS							

- NOTES:
- UNLESS SPECIFIED HEREIN NOT TO BE PROVIDED, INSTALLED, AND/OR FINISHED BY GENERAL CONTRACTOR, THE GENERAL CONTRACTOR OR HIS SUBCONTRACTORS ARE TO PROVIDE INSTALL AND FINISH ALL ITEMS IN THE CONSTRUCTION DOCUMENTS.
  - WHERE SUBMITTALS ARE NOT REQUIRED, THE EXACT SPECIFICATION MUST BE USED.

OWNER: RD AMERICAN GROUP 6100 OAK TREE BLVD INDEPENDENCE, OH 44131 PHONE: 216-928-2775

ARCHITECT: CHRISTOPHER W. WHITE ARCHITECT 5801 E. 41st ST., SUITE 712 TULSA, OKLAHOMA 74135 PHONE: 918-664-1971

STRUCTURAL ENGINEER: SHOUZEN ENGINEERING INC. 8128 EAST 63rd SOUTH TULSA, OKLAHOMA 74133 PHONE: 918-252-4581

CIVIL ENGINEER: HAMILTON DESIGNS, LLC 11 MUNICIPAL DR, STE. 300 FISHERS, IN 46038 PHONE: 317-970-8800

White Design Group, P.C.  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

New Restaurant Conversion For:  
Arby's - 1632 AR-25 Bypass  
Heber Springs, Arkansas

Sheet Content  
Sheet Index, General Notes, Code Info., Vicinity Map, Responsibility Schedule

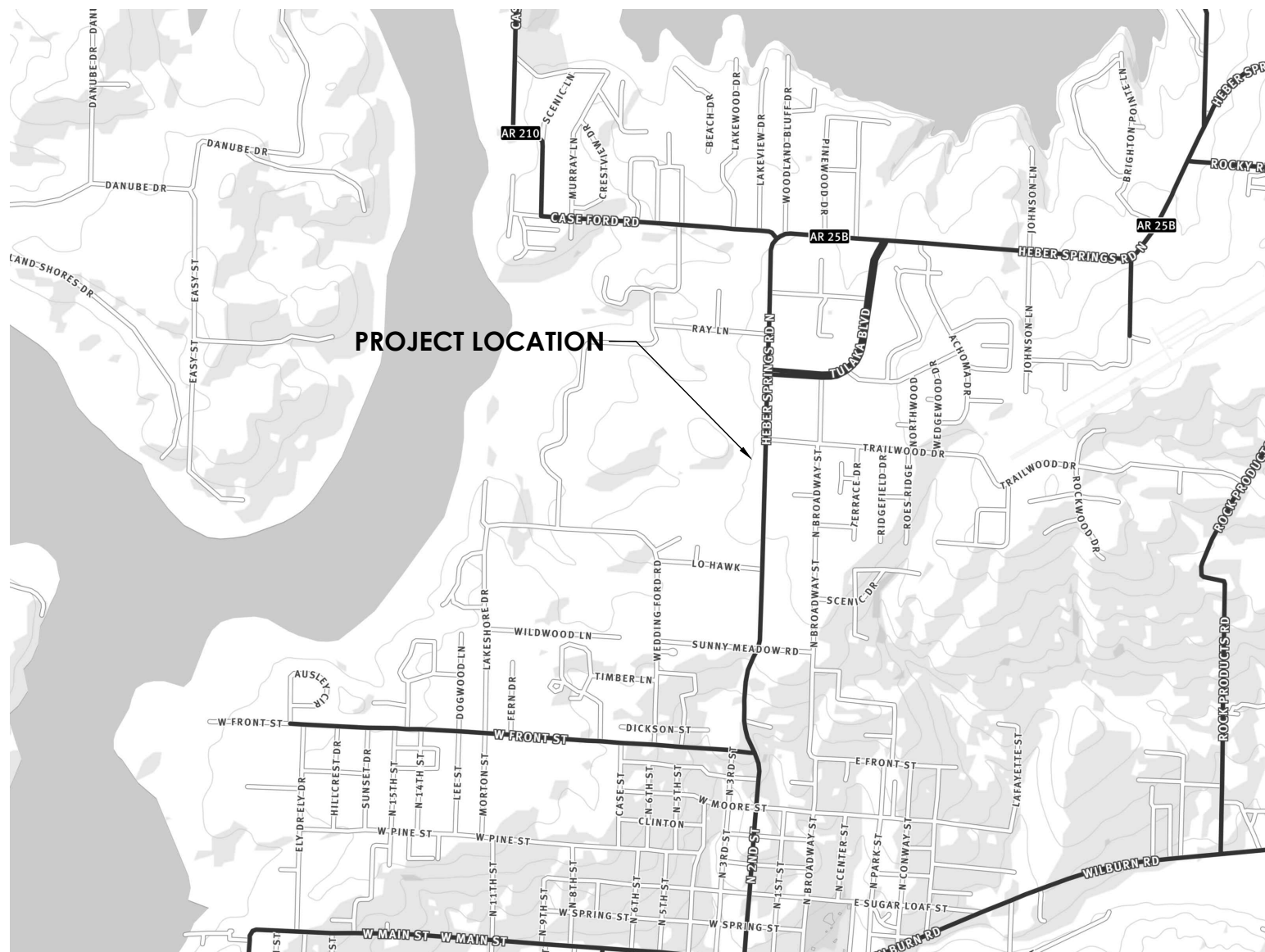
Sheet Number  
G101  
Date: 10-29-21

CIVIL CONSTRUCTION PLANS

FOR

ARBY'S | HEBER SPRINGS

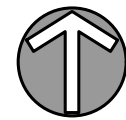
1632 Heber Springs Road  
Heber Springs, AR 72543



VICINITY MAP

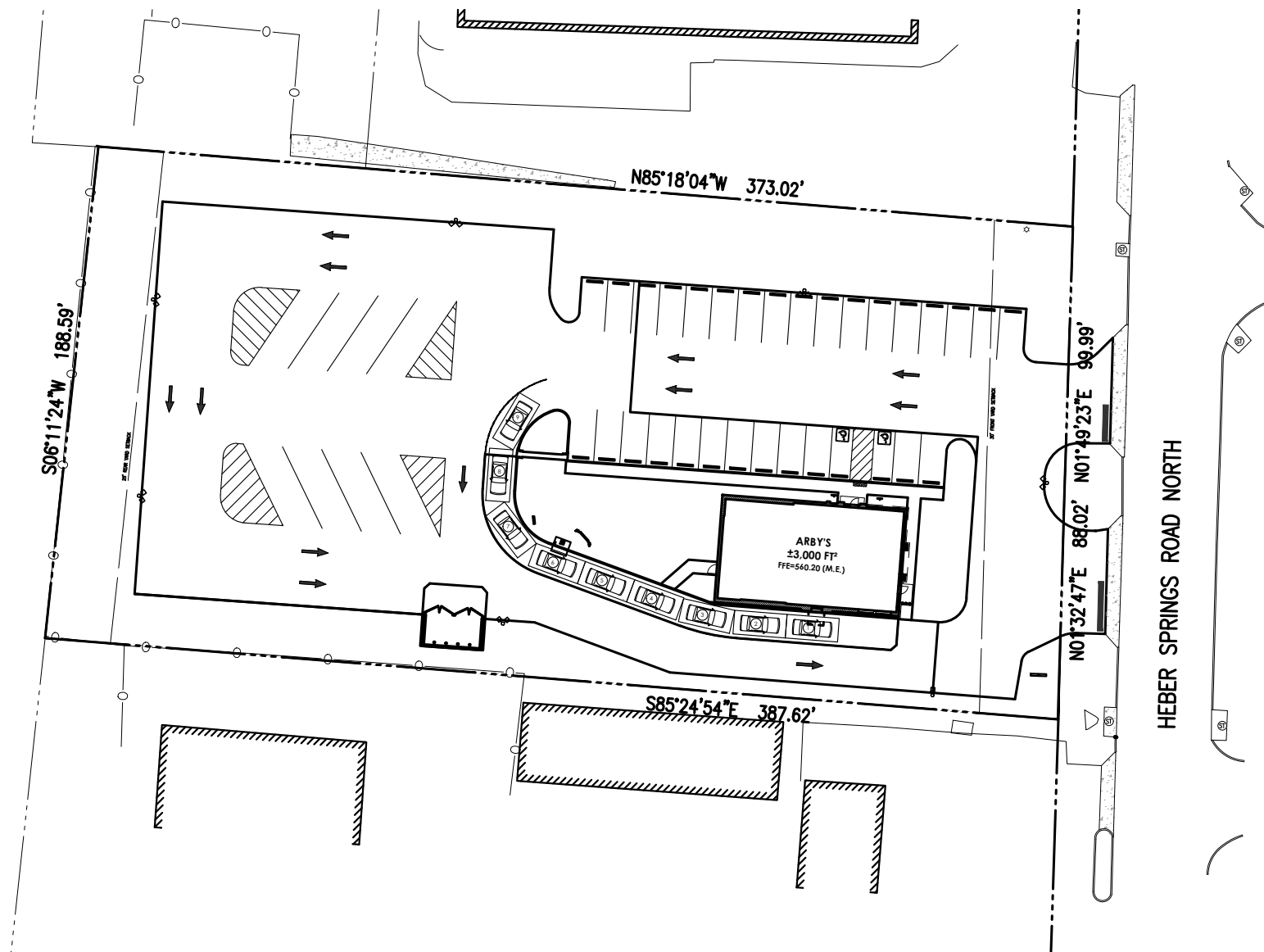
HEBER SPRINGS, ARKANSAS

1" = 2,000'



SHEET INDEX

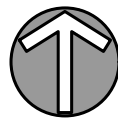
C-001	COVER SHEET
C-002	GENERAL NOTES
1 of 2	ALTA/NSPS LAND TITLE SURVEY
2 of 2	ALTA/NSPS LAND TITLE SURVEY
CD-101	DEMOLITION PLAN
CS-101	SITE PLAN
CS-501	SITE DETAILS
CS-502	SITE DETAILS
CG-101	GRADING PLAN
CG-501	GRADING DETAILS
CU-101	UTILITY PLAN
CU-501	UTILITY DETAILS
CE-101	STORMWATER POLLUTION PREVENTION PLAN
CE-501	STORMWATER POLLUTION PREVENTION DETAILS
LP-101	LANDSCAPE PLAN
LP-501	LANDSCAPE DETAILS



SITE MAP

HEBER SPRINGS, ARKANSAS

1" = 60'



Michael Thompson

DATE  
10/22/2021

DRAWN BY  
KPB

CHECKED BY  
TLP

HAMILTON  
DESIGNS

A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-8800  
www.hamilton-designs.com

CONSTRUCTION PLANS FOR:  
**ARBY'S | HEBER SPRINGS**

1632 Heber Springs Road  
Heber Springs, Arkansas 72543

**RB AMERICAN GROUP, LLC**

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.  
2021-0122

DATE  
10/22/2021

SCALE

SHEET NAME  
**COVER SHEET**

SHEET NO.

**C-001**

CONSULTANT TEAM

DEVELOPER/OWNER

**RB AMERICAN GROUP, LLC**  
6200 OAK TREE BLVD  
INDEPENDENCE, OHIO 44131  
PH: (317) 507-3881

CONTACT: T. ROBERT LACH  
EMAIL: blach@flynnrg.com

CIVIL ENGINEER

**HAMILTON DESIGNS, LLC**  
11 MUNICIPAL DRIVE  
SUITE 300  
FISHERS, INDIANA 46038  
PH: (317) 570-8800

CONTACT: MICHAEL THOMPSON, PE  
EMAIL: mthompson@hamilton-designs.com

ARCHITECT

PLAN INVENTORY

STORM SEWER	
SIZE	LENGTH
12" RCP	46 LF
10" PVC	--- LF
6" HDPE	--- LF
PAVEMENT	
MATERIAL	AREA
CONCRETE	2,798 FT <sup>2</sup>
ASPHALT	
STANDARD DUTY	3,358 FT <sup>2</sup>
HEAVY DUTY	25,254 FT <sup>2</sup>
MILL & RESURFACE	8,532 FT <sup>2</sup> (ALTERNATE)
MILL, WEDGE, & RESURFACE	4,014 FT <sup>2</sup> (ALTERNATE)
CURB	
TYPE	LENGTH
6" CURB	223 FT
CURB AND WALK	----- FT

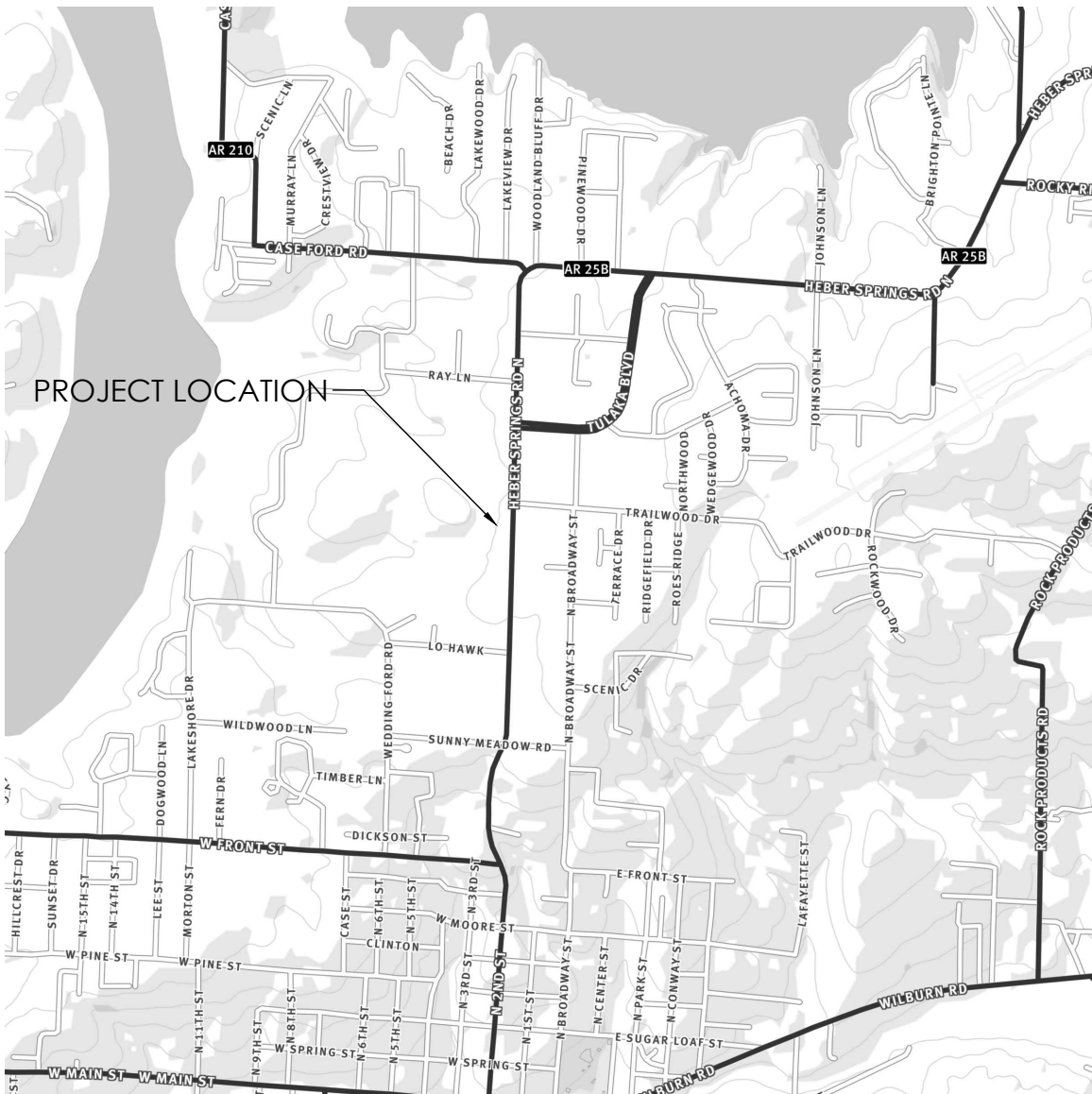


Know what's below.  
Call before you dig.



DEMOLITION NOTES

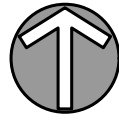
1. NO ATTEMPT IS MADE TO STIPULATE EVERY REQUIRED ITEM OF REMOVAL AND DEMOLITION EITHER ON DRAWINGS OR IN SPECIFICATIONS. THE CONTRACTOR MUST VISIT THE SITE AND STUDY EXISTING PHYSICAL CONDITIONS, REVIEW DRAWINGS, AND REACH THEIR OWN CONCLUSIONS ON WORK NECESSARY TO ACCOMPLISH INTENDED RESULTS DESCRIBED BY THE PROJECT DOCUMENTS.
2. CONTRACTOR SHALL REQUEST UTILITY LOCATIONS PRIOR TO THE COMMENCEMENT OF WORK. IT SHALL BE THE RESPONSIBILITY OF EACH SUBCONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PRIOR TO ANY EXCAVATION AT LEAST 72 HOURS PRIOR TO THEIR PHASE OF WORK. CONTRACTOR SHALL NOTIFY IN WRITING TO THE OWNER OR THE ENGINEER OF ANY CHANGES, OMISSIONS OR ERRORS FOUND ON THESE PLANS OR IN THE FIELD BEFORE WORK IS STARTED OR RESUMED.
3. ALL WORK TO BE ACCOMPLISHED IN STRICT ACCORDANCE WITH ALL LOCAL ORDINANCES, CITY OR STATE.
4. THE CONTRACTOR SHALL COORDINATE WORK ASSOCIATED WITH THE REMOVAL, RELOCATION OR ABANDONMENT OF UTILITIES WITH THE UTILITY COMPANY OR ENTITY HAVING OWNERSHIP OF EACH RESPECTIVE UTILITY. COSTS FOR DISCONNECTION, REMOVAL AND/OR RELOCATION OF EXISTING UTILITIES AS SHOWN ON THE DRAWINGS OR AS NECESSARY TO ALLOW FOR EXECUTION OF THE WORK SHALL BE PAID BY THE CONTRACTOR.
5. NO OPEN BURNING SHALL BE PERMITTED ON THE SITE.
6. THE OWNER HAS FIRST SALVAGE RIGHTS ON ALL ITEMS REMOVED. IF OWNER FORFEITS RIGHTS THEN ALL DEMOLISHED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LEGALLY DISPOSED OF OFF-SITE UNLESS OTHERWISE SHOWN.
7. WITHIN THE CONSTRUCTION LIMITS, THE INTENT IS TO HAVE A CLEAN, CLEAR SITE, FREE OF ALL EXISTING ITEMS NOTED TO BE REMOVED IN ORDER TO PERMIT THE CONSTRUCTION OF THE NEW PROJECT.
8. A CLEAN, STRAIGHT EDGE SHALL BE SAWCUT BETWEEN ALL CONCRETE AND ASPHALT SURFACES SCHEDULED FOR DEMOLITION AND CONCRETE AND ASPHALT SURFACES TO REMAIN IN-PLACE.
9. FOR ALL ITEMS NOTED TO BE REMOVED - REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS, BUT ALL UNDERGROUND ELEMENTS AS WELL INCLUDING BUT NOT NECESSARILY LIMITED TO: FOUNDATIONS, GRAVEL FILLS, TREE ROOTS, OLD PIPE, ETC.
10. BACKFILL ALL EXCAVATIONS RESULTING FROM THE DEMOLITION WORK TO MEET THE REQUIREMENTS FOR THE PROPOSED USE. FOR ALL UTILITY LINES AND STRUCTURES DESIGNATED TO BE REMOVED, PLACE AND COMPACT STRUCTURAL BACKFILL WITHIN TRENCH.
11. GENERAL CONTRACTOR IS RESPONSIBLE TO VERIFY, PRIOR TO THE FINAL CONTRACT EXECUTION, IF ANY BUILDING STRUCTURE THAT IS NOTED TO BE REMOVED HAS A BASEMENT. IF SO THE BUILDING STRUCTURE, BOTH FLOOR STRUCTURES, BASEMENT, FOUNDATION, ETC. ARE TO BE REMOVED AND BACKFILLED TO EXISTING GRADE ELEVATIONS SURROUNDING THE EXISTING STRUCTURE.
12. ALL NECESSARY APPROVALS FROM AGENCIES GOVERNING THIS WORK SHALL BE SECURED BY THE CONTRACTOR IF THEY HAVE NOT BEEN PREVIOUSLY OBTAINED BY THE OWNER PRIOR TO BEGINNING WORK.
13. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF VEHICULAR AND PEDESTRIAN TRAFFIC MEASURES PRIOR TO THE COMMENCEMENT OF DEMOLITION. ALL MEASURES SHALL BE APPROVED BY THE OWNER AND WILL REMAIN IN PLACE UNTIL COMPLETION OF PROJECT. CONTRACTOR SHALL ADJUST AS NEEDED DURING CONSTRUCTION.
14. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING BENCHMARKS AND RELOCATING BENCHMARKS IF NECESSARY. BENCHMARKS SHALL BE RELOCATED TO ORIGINAL ELEVATION. ALL BENCHMARKS SHALL BE RELOCATED OR REPLACED BY AN ARKANSAS LICENSED SURVEYOR.
15. ALL DEMOLITION AND CONSTRUCTION ACTIVITY ON THIS SITE IS TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.
16. CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO ANY EXISTING CONDITIONS DAMAGED DURING DEMOLITION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE PATTERNS, UTILITIES, LIGHTING, PAVEMENT, SIDEWALKS, CURBS, ETC.. REPAIRS SHALL BE EQUAL TO EXISTING CONDITIONS.
17. EROSION CONTROL SHALL BE IN PLACE PRIOR TO ANY SOIL DISTURBANCE, INCLUDING PAVEMENT REMOVAL.
18. MANHOLES, CATCH BASINS, CLEANOUTS, VALVE BOXES, FRAMES COVERS AND GRATES REMAINING IN USE SHALL BE PROTECTED AND ADJUSTED TO FINAL GRADES.



VICINITY MAP

HEBER SPRINGS, ARKANSAS

1" = 2,000'



SITE NOTES

1. ALL RADII AND OTHER DIMENSIONS FOR 6" STANDING CURB AND CONCRETE CURB AND WALK ARE TO THE FACE OF CURB AND/OR EDGE OF WALK.
2. ALL DIMENSIONS ARE TO OUTSIDE FACE OF BRICK OR FACING MATERIAL, WHERE APPLICABLE.
3. BEARINGS, DIMENSIONS AND EASEMENTS ARE SHOWN FOR REFERENCE. REFER TO RECORDED PLATS AND SURVEYS FOR ADDITIONAL PROPERTY INFORMATION.
4. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS.
5. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO HIS PHASE OF WORK. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATIONS FOR EACH UTILITY BEFORE WORK IS STARTED. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER OR THE ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN THE FIELD BEFORE WORK IS STARTED OR RESUMED.
6. ALL SIDEWALK CURB AND GUTTER STREET PAVING, CURB CUTS, DRIVEWAY APPROACHES, HANDICAP RAMP, ETC. CONSTRUCTED OUTSIDE THE PROPERTY LINE IN THE RIGHT-OF-WAY SHALL CONFORM TO ALL MUNICIPAL AND/OR STATE SPECIFICATIONS AND REQUIREMENTS.
7. FOR AREAS OUTSIDE THE PROPERTY LINES, REPAIR AND/OR REPLACE ALL DAMAGE DONE TO EXISTING ELEMENTS (SIDEWALKS, PAVING, LANDSCAPING, ETC.) AS REQUIRED BY OWNER AND/OR GOVERNING AUTHORITY.
8. PROOF ROLL BUILDING AND ALL PARKING AREAS. NOTIFY THE ENGINEER OF ANY UNACCEPTABLE AREAS.
9. EDGE OF NEW PAVEMENT TO BE FLUSH WITH EXISTING PAVEMENT.
10. SIDEWALK EXPANSION JOINTS ARE TO BE PLACED AT ALL WALK INTERSECTIONS AND BETWEEN WALKS AND PLATFORMS, SIDEWALK SCORES AND CONTROL JOINTS ARE TO BE EQUALLY SPACED BETWEEN EXPANSION JOINTS AND PERPENDICULAR TO SIDEWALKS AT 5' INTERVALS OR LESS WITH AN EXPANSION JOINT EVERY 30' OR LESS.
11. PARKING SPACE STRIPES SHALL BE 4 INCHES WIDE. YELLOW OR WHITE STRIPES SHALL BE PROVIDED AT OWNER'S PREFERENCE UNLESS OTHERWISE SHOWN.
12. UNLESS OTHERWISE SHOWN, PERMANENT SIGNS SHALL BE MOUNTED ON A SINGLE U-CHANNEL DRIVE POST DRIVEN 42 INCHES BELOW GRADE. THE BOTTOM EDGE OF THE SIGN SHALL BE 6 FEET ABOVE THE NEAREST PAVEMENT EDGE ELEVATION.
13. ALL EXCAVATED AREAS TO BE SEEDED AND/OR SODDED AFTER FINISH GRADING UNLESS OTHERWISE NOTED. ALL NEWLY SODDED/SEEDED AREAS SHALL HAVE A MINIMUM OF 4" OF TOPSOIL. HOLD SOIL DOWN 1" FROM PAVEMENT ELEVATION. CONTRACTOR TO SUPPLY STRAW MULCH WHERE GRASS SEED HAS BEEN PLANTED.
14. RESURFACE OR RECONSTRUCT AT LEAST TO ORIGINAL CONDITIONS ALL AREAS WHERE TRAFFIC BY CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS HAVE DAMAGED EXISTING PAVEMENT, LAWNS OR OTHER IMPROVEMENTS DURING CONSTRUCTION. AFTER CONSTRUCTION WORK IS COMPLETE.
15. ALL UTILITY TRENCHES WITHIN 5 FEET OF PAVEMENT SHALL BE COMPLETELY BACKFILLED WITH GRANULAR BACKFILL.
16. FOR PROPOSED UTILITY LOCATIONS, SEE THE UTILITY PLAN.
17. TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
18. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY, OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
19. ALL CONSTRUCTION ACTIVITY ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.

EROSION CONTROL NOTES

1. EARTH MOVING MAY NOT COMMENCE UNTIL ITEMS 1-4 OF "PRE-CONSTRUCTION ACTIVITIES" (CE-101) HAVE BEEN COMPLETED IN ADDITION TO ITEMS DEPICTED ON PLAN.
2. ALL DISTURBED AREAS THAT WILL POTENTIALLY BE IDLE FOR 14 DAYS OR MORE SHALL BE STABILIZED (SEEDED, MULCHED, ETC.) IMMEDIATELY.
3. ADDITIONAL STORMWATER POLLUTION PREVENTION MAY BE REQUIRED IN THE FIELD BY CITY OF HEBER SPRINGS OR REVIEW AUTHORITY.
4. ALL EROSION CONTROL MATERIALS MUST BE APPROVED BY THE CITY OF HEBER SPRINGS INSPECTOR PRIOR TO INSTALLATION.
5. THERE SHALL BE NO DIRT, DEBRIS OR STORAGE OF MATERIALS IN THE STREETS.
6. APPROXIMATE CONSTRUCTION SCHEDULE:  
START DATE: DECEMBER 2021  
COMPLETION DATE: DECEMBER 2022
7. RECEIVING WATER: GREERS FERRY LAKE
8. LATITUDE: 35°30'34" N  
LONGITUDE: 92°01'47" W
9. CONTACT PERSON:  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD  
INDEPENDENCE, OHIO 44131  
PH: (317) 507-3881  
CONTACT: T. ROBERT LACH  
EMAIL: blach@flynnrg.com
10. WARNING: THIS SHEET TO BE USED FOR STORMWATER POLLUTION PREVENTION PURPOSES ONLY. FOR ANY OTHER INFORMATION SEE SHEET CS-101.
11. SEE SHEETS CE-501 FOR ALL STORMWATER POLLUTION PREVENTION PLAN DETAILS & NOTES.
12. ALL EROSION CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE STORMWATER AND EROSION CONTROL STANDARDS AND REQUIREMENTS PUT IN PLACE BY THE STATE OF ARKANSAS, CITY OF HEBER SPRINGS, CLEBURNE COUNTY, OR ANY THE GOVERNING AUTHORITY.
13. ALL CONSTRUCTION ACTIVITY ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.
14. EXISTING EROSION CONTROL MEASURES: ANY PART DAMAGED, DESTROYED OR DISTURBED DURING CONSTRUCTION IS TO BE REPLACED IMMEDIATELY.

FLOOD NOTE

THE ACCURACY OF ANY FLOOD HAZARD DATA SHOWN ON THIS REPORT IS SUBJECT TO MAP SCALE UNCERTAINTY AND TO ANY OTHER UNCERTAINTY IN LOCATION OR ELEVATION ON THE REFERENCED FLOOD INSURANCE RATE MAP. THE WITHIN DESCRIBED TRACT OF LAND LIES WITHIN FLOOD HAZARD ZONE X (UNSHADED) AS SAID TRACT PLOTS BY SCALE ON COMMUNITY PANEL NUMBER 05023 C 014 D THE FLOOD INSURANCE RATE MAPS FOR CLEBURNE COUNTY, HEBER SPRINGS, ARKANSAS (MAPS DATED FEBRUARY 16, 2006).

IRRIGATION NOTE

LANDSCAPE INSTALLER TO INCLUDE IRRIGATION TO ALL PLANTS SHOWN ON PLAN. WORK TO INCLUDE ALL NECESSARY INFRASTRUCTURE UP TO THE SUBBED WATER SERVICE.

GRADING NOTES

1. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 72 HOURS BEFORE CONSTRUCTION IS TO START, TO VERIFY IF ANY UTILITIES ARE PRESENT ON SITE. ALL VERIFICATIONS (LOCATION, SIZE AND DEPTH) SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES. WHEN EXCAVATING IS AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THAT UTILITY COMPANY CAN BE PRESENT TO INSTRUCT AND OBSERVE DURING CONSTRUCTION.
2. THE EXCAVATING CONTRACTOR MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. VERIFY COVER REQUIREMENTS BY UTILITY CONTRACTORS AND/OR UTILITY COMPANIES SO AS NOT TO CAUSE DAMAGE.
3. ALL GRADES AT PROJECT LIMITS SHALL MEET EXISTING GRADES.
4. THE CONTRACTOR SHALL NOTIFY, IN WRITING, THE OWNER AND THE ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN THE FIELD BEFORE WORK IS STARTED OR RESUMED.
5. ANY PART OF THE UTILITY PIPE TRENCHES RUNNING WITHIN 5 FEET OF PAVED AREAS TO BE BACKFILLED WITH GRANULAR MATERIAL.
6. REMOVE AND BACKFILL ALL AREAS WHERE ANY FIELD TILE CROSSES PROPOSED BUILDING PAD. ALL FIELD TILES INTERCEPTED TO BE PERPETUATED INTO THE STORM SEWER SYSTEM. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER AND THE ENGINEER IN ANY CIRCUMSTANCES WHERE THIS CANNOT BE ACCOMPLISHED.
7. ALL SIDEWALKS SHALL HAVE A MAXIMUM GROSS SLOPE OF 2.0% (1:50) AND A MAXIMUM RUNNING SLOPE OF 5.0% (1:20).
8. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS/SIDEWALK. GRASS SHALL NOT CREATE BARRIER FOR DRAINAGE FROM SIDEWALK TO LAWN. BUILDING PERIMETER SIDEWALKS SHALL DRAIN 2% MAXIMUM AWAY FROM STRUCTURE.
9. TOPSOIL SHALL BE STRIPPED FROM ALL AREAS TO RECEIVE PAVING AND FROM WITHIN THE LIMITS OF PROPOSED BUILDINGS AND STRUCTURES. TOPSOIL SHALL BE STRIPPED TO THE DEPTH SHOWN IN THE GEOTECHNICAL REPORT, OR TO A DEPTH OF 6 INCHES, WHICHEVER IS GREATER.
10. AFTER STRIPPING TOPSOIL MATERIAL, PROOFROLL WITH A MEDIUM WEIGHT ROLLER TO DETERMINE LOCATIONS OF ANY POCKETS OF UNSUITABLE MATERIAL. THE NECESSITY FOR SUBDRAINS AND/OR REMOVAL OF ANY UNSUITABLE MATERIAL WITHIN THE PROPOSED PARKING AREAS WILL BE DETERMINED AT THE TIME OF CONSTRUCTION.
11. TOPSOIL SHALL BE PLACED TO A DEPTH OF 4 TO 6 INCHES IN ALL AREAS TO BE SEEDED OR SODDED PER THE SPECIFICATIONS.
12. EXCESS TOPSOIL MAY BE PLACED IN MOUNDING AREAS AND NONSTRUCTURAL FILL AREAS AS AVAILABLE.
13. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED OR SODDED UNLESS OTHERWISE SHOWN.
14. FINAL GRADES AT THE PROJECT BOUNDARY SHALL MATCH EXISTING ELEVATIONS UNLESS OTHERWISE SHOWN.
15. PROVIDE POSITIVE DRAINAGE WITHOUT PONDING, IN ALL AREAS. AFTER INSTALLATION, CONTRACTOR TO TEST FOR, AND CORRECT, IF ANY, THIRD BATHING CONDITIONS.
16. ALL PROPOSED SLOP ELEVATIONS ARE THE FINAL PAVEMENT AND FINAL GRADE ELEVATIONS.
17. SEE APPROPRIATE DETAILS TO DETERMINE SUBGRADE ELEVATIONS BELOW FINISH GRADE ELEVATIONS INDICATED.
18. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
19. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM THE ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
20. CONTRACTOR TO PROVIDE CLEAN PLANTING SOIL IN ALL LANDSCAPE AREAS TO A DEPTH AS INDICATED ON THE LANDSCAPE INSTALLATION DETAILS, INCLUDING ADJACENT TO THE BUILDING. SOIL SHALL BE FREE OF GRAVEL AND ANY COMPACTED HARD PAN. COORDINATE WITH LANDSCAPE INSTALLER FOR APPROPRIATE BACKFILL IN ALL LANDSCAPE AREAS.

LANDSCAPING NOTES

1. IN CASE OF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.
2. ALL SHRUB PLANTING AREAS TO BE COVERED WITH A 3" LAYER OF ROCK MULCH. ROCK MULCH TO BE APPROVED BY OWNER.
3. AN APPROVED PRE-EMERGENT HERBICIDE SHALL BE APPLIED IN ALL PLANTING BEDS AT A RATE SPECIFIED BY MANUFACTURER FOR EACH PLANT VARIETY.
4. FINAL PLACEMENT OF PLANT MATERIALS, ETC. SHALL BE APPROVED BY LANDSCAPE ARCHITECT BEFORE PLANTING OPERATIONS ARE TO PROCEED. ALL TREE LOCATIONS SHALL BE MARKED WITH A WOOD STAKE INDICATING VARIETY AND SIZE OF TREE. ALL GROUND COVER AND PLANTING BED LINES SHALL BE MARKED WITH HIGHLY VISIBLE PAINT LINES WITH OCCASIONAL WOOD STAKES FOR REFERENCE. ALL STAKES SHALL BE REMOVED FOLLOWING PLANTING OPERATIONS. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST PLANT LOCATIONS ON THE SITE.
5. NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE ALLOWED. IF PLANTS ARE NOT AVAILABLE, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO THE BID IN WRITING. ALL PLANTS SHALL BE INSPECTED AND TAGGED WITH PROJECT I.D. AT NURSERY OR CONTRACTOR'S OPERATIONS PRIOR TO MOVING TO THE JOB SITE. PLANTS MAY BE INSPECTED, APPROVED OR REJECTED ON THE JOB SITE BY LANDSCAPE ARCHITECT.
6. ALL PLANTS SHALL MEET OR EXCEED AMERICAN STANDARDS FOR NURSERY STOCK, 2004 EDITION, AS SET FORTH BY AMERICAN ASSOCIATION OF NURSERYMEN.
7. PLANTS AND ALL OTHER MATERIALS TO BE STORED ON SITE WILL BE PLACED WHERE THEY WILL NOT CONFLICT WITH CONSTRUCTION OPERATIONS AND AS DIRECTED BY LANDSCAPE ARCHITECT.
8. ALL LANDSCAPE PLANTINGS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING FINAL INSPECTION BY LANDSCAPE ARCHITECT. AT THE END OF THIS PERIOD, IF PLANT MATERIAL TERMED DEAD OR UNSATISFACTORY BY LANDSCAPE ARCHITECT SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE CONTRACTOR.
9. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IN WRITING PRIOR TO BID DATE OF ANY PLANTS HE/SHE FEELS MAY NOT SURVIVE IN LOCATIONS NOTED ON PLANS.
10. ALL LANDSCAPE PLANTINGS TO BE MAINTAINED BY CONTRACTOR FOR 60 DAYS FOLLOWING FINAL INSPECTION BY LANDSCAPE ARCHITECT. MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATING, MULCHING, MOVING, AND ALL OTHER NECESSARY OPERATIONS REQUIRED FOR PROPER ESTABLISHMENT PLANTINGS.

SURVEY AND UTILITY DISCLAIMER

HORIZONTAL AND VERTICAL SURVEY INFORMATION WAS PROVIDED BY CLARK LAND SURVEYING INC., DRAWING LABELED, ALTA/NSPS LAND TITLE SURVEY, PROJECT NO. 210648 AND DATED 05/21/2021.

PRIOR TO ANY EXCAVATION FOR UNDERGROUND UTILITIES, CONTRACTOR SHALL EXPOSE AND VERIFY LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO GAS, WATER AND SANITARY SEWER. ANY CONFLICTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND THE APPROPRIATE AUTHORITIES.

BENCHMARK

SITE BENCH MARK #1  
#5 REBAR WITH CAP MARKED "1269" AS SHOWN HEREON (NAVD 88)  
ELEV=560.56

NOTES

1. SEE SHEET C-002 FOR GENERAL NOTES
2. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION DOCUMENT SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.

UTILITY NOTES

1. CONTRACTOR TO BE RESPONSIBLE FOR VERIFYING & APPLYING FOR UTILITY SERVICE WITH EACH UTILITY COMPANY PRIOR TO STARTING CONSTRUCTION.
2. THE SIZE AND LOCATION OF EXISTING UTILITIES SHOWN ARE PER INFORMATION PROVIDED BY THE SURVEY AND RESPECTIVE UTILITY COMPANIES. ALL UTILITY COMPANIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION FOR FIELD LOCATION OF SERVICES.
3. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND CONDITIONS PERTAINING TO THEIR PHASE OF WORK. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF THE VARIOUS UTILITIES FOR PROPER STAKE LOCATION FOR EACH UTILITY BEFORE WORK IS STARTED. THE CONTRACTOR SHALL NOTIFY, IN WRITING, THE OWNER AND THE ENGINEER OF ANY CHANGES, OMISSIONS, OR ERRORS FOUND ON THESE PLANS OR IN THE FIELD BEFORE WORK IS STARTED OR RESUMED.
4. ANY PART OF THE UTILITY PIPE TRENCHES RUNNING WITHIN 5 FEET OF PAVED AREAS TO BE BACKFILLED WITH GRANULAR MATERIAL.
5. CONTRACTOR SHALL MINIMIZE DAMAGE TO EXISTING TREES.
6. REMOVE AND BACKFILL ALL AREAS WHERE ANY FIELD TILE CROSSES PROPOSED BUILDING PAD. ALL FIELD TILES INTERCEPTED TO BE PERPETUATED INTO THE STORM SEWER SYSTEM. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER AND THE ENGINEER IN ANY CIRCUMSTANCES WHERE THIS CANNOT BE ACCOMPLISHED.
7. CONTRACTOR TO SUPPLY ALL TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION TO CONFORM TO APPLICABLE LOCAL AND STATE STANDARDS.
8. ALL CONSTRUCTION ACTIVITY ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS FOR WORKER SAFETY.
9. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR CONTINUATION OF UTILITIES WITHIN 5 FEET OF STRUCTURES.
10. PRESSURE UTILITY SERVICE LINES MAY NEED TO BE INSTALLED AT A DEPTH GREATER THAN THAT SPECIFIED OR SHOWN ON THE DRAWINGS TO CLEAR EXISTING AND PROPOSED CROSSING UTILITIES. IN SUCH CASES, THE CONTRACTOR SHALL INSTALL VERTICAL BENDS AS REQUIRED TO ACHIEVE APPROPRIATE CLEARANCE BETWEEN THE CROSSING UTILITIES.
11. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET BETWEEN WATER LINES AND SEWERS SHALL BE MAINTAINED AT ALL TIMES. A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN WATER LINES AND SEWERS SHALL BE MAINTAINED AT CROSSINGS.
12. PIPE LENGTHS SHOWN ARE MEASURED FROM CENTER TO CENTER OF STRUCTURES ROUNDED TO THE NEAREST FOOT.
13. WHERE GRADE MODIFICATIONS (CUT OR FILL) ARE SHOWN ADJACENT TO EXISTING VALVE BOX COVERS AND MANHOLE CASTINGS, THE VALVE BOX COVERS AND MANHOLE CASTINGS SHALL BE ADJUSTED FLUSH WITH THE PROPOSED GRADE.
14. ADJUSTMENTS OF EXISTING MANHOLE CASTINGS TO GRADE TO A MAXIMUM OF 12 INCHES SHALL BE MADE USING PRECAST CONCRETE ADJUSTING RINGS PROVIDED THE TOTAL HEIGHT OF EXISTING AND NEW ADJUSTING RINGS DOES NOT EXCEED 12 INCHES.
15. ADJUSTMENTS OF CASTINGS WHERE THE TOTAL HEIGHT OF ADJUSTING RINGS WOULD EXCEED 12 INCHES SHALL BE MADE BY REPLACING THE CONE AND/OR BARREL SECTION OF THE STRUCTURE.
16. PAVEMENTS, WALKS, CURBS AND OTHER SURFACE IMPROVEMENTS REQUIRING REMOVAL FOR INSTALLATION OF UNDERGROUND UTILITIES SHALL BE RESTORED TO THEIR PRESENT CONDITION UNLESS OTHERWISE SHOWN.
17. MANHOLE CASTINGS LOCATED WITHIN ASPHALT PAVEMENT AREAS SHALL INCLUDE A CONCRETE PAVED COLLAR EXTENDING A MINIMUM OF 12 INCHES IN ALL DIRECTIONS FROM THE EDGE OF THE CASTING PER THE DETAILS.
18. CONTRACTOR TO PROVIDE THE NECESSARY CONDUIT TO PROPERLY RUN AND FEED THE PROPOSED SITE LIGHTING PRIOR TO PAVING.
19. CONTRACTOR TO PROVIDE BACK FILL FOR CONDUIT PER THE 'FLEXIBLE PIPE BEDDING DETAIL' FOUND ON SHEET CU-01.

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF CLEBURNE, STATE OF ARKANSAS, AND IS DESCRIBED AS FOLLOWS:

PART OF THE WEST 1/2 OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST, CLEBURNE COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF THE WEST 1/2 NORTHWEST 1/4 SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST AND RUNNING THENCE NORTH 85 DEGREES 10 MINUTES WEST 45.97 FEET TO THE POINT OF BEGINNING OF THE TRACT DESCRIBED HEREIN AND ALSO BEING A POINT ON THE WEST RIGHT OF WAY LINE OF ARKANSAS STATE HIGHWAY 25; THENCE SOUTH 01 DEGREE 48 MINUTES WEST 82.92 FEET ALONG SAID WEST RIGHT OF WAY LINE OF ARKANSAS STATE HIGHWAY 25; THENCE NORTH 85 DEGREES 10 MINUTES WEST 355.52 FEET; THENCE NORTH 01 DEGREE 57 MINUTES EAST 100.00 FEET; THENCE SOUTH 85 DEGREES 10 MINUTES EAST 355.26 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF ARKANSAS STATE HIGHWAY 25; THENCE SOUTH 01 DEGREE 48 MINUTES WEST 17.09 FEET TO THE POINT OF BEGINNING OF SAID TRACT AND CONTAINING 0.81 ACRE, MORE OR LESS.

AND

A PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CLEBURNE COUNTY, ARKANSAS, DESCRIBED AS PROCEEDING FROM THE NORTHEAST CORNER OF SAID SUBDIVISION; THEN NORTH 85 DEGREES 10 MINUTES WEST 45.97 FEET TO THE WEST LINE OF ARKANSAS HIGHWAY NO. 25; THEN SOUTH 01 DEGREE 48 MINUTES WEST ALONG THE WEST LINE OF HIGHWAY NO. 25 A DISTANCE OF 170.92 FEET; THEN NORTH 85 DEGREES 10 MINUTES WEST 218.32 FEET TO THE POINT OF BEGINNING, THEN CONTINUING NORTH 85 DEGREES 10 MINUTES WEST 137.20 FEET, THEN NORTH 01 DEGREE 52 MINUTES 50 SECONDS EAST 88.0 FEET, THEN SOUTH 85 DEGREES 10 MINUTES EAST 133.28 FEET, THEN SOUTH 00 DEGREES 39 MINUTES 18 SECONDS EAST 88.29 FEET TO THE POINT OF BEGINNING, CONTAINING 0.273 ACRE, MORE OR LESS.

AND

A PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CLEBURNE COUNTY, ARKANSAS, DESCRIBED AS PROCEEDING FROM THE NORTHEAST CORNER OF SAID SUBDIVISION; THEN NORTH 85 DEGREES 10 MINUTES WEST 45.97 FEET TO THE POINT OF BEGINNING; THENCE NORTH 85 DEGREES 10 MINUTES WEST ALONG THE WEST LINE OF HIGHWAY 25 A DISTANCE OF 170.92 FEET; THEN NORTH 85 DEGREES 10 MINUTES WEST 355.52 FEET TO THE POINT OF BEGINNING, THEN CONTINUING NORTH 85 DEGREES 10 MINUTES WEST 137.20 FEET, THEN NORTH 01 DEGREE 52 MINUTES 50 SECONDS WEST 188.0 FEET TO THE POINT OF BEGINNING, CONTAINING 0.10 ACRE, MORE OR LESS.

AND

PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 THENCE NORTH 85 DEGREES 10 MINUTES WEST 45.97 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF ARKANSAS STATE HIGHWAY NO. 25, THENCE SOUTH 01 DEGREE 48 MINUTES WEST ALONG SAID RIGHT OF WAY LINE 170.92 FEET TO THE POINT OF BEGINNING; THENCE NORTH 85 DEGREES 10 MINUTES WEST 355.52 FEET, THENCE NORTH 01 DEGREE 57 MINUTES EAST 88.0 FEET, THENCE SOUTH 85 DEGREES 10 MINUTES EAST 355.52 FEET TO A POINT ON THE AFORESAID WEST RIGHT OF WAY LINE, THENCE SOUTH 01 DEGREE 49 MINUTES WEST 88.0 FEET TO THE POINT OF BEGINNING, CONTAINING 0.72 ACRE, LESS AND EXCEPT 0.273 ACRE, MORE PARTICULARLY DESCRIBED AS A PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CLEBURNE COUNTY, ARKANSAS, DESCRIBED AS PROCEEDING FROM THE NORTHEAST CORNER OF SAID SUBDIVISION; THEN NORTH 85 DEGREES 10 MINUTES WEST 45.97 FEET TO THE WEST LINE OF ARKANSAS HIGHWAY NO. 26; THEN SOUTH 01 DEGREE 48 MINUTES WEST ALONG THE WEST LINE OF HIGHWAY NO. 25 A DISTANCE OF 170.92 FEET; THEN NORTH 85 DEGREES 10 MINUTES WEST 218.32 FEET TO THE POINT OF BEGINNING, THEN CONTINUING NORTH 85 DEGREES 10 MINUTES WEST 137.20 FEET, THEN NORTH 01 DEGREE 52 MINUTES 50 SECONDS EAST 88.0 FEET, THEN SOUTH 85 DEGREES 10 MINUTES EAST 133.28 FEET, THE SOUTH 00 DEGREES 39 MINUTES 18 SECONDS EAST 88.29 FEET TO THE POINT OF BEGINNING IN SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN CLEBURNE COUNTY, ARKANSAS, LEAVING A TOTAL OF .447 ACRE, MORE OR LESS

REVISION BLOCK



Michael Thompson

DATE

10/22/2021

DRAWN BY

KPB

CHECKED BY

TLP

HAMILTON  
DESIGNS

A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-9800  
www.hamilton-designs.com

CONSTRUCTION PLANS FOR:

ARBY'S | HEBER SPRINGS

1632 Heber Springs Road  
Heber Springs, Arkansas 72543

RB AMERICAN GROUP, LLC

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.

2021-0122

DATE

10/22/2021

SCALE

SHEET NAME

GENERAL  
NOTES

SHEET NO.

C-002



Know what's below.  
Call before you dig.

A site location map showing the intersection of Trailwood Drive and Highway 29B. The map includes labels for 'SITE' with a grey rectangle, 'TRAILWOOD DRIVE', 'HIGHWAY 29B', 'NEER SPRINGS ROAD N', 'LO HAWK', and 'N.T.S.'. A north arrow is also present.

3. Any underground utilities shown have been located from field survey information, and utility markings, as provided by GPRS, Inc. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located as accurately as possible from the information available. Public utility location request was made under Ticket No. 210505-1697 dated 5/5/2021. This site was located by standard RF methods and with GPR locating.
2. Bearings are relative to Grid North per GPS observations, Arkansas State Plane Coordinate System (0301). (NAD83)
3. FEDERAL EMERGENCY MANAGEMENT AGENCY, FEMA FIRMette published 5/21/2021, referencing Flood Insurance Rate Map, Map Number 05023C0144D, with an effective date of 02/16/2006, indicates this parcel of land is located in Zone X (Area of minimal flood hazard).
4. This survey does not constitute a title search by Clark Land Surveying, Inc. to determine ownership or easements of record. For all information regarding easements, rights of way and title of record, Clark Land Surveying, Inc. relied upon a Commitment for Title Insurance, prepared by First American Title Insurance Company, Commitment No. NCS-1064967-OMHA, with an effective date of April 30, 2021.
5. The lineal units used in this drawing are U.S. Survey Feet.
6. Elevations are based on NAVD 88 datum.
7. The improvements shown hereon are as of the date of field work, 5/13/2021.
8. No zoning information was provided by client.
9. This property contains a calculated area of 71,544 square feet (1,642 acres) more or less.
10. There are improvements along portions of the boundary as shown hereon. Ownership and/or maintenance responsibilities of said improvements was not determined by this survey.
11. Access is obtained directly from Highway 25. The right of way lines of said street and the boundary lines of subject property are coterminous and contain no gaps, gores or overlaps.
12. Easements and other record documents shown or noted on this survey were examined as to location and purpose and were not examined as to restrictions, exclusions, conditions, obligations, terms, or as to the right to grant the same.
13. This ALTA/NSPS Land Title Survey was prepared for the exclusive use of persons/parties listed in certification. Said statement does not extend to any unnamed person/parties without an express statement by the surveyor naming said person/parties.
14. The subject property is commonly known as 1632 Highway 25 B, Heber Springs, Arkansas. No posted address was located during the course of field work. Address listed hereon is gained from county assessor information.
15. There is no observable evidence of earth moving work, building construction or building additions within recent months.
16. There are no changes in street right of way lines either completed or proposed, per documents provided by title company.
17. There is no observable evidence of recent street or sidewalk construction or repairs.
18. Site Benchmark: #5 Rebar with cap marked "1269" as shown hereon. Elevation: 560.56.
19. Elevations are based on NAVD88 datum.
20. Encroachment Statement:  
  
No apparent encroachments at the time of survey.
21. As to Table A Item 9: 43 Regular spaces + 2 Handicap Spaces = 45 Total Parking Spaces.
22. As to Table A Item 20: All surveyed utilities are depicted as ASCE 38-02 "Quality Level B" unless noted otherwise. Utilities were located by GPRS Inc. on May 10, 2021.
23. Quality level definitions as per ASCE 38-02

- QL-D involves utility records research and interviews with knowledgeable utility personnel.
- QL-C involves surface survey and identifying and recording aboveground features of subsurface utilities, such as manholes, valves, and hydrants.
- QL-B involves application of "surface geophysical methods," such as EM-based locating instruments, GPR, radar tomography, metal detectors, and optical instruments, to gather and record approximate horizontal (and, in some cases, vertical) positional data.
- QL-A involves physical exposure via "soft-digging" (vacuum excavation or hand-digging) and provides precise horizontal and vertical positional data.

The Land referred to herein below is situated in the County of Cleburne, State of Arkansas, and is described as follows:

PART OF THE WEST 1/2 OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST, CLEBURNE COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF THE WEST 1/2 NORTHWEST 1/4 SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST AND RUNNING THENCE NORTH 85 DEGREES 10 MINUTES WEST 45.97 FEET TO THE POINT OF BEGINNING OF THE TRACT DESCRIBED HEREIN AND ALSO BEING A POINT ON THE WEST RIGHT OF WAY LINE OF ARKANSAS STATE HIGHWAY 25; THENCE SOUTH 01 DEGREE 48 MINUTES WEST 82.92 FEET ALONG SAID WEST RIGHT OF WAY LINE TO THE POINT OF BEGINNING OF THE TRACT DESCRIBED HEREIN AND ALSO BEING A POINT ON THE WEST RIGHT OF WAY LINE OF ARKANSAS STATE HIGHWAY 25; THENCE NORTH 85 DEGREES 10 MINUTES WEST 355.22 FEET TO THE POINT OF BEGINNING OF THE TRACT DESCRIBED HEREIN AND ALSO BEING A POINT ON THE WEST RIGHT OF WAY LINE OF ARKANSAS STATE HIGHWAY 25; THENCE SOUTH 01 DEGREE 48 MINUTES WEST 17.09 FEET TO THE POINT OF BEGINNING OF SAID TRACT AND CONTAINING 0.81 ACRE, MORE OR LESS.

A PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CLEBURNE COUNTY, ARKANSAS, DESCRIBED AS PROCEEDING FROM THE NORTHEAST CORNER OF SAID SUBDIVISION; THENCE NORTH 85 DEGREES 10 MINUTES WEST 45.97 FEET TO THE WEST LINE OF ARKANSAS HIGHWAY NO. 25; THENCE SOUTH 01 DEGREE 48 MINUTES WEST ALONG THE WEST LINE OF HIGHWAY NO. 25 A DISTANCE OF 170.97 FEET; THENCE NORTH 85 DEGREES 10 MINUTES WEST 18.33 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING NORTH 85 DEGREES 10 MINUTES WEST 100 FEET, THEN NORTH 01 DEGREE 52 MINUTES 50 SECONDS EAST 88.0 FEET, THEN SOUTH 85 DEGREES 10 MINUTES EAST 133.28 FEET, THEN SOUTH 00 DEGREES 39 MINUTES 18 SECONDS EAST 88.29 FEET TO THE POINT OF BEGINNING, CONTAINING 0.273 ACRE, MORE OR LESS.

A PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 10 NORTH, RANGE 10 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CLEBURNE COUNTY, ARKANSAS, DESCRIBED AS PROCEEDING FROM THE NORTHEAST CORNER OF SAID SUBDIVISION, THEN NORTH 85 DEGREES 10 MINUTES WEST 45.97 FEET TO THE WEST LINE OF ARKANSAS HIGHWAY NO. 25, THEN SOUTH 01 DEGREE 48 MINUTES WEST ALONG THE WEST LINE OF HIGHWAY 25 A DISTANCE OF 170.92 FEET, THEN NORTH 85 DEGREES 10 MINUTES WEST 355.52 FEET TO THE POINT OF BEGINNING, THEN NORTH 85 DEGREES 10 MINUTES WEST 32.20 FEET, THEN NORTH 06 DEGREES 19 MINUTES 55 SECONDS EAST 187.84 FEET, THEN SOUTH 85 DEGREES 10 MINUTES EAST 17.60 FEET, THEN SOUTH 01 DEGREE 52 MINUTES 50 SECONDS WEST 188.0 FEET TO THE POINT OF BEGINNING, CONTAINING 0.10 ACRE, MORE OR LESS.

PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4, MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
 COMMENCING AT THE SOUTHEAST CORNER OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, THENCE NORTH 85 DEGREE  
 10 MINUTES WEST 45.97 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF ARKANSAS STATE HIGHWAY NO. 25, THENCE SOUTH 01  
 DEGREE 10 MINUTES WEST 170.92 FEET TO THE POINT OF BEGINNING, BEING THE SOUTHWEST CORNER OF SAID DIVISION; THEN  
 NORTH 85 DEGREES 10 MINUTES WEST 355.52 FEET, THENCE NORTH 01 DEGREE 57 MINUTES EAST 88.0 FEET, THENCE SOUTH 85 DEGREES 10 MINUTES EAST  
 355.52 FEET TO A POINT ON THE AFORESAID WEST RIGHT OF WAY LINE, THENCE SOUTH 01 DEGREE 49 MINUTES WEST 88.0 FEET TO  
 THE POINT OF BEGINNING, CONTAINING 0.72 ACRE, LESS AND EXCEPT 0.273 ACRE, MORE PARTICULARLY DESCRIBED AS A PART OF THE  
 WEST 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4, SECTION 10, TOWNSHIP 18 NORTH, RANGE 10 WEST OF THE FIFTH  
 PRINCIPAL MERIDIAN, CLEBURNE COUNTY, ARKANSAS, AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID DIVISION; THEN  
 NORTH 85 DEGREES 10 MINUTES WEST 45.97 FEET TO THE WEST LINE OF ARKANSAS HIGHWAY NO. 26; THEN SOUTH 01 DEGREE 48  
 MINUTES WEST ALONG THE WEST LINE OF HIGHWAY NO. 25 A DISTANCE OF 170.92 FEET; THEN NORTH 85 DEGREES 10 MINUTES WEST  
 218.32 FEET TO THE POINT OF BEGINNING, THEN CONTINUING NORTH 85 DEGREES 10 MINUTES WEST 137.20 FEET, THEN NORTH 01  
 DEGREE 10 MINUTES WEST 170.92 FEET TO THE POINT OF BEGINNING IN SECTION 11, TOWNSHIP 18 NORTH, RANGE 10 WEST OF THE FIFTH  
 PRINCIPAL MERIDIAN IN CLEBURNE COUNTY, ARKANSAS, LEAVING A TOTAL OF .447 ACRE, MORE OR LESS

Item No.

5 Any Lien, or Right to a Lien, for Services, Labor or Material heretofore or hereafter furnished, imposed by law and not shown in the public records.  
-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

6. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.  
-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

Any claim, to (a) ownership of or rights to minerals and similar substances, including but not limited to ores, metals, coal, lignite, oil, gas, uranium, limestone, clay, rock, sand, and gravel located in, on, or under the Land or produced from the Land, whether such ownership or rights arise by lease, grant, exception, conveyance, reservation, or otherwise, and (b) any rights, privileges, immunities, or rights in way, of, or in, or appurtenant to the Land, whether or not the claimant is a party to the Survey, or interests or rights excepted in (a) or (b) appear in the Public Records are shown in Schedule B. INTERESTS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

8 Taxes and assessments for the year 2021, and subsequent years, not yet due and payable.  
-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

9 Rights of tenants in possession under unrecorded leases solely as tenants and solely with respect to space occupied by each such tenant, (together with non-exclusive rights in common with other tenants in areas used by all tenants).  
-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

10 Loss arising from security interest evidenced by Financing Statements and Liens filed of record as o  
the effective date hereof, under the Arkansas Uniform Commercial Code in the State of Arkansas.  
-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

11. Loss arising from and/or resulting from oil, gas and/or all other minerals, conveyed, retained, leased assigned or any other activity concerning the sub-surface rights or ownership, including but not limited to the right of ingress or egress for said sub-surface purposes.  
-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

12. General and special taxes for the year 2021 and subsequent years which are not yet due and payable. Taxes for the year 2019 and prior years are paid.  
-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

13 Subject to any controlled access restrictions in favor of the Arkansas Highway Commission.  
-IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

14. The policy, when issued, will not insure as to the amount of acreage contained within the described boundaries of the Land. Any mention of acreage amounts is done so for descriptive purposes only.  
- IS LOCATED ON THE SURVEY AREA, BLANKET IN NATURE.

Items not listed above are determined non-survey related items and are not plotted hereon.

To RB Ark Restaurants, LLC, a Delaware limited liability company, First American Title Insurance Company:

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, 6a, 6b, 7a, 7b1, 7c, 8, 9, 11a, 11b, 13, 14, 16, 17, 19, and 20 of Table A thereof. The field work was completed on 5/13/2021.  
Date of Plat or Map: 5/21/2021.

The undersigned further states that the plat was surveyed and drawn to the normal standard of practice of surveyors in the State of Arkansas under his direct responsibility and supervision and accurately shows the described tract of land thereof to the best of his professional knowledge, belief and opinion. This certification is neither a warranty nor guarantee, either expressed or implied.



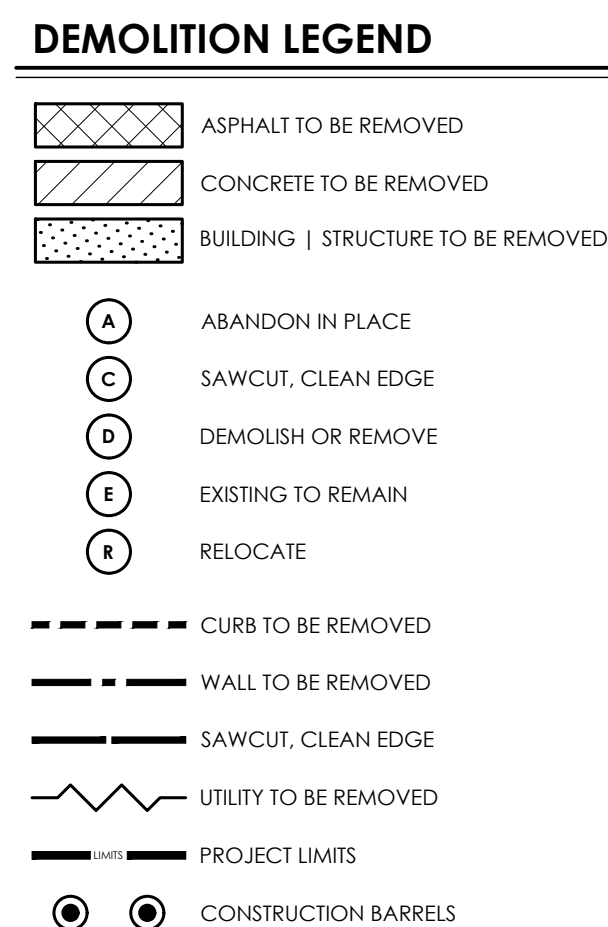
James A. Rasburry  
Arkansas Professional Land Surveyor No. 1506  
For and on behalf of Clark Land Surveying, Inc.  
Email: ALTA@clarkls.com

[illegible]





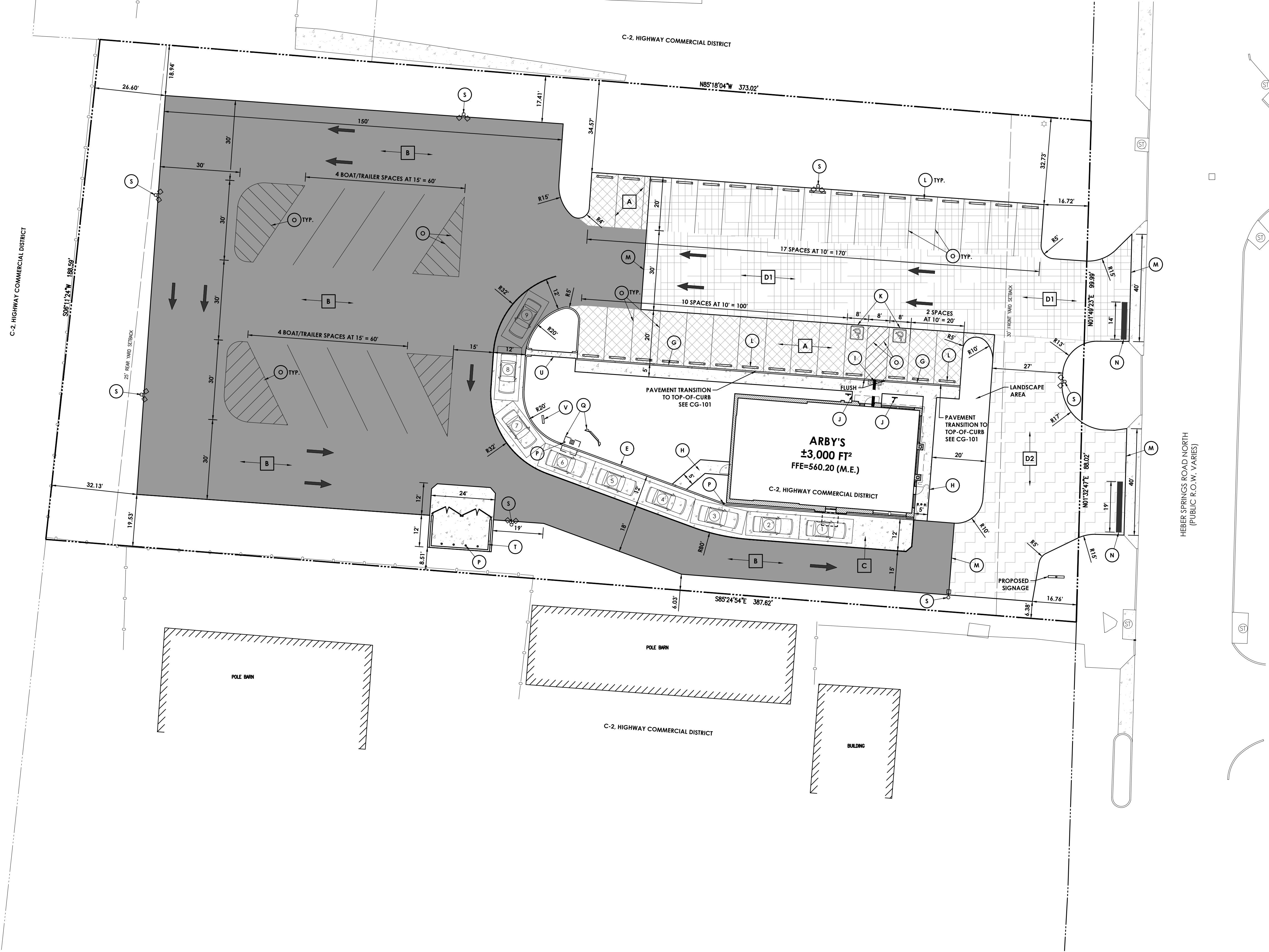




CD-101



p:\2021\10\22 - rb american group - heber springs, mo\drawings\cs-101.dwg



#### SITE INFORMATION

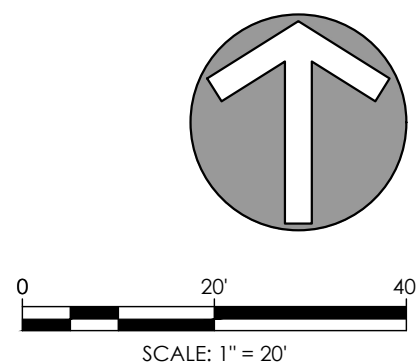
PARCEL NUMBER: 300-02829-000-C  
ZONING DISTRICT: C-2, HIGHWAY COMMERCIAL DISTRICT  
LOT AREA: 1.64 ACRES  
BUILDING AREA: 3,000 FT²  
ADJOINER ZONING: C-2, HIGHWAY COMMERCIAL DISTRICT  
NORTH C-2, HIGHWAY COMMERCIAL DISTRICT  
SOUTH C-2, HIGHWAY COMMERCIAL DISTRICT  
EAST C-2, HIGHWAY COMMERCIAL DISTRICT  
WEST C-2, HIGHWAY COMMERCIAL DISTRICT  
PROPOSED USE: NEW QUICK-SERVE RESTAURANT (ARBY'S)  
BUILDING SETBACKS: FRONT 30' REQUIRED | 50' PROVIDED  
SIDE 0' REQUIRED | 34' PROVIDED  
REAR 25' REQUIRED | 241' PROVIDED  
PARKING DATA: REQUIRED SPACES (1) SPACE FOR EVERY (100) SQ. FT. 30 SPACES  
PROVIDED SPACES 39 SPACES

#### LEGEND OF EXISTING FEATURES

---	PROPERTY LINE	⊕	BENCHMARK
---	RIGHT-OF-WAY LINE	○ RBC	MONUMENT
---	SETBACK LINE	△	SECTION CORNER
---	EASEMENT	ET HC	TRANSFORMER
---	SECTION LINE	E	HVAC
---	CENTERLINE	⊕	ELECTRIC METER
---	799	⊕	ELECTRIC MANHOLE
---	INTERMEDIATE CONTOUR	⊕	POWER POLE   GUY WIRE
---	800	⊕	LIGHT POLE
---	INDEX CONTOUR	⊕	TELEPHONE PEDESTAL
---	TELEPHONE UNDER GR.	⊕	TELEPHONE MANHOLE
---	TELEPHONE OVERHEAD	⊕	GAS MARKER
---	FIBER OPTIC SERVICE	⊕	ELECTRIC MARKER
---	GAS SERVICE	⊕	TRAFFIC POLE
---	POWER UNDERGROUND	⊕	GAS METER
---	POWER OVERHEAD	⊕	GAS VALVE
---	WATER SERVICE	⊕	STORM MANHOLE
---	SANITARY SEWER	⊕	SANITARY MANHOLE
---	STORM SEWER	⊕	STORM INLETS
---	POND NORMAL POOL	⊕	CLEAN-OUT
---	EX. FLOWLINE	⊕	DOWNSPOUT
---	CHAIN LINK FENCE	⊕	FIRE HYDRANTS
---	FARM FENCE	⊕	WATER METER
---	WOOD FENCE	⊕	WATER VALVES
---	IRON FENCE   RAILING	⊕	POST INDICATOR VALVE
---	BUILDING   STRUCTURE	⊕	FIRE DEPARTMENT CONN.
---	EX. BUILDING OVERHEAD	⊕	SIGNS
---	RIM	⊕	MAILBOX
---	INV.	⊕	ADA PARKING
---	FFE	⊕	PARKING COUNT
---		⊕	TREES
---		⊕	SHRUB
---		⊕	SPOT GRADE

#### SITE PLAN LEGEND - PROPOSED

A	STANDARD DUTY ASPHALT PAVEMENT	CS-501
B	HEAVY DUTY ASPHALT PAVEMENT	CS-501
C	CONCRETE PAVEMENT	CS-501
D1	ASPHALT MILL AND RESURFACE, 1"-2" (ALTERNATE)	CS-501
D2	ASPHALT MILL, WEDGE, AND RESURFACE (ALTERNATE)	CS-501
E	6" CONCRETE CURB	CS-501
F	DEPRESSED CONCRETE GUTTER	CS-501
G	CONCRETE CURB AND WALK	CS-501
H	CONCRETE SIDEWALK	CS-501
I	DETECTABLE WARNING SURFACE	CS-502
J	ACCESSIBLE PARKING SIGNAGE	CS-501
K	ACCESSIBLE PARKING PAVEMENT MARKINGS	CS-501
L	PRECAST CONCRETE WHEELSTOP	CS-501
M	SAWCUT / LAP JOINT	CS-501
N	PAVEMENT STRIPING, 24" STOP BAR	CS-501
O	PAVEMENT STRIPING, 4" SOLID	CS-501
P	BOLLARD	CS-501
Q	MENU BOARD, ORDER CONFIRMATION, AND CANOPY (SEE ARCHITECTURAL PLANS FOR DETAILS)	CS-502
R	CLEARANCE BAR (SEE ARCHITECTURAL PLANS FOR DETAILS)	CS-502
S	LIGHT POLE	CS-502
T	DUMPSTER ENCLOSURE	CS-502
U	CONCRETE PAVED SWALE	CS-502
V	PREVIEW MENU BOARD (SEE ARCHITECTURAL PLANS FOR DETAILS)	CS-502
---	ACCESSIBLE ROUTE	



REVISION BLOCK



DATE: 10/22/2021  
DRAWN BY: KPB  
CHECKED BY: TLP

**HAMILTON DESIGNS**  
A LIMITED LIABILITY COMPANY

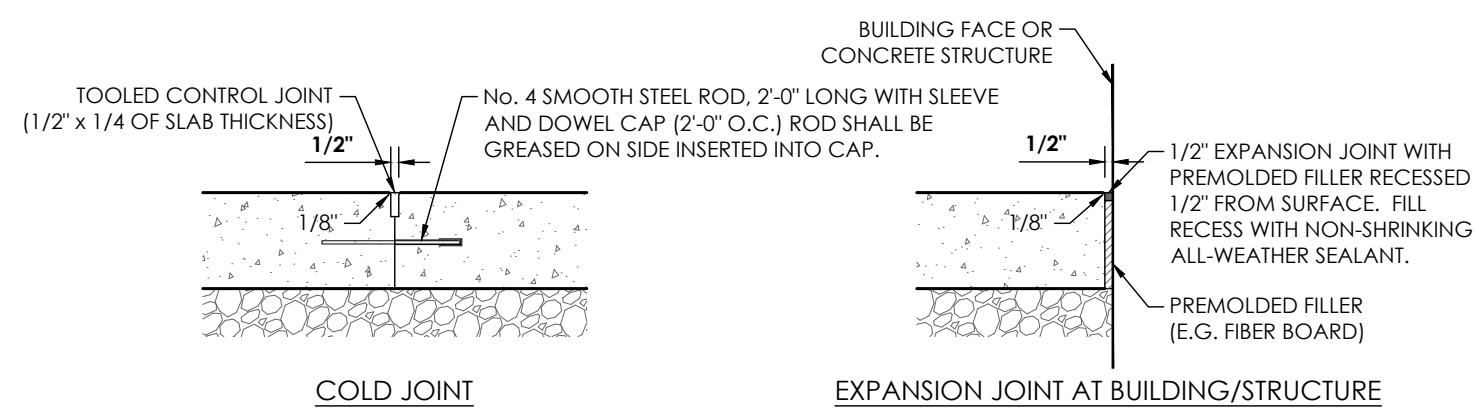
11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-9800  
www.hamilton-designs.com

CONSTRUCTION PLANS FOR:  
**ARBY'S | HEBER SPRINGS**  
1432 Heber Springs Road  
Heber Springs, Arkansas 72543

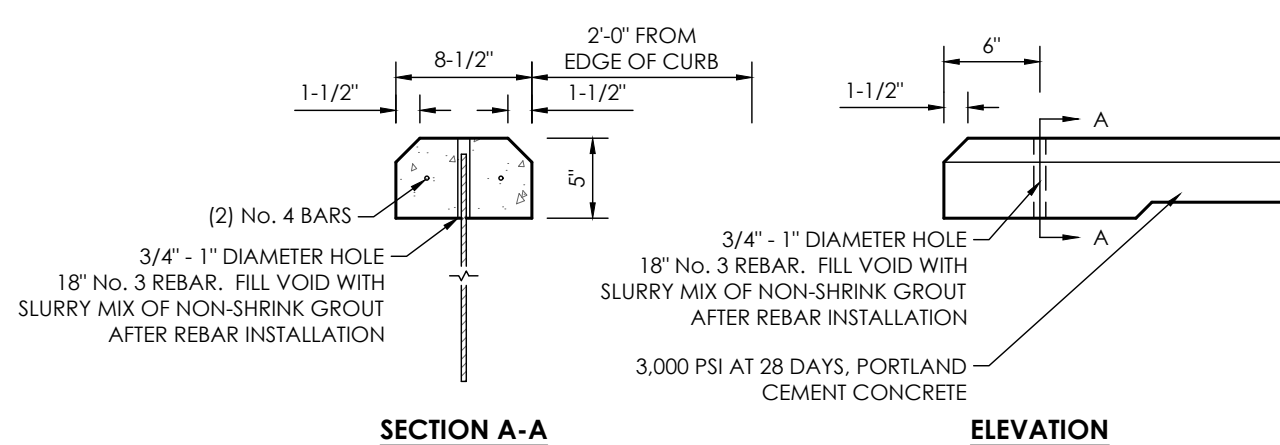
**RB AMERICAN GROUP, LLC**  
6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.: 2021-0122  
DATE: 10/22/2021  
SCALE: 1" = 20'  
SHEET NAME: **SITE PLAN**  
SHEET NO.: **CS-101**





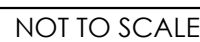
NOT TO SCALE



NOT TO SCALE



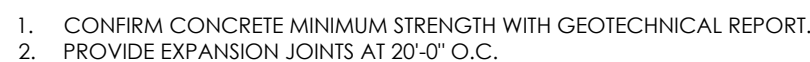
- NOTES:
1. ALL LETTERS ARE 1" SERIES "C" PER 2003 MUTCD.
  2. TOP PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
  3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
  4. FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
- CONTRACTOR SHALL VERIFY FINE AMOUNT AND ORDINANCE NUMBER.
5. ONE (1) SIGN REQUIRED FOR EACH ACCESSIBLE PARKING SPACE.
  6. INSTALLED HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24.2.3 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD)
  7. SIGN MAY BE MOUNTED ON BUILDINGS/WALL, AT PROPER HEIGHT, IF ADJUDGED WITHIN 1/2" OF CENTER OF PARKING SPACE.



NOT TO SCALE



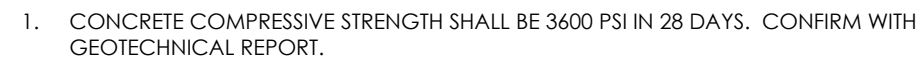
NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



Michael Thompson

DATE  
10/22/2021

DRAWN  
KPB

CHECKED BY  
TLP

HAMILTON  
DESIGNS

A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-8800  
[www.hamilton-designs.com](http://www.hamilton-designs.com)

CONSTRUCTION PLANS FOR:  
**ARBY'S | HEBER SPRINGS**

1632 Heber Springs Road  
Heber Springs, Arkansas 72543

---

RB AMERICAN GROUP, LLC

RB AMERICAN GROUP, LLC

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.  
2021-0122

DATE  
10/22/2021

SCALE

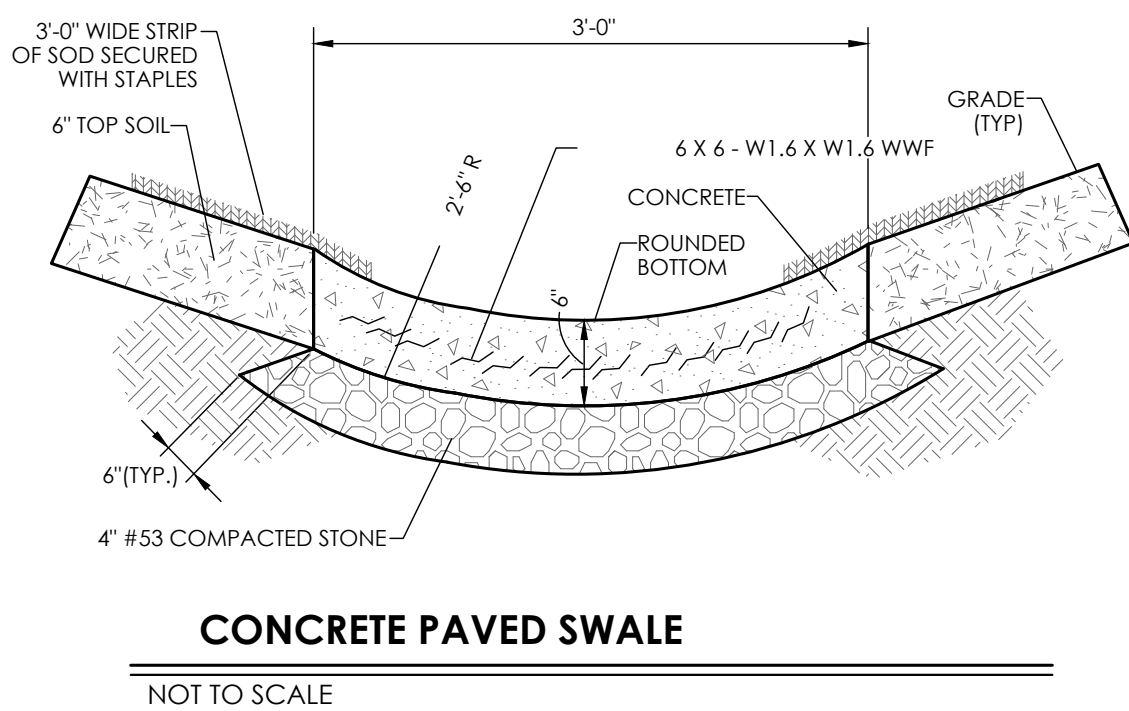
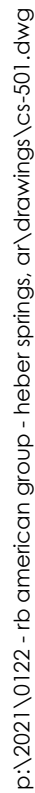
SHEET NAME

**SITE  
DETAILS**

SHEET NO.

CS-501





1. ELECTRICAL CONDUIT, REFER TO ELECTRICAL DRAWINGS.
2. CONCRETE PIER, REFER TO STRUCTURAL DRAWINGS.
3. PROVIDE GROUND LUG IN BASE BOLTED TO BASE PLATE. REFER TO STRUCTURAL DRAWINGS.
4. BASE COVER OVER GALVANIZED WASHERS, NUTS AND LOCKNUTS. REFER TO STRUCTURAL DRAWINGS.
5. GROUND CLAMP, REFER TO ELECTRICAL DRAWINGS.
6. GROUND WIRE, REFER TO ELECTRICAL DRAWINGS.
7. GALVANIZED ANCHOR BOLTS, REFER TO STRUCTURAL DRAWINGS.
8. TIE LOOPS, REFER TO STRUCTURAL DRAWINGS.
9. VERTICAL REBAR, REFER TO STRUCTURAL DRAWINGS.
10. NON-SHRINK GROUT, REFER TO STRUCTURAL DRAWINGS.

REVISION BLOCK



Michael Thompson

DATE  
10/22/2021

DRAWN BY  
KPB

CHECKED BY  
CHK

HAMILTON  
DESIGNS  
A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-8800  
[www.hamilton-designs.com](http://www.hamilton-designs.com)

CONSTRUCTION PLANS FOR:

CONSTRUCTION TENDERS FOR:  
**ARBY'S | HEBER SPRINGS**

1632 Heber Springs Road  
Heber Springs, Arkansas 72543

RB AMERICAN GROUP, LLC

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.  
2021-0122

DATE  
10/22/2021

SCALE

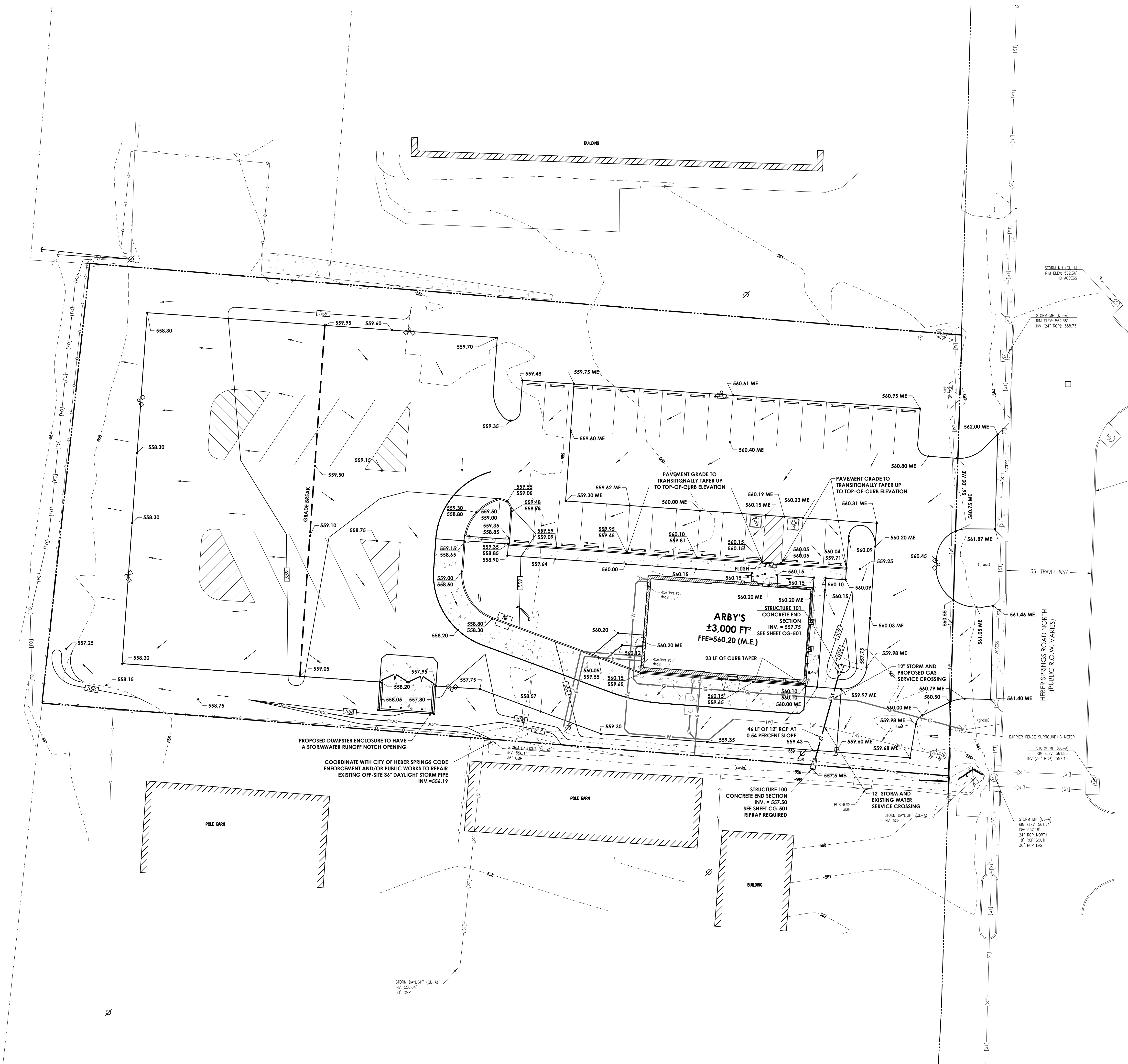
SHEET NAME

## SITE DETAILS

SHEET NO

CS-502

p:\2021\10\22 - rb american group - heber springs.mxd drawings\cg-101.dwg

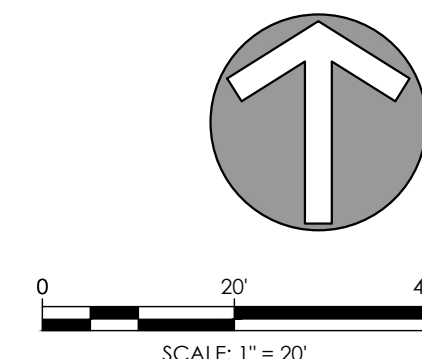


#### LEGEND OF EXISTING FEATURES

---	PROPERTY LINE	+	BENCHMARK
---	RIGHT-OF-WAY LINE	○ RBC	MONUMENT
---	SETBACK LINE	△	SECTION CORNER
---	EASEMENT	ET	TRANSFORMER
---	SECTION LINE	EQ	HVAC
---	CENTERLINE	⊗	ELECTRIC METER
---	799	⊗	ELECTRIC MANHOLE
---	800	⊗	POWER POLE   GUY WIRE
---	INDEX CONTOUR	☆	LIGHT POLE
[T]	TELEPHONE UNDER GR.	△	TELEPHONE PEDESTAL
[OH-T]	TELEPHONE OVERHEAD	⊗	TELEPHONE MANHOLE
[FO]	FIBER OPTIC SERVICE	⊗	GAS MARKER
[G]	GAS SERVICE	⊗	ELECTRIC MARKER
[E]	POWER UNDERGROUND	⊗	TRAFFIC POLE
[OH-E]	POWER OVERHEAD	⊗	TRAFFIC MANHOLE
[W]	WATER SERVICE	⊗	GAS METER
[S]	SANITARY SEWER	⊗	GAS VALVE
[ST]	STORM SEWER	⊗	STORM MANHOLE
[NP]	POND NORMAL POOL	⊗	SANITARY MANHOLE
---	EX. FLOWLINE	⊗	STORM INLETS
---	CHAIN LINK FENCE	⊗	CLEAN-OUT
---	FARM FENCE	⊗	DOWNSPOUT
---	WOOD FENCE	⊗	FIRE HYDRANTS
---	IRON FENCE   RAILING	⊗	WATER METER
---	BUILDING   STRUCTURE	⊗	WATER VALVES
---	EX. BUILDING OVERHEAD	⊗	POST INDICATOR VALVE
RIM	RIM ELEVATION	⊗	FIRE DEPARTMENT CONN.
INV.	INVERT ELEVATION	⊗	SIGNS
FFE	FINISHED FLOOR ELEVATION	⊗	MAILBOX
		⊗	ADA PARKING
		⊗	PARKING COUNT
		⊗	TREES
		⊗	SHRUB
		⊗	SPOT GRADE

#### GRADING PLAN LEGEND

ST	STORM SEWER	RIM	RIM ELEVATION
SSD	SUBSURFACE DRAIN	INV.	INVERT ELEVATION
---	SWALE   FLOWLINE	FFE	FINISHED FLOOR ELEVATION
NP	POND (NORMAL POOL)	---	FLOW ARROW
799	INTERMEDIATE CONTOUR	⊗	STORM MANHOLE
800	INDEX CONTOUR	⊗	STORM INLETS
800.00 ME	MATCH EXISTING	⊗	STORM ENDSECTION
800.00	PAVEMENT SPOT GRADE	⊗	CLEAN-OUT
800.4	GROUND SPOT GRADE	⊗	DOWNSPOUT
800.00	TOP OF CURB		
800.20	BOTTOM OF CURB		
800.00 TW	TOP OF WALL		
800.50 BW	BOTTOM OF WALL		



Know what's below.  
Call before you dig.

REVISION BLOCK



DATE  
10/22/2021

DRAWN BY  
KPB

CHECKED BY  
TLP

**HAMILTON  
DESIGNS**  
A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-9800  
www.hamilton-designs.com

CONSTRUCTION PLANS FOR:  
**ARBY'S | HEBER SPRINGS**

1432 Heber Springs Road  
Heber Springs, Arkansas 72543

**RB AMERICAN GROUP, LLC**

4200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.  
2021-0122

DATE  
10/22/2021

SCALE  
1" = 20'

SHEET NAME  
**GRADING  
PLAN**

SHEET NO.

**CG-101**



1. IF WITHIN 5' OF EDGE OF PAVEMENT, USE "B" BORROW OR EQUIVALENT GRANULAR MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY FOR ENTIRE TRENCH BACKFILL.
2. IF NOT WITHIN 5' OF EDGE OF PAVEMENT, USE "B" BORROW COMPACTED TO 90% STANDARD PROCTOR DENSITY TO  $\frac{1}{2}$  OF PIPE DIAMETER AND REGULAR BACKFILL TO TOP OF TRENCH..
3. ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS.
4. A MINIMUM 9" OF CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE.

### REINFORCED CONCRETE PIPE (RCP) BEDDING/TRENCH DETAIL

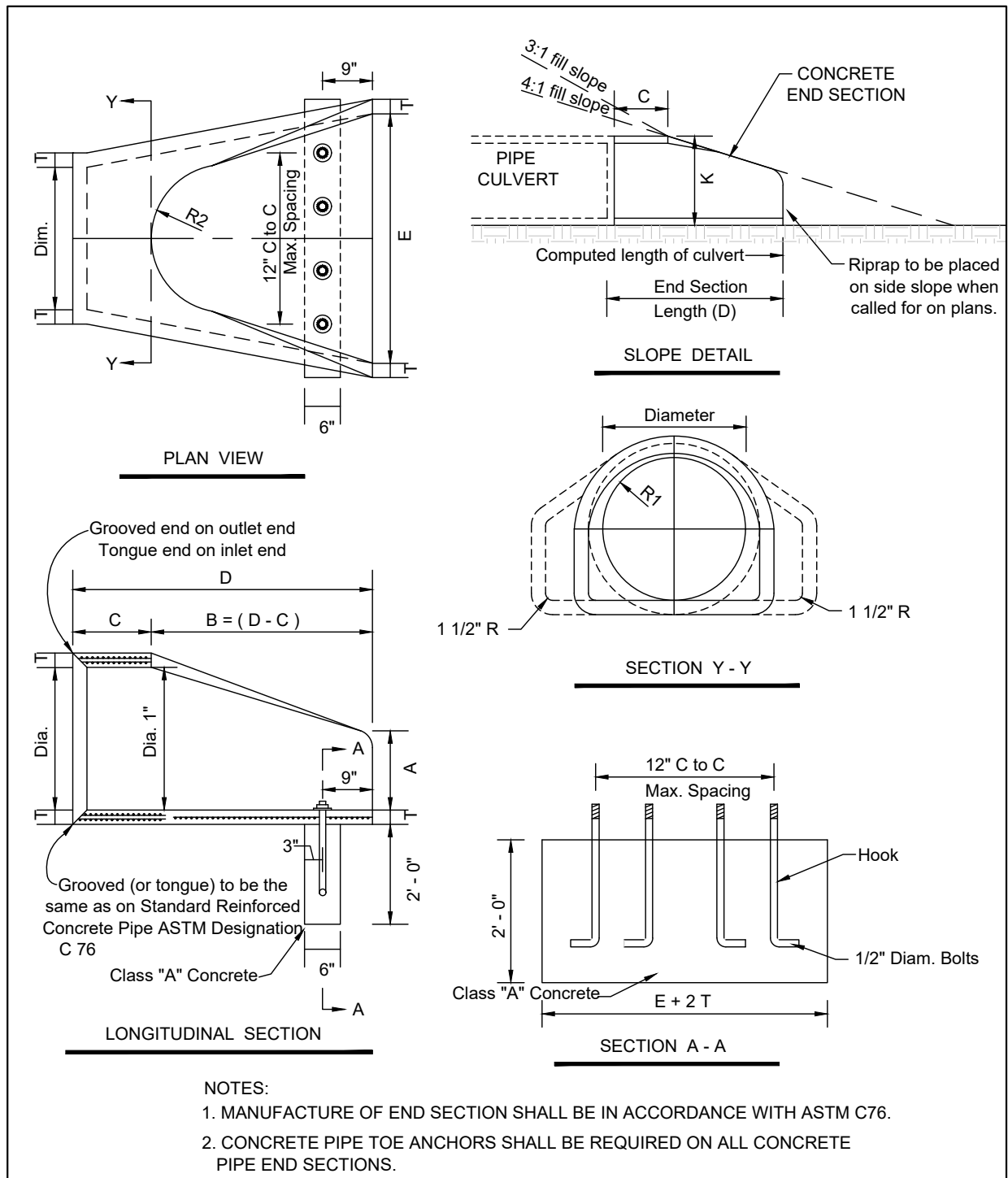
NOT TO SCALE



1. WHERE PIPE IS DIRECTLY BENEATH OR WITHIN 5 FEET OF PAVEMENT AREAS, FINAL BACKFILL SHOULD CONSIST OF COMPACTED #53 AGGREGATE PLACED FROM 12" ABOVE TOP OF PIPE TO TOP OF PAVEMENT.
2. OUTSIDE PAVEMENT AREAS, NATIVE MATERIAL SHALL BE USED AND COMPACTED TO PREVENT SETTLEMENT. NATIVE MATERIAL TO BE CLEAN FILL MATERIAL AND FREE OF ROCKS 6" IN DIAMETER AND LARGER.
3. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D231, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY CONDUITS," LATEST EDITION.
4. ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS. BEDDING MATERIAL SHALL BE HAND PLACED AROUND THE HAUNCH & SIDES OF THE PIPE TO ENSURE PROPER COMPACTION & COMPLETE FILING OF ALL VOIDS.

### FLEXIBLE PIPE BEDDING DETAIL

NOT TO SCALE



DIA	T (min.)	A x	C x	D x	E x	K	R1	R2	Approx. Weight
12"	2"	5"	4"	6.5"	2.2"	1.3	10.18"	9"	800
15"	2.144"	7"	4.0"	6.3"	2.2"	1.5	12.12"	11"	1100
18"	2.124"	11"	4.1"	6.2"	3.3"	1.8	15.12"	12"	1300
21"	2.344"	11"	3.6"	6.3"	3.3"	2.1	16.18"	13"	1500
24"	3"	1.0"	2.8"	6.3"	4.0"	2.3	16.36"	14"	1800
27"	3.144"	1.1"	2.5"	6.3"	4.6"	2.6	18.916"	14.12"	2100
30"	3.142"	1.2"	1.0"	6.3"	5.0"	2.9	18.12"	15"	2400
33"	3.344"	1.3"	3.6"	6.3"	5.3"	3.1	23.344"	17.12"	4100
36"	4"	1.5"	3.1"	8.3"	6.0"	3.4	24.516"	20"	4200
42"	4.142"	1.9"	2.11"	8.3"	6.6"	4.6	4.227 14"	22"	5380
48"	5"	2"	2.2"	8.3"	7"	4.8	4.823 18"	22"	6550

x Tolerance ± 1/16"

**ST-4**

### PRECAST CONCRETE END SECTION

SCALE: NONE

REVISION BLOCK



Michael Thompson

DATE \_\_\_\_\_

10/22/2021

DRAWN BY

CHECKED BY

# HAMILTON DESIGNS

A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300

11 Municipal Drive, Suite 300

11 Municipal Drive, Suite 300

11 Municipal Drive, Suite 300

R:

# ARBY'S | HEBER SPRINGS

1632 Heber Springs Road  
Heber Springs, Arkansas 72543

RB AMERICAN GROUP, LLC

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.

2021-0122

DATA

DATE  
10/22/2021

SCALE

SHEET NAME

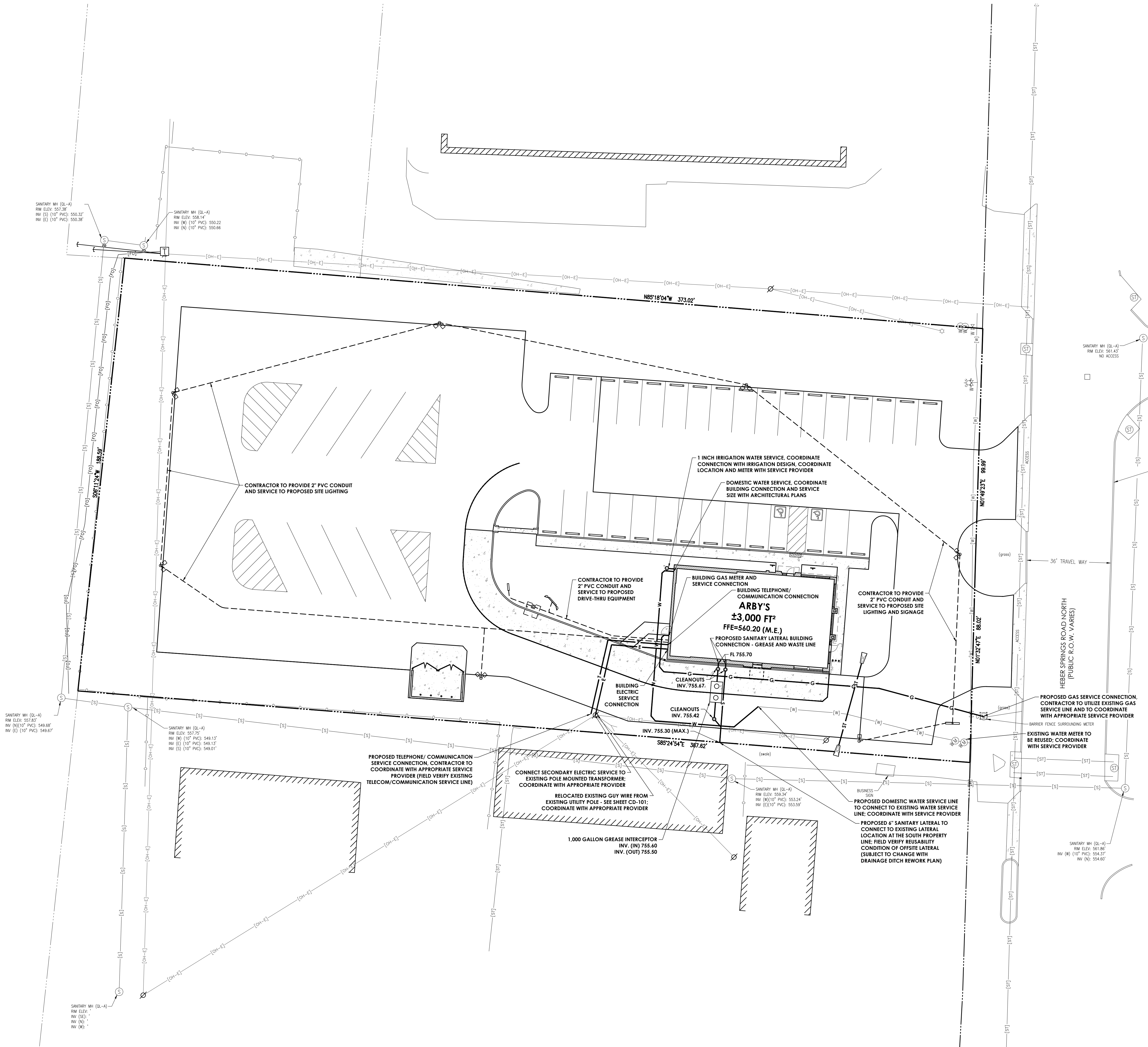
## GRADING DETAILS

SHEET NO.

CG-501



p:\2021\10\22 - rb american group - heber springs, on\drawings\cu-101.dwg  
p:\2021\10\22 - rb american group - heber springs, on\drawings\cu-101.dwg



#### LEGEND OF EXISTING FEATURES

---	PROPERTY LINE	⊕	BENCHMARK
---	RIGHT-OF-WAY LINE	○ RBC	MONUMENT
---	SETBACK LINE	△	SECTION CORNER
---	EASEMENT	ET HC	TRANSFORMER
---	SECTION LINE	E M E	ELECTRIC METER
---	CENTERLINE	⊕ C	ELECTRIC MANHOLE
---	799	⊕ C	POWER POLE   GUY WIRE
---	800	☆	LIGHT POLE
---	INDEX CONTOUR	⊕ 1	TELEPHONE PEDESTAL
---	TELEPHONE UNDER GR.	G M E	TELEPHONE MANHOLE
[OH-T]	TELEPHONE OVERHEAD	TR M	GAS MARKER
[FO]	FIBER OPTIC SERVICE	G M	ELECTRIC MARKER
[G]	GAS SERVICE	G M	TRAFFIC POLE
[E]	POWER UNDERGROUND	G M	TRAFFIC MANHOLE
[OH-E]	POWER OVERHEAD	G M	GAS METER
[W]	WATER SERVICE	G M	GAS VALVE
[S]	SANITARY SEWER	ST S	STORM MANHOLE
[ST]	STORM SEWER	ST S	SANITARY MANHOLE
[NP]	POND NORMAL POOL	ST S	STORM INLETS
000	EX. FLOWLINE	C.O. D.S.	CLEAN-OUT DOWNSPOUT
---	CHAIN LINK FENCE	⊕	FIRE HYDRANTS
X X	FARM FENCE	W M	WATER METER
/ /	WOOD FENCE	W M	WATER VALVES
---	IRON FENCE   RAILING	⊕	POST INDICATOR VALVE
---	BUILDING   STRUCTURE	⊕	FIRE DEPARTMENT CONN.
---	EX. BUILDING OVERHEAD	+	SIGNS
RIM	RIM ELEVATION	⊕	MAILBOX
INV.	INVERT ELEVATION	⊕	ADA PARKING
FFE	FINISHED FLOOR ELEVATION	⊕	PARKING COUNT
		⊕	TREES
		⊕	SHRUB
		+	SPOT GRADE

#### UTILITY PLAN LEGEND - PROPOSED

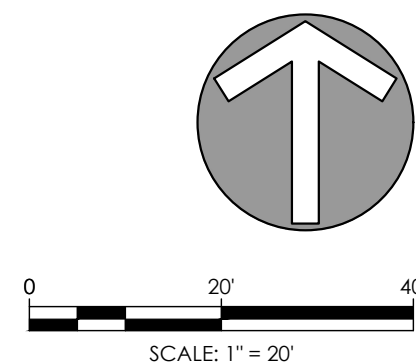
ST	STORM SEWER	⊕	SANITARY MANHOLE
S	SANITARY SEWER	⊕	SANITARY SEWER CLEANOUT
W	WATER SERVICE	⊕	FIRE HYDRANT
F	FIRE SERVICE	W M	WATER METER
G	GAS SERVICE	W M	WATER VALVE
T	TELEPHONE / COMMUNICATION	⊕	POST INDICATOR VALVE
OH-T	OVERHEAD TELEPHONE / COMMUNICATION	⊕	FIRE DEPARTMENT CONN.
E	ELECTRIC SERVICE	RIM	RIM ELEVATION
OH-E	OVERHEAD ELECTRIC SERVICE	INV.	INVERT ELEVATION
⊕	TRANSFORMER	FFE	FINISHED FLOOR ELEVATION
⊕	POWER POLE	⊕	STORM MANHOLE
⊕	LIGHT POLE	⊕	STORM INLETS
		⊕	STORM ENDSECTION
		⊕	STORM SEWER CLEANOUT
		⊕	DOWNSPOUT

#### UTILITY CONTACTS

<b>ELECTRIC SERVICE</b> FIRST ELECTRIC COOPERATIVE 150 INDUSTRIAL PARK ROAD HEBER SPRINGS, AR 72543 CONTACT: JESSY BEAVER P. (800) 489-7405 x2228 E. jessy.beaver@fec.coop	<b>WATER SERVICE</b> HEBER SPRINGS WATER AND WASTEWATER UTILITY 1108 W. FRONT STREET HEBER SPRINGS, AR 72543 CONTACT: PAUL GRAHAM P. (501) 362-3422 E. paul@heberspringswater.com
<b>PHONE SERVICE</b> AT&T 1141 HIGHWAY 258 NORTH HEBER SPRINGS, AR 72543 CONTACT: P. (501) 250-2256 E.	<b>SEWER DISTRICT</b> HEBER SPRINGS WATER AND WASTEWATER UTILITY 1108 W. FRONT STREET HEBER SPRINGS, AR 72543 CONTACT: PAUL GRAHAM P. (501) 362-3422 E. paul@heberspringswater.com
<b>GAS SERVICE</b> CENTERPOINT ENERGY 2205 E. ROOSEVELT ROAD LITTLE ROCK, AR 72206 CONTACT: P. (800) 992-7552 E.	

#### UTILITY NOTES

- CONTRACTOR TO FIELD VERIFY THE CONDITION OF ALL EXISTING UTILITIES TO BE REUSED AND COORDINATE WITH THE PROVIDER(S)
- PROPOSED SANITARY LATERAL INVERTS SUBJECT TO CHANGE PER EXISTING LATERAL VERIFICATION
- PROPOSED SANITARY LATERAL CONNECTION SUBJECT TO CHANGE PER DRAINAGE DITCH REWORK PLAN



REVISION BLOCK



DATE 10/22/2021	
DRAWN BY KPB	CHECKED BY TLP

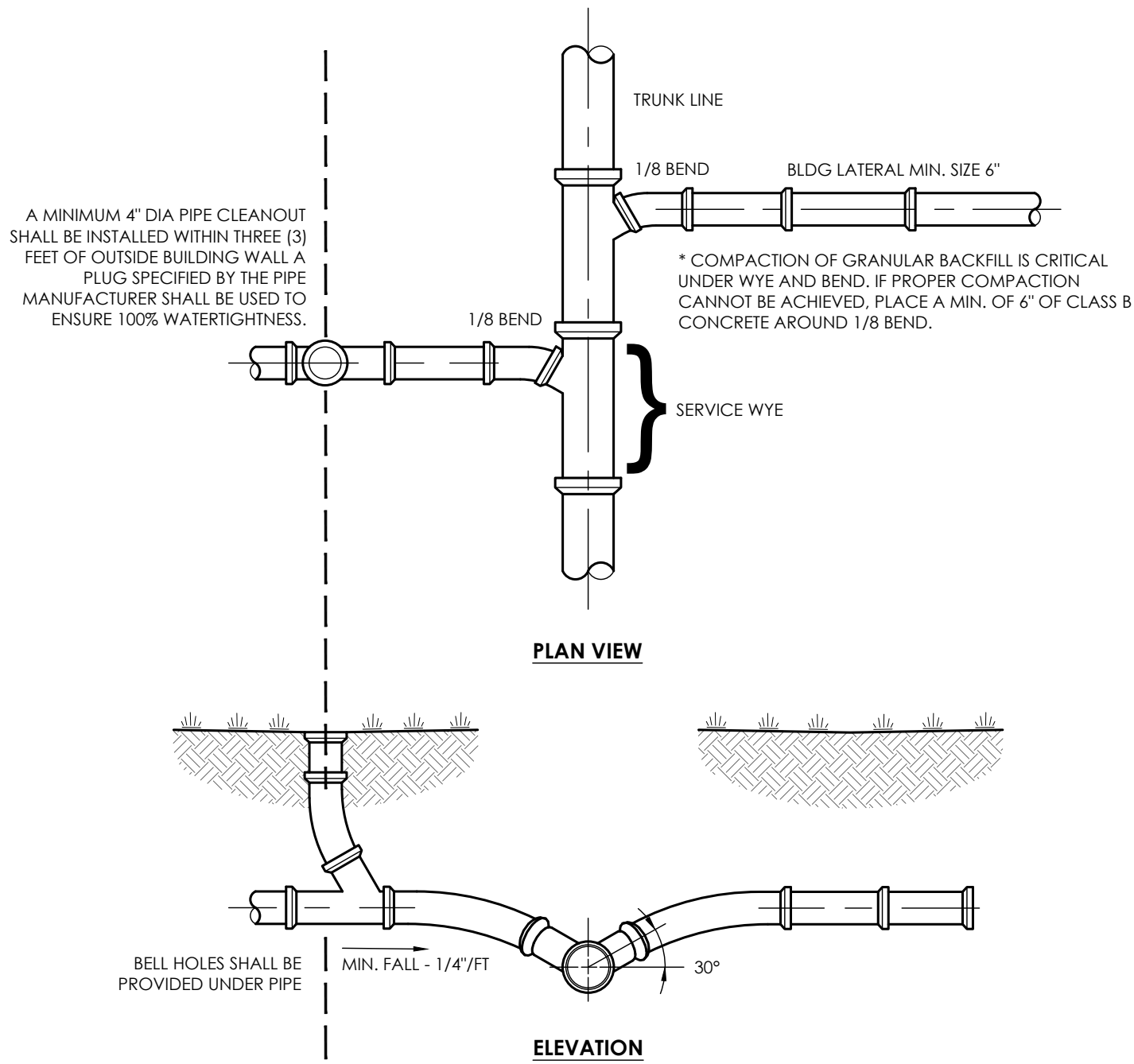
**HAMILTON  
DESIGNS**  
A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-9800  
www.hamilton-designs.com

CONSTRUCTION PLANS FOR:  
**ARBY'S | HEBER SPRINGS**  
1432 Heber Springs Road  
Heber Springs, Arkansas 72543

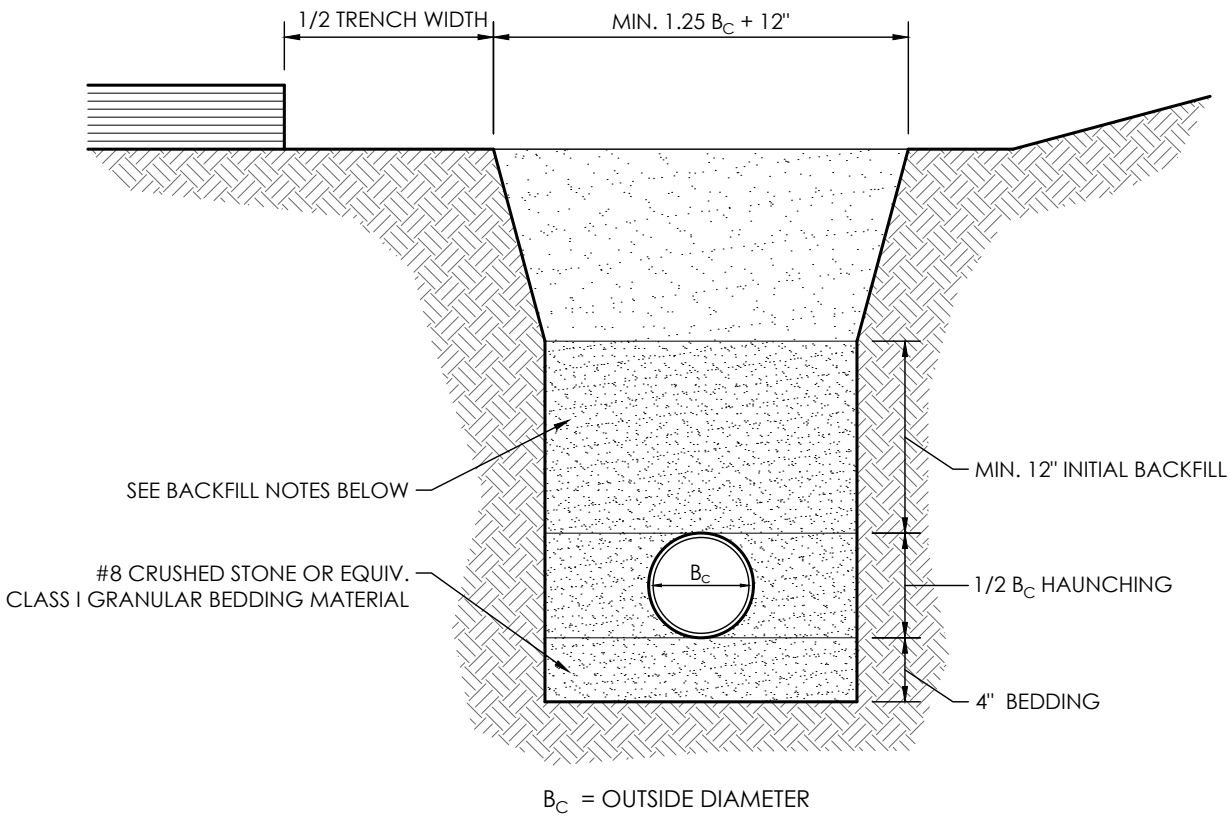
**RB AMERICAN GROUP, LLC**  
6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO. 2021-0122
DATE 10/22/2021
SCALE 1" = 20'
SHEET NAME UTILITY PLAN
SHEET NO. CU-101



**SERVICE CONNECTION FOR SHALLOW SEWERS  
(LESS THAN 15 FEET)**

NOT TO SCALE

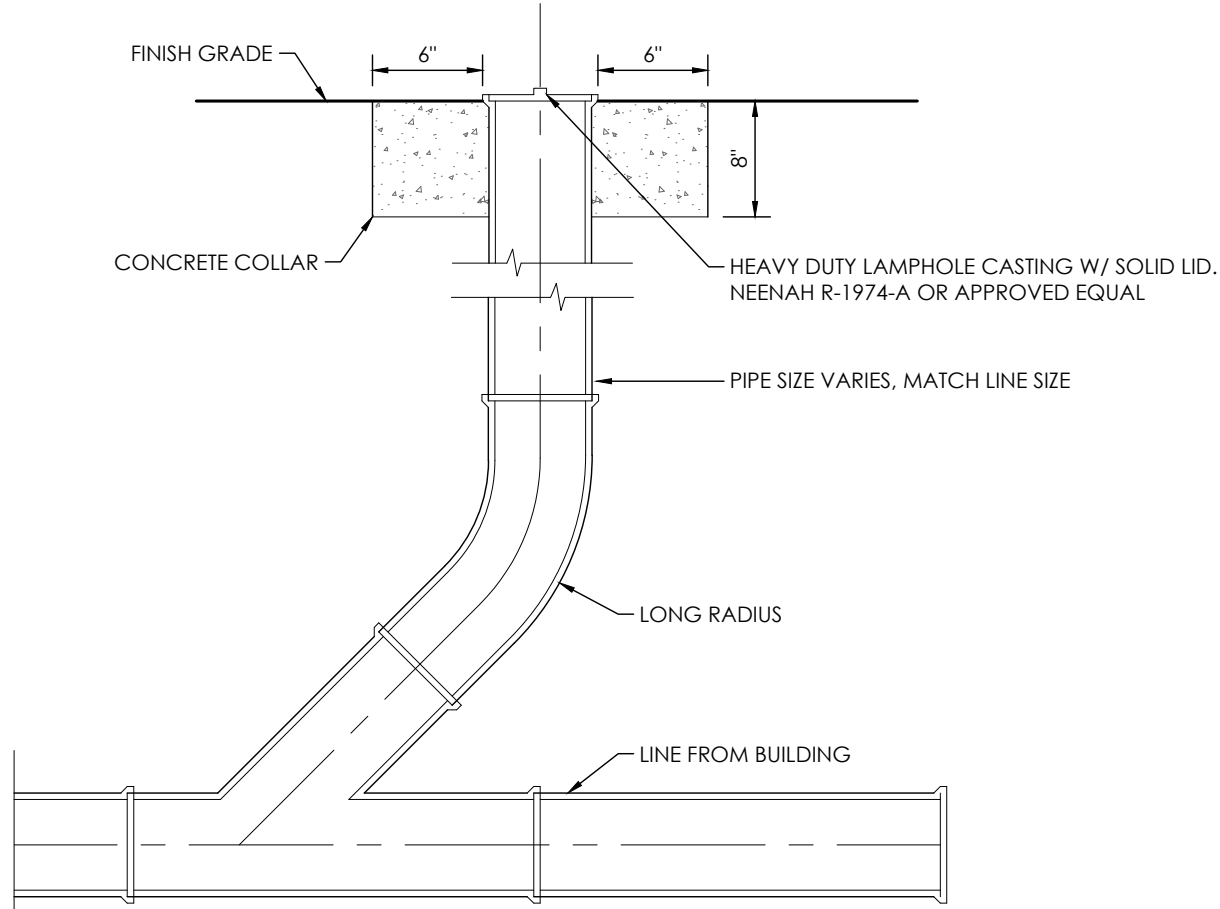


**BACKFILL NOTES:**

1. WHERE PIPE IS DIRECTLY BENEATH OR WITHIN 5 FEET OF PAVEMENT AREAS, FINAL BACKFILL SHOULD CONSIST OF COMPACTED #53 AGGREGATE PLACED FROM 12" ABOVE THE TOP OF PIPE TO THE PAVEMENT BASE.
2. OUTSIDE PAVEMENT AREAS, NATIVE MATERIAL SHALL BE USED AND COMPACTED TO PREVENT SETTLEMENT. NATIVE MATERIAL TO BE CLEAN FILL MATERIAL AND FREE OF ROCKS 6" IN DIAMETER AND LARGER.
3. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D231, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
4. ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS. BEDDING MATERIAL SHALL BE HAND PLACED AROUND THE HAUNCH & SIDES OF THE PIPE TO ENSURE PROPER COMPACTION & COMPLETE FILING OF ALL VOIDS.

**FLEXIBLE PIPE BEDDING DETAIL**

NOT TO SCALE



**HEAVY DUTY CLEANOUT DETAIL**

NOT TO SCALE

REVISION BLOCK



Michael Thompson

DATE  
10/22/2021

DRAWN BY  
KPB

CHECKED BY  
TLP

**HAMILTON  
DESIGNS**

A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-8800  
www.hamilton-designs.com

CONSTRUCTION PLANS FOR:

**ARBY'S | HEBER SPRINGS**

1432 Heber Springs Road  
Heber Springs, Arkansas 72543

**RB AMERICAN GROUP, LLC**

4200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.  
2021-0122

DATE  
10/22/2021

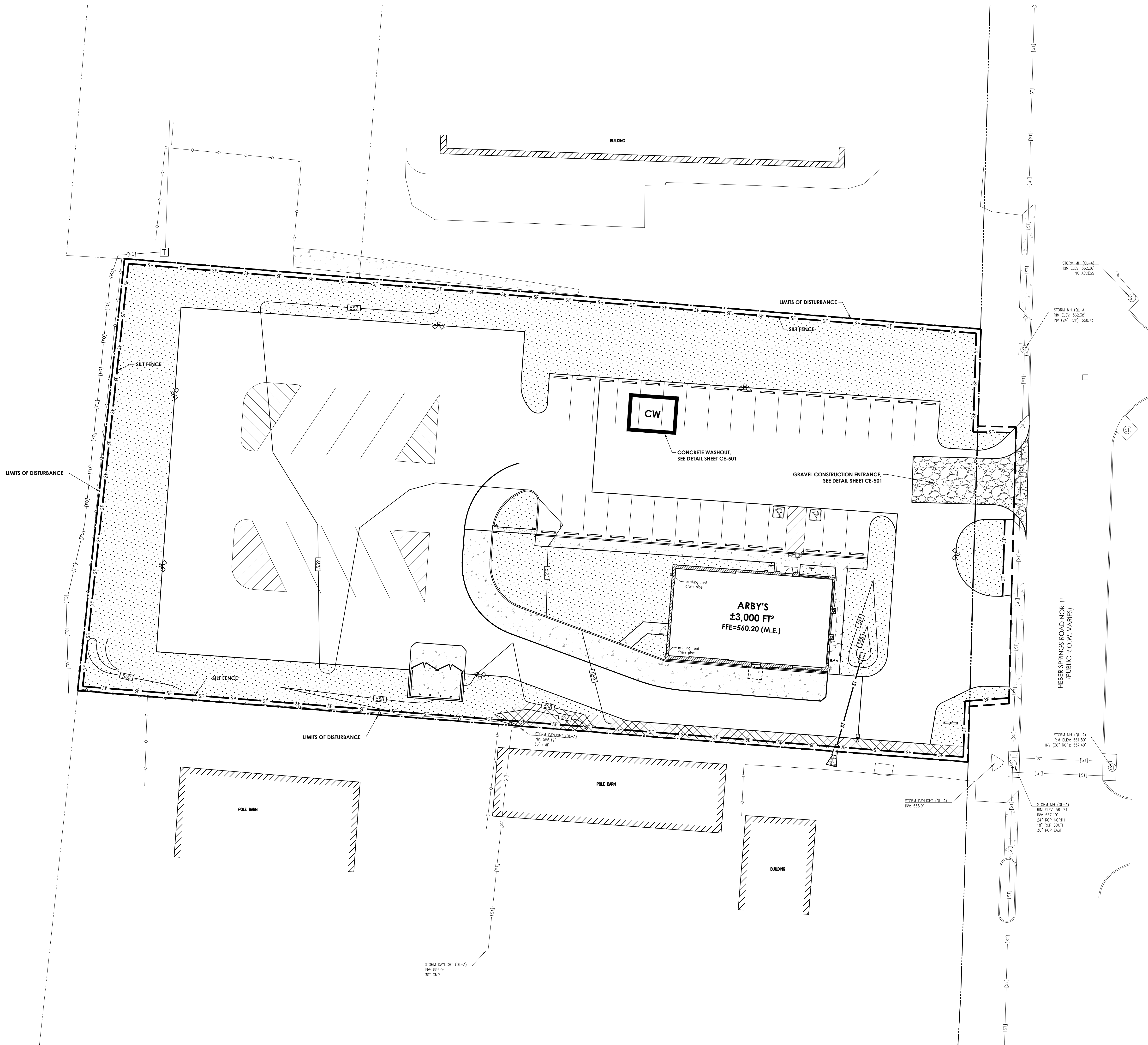
SCALE

SHEET NAME  
**UTILITY  
DETAILS**

SHEET NO.

**CU-501**

p:\2021\10\22 - rb american group - heber springs, ar\drawings\ce-101.dwg



#### LEGEND OF EXISTING FEATURES

---	PROPERTY LINE	⊕	BENCHMARK
---	RIGHT-OF-WAY LINE	○ RBC	MONUMENT
---	SETBACK LINE	△	SECTION CORNER
---	EASEMENT	ET HC	TRANSFORMER
---	SECTION LINE	E M	HVAC
---	CENTERLINE	E M	ELECTRIC METER
---	799	⊕	ELECTRIC MANHOLE
---	INTERMEDIATE CONTOUR	⊕	POWER POLE   GUY WIRE
---	800	⊕	LIGHT POLE
---	INDEX CONTOUR	⊕	TELEPHONE PEDESTAL
---	TELEPHONE UNDER GR.	⊕	TELEPHONE MANHOLE
---	TELEPHONE OVERHEAD	TR	GAS MARKER
---	FIBER OPTIC SERVICE	TR	ELECTRIC MANHOLE
---	GAS SERVICE	TR	TRAFFIC POLE
---	POWER UNDERGROUND	TR	TRAFFIC MANHOLE
---	POWER OVERHEAD	TR	GAS METER
---	WATER SERVICE	TR	GAS VALVE
---	SANITARY SEWER	TR	STORM MANHOLE
---	STORM SEWER	TR	SANITARY MANHOLE
---	POND NORMAL POOL	TR	STORM INLETS
---	EX. FLOWLINE	TR	CLEAN-OUT
---	CHAIN LINK FENCE	TR	DOWNSPOUT
---	FARM FENCE	TR	FIRE HYDRANTS
---	WOOD FENCE	TR	WATER METER
---	IRON FENCE   RAILING	TR	WATER VALVES
---	BUILDING   STRUCTURE	TR	POST INDICATOR VALVE
---	EX. BUILDING OVERHEAD	TR	FIRE DEPARTMENT CONN.
---	RIM	TR	SIGNS
---	INV.	TR	MAILBOX
---	FFE	TR	ADA PARKING
---		TR	PARKING COUNT
---		TR	TREES
---		TR	SHRUB
---		TR	SPOT GRADE

#### STORMWATER POLLUTION PREVENTION PLAN LEGEND

---	PROPOSED SEEDING	---	CE-501
---	EROSION CONTROL MATTING	---	CE-501
---	RIPRAP OUTLET PROTECTION	---	CE-501
---	GRAVEL CONSTRUCTION ENTRANCE	---	CE-501

---	CONSTRUCTION LIMITS	---	CW	CONCRETE WASHOUT
---	SILT FENCE	---	---	INLET PROTECTION
---	STORM SEWER	---	---	STORM MANHOLE
---	SUBSURFACE DRAIN	---	---	STORM INLETS
---	SWALE   FLOWLINE	---	---	INVERT ELEVATION
---	INTERMEDIATE CONTOUR	---	---	CLEAN-OUT
---	INDEX CONTOUR	---	---	DOWNSPOUT
---	FLOW ARROW	---	---	

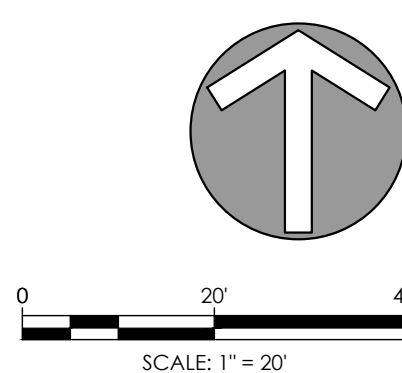
#### CONSTRUCTION SEQUENCE

##### PRE-CONSTRUCTION ACTIVITIES:

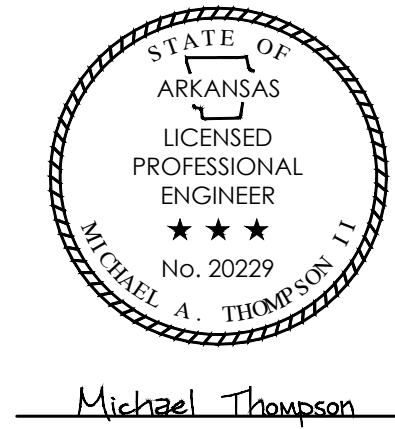
- CALL 811 SERVICE AT 811 TO CHECK THE LOCATION OF ANY EXISTING UTILITIES. THEY SHOULD BE NOTIFIED TWO WORKING DAYS BEFORE CONSTRUCTION TAKES PLACE.
- A SILT FENCE SHALL BE INSTALLED AT THE EDGES OF THE PROJECT SITE WHERE THERE IS POTENTIAL FOR ANY STORMWATER RUNOFF. POTENTIAL AREAS ARE IDENTIFIED BASED ON EXISTING TOPOGRAPHY AND SHOWN ON SHEET CE-101. THE INSTALLED SILT FENCE SHOULD BE INSPECTED AND ANY ACCUMULATING SEDIMENT REMOVED.
- EVALUATE EXISTING VEGETATION SUITABLE FOR USE AS FILTER STRIPS ALONG THE PROPERTY BOUNDARIES.
- A CONSTRUCTION ENTRANCE SHALL BE PLACED AS SHOWN ON SHEET CE-101.
- ESTABLISH CONSTRUCTION STAGING AREA FOR EQUIPMENT AND VEHICLES AS FAR FROM INLETS AND SWALES AS POSSIBLE.
- ESTABLISH ONSITE LOCATION FOR OWNER/OPERATOR/CONTRACTOR PLACEMENT OF APPROVED PLANS AND INSPECTION DOCUMENTATION.

##### CONSTRUCTION ACTIVITIES:

- ONCE EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE, BEGIN LAND CLEARING FOLLOWED IMMEDIATELY BY ROUGH GRADING. DO NOT LEAVE LARGE AREAS UNPROTECTED FOR MORE THAN 14 DAYS. ALL DISTURBED AREAS THAT POTENTIALLY WILL BE IDLE FOR 14 DAYS OR MORE WILL BE STABILIZED (SEEDED, MULCHED, ETC.) IMMEDIATELY.
- AFTER COMPLETION OF MASS GRADING, FINAL GRADE AND SEED LANDSCAPE BERMS, AND SWALES IMMEDIATELY AFTER GRADING IS COMPLETED.
- UPON COMPLETION OF MASS GRADING, INSTALL SANITARY AND STORM SEWERS. AS STORM SEWERS ARE CONSTRUCTED, INSTALL INLET PROTECTION MEASURES. INSTALL RIPRAP UPON COMPLETION OF END SECTION INSTALLATION.
- UPON COMPLETION OF SEWER INSTALLATION AND INLET PROTECTION, PROCEED WITH ASPHALT PAVEMENT CONSTRUCTION.
- AS NECESSARY, LIVING OF ASPHALT PARKING SHOULD BE DONE PRIOR TO THE INSTALLATION OF STORM SEWERS TO PREVENT THE TRANSMISSION OF LIME DUST TO PONDS OR RECEIVING WATERS.
- CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES AND DEVICES DURING THE CONSTRUCTION PHASE AND UNTIL SILTATION OF THE STREETS AND STORM SEWERS WILL NO LONGER OCCUR.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT FROM INSTALLED EROSION CONTROL FEATURES.
- WHEN 70% OF VEGETATIVE COVER IS OBTAINED THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.



REVISION BLOCK



DATE  
10/22/2021

DRAWN BY  
HYC

CHECKED BY  
TLP

**HAMILTON  
DESIGNS**  
A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-9800  
www.hamilton-designs.com

CONSTRUCTION PLANS FOR:  
**ARBY'S | HEBER SPRINGS**

1632 Heber Springs Road  
Heber Springs, Arkansas 72543

**RB AMERICAN GROUP, LLC**

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.  
2021-0122

DATE  
10/22/2021

SCALE  
1" = 20'

SHEET NAME  
**STORMWATER POLL.  
PREVENTION PLAN**

SHEET NO.

**CE-101**



© 2021 10/22 - rb american group - heber springs, ar drawings (ce-501) (dwg)

#### Seedbed Preparation

Apply lime to raise the pH to the level needed for species being seeded. Apply 23 pounds of 12-12-12 analysis fertilizer (or equivalent) per 1000 sq. ft. (approximately 1000 pounds per acre) or fertilize according to test. Application of 150 lbs. of ammonium nitrate on areas low in organic matter and fertility will greatly enhance vegetative growth.

Work the fertilizer and lime into the soil to a depth of 2-3 inches with a harrow, disk or rake operated across the slope as much as possible.

#### Seeding

Select a seed mixture based on projected use of the area (Figure 5-2), while considering best seeding dates. See Figure 5-3 this sheet. If tolerances are a problem, such as salt tolerance of seedings adjacent to streets and highways, see Figure 5-4 this sheet before final selection.

Figure 5-2: Permanent Seed Mixtures

Species	Seeding Rate lbs/acre	Suitable pH lbs/1000 sq. ft.	Site Suitability*	Droughty	Well Drained	Wet
Level and Sloping, Open Areas						
Tall Fescue	35 0.8	5.5 - 8.3	2	1		2
Tall Fescue	25 0.6	5.5 - 8.3				
Red Clover**	5 0.12					
Kentucky Bluegrass	15 0.4	5.5 - 7.5	2	1		
Creeping Red Fescue	15 0.4					
Steep Banks and Cuts						
Tall Fescue	15 0.4	5.8 - 7.5	2	1		2
Kentucky Bluegrass	25 0.6					
Tall Fescue	35 0.8	5.5 - 8.3	2	1		
Emerald Crownvetch**	10 0.25					
Lawns and High Maintenance Areas						
Kentucky Bluegrass	40 0.9	5.8 - 7.5	2	1		
Creeping Red Fescue	40 0.9					
Perennial Ryegrass	170 4.0	5.0 - 7.5		1		
(Turf Type)						
Tall Fescue	170 4.0	5.5 - 8.3	2	1		2

\* 1 - Preferred 2 - Will Tolerate  
\*\* Inoculate with specific Inoculant.

#### Temporary Seeding Dates

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Wheat or Rye												
Oats												
Annual Ryegrass												

#### Permanent Seeding Dates

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Native Seed												
Non-Irrigated*												
Irrigated												
Dormant Seeding**												

Irrigation needed during this period. To control erosion at times other than in the shaded areas, use mulch.  
\* Late summer seeding dates may be extended 5 days if mulch is applied.  
\*\* Note: If temporary stabilization must occur during the winter show mulch applied at a rate of 2 tones per acre and crimped in will be an acceptable cover.

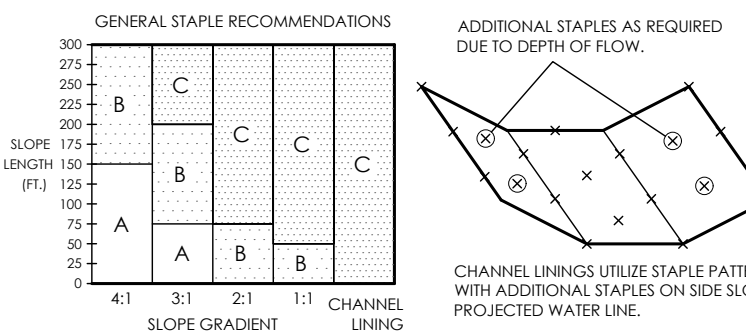
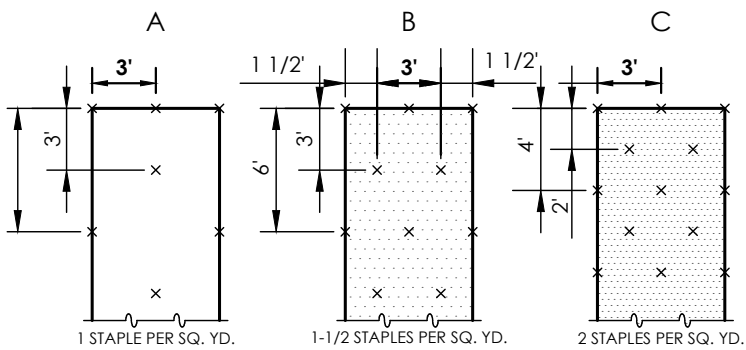
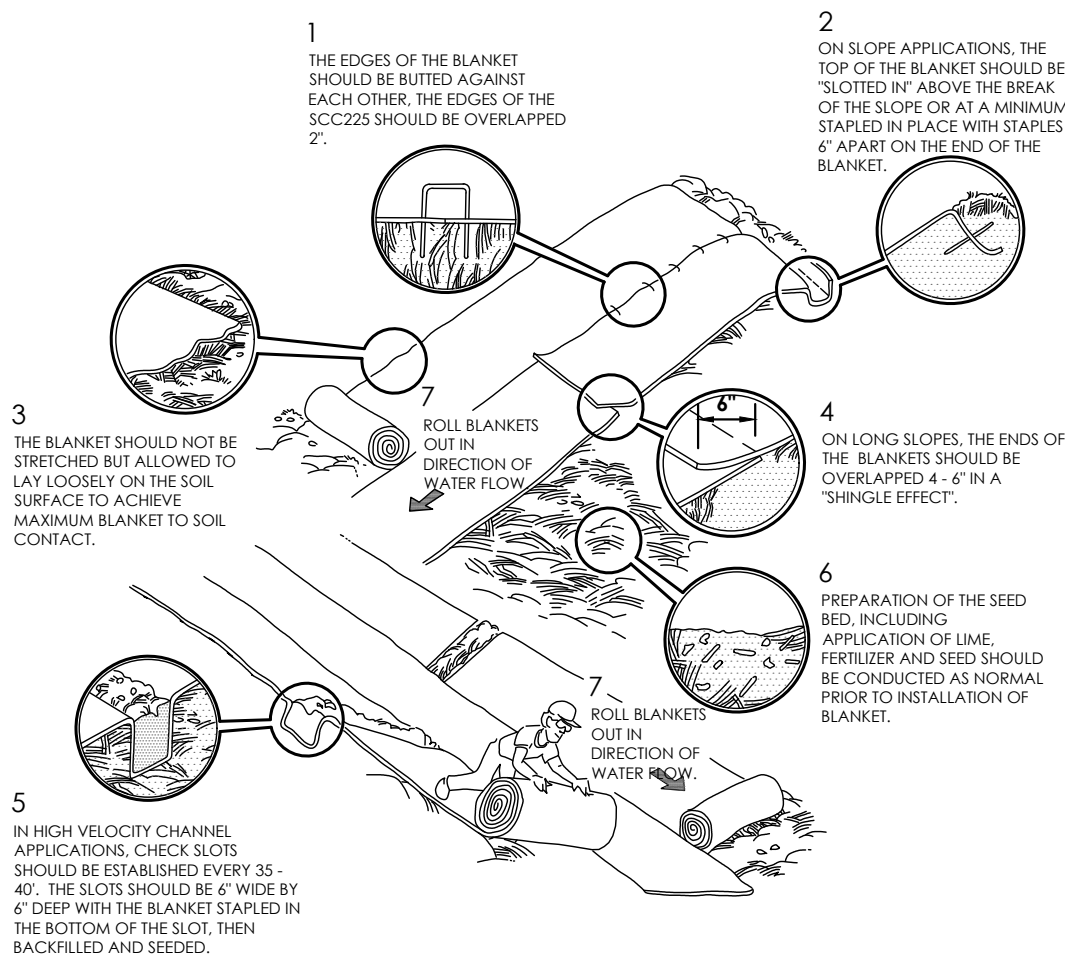
#### Temporary Seed Application Rates

Kind of Seed	1000 Sq. Ft.	Acres	Remarks
Wheat or Rye	3.5 lbs.	150 lbs.	Cover seed 1" to 1 1/2" deep
Spring Oats	2.3 lbs.	100 lbs.	Cover seed 1" deep
Annual ryegrass	1.0 lb.	40 lbs.	Cover seed 1/4" deep*

\* Not necessary where mulch is applied.

#### SEEDING SCHEDULE

NOT TO SCALE

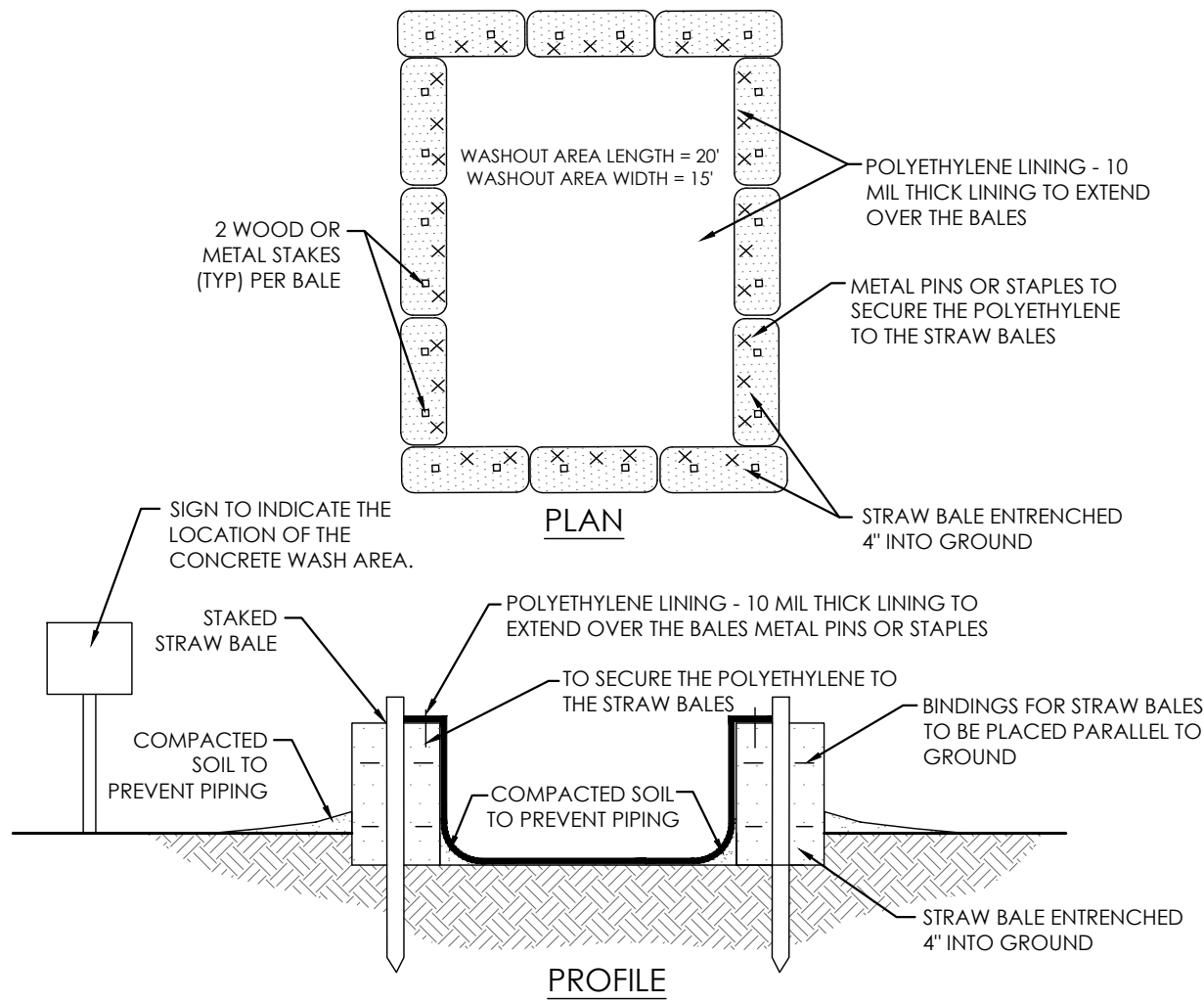


STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN EROSION CONTROL BLANKETS. STAPLE PATTERNS MAY VARY DEPENDING UPON SOIL TYPE AND AVERAGE ANNUAL RAINFALL.

AT SLOPE LENGTHS GREATER THAN 300 FEET OR WHERE DRAINAGE OVER LARGE AREAS IS DIRECTED OVER THE BLANKETS, STAPLE PATTERN "C" SHOULD BE UTILIZED.

#### EROSION CONTROL MATTING

NOT TO SCALE

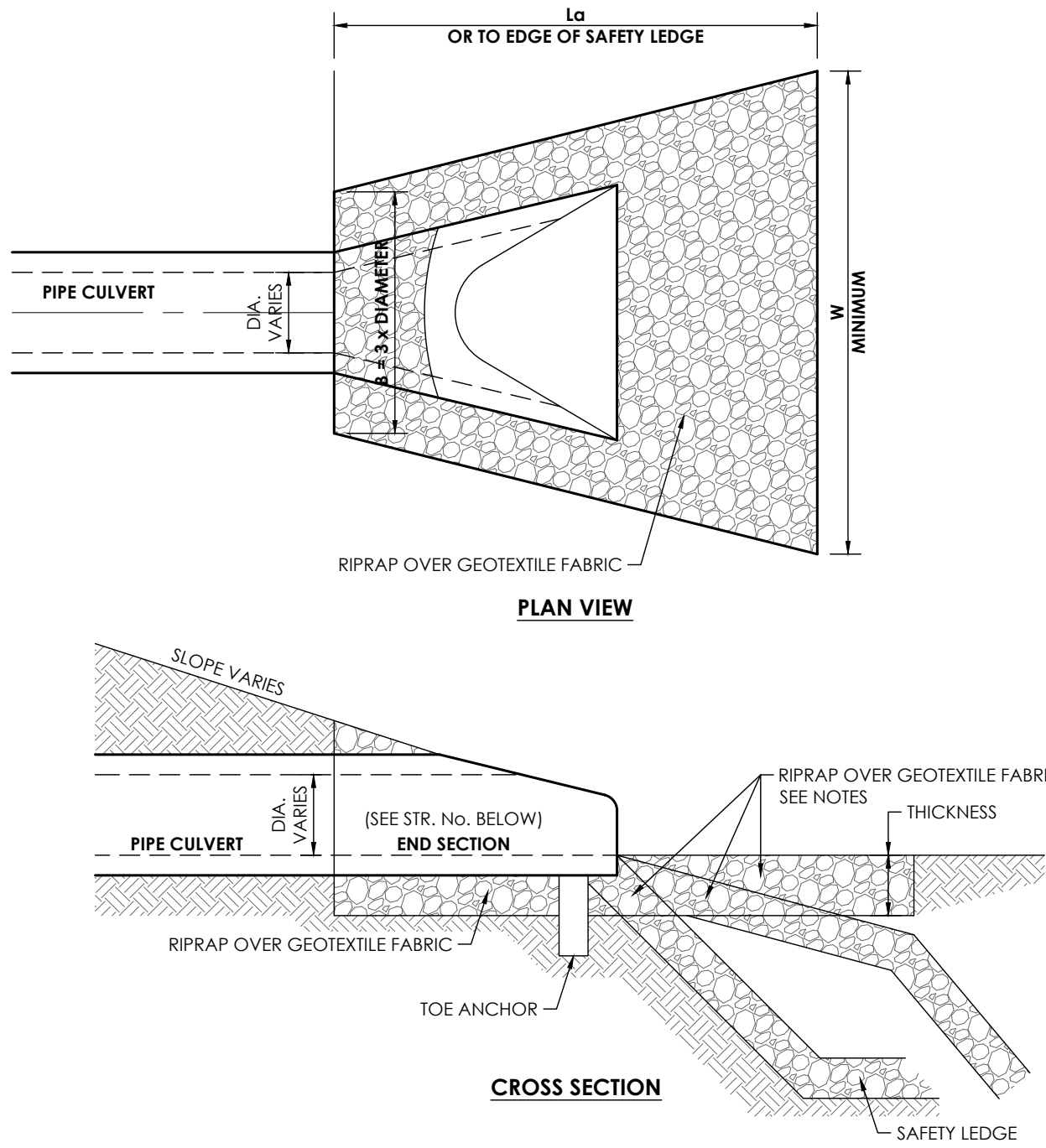


#### NOTES:

- CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
- SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
- AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
- WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE INSPECTOR.
- CONTRACTOR SHALL PROVIDE ADDITIONAL WASHOUT STRUCTURES OR LARGER STRUCTURES IF REQUIRED.

#### CONCRETE WASHOUT

NOT TO SCALE



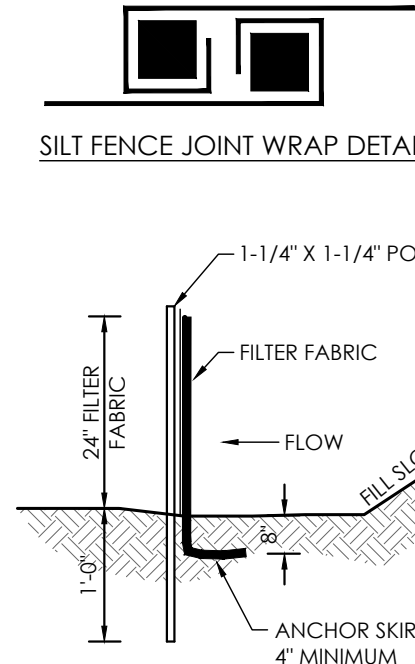
Structure No.	B	La	W	Thickness	d <sub>50</sub>	Size of Stone	Percent of Total Weight Larger than Given Size
100	3'	6'	6'	18"	6"	3 x d <sub>50</sub>	0%
-	0'	0'	0'	0"	0"	2 x d <sub>50</sub>	20%
-	0'	0'	0'	0"	0"	1 x d <sub>50</sub>	50%
-	0'	0'	0'	0"	0"	0.1 x d <sub>50</sub>	90%

Depth of riprap shall not be less than 3 x d<sub>50</sub>.

- GEOTEXTILE TO BE POLYFELT TS700 OR APPROVED EQUAL

#### RIPRAP OUTLET PROTECTION

NOT TO SCALE

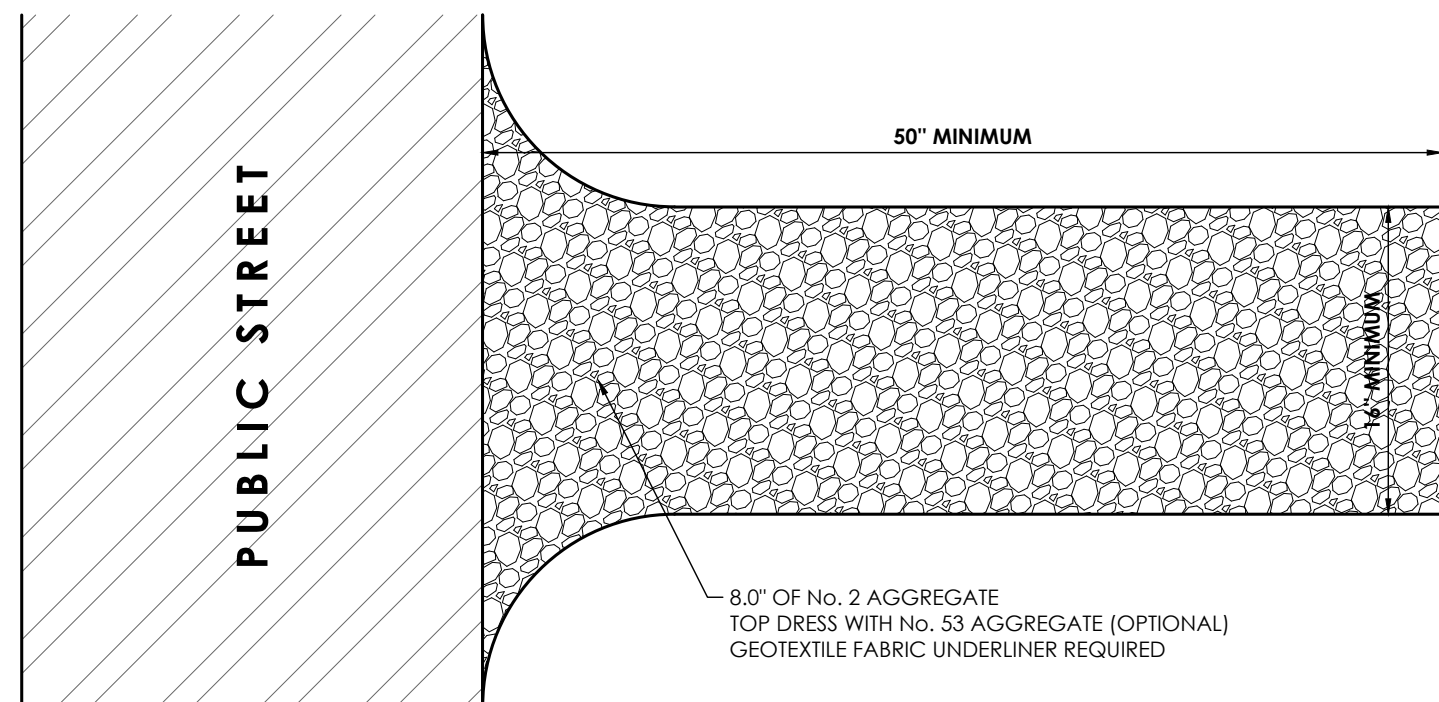


#### NOTES:

- FILTER FABRIC FENCE SHALL BE A MINIMUM OF 36" IN WIDTH.
- TURN SILT FENCE UP SLOPE AT ENDS.

#### TEMPORARY SILT FENCE

NOT TO SCALE



#### GRAVEL CONSTRUCTION ENTRANCE

NOT TO SCALE

#### SOILS LEGEND + DESCRIPTION

Map Unit: 29 - Steprock-Linker complex



CONSTRUCTION PLANS FOR:

ARBY'S | HEBER SPRINGS

1432 Heber Springs Road  
Heber Springs, Arkansas 72543

RB AMERICAN GROUP, LLC

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.

2021-0122

DATE

10/22/2021

SCALE

SHEET NAME

STORMWATER POLL.  
PREV. DETAILS

SHEET NO.

CE-501

REVISION BLOCK



Michael Thompson

DATE

10/22/2021

DRAWN BY

HYC

CHECKED BY

TLP

HAMILTON  
DESIGNS  
A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-9800  
www.hamilton-designs.com



p:\2021\1022 - rb american group - heber springs, ar\drawings\lp-101.dwg

#### PLANT SCHEDULE

Key	Botanical Name	Common Name	Quantity	Size	Condition	Remarks
SHADE TREES						
AR	ACER RUBRUM	RED MAPLE	4	3 IN	B&B	MULTI-STEM
GI	GLEDITSIA TRIACANTHOS	HONEY LOCUST	2	3 IN	B&B	MULTI-STEM
DECIDUOUS SHRUBS						
CJ	CALICARPA JAPONICA	JAPANESE BEAUTYBERRY	9	24 IN	#3 CONT.	42" ON CENTER
VA	VACCINIUM ARBOREUM	FARKLEBERRY	10	12 IN	#3 CONT.	42" ON CENTER

#### LEGEND OF EXISTING FEATURES

---	PROPERTY LINE	⬮	BENCHMARK
---	RIGHT-OF-WAY LINE	○ RBC	MONUMENT
---	SETBACK LINE	△	SECTION CORNER
---	EASEMENT	ET HC	TRANSFORMER
---	SECTION LINE	E@ E	ELECTRIC METER
---	CENTERLINE	⊘	ELECTRIC MANHOLE
---	799	⊘	POWER POLE   GUY WIRE
---	800	☆	LIGHT POLE
---	INDEX CONTOUR	⊘	TELEPHONE PEDESTAL
---	TELEPHONE UNDER GR.	⊘	TELEPHONE MANHOLE
---	TELEPHONE OVERHEAD	TR ⊘	GAS MARKER
---	FIBER OPTIC SERVICE	⊘	ELECTRIC MARKER
---	GAS SERVICE	⊘	TRAFFIC POLE
---	POWER UNDERGROUND	⊘	TRAFFIC MANHOLE
---	POWER OVERHEAD	⊘	GAS METER
---	WATER SERVICE	⊘	GAS VALVE
---	SANITARY SEWER	⊘	STORM MANHOLE
---	STORM SEWER	⊘	SANITARY MANHOLE
---	POND NORMAL POOL	⊘	STORM INLETS
---	EX. FLOWLINE	⊘	CLEAN-OUT
---	CHAIN LINK FENCE	⊘	DOWNSPOUT
---	FARM FENCE	⊘	FIRE HYDRANTS
---	WOOD FENCE	⊘	WATER METER
---	IRON FENCE   RAILING	⊘	WATER VALVES
---	BUILDING   STRUCTURE	⊘	POST INDICATOR VALVE
---	EX. BUILDING OVERHEAD	⊘	FIRE DEPARTMENT CONN.
---	RIM	⊘	SIGNS
---	INV.	⊘	MAILBOX
---	FFE	⊘	ADA PARKING
---		⊘	PARKING COUNT
---		⊘	TREES
---		⊘	SHRUB
---		⊘	SPOT GRADE

#### LANDSCAPE LEGEND - PROPOSED

---	HARDWOOD MULCH	⊘	EVERGREEN TREE
---	PERMANENT SEEDING	⊘	DECIDUOUS TREE
---	SOD	⊘	DECIDUOUS TREE
---	PERENNIAL PLANTINGS	⊘	ORNAMENTAL TREE
---	LANDSCAPE EDGING	⊘	ORNAMENTAL TREE
---	DECIDUOUS SHRUB	⊘	ORNAMENTAL TREE
---	DECIDUOUS SHRUB	⊘	ORNAMENTAL TREE
---	EVERGREEN SHRUB	⊘	MULTI-STEM TREE
---	ORNAMENTAL GRASS	⊘	
---	PLANT TAG	⊘	

REVISION BLOCK



DATE  
10/22/2021

DRAWN BY  
HYC

CHECKED BY  
KPB

**HAMILTON  
DESIGNS**  
A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-9800  
www.hamilton-designs.com

CONSTRUCTION PLANS FOR:  
**ARBY'S | HEBER SPRINGS**

1632 Heber Springs Road  
Heber Springs, Arkansas 72543

**RB AMERICAN GROUP, LLC**

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.  
2021-0122

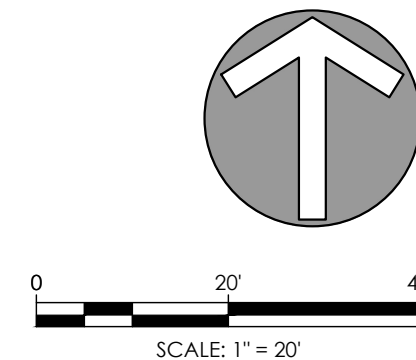
DATE  
10/22/2021

SCALE  
1" = 20'

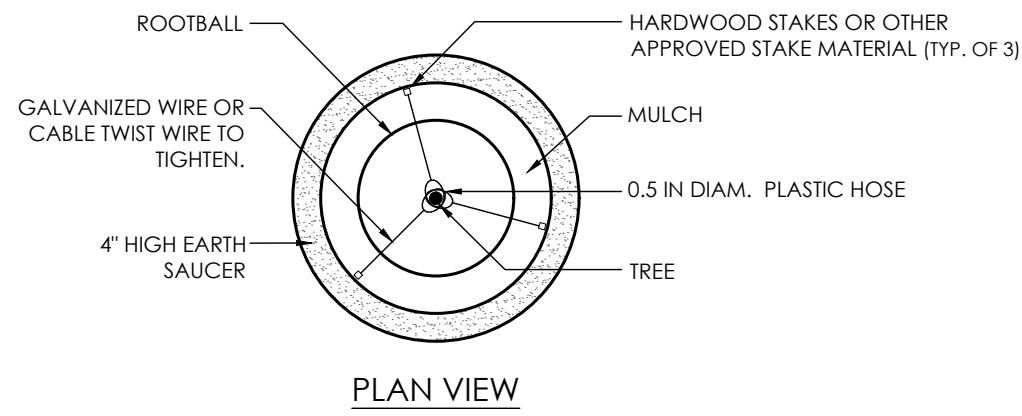
SHEET NAME  
**LANDSCAPE  
PLAN**

SHEET NO.

**LP-101**



p:\2021\10\22 - rb american group - heber springs, mo\drawings\lp-501.dwg



1. LOCATE (1) STAKE DIRECTLY SOUTHWEST OF TREE TRUNK

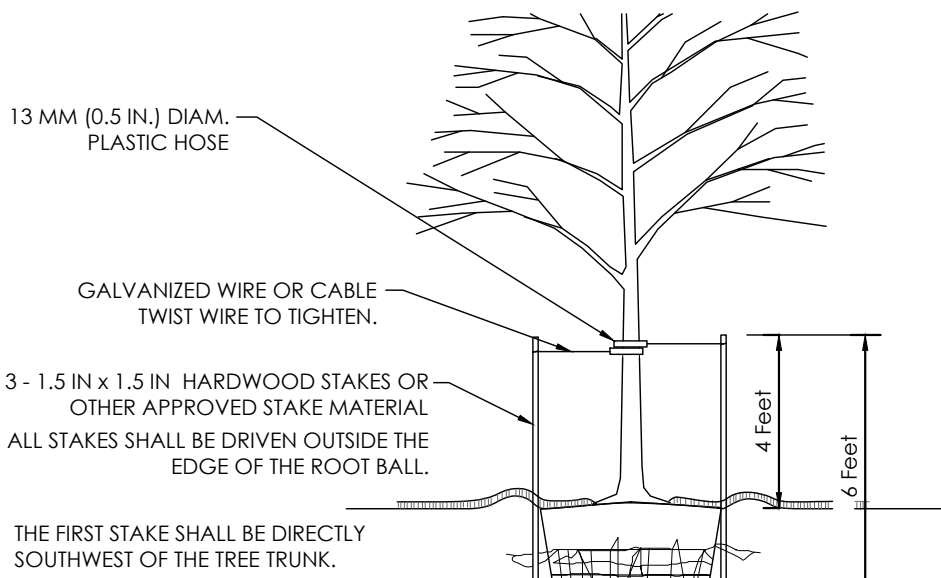
#### TREE STAKING DETAIL

NOT TO SCALE

WIRE OR CABLE SIZES SHALL BE AS FOLLOWS:  
TREES UP TO 2.5 IN CALIPER - 14 GAUGE  
TREES 2.5 IN TO 75 MM 3 IN CALIPER - 12 GAUGE

TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. PLASTIC HOSE SHALL BE LONG ENOUGH TO ACCOMMODATE 1.5 IN OF GROWTH AND BUFFER ALL BRANCHES FROM THE WIRE.

TUCK ANY LOOSE ENDS OF THE WIRE OR CABLE INTO THE WIRE WRAP SO THAT NO SHARP WIRE ENDS ARE EXPOSED.

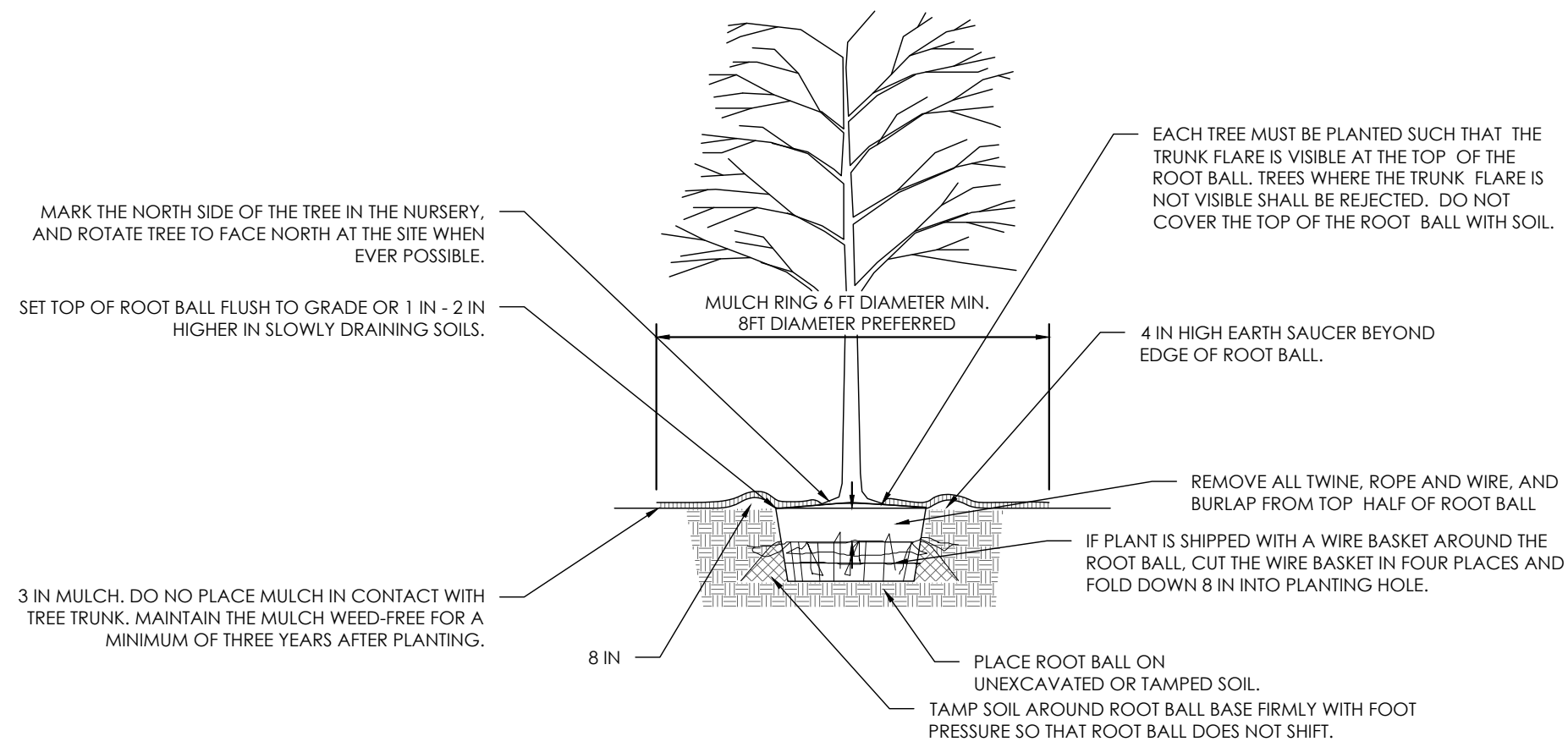


ASSURE THAT THE BEARING SURFACE OF THE PROTECTIVE COVERING OF THE WIRE OR CABLE AGAINST THE TREE TRUNK IS A MINIMUM OF 0.5 IN.

REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN SUFFICIENT ROOTS TO OVERCOME THE PROBLEM THAT REQUIRED THE TREE TO BE STAKED. STAKES SHALL BE REMOVED NO LATER THE END OF THE FIRST FULL GROWING SEASON AFTER PLANTING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE STAKING MATERIALS.

#### TREE STAKING DETAIL, 3" CALIPER OR LESS

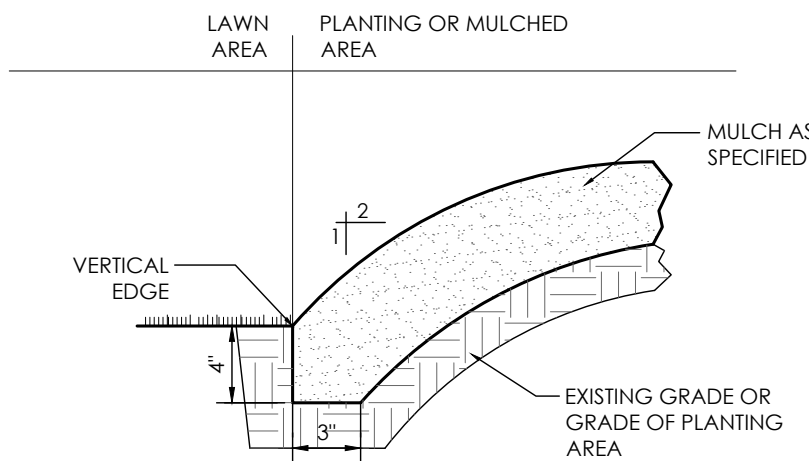
NOT TO SCALE



- NOTE:
1. THIS DETAIL ASSUMES THAT THE PLANTING SPACE IS LARGER THAN AN 8' SQUARE OPEN TO THE SKY, AND NOT COVERED BY ANY PAVING OR GRATING.
  2. STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT
  3. WRAP TREE TRUNKS ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
  4. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
  5. FOR DIMENSIONS OF PLANTING AREAS, TYPES OF SOIL, AMENDMENTS, OR SOIL REPLACEMENT, SEE "SOIL IMPROVEMENT DETAILS"

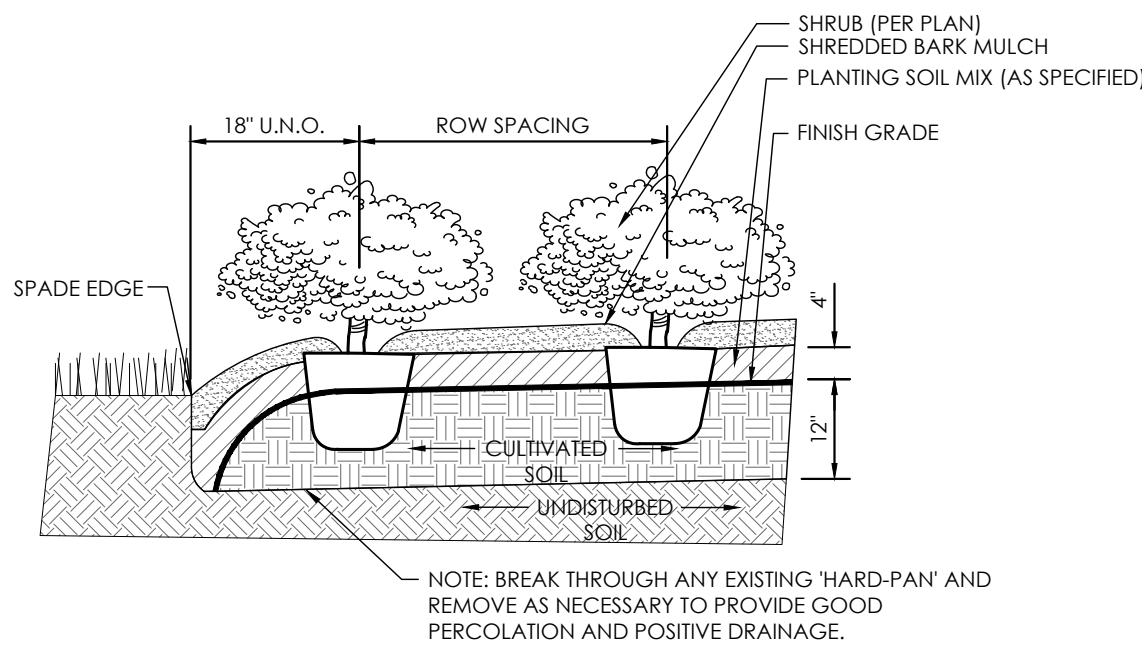
#### TREE PLANTING DETAIL, FOR B&B ALL SOIL TYPES

NOT TO SCALE



#### SPADE EDGE

NOT TO SCALE

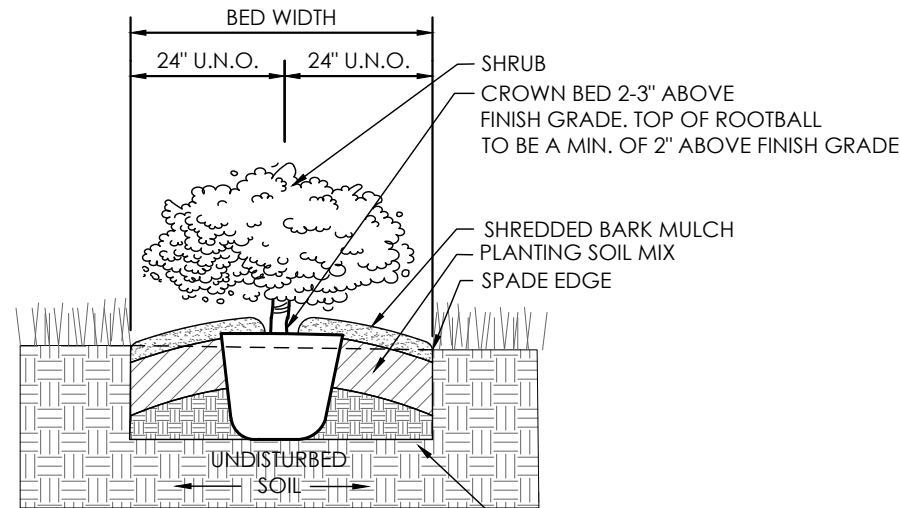


#### PLANTING PROCEDURE

1. LAYOUT BED AND OUTLINE WITH SPADE EDGE.
2. ROTOTILL BED TO 12" DEPTH.
3. SPREAD 4" MIN. LAYER OF PLANTING SOIL MIX OVER BED.
4. ROTOTILL PLANTING SOIL MIX INTO TOP OF BED.
5. INSTALL PLANTS, MULCH, AND WATER THOROUGHLY.

#### SHRUB MASS PLANTING

NOT TO SCALE

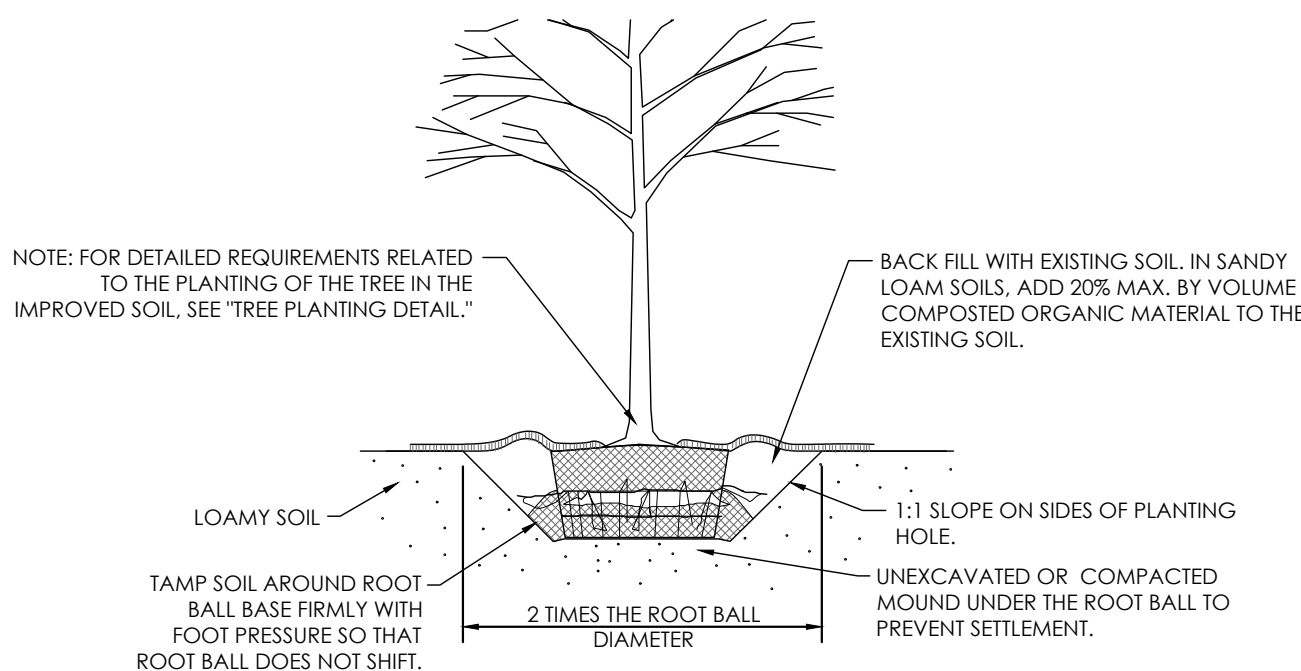


#### PLANTING PROCEDURE

1. LAYOUT BED AND OUTLINE WITH SPADE EDGE.
2. ROTOTILL BED TO 12" DEPTH.
3. SPREAD 4" MIN. LAYER OF PLANTING SOIL MIX OVER BED.
4. ROTOTILL PLANTING SOIL MIX INTO TOP OF BED.
5. INSTALL PLANTS, MULCH, AND WATER THOROUGHLY.

#### HEDGE PLANTING

NOT TO SCALE



LOAMY SOILS INCLUDE THE FOLLOWING USDA TEXTURAL CLASSIFICATIONS AND HAVE A CLAY CONTENT OF BETWEEN 15 TO 27%: LOAM, SANDY LOAM AND SILT LOAM. NOTE THAT SOILS AT THE OUTER LIMITS OF THE LOAM CLASSIFICATIONS MAY PRESENT SPECIAL PLANTING PROBLEMS NOT ANTICIPATED BY THIS DETAIL.

LOAMY SOILS ARE DEFINED AS GRANULAR OR BLOCKY FRIABLE SOILS, A MIXTURE OF SAND, SILT AND CLAY PARTICLES WITH A MINIMUM OF 1.5% BY DRY WEIGHT ORGANIC MATTER. THE SOIL MUST NOT BE SO COMPACTED AS TO IMPEDE ROOT GROWTH OR DRAINAGE. THE SOIL STRUCTURE SHALL NOT BE PLATY OR MASSIVE. THE SOIL MUST BE TESTED FOR TEXTURE, DRAINAGE CAPABILITY, PH, AND NUTRIENT VALUES PRIOR TO DETERMINING ANY ADDITIONAL SOIL IMPROVEMENTS. CONTRACTOR SHALL CONSULT LANDSCAPE ARCHITECT IN POOR SOIL CONDITIONS.

1. TREES PLANTED IN NON RESTRICTED SOIL CONDITIONS. THIS DETAIL ASSUMES THAT THE AREA OF LOAMY SOIL AVAILABLE TO EACH TREE IS A MINIMUM OF 500 SQUARE FEET.

#### SOIL IMPROVEMENT DETAIL

NOT TO SCALE

REVISION BLOCK



Michael Thompson

DATE

10/22/2021

DRAWN BY

HYC

CHECKED BY

TLP

## HAMILTON DESIGNS

A LIMITED LIABILITY COMPANY

11 Municipal Drive, Suite 300  
Fishers, Indiana 46038  
P. (317) 570-9800  
www.hamilton-designs.com

CONSTRUCTION PLANS FOR:

ARBY'S | HEBER SPRINGS

1632 Heber Springs Road  
Heber Springs, Arkansas 72543

RB AMERICAN GROUP, LLC

6200 Oak Tree Blvd., Suite 250  
Independence, Ohio 44131

PROJECT NO.

2021-0122

DATE

10/22/2021

SCALE

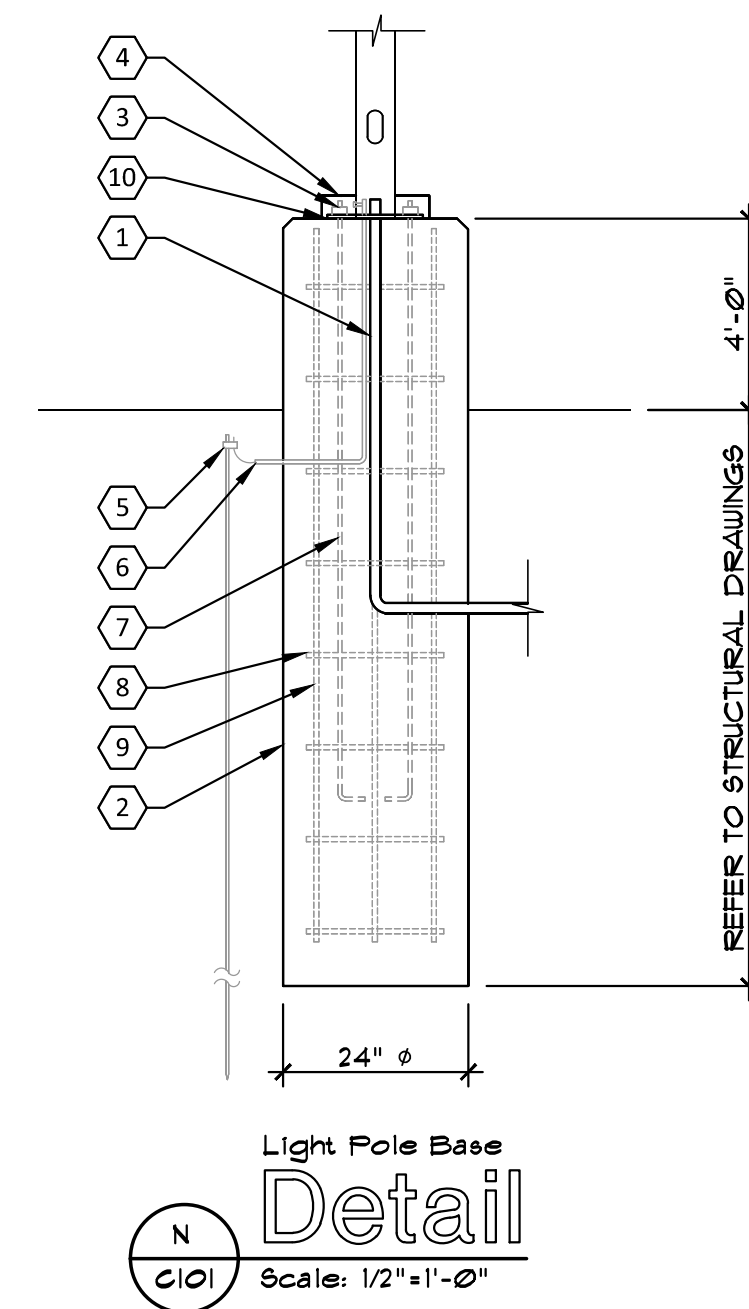
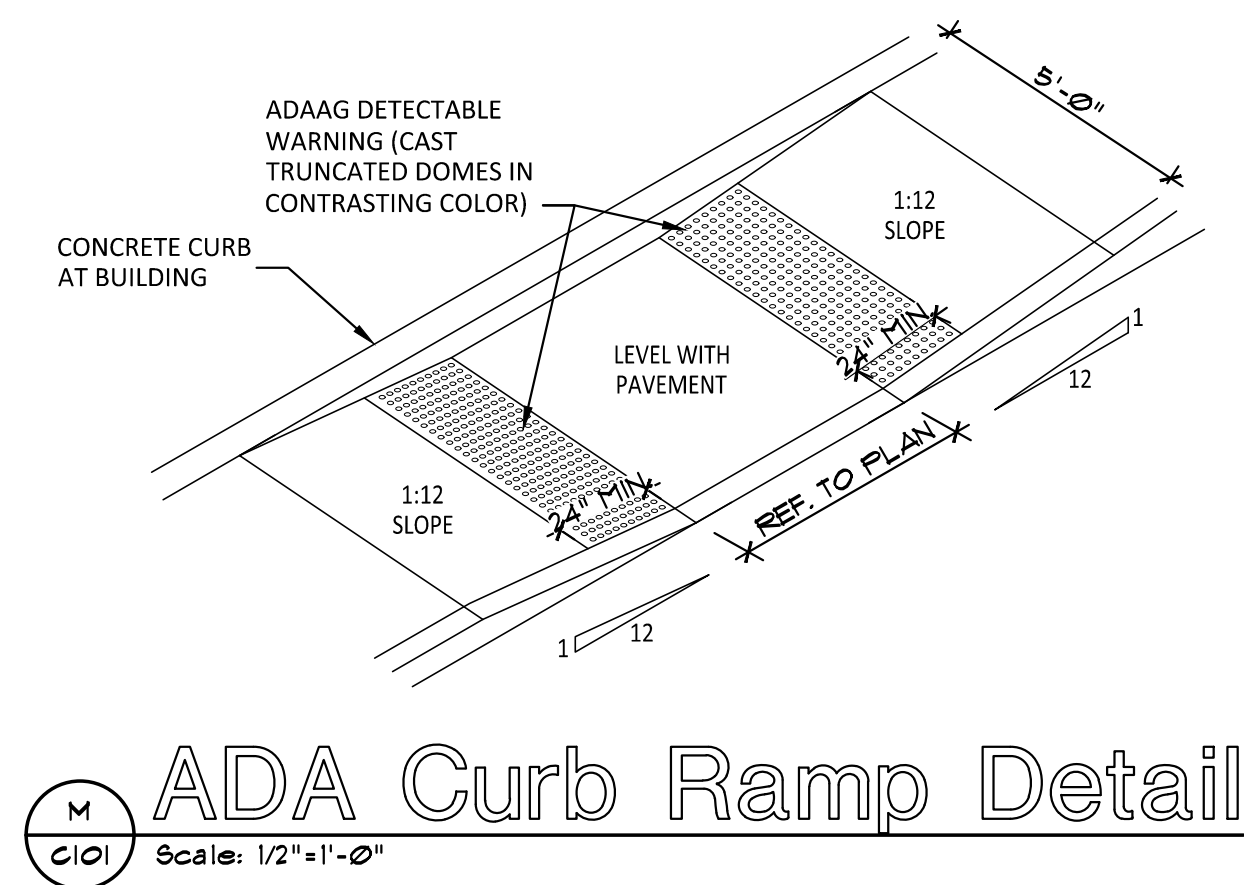
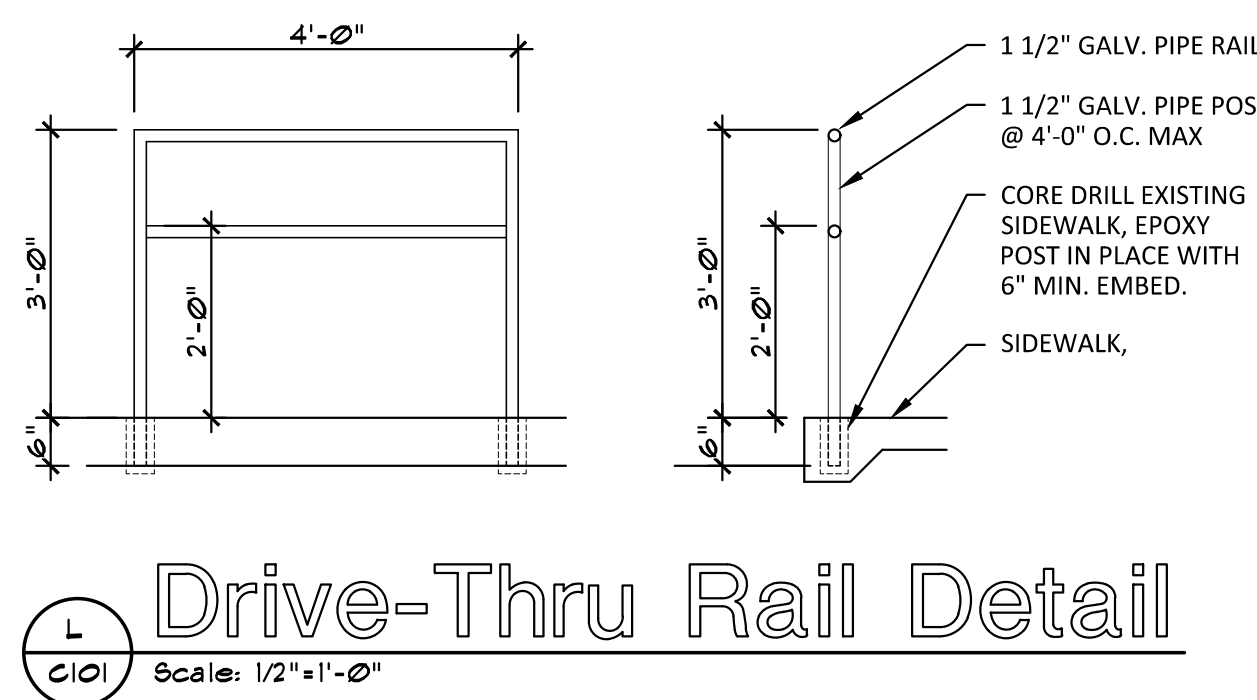
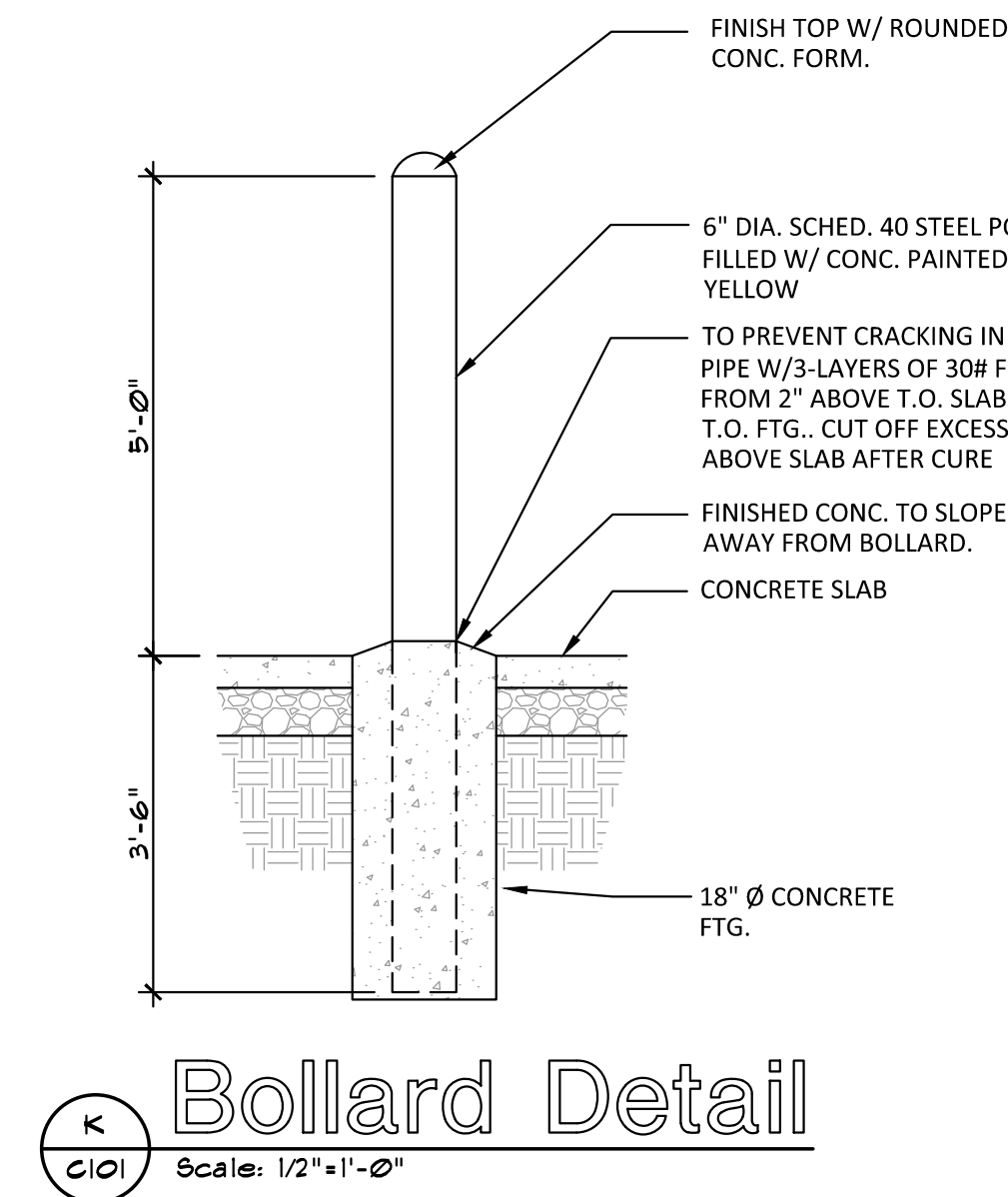
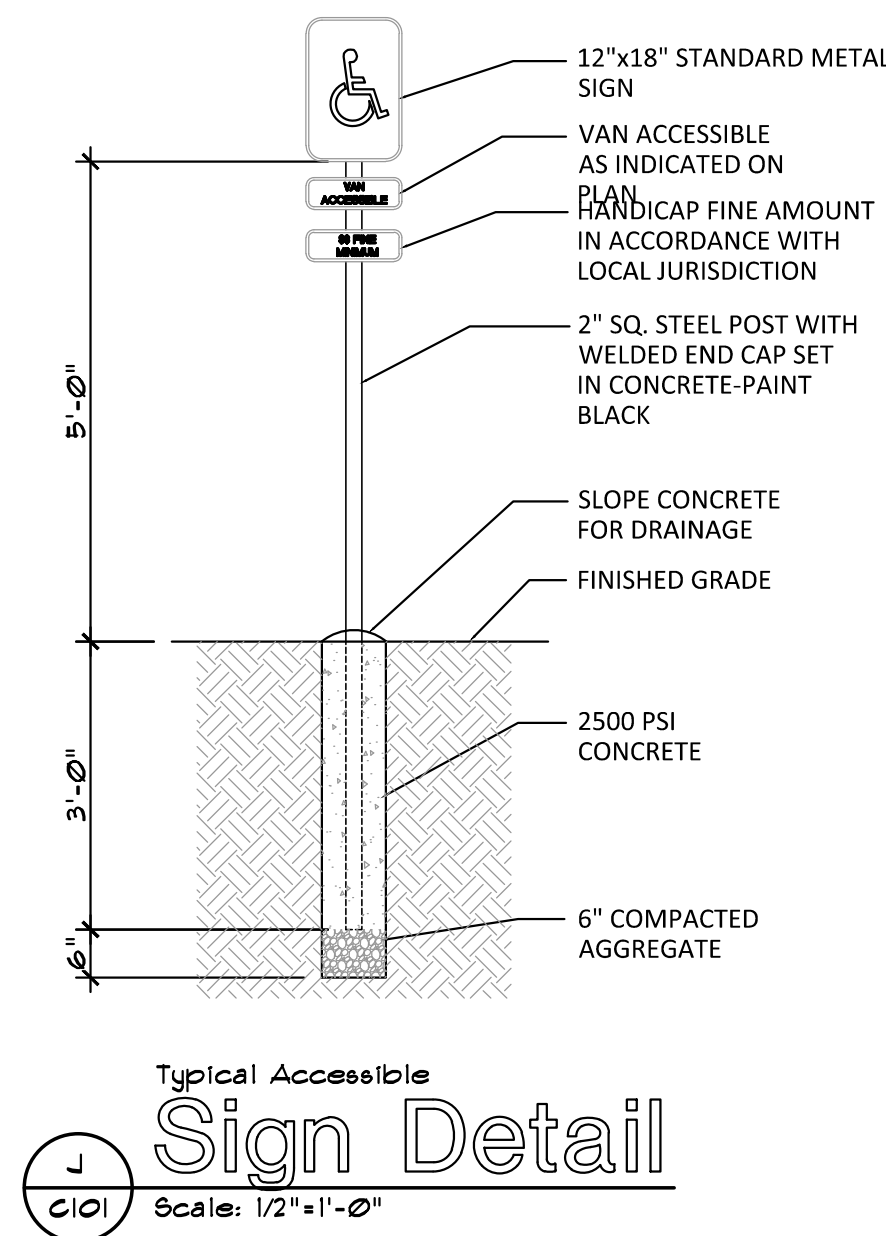
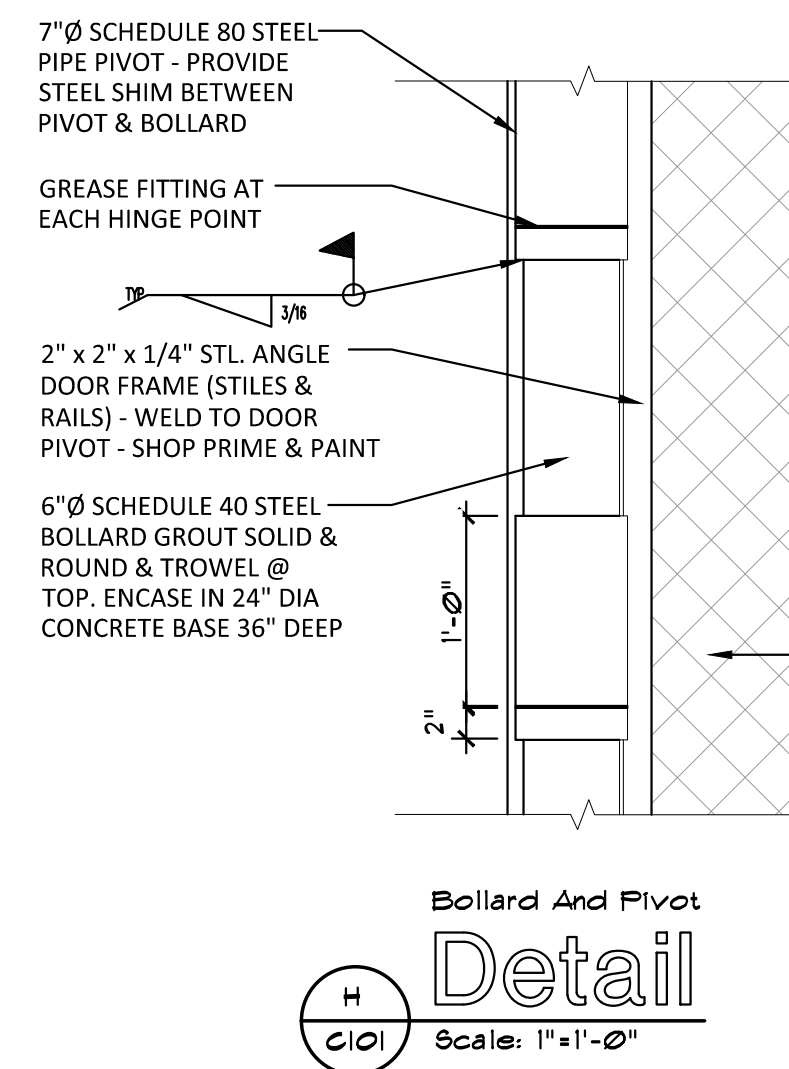
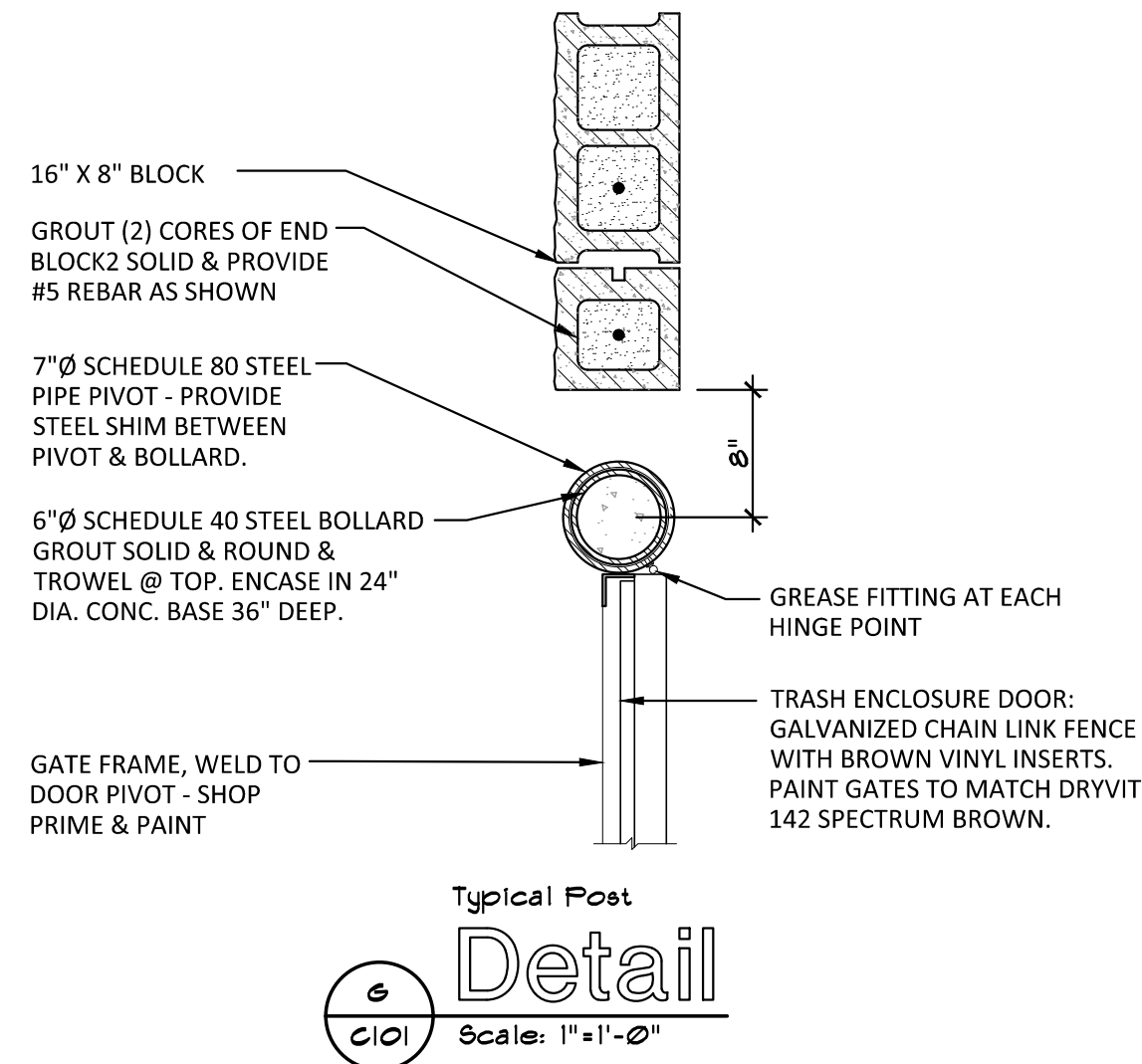
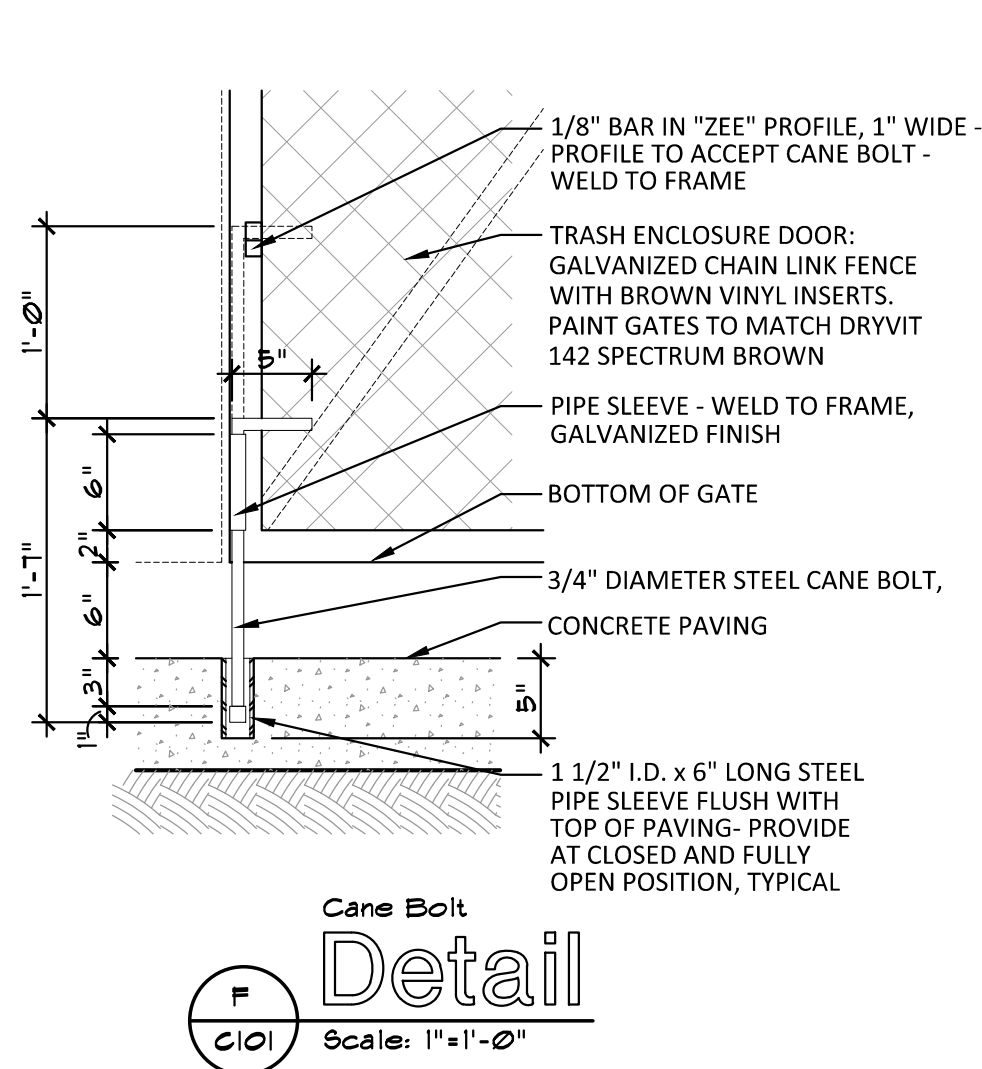
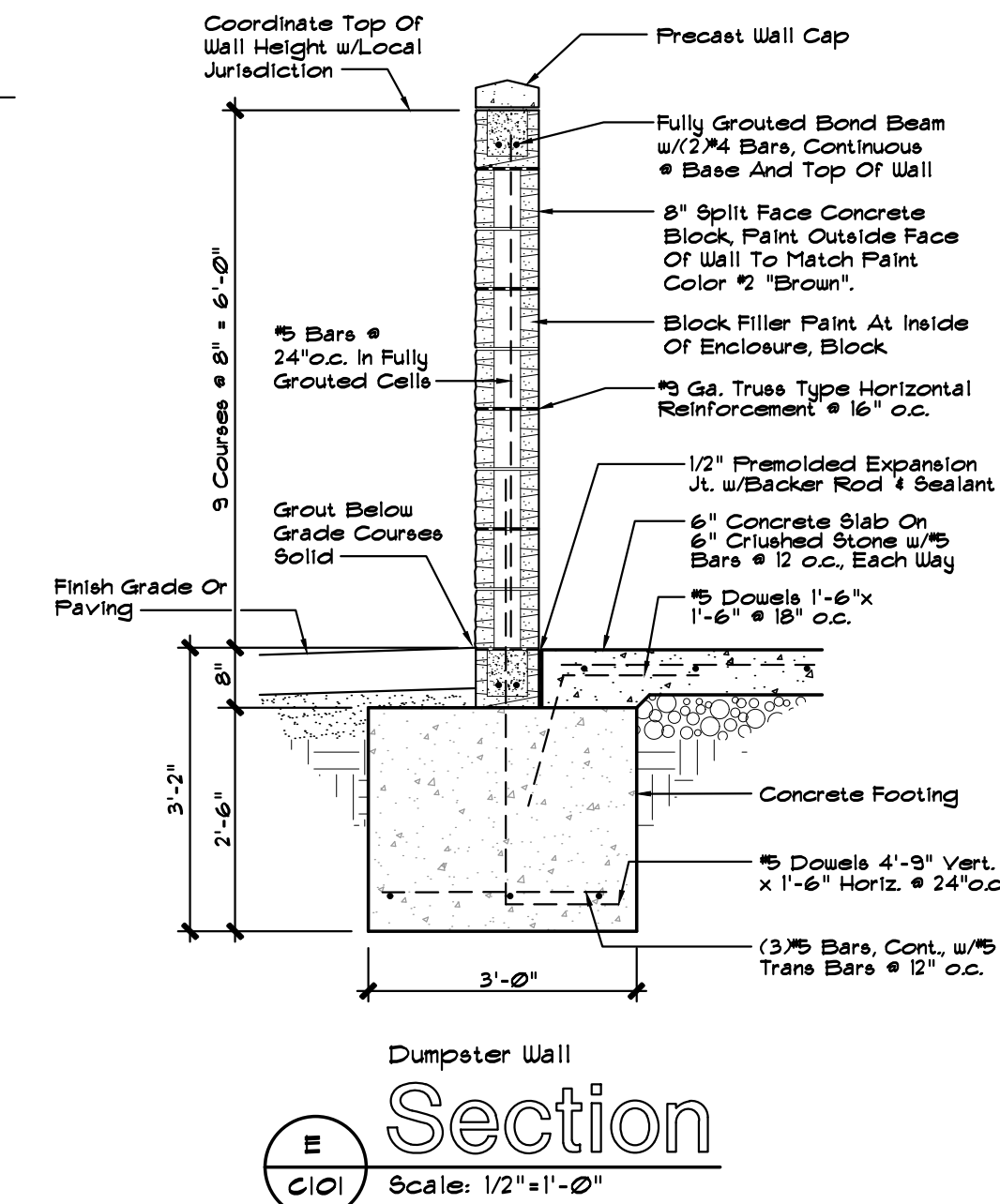
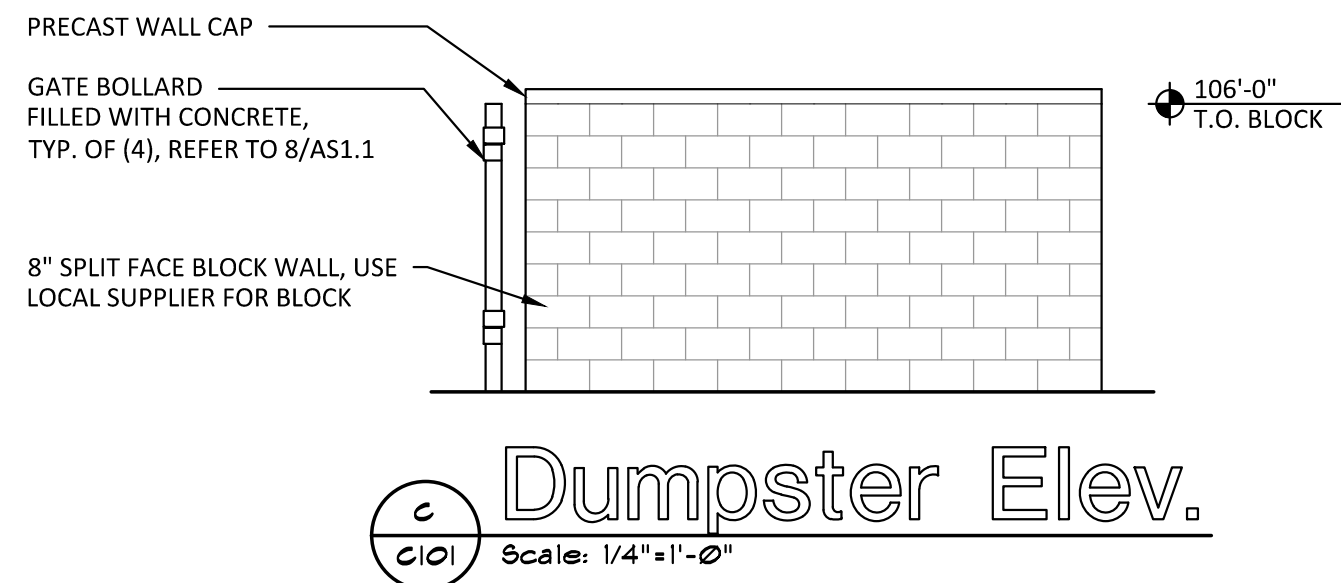
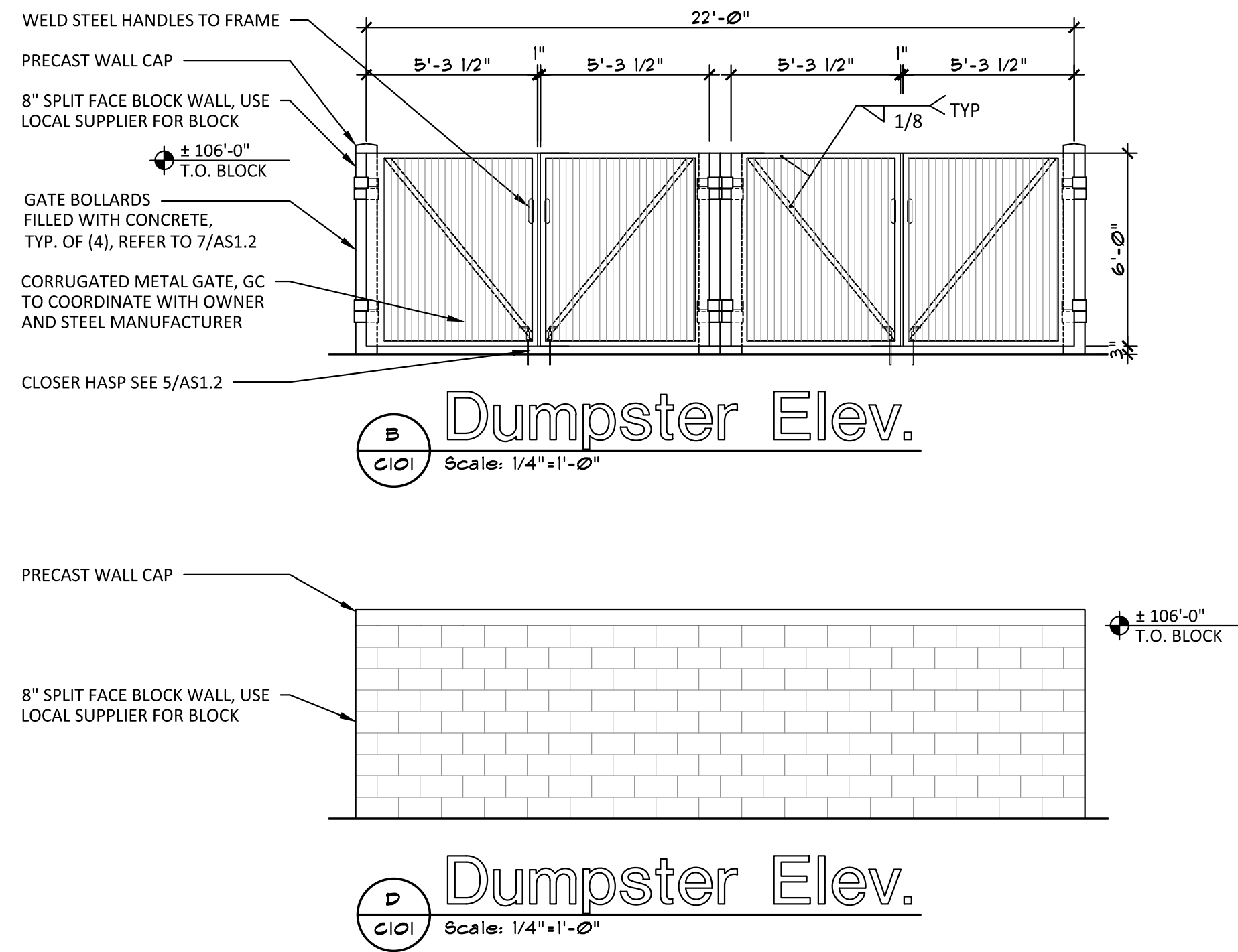
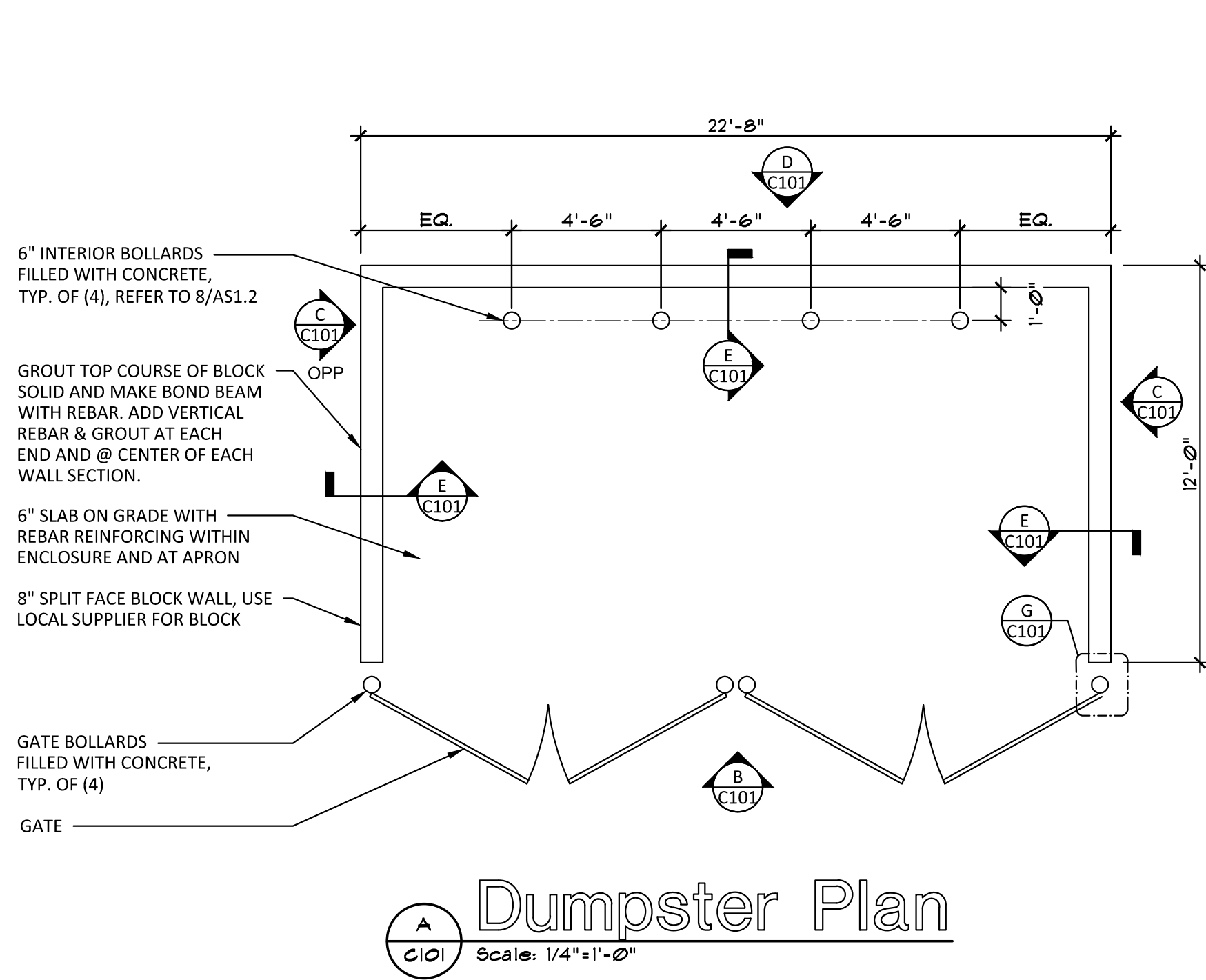
SHEET NAME

LANDSCAPE  
DETAILS

SHEET NO.

LP-501





## General Notes

- These Are Typical Site Details. All Project Specific Info. Needs To Be Coordinated With The G.C., Civil Engineer, Owner And The Soils Investigation Report.
- Dumpster Details Are Intended For Reference Only. Civil Engineer To Show Dumpster Location With All Necessary Dimensions And Details On Their Respective Sheets.

## Pole Base Notes

- ELECTRICAL CONDUIT, REFER TO ELECTRICAL DRAWINGS.
- CONCRETE PIER, REFER TO STRUCTURAL DRAWINGS.
- PROVIDE GROUND LUG IN BASED BOLTED TO BASE PLATE. REFER TO STRUCTURAL DRAWINGS.
- BASE COVER OVER GALVANIZED WASHERS, NUTS AND LOCKNUTS. REFER TO STRUCTURAL DRAWINGS.
- GROUND CLAMP, REFER TO ELECTRICAL DRAWINGS.
- GROUND WIRE, REFER TO ELECTRICAL DRAWINGS.
- GALVANIZED ANCHOR BOLTS, REFER TO STRUCTURAL DRAWINGS.
- TIE LOOPS, REFER TO STRUCTURAL DRAWINGS.
- VERTICAL REBAR, REFER TO STRUCTURAL DRAWINGS.
- NON-SHRINK GROUT, REFER TO STRUCTURAL DRAWINGS.

Christopher W. White  
Architect  
5801 E. 41st St., Suite 712  
Tulsa, Oklahoma

10-29-21

Revisions:

White Design Group, P.C.  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

Arby's - 1632 AR-25 Bypass

Arkansas

Heber Springs.

Sheet Content  
Dumpster Plan,  
Dumpster Elevations,  
Section, Dumpster  
Details, Site Plan  
Details, General Notes

Sheet Number  
C101  
Date: 10-29-21

Revisions:

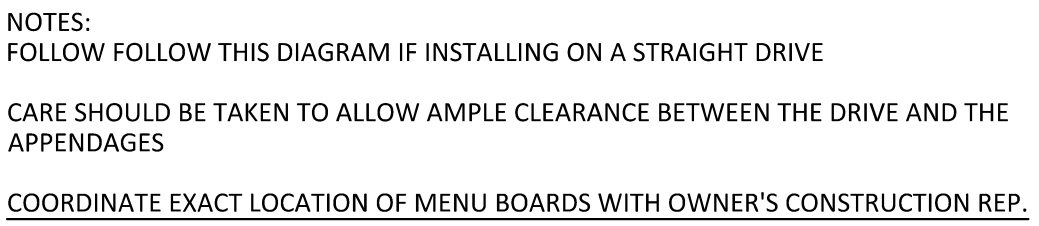
Arkansas

Heber Springs,

Drive-Thru Plan, Canopy  
Detail, General Notes,  
Drive-Thru Menu System  
Notes

## C102

**Date: 10-29-21**



THE DRIVE THRU CANOPY SYSTEM IS A PRE-FABRICATED UNIT. THE CANOPY WILL BE PROVIDED BY OTHER AND INSTALLED BY THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL PROVIDE THE CONCRETE FOUNDATION. COORDINATE THE EXACT LOCATION WITH THE SITE PLAN AND STRUCTURAL DRAWINGS. THE GENERAL CONTRACTOR SHALL PROVIDE ALL REQUIRED CONDUIT FOR POWER/COMMUNICATION WIRING AND MAKE ALL FINAL CONNECTIONS TO THE CANOPY.

THESE ARE TYPICAL MENU BOARD DETAILS. THEY HAVE BEEN SUPPLIED BY ARBY'S RESTAURANT GROUP FOR INFORMATIONAL PURPOSES ONLY. THEY DO NOT TAKE THE PLACE OF SHOP DRAWINGS THAT SHOULD BE SUBMITTED BY THE CONTRACTOR/MANUFACTURER THAT IS RESPONSIBLE FOR THE SITE SPECIFIC PROJECT. ALL PROJECT SPECIFIC INFORMATION NEEDS TO BE COORDINATED WITH THE G.C., CIVIL ENGINEER, OWNER AND THE SOILS INVESTIGATION REPORT.



## Canopy Detail

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

- A. THESE ARE TYPICAL SITE DETAILS. ALL PROJECT SPECIFIC INFORMATION NEEDS TO BE COORDINATED WITH THE G.C., CIVIL ENGINEER, OWNER AND THE SOILS INVESTIGATION REPORT.
- B. THE MENU BOARD AND CANOPY POSTS DETAILS ARE FOR REFERENCE ONLY. SIGNAGE VENDOR SHALL PROVIDE SHOP DRAWINGS AND MAKE THEIR OWN PERMIT SUBMITTAL.
- C. FOUNDATION INFORMATION SHOWN IN DETAILS IS FOR REFERENCE ONLY. G.C. TO COORDINATE FINAL SIZE WITH SIGNAGE VENDOR AND ENGINEER OF RECORD.

NOTE: MENU BOARD SUPPLIED BY OWNER, ASSEMBLED AND INSTALLED BY G.C.

### BOARD SPECIFICATIONS:

OVERALL LIGHT BOX SIZE:	21-1/8"W X 8.50"D X 49-1/4"H
OVERALL SIZE WITH BASE:	18-7/8"W (BASE) X 7"D X 72"H
SHIPPING WEIGHT:	65 LBS. (PREVIEW BOARD)
	23 LBS. / 11 LBS (POLE MOUNT/BASE FOR POLE)
	15 LBS. (BRACKET MOUNT)

### SYSTEM BASICS:

1. THE SYSTEM IS COMPRISED OF ONE LIGHT BOX WITH THE OPTION OF MOUNTING IT THREE DIFFERENT WAYS. IT CAN BE MOUNTED AS A FREESTANDING PREVIEW BOARD WITH OPTIONAL PEDESTAL BASE AS AN APPENDAGE PREVIEW BOARD WITH AVAILABLE HARDWARE OR AS A WALL MOUNTED PREVIEW BOARD.
2. EACH SYSTEM IS DESIGNED FOR EASY TRANS-LITE REMOVAL USING TWO SEPARATE DOORS. THE PANEL OPTIONS, (TWO MINI TRANSPARENCIES OR ONE LARGE TRANSPARENCY PANEL) LIFT AND DROP INTO THE CABINET WITH EASE.
3. TRANS-LITE SIZES:  
FULL TRANS-LITE IS 15.75"W X 21.81"H  
MINI TRANS-LITE IS 15.50"W X 10.50"W

## ELECTRICAL INFORMATION:

THE SYSTEM IS POWERED BY 110 VOLTS, 60 HERTZ ON A BASIC 15 AMP CIRCUIT.  
BALAST REPLACEMENT: (1) POWER LIGHTING #8G3900W RAPID START 800MA 1.6 AMPS  
LAMP REPLACEMENT: (2) F42T12/D/HO/42- 55 WATT FLUORESCENT

**BASIC CONSTRUCTION:**

LIGHT BOX:	ROTO MOLDED POLYETHYLENE ENCLOSURE
DOOR:	FORMED SHEET METAL POWDER PAINTED, HINGED DOWN ENTIRE LENGTH. WINDOWS ARE NON-GLARE ACRYLIC 1/8" THICK WITH ALLEN WRENCH MOUNTED SCREWS.
MENU PANEL:	FABRICATED HEAT AND LIGHT RESISTANT ACRYLIC PLASTIC
DOOR:	ROTO-MOLDED POLYETHYLENE

SEE MANUFACTURER'S INSTALLATION INSTRUCTIONS (BY HOWARD COMPANY, INC.)  
(ALTERNATE BY VISUAL GRAPHICS SYSTEMS INC.)

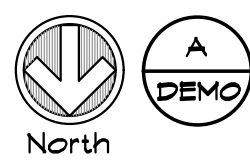
**Revisions:**

Arkansas

Heber Springs,

Demolition Plan,  
Demolition Notes

DEMO



Scale:  $1/4" = 1' - 0"$

1. The Demolition Contractor Shall Not Remove Any Structural Load Bearing Walls, Shear Walls, Etc. Without Prior Approval Of The Project Structural Engineer. Verify All Interior Walls As Non-Load Bearing Or Shear Walls Prior To Removal.
2. The Project Structural Engineer Shall Be Notified Upon Uncovering Of Any Potential Structural Framing Prior To Removal. Removal Only Upon Permission Of The Project Structural Engineer.
3. **FIELD VERIFICATION REQUIRED** - The Contractor Shall Advise The Architect & Structural Engineer Of Any Structural Shear Walls That Extend To The Roof Trusses With Plywood Covering And Tie-Down. Remove Only Upon Approval From The Structural Engineer.
4. The Contractor Shall Verify Any Items That Are To Be Retained For The Owner Prior To Removal From The Site.



## Interior Finish Notes

1. Install Faux Ceramic Wainscot Panel Between New Base Tiles And Chair Rail On All Walls Throughout Public Areas. Provide Owner Supplied 'J' Trim Above Base Tile And Below Wainscot Chair Rail Trim, Typical
2. Provide New Inspire Wall Coverings Per Interior Elevations.
3. Provide New Inspire Floor & Base Tiles Throughout Dining Area And Restrooms. Refer: Interior Elevations & Floor Finish Plan.
4. Patch And Repair Wall And Floor Finishes As Required Throughout Kitchen.
5. Replace Existing Receptacles To Match Adjacent Surfaces Throughout Public Spaces As Required. No White Outlets On Dark Surfaces.
6. The Contractor Shall Prepare Raised Window Sill For New Solid Surface Sill To Be Provided & Installed By Furniture Vendor In Public Areas Where Applicable. Refer: Interior Elevations.

## Keynote Schedule

Mark	Description
1	New 4'x10' Prefabricated Soffit With Wood Plank Finish. Supplied And Installed By Furniture Vendor.
2	New Digital Menuboards To Be Installed By Owners Vendor. Contractor's Electrician To Provide Dedicated Circuit w/Continuous Power For Menuboards. Paint New Bulkhead Wall "White". Refer: Interior Elevations And Interior Finish Notes.
3	New Header, Paint, Refer: Interior Elevations.
4	Existing Glazing Unit To Remain, Typical. Replace Broken Seal Units, Typical.
5	New Restroom, Restroom Fixtures And Accessories. Refer: Restroom Details Sheet A104, Verify w/Owner's Construction Manager, Typical.
6	Provide New Faux Red Subway Tile Panels On Wall At Indicated Locations. Refer: Interior Elevations.
7	New Service Counter At 2'-10" AFF. Provided And Installed By Furniture Vendor. Refer: Section 4 Interior Elevations.
8	New ADA Compliant 3'-6" x 10'-0" Condiment Counter With Countertop At 2'-10" AFF. Provided And Installed By Furniture Vendor. Refer: Interior Elevations.
9	New Production Table, Refer: Equipment Plan And Schedule.
10	Provide ADA Compliant Exit Signage. Refer: Interior Elevations.
11	New Tables And Seating Provided And Installed By Furniture Vendor. New Chairs And Barstools To Be Provided By Owner, Installed By Contractor.
12	Install Owner Provided Drive-Thru Window, Refer: Equipment Plan And Schedule.
13	Contractor To Install Owner Provided White Faux Tile Panels Over Wall Finish Where Indicated.
14	New Entrance Canopy. Provided And Installed By Canopy Manufacturer. Contractor To Provide New Support Blocking And Coordinate Installation.
15	New Accessible Baby Changing Station Provided By Owner, Installed By Contractor, Refer To Interior Elevations And Restroom Details.
16	6" Dia. Steel Pipe Columns, Prime, Prepare And Paint. Refer: Exterior Finish Notes.
17	Provide ADA Compliant Signage, Refer: Interior Elevations.
18	Line Of New 2'-0"H. Prefabricated Metal Signage Band, Red. Provided And Installed By Signage Vendor. Contractor To Coordinate Installation.
19	New EIFS, w/Brick Stencil Pattern, Color #1, Over 1 1/2" Rigid Insulation Over Existing Brick Veneer. Furr-Out w/2x Framing & 1/2" Sheathing Above Brick Line. Refer: Building Elevations.
20	Existing Glazing Unit To Be Modified, Refer: Building Elevations.
21	New 2'-0"H. Prefab. Drive-Thru Canopy, Red. Provided & Installed By Canopy Manufacturer. Contractor To Provide New Support Blocking & Coordinate Installation.
22	New Divider Half Wall To 4'-0" AFF, 2x4 Wood Studs @ 16" o.c., Provide In Wall Steel Supports As Required. Provide Wood Plank Cladding, Refer: Interior Elevations.
23	New Divider Wall To Ceiling, 2x4 Wood Studs @ 16" o.c., Provide In Wall Steel Supports As Required. Provide Wood Plank Cladding, Refer: Interior Elevations.
24	New Arby's 36 1/4" Carousel 'A' Sign. Contractor To Provide New Electrical. Verify Location w/Owner. Center Between Soda Machine And Wall, And Center Vertically Between The Top Of Condiment Counter & Bottom Of Existing Gypsum Board Soffit.
25	New Brushed Stainless Steel Apron (Exterior) And Sill (Interior) At Drive Thru Service Window.
26	New Solid Surface Window Sill, Provided And Installed By Furniture Vendor. Contractor To Coordinate Installation.
27	New Type I Ventilation Hood w/Ansul System. Entire Assembly To Meet All Applicable Codes Including Required Distances To Combustible Construction, Etc.
28	New 4'x10' Prefabricated Soffit Element With Plastic Laminate Finish, Red. Supplied And Installed By Furniture Vendor.
29	Provide Stainless Steel Sheet Over 5/8" Cement Board On Metal Stud Furring Behind Hood. Extend Stainless Steel Sheet Width As Indicated From Slab To Top Of Wall. Provide 5/8" Cement Board On Metal Stud Framing To Achieve Non-Combustible Requirements In Exterior Wall Behind Hood. No Non-Combustible Materials Allowed Within 24" Of Vent Hood.
30	New EIFS, Over 1 1/2" Rigid Insul. Over Tyvek Stucco Wrap Over 1/2" Exterior Sheathing Over Existing Masonry Or New 2x6 Wood Framing. Refer: Elevations.

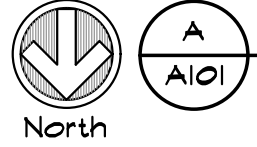
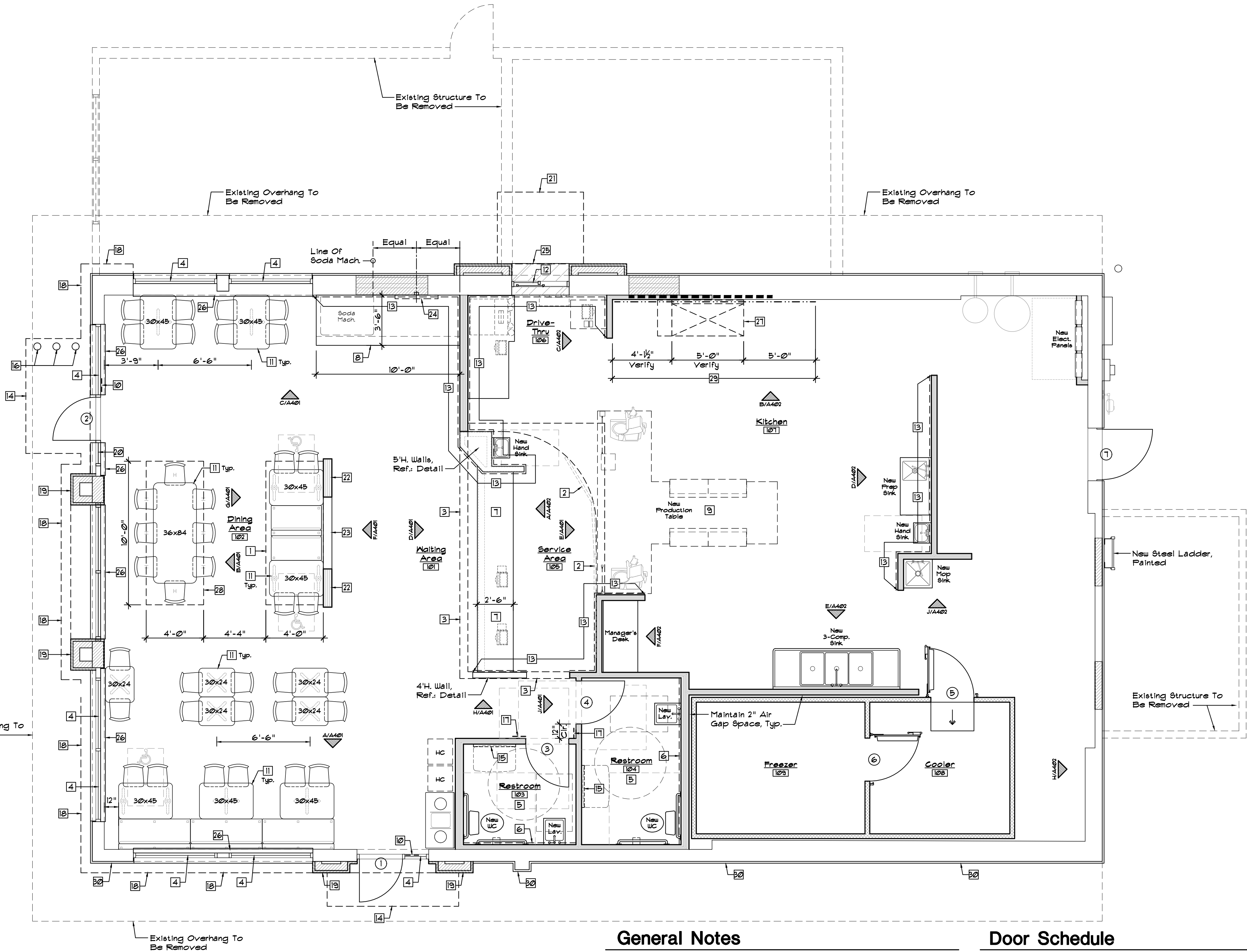
### Sheet Content

Floor Plan, Accessibility Requirements, Interior Finish Notes, ADA Guidelines For Doors, Door Notes, Door Schedule, General Notes, Field Verification Note

### Sheet Number

A101

Date: 10-29-21



## Floor Plan

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

## Legend

- Existing CMU Exterior Wall To Remain w/EIFS, Over 1 1/2" Rigid Insul. Over 1/2" Ext. Sheathing
- New Prefab. Walk-In Freezer/ Cooler Unit Walls
- New Wall Partition - Refer: Framing Floor Plan
- New Exterior Wall - 2x6 Wood Studs @ 16" o.c. Min.

- Existing CMU Exterior Load Bearing Wall w/5/8" Cement Board On Metal Stud Furring, No Combustible Mat's Allowed Within 24" Of Vent Hood (Verify Existing Construction)
- Provide 30 GA. Brushed Stainless Steel Panels With Crimped Edges Where Indicated.

### NOTES:

1. Provide Batt Insulation, Continuous In Walls Of Rooms 103 & 104 For Sound Attenuation.
2. Provide Firestopping In Interior Walls At Ceiling Level.
3. Provide Cement Board To 24" AFF. In Kitchen Areas, Restrooms & UNO.
4. Provide Cement Board To 34" AFF. In Dining Areas Where Wainscots Are Indicated.

## General Notes

1. Maintain Structural Integrity Of All Existing Shear Walls, Report Any Conflicts To Architect Prior To Construction.
2. Provide Moisture Resistant Backerboard At All Locations Where Ceramic Wall Tile Is Used.
3. Wood Trim Note - Ease All Edges & Sand As Required In Order To Achieve The Highest Quality Of Finished Woodworking. Provide Samples For Approval Prior To Installation.
4. General Contractor To Inspect Existing Dining Room Window Head, Jamb & Sill Flashing & Repair Or Replace As Required.
5. Verify All Existing Dimensions And Conditions Prior To Starting Of Any Construction.

## ADA Guidelines For Doors

1. Door Openings Shall Provide A Clear Width Of 32 Inches Minimum.
2. Thresholds, If Provided At Doorways, Shall Be 1/2 Inch High, Maximum. Raised Thresholds & Changes In Level @ Doorways Shall Comply With ADA Standard Sections 302.303.
3. Door Closers Shall Be Adjusted So That From An Open Position Of 90 Degrees, The Time Required To Move The Door To A Position Of 12 Degrees From The Latch Is 5 Seconds Minimum.
4. The Allowable Opening Force For Accessible Doors Shall Be 5 Lbs. Max.
5. Provide 10" High Bottom Rail On All New Storefront Glass Doors.

## Door Notes

1. Contractor To Replace All ADA Closers & Thresholds On All Entry And Bathroom Doors. Verify ADA Compliance.
2. Interior Signage - Contractor To Install New Owner Provided Men, Women & Occupancy Signage. Restroom Signs To Be Mounted On The Latch Side Of Restroom Doors, Mounted 60 Inches To The Center Of The Signs From The Finished Floor.
3. Repair And Reseal All Existing Exterior Door Thresholds, Provide New Weather Stripping As Required.
4. Provide Door Stops At All Exterior Doors To Prevent Damage.
5. The Contractor Shall Verify All Door Sizes Prior To Starting Construction.
6. The Contractor Shall Verify All Doors Indicated To Be Replaced With New, With Owner Prior To Purchasing.
7. Contractor To Re-Use Existing Door Frames Where Possible. Verify Any Frames Needing To Be Replaced With Owners Construction Manager.

## Door Schedule

1. New 3'-0" x 1'-0" Storefront Glass Door Into Existing Frame. Provide ADA Closer, Push/Pull, Hardware, Threshold And Panic Hardware. Match Color Of Existing Storefront Framing. Refer: Door Notes & ADA Guidelines For Doors. Verify Size And Color With Owner. Lockable.
2. New 3'-0" x 1'-0" Storefront Glass Door Into Existing Frame. Provide ADA Closer, Push/Pull, Hardware, Threshold And Panic Hardware. Match Color Of Existing Storefront Framing. Refer: Door Notes & ADA Guidelines For Doors. Verify Size And Color With Owner. Lockable.
3. New 3'-0" x 1'-0" S.C. Wood Door Stained To Match Lobby Trim. New Steel Frame, Paint, Refer: Interior Finish Notes. Provide Sanitgrasp Door Pull On Full Side, Bolt Through Door To Steel Push Plate. Provide ADA Compliant Hardware.
4. New 3'-0" x 1'-0" S.C. Wood Door Stained To Match Lobby Trim. New Steel Frame, Paint, Refer: Interior Finish Notes. Provide Sanitgrasp Door Pull On Full Side, Bolt Through Door To Steel Push Plate. Provide ADA Compliant Hardware.
5. New Prefabricated Cooler Door.
6. New Prefabricated Freezer Door.
7. New 3'-6" x 1'-0" Insulated Metal Door. Verify ADA Closer & Threshold. Verify Existing Panic Hardware. Paint Exterior & Interior To Match Adjacent Surfaces.

### Notes:

Refer: To Hardware Schedule For Typical Door Hardware.

### POST TENSIONED SLAB NOTE:

The Contractor Shall Verify That The Existing Conc. Floor Slab Is Not A Post Tensioned Slab Prior To Starting Of Construction. Under No Circumstances Are Any Post Tensioned Reinforcing Cables To Be Cut Or Damaged, Notify The Architect And Engineer If The Existing Floor Slab Has Post Tensioned Reinforcing, Etc.



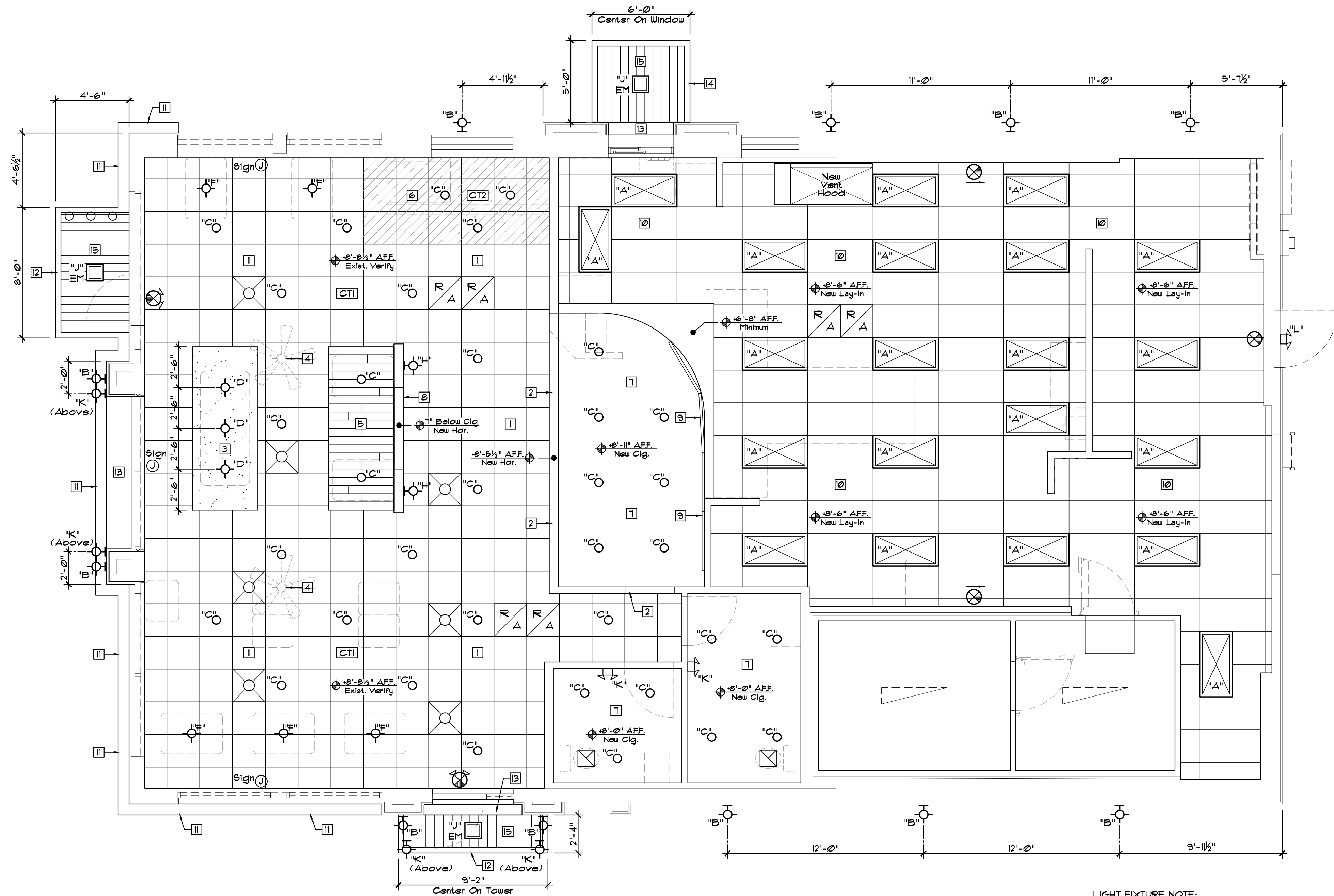


- |    |                                                                                                                                                    |     |                                                                                               |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------|
| 1. | 2x6 WD. STUD WALL @ 16" O.C.                                                                                                                       | 6.  | FURR OUT EXTERIOR WALL WITH 2x4 WOOD STUDS FOR WATER PIPING.                                  |
| 2. | PARTIAL HEIGHT WALL. INSTALL UNISTRUT AT EACH END AND 4'-0" O.C. MAX. REFER TO DETAIL 6/A01.                                                       | 7.  | PROVIDE IN-WALL CHASE FOR SODA LINES. WRAP OPENING WITH FRP. REFER TO PLUMBING DRAWINGS.      |
| 3. | 2 x 4 FUR OUT WALL AT ELECTRIC PANELS, REFER TO ELECTRICAL DRAWINGS.                                                                               | 8.  | PARTIAL HEIGHT WALL LOCATION UNDER SERVICE COUNTER. REFER TO COUNTER SECTION.                 |
| 4. | INSTALL TELEVISION AND MOUNTING BRACKET. PROVIDE IN-WALL BLOCKING. COORDINATE FINAL LOCATION WITH DECOR. VERIFY WITH OWNER DURING BIDDING PROCESS. | 9.  | PARTIAL HEIGHT WALL. INSTALL UNISTRUT AT EACH END AND 4'-0" O.C. MAX. REFER TO DETAIL 6/A102. |
| 5. | PREPARE STAINLESS STEEL SHEET OVER 1/2" CEMENT BOARD                                                                                               | 10. | PARTIAL HEIGHT WALLS. REFER TO DETAIL 8/A102.                                                 |

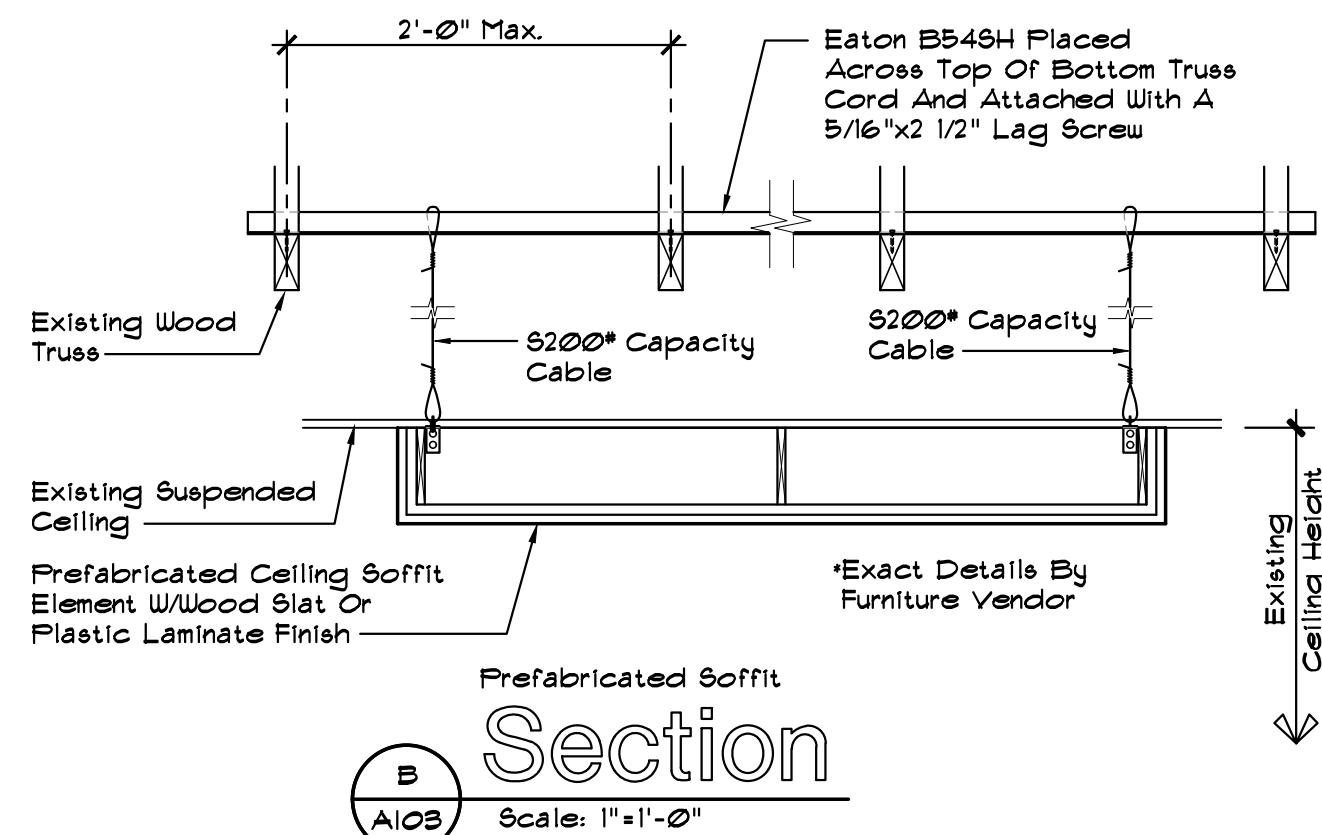
- |    |                                                                                                                                                                                                                                                                                                                          |     |                                                                                                                                                                                                                        |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A. | VERIFY ALL UNMARKED WALLS WITH ARCHITECT.                                                                                                                                                                                                                                                                                | R.  | VERIFY ALL EXTERIOR WALLS AND REFER TO STRUCTURAL DRAWINGS FOR STUD TYPE AT HOOD.                                                                                                                                      |
| B. | GENERAL CONTRACTOR TO PROVIDE ALL WALLS INDICATED ON FLOOR PLAN.                                                                                                                                                                                                                                                         | S.  | ALL INTERIOR WALLS ARE 3 1/2" WOOD STUDS U.N.O.                                                                                                                                                                        |
| C. | PROVIDE 2x6 WOOD BLOCKING IN PARTITIONS TO SUPPORT ALL CASEWORK, DOOR WALL STOPS, ELECTRICAL AND MECHANICAL DEVICES, AND FIRE EXTINGUISHERS.                                                                                                                                                                             | T.  | VERIFY LOCATION OF ALL EQUIPMENT AND VERIFY SIZES, WALL OPENINGS, AND SUPPORT REQUIREMENTS WITH MANUFACTURER. PROVIDE REINFORCEMENT AS REQUIRED BY MANUFACTURER.                                                       |
| D. | ELECTRICAL CONTRACTOR TO COORDINATE LOCATIONS OF MECHANICAL EQUIPMENT AND FIRE PROTECTION PRIOR TO STARTING WORK.                                                                                                                                                                                                        | U.  | ALL DOORS TO BE LOCATED 4" FROM ADJACENT WALL OR COUNTER, OR CENTERED IN WALL UNLESS OTHERWISE NOTED.                                                                                                                  |
| E. | GENERAL CONTRACTOR TO PATCH ALL ROOF PENETRATIONS MADE BY THIS PROJECT WITH OWNER'S ROOFING CONTRACTOR.                                                                                                                                                                                                                  | V.  | ALL WALLS TO RECEIVE LAMINATE OR WOOD PLANKS MUST HAVE PLYWOOD BACKING IN LIEU OF GYP. BD. COORDINATE LOCATION WITH INTERIOR FINISHERS.                                                                                |
| F. | GENERAL CONTRACTOR TO PROVIDE ALL ROOF PATCHING AROUND MECHANICAL EQUIPMENT. VERIFY ROOF WARRANTY REQUIREMENTS WITH OWNER.                                                                                                                                                                                               | W.  | DO NOT INSTALL PLYWOOD ON WALLS TO RECEIVE TILE. REFER TO WALL TYPES FOR SPECIFIC SHEATHING REQUIREMENTS.                                                                                                              |
| G. | SEE WALL SECTIONS AND DETAILS.                                                                                                                                                                                                                                                                                           | X.  | 2x2 FLOOR HEIGHT STAINLESS STEEL CORNER GUARDS ON ALL OUTSIDE CORNERS IN KITCHEN, PROVIDED AND INSTALLED BY GC.                                                                                                        |
| H. | SEE INTERIOR FINISH NOTES FOR FINISH SPECIFICATIONS AND PLAN.                                                                                                                                                                                                                                                            | Y.  | THE GENERAL CONTRACTOR IS TO VERIFY SIZE, QUANTITY AND LOCATION OF FIRE EXTINGUISHERS WITH LOCAL FIRE MARSHAL PRIOR TO INSTALLATION. REFER TO LIFE SAFETY PLAN.                                                        |
| I. | SEE SHEET A103 FOR REFLECTED CEILING PLAN.                                                                                                                                                                                                                                                                               | Z.  | 2x BLOCKING TO BE PROVIDED AT ALL SINKS, GRAB BARS, MIRRORS, DISPENSERS, AND HAND DRYERS PER MFR. SPECIFICATIONS.                                                                                                      |
| J. | SEE SHEET A101 FOR DOOR SCHEDULE.                                                                                                                                                                                                                                                                                        | AA. | DO NOT SCALE OFF PLANS, CALL THE ARCHITECT FOR ADDITIONAL DIMENSIONAL INFORMATION IF REQUIRED.                                                                                                                         |
| K. | VERIFY ALL OWNER SUPPLIED EQUIPMENT BEFORE ROUGH-INS ARE COMPLETED & GYP. BOARD IS INSTALLED.                                                                                                                                                                                                                            | AB. | WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS IN ALL CASES. G.C. SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO STARTING WORK. |
| L. | ELECTRICAL CONTRACTOR TO COORDINATE LIGHT FIXTURE LOCATIONS WITH MECHANICAL EQUIPMENT PRIOR TO INSTALLATION.                                                                                                                                                                                                             | AC. | ALL DIVIDER WALL ANGLES ARE 45°, 90° OR 180° U.N.O.                                                                                                                                                                    |
| M. | FRAMING CONTRACTOR TO COORDINATE FRAMING AROUND HVAC DUCTS, PIPES, CONDUITS AND OTHER ITEMS LOCATED ABOVE THE CEILING.                                                                                                                                                                                                   | AD. | G.C. IS TO LOCATE THERMOSTATS IN LOCATIONS THAT DO NOT INTERFERE WITH DECOR.                                                                                                                                           |
| N. | THERMAL AND ACOUSTICAL INSULATION IN FLOORS, WALLS AND CEILING TO COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS FOR FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS.                                                                                                                                                          | AE. | G.C. IS TO REFER TO INTERIOR ELEVATIONS FOR TYPICAL WALL FINISHES.                                                                                                                                                     |
| O. | ALL SHEATHING THAT IS TO RECEIVE FULLY ADHERED ROOF MEMBRANE IS TO BE ATTACHED TO METAL FRAMING BY THE USE OF NON-REVERSING SCREWS. NO NAIL FASTENERS ARE PERMITTED.                                                                                                                                                     | AF. | REFER TO FINISH SCHEDULE FOR EXTENT OF FINISHES AND FIXTURE WORK.                                                                                                                                                      |
| P. | PROVIDE TACTILE EXIT SIGNAGE AT EACH DOOR SERVING AS EXIT DISCHARGE POINTS.                                                                                                                                                                                                                                              | AG. | PROVIDE 1/2" PLYWOOD ON WALLS TO RECEIVE FRP.                                                                                                                                                                          |
| Q. | ALL MATERIALS SPECIFIED ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. CONTRACTOR IS TO CONSTRUCT THE PROJECT ACCORDING TO THE CONTRACT DOCUMENTS. ANY DEVIATION FROM THE INTENT OF THE CONTRACT DOCUMENTS WITHOUT ARCHITECT OR OWNER APPROVAL ARE AT THE CONTRACTOR'S OWN RISK. | AH. | ALL EXPOSED SHEATHING TO BE PAINTED IN DINING ROOM SHALL BE 1/2" GYP. BOARD.                                                                                                                                           |







Reflected Ceiling Plan  
North  
Scale: 1/4"=1'-0"



Section  
Scale: 1"=1'-0"

LIGHT FIXTURE NOTE:  
Refer To The Electrical Lighting  
Plan For All Light Fixture Types And  
Specification Information.

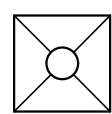
FIELD VERIFICATION NOTE:  
The Contractor And Furniture Vendor Shall Verify All  
Existing Conditions, Dimensions, Etc. And Report  
Any Discrepancies And/Or Conflicts With The  
Proposed Work To The Owner And Architect.

## Emergency Illumination Note

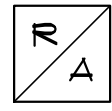
The Contractor Shall Provide Emergency Lights And Ballasts  
To Ensure 1 Footcandle Measured At The Floor For All Exit  
Access Passageways, And At Exterior Of All Egress Doorways.  
The Emergency Power System Shall Provide Power For A  
Duration Of Not Less Than 90 Minutes.

## General Notes

- The Contractor Shall Verify All Switching Types, Circulating  
Requirements And Switching Locations With Owner.
- All Lighting Fixtures To Be Provided By Owner, Installed  
By Contractor.
- The Contractor Shall Coordinate The Installation Of Owner  
Provided New Speakers In The Public Area Ceilings.  
Confirm With Owner.
- The Contractor Shall Coordinate The Installation Of Owner  
Provided New Building Signage. Relocate Or Provide  
J-Box And/Or Plywood Backing, Etc. As Required.
- Clean All Diffusers And Returns Prior To Painting.  
Relocate Any Existing Diffusers/Returns That Are In The  
Same Location As New Prefabricated Soffits.
- Light Fixtures That Protrude 4" Or More From The Wall  
Surface At The Base Of The Wall Shall Be Mounted 1"  
High Or Have The Walking Surface Below Restricted To  
Prevent Non-Compliance With ADA Protruding Objects  
Requirements.
- Replace Existing Public Space 2x2 Light Fixtures With  
New LED Recessed Can Fixtures. Verify Lighting  
Distribution With Owner - Add Or Relocated Fixtures As  
Owner Directs. Refer: Light Fixture Schedule.
- All Ceilings Over Foodservice Preparation Areas Shall  
Meet Local Health Department Requirements For  
Washability, Light Reflectance, Etc.



Supply Air Diffuser



Return Air Diffuser



Exhaust Fan

9'-6" AFF. Ceiling Height

- ① SIGN Outlet for Signage, Verify With Signage  
Contractor. Verify Exact Vertical And Horizontal  
Alignment For Signage.

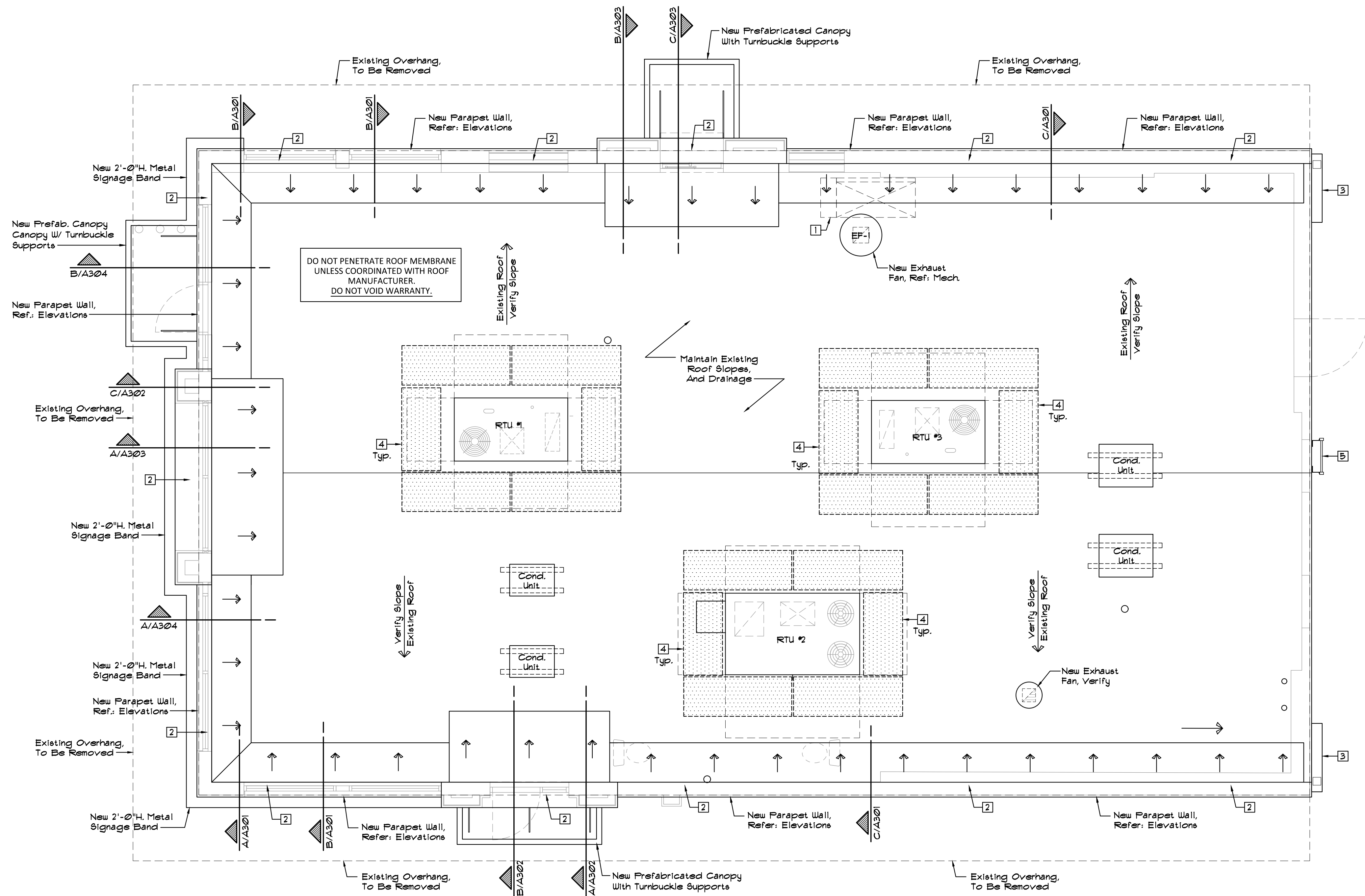
## RCP Notes

- CENTER ACOUSTIC CEILING SYSTEM GRID WITHIN EACH ROOM UNLESS  
NOTED OTHERWISE.
- SEE MECHANICAL AND ELECTRICAL SHEETS FOR HVAC DEVICE AND LIGHT  
FIXTURE LOCATIONS.
- EXPOSED INSULATION TO HAVE A FLAME SPREAD RATING OF 25 OR LESS &  
A SMOKE DEVELOPMENT RATING OF 450 OR LESS PER IBC 719.3
- CONCEALED INSULATION TO HAVE A FLAME SPREAD RATING OF 25 OR LESS  
& A SMOKE DEVELOPMENT RATING OF 450 OR LESS PER IBC 719.2
- MATERIALS IN PLENUM SPACES SHALL BE NONCOMBUSTIBLE OR SHALL  
HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE -  
DEVELOPED INDEX OF NOT MORE THAN 50 PER IMC 602.2.1.
- STUD CONTRACTOR TO COORDINATE FRAMING AROUND HVAC DUCTS,  
PIPES, CONDUITS AND OTHER ITEMS LOCATED ABOVE FINISHED CEILING.
- SEE ELECTRICAL DRAWINGS FOR SWITCHING AND CIRCUIT INFORMATION.
- REFER TO INTERIOR FINISH NOTES PRIOR TO FRAMING THE BULKHEAD  
OVER THE SEATING AREA. DIMENSIONS ARE SUBJECT TO CHANGE BASED  
ON SEATING LAYOUT.
- ALL EDGE TRACKS OF FRP WALLS ARE TO BE SEALED TO WALL AND ALL  
CEILING TILE PENETRATIONS TO HAVE TRIM ALONG EDGES, TYPICAL  
THROUGHOUT.
- REFER TO THIS SHEET FOR ALL DECORATIVE LIGHTING LOCATIONS AND  
DECORATIVE CEILING TREATMENTS. G.C. IS TO CONFIRM WITH OWNER IF  
THESE ITEMS ARE PROVIDED BY OWNER.
- REFER TO MECHANICAL DRAWINGS FOR DUCTWORK LAYOUT, SOFFIT  
DIMENSIONS AND CANOPY SIZES.

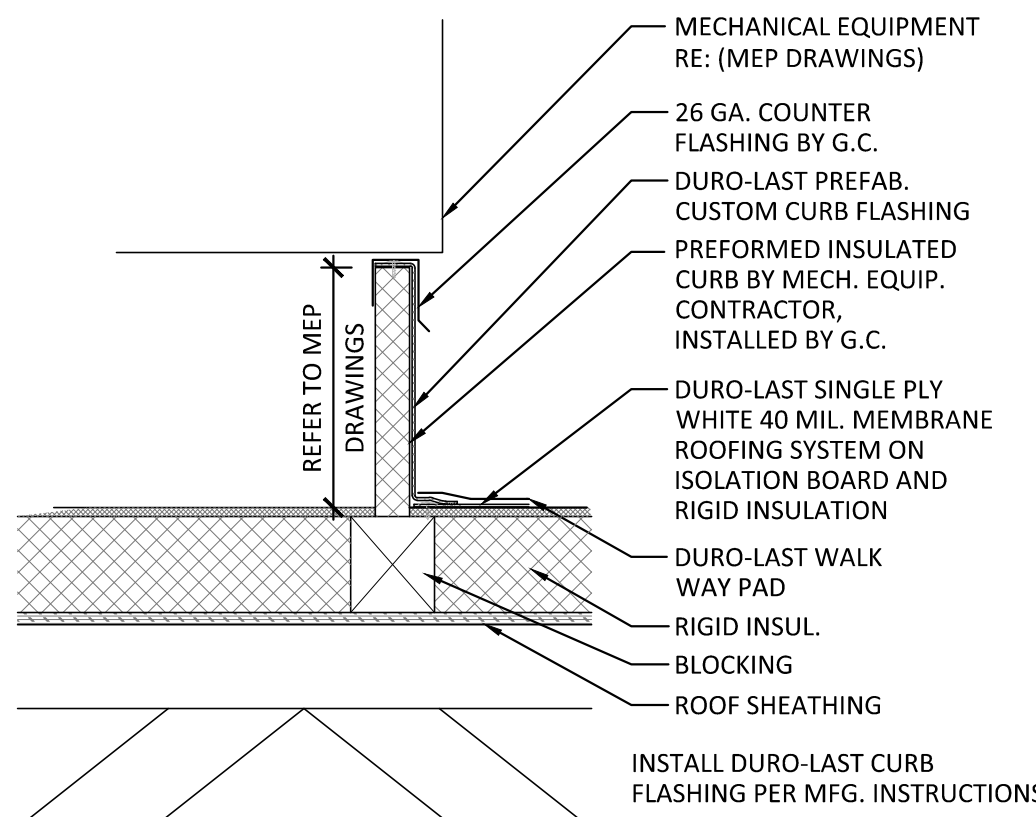
## Keynote Schedule

Mark	Description
1	New Suspended Ceiling Grid, Paint To Match Armstrong "T32 'Adobe' Tiles. Provide New Armstrong "T32 Fine Fluoresced Angled Regular Ceiling Tiles, Color: 'Adobe'. Install New Owner Provided Speakers, Verify Locations With Owner's Construction Manager.
2	New Gypsum Board Header, Paint 'Red'. Refer: Interior Finish Schedule.
3	New 4'x10' Prefabricated Soffit Element With Plastic Laminate Finish Red. Supplied And Installed By Seating Vendor. Mount To Ceiling Using All-Thread To Existing Roof Trusses, Typical.
4	Existing Ceiling Fan To Be Removed. Patch & Repair Finishes As Required.
5	New 4'x10' Prefabricated Soffit Element With Wood Plank Finish, Stained. Supplied And Installed By Seating Vendor. Mount To Ceiling Using All-Thread To Existing Roof Trusses, Typical.
6	New Suspended Vinyl Faced Ceiling Tiles Into New Grid. Paint Grid, Color To Match Armstrong "T32 'Adobe'. Above New Condiment Counter Only.
7	New Gypsum Board Ceiling, Paint 'White'. Refer: Interior Finish Notes.
8	New Header At Divider Wall. Refer: Interior Elevations And Finish Schedule.
9	New Digital Menuboards Provided By Owner, Installed By Owner Vendor. Contractor's Electrician To Provide Separate Circuit w/Continuous Power For Menuboards. Center J-Box & Data On New Bulkhead Wall. Paint Bulkhead Wall 'White'. Refer: Interior Finish Schedule.
10	New Suspended Vinyl Faced Ceiling Tiles Into New Grid. Color 'White'. Kitchen Area.
11	Prefabricated Color Band Element, Provided & Installed By Signage Contractor, Coordinated By Contractor.
12	New 2'-0"x4. Prefab. Entry Canopy, Red. Provided & Installed By Canopy Manufacturer. Contractor To Provide New Support Blocking & Coordinate Installation.
13	New E.I.F.S. Soffit w/Drip Edge, Finish To Match Adjacent Vertical Wall Surface, Refer: Building Elevations And Exterior Finish Notes.
14	New 2'-0"x4. Prefab. Drive-Thru Canopy, Red. Provided & Installed By Canopy Manufacturer. Contractor To Provide New Support Blocking & Coordinate Installation.
15	New Metal Soffit Panels By Canopy Supplier.

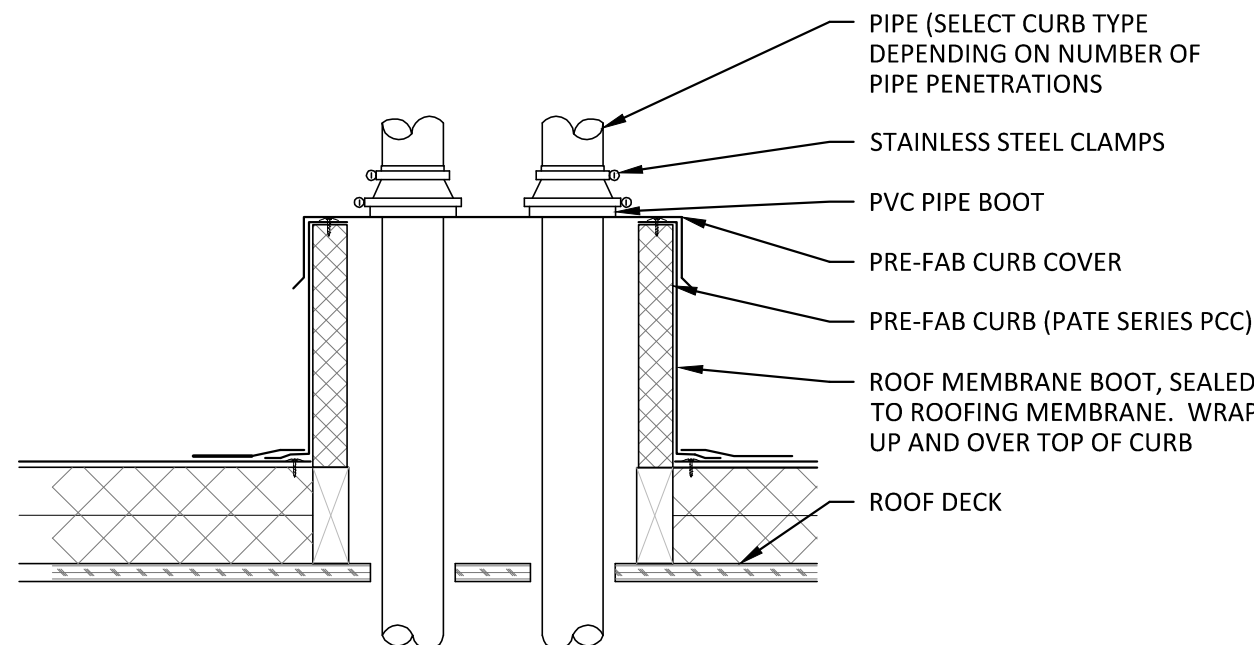




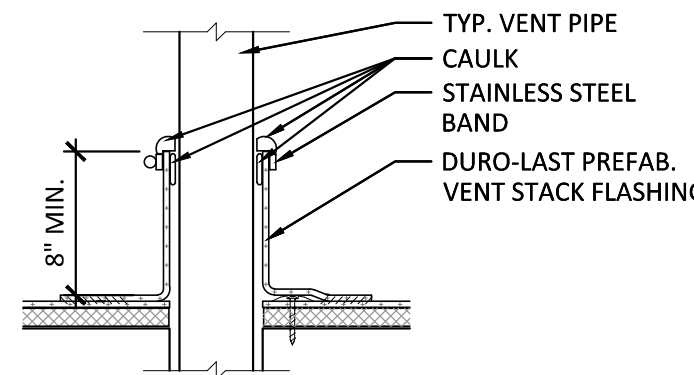
North  
Roof Plan  
A104 Scale: 1/4"=1'-0"



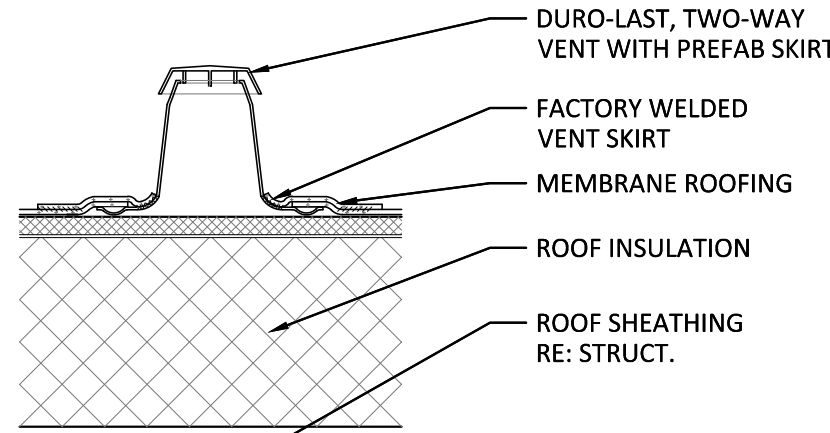
Mechanical Curb  
Detail  
B A104 Scale: 1/4"=1'-0"



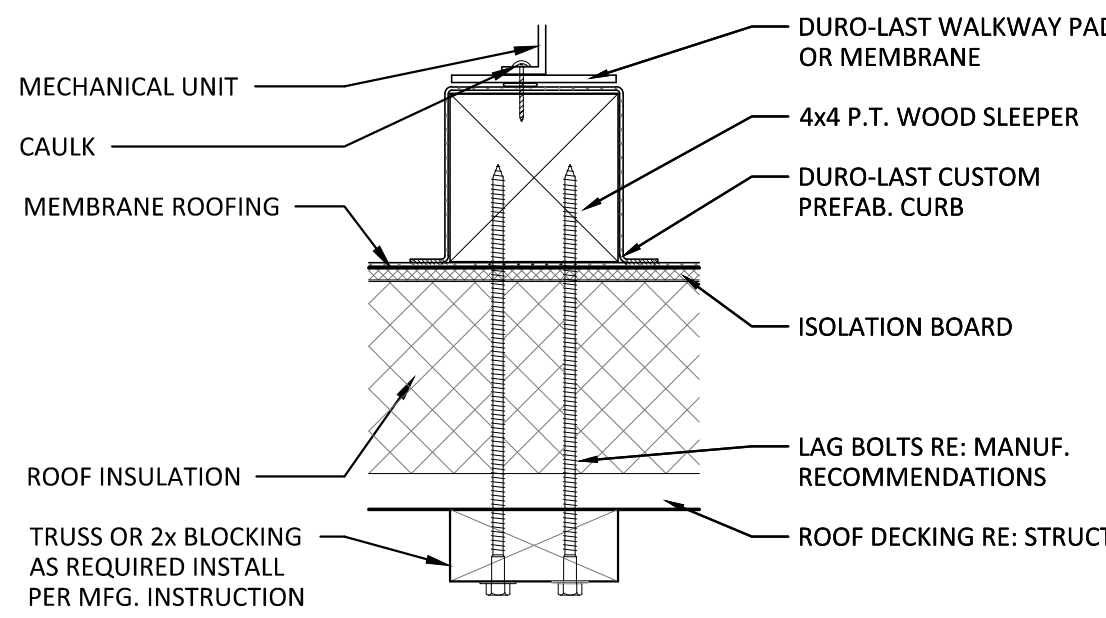
Roof Penetration  
Detail  
C A104 Scale: 1/4"=1'-0"



Typical Vent  
Detail  
D A104 Scale: 1/4"=1'-0"



Two-Way Vent  
Detail  
E A104 Scale: 1/4"=1'-0"



Wood Sleeper  
Detail  
F A104 Scale: 1/4"=1'-0"

- NOTES:
1. The Roof Plan Represents An Approximation Of Existing Conditions. The Contractor Shall Verify And Coordinate Any Work Done On The Roof With The Architect.
  2. The Contractor Shall Verify That The Roof Drainage System, Roof Drains, Etc. Are Clear And Functioning Properly. Maintain Existing Roof Scupper Opening.

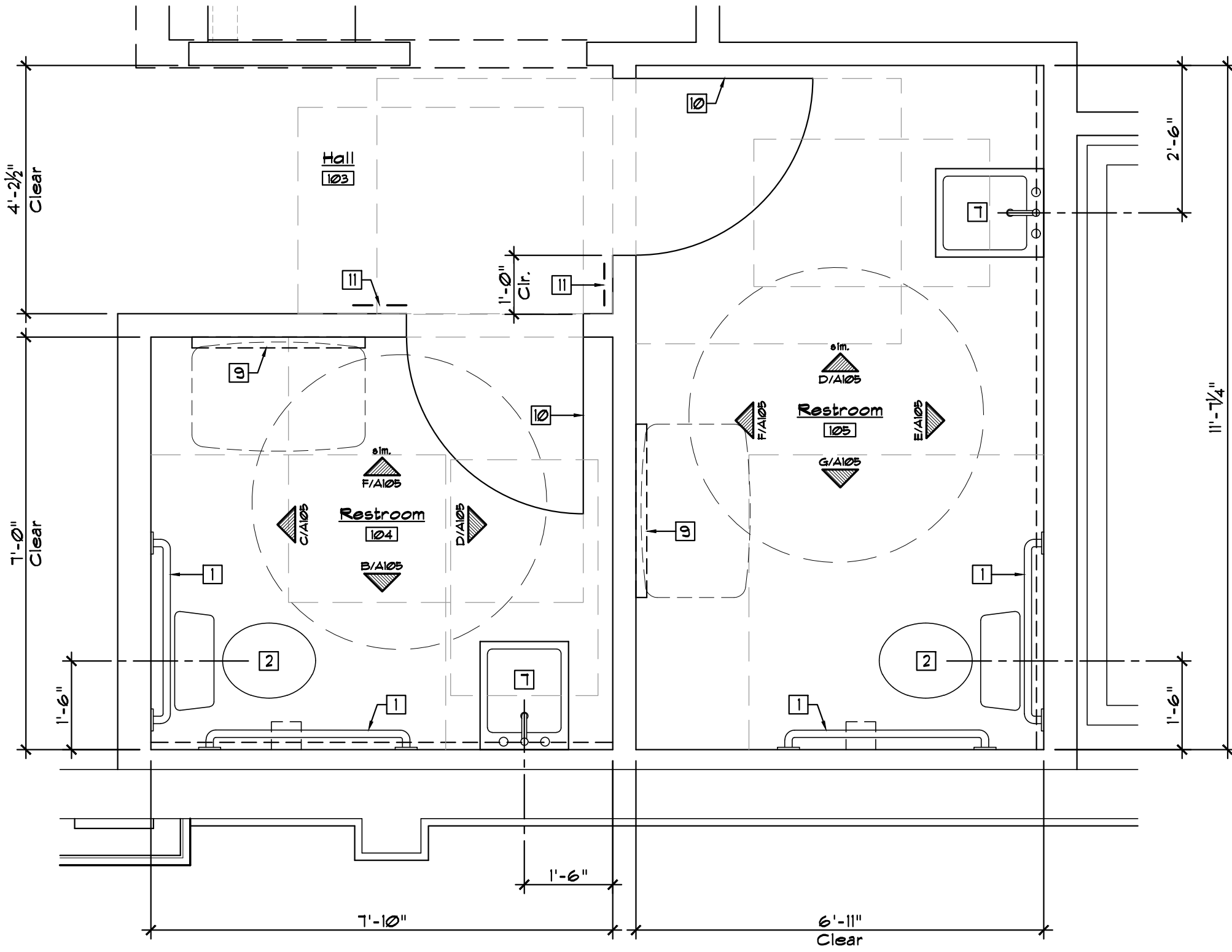
**PREFABRICATED CANOPY NOTES**  
The Prefabricated Canopy Manufacturer Shall Be Responsible For The Proper Design & Engineering Required For The Construction And Installation Of The Canopies. The Canopy Manufacturer Shall Provide Fully Engineered Connection Details Sealed And Signed By A Structural Engineer Licensed And In Good Standing In The State That The Project Is Located. The Design Documents Shall Indicate The Existing Conditions Accurately And Be Submitted To The Building Official, Architect, And Owner Prior To Starting Of Any Construction.

## Roof Plan Notes

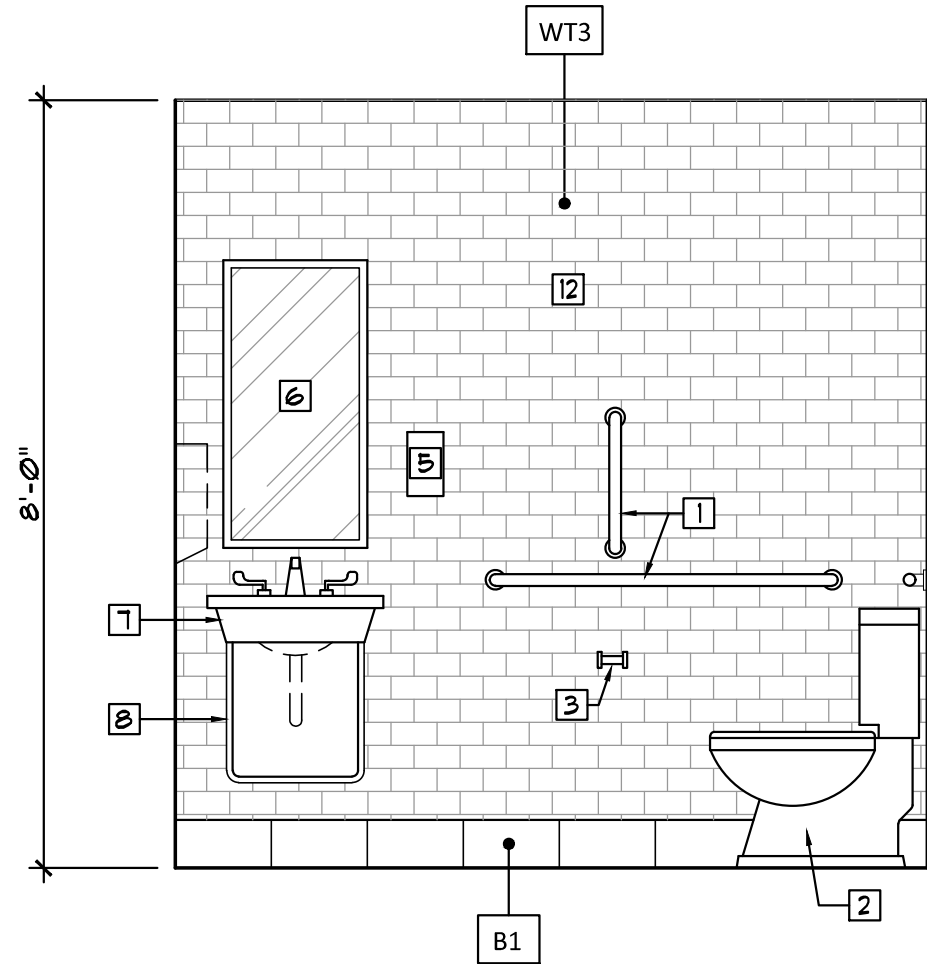
- A. ROOF TO BE: DURO-LAST, SINGLE-PLY, WHITE 50 MIL. ROOF MEMBRANE. INSTALL PER MANUFACTURER'S SPECIFICATIONS. 20 YEAR WARRANTY, NO DOLLAR LIMIT. PROVIDE ROOF VENTS AS REQUIRED. WRAP MEMBRANE UP AND OVER PARAPET WALL, TERMINATE BEHIND PRE-FINISHED METAL COPING. REFER TO WALL SECTIONS.
- B. R-20 MINIMUM REQUIRED FOR ROOF INSULATION COMPLETELY ABOVE DECK.
- C. ACCENT BAND AND CANOPIES ARE SHOWN FOR DESIGN INTENT AND ARE FOR REFERENCE ONLY. REFER TO ACCENT BAND/CANOPY SHOP DRAWINGS FOR EXACT SIZE AND LOCATION. PROVIDE BLOCKING AS REQUIRED FOR FASTENING ACCENT BAND AND CANOPIES TO EXISTING WALL.
- D. GC IS RESPONSIBLE FOR MAINTAINING ROOF WARRANTY DURING CONSTRUCTION. COORDINATE INSTALLATION WITH MANUFACTURER.
- E. DO NOT PENETRATE ROOF MEMBRANE UNLESS COORDINATED WITH ROOF MANUFACTURER. **DO NOT VOID WARRANTY.**
- F. ROUTE TV CABLING THROUGH PREFABRICATED ROOF CURB FOR PIPING PENETRATIONS.
- G. BASIS OF DESIGN FOR ROOF LADDER IS O'KEEFE'S 502 ACCESS LADDER, ALUMINUM. TUBULAR RAIL LOW PARAPET W/ ROOF OVER RAIL EXTENSIONS.

## Keynote Schedule

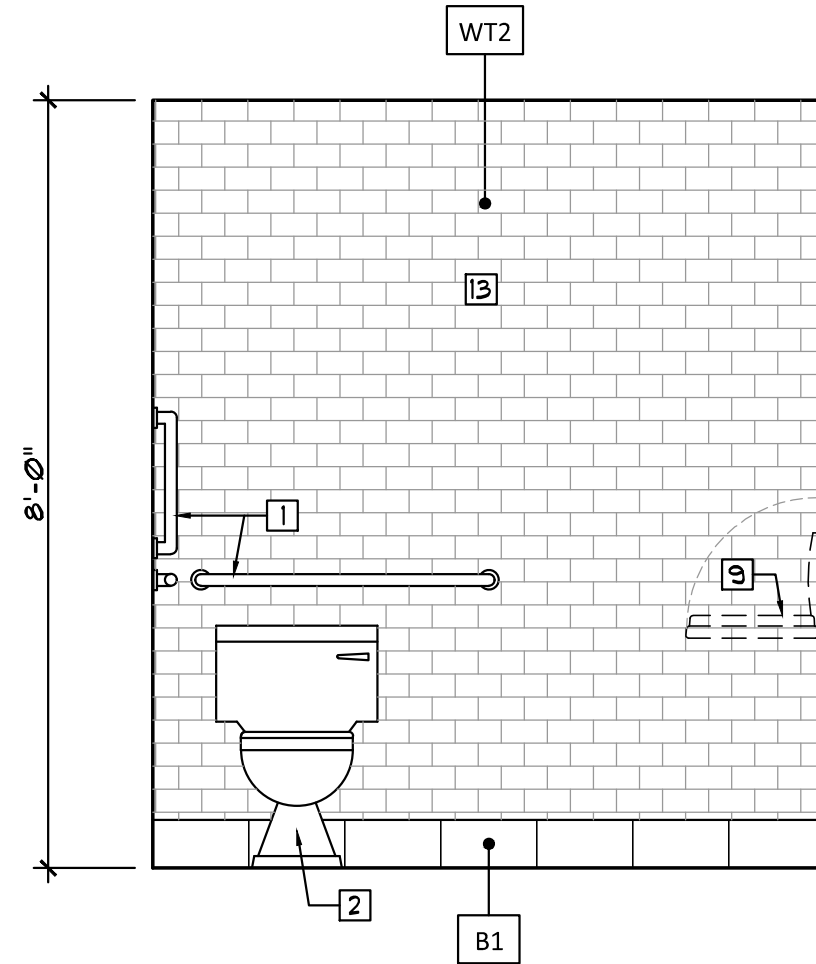
Mark	Description
1	LINE OF HOOD BELOW.
2	PRE-FINISHED METAL COPING, OVERLAP SEAMS 1 1/2" MIN. AT ALL JOINTS. REFER TO ELEVATIONS.
3	NEW GUTTER AND DOWNSPOUT SYSTEM. REFER: BUILDING ELEVATIONS.
4	DURO-LAST WORK MATS.
5	ROOF ACCESS LADDER.



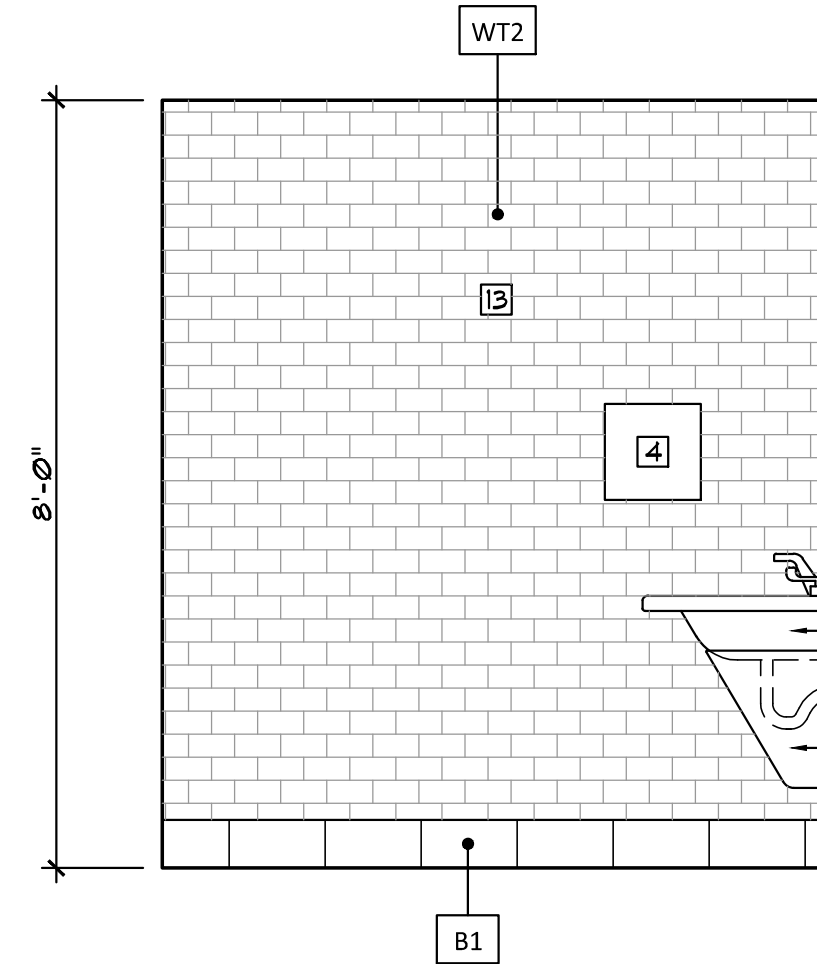
A Plan Detail  
Scale: 1/2"=1'-0"



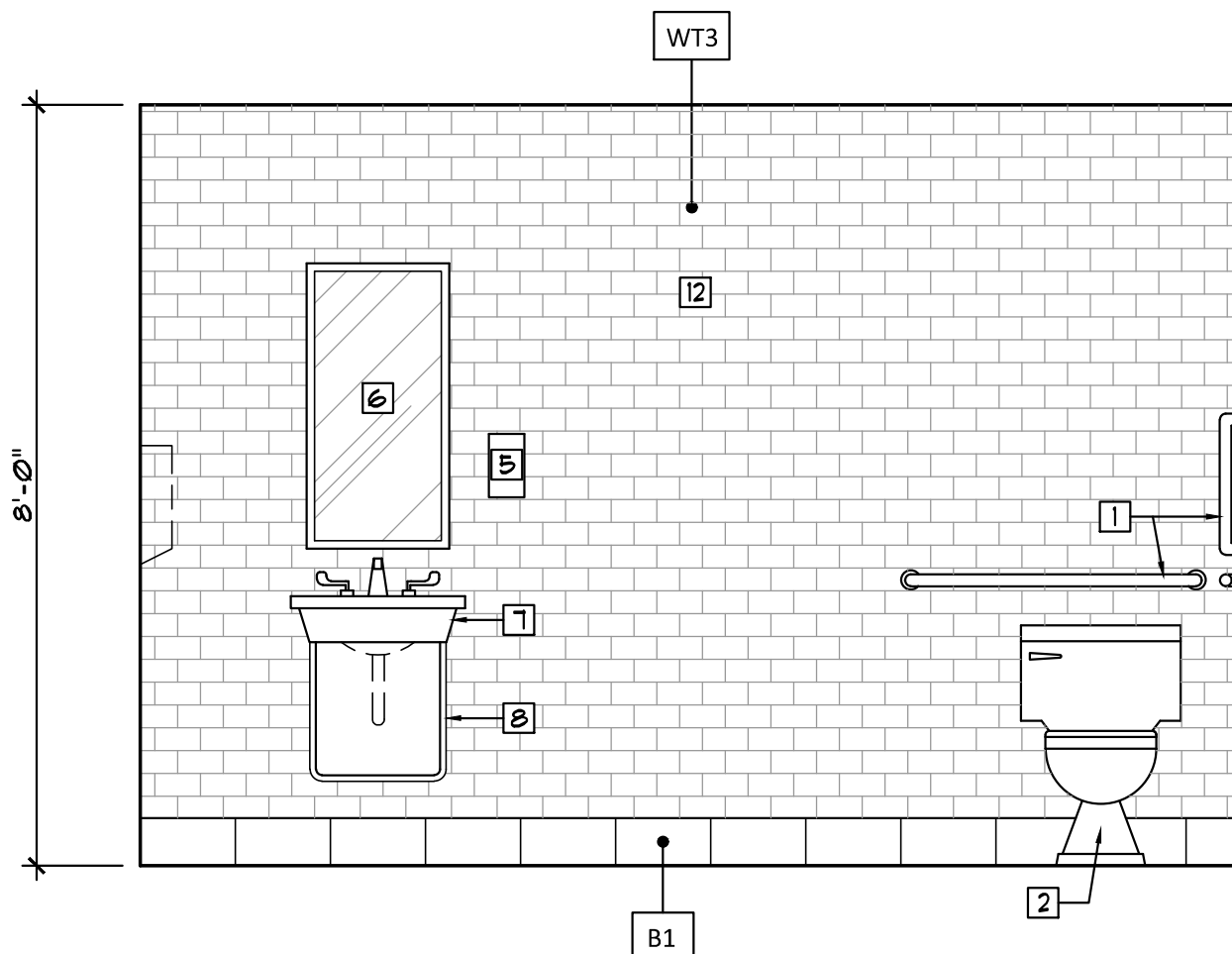
B Interior Elev.  
Scale: 1/2"=1'-0"



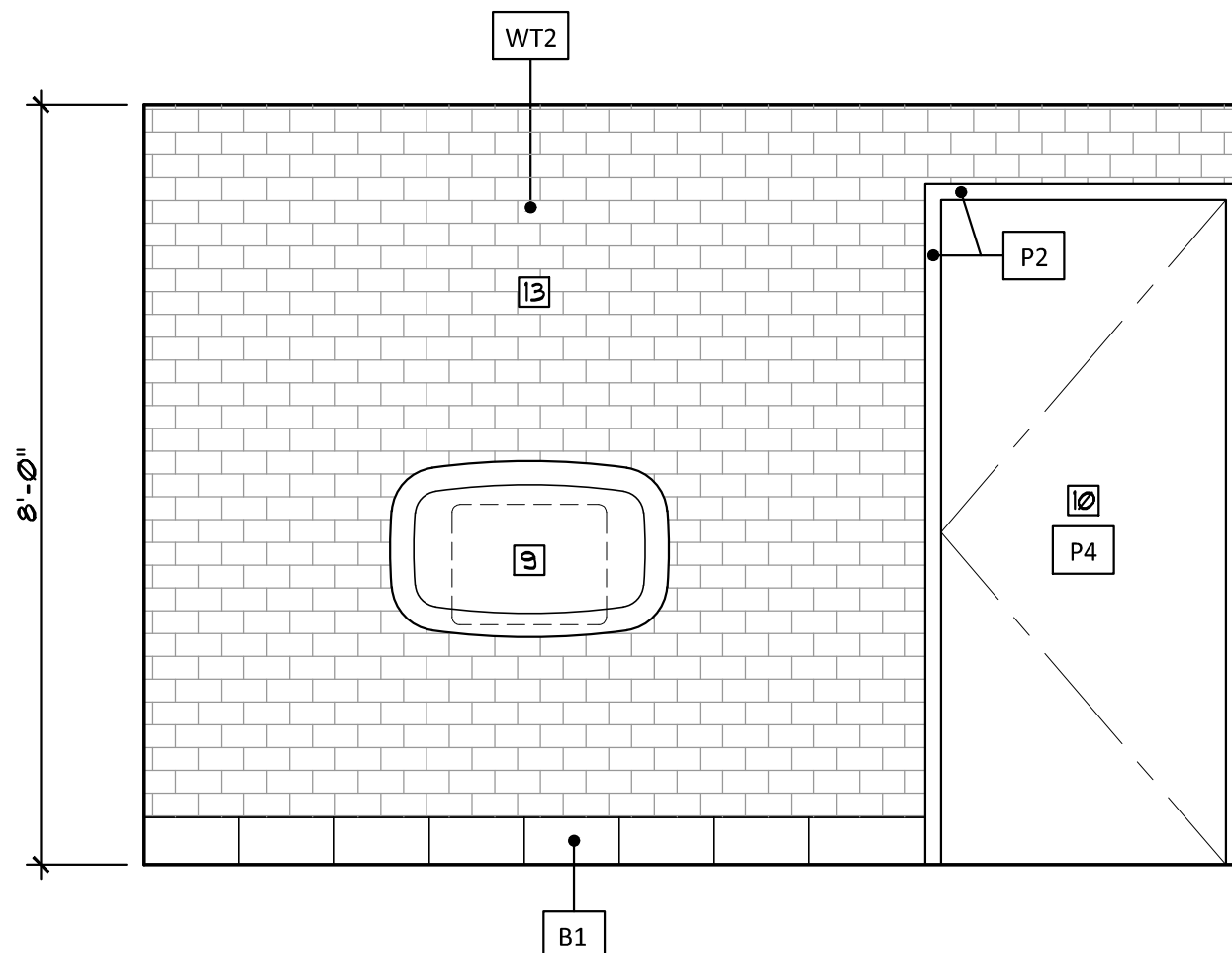
C Interior Elev.  
Scale: 1/2"=1'-0"



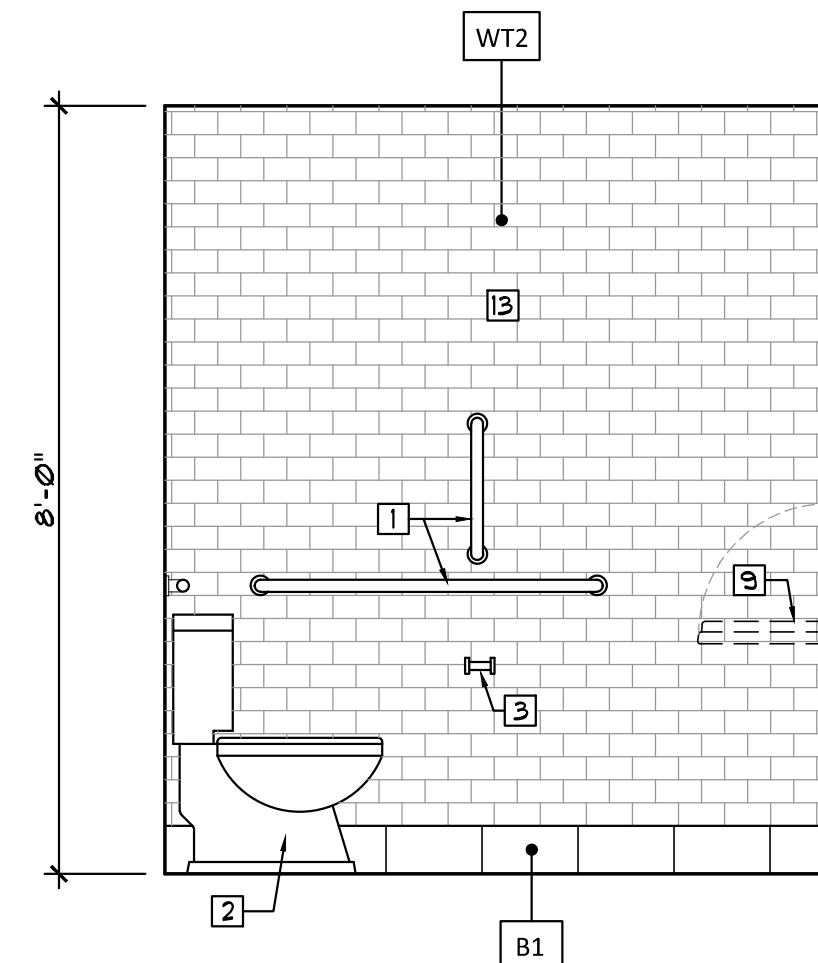
D Interior Elev.  
Scale: 1/2"=1'-0"



E Interior Elevation  
Scale: 1/2"=1'-0"



F Interior Elevation  
Scale: 1/2"=1'-0"



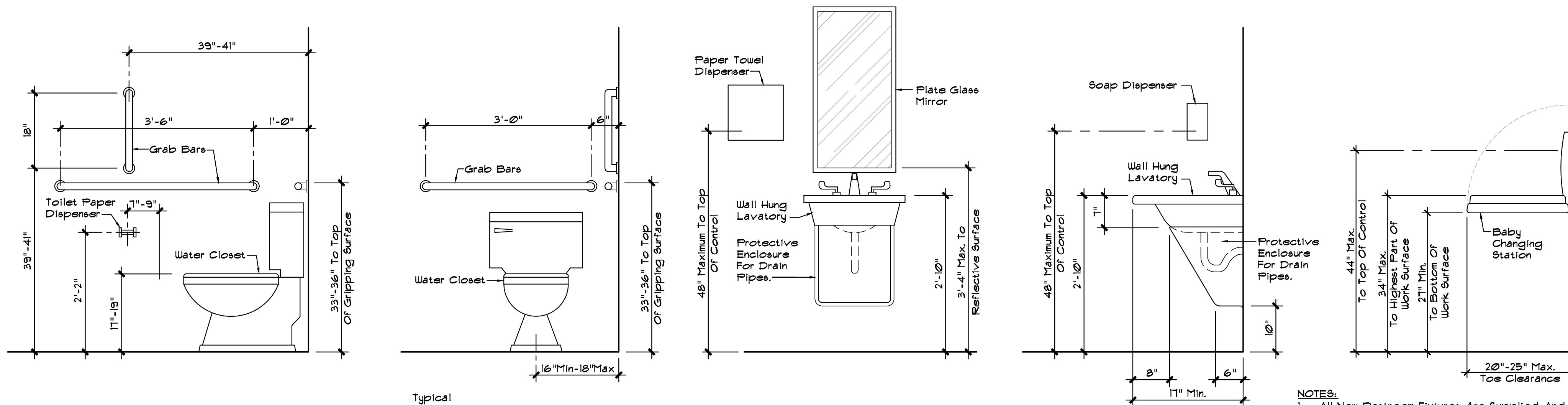
G Interior Elev.  
Scale: 1/2"=1'-0"

## Restroom Plan Notes

- CONTRACTOR TO PROVIDE BLOCKING FOR ACCESSORY MOUNTING AS REQUIRED.
- ALL PIPES UNDER LAVATORY SHALL BE INSULATED, REFER TO PLUMBING DRAWINGS.
- ALL TOILET ACCESSORY FINISHES TO BE SATIN STAINLESS STEEL.
- RESTROOM DESIGN TO MEET IBC AND COMPLY WITH ICC/ANSI 117.1 AND ADAAG 2010 AND ACCESSIBILITY CODE.
- PAPER TOWEL DISPENSER TO PROJECT LESS THAN 4" INTO ROOM IF THE UNIT IS LOCATED IN THE CIRCULATION PATH.
- G.C. TO VERIFY ROUGH LAYOUT OF RESTROOM WALLS AND FIXTURES PRIOR TO INSTALLING ANY WALL AND FLOOR FINISHES TO INSURE ADHERENCE TO ALL DIMENSIONS. ANY CHANGES ON SITE AS THE USE OF DIFFERENT ACCESSORIES THAN THE ONES SPECIFIED SHOULD BE DONE IN COORDINATION WITH ALL APPLICABLE ACCESSIBILITY CODES. ANY DEVIATIONS THAT DO NOT COMPLY TO THE APPLICABLE ACCESSIBILITY CODES WILL BE CORRECTED BY THE G.C. WITH NO ADDITIONAL COMPENSATION.

## Keynote Schedule

Mark	Description
1	New ADA Compliant Grab Bars, Verify 1 1/2" Diameter Bars Mounted 1 1/2" Out From Wall Surface. Contractor To Verify Or Provide Adequate Blocking And Connection To Support 250 lbs Of Force. Bobrick B-950, Verify.
2	New Water Closet Supplied And Installed By Contractor.
3	New Toilet Paper Dispenser, Supplied By Owner, Installed By Contractor. Surface Mounted, Bobrick B-2888, Verify.
4	New Paper Towel Dispenser, Supplied By Owner, Installed By Contractor. Recessed Bobrick B-3961 "Classic Series", Verify.
5	New Soap Dispenser, Supplied By Owner, Installed By Contractor.
6	New ADA Compliant Plate Glass Mirror, Provide Mounting Indicated To The Reflective Surface Of The Mirror, Supplied And Installed By Contractor. 18"U x 30"H w/Tempered Glass, Bobrick B-290, Verify.
7	New ADA Compliant Wall Hung Lavatory, Supplied And Installed By Contractor.
8	New ADA Compliant Lavatory Protective Enclosure For Drain Pipes. LAV SHIELD - MdL2018, Or Pre-cut MdL. As Applicable. Supplied And Installed By Contractor.
9	New Accessible Baby Changing Station Provided By Owner, Installed By Contractor. Refer Manufacturer's Mounting Instructions. Rubbermaid, KB10-88RE, Verify.
10	New 3'-0" x 1'-0" S.C. Wood Door Stained To Match Lobby Trim. New Steel Frame, Paint, Color To Match Lobby Trim. Refer: Door Schedule & Hardware Schedule.
11	Provide New ADA Compliant Signage.
12	Provide New Faux Red Subway Tile Panels - WT3 On Wall. Refer: Interior Finish Schedule.
13	Provide New Faux White Subway Tile Panels - WT2 On Wall. Refer: Interior Finish Schedule.



Typical  
H Accessible Clearance Requirements  
Scale: 3/4"=1'-0"

- NOTES:
- All New Restroom Fixtures Are Supplied And Installed By Contractor. Verify Brand And Model With Owners Construction Manager Prior To Starting Construction.
  - All New Accessories Are Provided By Owner And Installed By Contractor, Verify With Owners Construction Manager.
  - The Contractor Shall Field Verify The Existing Facilities For ADA Compliance & Rectify Any Areas Of Non-Compliance.

Christopher W. White  
Architect  
5801 E. 41st St., Suite 712  
Tulsa, Oklahoma

CHRISTOPHER W. WHITE

REGISTERED  
ARCHITECT

★

*C. White*

★

No. 3086  
ARKANSAS

10-29-21

Revisions:

White Design Group, P.C.

Restaurant and Interiors Consulting

5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

Arby's - 1632 AR-25 Bypass

Heber Springs, Arkansas

New Restaurant Conversion For:

Arby's - 1632 AR-25 Bypass

Heber Springs, Arkansas

Sheet Content

Floor Finish Plan, Floor  
Finish Schedule, Notes

Sheet Number

A106

Date: 10-29-21

North

A106

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

Floor Finish Plan

Legend

F1

6"X24" Stonepeak - Cottage "Mountain Retreat"  
Grout: Custom Building Products #60 "Charcoal"

F2

12"X12" Stonepeak - Simply Modern "Simply Coffee"  
Grout: Custom Building Products #60 "Charcoal"

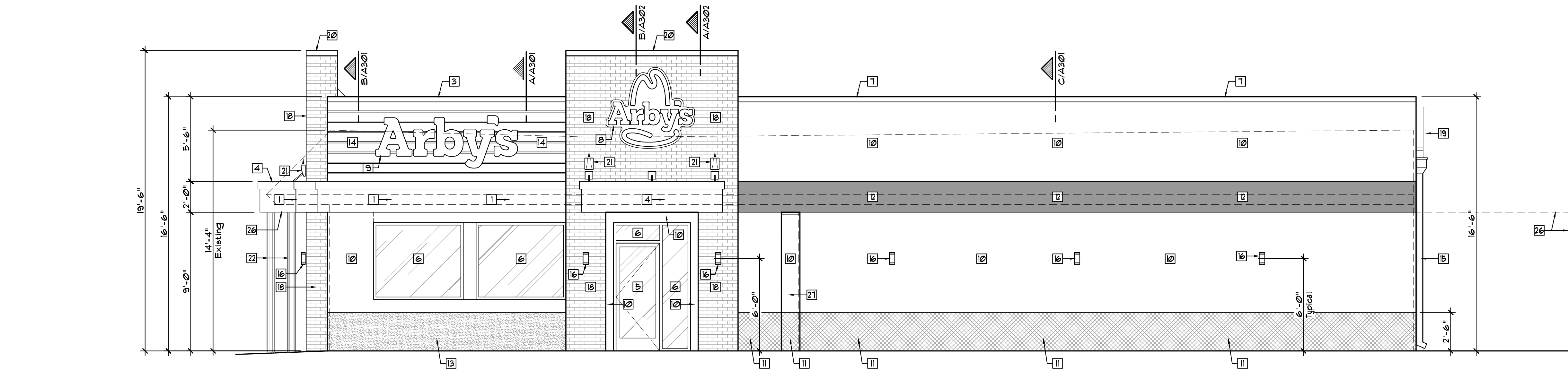
F3

Quarry Tile - STP Quarry, 31 T Red Or 57 T Grey  
6"X6" / Textured Finish, Grout: "Charcoal"

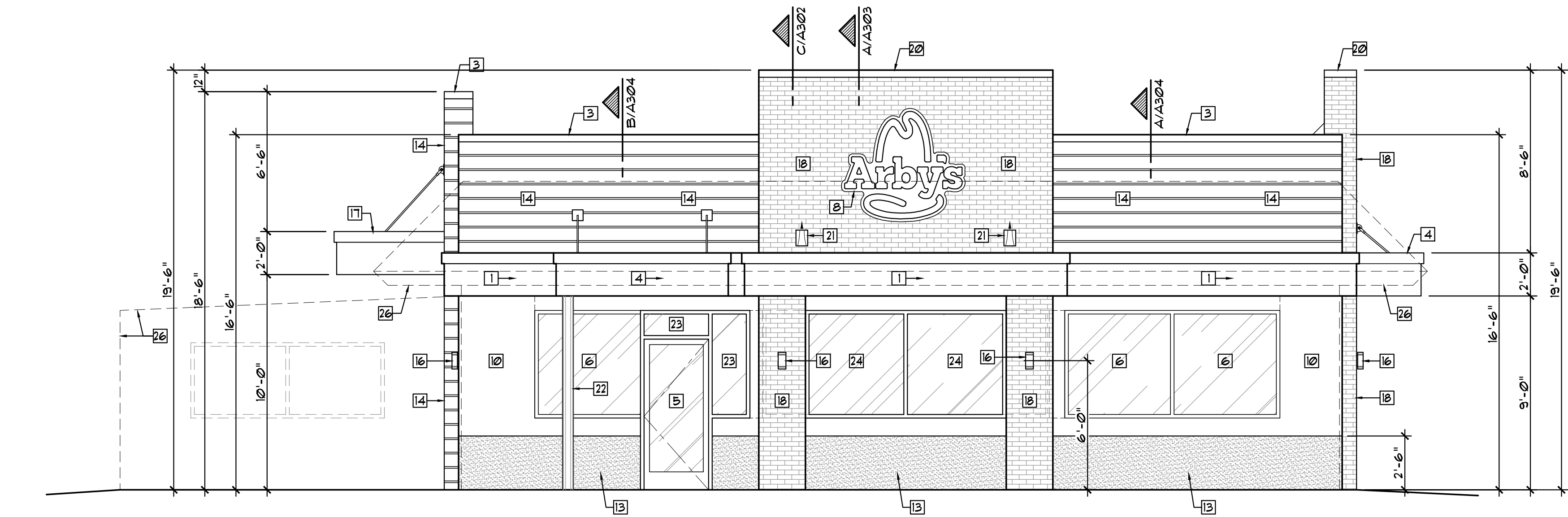
Floor Finish Schedule		
FLOORS		
F1	6"X24" Stonepeak - Cottage "Mountain Retreat" Grout: 1/8", Custom Building Products #60 "Charcoal"	Dining Room Accent
F2	12"X12" Stonepeak - Simply Modern "Simply Coffee" Grout: 1/8", Custom Building Products #60 "Charcoal"	Dining Room Field, Restrooms
F3	Quarry Tile - STP Quarry, 31 T Red Or 57 T Grey 6"X6" / Textured Finish, Grout: "Charcoal"	Kitchen - Verify Color W/Owner
BASE		
B1	6"X12" Stonepeak - Simply Modern "Simply Coffee" Grout: 1/8", Custom Building Products #60 "Charcoal" (Base Tile Is F2 12"x12" Tile Cut In Half)	Dining Room, Restrooms
B2	Quarry Tile - STP Quarry, 31 T Red Or 57 T Grey 5"X6" Cove Base, Grout: "Charcoal"	Kitchen - Verify Color W/Owner
NOTES		
All Tile Shall Be Installed Per ANSI Documented Tile Industry Standards For Commercial Installations.		

Keynote Schedule	
MARK	DESCRIPTION
1	Align Base Tile Grout Lines With Floor And Wainscot Tile Grout Lines, Typical.
2	Align And Center Floor Field Tile With Floor Accent Tile, As Shown, Typical.
3	Provide Flush Transition Between Kitchen Floor Tile And Floor Field Tile, Verify.
4	Insulated Prefabricated Floors Within The Cooler And Freezer.

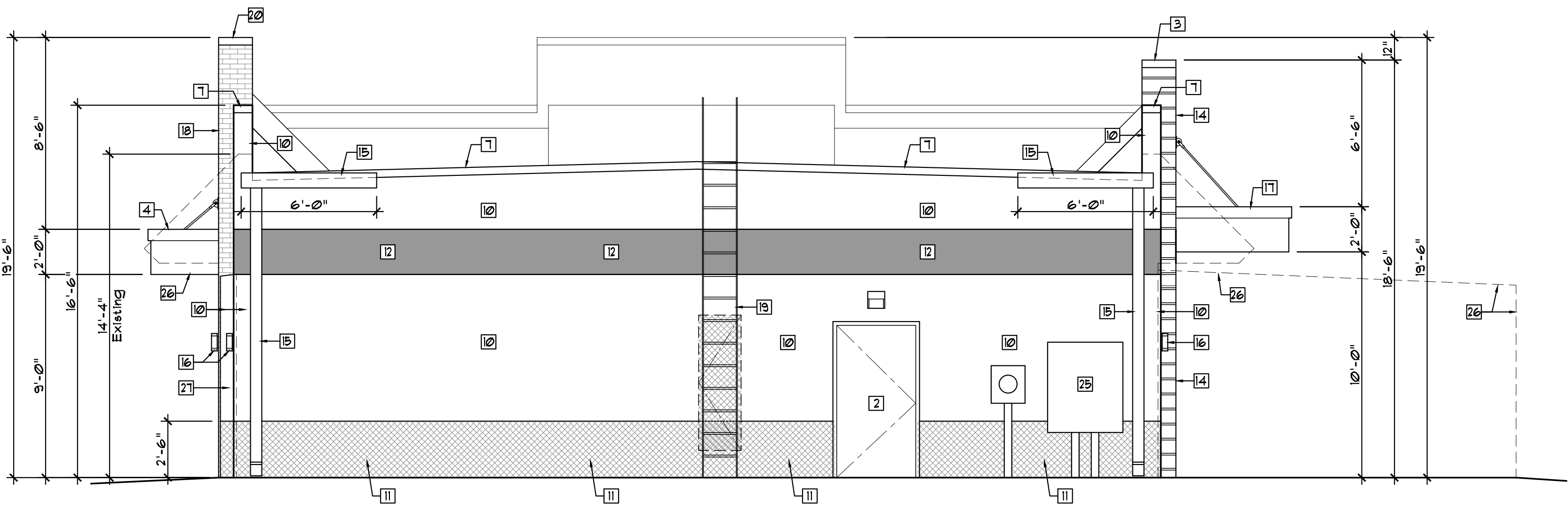




A  
A201  
North Elevation  
Scale: 1/4"=1'-0"



B  
A201  
East Elevation  
Scale: 1/4"=1'-0"



C  
A201  
West Elevation  
Scale: 1/4"=1'-0"

## General Notes

- The Contractor Shall Not Perform Any Structural Demolition Prior To Field Verification From The Structural Engineer.
- These Drawings Represent An Approximation Of Existing Conditions. The Contractor Shall Notify The Architect Of Any Discrepancies Immediately Upon Uncovering Of The Existing Structural Conditions.
- All Exterior Surfaces Shall Be Cleaned, Patched, Repaired As Required And Prepared To Receive New Paint Per Drawings And Utilizing Arby's Paint Specifications.
- The Contractor Shall Provide Blocking For Signage As Directed By Suppliers.
- The Contractor Shall Provide All Flashing, Assemblies, Details, Etc.
- Verify And Maintain All Existing Roof Drain/Downspout Assemblies.
- The Contractor Shall Provide All Necessary Details As Required By The EIFS Manufacturer In Order To Maintain The Warranty. Provide All Backer Rods, Sealant Locations, Flashing Minimum Coverages, Etc.
- Provide Dryvit EIFS System Or Approved Equal, System To Have A Water Management System With Appropriate Details. The EIFS Application Shall Be Installed Over A Water-Resistive Barrier Complying W/ASTM E2570, With A Means Of Draining Moisture To The Exterior. Provide Submittal With Proposed System And Details Indicated. All EIFS Work Shall Be Performed Per Manufacturers Requirements To Maintain Warranty.
- The Contractor Shall Review All New EIFS, Paint, & Coping Cap Colors And Their Locations With The Owners Construction Manager Prior To Proceeding With The Work.
- Exterior Light Fixtures That Protrude 4" Or More From The Wall Surface At The Base Of The Wall Shall Be Mounted 1" High Or Have The Walking Surface Below Restricted To Prevent Non-Compliance With ADA Protruding Objects Requirements.

## Paint Legend

- PAINT COLOR #1**  
Sherwin Williams To Match Dryvit #310 "China White".  
Satin Finish. Prepare And Prime As Required.
- PAINT COLOR #2**  
Sherwin Williams #2808 "Rookwood Dark Brown". Satin Finish. Prepare & Prime As Required.
- PAINT COLOR #3**  
Sherwin Williams #6869 "Stop". Satin Finish. Prepare & Prime As Required.
- PAINT COLOR #4**  
Sherwin Williams #7024 "Functional Gray". Satin Finish. Prepare & Prime As Required.

## Exterior Finish Notes

EXTERIOR INSULATION AND FINISH SYSTEM (E.I.F.S.)  
W/SIM. BRICK PATTERN, COLOR #1- FRONT TOWER  
Simulated Brick Stencil Pattern W/Dryvit 23Pt. 1/2"  
"Brooklyn Brick" Template - Color #1: #310 "China White". Grout Color: #ARB111009, NCB.  
Coping Color #3.

EXTERIOR INSULATION AND FINISH SYSTEM (E.I.F.S.)  
COLOR #1  
Dryvit - Color: #310 "China White" Sandblast  
Texture. Coping Color #1.

EXTERIOR INSULATION AND FINISH SYSTEM (E.I.F.S.)  
COLOR #2  
Dryvit - Color: To Match Sherwin Williams #2808  
"Rookwood Dark Brown". Sandblast Texture.  
Coping Color #2.

PAINT COLOR #1  
Sherwin Williams To Match E.I.F.S. Color  
#1 Dryvit #310 "China White". Satin  
Finish. Prepare And Prime As Required.

PAINT COLOR #2  
Sherwin Williams #2808 "Rookwood Dark  
Brown". Satin Finish. Prepare & Prime As  
Required.

PAINT COLOR #3  
Sherwin Williams #6869 "Stop". Satin Finish.  
Prepare & Prime As Required.

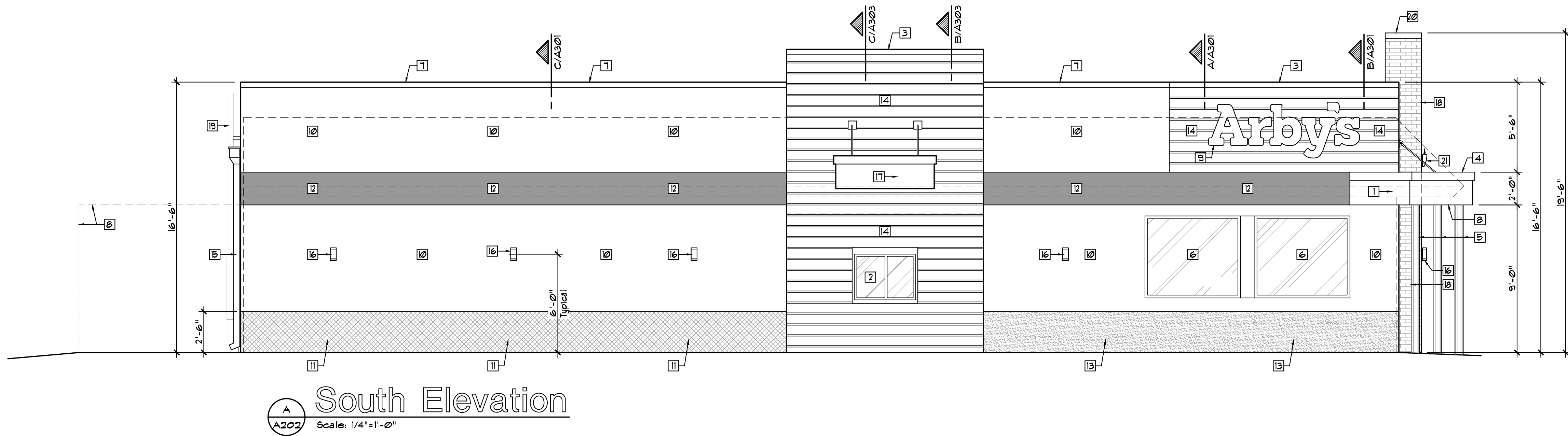
PAINT COLOR #4  
Sherwin Williams #7024 "Functional Gray".  
Satin Finish. Prepare & Prime As Required.

PREFABRICATED 2'-0" HIGH COLOR BAND  
Color: Prefinished Metal, Red. Provided By  
Signage Manufacturer.

6" PREFABRICATED POSTS  
Product Code: 9840-80957R  
Product Name: FC SD RAL 8017  
CHOC. BROWN

## Keynote Schedule

Mark	Description
1	New 2'-0"H. Prefab. Metal Signage Band, Red, By Owner. Contractor To Coordinate Installation.
2	New Metal Door & Frame, Paint Color #4, Gray. Refer: Exterior Finish Notes.
3	New Metal Coping, Paint: Color #2, Brown. Refer: Exterior Finish Notes.
4	New 2'-0"H. Prefab. Entrance Canopy Provided And Installed By Canopy Manufacturer. Contractor To Provide New Support Blocking & Coordinate Installation. See Note.
5	New Storefront Glass Doors Into New Or Existing Frame. Provide New ADA Closers, Push/Pull, Hardware, Threshold And Panic Hardware. Match Color Of Existing Storefront Framing. Refer: Door Schedule.
6	Existing Glazing Unit To Remain, Typical. Clean Frames, Replace Broken Seal Units, Typical.
7	New Metal Coping, Paint: Color #1, White. Refer: Exterior Finish Notes.
8	New 5'-0" High Backlit 'Hat' Signage By Owner. Contractor To Coordinate Installation.
9	New 2'-6" High Backlit Signage By Owner. Contractor To Coordinate Installation.
10	New EIFS, On 1 1/2" Rigid Insulation Over Tyvek Stucco Wrap Over Exterior Existing Masonry Wall Surface, Patch And Prepare As Required. EIFS Color #1, Refer: Exterior Finish Notes.
11	New Painted Wainscot Over New EIFS, On 1 1/2" Rigid Insulation Over Tyvek Stucco Wrap Over Exterior Sheathing Over Existing Masonry Wall Surface, Patch And Prepare As Required. Paint: Color #4, Gray, Ref: Exterior Finish Notes.
12	New Painted Accent Band Over New EIFS, Paint Color #3, Refer: Exterior Finish Notes.
13	New Painted Wainscot Over New EIFS, On 1 1/2" Rigid Insulation Over Tyvek Stucco Wrap Over Exterior Sheathing Over Existing Masonry Wall Surface, Patch And Prepare As Req'd. Paint: Color #2, Brown, Ref: Exterior Finish Notes.
14	New EIFS, On 1 1/2" Rigid Insulation W/1" Horizontal "V" Reveals @ 8"oc, Over Tyvek Stucco Wrap Over Exterior Sheathing Over New 2x Framing. EIFS Color #2. Refer: Exterior Finish Notes.
15	New Collector Heads, Downspouts And Gutter System. Prepare And Paint: Color #1. Ref: Exterior Finish Notes.
16	New LED Exterior Performance Wall Sconce, Refer: Reflected Ceiling Plan And Light Fixture Schedule.
17	New 2'-0"H. Prefab. Drive-Thru Canopy, Red. Provided & Installed By Canopy Manufacturer. Contractor To Provide New Support Blocking & Coordinate Installation.
18	New EIFS, W/Brick Stencil Pattern, Color #1, Over 1 1/2" Rigid Insulation Over Tyvek Stucco Wrap Over Exterior Sheathing Over New 2x Framing. Verify Blocking & Electrical Requirements For New Hat Signage. Refer: Wall Sections And Exterior Finish Notes.
19	New Steel Ladder, Paint: Color #4, Gray. Provided By Owner And Installed By Contractor. Refer: Exterior Finish Notes.
20	New Metal Coping, Paint: Color #3, Red. Typical At Brick Stencil Tower Elements, Refer: Exterior Finish Notes.
21	New Exterior Performance Wall Sconce, Refer: Reflected Ceiling Plan And Light Fixture Schedule.
22	6" Dia. Steel Pipe Columns, Prime, Prepare And Paint. Refer: Exterior Finish Notes.
23	Modify Exist. Glazing System To Accommodate New Config. Provide New 1" Insulated Glazing & Mullions As Required.
24	New 1" Insulated Glazing Units In Aluminum Storefront System To Match Existing. Contractor To Match Existing.
25	New MDF Panel, Paint: Color #4, Gray, Ref: Ext. Finish Notes.
26	Existing Structure And/Or Existing Overhang To Be Removed.
27	Existing CMU Pilaster To Remain. Wrap W/EIFS And Slope Top To Drain Away From Building.



#### PREFABRICATED CANOPY NOTES

The Prefabricated Canopy Manufacturer Shall Be Responsible For The Proper Design & Engineering Required For The Construction And Installation Of The Canopies. The Canopy Manufacturer Shall Provide Fully Engineered Connection Details Sealed And Signed By A Structural Engineer Licensed And In Good Standing In The State That The Project Is Located. The Design Documents Shall Indicate The Existing Conditions Accurately And Be Submitted To The Building Official, Architect, And Owner Prior To Starting Of Any Construction.

#### Exterior Finish Notes

- PAINT ALL EXPOSED GAS PIPE, ROOF ACCESS LADDER, ETC. TO MATCH ADJACENT EXTERIOR WALL SURFACE. DO NOT PAINT ELECTRIC OR GAS SERVICE EQUIPMENT.
- ALUMINUM STOREFRONT TO BE DARK BRONZE.
- ALL GLAZING TO BE 1" INSULATED GLAZING.
- BASIS OF DESIGN FOR THE EIFS WALL SYSTEM IS DRYVIT OUTSULATION PLUS MD. EIFS WALL SYSTEM IS 1 1/2" THICK UNLESS NOTED OTHERWISE. INSTALL EIFS PRODUCT IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND DETAILS.
- SIGNAGE IS SHOWN FOR REFERENCE ONLY. FINAL SIZE, LOCATION AND QUANTITY TO BE DETERMINED BY SIGNAGE VENDOR. SIGNAGE VENDOR SHALL PERMIT ALL SIGNS UNDER SEPARATE COVER.
- REFER TO ELECTRICAL DRAWINGS FOR EXTERIOR LIGHTING SPECIFICATIONS.
- ALL WALL MOUNTED LIGHT FIXTURES TO BE SET IN CONTINUOUS BED OF CAULK AND THEN SHALL BE SEALED TO WALL WITH SEPARATE BEAD OF CAULK. CAULK TO MATCH ADJACENT SURFACE.
- PAINT EIFS WALL BEHIND ACCENT BAND RED. EXPOSED EIFS EDGE BELOW ACCENT BAND TO MATCH METAL.
- THRU-WALL FLASHING SHALL BE PRE-FINISHED TO MATCH STOREFRONT (DARK BRONZE).

#### Paint Legend

- PAINT COLOR #1**  
Sherwin Williams To Match Dryvit #310 "China White".  
Satin Finish, Prepare And Prime As Required.
- PAINT COLOR #2**  
Sherwin Williams #2808 "Rookwood Dark Brown". Satin Finish. Prepare & Prime As Required.
- PAINT COLOR #3**  
Sherwin Williams #6869 "Stop". Satin Finish. Prepare & Prime As Required.
- PAINT COLOR #4**  
Sherwin Williams #7024 "Functional Gray". Satin Finish. Prepare & Prime As Required.

#### Signage Notes

- All Signage Work Shall Be Performed Under A Separate Permit.
- Signage Vendor To Verify Local Signage Ordinances Or Restrictions With Owner Prior To Starting Work.
- Contractor To Provide New Plywood Backing And Support Blocking As Required For Mounting Of Signage. Coordinate Installation With Signage Vendor And Owner's Construction Manager.

#### General Notes

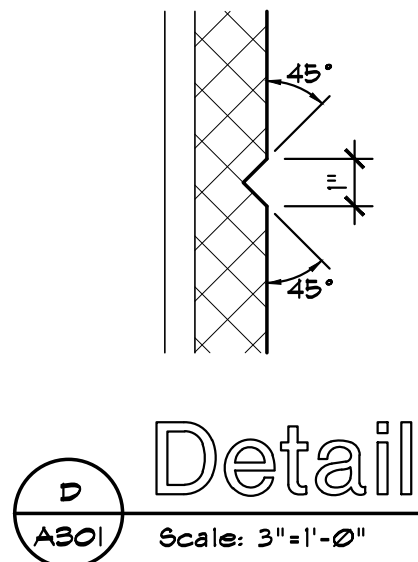
- The Contractor Shall Not Perform Any Structural Demolition Prior To Field Verification From The Structural Engineer.
- These Drawings Represent An Approximation Of Exist. Conditions. The Contractor Shall Notify The Architect Of Any Discrepancies Immediately Upon Uncovering Of The Existing Structural Conditions.
- All Exterior Surfaces Shall Be Cleaned, Patched, Repaired As Required And Prepared To Receive New Paint Per Drawings And Utilizing Arby's Paint Specifications.
- The Contractor Shall Provide Blocking For Signage As Directed By Suppliers.
- The Contractor Shall Provide All Flashing, Assemblies, Details, Etc.
- Verify And Maintain All Existing Roof Drain/Downspout Assemblies.
- The Contractor Shall Provide All Necessary Details As Required By The EIFS Manufacturer In Order To Maintain The Warranty. Provide All Backer Rods, Sealant Locations, Flashing Minimum Coverages, Etc.
- Provide Dryvit EIFS System Or Approved Equal System To Have A Water Management System With Appropriate Details. The EIFS Application Shall Be Installed Over A Water-Resistive Barrier Complying w/ASTM E2370, With A Means Of Draining Moisture To The Exterior. Provide Submittal With Proposed System And Details Indicated. All EIFS Work Shall Be Performed Per Manufacturers Requirements To Maintain Warranty.
- The Contractor Shall Review All New EIFS, Paint & Coping Cap Colors And Their Locations With The Owners Construction Manager Prior To Proceeding With The Work.
- Exterior Light Fixtures That Protrude 4" Or More From The Wall Surface At The Base Of The Wall Shall Be Mounted 1" High Or Have The Walking Surface Below Restricted To Prevent Non-Compliance With ADA Protruding Objects Requirements.

#### Exterior Paint Specifications - Inspire

PAINT COLOR #1	Substrate(s)	Sherwin Williams (SW) Product	Remarks	PAINT COLOR #3	Substrate(s)	Sherwin Williams (SW) Product	Remarks
PAINT COLOR #1 Sherwin Williams To Match Dryvit #310 "China White"	E.I.F.S. (Dryvit), stucco; concrete block, cementitious material, Hardi-Panel	Primer: Loxon Acrylic Concrete & Masonry Primer / Sealer, LX02W0050*  Finish: A100 Acrylic Satin, A82W51 Option: Loxon Self Cleaning Acrylic, Flat, LX13 Series	Use at least two coats of finish. Primer tinted to SW P1.	PAINT COLOR #3 SW #6869, "Stop"	E.I.F.S. (Dryvit), stucco; concrete block, cementitious material, Hardi-Panel	Primer: Loxon Acrylic Concrete & Masonry Primer / Sealer, LX02W0050*  Finish: Pro Industrial DTM Acrylic Gloss, B66-1050 Series NOTE: Apply SherClear 1K Acrylic Clear Coat for additional UV protection, B66C Series	Use at least two coats of finish. May require 3-4 coats to get proper coverage. Primer tinted to SW P1.
	Prefinished metal or factory primed	Primer: Bond-Plex Waterbased Acrylic Coating, B71-200 Finish: Pro Industrial DTM Acrylic EgShel, B66-1250 Series			Prefinished metal or factory primed; Kynar-finished roof or metal storefront	Primer: Bond-Plex Waterbased Acrylic Coating, B71-200 Finish: Pro Industrial DTM Acrylic Gloss, B66-1050 Series NOTE: Apply SherClear 1K Acrylic Clear Coat for additional UV protection, B66C Series	
	Wood	Primer: A-100 Exterior Latex Primer B42W08041 Finish: A100 Acrylic Satin, A82W51			Wood	Primer: A-100 Exterior Latex Primer B42W08041 Finish: Pro Industrial DTM Acrylic Gloss, B66-1050 Series NOTE: Apply SherClear 1K Acrylic Clear Coat for additional UV protection, B66C Series	
PAINT COLOR #2 SW #2808, "Rookwood Dark Brown"	E.I.F.S. (Dryvit), stucco; concrete block, cementitious material, Hardi-Panel	Primer: Loxon Acrylic Concrete & Masonry Primer / Sealer, LX02W0050*  Finish: A100 Exterior Acrylic Satin, A82W151 Series Option: Loxon Self Cleaning, Flat, LX13 Series	Use at least two coats of finish. Primer tinted to SW P2.	PAINT COLOR #4 SW #7024, "Functional Gray"	E.I.F.S. (Dryvit), stucco; concrete block, cementitious material, Hardi-Panel	Primer: Loxon Acrylic Concrete & Masonry Primer / Sealer, LX02W0050*  Finish: A100 Exterior Acrylic Satin, A82W151 Series Option: Loxon Self Cleaning, Flat, LX13 Series	Use at least two coats of finish.
	Prefinished metal or factory primed	Primer: Bond-Plex Waterbased Acrylic Coating, B71-200 Finish: Pro Industrial DTM Acrylic EgShel, B66-1250 Series			Prefinished aluminum; aluminum storefront; galvanized	Primer: Bond-Plex Waterbased Acrylic Coating, B71-200 Finish: Pro Industrial DTM Acrylic Gloss, B66-1050 Series NOTE: Apply SherClear 1K Acrylic Clear Coat for additional UV protection, B66C Series	
	Wood	Primer: Exterior Latex Wood Primer B24W08041 Finish: A100 Acrylic Satin, A82W151 Series			Wood	Primer: Bond-Plex Waterbased Acrylic Coating, B71-200 Finish: Pro Industrial DTM Acrylic EgShel, B66-1250 Series Primer: Exterior Latex Wood Primer B24W08041 Finish: A100 Acrylic Satin, A82W151	

\*Loxon Masonry Conditioner, Guide Coat White, LX03W0100 May also be used on cementitious surfaces.





Detail  
Scale: 3/4"=1'-0"

## General Notes

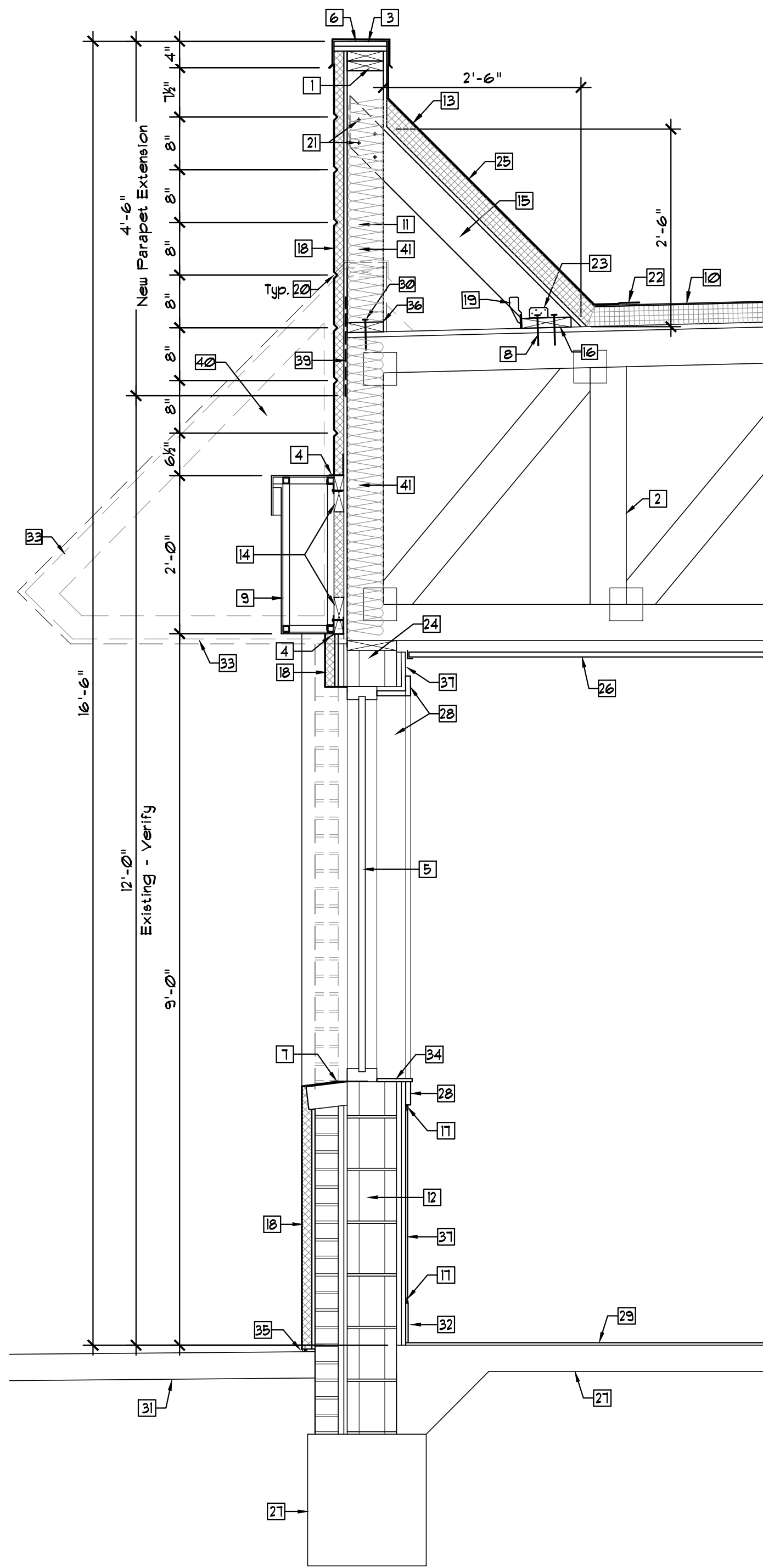
- All Blocking Cut To Fit Tight And (2) 8d Toe Nails Ea. End Min.
- Provide Sealant And Backer Rods At All Appropriate Locations. (All Flashings, Coping Caps, Window And Door Frames, Etc.)
- The Contractor Shall Provide All Necessary Details As Required By The E.I.F.S. Manufacturer In Order To Maintain The Warranty. Provide All Backer Rods, Sealant Locations, Flashing Minimum Coverages, Etc.
- Provide Dryvit E.I.F.S. System Or Approved Equal System To Have A Water Management System With Appropriate Details. Provide Submittal With Proposed System And Details Indicated.
- Contractor To Verify Continuous Wall, Roof Insulation, And Vapor Barrier And Provide New As Required To Maintain Fully Insulate And Weatherproof Building Envelope.
- Provide Galvanized Or Prefinished Metal Flashing At All Windows, Penetrations, Coping Caps, Etc. In Accordance With SMACNA Industry Standard Details Minimum. Provide Shop Drawings For Each Condition To The Owner And Architect For Approval.

### EXTENSIVE FIELD VERIFICATION REQUIRED

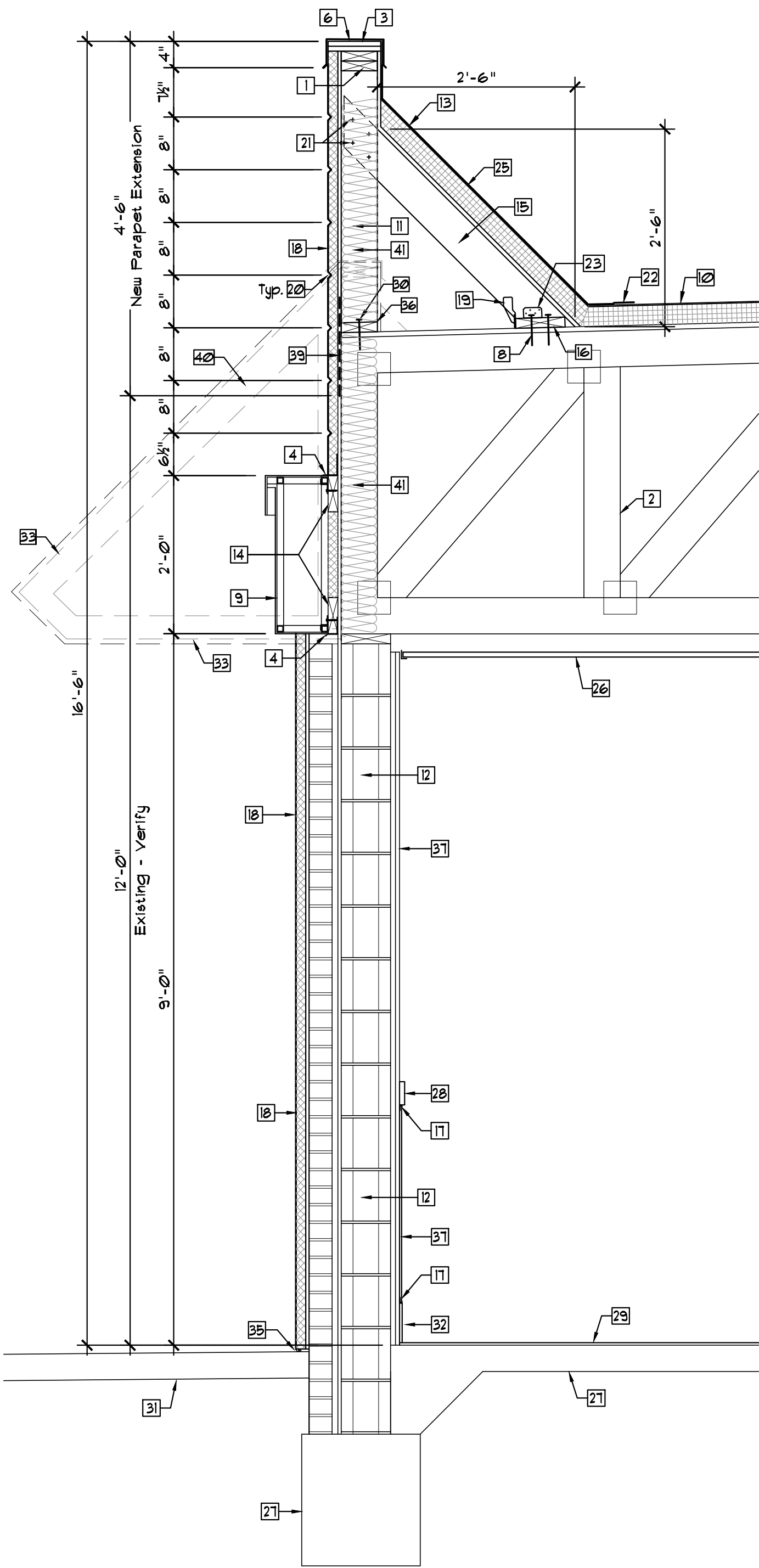
The Contractor Shall Inspect The Existing Conditions And Report Any Differences To The Assumed Conditions Indicated On The Wall Sections To The Architect And Structural Engineer. The Wall Sections Represent An Approximation Of Existing Conditions Based Upon The Limited Amount Of Visual Inspection That Was Available Without Destructive Demolition To The Architect.

### PREFABRICATED CANOPY NOTES

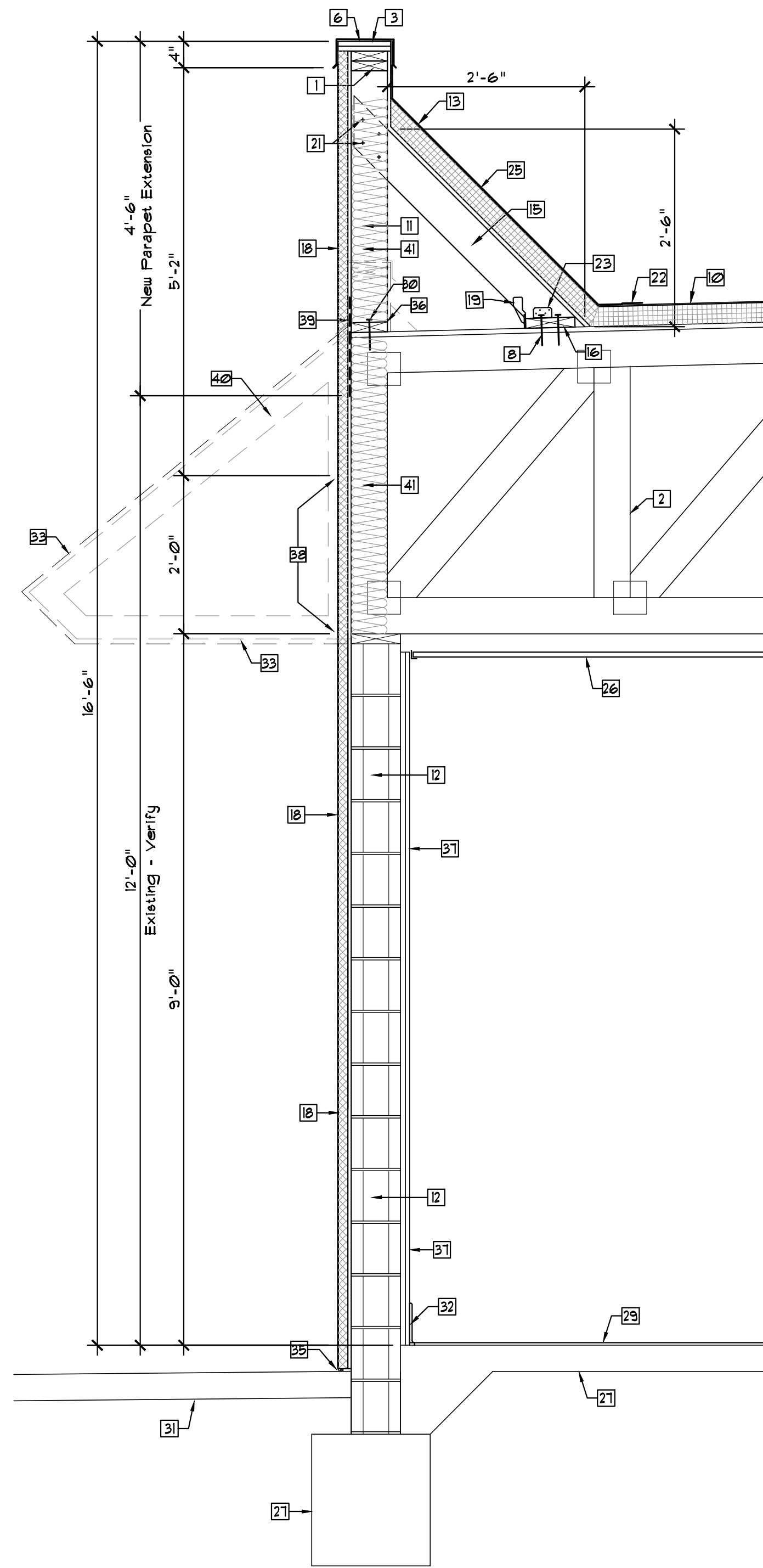
The Prefabricated Canopy Manufacturer Shall Be Responsible For The Proper Design & Engineering Required For The Construction And Installation Of The Canopies. The Canopy Manufacturer Shall Provide Fully Engineered Connection Details Sealed And Signed By A Structural Engineer Licensed And In Good Standing In The State That The Project Is Located. The Design Documents Shall Indicate The Existing Conditions Accurately And Be Submitted To The Building Official, Architect, And Owner Prior To Starting Of Any Construction.



Section A  
Scale: 3/4"=1'-0"



Section B  
Scale: 3/4"=1'-0"



Section C  
Scale: 3/4"=1'-0"

## Keynote Schedule

Mark	Description
1	New 2x6 Top Plate.
2	Existing Structural Wood Truss To Remain.
3	2 Layers 3/4" Plywood Cap.
4	Galvanized Flashing.
5	Existing Glazing Unit To Remain, Typical. Clean Frames, Replace Broken Seal Units, Typical.
6	New Metal Cap Flashing By Roofing Man. Ref.: Finish Notes.
7	Provide New Prefinished Window Sill Flashing To Match Exist. Glazing System, Hem Exposed Edges.
8	2-#2x4" Screws Into Each Wood Truss.
9	2'-0" High Prefabricated Metal Accent Band, Provided And Installed By Signage Manufacturer.

## Keynote Schedule

Mark	Description
10	New Membrane Roofing Over New Rigid Roof Insulation, R-20 Min, Protect During Construction. Refer: Roof Plan Notes.
11	New 2x6 Wood Studs @ 24"o.c., Match Exist. Truss Spacing.
12	Existing Concrete Block To Remain, Field Verify.
13	1/2" Exterior Grade Plywd. Para. Over Wood Stud Framing w/Membrane Roofing Over Rigid Roof Insulation.
14	New Continuous 2x6, Verify. Provide 2 - #10 x 4" Screws Into New Wall Studs.
15	New 2x6 Wood Bracing @ 24"o.c., Match Spacing Of Existing Wood Trusses.
16	New Continuous 2x8.
17	New Metal 'J' Trim Above Base Tile And Below Wainscot Chair Rail Trim, Supplied By Owner, Installed By Contractor, Typical.

## Keynote Schedule

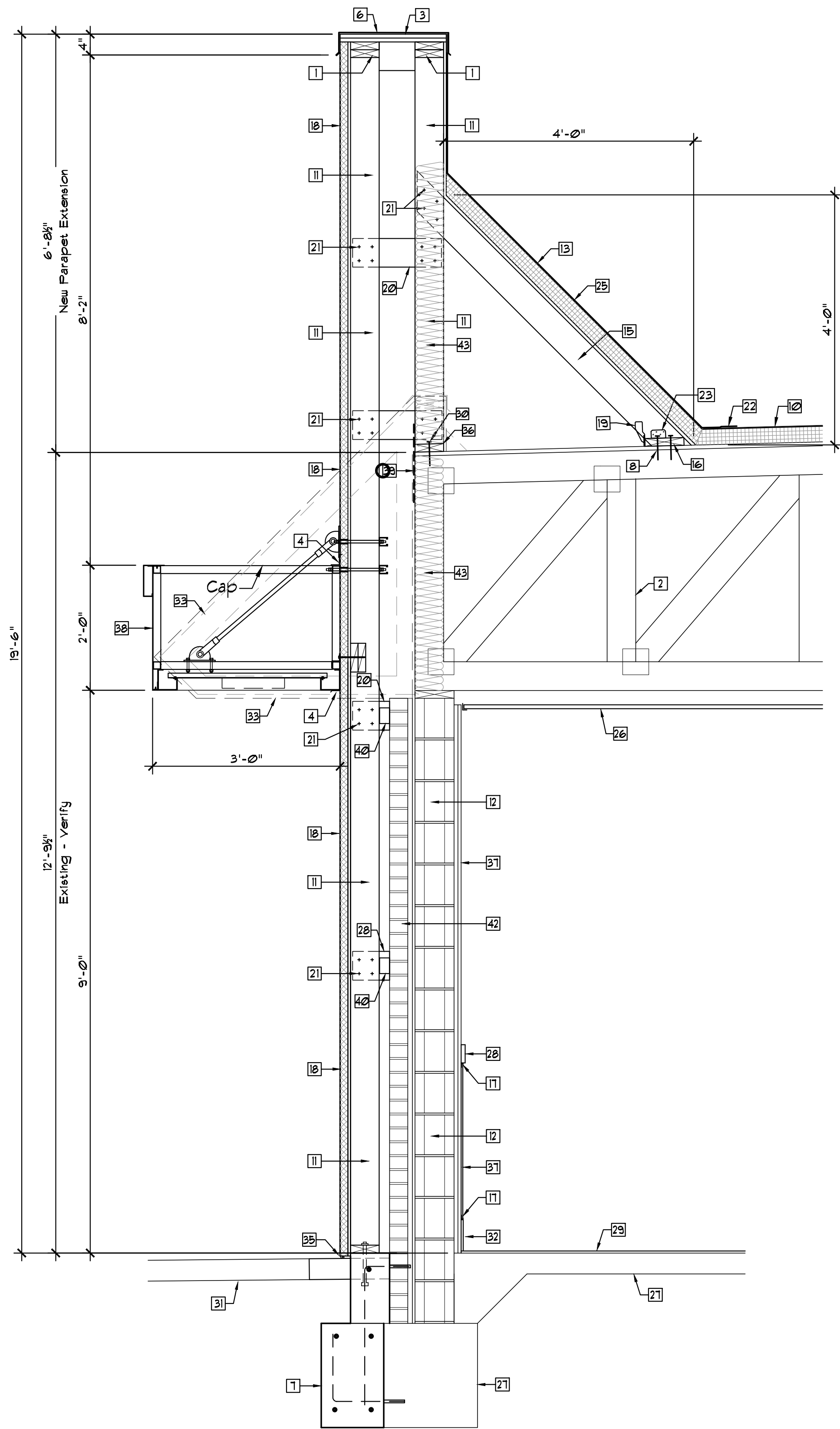
Mark	Description
18	New E.I.F.S. Over 1 1/2" Rigid Insul. Over Tyvek Stucco Wrap Over 1/2" Exterior Sheathing Over Existing Masonry Or New 2x6 Wood Framing. Refer: Elevations.
19	Simpson H3 @ Each Brace.
20	1" E.I.F.S. Reveal, Typical. Refer: Bldg Elevations & Detail D/A301.
21	4 - 10d Nails, Typical Unless Noted Otherwise.
22	Provide New Flashing And Counter Flashing Assembly Overlapped And Tied Into Existing Or New Roofing Membrane.
23	Simpson A23 At Each Brace.
24	Existing CMU Header To Remain, Verify.
25	Extend Roofing Membrane Up Parapet.

## Keynote Schedule

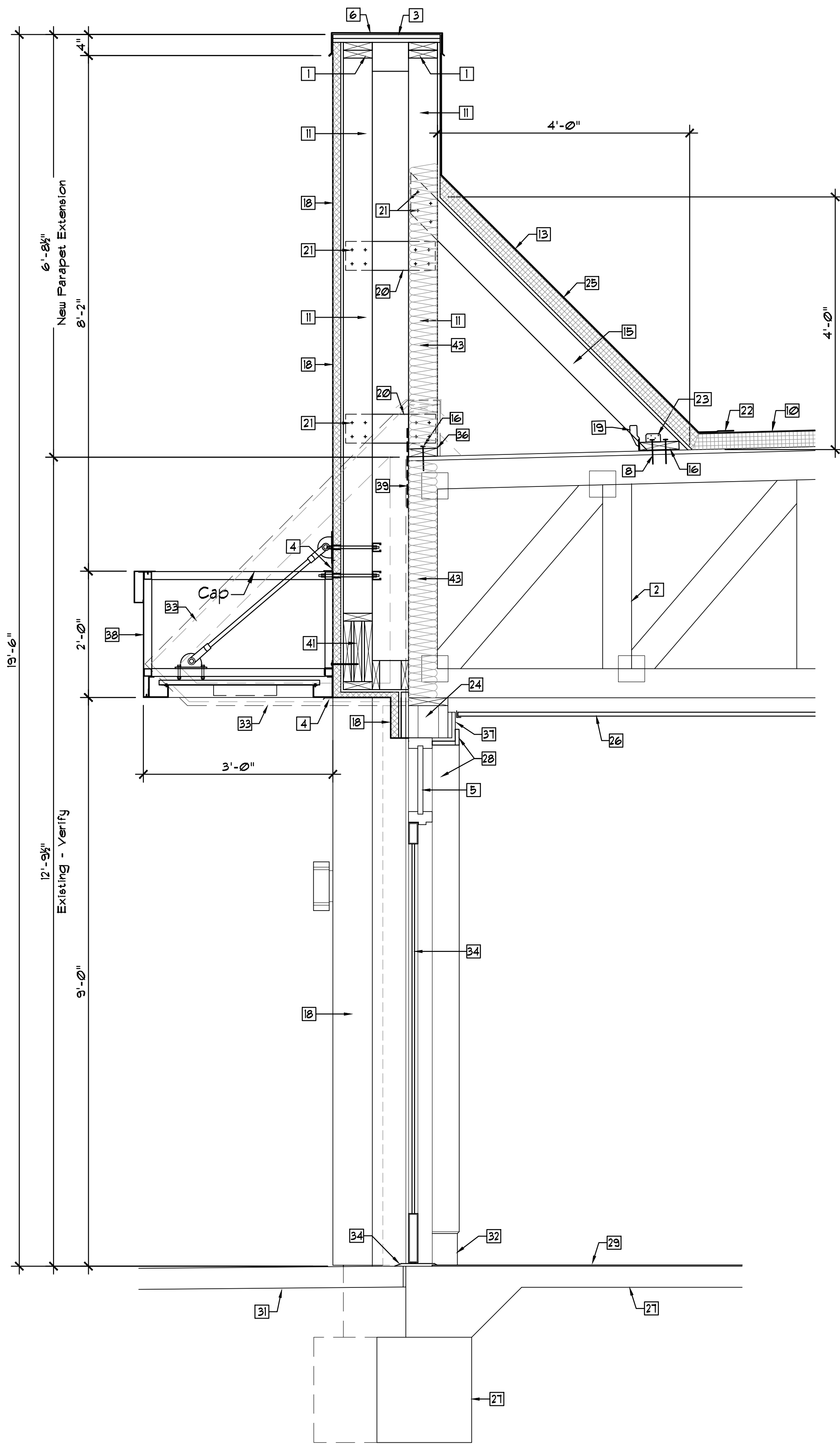
Mark	Description
26	New Suspended Ceiling Tile And Grid System. Refer: Reflected Ceiling Plan And Interior Finish Notes.
27	Existing Concrete Slab & Footings To Remain, Verify.
28	New 3" Solid Wood Trim. Refer: Interior Elevations.
29	New Floor Tile. Refer: Floor Finish Plan And Finish Schedule.
30	10d Nails @ 8"o.c.
31	Existing Concrete Sidewalk Or Paving To Remain, Refer: Civil Drawings.
32	New Base Tile, Refer: Interior Finish Notes.
33	Existing Sloped Metal Roofing And Framing To Be Removed.
34	New Solid Surface Sill, Provided And Installed By Furniture Vendor. Contractor To Coordinate Exact Depth, Etc.

## Keynote Schedule

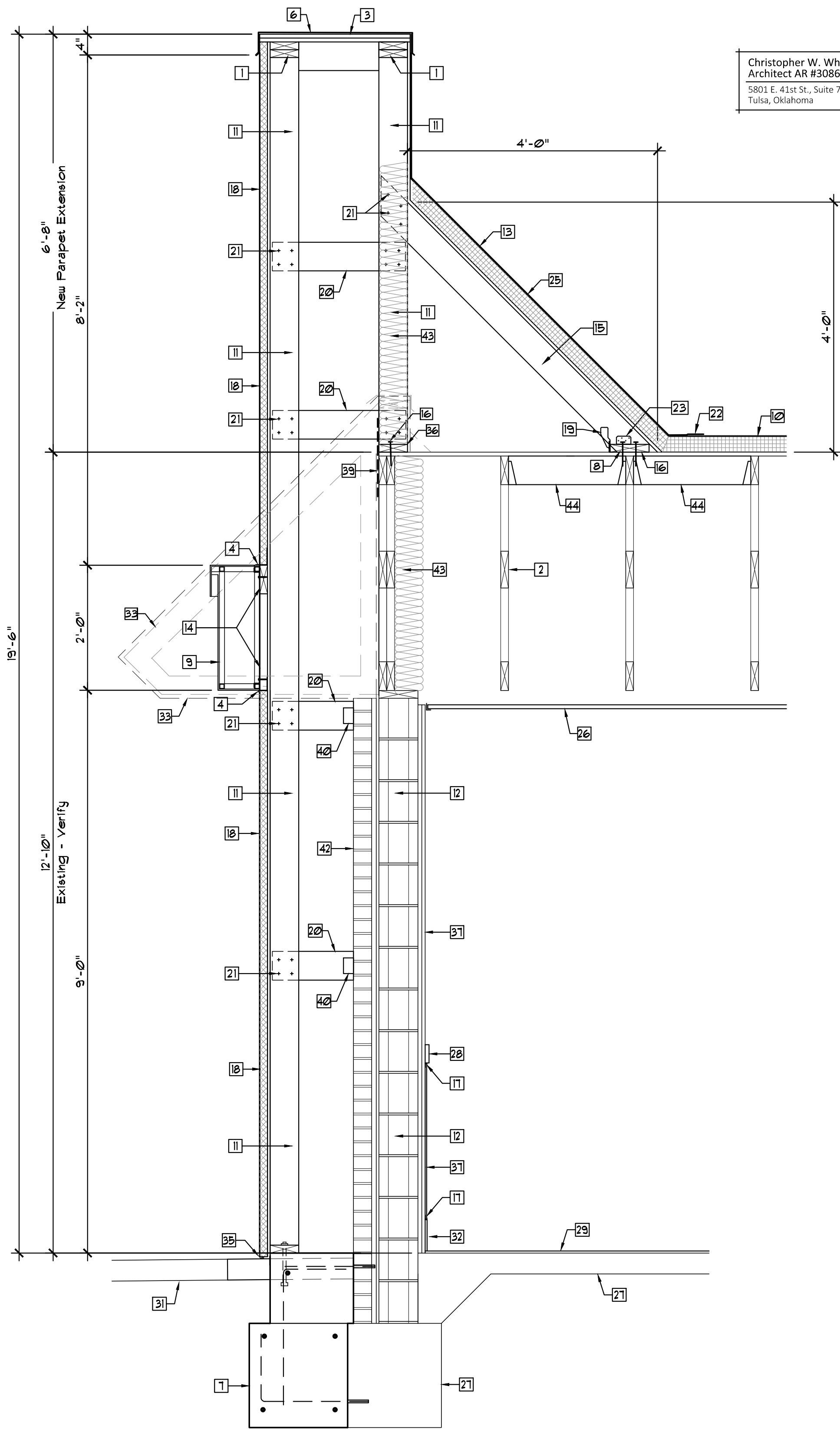
Mark	Description
35	New Flashing, Sealant And Backer Rod @ New E.I.F.S. Wall Base, Refer: E.I.F.S. Manufacturers Installation Instructions, Typical.
36	New Treated 2x6 Sill Plate.
37	New Wall Finish, Refer: Interior Finish Notes.
38	Painted Accent Stripes, Red. Refer: Building Elevations And Finish Notes.
39	Simpson L9TA15 From Stud To End Of Truss.
40	Contractor To Verify That Existing Overhang Framing Is Not An Integral Part Of The Existing Roof Trusses. Notify The Architect And Structural Engineer If Existing Conditions Differ From Those Indicated.
41	Provide New R-19 Batt Insulation As Required To Achieve Fully Insulated Envelope. Facing As Required By Code.



**Section A**  
A302 Scale: 3/4"=1'-0"



**Section B**  
A302 Scale: 3/4"=1'-0"



**Section C**  
A302 Scale: 3/4"=1'-0"

Keynote Schedule	
Mark	Description
1	New 2x6 Top Plate.
2	Existing Structural Wood Truss To Remain.
3	2 Layers 3/4" Plywood Cap.
4	Galvanized Flashing.
5	Existing Glazing Unit To Remain, Typical. Clean Frames, Replace Broken Seal Units, Typical.
6	New Metal Cap Flashing By Roofing Man. Ref: Finish Notes.
7	New Concrete Footing, Refer: Foundation Plan And Details, Sheet S101.
8	2-#2x4" Screws Into Each Wood Truss Or Blocking.
9	2'-0" High Prefabricated Metal Accent Band, Provided And Installed By Signage Manufacturer.

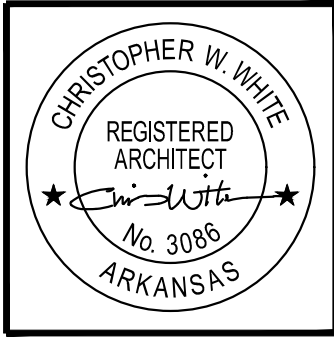
Keynote Schedule	
Mark	Description
10	New Membrane Roofing Over New Rigid Roof Insulation, R-20 Min, Protect During Construction. Refer: Roof Plan Notes.
11	New 2x6 Wood Studs @ 24"o.c., Match Exist. Truss Spacing.
12	Existing Concrete Block To Remain, Field Verify.
13	1/2" Exterior Grade Plywd. Para. Over Wood Stud Framing w/Membrane Roofing Over Rigid Roof Insulation.
14	New Continuous 2x6, Verify. Provide 2 - #10 x 4" Screws Into New Wall Studs.
15	New 2x6 Wood Bracing @ 24"o.c., Match Spacing Of Existing Wood Trusses.
16	New Continuous 2x8.
17	New Metal 'J' Trims Above Base Tile And Below Wainscot Chair Rail Trim, Supplied By Owner, Installed By Contractor, Typical.

Keynote Schedule	
Mark	Description
18	New E.I.F.S. Over 1 1/2" Rigid Insul. Over Tyvek Stucco Wrap Over 1/2" Exterior Sheathing Over Existing Masonry Or New 2x6 Wood Framing. Refer: Elevations.
19	Simpson H3 @ Each Brace.
20	New 2x6 Wood Bracing @ Locations Indicated.
21	4 - 10d Nails, Typical Unless Noted Otherwise.
22	Provide New Flashing And Counter Flashing Assembly Overlapped And Tied Into Existing Or New Roofing Membrane.
23	Simpson A23 At Each Brace.
24	Existing CMU Header To Remain, Verify.
25	Extend Roofing Membrane Up Parapet.
26	New Suspended Ceiling Tile And Grid System, Refer: Reflected Ceiling Plan And Interior Finish Notes.

Keynote Schedule	
Mark	Description
27	Existing Concrete Slab & Footings To Remain, Verify.
28	New 3" Solid Wood Trim. Refer: Interior Elevations.
29	New Floor Tile. Refer: Floor Finish Plan And Finish Schedule.
30	#12 x 4" Screw From New 2x6 Into Existing Wood Truss.
31	Existing Concrete Sidewalk Or Paving To Remain, Refer: Civil Drawings. Sawcut & Provide New Where Required.
32	New Base Tile, Refer: Interior Finish Notes.
33	Existing Sloped Metal Roofing And Framing To Be Removed.
34	New ADA Compliant Door And Threshold, Refer: Door Schedule, Door Types & Door Hardware.
35	New Flashing, Sealant And Backer Rod @ New E.I.F.S. Wall Base, Refer: E.I.F.S. Manufacturers Installation Instructions, Typical.
36	New Treated 2x6 Sill Plate.

Keynote Schedule	
Mark	Description
37	New Wall Finish, Refer: Interior Finish Notes.
38	New 2'-0"H. Prefabricated Canopy Provided & Installed By Canopy Mfr. Contractor To Provide New Support Blocking & Coordinate Installation. Connections To Be Designed By Canopy Mfr's. Structural Engineer, Ref: Prefab. Canopy Notes.
39	Simpson L8TA15 From Stud To End Of Truss.
40	Simpson A24 Angle With 1/2" # Thru Bolt Into Brace And 1/2" # x 2" Embedment, Hilli HIT-IC HY 210 Adhesive Anchor Into CMU Wall.
41	New 3-2x12 Wood Header, Refer: Sheet S101.
42	Existing Brick Veneer To Remain.
43	Provide New R-19 Batt Insulation As Required To Achieve Fully Insulated Envelope. Facing As Required By Code.
44	New 2x6 Blocking Between Trusses w/Simpson LU26 Each End.

Christopher W. White  
Registered Architect AR #3086  
5801 E. 41st St., Suite 712  
Tulsa, Oklahoma



Revisions:

**White Design Group, P.C.**  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

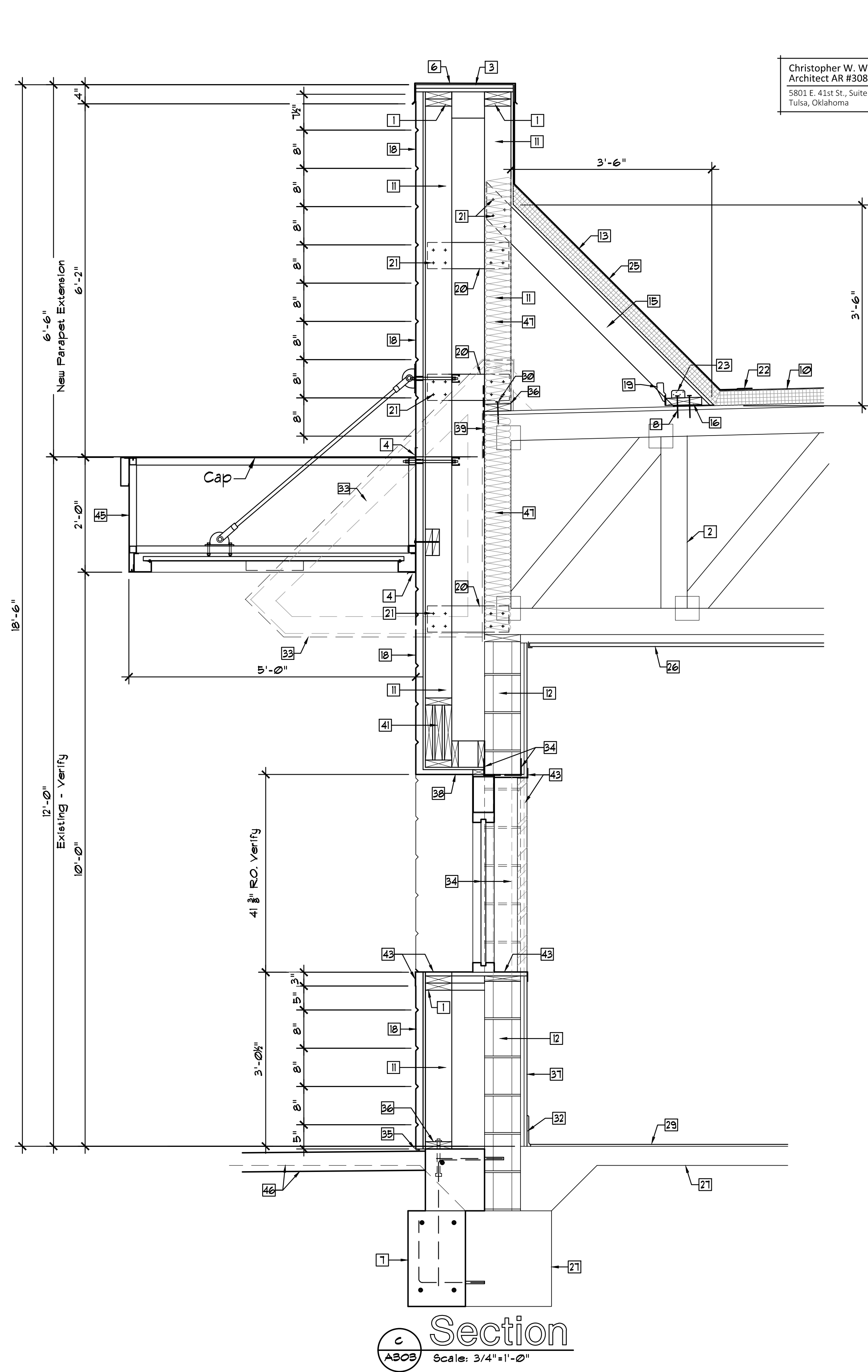
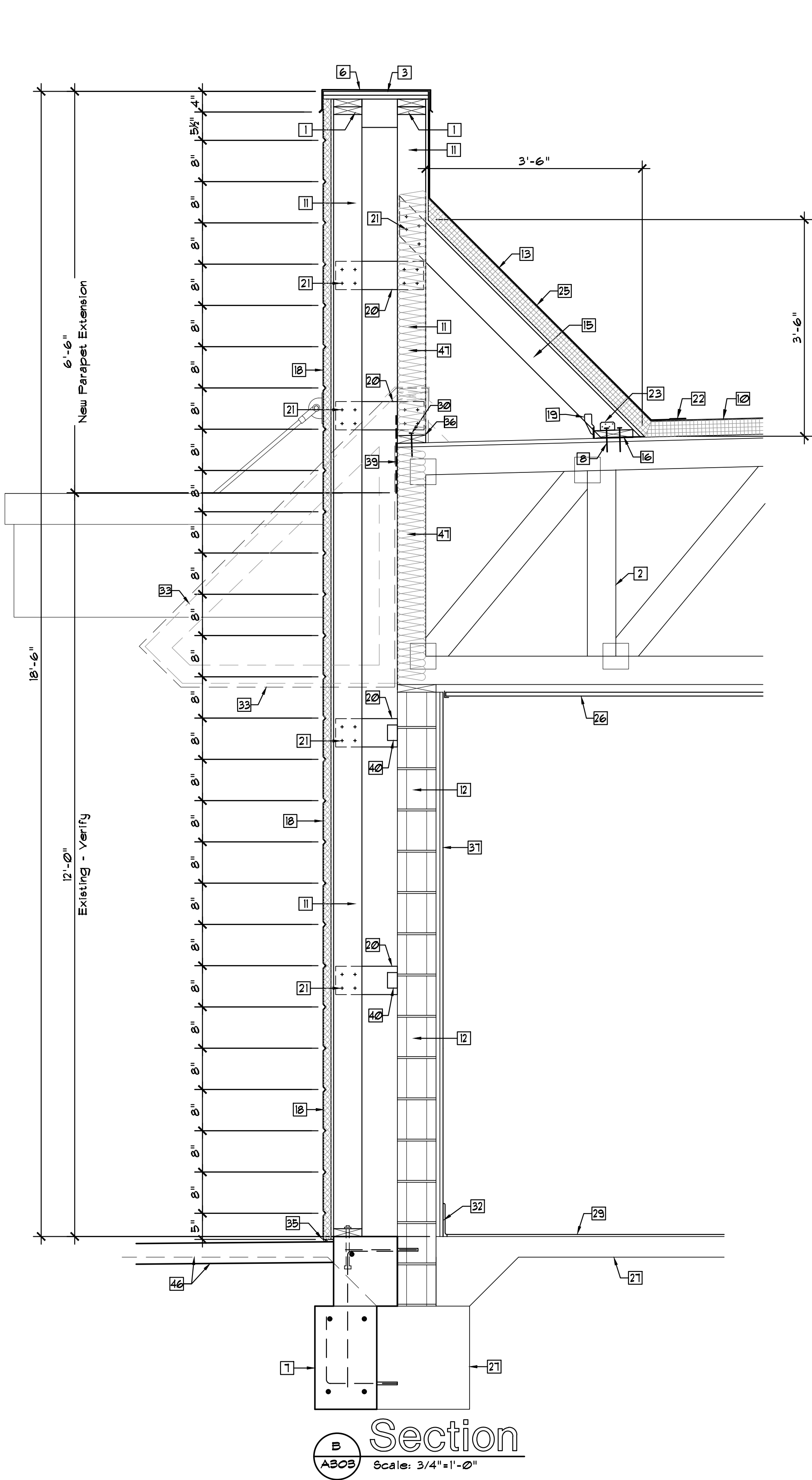
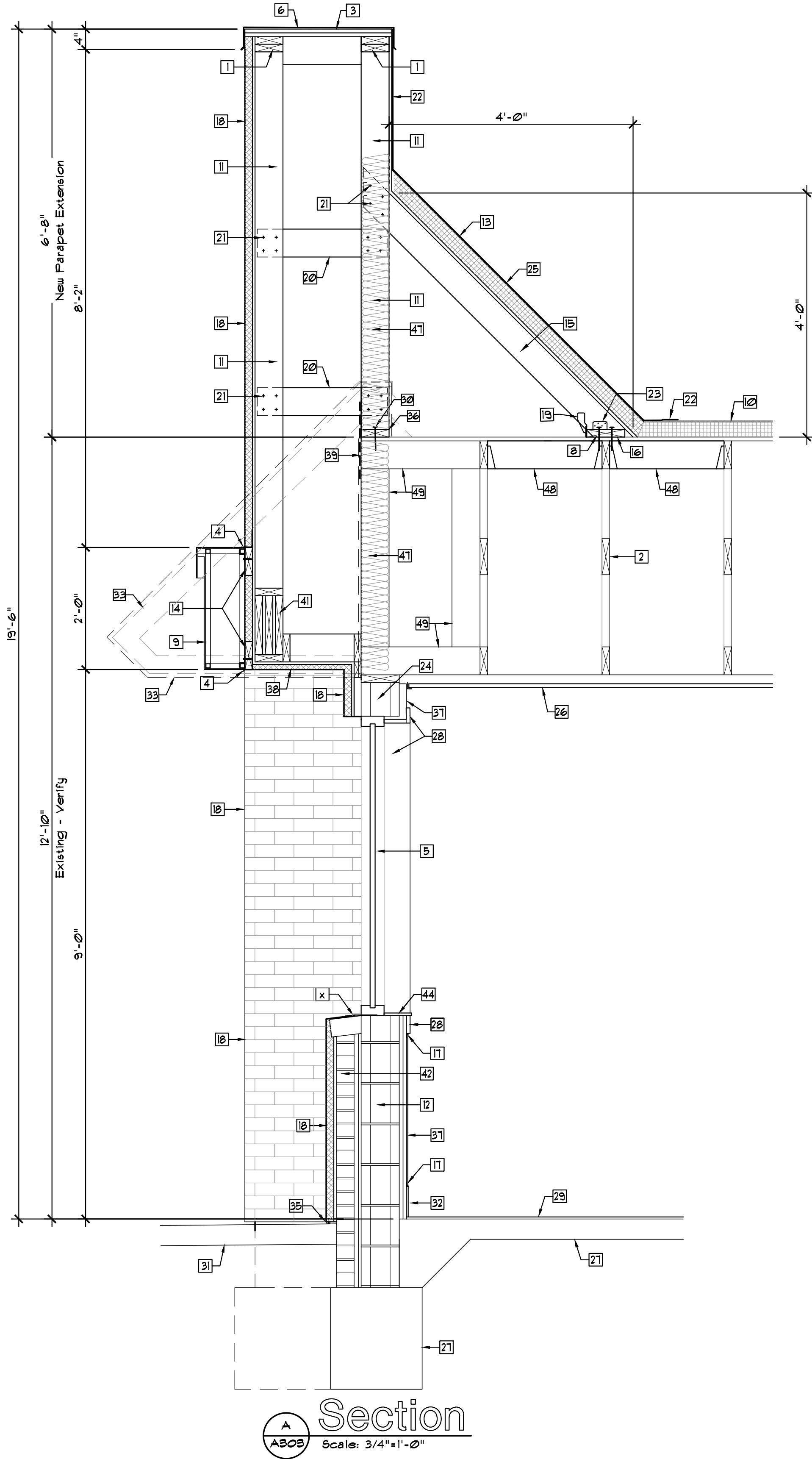
New Restaurant Conversion For:  
**Arby's - 1632 AR-25 Bypass**  
Heber Springs, Arkansas

Sheet Content
Sections

Sheet Number
A302

Date: 10-29-21
----------------





Keynote Schedule	
Mark	Description
1	New 2x6 Top Plate.
2	Existing Structural Wood Truss To Remain.
3	2 Layers 3/4" Plywood Cap.
4	Galvanized Flashing.
5	New 1" Insulated Storefront Glazing In Aluminum Framing, Provide Color/Finish To Match Existing.
6	New Metal Cap Flashing By Roofing Man. Ref: Finish Notes.
7	New Concrete Footing, Refer: Foundation Plan And Details, Sheet S101.
8	2-#2x4" Screws Into Each Wood Truss Or Blocking.
9	2'-0" High Prefabricated Metal Accent Band, Provided And Installed By Signage Manufacturer.
10	New Membrane Roofing Over New Rigid Roof Insulation, R-20 Min, Protect During Construction. Refer: Roof Plan Notes.

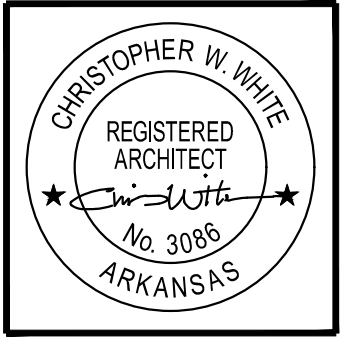
Keynote Schedule	
Mark	Description
11	New 2x6 Wood Studs @ 24"o.c., Match Exist. Truss Spacing.
12	Existing Concrete Block To Remain, Field Verify.
13	1/2" Exterior Grade Plywd. Para. Over Wood Stud Framing w/Membrane Roofing Over Rigid Roof Insulation.
14	New Continuous 2x6, Verify. Provide 2 - #10 x 4" Screws Into New Wall Studs.
15	New 2x6 Wood Bracing @ 24"o.c., Match Spacing Of Existing Wood Trusses.
16	New Continuous 2x8.
17	New Metal 'J' Trims Above Base Tile And Below Wainscot, Chair Rail Trim, Supplied By Owner, Installed By Contractor, Typical.
18	New E.I.F.S. Over 1 1/2" Rigid Insul. Over Tyvek Stucco Wrap Over 1/2" Exterior Sheathing Over Existing Masonry Or New 2x6 Wood Framing. Refer: Elevations.
19	Simpson H3 @ Each Brace.

Keynote Schedule	
Mark	Description
20	New 2x6 Wood Bracing @ Locations Indicated.
21	4 - 10d Nails, Typical Unless Noted Otherwise.
22	Provide New Flashing And Counter Flashing Assembly Overlapped And Tied Into Existing Or New Roofing Membrane.
23	Simpson A23 At Each Brace.
24	Existing CMU Header To Remain, Verify.
25	Extend Roofing Membrane Up Parapet.
26	New Suspended Ceiling Tile And Grid System, Refer: Reflected Ceiling Plan And Interior Finish Notes.
27	Existing Concrete Slab & Footings To Remain, Verify.
28	New 3" Solid Wood Trim. Refer: Interior Elevations.
29	New Floor Tile. Refer: Floor Finish Plan And Finish Schedule.
30	#12 x 4" Screw From New 2x6 Into Existing Wood Truss.

Keynote Schedule	
Mark	Description
31	Existing Concrete Sidewalk Or Paving To Remain, Refer: Civil Drawings.
32	New Base Tile, Refer: Interior Finish Notes.
33	Existing Sloped Metal Roofing And Framing To Be Removed.
34	New Drive Thru Service Window, Provide New Steel Lintels & Remove Existing CMU, Refer: Structural.
35	New Flashing, Sealant And Backer Rod @ New E.I.F.S. Wall Base, Refer: E.I.F.S. Manufacturers Installation Instructions, Typical.
36	New Treated 2x6 Base Plate.
37	New Wall Finish, Refer: Interior Finish Notes.
38	New E.I.F.S. Over 1" Rigid Insulation Over Tyvek Stucco Wrap Over 1/2" Exterior Sheathing New 2x6 Wood Framing At Soffit.
39	Simpson LST415 From Stud To End Of Truss.
40	Simpson A24 Angle With 1/2" Thru Bolt Into Brace And 1/2" x 2" Embedment, Hit! HIT-IC HY 210 Adhesive Anchor Into CMU Wall.

Keynote Schedule	
Mark	Description
41	New 3-2x12 Wood Header, Refer: Sheet S102.
42	Existing Brick Venser To Remain.
43	New Brushed Stainless Steel Trims And Apron.
44	New Solid Surface Sill, Provided And Installed By Furniture Vendor. Contractor To Coordinate Exact Depth Etc.
45	New 2'-0"H. Prefabricated Canopy Provided & Installed By Canopy Mfr. Contractor To Provide New Support Blocking & Coordinate Installation. Connections To Be Designed By Canopy Mfr's. Structural Engineer, Ref: Prefab. Canopy Notes.
46	Existing Floor Slab To Be Removed, Provide New Paving, Refer: Civil Drawings.
47	Provide New R-19 Batt Insulation As Required To Achieve Fully Insulated Envelope. Facing As Required By Code.
48	New 2x6 Blocking Between Trusses w/Simpson LU26 Each End.
49	Existing Outrigger Truss, Field Verify.

Christopher W. White  
Architect AR #3086  
5801 E. 41st St., Suite 712  
Tulsa, Oklahoma



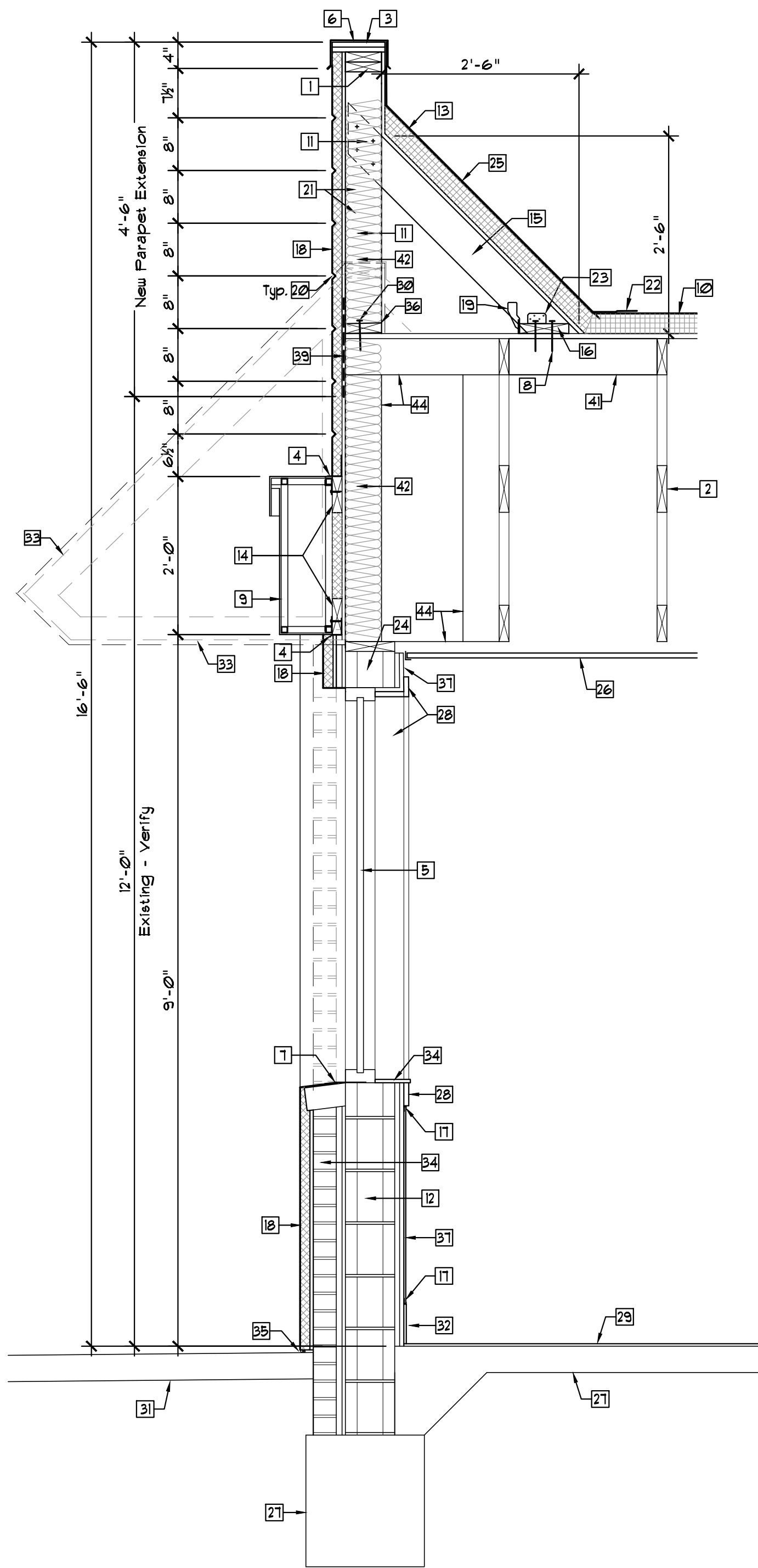
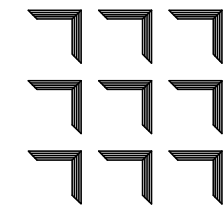
Revisions:

White Design Group, P.C.  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

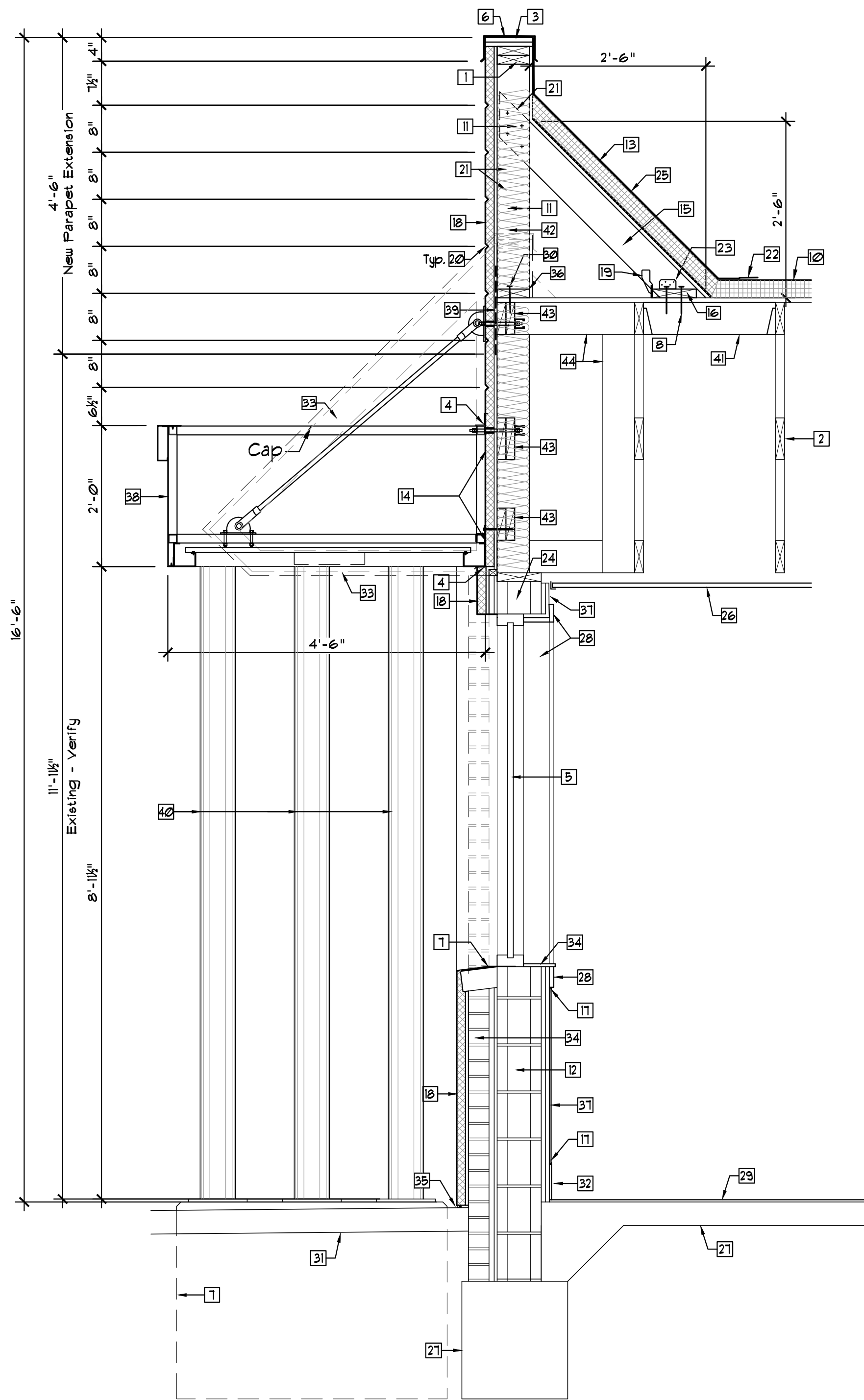
New Restaurant Conversion For:  
Arby's - 1632 AR-25 Bypass  
Heber Springs, Arkansas

Sheet Content  
Sections

Sheet Number  
A303  
Date: 10-29-21



**Section A**  
A304 Scale: 3/4"=1'-0"



**Section B**  
A304 Scale: 3/4"=1'-0"

## General Notes

- All Blocking Cut To Fit Tight And (2) 8d Toe Nails Ea. End Min.
- Provide Sealant And Backer Rods At All Appropriate Locations. (All Flashings, Coping Caps, Window And Door Frames, Etc.)
- The Contractor Shall Provide All Necessary Details As Required By The E.I.F.S. Manufacturer In Order To Maintain The Warranty. Provide All Backer Rods, Sealant Locations, Flashing Minimum Coverages, Etc.
- Provide Dryvit E.I.F.S. System Or Approved Equal System To Have A Water Management System With Appropriate Details. Provide Submittal With Proposed System And Details Indicated.
- Contractor To Verify Continuous Wall, Roof Insulation, And Vapor Barrier And Provide New As Required To Maintain Fully Insulate And Weatherproof Building Envelope.
- Provide Galvanized Or Prefinished Metal Flashing At All Windows, Penetrations, Coping Caps, Etc. In Accordance With SMACNA Industry Standard Details Minimum. Provide Shop Drawings For Each Condition To The Owner And Architect For Approval.

### EXTENSIVE FIELD VERIFICATION REQUIRED

The Contractor Shall Inspect The Existing Conditions And Report Any Differences To The Assumed Conditions Indicated On The Wall Sections To The Architect And Structural Engineer. The Wall Sections Represent An Approximation Of Existing Conditions Based Upon The Limited Amount Of Visual Inspection That Was Available Without Destructive Demolition To The Architect.

### PREFABRICATED CANOPY NOTES

The Prefabricated Canopy Manufacturer Shall Be Responsible For The Proper Design & Engineering Required For The Construction And Installation Of The Canopies. The Canopy Manufacturer Shall Provide Fully Engineered Connection Details Sealed And Signed By A Structural Engineer Licensed And In Good Standing In The State That The Project Is Located. The Design Documents Shall Indicate The Existing Conditions Accurately And Be Submitted To The Building Official, Architect, And Owner Prior To Starting Of Any Construction.

## Keynote Schedule

Mark	Description
1	New 2x6 Top Plate.
2	Existing Structural Wood Truss To Remain.
3	2 Layers 3/4" Plywood Cap.
4	Galvanized Flashing.
5	Existing Glazing Unit To Remain, Typical. Clean Frames, Replace Broken Seal Units, Typical.
6	New Metal Cap Flashing By Roofing Man. Ref: Finish Notes.
7	New Concrete Footing Beyond For 6" Posts, Refer: Foundation Plan And Details, Sheet 9101.
8	2-#2x4" Screws Into Each Wood Truss.
9	2'-0" High Prefabricated Metal Accent Band, Provided And Installed By Signage Manufacturer.

## Keynote Schedule

Mark	Description
10	New Membrane Roofing Over New Rigid Roof Insulation, R-20 Min, Protect During Construction. Refer: Roof Plan Notes.
11	New 2x6 Wood Studs @ 24"o.c., Match Exist. Truss Spacing.
12	Existing Concrete Block To Remain, Field Verify.
13	1/2" Exterior Grade Plywd. Para. Over Wood Stud Framing w/Membrane Roofing Over Rigid Roof Insulation.
14	New Continuous 2x6, Verify. Provide 2 - #10 x 4" Screws Into New Wall Studs.
15	New 2x6 Wood Bracing @ 24"o.c., Match Spacing Of Existing Wood Trusses.
16	New Continuous 2x8.
17	New Metal 'J' Trim Above Base Tile And Below Wainscot Chair Rail Trim, Supplied By Owner, Installed By Contractor, Typical.

## Keynote Schedule

Mark	Description
18	New E.I.F.S. Over 1 1/2" Rigid Insul. Over Tyvek Stucco Wrap Over 1/2" Exterior Sheathing Over Existing Masonry Or New 2x6 Wood Framing. Refer: Elevations.
19	Simpson H3 @ Each Brace.
20	1" E.I.F.S. Reveal, Typical. Refer: Bldg Elevations & Detail D/A301.
21	4 - 10d Nails, Typical Unless Noted Otherwise.
22	Provide New Flashing And Counter Flashing Assembly Overlapped And Tied Into Existing Or New Roofing Membrane.
23	Simpson A23 At Each Brace.
24	Existing CMU Header To Remain, Verify.
25	Extend Roofing Membrane Up Parapet.
26	New Suspended Ceiling Tile And Grid System, Refer: Reflected Ceiling Plan And Interior Finish Notes.

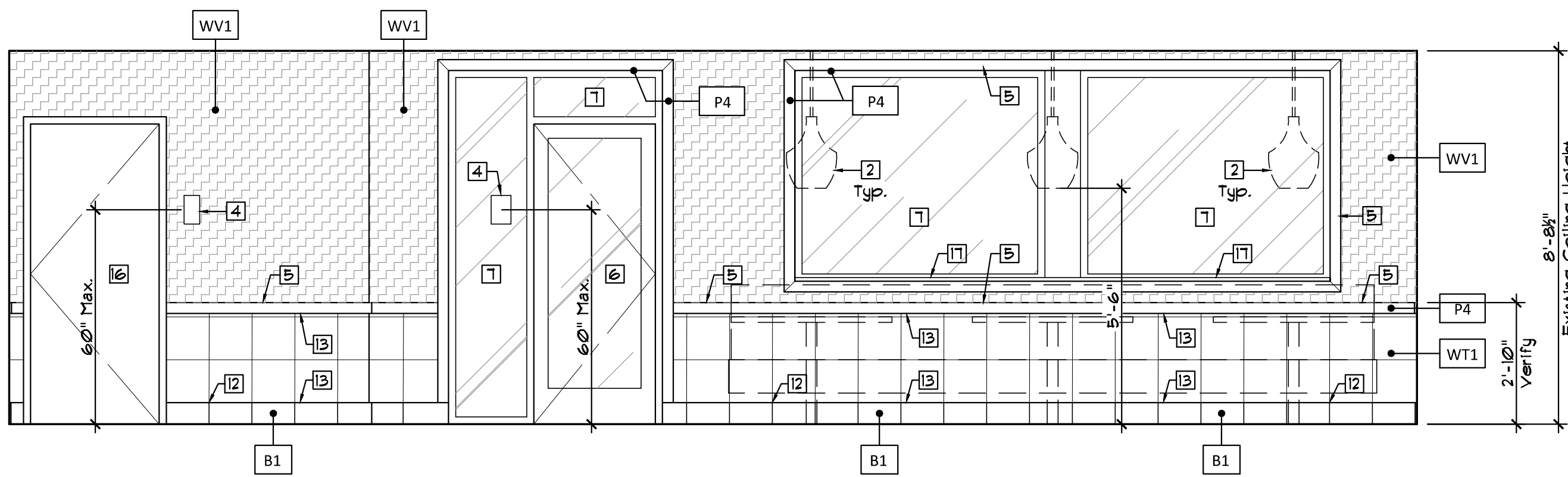
## Keynote Schedule

Mark	Description
27	Existing Concrete Slab & Footings To Remain, Verify.
28	New 3" Solid Wood Trim. Refer: Interior Elevations.
29	New Floor Tile. Refer: Floor Finish Plan And Finish Schedule.
30	#12 x 4" Screw From New 2x6 Into Existing Wood Truss.
31	Existing Concrete Sidewalk Or Paving To Remain, Refer: Civil Drawings.
32	New Base Tile, Refer: Interior Finish Notes.
33	Existing Sloped Metal Roofing And Framing To Be Removed.
34	Existing Brick Veneer To Remain.
35	New Flashing, Sealant And Backer Rod @ New E.I.F.S. Wall Base, Refer: E.I.F.S. Manufacturers Installation Instructions, Typical.
36	New Treated 2x6 Base Plate.

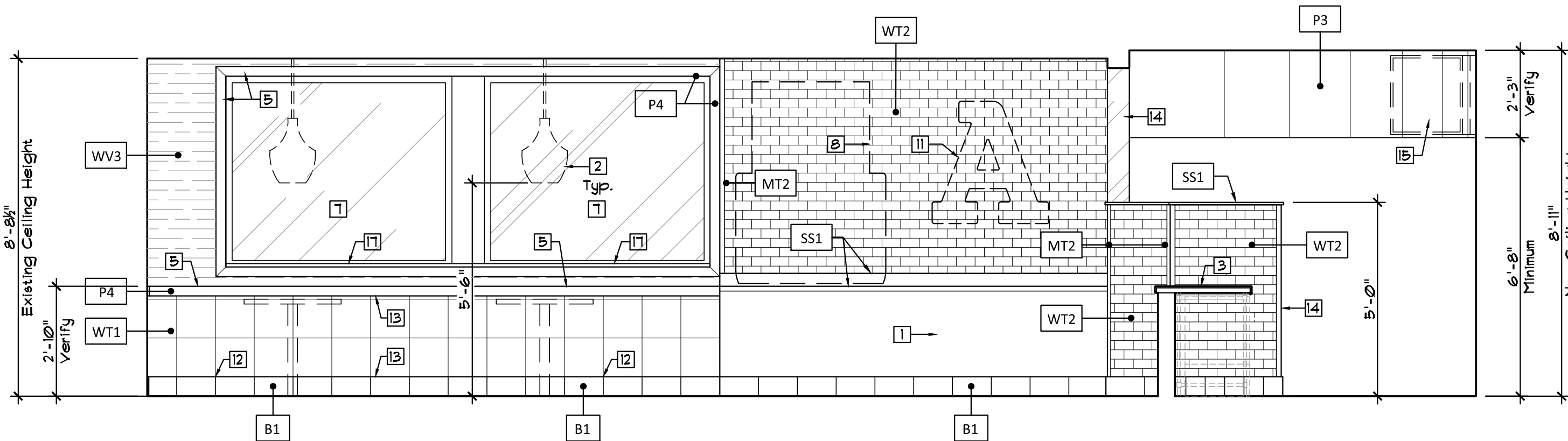
## Keynote Schedule

Mark	Description
37	New Wall Finish, Refer: Interior Finish Notes.
38	New 2'-0"H. Prefabricated Canopy Provided & Installed By Canopy Mfr. Contractor To Provide New Support Blocking & Coordinate Installation. Connections To Be Designed By Canopy Mfr's. Structural Engineer, Ref: Prefab. Canopy Notes.
39	Simpson LSTA15 From Stud To End Of Truss.
40	6" Dia. Steel Pipe Columns, Prime, Prepare And Paint. Refer: Exterior Finish Notes.
41	New 2x6 Blocking Supports For Angled Kickers Where Required, Typical.
42	Provide New R-19 Batt Insulation As Required To Achieve Fully Insulated Envelope. Facing As Required By Code.
43	New Blocking Between Trusses As Req'd For Canopy Connection (By Others).
44	Existing Outrigger Truss, Field Verify.

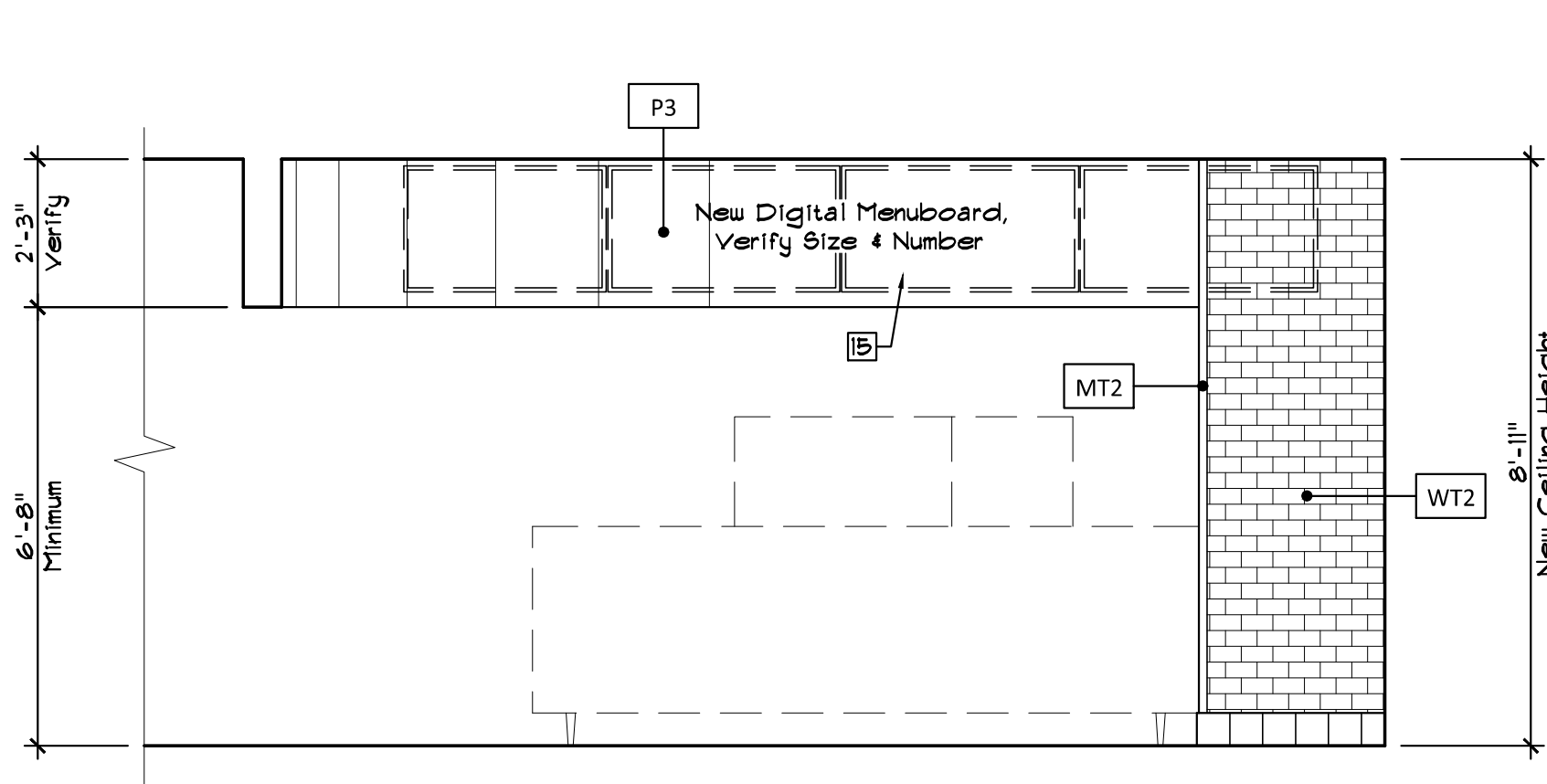




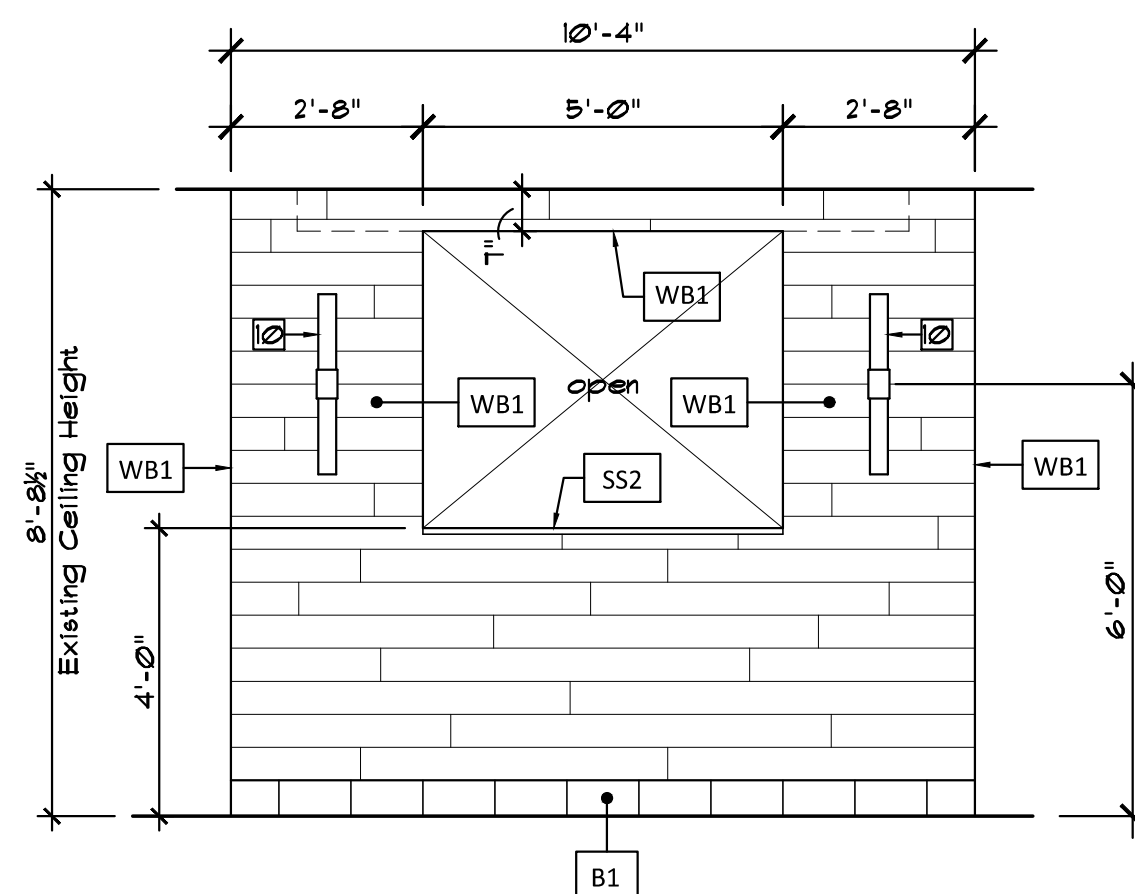
**A** Interior Elevation  
A401 Scale: 3/8"=1'-0"



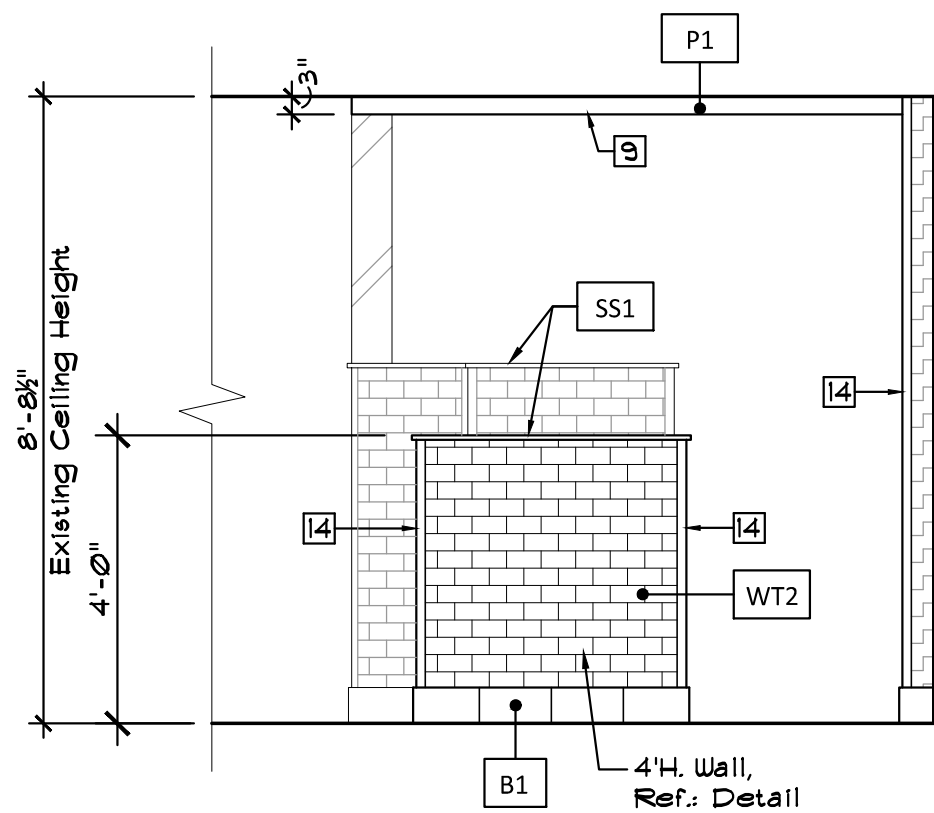
**C** Interior Elevation  
A401 Scale: 3/8"=1'-0"



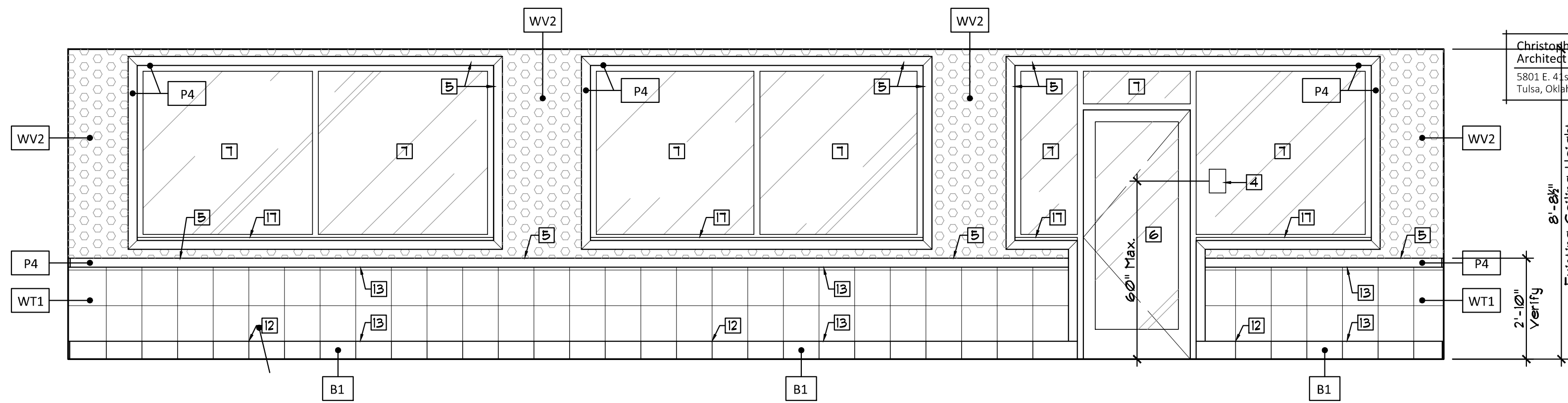
**E** Interior Elevation  
A401 Scale: 3/8"=1'-0"



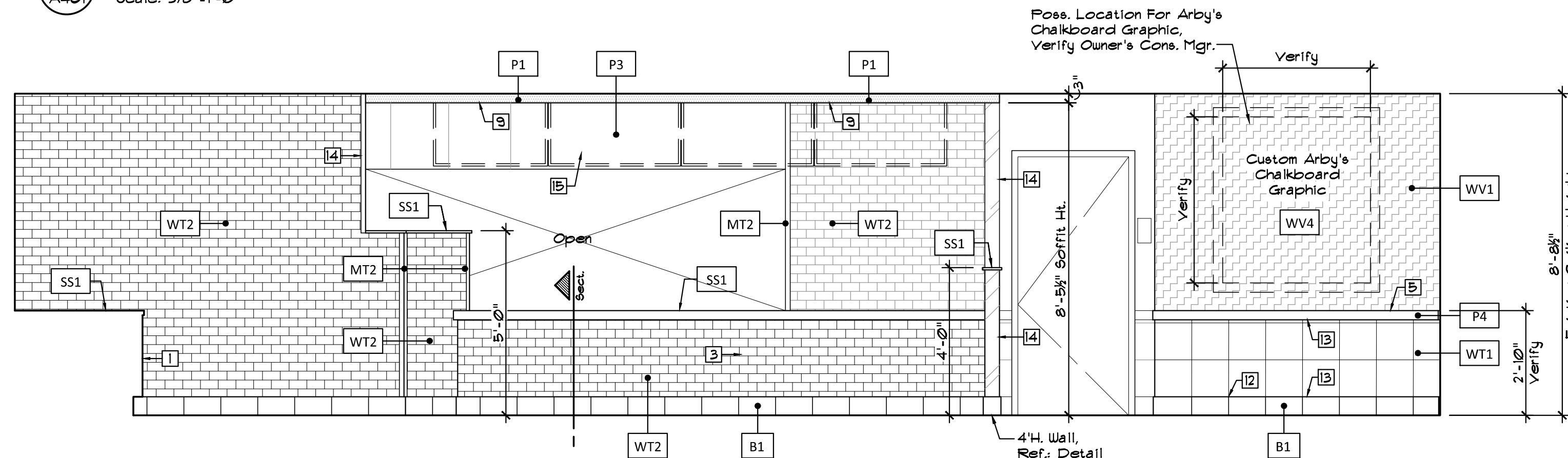
**F** Interior Elevation  
A401 Scale: 3/8"=1'-0"



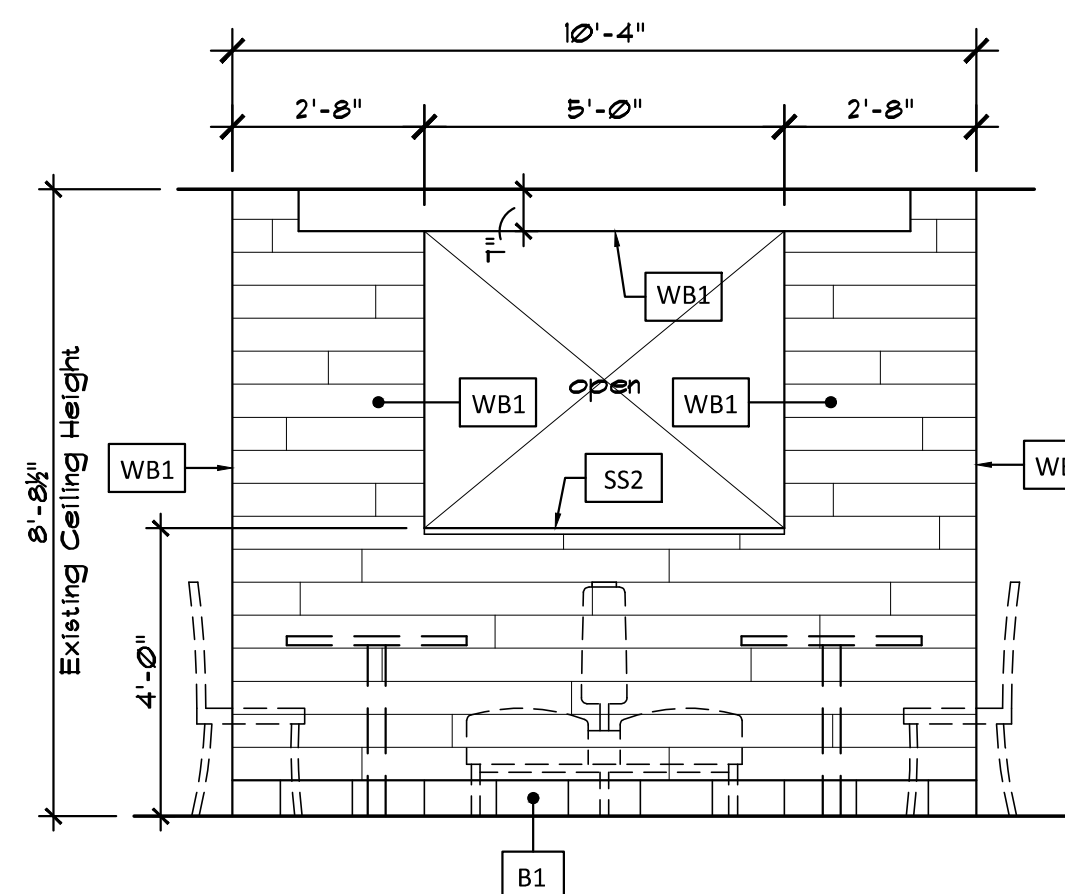
**H** Interior Elevation  
A401 Scale: 3/8"=1'-0"



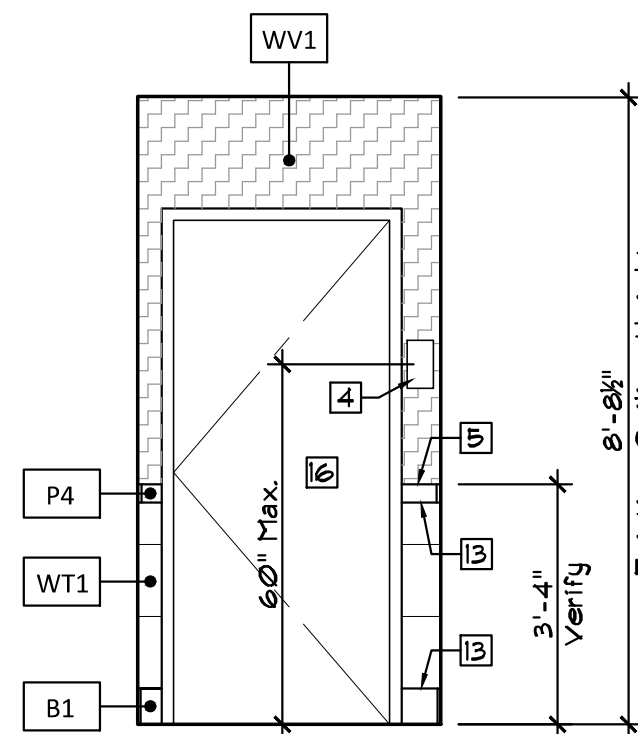
**B** Interior Elevation  
A401 Scale: 3/8"=1'-0"



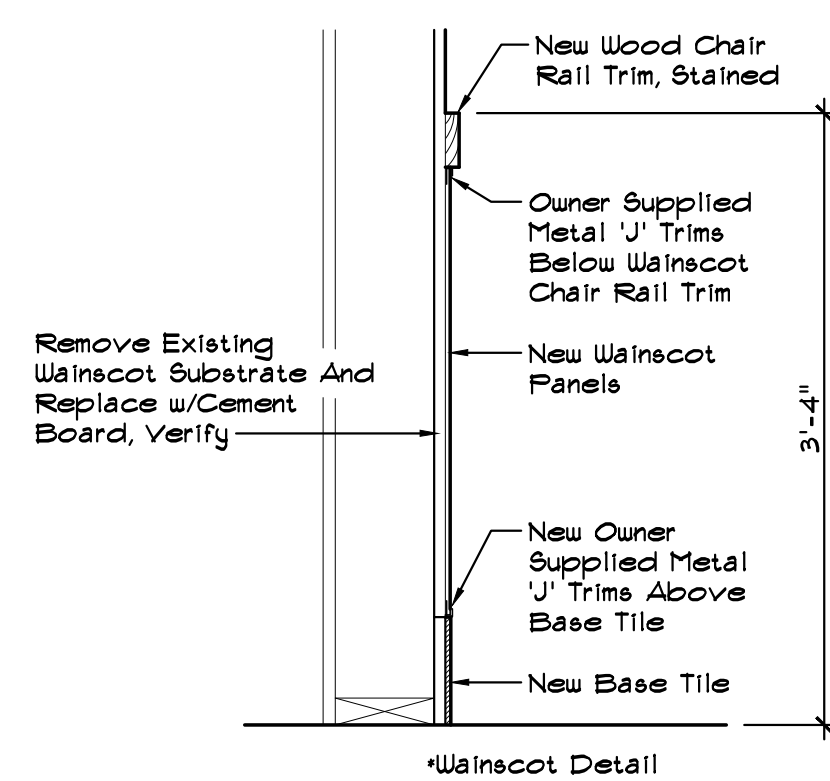
**D** Interior Elevation  
A401 Scale: 3/8"=1'-0"



**G** Interior Elevation  
A401 Scale: 3/8"=1'-0"



**J** Int. Elev.  
A401 Scale: 3/8"=1'-0"



**E** Section  
A401 Not To Scale

## Interior Finish Notes

1. Install Faux Ceramic Wainscot Panel Between New Base Tiles And Chair Rail On All Walls Throughout Public Areas. Provide Owner Supplied 'J' Trim Above Base Tile And Below Wainscot Chair Rail Trim, Typical.
2. Provide New Inspire Wall Coverings Per Interior Elevations.
3. Provide New Inspire Floor & Base Tiles Throughout Dining Area And Restrooms. Refer: Interior Elevations & Floor Finish Plan.
4. Patch And Repair Wall And Floor Finishes As Required Throughout Kitchen.
5. The Contractor Shall Prepare Raised Window Sill For New Solid Surface Sill To Be Provided & Installed By Furniture Vendor In Public Areas Where Applicable. Refer: Interior Elevations.
6. The Contractor Shall Install All Owner Provided Artwork Throughout The Public Areas. The Artwork Shall Be Mounted At 5'-6" Above The Finished Floor To The Centerline Of The Artwork.

## Keynote Schedule

Mark	Description
1	New ADA Compliant 3'-6" x 10'-0" Condiment Counter With Countertop At 2'-10" AFF. Provided And Installed By Furniture Vendor.
2	New Pendant Light Fixture, Refer: Reflected Ceiling Plan.
3	New Service Counter At 2'-10" AFF. Provided And Installed By Furniture Vendor. Refer: Section.
4	New ADA Tactile Compliant Signage.
5	New Wood Trim, Stained, Typical Throughout Dining/Vestibule/Hallway.
6	New Storefront Glass Door, Refer: Door Schedule.
7	Existing Glazing Unit To Remain, Typical. Replace Broken Seal Units, Typical.
8	Line Of Soda Machine, Verify With Owner.
9	New Gypsum Board Header, Paint Red. Refer: Interior Finish Schedule.
10	New Inspire Wall Sconce, Refer: Reflected Ceiling Plan.
11	New Arby's 36"H. Carousel 'A' Sign. Contractor To Provide New Electrical. Verify Location And Sign Size w/Owner.
12	Align Base Tile Grout Lines With Floor And Wainscot Tile Grout Lines, Typical.
13	New Metal 'J' Trim Above Base Tile And Below Wainscot Chair Rail Trim, Supplied By Owner, Install By Contractor, Typical.
14	New Brushed Stainless Steel End Cap Guard.
15	New Owner Provided Digital Menuboards To Be Installed By Owners Vendor.
16	New Solid Core Wood Door, Stained, Refer: Door Schedule.
17	New Solid Surface Window Sill, Provided And Installed By Furniture Vendor. Contractor To Coordinate Installation.

New Restaurant Conversion For:

Arby's - 1632 AR-25 Bypass

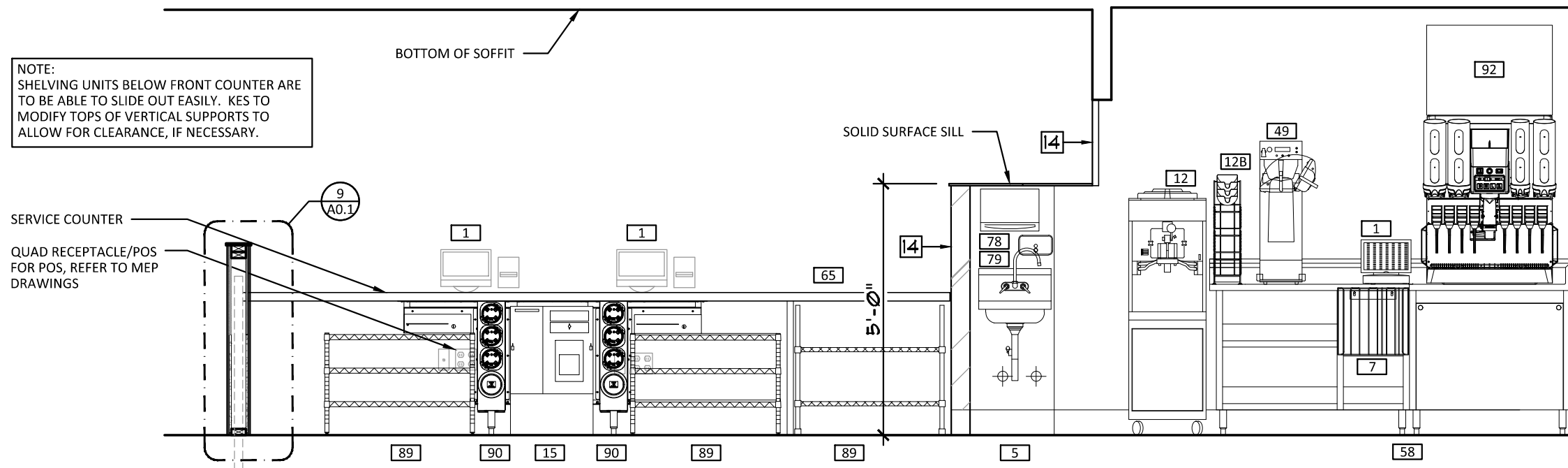
Heber Springs, Arkansas

Sheet Content  
Interior Elevations,  
Wainscot Detail,  
Interior Finish Notes

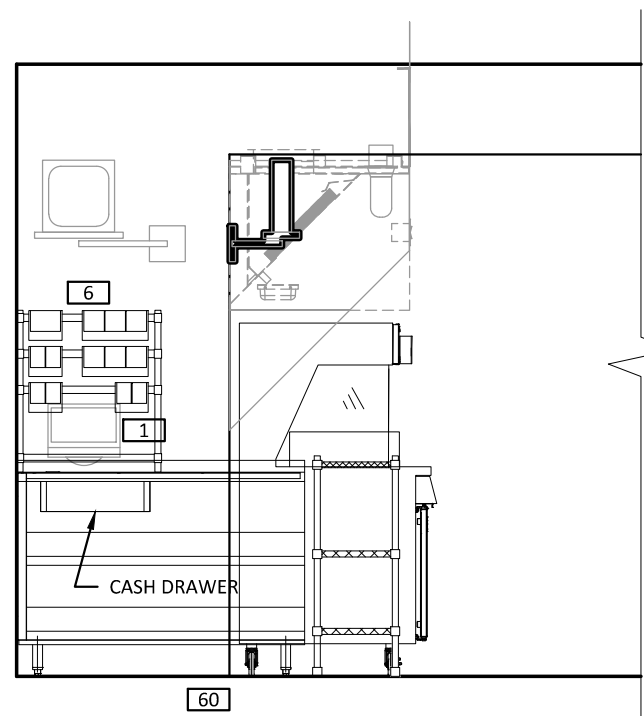
Sheet Number  
**A401**  
Date: 10-29-21

White Design Group, P.C.  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

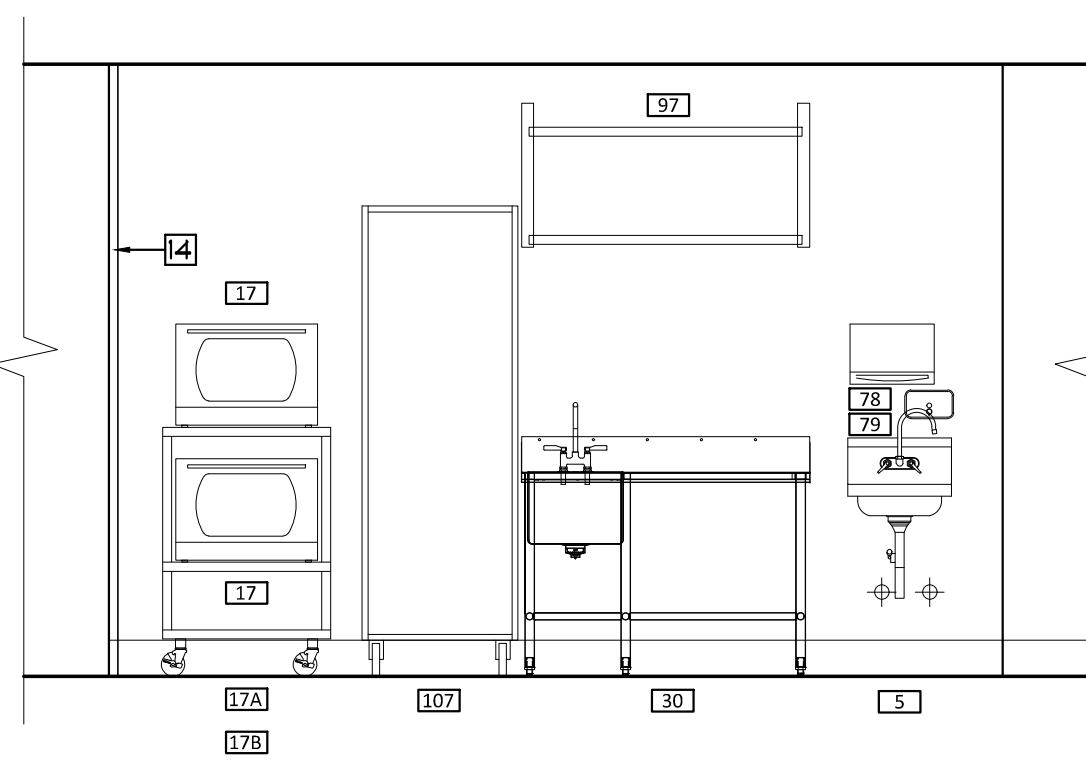
Christopher W. White  
REGISTERED ARCHITECT  
AR #3086  
5801 E. 41st St., Suite 712  
Tulsa, Oklahoma  
10-29-21  
Revisions:



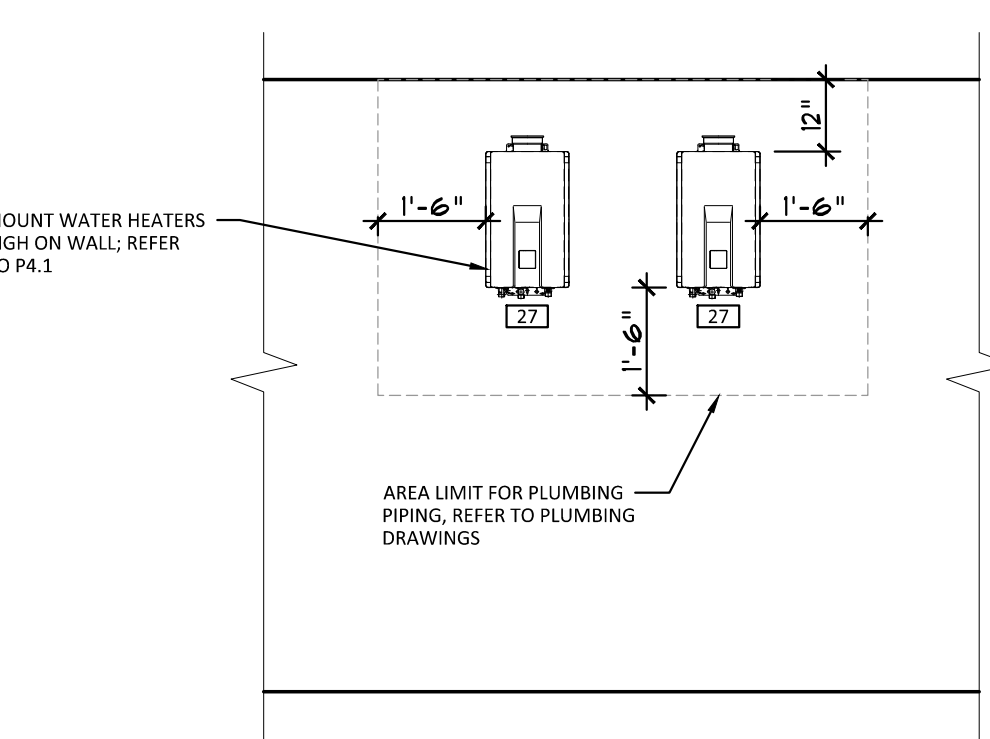
**A**  
A402  
**Kitchen Elevation**  
Scale: 3/8"=1'-0"



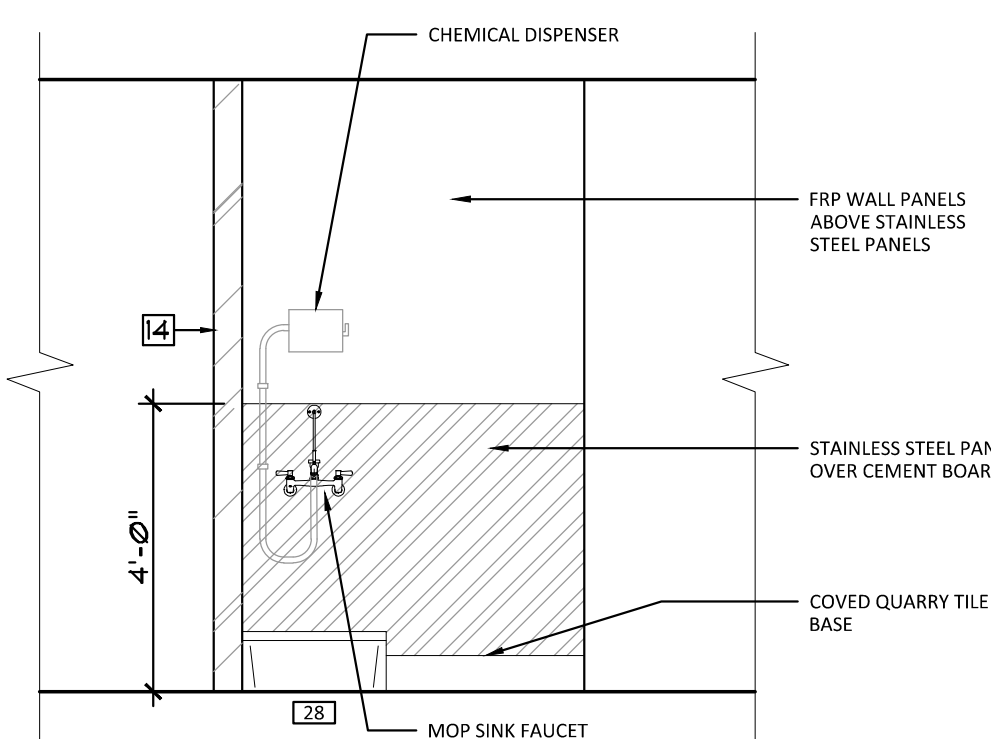
**C**  
A402  
**Kitchen Elev.**  
Scale: 3/8"=1'-0"



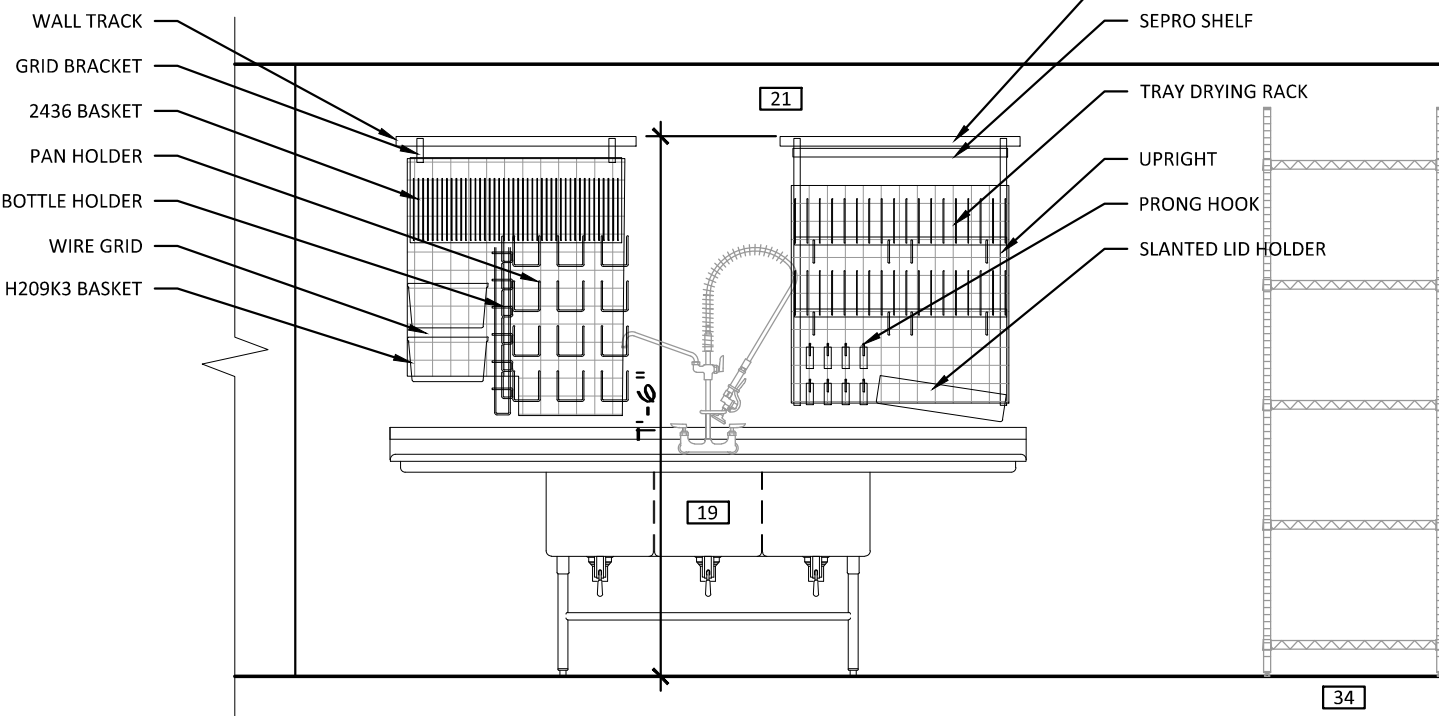
**D**  
A402  
**Kitchen Elevation**  
Scale: 3/8"=1'-0"



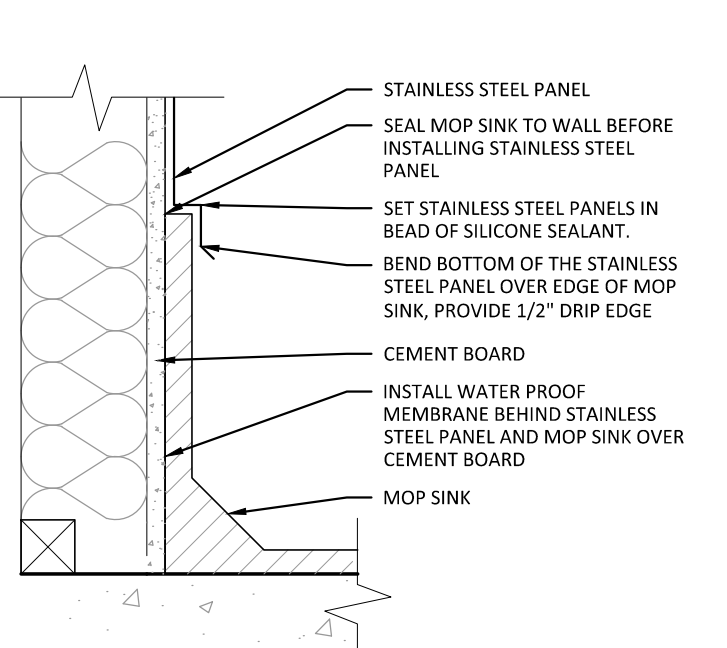
**H**  
A402  
**Kitchen Elev.**  
Scale: 3/8"=1'-0"



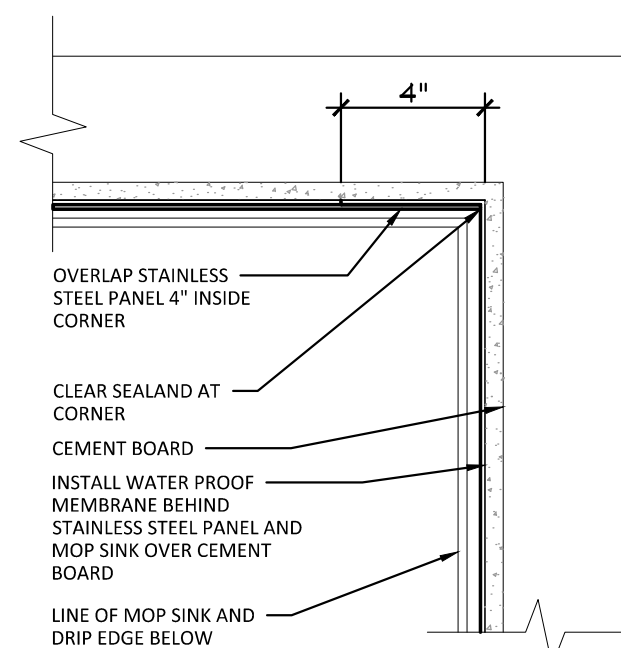
**J**  
A402  
**Kitchen Elev.**  
Scale: 3/8"=1'-0"



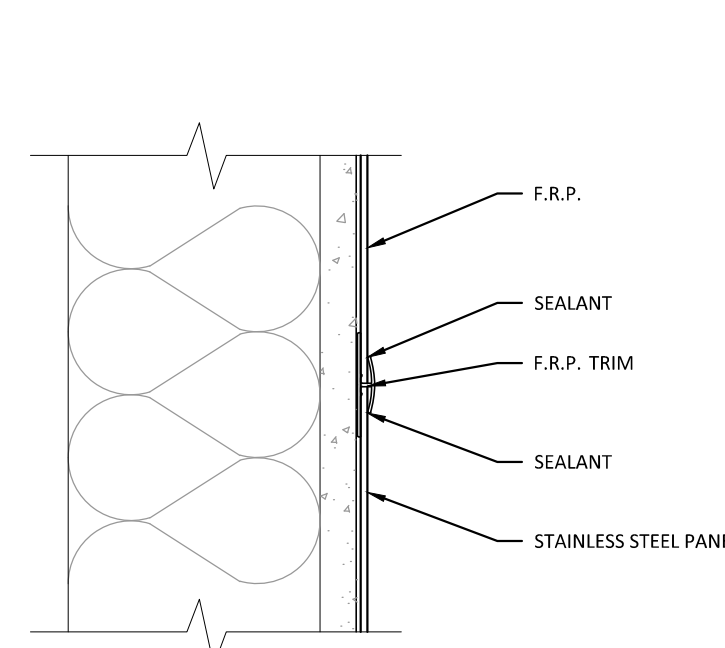
**E**  
A402  
**Kitchen Elevation**  
Scale: 3/8"=1'-0"



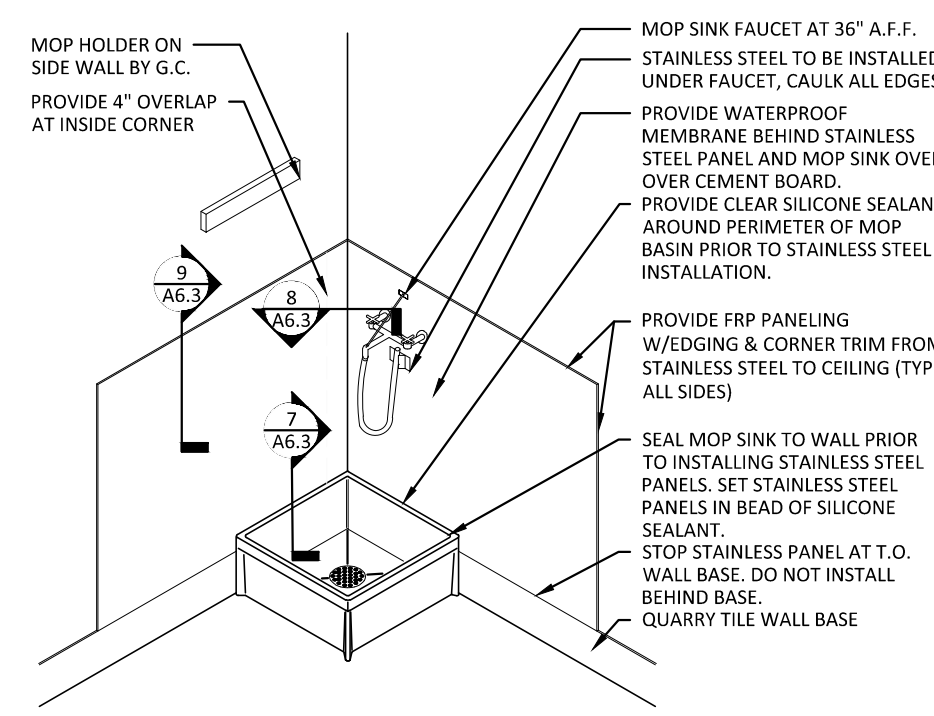
**K**  
A402  
**Mop Sink Section Detail**  
Scale: 1 1/2"=1'-0"



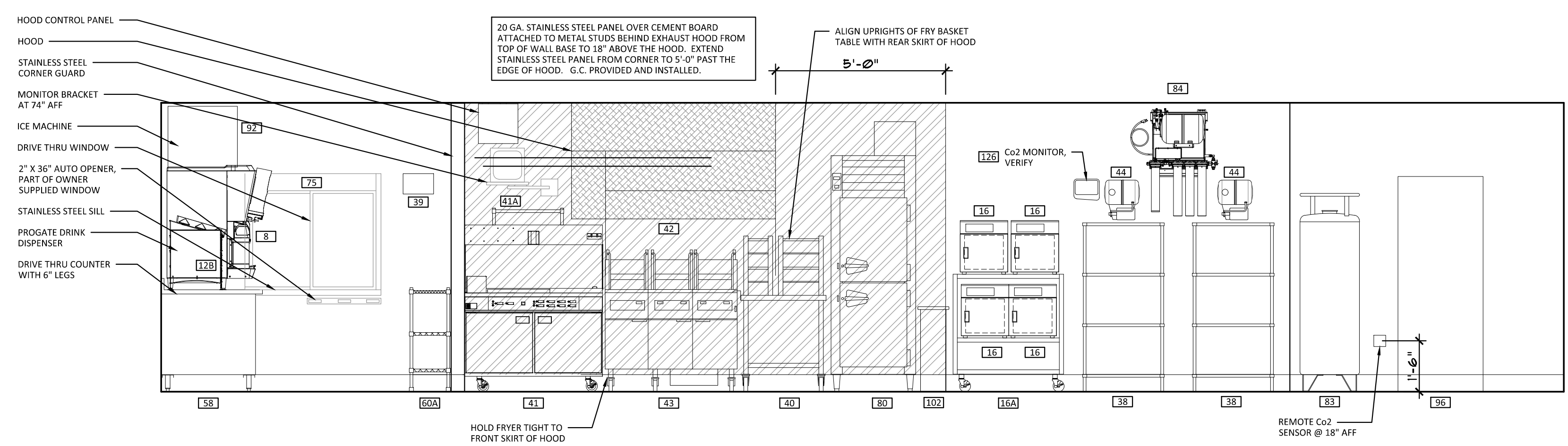
**L**  
A402  
**Mop Sink Corner Detail**  
Scale: 1 1/2"=1'-0"



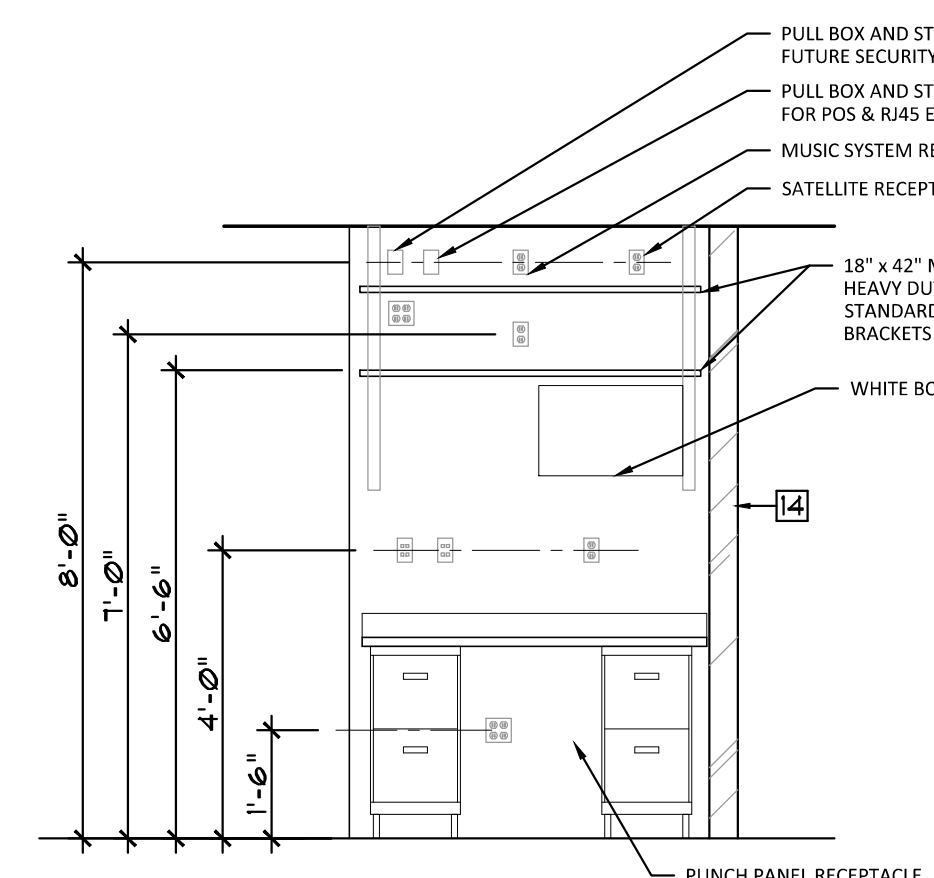
**M**  
A402  
**Mop Sink Trim Detail**  
Scale: 3"=1'-0"



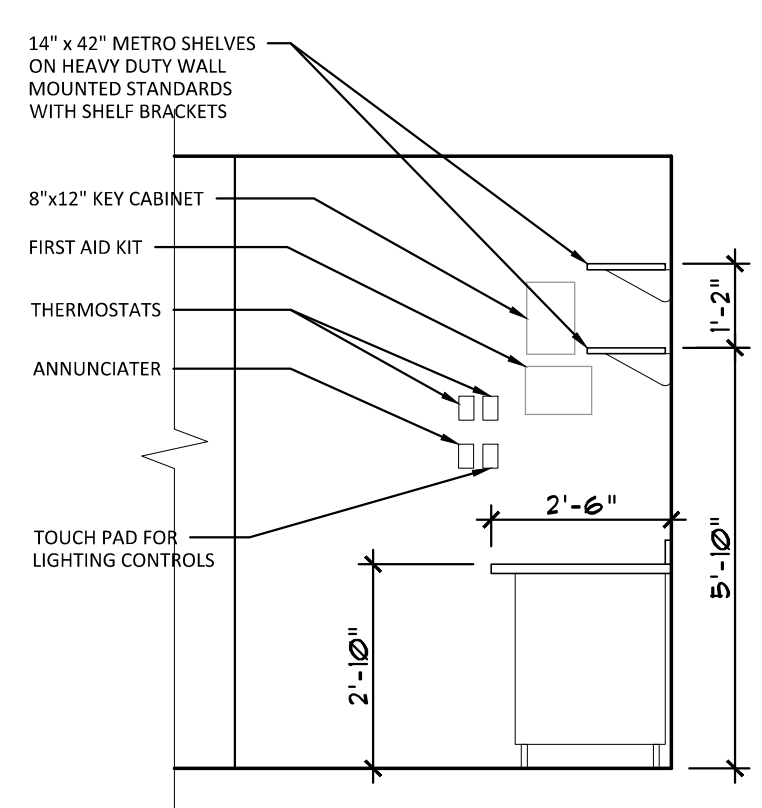
**N**  
A402  
**Mop Sink Detail**  
Not To Scale



**B**  
A402  
**Kitchen Elevation**  
Scale: 3/8"=1'-0"



**F**  
A402  
**Manager's Desk Kitchen Elev.**  
Scale: 3/8"=1'-0"



**G**  
A402  
**Manager's Desk Kitchen Elev.**  
Scale: 3/8"=1'-0"

Christopher W. White  
Architect AR #3086  
5801 E. 41st St., Suite 712  
Tulsa, Oklahoma



10-29-21  
Revisions:

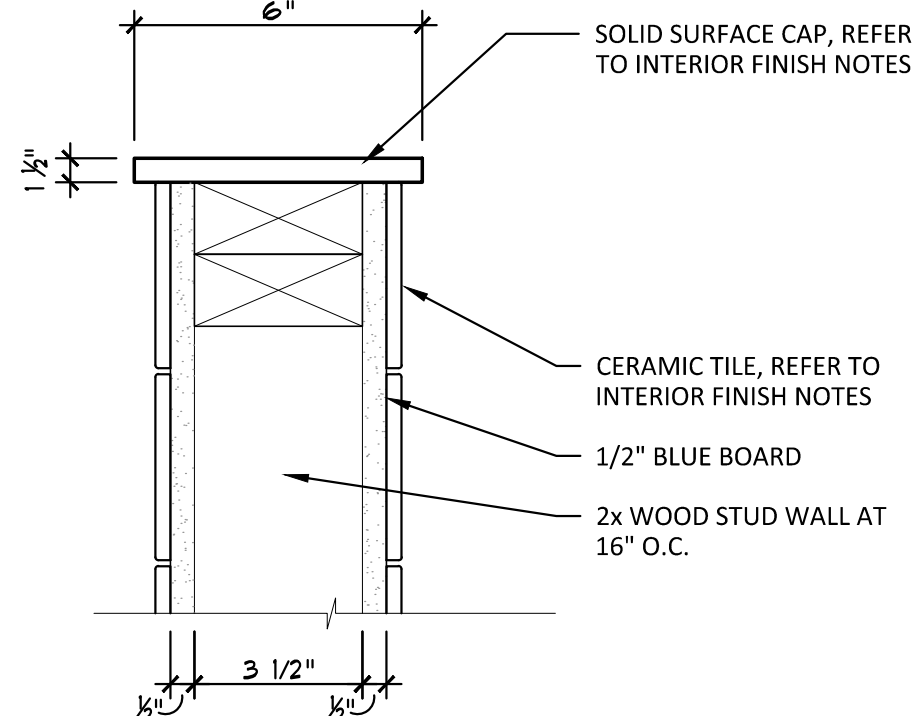
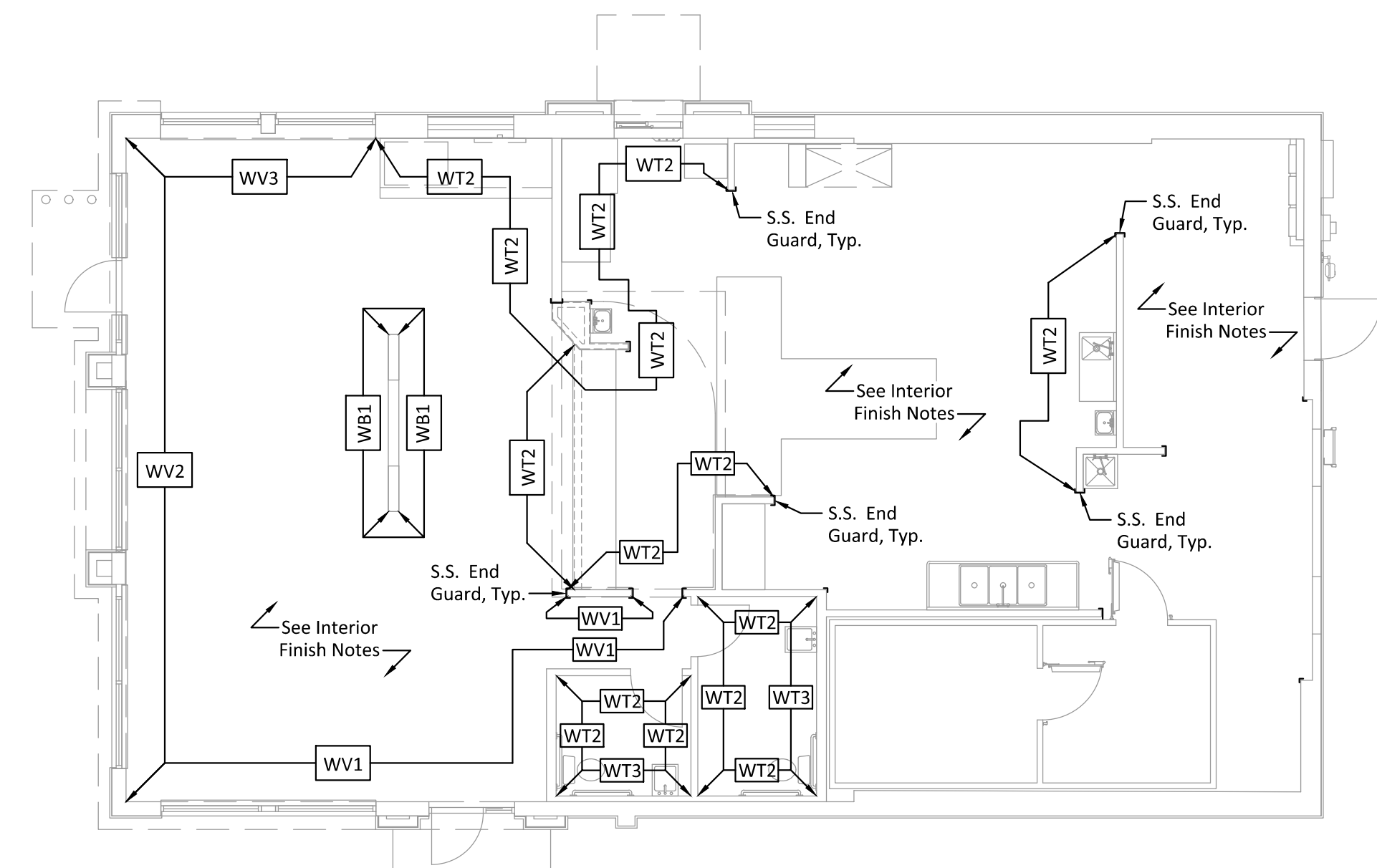
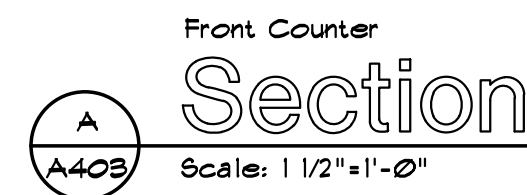
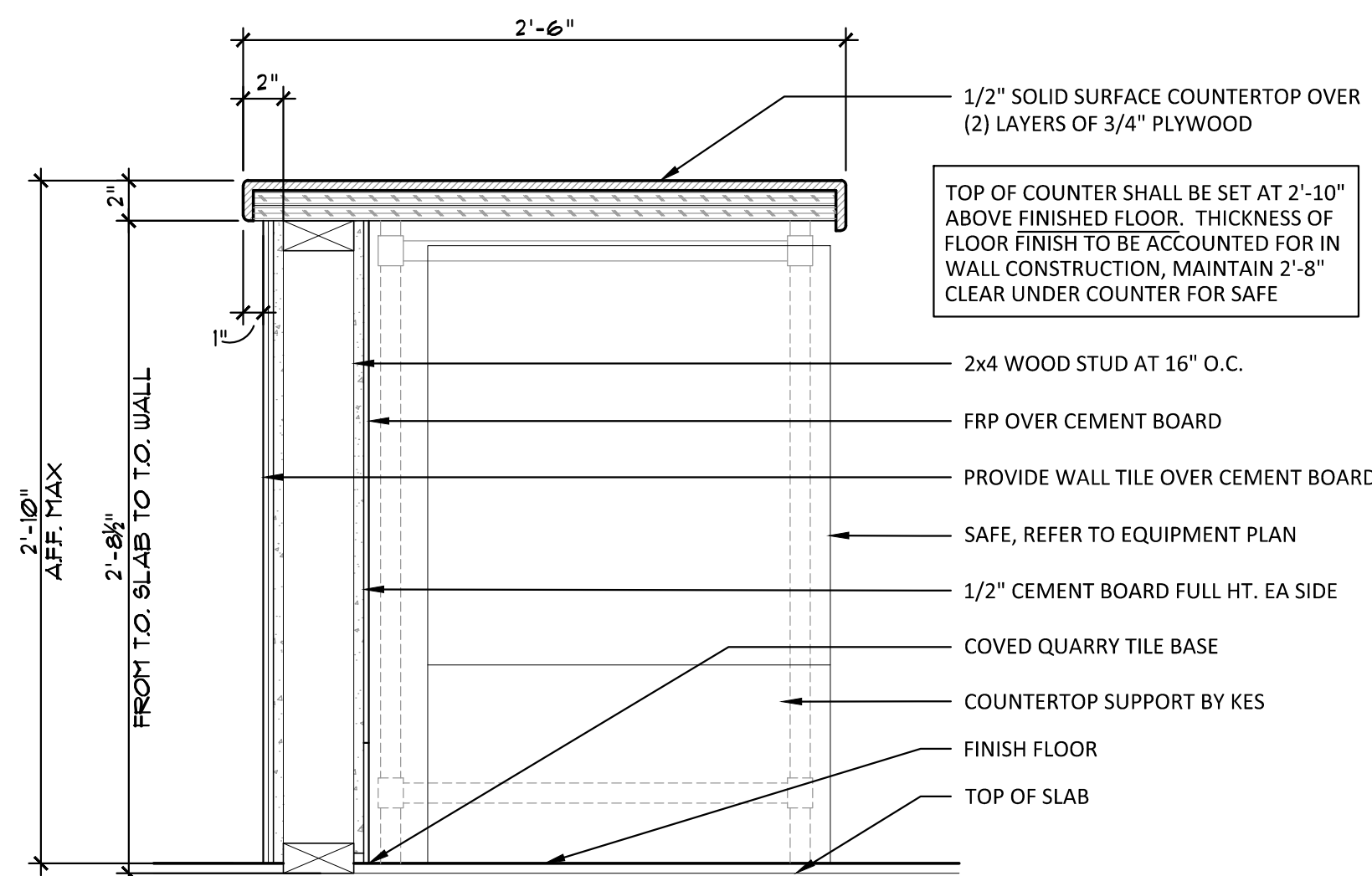
White Design Group, P.C.  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

New Restaurant Conversion For:  
Arby's - 1632 AR-25 Bypass  
Heber Springs, Arkansas

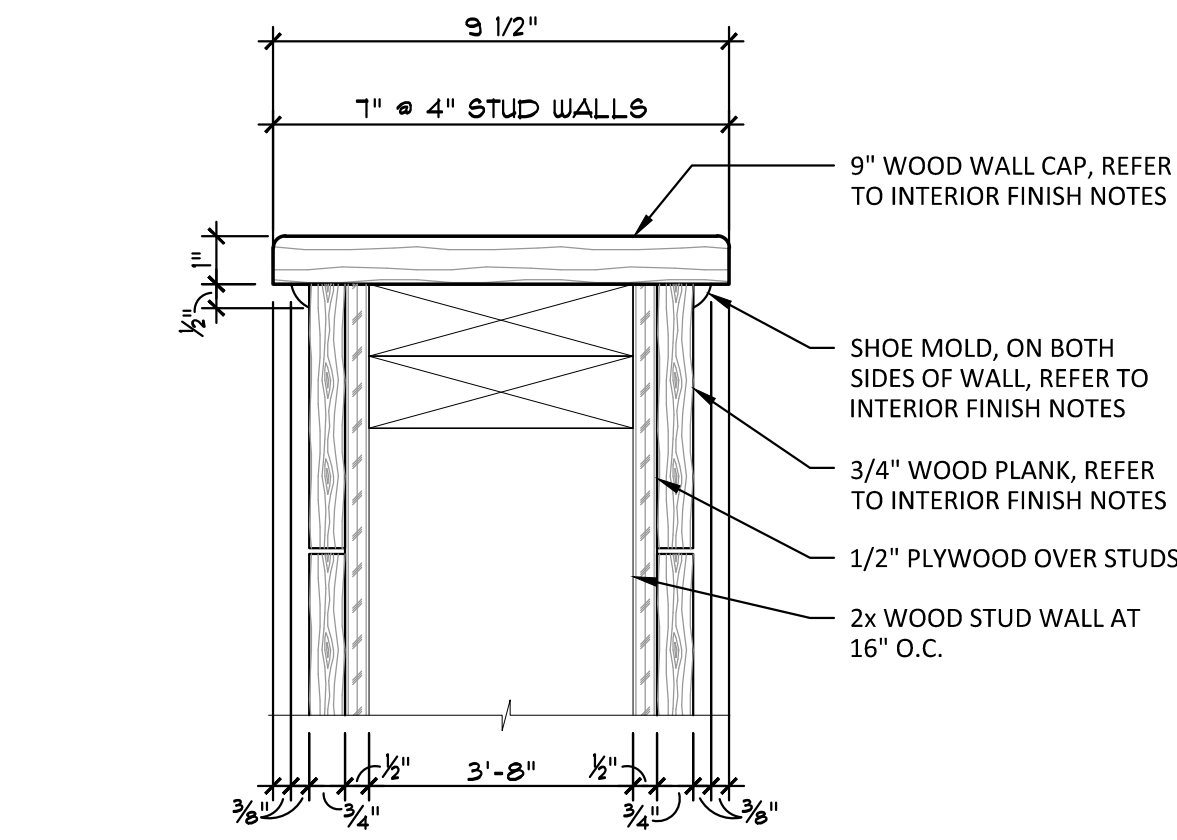
Sheet Content  
Kitchen Elevations,  
Mop Sink Details

Sheet Number  
A402  
Date: 10-29-21

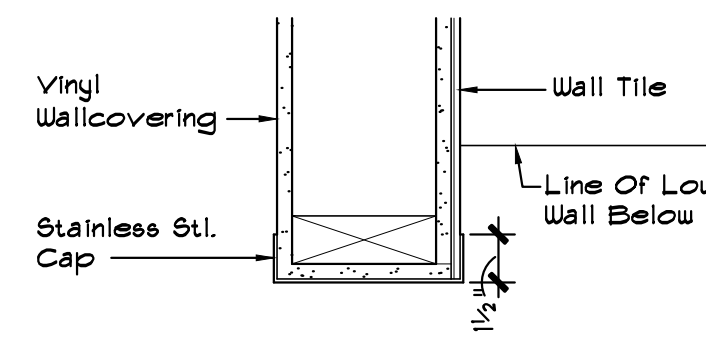




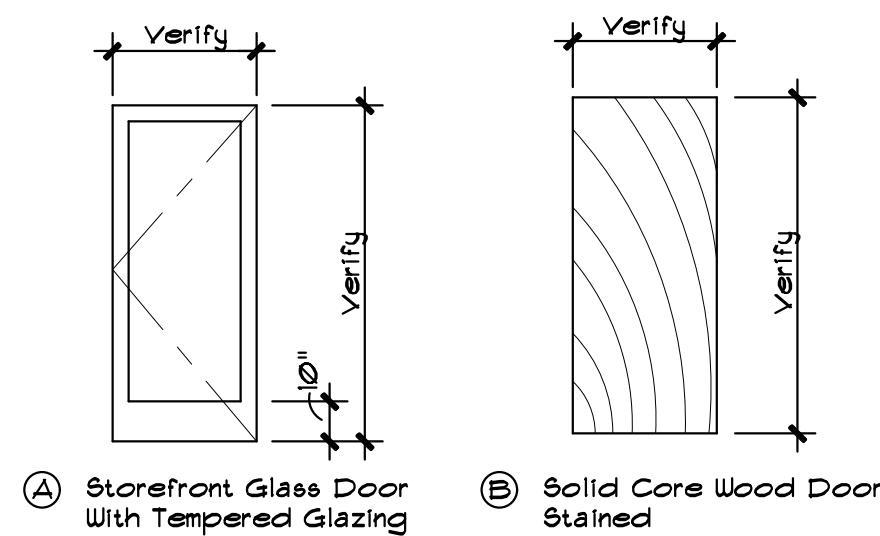

Wall Cap Detail  
 Scale: 3"=1'-0"




Wall Cap Detail  
 Scale: 3"=1'-0"



S.S. Guard  
Section  
D  
A403  
Not To Scale



Typical  
Door Types

## Hardware Notes

1. All Hardware Shall Meet ADA Guidelines, & Shall Conform To All City, State, & National Building Codes, Laws, Special Ordinances And/Or Regulations.
2. All Standard Locksets Shall Be Lever Type In Conformance To ADA Guideline. Keying Requirements Shall Be Coordinated With The Owner.
3. Hinges, Strikes & Other Accessory Requirements Shall Be Coordinated And Provided With Door Size, Type, & Use.
4. Mount The Sanitigrasp Door Pull At 36" AFF. To The Bottom Of The Full Handle.

## Interior Finish Schedule

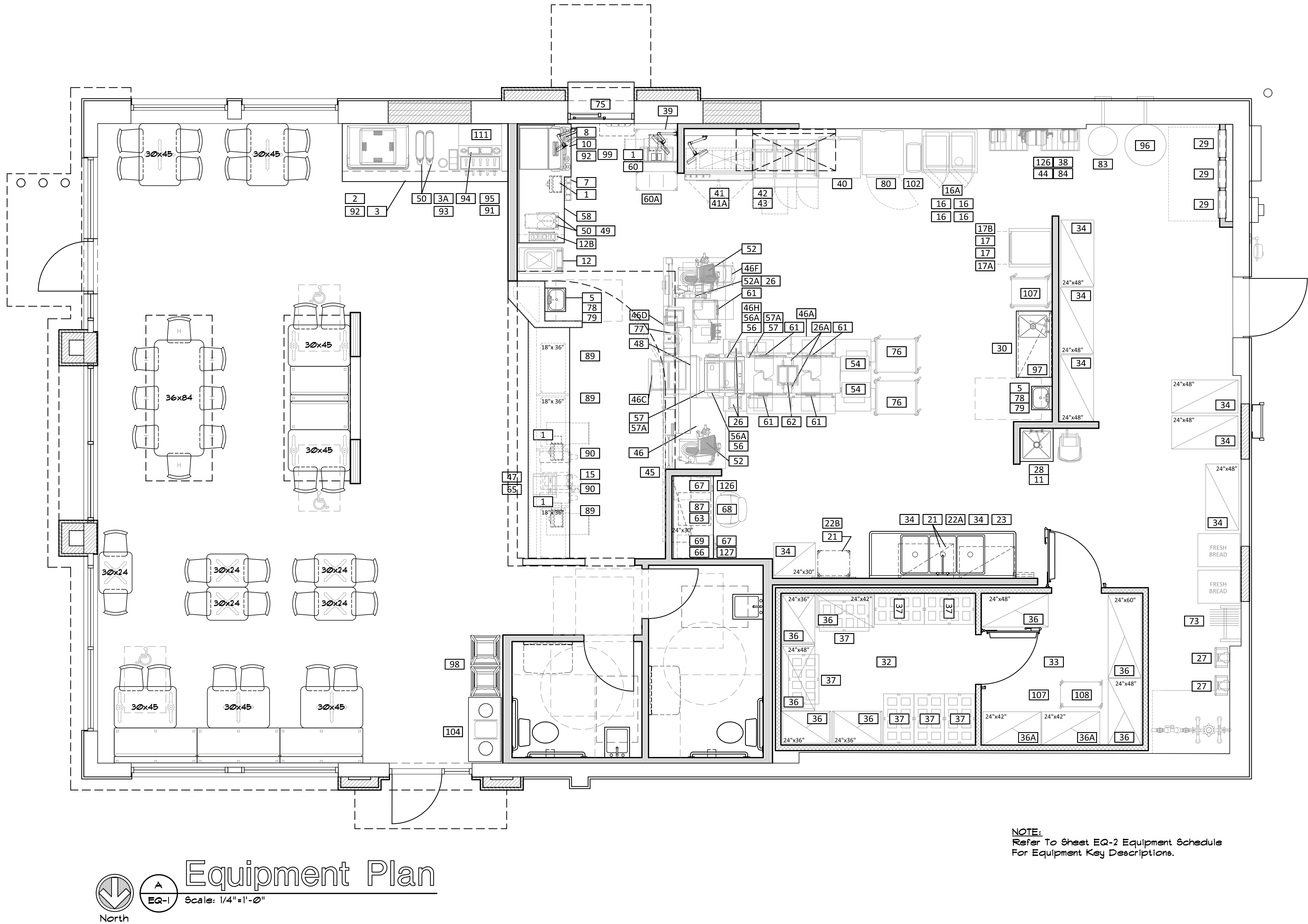
FLOORS		
F1	6"X24" Stonepeak - Cottage "Mountain Retreat" Grout: Custom Building Products #60 "Charcoal"	Dining Room Accent
F2	12"X12" Stonepeak - Simply Modern "Simply Coffee" Grout: Custom Building Products #60 "Charcoal"	Dining Room Field, Restrooms
F3	Quarry Tile - STP Quarry, 31 T Red Or 57 T Grey 6"X6" / Textured Finish, Grout: "Charcoal"	Kitchen
BASE		
B1	6"X12" Stonepeak - Simply Modern "Simply Coffee" Grout: Custom Building Products #60 "Charcoal" (Base Tile is 'F2' 12"x12" Tile Cut In Half)	Dining Room, Restrooms
B2	Quarry Tile - STP Quarry, 31 T Red Or 57 T Grey 5"X6" Cove Base, Grout: "Charcoal"	Kitchen
PAINTS		
P1	Sherwin Williams SW-6864 "Cherry Tomato"	Dining Room Soffits
P2	Sherwin Williams SW-6083 "Sable" Gloss	Bathroom And Closet, Door Steel Frames
P3	Sherwin Williams SW-7005 "Pure White"	Dining Room Soffits, Restroom Ceilings
P4	Wood Stain To Match Pionite WW011 "Kingsly"	Solid Wood Trims Restroom Doors

WALLS		
WV1	Wolf Gordon - Bamboo #G9061644 "Platinum"	Dining Room
WV2	National Wall Covering - LXB-VIO-15 "Viola"	Dining Room
WV3	Wolf Gordon - Symphony #AZ52397ST "Pitch Black"	Dining Room
WV4	APA Graphics - Custom "Chalkboard Vintage Arby's" Custom 48"x69" (Verify)/W New Wood Trim Frame	Vestibule
WT1	MRO Built - Faux Tile "Custom/Random Stain"	Dining Room Wainscot
WT2	MRO Built - Subway Tile "White"	Dining Room, Restrooms, Kitchen, Menuboard Bulkhead
WT3	MRO Built - Subway Tile "Red"	Restroom Accent Wall
WB1	APA Graphics - 6"x8"-0" Planks, Random Stain, Random Sized. Provide Corner Trims.	Dining Room
FRP	FRP Panels - Panolam "White"	Kitchen Areas
P(X)	Gypsum Board, Painted. Eggshell Finish. Refer: Paint Colors.	Dining Room
TOILET PARTITIONS (IF USED)		
TP1	Stainless Steel Toilet Partitions	Replace Existing Typical If Used

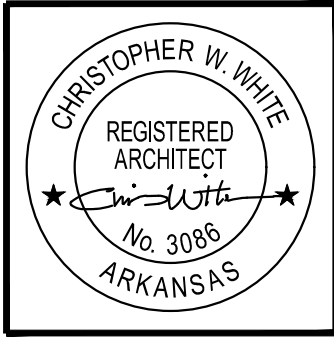
CEILINGS		
CT1	Armstrong 24"x24"x5/8" Angled Tegular #1732 "Adobe" Grid - Prelude 15/16" Exposed Tee Grid, "Adobe".	Dining Room, Restrooms, Vestibule
CT2	USG Interiors 24"x24" Vinyl Faced Gypsum Lay-In Tiles. Pattern: Stipple, Edge: Square, Color: "White" Or Equal	Above Condiment Counter Paint To Match "Adobe"
CT3	USG Interiors 24"x48" Vinyl Faced Gypsum Lay-In Tiles. Pattern: Stipple, Edge: Square, Color: White. Or Equal	Above Foodservice Areas, Match Existing
P(X)	Gypsum Board, Painted. Eggshell Finish. Refer: Paint Colors.	Dining Room, Restrooms
SOLID SURFACE		
SS1	Corian "Arctic Ice"	Service/Condiment Countertops Trash Top, Window Sills
SS2	Corian "Deep Caviar"	Top Cap At Divider Wall
PLASTIC LAMINATES		
PL1	Pionite WX110 Suede "Smooth Paddlin" Laminate Grain To Be Run Horizontally	Condiment Counter Cabinets, Trash Cabinets
METAL TRIMS		
MT1	3/4" X 3/4" Brushed Stainless Steel Corner Trim	Horizontal At Bottom Of Menu- Board Bulkhead (Straight Only)
MT2	1 1/2" X 1 1/2" Brushed Stainless Steel Corner Trim	Vertical At Locations Indicated Refer: Interior Elevations

## Finish Notes

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>A. ALL GYP. BOARD TO BE 1/2" ABOVE FINISH FLOOR.</p> <p>B. WATER RESISTANT GYP. BOARD AT WET WALLS TO BE 4'-0" MIN. IN EACH DIRECTION.</p> <p>C. ALL UNDERSIDES OF GYP. BOARD SOFFITS AND HEADERS TO BE PAINTED UNLESS OTHERWISE NOTED.</p> <p>D. ALL WALLS SHALL RECEIVE (1) COAT OF PRIMER PAINT AND (2) COATS OF SPECIFIED PAINT, U.N.O. FINISH COAT TO BE APPLIED WITH A ROLLER.</p> <p>E. WALLS TO RECEIVE VINYL WALL COVERING SHALL RECEIVE (1) COAT OF WALLCOVERING PRIMER</p> <p>F. TRANSITION OF FLOOR MATERIAL TO OCCUR UNDER DOORS WHEN POSSIBLE.</p> <p>G. SEE DOOR SCHEDULE FOR DOOR HARDWARE INFORMATION.</p> <p>H. PROTECT ALL FINISHED FLOORING FROM DAMAGE THROUGHOUT CONSTRUCTION DURATION. COVER OR MASK SURFACES IN ACCORDANCE WITH SPECIFIC MANUFACTURER'S REQUIREMENTS.</p> <p>I. FLOORING CONTRACTOR TO REVIEW ALL INSTALLATION CONDITIONS WITH GENERAL CONTRACTOR BEFORE BEGINNING INSTALLATION.</p> <p>J. PREP FLOORS WITH THINSET AS REQUIRED TO CREATE A FLUSH TRANSITION BETWEEN FLOORING SURFACE MATERIALS. ALL THRESHOLDS TO MEET A.D.A. REQUIREMENTS.</p> <p>K. ALL SUBSTITUTES MUST BE APPROVED BY ARCHITECT AND BE OF EQUAL QUALITY.</p> <p>L. ALL INTERIOR WALL AND CEILING FINISHES TO COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS FOR FLAME SPREAD AND SMOKE DEVELOPMENT RATING.</p> <p>M. ALL EXPOSED TRAPS, WATER LINES AND OTHER MISCELLANEOUS PLUMBING EQUIPMENT UNDER LAVATORIES SHALL BE COVERED OR PROTECTED.</p> <p>N. ALL RESTROOM WALLS TO RECEIVE SEMI-GLOSS EPOXY PAINT WHERE NO OTHER FINISH EXISTS.</p> | <p>O. PROVIDE FRP ON WALLS WHERE INDICATED ON FLOOR PLANS, ELEVATIONS AND DETAILS. CONTINUOUSLY SEAL ALONG ALL JOINTS BETWEEN BASES AND PANELS. USE FRP ACCESSORIES FROM MANUFACTURER FOR COMPLETE INSTALLATION.</p> <p>P. INSTALL FRP FROM TOP OF WALL BASE TO 6" ABOVE CEILING.</p> <p>Q. PROVIDE STAINLESS STEEL SCHLUTER QUADEC EDGE PROTECTION STRIP AT 90 DEGREE OUTSIDE CORNERS AND STAINLESS STEEL SCHLUTER DECO-DE PROTECTION STRIP AT 135 DEGREE OUTSIDE CORNERS OF CERAMIC WALL TILE, REFER TO DECOR DRAWINGS.</p> <p>R. PROVIDE STAINLESS STEEL COVE BASE SCHLUTER DILEX AT FLOOR TILE TO WALL TILE TRANSITIONS IN RESTROOM.</p> <p>S. ALL WALKING SURFACES TO HAVE SLIP RESISTANT SURFACE AND BE SECURELY ATTACHED TO SUB-FLOOR. CHANGES IN THE FLOOR ELEVATION SHALL NOT EXCEED 1/4". FLOOR FINISHES SHALL COMPLY WITH IBC SECTION 1003.4 AND ICC/ANSI 117.1.</p> <p>T. ALL INTERIOR FINISHES SHALL COMPLY WITH IBC SECTION 803 AND TABLE 803.5.</p> <p>U. SEE DECOR PACKAGE FOR ADDITIONAL DETAILS OF FINISHES AND BUILT-IN ITEMS. ALL FLOOR GROUT TO BE EPOXY TYPE.</p> <p>V. FOR ARMSTRONG STRATEGIC ACOUNT PROGRAM PRICING, CONTACT LOUIS JOHN 877-276-7876, OPTION 8 EXTENSION 8326.</p> <p>W. PROVIDE 1/2" PLYWOOD ON WALLS TO RECEIVE FRP.</p> <p>X. PROVIDE 1/2" CEMENT BOARD BEHIND TILE.</p> <p>Y. EXPOSED PIPING ON WALL SHALL BE PAINTED TO MATCH WALL.</p> <p>Z. ALL INTERIOR CAULKING BY G.C.</p> <p>AA. REFER TO INTERIOR ELEVATIONS FOR MORE INFORMATION.</p> <p>AB. REVIEW FINAL FINISH SCHEDULE FOR COORDINATION OF FINISHES. NOTIFY ARCHITECT IMMEDIATELY IF THERE ARE ANY DEVIATIONS.</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|







10-28-21

Revisions:

White Design Group, P.C.  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

New Restaurant Conversion For:  
Arby's - 1632 AR-25 Bypass  
Heber Springs, Arkansas

Sheet Content  
Equipment Schedule

Sheet Number  
EQ-2  
Date: 10-28-21

## Equipment Schedule

	NO	QTY.	ITEM	MANUF. AND MODEL NO.	REMARKS
	1	4	CASH REGISTER	BY OWNER (DEDICATED ELECTRICAL CIRCUIT)	ISOLATED, DEDICATED ELEC. CIRCUIT REQUIRED
	2	1	12 HEAD DRINK DISPENSER w/ ICE MAKER ABOVE (SEE #92C)	IMI CORNELIUS, ENDURO 300 - 12 HEAD	INCLUDED IN BEVERAGE PACKAGE
	3	1	SELF SERVE BEVERAGE COUNTER	KES / DECOR	
	3A	1	BAIN MARIE	VOLLRATH 1.25 QT BAIN MARIE 78710	INTEGRATED INTO #3 SELF-SERVE BEVERAGE COUNTER
VERIFY MODEL QNTY.	5	2	WALL MOUNTED HAND SINK	ADVANCE TABCO, 7-PS-68	
	5	ALT.	WALL MOUNTED HAND SINK	KROWNE HS-2	
	5A	-	NOT USED		
	7	4	CUP DISPENSER	SAN JAMAR C2410C	INTEGRATED INTO #58 DRIVE-THRU BEVERAGE COUNTER
	8	1	8 HEAD DRIVE-THRU DRINK DISPENSER W/ OVERHEAD ICE MAKER ABOVE (SEE #92)	CORNELIUS IDC255 PRO FAST GATE - 8 HEAD, 7 OPTIFIL VALVES & 1 VARIETY VALVE (10 FLAVORS)	INCLUDED IN BEVERAGE PACKAGE
	10	1	LID HOLDER	INCLUDED WITH #8	MOUNTED ON ITEM #8
	11	1	MOP HOLDER	BY OWNER	
VERIFY MODEL	12	1	SHAKE MACHINE	ELECTRO FREEZE CS704	
	12	ALT.	SHAKE MACHINE	TAYLOR MODEL 60	DIFFERENT ELECTRICAL REQUIREMENTS THAN ELECTRO-FREEZE CS704
	12B	1	DISPOSABLE CUP DISPENSER	SAN JAMAR C8594WFDARB	
	14	1	AUTO GREETER (NOT SHOWN)	ERC/PANSONIC - ULTRADTAGARB	
	15	1	SAFE - (4) TILLS	TIDEL TILL STORAGE VAULT AND SIDE VAULT, SERIES 4	FOR CORPORATE STORES ONLY
VERIFY MODEL	15	ALT.	SAFE - (4) TILLS	AMERICAN SECURITY PRODUCTS (AMSEC), RETAIL MONEY MANAGER SAFE, MODEL #SK2012-648 A (L OR R SWING)	26"H X 20"W X 18 1/2"D, W/ ACCESS CONTROL SYSTEM, W/ ATTENDANT DRAWER, 4 TILLS, W/ 6 KEYS & COIN RACK UPON REQUEST. G.C. TO COORDINATE LOCATION OF SECURING BOLTS FOR SAFE
	15	ALT.	SAFE - (5) TILLS	FIRE KING SECURITY, NKL AUDITLOK XL DROP SAFE, MODEL #B5D 3220 AAXR-AR	32"H X 20"W X 20"D, 5 TILLS, W/ 6 KEYS & COIN RACK UPON REQUEST. G.C. TO COORDINATE LOCATION OF SECURING BOLTS FOR SAFE
	15	ALT.	SAFE - (4) TILLS	FIRE KING SECURITY, NKL AUDITLOK XL DROP SAFE, MODEL #B5D 2920 AAXR-AR	29"H X 20"W X 20"D, 4 TILLS, W/ 6 KEYS & COIN RACK UPON REQUEST. G.C. TO COORDINATE LOCATION OF SECURING BOLTS FOR SAFE
VERIFY MODEL	16	4	COOK & HOLD CABINET	ALTO-SHAAM - 300TH-ARB1-5S (WITH SITESAGE SPOD)	16-13/16"W X 25-3/16"D X 18-15/16"H
	16	ALT.	COOK & HOLD CABINET	FWE-LCHR-1220-4 (WITH SITESAGE SPOD)	18"W X 26"D X 20.5"H
	16A	1	COOK & HOLD STAND	KES	44.5" W x 41 1/2" T MOBILE STAND TO HOLD (4) #16
	17	2	DIGITAL COUNTERTOP ELECTRIC CONVECTION OVEN	CADCO, MODEL XAFT-03HS-LD	28 1/8"D x 23 5/8"W x 16 7/8"H
	17A	1	OVEN STAND	KES	28" W x 41 1/2" T MOBILE STAND, TO HOLD (2) #17
	17B	1	OVEN TIMER	A.J. ANTUNES SOLAR TIMER MODEL #TTS-8 OT	
	21	LOT	SHELVING ABOVE 3 COMPARTMENT SINK	SMART WALL SYSTEM, ARBSWDM	
	21A	OPTL	SHELVING ABOVE CLEAN DISH TABLE	METRO ARBCS305W	
VERIFY MODEL	22	-	NOT USED		
	22	-	NOT USED		
	22A	1	3 COMPARTMENT SINK WITH WAREWASHING SOILED TABLE	KES, CUSTOM FAB	INCLUDES LEVER DRAINS AND PRE-RINSE WASH ASSEMBLY
	22B	1.	CLEAN LANDING DISHTABLE	KES, CUSTOM FAB	
	23	1	KNIFE RACK	SAN JAMAR, SAF-T-KNIFE STATION, STK1008	15"x15"x4.25", INCLUDED IN SMALLWARES PACKAGE
	26	1	BEEF PORTION SCALE	TAYLOR MODEL TE32WD-AR	DIGITAL WIRELESS BEEF SCALE
	26A	1	BEEF PORTION SCALE	TAYLOR MODEL TE10CSW	ON COLDWELL
	27	2	TANKLESS WATER HEATER	RINNAI CU139H	SEE PLUMBING DRAWINGS
	28	1	MOP SINK	REFER TO PLUMBING DRAWINGS	
	28A	1	MOP BUCKET	BY OWNER	
	29	LOT	ELECTRIC PANELS	REFER TO ELECTRICAL DRAWINGS	
	30		PREP TABLE W/ BACKSPASH, PREP SINK AND SPACE FOR SLICER	KES, CUSTOM FAB ITEM, INCLUDES (1)R231 FAUCET WITH 12" SPOUT AND (1) LEVER WASTE DRAIN	96" X 34" X 36"H, 16" A.F.F. (CW & HW), 8" A.F.F. (W)
	31	1	DRIVE THRU TIMER (NOT SHOWN)	HYPERACTIVE QTIMER SYSTEM	
	32	1	WALK-IN FREEZER	ICS	
	33	1	WALK-IN COOLER	ICS	
	34	LOT	DRY STORAGE SHELVING, BRIGHT ZINC FINISH	METRO - REFER TO PLAN FOR LOCATION, QUANTITY, & SIZE OF SHELVING UNITS	SEE PLAN FOR SHELF LOCATION, ALL SHELVING UNITS TO BE (5) TIERED. PROVIDE 86" POSTS.
	35	LOT	DISH DRYING RACK	METRO - REFER TO PLAN FOR LOCATION, QUANTITY, & SIZE OF SHELVING UNITS	SEE PLAN FOR SHELF LOCATION, ALL SHELVING UNITS TO BE (5) TIERED. PROVIDE 86" POSTS.
VERIFY QNTY.	36	LOT	COOLER SHELVING- METROSEAL II, EPOXY COATED	METRO - REFER TO PLAN FOR LOCATION, QUANTITY, & SIZE OF SHELVING UNITS	SEE PLAN FOR SHELF LOCATION, ALL SHELVING UNITS TO BE (4) TIERED. PROVIDE 74" POSTS.
VERIFY QNTY.	36A	LOT	BEEF TEMPERING COOLER SHELVING- METROSEAL III, EPOXY COATED FRAME,	METRO - SUPER ERECTA PRO SHELF, REMOVABLE POLYMER SHELF MAT, METROSEAL III, EPOXY COATED FRAME,	SEE PLAN FOR SHELF LOCATION. ALL SHELVING UNITS TO BE (10) TIERED, PROVIDE 74" POSTS.
VERIFY QNTY.	37	LOT	FREEZER RACKS, METRO	METRO - BOW TIE DUNNAGE RACKS REFER TO PLAN FOR LOCATION, QUANTITY, & SIZE OF RACK	
	38	LOT	BAG-N-BOX SHELVING	MANITOWOC, TOP PUMP MOUNT BACKROOM PACKAGE, AR-10-2-20W-1PM	INCLUDED IN BEVERAGE PACKAGE, 80H x 28"W x 20"D, 4H, EPOXY COATED, SEE PLAN FOR SHELF LOCATION
	39	1	WIRELESS DRIVE THRU ORDER SYSTEM	HM ELECTRONICS, MODEL #HME EOS HD DIGITAL SYSTEM, C40000-5-HS3-AR-NS SYSTEM	WITH (5) ALL-IN-ONE HEADSETS
	40	1	FRY BASKET TABLE	KES, CUSTOM FAB ITEM	30" W x 30" D
	41	1	FRY DUMP	MARSHALL AIR THERMOGLO, MODEL #RS-48-SLT (RRS-48-SRT FOR REVERSE LAYOUT)	33"H X 48 6/32"W X 32.75"D, 20 AMP, NEMA 6-20, W/ BUILT-IN FRY STATION TIMER, PROVIDE STAINLESS STEEL BACK PANEL OPTIONAL.
	42	1	EXHAUST HOOD	CAPTIVEAIRE, BD-2 SERIES, SEE MECHANICAL PLANS	60" x 28" x 47", STAINLESS STEEL W/ UL LISTING, FILTERS, 4" BACKSPACER, PROVIDE COMPLETE FIRE SUPPRESSION SYSTEM, ANSUL SYSTEM
VERIFY MODEL	43	1	3 BANK FRYER W/ NATURAL GAS	HENNY PENNY, EVOLUTION ELITE, 3 WELL OPEN FRYER, EEG-243.41ARB GAS WITH DIRECT-CONNECT	GAS BURNERS, NATURAL OR LIQUID PETROLEUM GAS, 225,000 BTU/HR, (66.2KW), 1" GAS CONNECTION, 14" A.F.F. G.C TO HOOK UP QUICK DISCONNECT (SUPPLIED BY KES), INCLUDE DORMONT GAS HOSE KIT #16100-KIT-48. ALSO INCLUDE DIRECT-CONNECT KIT TO ALLOW HOOK-UP TO GREASE TANK (96). HOLD UNIT OFF WALL 4".
	43	ALT.	3 BANK FRYER W/ NATURAL GAS	FRYMASTER, 3FGQ30UOZQTZBNG	GAS BURNERS, NATURAL OR LIQUID PETROLEUM GAS, 225,000 BTU/HR, (66.2KW), 1" GAS CONNECTION, 14" A.F.F. G.C TO HOOK UP QUICK DISCONNECT (SUPPLIED BY KES), INCLUDE DORMONT GAS HOSE KIT #16100-KIT-48. ALSO INCLUDE DIRECT-CONNECT KIT TO ALLOW HOOK-UP TO GREASE TANK (96). HOLD UNIT OFF WALL 4".
	44	2	COLD CARBONATOR	MCCANN E SERIES	INCLUDED IN BEVERAGE PACKAGE, PROVIDE SHELF AND MOUNTING BRACKETS. LOCATE SHELF ON WALL ADJACENT TO WATER FILTER.
	45	1	MENU BOARD	HOWARD, 11 PANEL, PLATINUM MODULAR LED MENU BOARD SYSTEM	COORDINATE WITH MENU BOARD OPTION IS BEING INSTALLED (CURVED OR STRAIGHT)
	46	-	087" DUAL-J LINE PROD. CNTR. (STANDARD OR REVERSE)	KES, CUSTOM FAB ITEM	200 AMP PANEL, 120 - 208V, 60HZ, 4 WIRE, POWER TO SUB PANEL BY G.C.
	46A	1	60" ROLL-IN COLD WELL UNIT	TRAULSEN, TB06F14-ZAR02, DUAL SIDED, 4 ROW, 32 PAN, LEFT HAND SYSTEM, PASS THRU W/DOORS	
	46C	1	UNDERCOUNTER REFRIGERATED DRAWERS	TRAULSEN, SAP-710 UHT27-D	INTEGRATED INTO #46 PRODUCTION COUNTER
	46F	1-	WARMER DRAWER	ALTO SHAAM 5001DN	INTEGRATED INTO #46, PRODUCTION COUNTER, INSTALLED ON SITE BY EQUIPMENT INSTALLER
	46H	1	BACKLINE TIMER	A.J. ANTUNES SOLAR TIMER MODEL #TTS-8 PT	MOUNTED ON PRODUCTION COUNTER (ITEM #46) NEAR THE CHEESE PUMP (ITEM #56)
	46M	-	TURNOVER DISPLAY	KES, CUSTOM FAB ITEM	INTEGRATED INTO #46 PRODUCTION COUNTER

## Equipment Schedule

	NO	QTY.	ITEM	MANUF. AND MODEL NO.	REMARKS
	47	1	TURNOVER DISPLAY CASE	CAL-MIL, AB101	24"L x 14"D x 24"H
VERIFY MODEL	49	1	COFFEE/TEA MAKER	BUNNOMATIC INFUSION TEA AND COFFEE BREWER #ITCB-DV 52200.0104 DUAL #ITCB-DV 52200.0105 SINGLE	
	49	ALT.	COFFEE/TEA MAKER	CURTIS, CB18323	
VERIFY MODEL	50	1	ICE TEA DISPENSER	BUNN TDO-N-3.5 39600.0001	
	50	ALT.	ICE TEA DISPENSER	CURTIS, TCN323	
VERIFY MODEL	52	2	SLICER	GLOBE 4913N	23" W x 26.7" D x 25.1" T
	52	ALT.	SLICER	HOBART H59-1B	24 5/8" W x 30 5/16" D x 29 5/16" T
	52A	1	SLICER HEAT LAMP	MARSHAL AIR BW48-3/DL2	24.875 X 28 X 24.75 STAINLESS STEEL CONSTRUCTION
	53	1	PORTION SCALE (NOT SHOWN)	TAYLOR, MODEL #THD32D	SEE SMALLWARES LIST
	53A	1	PORTION SCALE (NOT SHOWN)	TAYLOR, MODEL #THD50	SEE SMALLWARES LIST
VERIFY MODEL	54	ALT.	VERTICAL TOASTER	ANTUNES VERTICAL CONTACT TOASTER, #VCT2000	23 1/4" H x 21 1/16" W x 14 5/8" D TOASTER IS BACKUP, STORED UNDER PREP TABLE) (SECOND
	54	2	MINI VERTICAL TOASTER	ANTUNES MINI VERTICAL CONTACT TOASTER, #MVCT2	25 1/1" H x 14 1/16" W x 14 5/8" D TOASTER IS BACKUP, STORED UNDER PREP TABLE) (SECOND
VERIFY MODEL	56	2	SINGLE CHEESE PUMP	STAR MFRG. #SPDE-1ARBL	9.6"W x 19.5"D x 30.25"H
	56		DUAL CHEESE PUMP	STAR MFRG. #SPDE-2ARBL	11"W x 21.3"D x 32.25"H
	56A	2	WIRE SOUFFLE CUP HOLDER	QUADRATEC, DISPWAR 0001	COLOR: BLACK
	57	2	HEAT N' HOLD	MERCO, MERCOMAX, MODEL MHD32SST2T	
	57A	2	UNDERCOUNTER HEAT N' HOLD	MERCO, MERCOECO, MODEL MHD42SSL1T	
	58	1	DRIVE-THRU COUNTER (BEVERAGE)	KES, CUSTOM FAB ITEM	86" LONG x 39" DEEP x 36" TALL
	60	1	DRIVE-THRU CASHIER STAND	METRO, #ARB3024DT	30" x 24" DRIVE THRU CASHIER STAND
	60A	1	WORK SMART DRIVE-THRU STAGING CART	METRO, #ARB1430SC	14" X 30" x 36"H CART ON CASTERS. USED WITH WORK SMART DT CASHIER STAND
	60B	1	DRIVE-THRU STATION	METRO, #ARB1430DTBN	24" x 36" DRIVE-THRU STATION -
	61	5	MICROWAVE OVEN	MENUMASTER COMMERCIAL MODEL MOC24	USED WITH PRODUCTION TABLE AND FRONT LINE SLICER COUNTER
	62	1	HEATED HOLDING	MERCO MODEL MHA32SSL2W	
	63	1	MUSIC SYSTEM	3-M	
	65	1	CASHIER / ORDER TAKING COUNTER	KES, CUSTOM FAB ITEM	
	66	1	MANAGER DESK TOP	KES, CUSTOM FAB ITEM	28" X 60" W/ SPLASH GUARD
	67	2	2 DRAWER FILE CABINET	BY OWNER	HON #312BLK, BLACK WITH LOCK, INCLUDING CABINET FEET, #A845048 ARG
	68	1	DESK CHAIR	BY OWNER	
	69	1	BACK OFFICE COMPUTER SYSTEM W/ PRINTER	BY OWNER	
	71	1	BULLETIN BOARD (NOT SHOWN)	BY OWNER	24" x 48"
	73	1	COAT RACK	METRO, ARBCR	WALL MOUNT COAT RACK, COLOR: GRAY
0	75	1	AUTOMATIC DRIVE THRU WINDOW	READY ACCESS (1) SINGLE PANEL SLIDER : LEFT TO RIGHT (STANDARD), RIGHT TO LEFT (REVERSE)	SIZE: COLOR: DARK BRONZE 47 1/2" W x 43 1/2"
0	75	ALT.	AUTOMATIC DRIVE THRU WINDOW	QUIKSERV (1) #55-4035E (R) ([1] #55-4035E (L) FOR REVERSE LAYOUT)	SIZE: COLOR: DARK BRONZE 48" W x 41"
	76	2	MOBILE BREAD RACK, ON CASTERS	METRO, #DD9678REVCO	30 7/8" x 24" x 74 1/2"H, 12 SHELVES
0	77	1	AU JUS SERVER	SERVER, MODEL SY 1.0 ARBY'S #85503, 1 GAL AU JUS SERVER	
0	78	2	PAPER TOWEL DISPENSER	BY OWNER	SEE SHEET A6.1 FOR MOUNTING HEIGHTS, 1 FOR EACH HAND SINK, SEE #5
0	79	2	LIQUID SOAP DISPENSER	BY OWNER	SEE SHEET A6.1 FOR MOUNTING HEIGHTS, 1 FOR EACH HAND SINK, SEE #5
0	80	1	SINGLE DOOR UPRIGHT FREEZER	TRAULSEN G12000	
0	83	1	BULK CO2	NUCO2	WITH ADAPTORS
0	84	1	WATER BOOST MODULAR FILTER SYSTEM	PENTAIR SHURFLO W86-M3-22-003-S5	INCLUDED IN BEVERAGE PACKAGE
0	87	1	MUSIC SYSTEM SHELVING, EPOXY COATED	METRO 1442NK3	(2) 14 X 42 WIRE SHELVES, BOTTOM @ 80" A.F.F. SEE PLAN FOR SHELF LOCATION, EPOXY COATED
	89	LOT	FRONT COUNTER SHELVING, BRIGHT ZINC FINISH	INTERMETRO REFER TO PLAN FOR LOCATION, QUANTITY, & SIZE OF SHELVING UNITS	SEE PLAN FOR SHELF LOCATION, ALL SHELVING UNITS TO BE (3) TIERED. PROVIDE 30" POSTS.
0	90	2	UNDER COUNTER, S/S CUP DISPENSER	KES, CUSTOM FAB ITEM	
	91	1	SOUFFLE CUP DISPENSER	TOMLINSON KSF1003SL	CAN USE 3/4 OR 1 OZ PAPER OR PLASTIC CUPS, INTEGRATED WITH ITEM #111
	92	2	ICE MAKER	MANITOWOC, IY-0686C-161	UNIT MOUNTS ON DRINK DISPENSER IN DRIVE THRU <8> AND DINING ROOM <2>. REMOTE CONDENSER ON ROOF <92A>. LINE SET R636 CONTROL WIRES FROM CONDENSING UNIT TO COIL. FIELD VERIFY LENGTH OF LINE SET REQUIRED.
	92A	2	ICE MAKER REMOTE CONDENSING UNIT	MANITOWOC, ICVD-0696	REMOTE CONDENSER FOR ICE MAKER <92> ON DRINK DISPENSER IN DRIVE THRU <8> AND DINING ROOM <2>. LOCATED ON ROOF, REFER TO A1.2 & MEP DRAWINGS FOR LOCATION
	92C	OPTL	SELF CONTAINED ICE MAKER	MANITOWOC, INDIGO SEARIES 606 IY-0606A	ICE MACHINE FOR DRINK DISPENSER IN DINING ROOM (2), WHEN SELECTED BY OWNER, REPLACES (1) ICE MAKER <92> AND REMOVES (1) REMOTE CONDENSER <92A>
	93	1	STRAW & LID HOLDER	KES, CUSTOM FAB ITEM	
	94	2	NAPKIN DISPENSER	PROVIDED BY KES	INTEGRATED WITH #111
	95	1	DISPENSER FOR SAUCES	SERVER PRODUCTS SE-SDI (ARBY'S) 07123	INTEGRATED WITH #111, 5 PUMP DISPENSER
VERIFY MODEL	96	ALT.	GREASE HOLDING TANK	DARLING INTERNATIONAL, 1500-H DIRECT PUMP	DIRECT CONNECTION WITH THE FRYMASTER / HENNY PENNY FRYER UNITS, SEE <43>.
	96	1	GREASE HOLDING TANK	MAHONEY ENVIRONMENTAL, METRO SECURE-TRACK SYSTEM (MST)	DIRECT CONNECTION WITH THE FRYMASTER / HENNY PENNY FRYER UNITS, SEE <43>.
	97	4	WALL MOUNTED SHELVING	METRO 24K36, (2) TIER SHELVING, BRIGHT ZINC FINISH	30" WALL MOUNTED STANDARDS OPTIONAL AT SERVICE DOOR
	98	2	HIGH CHAIR / BOOSTER SEATS	BY OWNER	
	99	1	AIR CURTAIN	QUIKSERV MODEL CHF-25" HEATED-CLR	25"W X 9"D X 14 3/8"H
	102	2	TRASH CONTAINER	RUBBERMAID #3540 SLIM JIM WASTE CONTAINER	COLOR: BROWN, ORDER #FG3540000 BRN
	103	1	SINGLE TRASH UNIT	KES, CUSTOM FAB ITEM	
	104	1	DOUBLE TRASH UNIT	KES, CUSTOM FAB ITEM	
0	107	1	HEAVY DUTY PAN RACKS	WIN-HOLT	
	109	LOT	S/S OUTSIDE CORNER GUARD (NOT SHOWN)	KES, CUSTOM FAB ITEM	2" x 2" x 108" 18 GAUGE, S.S. PROVIDE 2X2 FULL HEIGHT STAINLESS STEEL CORNER GUARDS ON ALL OUTSIDE CORNERS IN KITCHEN. KITCHEN EQUIPMENT SUPPLIER (KES) TO SUPPLY AND INSTALL ALL S.S. GUARDS.
	111	1	CONDIMENT TOPPER	KES, CUSTOM FAB ITEM	HOLDS ITEMS #91, #94 AND #95
	123	1	SYSTEMS BOARD (NOT SHOWN)	BY OWNER	36" W X 48" T, WHITE PLASTIC POLY PEG BOARD TO BE MOUNTED ON WALL NEAR MANAGERS DESK
	125	LOT	SECURITY CAMERAS	BY OWNER	
	126	LOT	Co2 MONITORING SYSTEM	CO2METER RAD-0102	HARDWIRED MONITOR AND REMOTE SENSOR, CONTACT JOSH PRINGLE AT CO2METER.COM, 877.678.4259. MOUNT MONITOR AT 60" AFF. MOUNT REMOTE SENSOR AT 18" AFF.
	127	1	SECURED NETWORK ENCLOSURE	CYBER-POWER "CARBON WALL MOUNT ENCLOSURE"; MODEL #CR9U61001	PROVIDED BY OWNER'S POS PROVIDER.

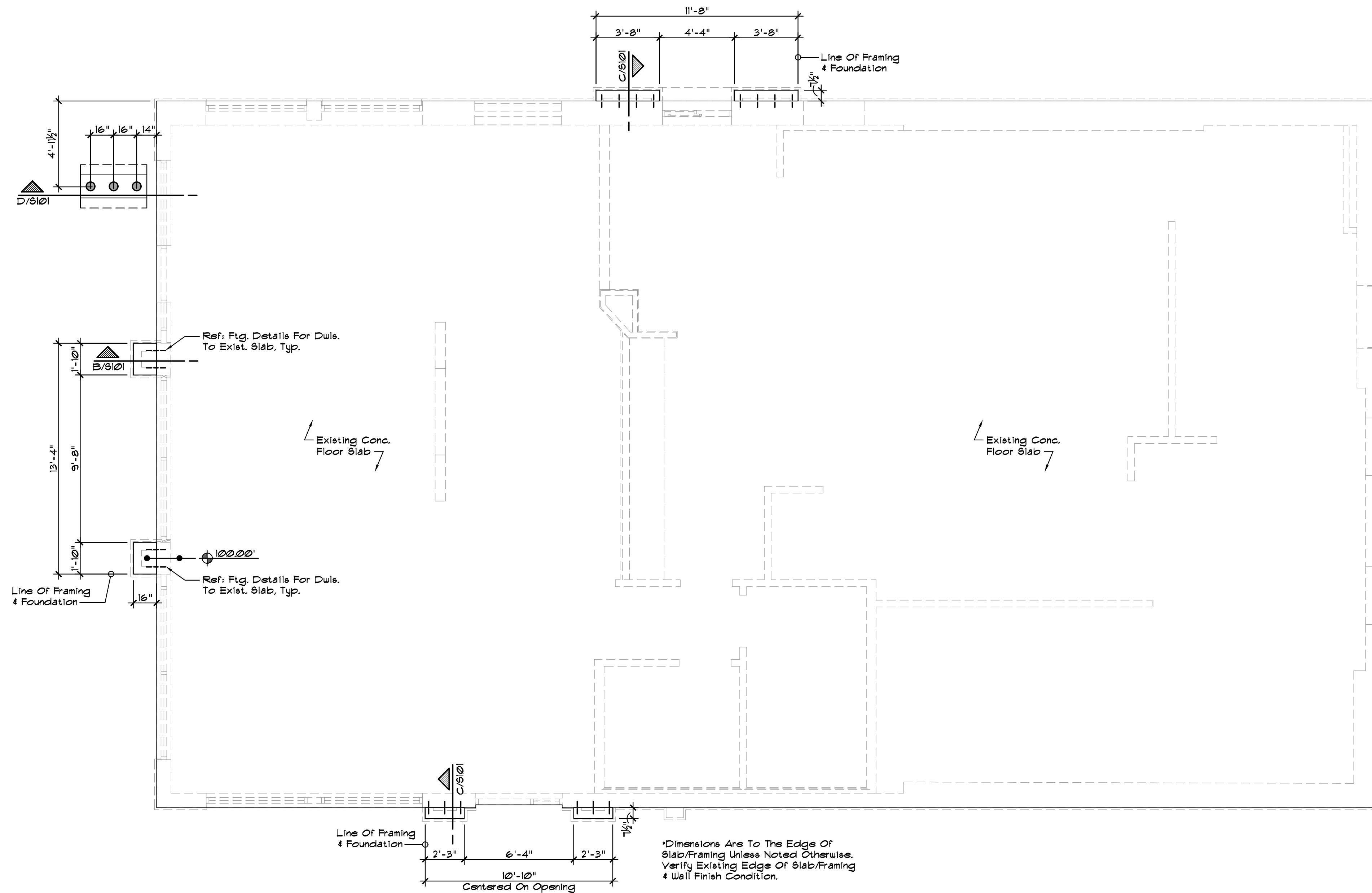
Revisions:

**White Design Group, P.C.**  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

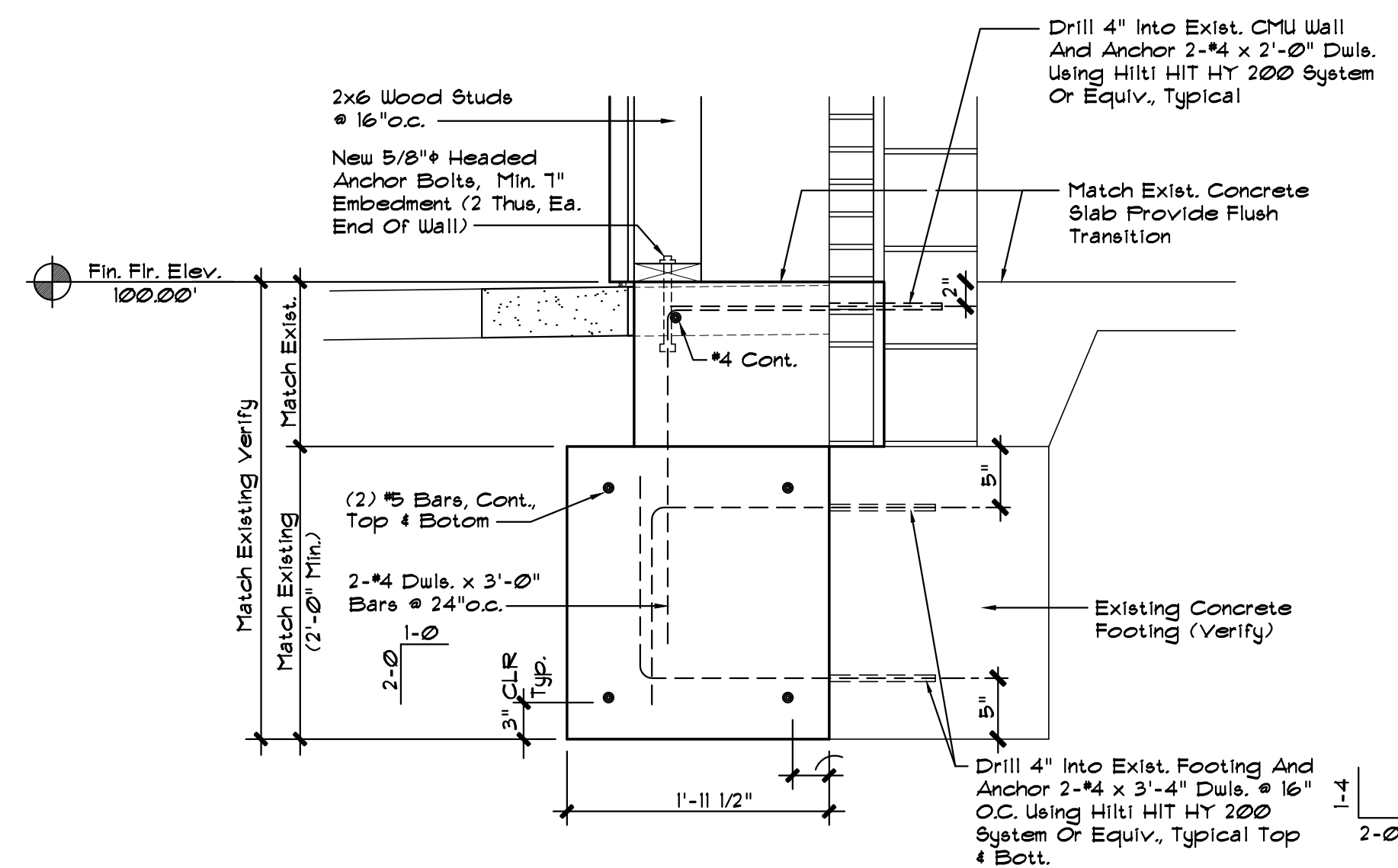
New Restaurant Conversion For:  
**Arby's - 1632 AR-25 Bypass**  
Heber Springs, Arkansas

**Sheet Content**  
Foundation Plan,  
Footing Details, Column  
Base Details

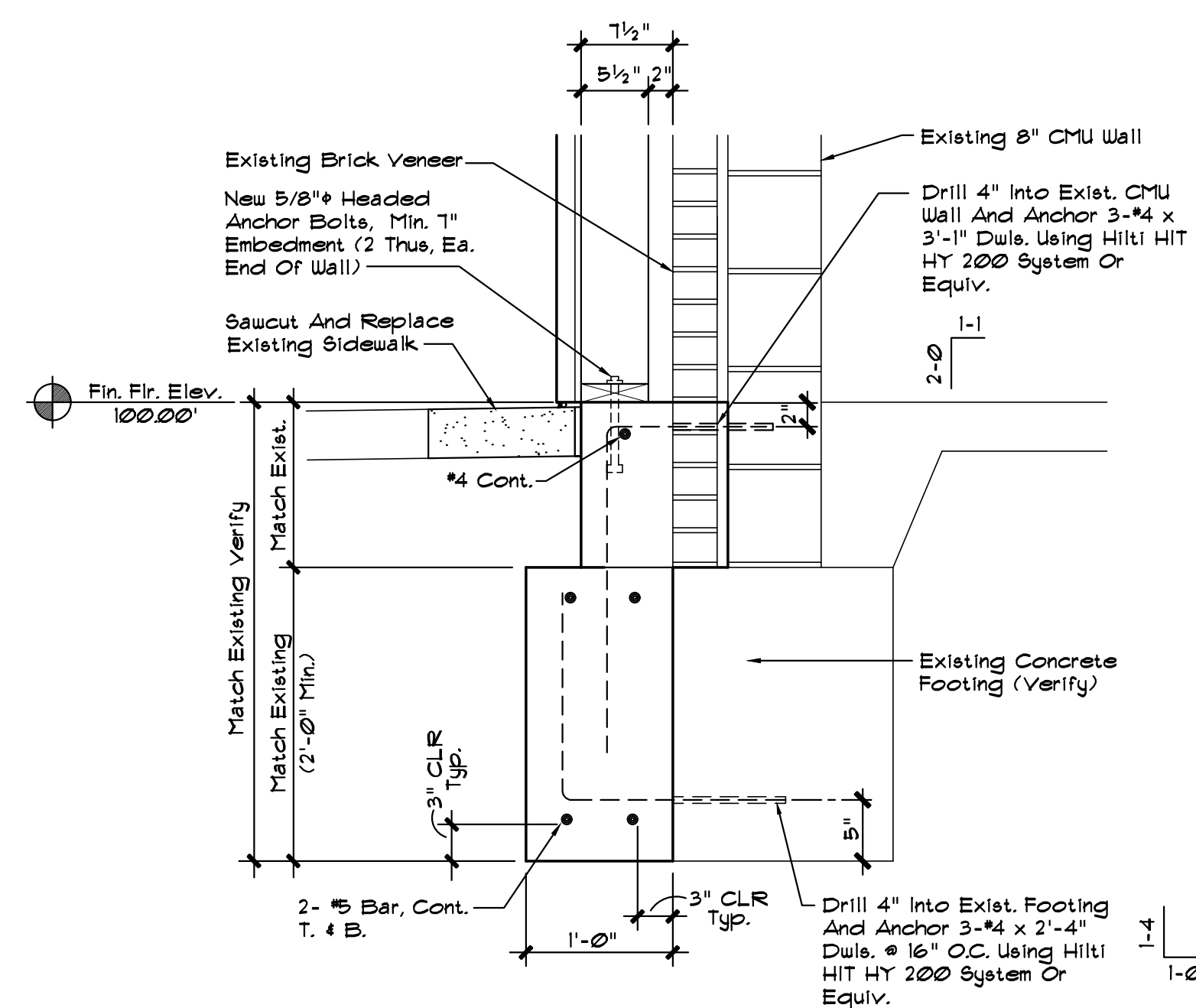
**Sheet Number**  
**S101**  
Date: 10-29-21



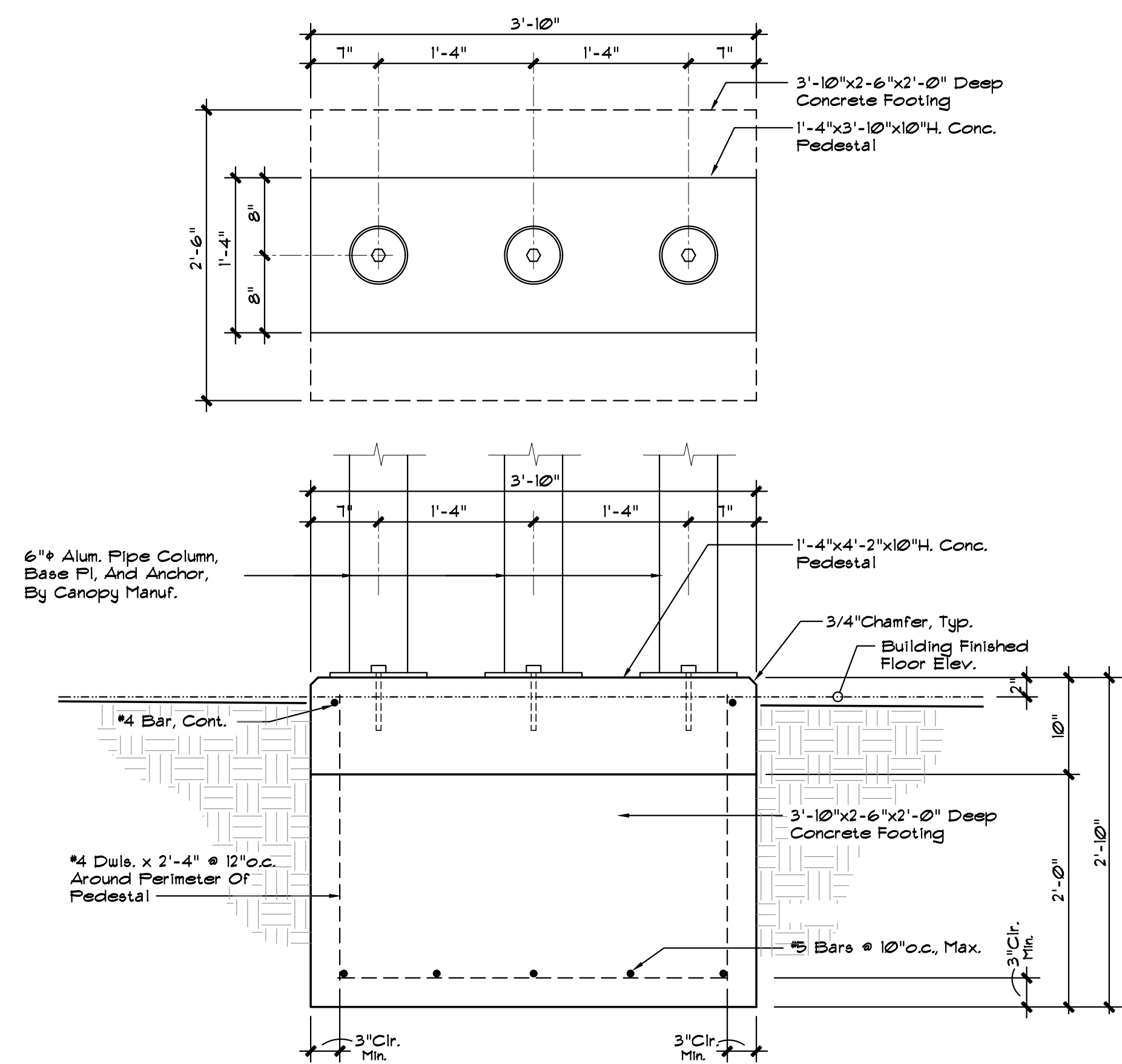
**Foundation Plan**  
Scale: 1/4"=1'-0"



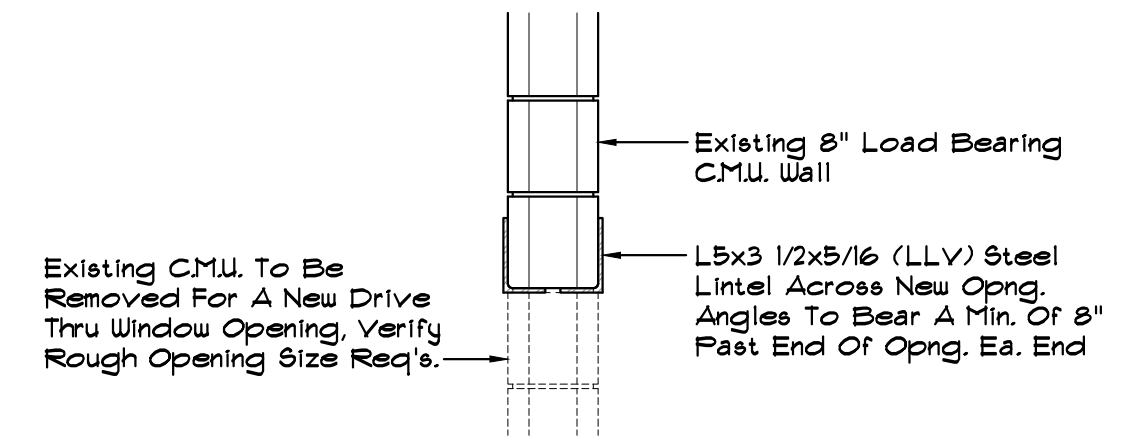
**Footing Detail**  
Scale: 1"=1'-0"



**Footing Detail**  
Scale: 1"=1'-0"



**Column Base Details**  
Scale: 1"=1'-0"



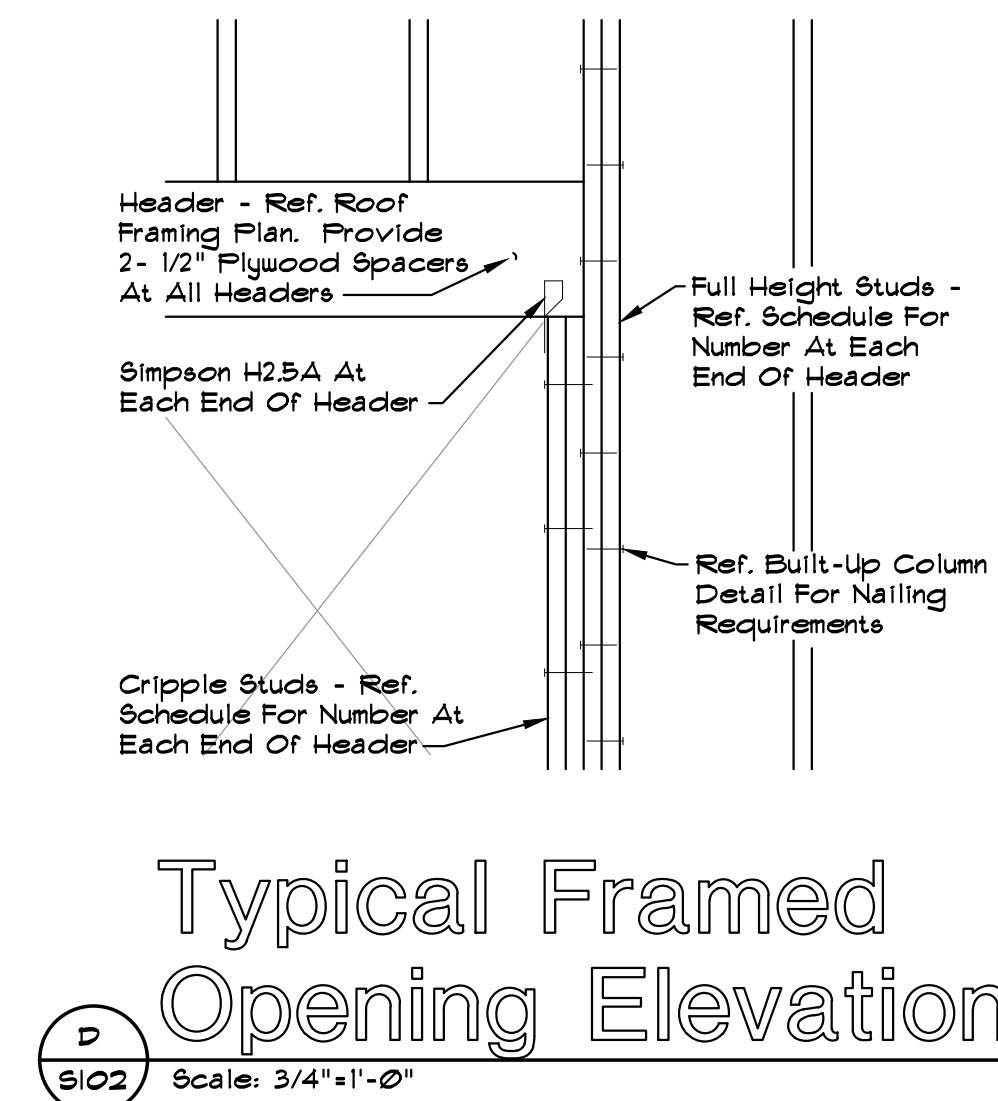
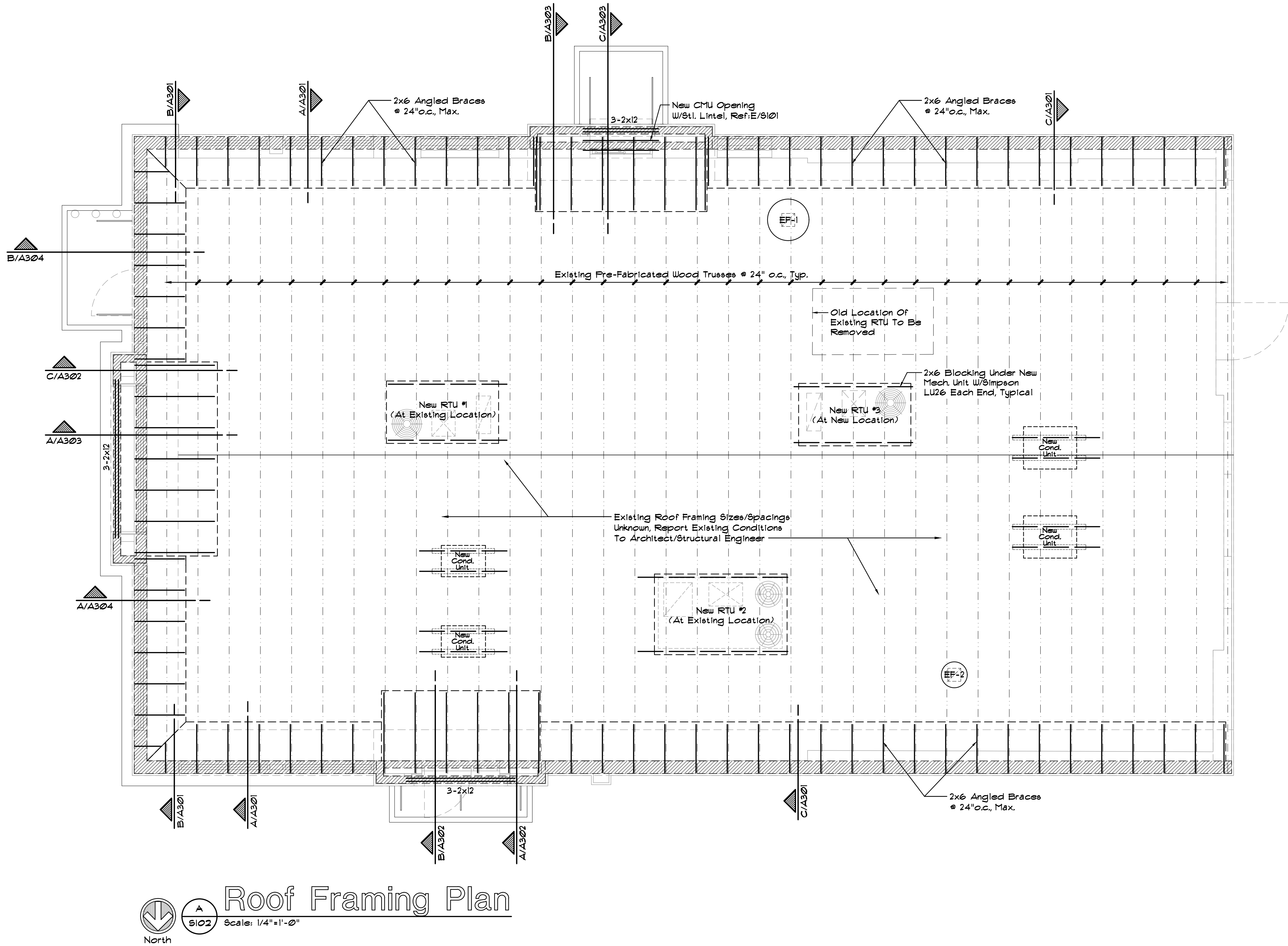
**INSTALLATION PROCEDURE**  
1. Sawcut 1/2 Through Wall & Install One Angle.  
2. Sawcut Other 1/2 Of Wall & Install Second Angle.  
3. Sawcut Joints & Remove CMU From Opening.

**Section E**  
Scale: 3/4"=1'-0"





Revisions:



Stud Schedule		
Opening Width	No. Of Cripple Studs	No. Of Full Height Studs
Less Than 4'-0"	1	1
4'-1" To 6'-0"	1	2
6'-1" To 9'-0"	2	2
9'-1" To 12'-0"	2	3

#### ROOF DESIGN LOADS

LIVE LOAD:	20 PSF
DEAD LOAD:	15 PSF

#### DESIGN CODE

2012 ARKANSAS FIRE PREVENTION CODE  
IBC 2015

#### WIND VALUES

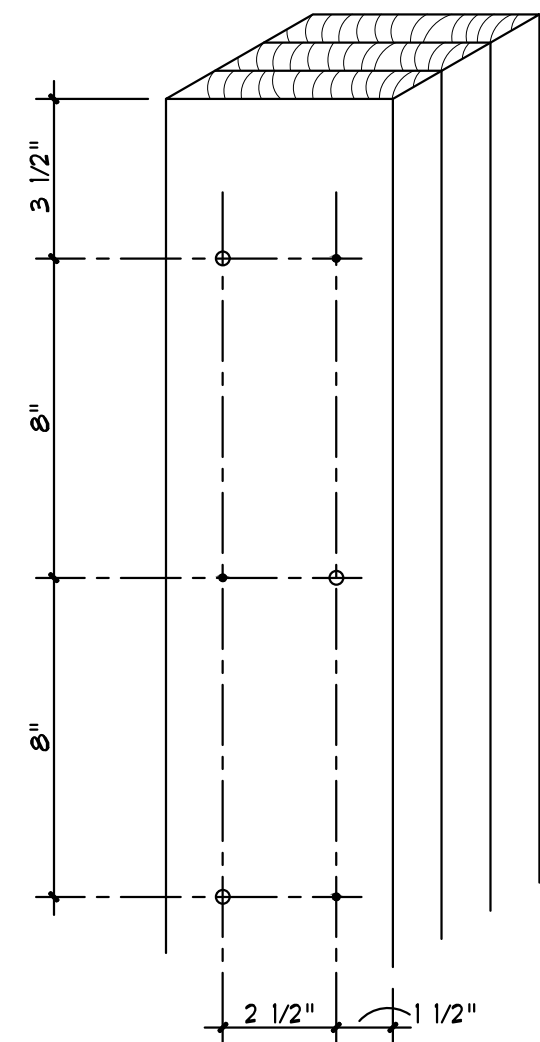
BASIC WIND SPEED: 90MPH (ULT.), EXP. B  
I = 10

#### SNOW LOAD

GROUND SNOW LOAD: 10 psf

#### SEISMIC VALUES

Ss = 0.53  
Si = 0.20  
SEISMIC DESIGN CATEGORY: D  
SITE CLASS: D  
SEISMIC RESISTING SYSTEM: LIGHT FRAMED WALL SYSTEM W/ WOOD STRUCTURAL PANELS  
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

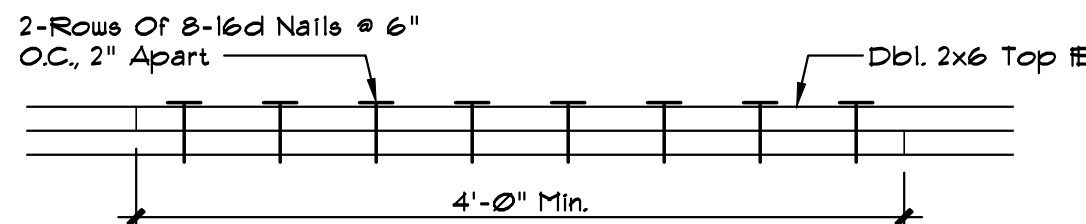


Three 2x6 Laminations W/ Two Rows of 30d Common Wire Nails.

o Indicates Nailed From Near Side  
• Indicates Nailed From Far Side

#### Typ. Nailing Detail For Built-Up Columns

Scale: 3"=1'-0"



#### Typ. Top Plate Splice Elevation

Scale: 1"=1'-0"

































## General Framing Notes

- Structural Lumber Shall Be Douglas Fir Larch No. 2 Or Better w/ E=1600000 PSI Min.
- Unless Noted Otherwise Hurricane Tie-Down Anchors Shall Be Used At All Roof Truss Bearing Locations.
- Sheathing For Roof Diaphragm Shall Be 5/8", CDX, APA Rated Plywood Sheathing With A Minimum Span Rating Of 32/16.
- All Wood Exposed To Moisture Or Dampness Or In Contact With Concrete Or Masonry Shall Be CCA Pressure Treated In Accordance With American Wood Preservers Association (AWPA) Standard C2. CCA Retention=0.40 lb/ft3.
- All Framing Accessories Shall Be As Manufactured By "Simpson" Or Approved Equal.
- Standard Washers Shall Be Used With All Bolts Fastening Wood Members.
- All Nailing Not Indicated On The Plans Or Details Shall Conform To The Nailing Schedule Of The Governing Building Code. Nails Shall Be Common Wire Nails. Spacing, End Distances And Edge Distances Of Nails And Spikes Shall Be Such As To Avoid The Unusual Splitting Of The Wood.
- Provide Multiple Studs At Bearing Points For Multiple Member Joists Or Beams, I.E. Triple Stud At Triple Member Beam, Unless Otherwise Noted. Multiple Studs To Carry Down To Foundation. Provide Other Additional Studs Where Noted On Details Or Plans.
- All Bolts Shall Be Galvanized. Bolt Holes Shall Be 1/16" Large Diameter Than Nominal Size Of Bolts Used. Retighten All Nuts Prior To Closing In, Splitting.
- Do Not Bore Or Notch Joists, Rafters Or Beams, Except Where Shown In Details. Obtain Architect's Approval For Any Holes Or Notches Not Detailed. Holes Through Sills, Plates. Studs And Double Plates In Interior, Bearing And Shear Walls Shall Not Exceed 1/3 The Plate, Or Stud Width. Use Bored Holes Located In The Center Of The Stud Or Plate.
- The Contractor Shall Contract With A Certified Inspection Firm To Provide Special Inspections On All Welded And High Strength Bolted Connections.
- Contractor To Verify All Existing Building Dimensions.

## General Structural Notes

- Footings Designs Are Based Upon An Estimated Bearing Value Of 1500 P.S.F.
  - All Reinforcing Steel In Footings Shall Be Securely Supported Before Pouring Concrete.
  - Exterior Slabs Shall Have A Minimum Slope Of 1/4" Per Foot Away From Building Unless Otherwise Noted.
  - Contractor to verify all existing building dimensions.
- CONCRETE**
- All Concrete Shall Conform To ACI Standard 318 "Building Code Requirements For Reinforced Concrete".
  - Minimum Compressive Strength (F'c) At End Of 28 Days Shall Be 3000 PSI. All Exterior Flatwork To Be 3500 PSI And Have An Air Entraining Admixture.
  - Maximum Slump Of Cast-In-Place Concrete Shall Be 4" For Footings And Slabs-On-Grades.
  - Provide Curing For Concrete In Accordance With ACI 308 "Recommended Practice For Curing Concrete" And In Accordance With Specifications.
- REINFORCING STEEL**
- Reinforcing Steel Shall Meet A.S.T.M. Specification A-615, Latest Revision: Bars Shall Be Grade 60.

MECHANICAL LEGEND

	SUPPLY DUCT UP		PIPING DOWN
	SUPPLY DUCT DOWN		PIPING UP
	RETURN DUCT UP		TURNING VANES
	RETURN DUCT DOWN		VOLUME DAMPER
	FIRE DAMPER		CONDENSATE DRAIN
	SMOKE DAMPER		MOTORIZED DAMPER
	COMB. FIRE/SMOKE DAMPER		BACKDRAFT DAMPER
	BACKDRAFT DAMPER		REMOTE ANNUNCIATOR
	SMOKE DETECTOR		REMOTE TEMP. SENSOR
	SPIN-IN WITH VOLUME DAMPER		THERMOSTAT
	45° RETURN DUCT TAP WITH VOL. DAMPER		FLEX DUCT
	DIFFUSER		LINEAR DIFFUSER WITH FLEX CONNECTION
	DIFFUSER WITH FLEX CONNECTION		ROUND DUCT UP
	GRILLE/REGISTER		ROUND DUCT DOWN
	SIDEWALL GRILLE/ REGISTER/ DIFFUSER		REDUCER
	CONNECT TO EXISTING		EXTENT OF DEMOLITION

SEQUENCE OF OPERATION

- A. PROVIDE STAND ALONE OR APPLICATION SPECIFIC CONTROLLERS AS REQUIRED TO PERFORM THE FOLLOWING SEQUENCES OF OPERATIONS.
- B. PACKAGED ROOFTOP UNITS
  - UNIT SHALL CONSIST OF SUPPLY AIR FAN, FILTERS, DX COOLING COIL, GAS-FIRED HEAT SECTION, AND A 7-DAY PROGRAMMABLE THERMOSTAT.
  - PROVIDE AN OVERRIDE SWITCH TO OPERATE THE UNIT DURING UNOCCUPIED HOURS. THIS SWITCH SHALL BE PART OF THE PROGRAMMABLE THERMOSTAT. OVERRIDE SWITCH ALLOWS THE UNIT TO OPERATE FOR TWO HOURS (ADJUSTABLE).
  - OCCUPIED MODE: BASED ON THE ROOFTOP UNIT'S HOURS OF OCCUPANCY, START THE UNIT AT THE BEGINNING OF OCCUPANCY AND SHUT DOWN THE UNIT AT THE END OF OCCUPANCY (NOTE: OUTSIDE AIR DAMPER WITHIN THE RTU SHALL OPEN AND THEN THE RTU SHALL START). THE UNIT SHALL START EARLIER AS DETERMINED BY THE PROGRAM FOR EARLY WARM-UP OR COOL DOWN. ON A SYSTEM STARTUP, THE RTU FAN SHALL START AND RUN CONTINUOUSLY AND THE INTERNAL FACTORY CONTROLS SHALL BE ENABLED. BASED ON THE SPACE TEMPERATURE SENSOR, THE UNIT SHALL CYCLE THE HEATING/COOLING TO MAINTAIN THE SPACE TEMPERATURE SETPOINT.
    - ECONOMIZER MODE: WHEN ENTHALPY OF OA IS BELOW 28 BTU/LB, ECONOMIZER MODE SHALL BE ENABLED. ECONOMIZER MODE SHALL LINEARLY MODULATE OUTDOOR AIR CFM FROM MINIMUM OA CFM TO 100% BASED ON ENTHALPY READINGS.
  - UNOCCUPIED MODE: THE RTU INTERNAL OA DAMPERS SHALL REMAINED CLOSED WHEN THE BUILDING IS NOT OCCUPIED. THE RTU SHALL STOP HEATING/COOLING AND THE FAN SHALL STOP. IF THE SPACE TEMPERATURE FALLS BELOW 60 DEGREE F (ADJUSTABLE), THE UNIT SHALL START AND HEAT UNTIL THE SPACE TEMPERATURE IS 64 DEGREE F (ADJUSTABLE) AND THEN SHUTDOWN. IF THE SPACE TEMPERATURE RISES ABOVE 85 DEGREE F (ADJUSTABLE), THE UNIT SHALL START AND COOL UNTIL THE SPACE TEMPERATURE IS 80 DEGREE F (ADJUSTABLE) AND THEN SHUTDOWN.
  - UPON DETECTION OF SMOKE BY UNIT SMOKE DETECTOR THE RTU SHALL SHUT DOWN AND AN ALARM SHALL BE SENT TO THE RESPECTIVE LOCAL REMOTE ANNUNCIATORS.
- C. KITCHEN HOOD EXHAUST FAN (EF-1)
  - THE KITCHEN HOOD EXHAUST FAN SHALL BE ENABLED WHEN ANY COOKING APPLUANCE LOCATED UNDER THE HOOD IS IN USE.
- D. EF-2
  - EXHAUST FAN SHALL RUN WHEN THE BUILDING IS OCCUPIED. EC TO WIRE THROUGH KITCHEN LIGHT SWITCH.
- E. ANSUL SYSTEM ACTIVATION
  - UPON ACTIVATION OF ANSUL SYSTEM, SHUT DOWN RTU-1 AND RTU-2. PROVIDE RELAYS, CONTACTS, INTERLOCKS, TRANSFORMERS AND ALL ASSOCIATED WIRING TO ACCOMPLISH SEQUENCE. MECHANICAL CONTRACTOR SHALL INTERLOCK RTU-1 AND RTU-2 TO ALSO SHUT DOWN.

GENERAL NOTES:

- A. ALL WORK TO BE PERFORMED TO MEET ALL STATE, CITY & LOCAL CODE REQUIREMENTS.
- B. ALL DUCTWORK TO BE CONSTRUCTED OF GALVANIZED METAL ACCORDING TO SMACMNA STANDARDS.
- C. ALL WALL PATCHING TO BE BY THE GENERAL CONTRACTOR.
- D. HVAC CONTRACTOR IS TO COORDINATE WITH OTHER TRADES BEFORE INSTALLING DUCTWORK. IF THE HVAC CONTRACTOR FAILS TO COORDINATE WITH OTHER TRADES AND THE WORK MUST BE ALTERED THE HVAC CONTRACTOR WILL CHANGE IT AT HIS OWN EXPENSE.
- E. ONCE THE SYSTEM IS COMPLETE AND ALL CEILING TILES ARE INSTALLED THE SYSTEM FILTER SHALL BE CHANGED AND THE AIR SIDE SHALL BE BALANCED. SUBMIT ELECTRONIC COPY OF BALANCE REPORT TO ENGINEER FOR REVIEW.
- F. COORDINATE THE EXACT LOCATION OF ALL GRILLES, REGISTERS & DIFFUSER WITH ARCHITECTURAL REFLECTED CEILING PLAN, ALSO COORDINATE MOUNTING HEIGHTS OF FIXTURES.
- G. HVAC CONTRACTOR IS TO VISIT THE SITE PRIOR TO SUBMITTING A BID & INCLUDE IN THE BID ANY ITEMS NECESSARY FOR A COMPLETE & OPERATIONAL SYSTEM.
- H. PROVIDE TURNING VANES AT ALL 90° CHANGE IN DIRECTION.
- I. DRAWINGS ARE SCHEMATIC IN NATURE & HVAC CONTRACTOR IS TO INCLUDE ANY ITEMS REQUIRED FOR A COMPLETE & OPERATIONAL SYSTEM WHETHER SHOWN OR NOT SHOWN ON THE DRAWINGS.
- J. HVAC CONTRACTOR TO FURNISH ALL PERMITS REQUIRED FOR HIS PORTION OF THE WORK.
- K. HVAC CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR CONCERNING ELECTRICAL REQUIREMENTS BEFORE ORDERING ANY EQUIPMENT.
- L. FLEXIBLE DUCTS SHALL BE WIREMOLD TYPE WGC, 1-1/2" INSULATION & RATED AT 10" W.C WITH A MAXIMUM LENGTH OF 5'-0".

ABBREVIATIONS

(D)	DEMOLITION	FPI	FINS PER INCH
(E)	EXISTING	GTC	GENERAL TRADES CONTRACTOR
(F)	FUTURE	ID	INNER DIAMETER
(R)	(RELOCATE)	LAT	LEAVING AIR TEMPERATURE
AAV	AUTOMATIC AIR VENT	LWT	LEAVING WATER TEMPERATURE
AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER
AMB	AMBIENT	N/A	NOT APPLICABLE
APD	AIR PRESSURE DROP	NC	NORMALLY CLOSED
BAS	BUILDING AUTOMATIC SYSTEM	NO	NORMALLY OPEN
BDD	BACKDRAFT DAMPER	NTS	NOT TO SCALE
BFP	BACKFLOW PREVENTER	OA	OUTSIDE AIR
BLDG	BUILDING	OD	OUTSIDE DIAMETER
BOB	BOTTOM OF BEAM	PD	PRESSURE DROP
BOD	BOTTOM OF DUCT	PRV	PRESSURE REDUCING VALVE
BOP	BOTTOM OF PIPE	RA	RETURN AIR
BOS	BOTTOM OF STRUCTURE	REL	RELIEF AIR
CL	CENTER LINE	SA	SUPPLY AIR
CO	CLEAN OUT	SCC	SENSIBLE COOLING CAPACITY
DB	DRY BULB	SP	STATIC PRESSURE
DIA	DIAMETER	TCP	TEMPERATURE CONTROL PANEL
DN	DOWN	TSP	TOTAL STATIC PRESSURE
EA	EXHAUST AIR	TYP	TYPICAL
EAT	ENTERING AIR TEMPERATURE	UNO	UNLESS NOTED OTHERWISE
EFF	EFFICIENCY	VFD	VARIABLE FREQUENCY DRIVE
EG	ETHYLENE GLYCOL	WB	WET BULB
ESP	EXTERNAL STATIC PRESSURE	WG	WATER GAUGE
EWT	ENTERING WATER TEMPERATURE	WPD	WATER PRESSURE DROP
EXH	EXHAUST		



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

GENERAL INFORMATION  
MECHANICAL

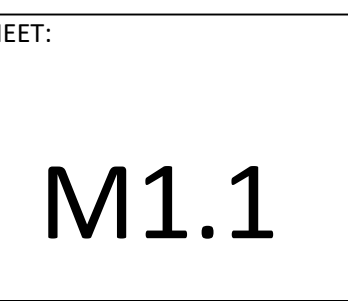
SHEET:

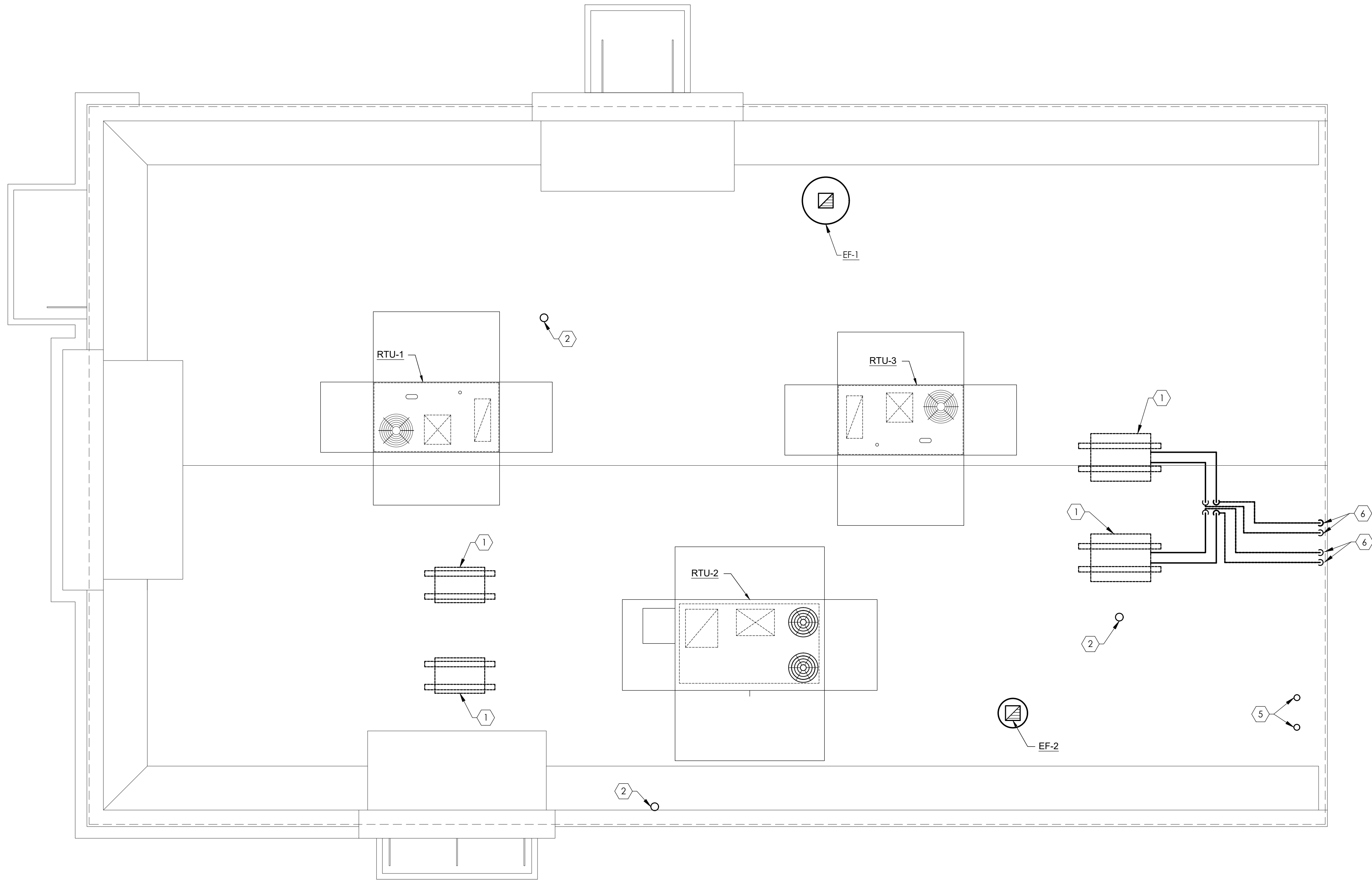
M0.0



- A. MOUNT ALL DUCTWORK TIGHT TO STRUCTURE EXCEPT WHERE NOTED.
- B. DO NOT PENETRATE KITCHEN EXHAUST HOODS OR DUCTWORK WITH ANY TYPE OF FASTENING ASSEMBLY [I.E. SCREWS, RIVETS].
- C. REFER TO SCHEDULES ON SHEET MS.1 FOR FURTHER INFORMATION ON MECHANICAL EQUIPMENT AND AIR DEVICES.
- D. ALL PROVIDED DUCT DIMENSIONS ARE METAL-TO-METAL LENGTHS. CONTRACTOR TO PROVIDE INSULATION WRAP ON DUCT EXTERIOR FOR ALL CONCEALED DUCT.
- E. **THE AIR BALANCE WILL BE PERFORMED BY THE OWNER. COORDINATE EXACT TIME WITH THE CONSTRUCTION MANAGER.**
- F. **CONTRACTOR TO ROUTE ALL INDIVIDUAL ROUND DUCT BRANCHES THROUGH JOISTS. TYP.**

1. UP TO EF ON ROOF. SEE SHEET M3.1 FOR CONTINUATION.
2. INSTALL LED TOUCHSCREEN (WITH CONTROLS LOCKED BY CODE) 24/7 PROGRAMMABLE THERMOSTAT MOUNTED AT 48" AFF. COORDINATE EXACT LOCATION WITH OWNER.
3. UP TO RTU ON ROOF. SEE SHEET M3.1 FOR CONTINUATION.
4. PROVIDE REMOTE TEMPERATURE SENSOR MOUNTED MOUNTED AT 72" A.F.F. FOR RTU-1 & RTU-2. WIRE BACK TO THERMOSTAT IN OFFICE.
5. PROVIDE 30" x 30" RETURN GRILLE ON SOFFIT AS HIGH AS POSSIBLE.
6. PROVIDE AUDIBLE/VISUAL REMOTE SMOKE DETECTOR ANNUNCIATOR WITH REMOTE KEY OPERATED RESET FOR RTU-1 SMOKE DETECTOR MOUNTED AT 48" AFF.
7. PROVIDE AUDIBLE/VISUAL REMOTE SMOKE DETECTOR ANNUNCIATOR WITH REMOTE KEY OPERATED RESET FOR RTU-2 SMOKE DETECTOR MOUNTED AT 48" AFF.
8. PROVIDE TYPE I KITCHEN EXHAUST DUCTWORK FROM KITCHEN EXHAUST HOOD TO EF-1 ON ROOF. DUCTWORK TO BE A MINIMUM 16 GAGE CARBON STEEL WITH CONTINUOUSLY WELDED LIQUID TIGHT SEAMS. PROVIDE GREASE RESERVOIR AS REQUIRED BY IMC 506.3.7 AND DUCT CLEANOUTS AS REQUIRED BY IMC 506.3.8. DUCTWORK SHALL BE INSULATED WITH 2-HOUR FLEXIBLE BLANKET TYPE FIRE WRAP WITH A FLAME SPREAD INDEX AT NOT MORE THAN 5 AND A SMOKE DEVELOPED INDEX NOT EXCEEDING 5. WHEN TESTED PER ASTM E-84 METHOD, WRAP SHALL COMPLY WITH ALL 5 FIRE TESTS OF STANDARD ASTM E-2236, GREASE DUCT ENCLOSURE SYSTEM, AND DUCT FIRESTOP SYSTEM BE ASTM E-814 CLASSIFIED. FABRICATED DUCT WRAP ENCLOSURE WITH 2 LAYERS OF WRAP TO PROVIDE 2-HOUR FIRE RATING. ALL DUCT ELBOWS ARE TO BE RADIUS ELBOWS. COORDINATE WRAPING WITH P.C. AND TRENCH DRAINAGE.
9. PROVIDE CLEAR PLASTIC INSERT TO BLANK OFF DIFFUSER THROW AT THE EXHAUST HOOD AS SHOWN.
10. INSTALL HOOD AT LOCATION SHOWN. PROVIDE ALL REQUIRED SUPPORTS AND ACCESSORIES FOR A COMPLETE INSTALLATION.

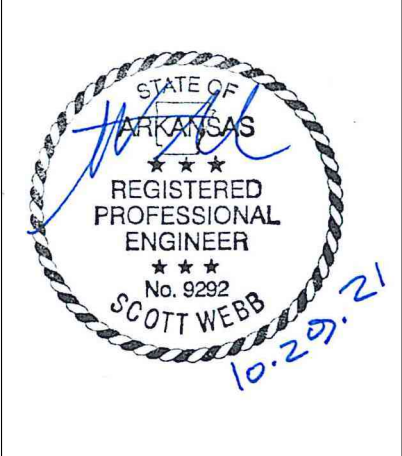




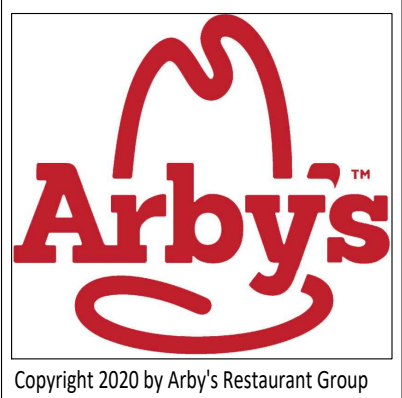
1 ROOF PLAN - MECHANICAL  
1/4" = 1'-0"

- GENERAL NOTES:
- A. MOUNT ALL HVAC EQUIPMENT ON ROOF PER DETAILS ON SHEET M5.1.
  - B. CONTRACTOR TO MAINTAIN MINIMUM MANUFACTURER RECOMMENDED SERVICE CLEARANCE AROUND EACH PIECE OF EQUIPMENT.
  - C. CONTRACTOR TO ENSURE A MINIMUM OF 10' CLEARANCE BETWEEN ALL OA INTAKES AND ANY EXHAUST FANS, VENTS, FLUES, ETC.
  - D. CONTRACTOR TO ENSURE ALL MECHANICAL EQUIPMENT IS INSTALLED A MINIMUM OF 10' FROM THE ROOF EDGE WHERE PARAPET IS 36" HIGH OR LESS.
  - E. COORDINATE EXHAUST LOCATION OF RTUS WITH STRUCTURE TO ENSURE DUCT DROPS ARE LOCATED WITHIN TRUSS.

- CODED NOTES: (#)
- 1. CONDENSING UNIT SHOWN FOR REFERENCE ONLY. EQUIPMENT AND ASSOCIATED REFRIGERANT PIPING TO BE INSTALLED BY KITCHEN EQUIPMENT SUPPLIER.
  - 2. PLUMBING VENT/ FLUE PIPING SHOWN FOR REFERENCE. MAINTAIN A MINIMUM OF 10'-0" CLEARANCE TO ANY OA INTAKE.
  - 3. RTU'S MOUNTED ON CURB ON ROOF. REFER TO DETAIL ON SHEET M5.1 FOR FURTHER INFORMATION.
  - 4. ZONE LOCATED 10' FROM EDGES OF BUILDING SHOWN FOR REFERENCE ONLY.
  - 5. WATER HEATER FLUE PENETRATIONS SHOWN FOR REFERENCE.
  - 6. WALK-IN COOLER VENDOR TO PROVIDE REFRIGERANT LINES FROM ROOF MOUNTED CONDENSING UNITS TO EVAPORATORS IN WALK-IN COOLERS. WALK-IN COOLER VENDOR TO ROUTE THRU PREFABRICATED ROOF CURB TO ABOVE THE CEILING AND DOWN THRU FURRED OUT WALL INTO THE WIC BOX. COORDINATE EXACT LOCATIONS WITH G.C. PRIOR TO INSTALLATION. G.C. TO PROVIDE SLEEVE IN WALL FROM WALK-IN COOLER ROOF UP TO CEILING SPACE ABOVE KITCHEN. REFER TO ARCHITECTURAL WALL SECTIONS.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

ROOF PLAN  
MECHANICAL

SHEET:

M3.1



ROOFTOP UNIT SCHEDULE																		
MARK	MANUFACTURER & MODEL NO.	AREA SERVED	NOM. TONS	CFM	CFM O/A	HEATING (MBH)		COOLING CAP. (MBH)		E.S.P. "in.WC"	EER	FAN HP	UNIT WT. LBS.	ELECTRICAL				ACCESORIES
						TYPE	INPUT OUTPUT	GROSS CAPACITY	NET CAPACITY					VOLTS	PH.	MCA	MOCP	
RTU1	LENNOX LGH060H4E	SEATING	5	1750	500	GAS	65 52	61.6	60	0.5	12.7	1	750	208	3	33	45	ALL
RTU2	LENNOX LGH092H4B	SEATING/KITCHEN/ RESTROOMS	7.5	3000	800	GAS	130.0 104.0	93	90	1.0"	12.5	3.0	1500	208	3	45	60	ALL
RTU3	LENNOX LGH048H4E	KITCHEN	4	1600	300	GAS	65 52	50.1	49	1.0	12.8	0.75	650	208	3	28	40	ALL
GENERAL NOTES: 1. HAILGUARD 2. 14" ROOF CURB 3. FACTORY PROVIDED DISCONNECT 4. FACTORY PROVIDED ENTHALPY ECONOMIZER WITH POWERED EXHAUST 5. RETURN AIR SMOKE DETECTOR FOR UNITS 5-TON OR MORE																		

GRILLES, REGISTERS, AND DIFFUSERS SCHEDULE									
UNIT DATA				PERFORMANCE DATA					
TAG	FUNCTION	MODEL	FACE SIZE	FRAME TYPE	MATERIAL	FINISH	BALANCE DAMPER	MAX N.C.	COMMENTS
D1	SUPPLY	TMS	24"x24"	LAY-IN	STEEL	BAIGE	—	25	
D2	SUPPLY	TMS	24"x24"	LAY-IN	STEEL	WHITE	—	25	
G1	RETURN	350RL	12"x12"	LAY-IN	STEEL	BEIGE	—	25	
G2	RETURN	50F	24"x24"	LAY-IN	STEEL	WHITE	—	25	
G3	RETURN	50F	24"x24"	LAY-IN	STEEL	BEIGE	—	25	

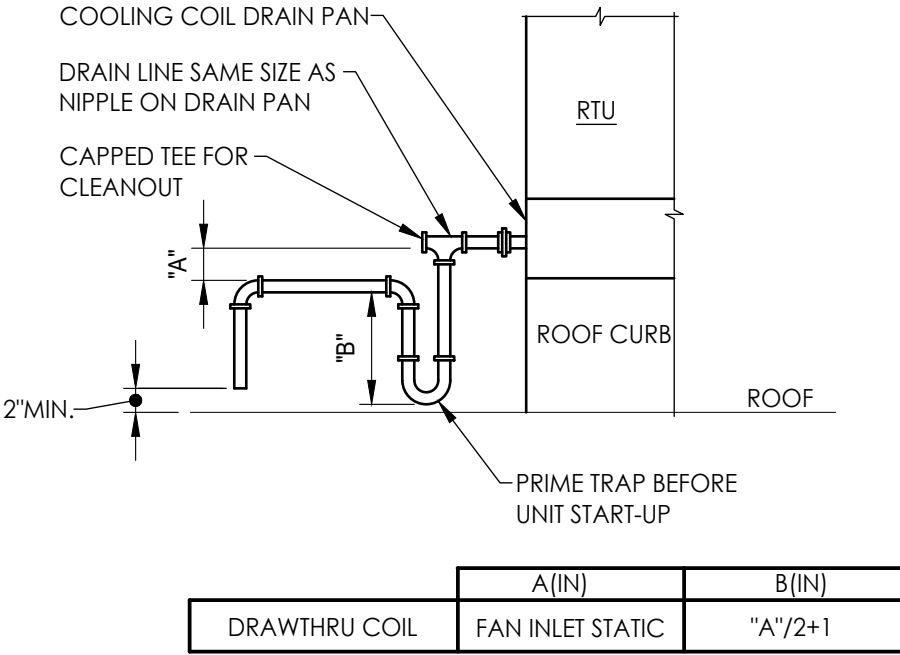
KITCHEN HOOD SCHEDULE												
THIS EQUIPMENT HAS BEEN SELECTED AND APPROVED BY CAPTIVEAIRE. ALL INFORMATION PERTINENT TO THESE UNITS SHALL BE THE SOLE RESPONSIBILITY OF CAPTIVEAIRE.												
BASED ON CAPTIVEAIRE U.N.O												
UNIT DATA				LIGHTS				MISC.				
TAG	MODEL	HOOD LENGTH	MAX. COOKING TEMP.	TOTAL EXHAUST CFM	RISER (W" x L")	S.P. (IN" W.G.)	QTY.	TYPE	FIRE SUPP. SYSTEM	HANGING WEIGHT (LBS.)	COMMENTS	
KH-1	5424-ND-2	5'-0"	450°F	1200	10x11	-0.31	2	INCAND.	YES	450		

EXHAUST FAN SCHEDULE													
THIS EQUIPMENT HAS BEEN SELECTED AND APPROVED BY CAPTIVEAIRE. ALL INFORMATION PERTINENT TO THESE UNITS SHALL BE THE SOLE RESPONSIBILITY OF CAPTIVEAIRE.													
BASED ON CAPTIVEAIRE U.N.O													
UNIT DATA				PERFORMANCE DATA						MOTOR DATA			
TAG	MODEL	FUNCTION	FAN TYPE	CFM	ESP	RPM	DAMPER	BELT OR DIRECT	HP	VOLT	PH	COMM ENTS	
EF-1	DU50HFA	KH-1 HOOD EXHAUST	ROOF MOUNTED UP BLAST	1200	0.75	1429	-	BELT	1/2	120	1	1,2	
EF-2	DR10HFA	RESTROOM EXHAUST	ROOF MOUNTED DOWN BLAST	350	0.25	1124	-	BELT	FRACT.	120	1	1,2	

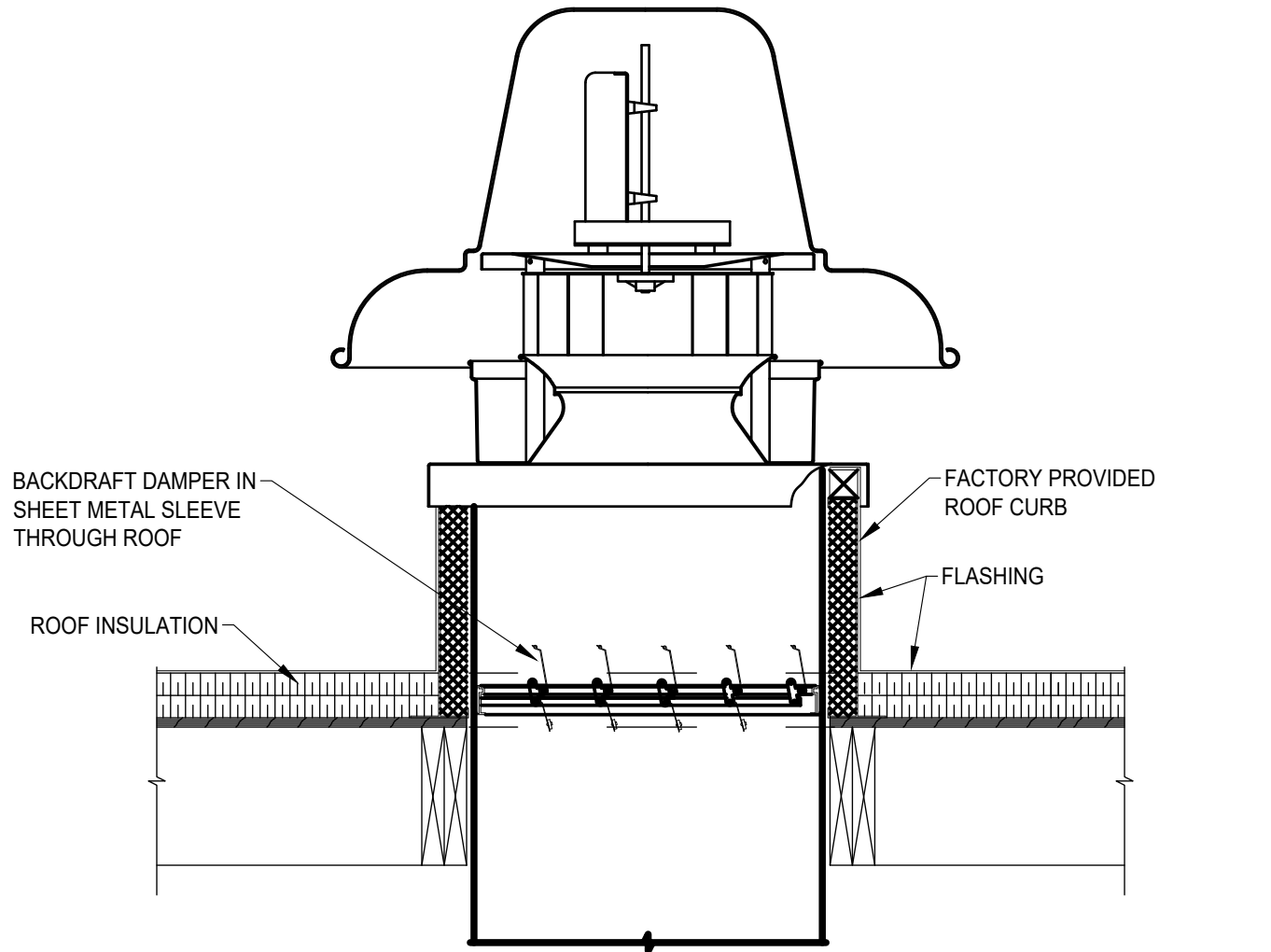
- NOTES:
1. FACTORY PROVIDED DISCONNECT SWITCH
  2. REFER TO CAPTIVEAIRE DRAWINGS FOR ROOF CURB

VENTILATION SCHEDULE													
SPACE DATA				PEOPLE VENTILATION			AREA VENTILATION			TOTAL			
SPACE NAME	ROOM NUMBER	CATEGORY	RTU SERVED BY	OCC.	CFM PER PERSON	CFM TOTAL (PEOPLE)	AREA (SF)	CFM REQUIRED PER SF	CFM TOTAL (AREA)	TOTAL VENTILATION	ROOFTOP UNIT VENTILATION SUMMATION		
DINING	102	FOOD & BEVERAGE/DINING	RTU-1	40	7.5	300	1000	0.18	180	480			
VESTIBULE (S)	100	CORRIDORS	RTU-2	—	—	0	38	0.18	7	7			
VESTIBULE (N)	101	CORRIDORS	RTU-2	—	—	0	50	0.18	9	9			
WOMENS	103	RESTROOMS	RTU-2	—	—	—	—	—	—	—			
MENS	104	RESTROOMS	RTU-2	—	—	—	—	—	—	—			
UNLISTED ROOMS ARE LUMPED INTO LISTED ROOMS										496	0.8	620	800
VENTILATION SCHEDULE													
SPACE DATA				PEOPLE VENTILATION			AREA VENTILATION			TOTAL			
SPACE NAME	ROOM NUMBER	CATEGORY	RTU SERVED BY	OCC.	CFM PER PERSON	CFM TOTAL (PEOPLE)	AREA (SF)	CFM REQUIRED PER SF	CFM TOTAL (AREA)	TOTAL VENTILATION	ROOFTOP UNIT VENTILATION SUMMATION		
SERVICE AREA	104	FOOD & BEVERAGE/KITCHEN	RTU-1	10	7.5	75	350	0.18	63	138			
KITCHEN	106	FOOD & BEVERAGE/KITCHEN	RTU-2 & RTU-3	2	7.5	15	500	0.18	90	90	SYSTEM EFFICIENCY	CORRECTED OA	OA PROVIDED
UNLISTED ROOMS ARE LUMPED INTO LISTED ROOMS										228	0.8	285	800

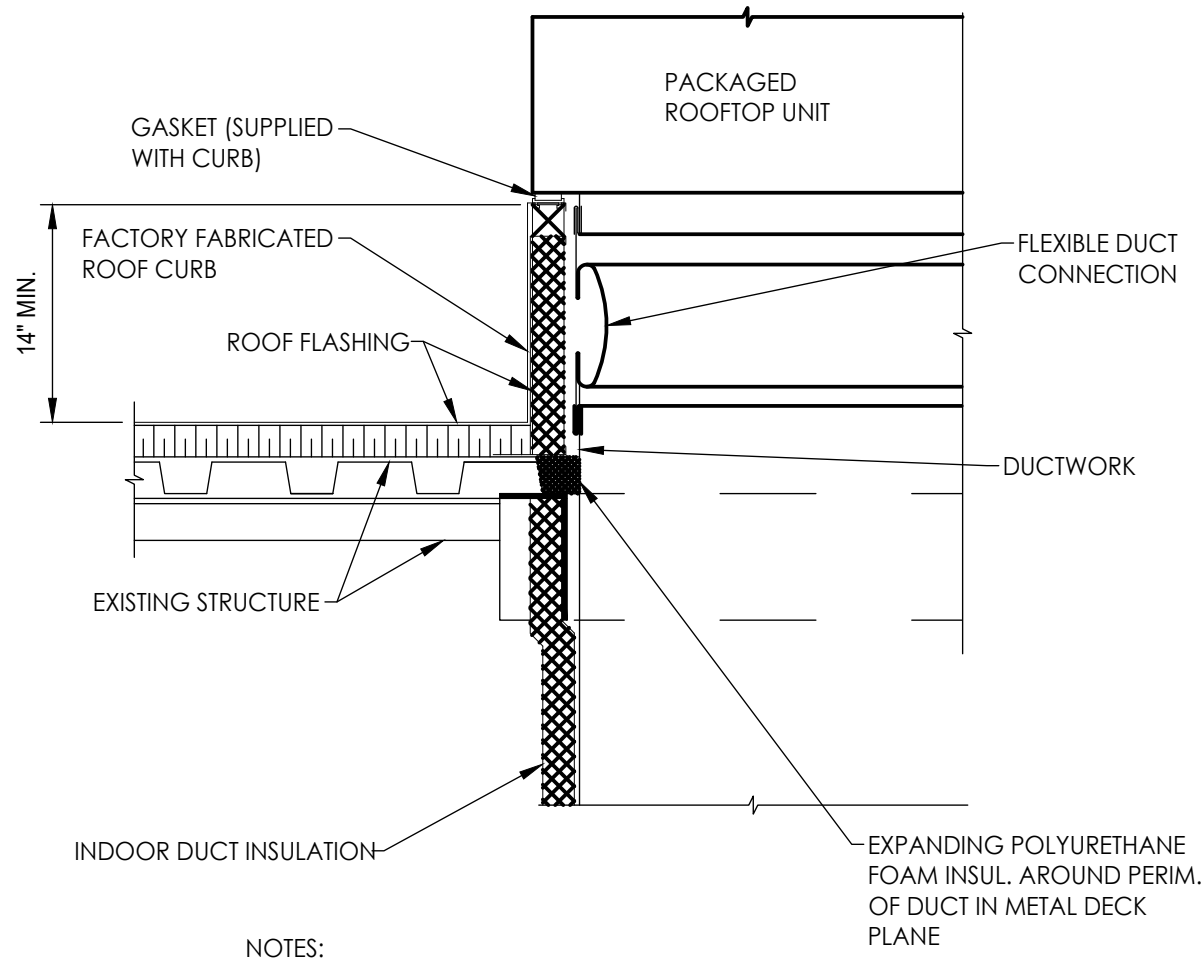
AIR BALANCE SCHEDULE						BUILDING PRESSURE
COMPONENT	SUPPLY CFM	RETURN CFM	SUPPLY AIR CFM TO HOOD	OUTDOOR AIR CFM	EXHAUST CFM	
RTU-1	1750	1250	—	500	—	
RTU-2	3000	2200	—	800	—	
RTU-3	1600	1300	—	300	—	
EF-1	—	—	—	—	1200	
EF-2	—	—	—	—	350	
TOTAL	6000	4400	0	1600	1550	+50 CFM



1 RTU CONDENSATE DRAIN DETAIL  
N.T.S.



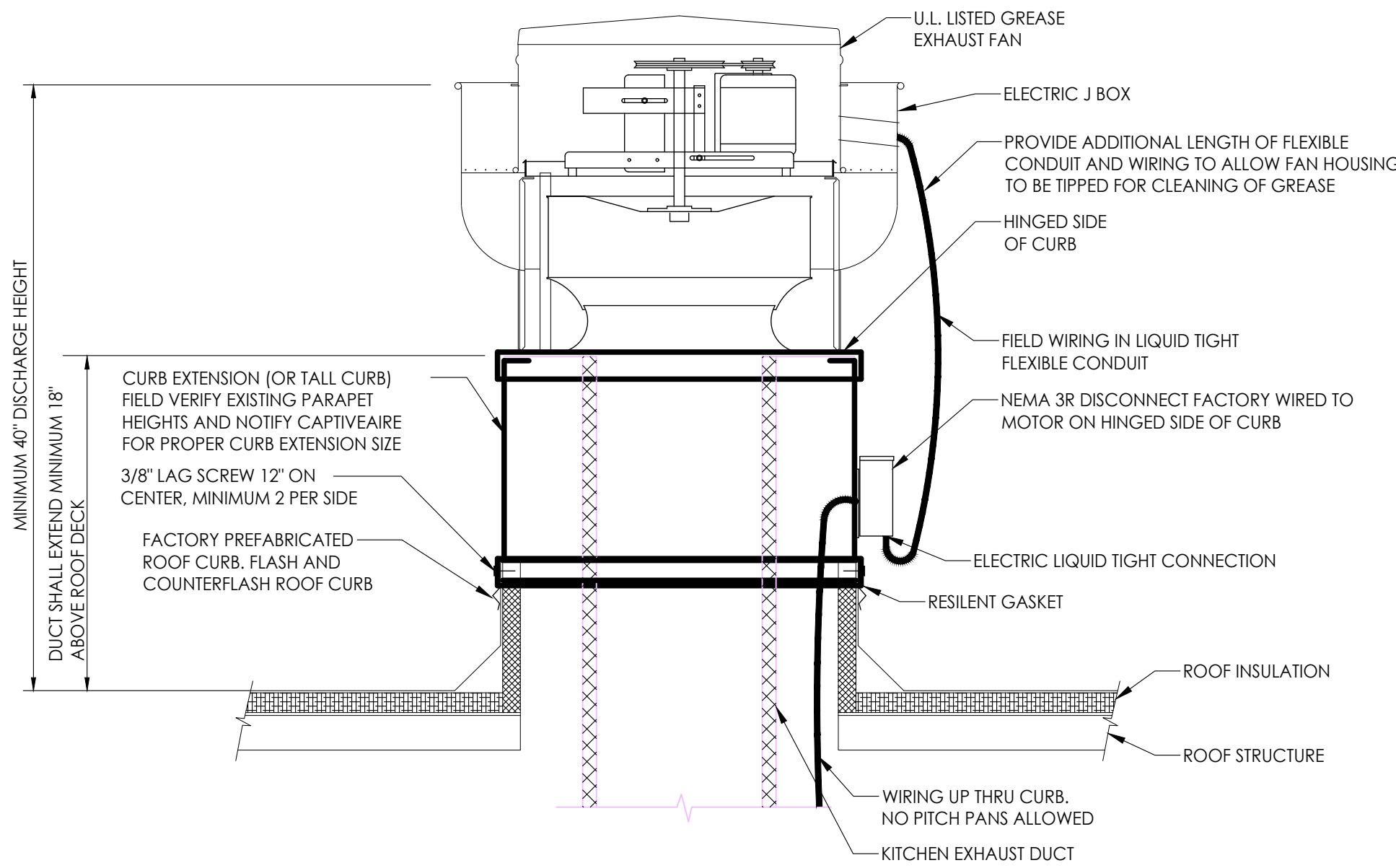
2 GENERAL EXHAUST FAN DETAIL  
N.T.S.



NOTES:

1. IN-FILL BETWEEN EQUIPMENT CURB AND DUCTWORK, ALL SIDES WITH BATT. INSULATION (TYP.).

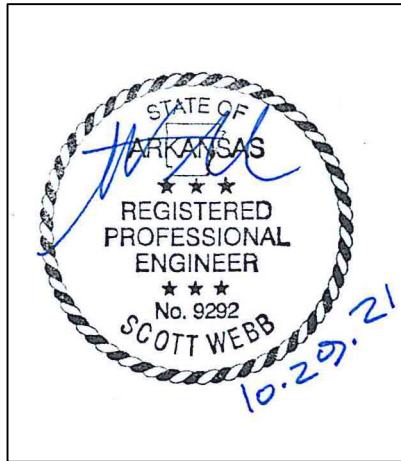
3 PACKAGED ROOFTOP UNIT DETAIL  
N.T.S.



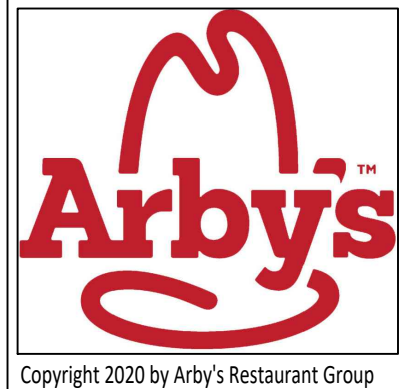
NOTES:

1. INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 96 REQUIREMENTS.
2. CUT AND PATCH EXISTING ROOFING AS REQUIRED FOR NEW CURB INSTALLATION.
3. CURB SHALL BE TAPERED TYPE AND MATCH THE PITCH OF THE ROOF.
4. CONTRACTOR TO PROVIDE TREATED WOOD BLOCKINGS AND SHIM FLAT ROOF CURB TILL LEVEL FOR ALL EXHAUST FANS AND TO ACHIEVE ROOF CURB HEIGHTS. PROVIDE ROOF CURB EXTENSION IF REQUIRED.

4 GREASE EXHAUST FAN DETAIL  
N.T.S.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SCHEDULES  
MECHANICAL

SHEET:

M5.1



SPECIFICATIONS - DIVISION 23 - HVAC

GENERAL MECHANICAL REQUIREMENTS:

HVAC SUBCONTRACTOR SHALL PROVIDE AT BID TIME A BID TO PROVIDE PREVENTATIVE MAINTENANCE SERVICES FOR ONE YEAR.

FURNISH TO THE OWNER ALL OPERATING & MAINTENANCE MANUALS, RECORD DRAWINGS, TEST & BALANCE REPORT, CONTRACTOR SHALL COORDINATE WITH MANUFACTURER REPRESENTATIVES FOR EMPLOYEE TRAINING REQUIREMENTS FOR ALL EQUIPMENT.

MECHANICAL CONTRACTOR SHALL SUBMIT COMPLIANCE CHECKLIST TO BUILDING OFFICIAL UPON SUBSTANTIAL COMPLETION OF PROJECT, PROVIDE EQUIPMENT INDICATED ON THE DRAWINGS, AND AS REQUIRED FOR A COMPLETE FUNCTIONING SYSTEM.

DEFINITIONS:

FURNISH MEANS TO SUPPLY AND DELIVER TO PROJECT SITE, READY FOR INSTALLATION.

INSTALL MEANS TO PLACE IN POSITION AND MAKE CONNECTIONS FOR SERVICE OR USE.

PROVIDE MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR INTENDED USE.

WARRANTY:

PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF THE COMPLETED PROJECT. PROVIDE A SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE. AT THE OWNER'S OPTION, CONTRACTOR SHALL INCLUDE ONE YEAR WARRANTY ON OWNER FURNISHED EQUIPMENT. CONTRACTOR SHALL INCLUDE COSTS FOR RECEIVING, HANDLING, STORAGE, AND HOISTING OF OWNER FURNISHED EQUIPMENT.

PROVIDE OPERATION MANUALS, MAINTENANCE MANUALS AND SCHEMATICS FOR ALL MECHANICAL EQUIPMENT INSTALLED.

COORDINATION:

COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.

DUCT DIMENSIONS:

UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON THE DRAWINGS ARE INSIDE CLEAR DIMENSIONS.

TEMPERATURE CONTROLS:

PROVIDE PROGRAMMABLE THERMOSTATS WITH REMOTE TEMPERATURE SENSORS AND REMOTE HUMIDSTATS COMPATIBLE WITH ROOFTOP UNIT. CONTROL WIRING SHALL BE INSTALLED IN CONDUIT. THERMOSTAT SHALL MEET SETPOINT ADJUSTMENT FOR UNOCCUPIED MODE: HEATING DOWN TO 55 DEGREES AND COOLING UP TO 85 DEGREES. PROVIDE INTERLOCK CONTROL WIRING BETWEEN HOOD EXHAUST FANS AND ROOFTOP UNITS.

END OF SECTION

SECTION 230593 - TESTING, ADJUSTING, AND BALANCING FOR HVAC

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. SUBMITTALS:

1. CERTIFIED TAB REPORTS.

B. TAB FIRM QUALIFICATIONS: AABC NEBB OR TAB88 CERTIFIED.

C. TAB REPORT FORMS: STANDARD TAB CONTRACTOR'S FORMS APPROVED BY ARCHITECT.

D. PERFORM TAB AFTER LEAKAGE AND PRESSURE TESTS ON AIR DISTRIBUTION SYSTEMS HAVE BEEN SATISFACTORILY COMPLETED.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 EXAMINATION

A. EXAMINE THE CONTRACT DOCUMENTS TO BECOME FAMILIAR WITH PROJECT REQUIREMENTS AND TO DISCOVER CONDITIONS IN SYSTEMS' DESIGNS THAT MAY PRECLUDE PROPER TAB OF SYSTEMS AND EQUIPMENT.

B. EXAMINE THE APPROVED SUBMITTALS FOR HVAC SYSTEMS AND EQUIPMENT.

C. EXAMINE SYSTEMS FOR INSTALLED BALANCING DEVICES, SUCH AS TEST PORTS, GAGE COCKS, THERMOMETER WELLS, FLOW-CONTROL DEVICES, BALANCING VALVES AND FITTINGS, AND MANUAL VOLUME DAMPERS. VERIFY THAT LOCATIONS OF THESE BALANCING DEVICES ARE ACCESSIBLE.

D. EXAMINE SYSTEM AND EQUIPMENT INSTALLATIONS AND VERIFY THAT FIELD QUALITY-CONTROL TESTING, CLEANING, AND ADJUSTING SPECIFIED IN INDIVIDUAL SECTIONS HAVE BEEN PERFORMED.

E. EXAMINE HVAC EQUIPMENT AND FILTERS AND VERIFY THAT BEARINGS ARE GREASED, BELTS ARE ALIGNED AND TIGHT, AND EQUIPMENT WITH FUNCTIONING CONTROLS IS READY FOR OPERATION.

F. EXAMINE TERMINAL UNITS, SUCH AS VARIABLE-AIR-VOLUME BOXES, AND VERIFY THAT THEY ARE ACCESSIBLE AND THEIR CONTROLS ARE CONNECTED AND FUNCTIONING.

G. EXAMINE AUTOMATIC TEMPERATURE SYSTEM COMPONENTS TO VERIFY THE FOLLOWING:

1. DAMPERS, VALVES, AND OTHER CONTROLLED DEVICES ARE OPERATED BY THE INTENDED CONTROLLER.

2. DAMPERS AND VALVES ARE IN THE POSITION INDICATED BY THE CONTROLLER.

3. INTEGRITY OF DAMPERS AND VALVES FOR FREE AND FULL OPERATION AND FOR TIGHTNESS OF FULLY CLOSED AND FULLY OPEN POSITIONS. THIS INCLUDES DAMPERS IN MULTIZONE UNITS, MIXING BOXES, AND VARIABLE-AIR-VOLUME TERMINALS.

4. AUTOMATIC MODULATING AND SHUTOFF VALVES, INCLUDING TWO-WAY VALVES AND THREE-WAY MIXING AND DIVERTING VALVES, ARE PROPERLY CONNECTED.

5. THERMOSTATS AND HUMIDISTATS ARE LOCATED TO AVOID ADVERSE EFFECTS OF SUNLIGHT, DRAFTS, AND COLD WALLS.

6. SENSORS ARE LOCATED TO SENSE ONLY THE INTENDED CONDITIONS.

7. SEQUENCE OF OPERATION FOR CONTROL MODES IS ACCORDING TO THE CONTRACT DOCUMENTS.

8. CONTROLLER SET POINTS ARE SET AT INDICATED VALUES.

9. INTERLOCKED SYSTEMS ARE OPERATING.

10. CHANGEOVER FROM HEATING TO COOLING MODE OCCURS ACCORDING TO INDICATED VALUES.

H. REPORT DEFICIENCIES DISCOVERED BEFORE AND DURING PERFORMANCE OF TEST AND BALANCE PROCEDURES.

3.2 GENERAL PROCEDURES FOR TESTING AND BALANCING

A. PERFORM TESTING AND BALANCING PROCEDURES ON EACH SYSTEM ACCORDING TO THE PROCEDURES CONTAINED IN AABC'S "NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE", ASHRAE 111, NEBB'S "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, AND BALANCING OF ENVIRONMENTAL SYSTEMS" OR SMACNA'S "HVAC SYSTEMS - TESTING, ADJUSTING, AND BALANCING" AND IN THIS SECTION.

B. CUT INSULATION, DUCTS, PIPES, AND EQUIPMENT CABINETS FOR INSTALLATION OF TEST PROBES TO THE MINIMUM EXTENT NECESSARY FOR TAB PROCEDURES. AFTER TESTING AND BALANCING, PATCH PROBE HOLES IN DUCTS WITH SAME MATERIAL AND THICKNESS AS USED TO CONSTRUCT DUCTS. INSTALL AND JOIN NEW INSULATION THAT MATCHES REMOVED MATERIALS. RESTORE INSULATION, COVERINGS, VAPOR BARRIER, AND FINISH.

C. MARK EQUIPMENT AND BALANCING DEVICES, INCLUDING DAMPER-CONTROL POSITIONS, VALVE POSITION INDICATORS, FAN-SPEED-CONTROL LEVERS, AND SIMILAR CONTROLS AND DEVICES, WITH PAINT OR OTHER SUITABLE, PERMANENT IDENTIFICATION MATERIAL TO SHOW FINAL SETTINGS.

3.3 GENERAL PROCEDURES FOR BALANCING AIR SYSTEMS

A. PREPARE SCHEMATIC DIAGRAMS OF SYSTEMS "AS-BUILT" DUCT LAYOUTS.

B. FOR VARIABLE-AIR-VOLUME SYSTEMS, DEVELOP A PLAN TO SIMULATE DIVERSITY.

C. DETERMINE THE BEST LOCATIONS IN MAIN AND BRANCH DUCTS FOR ACCURATE DUCT AIRFLOW MEASUREMENTS.

D. VERIFY THAT MOTOR STARTERS ARE EQUIPPED WITH PROPERLY SIZED THERMAL PROTECTION.

E. CHECK FOR AIRFLOW BLOCKAGES.

F. CHECK CONDENSATE DRAINS FOR PROPER CONNECTIONS AND FUNCTIONING.

G. CHECK FOR PROPER SEALING OF AIR-HANDLING UNIT COMPONENTS.

H. CHECK FOR PROPER SEALING OF AIR DUCT SYSTEM.

3.4 TOLERANCES

A. SET HVAC SYSTEM AIRFLOW AND WATER FLOW RATES WITHIN THE FOLLOWING TOLERANCES:

1. SUPPLY, RETURN, AND EXHAUST FANS AND EQUIPMENT WITH FANS: PLUS OR MINUS 10 PERCENT.

2. AIR OUTLETS AND INLETS: PLUS OR MINUS 10 PERCENT.

END OF SECTION 230593

SECTION 230700 - HVAC INSULATION

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. SURFACE-BURNING CHARACTERISTICS:

1. INDOOR INSULATION AND RELATED MATERIALS: TO BE FACTORY LABELED DESIGNATING MAXIMUM FLAME-SPREAD INDEX OF 25 OR LESS, AND SMOKE-DEVELOPED INDEX OF 50 OR LESS ACCORDING TO ASTM E 84.

2.2 INSULATION MATERIALS

A. FLEXIBLE ELASTOMERIC: CLOSED-CELL, SPONGE- OR EXPANDED-RUBBER MATERIALS. COMPLY WITH ASTM C 534, TYPE I FOR TUBULAR MATERIALS AND TYPE II FOR SHEET MATERIALS.

B. MINERAL-FIBER BLANKET INSULATION: COMPLY WITH ASTM C 553, TYPE II AND ASTM C 1290, TYPE I.

1. FSK JACKET: ALUMINUM-FOIL, FIBERGLASS-REINFORCED SCRIM WITH KRAFT-PAPER BACKING; COMPLYING WITH ASTM C 1136, TYPE II.

2. FSK TAPE: FOIL-FAACE, VAPOR-RETARDER TAPE MATCHING FACTORY-APPLIED JACKET WITH ACRYLIC ADHESIVE; COMPLYING WITH ASTM C 1136.

C. MINERAL-FIBER, PIPE AND TANK INSULATION: COMPLYING WITH ASTM C 1393, TYPE II OR TYPE IIIA, CATEGORY 2, OR WITH PROPERTIES SIMILAR TO ASTM C 412, TYPE IB; AND HAVING FACTORY-APPLIED ASJ JACKET, NOMINAL DENSITY IS 2.5 LB/CU. FT. OR MORE. THERMAL CONDUCTIVITY (K-VALUE) AT 100 DEG F IS 0.29 BTU X IN./H X SQ. FT. X DEG F OR LESS.

1. ASJ: WHITE, KRAFT-PAPER, FIBERGLASS-REINFORCED SCRIM WITH ALUMINUM-FOIL BACKING; COMPLYING WITH ASTM C 1136, TYPE I.

2. ASJ TAPE: WHITE VAPOR-RETARDER TAPE MATCHING FACTORY-APPLIED JACKET WITH ACRYLIC ADHESIVE, COMPLYING WITH ASTM C 1136.

D. FLEXIBLE ELASTOMERIC ADHESIVE: COMPLY WITH MIL-A-24179A, TYPE II, CLASS I.

E. MINERAL-FIBER ADHESIVE: COMPLY WITH MIL-A-3314C, CLASS 2, GRADE A.

F. VAPOR-BARRIER MASTIC: WATER BASED; SUITABLE FOR INDOOR AND OUTDOOR USE ON BELOW AMBIENT SERVICES; COMPLY WITH MIL-PRF-19565C, TYPE II.

PART 3 - EXECUTION

3.1 INSULATION INSTALLATION

A. COMPLY WITH REQUIREMENTS OF THE MIDWEST INSULATION CONTRACTORS ASSOCIATION'S "NATIONAL COMMERCIAL & INDUSTRIAL INSULATION STANDARDS" FOR INSULATION INSTALLATION ON PIPES AND EQUIPMENT.

B. INSULATION INSTALLATION AT INTERIOR WALL AND PARTITION PENETRATIONS (THAT ARE NOT FIRE RATED): INSTALL INSULATION CONTINUOUSLY THROUGH WALLS AND PARTITIONS.

C. INSULATION INSTALLATION AT FIRE-RATED WALL, PARTITION, AND FLOOR PENETRATIONS: INSTALL INSULATION CONTINUOUSLY THROUGH PENETRATIONS. SEAL PENETRATIONS. COMPLY WITH REQUIREMENTS IN SECTION 078400.

D. FLEXIBLE ELASTOMERIC INSULATION INSTALLATION:

1. SEAL LONGITUDINAL SEAMS AND END JOINTS WITH ADHESIVE TO ELIMINATE OPENINGS IN INSULATION THAT ALLOW PASSAGE OF AIR TO SURFACE BEING INSULATED.

2. INSULATION INSTALLATION ON PIPE FITTINGS AND ELBOWS: INSTALL MITERED SECTIONS OF PIPE INSULATION. SECURE INSULATION MATERIALS AND SEAL SEAMS WITH ADHESIVE TO ELIMINATE OPENINGS IN INSULATION THAT ALLOW PASSAGE OF AIR TO SURFACE BEING INSULATED.

E. MINERAL-FIBER INSULATION INSTALLATION:

1. INSULATION INSTALLATION ON STRAIGHT PIPES AND TUBES: WHERE VAPOR BARRIERS ARE INDICATED, SEAL LONGITUDINAL SEAMS, END JOINTS, AND PROTRUSIONS WITH VAPOR-BARRIER MASTIC AND JOINT SEALANT.

2. FOR INSULATION WITH FACTORY-APPLIED JACKETS ON ABOVE AMBIENT SURFACES, SECURE LAPS WITH OUTWARD CLINCHED STAPLES AT 6 INCHES O.C.

3. FOR INSULATION WITH FACTORY-APPLIED JACKETS ON BELOW AMBIENT SURFACES, DO NOT STAPLE LONGITUDINAL TABS BUT SECURE TABS WITH ADDITIONAL ADHESIVE AS RECOMMENDED BY INSULATION MATERIAL MANUFACTURER AND SEAL WITH VAPOR-BARRIER MASTIC AND FLASHING SEALANT.

4. BLANKET INSULATION INSTALLATION ON DUCTS AND PLENUMS: SECURE WITH ADHESIVE AND INSULATION PINS.

5. FOR DUCTS AND PLENUMS WITH SURFACE TEMPERATURES BELOW AMBIENT, INSTALL A CONTINUOUS UNBROKEN VAPOR BARRIER.

F. PLENUMS AND DUCTS REQUIRING INSULATION:

1. CONCEALED SUPPLY AIR.

2. CONCEALED AND EXPOSED OUTDOOR AIR.

3. CONCEALED AND EXPOSED RETURN AIR LOCATED IN NON-CONDITIONED SPACE.

3.2 DUCT AND PLENUM INSULATION SCHEDULE

RETAIN "ONE OF" OPTION IN PARAGRAPHS IN THIS ARTICLE TO ALLOW CONTRACTOR TO SELECT PIPING MATERIALS FROM THOSE RETAINED.

A. CONCEALED DUCT INSULATION SHALL BE 1-1/2" THICK MINERAL-FIBER BLANKET WITH A 1.5-LB/CU. FT. NOMINAL DENSITY.

3.3 HVAC PIPING INSULATION SCHEDULE

A. CONDENSATE PIPING: INSULATION SHALL BE 1" THICK FLEXIBLE ELASTOMERIC.

B. REFRIGERANT PIPING: INSULATION SHALL BE 1" THICK FLEXIBLE ELASTOMERIC.

END OF SECTION 230700

SECTION 232300 - REFRIGERANT PIPING

PART 2 - PRODUCTS

2.1 TUBES AND FITTINGS

A. COPPER TUBE: ASTM B 88, TYPE K OR TYPE L, ANNEALED OR DRAWN-TEMPER TUBING AND WROUGHT-COPPER FITTINGS WITH BRAZED OR SOLDERED JOINTS.

B. WROUGHT-COPPER FITTINGS AND UNIONS: ASME B16.22.

C. SOLDER FILLER METALS: ASTM B 32. USE 95-5 TIN ANTIMONY OR ALLOY HB SOLDER TO JOIN COPPER SOCKET FITTINGS ON COPPER PIPE.

D. BRAZING FILLER METALS: AWS A5.8.

2.2 VALVES AND SPECIALTIES

A. AS REQUIRED BY THE KITCHEN EQUIPMENT MANUFACTURER.

PART 3 - EXECUTION

3.1 INSTALLATION

A. INSTALL REFRIGERANT PIPING AND CHARGE WITH REFRIGERANT ACCORDING TO ASHRAE 15.

B. INSTALL REFRIGERANT PIPING AS REQUIRED BY THE KITCHEN EQUIPMENT MANUFACTURER.

END OF SECTION 232300

SECTION 233100 - HVAC DUCTS AND CASINGS

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."

B. STRUCTURAL PERFORMANCE: DUCT HANGERS AND SUPPORTS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS DESCRIBED IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE".

C. COMPLY WITH NFPA 96 FOR DUCTS CONNECTED TO COMMERCIAL KITCHEN HOODS.

2.2 DUCTS

A. GALVANIZED-STEEL SHEET: ASTM A 653/A 653M, AND A 924 WITH G90 HOT-DIP GALVANIZED COATING.

1. GALVANIZED COATING DESIGNATION: G90.

B. TYPE I KITCHEN EXHAUST DUCTWORK

1. FIELD FABRICATED RECTANGULAR KITCHEN GREASE DUCT:

a. MINIMUM 16 GAUGE CARBON STEEL WHERE CONCEALED, AND OF MINIMUM 16 GAUGE STAINLESS STEEL WHERE EXPOSED. JOINTS AND SEAMS SHALL BE CONTINUOUSLY WELDED LIQUID TIGHT ON THE EXTERNAL SIDE OF THE DUCT SYSTEM.

b. PROVIDE GREASE RESERVOIR AS REQUIRED BY THE REQUIREMENTS OF IMC 506.3.7.1 AND PROVIDE DUCT CLEANOUT(S) AS REQUIRED BY THE REQUIREMENTS OF IMC 506.8.3.

C. COMPOSITE GREASE DUCT ENCLOSURE ASSEMBLIES: PROVIDE FLEXIBLE BLANKET-TYPE INSULATION COMPOSED OF FIBER BLANKET ENCAPSULATED IN AN ALUMINUM FOIL SCRIM, PROVIDING A NONCOMBUSTIBLE WRAP TO PROVIDE A VAPOR AND DUST BARRIER. DUCT WRAP SYSTEM SHALL HAVE FLAME SPREAD INDEX OF NOT MORE THAN 5 AND SMOKE DEVELOPED INDEX NOT EXCEEDING 5. WHEN TESTED PER ASTM E-84 METHOD, INSULATION AND JACKET SHALL BE RATED FOR OPERATING TEMPERATURES UP TO 2000°F. DUCT WRAP SYSTEM MUST COMPLY WITH ALL FIVE FIRE TESTS OF STANDARD ASTM E2336, GREASE DUCT ENCLOSURE SYSTEM, AND THE DUCT FIRESTOP SYSTEM SHALL BE ASTM E814 CLASSIFIED. FABRICATE DUCT WRAP ENCLOSURE WITH (2) LAYERS OF DUCT WRAP TO PROVIDE 2-HOUR FIRE RATING. PROVIDE COMPOSITE GREASE DUCT FIRE PROTECTION INSULATION FROM ONE OF THE FOLLOWING: THERMAL CERAMICS FIREMASTER FASTWRAP XL, UNIFRAX FYREWRAP 2.0 MAX.

C. JOINT AND SEAM TAPE, AND SEALANT: COMPLY WITH UL 181A, PROVIDE POLYMERIC RUBBER TYPE SEALANT FOR USE ON BOTH INTERIOR LOCATED DUCTWORK AND DUCTWORK EXPOSED TO OUTDOOR CONDITIONS. SEALER SHALL HAVE HIGH BONDING STRENGTH FOR SURE, FIRST TIME SEALING OF JOINTS IN LOW, MEDIUM, AND HIGH PRESSURE DUCT SYSTEMS. SEALER SHALL BE HIGH IN SOLID CONTENT, PROVIDE A TWO PART TAPE SEALING SYSTEM, CONSISTING OF WOVEN FIBER TAPE IMPREGNATED WITH A GYPSUM MINERAL COMPOUND, AND A MODIFIED ACRYLIC/SILICONE ACTIVATOR THAT REACTS EXOTHERMICALLY WITH THE TAPE. TWO PART TAPE SEALING SYSTEM MUST BE RATED FOR BOTH INDOOR AND OUTDOOR APPLICATION. TAPE SHALL NOT CONTAIN ASBESTOS.

D. METAL DUCT FABRICATION: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."

2.3 ACCESSORIES

A. VOLUME DAMPERS AND CONTROL DAMPERS: SINGLE-BLADE AND MULTIPLE OPPOSED-BLADE DAMPERS, STANDARD LEAKAGE RATING, AND SUITABLE FOR HORIZONTAL OR VERTICAL APPLICATIONS; FACTORY FABRICATED AND COMPLETE WITH REQUIRED HARDWARE AND ACCESSORIES.

1. ROUND VOLUME DAMPERS: PROVIDE MINIMUM 20 GAUGE GALVANIZED STEEL FRAME AND BLADES, MINIMUM 3/8" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS, WITH LOCKING POSITION REGULATOR. REGULATOR SHALL BE POSITIONED WITH SHEET METAL BRACKET BEYOND DUCT COVERING. WHERE POSITIONING REGULATOR IS NOT ACCESSIBLE, PROVIDE COUPLING AND EXTENSION ROD WITH REGULATOR FOR CEILING OR WALL INSTALLATION, AS REQUIRED.

2. RECTANGULAR VOLUME DAMPERS: PROVIDE MINIMUM 16 GAUGE GALVANIZED STEEL CHANNEL FRAME, 16 GAUGE GALVANIZED STEEL BLADES, MINIMUM 1/2" HEXAGONAL AXLE, BOLDED SYNTHETIC BEARINGS, WITH 3/8" SQUARE PLATED STEEL CONTROL SHAFT. LINKAGES SHALL BE CONCEALED IN THE FRAME. OPERATING SHAFT SHALL EXTEND BEYOND FRAME AND DUCT TO A LOCKING QUADRANT WITH ADJUSTABLE LEVER. MAXIMUM BLADE WIDTH SHALL NOT EXCEED 6".

B. FLEXIBLE DUCT CONNECTORS: FLAME-RETARDED OR NONCOMBUSTIBLE FABRICS, COATINGS, AND ADHESIVES COMPLYING WITH UL 181, CLASS 1, CONNECTOR TO BE 30 OUNCE, NEOPRENE COATED, FIBERGLASS FABRIC.

C. FLEXIBLE DUCTS: FACTORY ASSEMBLED, UL 181, CLASS 1, WITH 1-1/2-INCH THICK (R-5 MIN.), 1 PCF FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER/VAPOR BARRIER. FLEXIBLE DUCT SHALL MEET NFPA 90A WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50, AND SHALL BE RATED FOR MINIMUM 2-INCH WG PRESSURE AND 0 TO 250°F TEMPERATURE. PROVIDE SCREW-OPERATED METAL ADJUSTABLE CLAMPING DEVICES. USE TWIST-LOCK CONICAL TAP COLLARS AT CONNECTIONS INTO SHEET METAL DUCTWORK. MAXIMUM EXTENDED LENGTH OF FLEXIBLE DUCT SHALL NOT EXCEED 5 FEET.

D. TURNING VANES: PROVIDE FABRICATED TURNING VANES AND VANE RUNNERS, CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS". PROVIDE TURNING VANES CONSTRUCTED OF CURVED BLADES, SUPPORTED WITH BARS PERPENDICULAR TO BLADES, AND SET INTO SIDE STRIPS SUITABLE FOR MOUNTING IN DUCTWORK. FOLLOW SMACNA GUIDELINES FOR SPACING SUPPORT, AND CONSTRUCTION. ALL BLADES SHALL BE DOUBLE THICKNESS AIRFOIL TYPE.

E. BIRD SCREENS AND FRAMES: PROVIDE BIRD SCREENS THAT CONFORM TO ASTM E 2016, NO. 2 MESH, ALUMINUM OR STAINLESS STEEL. PROVIDE "MEDIUM-LIGHT" RATED ALUMINUM SCREENS. PROVIDE "LIGHT" RATES STAINLESS STEEL SCREENS.

F. DUCT-MOUNTED ACCESS DOORS: FABRICATE ACCESS PANELS ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE"; FIGURES 2-10, "DUCT ACCESS DOORS AND PANELS;" AND 2-11, "ACCESS PANELS - ROUND DUCT."

PART 3 - EXECUTION

3.1 INSTALLATION

A. INSTALL DUCTWORK, ACCESSORIES, AND SUPPORTS ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" UNLESS OTHERWISE INDICATED.

B. SEAL DUCTS TO THE FOLLOWING SEAL CLASSES ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE": 1-INCH WG, SEAL CLASS A.

C. CONCEAL DUCTS FROM VIEW IN FINISHED AND OCCUPIED SPACES.

D. AVOID PASSING THROUGH OR ABOVE ELECTRICAL EQUIPMENT SPACES AND ENCLOSURES.

E. CLEAN DUCT SYSTEMS BEFORE TESTING, ADJUSTING, AND BALANCING.

3.2 TESTING, ADJUSTING, AND BALANCING

A. BALANCE AIRFLOW WITHIN DISTRIBUTION SYSTEMS, INCLUDING SUBMAINS, BRANCHES, AND TERMINALS TO INDICATED QUANTITIES PER SPECIFICATIONS.

END OF SECTION 233100

SECTION 233423 - HVAC EXHAUST FANS

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. PRODUCTS SHALL BE LICENSED TO USE THE AMCA-CERTIFIED RATINGS SEAL.

B. EXHAUST FANS SHALL COMPLY WITH UL 705, TYPE I FANS SHALL ALSO COMPLY WITH UL 762.

C. TYPE I FANS TO BE DESIGNED FOR HIGH HEAT OPERATION AT 300°F.

D. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.

2.2 CENTRIFUGAL VENTILATORS

A. HOUSING: REMOVABLE, SPUN-ALUMINUM, DOME TOP AND OUTLET BAFFLE; SQUARE, ONE-PIECE, ALUMINUM BASE WITH VENTURI INLET CONE.

1. UPBLAST UNITS: ALUMINUM DISCHARGE BAFFLE TO DIRECT DISCHARGE AIR UPWARD, WITH RAIN AND SNOW DRAINS.

B. FAN WHEELS: ALUMINUM HUB AND WHEEL WITH BACKWARD-INCLINED BLADES.

C. BELT-DRIVEN DRIVE ASSEMBLY: RESILIENTLY MOUNTED TO HOUSING.

1. FAN SHAFT: TURNED, GROUND, AND POLISHED STEEL; KEYS TO WHEEL HUB.

2. SHAFT BEARINGS: PERMANENTLY LUBRICATED, PERMANENTLY SEALED, SELF-ALIGNING BALL BEARINGS.

3. PULLEYS: CAST-IRON, ADJUSTABLE-PITCH MOTOR PULLEY.

4. FAN AND MOTOR ISOLATED FROM EXHAUST AIRSTREAM.

D. ACCESSORIES:

1. DISCONNECT SWITCH: NON-FUSIBLE TYPE, WITH THERMAL-OVERLOAD PROTECTION, FACTORY WIRED THROUGH AN INTERNAL ALUMINUM CONDUIT.

2. BIRD SCREENS: REMOVABLE, 1/2-INCH MESH, ALUMINUM OR BRASS WIRE.

3. DAMPERS: COUNTERBALANCED, PARALLEL-BLADE, BACKDRAFT DAMPERS MOUNTED IN CURB BASE; FACTORY SET TO CLOSE WHEN FAN STOPS.

4. MOTORIZED DAMPERS: PARALLEL-BLADE DAMPERS MOUNTED IN CURB BASE WITH ELECTRIC ACTUATOR; WIRED TO CLOSE WHEN FAN STOPS.

5. GREASE BOX FOR TYPE I EXHAUST FANS.

6. G2 GREASE GUARD FOR TYPE I EXHAUST FANS.

E. ROOF CURBS: 20 GAUGE GALVANIZED STEEL; MITERED AND WELDED CORNERS; 1-1/2-INCH THICK, RIGID, FIBERGLASS INSULATION ADHERED TO INSIDE WALLS; AND 1-1/2-INCH WOOD NAILER. SIZE AS REQUIRED TO SUIT ROOF OPENING AND FAN BASE.

1. CONFIGURATION: SELF-FLASHING WITHOUT A CANT STRIP, WITH MOUNTING FLANGE.

2. OVERALL HEIGHT: 12 INCHES FOR GENERAL EXHAUST FANS; 20 INCHES FOR KITCHEN EXHAUST FANS.

3. PITCH MOUNTING: MANUFACTURE CURB FOR ROOF SLOPE.

4. MOUNTING PEDESTAL: GALVANIZED STEEL WITH REMOVABLE ACCESS PANEL.

5. TYPE I ROOF CURBS TO BE VENTED TYPE.

6. TYPE I AND TYPE 2 ROOF CURBS TO BE HINGED TYPE.

F. CAPACITIES AND CHARACTERISTICS:

1. SEE SCHEDULE.

2.3 MOTORS

A. COMPLY WITH NEMA DESIGNATION, TEMPERATURE RATING, SERVICE FACTOR, ENCLOSURE TYPE, AND EFFICIENCY REQUIREMENTS FOR MOTORS.

1. MOTOR SIZES: MINIMUM SIZE AS INDICATED, IF NOT INDICATED, LARGE ENOUGH SO DRIVEN LOAD WILL NOT REQUIRE MOTOR TO OPERATE IN SERVICE FACTOR RANGE ABOVE 1.0.

B. ENCLOSURE TYPE: TOTALLY ENCLOSED, FAN COOLED.

PART 3 - EXECUTION

3.1 INSTALLATION

A. INSTALL UNITS WITH CLEARANCES FOR SERVICE AND MAINTENANCE.

B. ROOF-MOUNTED UNITS: INSTALL ROOF CURB ON ROOF STRUCTURE, ACCORDING TO ARI GUIDELINE B. INSTALL AND SECURE ROOF-MOUNTED FANS ON CURBS, AND COORDINATE ROOF PENETRATIONS AND FLASHING WITH ROOF CONSTRUCTION.

END OF SECTION 233423



PROPRIETARY INFORMATION NOTICE:

THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632-AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RE AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SPECIFICATIONS  
MECHANICAL

SHEET:

M7.1



SPECIFICATIONS - DIVISION 23 - HVAC (CONTINUED)

SECTION 233713 - DIFFUSERS, REGISTERS, AND GRILLES	
PART 1 - GENERAL	
1.1 SECTION REQUIREMENTS	
A. SUBMITTALS:	
1. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED, INCLUDING COLOR CHARTS FOR FACTORY FINISHES.	
PART 2 - PRODUCTS	
2.1 DIFFUSERS, REGISTERS, AND GRILLES:	
A. REFER TO SCHEDULES FOR FINISH TYPE, COLOR, MATERIAL, AND MOUNTING.	
PART 3 - EXECUTION	
3.1 INSTALLATION	
A. INSTALL DIFFUSERS, REGISTERS, AND GRILLES LEVEL AND PLUMB.	
B. CEILING-MOUNTED OUTLETS AND INLETS: DRAWINGS INDICATE GENERAL ARRANGEMENT OF DUCTS, FITTINGS, AND ACCESSORIES. MAKE FINAL LOCATIONS WHERE INDICATED, AS MUCH AS PRACTICAL. FOR UNITS INSTALLED IN LAY-IN CEILING PANELS, LOCATE UNITS IN THE CENTER OF PANEL UNLESS OTHERWISE INDICATED. WHERE ARCHITECTURAL FEATURES OR OTHER ITEMS CONFLICT WITH INSTALLATION, NOTIFY ARCHITECT FOR A DETERMINATION OF FINAL LOCATION.	
C. AFTER INSTALLATION, ADJUST DIFFUSERS, REGISTERS, AND GRILLES TO AIR PATTERNS INDICATED, OR AS DIRECTED, BEFORE STARTING AIR BALANCING.	
END OF SECTION 233713	
SECTION 237413 - PACKAGED ROOFTOP UNITS	
1.1 SUMMARY	
A. THIS SECTION INCLUDES PACKAGED, ROOFTOP UNITS WITH THE FOLLOWING COMPONENTS AND ACCESSORIES:	
1. DIRECT EXPANSION COOLING.	
2. GAS FURNACE.	
3. ECONOMIZER OUTDOOR-AND RETURN-AIR DAMPER SECTION.	
4. INTEGRAL SPACE TEMPERATURE CONTROLS.	
5. ROOF CURBS.	
1.2 SECTION REQUIREMENTS	
A. SUBMITTALS:	
1. PRODUCT DATA: INCLUDE MANUFACTURER'S TECHNICAL DATA FOR EACH RTU, INCLUDING RATED CAPACITIES, DIMENSIONS, REQUIRED CLEARANCES, CHARACTERISTICS, FURNISHED SPECIALTIES, AND ACCESSORIES.	
PART 2 - PRODUCTS	
2.1 CASING	
A. GENERAL FABRICATION REQUIREMENTS FOR CASINGS: FORMED AND REINFORCED INSULATED PANELS, FABRICATED TO ALLOW REMOVAL FOR ACCESS TO INTERNAL PARTS AND COMPONENTS, WITH JOINTS BETWEEN SECTIONS SEALED.	
B. EXTERIOR CASING MATERIAL: GALVANIZED STEEL WITH FACTORY-PAINTED FINISH, WITH PITCHED ROOF PANELS AND KNOCKOUTS WITH GROMMET SEALS FOR ELECTRICAL AND PIPING CONNECTIONS AND LIFTING LUGS.	
1. CASING THICKNESS: 1/8 GAUGE THICK.	
C. CASING INSULATION AND ADHESIVE: COMPLY WITH NFPA 90A.	
1. MATERIALS: ASTM C 1071, TYPE I.	
2. THICKNESS: 1/2 INCH	
3. LINER MATERIALS SHALL HAVE AIR-STREAM SURFACE INSULATED WITH A MINIMUM 1/2-IN. THICK, MINIMUM 1 1/2 LB DENSITY, FLEXIBLE FIBERGLASS INSULATION BONDED WITH A PHENOLIC BINDER. NEOPRENE COATED ON THE AIR SIDE.	
4. LINER ADHESIVE: COMPLY WITH ASTM C 916, TYPE I.	
D. UNIT SHALL HAVE A THRU-THE-BASE GAS AND ELECTRICAL CONNECTIONS.	
2.2 FANS	
OPTION A OR B:	
A. DIRECT-DRIVEN SUPPLY-AIR FANS: DOUBLE WIDTH, BACKWARD INCLINED, CENTRIFUGAL; WITH PERMANENTLY LUBRICATED, MOTOR RESILIENTLY MOUNTED IN THE FAN INLET, ALUMINUM OR PAINTED-STEEL WHEELS, AND GALVANIZED- OR PAINTED-STEEL FAN SCROLLS.	
B. BELT-DRIVEN SUPPLY-AIR FANS: DOUBLE WIDTH, FORWARD CURVED, CENTRIFUGAL; WITH PERMANENTLY LUBRICATED, SINGLE-SPEED MOTOR INSTALLED ON AN ADJUSTABLE FAN BASE RESILIENTLY MOUNTED IN THE CASING; ALUMINUM OR PAINTED-STEEL WHEELS, AND GALVANIZED- OR PAINTED-STEEL FAN SCROLLS.	
C. CONDENSER-COIL FAN: DIRECT DRIVE, PROPELLER, MOUNTED ON SHAFT OF PERMANENTLY LUBRICATED MOTOR WITH THERMAL OVERLOAD PROTECTION.	
D. POWER EXHAUST: FORWARD CURVED, SHAFT MOUNTED ON PERMANENTLY LUBRICATED MOTOR.	
2.3 COILS	
A. SUPPLY-AIR REFRIGERANT COIL:	
1. ALUMINUM-PLATE FIN AND SEAMLESS INTERNALLY GROOVED COPPER TUBE IN STEEL CASING WITH EQUALIZING-TYPE VERTICAL DISTRIBUTOR.	
2. POLYMER STRIP SHALL PREVENT ALL COPPER COIL FROM CONTACTING STEEL COIL FRAME OR CONDENSATE PAN.	
3. CATHODIC EPOXY COATING.	
4. CONDENSATE DRAIN PAN: GALVANIZED STEEL WITH CORROSION-RESISTANT COATING FORMED WITH PITCH AND DRAIN CONNECTIONS.	
B. OUTDOOR-AIR REFRIGERANT COIL:	
1. ALUMINUM-PLATE FIN AND SEAMLESS INTERNALLY GROOVED COPPER TUBE IN STEEL CASING WITH EQUALIZING-TYPE VERTICAL DISTRIBUTOR.	
2. POLYMER STRIP SHALL PREVENT ALL COPPER COIL FROM CONTACTING STEEL COIL FRAME OR CONDENSATE PAN.	
3. CATHODIC EPOXY COATING.	
2.4 REFRIGERANT CIRCUIT COMPONENTS	
A. NUMBER OF REFRIGERANT CIRCUITS: TWO	
B. COMPRESSOR: HERMETIC, SCROLL, MOUNTED ON VIBRATION ISOLATORS; WITH INTERNAL OVERCURRENT AND HIGH-TEMPERATURE PROTECTION, INTERNAL PRESSURE RELIEF AND CRANKCASE HEATER.	
C. REFRIGERATION SPECIALTIES:	
1. REFRIGERANT: R-410A.	
2. EXPANSION VALVE WITH REPLACEABLE THERMOSTATIC ELEMENT.	
3. REFRIGERANT FILTER/DRYER.	
4. MANUAL-RESET HIGH-PRESSURE SAFETY SWITCH.	
5. AUTOMATIC-RESET LOW-PRESSURE SAFETY SWITCH.	
6. MINIMUM OFF-TIME RELAY.	
7. AUTOMATIC-RESET COMPRESSOR MOTOR THERMAL OVERLOAD.	
8. BRASS SERVICE VALVES INSTALLED IN COMPRESSOR SUCTION AND LIQUID LINES.	
9. LOW-AMBIENT KIT HIGH-PRESSURE SENSOR.	
10. HOT-GAS REHEAT SOLENOID VALVE WITH A REPLACEABLE MAGNETIC COIL.	
2.5 AIR FILTRATION	
A. PROVIDE 2" THROW-AWAY FIBERGLASS FILTERS.	
2.6 GAS FURNACE	
A. BURNERS: IN-SHOT TYPE CONSTRUCTED OF ALUMINUM-COATED STEEL.	
1. FUEL: NATURAL GAS.	
2. IGNITION: DIRECT SPARK IGNITION (DSI).	
VERIFY AVAILABILITY OF HIGH-ALTITUDE FEATURE WITH MANUFACTURERS.	
3. HIGH-ALTITUDE KIT: FOR PROJECT ELEVATIONS MORE THAN 2,000 FEET ABOVE SEA LEVEL.	
B. HEAT-EXCHANGER AND DRAIN PAN: STAINLESS STEEL.	
C. INDUCED DRAFT COMBUSTION BLOWER.	
D. SAFETY CONTROLS:	
1. GAS CONTROL VALVE: TWO STAGE.	
2. GAS TRAIN: SINGLE-BODY, REGULATED, REDUNDANT, 24-V AC GAS VALVE ASSEMBLY CONTAINING PILOT	
SOLENOID VALVE, PILOT FILTER, PRESSURE REGULATOR, PILOT SHUTOFF, AND MANUAL SHUTOFF.	
2.7 DAMPERS	
A. OUTDOOR AND RETURN AIR MIXING DAMPERS: PARALLEL OR OPPOSED-BLADE GALVANIZED-STEEL DAMPERS	
MECHANICALLY FASTENED TO CADMIUM PLATED FOR GALVANIZED-STEEL OPERATING ROD IN REINFORCED CABINET.	
CONNECT OPERATING RODS WITH COMMON LINKAGE AND INTERCONNECT LINKAGES SO DAMPERS OPERATE	
SIMULTANEOUSLY.	
1. DAMPER MOTOR: MODULATING WITH ADJUSTABLE MINIMUM POSITION.	
2. RELIEF AIR DAMPER: GRAVITY ACTUATED, WITH BIRD SCREEN AND HOOD.	
2.8 ELECTRICAL POWER CONNECTION	
A. PROVIDE FOR SINGLE CONNECTION OF POWER TO UNIT WITH UNIT-MOUNTED DISCONNECT SWITCH ACCESSIBLE	
FROM OUTSIDE UNIT AND CONTROL-CIRCUIT TRANSFORMER WITH BUILT-IN OVERCURRENT PROTECTION.	
2.9 CONTROLS	
A. BASIC UNIT CONTROLS:	
1. CONTROL-VOLTAGE TRANSFORMER.	
2. WALL-MOUNTED THERMOSTAT OR SENSOR WITH THE FOLLOWING FEATURES:	
a. HEAT-COOL-OFF SWITCH.	
b. FAN ON-AUTO SWITCH.	
c. FAN-SPEED SWITCH.	
d. AUTOMATIC CHANGEOVER.	
e. ADJUSTABLE DEADBAND.	
f. EXPOSED SET POINT.	
g. EXPOSED INDICATION.	
h. DEGREE F INDICATION.	
i. UNOCCUPIED-PERIOD-OVERRIDE PUSH BUTTON.	
j. DATA ENTRY AND ACCESS PORT TO INPUT TEMPERATURE AND HUMIDITY SET POINTS, OCCUPIED AND UNOCCUPIED	
PERIODS, AND OUTPUT ROOM TEMPERATURE AND HUMIDITY, SUPPLY-AIR TEMPERATURE, OPERATING MODE, AND	
STATUS.	
3. WALL-MOUNTED HUMIDISTAT OR SENSOR WITH THE FOLLOWING FEATURES:	
a. EXPOSED SET POINT.	
b. EXPOSED INDICATION.	
4. REMOTE WALL-MOUNTED ANNUNCIATOR PANEL WITH KEYED ACCESS FOR EACH UNIT:	
a. LIGHTS TO INDICATE POWER ON, UNIT ALARM OR FAILURE, SMOKE DETECTION.	
B. DDC CONTROLLER:	
1. CONTROLLER SHALL HAVE VOLATILE-MEMORY BACKUP.	
2. SAFETY CONTROL OPERATION:	
a. SMOKE DETECTORS: STOP FAN AND CLOSE OUTDOOR-AIR DAMPER IF SMOKE IS DETECTED, PROVIDE ADDITIONAL	
CONTACTS FOR ALARM INTERFACE TO FIRE ALARM CONTROL PANEL.	
b. FIRE ALARM CONTROL PANEL INTERFACE WHERE APPLICABLE.	
c. LOW-DISCHARGE TEMPERATURE: STOP FAN AND CLOSE OUTDOOR-AIR DAMPER IF SUPPLY AIR TEMPERATURE IS LESS	
THAN 40°F.	
RETAIN FIRST SUBPARAGRAPH BELOW FOR AIR-TO-AIR HEAT-PUMP FEATURE.	
d. DEFROST CONTROL FOR CONDENSER COIL: PRESSURE DIFFERENTIAL SWITCH TO INITIATE DEFROST SEQUENCE.	
3. UNIT SHALL BE CAPABLE OF DIRECT COMMUNICATION WITH GENERIC OPEN PROTOCOL SUCH AS BACNET MS/TP,	
LONTALK, OR MODUS. THIS WILL ALLOW THE UNIT TO INTEGRATE WITH A FACILITY ENERGY MANAGEMENT SYSTEM.	
4. SCHEDULED OPERATION: OCCUPIED AND UNOCCUPIED PERIODS ON SEVEN-DAY CLOCK WITH A MINIMUM OF	
FOUR PROGRAMMABLE PERIODS PER DAY.	
5. UNOCCUPIED PERIOD:	
a. HEATING SETBACK: 10°F.	
b. COOLING SETBACK: SYSTEM OFF.	
c. OVERRIDE OPERATION: TWO HOURS.	
6. SUPPLY FAN OPERATION:	
a. OCCUPIED PERIODS: RUN FAN CONTINUOUSLY.	
b. UNOCCUPIED PERIODS: CYCLE FAN TO MAINTAIN SETBACK TEMPERATURE.	
7. REFRIGERANT CIRCUIT OPERATION:	
a. OCCUPIED PERIODS: CYCLE OR STAGE COMPRESSORS, AND OPERATE HOT-GAS BYPASS TO MATCH COMPRESSOR	
OUTPUT TO COOLING LOAD TO MAINTAIN ROOM TEMPERATURE AND HUMIDITY. CYCLE CONDENSER FANS TO	
MAINTAIN MAXIMUM HOT-GAS PRESSURE. OPERATE LOW-AMBIENT CONTROL KIT TO MAINTAIN MINIMUM HOT-GAS	
PRESSURE.	
b. UNOCCUPIED PERIODS: CYCLE COMPRESSORS AND CONDENSER FANS FOR HEATING TO MAINTAIN SETBACK	
TEMPERATURE.	
8. HOT-GAS REHEAT-COIL OPERATION (OPTIONAL):	
a. OCCUPIED PERIODS: HUMIDISTAT OPENS HOT-GAS VALVE TO PROVIDE HOT-GAS REHEAT, AND CYCLES	
COMPRESSOR.	
b. UNOCCUPIED PERIODS: REHEAT NOT REQUIRED.	
9. GAS FURNACE OPERATION:	
a. OCCUPIED PERIODS: STAGE BURNER TO MAINTAIN ROOM TEMPERATURE.	
b. UNOCCUPIED PERIODS: CYCLE BURNER TO MAINTAIN SETBACK TEMPERATURE.	
10. FIXED MINIMUM OUTDOOR-AIR DAMPER OPERATION:	
a. OCCUPIED PERIODS: OPEN TO 25 PERCENT.	
b. UNOCCUPIED PERIODS: CLOSE THE OUTDOOR-AIR DAMPER.	
11. ECONOMIZER OUTDOOR-AIR DAMPER OPERATION:	
a. OCCUPIED PERIODS: OPEN TO 25 PERCENT FIXED MINIMUM INTAKE, AND MAXIMUM 100 PERCENT OF THE FAN	
CAPACITY TO COMPLY WITH ASHRAE CYCLE II. CONTROLLER SHALL PERMIT AIR-SIDE ECONOMIZER OPERATION WHEN	
OUTDOOR AIR IS LESS THAN 60 ° F. USE MIXED-AIR TEMPERATURE AND SELECT BETWEEN OUTDOOR-AIR AND RETURN-AIR	
ENTHALPY TO ADJUST MIXING DAMPERS DURING ECONOMIZER CYCLE OPERATION. LOCK OUT COOLING.	
b. UNOCCUPIED PERIODS: CLOSE OUTDOOR-AIR DAMPER AND OPEN RETURN-AIR DAMPER.	
2.10 ACCESSORIES	
A. DUPLEX, 115-V, GROUND-FAULT-INTERRUPTER OUTLET WITH 15-A OVERCURRENT PROTECTION, INCLUDE	
TRANSFORMER IF REQUIRED.	
B. LOW-AMBIENT KIT STAGED DOWN TO 0°F.	
C. FILTER DIFFERENTIAL PRESSURE SWITCH WITH SENSOR TUBING ON EITHER SIDE OF FILTER, SET FOR FINAL FILTER	
PRESSURE LOSS.	
D. HAIL GUARDS OF GALVANIZED STEEL, PAINTED TO MATCH CASING.	
E. DUCT MOUNTED SMOKE DETECTOR IN RETURN AIR STREAM CAPABLE OF SHUTTING DOWN THE UNIT IN THE	
PRESENCE OF SMOKE DETECTION.	
2.11 ROOF CURBS	
A. MATERIALS: GALVANIZED STEEL WITH CORROSION-PROTECTION COATING, WATERTIGHT GASKETS, AND	
FACTORY-INSTALLED WOOD NAILER; COMPLYING WITH NRCA STANDARDS.	
1. CURB INSULATION AND ADHESIVE: COMPLY WITH NFPA 90A OR NFPA 90B.	
a. MATERIALS: ASTM C 1071, TYPE I OR II.	
b. THICKNESS: 1-1/2 INCHES.	
2. APPLICATION: FACTORY APPLIED WITH ADHESIVE AND MECHANICAL FASTENERS TO THE INTERNAL SURFACE OF	
CURB.	
a. LINER ADHESIVE: COMPLY WITH ASTM C 916, TYPE I.	
b. MECHANICAL FASTENERS: GALVANIZED STEEL, SUITABLE FOR ADHESIVE ATTACHMENT, MECHANICAL ATTACHMENT,	
OR WELDING ATTACHMENT TO DUCT WITHOUT DAMAGING LINER WHEN APPLIED AS RECOMMENDED BY	
MANUFACTURER AND WITHOUT CAUSING LEAKAGE IN CABINET.	
c. LINER MATERIALS SHALL HAVE AIR-STREAM SURFACE INSULATED WITH A MINIMUM 1/2-IN. THICK, MINIMUM 1 1/2 LB	
DENSITY, FLEXIBLE FIBERGLASS INSULATION BONDED WITH A PHENOLIC BINDER, NEOPRENE COATED ON THE AIR SIDE.	
d. LINER ADHESIVE: COMPLY WITH ASTM C 916, TYPE I.	
B. CURB HEIGHT: 14 INCHES TYPICAL. PROVIDE 24 INCH CURB IN AREAS WITH EXPECTED HEAVY SNOWFALL.	
PART 3 - EXECUTION	
3.1 EXAMINATION	
A. EXAMINE SUBSTRATES, AREAS, AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS	
FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF RTUS.	
B. EXAMINE ROUGHING-IN FOR RTUS TO VERIFY ACTUAL LOCATIONS OF PIPING AND DUCT CONNECTIONS BEFORE	
EQUIPMENT INSTALLATION.	
C. EXAMINE ROOFS FOR SUITABLE CONDITIONS WHERE RTUS WILL BE INSTALLED.	
D. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.	
3.2 INSTALLATION	
A. ROOF CURB: INSTALL ON ROOF STRUCTURE, LEVEL AND SECURE. INSTALL RTUS ON CURBS AND COORDINATE ROOF	
PENETRATIONS AND FLASHING WITH ROOF CONSTRUCTION. RTUS TO UPPER CURB RAIL, AND SECURE CURB BASE TO	
ROOF FRAMING OR CONCRETE BASE WITH ANCHOR BOLTS.	
3.3 CONNECTIONS	
A. THE FOLLOWING ARE SPECIFIC CONNECTION REQUIREMENTS:	
1. INSTALL DUCTS TO TERMINATION AT TOP OF ROOF CURB.	
2. REMOVE ROOF DECKING ONLY AS REQUIRED FOR PASSAGE OF DUCTS. DO NOT CUT OUT DECKING UNDER ENTIRE	
ROOF CURB.	
3.4 COORDINATION	
A. CONTRACTOR TO COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER TO ENSURE THAT THE RTUS ARE COORDINATED	
WITH THE KITCHEN EQUIPMENT, PARTICULARLY THE EXHAUST HOODS AND THE MAKE-UP AIR UNIT, TO PROPERLY	
PRESSURIZE THE BUILDING/SPACE.	
B. CONTRACTOR TO ENSURE THAT ALL THERMOSTATS AND SENSORS ARE COMPATIBLE WITH THE RTU CONTROLS.	
3.5 FIELD QUALITY CONTROL	
A. MANUFACTURER'S FIELD SERVICE: ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT, TEST,	
AND ADJUST COMPONENTS, ASSEMBLIES, AND EQUIPMENT INSTALLATIONS, INCLUDING CONNECTIONS. REPORT RESULTS	
IN WRITING.	
B. PERFORM TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.	
1. MANUFACTURER'S FIELD SERVICE: ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT	
COMPONENTS, ASSEMBLIES, AND EQUIPMENT INSTALLATIONS, INCLUDING CONNECTIONS, AND TO ASSIST IN TESTING.	
REPORT RESULTS IN WRITING.	
C. TESTS AND INSPECTIONS:	
1. AFTER INSTALLING RTUS AND AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, TEST UNITS FOR COMPLIANCE	
WITH REQUIREMENTS.	
2. OPERATIONAL TEST: AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, START UNITS TO CONFIRM PROPER MOTOR	
ROTATION AND UNIT OPERATION.	
3. TEST AND ADJUST CONTROLS AND SAFETIES. REPLACE DAMAGED AND MALFUNCTIONING CONTROLS AND	
EQUIPMENT.	
D. REMOVE AND REPLACE MALFUNCTIONING UNITS AND RETEST AS SPECIFIED ABOVE.	
3.6 STARTUP SERVICE	
A. ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO PERFORM STARTUP SERVICE.	
B. COMPLETE INSTALLATION AND STARTUP CHECKS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND	
DO THE FOLLOWING:	
1. INSPECT FOR VISIBLE DAMAGE TO UNIT CASING, FURNACE COMBUSTION CHAMBER, COMPRESSOR, COILS, AND	
FANS.	
2. VERIFY THAT LABELS ARE CLEARLY VISIBLE. CLEARANCES HAVE BEEN PROVIDED FOR SERVICING, CONTROLS ARE	
CONNECTED AND OPERABLE, AND FILTERS ARE INSTALLED.	
3. CLEAN CONDENSER COIL AND FURNACE AND INSPECT FOR CONSTRUCTION DEBRIS.	
4. REMOVE PACKING FROM VIBRATION ISOLATORS.	
5. VERIFY LUBRICATION ON FAN AND MOTOR BEARINGS.	
6. INSPECT FAN-WHEEL ROTATION FOR MOVEMENT IN CORRECT DIRECTION WITHOUT VIBRATION AND BINDING.	
7. ADJUST FAN BELTS TO PROPER ALIGNMENT AND TENSION.	
8. START UNIT ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.	
a. INSPECT AND RECORD PERFORMANCE OF INTERLOCKS AND PROTECTIVE DEVICES; VERIFY SEQUENCES.	
10. OPERATE UNIT FOR AN INITIAL PERIOD AS RECOMMENDED OR REQUIRED BY MANUFACTURER.	
11. PERFORM THE FOLLOWING OPERATIONS FOR BOTH MINIMUM AND MAXIMUM FIRING. ADJUST BURNER FOR PEAK EFFICIENCY.	
a. MEASURE GAS PRESSURE ON MANIFOLD.	
b. INSPECT OPERATION OF POWER VENTS.	
c. MEASURE SUPPLY-AIR TEMPERATURE AND VOLUME WHEN BURNER IS AT MAXIMUM FIRING RATE AND WHEN BURNER IS OFF. CALCULATE	
USEFUL HEAT TO SUPPLY AIR.	
20. ADJUST AND INSPECT HIGH-TEMPERATURE LIMITS.	
21. INSPECT OUTDOOR-AIR DAMPERS FOR PROPER STROKE AND INTERLOCK WITH RETURN-AIR DAMPERS.	
22. INSPECT CONTROLS FOR CORRECT SEQUENCING OF HEATING, MIXING DAMPERS, REFRIGERATION, AND NORMAL AND EMERGENCY	
SHUTDOWN.	
23. SIMULATE MAXIMUM COOLING DEMAND AND INSPECT THE FOLLOWING:	
a. COMPRESSOR REFRIGERANT SUCTION AND HOT-GAS PRESSURES.	
b. SHORT CIRCUITING OF AIR THROUGH CONDENSER COIL OR FROM CONDENSER FANS TO OUTDOOR-AIR INTAKE.	
27. VERIFY OPERATION OF REMOTE PANEL INCLUDING PILOT-LIGHT OPERATION AND FAILURE MODES. INSPECT THE FOLLOWING:	
a. HIGH-TEMPERATURE LIMIT ON GAS-FIRED HEAT EXCHANGER.	
b. LOW-TEMPERATURE SAFETY OPERATION.	
c. FILTER HIGH-PRESSURE DIFFERENTIAL ALARM.	
d. ECONOMIZER TO MINIMUM OUTDOOR-AIR CHANGEOVER.	
e. RELIEF-AIR FAN OPERATION.	
f. SMOKE ALARMS.	
28. AFTER STARTUP AND PERFORMANCE TESTING AND PRIOR TO SUBSTANTIAL COMPLETION, REPLACE EXISTING FILTERS WITH NEW FILTERS.	
CLEANING AND ADJUSTING	
A. OCCUPANCY ADJUSTMENTS: WHEN REQUESTED WITHIN 12 MONTHS OF DATE OF SUBSTANTIAL COMPLETION, PROVIDE ON-SITE	
ASSISTANCE IN ADJUSTING SYSTEM TO SUIT ACTUAL OCCUPIED CONDITIONS. PROVIDE UP TO TWO VISITS TO SITE DURING	
OTHER-THAN-NORMAL OCCUPANCY HOURS FOR THIS PURPOSE.	
B. AFTER COMPLETING SYSTEM INSTALLATION AND TESTING, ADJUSTING, AND BALANCING RTU AND AIR-DISTRIBUTION SYSTEMS, CLEAN	
FILTER HOUSINGS AND INSTALL NEW FILTERS.	
EXTERIOR RECTANGULAR METAL DUCT AND FITTINGS SHALL BE DOUBLE WALL CONSTRUCTION. THE OUTER SHELL SHALL BE FABRICATED WITH	
GALVANIZED SHEET STEEL LOCK-FORMING QUALITY: ASTM A653/A653M, WITH ASTM G-90 GALVANIZE COATING. THE INSULATION SHALL BE 2" (R-8)	
FIBERGLASS DUCT WRAP. THE INNER SHELL SHALL BE 24 GA PERFORATED METAL WITH 3/32" DIAMETER HOLES ON 3/16" STAGGERED CENTERS.	
MYLAR SHALL BE INSTALLED BETWEEN THE FIBERGLASS DUCT WRAP AND THE PERFORATED INNER SHELL. ALL JOINT CONNECTORS SHALL BE WARD	
ANGLE FLANGES WITH APPROPRIATE GASKETS. METAL GAUGES SHALL CONFORM TO SMAGNA'S 37W-G STANDARDS. ALL PIECES SHALL HAVE	
NOSING ON BOTH ENDS. ALL SEAMS TO BE PITTSBURGH AND SEALED WITH SHACMA. APPROVED EXTERIOR JOINT SEALANT. ALL 90 DEGREE	
ELBOWS SHALL HAVE DOUBLE TURNING VANES. APPROVED MANUFACTURES: AUTODUCT/SEMCO.	



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY  
REQUIRE REVISION TO CONFORM TO LOCAL,  
STATE, AND FEDERAL CODES, ORDINANCES  
OR OTHER CONDITIONS. THE DESIGN  
CONCEPTS EMBODIED IN THESE DOCUMENTS  
ARE SPECIFICALLY FOR THIS PROJECT.  
INFORMATION CONTAINED HEREIN REMAINS  
THE SOLE PROPERTY OF ARBY'S RESTAURANT  
GROUP, IS CONFIDENTIAL AND PROPRIETARY  
AND IS NOT TO BE COPIED, REPRODUCED,  
DISCLOSED OR OTHERWISE TRANSFERRED TO  
OTHER PARTIES IN ANY FORM WHATSOEVER  
WITHOUT THE EXPRESS WRITTEN CONSENT  
OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
FOR  
HEBER SPRINGS, AR 72543  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SPECIFICATIONS  
MECHANICAL

SHEET:

M7.2



HOOD INFORMATION - Job#2788398

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	TOTAL EXH. CFM	EXHAUST PLENUM RISER(S)				CFM	S.P.	HOOD CONSTRUCTION	HOOD CONFIG.	
						WIDTH	LENG.	HEIGHT	DIA.				END TO END	ROW
1		3044 BD-2	5' 0.00"	450 Deg.	1200			4'	12"	1200	-0.452"	430 SS Where Exposed	ALONE	ALONE

HOOD INFORMATION

HOOD NO.	TAG	FILTER(S)					LIGHT(S)			UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WGT		
		TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 9 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM				ELECTRICAL	SWITCHES
												TYPE	SIZE			MODEL #	QUANTITY
1		SS Baffle with Handles	3	16"	16"	30%	2	Screw In Compact	NO	Left	12"x30"x24"	Ansul R102	3.0			YES	280 LBS

HOOD OPTIONS

HOOD NO.	TAG	OPTION									
		FIELD WRAPPER	31.00'	High	Front, Left, Right						
1		BACKSPLASH	63.00'	High	X	72.00'	Long	430 SS	Vertical		
		BACKSPLASH	114.00'	High	X	18.00'	Long	430 SS	Vertical		
		BACKSPLASH	114.00'	High	X	18.00'	Long	430 SS	Vertical		
		RIGHT QUARTER END PANEL	20'	Top Width,	0'	Bottom Width,	20'	High	430 SS		
		LEFT QUARTER END PANEL	20'	Top Width,	0'	Bottom Width,	20'	High	430 SS		

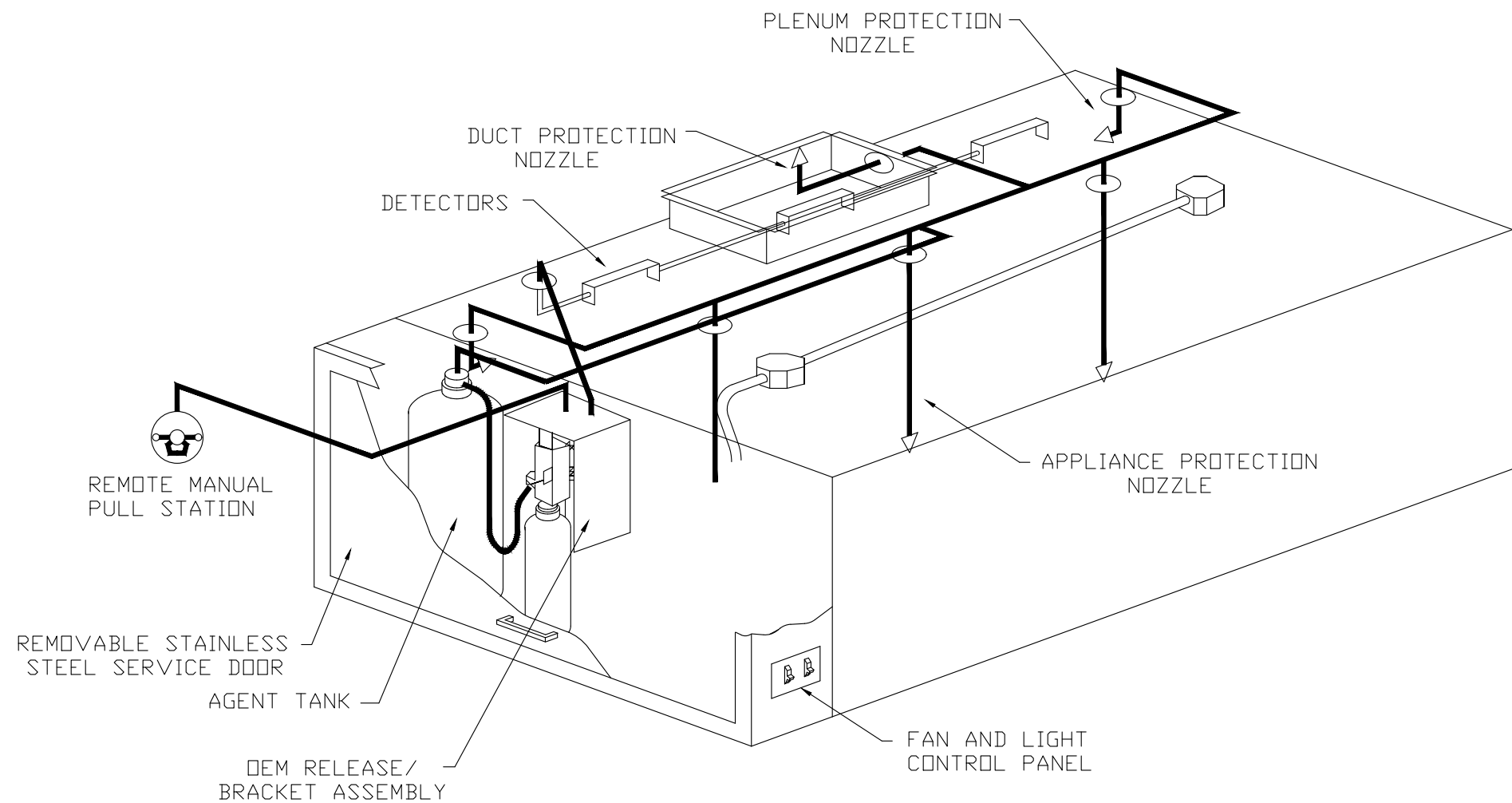
SPECIFICATIONS

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

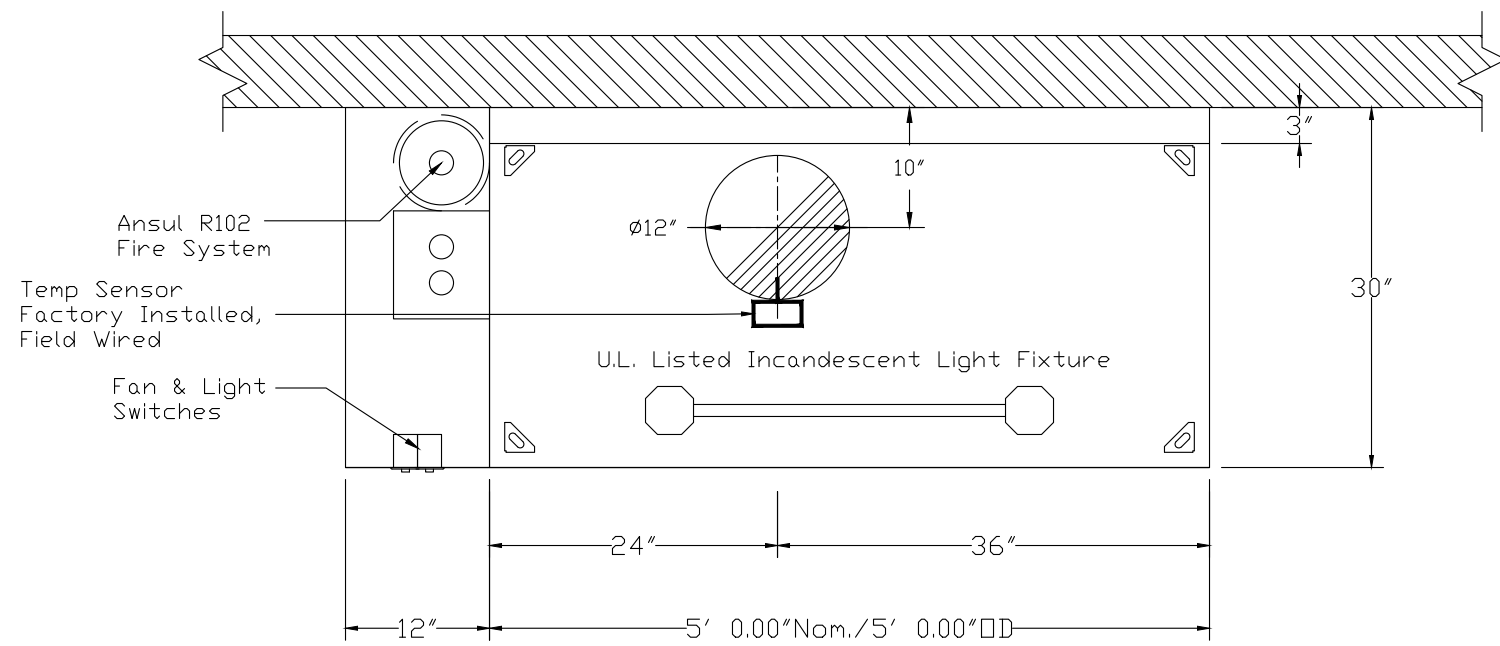
THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

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

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

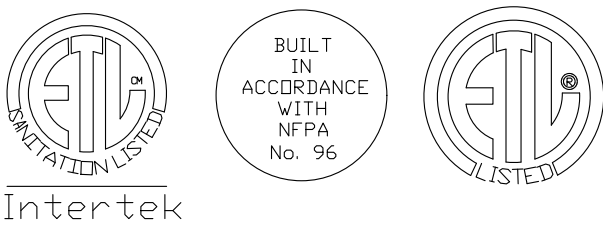


TYPICAL ANSUL R-102 SYSTEM LAYOUT



PLAN VIEW - Hood #1 (H-1)  
5' 0.00" LONG 3044BD-2

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH



NFPA #96  
UL 710 & ULC710 STANDARDS  
E.T.L. LISTED 3054804-001

UNLESS SPECIFICALLY NOTED:

THE MODEL BD-2 HOOD IS LISTED WITH A MINIMUM SIDE OVERHANG TO THE COOKING EQUIPMENT SURFACE OF 0", AND A MINIMUM FRONT OVERHANG OF -3". FOR 450°F APPLICATIONS, THE MINIMUM EXHAUST RATE IS 150 CFM/FT.

HVAC DISTRIBUTION NOTE

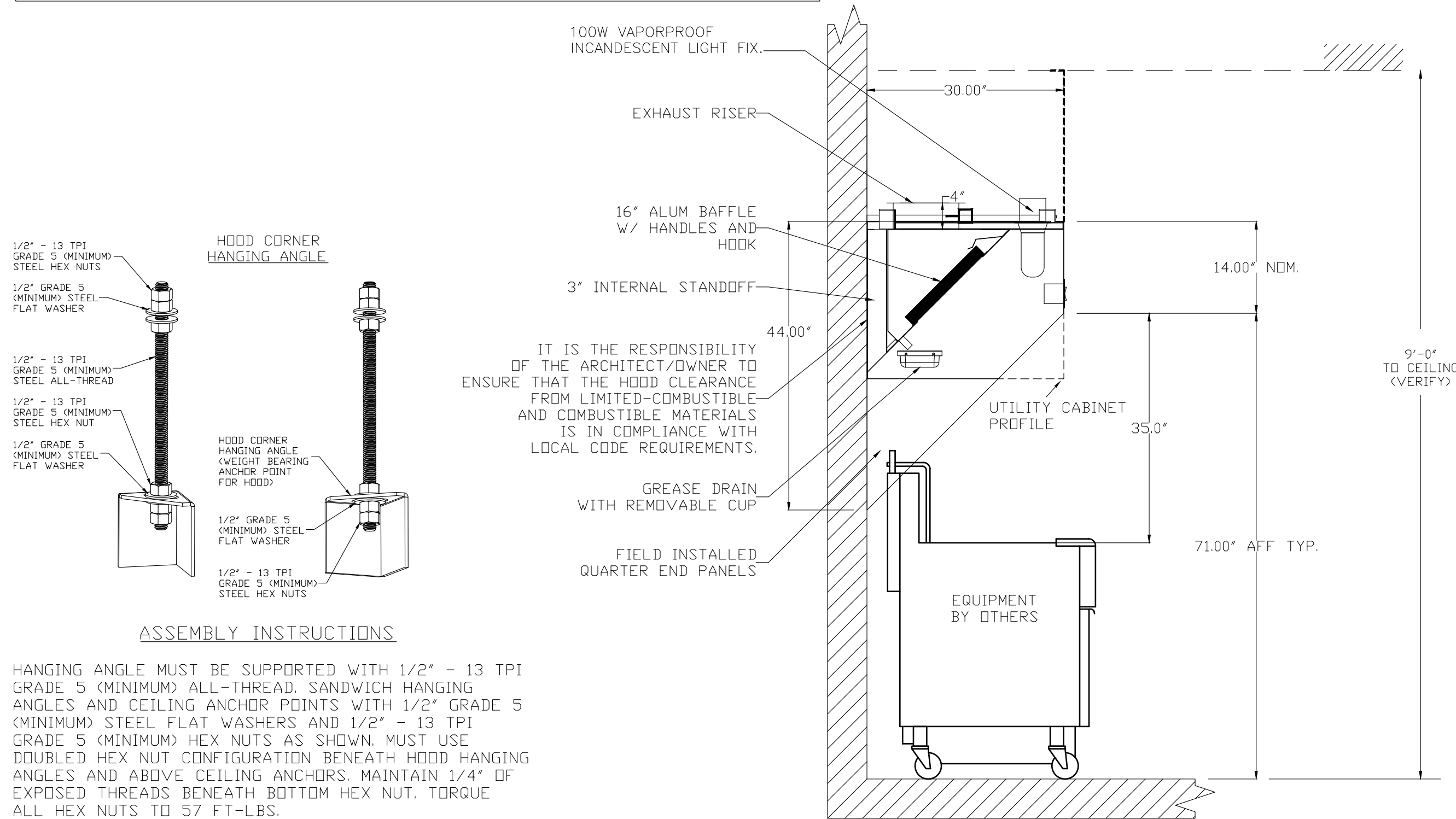
IT IS RECOMMENDED NOT TO INSTALL HIGH VELOCITY DIFFUSERS OR HVAC RETURNS WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

CAPTIVEAIRE SYSTEMS RECOMMENDS THE USE OF LISTED, PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

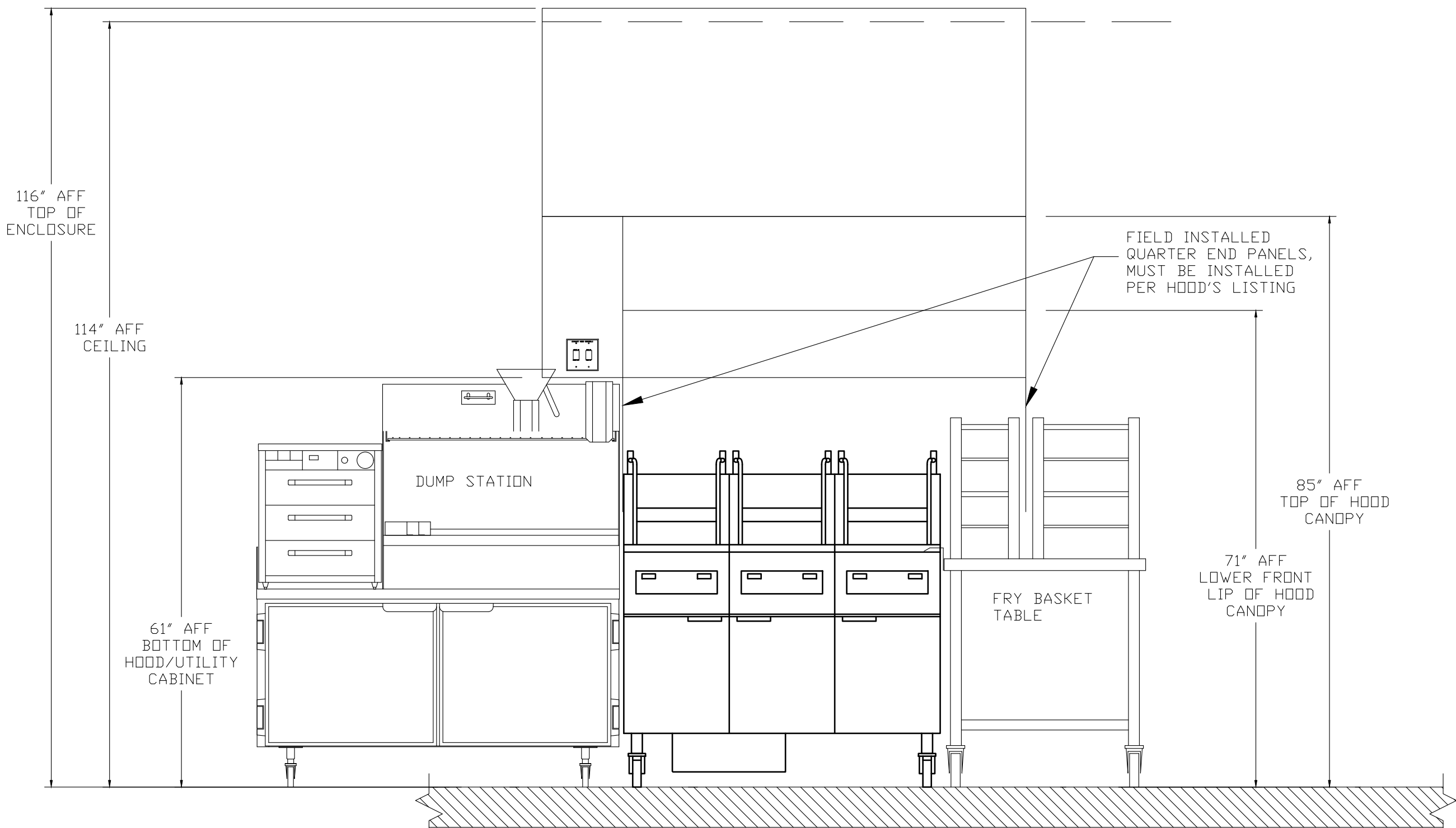
VERIFY CEILING HEIGHT

' - "

HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS



SECTION VIEW - MODEL 3044BD-2 w/ PSP



ELEVATION VIEW - MODEL 3044BD-2

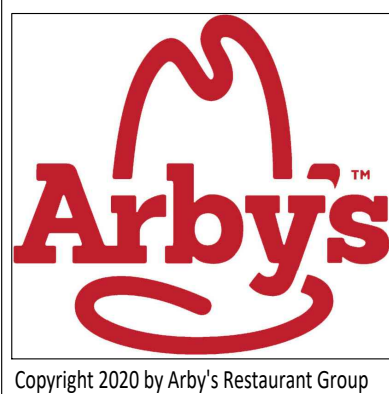
REVISIONS

DESCRIPTION	DATE:

**CAPTIVEAIRE**  
Atlanta Office  
1395 S. Marietta Pkwy, Bldg 100, Ste 105, Marietta, GA 30067  
PHONE: (800) 882-6626 FAX: (919) 227-5964 EMAIL: reg50@captiveaire.com  
www.captiveaire.com



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IT IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
DATE:	9/28/2016
DWG.#:	2788398
DRAWN BY:	WAH-50
SCALE:	3/4" = 1'-0"
MASTER DRAWING	

CAPTIVEAIRE DRAWING

SHEET:  
H1.1

SHEET NO.  
1



EXHAUST FAN INFORMATION - Job#2788398

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES
1	EF-1	DUS0HFA	1200	0.750	1320	0.500	0.2560	1	115	8.4	65	14.3
2	EF-2	DR10HFA	350	0.250	1111	0.060	0.0270	1	115	1.1	33	2.8

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	EF-1	1 - Grease Box

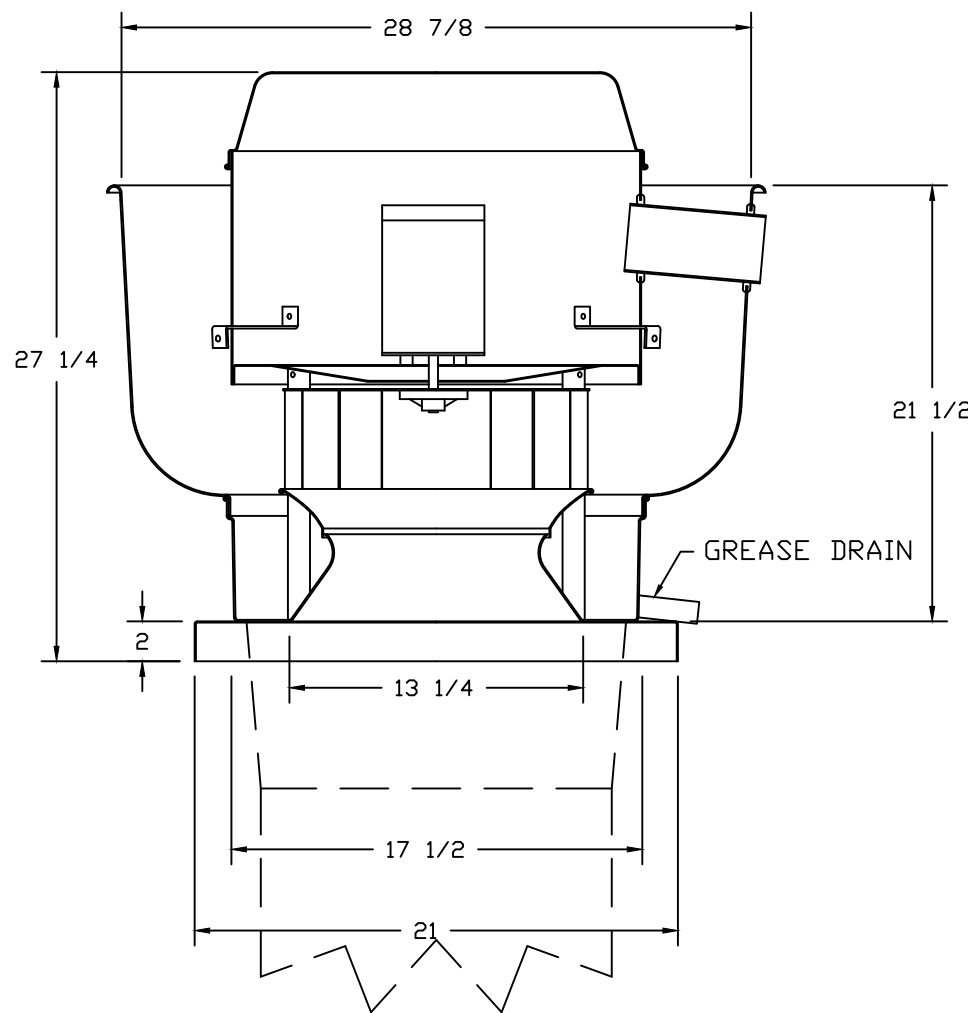
FAN ACCESSORIES

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

CURB ASSEMBLIES

NO.	DN FAN	WEIGHT	ITEM	SIZE
1	# 1	31 LBS	Curb	19.500"W x 19.500"L x 20.000"H Vented Hinged
2	# 2	16 LBS	Curb	17.500"W x 17.500"L x 12.000"H

FAN #1 DUS0HFA - EXHAUST FAN (EF-1)



FEATURES:

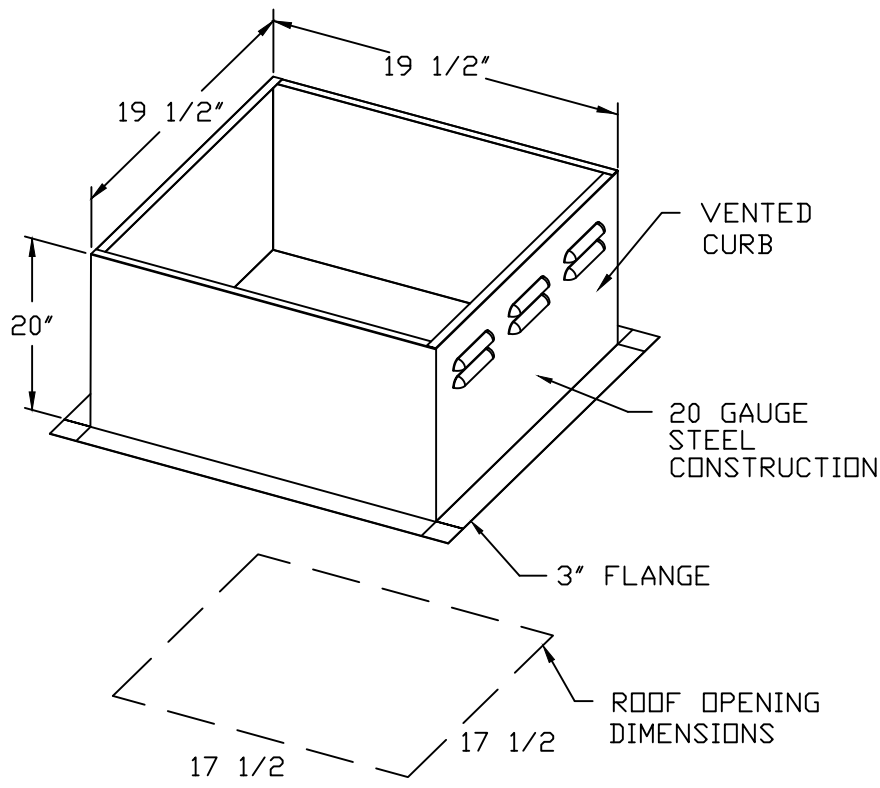
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- RESTAURANT MODEL
- UL705 AND UL762
- VARIABLE SPEED CONTROL
- INTERNAL WIRING
- WEATHERPROOF DISCONNECT
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE)
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

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

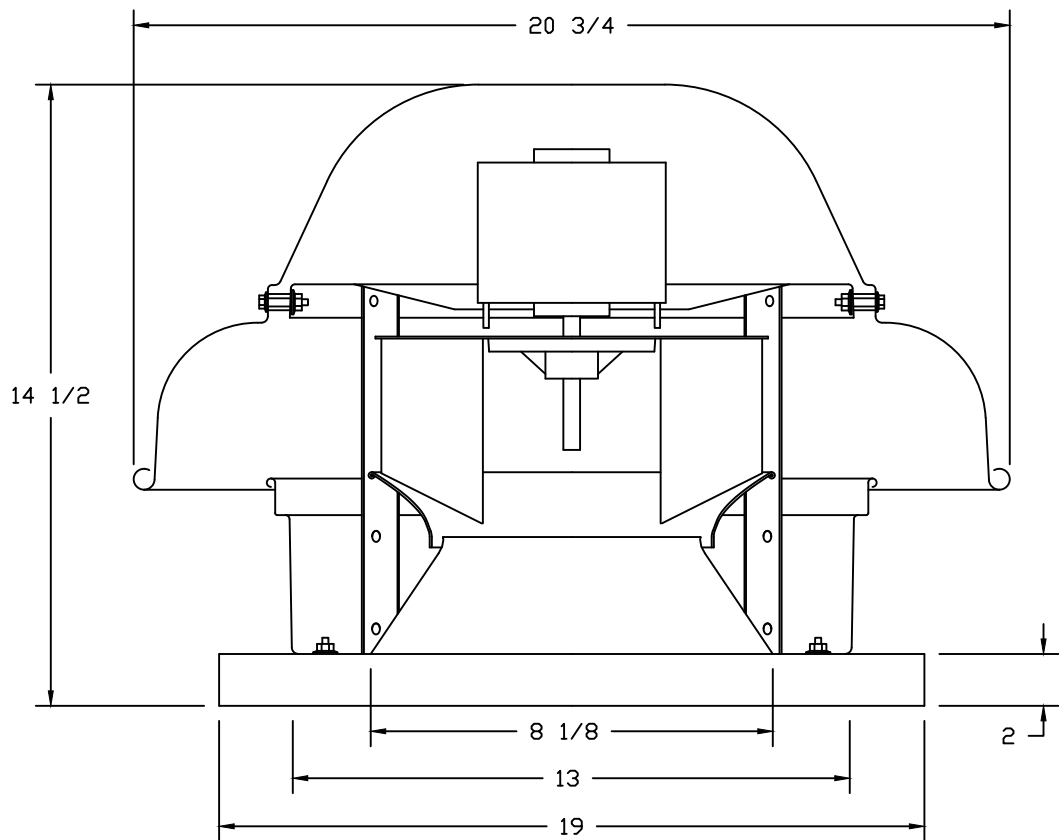
**ABNORMAL FLARE-UP TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS

GREASE BOX

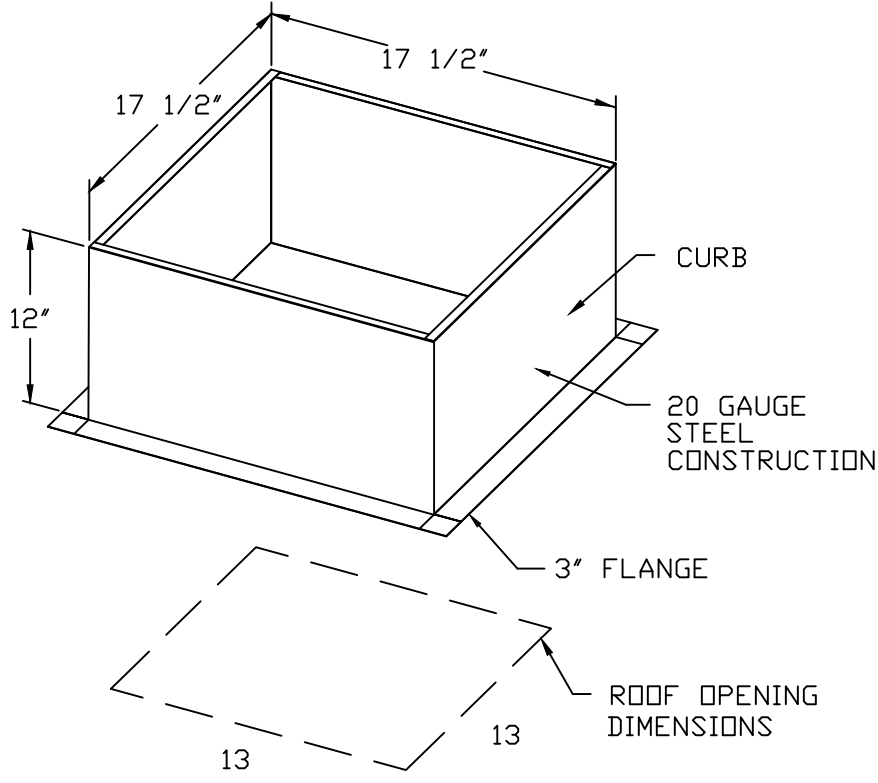


FAN #2 DR10HFA - EXHAUST FAN (EF-2)



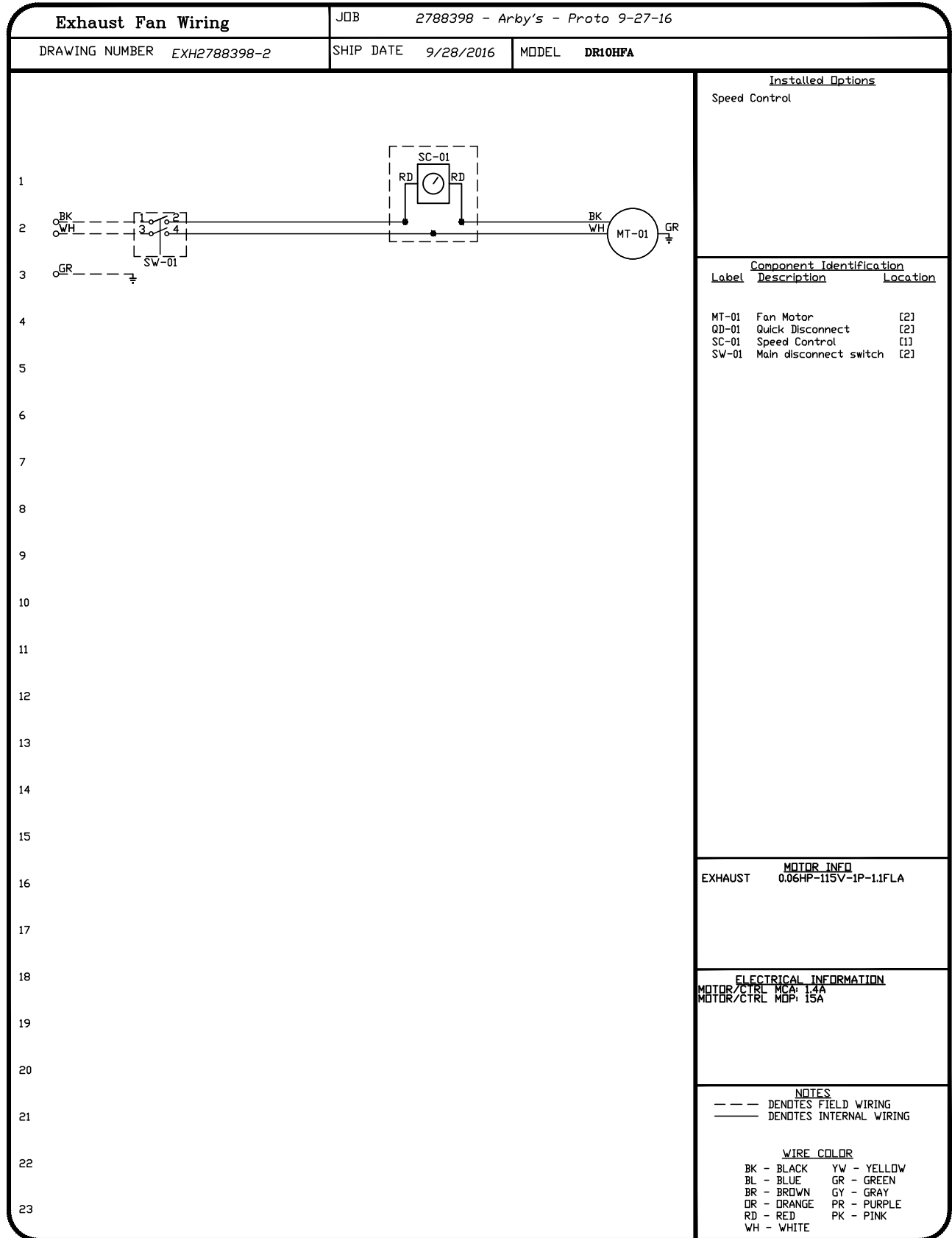
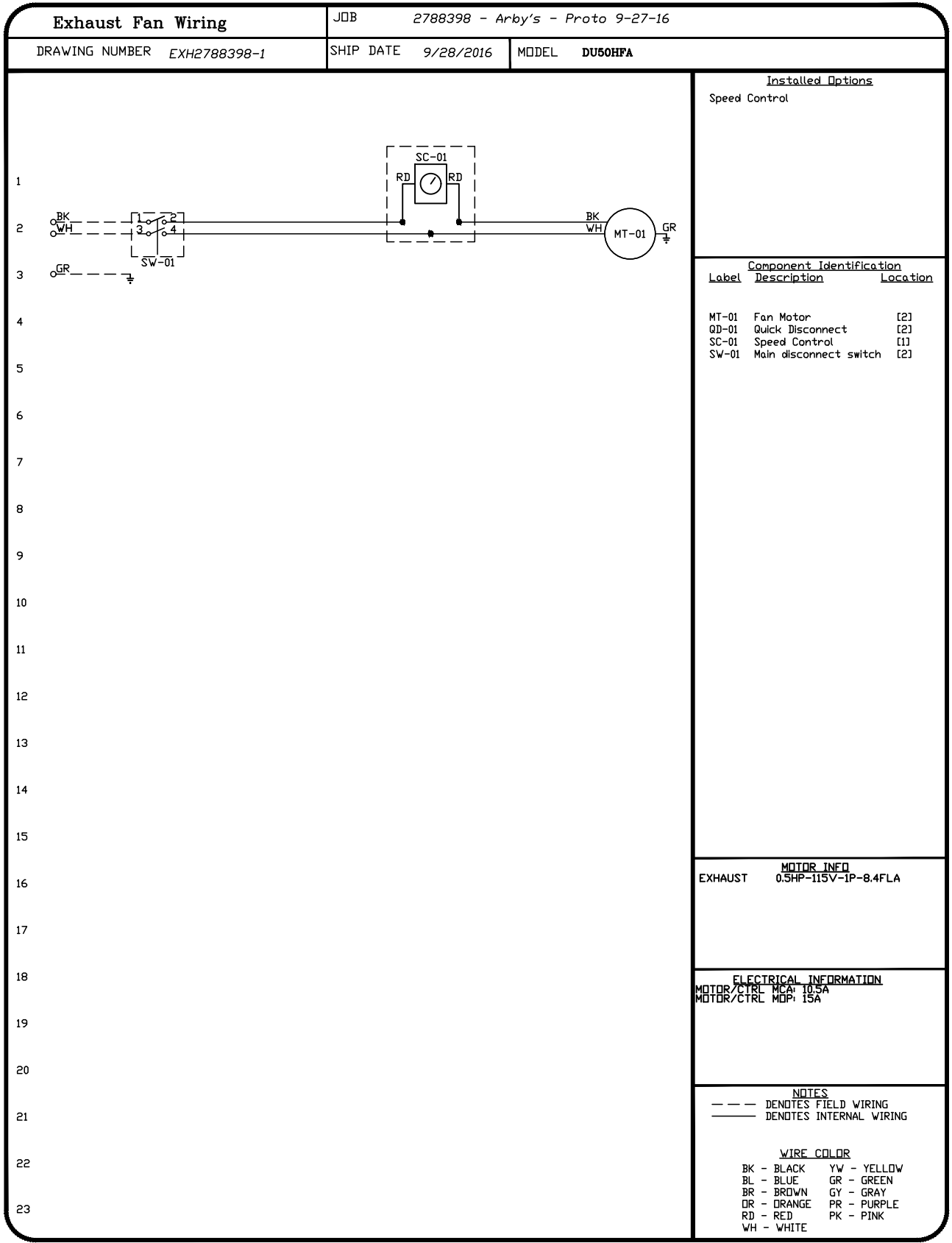
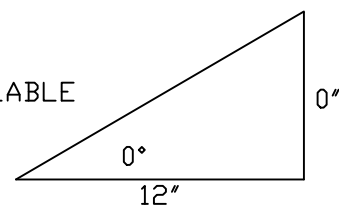
FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
- ROOF MOUNTED FANS
- UL705
- SAFETY DISCONNECT
- STANDARD BIRD SCREEN
- SPEED CONTROL



PITCHED CURBS ARE AVAILABLE FOR PITCHED ROOFS.

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



REVISIONS

DESCRIPTION	DATE:
Δ	
Δ	
Δ	
Δ	

CAPTIVEAIR

Atlanta Office

1395 S. Marietta Pkwy, Bldg 100, Ste 105, Marietta, GA 30067 PHONE: (800) 862-8626 FAX: (919) 227-5964 EMAIL: reg50@captivaire.com

Arby's

DATE: 9/28/2016

DWG.#: 2788398

DRAWN BY: WAH-50

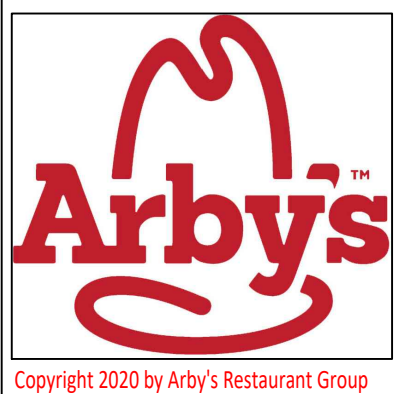
SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 2



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

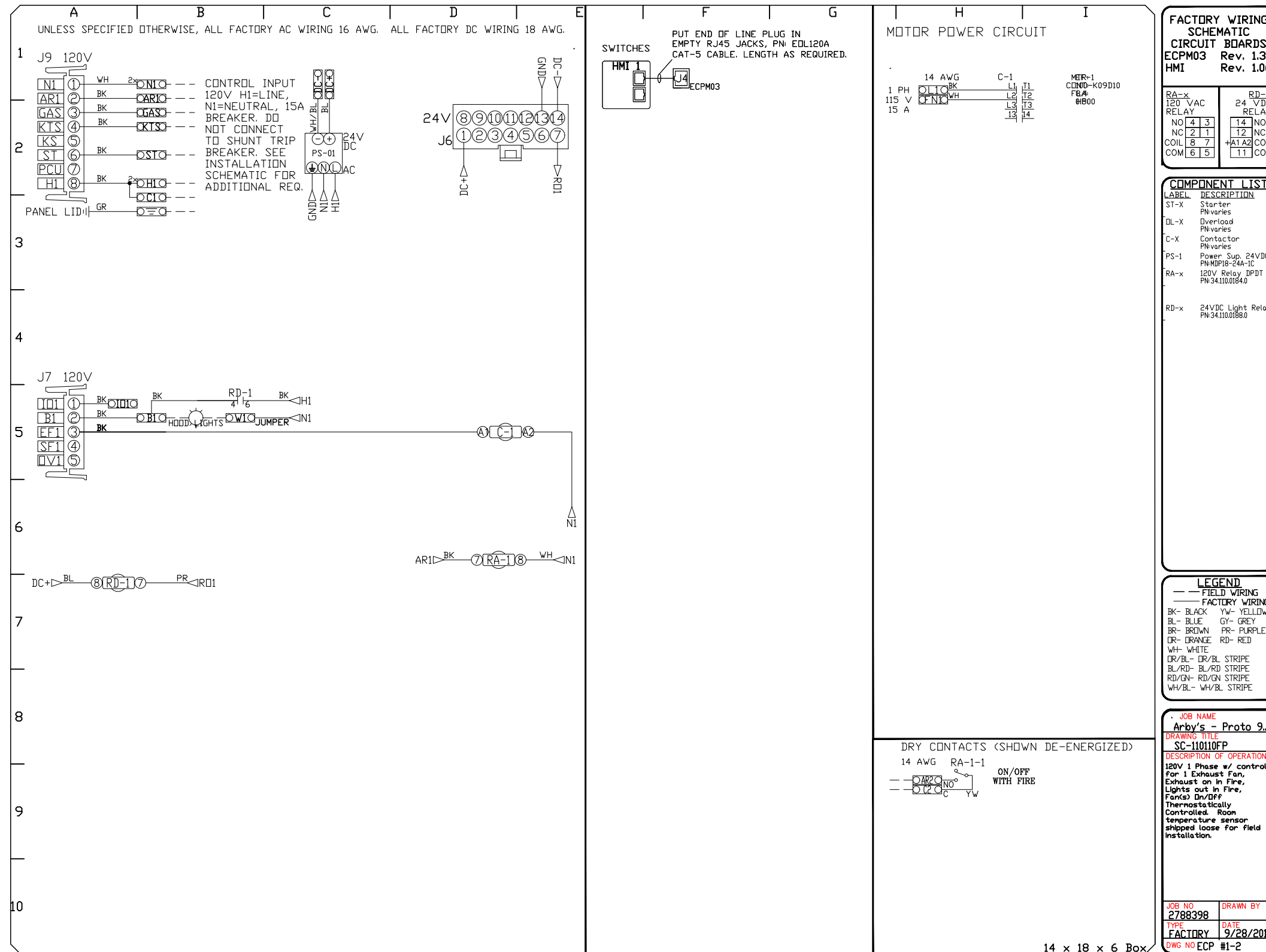
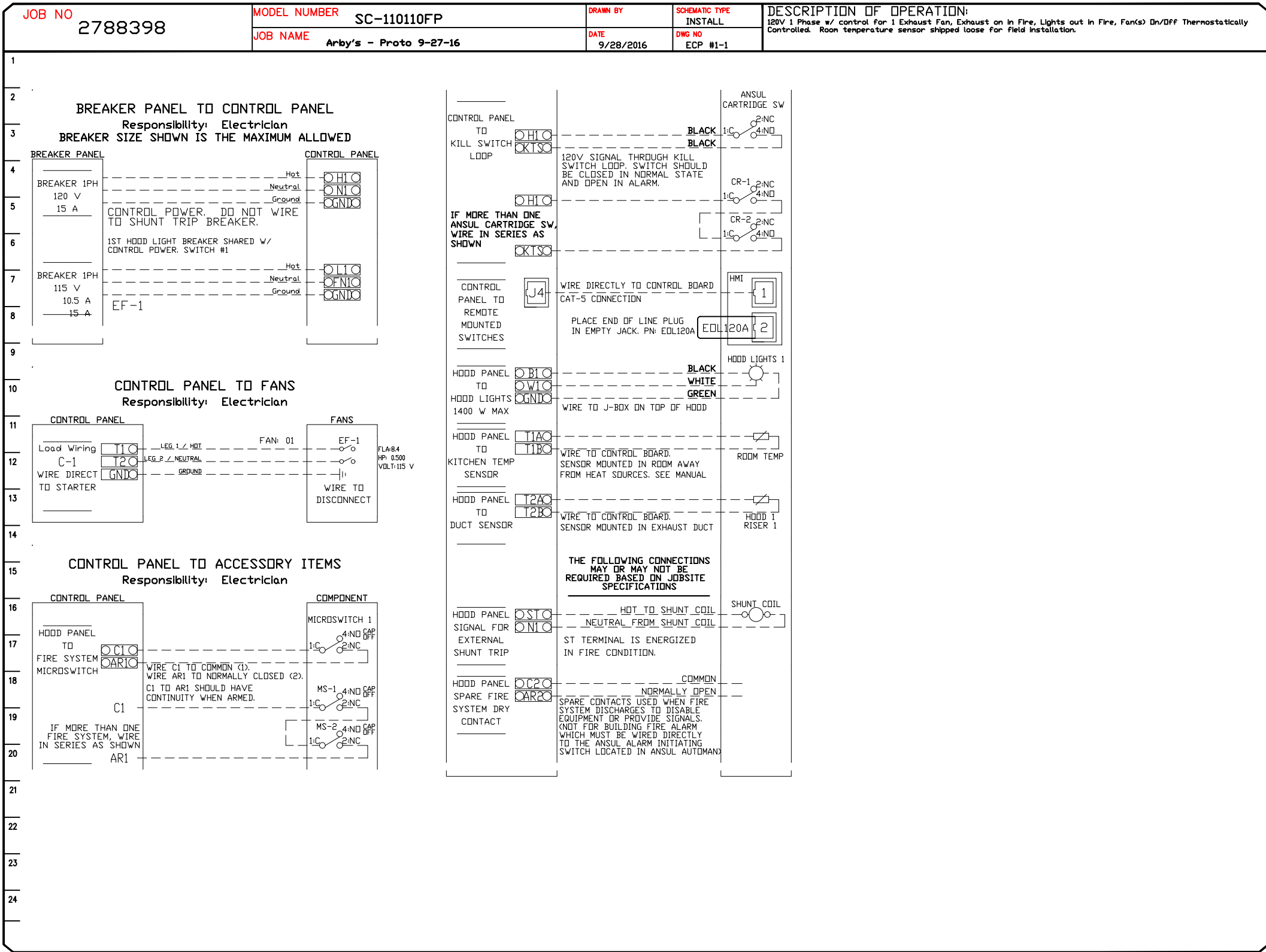
CAPTIVEAIR  
DRAWING

SHEET:

H1.2

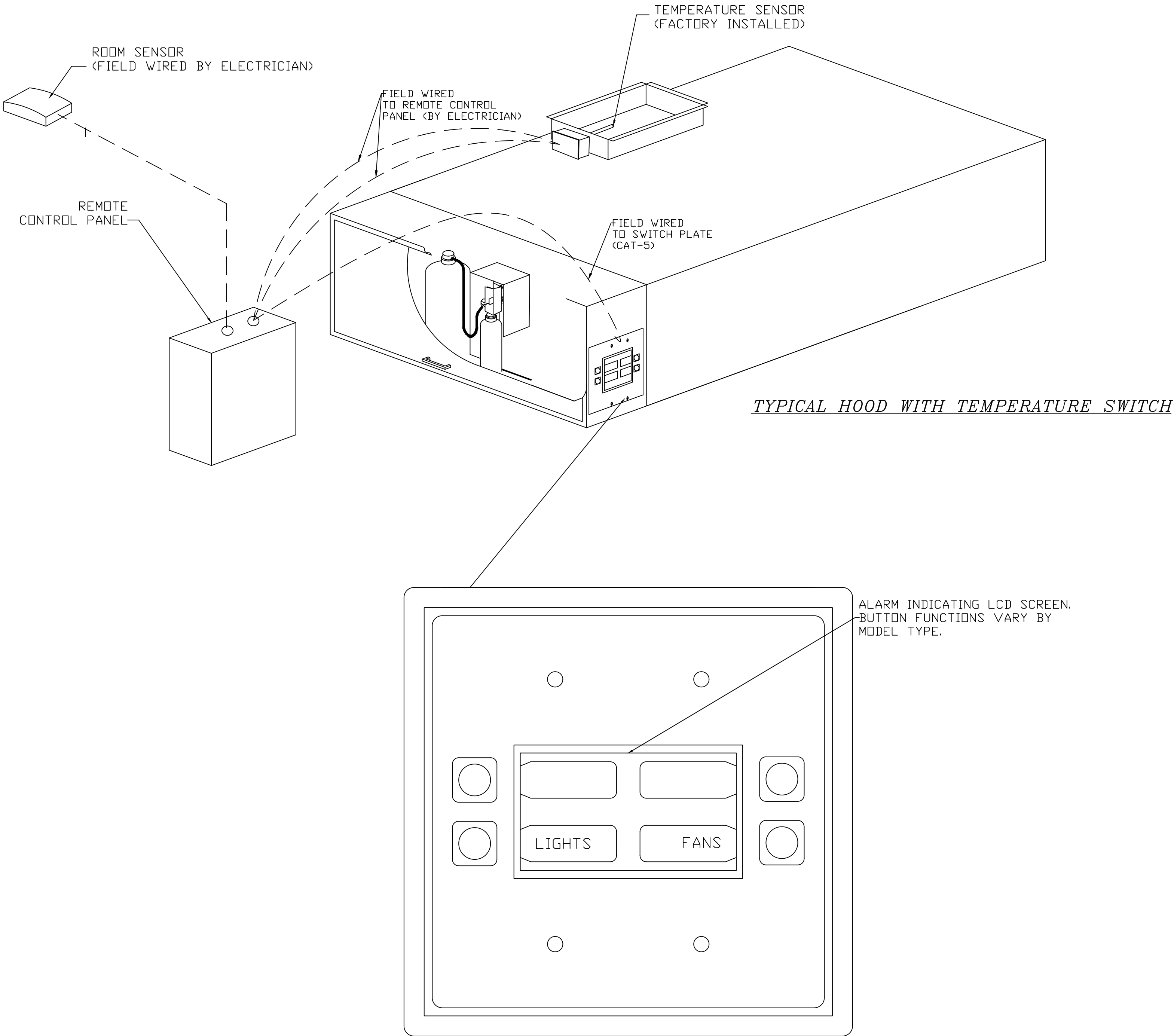
ELECTRICAL PACKAGES -- Job#2788398

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED			
				LOCATION	QUANTITY		FAN TAG	TYPE	HP	VOLT FLA
1		SC-110110FP	Wall Mount In SS Box	Utility Cabinet Left	1 Light 1 Fan	Smart Controls Thermostatic Control	EF-1	Exhaust	1	0.500 115 8.4



TEMPERATURE SENSOR INTERLOCK

The Temperature Sensor Interlock option complies with IMC 2006 507.2.1.1 and NFPA 96 11.1.1 by interlocking with cooking appliances through means of a heat sensor to automatically activate exhaust fans during cooking operations.



REVISIONS

DESCRIPTION

DATE

Atlanta Office

1395 S. Marietta Pkwy, Bldg 100, Ste 105, Marietta, GA 30067 PHONE: (800) 882-6626 FAX: (919) 227-5964 EMAIL: reg50@captiveaire.com

Arby's

DATE: 9/28/2016

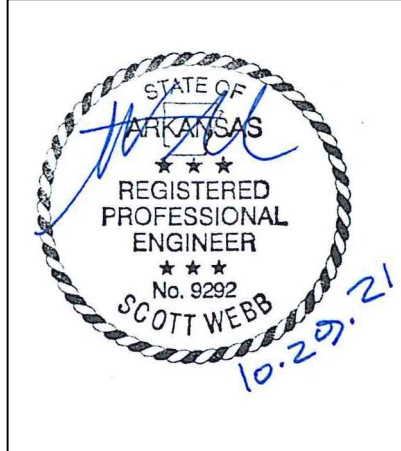
DWG.#: 2788398

DRAWN BY: WAH-50

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

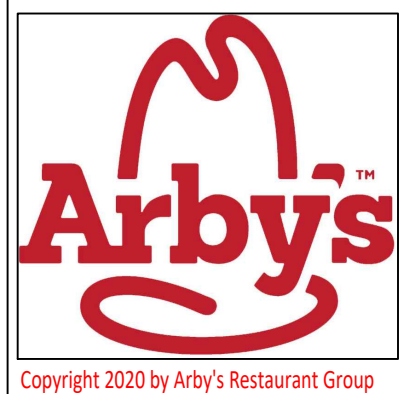
MASTER DRAWING

SHEET NO. 3



PROPRIETARY INFORMATION NOTICE:

THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP

INSPIRE DUAL REGULAR 40 - STANDARD

1632 AR-25 BYPASS

HEBER SPRINGS, AR 72543

FOR RB AMERICAN GROUP, LLC

6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

CAPTIVEAIRE DRAWING

SHEET:

H1.3



PLUMBING LEGEND			
	EXISTING TO REMAIN		BALL VALVE
	EXISTING TO BE DEMOLISHED		BUTTERFLY VALVE
	SANITARY		GATE VALVE (SCREWED BODY)
	STORM (BELOW GROUND)		GATE VALVE (FLANGED BODY)
	STORM (ABOVE GROUND)		BALANCING VALVE
	OVERFLOW (SECONDARY STORM)		CHECK VALVE
	GREASE WASTE		PLUG VALVE
	DO NOT TAP		THERMOSTATIC MIXING VALVE
	DOMESTIC COLD WATER		PRESSURE REDUCING VALVE
	DOMESTIC HOT WATER		PRESSURE GAUGE
	DOMESTIC HOT WATER RETURN		RELIEF VALVE
	NATURAL GAS		SOLENOID VALVE
	VENT		STRAINER
	FILTERED WATER		UNION
	SODA CONDUIT		WATER HAMMER ARRESTOR
	PIPE TURNED UP		THERMOMETER
	PIPE TURNED DOWN		CONNECT TO EXISTING
	PETE'S PLUG		FLOOR PENETRATION MARKER

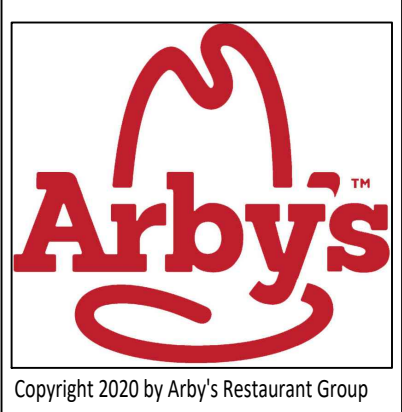
ABBREVIATIONS			
[D]	DEMOLITION	HD	HEAD
[E]	EXISTING	HGT	HEIGHT
[F]	FUTURE	HP	HORSEPOWER
[R]	RELOCATE	INV	INVERT
AAV	AIR ADMITTANCE VALVE	IW	INDIRECT WASTE
ABV	ABOVE	KEC	KITCHEN EQUIPMENT CONTRACTOR
AFF	ABOVE FINISHED FLOOR	LB	POUNDS
AFG	ABOVE FINISHED GRADE	LF	LINEAR FEET
AHJ	AUTHORITY HAVING JURISDICTION	LG	LENGTH
AUTO	AUTOMATIC	MAX	MAXIMUM
AVG	AVERAGE	MFC	MANUFACTURER
BLDG	BUILDING	MIN	MINIMUM
BOP	BOTTOM OF PIPE	MS	MOP SINK
BFP	BACKFLOW PREVENTER	N/A	NOT APPLICABLE
CA	COMPRESSED AIR	NC	NORMALLY CLOSED
CAP	CAPACITY	NO	NORMALLY OPEN
CFH	CUBIC FEET PER HOUR	NPW	NON-POTABLE WATER
CFM	CUBIC FEET PER MINUTE	NTS	NOT TO SCALE
CO	CLEANOUT	OF	OWNER FURNISHED
CONN	CONNECTION OR CONNECT	PC	PLUMBING CONTRACTOR
CONT	CONTINUATION	PD	PUMPED DISCHARGE
CU FT	CUBIC FEET	PLBG	PLUMBING
DCVA	DOUBLE CHECK VALVE ASSEMBLY	PPM	PARTS PER MILLION
DCW	DOMESTIC COLD WATER	PRS	PRESSURE
DEPT	DEPARTMENT	PRV	PRESSURE REDUCING VALVE
DHW	DOMESTIC HOT WATER	PSI	POUNDS PER SQUARE INCH
DIA	DIAMETER	PSIG	PSI GAUGE
DN	DOWN	RP	RECIRCULATION PUMP
DW	DIRECT WASTE	RPZ	REDUCED PRESSURE ZONE
DWG	DRAWING	SH	SHOWER
DWV	DRAIN WASTE VENT	SRD	SECONDARY ROOF DRAIN
EL	ELEVATION	STD	STANDARD
EW	ELECTRIC WATER COOLER	STR	STRAINER
EXH	EXHAUST	TEMP	TEMPERATURE
*F	DEGREES FAHRENHEIT	TMV	THERMOSTATIC MIXING VALVE
FD	FLOOR DRAIN	TOP	TOP OF PIPE
FIN	FINISHED	TP	TRAP PRIMER
FT	FOOT OR FEET	TS	TRAP SEAL
G	GAS	TWS	TEMPERED WATER SUPPLY
GA	GAUGE	TYP	TYPICAL
GAL	GALLONS	UNO	UNLESS NOTED OTHERWISE
GC	GENERAL CONTRACTOR	UR	URINAL
GPD	GALLONS PER DAY	V	VENT
GPH	GALLONS PER HOUR	VB	VACUUM BREAKER
GPM	GALLONS PER MINUTE	VDC	VENTED DOUBLE CHECK
HB	HOSE BIBB	VTR	VENT THRU ROOF
HC	HVAC CONTRACTOR	WC	WATER CLOSET

- PLUMBING GENERAL NOTES:
- A. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY, INCLUDING APPLICABLE SECTIONS OF ANY INTERIM AMENDMENTS AT THE TIME OF THE PROPOSAL. PLUMBING CONTRACTOR SHALL PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK AND OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- B. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS, INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
- C. COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE PIPE RISES, DROPS, AND OFFSETS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK. IF PLUMBING CONTRACTOR FAILS TO COORDINATE WITH OTHER TRADES AND WORK IS REQUIRED TO BE ALTERED, THE PLUMBING CONTRACTOR WILL BE RESPONSIBLE FOR THE WORK AT THEIR OWN EXPENSE.
- D. DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED, THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE PIPING, CONNECTIONS, FITTINGS, VALVES, OFFSETS, ETC., AND ALL MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
- E. PROVIDE BACKFLOW PREVENTION DEVICES IN WATER LINES FEEDING PLUMBING FIXTURES AND/OR EQUIPMENT, AS SHOWN ON PLANS AND ELSEWHERE AS REQUIRED BY LOCAL AUTHORITIES. USE DEVICES OF APPROVED TYPE (ASSE LISTED ATMOSPHERIC VACUUM, PRESSURE VACUUM, DOUBLE CHECK, REDUCED PRESSURE ZONE) AND MANUFACTURER.
- F. VERIFY SERVICE CONNECTION POINTS, SIZES, ELEVATIONS, INVERTS, AND METERING LOCATIONS FOR PROJECT WITH LOCAL UTILITIES CO. AND/OR CIVIL ENGINEER. SERVICES TO INCLUDE BUT NOT LIMITED TO (DOMESTIC WATER, FIRE, SANITARY SEWER, STORM SEWER, GAS, ETC.) PRIOR TO STARTING WORK.
- G. VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION, IF PRESSURE AT BUILDING ENTRY PRIOR TO ALL LOCALLY REQUIRED DEVICES SUCH AS WATER METER, BACKFLOW PREVENTION DEVICES, ETC. IS LESS THAN 55 PSIG STATIC, CONTACT OWNERS REPRESENTATIVES. IF PRESSURE IS IN EXCESS OF 80 PSIG STATIC, INSTALLATION OF PRESSURE REDUCING VALVE IS REQUIRED.
- H. PLUMBING CONTRACTOR TO VISIT THE SITE PRIOR TO SUBMITTING BID, INCLUDE ANY ADDITIONAL ITEMS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- I. ALL CUTTING OF EXISTING FLOORS, EXCAVATION AND BACK FILL TO BE PART OF THE PLUMBING CONTRACTOR BID, PATCHING OF FLOORS AND ROOF TO BE BY GENERAL CONTRACTOR.
- J. PLUMBING CONTRACTOR TO REMOVE FROM THE SITE ANY SURPLUS EXCAVATION.
- K. EXTERIOR GAS LINE PIPING TO BE PAINTED TO MATCH BUILDING EXTERIOR.
- L. COORDINATE ALL FLOOR PENETRATIONS WITH STRUCTURAL DRAWINGS. SET SLEEVES IN FLOORS AND WALLS AND ATTACHMENTS FOR HANGERS AS CONSTRUCTION PROGRESSES. ALL PENETRATIONS MUST BE SEALED AND HELD AS TIGHT TO COLUMNS OR WALLS AS POSSIBLE.
- M. ALL PIPING SHALL BE CONCEALED INSIDE WALLS, BELOW FLOORS OR ABOVE CEILINGS UNLESS INDICATED OTHERWISE.
- N. ALL PIPING SHALL BE SLOPED AS PER THE MINIMUM GRADE REQUIRED BY CODE (UNLESS NOTED OTHERWISE) FOR EACH PARTICULAR PIPE SIZE.
- O. COORDINATE UNDERGROUND PIPING WITH GRADE BEAMS AND WALL FOOTINGS.
- P. DO NOT RUN PLUMBING PIPING THROUGH ELECTRICAL ROOMS, DIRECTLY ABOVE ELECTRICAL PANELS OR THROUGH OTHER WATER SENSITIVE AREAS.
- Q. PROVIDE WATER HAMMER ARRESTORS IN ALL BRANCH LINES SERVING FIXTURES, BANK OF FIXTURES, AND ALL FIXTURES/EQUIPMENT WITH QUICK CLOSING VALVES, SOLENOID VALVES AND/OR FLUSH VALVES IN ACCORDANCE WITH STANDARD PDI-WH-201 AND THE LOCAL PLUMBING CODE.
- R. PLUMBING VENTS EXTENDING THROUGH ROOF SHALL TERMINATE AT 1'-0" (MINIMUM) ABOVE ROOF AND AT A MINIMUM DISTANCE OF 12'-0" HORIZONTALLY FROM ANY AIR INTAKE OR OPERABLE WINDOW.
- S. ALL EQUIPMENT, PIPING, APPURTENANCES SHALL BE PROTECTED FROM DEBRIS AND DAMAGE. SENSITIVE EQUIPMENT SHALL NOT BE DELIVERED TO THE JOB SITE UNTIL SUCH TIME AS IT IS TO BE INSTALLED. PIPING ENDS SHALL BE CLOSED BY TEMPORARY MEANS WHEN PORTIONS OF THE SYSTEM ARE NOT COMPLETE.
- T. LOCATE ALL VALVES WHERE THEY ARE ACCESSIBLE FOR SERVICE AND USE. WHERE ACCESS PANELS ARE REQUIRED COORDINATE SELECTION AND LOCATION WITH ARCHITECT.
- U. PROVIDE TRAP PRIMER AND CONNECTION FOR ANY FLOOR DRAIN, FLOOR SINK OR HUB DRAIN NOT SUBJECT TO REGULAR FLOW.
- V. ALL PENETRATIONS AT FLOORS AND RATED PARTITIONS SHALL HAVE A UL CLASSIFIED FIRE STOP SYSTEM TESTED TO ASTM E814 AND UL 1497 BY UNDERWRITERS LABORATORIES. FIRE STOP SYSTEMS SHALL BE PROSET SYSTEMS, PENSL FIRESTOP SYSTEMS OR 3M COMPANY.
- W. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES. EXACT LOCATION OF ALL FIXTURES MUST BE VERIFIED IN THE FIELD PRIOR TO INSTALLATION. FINAL LOCATION SHALL BE AS DIRECTED BY THE GENERAL CONTRACTOR.
- X. PLUMBING CONTRACTOR TO COORDINATE WITH TENANT ON EXACT LOCATION OF ROUGH-INS.
- Y. ALL MIXING VALVES SHALL BE SET TO PROVIDE WATER AT TEMPERATURES THAT COMPLY WITH ASSE 1070 STANDARDS FOR PERFORMANCE REQUIREMENTS FOR WATER TEMPERATURE LIMITING DEVICES.
- Z. MATERIALS IN PLENUM SPACES SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE - DEVELOPED INDEX OF NOT MORE THAN 50 PER IMC 602.2.1.
- AA. PLUMBING CONTRACTOR TO VERIFY INVERT OF ALL TIE-IN POINTS INDICATED ON PLAN PRIOR TO INSTALLATION. NOTIFY ARCHITECT IMMEDIATELY IF EXISTING INVERT WILL BE INSUFFICIENT.
- AB. WHERE AIR ADMITTANCE VALVES SHALL BE INSTALLED, PRIOR TO INSTALLATION PERFORM TESTING REQUIRED BY SECTION 312 OF THE 2006 IPC.
- AC. ALL PIPING PENETRATING CEILINGS AND WALLS SHALL BE INSTALLED WITH CHROME-PLATED ESCUTCHEONS AT THE PENETRATION. ALL PIPING PENETRATING EXTERIOR WALLS AND ROOFS SHALL BE FLASHED IN AN APPROVED MANNER AND SHALL BE PROTECTED AS REQUIRED BY LOCAL CODE AUTHORITY.
- AD. TOPS OF ALL FLOOR DRAINS AND CLEANOUTS SHALL BE SET FLUSH WITH FINISHED FLOOR.
- AE. ALL PIPING ABOVE GRADE SHALL BE PROPERLY SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING TILES OR CEILING STRUCTURE.
- AF. PLUMBING CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL PLUMBING EQUIPMENT WITH THE ELECTRICAL DRAWINGS, AND SHALL FURNISH EQUIPMENT WIRED FOR THE VOLTAGES SHOWN THEREIN.
- AG. WATER PIPING ROUTED ABOVE CEILINGS SHALL BE ROUTED ON HEATED SIDE (UNDERSIDE) OF CEILING INSULATION.
- AH. ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER START-UP.
- AI. INCLUDE THE COST IN BID TO USE LANDLORD'S ROOFER (AND ANY OTHER LANDLORD DESIGNATED CONTRACTORS) IF DIRECTED BY CONSTRUCTION MANAGER.

- PLUMBING FOOD SERVICE NOTES:
- A. FOOD SERVICE EQUIPMENT IS FURNISHED AND INSTALLED BY THE FOOD SERVICE EQUIPMENT CONTRACTOR AS INDICATED BY FOOD SERVICE DOCUMENTATION INCLUDING UNDER SEPARATE CONTRACT WITH THE DESIGN DOCUMENTATION FOR THIS PROJECT. PLUMBING ACCESSORIES, INCLUDING FAUCETS, DRAINS, VALVES, PRESSURE/FLOW REGULATORS, FILTERS, ETC., IS FURNISHED LOOSE WITH THE FOOD SERVICE EQUIPMENT, FOR INSTALLATION AND FINAL CONNECTION BY THE PLUMBING CONTRACTOR, UNLESS INDICATED OTHERWISE.
- B. INSTALL FOOD SERVICE EQUIPMENT PIPING AND ACCESSORIES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS. SEE FOOD SERVICE DOCUMENTATION FOR SPECIFIC DIRECTION AT INDIVIDUAL ITEMS.
- C. SEE FOOD SERVICE DOCUMENTATION FOR ADDITIONAL INFORMATION PERTAINING TO FOOD SERVICE EQUIPMENT PLUMBING REQUIREMENTS, INCLUDING UTILITIES REQUIRED, CONNECTION SIZES AND ROUGH-IN LOCATIONS FOR SPECIFIC ITEMS (SUPPLY AND DRAIN). COORDINATE FINAL INSTALLATION WITH THE FOOD SERVICE EQUIPMENT AS ACTUALLY INSTALLED. LOCATIONS OF FLOOR DRAINS, FLOOR SINKS AND OTHER ASSEMBLIES UTILIZED FOR INDIRECT DRAINAGE FROM FOOD SERVICE EQUIPMENT, ARE TO BE DETERMINED FROM THE ARCHITECTURAL SLAB PLAN. THE PLUMBING CONTRACTOR SHALL EXTEND PIPING BELOW COUNTERS, IN CASEWORK OR STRUCTURE AS REQUIRED FROM DROP OR RISE POINTS INDICATED ON PLANS TO EQUIPMENT CONNECTION POINTS.
- D. ALL FOOD SERVICE EQUIPMENT INTERCONNECTING PIPING (SUPPLY AND DRAIN) IS FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR, UNLESS INDICATED OTHERWISE ON THESE OR THE FOOD SERVICE DRAWINGS. SEE FOOD SERVICE DRAWINGS FOR PIPING NOT SHOWN ON PLUMBING CONTRACT DRAWINGS, INCLUDING CONDENSATION DRAIN PIPING FROM REFRIGERATION EQUIPMENT. ALL DRAIN PIPING WITHIN REFRIGERATOR/FREEZER ENCLOSURES TO BE INSULATED AS SPECIFIED FOR DOMESTIC HOT WATER PIPING, TO A POINT 24" OUTSIDE OF ENCLOSURE. FOOD SERVICE EQUIPMENT CONTRACTOR SHALL PROVIDE HEAT TRACING UNDERNEATH INSULATION FOR ENTIRE LENGTH OF DRAIN PIPING WITHIN WALK-IN FREEZER. COORDINATE INSTALLATION WITH FOOD SERVICE AND ELECTRICAL CONTRACTORS.
- E. WHERE WASTE LINES FROM FOOD SERVICE EQUIPMENT ARE INDICATED TO BE INDIRECTLY DISCHARGED TO THE SANITARY SYSTEM, A MINIMUM AIR GAP OF 2", OR TWICE THE EFFECTIVE OPENING OF THE INDIRECT WASTE PIPE, SHALL BE MAINTAINED ABOVE THE FLOOD RIM OF THE DRAIN PER 'SAFE WASTE' REQUIREMENTS.
- F. PLUMBING SUPPLY PIPING (DHW, DCW, ETC.) SERVING FOOD SERVICE EQUIPMENT PROVIDED WITH SOLENOID VALVES OR OTHER QUICK-CLOSING DEVICES SHALL HAVE A SHOCK ABSORBER FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR AT THE TOP OF THE SUPPLY DROP OR BASE OF SUPPLY RISER INDICATED ON PLANS. MULTIPLE ITEMS SERVED BY A COMMON SUPPLY DROP OR RISE MAY BE SERVED BY A SINGLE SHOCK ABSORBER. SIZED AND INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS FOR TYPE AND QUANTITY OF FIXTURES SERVED. WHERE QUICK CLOSING DEVICES SUPPLY PIPING IS FURNISHED WITH A BACKFLOW PREVENTER OR CHECK VALVE, THE SHOCK ABSORBER SHALL BE INSTALLED DOWNSTREAM SIDE OF THE BACKFLOW PREVENTER OR CHECK VALVE.
- G. WHERE A SINGLE PLUMBING SUPPLY DROP OR RISE SERVES MULTIPLE FOOD SERVICE ITEMS, VERIFY LOCATIONS AND SIZES OF INDIVIDUAL SUPPLY CONNECTIONS FROM THE FOOD SERVICE CONTRACT DRAWINGS. PROVIDE INDIVIDUAL SUPPLY BRANCHES TO EQUIPMENT, WITH STOP VALVES AS REQUIRED.
- H. EACH FOOD SERVICE FIXTURE AND/OR PIECE OF EQUIPMENT TO BE PROVIDED WITH INDIVIDUAL IN-LINE STOP VALVE IN EACH PLUMBING SUPPLY CONNECTED. NATURAL GAS STOPS TO BE A.G.A. LISTED TWO PIECE BALL VALVE WITH LEVER HANDLE.
- I. RUN PIPING CONCEALED WHENEVER POSSIBLE. IN STRUCTURE OR CASEWORK, SECURE PIPING TO STRUCTURE PROVIDED UNDER SEPARATE CONTRACT WITHIN CASEWORK (WHERE APPLICABLE) WITH COMPATIBLE FASTENERS PROVIDED BY THE PLUMBING CONTRACTOR.
- J. COORDINATE INSTALLATION OF ALL ITEMS AND VERIFY CONDITIONS IN ADVANCE WITH THE FOOD SERVICE FIXTURES/EQUIPMENT CONTRACTOR(S).
- K. GREASE BEARING DRAIN/WASTE PIPING FROM FIXTURES AND/OR EQUIPMENT TO INTERCEPTOR IS TO BE SLOPED AT A MINIMUM 1/4" PER LINEAR FOOT PER CODE REQUIREMENTS.
- L. INSULATE ALL HOT WATER AND ALL COLD WATER PIPING PER SPECIFICATIONS.
- M. COMPLY W/ LOCAL HEALTH DEPARTMENT REGULATIONS. OMIT ESCUTCHEONS IN FOOD SERVICE AREAS. SEAL PIPES NEATLY WITH GROUT AT WALL, FLOOR, OR CEILING PENETRATIONS. OMIT INSULATION ON EXPOSED PIPING BEHIND AND UNDER EQUIPMENT. PROVIDE CLEARANCE BEHIND AND UNDER EXPOSED PIPING AS REQUIRED BY HEALTH DEPARTMENT. WHEREVER POSSIBLE, INSTALL PIPING IN FOOD SERVICE AREAS CONCEALED. CONFORM TO HEALTH DEPARTMENT REQUIREMENTS FOR LOCATIONS OF FLOOR SINKS. NO EXPOSED PEX TUBING IF PEX TUBING IS USED.
- N. FURNISH ACCESS DOORS TO ALLOW ACCESS TO VALVES LOCATED ABOVE GYPSUM WALLBOARD CEILINGS OR ELSEWHERE AS REQUIRED OR SHOWN. COORDINATE THE LOCATION AND INSTALLATION OF ALL ACCESS DOORS WITH THE GENERAL TRADES CONTRACTOR.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

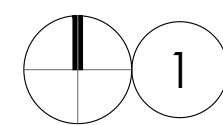
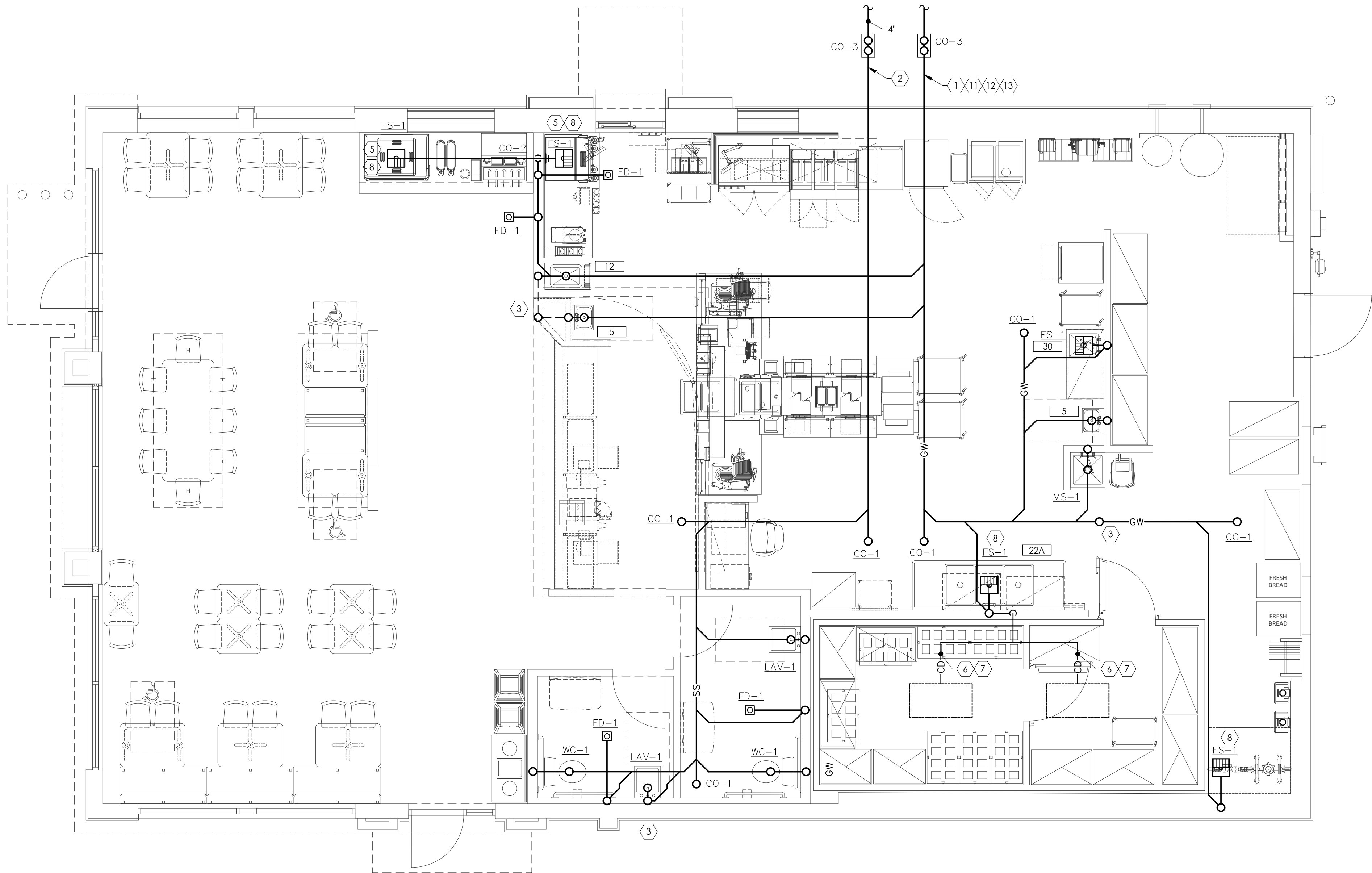
GENERAL INFORMATION  
PLUMBING

SHEET:

P0.0

DRAWING INDEX	
P0.0	GENERAL INFORMATION - PLUMBING
P1.1	WASTE AND VENT PLAN - PLUMBING
P2.1	DOMESTIC WATER AND GAS PLAN - PLUMBING
P3.1	ISOMETRICS - PLUMBING
P4.1	DETAILS - PLUMBING
P4.2	DETAILS - PLUMBING
P5.1	SCHEDULES - PLUMBING
P7.1	SPECIFICATIONS - PLUMBING
P7.2	SPECIFICATIONS - PLUMBING
P7.3	SPECIFICATIONS - PLUMBING





SANITARY PLAN - PLUMBING  
1/4" = 1'-0"

GENERAL NOTES:

- CONTRACTOR SHALL PROVIDE ALTERNATE BID FOR SURESEAL TRAP GUARD OR EQUIVALENT PRODUCT IN LIEU OF TRAP PRIMERS. CONTRACTOR SHALL VERIFY LOCAL CODE REQUIREMENTS.
- CONTRACTOR SHALL FIELD VERIFY EXACT CONTINUATION AND ROUTING OF SANITARY PIPING FOR A PROPER OPERATING SYSTEM. PLUMBING CONTRACTOR SHALL FIELD VERIFY INVERT ELEVATION PRIOR TO SANITARY LINE INSTALLATION AND NOTIFY ARCHITECT/ENGINEER WITH ANY DISCREPANCIES IMMEDIATELY.
- ALL SANITARY PIPING 2-1/2" AND SMALLER SHALL BE INSTALLED WITH A SLOPE OF 1/4" PER FOOT. ALL SANITARY PIPING 3" AND LARGER SHALL BE INSTALLED AT A SLOPE OF 1/8" PER FOOT. PROVIDE PROPER SLOPE FOR VENT PIPING TO DRAIN BACK TO DRAINAGE SYSTEM TO DRAIN ANY ACCUMULATIVE MOISTURE.
- ALL UNDERGROUND GREASE WASTE PIPING UPSTREAM OF GREASE INTERCEPTOR SHALL BE INSTALLED WITH A SLOPE OF 1/4" PER FOOT.
- ALL UNDERGROUND GREASE WASTE PIPING TO BE PVC. CAST IRON PIPING SHALL BE USED FOR THE FLOOR DRAIN IN FRONT OF FRYER.
- ALL WASTE PIPING SHOWN IS LOCATED BELOW FINISHED FLOOR, U.N.O.
- ALL VENT PIPING SHOWN IS LOCATED ABOVE FINISHED CEILINGS AND INSIDE WALLS, U.N.O.
- ROOF OVERFLOW DRAINAGE IS BY SCUPPERS. REFER TO THE ARCHITECTURAL DRAWINGS.
- REFER TO STACK DIAGRAM AND SCHEDULES FOR COMPLETE PIPE SIZING INFORMATION.
- SMOKE ALL PLUMBING VENT PIPING PRIOR TO CLOSING WALL CAVITIES AND PRIOR TO TURN OVER.

CODED NOTES: (#)

- CONNECT 4" GREASE WASTE PIPING TO SITE UTILITY CONTRACTOR PROVIDED SITE GREASE WASTE SEWER 5'-0" OUTSIDE BUILDING WALL. REFER TO CIVIL DRAWINGS FOR CONTINUATION. COORDINATE EXACT POINT-OF-CONNECTION WITH SITE UTILITY CONTRACTOR AND GENERAL TRADES CONTRACTOR.
- CONNECT 4" SANITARY DRAINAGE PIPING TO SITE UTILITY CONTRACTOR PROVIDED SITE SANITARY SEWER 5'-0" OUTSIDE BUILDING WALL. REFER TO CIVIL DRAWINGS FOR CONTINUATION. COORDINATE EXACT POINT-OF-CONNECTION WITH SITE UTILITY CONTRACTOR AND GENERAL TRADES CONTRACTOR.
- PROVIDE 3" VTR. REFER TO DETAIL ON SHEET P4.2.
- PROVIDE DRAINAGE PIPING FROM ICE MACHINE AND BEVERAGE DISPENSER TO FS-1 PER MANUFACTURER INSTRUCTIONS.
- 1" COPPER CONDENSATE DRAIN FROM COOLER/FREEZER EVAPORATOR. EXTEND TO FLOOR SINK. PROVIDE 3" AIR GAP. PROVIDE CORROSION RESISTANT 'STAND-OFFS' TO ALLOW 1" CLEARANCE BETWEEN WALL AND PIPING. INSULATE PIPING WITH 3/4" THICK ELASTOMERIC INSULATION.
- WALK-IN COOLER VENDOR TO PROVIDE HEAT TRACING ON FREEZER DRAIN LINE. COORDINATE ELECTRICAL CONNECTION WITH ELECTRICAL CONTRACTOR.
- PROVIDE 3" (MIN.) AIR GAP AT INDIRECT CONNECTION (TYPICAL). CONTRACTOR SHALL VERIFY LOCAL CODE REQUIREMENTS.
- NOT USED.
- NOT USED.
- REFER TO CIVIL DRAWINGS FOR EXACT LOCATION OF GREASE INTERCEPTOR. INTERCEPTOR TO BE FURNISHED BY PC AND INSTALLED BY SITE UTILITY CONTRACTOR. REFER TO DETAIL ON SHEET P4.2. COORDINATE INSTALLATION WITH GC AND SITE UTILITY CONTRACTOR.
- PROVIDE 3" VENT FROM GREASE INTERCEPTOR INTO BUILDING BY PC.
- PROVIDE 3" VENT RISER FROM GREASE INTERCEPTOR TO 3" VTR. REFER TO DETAIL ON SHEET P4.1.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

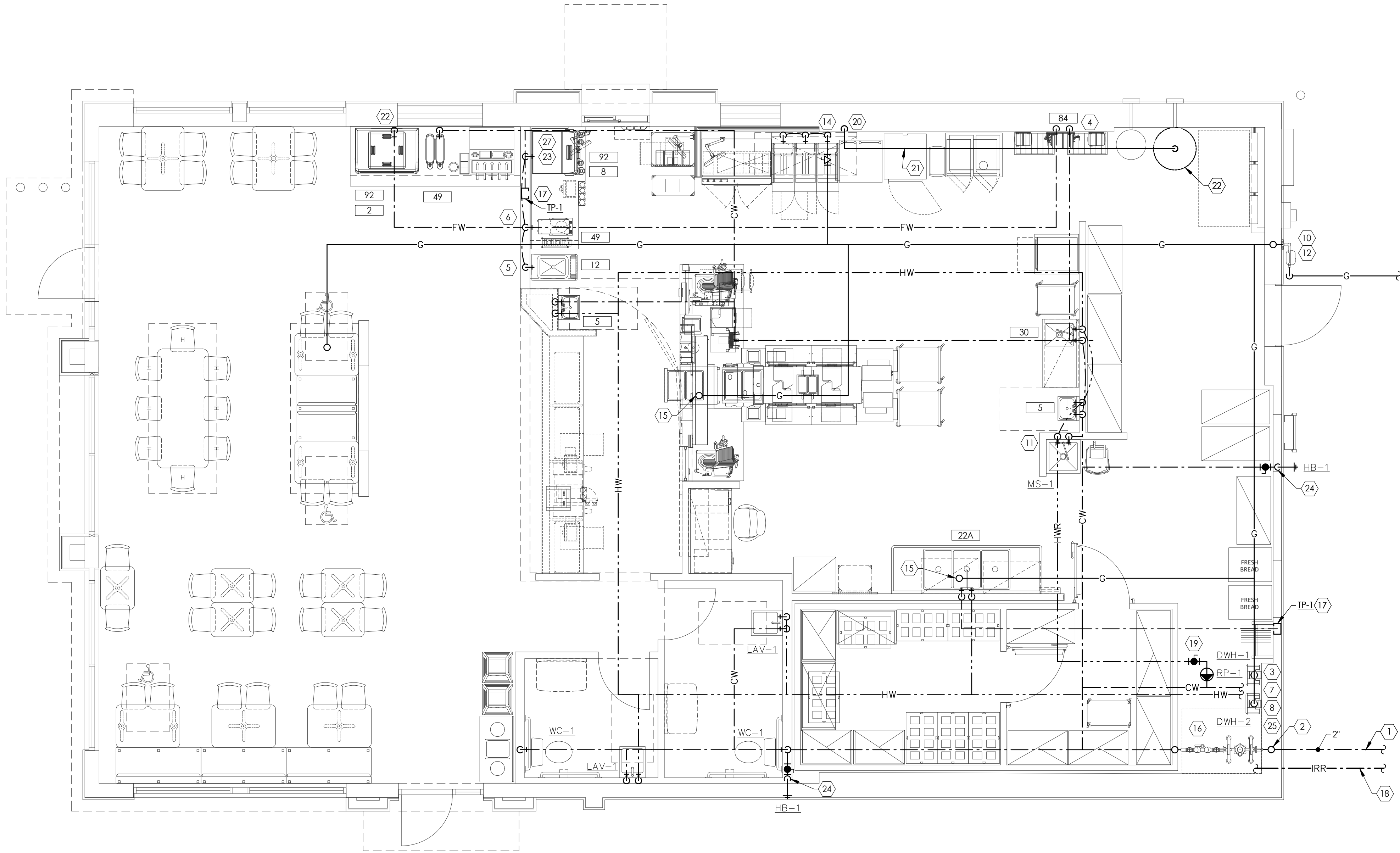
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

WASTE AND VENT PLAN  
PLUMBING

SHEET:

P1.1





**1** WATER & GAS PLAN - PLUMBING  
1/4" = 1'-0"

GENERAL NOTES:

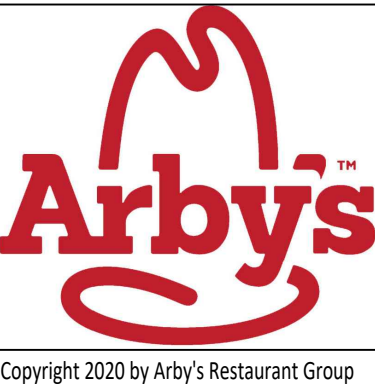
- A. PLUMBING CONTRACTOR SHALL PROVIDE ALTERNATE BID FOR SURESEAL TRAP GUARD OR EQUIVALENT TRAP GUARD AS OPPOSED TO TRAP PRIMERS IF LOCAL CODE PERMITS THE USE OF TRAP GUARDS.
- B. THE BASIS OF DESIGN FOR THE DOMESTIC COLD WATER SYSTEM SHALL BE PEX PIPING SYSTEM.
- C. REFER TO SCHEDULE ON SHEET P5.1 FOR ADDITIONAL PIPE SIZING INFORMATION.
- D. ROUTE PIPING UP IN TRUSS SPACE WHERE CEILING SPACE IS LIMITED.
- E. TRAP PRIMER/VALVES TO BE IN AN ACCESSIBLE SPACE ABOVE CEILING. IF NOT PROVIDE A MINIMUM 12"x12" ACCESS PANEL, OR LARGER IF REQUIRED TO ADEQUATELY ACCESS THE TRAP PRIMER/VALVES. REFER TO DETAIL ON SHEET P4.1.
- F. ALL GAS PIPING IN CONCEALED AREAS SHALL BE WELDED.

CODED NOTES: (#)

- 1. CONNECT 2" WATER LINE TO SITE UTILITY CONTRACTOR PROVIDED WATER SERVICE LINE 5'-0" OUTSIDE BUILDING WALL AND EXTEND INTO BUILDING. COORDINATE EXACT LOCATION AND POINT-OF-CONNECTION WITH SITE UTILITY CONTRACTOR AND ARBY'S CONSTRUCTION MANAGER.
- 2. 2" DOMESTIC WATER SERVICE ENTRANCE. REFER TO DETAIL ON SHEET P4.2.
- 3. PROVIDE WATER HEATERS ON FACE OF SOFFIT AS HIGH AS POSSIBLE. REFER TO DETAIL ON SHEET P4.1.
- 4. 1/2" DCW WITH BALL SHUT OFF VALVE AND ASSE 1022 LISTED BFP 6" BELOW CEILING TO WATER BOOSTER FILTER SYSTEM (84). COORDINATE EXACT REQUIREMENTS WITH SODA VENDOR. REFER TO WATER FILTER SYSTEM DETAIL ON SHEET P4.2.
- 5. CONNECT TO SODA PROVIDED FILTERED WATER LINE ABOVE CEILING AND PROVIDED 1/2" FW DROP IN WALL TO 21" AFF FOR SHAKE MACHINE (12). PROVIDE BALL STOP VALVE, ASSE 1022 LISTED BFP AND FINAL CONNECTION TO EQUIPMENT. COORDINATE EXACT REQUIREMENTS WITH SODA VENDOR.
- 6. CONNECT TO SODA PROVIDED FILTERED WATER LINE ABOVE CEILING AND PROVIDE 1/2" FW DROP DOWN IN WALL AND UNDER COUNTERTOP TO 44" AFF FOR COFFEE MAKER (49). PROVIDE BALL SHUTOFF VALVE, ASSE 1022 LISTED BFP AND FINAL CONNECTION TO EQUIPMENT. COORDINATE EXACT REQUIREMENTS WITH SODA VENDOR.
- 7. INSTALL WATER HEATER CONCENTRIC INTAKE AIR AND FLUE VENT PIPING THROUGH ROOF PER DETAIL ON SHEET P4.2.
- 8. DCW, DHW, DHWR, AND GAS PIPING ROUTED TO WATER HEATERS. REFER TO WATER HEATER DETAIL ON SHEET P4.1.
- 9. PROVIDE 1/2" DCW AND DHW IN LOW WALL CAVITY TO SINK AND CONNECT.
- 10. ROUTE GAS PIPING INTO BUILDING AND RISE IN WALL CAVITY TO ABOVE CEILING WITHIN TRUSS SPACE. PROVIDE WATERTIGHT SEAL AT WALL PENETRATION. PAINT EXTERIOR PIPING TO MATCH EXTERIOR WALL FINISHES. COORDINATE COLOR WITH CONSTRUCTION MANAGER AND ARCHITECT.
- 11. 1/2" DCW AND 1/2" DHW DOWN IN WALL TO MOP SINK.
- 12. GAS METER AND SERVICE ENTRANCE. REFER TO DETAIL ON SHEET P4.1. PC SHALL COORDINATE NEW GAS SERVICE AND METER WITH LOCAL NATURAL GAS AUTHORITY. TOTAL GAS LOAD: 955 CFH; DELIVERY PRESSURE: 7" WC; TOTAL EQUIVALENT LENGTH OF PIPE: 125 FEET.
- 13. GAS PIPING ROUTED ABOVE CEILING WITHIN TRUSS SPACE.
- 14. PROVIDE 1-1/2" GAS PIPING DOWN THROUGH CEILING TO MECHANICAL GAS SHUT-OFF VALVE. MECHANICAL GAS SHUT-OFF VALVE FURNISHED BY HOOD MANUFACTURER AND INSTALLED BY THE PC. MANUAL SHUT-OFF VALVE PROVIDED BY PC. INSTALL MECHANICAL VALVE AND MANUAL VALVE BELOW CEILING. REFER TO GAS RISER DIAGRAM ON THIS SHEET AND DETAIL ON SHEET P4.2.
- 15. 1-1/4" GAS PIPING ROUTED UP THROUGH ROOF. REFER TO ROOF PENETRATION DETAIL ON SHEET P4.2.
- 16. AREA FOR WATER METER AND BACKFLOW PREVENTER ACCESS.
- 17. TRAP PRIMER. REFER TO DETAIL ON SHEET P4.2.
- 18. IF IRRIGATION SYSTEM IS REQUIRED, PROVIDE 1" TAP, METER AND ASSE 1013 BACKFLOW ASSEMBLY INSIDE BUILDING FOR IRRIGATION SYSTEM. DO NOT PROVIDE IF NOT REQUIRED. CONTRACTOR TO VERIFY REQUIREMENTS WITH CONSTRUCTION MANAGER AND LOCAL CODE AUTHORITY.
- 19. PROVIDE CHECK VALVE, BALL VALVE AND PETE'S PLUGS ABOVE CEILING IN DHWR PIPING.
- 20. PC SHALL ROUTE 3/4" GALVANIZED USED FRYER GREASE PIPING DOWN ON WALL AND HORIZONTALLY TO THE FRYERS PER MANUFACTURERS RECOMMENDATIONS. SECURE INLET PIPE TO WALL WITH STANDOFF BRACKETS AND PIPE COVER, REFER TO PIPE COVER DETAIL ON SHEET P4.1. REFER TO NOTE 22 AND 23 FOR COORDINATION.
- 21. USED FRYER GREASE PIPING ROUTED ABOVE CEILING. INSTALL PIPE PER MANUFACTURERS RECOMMENDATIONS WITH 1/8" MIN SLOPE TO ALLOW FOR RESIDUAL GREASE TO DRAIN INTO STORAGE TANK WHEN THE SYSTEM IS NOT IN USE.
- 22. USED FRYER GREASE HOLDING TANK (96) BY KITCHEN EQUIPMENT SUPPLIER.
- 23. CONNECT TO SODA PROVIDED FILTERED WATER LINE ABOVE CEILING AND PROVIDE 1/2" FW DROP TO 84" AFF TO ICE MAKER (92) WITH WHIP CONNECTOR FURNISHED BY SODA VENDOR. PROVIDE BALL SHUTOFF VALVE, ASSE 1022 LISTED BFP AND FINAL CONNECTION TO EQUIPMENT. COORDINATE EXACT REQUIREMENTS WITH SODA VENDOR.
- 24. 3/4" DCW DOWN IN WALL TO EXTERIOR WALL HYDRANT. PIPE INSULATION TO RUN CONTINUOUSLY WITHIN WALL STRUCTURE. COORDINATE MOUNTING HEIGHT OF WALL HYDRANT WITH ARCHITECT AND ARBY'S CONSTRUCTION MANAGER.
- 25. INSTALL VERTICAL CONCENTRIC ROOF TERMINATION KIT FURNISHED BY WATER HEATER MANUFACTURER. REFER TO DETAIL ON SHEET P4.2.
- 26. PROVIDE 1/2" VALVED DHW DOWN IN WALL TO DISHWASHER (22) AND CONNECT. PROVIDE ASSE 1013 BACKFLOW PREVENTER ON DHW LINE IN AN ACCESSIBLE LOCATION. PROVIDE DRAIN LINE FROM BACKFLOW PREVENTER TO NEAREST DRAIN. COORDINATE EXACT LOCATION OF DRAIN WITH CONSTRUCTION MANAGER.
- 27. PROVIDE 4" CONDUIT IN WALL BETWEEN SODA DISPENSERS FOR SODA CONDUIT. PROVIDE 12X12 CUT OUT HOLE UNDER DRIVE THROUGH COUNTER TO CONNECT SODA LINES.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

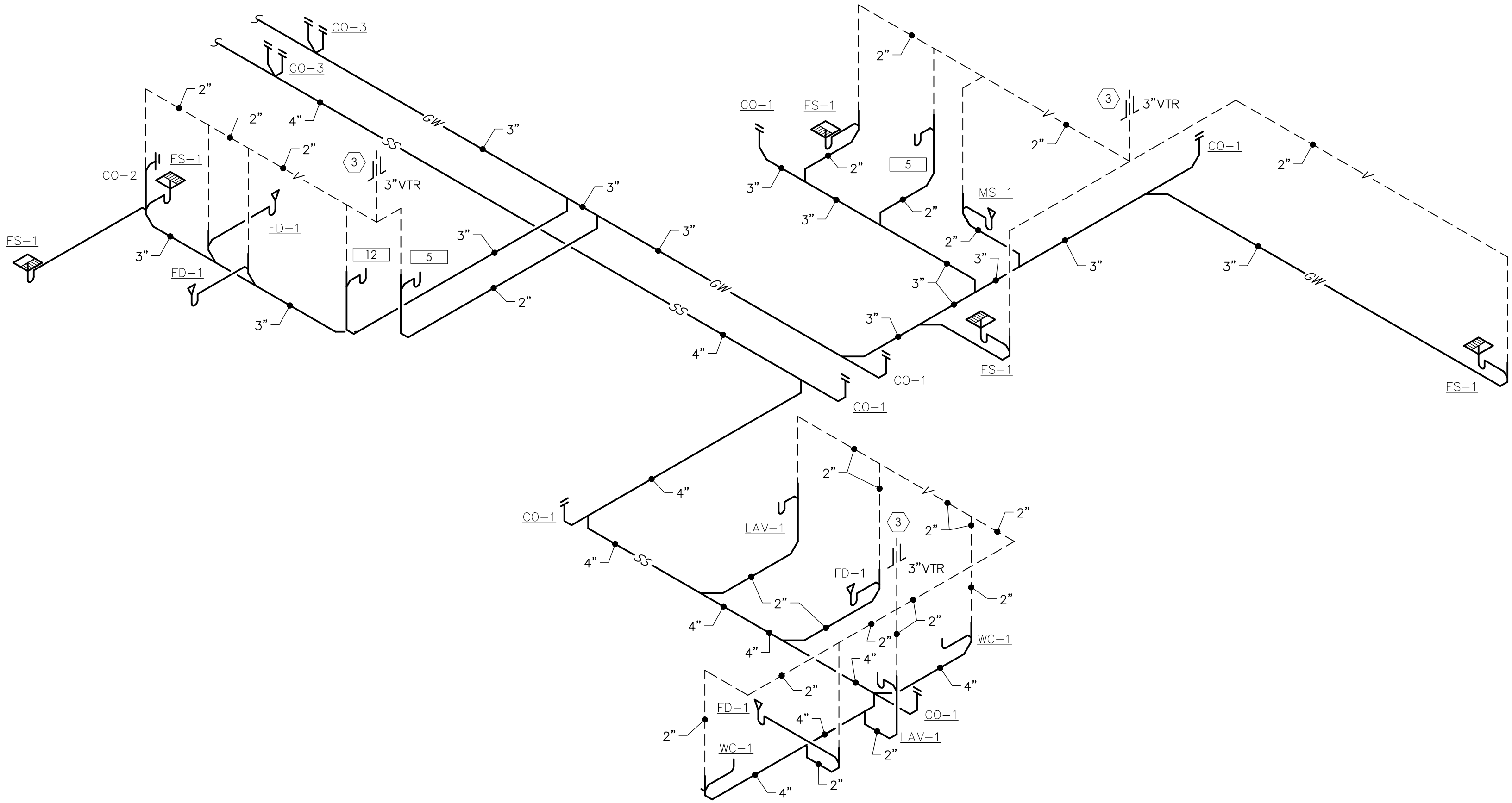
PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

DOMESTIC WATER & GAS PLAN  
PLUMBING

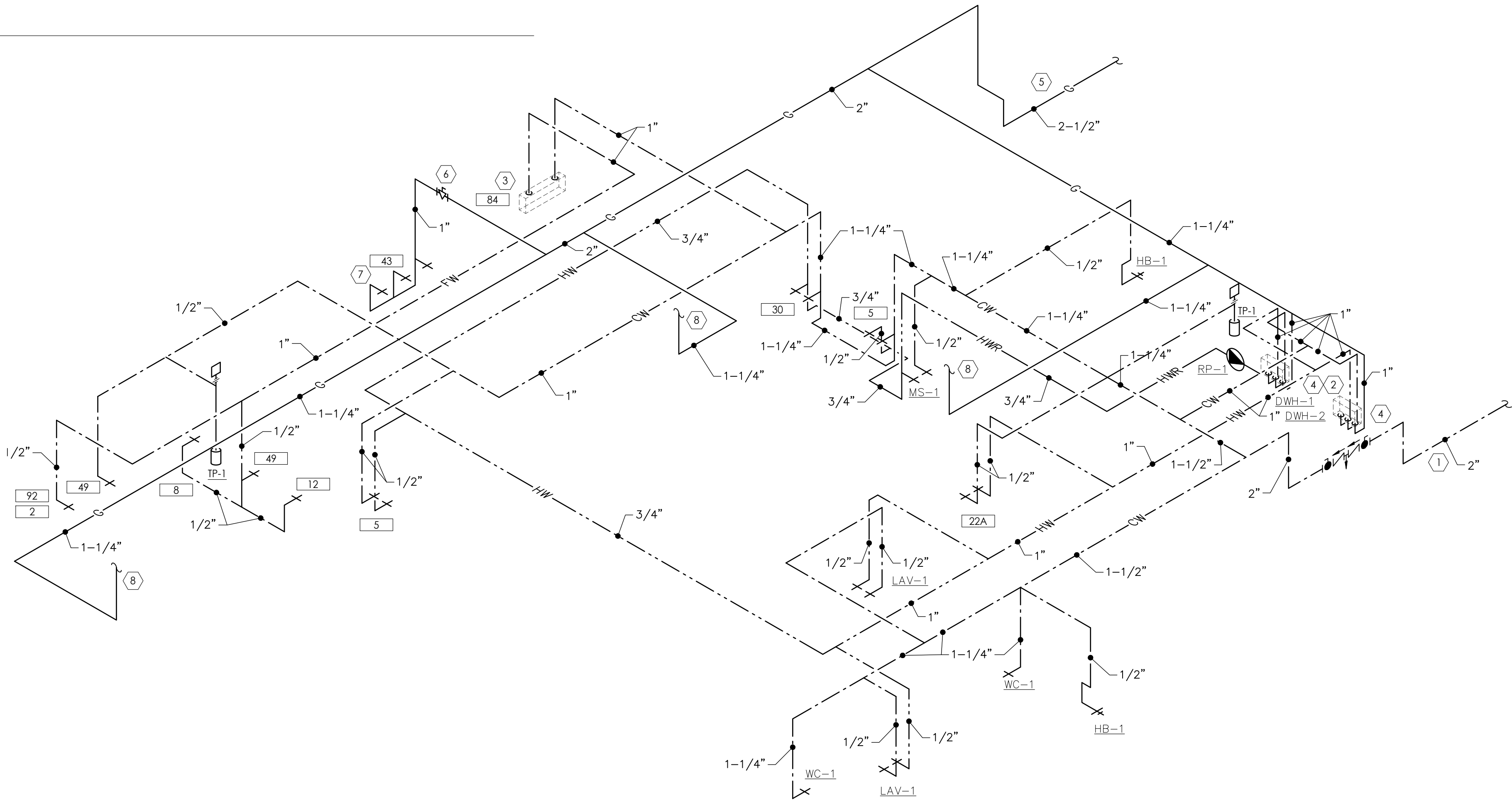
SHEET:

P2.1



- CODED NOTES:** (#)
1. REFER TO WATER SERVICE ENTRANCE DETAIL ON SHEET P4.1 FOR CONTINUATION.
  2. REFER TO WATER HEATER DETAIL ON SHEET P4.1 FOR CONTINUATION.
  3. REFER TO WATER FILTER SYSTEM DETAIL ON SHEET P4.1 FOR CONTINUATION.
  4. PROVIDE CONNECTION TO WATER HEATER. REFER TO DETAIL ON SHEET P4.1.
  5. 2-1/2" NATURAL GAS FROM GAS METER. REFER TO DETAIL ON SHEET P4.1.
  6. KITCHEN GAS SHUTOFF VALVE. REFER TO DETAIL ON SHEET P4.1.
  7. REFER TO KITCHEN GAS EQUIPMENT CONNECTION DETAIL ON SHEET P4.1.
  8. REFER TO ROOF PLAN FOR CONTINUATION.

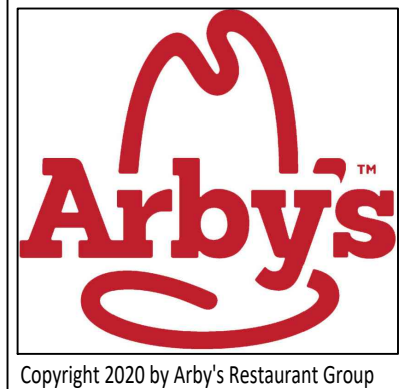
**1 SANITARY & VENT RISERS - PLUMBING**  
1/4" = 1'-0"



**1 DOMESTIC WATER & GAS RISERS - PLUMBING**  
1/4" = 1'-0"



**PROPRIETARY INFORMATION NOTICE:**  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



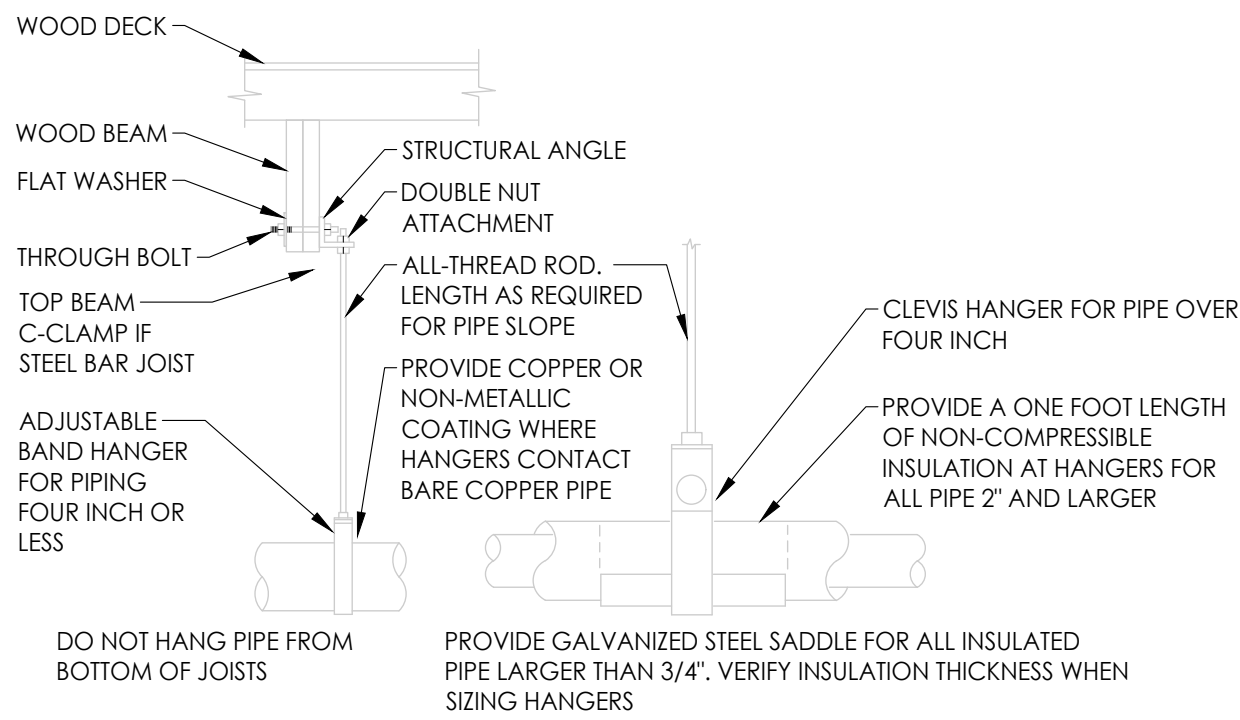
**ARBY'S RESTAURANT GROUP**  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

ISOMETRICS  
PLUMBING

SHEET:

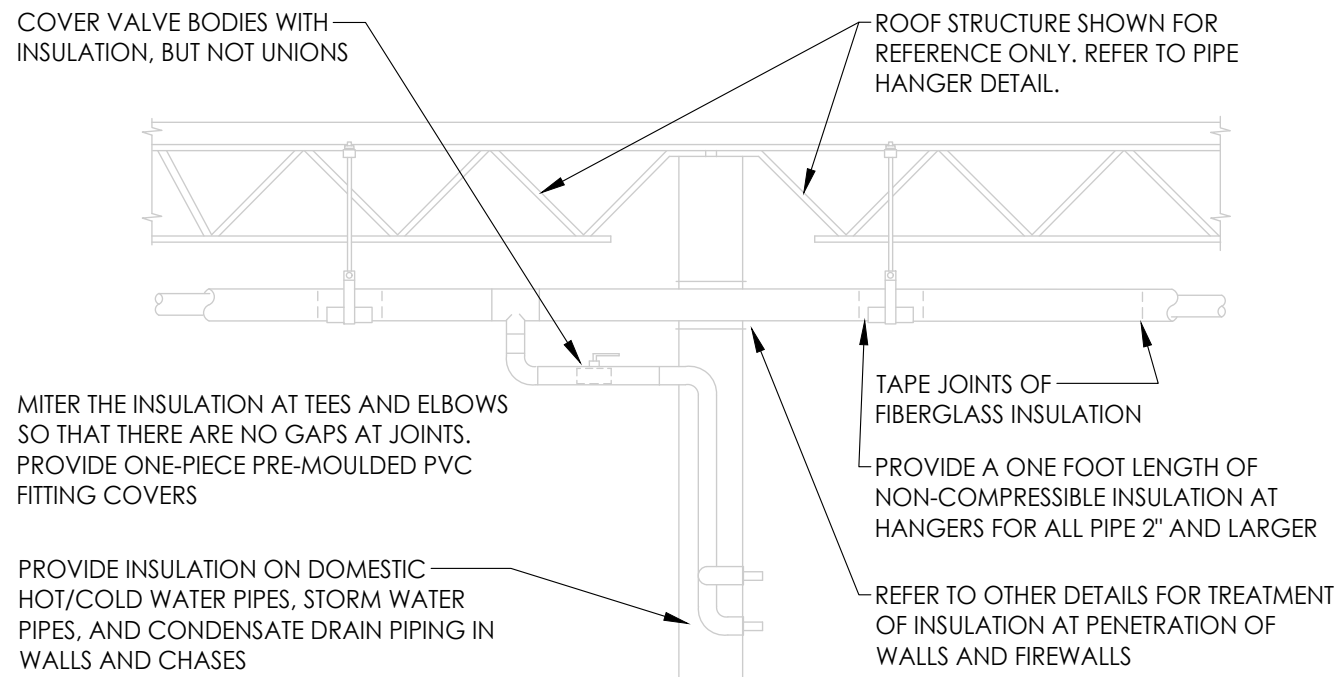




PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN HERE. DO NOT INSTALL HANGER INSIDE INSULATION OR OTHERWISE PENETRATE VAPOR BARRIER. DO NOT HANG ONE PIPE FROM ANOTHER. TRAPEZE HANGERS MAY BE USED FOR MULTIPLE PARALLEL PIPES. HANGER SPACING FOR PIPE SIZE: COPPER: 4\"=12\"; 3\"=11\"; 2\"=10\"; 1\"=9\"; 1-1/2\"=8\"; 1-1/4\"=7\"; 1\"=6\"; 3/4\"=6\"; 1/2\"=5\". CAST IRON: 10\" AND ONE NEAR ALL JOINTS. STEEL: 4\"=14\"; 3\"=12\"; 2-1/2\"=11\"; 2\"=10\"; 1-1/2\"=9\"; 1\"=7\"; 3/4\"=6\"; 1/2\"=5\". LOCATE HANGERS AS CLOSE AS POSSIBLE TO TURNS AND TEES OF PIPE. PROVIDE SUPPLEMENTARY STEEL STRUTS BETWEEN JOISTS IF REQUIRED. LOCATE HANGERS TO TAKE LOAD OFF OF EQUIPMENT CONNECTIONS. ANCHOR WATER PIPE AGAINST SWAYING DUE TO CHANGES IN WATER VELOCITY. PROVIDE SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES. CHAINS OR PERFORATED STRAP IRON OR STEEL IS NOT ACCEPTABLE. REFER TO CODES AND SPECIFICATIONS FOR FURTHER INFORMATION.

## 1 PIPE HANGER DETAIL

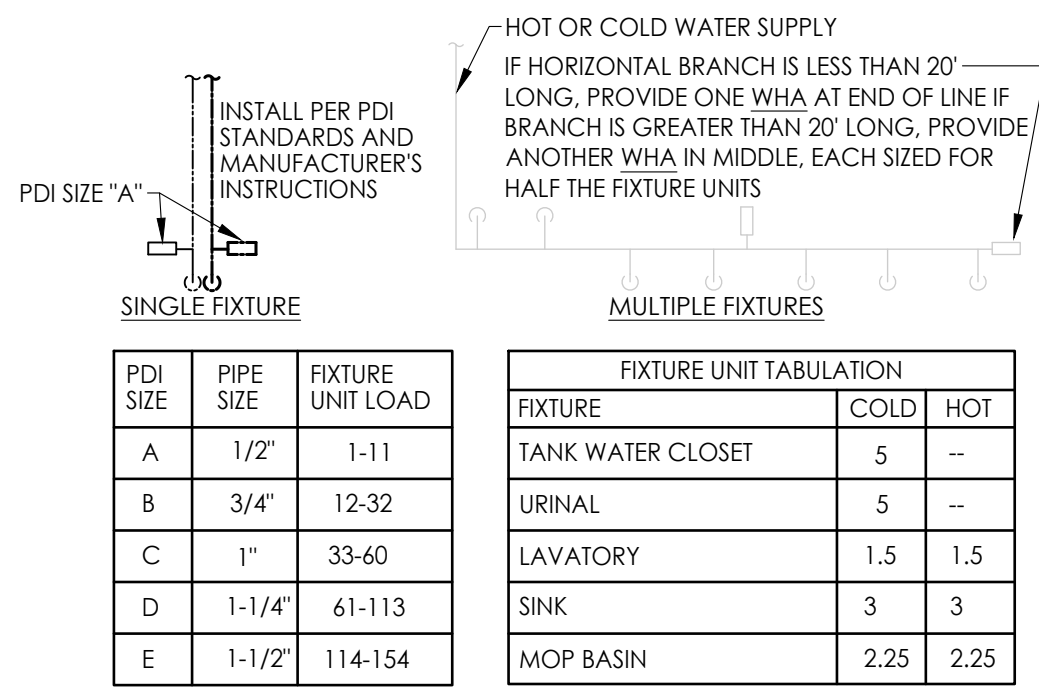
N.T.S.



PROVIDE FIBERGLASS INSULATION WITH ALL-SERVICE JACKET WITH VAPOR BARRIER ON ALL COLD/HOT WATER PIPING AND CONDENSATE DRAIN PIPE. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION REGARDING INSULATION. INSTALL ALL ITEMS PER SPECIFICATIONS AND MANUFACTURER'S INSTRUCTIONS. MAINTAIN VAPOR BARRIER ON COLD PIPING BY MEANS OF SEALANT AND TAPE. FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES SHALL NOT EXCEED 25/50. SEAL EXPOSED ENDS OF FIBERGLASS INSULATION WITH ADHESIVE MASTIC.

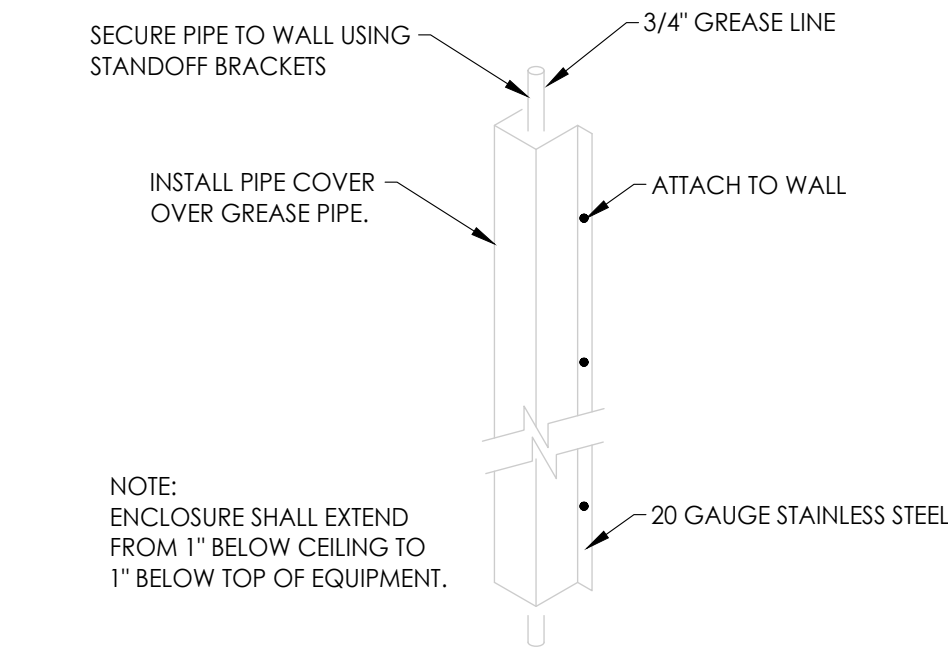
## 2 PIPE INSULATION DETAIL

N.T.S.



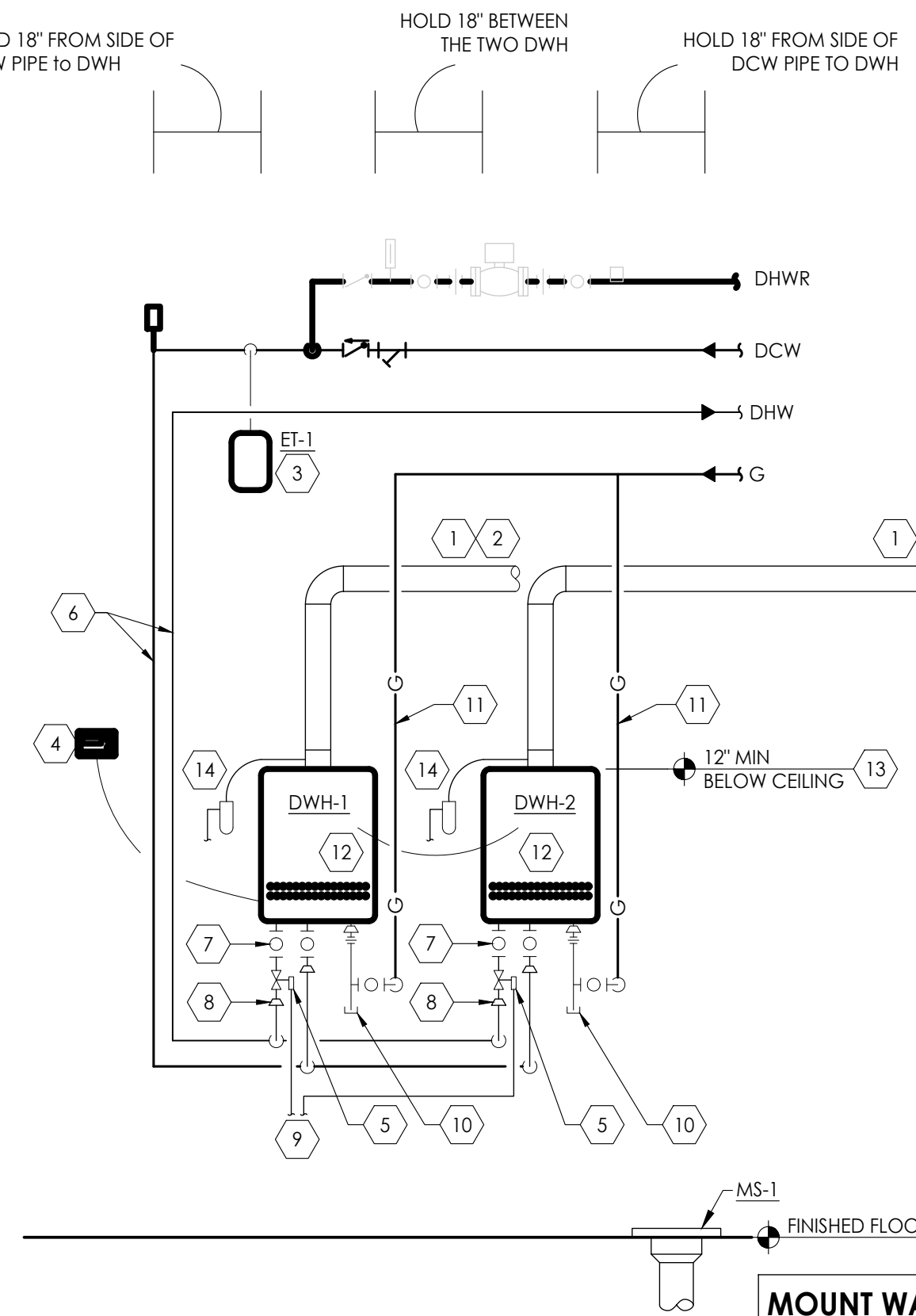
## 3 WATER HAMMER ARRESTERS DETAIL

N.T.S.



## 4 PIPE COVER DETAIL

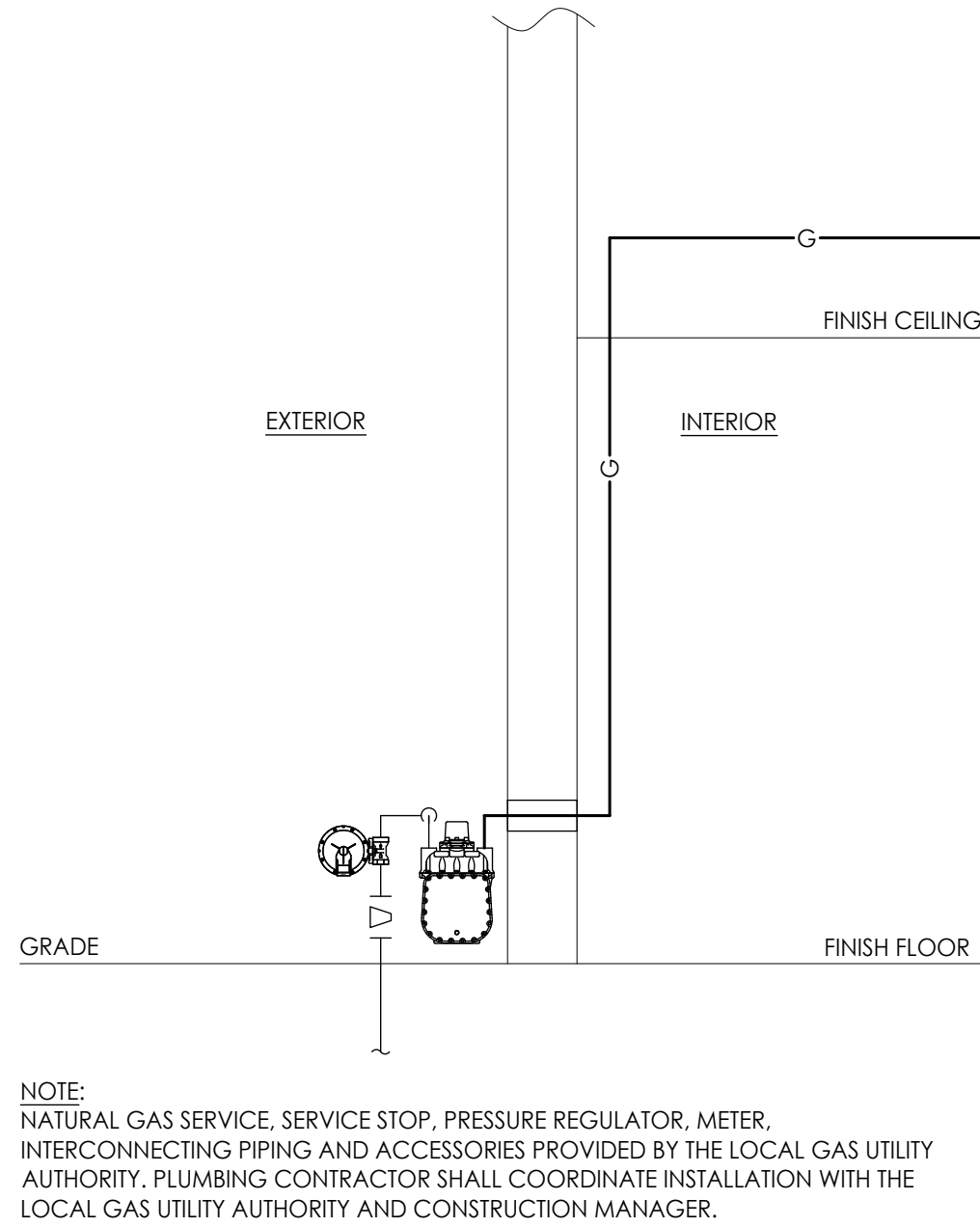
N.T.S.



MOUNT WATER HEATER AS CLOSE TO MOP SINK AS POSSIBLE

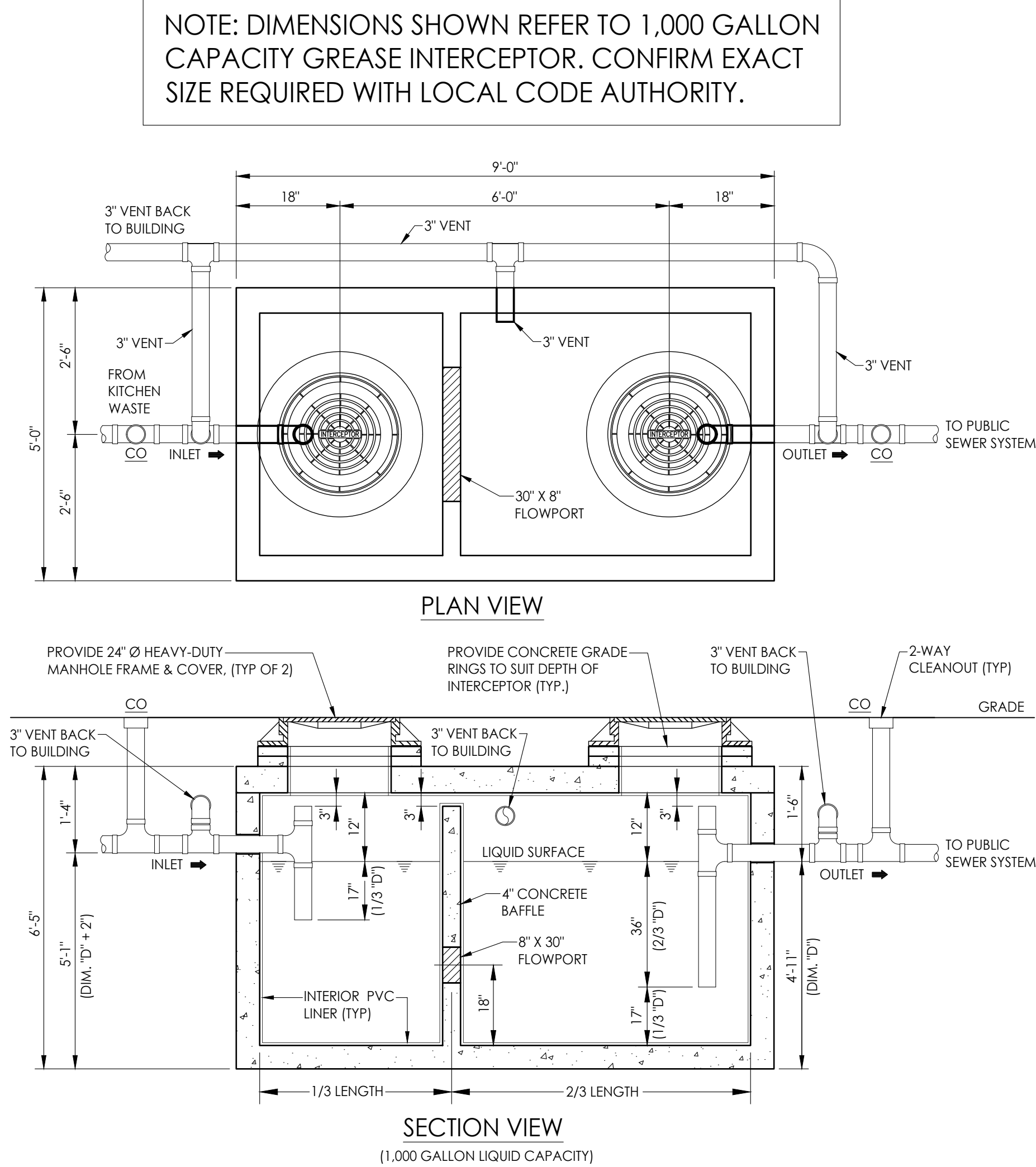
- WATER HEATER DETAIL NOTES
1. PROVIDE 5\"/>
  2. PROVIDE RINNAU/UBINK ROLUX CONCENTRIC VERTICAL TERMINATION KIT FOR FLUE/INTAKE TERMINATION THROUGH ROOF. INSTALL PER MANUFACTURER'S INSTRUCTIONS. REFER TO DETAIL ON SHEET P4-2.
  3. PROVIDE EXPANSION TANK AS SHOWN PER MANUFACTURER'S REQUIREMENTS. SUPPORT TANK FROM WALL OR STRUCTURE ABOVE.
  4. INSTALL REMOTE CONTROL PANEL 48\"/>
  5. PROVIDE WIRING FROM THE REMOTE CONTROL PANEL TO THE WATER HEATER. CONCEAL WIRING WITHIN THE WALL.
  6. PROVIDE PRESSURE RELIEF VALVE. PIPE PRESSURE RELIEF VALVE TO MS-1.
  7. ROUTE DCW AND DHW PIPING EXPOSED ON SURFACE OF WALL. SUPPORT PIPING WITH WALL STANDOFFS. INSULATE PIPING PER SPECIFICATIONS AND COVER EXPOSED INSULATION WITH PVC PROTECTIVE JACKET.
  8. PROVIDE THE ISOLATOR EXP\"/>
  9. IF THE COLD, HOT, OR GAS PIPE LINE SIZE AS SHOWN ON THE PLUMBING PLANS IS LARGER THAN THE WATER HEATER CONNECTION SIZES, PROVIDE REDUCERS WITHIN 6\"/>
  10. PIPE PRESSURE RELIEF VALVE DISCHARGE AND FLUE CONDENSATE DRAIN TO MS-1. DRAIN THROUGH AN AIR GAP.
  11. PROVIDE AN EXPOSED DRIP LEG AND LINE-SIZE GAS VALVE ON THE GAS SERVICE TO THE WATER HEATER.
  12. ROUTE GAS PIPING EXPOSED ON SURFACE OF THE WALL.
  13. PROVIDE QUICK CONNECT CORD TO CONNECT THE WATER HEATERS. INSTALL THE TWO UNITS 18.5\"/>
  14. MOUNT HEATER AS HIGH AS POSSIBLE BELOW CEILING. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH CONSTRUCTION MANAGER.
  15. PROVIDE CONDENSATE TRAP AVAILABLE WITH WATER HEATER AND INDIRECT DRAIN TO MOP SINK.

- WATER HEATER INSTALLATION NOTES
- A. CLEAN INLET STRAINERS AFTER CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO TURNOVER OF THE BUILDING TO THE OWNER.
  - B. INSTALL PIPING WITH AS FEW ELBOWS AS POSSIBLE.
  - C. MAINTAIN REQUIRED CLEARANCES TO COMBUSTIBLE MATERIALS.
  - D. ADJUST WATER HEATER TO A SEIPOINT OF 140° F.



## 6 GAS SERVICE RISER DETAIL

N.T.S.



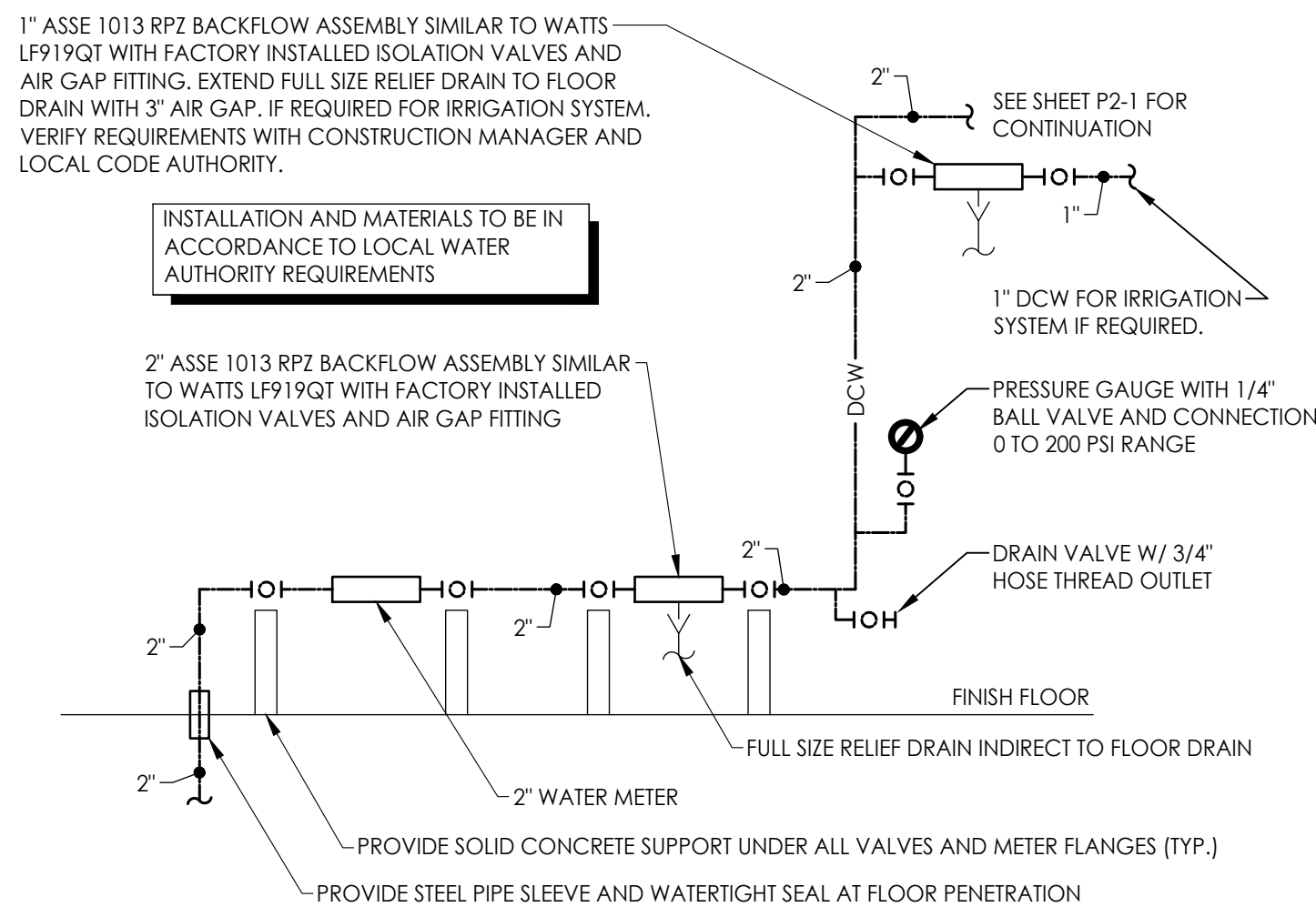
- GREASE INTERCEPTOR NOTES:
1. CONSTRUCTION AND INSTALLATION OF GREASE INTERCEPTOR MUST COMPLY WITH THE REQUIREMENTS OF THE LOCAL CODE AUTHORITY.
  2. ALL CONCRETE SHALL BE CLASS \"C\" 5000 PSI @ 28 DAYS REINFORCED WITH 6 X 6 (10 GA X 10 GA) WELDED WIRE MESH AND #3 REINFORCING BARS.
  3. EXCAVATION FOR TANK MUST BE COMPLETELY LEVEL AND FREE OF ROCKS OR DEBRIS. PROVIDE 1\"/>
  4. INLET AND OUTLET OPENINGS SHALL BE PROVIDED WITH ADJUSTABLE NEOPRENE GASKETS (POLYLOCK PIPE SEAL).
  5. ALL INLET, OUTLET AND INTERNAL PIPING SHALL BE PVC SDR 35 GRAVITY SEWER PIPE.
  6. ALL PIPING SHALL BE THE RESPONSIBILITY OF PLUMBING CONTRACTOR.
  7. PROVIDE TRAFFIC BEARING MANHOLE EXTENSIONS TO GRADE AS REQUIRED.
  8. SIZING AND DIMENSIONAL DATA IS BASED ON A 1,000 GALLON CAPACITY GREASE INTERCEPTOR AND IS DIAGRAMMATIC. CONSULT WITH ACTUAL MANUFACTURER FOR EXACT DIMENSIONS AND FIELD EXCAVATION REQUIREMENTS.

## 8 GREASE INTERCEPTOR DETAIL

N.T.S.

## 5 INSTANTANEOUS WATER HEATER DETAIL

N.T.S.

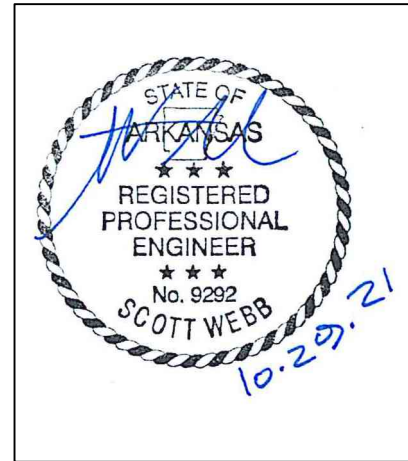


## 7 WATER SERVICE ENTRANCE

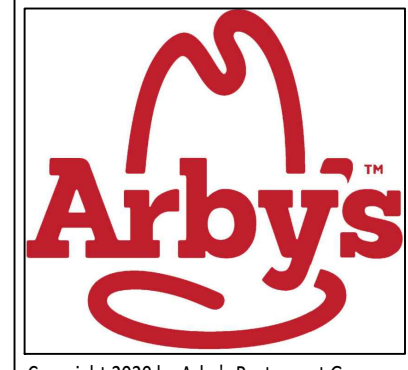
N.T.S.

### WATER SERVICE NOTES:

1. WATER SERVICE ENTRANCE MATERIALS, INSTALLATION, AND ALL COMPONENTS (INCLUDING BUT NOT LIMITED TO METERS AND BACKFLOW PREVENTERS) TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL WATER AUTHORITY, VERIFIED IN ADVANCE OF ANY WORK.
2. ALL REDUCED PRESSURE ZONE PRINCIPLE BACKFLOW PREVENTERS TO BE COMPLETE APPROVED ASSEMBLIES INCLUDING BUT NOT LIMITED TO TEST COCKS AND AIR GAP FITTINGS AT VENT/RAIN CONNECTION POINT. ASSEMBLIES TO BE AS LISTED IN ASSE 1013, APPROVED BY THE LOCAL BACKFLOW PREVENTION AUTHORITY.
3. PROVIDE FLOOR AND WALL SUPPORT ASSEMBLIES AS REQUIRED TO SECURE AND SUPPORT ITEMS INDICATED AT STRUCTURE. PIPE STANDS EQUAL TO GRINNELL FIG. 62, WALL BRACKETS EQUAL TO GRINNELL FIG. 199.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

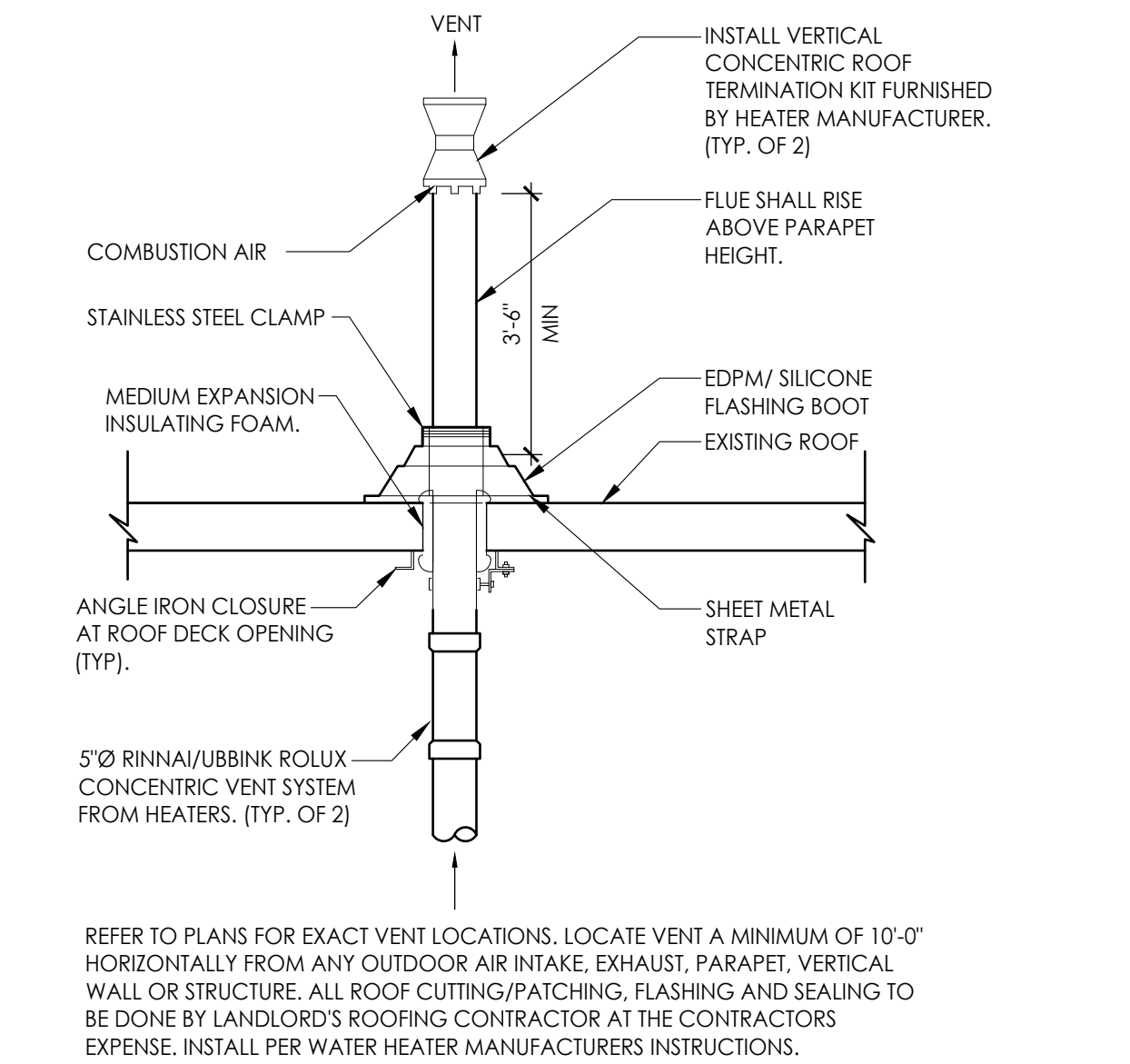
PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

DETAILS - PLUMBING

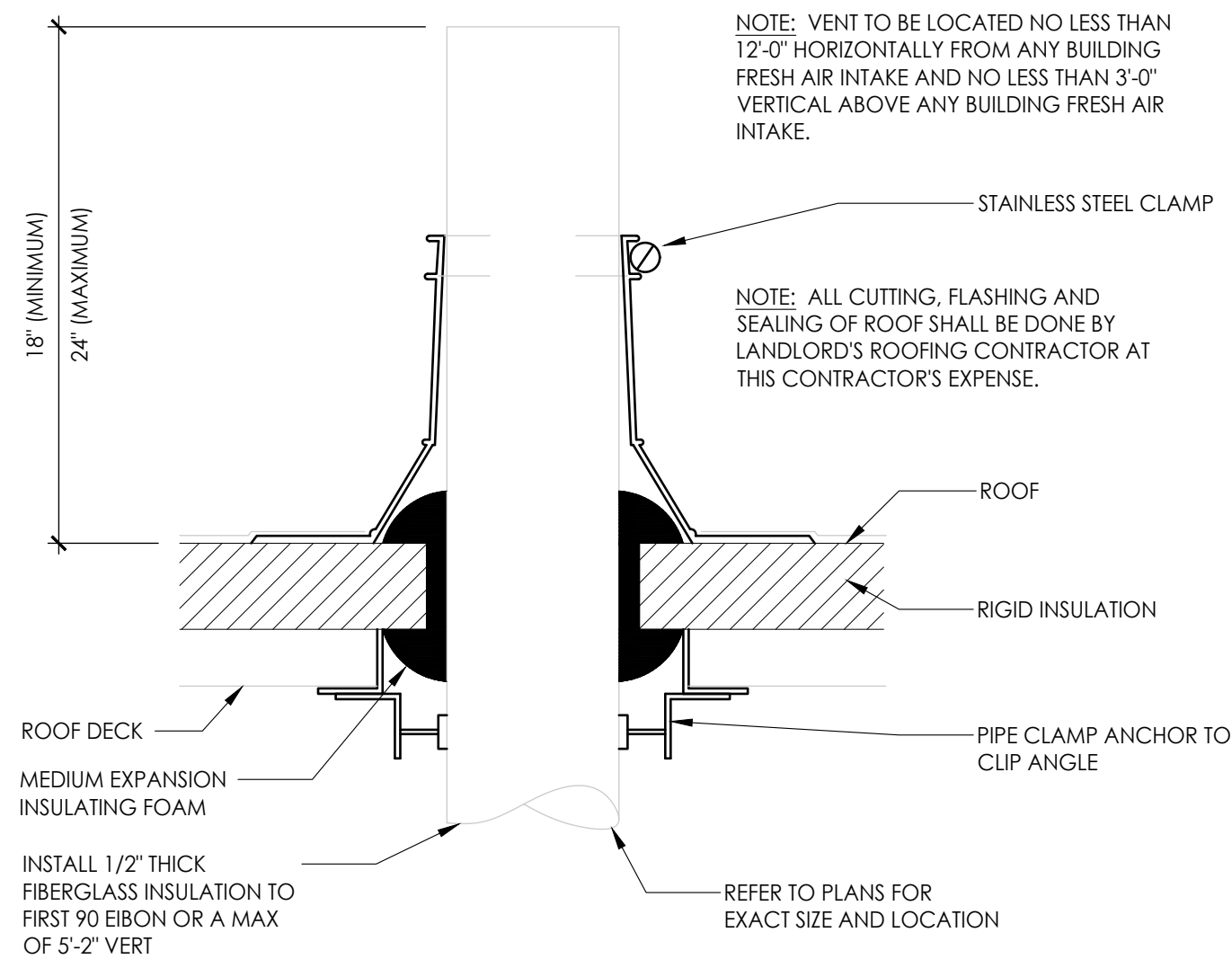
SHEET:

P4.1

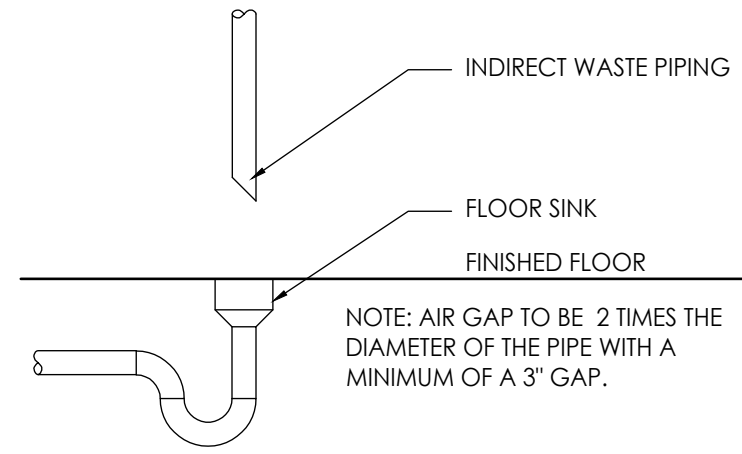




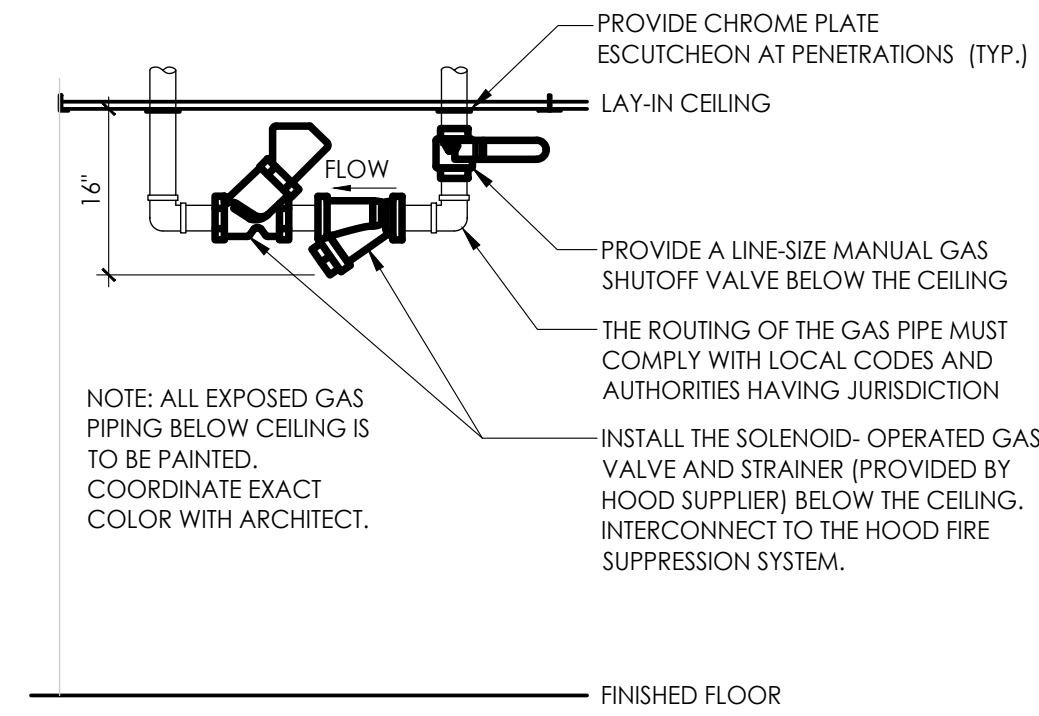
1 WATER HEATER ROOF VENT PENETRATION DETAIL  
N.T.S.



2 VENT THROUGH ROOF DETAIL  
N.T.S.



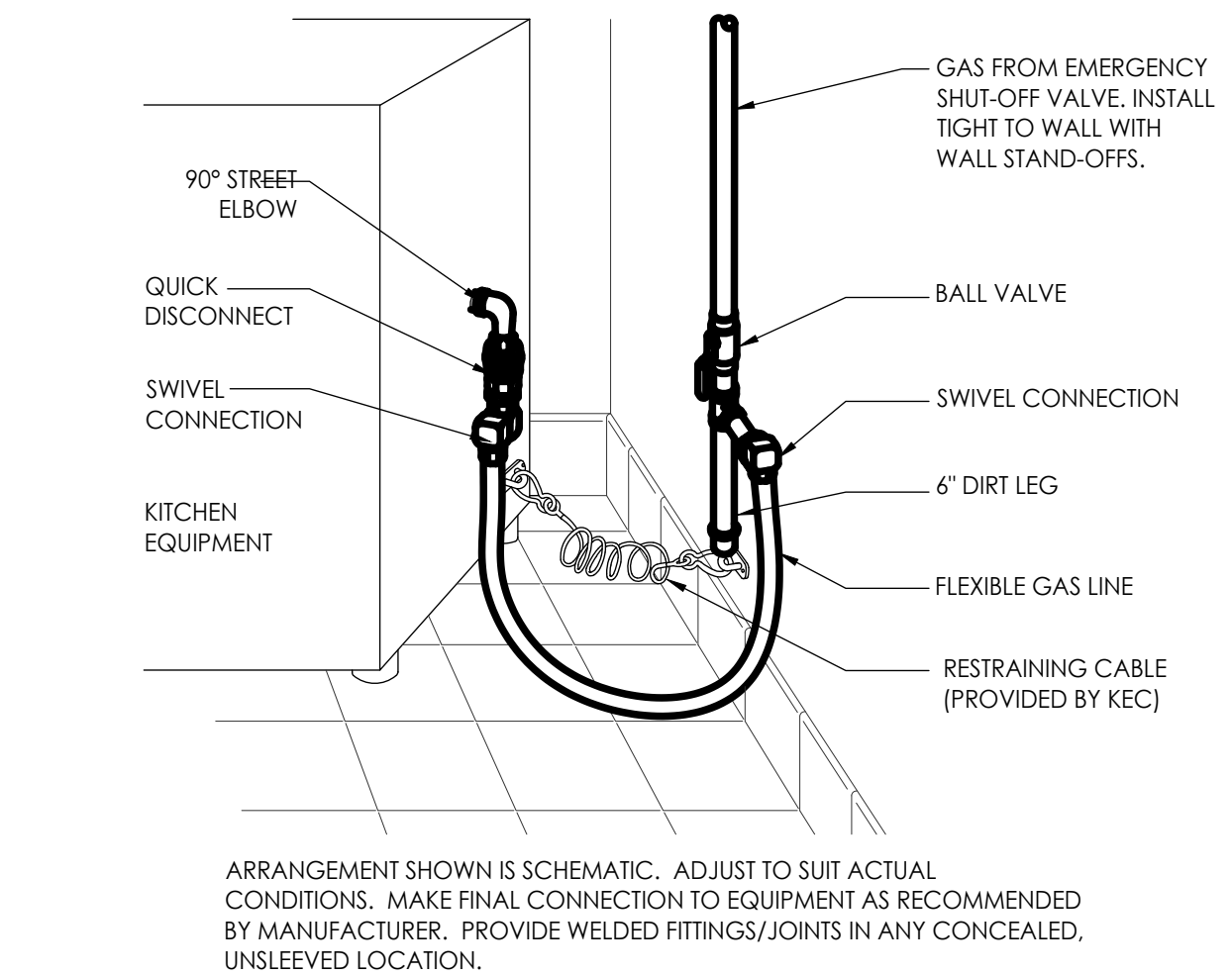
3 FLOOR SINK DETAIL  
N.T.S.



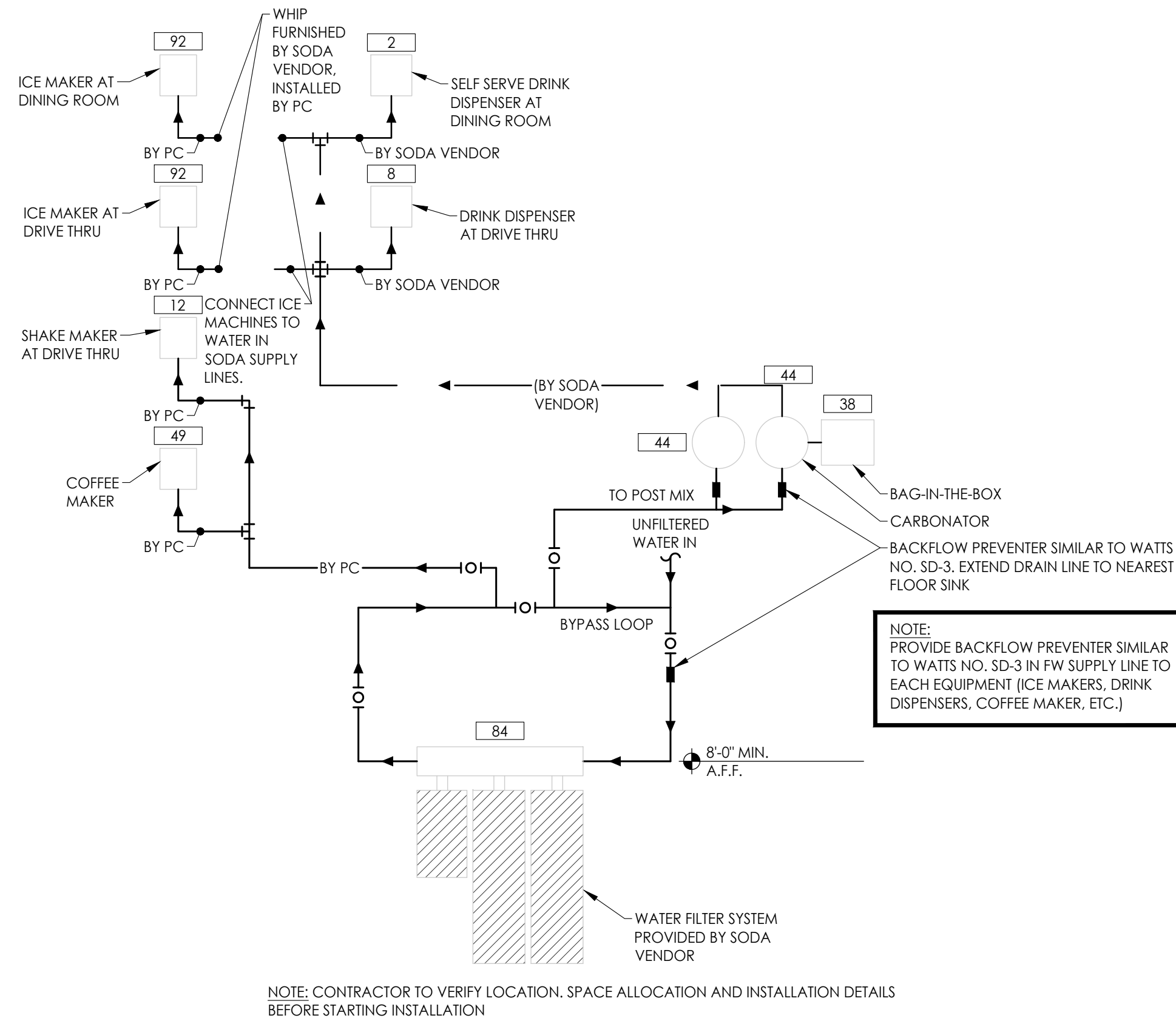
SEQUENCE OF OPERATIONS:

- NORMAL MODE:
- WHEN HOOD FAN IS ENERGIZED, SOLENOID VALVE SHALL OPEN.
  - ON A LOSS OF POWER OR IF THE FAN IS DE-ENERGIZED, THE VALVE SHALL CLOSE.
- EMERGENCY MODE:
- UPON ACTUATION OF THE FIRE SUPPRESSION SYSTEM OR A SIGNAL FROM THE FIRE ALARM, THE SOLENOID VALVE SHALL CLOSE.

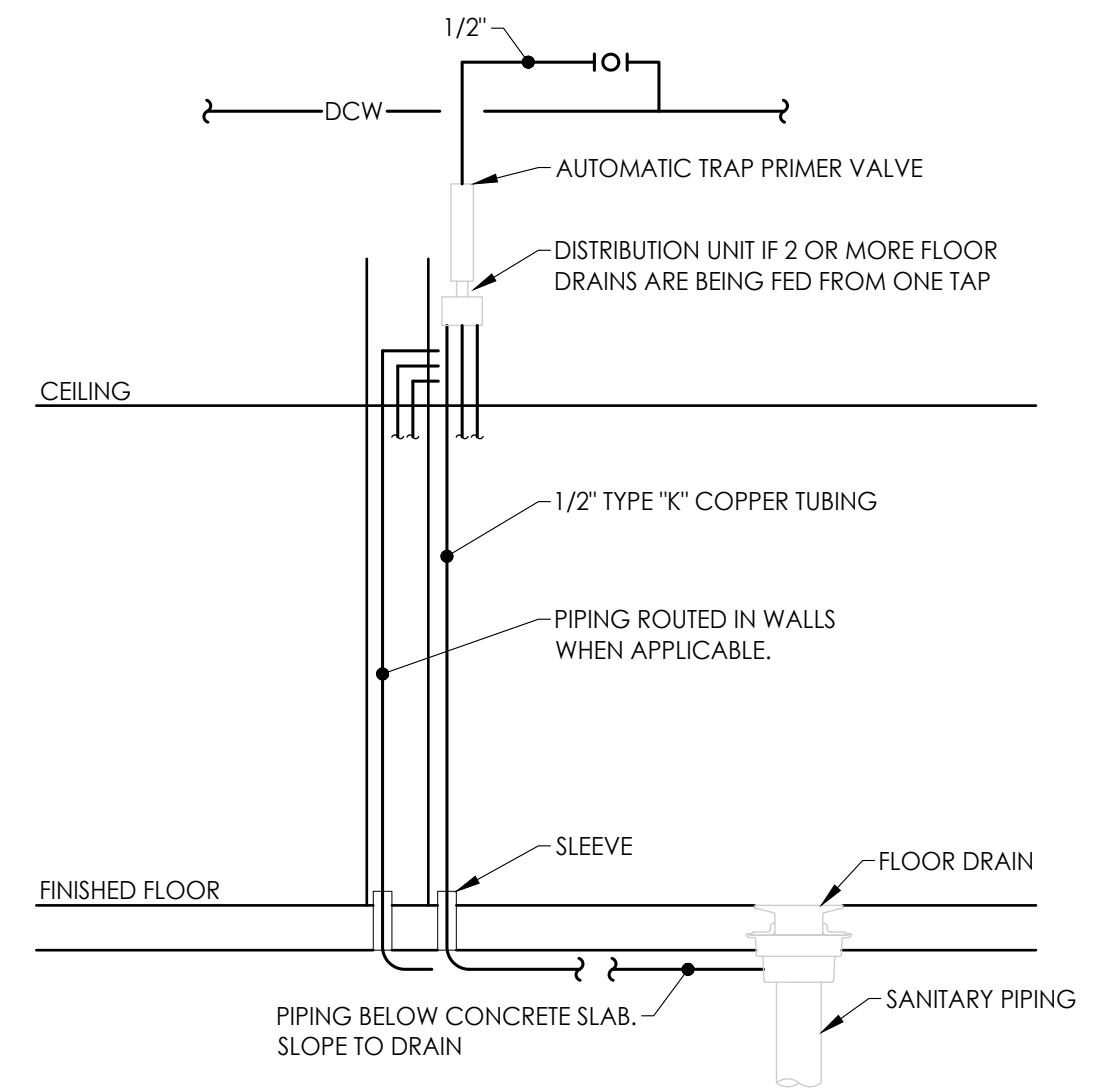
4 KITCHEN EMERGENCY GAS SHUTOFF DETAIL  
N.T.S.



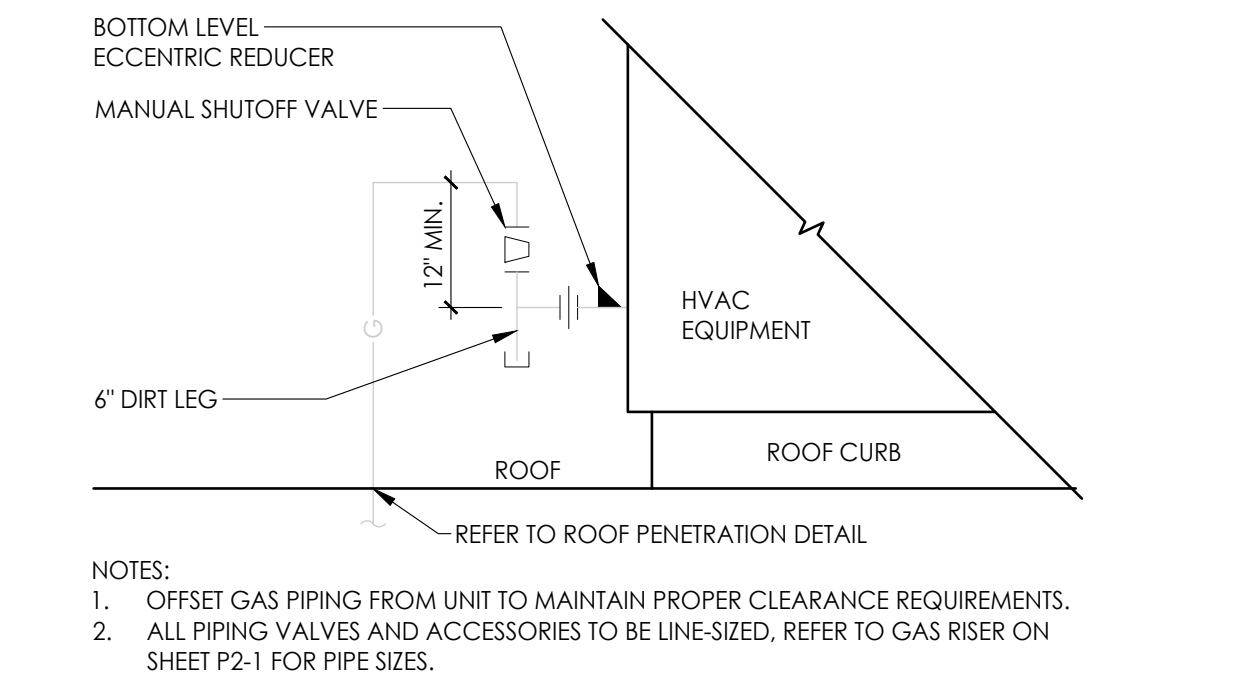
5 KITCHEN GAS CONNECTION DETAIL  
N.T.S.



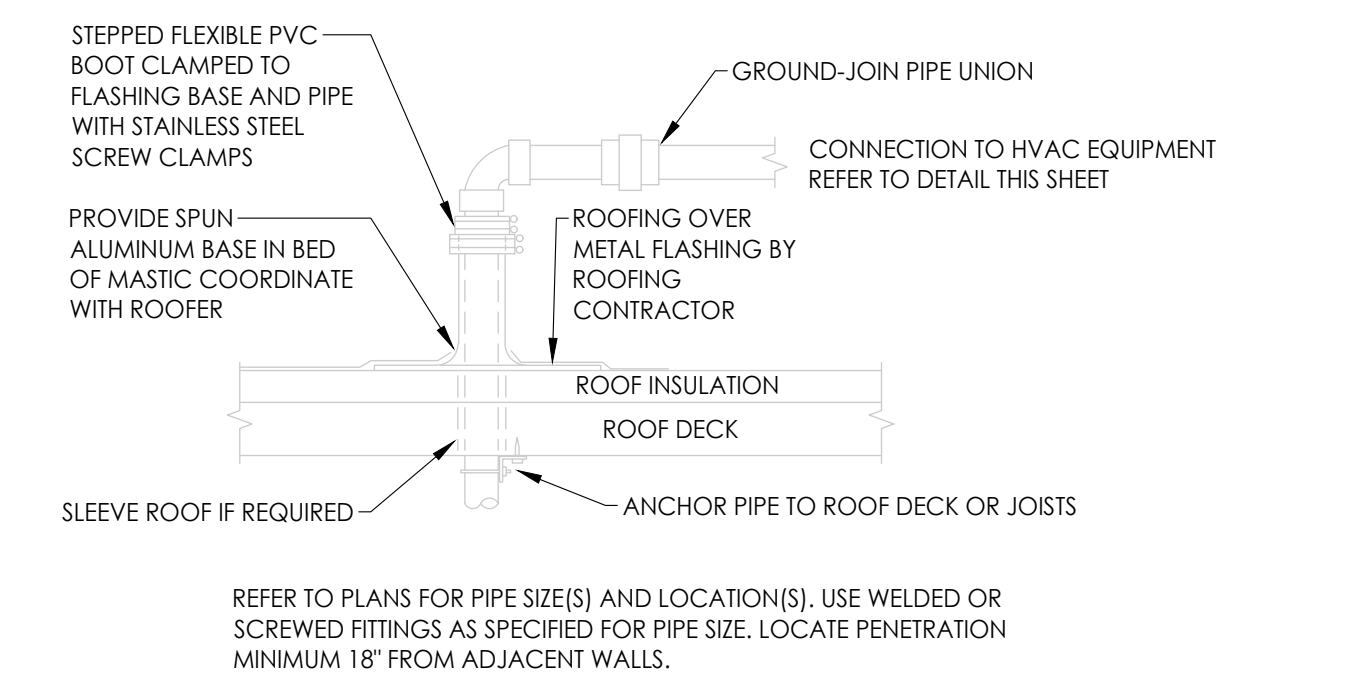
6 WATER FILTER SYSTEM DETAIL  
N.T.S.



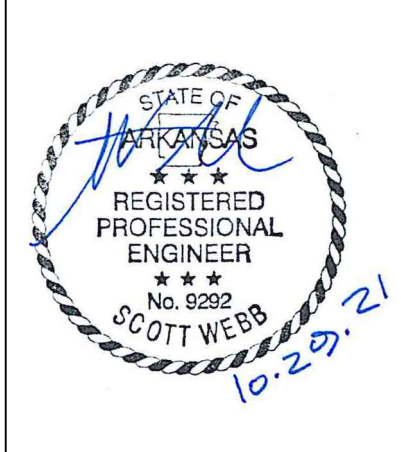
7 TRAP PRIMER DETAIL  
N.T.S.



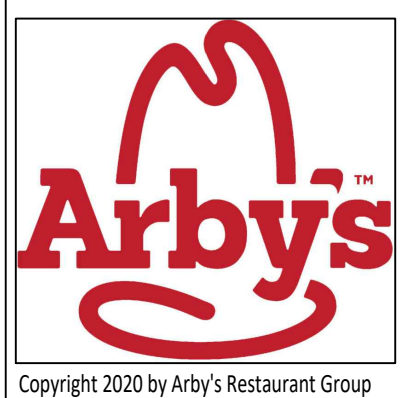
8 RTU GAS CONNECTION DETAIL  
N.T.S.



9 ROOF PENETRATION  
N.T.S.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

DETAILS - PLUMBING

SHEET:  
  
P4.2



WATER HEATER SCHEDULE				
TAG	DESCRIPTION	MBH INPUT	RECOVERY	MANUFACTURER/ MODEL NO.
DWH-1	GAS-FIRED INSTANTANEOUS DOMESTIC WATER HEATER	15,200 - 199,000	3.8 GPM @ 100° RISE	RINNAI CU199I
DWH-2	GAS-FIRED INSTANTANEOUS DOMESTIC WATER HEATER	15,200 - 199,000	3.8 GPM @ 100° RISE	RINNAI CU199I

COMMENTS:  
1. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION  
2. U.L. LISTED  
3. PROVIDE REMOTE CONTROLLERS  
4. SET HOT WATER SUPPLY TEMPERATURE TO 140 DEGREES F

GAS CONNECTED LOAD SCHEDULE				
TAG	EQUIPMENT	INLET CONNECTION	MIN. SUPPLY INLET PRESSURE (WC)	INPUT LOAD (CFH)
43	3–BANK DEEP FRYER	1"	3.5"	225
DWH–1	TANKLESS WATER HEATER	3/4"	5"	199
DWH–2	TANKLESS WATER HEATER	3/4"	5"	199
RTU–1	HVAC ROOFTOP UNIT	3/4"	5"	65
RTU–2	HVAC ROOFTOP UNIT	3/4"	5"	130
RTU–3	HVAC ROOFTOP UNIT	3/4"	5"	65
			TOTAL	883

PLUMBING EQUIPMENT SCHEDULE				
TAG	ITEM	MANUFACTURER	MODEL NO.	COMMENTS
TP-1	TRAP PRIMER	PRECISION PLUMBING	PR-500	ALL BRASS BODY TRAP PRIMER VALVE, PRESSURE DROP OF 5 - 10 PSIG OPENS VALVE, OPERATING RANGE: 35 - 75 PSIG, 1/2" MALE NPT INLET CONNECTION, 1/2" FEMALE NPT OUTLET CONNECTION.
ET-1	EXPANSION TANK	ZURN	XT-18	THERMAL EXPANSION TANK, MOUNT ON WALL NEAR WATER HEATER. SEE PLANS FOR EXACT LOCATION. REFER TO DETAIL ON SHEET P4.20.
RP-1	DOMESTIC HOT WATER RECIRCULATION PUMP	GRUNDFOS	ALPHA2 15-55SF	ALL BRONZE CONSTRUCTION, LISTED FOR POTABLE WATER SERVICE AND 120 PSIG WORKING PRESSURE, 6.3 GPM AT 6 FEET OF HEAD, 115 VOLTS, 45 WATTS, SINGLE PHASE, 3250 RPM. MOUNT PUMP NEAR WATER HEATER IN ACCESSIBLE LOCATION. PUMP TO BE ON A TIMECLOCK. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
HB-1	EXTERIOR WALL HYDRANT	ZURN	Z1321-C-BFP	EXTERIOR FREEZEPROOF WALL HYDRANT RECESSED IN LOCKABLE WALL BOX. AUTOMATIC DRAINING WITH INTEGRAL ASSE 1052 APPROVED DOUBLE CHECK BACKFLOW PREVENTER, LOOSE KEY, HARDENED STAINLESS STEEL OPERATING STEM AND ONE-PIECE VALVE PLUNGER TO CONTROL BOTH FLOW AND DRAIN FUNCTIONS, BRONZE SEAT AND SEAT WASHER, 3/4" INLET AND 3/4" HOSE OUTLET CONNECTION, CHROME FINISH, ANODIZED ALUMINUM WALL BOX AND DOOR WITH OPERATION KEY LOCK AND "WATER" STAMPED ON COVER. INSTALL UNIT AT 24" ABOVE FINISHED GRADE AND SECURE TO STRUCTURE.

DRAIN AND CLEANOUT SCHEDULE				
TAG	ITEM	MANUFACTURER	MODEL NO.	COMMENTS
FD-1	FLOOR DRAIN	ZURN	FR06NIC3N	LIGHT-DUTY PLASTIC FLOOR DRAIN WITH 6" DIA. NICKEL BRONZE STRAINER, MEMBRANE FLASHING CLAMP AND 1/2" TRAP PRIMER CONNECTION. PROVIDE OUTLET WITH P-TRAP. CLEAN AND POLISH ROUND STRAINER TOP AFTER INSTALLATION.
FS-1	FLOOR SINK INDIRECT WASTE RECEPTOR	ZURN	FD2370-PVC-DS-H-Y	PVC PLASTIC FLOOR RECEPTOR WITH 12" X 12" SQUARE TOP, 6" DEEP SUMP BODY, PVC BODY, PVC LOOSE SET 1/2 GRATE, STAINLESS STEEL DEBRIS BASKET AND ANCHOR FLANGE. PROVIDE OUTLET WITH P-TRAP. PROVIDE WITH FLASHING COLLAR WHERE REQUIRED.
CO-1	FINISHED AREA FLOOR CLEANOUT	ZURN	CR06NIC3N	LIGHT-DUTY CAST IRON CLEANOUT WITH GAS TIGHT POLYPROYLENE PLUG, AND 6" DIA. ADJUSTABLE SCORiated NICKEL BRONZE TOP.
CO-2	FINISHED WALL CLEANOUT	ZURN	Z1441	PROVIDE CLEANOUT TEE. PROVIDE COUNTERSUNK ABS TAPERED THREAD PLUG AND ROUND SMOOTH STAINLESS STEEL WALL ACCESS COVER AND SECURING SCREW.
CO-3	EXTERIOR CLEANOUT	ZURN	ZN1400-HD	EXTRA HEAVY-DUTY ADJUSTABLE CLEANOUT, CAST IRON BODY WITH ANCHOR FLANGE AND ABS TAPERED THREAD PLUG, ROUND SCORiated EXTRA HEAVY-DUTY NICKEL BRONZE VENEER CAST IRON COVER. SET TOP OF CASTING FLUSH WITH ADJACENT FINISHED PAVEMENT.
RD-1	PRIMARY ROOF DRAIN	SIOUX CHIEF	868-1504	ROOF DRAIN WITH CAST IRON BODY, LARGE SUMP, ROOF/DECK RECEIVER PAN, CLAMPING COLLAR, DECK CLAMP, REMOVABLE 15" DIAMETER ROUND ALUMINUM DOME STRAINER, FLASHING/MEMBRANE CLAMP, GRAVEL STOP & BOTTOM NO-HUB OUTLET CONNECTION. FURNISH WITH BODY EXTENSION (IF REQUIRED) FOR BUILT-UP ROOF CONSTRUCTION. PIPE SIZE AS INDICATED ON DRAWINGS.

PLUMBING FIXTURE SCHEDULE												
FIXTURE								ACCESSORIES				
TAG	ITEM	MANUFACTURER	MODEL	DCW	DHW	DRAIN	VENT	ITEM	MANUFACTURER	MODEL	DESCRIPTION	
WC-1	WATER CLOSET	ZURN	Z5665-BWL1	1"	-	4"	2"	SEAT	ZURN	Z5955SS-EL	ADA COMPLIANT FLOOR MOUNTED WHITE VITREOUS CHINA TOILET, ELONGATED BOWL, 16-1/2" RIM HEIGHT, EXPOSED 1-1/2" TOP SPUD, 1.28 GPF, PROVIDE FLOOR BOLTS, WAX RING & BOLT COVERS. PROVIDE HEAVY-DUTY PLASTIC ELONGATED OPEN FRONT SEAT LESS COVER WITH STAINLESS STEEL SELF-SUSTAINING CHECK HINGES. PROVIDE CHROME PLATED BRASS 1.28 GPF HARD WIRED SENSOR ACTIVATED FLUSHMETER WITH MANUAL OVERRIDE FLUSH BUTTON.	
								FLUSHOMETER	ZURN	ZER6000AV-HET		
								-	-	-		
UR-1 (FOR MULTIPLE OCC RESTROOM)	URINAL	ZURN	Z5730	3/4"	-	2"	1-1/2"	FLUSHOMETER	ZURN	ZEM56003IS-WS1	ADA COMPLIANT WALL MOUNTED WHITE VITREOUS CHINA URINAL, SIPHON JET, 17" RIM HEIGHT, 1.0 GPF, EXPOSED 3/4" TOP INLET SPUD. PROVIDE CHROME PLATED BRASS 1.0 GPF HARD WIRED SENSOR ACTIVATED FLUSHMETER WITH MANUAL OVERRIDE FLUSH BUTTON. PROVIDE RIGID IN-WALL PLATE TYPE SUPPORT SYSYTEM. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS.	
								CARRIER	ZURN	Z1221-F/ZC-Z5730		
								-	-	-		
LAV-1	LAVATORY	ZURN	Z5344	3/8"	3/8"	1-1/4"	1-1/2"	FAUCET	ZURN	Z6915-CWB-F	ADA COMPLIANT WALL MOUNTED WHITE VITREOUS CHINA LAVATORY, 4" CENTER FAUCET HOLES, OVERFLOW, PROVIDE CHROME PLATED BRASS 4" CENTERSET HARD WIRED SENSOR ACTIVATED FAUCET, 0.5 GPM VANDAL RESISTANT SPRAY HEAD, PROVIDE CHROME PLATED GRID STRAINER DRAIN WITH CHROME PLATED BRASS TAILPIECE. PROVIDE CHROME PLATED BRASS P-TRAP WITH CLEANOUT, WALL BEND AND WALL FLANGE. PROVIDE CHROME PLATED BRASS LOOSE KEY ANGLE BALL STOP WITH CHROME PLATED FLEXIBLE COPPER SUPPLY RISERS, PROVIDE CHROME FINISH ASSE 1070 LISTED UNDER-SINK THERMOSTATIC MIXING VALVE SET AT 105°F. PROVIDE MOLDED VINYL SAFETY COVERS FOR ALL EXPOSED SUPPLY AND DRAIN PIPING. PROVIDE RIGID IN-WALL CONCEALED ARM LAVATORY SUPPORT SYSTEM.	
								DRAIN	ZURN	Z8743-6-PC		
								TRAP	ZURN	Z8702-9BWCBX-WC-PC		
								SUPPLY	ZURN	Z8802-XL-LR-LK-Q-PC		
								ASSE 1070 TMV	ZURN WILKINS	ZW1070XL		
								PIPING COVER	ZURN	Z8946-1-NT		
								CARRIER	ZURN	Z1231-F/Z-5344		
MS-1	MOP SINK	ZURN	Z1996-24	1/2"	1/2"	3"	1-1/2"	FAUCET	ZURN	Z843M1-XL-CS	FLOOR MOUNTED ONE-PIECE MOLDED FIBERGLASS MOP SERVICE BASIN WITH INTEGRAL MOLDED-IN DRAIN AND REMOVABLE STAINLESS STEEL STRAINER. PROVIDE CHROME PLATED CAST BRASS SERVICE SINK FAUCET WITH COLOR-CODED METAL LEVER HANDLES, QUARTER-TURN CERAMIC DISC CARTRIDGES, INTEGRAL SERVICE STOPS, INTEGRAL CHECK STOPS, 6" CAST BRASS SPOUT WITH VACUUM BREAKER, 3/4" HOSE THREAD OUTLET, PAIL HOOK AND ADJUSTABLE WALL BRACE. PROVIDE HOSE AND STAINLESS STEEL HOSE HOLDER, STAINLESS STEEL MOP HANGER, STAINLESS STEEL BUMPER GUARDS, STAINLESS STEEL WALL GUARDS. INSTALL FAUCET AT 36" ABOVE FINISH FLOOR.	
								HOSE & BRACKET	ZURN	J1996-HH		
								MOP HANGER	ZURN	J1996-MH		
								BUMPER GUARDS	ZURN	J1996-BS24		
								WALL GUARDS	ZURN	JP1996-WG24		

KITCHEN EQUIPMENT PLUMBING SCHEDULE										
TAG	QTY	DESCRIPTION	PROVIDED BY	INSTALLED BY	RUN–OUT SIZES (MIN.)					REMARKS
					DCW	FW	DHW	DRAIN	GAS	
2	1	12–HEAD DRINK DISPENSER	OWNER	OWNER	–	BY SODA VENDOR	–	3/4" & 1/2"	–	3/4" DRAIN FROM BIN & 1/2" DRAIN FROM TOWER.
5	1	WALL MOUNTED HAND SINK	OWNER	GC	1/2"	–	1/2"	1–1/2"	–	G.C. TO RUN PLUMBING AND CONNECT, PROVIDE WITH ASSE 1070 LISTED MIXING VALVE SIMILAR TO THE WATTS LEAD FREE LFMMV–UT–M1. SET THE MIXED OUTLET WATER TEMPERATURE AT 110F
8	1	8–HEAD DRIVE–THRU DRINK DISPENSER W/ OVERHEAD ICE MAKER ABOVE (SEE #92)	OWNER	OWNER	–	BY SODA VENDOR	–	3/4" & 1/2"	–	3/4" DRAIN FROM ICE MAKER & 1/2" DRAIN FROM TOWER
12	1	SHAKE MACHINE	OWNER	GC	–	1/2"	–	–	–	REQUIRES A SERVER 3 PUMP RAIL FOR SYRUPS. PROVIDE 1/2" X 3/8" LEAD–FREE CHROME PLATED BRASS 1/4–TURN BALL STOP. WATTS #SD–3 ASSE 1022 LISTED DUAL CHECK BACKFLOW PREVENTER W/ INLET STRAINER AND FOOD GRADE PLASTIC TUBING ON SUPPLY CONNECTION
22A	1	3 COMPARTMENT SINK	OWNER	GC	1/2"	–	1/2"	1–1/2" F.S.	–	16" AFF (DCW AND DHW), 8" AFF (DRAIN), G.C. TO RUN PLUMBING AND CONNECT. INCLUDES (1) B231 FAUCET WITH 12" SOPUT, (1) B133B FAUCET W/ BACKSPASH MOUNT, (1) B–157 PRE–RINSE FAUCET AND (3) LEVER WASTES.
30	1	PREP TABLE W/ BACKSPASH AND HAND SINK	OWNER	GC	1/2"	–	1/2"	1–1/2"	–	16" AFF (DCW AND DHW), 8" AFF (DRAIN", G.C. TO RUN PLUMBING AND CONNECT. INCLUDES (1) B231 FAUCET WITH 12" SPOUT.
43	1	2 BANK, 6 BASKET FRYER W/ NATURAL GAS	OWNER	GC	–	–	–	–	1"	TABLEDIT® 75,000 BTU/H INPUT PER FRYPOT, FACTORY MANIFOLD TO (1) CONNECTION, TOTAL 225,000 BTU/H. 1" CONNECTION AT 11.5" AFF, G.C. TO HOOK UP QUICK DISCONNECT (SUPPLIED BY KES). INCLUDE DORMONT GAS HOSE KIT #B100–KIT–48. ALSO INCLUDE DIVERTER KIT TO ALLOW HOOK–UP TO DARLING 1500 H UNIT.
49	1	COFFEE MAKER	OWNER	GC	–	1/4"	–	–	–	PROVIDE A 1/2" X 1/4" LEAD–FREE CHROME PLATED BRASS 1/4–TURN BALL STOP. WATTS #SD–3 ASSE 1022 LISTED DUAL CHECK BACKFLOW PREVENTER W/ INLET STRAINER, AND FOOD GRADE PLASTIC TUBING ON SUPPLY CONNECTION.
84	1	WATER BOOST MODULAR FILTER SYSTEM	OWNER	GC	3/8"	3/8"	–	–	–	PROVIDE A 1/2" X 3/8" LEAD–FREE CHROME PLATED BRASS 1/4–TURN BALL STOP. WATTS #SD–3 ASSE 1022 LISTED DUAL CHECK BACKFLOW PREVENTER W/ INLET STRAINER, PRESSURE GAUGE AND UNION AT INLET CONNECTION. PROVIDE UNION, SWING CHECK VALVE, PRESSURE GAUGE, BALL SHUTOFF VALVE, AND FOOD GRADE PLASTIC TUBING AT OUTLET CONNECTION.
92	2	ICE MAKER	OWNER	GC	–	1/2"	–	–	–	(1) UNIT MOUNTS ON PEPSI UNIT AT DRIVE THRU, (1) UNIT MOUNTS ON ITEM #2 II CORNELIUS ED300 BEVERAGE DISPENSER IN DINING AREA. REMOTE CONDENSER IC VD–0695, LINE SET RC21 CONTROL WIRES FROM CONDENSING UNIT TO COIL, PROVIDE A 1/2" X 3/8" LEAD–FREE CHROME PLATED BRASS 1/4–TURN BALL STOP, WATTS #SD–3 ASSE 1022 LISTED DUAL CHECK BACKFLOW PREVENTER W/ INLET STRAINER AND FOOD GRADE PLASTIC TUBING ON SUPPLY CONNECTION.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURNAT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SCHEDULES - PLUMBING

SHEET:



SPECIFICATIONS - DIVISION 22 - PLUMBING

SECTION 220500 - COMMON WORK RESULTS FOR PLUMBING

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. HANGERS AND SUPPORTS FOR PLUMBING PIPING EQUIPMENT:

- 1. STRUCTURAL PERFORMANCE: HANGERS AND SUPPORTS SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED ACCORDING TO ASCE/SEI 7.
- a. DESIGN SUPPORTS FOR MULTIPLE PIPES CAPABLE OF SUPPORTING COMBINED WEIGHT OF SUPPORTED SYSTEMS, AND SYSTEM CONTENTS.
- b. DESIGN EQUIPMENT SUPPORTS CAPABLE OF SUPPORTING COMBINED OPERATING WEIGHT OF SUPPORTED EQUIPMENT AND CONNECTED SYSTEMS AND COMPONENTS.
- c. DESIGN SEISMIC-RESTRAINT HANGERS AND SUPPORTS FOR PIPING AND EQUIPMENT AND OBTAIN APPROVAL FROM AUTHORITIES HAVING JURISDICTION.

2.2 SLEEVES AND SLEEVE SEALS

- A. GALVANIZED-STEEL-PIPE SLEEVES: ASTM A 53/A 53M, TYPE E, GRADE B, SCHEDULE 40, ZINC COATED, WITH PLAIN ENDS.
- B. PVC-PIPE SLEEVES: ASTM D 1785, SCHEDULE 40.
- C. GALVANIZED-STEEL-SHEET SLEEVES: 0.0239-INCH MINIMUM THICKNESS; ROUND TUBE CLOSED WITH WELDED LONGITUDINAL JOINT.

2.3 GROUT

- A. STANDARD: ASTM C 1107/C 1107M, GRADE B, POST-HARDENING AND VOLUME-ADJUSTING, DRY, HYDRAULIC-CEMENT GROUT.
  - 1. CHARACTERISTICS: NONSHRINK; RECOMMENDED FOR INTERIOR AND EXTERIOR APPLICATIONS.
  - 2. DESIGN MIX: 5000-PSI, 28-DAY COMPRESSIVE STRENGTH.
  - 3. PACKAGING: PREMIXED AND FACTORY PACKAGED.

2.4 ESCUTCHEONS AND FLOOR PLATES

- A. ONE-PIECE, DEEP-PATTERN TYPE: DEEP-DRAWN, BOX-SHAPED BRASS WITH CHROME-PLATED FINISH AND SPRING-CLIP FASTENERS.
- B. ONE-PIECE, STAMPED-STEEL TYPE: WITH CHROME-PLATED FINISH AND SPRING-CLIP FASTENERS.
- C. ONE-PIECE FLOOR PLATES: CAST-IRON FLANGE WITH HOLES FOR FASTENERS.

2.5 PRESSURE GAGES AND TEST PLUGS

- A. DIRECT-MOUNTED, METAL-CASE, DIAL-TYPE PRESSURE GAGES:
  - 1. STANDARD: ASME B40.100.
  - 2. CASE: SEALED OPEN-FRONT, PRESSURE RELIEF TYPE(S); CAST ALUMINUM OR DRAWN STEEL 4-1/2-INCH NOMINAL DIAMETER.
  - 3. MOVEMENT: MECHANICAL, WITH LINK TO PRESSURE ELEMENT AND CONNECTION TO POINTER.
  - 4. DIAL: NONREFLECTIVE ALUMINUM WITH PERMANENTLY ETCHED SCALE MARKINGS GRADUATED IN PSI.
  - 5. POINTER: DARK-COLORED METAL.
  - 6. WINDOW: PLASTIC.
  - 7. RING: METAL.
  - 8. ACCURACY: GRADE A, PLUS OR MINUS 1 PERCENT OF MIDDLE HALF OF SCALE RANGE.
- B. TEST PLUG: CORROSION-RESISTANT BRASS OR STAINLESS-STEEL BODY WITH TWO SELF-SEALING RUBBER CORE INSERTS AND GASKETED AND THREADED CAP, WITH EXTENDED STEM FOR UNITS TO BE INSTALLED IN INSULATED PIPING. MINIMUM PRESSURE AND TEMPERATURE RATING 500 PSIG AT 200 DEG F.

2.6 HANGERS AND SUPPORTS FOR PLUMBING PIPING EQUIPMENT

- A. CARBON-STEEL PIPE HANGERS AND SUPPORTS:
  - 1. DESCRIPTION: MSS SP-58, TYPES 1 THROUGH 58, FACTORY-FABRICATED COMPONENTS.
  - 2. GALVANIZED METALLIC COATINGS: PREGALVANIZED OR HOT DIPPED.
  - 3. NONMETALLIC COATINGS: PLASTIC COATING, JACKET, OR LINER.
  - 4. PADDED HANGERS: HANGER WITH FIBERGLASS OR OTHER PIPE INSULATION PAD OR CUSHION TO SUPPORT BEARING SURFACE OF PIPING.
  - 5. HANGER RODS: CONTINUOUS-THREAD ROD, NUTS, AND WASHER MADE OF CARBON STEEL.
- B. COPPER PIPE HANGERS:
  - 1. DESCRIPTION: MSS SP-58, TYPES 1 THROUGH 58, COPPER-COATED-STEEL, FACTORY-FABRICATED COMPONENTS.
  - 2. HANGER RODS: CONTINUOUS-THREAD ROD, NUTS, AND WASHER MADE OF COPPER-COATED STEEL.
- C. FASTENER SYSTEMS:
  - 1. MECHANICAL-EXPANSION ANCHORS: INSERT-WEDGE-TYPE, ZINC-COATED STEEL ANCHORS, FOR USE IN HARDENED PORTLAND CEMENT CONCRETE; WITH PULL-OUT, TENSION, AND SHEAR CAPACITIES APPROPRIATE FOR SUPPORT LOADS AND BUILDING MATERIALS WHERE USED.

D. MISCELLANEOUS MATERIALS:

- 1. STRUCTURAL STEEL: ASTM A 36/A 36M, CARBON-STEEL PLATES, SHAPES, AND BARS; BLACK AND GALVANIZED.
- 2. GROUT: ASTM C 1107, FACTORY-MIXED AND -PACKAGED, DRY, HYDRAULIC-CEMENT, NONSHRINK AND NONMETALLIC GROUT; SUITABLE FOR INTERIOR AND EXTERIOR APPLICATIONS.
  - a. PROPERTIES: NONSTAINING, NONCORROSIVE, AND NONGASEOUS.
  - b. DESIGN MIX: 5000-PSI, 28-DAY COMPRESSIVE STRENGTH.

PART 3 - EXECUTION

3.1 GENERAL PIPING INSTALLATIONS

- A. INSTALL PIPING FREE OF SAGS AND BENDS.
- B. INSTALL FITTINGS FOR CHANGES IN DIRECTION AND BRANCH CONNECTIONS.

C. SLEEVES:

- 1. INSTALL SLEEVES FOR PIPING PASSING THROUGH PENETRATIONS IN FLOORS, PARTITIONS, ROOFS, AND WALLS.
- 2. INSTALL SLEEVES IN CONCRETE FLOORS, CONCRETE ROOF SLABS, AND CONCRETE WALLS AS NEW SLABS AND WALLS ARE CONSTRUCTED.
  - a. USE GROUT AND SEAL THE SPACE OUTSIDE OF SLEEVES IN SLABS AND WALLS WITHOUT SLEEVE-SEAL SYSTEM.
- 3. INSTALL SLEEVES FOR PIPES PASSING THROUGH INTERIOR PARTITIONS.
- 4. FIRE-BARRIER PENETRATIONS: MAINTAIN INDICATED FIRE RATING OF WALLS, PARTITIONS, CEILINGS, AND FLOORS AT PIPE PENETRATIONS. SEAL PIPE PENETRATIONS WITH FIRESTOP MATERIALS. COMPLY WITH REQUIREMENTS FOR FIRESTOPPING SPECIFIED IN SECTION 078446 "PENETRATION FIRESTOPPING."

D. ESCUTCHEONS AND FLOOR PLATES:

- 4. INSTALL ESCUTCHEONS FOR PIPING PENETRATIONS OF WALLS, CEILINGS, AND FINISHED FLOORS.
- 5. INSTALL ESCUTCHEONS WITH ID TO CLOSELY FIT AROUND PIPE, TUBE, AND INSULATION OF PIPING AND WITH OD THAT COMPLETELY COVERS OPENING.
- 6. INSTALL FLOOR PLATES FOR PIPING PENETRATIONS OF EQUIPMENT-ROOM FLOORS.
- 7. INSTALL FLOOR PLATES WITH ID TO CLOSELY FIT AROUND PIPE, TUBE, AND INSULATION OF PIPING AND WITH OD THAT COMPLETELY COVERS OPENING.

F. METERS AND GAGES:

- 1. INSTALL DIRECT-MOUNTED PRESSURE GAGES IN PIPING TEES WITH PRESSURE GAGE LOCATED ON PIPE AT THE MOST READABLE POSITION.
- 2. INSTALL METERS AND GAGES ADJACENT TO MACHINES AND EQUIPMENT TO ALLOW SERVICE AND

MAINTENANCE OF METERS, GAGES, MACHINES, AND EQUIPMENT.

- 3. ADJUST FACES OF METERS AND GAGES TO PROPER ANGLE FOR BEST VISIBILITY.
- G. INSTALL UNIONS AT FINAL CONNECTION TO EACH PIECE OF EQUIPMENT.
- H. INSTALL DIELECTRIC UNIONS AND FLANGES TO CONNECT PIPING MATERIALS OF DISSIMILAR METALS IN GAS PIPING.
- I. INSTALL DIELECTRIC COUPLING AND NIPPLE FITTINGS TO CONNECT PIPING MATERIALS OF DISSIMILAR METALS IN WATER PIPING.
- 3.2 HANGERS AND SUPPORTS
  - A. COMPLY WITH MSS SP-69 AND MSS SP-89. INSTALL BUILDING ATTACHMENTS WITHIN CONCRETE OR TO STRUCTURAL STEEL.
  - B. INSTALL HANGERS AND SUPPORTS TO ALLOW CONTROLLED THERMAL AND SEISMIC MOVEMENT OF PIPING SYSTEMS.
  - C. INSTALL POWDER-ACTUATED FASTENERS AND MECHANICAL-EXPANSION ANCHORS IN CONCRETE AFTER CONCRETE IS CURED. DO NOT USE IN LIGHTWEIGHT CONCRETE OR IN SLABS LESS THAN 4 INCHES THICK.
  - D. LOAD DISTRIBUTION: INSTALL HANGERS AND SUPPORTS SO PIPING LIVE AND DEAD LOADING AND STRESSES FROM MOVEMENT WILL NOT BE TRANSMITTED TO CONNECTED EQUIPMENT.
  - E. HORIZONTAL-PIPING HANGERS AND SUPPORTS: UNLESS OTHERWISE INDICATED AND EXCEPT AS SPECIFIED IN PIPING SYSTEM SPECIFICATION SECTIONS, INSTALL THE FOLLOWING TYPES:
    - 1. ADJUSTABLE STEEL CLEVIS HANGERS (MSS TYPE 1): FOR SUSPENSION OF NONINSULATED OR INSULATED STATIONARY PIPES, NPS 1/2 TO NPS 30.
    - 2. PIPE HANGERS (MSS TYPE 5): FOR SUSPENSION OF PIPES, NPS 1/2 TO NPS 4, TO ALLOW OFF-CENTER CLOSURE FOR HANGER INSTALLATION BEFORE PIPE ERECTION.
    - 3. ADJUSTABLE STEEL BAND HANGERS (MSS TYPE 7): FOR SUSPENSION OF NONINSULATED STATIONARY PIPES, NPS 1/2 TO NPS 8.
    - 4. ADJUSTABLE BAND HANGERS (MSS TYPE 9): FOR SUSPENSION OF NONINSULATED STATIONARY PIPES, NPS 1/2 TO NPS 8.
    - 5. ADJUSTABLE SWIVEL-RING BAND HANGERS (MSS TYPE 10): FOR SUSPENSION OF NONINSULATED STATIONARY PIPES, NPS 1/2 TO NPS 2.
  - F. VERTICAL-PIPING CLAMPS: UNLESS OTHERWISE INDICATED AND EXCEPT AS SPECIFIED IN PIPING SYSTEM SPECIFICATION SECTIONS, INSTALL THE FOLLOWING TYPES:
    - 1. EXTENSION PIPE OR RISER CLAMPS (MSS TYPE 8): FOR SUPPORT OF PIPE RISERS, NPS 3/4 TO NPS 20.
    - 2. CARBON- OR ALLOY-STEEL RISER CLAMPS (MSS TYPE 42): FOR SUPPORT OF PIPE RISERS, NPS 3/4 TO NPS 20, IF LONGER ENDS ARE REQUIRED FOR RISER CLAMPS.

3.3 GENERAL EQUIPMENT INSTALLATIONS

- A. INSTALL EQUIPMENT TO ALLOW MAXIMUM POSSIBLE HEADROOM UNLESS SPECIFIC MOUNTING HEIGHTS ARE NOT INDICATED.
- B. INSTALL EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS, UNLESS OTHERWISE INDICATED.
- C. INSTALL MECHANICAL EQUIPMENT TO FACILITATE SERVICE, MAINTENANCE, AND REPAIR OR REPLACEMENT OF COMPONENTS. CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH MINIMUM INTERFERENCE TO OTHER INSTALLATIONS. EXTEND GREASE FITTINGS TO ACCESSIBLE LOCATIONS.
- D. INSTALL EQUIPMENT TO ALLOW RIGHT OF WAY FOR PIPING INSTALLED AT REQUIRED SLOPE.

END OF SECTION

SECTION 220523 - GENERAL-DUTY VALVES FOR PLUMBING PIPING

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. SUBMITTALS:

- 1. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

- A. ASME COMPLIANCE: ASME B16.10 AND ASME B16.34 FOR FERROUS VALVE DIMENSIONS AND DESIGN CRITERIA.
- B. NSF COMPLIANCE: NSF 61 FOR VALVE MATERIALS FOR POTABLE-WATER SERVICE.
- 2.2 GENERAL-DUTY VALVES
  - A. VALVE SIZES: SAME AS UPSTREAM PIPING UNLESS OTHERWISE INDICATED.
  - B. VALVES IN INSULATED PIPING: WITH 2-INCH STEM EXTENSIONS.
  - C. END CONNECTIONS: THREADS SHALL COMPLY WITH ANSI B1.20.1. FLANGES SHALL COMPLY WITH ANSI B16.24 FOR BRONZE VALVES. SOLDER-JOINT CONNECTIONS SHALL COMPLY WITH ANSI B16.18.
  - D. ONE-PIECE, COPPER-ALLOY BALL VALVES: LEAD FREE BRONZE BODY WITH CHROME-PLATED BRASS BALL, MITF SEATS, AND 600-PSIG MINIMUM CWP RATING.
  - E. TWO-PIECE, COPPER-ALLOY BALL VALVES: LEAD FREE BRONZE BODY WITH FULL-PORT, CHROME-PLATED BRASS BALL; RPTFE SEATS; AND 600-PSIG MINIMUM CWP RATING AND BLOWOUT-PROOF STEM.
  - F. LEAD FREE BRONZE, SWING CHECK VALVES: CLASS 125, BRONZE BODY WITH BRONZE DISC AND SEAT.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. USE BALL VALVES FOR SHUTOFF DUTY AND FOR THROTTLING DUTY.
- B. LOCATE VALVES FOR EASY ACCESS AND PROVIDE SEPARATE SUPPORT WHERE NECESSARY.
- C. INSTALL VALVES FOR EACH FIXTURE AND ITEM OF EQUIPMENT.
- D. INSTALL VALVES IN HORIZONTAL PIPING WITH STEM AT OR ABOVE CENTER OF PIPE.
- E. INSTALL VALVES IN A POSITION TO ALLOW FULL STEM MOVEMENT.
- F. INSTALL CHECK VALVES FOR PROPER DIRECTION OF FLOW IN HORIZONTAL POSITION WITH HINGE PIN LEVEL.

END OF SECTION

SECTION 220700 - PLUMBING INSULATION

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. INSULATION INSTALLED INDOORS: FLAME-SPREAD INDEX OF 25 OR LESS, AND SMOKE-DEVELOPED INDEX OF 50 OR LESS ACCORDING TO ASTM E 84.

2.2 INSULATION MATERIALS

- A. MINERAL-FIBER, PREFORMED PIPE INSULATION: COMPLY WITH ASTM C 547, TYPE I, GRADE A, WITH FACTORY-APPLIED ASJ.
  - 1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
    - a. JOHNS MANVILLE; MICRO-LOK.
    - b. KNAUF INSULATION; 1000-DEGREE PIPE INSULATION.
    - c. OWENS CORNING; FIBERGLAS PIPE INSULATION.
  - 2. TYPE I, 850 DEG F MATERIALS: MINERAL OR GLASS FIBERS BONDED WITH A THERMOSETTING RESIN. COMPLY WITH ASTM C 547, TYPE I, GRADE A, WITH FACTORY-APPLIED ASJ. FACTORY-APPLIED JACKET REQUIREMENTS ARE SPECIFIED IN "FACTORY-APPLIED JACKETS" ARTICLE.
- B. PROTECTIVE SHIELDING PIPE COVERS:
  - 1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
    - a. MCGUIRE MANUFACTURING.
    - b. PLUMBEREX.

- c. TRUEBRO; A BRAND OF IPS CORPORATION.
- d. ZURN INDUSTRIES, LLC; TUBULAR BRASS PLUMBING PRODUCTS OPERATION.

- 2. DESCRIPTION: MANUFACTURED PLASTIC WRAPS FOR COVERING PLUMBING FIXTURE HOT- AND COLD-WATER SUPPLIES AND TRAP AND DRAIN PIPING. COMPLY WITH AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.

2.3 ADHESIVES

- A. MINERAL-FIBER ADHESIVE: COMPLY WITH MIL-A-3316C, CLASS 2, GRADE A.

- 1. FOR INDOOR APPLICATIONS, ADHESIVE SHALL HAVE A VOC CONTENT OF 80 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

- 2. ADHESIVE SHALL COMPLY WITH THE TESTING AND PRODUCT REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES' "STANDARD PRACTICE FOR THE TESTING OF VOLATILE ORGANIC EMISSIONS FROM VARIOUS SOURCES USING SMALL-SCALE ENVIRONMENTAL CHAMBERS."

2.4 MASTICS

- A. VAPOR-BARRIER MASTIC: WATER BASED; SUITABLE FOR INDOOR USE ON BELOW AMBIENT SERVICES.

- 1. FOR INDOOR APPLICATIONS, USE MASTICS THAT HAVE A VOC CONTENT OF 50 G/L OR LESS.
- 2. WATER-VAPOR PERMEANCE: ASTM E 96/E 96M, PROCEDURE B, 0.013 PERM AT 43-MIL DRY FILM THICKNESS.
- 3. SERVICE TEMPERATURE RANGE: MINUS 20 TO PLUS 180 DEG F.
- 4. SOLIDS CONTENT: ASTM D 1644, 58 PERCENT BY VOLUME AND 70 PERCENT BY WEIGHT.
- 5. COLOR: WHITE.
- B. BREATHER MASTIC: WATER BASED; SUITABLE FOR INDOOR AND OUTDOOR USE ON ABOVE AMBIENT SERVICES.
  - 1. WATER-VAPOR PERMEANCE: ASTM F 1249, 1.8 PERMS AT 0.0625-INCH DRY FILM THICKNESS.
  - 2. SERVICE TEMPERATURE RANGE: MINUS 20 TO PLUS 180 DEG F.
  - 3. SOLIDS CONTENT: 60 PERCENT BY VOLUME AND 66 PERCENT BY WEIGHT.
  - 4. COLOR: WHITE.

2.5 SEALANTS

- A. JOINT SEALANTS:

- 1. MATERIALS SHALL BE COMPATIBLE WITH INSULATION MATERIALS, JACKETS, AND SUBSTRATES.
- 2. PERMANENTLY FLEXIBLE, ELASTOMERIC SEALANT.
- 3. SERVICE TEMPERATURE RANGE: MINUS 100 TO PLUS 300 DEG F.
- 4. COLOR: WHITE OR GRAY.
- 5. FOR INDOOR APPLICATIONS, SEALANTS SHALL HAVE A VOC CONTENT OF 420 G/L OR LESS.
- B. ASJ FLASHING SEALANTS:
  - 1. MATERIALS SHALL BE COMPATIBLE WITH INSULATION MATERIALS, JACKETS, AND SUBSTRATES.
  - 2. FIRE- AND WATER-RESISTANT, FLEXIBLE, ELASTOMERIC SEALANT.
  - 3. SERVICE TEMPERATURE RANGE: MINUS 40 TO PLUS 250 DEG F.
  - 4. COLOR: WHITE.
  - 5. FOR INDOOR APPLICATIONS, SEALANTS SHALL HAVE A VOC CONTENT OF 420 G/L OR LESS.

2.6 FACTORY-APPLIED JACKETS

- A. INSULATION SYSTEM SCHEDULES INDICATE FACTORY-APPLIED JACKETS ON VARIOUS APPLICATIONS. WHEN FACTORY-APPLIED JACKETS ARE INDICATED, COMPLY WITH THE FOLLOWING:

- 1. ASJ: WHITE, KRAFT-PAPER, FIBERGLASS-REINFORCED SCRIM WITH ALUMINUM-FOIL BACKING; COMPLYING WITH ASTM C 1136, TYPE I.

2.7 TAPES

- A. ASJ TAPE: WHITE VAPOR-RETARDER TAPE MATCHING FACTORY-APPLIED JACKET WITH ACRYLIC ADHESIVE, COMPLYING WITH ASTM C 1136.

- 1. WIDTH: 3 INCHES.
- 2. THICKNESS: 11.5 MILS.
- 3. ADHESION: 90 OUNCES FORCE/INCH IN WIDTH.
- 4. ELONGATION: 2 PERCENT.
- 5. TENSILE STRENGTH: 40 LBF/INCH IN WIDTH.
- 6. ASJ TAPE DISKS AND SQUARES: PRECUT DISKS OR SQUARES OF ASJ TAPE.

PART 3 - EXECUTION

3.1 PIPE INSULATION INSTALLATION

- A. COMPLY WITH REQUIREMENTS OF THE MIDWEST INSULATION CONTRACTORS ASSOCIATION'S "NATIONAL COMMERCIAL & INDUSTRIAL INSULATION STANDARDS" FOR INSULATION INSTALLATION ON PIPES AND EQUIPMENT.
- B. INSULATION INSTALLATION AT INTERIOR WALL AND PARTITION PENETRATIONS [THAT ARE NOT FIRE RATED]: INSTALL INSULATION CONTINUOUSLY THROUGH WALLS AND PARTITIONS.
- C. INSULATION INSTALLATION AT FIRE-RATED WALL, PARTITION, AND FLOOR PENETRATIONS: INSTALL INSULATION CONTINUOUSLY THROUGH PENETRATIONS. SEAL PENETRATIONS, COMPLY WITH REQUIREMENTS IN SECTION 078400.
- D. MINERAL-FIBER INSULATION INSTALLATION:
  - 1. INSULATION INSTALLATION ON STRAIGHT PIPES AND TUBES: WHERE VAPOR BARRIERS ARE INDICATED, SEAL LONGITUDINAL SEAMS, END JOINTS, AND PROTRUSIONS WITH VAPOR-BARRIER MASTIC AND JOINT SEALANT.
  - 2. FOR INSULATION WITH FACTORY-APPLIED JACKETS ON ABOVE AMBIENT SURFACES, SECURE LAPS WITH OUTWARD CLINCHED STAPLES AT 6 INCHES O.C.
  - 3. FOR INSULATION WITH FACTORY-APPLIED JACKETS ON BELOW AMBIENT SURFACES, DO NOT STAPLE LONGITUDINAL TABS BUT SECURE TABS WITH ADDITIONAL ADHESIVE AS RECOMMENDED BY INSULATION MATERIAL MANUFACTURER AND SEAL WITH VAPOR-BARRIER MASTIC AND FLASHING SEALANT.
- E. INTERIOR PIPING SYSTEM APPLICATIONS: INSULATE THE FOLLOWING PIPING SYSTEMS:
  - 1. DOMESTIC HOT WATER.
  - 2. RECIRCULATED DOMESTIC HOT WATER.
  - 3. EXPOSED WATER SUPPLIES AND SANITARY DRAINS OF FIXTURES FOR PEOPLE WITH DISABILITIES.

F. DO NOT APPLY INSULATION TO THE FOLLOWING SYSTEMS, MATERIALS, AND EQUIPMENT:

- 1. FLEXIBLE CONNECTORS.
- 2. SANITARY DRAINAGE AND VENT PIPING.
- 3. DRAINAGE PIPING LOCATED IN CRAWLSPACES UNLESS OTHERWISE INDICATED.
- 4. CHROME-PLATED PIPES AND FITTINGS, EXCEPT FOR PLUMBING FIXTURES FOR PEOPLE WITH DISABILITIES.
- 5. PIPING SPECIALTIES, INCLUDING AIR CHAMBERS, UNIONS, STRAINERS, CHECK VALVES, PLUG VALVES, AND FLOW REGULATORS.

3.2 INDOOR PIPING INSULATION SCHEDULE

- A. DOMESTIC COLD WATER:

- 1. NPS 1 AND SMALLER: INSULATION SHALL BE THE FOLLOWING:
  - a. MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I: 1/2 INCH THICK.
- 2. NPS 1-1/4 AND LARGER: INSULATION SHALL BE THE FOLLOWING:
  - a. MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I: 1 INCH THICK.

- B. DOMESTIC HOT AND RECIRCULATED HOT WATER:

- 1. NPS 2 AND SMALLER: INSULATION SHALL BE THE FOLLOWING:
  - a. MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I: 1 INCH THICK.

- C. EXPOSED SANITARY DRAINS, DOMESTIC WATER, DOMESTIC HOT WATER, AND STOPS FOR PLUMBING FIXTURES FOR PEOPLE WITH DISABILITIES:

- 1. ALL PIPE SIZES: INSULATION SHALL BE THE FOLLOWING:
  - a. PROTECTIVE SHIELDING PIPING COVERS.
  - b. MANUFACTURED PLASTIC WRAPS FOR COVERING PLUMBING FIXTURE HOT- AND COLD-WATER SUPPLIES AND TRAP AND DRAIN PIPING. COMPLY WITH AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.

END OF SECTION

SECTION 221116 - DOMESTIC WATER PIPING

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. POTABLE-WATER PIPING AND COMPONENTS SHALL COMPLY WITH NSF 14 AND NSF 61.

2.2 PIPE AND FITTINGS

- A. CPVC PIPING: ASTM F 441/F 441M, SCHEDULE 40 PIPE WITH ASTM F 438, CPVC SCHEDULE 40 SOCKET-TYPE FITTINGS.
- B. UPONOR PEX TUBE AND FITTINGS: ASTM F 877, SDR 9 PEX TUBING AND ASTM F 1807, METAL INSERT-TYPE FITTINGS WITH COPPER OR STAINLESS-STEEL CRIMP RINGS.

- 1. MANIFOLD: ASTM F 877 PLASTIC OR CORROSION-RESISTANT-METAL ASSEMBLY, WITH A PLASTIC OR CORROSION-RESISTANT-METAL VALVE FOR EACH OUTLET.

C. SPECIAL-DUTY VALVES:

- 1. COMPLY WITH REQUIREMENTS IN SECTION 220523 "GENERAL-DUTY VALVES FOR PLUMBING PIPING" FOR GENERAL-DUTY METAL VALVES.
- 2. COMPLY WITH REQUIREMENTS IN SECTION 221119 "DOMESTIC WATER PIPING SPECIALTIES" FOR BALANCING VALVES, DRAIN VALVES, BACKFLOW PREVENTERS, AND VACUUM BREAKERS.
- D. TRANSITION FITTINGS: MANUFACTURED PIPING COUPLING OR SPECIFIED PIPING SYSTEM FITTING. SAME SIZE AS PIPES TO BE JOINED AND PRESSURE RATING AT LEAST EQUAL TO PIPES TO BE JOINED.
- E. FLEXIBLE CONNECTORS: STAINLESS-STEEL, CORRUGATED-METAL TUBING WITH WIRE-BRAID COVERING, WORKING-PRESSURE RATING A MINIMUM OF 200 PSIG.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. COMPLY WITH REQUIREMENTS IN SECTION 220500 "COMMON WORK RESULTS FOR PLUMBING" FOR BASIC PIPING INSTALLATION REQUIREMENTS.
- B. INSTALL WALL PENETRATION SYSTEM AT EACH SERVICE PIPE PENETRATION THROUGH FOUNDATION WALL. MAKE INSTALLATION WATERTIGHT. COMPLY WITH REQUIREMENTS IN SECTION 220500 "COMMON WORK RESULTS FOR PLUMBING" FOR WALL PENETRATION SYSTEMS.
- C. INSTALL SHUTOFF VALVE, HOSE-END DRAIN VALVE, STRAINER, PRESSURE GAGE, AND TEST TEE WITH VALVE, INSIDE THE BUILDING AT EACH DOMESTIC WATER SERVICE ENTRANCE. COMPLY WITH REQUIREMENTS IN SECTION 220500 "COMMON WORK RESULTS FOR PLUMBING" FOR PRESSURE GAGES AND SECTION 221119 "DOMESTIC WATER PIPING SPECIALTIES" FOR DRAIN VALVES AND STRAINERS.
- D. INSTALL DOMESTIC WATER PIPING WITHOUT PITCH FOR HORIZONTAL PIPING AND PLUMB FOR VERTICAL PIPING.
- E. COMPLY WITH REQUIREMENTS IN SECTION 220500 "COMMON WORK RESULTS FOR PLUMBING" FOR BASIC PIPING JOINT CONSTRUCTION.
  - 1. SOLDERED JOINTS: COMPLY WITH PROCEDURES IN ASTM B 828 UNLESS OTHERWISE INDICATED.
- F. COMPLY WITH REQUIREMENTS IN SECTION 220500 "COMMON WORK RESULTS FOR PLUMBING" FOR PIPE HANGER AND SUPPORT DEVICES.

- 1. INSTALL VINYL-COATED HANGERS FOR CPVC PIPING WITH THE FOLLOWING MAXIMUM HORIZONTAL SPACING AND MINIMUM ROD DIAMETERS:
  - a. NPS 1 AND SMALLER: 36 INCHES WITH 3/8-INCH ROD.
  - b. NPS 1-1/4 TO NPS 2: 48 INCHES WITH 3/8-INCH ROD.
  - c. NPS 2-1/2 TO NPS 3-1/2: 48 INCHES WITH 1/2-INCH ROD.
  - d. INSTALL SUPPORTS FOR VERTICAL CPVC PIPING EVERY 60 INCHES FOR NPS 1 AND SMALLER, AND EVERY 72 INCHES FOR NPS 1-1/4 AND LARGER.
- 2. INSTALL VINYL-COATED HANGERS FOR PEX PIPING WITH THE FOLLOWING MAXIMUM HORIZONTAL SPACING AND MINIMUM ROD DIAMETERS:
  - a. NPS 1 AND SMALLER: 32 INCHES WITH 3/8-INCH ROD.
  - b. INSTALL HANGERS FOR VERTICAL PEX PIPING EVERY 48 INCHES.

3.2 INSPECTING AND CLEANING

- A. INSPECT AND TEST PIPING SYSTEMS AS FOLLOWS:

- 1. FILL DOMESTIC WATER PIPING. CHECK COMPONENTS TO DETERMINE THAT THEY ARE NOT AIR BOUND AND THAT PIPING IS FULL OF WATER.
- 2. TEST FOR LEAKS AND DEFECTS IN NEW PIPING AND PARTS OF EXISTING PIPING THAT HAVE BEEN ALTERED, EXTENDED, OR REPAIRED.
- B. CLEAN AND DISINFECT POTABLE DOMESTIC WATER PIPING BY FILLING SYSTEM WITH WATER/CHLORINE SOLUTION WITH AT LEAST 50 PPM OF CHLORINE. ISOLATE WITH VALVES AND ALLOW TO STAND FOR 24 HOURS. FLUSH SYSTEM WITH CLEAN, POTABLE WATER UNTIL NO CHLORINE IS IN WATER COMING FROM SYSTEM AFTER THE STANDING TIME

3.3 PIPING SCHEDULE

- A. ABOVEGROUND DISTRIBUTION PIPING: PEX PIPING.
- B. BELOWGROUND DISTRIBUTION PIPING: PEX PIPING INSTALLED IN PROTECTIVE PVC CONDUIT..



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IT IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SPECIFICATIONS  
PLUMBING

SHEET:



SPECIFICATIONS - DIVISION 22 - PLUMBING (CONTINUED)

<div>3.4 VALVE SCHEDULE</div> <div>A. DRAWINGS INDICATE VALVE TYPES TO BE USED. WHERE SPECIFIC VALVE TYPES ARE NOT INDICATED, THE FOLLOWING REQUIREMENTS APPLY:<div>1. SHUTOFF DUTY: USE BRONZE BALL VALVES FOR PIPING NPS 2 AND SMALLER.</div><div>2. THROTTLING DUTY: USE BRONZE BALL VALVES FOR PIPING NPS 2 AND SMALLER.</div><div>3. HOT-WATER-PIPING, BALANCING DUTY: MEMORY-STOP BALANCING VALVES.</div><div>4. DRAIN DUTY: HOSE-END DRAIN VALVES.</div></div> <div>B. INSTALL BALL VALVES CLOSE TO MAIN ON EACH BRANCH AND RISER SERVING TWO OR MORE PLUMBING FIXTURES OR EQUIPMENT CONNECTIONS AND WHERE INDICATED.</div> <div>C. INSTALL BALL VALVES ON INLET TO EACH PLUMBING EQUIPMENT ITEM, ON EACH SUPPLY TO EACH PLUMBING FIXTURE NOT HAVING STOPS ON SUPPLIES, AND ELSEWHERE AS INDICATED.</div> <div>D. INSTALL DRAIN VALVE AT BASE OF EACH RISER, AT LOW POINTS OF HORIZONTAL RUNS, AND WHERE REQUIRED TO DRAIN WATER DISTRIBUTION PIPING SYSTEM.</div> <div>E. INSTALL SWING CHECK VALVE ON DISCHARGE SIDE OF EACH PUMP AND ELSEWHERE AS INDICATED.</div> <div>F. INSTALL BALL VALVES IN EACH HOT-WATER CIRCULATING LOOP AND DISCHARGE SIDE OF EACH PUMP.</div> <div>END OF SECTION</div> <div>SECTION 221119 - DOMESTIC WATER PIPING SPECIALTIES</div> <div>PART 2 - PRODUCTS</div> <div>2.1 GENERAL REQUIREMENTS FOR PIPING SPECIALTIES</div> <div>A. POTABLE-WATER PIPING AND COMPONENTS SHALL COMPLY WITH NSF 61 AND NSF 14.</div> <div>2.2 PERFORMANCE REQUIREMENTS</div> <div>A. MINIMUM WORKING PRESSURE FOR DOMESTIC WATER PIPING SPECIALTIES: 125 PSIG UNLESS OTHERWISE INDICATED.</div> <div>2.3 MANUFACTURED UNITS</div> <div>A. PIPE-APPLIED, ATMOSPHERIC-TYPE VACUUM BREAKERS:<div>1. STANDARD: ASSE 1001.</div><div>2. SIZE: NPS 1/4 TO NPS 3, AS REQUIRED TO MATCH CONNECTED PIPING.</div><div>3. BODY: BRONZE.</div><div>4. INLET AND OUTLET CONNECTIONS: THREADED.</div><div>5. FINISH: CHROME PLATED.</div></div> <div>B. HOSE-CONNECTION VACUUM BREAKERS:<div>1. STANDARD: ASSE 1011.</div><div>2. BODY: BRONZE, NONREMOVABLE, WITH MANUAL DRAIN.</div><div>3. OUTLET CONNECTION: GARDEN-HOSE THREADED COMPLYING WITH ASME B1.20.7.</div><div>4. FINISH: CHROME OR NICKEL PLATED BRONZE.</div></div> <div>C. REDUCED-PRESSURE-PRINCIPLE BACKFLOW PREVENTERS:<div>1. STANDARD: ASSE 1013.</div><div>2. OPERATION: CONTINUOUS-PRESSURE APPLICATIONS.</div><div>3. PRESSURE LOSS: 12 PSIG MAXIMUM, THROUGH MIDDLE THIRD OF FLOW RANGE.</div><div>4. BODY: LEAD FREE BRONZE OR STAINLESS STEEL FOR NPS 2 AND SMALLER.</div><div>5. END CONNECTIONS: THREADED FOR NPS 2 AND SMALLER.</div><div>6. CONFIGURATION: DESIGNED FOR HORIZONTAL, STRAIGHT-THROUGH FLOW.</div><div>7. ACCESSORIES:<div>a. VALVES NPS 2 AND SMALLER: BALL TYPE WITH THREADED ENDS ON INLET AND OUTLET.</div><div>b. AIR-GAP FITTING: ASME A112.1.2, MATCHING BACKFLOW-PREVENTER CONNECTION.</div></div></div> <div>D. WATER REGULATORS:<div>1. STANDARD: ASSE 1003.</div><div>2. PRESSURE RATING: INITIAL WORKING PRESSURE OF 150 PSIG.</div><div>3. DESIGN OUTLET PRESSURE SETTING: 60 PSIG.</div><div>4. BODY: LEAD FREE BRONZE WITH CHROME-PLATED FINISH FOR NPS 2 AND SMALLER.</div><div>5. END CONNECTIONS: THREADED FOR NPS 2 AND SMALLER.</div></div> <div>E. MEMORY-STOP BALANCING VALVES:<div>1. STANDARD: MSS SP-110 FOR TWO-PIECE, COPPER-ALLOY BALL VALVES.</div><div>2. PRESSURE RATING: 400-PSIG MINIMUM CWP.</div><div>3. SIZE: NPS 2 OR SMALLER.</div><div>4. BODY: LEAD FREE COPPER ALLOY.</div><div>5. PORT: FULL PORT.</div><div>6. BALL: CHROME-PLATED BRASS.</div><div>7. SEATS AND SEALS: REPLACEABLE.</div><div>8. END CONNECTIONS: SOLDER JOINT OR THREADED.</div><div>9. HANDLE: VINYL-COVERED STEEL WITH MEMORY-SETTING DEVICE.</div></div> <div>F. THERMOSTATIC, WATER MIXING VALVES:<div>1. STANDARD: ASSE 1017.</div><div>2. PRESSURE RATING: 125 PSIG MINIMUM UNLESS OTHERWISE INDICATED.</div><div>3. TYPE: EXPOSED-MOUNTED, THERMOSTATICALLY CONTROLLED, WATER MIXING VALVE.</div><div>4. MATERIAL: LEAD FREE BRONZE BODY WITH CORROSION-RESISTANT INTERIOR COMPONENTS.</div><div>5. CONNECTIONS: THREADED OR UNION INLETS AND OUTLET.</div><div>6. ACCESSORIES: MANUAL TEMPERATURE CONTROL, CHECK STOPS ON HOT- AND COLD-WATER SUPPLIES, AND ADJUSTABLE, TEMPERATURE-CONTROL HANDLE.</div><div>7. TEMPERED-WATER SETTING: AS SPECIFIED ON DRAWINGS.</div><div>8. PRESSURE DROP AT DESIGN FLOW RATE: NOT EXCEED 15 PSIG.</div><div>9. VALVE FINISH: CHROME PLATED.</div><div>10. PIPING FINISH: CHROME PLATED.</div></div> <div>G. Y-PATTERN STRAINERS:<div>1. PRESSURE RATING: 125 PSIG MINIMUM UNLESS OTHERWISE INDICATED.</div><div>2. BODY: LEAD FREE BRONZE FOR NPS 2 AND SMALLER.</div><div>3. END CONNECTIONS: THREADED FOR NPS 2 AND SMALLER.</div><div>4. SCREEN: STAINLESS STEEL WITH ROUND PERFORATIONS UNLESS OTHERWISE INDICATED.</div><div>5. PERFORATION SIZE:<div>a. STRAINERS NPS 2 AND SMALLER: 0.020 INCH.</div></div><div>6. DRAIN: PIPE PLUG.</div></div> <div>H. HOSE BIBBS:<div>1. STANDARD: ASME A112.18.1 FOR SEDIMENT FAUCETS.</div></div>	<div>2. BODY MATERIAL: BRONZE.</div> <div>3. SEAT: BRONZE, REPLACEABLE.</div> <div>4. SUPPLY CONNECTIONS: NPS 3/4 THREADED OR SOLDER-JOINT INLET.</div> <div>5. OUTLET CONNECTION: GARDEN-HOSE THREAD COMPLYING WITH ASME B1.20.7.</div> <div>6. PRESSURE RATING: 125 PSIG.</div> <div>7. VACUUM BREAKER: INTEGRAL, NONREMOVABLE, DRAINABLE, HOSE-CONNECTION VACUUM BREAKER COMPLYING WITH ASSE 1011.</div> <div>8. FINISH FOR EQUIPMENT ROOMS: ROUGH BRONZE, OR CHROME OR NICKEL PLATED.</div> <div>9. FINISH FOR SERVICE AREAS: CHROME OR NICKEL PLATED.</div> <div>10. FINISH FOR FINISHED ROOMS: CHROME OR NICKEL PLATED.</div> <div>11. OPERATION FOR EQUIPMENT ROOMS: WHEEL HANDLE OR OPERATING KEY.</div> <div>12. OPERATION FOR SERVICE AREAS: OPERATING KEY.</div> <div>13. OPERATION FOR FINISHED ROOMS: OPERATING KEY.</div> <div>14. INCLUDE OPERATING KEY WITH EACH OPERATING-KEY HOSE BIBB.</div> <div>15. INCLUDE INTEGRAL WALL FLANGE WITH EACH CHROME- OR NICKEL-PLATED HOSE BIBB.</div> <div>I. NONFREEZE WALL HYDRANTS:<div>1. STANDARD: ASME A112.21.3M FOR CONCEALED OR EXPOSED-OUTLET, SELF-DRAINING WALL HYDRANTS.</div><div>2. PRESSURE RATING: 125 PSIG.</div><div>3. OPERATION: LOOSE KEY.</div><div>4. CASING AND OPERATING ROD: OF LENGTH REQUIRED TO MATCH WALL THICKNESS. INCLUDE WALL CLAMP.</div><div>5. INLET: NPS 3/4.</div><div>6. OUTLET: CONCEALED, WITH INTEGRAL VACUUM BREAKER AND GARDEN-HOSE THREAD COMPLYING WITH ASME B1.20.7.</div><div>7. BOX: DEEP, FLUSH MOUNTED WITH COVER.</div><div>8. BOX AND COVER FINISH: CHROME PLATED.</div><div>9. OUTLET: EXPOSED, WITH INTEGRAL VACUUM BREAKER AND GARDEN-HOSE THREAD COMPLYING WITH ASME B1.20.7.</div><div>10. NOZZLE AND WALL-PLATE FINISH: POLISHED NICKEL BRONZE.</div><div>11. OPERATING KEYS: ONE WITH EACH WALL HYDRANT.</div></div> <div>J. BALL-VALVE-TYPE, HOSE-END DRAIN VALVES:<div>1. STANDARD: MSS SP-110 FOR STANDARD-PORT, TWO-PIECE BALL VALVES.</div><div>2. PRESSURE RATING: 400-PSIG MINIMUM CWP.</div><div>3. SIZE: NPS 3/4.</div><div>4. BODY: COPPER ALLOY.</div><div>5. BALL: CHROME-PLATED BRASS.</div><div>6. SEATS AND SEALS: REPLACEABLE.</div><div>7. HANDLE: VINYL-COVERED STEEL.</div><div>8. INLET: THREADED OR SOLDER JOINT.</div><div>9. OUTLET: THREADED, SHORT NIPPLE WITH GARDEN-HOSE THREAD COMPLYING WITH ASME B1.20.7 AND CAP WITH BRASS CHAIN.</div></div> <div>K. WATER-HAMMER ARRESTERS:<div>1. STANDARD: ASSE 1010 OR PDI-WH 201.</div><div>2. TYPE: COPPER TUBE WITH PISTON.</div><div>3. SIZE: ASSE 1010, SIZES AA AND A THROUGH F, OR PDI-WH 201, SIZES A THROUGH F.</div></div> <div>L. SUPPLY-TYPE, TRAP-SEAL PRIMER DEVICE:<div>1. STANDARD: ASSE 1018</div><div>2. PRESSURE RATING: 125 PSIG MINIMUM.</div><div>3. BODY: BRONZE.</div><div>4. INLET AND OUTLET CONNECTIONS: NPS 1/2 THREADED, UNION, OR SOLDER JOINT.</div><div>5. GRAVITY DRAIN OUTLET CONNECTION: NPS 1/2 THREADED OR SOLDER JOINT.</div><div>6. FINISH: CHROME PLATED, OR ROUGH BRONZE FOR UNITS USED WITH PIPE OR TUBE THAT IS NOT CHROME FINISHED.</div></div> <div>M. WATER FILTERS: CARTRIDGE TYPE, INCLUDING HOUSING, FITTINGS, FILTER CARTRIDGES, AND CARTRIDGE END CAPS.</div> <div>PART 3 - EXECUTION</div> <div>3.1 INSTALLATION</div> <div>A. INSTALL BACKFLOW PREVENTERS IN EACH WATER SUPPLY TO MECHANICAL EQUIPMENT AND SYSTEMS AND TO OTHER EQUIPMENT AND WATER SYSTEMS THAT MAY BE SOURCES OF CONTAMINATION. COMPLY WITH AUTHORITIES HAVING JURISDICTION.</div> <div>B. INSTALL WATER REGULATORS WITH INLET AND OUTLET SHUTOFF VALVES. INSTALL PRESSURE GAGES ON INLET AND OUTLET</div> <div>C. INSTALL BALANCING VALVES IN LOCATIONS WHERE THEY CAN EASILY BE ADJUSTED.</div> <div>D. INSTALL TEMPERATURE-ACTUATED, WATER MIXING VALVES WITH CHECK STOPS OR SHUTOFF VALVES ON INLETS AND WITH SHUTOFF VALVE ON OUTLET.</div> <div>E. INSTALL Y-PATTERN STRAINERS FOR WATER ON SUPPLY SIDE OF EACH CONTROL VALVE, WATER PRESSURE-REDUCING VALVE, SOLENOID VALVE AND PUMP.</div> <div>F. INSTALL WATER-HAMMER ARRESTERS IN WATER PIPING ACCORDING TO PDI-WH 201.</div> <div>G. INSTALL SUPPLY-TYPE, TRAP-SEAL PRIMER VALVES WITH OUTLET PIPING PITCHED DOWN TOWARD DRAIN TRAP A MINIMUM OF 1 PERCENT, AND CONNECT TO FLOOR-DRAIN BODY, TRAP, OR INLET FITTING. ADJUST VALVE FOR PROPER FLOW.</div> <div>3.2 FIELD QUALITY CONTROL</div> <div>A. PERFORM THE FOLLOWING TESTS AND INSPECTIONS:<div>1. TEST EACH PRESSURE VACUUM BREAKER, REDUCED-PRESSURE-PRINCIPLE BACKFLOW PREVENTER, AND DOUBLE-CHECK BACKFLOW-PREVENTION ASSEMBLY ACCORDING TO AUTHORITIES HAVING JURISDICTION AND THE DEVICE'S REFERENCE STANDARD.</div><div>2. DOMESTIC WATER PIPING SPECIALTIES WILL BE CONSIDERED DEFECTIVE IF THEY DO NOT PASS TESTS AND INSPECTIONS.</div><div>3. PREPARE TEST AND INSPECTION REPORTS.</div></div> <div>END OF SECTION</div> <div>SECTION 221123 - DOMESTIC WATER PUMPS</div> <div>PART 2 - PRODUCTS</div> <div>2.1 PERFORMANCE REQUIRMENTS</div> <div>A. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.</div> <div>B. COMPLY WITH UL 778 FOR MOTOR-OPERATED WATER PUMPS.</div> <div>2.2 DOMESTIC WATER PUMPS</div> <div>A. HOT WATER CIRCULATOR PUMP, RP-1:<div>1. BASIS-OF-DESIGN PRODUCT: GRUNDFOS ALPHA 15-55SF, AS INDICATED ON DRAWINGS.</div></div>	<div>2. CASING: STAINLESS STEEL WITH COMPANION-FLANGE CONNECTIONS.</div> <div>3. MOTOR: AUTOMATIC ADJUSTABLE, WET-ROTOR, PERMANENT MAGNET.</div> <div>2.3 MOTORS</div> <div>A. COMPLY WITH NEMA DESIGNATION, TEMPERATURE RATING, SERVICE FACTOR, ENCLOSURE TYPE, AND EFFICIENCY REQUIREMENTS FOR MOTORS.</div> <div>B. MOTOR SIZES: MINIMUM SIZE AS INDICATED. IF NOT INDICATED, LARGE ENOUGH SO DRIVEN LOAD WILL NOT REQUIRE MOTOR TO OPERATE IN SERVICE FACTOR RANGE ABOVE 1.0.</div> <div>2.4 CONTROLS</div> <div>A. TIMERS: ELECTRIC, FOR CONTROL OF HOT-WATER CIRCULATION PUMP.</div> <div>1. TYPE: PROGRAMMABLE, SEVEN-DAY CLOCK WITH MANUAL OVERRIDE ON-OFF SWITCH.</div> <div>2. PROGRAMMABLE SEQUENCE OF OPERATION: UP TO TWO ON-OFF CYCLES EACH DAY FOR SEVEN DAYS.</div> <div>PART 3 - EXECUTION</div> <div>3.1 INSTALLATION</div> <div>A. INSTALL PUMPS WITH ACCESS FOR PERIODIC MAINTENANCE, INCLUDING REMOVAL OF MOTORS, IMPELLERS, COUPLINGS, AND ACCESSORIES.</div> <div>B. SUPPORT PUMPS AND PIPING SO WEIGHT OF PIPING IS NOT SUPPORTED BY PUMP VOLUTE.</div> <div>C. INSTALL ELECTRICAL CONNECTIONS FOR POWER, CONTROLS, AND DEVICES.</div> <div>D. SUSPEND IN-LINE PUMPS INDEPENDENT FROM PIPING. USE CONTINUOUS-THREAD HANGER RODS AND VIBRATION ISOLATION HANGERS, FABRICATE BRACKETS OR SUPPORTS AS REQUIRED FOR PUMPS.</div> <div>E. CONNECT PIPING WITH VALVES THAT ARE AT LEAST THE SAME SIZE AS PIPING CONNECTING TO PUMPS.</div> <div>F. INSTALL SUCTION AND DISCHARGE PIPE SIZES EQUAL TO OR GREATER THAN DIAMETER OF PUMP NOZZLES.</div> <div>G. INSTALL SHUTOFF VALVE AND STRAINER ON SUCTION SIDE OF PUMPS.</div> <div>H. INSTALL NONSLAM CHECK VALVE AND THROTTLING VALVE ON DISCHARGE SIDE OF PUMPS.</div> <div>I. INSTALL THERMOSTATS IN HOT-WATER RETURN PIPING.</div> <div>J. INSTALL TEST PLUGS ON SUCTION AND DISCHARGE OF EACH PUMP. INSTALL AT INTEGRAL PRESSURE GAGE TAPPINGS WHERE PROVIDED.</div> <div>END OF SECTION</div> <div>SECTION 221316 - SANITARY WASTE AND VENT PIPING</div> <div>PART 2 - PRODUCTS</div> <div>2.1 PERFORMANCE REQUIREMENTS</div> <div>A. COMPONENTS AND INSTALLATION SHALL BE CAPABLE OF WITHSTANDING THE FOLLOWING MINIMUM WORKING PRESSURE UNLESS OTHERWISE INDICATED:<div>1. SOIL, WASTE, AND VENT PIPING: 10-FOOT HEAD OF WATER.</div></div> <div>B. PIPING MATERIALS SHALL BEAR LABEL, STAMP, OR OTHER MARKINGS OF SPECIFIED TESTING AGENCY.</div> <div>C. COMPLY WITH NSF/ANSI 14, "PLASTICS PIPING SYSTEMS COMPONENTS AND RELATED MATERIALS," FOR PLASTIC PIPING COMPONENTS.</div> <div>2.2 PIPES AND FITTINGS</div> <div>A. PVC PLASTIC, DWV PIPE AND FITTINGS: ASTM D 2665, SCHEDULE 40, PLAIN ENDS WITH PVC SOCKET-TYPE, DWV PIPE FITTINGS.<div>1. ADHESIVE PRIMER: ASTM F 656.<div>a. ADHESIVE PRIMER SHALL HAVE A VOC CONTENT OF 550 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).</div></div><div>2. SOLVENT CEMENT: ASTM D 2564.<div>a. PVC SOLVENT CEMENT SHALL HAVE A VOC CONTENT OF 510 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).</div></div></div> <div>PART 3 - EXECUTION</div> <div>3.1 PIPING INSTALLATION</div> <div>A. INSTALL WALL PENETRATION SYSTEM AT EACH PIPE PENETRATION THROUGH FOUNDATION WALL. MAKE INSTALLATION WATERTIGHT. COMPLY WITH REQUIREMENTS IN SECTION 220513 "COMMON WORK RESULTS FOR PLUMBING" FOR WALL PENETRATION SYSTEMS.</div> <div>B. MAKE CHANGES IN DIRECTION FOR SOIL AND WASTE DRAINAGE AND VENT PIPING USING APPROPRIATE BRANCHES, BENDS, AND LONG-SWEEP BENDS. SANITARY TEES AND SHORT-SWEEP 1/4 BENDS MAY BE USED ON VERTICAL STACKS IF CHANGE IN DIRECTION OF FLOW IS FROM HORIZONTAL TO VERTICAL. USE LONG-TURN, DOUBLE Y-BRANCH AND 1/8-BEND FITTINGS IF TWO FIXTURES ARE INSTALLED BACK TO BACK OR SIDE BY SIDE WITH COMMON DRAIN PIPE. STRAIGHT TEES, ELBOWS, AND CROSSES MAY BE USED ON VENT LINES. DO NOT CHANGE DIRECTION OF FLOW MORE THAN 90 DEGREES. USE PROPER SIZE OF STANDARD INCREASERS AND REDUCERS IF PIPES OF DIFFERENT SIZES ARE CONNECTED. REDUCING SIZE OF DRAINAGE PIPING IN DIRECTION OF FLOW IS PROHIBITED.</div> <div>C. LAY BURIED BUILDING DRAINAGE PIPING BEGINNING AT LOW POINT OF EACH SYSTEM. INSTALL TRUE TO GRADES AND ALIGNMENT INDICATED, WITH UNBROKEN CONTINUITY OF INVERT. PLACE HUB ENDS OF PIPING UPSTREAM. INSTALL REQUIRED GASKETS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR USE OF LUBRICANTS, CEMENTS, AND OTHER INSTALLATION REQUIREMENTS. MAINTAIN SWAB IN PIPING AND PULL PAST EACH JOINT AS COMPLETED.</div> <div>D. INSTALL SOIL AND WASTE DRAINAGE AND VENT PIPING AT THE FOLLOWING MINIMUM SLOPES, UNLESS OTHERWISE INDICATED:<div>1. HORIZONTAL SANITARY DRAINAGE PIPING: 2 PERCENT DOWNWARD IN DIRECTION OF FLOW FOR PIPING NPS 2-1/2 AND SMALLER; 1 PERCENT DOWNWARD IN DIRECTION OF FLOW FOR PIPING NPS 3 AND LARGER.</div><div>2. VENT PIPING: ALL VENT AND BRANCH VENT PIPING SHALL BE GRADED AND CONNECTED TO DRAIN BACK TOWARD VERTICAL FIXTURE VENT OR TOWARD VENT STACK.</div></div> <div>G. INSTALL PVC SOIL AND WASTE DRAINAGE AND VENT PIPING ACCORDING TO ASTM D 2665.</div> <div>H. INSTALL UNDERGROUND PVC SOIL AND WASTE DRAINAGE PIPING ACCORDING TO ASTM D 2321.</div> <div>I. DO NOT ENCLOSE, COVER, OR PUT PIPING INTO OPERATION UNTIL IT IS INSPECTED AND APPROVED BY AUTHORITIES HAVING JURISDICTION.</div> <div>J. COMPLY WITH REQUIREMENTS IN SECTION 220513 "COMMON WORK RESULTS FOR PLUMBING" FOR BASIC PIPING JOINT CONSTRUCTION.</div> <div>K. COMPLY WITH REQUIREMENTS IN SECTION 220513 "COMMON WORK RESULTS FOR PLUMBING" FOR PIPE HANGER AND SUPPORT DEVICES.</div> <div>3.2 PIPE SCHEDULE</div> <div>A. ABOVEGROUND APPLICATIONS: PVC PLASTIC, DWV PIPE AND FITTINGS WITH SOLVENT-CEMENTED JOINTS, COPPER DRAINAGE TUBE AND FITTINGS WITH SOLDERED JOINTS, PVC PLASTIC PIPE AND FITTINGS SHALL NOT BE PERMITTED FOR INSTALLATION IN RETURN AIR PLENUMS OR LOCATIONS EXPOSED TO RETURN AIR PLENUMS.</div> <div>B. BELOWGROUND APPLICATIONS: PVC PLASTIC, DWV PIPE AND DRAINAGE-PATTERN FITTINGS WITH CEMENTED JOINTS.</div> <div>END OF SECTION</div> <div>SECTION 221319 - SANITARY WASTE PIPING SPECIALTIES</div> <div>PART 1 - GENERAL</div> <div>1.1 SECTION REQUIREMENTS</div> <div>A. SUBMITTALS:<div>1. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.<div>a. INCLUDE RATED CAPACITIES, OPERATING CHARACTERISTICS, AND ACCESSORIES FOR GREASE INTERCEPTORS.</div></div></div>	<div>PART 2 - PRODUCTS</div> <div>2.1 PERFORMANCE REQUIREMENTS</div> <div>A. DRAINAGE PIPING SPECIALTIES SHALL BEAR LABEL, STAMP, OR OTHER MARKINGS OF SPECIFIED TESTING AGENCY.</div> <div>2.2 MANUFACTURED UNITS - AS INDICATED ON DRAWINGS</div> <div>A. FLOOR CLEANOUTS: PER STANDARD ASME A112.36.2M-2002.</div> <div>B. WALL CLEANOUTS:</div> <div>C. FLOOR DRAINS: PER STANDARD ASME A112.6.3-2001.</div> <div>D. CAST IRON FLOOR SINKS: PER STANDARD ASME A112.6.7-2001.</div> <div>E. PVC PLASTIC FLOOR SINKS: PER STANDARD ASME A112.6.7-2001.</div> <div>PART 3 - EXECUTION</div> <div>3.1 INSTALLATION</div> <div>A. INSTALL CLEANOUTS AT GRADE AND EXTEND TO WHERE BUILDING SANITARY DRAINS CONNECT TO BUILDING SANITARY SEWERS.</div> <div>B. INSTALL FLOOR DRAINS AT LOW POINTS OF SURFACE AREAS TO BE DRAINED. SET GRATES OF DRAINS FLUSH WITH FINISHED FLOOR UNLESS OTHERWISE INDICATED.</div> <div>1. INSTALL FLOOR-DRAIN FLASHING COLLAR OR FLANGE SO NO LEAKAGE OCCURS BETWEEN DRAIN AND ADJOINING FLOORING. MAINTAIN INTEGRITY OF WATERPROOF MEMBRANES WHERE PENETRATED.</div> <div>2. INSTALL INDIVIDUAL TRAPS FOR FLOOR DRAINS CONNECTED TO SANITARY BUILDING DRAIN, UNLESS OTHERWISE INDICATED.</div> <div>C. PROVIDE A 2" MINIMUM AIR-GAP OR 2 TIMES THE PIPE DIAMETER (WHICHEVER IS GREATER) ON INDIRECT-WASTE PIPING DISCHARGE INTO SANITARY DRAINAGE SYSTEM.</div> <div>END OF SECTION</div> <div>SECTION 22 34 00 - FUEL-FIRED, DOMESTIC WATER HEATERS</div> <div>PART 1 - GENERAL</div> <div>1.1 SUMMARY</div> <div>A. SECTION INCLUDES:<div>1. COMMERCIAL, GAS-FIRED, TANKLESS, DOMESTIC-WATER HEATERS.</div><div>2. DOMESTIC-WATER HEATER ACCESSORIES.</div></div> <div>1.2 QUALITY ASSURANCE</div> <div>A. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.</div> <div>B. NSF COMPLIANCE: FABRICATE AND LABEL EQUIPMENT COMPONENTS THAT WILL BE IN CONTACT WITH POTABLE WATER TO COMPLY WITH NSF 61, "DRINKING WATER SYSTEM COMPONENTS - HEALTH EFFECTS."</div> <div>1.3 WARRANTY</div> <div>A. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF FUEL-FIRED, DOMESTIC-WATER HEATERS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.<div>1. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:<div>a. STRUCTURAL FAILURES INCLUDING STORAGE TANK AND SUPPORTS.</div><div>b. FAULTY OPERATION OF CONTROLS.</div><div>c. DETERIORATION OF METALS, METAL FINISHES, AND OTHER MATERIALS BEYOND NORMAL USE.</div><div>d. WARRANTY PERIODS: FROM DATE OF SUBSTANTIAL COMPLETION.<div>a. GAS-FIRED, TANKLESS, DOMESTIC-WATER HEATERS:<div>1) HEAT EXCHANGER: TEN YEARS.</div><div>2) CONTROLS AND OTHER COMPONENTS: FIVE YEARS.</div><div>3) THERMAL EXPANSION TANK: FIVE YEARS.</div></div></div></div></div>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

PART 2 - PRODUCTS

A. COMMERCIAL, GAS-FIRED, TANKLESS, DOMESTIC-WATER HEATER, DWH-1 & DWH-2:

1. BASIS-OF-DESIGN PRODUCT: RINNAI MODEL, PROVIDE AS INDICATED ON DRAWINGS.

2. STANDARD: ANSI Z21.10.3/CSA 4.3 FOR GAS-FIRED, INSTANTANEOUS, DOMESTIC WATER HEATERS FOR INDOOR APPLICATIONS.

3. FORCED DRAFT DIRECT VENT SYSTEM.

B. DOMESTIC WATER COMPRESSION TANKS:

1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS. PROVIDE PRODUCTS BY ONE OF THE FOLLOWINGS: RETAIN OPTION IN FIRST SUBPARAGRAPH BELOW IF MANUFACTURER'S NAME AND MODEL NUMBER ARE INDICATED IN SCHEDULES OR PLANS ON DRAWINGS; DELETE OPTION AND INSERT MANUFACTURER'S NAME AND MODEL NUMBER IF NOT INCLUDED ON DRAWINGS.

a. AMTROL INC.

b. RHEEM-RUUD.

c. WATTS WATER TECHNOLOGIES, CO.

d. WESSELS TANK CO.

2. DESCRIPTION: STEEL, PRESSURE-RATED TANK CONSTRUCTED WITH WELDED JOINTS AND FACTORY-INSTALLED BUTYL-RUBBER DIAPHRAGM. INCLUDE AIR PRECHARGE TO MINIMUM SYSTEM-OPERATING PRESSURE AT TANK.

3. CONSTRUCTION:

a. TAPPINGS: FACTORY-FABRICATED STEEL, WELDED TO TANK BEFORE TESTING AND LABELING. INCLUDE ASME B1.20.1 PIPE THREAD.

b. INTERIOR FINISH: COMPLY WITH NSF 61 BARRIER MATERIALS FOR POTABLE-WATER TANK LININGS, INCLUDING EXTENDING FINISH INTO AND THROUGH TANK FITTINGS AND OUTLETS.

c. AIR-CHARGING VALVE: FACTORY INSTALLED.

C. GAS SHUTOFF VALVES: ANSI Z21.15/CSA 9.1-M, MANUALLY OPERATED, FURNISH FOR INSTALLATION IN PIPING.

D. GAS PRESSURE REGULATORS: ANSI Z21.18/CSA 6.3, APPLIANCE TYPE. INCLUDE 1/2-PSIG PRESSURE RATING AS REQUIRED TO MATCH GAS SUPPLY.

E. AUTOMATIC GAS VALVES: ANSI Z21.21/CSA 6.5, APPLIANCE, ELECTRICALLY OPERATED, ON-OFF AUTOMATIC VALVE.

F. SOURCE QUALITY CONTROL

1. HYDROSTATICALLY TEST COMMERCIAL DOMESTIC-WATER HEATERS TO MINIMUM OF ONE AND ONE-HALF TIMES PRESSURE RATING BEFORE SHIPMENT.

2. DOMESTIC-WATER HEATERS WILL BE CONSIDERED DEFECTIVE IF THEY DO NOT PASS TESTS AND INSPECTIONS.

3. PREPARE TEST AND INSPECTION REPORTS.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SPECIFICATIONS  
PLUMBING

SHEET:



SPECIFICATIONS - DIVISION 22 - PLUMBING (CONTINUED)

PART 3 - EXECUTION

3.1 DOMESTIC WATER HEATER INSTALLATION

A. INSTALL TANKLESS DOMESTIC WATER HEATERS AT LEAST 80 INCHES ABOVE FLOOR ON WALL BRACKET.

1. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES.

2. ARRANGE UNITS SO CONTROLS AND DEVICES THAT REQUIRE SERVICING ARE ACCESSIBLE.

3. PLACE AND SECURE ANCHORAGE DEVICES, USE SETTING DRAWINGS, TEMPLATES, DIAGRAMS, INSTRUCTIONS, AND DIRECTIONS FURNISHED WITH ITEMS TO BE EMBEDDED.

4. INSTALL ANCHOR BOLTS TO ELEVATIONS REQUIRED FOR PROPER ATTACHMENT TO SUPPORTED EQUIPMENT.

5. ANCHOR DOMESTIC-WATER HEATERS TO SUBSTRATE.

B. INSTALL GAS-FIRED, DOMESTIC-WATER HEATERS ACCORDING TO NFPA 54.

1. INSTALL GAS SHUTOFF VALVES ON GAS SUPPLY PIPING TO GAS-FIRED, DOMESTIC-WATER HEATERS WITHOUT SHUTOFF VALVES.

2. INSTALL GAS PRESSURE REGULATORS ON GAS SUPPLIES TO GAS-FIRED, DOMESTIC-WATER HEATERS WITHOUT GAS PRESSURE REGULATORS IF GAS PRESSURE REGULATORS ARE REQUIRED TO REDUCE GAS PRESSURE AT BURNER.

3. INSTALL AUTOMATIC GAS VALVES ON GAS SUPPLIES TO GAS-FIRED, DOMESTIC-WATER HEATERS IF REQUIRED FOR OPERATION OF SAFETY CONTROL.

C. INSTALL PRESSURE RELIEF VALVES IN WATER PIPING FOR DOMESTIC WATER HEATERS WITHOUT STORAGE. EXTEND COMMERCIAL-WATER-HEATER RELIEF-VALVE OUTLET, WITH DRAIN PIPING SAME AS DOMESTIC-WATER PIPING IN CONTINUOUS DOWNWARD PITCH, AND DISCHARGE BY POSITIVE AIR GAP ONTO CLOSEST FLOOR DRAIN.

D. INSTALL WATER-HEATER DRAIN PIPING AS INDIRECT WASTE TO SPILL BY POSITIVE AIR GAP INTO OPEN DRAINS OR OVER FLOOR DRAINS. INSTALL HOSE-END DRAIN VALVES AT LOW POINTS IN WATER PIPING FOR DOMESTIC-WATER HEATERS THAT DO NOT HAVE TANK DRAINS.

E. INSTALL THERMOMETER ON OUTLET PIPING OF DOMESTIC-WATER HEATERS. COMPLY WITH REQUIREMENTS FOR THERMOMETERS SPECIFIED IN SECTION 220500 - "COMMON WORK RESULTS FOR PLUMBING".

3.2 FIELD QUALITY CONTROL

A. PERFORM TESTS AND INSPECTIONS.

1. MANUFACTURER'S FIELD SERVICE; ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT COMPONENTS, ASSEMBLIES, AND EQUIPMENT INSTALLATIONS, INCLUDING CONNECTIONS, AND TO ASSIST IN TESTING.

2. LEAK TEST: AFTER INSTALLATION, CHARGE SYSTEM AND TEST FOR LEAKS. REPAIR LEAKS AND RETEST UNTIL NO LEAKS EXIST.

3. OPERATIONAL TEST: AFTER ELECTRICAL CIRCUITRY HAS BEEN ENERGIZED, START UNITS TO CONFIRM PROPER OPERATION.

4. TEST AND ADJUST CONTROLS AND SAFETIES. REPLACE DAMAGED AND MALFUNCTIONING CONTROLS AND EQUIPMENT.

B. DOMESTIC-WATER HEATERS WILL BE CONSIDERED DEFECTIVE IF THEY DO NOT PASS TESTS AND INSPECTIONS.

C. PREPARE TEST AND INSPECTION REPORTS.

3.3 DEMONSTRATION

A. ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO TRAIN OWNER'S MAINTENANCE PERSONNEL TO ADJUST, OPERATE, AND MAINTAIN COMMERCIAL, GAS-FIRED, STORAGE, DOMESTIC-WATER HEATERS.

END OF SECTION

SECTION 224000 - PLUMBING FIXTURES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

A. SUBMITTALS:

1. PRODUCT DATA FOR EACH TYPE OF PLUMBING FIXTURE, INCLUDING TRIM, FITTINGS, ACCESSORIES, APPLIANCES, APPURTENANCES, EQUIPMENT, AND SUPPORTS.

2. DOCUMENTATION INDICATING FLOW AND WATER CONSUMPTION REQUIREMENTS.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. REGULATORY REQUIREMENTS: COMPLY WITH REQUIREMENTS IN ICC A117.1, "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES"; PUBLIC LAW 90-480, "ARCHITECTURAL BARRIERS ACT"; AND PUBLIC LAW 101-336, "AMERICANS WITH DISABILITIES ACT" FOR PLUMBING FIXTURES FOR PEOPLE WITH DISABILITIES.

B. REGULATORY REQUIREMENTS: COMPLY WITH REQUIREMENTS IN PUBLIC LAW 102-486, "ENERGY POLICY ACT," ABOUT WATER FLOW AND CONSUMPTION RATES FOR PLUMBING FIXTURES.

C. NSF STANDARD: COMPLY WITH NSF 61, "DRINKING WATER SYSTEM COMPONENTS - HEALTH EFFECTS," FOR FIXTURE MATERIALS THAT WILL BE IN CONTACT WITH POTABLE WATER.

D. FIXTURES SHALL BE PROVIDED AS SCHEDULED ON THE DRAWINGS.

PART 3 - EXECUTION

3.1 INSTALLATIONS

A. INSTALL FITTING INSULATION KITS ON FIXTURES FOR PEOPLE WITH DISABILITIES.

B. INSTALL FIXTURES WITH FLANGES AND GASKET SEALS.

C. INSTALL TANKS FOR ACCESSIBLE, TANK-TYPE WATER CLOSETS WITH LEVER HANDLE MOUNTED ON WIDE SIDE OF COMPARTMENT.

D. FASTEN WALL-HANGING PLUMBING FIXTURES SECURELY TO SUPPORTS ATTACHED TO BUILDING SUBSTRATE WHEN SUPPORTS ARE SPECIFIED, AND TO BUILDING WALL CONSTRUCTION WHERE NO SUPPORT IS INDICATED.

E. FASTEN FLOOR-MOUNTED FIXTURES TO SUBSTRATE. FASTEN FIXTURES HAVING HOLES FOR SECURING FIXTURE TO WALL CONSTRUCTION, TO REINFORCEMENT BUILT INTO WALLS.

F. FASTEN WALL-MOUNTED FITTINGS TO REINFORCEMENT BUILT INTO WALLS.

G. FASTEN COUNTER-MOUNTING PLUMBING FIXTURES TO CASEWORK.

H. SECURE SUPPLIES TO SUPPORTS OR SUBSTRATE WITHIN PIPE SPACE BEHIND FIXTURE.

I. SET MOP BASINS IN LEVELING BED OF CEMENT GROUT.

J. INSTALL INDIVIDUAL SUPPLY INLETS, SUPPLY STOPS, SUPPLY RISERS, AND TUBULAR BRASS TRAPS WITH CLEANOUTS AT FIXTURE.

K. INSTALL WATER-SUPPLY STOP VALVES IN ACCESSIBLE LOCATIONS.

L. INSTALL TRAPS ON FIXTURE OUTLETS. OMIT TRAPS ON FIXTURES HAVING INTEGRAL TRAPS. OMIT TRAPS ON INDIRECT WASTES UNLESS OTHERWISE INDICATED.

M. INSTALL ESCUTCHEONS AT WALL, FLOOR, AND CEILING PENETRATIONS IN EXPOSED, FINISHED LOCATIONS AND WITHIN CABINETS AND MILLWORK. USE DEEP-PATTERN ESCUTCHEONS WHERE REQUIRED TO CONCEAL PROTRUDING PIPE FITTINGS.

N. SEAL JOINTS BETWEEN FIXTURES AND WALLS, FLOORS, AND COUNTERS USING SANITARY-TYPE, ONE-PART, MILDEW-RESISTANT, SILICONE SEALANT. MATCH SEALANT COLOR TO FIXTURE COLOR.

O. INSTALL PIPING CONNECTIONS BETWEEN PLUMBING FIXTURES AND PIPING SYSTEMS AND PLUMBING EQUIPMENT. INSTALL INSULATION ON SUPPLIES AND DRAINS OF FIXTURES FOR PEOPLE WITH DISABILITIES.

END OF SECTION

SECTION 221623 - FACILITY NATURAL-GAS PIPING

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. MINIMUM OPERATING-PRESSURE RATINGS:

1. PIPING AND VALVES: 100 PSIG MINIMUM UNLESS OTHERWISE INDICATED.

B. NATURAL-GAS SYSTEM PRESSURE WITHIN BUILDING: ONE DISTRIBUTION PRESSURE. 14" W.C., BUT NOT MORE THAN 2.0 PSIG.

2.2 PIPES, TUBES, AND FITTINGS

A. STEEL PIPE: ASTM A 53/A 53M, BLACK STEEL, SCHEDULE 40, TYPE E OR S, GRADE B.

1. MALLEABLE-IRON THREADED FITTINGS: ASME B16.3, CLASS 150, STANDARD PATTERN.

2. WROUGHT-STEEL WELDING FITTINGS: ASTM A 234/A 234M FOR BUTT WELDING AND SOCKET WELDING.

3. UNIONS: ASME B16.39, CLASS 150, MALLEABLE IRON WITH BRASS-TO-IRON SEAT, GROUND JOINT, AND THREADED ENDS.

4. PROTECTIVE COATING FOR UNDERGROUND PIPING: FACTORY-APPLIED, THREE-LAYER COATING OF EPOXY, ADHESIVE, AND PE.

B. CORRUGATED, STAINLESS-STEEL TUBING: COMPLY WITH ANSI/AS LC 1; INCLUDE FLAME-RETARDANT PE COATING, COPPER-ALLOY THREADED ENDS, AND STRIKER PLATES.

2.3 SPECIALTIES

A. APPLIANCE FLEXIBLE CONNECTORS:

1. INDOOR, FIXED-APPLIANCE FLEXIBLE CONNECTORS: COMPLY WITH ANSI Z21.24.

2. INDOOR, MOVABLE-APPLIANCE FLEXIBLE CONNECTORS: COMPLY WITH ANSI Z21.69.

3. OUTDOOR, APPLIANCE FLEXIBLE CONNECTORS: COMPLY WITH ANSI Z21.75.

4. CORRUGATED STAINLESS-STEEL TUBING WITH POLYMER COATING.

B. STRAINERS: ASTM A 126, CLASS B, CAST-IRON BODY, Y-PATTERN, FULL SIZE OF CONNECTING PIPING, CWP RATING OF 125 PSIG. INCLUDE 40-MESH STARTUP STRAINER, AND PERFORATED STAINLESS-STEEL BASKET.

C. WEATHERPROOF VENT CAP: CAST-OR MALLEABLE-IRON INCREASER FITTING WITH CORROSION-RESISTANT WIRE SCREEN, WITH FREE AREA AT LEAST EQUAL TO CROSS-SECTIONAL AREA OF CONNECTING PIPE AND THREADED-END CONNECTION.

2.4 VALVES

A. GENERAL REQUIREMENTS FOR METALLIC MANUAL GAS SHUTOFF VALVES: COMPLY WITH ASME B16.33.

1. CWP RATING: 125 PSIG.

B. ONE-PIECE, BRONZE BALL VALVE WITH BRONZE TRIM: MSS SP-110.

1. BODY: BRONZE, COMPLYING WITH ASTM B 584.

2. BALL: CHROME-PLATED BRASS.

3. STEM: BRONZE; BLOWOUT PROOF.

4. SEATS: REINFORCED TFE; BLOWOUT PROOF.

5. PACKING: SEPARATE PACKNUT WITH ADJUSTABLE STEM PACKING THREADED ENDS.

6. CWP RATING: 600 PSIG.

7. LISTING: VALVES NPS 1 AND SMALLER SHALL BE LISTED AND LABELED BY AN NRTL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

8. SERVICE: SUITABLE FOR NATURAL-GAS SERVICE WITH "WOG" INDICATED ON VALVE BODY.

C. TWO-PIECE, FULL-PORT, BRONZE BALL VALVES WITH BRONZE TRIM: MSS SP-110.

1. BODY: BRONZE, COMPLYING WITH ASTM B 584.

2. BALL: CHROME-PLATED BRONZE.

3. STEM: BRONZE; BLOWOUT PROOF.

4. SEATS: REINFORCED TFE; BLOWOUT PROOF.

5. PACKING: THREADED BODY PACKNUT DESIGN WITH ADJUSTABLE STEM PACKING.

6. CWP RATING: 600 PSIG.

7. LISTING: VALVES NPS 1 AND SMALLER SHALL BE LISTED AND LABELED BY AN NRTL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

8. SERVICE: SUITABLE FOR NATURAL-GAS SERVICE WITH "WOG" INDICATED ON VALVE BODY.

D. BRONZE PLUG VALVES: MSS SP-78.

1. BODY: BRONZE, COMPLYING WITH ASTM B 584.

2. PLUG: BRONZE.

3. OPERATOR: SQUARE HEAD OR LUG TYPE WITH TAMPERPROOF FEATURE WHERE INDICATED.

4. PRESSURE CLASS: 125 PSIG.

5. LISTING: VALVES NPS 1 AND SMALLER SHALL BE LISTED AND LABELED BY AN NRTL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

6. SERVICE: SUITABLE FOR NATURAL-GAS SERVICE WITH "WOG" INDICATED ON VALVE BODY.

E. CAST-IRON, NONLUBRICATED PLUG VALVES: MSS SP-78.

1. BODY: CAST IRON, COMPLYING WITH ASTM A 126, CLASS B.

2. PLUG: BRONZE OR NICKEL-PLATED CAST IRON.

3. SEAT: COATED WITH THERMOPLASTIC.

4. STEM SEAL: COMPATIBLE WITH NATURAL GAS.

5. OPERATOR: SQUARE HEAD OR LUG TYPE WITH TAMPERPROOF FEATURE WHERE INDICATED.

6. PRESSURE CLASS: 125 PSIG.

7. LISTING: VALVES NPS 1 AND SMALLER SHALL BE LISTED AND LABELED BY AN NRTL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

8. SERVICE: SUITABLE FOR NATURAL-GAS SERVICE WITH "WOG" INDICATED ON VALVE BODY.

F. ELECTRICALLY OPERATED, AUTOMATIC GAS VALVES: COMPLY WITH UL 429.

2.5 PRESSURE REGULATORS

A. GENERAL REQUIREMENTS: SINGLE STAGE, STEEL JACKETED, AND CORROSION RESISTANT. INCLUDE ELEVATION COMPENSATOR.

B. LINE PRESSURE REGULATORS: ANSI Z21.80: 2-PSIG MAXIMUM INLET PRESSURE. FACTORY- OR FIELD-INSTALLED, STAINLESS-STEEL SCREEN IN VENT OPENING IF NOT CONNECTED TO VENT PIPING.

C. APPLIANCE PRESSURE REGULATORS: ANSI Z21.18: 2-PSIG MAXIMUM INLET PRESSURE. REGULATOR MAY INCLUDE VENT LIMITING DEVICE, INSTEAD OF VENT CONNECTION, IF APPROVED BY AUTHORITIES HAVING JURISDICTION.

PART 3 - EXECUTION

3.1 INDOOR PIPING INSTALLATION

A. COMPLY WITH REQUIREMENTS IN SECTION 220500 "COMMON WORK RESULTS FOR PLUMBING" FOR BASIC PIPING INSTALLATION REQUIREMENTS.

B. INSTALL PIPING IN CONCEALED LOCATIONS UNLESS OTHERWISE INDICATED AND EXCEPT IN EQUIPMENT ROOMS AND SERVICE AREAS.

C. INSTALL ESCUTCHEONS AT PENETRATIONS OF INTERIOR WALLS, CEILINGS, AND FLOORS.

D. FIRE-BARRIER PENETRATIONS: MAINTAIN INDICATED FIRE RATING OF WALLS, PARTITIONS, CEILINGS, AND FLOORS AT PIPE PENETRATIONS. SEAL PIPE PENETRATIONS WITH FIRESTOP MATERIALS. COMPLY WITH REQUIREMENTS IN SECTION 078413 "PENETRATION FIRESTOPPING."

E. INSTALL GAS STOPS FOR SHUTOFF TO APPLIANCES WITH LOW-PRESSURE GAS SUPPLY.

F. INSTALL NATURAL-GAS PIPING AT UNIFORM GRADE OF 2 PERCENT DOWN TOWARD DRIP AND SEDIMENT TRAPS.

G. USE ECCENTRIC REDUCER FITTINGS TO MAKE REDUCTIONS IN PIPE SIZES. INSTALL FITTINGS WITH LEVEL SIDE DOWN.

H. CONNECT BRANCH PIPING FROM TOP OR SIDE OF HORIZONTAL PIPING.

I. INSTALL UNIONS IN PIPES NPS 2 AND SMALLER, ADJACENT TO EACH VALVE, AT FINAL CONNECTION TO EACH PIECE OF EQUIPMENT. UNIONS ARE NOT REQUIRED AT FLANGED CONNECTIONS.

J. INSTALL STRAINER ON INLET OF EACH LINE PRESSURE REGULATOR AND AUTOMATIC OR ELECTRICALLY OPERATED VALVE.

K. INSTALL PRESSURE GAGE PLUG UPSTREAM AND DOWNSTREAM FROM EACH LINE REGULATOR.

L. CONNECT GAS PIPING TO EQUIPMENT AND APPLIANCES WITH SHUTOFF VALVES AND UNIONS. INSTALL GAS VALVE UPSTREAM FROM AND WITHIN 72 INCHES OF EACH APPLIANCE USING GAS. INSTALL UNION OR FLANGED CONNECTIONS DOWNSTREAM FROM VALVES.

M. EXTEND RELIEF VENT CONNECTIONS FOR SERVICE REGULATORS, LINE REGULATORS, AND OVERPRESSURE PROTECTION DEVICES TO THE OUTDOORS AND TERMINATE WITH WEATHERPROOF VENT CAP.

N. DO NOT USE NATURAL-GAS PIPING AS GROUNDING ELECTRODE.

3.2 PIPING JOINT CONSTRUCTION

A. THREADED JOINTS: THREAD PIPE WITH TAPERED PIPE THREADS COMPLYING WITH ASME B1.20.1.

B. WELDED JOINTS: CONSTRUCT JOINTS ACCORDING TO AWS D10.12M/D10.12, USING QUALIFIED PROCESSES AND WELDING OPERATORS.

C. JOINTS IN STEEL PIPING WITH PROTECTIVE COATING: APPLY JOINT COVER KITS TO PIPE AFTER JOINING TO COVER, SEAL, AND PROTECT JOINTS.

D. FLANGED JOINTS: INSTALL GASKET MATERIAL, SIZE, TYPE, AND THICKNESS APPROPRIATE FOR NATURAL-GAS SERVICE. INSTALL GASKET CONCENTRICALLY POSITIONED.

3.3 VALVE INSTALLATION

A. INSTALL MANUAL GAS SHUTOFF VALVE FOR EACH GAS APPLIANCE AHEAD OF CORRUGATED STAINLESS-STEEL TUBING, ALUMINUM, OR COPPER CONNECTOR.

B. INSTALL REGULATORS AND OVERPRESSURE PROTECTION DEVICES WITH MAINTENANCE ACCESS SPACE ADEQUATE FOR SERVICING AND TESTING.

3.4 INDOOR PIPING SCHEDULE FOR SYSTEM PRESSURES MORE THAN 7" W.C. AND LESS THAN 5 PSIG.

A. ABOVEGROUND, BRANCH PIPING NPS 1 AND SMALLER SHALL BE THE FOLLOWING:

1. CORRUGATED STAINLESS-STEEL TUBING WITH MECHANICAL FITTINGS HAVING SOCKET OR THREADED ENDS TO MATCH ADJACENT PIPING.

2. STEEL PIPE WITH MALLEABLE-IRON FITTINGS AND THREADED JOINTS.

B. ABOVEGROUND, DISTRIBUTION PIPING SHALL BE THE FOLLOWING:

1. STEEL PIPE WITH MALLEABLE-IRON FITTINGS AND THREADED JOINTS.

C. UNDERGROUND, BELOW BUILDING, SHALL BE [ ONE OF ] THE FOLLOWING:

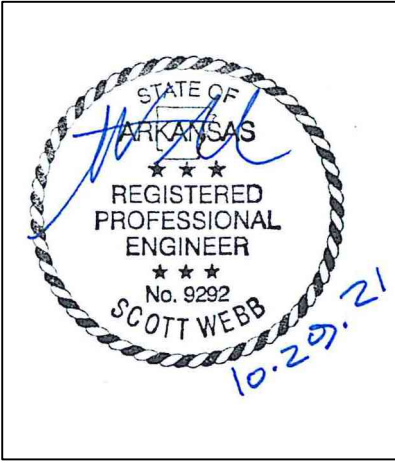
1. STEEL PIPE WITH MALLEABLE-IRON FITTINGS AND THREADED JOINTS.

2. STEEL PIPE WITH WROUGHT-STEEL FITTINGS AND WELDED JOINTS.

D. CONTAINMENT CONDUIT: STEEL WITH WROUGHT-STEEL FITTINGS AND WELDED JOINTS. COAT PIPE AND FITTINGS WITH PROTECTIVE COATING FOR STEEL PIPING.

E. CONTAINMENT CONDUIT VENT PIPING: STEEL PIPE WITH MALLEABLE-IRON FITTINGS AND THREADED OR WROUGHT-STEEL FITTINGS WITH WELDED JOINTS. COAT UNDERGROUND PIPE AND FITTINGS WITH PROTECTIVE COATING FOR STEEL PIPING.

END OF SECTION



PROPRIETARY INFORMATION NOTICE:

THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SPECIFICATIONS  
PLUMBING

SHEET:

P7.3



ELECTRICAL LEGEND

DETAIL	DESCRIPTION
	SIMPLEX RECEPTACLE
	DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE ABOVE COUNTER
	DUPLEX RECEPTACLE - GFCI
	DUPLEX RECEPTACLE - GFCI, ABOVE COUNTER
	SPLIT RECEPTACLE
	DUPLEX RECEPTACLE - WITH WEATHERPROOF COVER & GFCI
	DOUBLE DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE IN CEILING
	DUPLEX RECEPTACLE - 20A, 125V, WITH ISOLATED GROUND
	BRANCH CIRCUIT HOME-RUN WITH CIRCUIT NUMBER
	FLOOR MOUNTED DUPLEX RECEPTACLE
	SPECIAL RECEPTACLE (SEE PLANS FOR TYPE)
	JUNCTION BOX
	MOTOR (SINGLE PHASE & THREE PHASE)
	TIME CLOCK
	VOLUME CONTROL
	PULL BOX - SIZE & TYPE AS REQUIRED
	TELEPHONE / DATA OUTLET
	TV CABLE OUTLET
	DISCONNECT - NON FUSED
	DISCONNECT - FUSED
	UTILITY METER
	ELECTRICAL PANEL

LIGHTING LEGEND

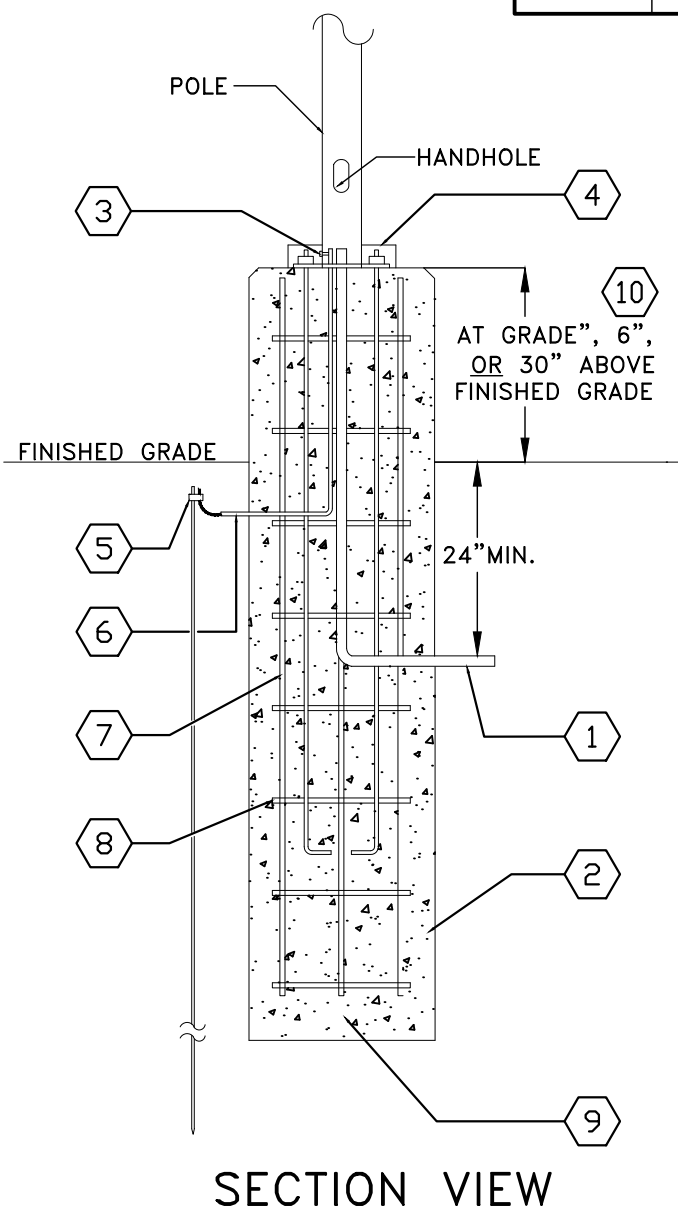
TAG	DESCRIPTION
	INTERIOR RECESSED DOWNLIGHT
	INTERIOR RECESSED DOWNLIGHT
	INTERIOR RECESSED DOWNLIGHT
	PENDANT
	PENDANT
	PENDANT
	TRACK LIGHT
	VANITY LIGHT
	WALL SCONCE
	2X4 LAY-IN TROFFER
	2X4 NIGHT LIGHT
	2X4 EMERGENCY LIGHT
	EXIT/EMERGENCY LIGHT W/ BATTERY PACK AND DUAL HEADS
	EXIT/EMERGENCY LIGHT WITH BATTERY PACK
	EXIT LIGHT (SURFACE MOUNTED)
	EXIT LIGHT (CEILING MOUNTED)
	REMOTE EMERGENCY HEADS
	EMERGENCY BATTERY PACK AND DUAL HEADS
	DIMMER SWITCH EQUAL TO LUTRON NOVA SERIES T
	TOGGLE SWITCH SINGLE POLE SWITCH WITH COVER PLATE
	TOGGLE SWITCH 2 POLE SWITCH WITH COVER PLATE
	TOGGLE SWITCH 3 WAY SWITCH WITH COVER PLATE
	TOGGLE SWITCH KEY OPERATED SWITCH WITH COVER PLATE
	PHOTOCELL
	WALL MOUNTED OCCUPANCY SENSOR
	CEILING MOUNTED OCCUPANCY SENSOR SENSOR SWITCH MODEL #CMR 9 2P

GENERAL NOTES:

- A. ALL WORK TO COMPLY TO ALL STATE, LOCAL, NEC, & NFPA CODES.
- B. ELECTRICAL CONTRACTOR TO VISIT THE SITE PRIOR TO SUBMITTING A BID & INCLUDE IN THEIR BID ANY ITEM ANY ITEMS NECESSARY FOR A COMPLETE & OPERATIONAL SYSTEM.
- C. DRAWINGS ARE SCHEMATIC IN NATURE. ELECTRICAL CONTRACTOR IS TO ADD ANY ITEMS THAT ARE REQUIRED FOR A COMPLETE & OPERATIONAL SYSTEM IN THEIR PROPOSAL.
- D. ELECTRICAL CONTRACTOR IS TO COORDINATE THEIR INSTALLATION WITH THE OTHER TRADES, IF A CONFLICT OCCURS AND IT IS DUE TO THE ELECTRICAL CONTRACTOR'S LACK OF COORDINATION, ALL WORK INVOLVED IN RESOLVING THE CONFLICT WILL BE AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.
- E. ELECTRICAL CONTRACTOR SHALL PAY ALL FEES AND PERMITS.

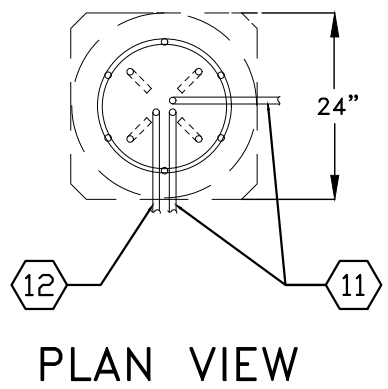
ABBREVIATIONS

(A)	EXISTING TO BE ABANDONED	INCD	INCANDESCENT
(D)	EXISTING TO BE DEMOLISHED	KVA	KILOVOLT AMPERE
(E)	EXISTING TO REMAIN	KW	KILOWATT
(F)	FUTURE	LTG	LIGHTING OR LIGHT
(R)	EXISTING TO BE RELOCATED	LRA	LOCKED ROTOR AMPS
A	AMPERE	MCA	MAXIMUM CURRENT AMPACITY
AC	ALTERNATING CURRENT OR AIR CONDITIONER	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AFG	ABOVE FINISHED GRADE	MDP	MAIN DISTRIBUTION PANEL
AIC	AMPS INTERRUPTING CAPACITY	MLO	MAIN LUGS ONLY
ANNC	ANNUNCIATOR	MOCP	MAXIMUM OVERCURRENT PROTECTION
AWG	AMERICAN WIRE GAUGE	MSB	MAIN SWITCHBOARD
BPS	BOLTED PRESSURE SWITCH	MH	METAL HALIDE
C	CONDUIT	MTS	MANUAL TRANSFER SWITCH
CB	CIRCUIT BREAKER	NAC	NOTIFICATION APPLIANCE CIRCUIT
CCTV	CLOSED CIRCUIT TELEVISION	NC	NORMALLY CLOSED
CKT	CIRCUIT	NO	NORMALLY OPEN
CM	CONSTRUCTION MANAGER	NF	NON-FUSED
DC	DIRECT CURRENT	OCC	OCCUPANCY
DP	DISTRIBUTION PANELBOARD	PA	PUBLIC ADDRESS
DTT	DOUBLE TWIN TUBE	PB	PULL BOX OR PUSH BUTTON
EB	ELECTRONIC BALLAST	PVC	POLYVINYL CHLORIDE (PLASTIC PIPE)
EC	ELECTRICAL CONTRACTOR	PWR	POWER
EM	EMERGENCY	RECPT	RECEPTACLE
EMT	ELECTRICAL METAL TUBING	STP	SHIELDED, TWISTED PAIR
EWC	ELECTRIC WATER COOLER	TC	TIME CLOCK
FA	FIRE ALARM	TRT	TRIPLE TUBE
FLA	FULL LOAD AMPS	TYP	TYPICAL
G	GROUND	UNO	UNLESS NOTED OTHERWISE
GC	GENERAL TRADES CONTRACTOR	UTP	UNSHIELDED, TWISTED PAIR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	V	VOLT
GEN	GENERATOR	W	WATT
HOA	HAND-OFF-AUTOMATIC	WAP	WIRELESS ACCESS POINT
HP	HORSEPOWER	WH	WATHOUR
HPC	HIGH PRESSURE CONTACT SWITCH	WP	WEATHERPROOF, NEMA 3R UNO
HZ	HERTZ	XFMR	TRANSFORMER
IG	ISOLATED GROUND	Z	IMPEDANCE
IMC	INTERMEDIATE METAL CONDUIT	Φ	PHASE



# NOTES:

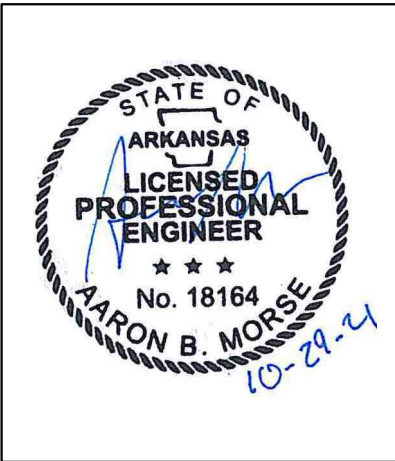
1. 1" OR AS NOTED (INSTALL ON MIN. 6" SAND BED WITH MIN. 6" SAND COVER BEFORE BACKFILL. CONDUIT SHALL BE FULL WEIGHT SCHEDULE 40 PVC).
2. REFER TO STRUCTURAL DRAWINGS.
3. PROVIDE GROUND LUG IN BASE BOLTED TO BASE PLATE. GROUND SHALL BE MIN. #10 SOLID. REFER TO STRUCTURAL DRAWINGS.
4. REFER TO STRUCTURAL DRAWINGS.
5. 1/2" EMT OR PVC FOR GROUND WIRE.
6. REFER TO STRUCTURAL DRAWINGS.
7. REFER TO STRUCTURAL DRAWINGS.
8. REFER TO STRUCTURAL DRAWINGS.
9. REFER TO STRUCTURAL DRAWINGS.
10. REFER TO STRUCTURAL DRAWING.
11. 24" MINIMUM RADIUS EXTENDED 3/4" MAXIMUM ABOVE FOUNDATION; NUMBER OF CONDUITS PER PLAN, 1" MINIMUM, OR AS NOTED.
12. CONDUIT STUB OUT FOR GROUND WIRE CONNECTION.



1 LIGHT POLE BASE DETAIL  
N.T.S.

DRAWING INDEX

E0.0	GENERAL INFORMATION - ELECTRICAL
E1.0	SITE LIGHTING ELECTRICAL PLAN
E1.1	LIGHTING PLAN - ELECTRICAL
E2.1	POWER PLAN - ELECTRICAL
E2.2	POS SYSTEMS PLAN
E3.1	ROOF PLAN - ELECTRICAL
E4.1	DIAGRAMS AND DETAILS - ELECTRICAL
E5.1	SCHEDULES - ELECTRICAL
E7.1	SPECIFICATIONS - ELECTRICAL
E7.2	SPECIFICATIONS - ELECTRICAL
E7.3	SPECIFICATIONS - ELECTRICAL



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:


ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

GENERAL INFORMATION  
ELECTRICAL






SHEET:

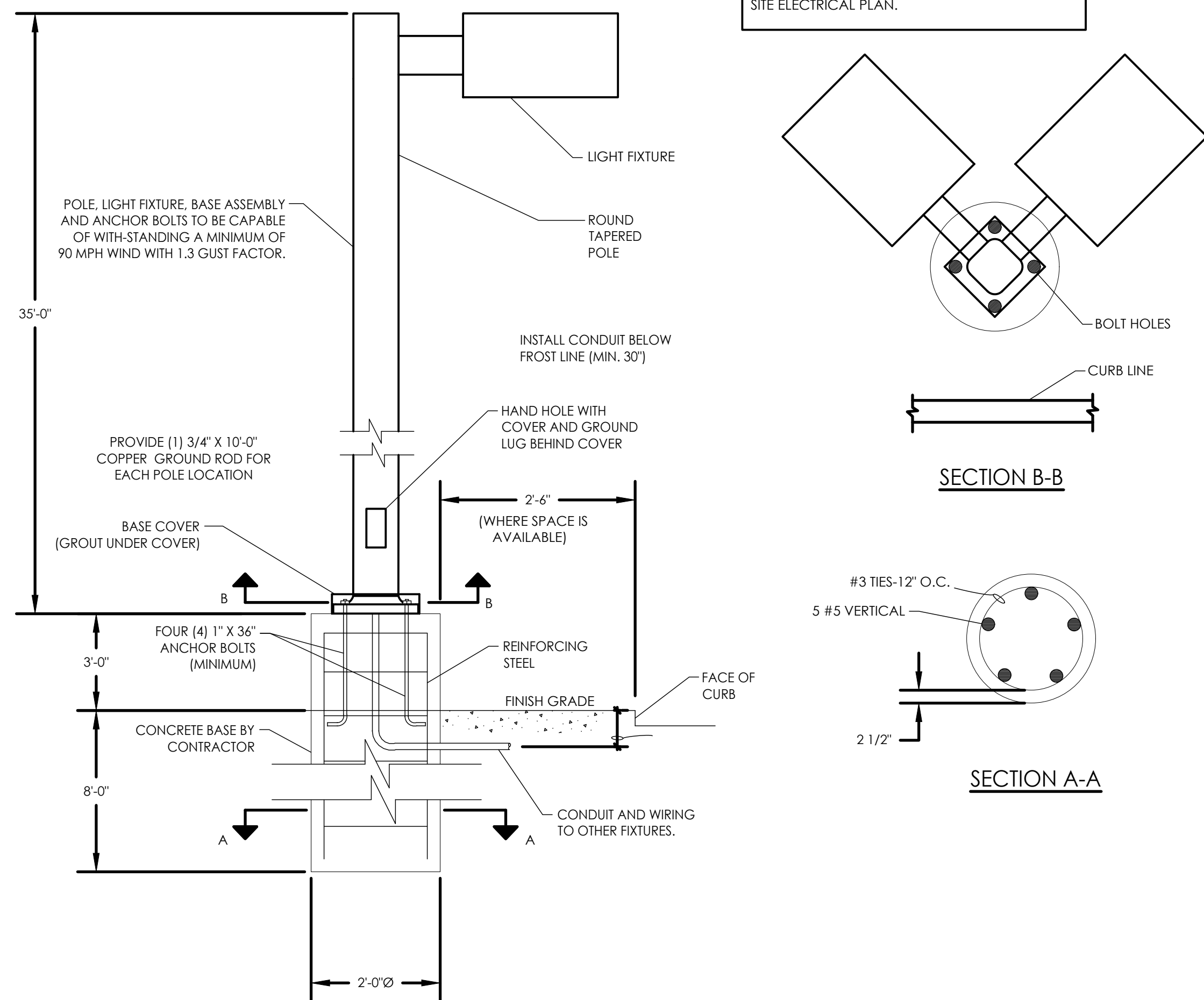
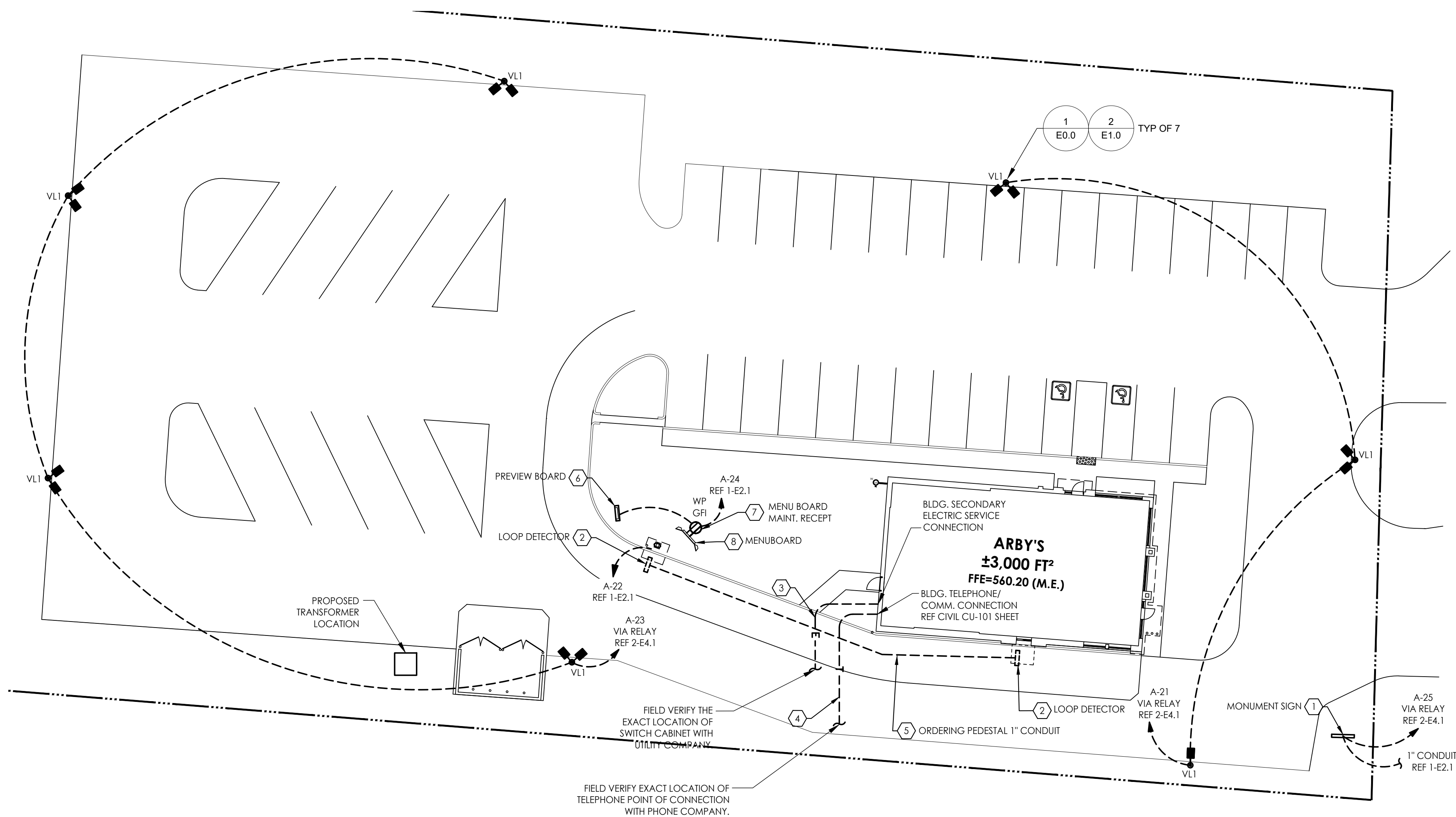
E0.0



SITE LIGHTING FIXTURE SCHEDULE 							
TYPE	MANUFACTURER	CATALOG NUMBER	VOLT	WATT	QTY	DESCRIPTION	NOTES
RxA	TRACE-LITE	RxA-70	120/277	70	8	[2] POLE FIXTURES @ 90° W/ 7" ARM	1,2,3
P	KW INDUSTRIES	STS-25	--	--	4	POLE, 25'-0"	--
NOTES: 1. FIXTURE FURNISHED WITH LED LAMP. 2. FIXTURE SHALL BE U.L. LISTED AND LABELED FOR WET LOCATIONS. 3. FULL CUT-OFF FIXTURES. FOR FIXTURE VERIFICATION, CONTACT PAUL GRAF OF ACCENT LIGHTING: (316) 636-1278 FAX (316) 636-1280							

NOTE:  
ELECTRICAL CONTRACTOR TO PROVIDE AS BUILT UNDER  
GROUND CONDUITS SURVEY CONDUCTED PRIOR TO FINAL  
INSPECTION BY UTILITY COMPANY.

SITE LIGHTING LEGEND	
	ELECTRIC SERVICE
	TELEPHONE / COMMUNICATION
	NEW PARKING LOT LIGHTS
	CONDUIT, CONCEALED IN SLAB
	PEDESTRIAN LIGHT



GENERAL NOTES:

1. CONTRACTOR SHALL HAVE A THOROUGH KNOWLEDGE OF AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES AND MANUFACTURER'S RECOMMENDATIONS.

CODED NOTES:

1. NOT USED.
2. CONTRACTOR SHALL INSTALL OWNER PROVIDED LOOP DETECTOR'S, 2" BELOW FINISH GRADE OF CONCRETE AT DRIVE THRU SPEAKER POST AND DRIVE THRU WINDOW.
3. (2) 4" SCHEDULE 40 PVC SECONDARY CONDUIT WITH PULLSTRING FROM POINT OF CONNECTION VERIFY EXACT LOCATION AND REQUIREMENTS WITH UTILITY COMPANY BEFORE WORK. UTILITY CONTACT: DAVID PAULK\_AEP (888)-216-3523/(405)-222-7636: 1/E-4. AND CIVIL PLAN FOR ADDITIONAL INFORMATION AND COORDINATION.
4. TELEPHONE SERVICE ENTRANCE: PROVIDE (1) 2" SCHEDULE 40 PVC CONDUIT 24" BELOW FINISHED GRADE WITH PULL STRING. CONTRACTOR SHALL COORDINATE ALL TELEPHONE COMPANY REQUIREMENTS WITH TELEPHONE COMPANY PRIOR TO BID. PROVIDE ALL MATERIAL AND FURNISH ALL LABOR NECESSARY TO COMPLY WITH TELEPHONE COMPANY REQUIREMENTS. REFER TO CIVIL PLAN FOR CONTINUATION OF CONNECTION
5. PROVIDE (1) 1/2" SCHEDULE 40 PVC CONDUIT 24" BELOW FINISHED GRADE WITH PULL STRING TO ORDERING PEDESTAL FOR MENU BOARD COMMUNICATION SYSTEM. RE:1/E-3.
6. BRANCH CIRCUIT CONTINUATION TO PREVIEW BOARD. COORDINATE SIGN LOCATION WITH SIGN CONTRACTOR. VERIFY CONNECTION REQUIREMENTS.
7. INSTALL WEATHER PROOF (GFJ) MAINTENANCE RECEPTACLE ON BACK SIDE OF MENU BOARD. RECEPTACLE TO BE CIRCUITED WITH MENU BOARD.
8. COORDINATE MENU BOARD AND PREVIEW BOARD(S) WITH SIGN CONTRACTOR. CIRCUIT SHALL BE CONTROLLED BY SWITCH "J". RE: 2/E-2



**PROPRIETARY INFORMATION NOTICE:**

THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group, Inc.

**ARBY'S RESTAURANT GROUP**  
**INSPIRE DUAL REGULAR 40 - STANDARD**  
**1632 AR-25 BYPASS**  
**HEBER SPRINGS, AR 72543**

PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SITE LIGHTING  
ELECTRICAL  
PLAN

**SHEET:**

# E1.0



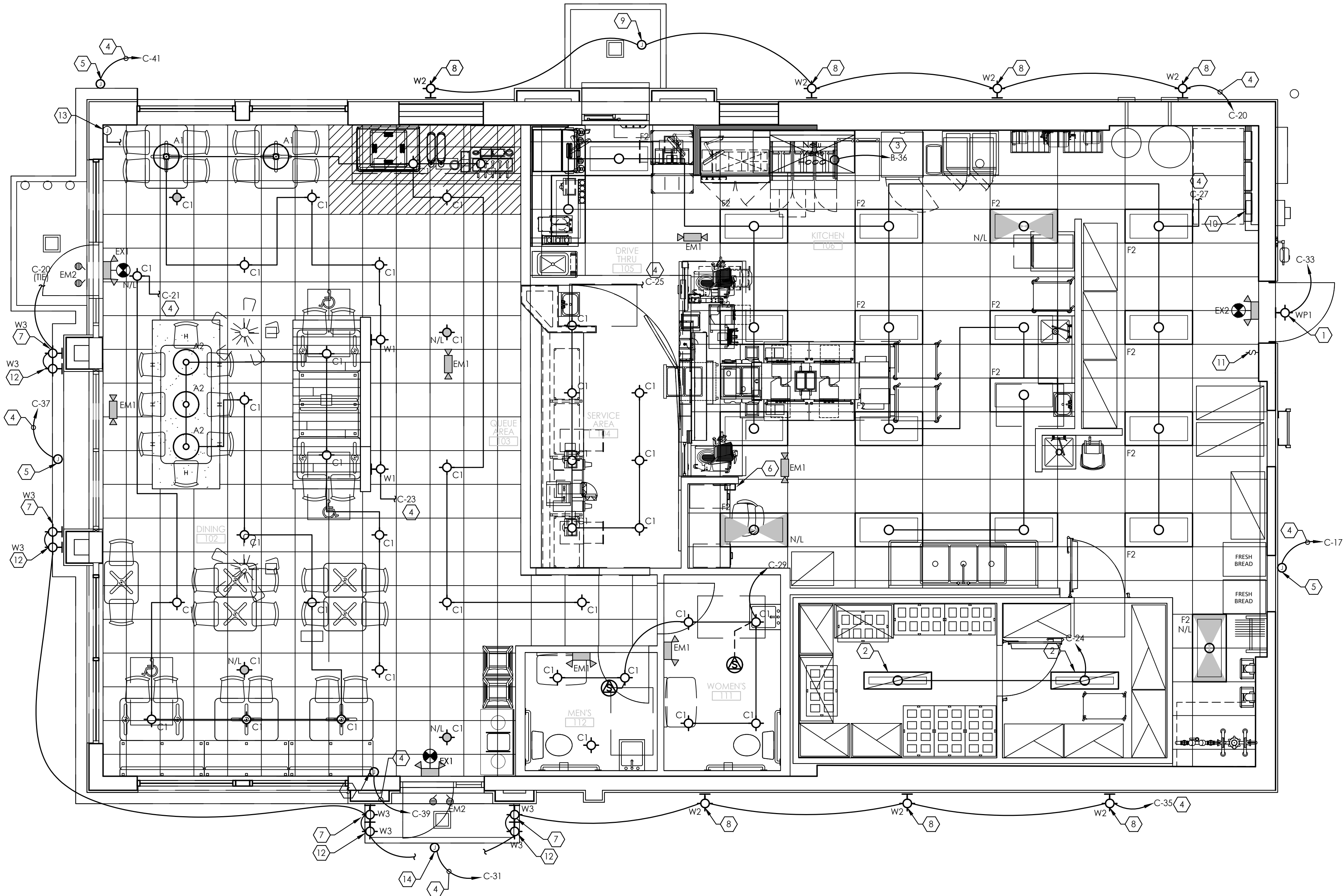
LUMINAIRE SCHEDULE										
TYPE	DESCRIPTION	MANUFACTURER	MODEL	HOUSING/ MOUNTING	LAMP TYPE	BALLAST/DRIVER	COMMENTS	VOLTS	INPUT WATTS	QUANTITY
A1	PENDANT	KICHLER	EVERLY 42046-OZ-1 (OLD BRONZE)	SUSPENDED	(1) 60W S21	N/A	SEE NOTE 1	120	60	1
A2	PENDANT	KICHLER	MISSOULA 78200-LT-1 (BRONZE)	SUSPENDED	SATCO S9578	N/A	SEE NOTE 1	120	60	3
C1	LED DOWNLIGHT	CREE	CR6T-825-35K-12-E26GU24	RECESSED	LED ENGINE	LED DRIVER	WHITE TRIM RING	120	12	39
C3	LED CYLINDER	LITHONIA	LDN6-27/15-L06-BR-LD-MVOLT-GZ10-PM-DBL	RECESSED	LED ENGINE	LED DRIVER	BLACK	120	20.5	4
F2	2X4 LED TROFFER	LITHONIA	ZR24-40L-40K-10V	RECESSED	LED ENGINE	LED DRIVER		120	44	14
W1	INTERIOR SCENCE	TECH	700BCLYNNWZ	WALL	N/A	N/A	SEE NOTE 1	120	40	2
W2	EXTERIOR UP/DOWN SCENCE	LITHONIA	OLLWU-WH	WALL	LED DRIVER	LED DRIVER		120	14	8
W3	EXTERIOR WALL SCENCE	RAB LIGHTING	SLIM12W-WHITE	WALL	LED DRIVER	LED DRIVER	-	120	12	8
WP1	EXTERIOR WALL PACK	GENERAL ELECTRIC	EWS30E3E1401DKBZ	WALL	LED DRIVER	LED DRIVER	-	120	90	1
EX1	COMBINATION EMERGENCY EXIT SIGN	LITHONIA	ECR-LED-HO-M6	UNIVERSAL	N/A	N/A	PENDANT MOUNTED AT 10'-0" AFF	120	3.3	2
EX2	COMBINATION EMERGENCY EXIT SIGN	LITHONIA	ECR-LED-HO-M6	UNIVERSAL	N/A	N/A		120	3.3	1
EM1	EMERGENCY BATTERY PACK WITH DUAL HEADS	NAVILITE	LED 90	WALL	N/A	N/A	-	120	10.8	7
EM2	EMERGENCY WP REMOTE TWIN HEAD	LITHONIA	ELAT-6CS-WP-M12	WALL	N/A	N/A	TWIN HEADS	120	7.2	2

NOTES:

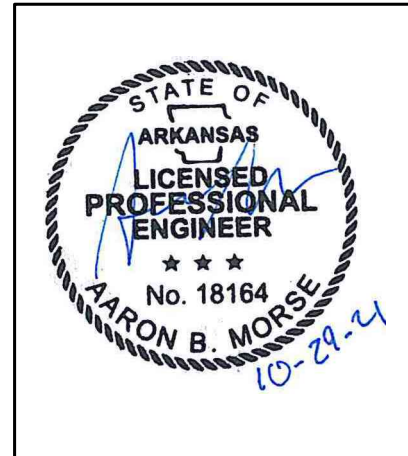
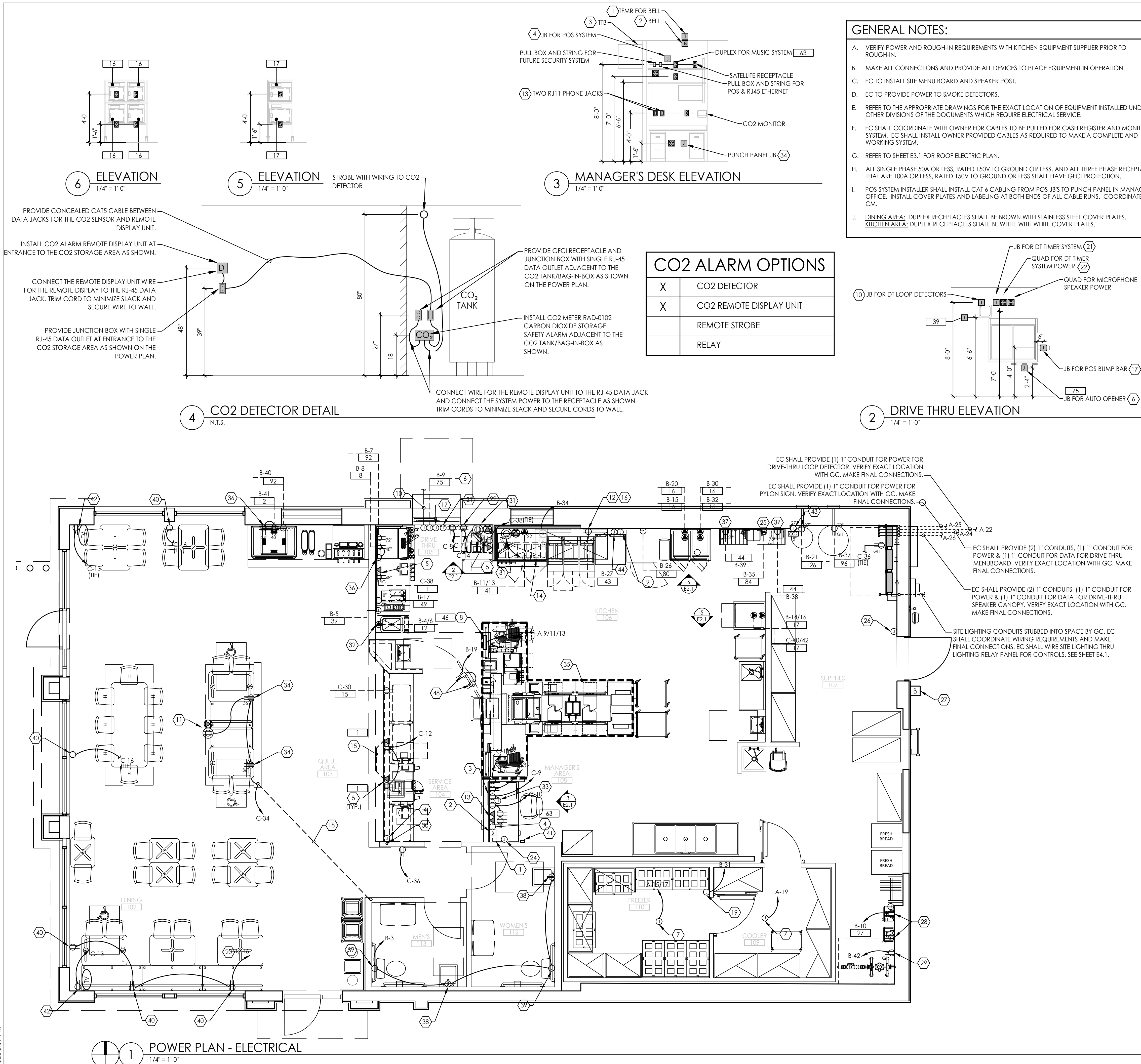
Call National Account Representative Mr. Kevin Price, E. Sam Jones 1-800-624-9849 for ordering.

Call National Account Hermitage Lighting for ordering: (800) 264-3383 or email Lindsey Sanders lsanders@hermitagelighting.com

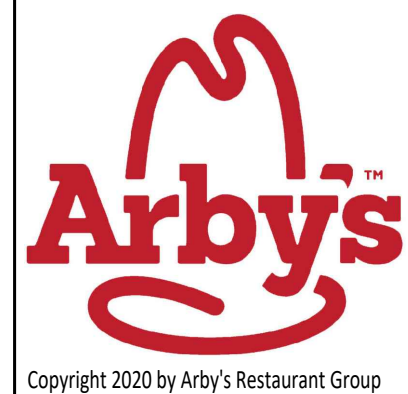
Call National Account, Regency Lighting for ordering: (800) 284-2024 x5100 or arbys@regencylighting.com







PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IT IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

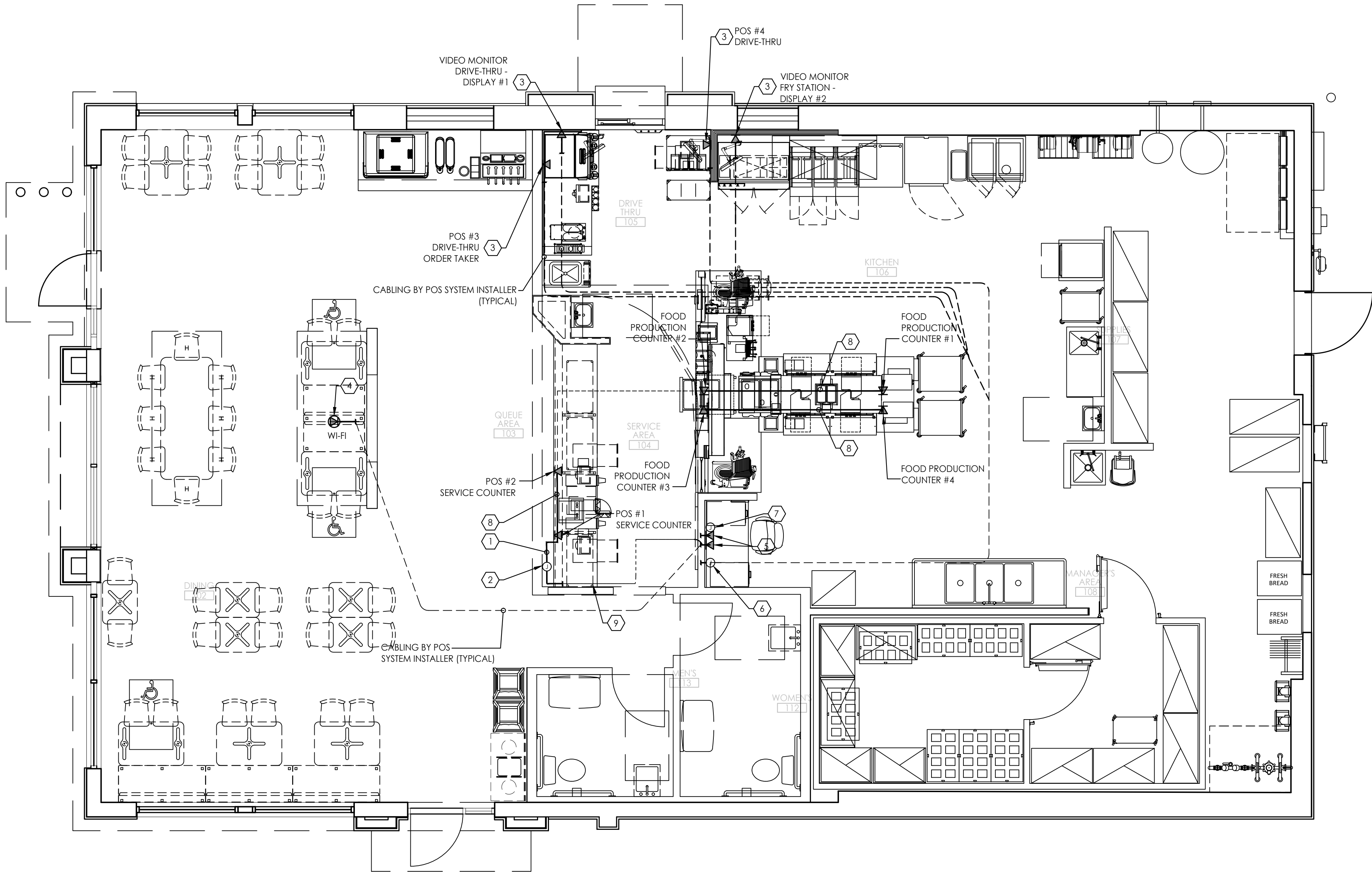
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

POWER PLAN  
ELECTRICAL

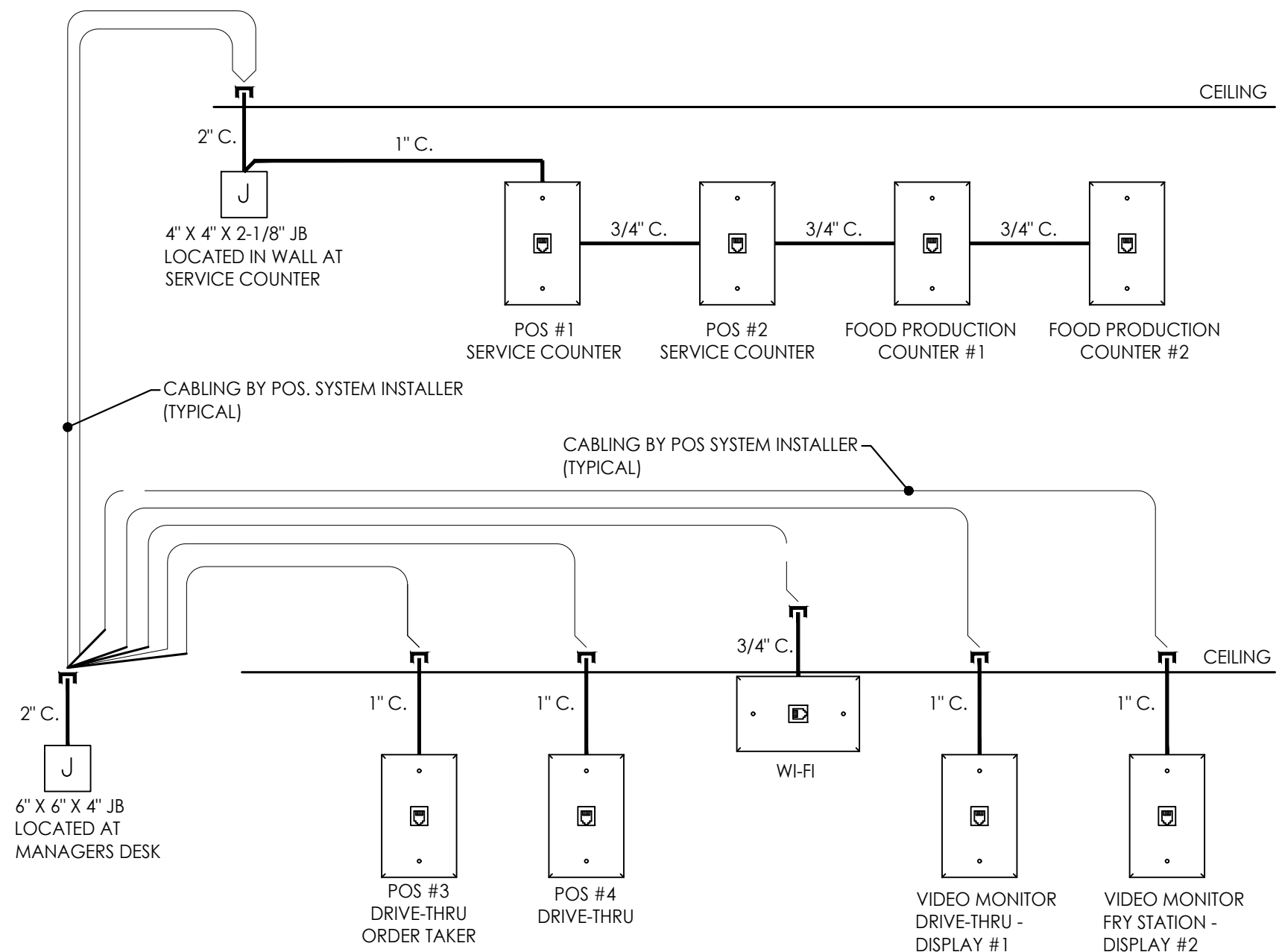
SHEET:

E2.1





2 P.O.S. SYSTEM CONDUIT/CABLING SCHEMATIC  
N.T.S.



- CODED NOTES:** (#)
1. PROVIDE 1" CONDUIT FROM WALL JUNCTION BOX.
  2. PROVIDE JUNCTION BOX AND 2" CONDUIT FOR POS SYSTEM. COORDINATE WITH POS INSTALLER PRIOR TO ROUGH-IN. SEE SCHEMATIC THIS SHEET.
  3. PROVIDE JUNCTION BOX AND 1" CONDUIT FOR POS SYSTEM. COORDINATE WITH POS INSTALLER PRIOR TO ROUGH-IN. SEE CONDUIT/CABLING SCHEMATIC THIS SHEET FOR MORE INFORMATION.
  4. PROVIDE JUNCTION BOX WITH PULL STRING AND (1) "8P8C" CONNECTOR ABOVE CEILING. SECURE TO LOBBY SIDE OF TRUSS ABOVE DECOR WALL FOR FUTURE WIFI. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR.
  5. PROVIDE JUNCTION BOX AND (2) 3/4" EMPTY CONDUITS WITH PULLSTRING TO ABOVE ACCESSIBLE CEILING FOR (2) "RJ11" PHONE JACKS (BY OTHERS).
  6. PROVIDE EMPTY 2" CONDUIT WITH PULLSTRING FROM 6"X6"X4" JUNCTION BOX TO ABOVE ACCESSIBLE CEILING FOR POS SYSTEM CABLES.
  7. PROVIDE JUNCTION BOX FOR PHONE/DATA PUNCH PANEL LOCATED BELOW ITB.
  8. PROVIDE 3/4" CONDUIT RUN IN HALF WALL.
  9. PROVIDE CONDUIT UNDERGROUND BACK TO MANAGERS DESK.

**STATE OF ARKANSAS**  
**LICENSED PROFESSIONAL ENGINEER**  
No. 18164  
**ARON B. MORSE**  
10-21-21

**PROPRIETARY INFORMATION NOTICE:**  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.

**Arby's**  
Copyright 2020 by Arby's Restaurant Group

**ARBY'S RESTAURANT GROUP**  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

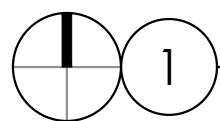
PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

POS SYSTEMS PLAN

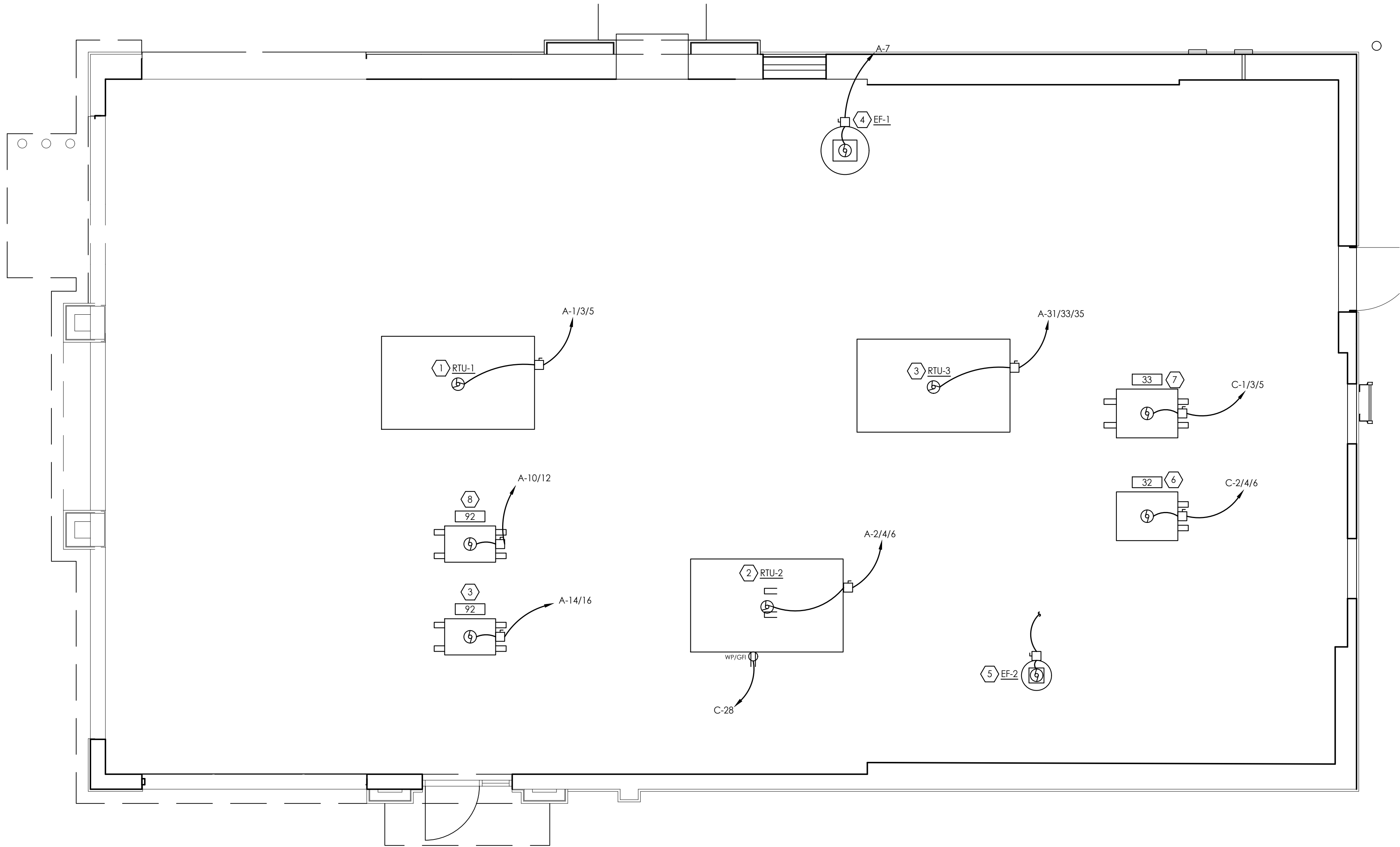
SHEET:

**E2.2**



ROOF PLAN - ELECTRICAL

1/4" = 1'-0"

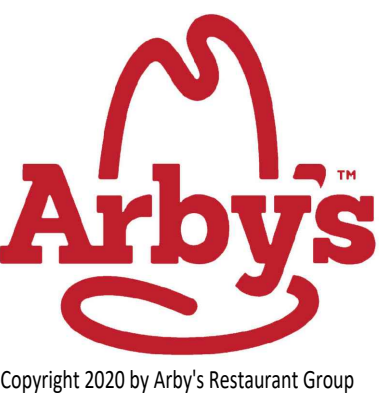


CODED NOTES:

1. RTU-1: 45 MCA, 208V-3PH, RUN (3) #4, #10G IN 1" CONDUIT FROM 60A/3P BREAKER THRU FACTORY SUPPLIED DISCONNECT TO UNIT. MAKE FINAL CONNECTION.
2. RTU-2: 45 MCA, 208V-3PH, RUN (3) #4, #10G IN 1" CONDUIT FROM 60A/3P BREAKER THRU FACTORY SUPPLIED DISCONNECT TO UNIT. MAKE FINAL CONNECTION.
3. DRIVE-THRU BEVERAGE STATION ICE MAKER CONDENSING UNIT: 2.4 KW, 208V-1PH. PROVIDE (2) #12, #12G IN 3/4" CONDUIT FROM 20A/2P BREAKER THROUGH 30A/2P NON-FUSED NEMA 3R DISC SWITCH TO UNIT. MAKE FINAL CONNECTION.
4. EF-1: 1/2 HP, 120V, PULL (2) #12, #12G IN 3/4" CONDUIT THROUGH HOOD MASTER CONTROL PANEL FOR CONTROL. SEE SHEET E2.1 FOR COORDINATION.
5. EF-2: FRACTIONAL HP, 120V, ROUTE CIRCUIT TO KITCHEN LIGHTING CIRCUIT TO OPERATE WHENEVER RESTAURANT IS IN USE.
6. 32 - WALK-IN FREEZER CONDENSING UNIT: 3.6 KW, 208V-3PH. PROVIDE (3) #12, #12G IN 3/4" CONDUIT FROM 20A/3P BREAKER THROUGH UNIT MOUNTED 30A/3P FUSED NEMA 3R DISC. SWITCH TO UNIT. MAKE FINAL CONNECTION.
7. 33 - WALK IN COOLER CONDENSING UNIT: 5.4 KW, 208V-3PH. PROVIDE (3) #12, #12G IN 3/4" CONDUIT FROM 20A/3P BREAKER THROUGH UNIT MOUNTED 30A/3P NON-FUSED NEMA 3R DISC. SWITCH TO UNIT. MAKE FINAL CONNECTION.
8. BEVERAGE STATION ICE MAKER CONDENSING UNIT: 2.4 KW, 208V-1PH. PROVIDE (2) #12, #12G IN 3/4" CONDUIT FROM 20A/2P BREAKER THROUGH 30A/2P NON-FUSED NEMA 3R DISC SWITCH TO UNIT. MAKE FINAL CONNECTION.



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

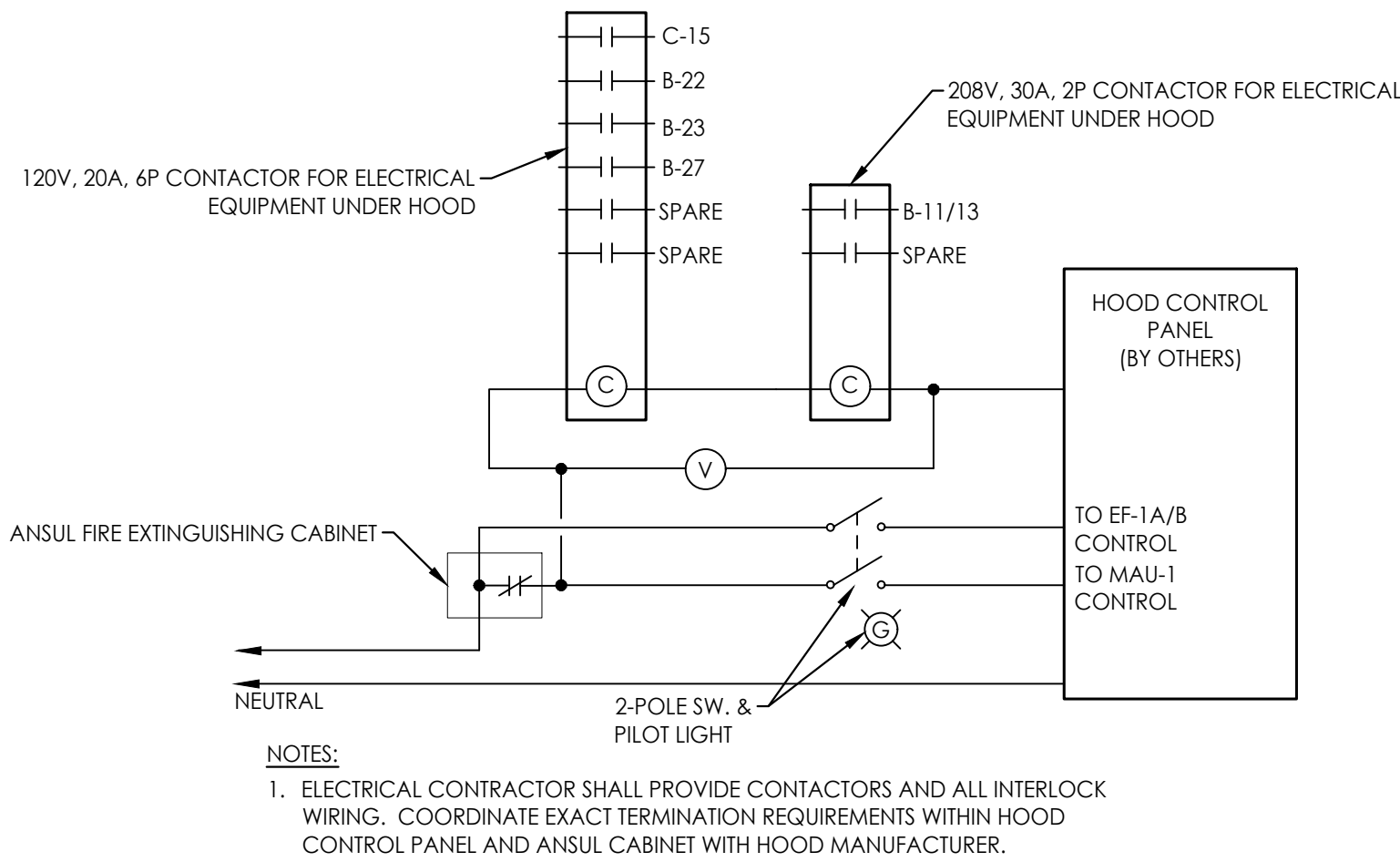
ROOF PLAN  
ELECTRICAL

SHEET:

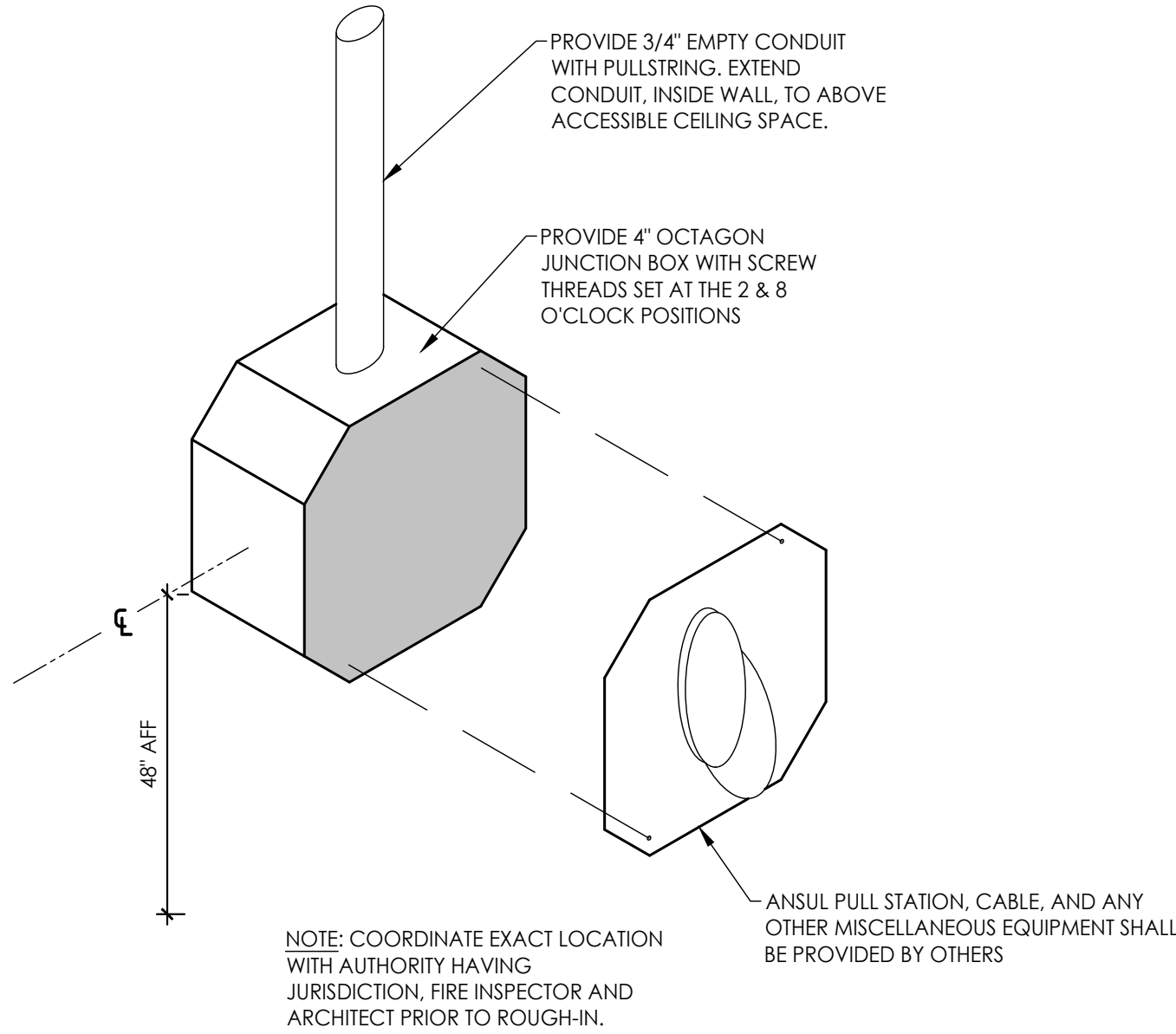
E3.1



4 SHUNT TRIP WIRING DIAGRAM  
N.T.S.



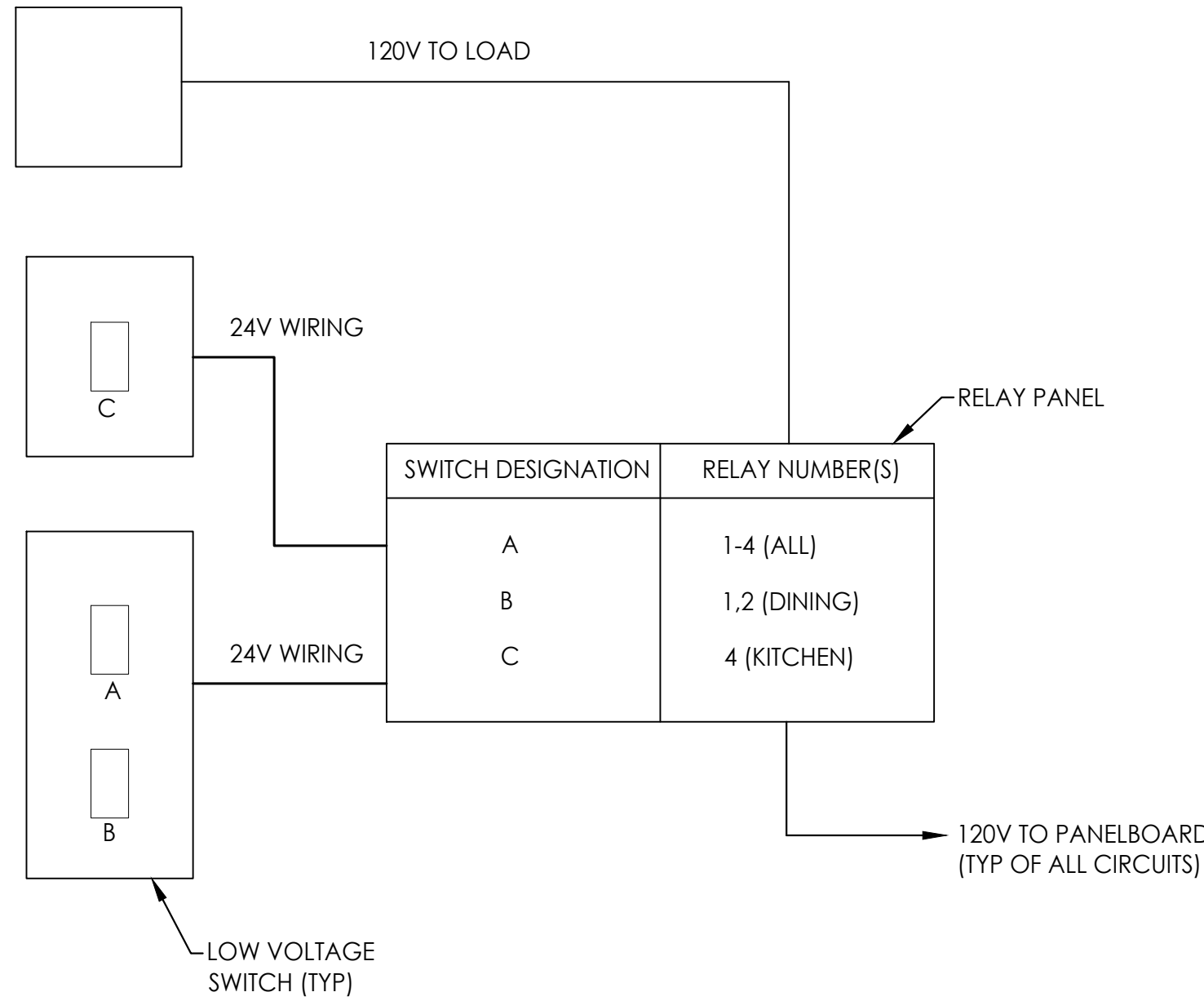
3 ANSUL PULL STATION  
N.T.S.



LIGHTING CONTROL PANEL SCHEDULE				
RELAY	CIRCUIT NUMBER	AREA CONTROLLED	CONTROL	VOLTS
1	C-21	DINING LIGHTING	LVS/TC	120
2	C-23	DINING LIGHTING	LVS/TC	120
3	C-25	SERVICE LIGHTING	LVS/TC	120
4	C-27	KITCHEN LIGHTING	LVS/TC	120
5	C-20	EXTERIOR LIGHTING	TC/PC	120
6	C-35	EXTERIOR LIGHTING	TC/PC	120
7	C-31	SIGNAGE	TC	120
8	C-37	SIGNAGE	TC	120
9	C-41	SIGNAGE	TC	120
10	C-16	SHOW WINDOW	TC	120
11	A-21	SITE LIGHTING	TC/PC	120
12	A-23	SITE LIGHTING	TC/PC	120
13	A-23	SITE LIGHTING	TC/PC	120
14	A-25	PYLON SIGN	TC/PC	120
15		SPARE		120
16		SPARE		120
17		SPARE		120

TC = TIME CLOCK  
PC = PHOTOCELL  
LVS = LOW VOLTAGE SWITCH

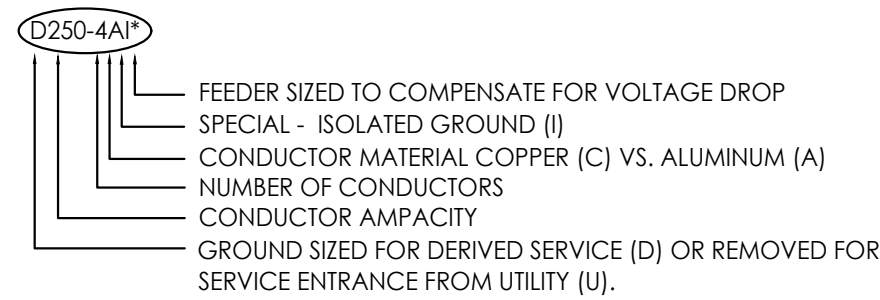
2 LIGHTING CONTROL WIRING DIAGRAM  
N.T.S.



GENERAL ONE LINE NOTES:

- A. PARALLEL FEEDER CONDUCTORS SHALL BE CUT TO EXACTLY THE SAME LENGTHS AND SHALL BE FROM THE SAME FACTORY RUN. ALL CONNECTIONS FOR SAME SHALL BE TORQUED TO IDENTICAL VALUES.
- B. EXTERIOR ELECTRICAL WORK SHALL NOT ONLY BE WEATHERPROOF AND WATER-TIGHT, BUT SHALL ALSO BE RUST-RESISTANT.
- C. CONDUCTORS BELOW GRADE OR SUBJECT TO MOISTURE SHALL BE "XHHW-2".
- D. PROVIDE FACTORY SERIES COORDINATION FOR ALL CIRCUIT BREAKERS (INCLUDING ALL BRANCH BREAKERS), RELATIVE TO "UPSTREAM" BREAKERS, SO THAT ONLY THE BREAKER CLOSEST IN THE CIRCUIT TO THE LOAD TRIPS UPON AN OVERLOAD OR FAULT CONDITION.
- F. GROUNDING ELECTRODE CONDUCTORS SHALL BE PROVIDED IN STRICT COMPLIANCE WITH N.E.C., INCLUDING N.E.C. ARTICLE 250 AND TABLE 250-66.
- G. EQUIPMENT GROUNDING CONDUCTORS SHALL BE PROVIDED IN STRICT COMPLIANCE WITH N.E.C., INCLUDING N.E.C. ARTICLE 250 AND TABLE 250-122. THESE CONDUCTORS MAY NOT BE INDICATED ON RISERS OR SINGLE-LINES, BUT SHALL BE PROVIDED UNDER BASE BID NEVERTHELESS.
- H. WORKING CLEARANCES SHALL BE PROVIDED FOR ALL ELECTRICAL EQUIPMENT (SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, STARTERS, DISCONNECTS, ETC. AS APPLICABLE) IN STRICT COMPLIANCE WITH N.E.C. CHAPTER 1, PART B, SECTION 110-26(g). LOCATIONS SHOWN ON FLOOR PLANS ARE SCHEMATIC AND DIAGRAMMATIC IN NATURE. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING COMPLIANCE WITH THE ABOVE N.E.C. REFERENCE. THIS REQUIREMENT APPLIES TO EQUIPMENT ON FLOOR PLANS AS WELL AS TO EQUIPMENT SHOWN ON RISER.
- I. HOLD ALL NEW OVERHEAD ELECTRICAL WORK AS TIGHT AS POSSIBLE TO THE BOTTOM OF THE OVERHEAD STRUCTURE. LOCATE ANY RELATED PULLBOXES SO THAT THEY WILL BE FULLY ACCESSIBLE AFTER ALL CONSTRUCTION WORK IS COMPLETE. AS WITH ALL WORK, COORDINATE IN ADVANCE WITH ALL OTHER TRADES.
- J. ALL PANELS HAVE NEMA 1 ENCLOSURES UNLESS OTHERWISE NOTED.
- K. ALL PANELS ARE FLUSH MOUNTED UNLESS OTHERWISE NOTED.
- L. NEW ELECTRICAL PANELBOARD FRAME AND BREAKER A.I.C. RATINGS TO MATCH EXISTING PANELBOARD AND BREAKER A.I.C. RATINGS.
- M. ELECTRICAL CONTRACTOR TO VERIFY PANEL LOADING WITH NEW CIRCUITS AND INSTALL NEW CIRCUIT DESCRIPTION CARDS.
- N. IF FAULT CURRENT AND SCA VALUES NOT INDICATED, ELECTRICAL CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY AND SIZE BREAKERS ACCORDINGLY.

CONDUCTOR NOMENCLATURE



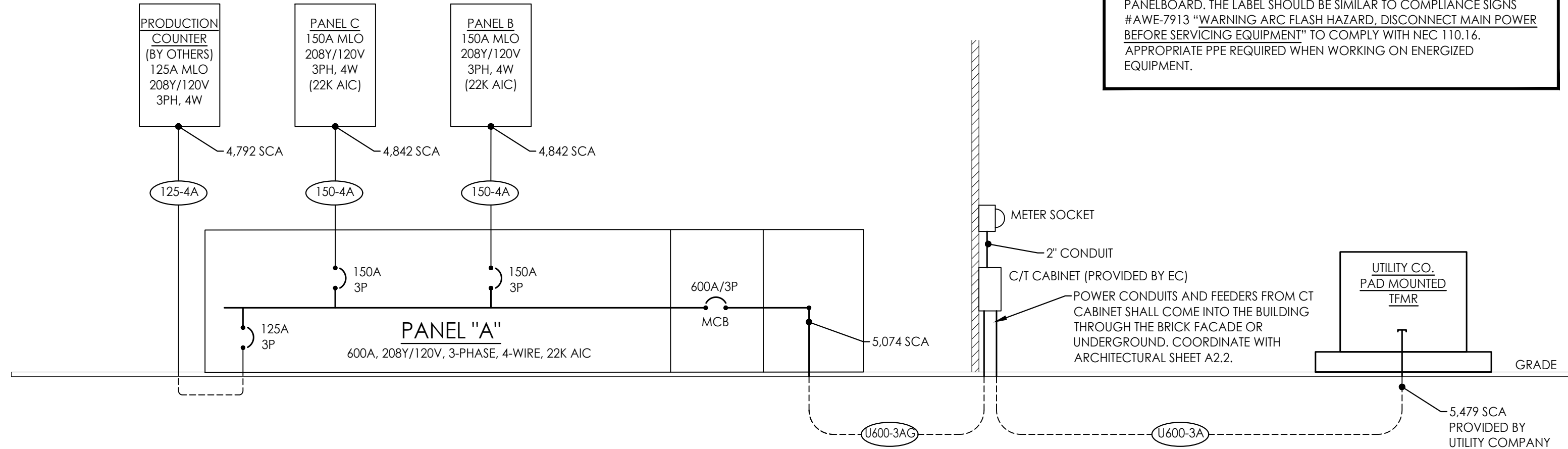
\* ALL ISOLATED GROUND CONDUCTORS SHALL BE CONTINUED TO SERVICE ENTRANCE GROUND BAR.

ONE LINE RISER WIRE SIZES

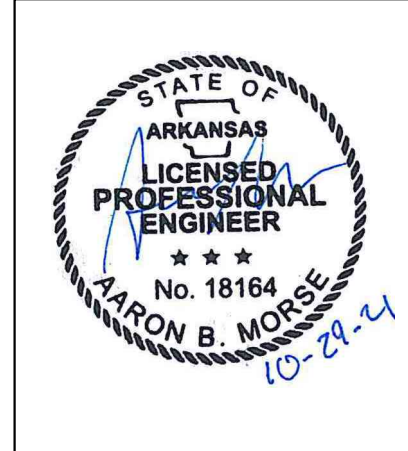
- 125-4A (4) #2/0 AWG AL, #4 AWG AL GROUND IN 2" CONDUIT
- 150-4A (4) #3/0 AWG AL, #4 AWG AL GROUND IN 2" CONDUIT
- U600-3A (2) SETS OF (4) #350 KCMIL CU IN 3" CONDUIT EACH
- U600-3AG (2) SETS OF (4) #350 KCMIL CU, (2) #2/0 CU GROUND IN 3" CONDUIT EACH

NOTE:

THE ELECTRICAL CONTRACTOR IS TO APPLY AN "ARC FLASH WARNING LABEL" TO BOTH THE DISCONNECT ENCLOSURE AND THE INTERIOR PANELBOARD. THE LABEL SHOULD BE SIMILAR TO COMPLIANCE SIGNS #AWE-7913 "WARNING ARC FLASH HAZARD, DISCONNECT MAIN POWER BEFORE SERVICING EQUIPMENT" TO COMPLY WITH NEC 110.16. APPROPRIATE PPE REQUIRED WHEN WORKING ON ENERGIZED EQUIPMENT.

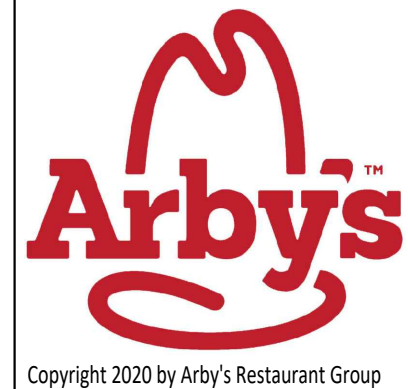


1 ONE LINE RISER DIAGRAM  
N.T.S.



PROPRIETARY INFORMATION NOTICE:

THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

DIAGRAMS AND DETAILS  
ELECTRICAL

SHEET:

E4.1



BREAKER NOTES:

- L = PROVIDE A BREAKER LOCK ON DEVICE  
T= PROVIDE A SHUNT TRIP BREAKER  
G= PROVIDE A GFI BREAKER  
A= PROVIDE AN ARC FAULT CIRCUIT INTERRUPTER BREAKER

PANELBOARD COMMENTS:

1. PROVIDE (2) #12, (1) #12 GND, 3/4" C FOR ALL BRANCH CCTS UNLESS STATED OTHERWISE.  
2. PROVIDE LOCKING TYPE BREAKER FOR ALL LIFE SAFETY AND NIGHT LIGHTING BRANCH CIRCUITS

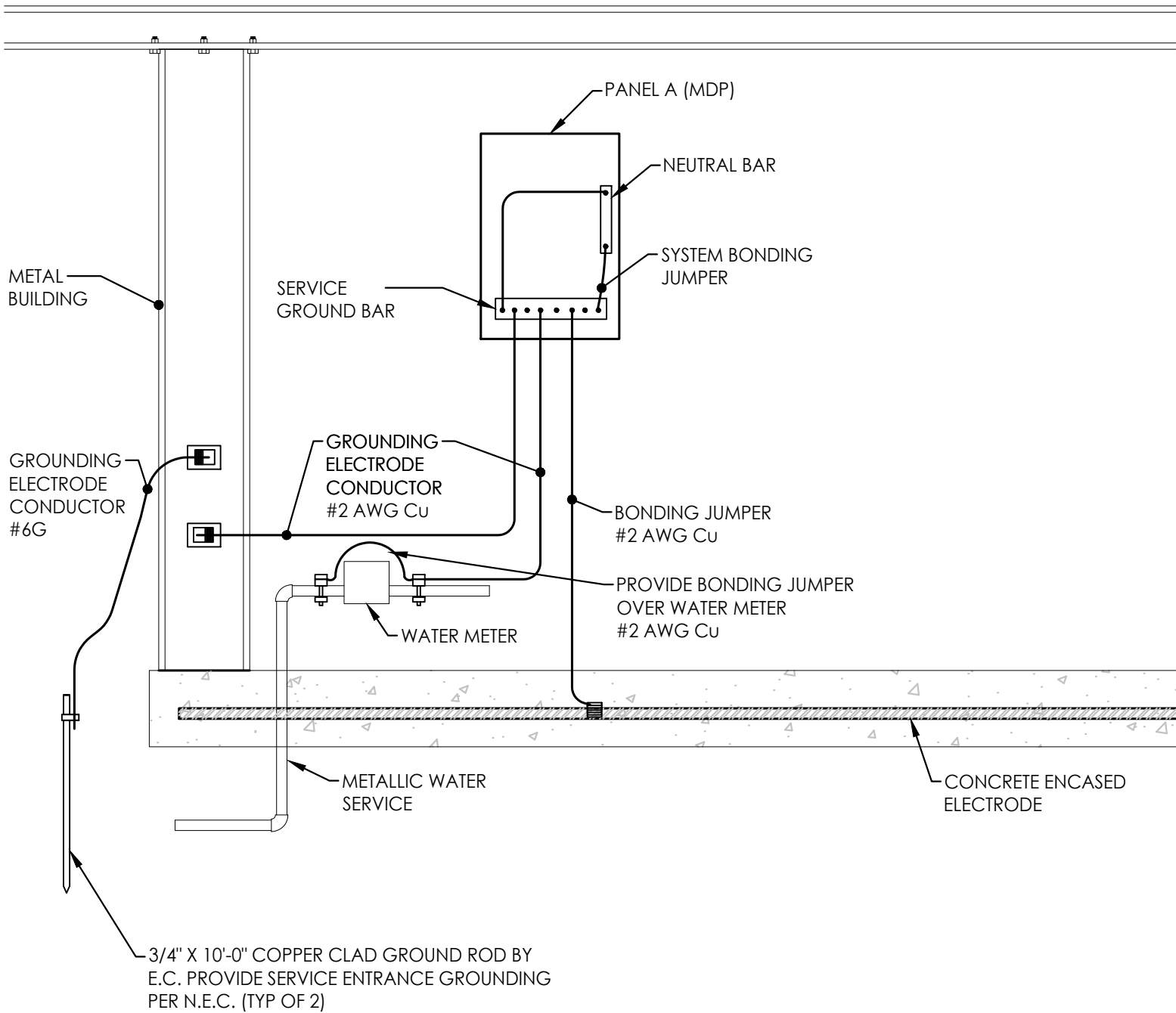
PCP						PANELBOARD										208Y/120V, 3PH, 4W 200A M.L.O 22,000 AIC GROUND BUS									
MOUNTING: LOCATION: PRODUCTION PANEL PANEL PROVIDED BY FOOD PRODUCTION MANUFACTURER																									
DESCRIPTION		WIRE	BRKR	PL	KVA						PL	BRKR	WIRE	DESCRIPTION											
					A		B		C																
1	TOASTER	12	20	2	1.68	1.55					2	20	12	MICROWAVE	2										
3							1.68	1.55							4										
5	TOASTER	12	20	2					1.68	1.55	2	20	12	MICROWAVE	6										
7					1.68	1.55									8										
9	MICROWAVE	12	20	2			1.55	1.55			2	20	12	MICROWAVE	10										
11									1.55	1.55					12										
13	PRINTERS	12	20	1	1.60	0.87					2	20	12	MERCO 3 TIER	14										
15	MICROWAVE	12	20	2			1.55	0.87							16										
17									1.55	0.87	1	20	12	SLICER	18										
19	HOT HOLD	12	20	1	1.50	0.67					1	20	12	SLICER	20										
21	HEAT LAMP	12	20	1			1.60	0.87			1	20	12	ALTO SHAM&HEATED SHELF	22										
23	TRAULSEN	12	20	1					1.15	1.17	1	20	12	CHEESE PUMP & AU JUS	24										
25	HEAT LAMP & AU JUS	12	20	1	1.53	0.48					1	20	12	UCR	26										
27	SCALE & DISPLAY	12	20	1			1.32	1.15			2	20	12	MERCO 4 TIER	28										
29	MONITORS	12	20	1					0.36	1.15					30										
TOTAL					13.10		13.68		12.38		KVA														
PER NEC ARTICLE 220					110		114		104		AMPS														
TOTAL LOAD					39.15		KVA		109		AMPS														
FEEDER LOAD					25.45		KVA		71		AMPS														

ELECTRICAL EQUIPMENT SCHEDULE									
ITEM	QUAN.	ITEM DESCRIPTION	VOLTS	PHASE	KW	AMPS	POWER CONNECTION	COMMENTS	
1	-	POS	120	1	-	-	-	-	
2	1	12-HEAD DRINK DISPENSER	120	1	0.6	5.2	NEMA 5-20R	-	
8	1	8-HEAD DRINK DISPENSER	120	1	1.1	9.3	NEMA 5-20R	-	
12	1	SHAKE MACHINE	208	1	4.4	21.0	NEMA 6-20R	-	
15	1	SAFE	120	1	0.1	1.0	NEMA 5-15R	-	
16	3	COOK AND HOLD	120	1	0.8	6.7	NEMA 5-15R	-	
17	1	CONVECTION OVEN	208	1	2.7	11.3	NEMA 6-15R	-	
27	1	TANKLESS WATER HEATER	120	1	0.1	0.8	NEMA 6-15R	-	
32	2	WALK-IN FREEZER CONDENSER UNIT	208	3	5.4	20.0	DIRECT	-	
33	1	WALK-IN COOLER CONDENSER UNIT	208	3	5.4	15.0	DIRECT	-	
39	1	DRIVE-THRU ORDER SYSTEM	120	1	0.4	3.3	DIRECT	-	
41	1	FRY DUMP	208	1	3.1	14.8	NEMA 6-20R	-	
43	1	GAS FRYER	120	1	1.2	10.0	NEMA 5-15R	AMPS GIVEN PER FRYER POT	
44	1	CARBONATOR	120	1	0.7	6.0	-	-	
45	1	MENU BOARD	120	1	-	-	NEMA 6-20R	-	
46	1	PRODUCTION COUNTER	208	3	22.8	125.0	DIRECT	-	
49	1	COFFEE MAKER	120	1	1.7	14.0	NEMA 5-15R	-	
63	1	MUSIC SYSTEM (MNGR'S DESK)	120	1	0.6	5.0	NEMA 5-15R	-	
75	1	AUTOMATIC DRIVE THRU WINDOW	120	1	0.1	0.8	DIRECT	-	
80	1	REACH-IN FREEZER	120	1	0.7	6.0	NEMA 5-15R	-	
92	2	REMOTE ICE CUBE MACHINE	120	1	0.1	1.1	NEMA 5-15R	-	
92	2	REMOTE CONDENSER	208	1	2.4	11.6	DIRECT	-	
96	1	GREASE STORAGE TANK	120	1	0.1	1.1	DIRECT	-	
126	1	CO2 MONITORING SYSTEM	120	1	0.1	1.0	NEMA 5-15R	-	

NOTE: COORDINATE MOUNTING HEIGHTS AND CONNECTIONS WITH ARBY'S CM PRIOR TO ROUGH-IN.

GROUNDING ELECTRODE DETAIL GENERAL NOTES:

- A. ALL GROUNDING ELECTRODES PRESENT SHALL BE BONDED TOGETHER.  
B. ALL GROUNDING ELECTRODE CONDUCTORS SHALL BE SIZED PER NEC TABLE 250.66 UNLESS NOTED OTHERWISE.  
C. GROUND RING SHALL BE #2 CU MINIMUM WITH FULL SIZE BONDING JUMPER.  
D. ALL BONDING JUMPERS SHALL BE SIZED PER NEC TABLE 250.122 UNLESS NOTED OTHERWISE.  
F. THIS DETAIL SHOWS ALL SUPPLEMENTAL GROUNDING METHODS. PER NEC 250.52(A)(1) ONE OF THE METHODS SHOWN MUST SUPPLEMENT BONDING TO WATER METER.



1 GROUNDING ELECTRODE SYSTEM DETAIL  
N.T.S.

A		PANELBOARD												208Y/120V, 3PH, 4W 600A M.C.B. 10,000 AIC GROUND BUS																																																																																																			
		(NEW)																																																																																																															
MOUNTING: SURFACE																																																																																																																	
LOCATION: REAR KITCHEN																																																																																																																	
		KVA														KVA																																																																																																	
		A B C														A B C																																																																																																	
1		RTU-1												8		45												3		3.96 5.40 3.96 5.40 3.96 5.40												3		60												8		RTU-2												2																																											
5																																																																																																																	
7		EF-1												8		20												1		1.60														13.10 1.20												2		20												10		SPARE												8																													
9		46 - PROD CONTROL PANEL												8		125												3		12.38 1.20 1.20 1.20 1.20 2.70												2		20												10		DRIVE THRU ICE COND UNIT												10																																											
13		WALK-IN FREEZER EVAP												10		20												2																																												DISHWASHER												16																													
15																																																																																																																	
17		WALK-IN COOLER EVAP												12		20												1		0.40 2.70														0.80 0.30												1		20												12		LOOP DETECTORS												20																													
19		SITE LIGHTING												10		20												1																1.20 0.40												1		20												12		DRIVE THRU MENUBOARD												22																													
21		SITE LIGHTING												10		20												1																																																																																					
23		PYLON SIGN												10		20												1		1.00 0.40																																																								DRIVE-THRU SPKR CANOPY												26															
25		SPARE												10		20												1																																												SPARE												28																													
27		SPACE												10		20												1																																												SPACE												30																													
29		RTU-3												8		40												3		3.36														3.36														3.36																												SPACE												32															
31																																																																								SPACE												34																													
33																																																																								SPACE												36																													
35																																																																																																																	
37		PANEL B														150												3		12.10 9.50														9.70 10.40																												PANEL C												38																													
39																																																																																																																	
41																																																																																																																	
		TOTAL																												54.00 50.62 53.40														KVA																																																																					
																														450 422 446														AMPS																																																																					
																														158.02 KVA 439														AMPS																																																																					
																														133.66 KVA 372														AMPS																																																																					
		PER NEC ARTICLE 220																																																																																																															



SPECIFICATIONS - DIVISION 26 - ELECTRICAL

SECTION 26 00 01 - GENERAL ELECTRICAL REQUIREMENTS		PLASTIC SELF-ADHESIVE COVER FLAP; NUMBERED TO SHOW CIRCUIT IDENTIFICATION. PROVIDE ON CONDUCTORS. PROVIDE COLOR CODED INSULATION FOR CONDUCTORS. PROVIDE COLOR CODED JACKETS FOR CABLES. MATCH COLOR SCHEMES WITH MARKING SYSTEM USED IN SUBMITTALS. CONTRACT DOCUMENTS, INDUSTRY STANDARDS, ETC. APPLY CABLE/CONDUCTOR IDENTIFICATION ON EACH CABLE IN EACH BOX/ENCLOSURE/CABINET FOR CABLES THAT ARE NOT AVAILABLE WITH COLOR CODED INSULATION OR JACKETS.	SURFACES, AND STRUCTURAL MEMBERS, KEEPING OFFSETS TO A MINIMUM AND FOLLOWING	INDICATED. UTILIZE COMPATIBLE METALLIC MATERIALS THROUGHOUT SYSTEM TO ELIMINATE GALVANIC
PART 1 - GENERAL				
1.1 RELATED DOCUMENTS				
A. DRAWINGS AND GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTAL CONDITIONS AND DIVISION-1 SPECIFICATION SECTIONS, APPLY TO WORK OF DIVISION 26 SECTIONS.				
B. E-SERIES DRAWINGS APPLY TO WORK OF DIVISION 26 SECTIONS AND VICE VERSA.				
1.2 GENERAL STANDARDS				
A. PROVIDE WORK IN COMPLIANCE WITH APPLICABLE PROVISIONS OF THE FOLLOWING STANDARDS. PROVIDE UL LISTING AND UL LABEL FOR ALL ELECTRICAL MATERIALS, EQUIPMENT, LUMINAIRES, DEVICES, ETC. IN CASES WHERE UL LISTING AND/OR LABELING IS NOT AVAILABLE FOR A PARTICULAR PRODUCT, PROVIDE EQUIVALENT LISTING AND LABELING FROM ANOTHER THIRD PARTY NATIONALLY RECOGNIZED CERTIFICATION LABORATORY, SUBJECT TO APPROVAL BY LOCAL ELECTRICAL INSPECTOR AND AUTHORITIES HAVING JURISDICTION.		2. USE THE FOLLOWING INSULATION COLOR CODE FOR POWER SYSTEM AND VOLTAGE IDENTIFICATION. THIS APPLIES TO BOTH FEEDER AND BRANCH CIRCUIT WIRING. DO NOT INTERCHANGE COLORS. THE USE OF SCOTCH COLOR CODING TAPES FOR PHASE IDENTIFICATION MAY BE USED ON FEEDER CABLES ONLY (#4 AWG AND LARGER).	2. WHEREVER POSSIBLE. SUPPORT AND ANCHOR CABLES AT MAXIMUM 4 FOOT INTERVALS AND	45. PROVIDE STEEL GROUNDING ELECTRODES WITH COPPER WELDED EXTERIOR, AND 3/4" DIAMETER BY 10
B. PROVIDE WORK IN STRICT ACCORDANCE WITH THE LATEST EDITION OF APPLICABLE CODES INCLUDING (BUT NOT LIMITED TO) THE FOLLOWING CODES AND STANDARDS.		a. 208Y/120V SYSTEM:BLACK, RED, BLUE & WHITE (NEUTRAL)	3. WITHIN 12" OF BOX OR OUTLET IN A MANNER THAT PREVENTS SAGGING. INSTALL CABLES IN A	FEET LENGTH. PROVIDE SHEET COPPER PLATE ELECTRODES THAT ARE 20-GAGE BY 36" BY 36", WITH CABLE
1. NATIONAL ELECTRICAL CODE (NEC), NFPA 70.		b. ELECTRONIC GROUND:GREEN WITH YELLOW TRACER (NEUTRAL)	4. MANNER THAT PREVENTS OVERHEATING. FASTEN CABLES DIRECTLY TO THE STRUCTURE USING	ATTACHMENTS (MINIMUM QUANTITY OF 2), SIZED FOR CABLES AS NECESSARY TO FULFILL PROJECT
2. LIFE SAFETY CODE, NFPA 101.		c. EQUIPMENT GROUNDING:GREEN	5. FACTORY CLAMPS AND CLIPS SPECIFICALLY DESIGNED FOR THE RESPECTIVE CABLE (CADDY OR	GROUNDING REQUIREMENTS. PROVIDE COPPER GROUND PLATES WHERE GROUND RODS CANNOT BE
3. OTHER PROVISIONS OF NFPA AS APPLICABLE.			6. EQUAL).	USED. PROVIDE CONNECTIONS TO GROUND ELECTRODES AT A POINT NOT LESS THAN 1 FOOT BELOW
4. LOCAL ELECTRICAL CODES.				GRADE LEVEL, AND NOT LESS THAN 2 FEET AWAY FROM FOOTINGS AND FOUNDATIONS. WELD
5. LOCAL UTILITY COMPANY REQUIREMENTS.				GROUNDING CONDUCTORS TO UNDERGROUND GROUNDING ELECTRODES WHERE MECHANICAL
6. ADA/ADAAG REQUIREMENTS.				CONNECTIONS CAN NOT, OR SHOULD NOT, BE UTILIZED.
7. ASME.				
8. INTERNATIONAL BUILDING CODE.				PART 3 - EXECUTION
9. INTERNATIONAL ENERGY CONSERVATION CODE.				3.1 INSTALLATION
1.3 MATERIALS AND EQUIPMENT				
A. UNLESS SPECIFICALLY INDICATED OTHERWISE PROVIDE (FURNISH AND INSTALL) ALL SPECIFIED AND DRAWN EQUIPMENT, RACEWAY, BOXES, LUMINAIRES, CONTROLS, WIRING, CABLING, SUPPORTS AND OTHER MATERIALS AS REQUIRED TO RENDER ALL ELECTRICAL AND ELECTRICALLY OPERATED EQUIPMENT, LUMINAIRES, DEVICES, ETC. FULLY OPERATIONAL. UNLESS SPECIFICALLY INDICATED OTHERWISE PROVIDE (FURNISH AND INSTALL) ALL MATERIALS THAT ARE SPECIFIED UNDER DIVISION 26. DISCREPANCIES OR UNCERTAINTIES PERCEIVED BY A BIDDER, OR OTHER QUESTIONABLE INTERPRETATIONS BY A BIDDER, ARE SUBJECT TO FINAL INTERPRETATIONS AND DECISIONS BY THE OWNER'S REPRESENTATIVE UNLESS ADDRESSED BEFORE BIDDING BY ADDENDUM OR UNLESS QUALIFIED OR EXCEPTED WITHIN BIDS.		C. RACEWAY IDENTIFICATION	9. OR WITHIN APPROPRIATELY SIZED STEEL WIREWAY(S), OR WITHIN A CUSTOM FABRICATED	A. TERMINATE FEEDER AND BRANCH CIRCUIT INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH
B. PROVIDE MATERIALS THAT ARE NEW, FULL WEIGHT, OF THE BEST QUALITY. PROVIDE SIMILAR MATERIALS THAT ARE OF THE SAME TYPE AND MANUFACTURER. PROVIDE MATERIALS, APPARATUS AND EQUIPMENT WITH UNDERWRITER'S LABORATORY, INC. LABEL WHERE REGULARLY SUPPLIED.		1. PROVIDE MANUFACTURER'S STANDARD SELF-ADHESIVE VINYL TAPE NOT LESS THAN 3 MILS THICK BY 1-1/2" WIDE. UNLESS OTHERWISE INDICATED OR REQUIRED BY GOVERNING REGULATIONS PROVIDE BLACK LETTERING ON ORANGE BASE WITH MINIMUM 1/2" HIGH LETTERING. AS A MINIMUM, NEATLY INSTALL MARKERS AT EACH AND EVERY ENTRY POINT TO ROOMS, JUNCTION BOXES, PULL BOXES, EQUIPMENT CONNECTIONS, ETC. DO NOT INSTALL THESE MARKERS ON EXPOSED RACEWAYS IN FINISHED AREAS THAT WILL BE OCCUPIED.	10. HEAVY-GAGE PAINTED SHEETMETAL CHASE APPROVED IN ADVANCE BY THE ENGINEER.	GROUNDING LUG, BUS, OR BUSHING. ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND
C. MAINTAIN SAFETY AND GOOD CONDITION OF THE MATERIALS AND EQUIPMENT INSTALLED UNTIL FINAL ACCEPTANCE BY THE OWNER. STORE MATERIALS TO PREVENT DAMAGE AND WEATHERING PRIOR TO INSTALLATION.			11. INSTALL IN A MANNER THAT FULLY CONCEALS CABLES, PREVENTS OVERHEATING OF CABLES,	AND PROTECTIVE DEVICES IN SHORTEST AND STRAIGHTEST PATHS AS POSSIBLE TO MINIMIZE TRANSIENT
D. WHEN SEVERAL MATERIALS, PRODUCTS OR ITEMS OF EQUIPMENT ARE SPECIFIED BY NAME FOR ONE USE, SELECT ONE OF THOSE SPECIFIED.			12. AND IS APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.	VOLTAGE RISES.
END OF SECTION			13. PROVIDE ONLY WHERE INSTALLED FOR NORMAL UTILITY CIRCUITS. INSTALL WIRING FOR	B. INSTALL CLAMP-ON CONNECTORS ON CLEAN METAL CONTACT SURFACES, TO ENSURE ELECTRICAL
SECTION 26 00 02 - BASIC ELECTRICAL MATERIALS AND METHODS			14. EMERGENCY SYSTEM CIRCUITS IN STEEL CONDUIT, NO EXCEPTIONS.	CONDUCTIVITY AND CIRCUIT INTEGRITY.
PART 1 - GENERAL			15. PART 2 - EXECUTION	
1.1 GENERAL			16. 2.1 INSTALLATION	C. PROVIDE CORROSION-RESISTANT FINISH TO BURIED METALLIC GROUNDING AND BONDING PRODUCTS.
A. FURNISH AND INSTALL ALL LABOR AND MATERIAL, TOOLS AND EQUIPMENT NECESSARY TO RENDER ALL SYSTEMS COMPLETE AND OPERATIONAL, AND READY FOR TURNOVER TO OWNER.				D. TERMINATE GROUND ELECTRODE CONDUCTORS WITH TWO-HOLE COMPRESSION LUGS. TERMINATE
1.2 HEIGHT OF BOXES				BONDING JUMPER CONDUCTORS WITH ONE-HOLE COMPRESSION LUGS.
A. OUTLET MOUNTING HEIGHTS AS INDICATED ON THE PLANS ARE APPROXIMATE. DETERMINE THE EXACT MOUNTING HEIGHTS (AND LOCATIONS) OF OUTLETS IN THE FIELD WITH RELATION TO ARCHITECTURAL DETAIL AND EQUIPMENT BEING SERVED. COORDINATE OUTLET LOCATION WITH EQUIPMENT, WITH FURNITURE PLANS AND WITH ARCHITECTURAL ELEVATION PLANS. WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, CONTACT THE OWNER'S REPRESENTATIVE FOR DIRECTION.			17. PROVIDE GROUNDED ("NEUTRAL") CONDUCTOR IN ALL LIGHTING CONTROL DEVICE (SWITCH, DIMMER,	E. INSTALL BRAIDED TYPE BONDING JUMPERS WITH GROUND CLAMPS ON VALVED WATER PIPING WHERE
B. PRIOR TO ROUGH-IN, COORDINATE FINAL MOUNTING HEIGHTS OF SYSTEM OUTLET BOXES IN FIELD WITH OWNER'S REPRESENTATIVE. INSTALL BOXES AT HEIGHTS AS FOLLOWS, TO CENTER OF BOX, UNLESS DIRECTED OTHERWISE IN FIELD OR OTHERWISE NOTED ON E-SERIES DRAWINGS OR ARCHITECTURAL PLANS. HEIGHT OF BOXES DIMENSIONED FROM CEILING APPLY TO ROOMS HAVING CEILINGS 9' OR LESS; IN ROOMS HAVING HIGHER CEILINGS, LOCATE THESE AS DIRECTED IN THE FIELD.			18. OCCUPANCY SENSOR, ETC.) WALL OUTLET BOXES, EVEN IF NOT IMMEDIATELY USED.	SUCH PIPING PENETRATES EXTERIOR WALLS AND FIRE WALLS. INSTALL WATER PIPE CONNECTOR FITTINGS
SWITCHES - COUNTERS		44" (FIELD VERIFY & MATCH COUNTER RECEPT. HEIGHTS)		SO THAT THEY MAKE CONTACT WITH THE WATER PIPE FOR A MINIMUM DISTANCE OF 1-1/2 INCHES
SWITCHES - ELSEWHERE		48" TO TOP OF OUTLET BOX		(MEASURED ALONG THE AXIS), AND HAVE A MINIMUM CONTACT SURFACE AREA OF 3 SQUARE INCHES.
OCCUPANCY SENSORS - WALLBOX SWITCHES		48" TO TOP OF OUTLET BOX		F. PROVIDE AND TEST A COMPLETE EARTHING (EARTH GROUND) SYSTEM FOR THE ENTIRE ELECTRICAL AND
OCCUPANCY SENSORS - ELSEWHERE		AS RECOMMENDED BY MANUFACTURER		TELECOMMUNICATIONS INFRASTRUCTURE.
RECEPTACLES - COUNTERS		44" (FIELD VERIFY)		G. EQUALIZE (BOND TOGETHER) GROUND POTENTIALS ASSOCIATED WITH THE ELECTRICAL DISTRIBUTION
RECEPTACLES - ELSEWHERE		18"		SYSTEM, SEPARATELY DERIVED SYSTEMS, STEEL STRUCTURAL SYSTEMS, AND WATER SERVICES PER NEC
DISCONNECTS		46"		AND AS APPLICABLE.
CIRCUIT BREAKER PANELBOARDS		72" TO TOP OF PANEL UNLESS SPECIAL CIRCUMSTANCES		H. PROVIDE CORROSION-RESISTANT FINISH TO FIELD-CONNECTIONS, TO PLACES WHERE FACTORY APPLIED
WALL MOUNTED LUMINAIRES		ARE INDICATED OR OTHERWISE APPLY		PROTECTIVE COATINGS HAVE BEEN DAMAGED, AND WHERE SUBJECT TO CORROSIVE ACTION.
CONTROL STATIONS		AS NOTED ON PLANS OR AS DIRECTED BY ARCHITECT		I. ROUTE GROUND CONDUCTORS USED FOR BONDING IN PROTECTIVE CONDUIT SLEEVES. PROVIDE BOTH
FIRE ALARM MANUAL PULL STATIONS		46"		ENDS OF THESE CONDUIT SLEEVES WITH GROUND BUSHINGS, AND BOND GROUND BUSHINGS TO
FIRE ALARM AUDIO/VISUAL ANNUNCIATORS		80" TO TOP OF OPERATING HANDLE		ENCLOSURES AND GROUND TERMINATIONS AT BOTH ENDS USING JUMPERS. SIZE GROUND JUMPER
TELEPHONE OUTLETS - DESK PHONE		18"		CONDUCTORS THE SAME AS THE RESPECTIVE GROUND CONDUCTOR THAT IS BEING PROTECTED WITHIN
TELEPHONE OUTLETS - WALL PHONE		46"		THE RESPECTIVE CONDUIT.
DATA OUTLETS		18" TO TOP OF OUTLET BOX.		J. PROVIDE CORROSION-RESISTANT FINISH TO BURIED METALLIC GROUNDING AND BONDING PRODUCTS.
1.3 ELECTRICAL INSTALLATIONS				K. TERMINATE GROUND ELECTRODE CONDUCTORS WITH TWO-HOLE COMPRESSION LUGS. TERMINATE
A. INSTALL WORK CONDUIT, WIRING, OUTLET BOX TYPE WORK IN FINISHED AREAS CONCEALED. SUCH WORK INSTALLED IN UNFINISHED AREAS MAY BE EXPOSED AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE.				BONDING JUMPER CONDUCTORS WITH ONE-HOLE COMPRESSION LUGS.
B. VERIFY DIMENSIONS BY FIELD MEASUREMENTS. TAKE MEASUREMENTS AND BE RESPONSIBLE FOR EXACT SIZE AND LOCATIONS OF OPENINGS REQUIRED FOR THE INSTALLATION OF WORK. FIGURED DIMENSIONS ARE REASONABLY ACCURATE AND SHOULD GOVERN IN SETTING OUT WORK. WHERE DETAILED METHOD OF INSTALLATION IS NOT INDICATED OR WHERE VARIATIONS EXIST BETWEEN DESCRIBED WORK AND APPROVED PRACTICE, FOLLOW DIRECTION OF THE OWNER'S REPRESENTATIVE.				
C. PROVIDE BRANCH SUBFEEDER CIRCUITS AS SHOWN ON THE PLANS. THE SYMBOLS USED TO INDICATE THE PURPOSE OF WHICH THE VARIOUS OUTLETS ARE INTENDED ARE IDENTIFIED IN THE ELECTRIC LEGEND. WHERE OUTLETS ARE INDICATED BY LETTERS ON PLANS, PROVIDE CORRESPONDING SWITCHES TO CONTROL THEM.				END OF SECTION
D. PROVIDE NO WIRE SIZE SMALLER THAN NO. 12 FOR BRANCH CIRCUITS UNLESS OTHERWISE NOTED ON PLANS FOR CONTROL CIRCUITS. PROVIDE LARGER SIZES WHERE REQUIRED BY PREVAILING CODES OR INDICATED ON CONTRACT DOCUMENTS. PROVIDE NEUTRAL CONDUCTOR FOR ALL MULTI-POLE FEEDERS. PROVIDE NEUTRAL CONDUCTOR(S) FOR ALL MULTI-POLE FEEDERS AND BRANCH CIRCUITS UNLESS THIS CONTRACTOR DETERMINES IN FIELD THAT THE AFFECTED LOAD(S) WILL NEVER HAVE NEED FOR A NEUTRAL CONDUCTOR AND NEC DOES NOT MANDATE OTHERWISE.				SECTION 26 05 33 - RACEWAYS FOR ELECTRICAL SYSTEMS
1.4 COORDINATION				PART 1 - GENERAL
A. PLANS ARE DIAGRAMMATIC INDICATING DESIGN INTENT AND INDICATING REQUIRED SIZE, POINTS OF TERMINATION AND, IN SOME CASES, SUGGESTED ROUTES OF RACEWAYS, ETC. HOWEVER, IT IS NOT INTENDED THAT DRAWINGS INDICATE FULLY COORDINATED CONDUIT ROUTING, NECESSARY OFFSETS, ETC. THE DRAWINGS ARE AN OUTLINE TO INDICATE THE APPROXIMATE LOCATION AND ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, OUTLETS, RACEWAYS, CABLES, ETC. INSTALL PIPING, CONDUIT, RACEWAYS, CABLE ASSEMBLIES, ETC. AS STRAIGHT AS POSSIBLE AND SYMMETRICAL (PERPENDICULAR TO OR PARALLEL WITH) WITH ARCHITECTURAL ITEMS. WORK IN AND ON THE BUILDING INSTALLED DIAGONAL TO BUILDING MEMBERS IS PROHIBITED.				1.1 RELATED WORK
B. CONSULT THE PLANS OF OTHER TRADES BEFORE INSTALLING WORK SO THAT WORK WILL NOT INTERFERE WITH THOSE.				A. INSTALL WIRE IN RACEWAY/CONDUIT (SIZED PER NEC) UNLESS SPECIFICALLY PERMITTED OTHERWISE ELSEWHERE IN DIVISION 26 SECTIONS, OR ON DRAWINGS.
C. PARTICIPATE IN COORDINATION EFFORTS AND IN PREPARATION OF COORDINATION DRAWINGS PRIOR TO FABRICATION OR INSTALLATION OF EQUIPMENT, MATERIALS, ETC. COORDINATE ACTUAL CLEARANCES OF INSTALLED EQUIPMENT. COORDINATE EXACT LOCATION OF ELECTRICAL OUTLETS, LIGHTING FIXTURES, CONDUITS, RACEWAYS, EQUIPMENT, CABLE ASSEMBLIES, APPLICABLE DEVICES, ETC. WELL IN ADVANCE OF INSTALLATION SO THERE WILL BE NO INTERFERENCES AT INSTALLATION BETWEEN THE VARIOUS TRADES.				B. INSTALL WIRING FOR DIFFERENT POWER VOLTAGES IN RACEWAY SYSTEMS SEPARATE FROM EACH OTHER (I.E. 24V SEPARATE FROM 208Y/120V, SEPARATE FROM 480Y/277V, ETC.).
D. ENSURE THAT WORK AND WORKING CLEARANCES IN ELECTRICAL ROOMS AND SIMILAR SPACES COMPLIES WITH NEC ARTICLE 110. THIS ALSO APPLIES TO FINALIZING LOCATIONS OF DISCONNECTS, STARTERS, CONTACTORS AND OTHER ELECTRICALLY OPERATED EQUIPMENT THAT MAY REQUIRE TESTING OR MAINTENANCE WHILE ENERGIZED.				C. INSTALL WIRING, WITH THE EXCEPTION OF VOICE AND DATA, FOR THE VARIOUS ELECTRICAL SYSTEMS IN RACEWAY SYSTEMS, WHICH ARE SEPARATE FROM EACH OTHER (I.E. FIRE ALARM SEPARATE FROM VOICE/DATA SEPARATE FROM ETC.).
E. COORDINATE AND CORRECT CONFLICTS IN EQUIPMENT AND MATERIALS PRIOR TO INSTALLATION. IF A CONFLICT CANNOT BE RESOLVED, REFER THE MATTER TO THE OWNER'S REPRESENTATIVE FOR A FINAL DECISION AS TO METHOD AND MATERIAL.				D. DO NOT INSTALL CONDUITS WITHIN SLABS UNLESS SPECIFICALLY NOTED ON DRAWINGS, OR UNLESS PART OF AN UNDERFLOOR DUCT RACEWAY SYSTEM.
1.5 IDENTIFICATION				E. DO NOT INSTALL CONDUITS BENEATH SLABS ON GRADE, EXCEPT IF WHERE SPECIFICALLY INDICATED OTHERWISE ON DRAWINGS, OR UNLESS SPECIAL CASE BY CASE PERMISSION IS OBTAINED FROM OWNER'S REPRESENTATIVE IN THE FIELD.
A. GENERAL				F. PROVIDE STEEL CONDUIT AND STEEL FITTINGS FOR INDOOR ABOVE-SLAB APPLICATIONS, AS SPECIFIED IN THIS SECTION.
1. SUBMIT MANUFACTURER'S DATA ON ELECTRICAL IDENTIFICATION MATERIALS AND PRODUCTS. SUBMIT DETAILED NAMEPLATE SCHEDULE INDICATING PROPOSED NOMENCLATURE, COLORS, TEXT HEIGHTS, FASTENING METHODS, ETC.				G. PROVIDE CONDUIT FITTINGS WITH INSULATED THROATS, OR PLASTIC BUSHINGS FOR CONDUITS 2" AND LARGER WHERE INSULATED THROATS ARE NOT READILY AVAILABLE.
B. CABLE AND CONDUCTOR IDENTIFICATION				H. PROVIDE MAXIMUM OF 40 PERCENT FILL FOR RACEWAYS, OR A THRESHOLD OF LESS IF REQUIRED BY NEC.
1. PROVIDE MANUFACTURER'S STANDARD VINYL-CLOTH SELF-ADHESIVE CONDUCTOR MARKERS OF WRAP-AROUND TYPE, EITHER PRE-NUMBERED PLASTIC COATED TYPE, OR WRITE-ON TYPE WITH CLEAR				
END OF SECTION				
SECTION 26 05 19 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES				
PART 1 - GENERAL				
1.1 GENERAL				
D. PROVIDE WIRE AND CABLE SUITABLE FOR THE TEMPERATURE, CONDITIONS, AND LOCATION WHERE INSTALLED.				
1.2 CONDUCTORS				
A. PROVIDE COPPER CONDUCTOR MATERIAL FOR WIRES AND CABLES UNLESS SPECIFICALLY INDICATED OTHERWISE ON SINGLE-LINE DIAGRAM ON DRAWINGS.				
B. CONDUCTOR SIZES INDICATED ARE BASED ON COPPER UNLESS SPECIFICALLY INDICATED OTHERWISE ON SINGLE-LINE DIAGRAM ON DRAWINGS.				
C. PROVIDE MINIMUM #12 AWG CONDUCTOR SIZE.				
D. STRANDED OR SOLID CONDUCTORS MAY BE USED FOR TYPE MC CABLE CONDUCTORS THAT ARE #10 AWG OR LESS WHERE PERMITTED BY PREVAILING CODES AND AUTHORITIES HAVING JURISDICTION. PROVIDE STRANDED CONDUCTORS FOR ALL OTHER APPLICATIONS.				
E. PROVIDE THE FOLLOWING MINIMUM WIRE SIZES BASED ON DISTANCES FROM PANEL TO FIRST DEVICE OF A 15 OR 20 AMPERE GENERAL LIGHTING OR RECEPTACLE BRANCH CIRCUIT. IN ADDITION TO UPSIZING CONDUCTORS AS REQUIRED FOR VOLTAGE DROP, PROVIDE MINIMUM #10 AWG CONDUCTORS TO THE LAST DEVICE FOR BRANCH CIRCUITS MORE THAN 150 FEET IN LENGTH.				
DISTANCE		AWG WIRE SIZES		
UP TO 60 FEET		#12		
61 TO 90 FEET		#10		
91 TO 150 FEET		#8		
151 TO 240 FEET		#6		
F. PROVIDE THE FOLLOWING MINIMUM AWG CONDUCTOR SIZES FOR GENERAL BRANCH CIRCUITING, BASED ON USING COPPER CONDUCTORS. WHERE APPLICABLE INCREASE AS REQUIRED TO ACCOMMODATE VOLTAGE DROP AND TO ACCOMMODATE SPECIAL CONDITIONS. DO NOT DERATE ANY GROUNDED (NEUTRAL) CONDUCTORS.				
EQUIPMENT GROUNDING				
SOURCE BREAKER/FUSE		AWG WIRE SIZE	AWG WIRE SIZE	
15 AMPERE		#14	#14	
20 AMPERE		#12	#12	
25 AMPERE		#10	#10	
30 AMPERE		#10	#10	
35 AMPERE		#8	#10	
40 AMPERE		#8	#10	
45 AMPERE		#8	#10	
50 AMPERE		#6	#10	
60 AMPERE		#6	#10	
70 AMPERE		#4	#8	
80 AMPERE		#4	#8	
90 AMPERE		#2	#8	
100 AMPERE		#2	#8	
G. PROVIDE CONDUCTOR INSULATION RATED AT 600VAC AND 90 DEGREES C. PROVIDE THHN/THWN INSULATION FOR CONDUCTORS SIZE 500 KCMIL AND LARGER, AND FOR CONDUCTORS # 8 AWG AND SMALLER. PROVIDE THW OR THHN/THWN INSULATION FOR OTHER SIZES AS APPROPRIATE FOR THE LOCATIONS WHERE INSTALLED.				
H. PROVIDE XHHW-2 INSULATION FOR WIRING BELOW GRADE AND FOR WIRING SUBJECT TO MOISTURE CONDITIONS.				
I. PROVIDE DEDICATED PARITY SIZED GROUNDED (NEUTRAL) CONDUCTOR FOR EACH BRANCH CIRCUIT PHASE CONDUCTOR FED FROM 15 AMPERE AND 20 AMPERE BRANCH CIRCUIT BREAKERS.				
J. PROVIDE GROUNDED (NEUTRAL) CONDUCTOR(S) FOR ALL MULTI-POLE FEEDERS UNLESS INDICATED OTHERWISE ON POWER DISTRIBUTION SINGLE-LINE DIAGRAM.				
K. PROVIDE GROUNDED (NEUTRAL) CONDUCTOR(S) FOR ALL MULTI-POLE BRANCH CIRCUITS.				
1.3 TYPE AC/MC CABLES				
A. PROVIDE TYPE AC/MC CABLES THAT ARE MINIMUM 90 DEGREES C RATED, WITH COMPONENTS AND FITTINGS LISTED FOR GROUNDING, AND COMPLIANT WITH THE FOLLOWING.				
1. UL STD. 4 AND UL STD. 83.				
2. ANSI E119 AND E814.				
3. NEC ARTICLES 250 AND 333.				
B. PROVIDE CABLE FORMED FROM CONTINUOUS LENGTH OF SPIRALLY WOUND, INTERLOCKED ZINC-COATED OR GALVANIZED (INSIDE & OUTSIDE) STRIP STEEL. PROVIDE CABLES WITH FULL PARITY SIZED GREEN INSULATED EQUIPMENT GROUND CONDUCTOR.				
C. PROVIDE COMPATIBLE STEEL FITTINGS WITH INTEGRAL RED PLASTIC INSULATED THROAT BUSHINGS, COMPLIANT WITH NEC 350-5.				
D. TYPE AC/MC CABLE MAY BE UTILIZED ONLY IF NEC APPROVED AND IF APPROVED BY LOCAL AUTHORITY HAVING JURISDICTION AND IF INCLUDED IN THE LIMITED APPLICATIONS DEFINED BELOW.				
1. PROVIDE FOR NEW 15 THROUGH 20 AMPERE BRANCH CIRCUIT WORK. THIS APPLIES ONLY UNDER ALL				
OF THE FOLLOWING CIRCUMSTANCES AND CONDITIONS.				
a. PROVIDE ONLY WHERE CONCEALED (INSTALL WIRING FOR EXPOSED APPLICATIONS IN				
RACEWAY).				
b. ROUTE CABLES PERPENDICULAR AND PARALLEL TO THE BUILDING ARCHITECTURAL LINES,				
MATERIALS OR COMPONENTS ARE NOT INDICATED, PROVIDE PRODUCTS THAT COMPLY WITH NEC, UL,				
AND IEEE REQUIREMENTS, AND WITH ESTABLISHED INDUSTRY STANDARDS FOR THOSE APPLICATIONS				



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SPECIFICATIONS  
ELECTRICAL

SHEET:

E7.1



SPECIFICATIONS - DIVISION 26 - ELECTRICAL (CONTINUED)

SECTION 26 05 33 - RACEWAYS FOR ELECTRICAL SYSTEMS (CONTINUED)

PART 2 - PRODUCTS

2.1 ELECTRICAL METALLIC TUBING (EMT)

A. PROVIDE GALVANIZED OR ZINC COATED STEEL EMT COMPLIANT WITH F5 WW-C-563, ANSI C80.3 AND UL 797.

B. PROVIDE EMT FOR ABOVE-GRADE CONDUIT, EXCEPT WHERE INDICATED OTHERWISE HEREIN, UNDER OTHER DIVISION 26 SECTIONS, OR ON DRAWINGS.

2.2 STEEL RIGID METAL CONDUIT (RMC)

A. PROVIDE RIGID STEEL, HEAVY WALL, FULL WEIGHT, ZINC-COATED, THREADED TYPE (GALVANIZED AFTER CUTTING/THREADING) CONDUIT CONFORMING TO ANSI C80.1 AND UL 6. PROVIDE ZINC COATING FUSED TO INSIDE AND OUTSIDE WALLS OF CONDUIT.

B. PROVIDE GALVANIZED OR ZINC COATED STEEL THREADED FITTINGS.

C. PROVIDE FOR THE FOLLOWING APPLICATIONS.

1. CONDUIT INSTALLED EMBEDDED IN CONCRETE, OR MASONRY.

2. CONDUITS (GROUNDED) THAT TURN UP FROM BELOW GRADE OR BELOW SLAB, EXCLUDING THE 90 DEGREE FITTINGS THAT CONNECT TO HORIZONTAL CONDUITS BELOW GRADE OR SLAB.

3. OTHER APPLICATIONS AS INDICATED IN PROJECT MANUAL OR ON DRAWINGS, AS REQUIRED BY NEC, OR AS OTHERWISE REQUIRED FOR SPECIAL PHYSICAL PROTECTION (I.E. NEARBY VEHICULAR/EQUIPMENT TRAFFIC, SITE MAINTENANCE EQUIPMENT, ETC.).

2.3 PVC COATED STEEL RIGID METAL CONDUIT (PVC/RMC)

A. PROVIDE RIGID STEEL, HEAVY WALL, FULL WEIGHT, THREADED TYPE (GALVANIZED AFTER CUTTING/THREADING INSIDE AND OUT) PVC COATED CONDUIT CONFORMING TO UL 6 STANDARD FOR SAFETY, RIGID METAL CONDUIT, AND UL514B STANDARD FOR SAFETY, FITTINGS FOR CONDUIT AND OUTLET BOXES

B. THE PVC COATED GALVANIZED RIGID CONDUIT MUST BE ETL VERIFIED TO THE INTERTEK ETL SEMKO HIGH TEMPERATURE H2O PVC COATING ADHESION TEST PROCEDURE FOR 200 HOURS. THE PVC COATED GALVANIZED RIGID CONDUIT MUST BEAR THE ETL VERIFIED PVC-001 LABEL TO SIGNIFY COMPLIANCE TO THE ADHESION PERFORMANCE STANDARD.

C. PROVIDE FOR APPLICATIONS SPECIFICALLY DESIGNATED ON DRAWINGS.

2.4 FLEXIBLE METAL CONDUIT

A. PROVIDE FLEXIBLE METAL CONDUIT COMPLIANT WITH F5 WW-C-566 AND UL 1, AND FORMED FROM CONTINUOUS LENGTH OF SPIRALLY WOUND, INTERLOCKED ZINC-COATED OR GALVANIZED (INSIDE & OUTSIDE) STRIP STEEL. PROVIDE CONDUIT FITTINGS FOR USE WITH FLEXIBLE STEEL CONDUIT OF THREADLESS HINGED CLAMP TYPE, WITH INSULATED THROATS. PROVIDE STRAIGHT TERMINAL CONNECTORS CONSISTING OF ONE PIECE BODY, FEMALE END WITH CLAMP AND DEEP SLOTTED MACHINE SCREW FOR SECURING CONDUIT, AND MALE THREADED END WITH LOCKNUT. DO NOT USE 45 DEGREE OR 90 DEGREE TERMINAL ANGLE CONNECTORS FOR FLEXIBLE OR WATER-TIGHT FLEXIBLE METAL CONDUIT IN LOCATIONS THAT WILL NOT BE FULLY ACCESSIBLE AFTER COMPLETION OF CONSTRUCTION. PROVIDE FULL SIZE GREEN INSULATED GROUND WIRE FOR ALL APPLICATIONS, REGARDLESS OF LENGTH. PROVIDE FLEXIBLE METAL CONDUIT FOR THE FOLLOWING CONDITIONS AS APPLICABLE

1. PROVIDE FOR FINAL 72 INCHES FROM OUTLET/JUNCTION BOXES TO RECESSED LUMINAIRES THAT ARE LOCATED IN ACCESSIBLE CEILING SYSTEMS. OPTIONALLY, TYPE AC/MC CABLE MAY BE USED FOR "FIXTURE WHIPS" (REFER TO SECTION 26 05 19).

2. PROVIDE FOR FINAL 24-72 INCHES OF CONNECTION TO INDOOR EQUIPMENT THAT IS SUBJECT TO MOVEMENT OR VIBRATION. LEAVE SUFFICIENT SLACK IN FLEXIBLE CONDUIT TO PERMIT MOVEMENT FROM VIBRATION WITHOUT ADVERSELY AFFECTING CONDUITS AND CONNECTIONS.

PART 3 - EXECUTION

A. GENERAL

1. PROVIDE CONDUIT, TUBING AND FITTINGS OF TYPES, GRADES, SIZES AND WEIGHTS (WALL THICKNESSES) FOR APPLICATIONS AS NEEDED TO RENDER ELECTRICAL WORK FULLY OPERATIONAL..

2. PROPERLY SUPPORT AND ANCHOR RACEWAYS FOR THEIR ENTIRE LENGTH USING STRUCTURAL MATERIALS. DO NOT SPAN ANY SPACE UNSUPPORTED.

END OF SECTION

SECTION 26 05 34 - BOXES AND FITTINGS FOR ELECTRICAL SYSTEMS

PART 1 - PRODUCTS

1.1 INDOOR BOXES

A. PROVIDE MINIMUM SIZE OF 4 INCHES SQUARE BY 1-1/2 INCHES DEEP FOR OUTLET BOXES AND JUNCTION BOXES. PROVIDE FOR EACH INSTALLATION, INCLUDING BOX SUPPORTS, MOUNTING EARS AND BRACKETS, WALLBOARD HANGERS, BOX EXTENSION RINGS, FIXTURE STUDS, CABLE CLAMPS, AND METAL STRAPS FOR SUPPORTING OUTLET BOXES, WHICH ARE COMPATIBLE WITH OUTLET BOXES BEING USED TO FULFILL INSTALLATION REQUIREMENTS FOR INDIVIDUAL WIRING SITUATIONS. PROVIDE WITH STAINLESS STEEL NUTS, BOLTS, SCREWS AND WASHERS.

1.2 DAMP AND WET LOCATION OUTLET BOXES AND COVERS

A. PROVIDE CORROSION-RESISTANT WEATHERTIGHT/RAINTIGHT OUTLET WIRING BOXES, OF TYPES, SHAPES AND SIZES, INCLUDING DEPTH OF BOXES, WITH THREADED CONDUIT HOLES FOR FASTENING ELECTRICAL CONDUIT, SUITABLY CONFIGURED FOR EACH APPLICATION, INCLUDING FACE PLATE GASKETS AND CORROSION-RESISTANT PLUGS AND FASTENERS. PROVIDE WEATHERTIGHT OUTLETS FOR INTERIOR AND EXTERIOR LOCATIONS EXPOSED TO WEATHER OR MOISTURE, I.E. IN DAMP OR WET LOCATIONS.

B. PROVIDE MINIMAL PROFILE ASSEMBLIES THAT ARE RATED NEMA 3R WHILE IN USE AND THAT EMPLOY RECESSED BOX AND COVER DESIGN, EQUAL TO THOMAS & BETTS "RED DOT" SERIES. PROVIDE TRIM COLOR(S) AS DIRECTED BY ARCHITECT.

PART 2 - EXECUTION

2.1 INSTALLATION

A. INSTALL ELECTRICAL BOXES IN THOSE LOCATIONS THAT ENSURE ACCESSIBILITY TO ENCLOSED ELECTRICAL WIRING.

B. DO NOT INSTALL ALUMINUM PRODUCTS IN CONCRETE.

C. CONSIDER THE OUTLET JUNCTION BOX LOCATIONS INDICATED ON DRAWINGS APPROXIMATE. STUDY THE GENERAL CONSTRUCTION WITH RELATION TO SPACES AND EQUIPMENT SURROUNDING EACH OUTLET, AND NEATLY INSTALL OUTLETS ACCORDINGLY.

END OF SECTION

SECTION 26 05 80 - MECHANICAL EQUIPMENT

PART 1 - GENERAL

1.1 RELATED WORK

A. PROVIDE ALL NECESSARY ELECTRICALLY RELATED WORK AS REQUIRED TO RENDER ALL MECHANICAL EQUIPMENT (INCLUDING PLUMBING, HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT) FULLY OPERATIONAL AND FULLY COMPLIANT WITH NEC. THIS INCLUDES, PRIOR TO ORDERING MATERIALS OR COMMENCING WITH ROUGH-IN, REVIEWING EQUIPMENT SUBMITTAL DATA AND COORDINATING WITH INSTALLING CONTRACTORS TO ENSURE THE CORRECT SIZE, RATING AND QUANTITY OF CONDUCTORS ARE PROVIDED.

PART 2 - EXECUTION

2.1 INSTALLATION

A. GENERAL

1. PROVIDE DISCONNECT SWITCH AHEAD OF ALL EQUIPMENT, INCLUDING CONTROLS, UNLESS THE MECHANICAL EQUIPMENT COMES WITH INTEGRAL NEC-COMPLIANT DISCONNECT(S). PROVIDE NEMA 3R ENCLOSURES WHERE INSTALLED OUTDOORS AND WHERE INSTALLED INDOORS IN AREAS SUBJECT TO MOISTURE. GROUND METAL FRAMES OF EQUIPMENT BY CONNECTING FRAMES TO THE GROUNDED METAL RACEWAY OR TO A FULL SIZE GREEN GROUND CONDUCTOR OR BOTH. PROVIDE THE NECESSARY ELECTRICAL CONNECTIONS BETWEEN THE SPECIFIED EQUIPMENT AND THE JUNCTION BOX NEAR EQUIPMENT WITH FLEXIBLE METALLIC CONDUIT (LIQUID-TIGHT OUTDOORS) AND MATCHED CONNECTORS (SEE SECTION 26 05 33), WHERE MECHANICAL EQUIPMENT LUGS CANNOT ACCOMMODATE CONDUCTOR SIZES SHOWN ON DRAWINGS, PROVIDE ILSCO CLEARTAP INSULATED MULTI-TAP CONNECTORS.

2. SIZES, ELECTRICAL RATINGS, ETC. OF EQUIPMENT AND WIRING SHOWN ON DRAWINGS ARE BASED ON THE RESPECTIVE EQUIPMENT DESIGN BASE MANUFACTURERS. IF DIFFERENT MANUFACTURER(S) OR MODEL(S) ARE ACTUALLY SUPPLIED, PROVIDE NECESSARY COORDINATION IN FIELD (PRIOR TO ORDERING MATERIALS AND PRIOR TO ROUGH-IN) AND PROVIDE THE NECESSARY SIZE OF RELATED ELECTRICAL EQUIPMENT, WIRING, CONDUIT, ETC.

3. PRIOR TO FURNISHING SUBMITTALS AND PRIOR TO ROUGH-IN, DETERMINE EXACT ELECTRICALLY RELATED CHARACTERISTICS, LOADS, VOLTAGES, DISCONNECT AND STARTER REQUIREMENTS, LOCATIONS, MOUNTING HEIGHTS, CONNECTION POINTS, ETC. OF MECHANICAL EQUIPMENT.

B. HACR BREAKERS

1. COORDINATE IN FIELD WITH THE RESPECTIVE TRADES AND DETERMINE CASE BY CASE, WHICH EQUIPMENT IS FACTORY LISTED FOR USE WITH HEATING AND AIR CONDITIONING RATED (HACR) BREAKERS, IN AN EFFORT TO MINIMIZE REQUIREMENTS FOR STOCKING OF FUSES BY THE OWNER, UTILIZE HACR BREAKERS AT THE SOURCE. PANELBOARDS AS THE NEC REQUIRED OVERCURRENT PROTECTION WHEREVER POSSIBLE (IN LIEU OF FUSING LOCAL DISCONNECT SWITCHES).

C. DISCONNECT SWITCH AND STARTER LOCATIONS

1. LOCATIONS OF DISCONNECTS AND STARTERS SHOWN ON DRAWINGS ARE INDICATED FOR SCHEMATIC PURPOSES ONLY. DETERMINE EXACT LOCATIONS IN FIELD SO THAT THEY ARE COMPLIANT WITH NEC ARTICLE 110 REQUIREMENTS FOR PANELBOARDS.

2. COMMERCIAL KITCHEN EXHAUST HOODS AND RELATED FAN EQUIPMENT

3. SEE DETAILS ON DRAWINGS.

a. REFER TO FOOD SERVICE DRAWINGS, FOOD SERVICE SPECIFICATIONS AND MANUFACTURER'S

SUBMITTALS FOR SPECIFIC INFORMATION. FIELD COORDINATE WORK WITH AFFECTED ENTITIES.

b. PROVIDE INTERLOCK WIRING AND CONNECTIONS TO AND FROM THE VARIOUS EQUIPMENT AND CONTROLS.

c. PROVIDE CONTROL WIRING FROM THE FAN UNITS TO RESPECTIVE REMOTE DUCT STATS.

d. PROVIDE AUXILIARY CONTROL CIRCUIT WIRING FROM THE FACTORY MICRO-SWITCH IN THE HOOD FIRE SUPPRESSION SYSTEMS TO RESPECTIVE DEDICATED FIRE ALARM SYSTEM MONITOR MODULES TO INITIATE ALARM SIGNAL WHEN RESPECTIVE HOOD FIRE PROTECTION SYSTEM IS ACTIVATED.

e. PROVIDE AUXILIARY CONTROL CIRCUIT WIRING FROM THE FACTORY MICRO-SWITCH IN THE HOOD FIRE SUPPRESSION SYSTEM TO CONTACTOR CONTROL COIL(S).

f. PROVIDE EMPTY OCTAGON BOX FOR MECHANICAL MANUAL PULL STATION (AND INSTALL PULL STATION) FOR EACH HOOD FIRE PROTECTION SYSTEM (MOUNTED AT 48" ABOVE FINISHED FLOOR TO TOP OF OUTLET BOX) WITH (1) 1/2" EMPTY CONDUIT ROUTED UP AND OVER TO HOOD AS DIRECTED BY HOOD INSTALLER IN FIELD (W/SWEEP 90'S). FIELD VERIFY LOCATION.

g. PROVIDE INTERLOCK CONTROL WIRING BETWEEN GAS SOLENOID SHUT OFF VALVES AND RESPECTIVE KITCHEN HOOD FIRE SUPPRESSION SYSTEM. COORDINATE WITH AFFECTED INSTALLERS.

END OF SECTION

SECTION 26 05 90 - MISCELLANEOUS SPECIALTIES

PART 1 - GENERAL

1.1 RELATED WORK

A. TIME BASED CONTROL - MULTI-PURPOSE TIME CLOCK (365 DAY)

1. PROVIDE INTERMATIC #ET90415CR SERIES MULTI-PURPOSE TIME CLOCK (OR EQUAL BY TORK), WHICH IS PROGRAMMABLE 365-DAY/24-HOUR WITH OVERRIDE CONTROLS. PROVIDE FOUR-CHANNEL UNIT. PROVIDE REQUIRED EXTERNAL CONTACTORS, RELAYS, ETC. TO RENDER THE CONTROL SYSTEMS FULLY OPERATIONAL. VERIFY ZONE CONTROL REQUIREMENTS IN FIELD PRIOR TO ROUGH-IN. PROVIDE 100-HOUR CARRYOVER.

2. REFER TO SECTION 26 27 40 FOR DEFINITION OF LIGHTING CONTACTORS. NOTE THAT ANY GIVEN LIGHTING CONTACTOR DESIGNATION MAY ACTUALLY INCLUDE MULTIPLE CONTACTORS DEPENDING ON HOW MANY CIRCUITS ARE CONTROLLED BY THE RESPECTIVE CONTACTOR DESIGNATION.

END OF SECTION

SECTION 26 09 23 - OCCUPANCY SENSORS

PART 1 - GENERAL

1.1 RELATED WORK

A. PROVIDE LABOR, MATERIALS, TOOLS, APPLIANCES, CONTROL HARDWARE, SENSOR, WIRE, JUNCTION BOXES AND EQUIPMENT NECESSARY FOR AND INCIDENTAL TO THE DELIVERY, INSTALLATION AND FURNISHING OF COMPLETELY OPERATIONAL OCCUPANCY SENSOR LIGHTING CONTROLS, AS DESCRIBED HEREIN.

B. PROVIDE PRODUCTS SUPPLIED FROM A SINGLE MANUFACTURER THAT HAS BEEN CONTINUOUSLY INVOLVED IN MANUFACTURING OF OCCUPANCY SENSORS FOR A MINIMUM OF FIVE (5) YEARS.

C. PROVIDE OCCUPANCY SENSORS FOR ENTIRE PROJECT THAT ARE ALL MADE BY THE SAME MANUFACTURER, REGARDLESS OF WHERE THE MATERIALS ARE SPECIFIED IN DIVISION 26 DOCUMENTS. PROVIDE COMPONENTS THAT ARE ALL MADE BY THE SAME MANUFACTURER IN CASES WHERE OCCUPANCY SENSOR COMPONENTS ARE ALSO CONNECTED TO A BUILDING LIGHTING CONTROL SYSTEM, REGARDLESS OF WHERE THE MATERIALS ARE SPECIFIED IN DIVISION 26 DOCUMENTS.

D. PROVIDE COMPONENTS THAT ARE U.L. LISTED, OFFER A FIVE (5) YEAR WARRANTY AND MEET STATE AND LOCAL APPLICABLE CODE REQUIREMENTS.

E. PROVIDE PRODUCTS MANUFACTURED BY AN ISO 9002 CERTIFIED MANUFACTURING FACILITY WITH A DEFECT RATE OF LESS THAN ONE-THIRD OF ONE PERCENT.

PART 2 - SPECIFIC REQUIREMENTS

2.1 ACCEPTABLE MANUFACTURERS

A. BASIS OF DESIGN MANUFACTURER IS WATTSTOPPER. OTHER ACCEPTABLE MANUFACTURERS ARE HUBBELL, SENSOR SWITCH, LEVITON, LUTRON, LC&D AND COOPER GREENGATE CA IN AS MUCH THE SYSTEMS MEET THE INTENT AND FUNCTIONALITY AND SUSTAINABILITY OF THE DESIGN.

2.2 PRODUCTS

A. CEILING SENSORS

1. PROVIDE STANDARD OF QUALITY EQUAL TO WATTSTOPPER: WT-60S, WT-600, WT-110S, WT-1100, WT-220S, WT-2200, WT-2250, WT-2255, WP-60S, WP-110S, WP-225S, WP-220S, W-500A, W-1000A, W-2000A, W-2000H, UT-300, UT-305, UT-355, WPIR, HB-100, HB-150, DT-200, DT-205, DT-300, DT-305, DT-355, CX-100, CX-105, CI-200, CI-205, CI-300, CI-305, CI-355, CI-12 OR CI-24 SERIES.

B. POWER AND AUXILIARY PACKS

1. PROVIDE STANDARD OF QUALITY EQUAL TO WATTSTOPPER: B120E-P, B277E-P, BZ-100, LC-100, C120E-P, C277E-P, S120/277-P, AT-120 OR AT-277 SERIES.

C. DUAL TECHNOLOGY SENSORS

1. PROVIDE SENSORS THAT ARE EITHER WALL MOUNTED, CORNER MOUNTED OR CEILING MOUNTED IN SUCH A WAY AS TO MINIMIZE COVERAGE IN UNWANTED AREAS. PROVIDE PASSIVE INFRARED AND ULTRASONIC TECHNOLOGIES FOR OCCUPANCY DETECTION.

D. GENERAL STANDARDS

1. PROVIDE SENSORS CAPABLE OF OPERATING NORMALLY WITH ELECTRONIC BALLASTS, PL LAMP SYSTEMS AND RATED MOTOR LOADS.

2. PROVIDE SENSORS WITH COVERAGE THAT REMAINS CONSTANT AFTER SENSITIVITY CONTROL HAS BEEN SET. AUTOMATIC REDUCTION IN COVERAGE DUE TO THE CYCLING OF AIR CONDITIONER OR HEATING FANS IS NOT PERMITTED.

3. PROVIDE SENSORS WITH READILY ACCESSIBLE, USER ADJUSTABLE SETTINGS FOR TIME DELAY AND SENSITIVITY. LOCATE SETTINGS ON THE SENSOR (NOT THE CONTROL UNIT) AND RECESS TO LIMIT TAMPERING.

4. PROVIDE BYPASS MANUAL OVERRIDE ON EACH SENSOR TO ACCOMMODATE FAILURES. CONFIGURE SO THAT WHEN BYPASS IS UTILIZED, LIGHTING REMAINS ON CONSTANTLY OR CONTROL DIVERTS TO A WALL SWITCH UNTIL SENSOR IS REPLACED. RECESS THIS CONTROL TO PREVENT TAMPERING.

5. PROVIDE SENSORS WITH AN LED AS A VISUAL MEANS OF INDICATION AT ALL TIMES TO VERIFY THAT MOTION IS BEING DETECTED DURING BOTH TESTING AND NORMAL OPERATION.

6. WHERE SPECIFIED, PROVIDE SENSOR WITH INTERNAL ADDITIONAL ISOLATED RELAY WITH NORMALLY OPEN, NORMALLY CLOSED AND COMMON OUTPUTS FOR USE WITH HVAC CONTROL, DATA LOGGING AND OTHER CONTROL OPTIONS. DO NOT USE SENSORS THAT UTILIZE SEPARATE COMPONENTS OR SPECIALLY MODIFIED UNITS TO ACHIEVE THIS FUNCTION.

7. PROVIDE SENSORS WITH UL RATED, 94V-0 PLASTIC ENCLOSURES.

END OF SECTION

SECTION 26 24 16 - PANELBOARDS

PART 1 - GENERAL

1.1 RELATED WORK

A. TYPES OF PANELBOARDS AND ENCLOSURES REQUIRED FOR THE PROJECT INCLUDE THE FOLLOWING.

1. POWER-DISTRIBUTION PANELBOARDS.

2. GENERAL USE PANELBOARDS.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PANELBOARD PRODUCTS OF ONE OF THE FOLLOWING (FOR EACH TYPE AND RATING OF PANELBOARD AND ENCLOSURE):

1. SQUARE D COMPANY.

2. GENERAL ELECTRIC COMPANY.

3. SIEMENS/ITE.

4. EATON.

2.2 GENERAL REQUIREMENTS

A. EXCEPT AS OTHERWISE INDICATED, PROVIDE PANELBOARDS, ENCLOSURES AND ANCILLARY COMPONENTS, OF TYPES, SIZES, AND RATINGS INDICATED, WHICH COMPLY WITH MANUFACTURER'S STANDARD MATERIALS; WITH THE DESIGN AND CONSTRUCTION IN ACCORDANCE WITH PUBLISHED PRODUCT INFORMATION.

B. PROVIDE PANELBOARDS WITH PROPER NUMBER OF UNIT PANELBOARD DEVICES AS REQUIRED FOR COMPLETE INSTALLATION. WHERE TYPES, SIZES, OR RATINGS ARE NOT INDICATED, COMPLY WITH NEC, UL AND ESTABLISHED INDUSTRY STANDARDS FOR THOSE APPLICATIONS INDICATED.

C. PROVIDE PANELBOARDS THAT ARE NEW AND MANUFACTURER'S LATEST STANDARD CATALOG DESIGN.

D. PROVIDE PANELBOARDS THAT BEAR UL LABELS FOR THEIR SPECIFIC APPLICATIONS.

E. PROVIDE PANELBOARDS SUITABLE FOR SERVICE VOLTAGE WITH NUMBER OF BRANCH CIRCUITS OF CAPACITY SCHEDULED.

F. PROVIDE PANELBOARDS, AND SECTIONS THEREOF IF APPLICABLE, WITH MAIN-LUGS-ONLY OF CAPACITY EQUAL TO, OR GREATER THAN, THE RATING OR SETTING OF THE OVERCURRENT PROTECTIVE DEVICE NEXT BACK ON THE LINE.

G. PROVIDE PANELBOARD BRANCHES AS SCHEDULED ON THE DRAWINGS.

H. PROVIDE CIRCUIT BREAKER PANELBOARD BUS ASSEMBLIES WITH DISTRIBUTED (SEQUENCE) TYPE BUSSING THROUGHOUT, SO THAT ANY TWO ADJACENT SINGLE-POLE BREAKERS, OR SPACES, ARE REPLACEABLE BY A TWO-POLE INTERNAL COMMON TRIP BREAKER, AND SO THAT ANY THREE ADJACENT SINGLE-POLE BREAKERS, OR SPACES, ARE REPLACEABLE BY A THREE-POLE INTERNAL COMMON TRIP BREAKER. THIS APPLIES FOR BRANCH BREAKERS SIZED 15 AMP THROUGH 70 AMP INCLUSIVE, WITHOUT DISTURBING ANY OTHER BREAKER.

J. PROVIDE DEAD-FRONT SAFETY TYPE PANELBOARDS AS INDICATED, WITH PANELBOARD SWITCHING AND PROTECTIVE DEVICES IN QUANTITIES, RATINGS, TYPES, AND WITH ARRANGEMENT SHOWN. PROVIDE WITH ANTI-TURN SOLDERLESS PRESSURE TYPE MAIN LUG CONNECTORS APPROVED FOR USE WITH COPPER OR ALUMINUM CONDUCTORS.

K. PROVIDE FULL-SIZED (100 PERCENT) NEUTRAL BUS. PROVIDE SUITABLE LUGS ON NEUTRAL BUS FOR OUTGOING FEEDERS REQUIRING NEUTRAL CONNECTIONS.

L. PROVIDE PANELBOARDS WITH BARE UNINSULATED GROUNDING BARS SUITABLE FOR BOLTING TO ENCLOSURES.

2.3 GENERAL USE CIRCUIT BREAKER PANELBOARDS

A. PROVIDE 208Y/120V THREE-PHASE GENERAL USE PANELBOARDS EQUAL TO SQUARE D NQOD WITH BOLT-ON BRANCH BREAKERS.

2.4 BUSSING

A. PROVIDE COPPER BUSSING.

2.5 CIRCUIT BREAKER PANELBOARD ENCLOSURES

A. PROVIDE GALVANIZED SHEET STEEL CABINET TYPE ENCLOSURES, IN SIZES AND NEMA TYPES AS INDICATED, CODE-GAGE, MINIMUM 16-GAGE THICKNESS.

B. PROVIDE BOXES WITH CODE-COMPLIANT SIDE AND END GUTTERS (MINIMUM 4 INCHES), AND OF CODE GAUGE GALVANIZED STEEL. PROVIDE BOXES THAT ARE 20 INCHES WIDE MINIMUM, AND 5-3/4 INCHES DEEP MINIMUM. PROVIDE BOXES WITH MULTIPLE KNOCKOUTS AND WIRING GUTTERS.

C. PROVIDE PANELBOARD TRIMS THAT ARE FLUSH OR SURFACE AS REQUIRED FOR RESPECTIVE APPLICATION, THAT ARE CONSTRUCTED OF CODE GAUGE STEEL, THAT ARE FINISHED WITH RUST INHIBITING PRIME COAT AND THEN FACTORY APPLIED HOT SPRAY LACQUER OR BAKED-ON ENAMEL, AND THAT ARE FACTORY PAINTED MANUFACTURER'S STANDARD LIGHT GRAY. PROVIDE TRIMS COMPLETE WITH CONCEALED HINGES AND CONCEALED TRIM CLAMPS. PROVIDE DOORS WITH FLUSH CHROMIUM PLATED COMBINATION CYLINDER LOCK AND CATCH, AND WITH DIRECTORY SUITABLE FOR CLEAR PLASTIC. PROVIDE LOCKS THAT ARE KEYS ALIKE.

D. PROVIDE ENCLOSURES THAT ARE FABRICATED BY SAME MANUFACTURER AS PANELBOARDS, WHICH MATE AND MATCH PROPERLY WITH PANELBOARDS TO BE ENCLOSED.

2.6 MOLDED CASE CIRCUIT BREAKERS

A. PROVIDE FACTORY-ASSEMBLED, MOLDED-CASE CIRCUIT BREAKERS OF FRAME SIZES, CHARACTERISTICS, AND RATINGS INCLUDING RMS SYMMETRICAL INTERRUPTING RATINGS REQUIRED FOR EACH APPLICATION. PROVIDE BREAKERS WITH PERMANENT THERMAL AND INSTANTANEOUS MAGNETIC TRIP, WITH FAULT-CURRENT LIMITING PROTECTION, AND WITH AMPERE RATINGS AS INDICATED.

B. PROVIDE COORDINATED SERIES-RATED CIRCUIT BREAKERS AS APPLICABLE THROUGHOUT, ACCOMMODATING RESPECTIVE AVAILABLE FAULT CURRENT.

C. PROVIDE BREAKERS THAT ARE DESIGNED TO BE MOUNTED AND OPERATED IN ANY PHYSICAL POSITION, AND TO BE OPERATED IN A MINIMUM AMBIENT TEMPERATURE OF 40 DEGREES C. PROVIDE BREAKERS WITH MECHANICAL SCREW TYPE REMOVABLE CONNECTOR LUGS, AL/CU RATED.

D. PROVIDE BRANCH CIRCUIT BREAKERS THAT ARE FULL AMBIENT COMPENSATED THERMAL MAGNETIC MOLDED CASE TYPE, WITH QUICK-MAKE AND QUICK-BREAK ACTION, AND WITH POSITIVE HANDLE TRIP INDICATION (ON BOTH MANUAL AND AUTOMATIC OPERATION). PROVIDE BREAKERS OF THE OVER-THE-CENTER TOGGLE OPERATING TYPE WITH THE HANDLE GOING TO A POSITION BETWEEN "ON" AND "OFF" TO INDICATE AUTOMATIC TRIPPING.

E. PROVIDE BOLT-ON BRANCH BREAKERS. PROVIDE FULL SIZE CIRCUIT BREAKERS. DO NOT PROVIDE "TANDEM" OR "SPLIT" BREAKERS

2.7 FAULT CURRENT RATINGS

A. PROVIDE ELECTRICAL DISTRIBUTION RELATED EQUIPMENT WITH APPROPRIATELY BRACED BUSSING AND PROPERLY RATED BREAKERS, FUSES, ETC. FOR THE AVAILABLE FAULT CURRENTS.

2.8 SERIES COORDINATION

A. PROVIDE FACTORY SERIES COORDINATION FOR ALL CIRCUIT BREAKERS (INCLUDING BRANCH BREAKERS), RELATIVE TO UPSTREAM BREAKERS, SO THAT ONLY THE BREAKER CLOSEST IN THE CIRCUIT TO THE LOAD TRIPS UPON AN OVERLOAD OR FAULT CONDITION.

PART 3 - EXECUTION

3.1 INSTALLATION

A. PROVIDE ENCLOSURES FASTENED FIRMLY TO WALLS AND STRUCTURAL SURFACES, ENSURING THAT THEY ARE PERMANENTLY AND MECHANICALLY ANCHORED.

B. PROVIDE NEATLY TYPEWRITTEN CIRCUIT DIRECTORY CARD FOR EACH PANELBOARD UPON COMPLETION OF INSTALLATION WORK. INCLUDE THE ACTUAL ROOM NAMES/NUMBERS THAT ARE SELECTED FOR INTERIOR SIGNAGE/DESIGNATION.

C. SCHEDULING SHOWN ON DRAWINGS IS SHOWN TO INDICATE FEEDER AND BRANCH CIRCUITING REQUIREMENTS. DETERMINE EXACT NUMBERING SEQUENCE OF CIRCUITS IN FIELD AFTER PERFORMING FINAL BALANCING

END OF SECTION

SECTION 26 27 26 - WIRING DEVICES

PART 1 - GENERAL

1.1 SUMMARY

A. PROVIDE WIRING DEVICES, IN TYPES, CHARACTERISTICS, GRADES, COLORS, AND ELECTRICAL RATINGS FOR APPLICATIONS INDICATED WHICH ARE UL LISTED AND WHICH COMPLY WITH NEMA WD 1 AND OTHER APPLICABLE UL AND NEMA STANDARDS. VERIFY COLOR SELECTIONS WITH OWNER'S REPRESENTATIVE.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING.

SWITCHES: LEVITON, HUBBELL, BRYANT, PASS & SEYMOUR, COOPER

DIMMERS: LUTRON

RECEPTACLES: LEVITON, HUBBELL, BRYANT, PASS & SEYMOUR, COOPER

WALL PLATES: LEVITON, HUBBELL, BRYANT, PASS & SEYMOUR, COOPER

2.2 WIRING DEVICE COLORS

A. UNLESS SPECIFICALLY INDICATED OTHERWISE, OR DIRECTED OTHERWISE IN FIELD, PROVIDE WHITE COLOR FOR NORMAL UTILITY WIRING DEVICES.

2.3 SPECIFICATION GRADE RECEPTACLES

A. STANDARD SPECIFICATION GRADE DUPLEX/SINGLE RECEPTACLES

1. PROVIDE DUPLEX RECEPTACLES EQUAL TO LEVITON #5362 SERIES. FOR RECEPTACLE CIRCUITS PROTECTED WITH 15A BREAKERS, PROVIDE NEMA 5-15R EQUIVALENTS. PROVIDE RECEPTACLES EQUAL TO LEVITON #5361 SERIES FOR SIMPLEX (SINGLE) APPLICATIONS.

B. GROUND-FAULT INTERRUPTER SPECIFICATION GRADE RECEPTACLES

1. PROVIDE GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLES EQUAL TO LEVITON #8898 SERIES. FOR RECEPTACLE CIRCUITS PROTECTED WITH 15A BREAKERS, PROVIDE NEMA 5-15R EQUIVALENTS.

2. RECEPTACLES INDICATED AS GFI MAY BE GFI-PROTECTED BY AN UPSTREAM GFI RECEPTACLE ON THE SAME CIRCUIT ONLY IF LOCATED IN THE SAME ROOM. OTHERWISE PROVIDE A SEPARATE GFI RECEPTACLE FOR EACH ONE SHOWN.

C. ISOLATED GROUND SPECIFICATION GRADE RECEPTACLES

1. PROVIDE DUPLEX ISOLATED GROUND RECEPTACLES EQUAL TO LEVITON #5362-IG. PROVIDE SIMPLEX (SINGLE) ISOLATED GROUND RECEPTACLES EQUAL TO LEVITON #5361-IG. FOR RECEPTACLE CIRCUITS PROTECTED WITH 15A BREAKERS, PROVIDE NEMA 5-15R EQUIVALENTS. PROVIDE DEDICATED INSULATED ISOLATED GROUND CONDUCTORS (GREEN WITH YELLOW TRACER) FOR EACH APPLICATION.

D. WEATHER RESISTANT GFCI RECEPTACLES

1. PROVIDE DUPLEX WEATHER RESISTANT RECEPTACLES EQUAL TO LEVITON # W7899 SERIES. FOR RECEPTACLE CIRCUITS PROTECTED WITH 15A BREAKERS, PROVIDE NEMA 5-15R EQUIVALENTS.

2.4 WIRING DEVICE ACCESSORIES

A. WALL PLATES

1. PROVIDE SINGLE AND COMBINATION, OF TYPES, SIZES, AND WITH GANGING AND CUTOUTS AS REQUIRED TO ACCOMMODATE EACH APPLICATION. PROVIDE PLATES WHICH MATE AND MATCH WITH WIRING DEVICES TO WHICH ATTACHED. PROVIDE METAL SCREWS FOR SECURING PLATES TO DEVICES WITH SCREW HEADS COLORED TO MATCH FINISH OF PLATES. PROVIDE WALL PLATE COLOR TO MATCH WIRING DEVICES UNLESS SPECIFICALLY INDICATED OTHERWISE.

2. PROVIDE STANDARD SIZE WALL PLATES. DO NOT PROVIDE "MIDWAY", "OVERSIZED" ("JUMBO") OR "EXTRA DEEP" WALL PLATES.

3. PROVIDE GALVANIZED STEEL WALL PLATES IN UNFINISHED EXPOSED-CONDUIT AREAS.

4. PROVIDE COMMERCIAL GRADE, SATIN FINISH STAINLESS STEEL WALL PLATES IN FINISHED AREAS, WITH BEVELED EDGES, EQUAL TO LEVITON TYPE 302 SERIES.

5. PROVIDE COMMERCIAL SPECIFICATION GRADE THERMOPLASTIC WALL PLATES IN FINISHED AREAS.

PART 3 - EXECUTION

3.1 INSTALLATION

A. PROVIDE GROUNDED ("NEUTRAL") CONDUCTOR IN ALL LIGHTING CONTROL DEVICE (SWITCH, DIMMER, OCCUPANCY SENSOR, ETC.) WALL OUTLET BOXES, EVEN IF NOT IMMEDIATELY USED.

B. INSTALL RECEPTACLES SO THAT THE GROUND PIN IS ORIENTED IN A CONSISTENT MANNER THROUGHOUT THE FACILITY, SO THAT THE ORIENTATION IS COMPLIANT WITH ALL PREVAILING CODES AND REGULATIONS, AND SO THAT THE ORIENTATION IS ACCEPTABLE TO THE ELECTRICAL INSPECTOR.

END OF SECTION

STATE OF ARKANSAS  
LICENSED PROFESSIONAL ENGINEER  
No. 18164  
LUTON B. MORSE

10-29-24

PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP. IT IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.

Arby's™

Copyright 2020 by Arby's Restaurant Group

ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40" - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

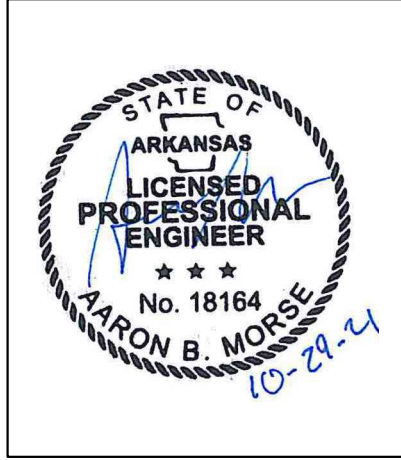
PROJECT NUMBER:

ISSUE PRELIMINARY PERMIT BID REVISION

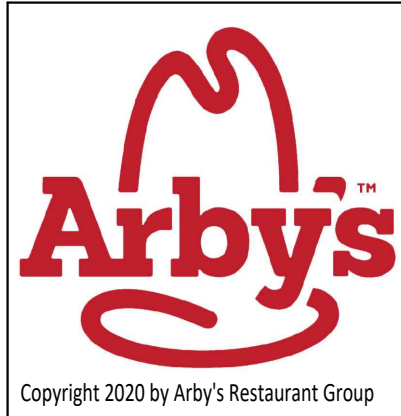
DATE

SPECIFICATIONS ELECTRICAL

SHEET:



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:	
ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SPECIFICATIONS  
ELECTRICAL

SHEET:



SPECIFICATIONS - DIVISION 26 - ELECTRICAL (CONTINUED)

SECTION 26 27 40 - DISCONNECTS, STARTERS, CONTACTORS

PART 1 - GENERAL

1.1 RELATED WORK

- A. PROVIDE NEMA STANDARD EQUIPMENT, INCLUDING THOSE INCORPORATED AS AN INTEGRAL PART OF A FACTORY/SHOP PRE-FABRICATED PIECE OF EQUIPMENT. DO NOT USE IEC STANDARDS FOR EQUIPMENT.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE EQUIPMENT OF ONE OF THE FOLLOWING (FOR EACH TYPE AND RATING):
  - 1. ALLEN-BRADLEY CO.
  - 2. GENERAL ELECTRIC CO.
  - 3. SIEMANS/ITE
  - 4. SQUARE D CO.
  - 5. EATON

2.2 MATERIALS

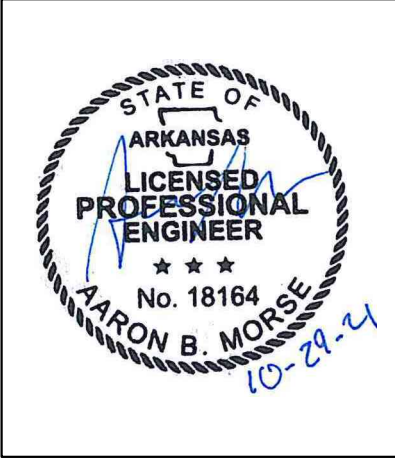
- A. DISCONNECT SWITCHES
  - 1. PROVIDE DISCONNECT SWITCHES EQUAL TO SQUARE D TYPE HD, HEAVY DUTY, SAFETY TYPE, QUICK MAKE AND QUICK BREAK AND EXTERNALLY OPERATED.
  - 2. PROVIDE FUSIBLE DISCONNECTS UNLESS NOTED OTHERWISE ON DRAWINGS OR DIRECTED OTHERWISE IN FIELD.
  - 3. PROVIDE DISCONNECT SWITCHES BRACED FOR 200,000 A.I.C.
  - 4. PROVIDE UNITS WITH FUSES OF CLASSES AND CURRENT RATINGS INDICATED, AND UL LISTED FOR USE AS SERVICE EQUIPMENT UNDER UL STANDARD 98 OR 869. SEE SECTION "FUSES" FOR FUSE SPECIFICATIONS. WHERE CURRENT LIMITING FUSES ARE INDICATED, PROVIDE SWITCHES WITH NON-INTERCHANGEABLE FEATURE SUITABLE ONLY FOR CURRENT LIMITING TYPE FUSES.
  - 5. INSTALL DISCONNECT SWITCHES WITHIN SIGHT OF CONTROLLER POSITION UNLESS OTHERWISE INDICATED.
- B. CONTACTORS
  - 1. PROVIDE CONTACTORS EQUIPPED WITH EXTERNAL PILOT LIGHTS IN COVER, AND EXTERNAL HOA SELECTOR SWITCHES IN COVER.
  - 2. WIRE CONTACTORS FOR LIGHTING APPLICATIONS SO THAT THE "AUTO" POSITION IS THE NORMAL ACTIVATED CONDITION (I.E. PHOTOCELL CONTROLLED, PHOTOCELL/TIME-CLOCK CONTROLLED, REMOTE SWITCH CONTROLLED, BAS CONTROLLED, ETC.); SO THAT THE "OFF" POSITION IS MANUAL OVERRIDE TO TURN LIGHTING OFF; AND SO THAT THE "HAND" POSITION IS MANUAL OVERRIDE TO TURN LIGHTING ON.
  - 3. PROVIDE CONTACTORS WITH FIELD CONVERTIBLE N.O./N.C. CONTACTS AND DESCRIPTIVE NAMEPLATES.
  - 4. PROVIDE CONTACTORS EQUAL TO SQUARE D CLASS 8903 (OR ALLEN-BRADLEY BUL. 500L-BA\*94 SERIES) FOR TUNGSTEN LIGHTING LOADS, BALLAST LIGHTING LOADS, AND SMALL RESISTANCE HEATING LOADS. PROVIDE CONTACTORS THAT ARE ELECTRICALLY OPERATED AND ELECTRICALLY HELD (EOEH). PROVIDE CONTACTORS IN FACTORY NEMA 1 ENCLOSURES, WITH 120V COILS (UNLESS INDICATED OTHERWISE ELSEWHERE OR OTHERWISE REQUIRED TO RENDER CONTROLS FULLY OPERABLE).
  - 5. PROVIDE "DRY" CONTACTS RATED AT 30A, MINIMUM 250V (600V IF REQUIRED BY APPLICATION). PROVIDE NUMBER OF POLES (MINIMUM OF THREE POLES) AND NUMBER OF CONTACTORS AS REQUIRED FOR EACH APPLICATION. FIELD VERIFY COIL VOLTAGE RATINGS.
  - 6. PROVIDE MAGNETIC (MECHANICALLY LATCHED) CONTACTORS EQUAL TO SQUARE D CLASS 8502 (OR ALLEN-BRADLEY BUL. 500-BA\*930 SERIES) FOR HEATING LOADS, CAPACITOR LOADS, TRANSFORMER LOADS, MOTOR LOADS, AND SIMILAR LOADS. PROVIDE CONTACTORS WITH FACTORY NEMA 1 ENCLOSURES, WITH 120V COILS (UNLESS INDICATED OTHERWISE ELSEWHERE OR OTHERWISE REQUIRED TO RENDER CONTROLS FULLY OPERABLE). PROVIDE STARTERS WITH HOLDING CIRCUIT CONTACTS (PROVIDE RELATED INTERLOCK WIRING). PROVIDE MAGNETIC CONTACTORS THAT ARE NEMA SIZE 1 MINIMUM. PROVIDE "DRY" CONTACTS RATED AT 30A, MINIMUM 250V (600V IF REQUIRED BY APPLICATION). PROVIDE NUMBER OF POLES (MINIMUM OF THREE POLES) AND NUMBER OF CONTACTORS AS REQUIRED FOR EACH APPLICATION. FIELD VERIFY COIL VOLTAGE RATINGS.

PART 3 - EXECUTION

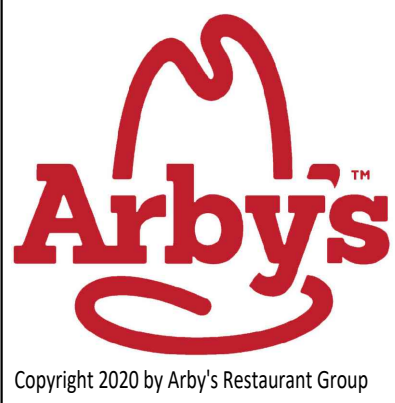
3.1 INSTALLATION

- A. PROVIDE UNITS WITH HORSEPOWER RATINGS SUITABLE TO THE LOADS. SIZE UNITS ACCORDING TO LOAD BEING SERVED OR AS NOTED ON DRAWINGS, WHICHEVER REQUIREMENT IS LARGER. INSTALL OVERLOADS AND FUSES AS NECESSARY TO FULFILL REQUIREMENTS OF EACH APPLICATION.
- B. FURNISH ADDITIONAL FUSES/OVERLOADS AMOUNTING TO 10 PERCENT OF FUSES PROVIDED, BUT NOT LESS THAN ONE SET OF 3 OF EACH KIND, FOR REQUIRED TYPES AND RATINGS.
- C. PROVIDE NEMA 3R ENCLOSURES FOR UNITS THAT ARE INSTALLED OUTDOORS, IN MOIST AREAS, AND IN OTHER ATMOSPHERES SUBJECT TO SIMILAR MOISTURE OR EXPOSURE.
- D. INSPECT OPERATING MECHANISMS FOR MALFUNCTIONING AND, WHERE NECESSARY, ADJUST UNITS FOR FREE MECHANICAL MOVEMENT. SUBSEQUENT TO COMPLETION OF INSTALLATION OF EQUIPMENT, ENERGIZE CIRCUITS AND DEMONSTRATE CAPABILITY AND COMPLIANCE WITH REQUIREMENTS. BEGIN BY DEMONSTRATING SWITCH OPERATION THROUGH SIX OPENING/CLOSING CYCLES WITH CIRCUIT UNLOADED. OPEN EACH SWITCH ENCLOSURE AND INSPECT INTERIORS, INSPECT MECHANICAL AND ELECTRICAL CONNECTIONS, INSPECT FUSE/OVERLOAD INSTALLATIONS, AND VERIFY ACCURACY OF TYPE AND RATING OF FUSES/OVERLOADS INSTALLED. CORRECT DEFICIENCIES THEN RETEST TO DEMONSTRATE COMPLIANCE. REMOVE AND REPLACE DEFECTIVE UNITS WITH NEW UNITS AND RETEST.

END OF SECTION



PROPRIETARY INFORMATION NOTICE:  
THESE PROTOTYPICAL DOCUMENTS MAY REQUIRE REVISIONS TO CONFORM TO LOCAL, STATE, AND FEDERAL CODES, ORDINANCES OR OTHER CONDITIONS. THE DESIGN CONCEPTS EMBODIED IN THESE DOCUMENTS ARE SPECIFICALLY FOR THIS PROJECT. INFORMATION CONTAINED HEREIN REMAINS THE SOLE PROPERTY OF ARBY'S RESTAURANT GROUP, IS CONFIDENTIAL AND PROPRIETARY AND IS NOT TO BE COPIED, REPRODUCED, DISCLOSED OR OTHERWISE TRANSFERRED TO OTHER PARTIES IN ANY FORM WHATSOEVER WITHOUT THE EXPRESS WRITTEN CONSENT OF ARBY'S RESTAURANT GROUP.



ARBY'S RESTAURANT GROUP  
INSPIRE DUAL REGULAR 40 - STANDARD  
1632 AR-25 BYPASS  
HEBER SPRINGS, AR 72543  
FOR  
RB AMERICAN GROUP, LLC  
6200 OAK TREE BLVD., SUITE 250, INDEPENDENCE, OHIO 44131

PROJECT NUMBER:

ISSUE	DATE
PRELIMINARY	
PERMIT	
BID	
REVISION	

SPECIFICATIONS  
ELECTRICAL

SHEET:

E7.3



INDEX	
DIVISION 1 GENERAL CONDITIONS	
00000	INSTRUCTIONS TO BIDDERS
01000	SUPPLEMENTARY GENERAL CONDITIONS
DIVISION 3 CONCRETE	
03000	CAST IN PLACE CONCRETE - REFER TO STRUCTURAL DRAWINGS
DIVISION 4 MASONRY	
04000	UNIT MASONRY ASSEMBLIES
DIVISION 5 METALS	
051200	STRUCTURAL STEEL FRAMING - REFER TO STRUCTURAL DRAWINGS
054000	COLD FORMED METAL FRAMING - REFER TO STRUCTURAL DRAWINGS
055000	METAL FABRICATIONS
DIVISION 6 WOODS AND PLASTICS	
061000	ROUGH CARPENTRY
064023	INTERIOR ARCHITECTURAL WOODWORK
066400	PLASTIC PANELING
DIVISION 7 THERMAL AND MOISTURE PROTECTION	
072100	THERMAL INSULATION
072419	WATER-DRAINAGE EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)
075213	ATACCTIC-POLYPROPYLENE (APP) MODIFIED BITUMINOUS MEMBRANE
075400	THERMOPLASTIC MEMBRANE ROOFING
076100	SHEET METAL ROOFING
076200	SHEET METAL FLASHING AND TRIM
077200	ROOF ACCESSORIES
079200	JOINT SEALANTS
DIVISION 8 DOORS AND WINDOWS	
081113	HOLLOW METAL DOORS AND FRAMES
081416	FLUSH WOOD DOORS
083113	ACCESS DOORS AND FRAMES
084113	ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS
087100	DOOR HARDWARE
DIVISION 9 FINISHES	
092900	GYPSUM BOARD
093000	TILING
095113	ACOUSTICAL PANEL CEILINGS
097200	WALL COVERINGS
099113	EXTERIOR PAINTING
099123	INTERIOR PAINTING
DIVISION 10 SPECIALTIES	
102800	TOILET, BATH, AND LAUNDRY ACCESSORIES
104416	FIRE EXTINGUISHERS
DIVISION 11 EQUIPMENT	
114000	FOODSERVICE EQUIPMENT

SECTION 000000 - INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

- A. BID THE PROJECT EXACTLY AS DRAWN AND SPECIFIED. COMPLETE ALL PROPOSALS AND INCLUDE ALL WORK AS SHOWN AND/OR SPECIFIED AND AS REQUIRED BY ALL APPLICABLE BUILDING CODES. THE CONTRACTOR IS HELD TO HAVE FULLY EXAMINED ALL DRAWINGS AND SPECIFICATIONS, NOT ONLY OF HIS/HER PARTICULAR CONCERN BUT OF ALLIED TRADES AS WELL, AND TO BE FULLY FAMILIAR WITH CONDITIONS UNDER WHICH HE/SHE WILL ASSUME HIS/HER WORK. PARTICULAR ATTENTION IS DRAWN TO THE GENERAL CONDITIONS AND THE SUPPLEMENTARY GENERAL CONDITIONS OF THE SPECIFICATIONS. THE CONTRACT IN THE FORM OF A SINGLE, LUMP SUM OF TYPE OF AGREEMENT, 1997 EDITION OF THE "AIA A201 - STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR".

PROPOSALS:

- A. SEALED BID PROPOSALS WILL BE RECEIVED BY OWNER AT SUCH TIME AND PLACED/DESIGNATED. SUBMIT PROPOSALS IN ACCORDANCE WITH OWNER'S "INVITATION TO BID". SIGN PROPOSALS BY LEGAL AUTHORIZED PARTIES OF COMPANIES ONLY AND STATE TITLES OF SAME. OWNER RETAINS THE RIGHT TO REJECT ANY AND/OR ALL PROPOSALS.

ACCEPTANCE OR WITHDRAWAL OF PROPOSALS:

- A. ANY CONTRACTOR WHO HAS SUBMITTED A PROPOSAL TO THE OWNER MAY WITHDRAW THIS PROPOSAL AT ANY TIME PRIOR TO THE SCHEDULED TIME FOR OPENING OF SAME; HOWEVER, ONCE PROPOSALS ARE OPENED THE CONTRACTOR AGREES TO HONOR SAME FOR A MINIMUM OF THIRTY (30) DAYS AFTER SCHEDULED DATE OF OPENING.

DISCREPANCIES:

- A. SHOULD A BIDDER FIND DISCREPANCIES OR AMBIGUITIES IN, OR OMISSIONS FROM, THE DRAWINGS AND/OR THE SPECIFICATIONS, OR BE IN DOUBT AS TO THEIR MEANING OR INTENT, NOTIFY THE CONSTRUCTION MANAGER FOR THE OWNER IN TIME TO ALLOW FOR ISSUANCE OF CLARIFICATION, BY MEANS OF ADDENDA, FOR DELIVERY IN SUFFICIENT TIME BEFORE PROPOSALS ARE DUE.

QUALIFICATION OF CONTRACTORS:

- A. THE OWNER RESERVES THE RIGHT TO REQUIRE ANY CONTRACTOR SUBMITTING A PROPOSAL TO FURNISH ANY OR ALL OF THE FOLLOWING INFORMATION PRIOR TO AWARD OF THE CONTRACT.
1. PERFORMANCE RECORD OF PROJECT COMPLETED OVER THE PREVIOUS TWO (2) YEARS.
  2. ADDRESS AND DESCRIPTION OF PLANT OR PERMANENT PLACE OF BUSINESS.
  3. ADDITIONAL INFORMATION AS REQUIRED TO SATISFY THE OWNER THAT THE CONTRACTOR IS ADEQUATELY PREPARED TO FULFILL ALL REQUIREMENTS OF THE CONTRACT, SUCH AS CONTAINED IN THE 1986 EDITION OF AIA DOCUMENT A305 - CONTRACTOR'S QUALIFICATION STATEMENT.

BIDDING DOCUMENTS:

- A. THE BIDDING DOCUMENTS WILL INCLUDE, BUT NOT NECESSARILY LIMITED, TO THE FOLLOWING ITEMS:
1. OWNER'S BID FORM.
  2. OWNER'S INVITATION TO BID NOTES.
  3. BUILDING AND CIVIL DRAWINGS AND SPECIFICATIONS.
- B. ALL BIDDERS SHALL BE AWARE OF AN FAMILIAR WITH THE A.I.A. "INSTRUCTION TO BIDDERS" AS CONTAINED IN THE 1997 EDITION OF A.I.A. DOCUMENT #A701. COPIES OF THIS DOCUMENT CAN BE OBTAINED FROM THE OWNER, OR THEIR DESIGNATED REPRESENTATIVE.
- C. INFORMATION AVAILABLE TO BIDDERS:
1. GEOTECHNICAL REPORT
  2. TOPOGRAPHIC AND BOUNDARY SURVEY

DISTRIBUTION OF DOCUMENTS:

- A. CONTRACTORS DESIRING TO BID THE WORK MAY OBTAIN OWNER DRAWINGS, SPECIFICATION AND SUPPLEMENTAL BIDDERS PACKAGE FROM OWNER'S CONSTRUCTION MANAGER. DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF OWNER AND ARE TO BE RETURNED COMPLETE AND IN GOOD CONDITION. USE BY UNAUTHORIZED PERSONS FOR ANY PURPOSE WHATSOEVER IS STRICTLY PROHIBITED AND IS PUNISHABLE UNDER FEDERAL COPYRIGHT LAWS.

CONDITIONS:

- A. SUBMITTAL OF A PROPOSAL BY ANY CONTRACTOR CONSTITUTES FULL ACCEPTANCE BY THAT CONTRACTOR OF ALL CONDITIONS AS HEREIN STATED.

BUILDING PACKAGE:

- A. CONTRACTOR WILL RECEIVE A NUMBER OF MISCELLANEOUS ITEMS AND INSTALL SOME AS PART OF THE GENERAL CONTRACT. THESE ITEMS ARE FOUND THROUGH THE DRAWING LABELED "OWNER". BE PREPARED TO ACCEPT DELIVERY OF THESE MISCELLANEOUS ITEMS AT THE TIME OF GROUNDBREAKING AND FURNISH ALL LABOR AND MATERIALS REQUIRED FOR THE UNLOADING, RECEIVING, SAFE GUARDING AND INSTALLATION OF THESE ITEMS.
- B. OWNER FURNISHED ITEMS. G.C. IS TO CONFIRM WITH OWNER IF THE FOLLOWING ITEMS ARE SUPPLIED AND/OR INSTALLED BY OWNER.
1. THE OWNER SHALL FURNISH VARIOUS ITEMS OF EQUIPMENT AND/OR MATERIALS FOR INSTALLATION BY THE CONTRACTOR. THE ITEMS SHALL INCLUDE, BUT NOT NECESSARILY LIMITED TO THE FOLLOWING ITEMS:
    - EXTERIOR MENU BOARD SYSTEM-CANOPY, SENSOR LOOP, BOARDS, AND SPEAKER PEDESTAL
    - INTERIOR MENU BOARD SYSTEM
    - DRINK TOWERS-FINAL CONNECTION BY VENDOR,
    - PLUMBING AND ELECTRICAL BY G.C.
    - KITCHEN EQUIPMENT
    - KITCHEN EXHAUST HOODS, FANS, AND CURBS
    - EXHAUST HOOD FIRE SUPPRESSION SYSTEM
    - ROOFTOP HVAC UNITS
    - DINING ROOM DÉCOR PACKAGE
    - DRIVE-UP AWNING
    - FIRE EXTINGUISHERS
  2. THE OWNER SHALL FURNISH AND INSTALL VARIOUS ITEMS OF EQUIPMENT AND/OR MATERIALS. SUCH ITEMS SHALL INCLUDE, BUT NOT NECESSARILY LIMITED TO THE FOLLOWING ITEMS:
    - STOREFRONT GLASS & GLAZING
    - AWNINGS (EXCEPT DRIVE UP AWNING TO BE INSTALLED BY THE CONTRACTOR)
    - BUILDING AND SITE SIGNAGE
    - SECURITY SYSTEMS
    - POS SYSTEM
    - MUSIC SYSTEM

ALTERNATES:

- A. SPECIFIC MANUFACTURERS FOR VARIOUS CONTRACTOR FURNISHED ITEMS ARE NOTED ON THE DRAWINGS. LIST OF APPROVED ALTERNATE MANUFACTURE'S PRODUCTS ARE FURNISHED. NOTE THIS INFORMATION ON THE PROPOSAL. ADDITIONALLY, PROVIDE PROPOSED SUBSTITUTIONS OF NON-APPROVED MANUFACTURERS IN COMPLIANCE WITH THE RESPECTIVE SECTION OF THE GENERAL CONDITIONS.
- B. IF ACCOMPANYING BID NOTES ARE PROVIDED BY OWNER, THOSE NOTES ARE TO SUPERSEDE ANY CONFLICTING INFORMATION IN THIS SECTION.

NOTICE TO PROCEED AND PRE-CONSTRUCTION MEETING:

- A. NO WORK WILL BE STARTED WITHOUT A PRE-CONSTRUCTION MEETING ATTENDED BY THE CONTRACTOR, OR HIS/HER REPRESENTATIVE, AND THE RECEIPT BY THE CONTRACTOR OF A FORMAL "NOTICE TO PROCEED" FROM OWNER, AND A DULY EXECUTED 1997 EDITION AIA DOCUMENT A101 STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR - STIPULATED SUM.

RECORD DRAWINGS:

- A. PRIOR TO RELEASE OF THE FINAL RETENTION, FURNISH OWNER A COMPLETE SET OF DRAWINGS REDLINED WITH ALL DEVIATIONS MADE DURING CONSTRUCTION PLUS THE PERMIT SET OF DRAWINGS AND SPECIFICATIONS MAINTAINED AT THE SITE.

SECTION 010000 - SUPPLEMENTARY CONDITIONS

DEFINITIONS:

- A. OWNER: THE OWNER IS DEFINED AS ARBY'S CORPORATE OR THE ARBY'S FRANCHISEE THROUGH WHICH THE "INVITATION TO BID" WAS PROVIDED. THE OWNER'S REPRESENTATIVE FOR ADMINISTRATION OF THE CONTRACT IS THE OWNER'S DESIGNATED "CONSTRUCTION MANAGER".
- B. OWNER'S TECHNICAL CONSULTANT: THE OWNER'S TECHNICAL CONSULTANT IS REFERRED TO "CONSULTANT" FOR PURPOSES OF THIS PROJECT. HE/SHE MAY BE AN ARCHITECT AND/OR ENGINEER, OR OTHER TECHNICAL REPRESENTATIVE, RESPONSIBLE FOR ASSISTING THE OWNER'S REPRESENTATIVE, IN ADMINISTRATION OF THE CONTRACT.
- C. CONTRACTOR: THE PERSON(S), COMPANY(IES) OR CORPORATION(S) WITH WHOM THE OWNER MAKES THE CONTRACT FOR THE WORK OR ANY PORTION THEREOF, OR FOR ANY MATERIALS OR RELATED SERVICES REQUIRED THERETO.
- D. SUBCONTRACTOR: ANY PERSON(S), COMPANY(IES) OR CORPORATION(S) WITH WHOM A CONTRACTOR MAKES A CONTRACT TO FURNISH LABOR AND/OR SERVICE AND/OR MATERIAL IN CONNECTION WITH THE PROJECT. WITHIN THE DRAWING AND SPECIFICATIONS, THE TERM "CONTRACTOR" IS INTERPRETED TO MEAN SUBCONTRACTOR WHERE APPLICABLE UNLESS FURTHER DEFINED.
- E. PROJECT: THE PROJECT IS DEFINED AS THE COMPLETE LABOR, MATERIALS AND SERVICES HIRED FOR CONSTRUCTION OF AN OWNER'S RESTAURANT AND ALL RELATED WORK AS DESCRIBED IN THE CONTRACT DOCUMENTS. INTENT OF PROJECT IS TO PROVIDE A COMPLETE FACILITY IN A COMPLETE AND USEABLE FACILITY SUITABLE FOR ITS INTENDED PURPOSE.
- F. SITE: THE PROPERTY ON WHICH THE PROJECT IS LOCATED.
- G. CONTRACT DOCUMENTS: THE CONTRACT DOCUMENTS CONSIST OF (1) THE BUILDING CONSTRUCTION CONTRACT (2) THE DRAWINGS (3) THE SPECIFICATIONS (4) SOILS REPORT. INCLUDE THE DATES AND REVISION DATES OF ALL DRAWINGS AND SPECIFICATIONS ON THE PROPOSAL FORM.

GENERAL CONDITIONS:

- A. THE STANDARD FORM OF GENERAL CONDITIONS PUBLISHED BY THE AIA FORM A201, 1997 EDITION, IS BINDING AND THE GENERAL CONDITIONS INCLUDED HEREIN ARE SUPPLEMENTARY THERETO. IN THE EVENT OF CONFLICT, THE SUPPLEMENTARY GENERAL CONDITIONS GOVERN OVER GENERAL CONDITIONS.
- B. USE AIA CONSTRUCTION CONTRACT, CONTRACTOR'S DRAW SCHEDULE, CONTRACT CHANGE ORDER AND FINAL WAIVER OF LIEN. COPIES OF THE ABOVE FORMS ARE ON FILE AT THE OWNER'S OFFICE.
- C. IT IS ACCEPTED AS A FACT THAT ALL CONTRACTORS HAVE INSPECTED THE SITE PRIOR TO SUBMITTING THEIR BID AND NO ADDITIONAL COMPENSATION IS ALLOWED FOR FAILURE TO FULFILL THIS REQUIREMENT. IT IS TO BE CONSTRUED; HOWEVER, THAT THE CONTRACTORS HAVE INCLUDED IN THEIR BIDS AMOUNTS TO COVER UNFORESEEN CONDITIONS OR OBSTACLES OTHER THAN THOSE INDICATED ON THE DRAWINGS OR VISUALLY APPARENT AT THE SITE. SHOULD UNFORESEEN CONDITIONS ARISE, NOTIFY THE OWNER IMMEDIATELY.
- D. THE FOLLOWING SPECIFICATIONS ARE DIVIDED INTO CHAPTERS AND EACH CONTRACTOR IS TO FIGURE ON THAT PORTION WITH WHICH HE IS CONCERNED. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO READ AND FAMILIARIZE HIMSELF WITH THE GENERAL CONDITIONS WHICH ARE CONSIDERED EQUALLY BINDING WITH THE REMAINING SPECIFICATIONS.
- E. SETTLE ANY CONTROVERSY OR CLAIM ARISING DUE TO A LABOR CONFLICT CAUSED BY THE WORDING OR ASSIGNMENT OF THESE SPECIFICATIONS IN ACCORDANCE WITH LOCAL GOVERNING LABOR PRACTICE.
- F. LIST ALTERNATES, WHETHER SPECIFIED BY THE OWNER OR SUGGESTED BY THE CONTRACTOR, SEPARATELY ON THE PROPOSAL. INDICATE THE COST OF MATERIALS AND LABOR REQUIRED TO COMPLETE THE ALTERNATE AND THE CREDIT DUE THE OWNER FOR ANY MATERIALS AND/OR LABOR NOT REQUIRED DUE TO THE ALTERNATE INSTALLATION.
- G. THE OWNER'S CONSTRUCTION MANAGER OR DESIGNATED REPRESENTATIVE IS THE OWNER'S AND THE ARCHITECT'S OR ENGINEER'S SOLE REPRESENTATIVE DURING THE ADMINISTRATION OF THE CONSTRUCTION CONTRACT.

DRAWINGS AND SPECIFICATIONS:

- A. EXECUTE ALL WORK ACCORDING TO THE TRUE MEANING AND INTENT OF THE DRAWINGS AND SPECIFICATIONS WHICH ARE INTENDED TO INCLUDE EVERYTHING REQUIRED AND NECESSARY FOR THE PROPER AND ENTIRE FINISHING OF THE WORK, NOTWITHSTANDING, THAT EACH AND EVERY ITEM NECESSARILY INVOLVED IN THE WORK IS NOT SPECIFICALLY MENTIONED. DELIVER THE COMPLETED WORK TO THE OWNER IN A PERFECT AND UNDAMAGED CONDITION WITHOUT EXCEPTION.
- B. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE COOPERATIVE. FURNISH AND PERFORM THE WORK OR MATERIALS CALLED FOR BY THE DRAWINGS AND SPECIFICATIONS IN THE SPECIFICATIONS OR VICE-VERSA IN AS FAITHFUL A MANNER AS THOUGH TREATED BY BOTH. THE SPECIFICATIONS ARE INTENDED TO REPRESENT MINIMUM DESIGN AND ARE SUPERSEDED BY THE DRAWINGS.
- C. BEFORE SUBMITTING A BID PROPOSAL CAREFULLY REVIEW THE DRAWINGS AND SPECIFICATIONS AND WHEN A CONFLICT, UNCERTAINTY OR DISCREPANCY BE FOUND, REPORT SAME TO THE OWNER IMMEDIATELY, WHO WILL MAKE A RULING ON EACH REPORT AND WILL NOTIFY ALL CONCERNED BIDDERS AS TO HIS DECISIONS. SHOULD SUCH CONFLICT, UNCERTAINTY OR DISCREPANCY, BE DISCOVERED AFTER SIGNING OF THE CONTRACT, CALL IT TO THE ATTENTION OF THE OWNER AND HIS DECISION IN REGARD THERETO IS FINAL.

PRECEDENCE OF DRAWINGS:

- A. THE ORDER OF PRECEDENCE OF DRAWINGS IS AS FOLLOWS:
1. ANY ADDENDA OVER ALL MATERIAL OF AN EARLIER DATE.
  2. EQUIPMENT DRAWINGS, AS MAY BE PROVIDED BY THE OWNER, OVER ARCHITECTURAL AND MECHANICAL DRAWINGS OF EARLIER DATES.
  3. OWNER'S DRAWINGS OVER OWNER SPECIFICATIONS.
  4. ARCHITECTURAL DRAWINGS OVER MECHANICAL AND ELECTRICAL DRAWINGS.
  5. LARGER SCALE DRAWINGS OVER SMALLER SCALE DRAWINGS.
  6. FIGURED DIMENSIONS OVER SCALE DIMENSIONS.
  7. SUPPLEMENTARY GENERAL CONDITIONS OVER AIA GENERAL CONDITIONS.

SALES TAX:

- A. INCLUDE IN THE PROPOSAL, THE PAYMENT OF ALL STATE AND LOCAL SALES AND OCCUPATIONAL TAXES AS MAY BE LEVIED BY THE GOVERNMENTAL AGENCIES REGARDING THE WORK.

SUBSTITUTION:

- A. ANY SUBSTITUTION MUST BE APPROVED IN ADVANCE OF CONSTRUCTION BY THE OWNER AFTER RECEIPT AND STUDY OF COMPLETE INFORMATION REGARDING SAME, INCLUDING ANY CREDITS OR ADDITIONAL COSTS.

MATERIALS AND WORKMANSHIP:

- A. UNLESS OTHERWISE PARTICULARLY STATED, FURNISH AND INSTALL ALL MATERIALS AND LABOR MENTIONED IN THESE SPECIFICATIONS AND/OR SHOWN ON THE DRAWINGS. EXECUTE ALL WORK IN A NEAT AND SKILLFUL MANNER TO THE ENTIRE SATISFACTION OF THE OWNER.

SUB-CONTRACTS:

- A. AS REQUIRED BY THE OWNER, HAVE THE NAMES OF ALL PROPOSED SUBCONTRACTORS APPROVED BY THE OWNER PRIOR TO AWARD OF THE CONTRACT. THE SUB-CONTRACTOR IS BOUND BY THE SPECIFICATIONS. NO CONTRACTOR OR SUB-CONTRACTOR MAY SUBLET OR ASSIGN HIS CONTRACT OR ANY PART THEREOF WITHOUT THE WRITTEN APPROVAL OF THE OWNER.

LAWS AND ORDINANCES:

- A. COMPLY IN ALL RESPECTS WITH ALL LAWS AND ORDINANCES HAVING JURISDICTION OVER THE WORK AND/OR MATERIALS OR METHODS EMPLOYED IN PERFORMING SAME. NO ADDITIONAL COMPENSATION WILL BE ALLOWED CONTRACTORS FOR FAILURE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS UNDER WHICH THEY WILL PERFORM THEIR WORK UNLESS THESE CONDITIONS ARE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO SIGNING OF CONTRACTS, AND PROVISIONS FOR ADJUSTING COSTS ARE MADE AT THAT TIME.

PERMITS, BOND, LICENSES:

- A. TAKE OUT AND PAY FOR ALL PERMITS, BONDS, LICENSES AND SIMILAR ITEMS. SHOULD SEPARATE CONTRACTS BE AWARDED, EACH CONTRACTOR IS RESPONSIBLE FOR PERMITS, FEES, BONDS, LICENSES, AND SIMILAR ITEMS AS MAY BE REQUIRED BY THE WORK COVERED UNDER HIS/HER PORTION OF THE CONTRACT. TURN OVER RECEIPTS FOR SAME TO THE OWNER UPON ON A TIMELY BASIS. AT THE OWNER'S ELECTION, THE OWNER MAY OBTAIN ANY OF THE PERMITS.

PROTECTION:

- A. BARRICADE AND/OR SHELTER HIS WORK AS TO REASONABLY PROTECT IT FROM DAMAGE. ARRANGE ALL BARRICADES SO AS TO INSURE A REASONABLE VISUAL AND PHYSICAL WARNING FOR WORKMEN AND THE PUBLIC. PROVIDE FLASHING TYPE BLINKERS AND OTHER DEVICES AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
- B. THE CONTRACTOR(S) IS HELD RESPONSIBLE FOR ANY DAMAGE TO HIS/HER WORK AS MAY BE DUE TO NEGLIGENCE OF THE ABOVE, OR AS MAY BE CAUSED BY ACCIDENT, WIND, RAIN, SNOW, FREEZING RAIN, RIOT, MALICIOUS MISCHIEF OR LABOR COMOTION, THEFT, OR SIMILAR REASONS, OF DUE TO HIS/HER ACTS, OMISSIONS OR NEGLIGENCE. IF SUCH DAMAGE OCCURS, RESTORE THE WORK TO ITS PREVIOUS CONDITION AT NO COST TO THE OWNER.
- C. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE OR LOSS TO OWNER'S BUILDING PACKAGE OR EQUIPMENT IN SAID CONTRACTOR'S POSSESSION. AT OWNER'S ELECTION, THE COST OF REPAIR OR REPLACEMENT OF ANY MISSING ITEMS WILL BE BORNE BY SAID CONTRACTOR.
- D. PROTECT ALL ADJOINING PROPERTY FROM DAMAGE DURING THE COURSE OF THE WORK. IF REQUIRED BY LOCAL LAWS OR ORDINANCES, ISSUE NOTICES TO OWNER OF SAID PROPERTY. NO USE OF ADJACENT PRIVATELY OWNED PROPERTY BY CONTRACTOR, WITHOUT WRITTEN PERMISSION BY ITS OWNER IS ALLOWED.

INSURANCE:

- A. IN GENERAL, MAINTAIN SUCH INSURANCE TO PROTECT CONTRACTOR, OWNER AND THE OWNER'S AGENTS AND REPRESENTATIVES FROM ANY AND ALL CLAIMS UNDER WORKMEN'S COMPENSATION ACTS AND FROM ALL CLAIMS FOR DAMAGES BECAUSE OF BODILY INJURY, INCLUDING DEATH, AND ALL CLAIMS FOR PROPERTY DAMAGE ARISING FROM CONTRACTOR'S OPERATIONS AND/OR THE OPERATIONS OF SUBCONTRACTORS EMPLOYED BY HIM, IN THE AMOUNT STATED HEREIN. FOR SUB- CONTRACTOR(S) NOT COVERED BY THE CONTRACTOR(S) INSURANCE, PROVIDE SIMILAR INSURANCE OF THEIR OWN. OBTAIN COVERAGE FROM A COMPANY HOLDING A GENERAL RATING OF "A" OR BETTER AS SET FORTH IN THE MOST CURRENT ISSUE OF BEST'S KEY RATING INSURANCE GUIDE. WHERE REQUESTED OR REQUIRED, SUCH POLICIES SHALL NAME THE OWNER AS "ADDITIONAL INSURED".
- B. "HOLD HARMLESS" CLAUSE: PROVIDE CERTIFICATE STATING THAT THIS ENDORSEMENT IS INCLUDED IN THE POLICY(IES).
- C. THIS CONTRACTOR ASSUMES THE LIABILITY FOR ALL LOSSES, DAMAGES(INCLUDING LOSS OF USE), EXPENSES, DEMANDS AND CLAIMS IN CONNECTION WITH OR ARISING OUT OF ANY INJURY OR ALLEGED INJURY TO PERSONS (INCLUDING DEATH) OR DAMAGES OR ALLEGED DAMAGE TO PROPERTY, SUSTAINED OR ALLEGED TO HAVE BEEN SUSTAINED, IN CONNECTION WITH OR TO HAVE ARISEN OUT OF THE PERFORMANCE OF THE WORK BY THE CONTRACTOR, HIS SUBCONTRACTORS, AND THEIR AGENTS, SERVANTS AND EMPLOYEES, INCLUDING LOSSES, EXPENSES, OR DAMAGES SUSTAINED BY THE OWNER AND THE CONSULTANTS. THE CONTRACTOR HEREBY UNDERTAKES AND AGREES TO INDEMNIFY AND HOLD HARMLESS THE OWNER AND THE CONSULTANTS, THEIR AGENTS, SERVANTS, AND EMPLOYEES, FROM ANY AND ALL SUCH LOSSES, EXPENSES, DAMAGES (INCLUDING LOSS OF USE), DEMANDS AND CLAIMS, AND DEFEND ANY SUIT OR ACTION BROUGHT AGAINST ANY OF THEM, BASED ON ANY ALLEGED INJURY (INCLUDING DEATH) OR DAMAGE (INCLUDING LOSS OF USE) AND PAY ALL DAMAGES, JUDGMENTS, COSTS AND EXPENSES, INCLUDING ATTORNEY'S FEES, IN CONNECTION WITH SAID DEMANDS AND CLAIMS RESULTING THEREFROM.

- D. THE ABOVE CLAUSE APPLIES IN ALL STATES UNLESS RESTRICTED BY STATE STATUTE, SHOULD THIS BE THE CASE. PROVIDE THE MAXIMUM FORM OF "HOLD HARMLESS" ALLOWED BY THE LAW.
- E. PROVIDE COMPREHENSIVE GENERAL LIABILITY INSURANCE INCLUDING A BROAD FORM ENDORSEMENT AND A BROAD FORM PROPERTY DAMAGE ENDORSEMENT WITH LIMITS NOT LESS THAN \$3 MILLION CSL (COMBINED SINGLE LIMIT). IF APPROPRIATE, ALSO MAINTAIN SCAFFOLDING AND DEMOLITION INSURANCE.
- F. PROVIDE WORKERS COMPENSATION INSURANCE IN ACCORDANCE WITH APPLICABLE STATE REQUIREMENTS.
- G. PROVIDE EMPLOYERS' LIABILITY INSURANCE IN AN AMOUNT NOT LESS THAN \$100,000.
- H. PROVIDE COMPREHENSIVE AUTOMOBILE LIABILITY INCLUDING OWNED, NON-OWNED AND HIRE COVERAGE IN AN AMOUNT NOT LESS THAN \$500,000 CSL (COMBINED SINGLE LIMIT).
- I. SATISFY ANY INSURANCE REQUIREMENTS NECESSITATED BY ANY PERTINENT GOVERNMENTAL AUTHORITY.
- J. AT OWNER'S ELECTION, MAINTAIN BUILDER'S RISK INSURANCE COVERING THE PREMISES. HAVE SUCH INSURANCE WRITTEN ON AN ALL RISK BASIS AND COVERING ALL THE WORK UNTIL OWNER'S FINAL ACCEPTANCE OF SAME.
- K. PROVIDE INSURANCE POLICIES IMMEDIATELY AFTER AWARD OF CONTRACT AND PRIOR TO ANY WORK BEING PERFORMED. UPON OBTAINING POLICIES, NOTIFY THE OWNER AND FILE CERTIFICATES AND/OR DUPLICATE POLICIES FROM INSURANCE COMPANIES WITH THE OWNER SHOWING POLICY NUMBERS, DATES POLICIES ARE IN EFFECT, AND ALL LIMITATIONS AND EXCLUSION. PROVIDE CERTIFICATES STATING THAT THE INSURANCE COMPANY WILL NOTIFY THE OWNER BY REGISTERED MAIL THIRTY (30) DAYS PRIOR TO THE EXPIRATION OR CANCELLATION OF ANY POLICY.

PERFORMANCE, MATERIAL AND LABOR BONDS:

- A. WHEN REQUESTED, PROVIDE PERFORMANCE BONDS, LABOR AND MATERIAL PAYMENT BONDS TO THE OWNER, PRIOR TO START OF WORK UNLESS OTHERWISE STATED, USE THE 1984 EDITION OF AIA DOCUMENT A312 - PERFORMANCE BOND AND PAYMENT BOND.

CONTRACTOR'S QUALIFIED JOB SITE SUPERINTENDENT:

- A. HAVE THE CONTRACTOR OR HIS/HER DESIGNATED AND QUALIFIED REPRESENTATIVE/JOB SUPERINTENDENT, WITH FULL AUTHORITY TO ACT ON BEHALF OF CONTRACTOR UNDER THE CONSTRUCTION CONTRACT, IN ATTENDANCE AT THE JOB SITE AND SUPERVISING SAID WORK, AT ALL TIMES DURING THE PROGRESS OF THE WORK.

TEMPORARY FACILITIES:

- A. TAKE CHARGE OF THE PREMISES FROM THE START TO THE PROJECT AND FURNISH THE FOLLOWING:
1. LAYING OUT OF ALL WORK AND ESTABLISHING BUILDING LINES AND LEVELS, CONFIRM THIS INFORMATION WITH THE OWNER.
  2. TEMPORARY ELECTRIC POWER, TWO TELEPHONE LINES, AND ONE CONTRACTOR PROVIDED FAX MACHINES, DURING THE PERIOD OF CONSTRUCTION. THIS DOES NOT INCLUDE PORTABLE GENERATORS FOR USE OF OTHER TRADES.
  3. HEATING OF BUILDING FOR WORKING AND DRYING PURPOSES DURING THE PERIOD OF CONSTRUCTION.
  4. TEMPORARY LADDERS AS REQUIRED FOR ACCESS TO ALL WORK.
  5. WATER FOR CONSTRUCTION USE.
  6. ACCEPTANCE, UNLOADING AND STORAGE OF OWNER'S EQUIPMENT DELIVERED TO THE SITE ARE THE RESPONSIBILITY OF THE CONTRACTOR.
  7. TEMPORARY TOILET FACILITIES FOR WORKERS.
  8. TWO ENCLOSED AND SECURED TRAILERS FOR STORAGE OF OWNER SUPPLIED ITEMS. THE MINIMUM LENGTH OF SAID TRAILERS IS TWENTY-FIVE FEET, BUT MAY RANGE TO FORTY- FEET, AT THE DISCRETION OF THE CONSTRUCTION MANAGER AS COMMUNICATED IN THE BID DOCUMENTS.

CONSTRUCTION LAYOUT:

- A. BEFORE PROCEEDING TO LAY OUT THE WORK, VERIFY LAYOUT INFORMATION SHOWN ON DRAWINGS, IN RELATION TO THE PROPERTY SURVEY AND EXISTING BENCHMARKS. IF DISCREPANCIES ARE DISCOVERED, NOTIFY THE OWNER'S REPRESENTATIVE PROMPTLY.
- B. GENERAL: ENGAGE A LAND SURVEYOR OR PROFESSIONAL ENGINEER, ACCEPTABLE TO THE OWNER, TO LAY OUT THE WORK USING ACCEPTED SURVEYING PRACTICES.
1. ESTABLISH BENCHMARKS AND CONTROL POINTS TO SET LINES AND LEVELS AT EACH STORY OF CONSTRUCTION AND ELSEWHERE AS NEEDED TO LOCATE EACH ELEMENT OF THE PROJECT.
  2. ESTABLISH DIMENSIONS WITHIN TOLERANCES INDICATED. DO NOT SCALE DRAWINGS TO OBTAIN REQUIRED DIMENSIONS.
  3. INFORM INSTALLERS OF LINES AND LEVELS TO WHICH THEY MUST COMPLY.
  4. CHECK THE LOCATION, LEVEL AND PLUMB, OF EVERY MAJOR ELEMENT AS THE WORK PROGRESSES.
  5. NOTIFY OWNER WHEN DEVIATIONS FROM REQUIRED LINES AND LEVELS EXCEED ALLOWABLE TOLERANCES.
  6. CLOSE SITE SURVEYS WITH AN ERROR OF CLOSURE EQUAL TO OR LESS THAN THE STANDARD ESTABLISHED BY AUTHORITIES HAVING JURISDICTION.
- C. SITE IMPROVEMENTS: LOCATE AND LAY OUT SITE IMPROVEMENTS, INCLUDING PAVEMENTS, GRADING, FILL AND TOPSOIL PLACEMENT, UTILITY SLOPES, AND INVERT ELEVATIONS.
- D. BUILDING LINES AND LEVELS: LOCATE AND LAY OUT CONTROL LINES AND LEVELS FOR STRUCTURES, BUILDING FOUNDATIONS, COLUMN GRIDS, AND FLOOR LEVELS, INCLUDING THOSE REQUIRED FOR MECHANICAL AND ELECTRICAL WORK. TRANSFER SURVEY MARKINGS AND ELEVATIONS FOR USE WITH CONTROL LINES AND LEVELS. LEVEL FOUNDATIONS AND PIERS FROM TWO OR MORE LOCATIONS.
- E. RECORD LOG: MAINTAIN A LOG OF LAYOUT CONTROL WORK. RECORD DEVIATIONS FROM REQUIRED LINES AND LEVELS. INCLUDE BEGINNING AND ENDING DATES AND TIMES OF SURVEYS, WEATHER CONDITIONS, NAME AND DUTY OF EACH SURVEY PARTY MEMBER, AND TYPES OF INSTRUMENTS AND TAPES USED. MAKE THE LOG AVAILABLE FOR REFERENCE BY ARCHITECT.

RECEIPT OF EQUIPMENT:

- A. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR IS THE RECEIVING PARTY FOR DELIVERIES OF EQUIPMENT AND MISCELLANEOUS ITEMS MADE TO THE JOB SITE BY COMMON CARRIER. IF, DURING THE RECEIPTS OF THOSE ITEMS BY THE CONTRACTOR'S REPRESENTATIVES, ANY MISSING OR DAMAGED ITEMS ARE OBSERVED, THE RECEIVING PERSON MUST:
1. MAKE A NOTATION OF THE DISCREPANCY ON THE DELIVERY TICKET.
  2. CALL OWNER AND ADVISE OF THE PROBLEM WITHIN 24 HOURS.
  3. CALL THE DELIVERY CARRIER AND/OR VENDOR TO FILE A CLAIM.

INSPECTION AND TESTS:

- A. CALL FOR ALL INSPECTIONS AS MAY BE REQUIRED BY LOCAL AUTHORITIES, ALLOWING A MINIMUM OF 24 HOUR NOTICE FOR INSPECTIONS TO BE MADE.
- B. NOTIFY THE OWNER FOR THE NECESSARY INSPECTIONS ONE WEEK PRIOR TO THE INSTALLATION OF THE ITEMS SPECIFIED IN THE "INVITATION TO BID".
- C. THE OWNER HAS THE RIGHT TO ORDER TESTS AND/OR LABORATORY EXAMINATION OF ANY MATERIAL OR WORK USED OR PERFORMED ON THE PROJECT SHOULD HE/SHE SUSPECT SUCH MATERIAL OR WORK TO BE OF LESSER QUALITY THAN SPECIFIED HEREIN. THE COSTS OF ALL SUCH TESTS WILL BE PAID BY THE OWNER UNLESS THEY INDICATE WORK OR MATERIALS TO BE OF LESSER QUALITY, IN WHICH CASE THE CONTRACTOR PAYS THE COSTS ALONG WITH ANY EXPENSES INCURRED IN CORRECTION OF THE WORK.

PROGRESS MEETINGS:

- A. CONDUCT PROGRESS MEETINGS AT REGULAR INTERVALS. COORDINATE DATES OF MEETINGS WITH PREPARATION OF PAYMENT REQUESTS.
- B. ATTENDEES: IN ADDITION TO REPRESENTATIVES OF OWNER AND CONSULTANTS EACH CONTRACTOR, SUBCONTRACTOR, SUPPLIER, AND OTHER ENTITY CONCERNED WITH CURRENT PROGRESS OR INVOLVED IN PLANNING, COORDINATION, OR PERFORMANCE OF FUTURE ACTIVITIES SHALL BE REPRESENTED AT THESE MEETINGS. ALL PARTICIPANTS AT THE CONFERENCE SHALL BE FAMILIAR WITH THE PROJECT AND AUTHORIZED TO CONCLUDE MATTERS RELATING TO THE WORK.
- C. CONTRACTOR'S CONSTRUCTION SCHEDULE: REVIEW PROGRESS MADE SINCE THE LAST MEETING. DETERMINE WHETHER EACH ACTIVITY IS ON TIME, AHEAD OF SCHEDULE, OR BEHIND SCHEDULE, IN RELATION TO CONTRACTOR'S CONSTRUCTION SCHEDULE. DETERMINE HOW CONSTRUCTION BEHIND SCHEDULE WILL BE EXPEDITED; SECURE COMMITMENTS FROM PARTIES INVOLVED TO DO SO. DISCUSS WHETHER SCHEDULE REVISIONS ARE REQUIRED TO ENSURE THAT CURRENT AND SUBSEQUENT ACTIVITIES WILL BE COMPLETED WITHIN THE CONTRACT TIME.

PRECEDING WORK:

- A. BEFORE STARTING WORK, EXAMINE WORK PREVIOUSLY INSTALLED AND IMMEDIATELY REPORT TO THE OWNER ANY VISIBLE DEFECTS OR CONDITIONS WHICH ADVERSELY AFFECT THE QUALITY AND/OR COMPLETION OF THIS WORK. IT IS ASSUMED ALL CONDITIONS ARE ACCEPTABLE IF NO SUCH REPORT IS RECEIVED.

CUTTING AND FITTING:

- A. EXECUTE ALL CUTTING AND FITTING OF WORK AS MAY BE REQUIRED BY OTHER TRADES SO AS TO INSURE AS NEAR PERFECT FIT OF MATERIALS AS POSSIBLE.

DAMAGED WORK:

- A. PAY FOR REPLACEMENT OF ANY WORK DAMAGED IN CONNECTION WITH THE CONTRACT, AND PERFORM SUCH PATCHING OR REPLACEMENT BY SKILLED PERSONNEL SPECIALIZING IN THE PARTICULAR TRADE SO AS TO RESTORE DAMAGED WORK TO COMPLETELY ACCEPTABLE CONDITION. SHOULD RESPONSIBILITY FOR DAMAGE BE UNABLE TO BE DETERMINED, PRORATE THE COST OF REPAIRING SAME AMONG CONTRACTORS WORKING ON THE JOB AT THE TIME THE DAMAGE OCCURRED AS DETERMINED BY THE OWNER. THE DECISION OF THE OWNER IS FINAL.

ADVERTISING:

- A. NO ADVERTISING IS ALLOWED, UNLESS SPECIFICALLY ALLOWED BY THE OWNER.

Christopher W. White  
Architect AR #3086  
5801 E. 41st St., Suite 712  
Tulsa, Oklahoma



10-29-21

Revisions:

New Restaurant Conversion For:  
**Arby's - 1632 AR-25 Bypass**  
Heber Springs, Arkansas

White Design Group, P.C.  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

Sheet Content  
Specifications

Sheet Number  
SP-1  
Date: 10-29-21



COMPLETED WORK:

- A. DELIVER COMPLETED WORK AS CALLED FOR BY THE CONTRACT TO THE OWNER FREE FROM LIENS, CLAIMS OR ENCUMBRANCES OF ANY DESCRIPTION WHATSOEVER AGAINST THE OWNER. ACCEPTANCE OF SUCH WORK IS DEFINED AS APPROVAL OF FINAL PAYOUT.
- B. IF OWNER RECEIVES "NOTICE OF CLAIM" TO BE FILED OR IF A CLAIM IS FILED AS A RESULT OF CONTRACTOR'S NON-PAYMENT, OWNER POSSESSES THE RIGHT UNDER THE CONSTRUCTION CONTRACT TO EITHER SETTLE THE CLAIM AND DEDUCT SOME FROM THE CONTRACT SUM OR TO REQUIRE THE CONTRACTOR TO BOND OVER SUCH SMALL CLAIMS, INCLUDING ANY ASSOCIATED EXPENSES AS DEFINED IN THE CONSTRUCTION CONTRACT AND TO PROMPTLY DEFEND TO CONCLUSION OWNER AND OWNER'S INTEREST AGAINST SAID CLAIM OF CLAIMS.
- C. COMPLETION OF WORK ON THE PROJECT REQUIRES THE SUBMISSION BY THE CONTRACTOR OF CERTAIN DOCUMENTATION IN ORDER FOR THE FINAL RETENTION DRAW TO BE PAID TO THE CONTRACTOR. THE SUBMISSION OF THESE DOCUMENTS IS DEFINED IN THE CONSTRUCTION CONTRACT AND IS INCLUSIVE OF THE FOLLOWING ITEMS: RECORD DRAWINGS AND SPECIFICATIONS INCLUDING MICROFICHE COPIES; LIEN WAIVERS FROM CONTRACTOR AND SUB-CONTRACTORS AND MATERIAL MEN; LIST OF ALL SUBCONTRACTORS AND MATERIAL MEN; CONTRACTOR'S GUARANTEE AND COMPLETION AFFIDAVIT; FINAL SIGNED PUNCH LIST; ANY WORK ORDERS AND ASSOCIATED CONTRACT CHANGE ORDERS; CERTIFICATE OF OCCUPANCY AND ANY RELATED PUBLIC AGENCY; CERTIFICATION OF PROJECT COMPLETION; COPIES OF PROJECT INSPECTION REPORTS; PERMITTED SET OF DRAWINGS AND SPECIFICATION; ALL WARRANTIES; ALL CERTIFICATIONS NOTED IN THE DRAWINGS INCLUDING CIVIL DRAWINGS, THE BID DOCUMENTS AND CONSTRUCTION CONTRACT; AND ANY REQUIRED TEST AND/OR ENGINEERING REPORTS.

MAINTENANCE AND CLEANING:

- A. THROUGHOUT THE PERIOD OF CONSTRUCTION, BE RESPONSIBLE FOR SATISFACTORILY MAINTAINING THE PREMISES IN A NEAT AND CLEAN CONDITION. THIS MEANS THE TIMELY REMOVAL OF ALL REFUSE AND DEBRIS FROM THE PREMISES.
- B. STORE ALL EQUIPMENT AND MATERIALS IN A NEAT MANNER AND PROTECT THEM FROM ANY DAMAGE FROM THE ELEMENTS. MAINTAIN BUILDING IN A GENERALLY CLEAN CONDITION DURING THE PERIOD OF CONSTRUCTION, AND UPON FINAL COMPLETION PROVIDE A PROFESSIONAL SERVICE TO THOROUGHLY CLEAN ALL GLASS, FLOORS, FURNITURE AND EQUIPMENT.

CHANGES:

- A. THE OWNER, WITHOUT INVALIDATING THE CONTRACT, MAY ORDER CHANGES IN THE WORK WITHIN THE GENERAL SCOPE OF THE CONTRACT, CONSISTING OF ADDITIONS, DELETIONS, OR OTHER REVISION. THE CONTRACT SUM AND THE CONTRACT TIME WILL BE ADJUSTED ACCORDINGLY. AN OWNER CONTRACT CHANGE ORDER MAY BE ISSUED BY AN OWNER'S CONSTRUCTION MANAGER BUT MUST BE APPROVED BY THE VICE PRESIDENT FACILITY DEVELOPMENT PRIOR TO PAYMENT, FOR CORPORATE PROJECTS.
- B. THE COST OR CREDIT TO THE OWNER RESULTING FROM A CHANGE IN THE WORK WILL BE DETERMINED BY MUTUAL AGREEMENT. PERFORM ALL WORK UNDER THE APPLICABLE CONDITINS OF THE CONTRACT DOCUMENTS.
- C. OBTAIN WRITTEN AUTHORIZATION FOR CHANGES IN THE WORK (CONSTRUCTION WORK ORDER) FROM THE OWNER'S CONSTRUCTION MANAGER PRIOR TO COMPLETION OF THE WORK.

GUARANTEE:

- A. A FULLY AND UNCONDITIONALLY GUARANTEE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED BY THE OWNER - CONTRACTOR AGREEMENT(S) FOR A PERIOD OF ONE (1) YER FROM THE DATE OF FINAL ACCEPTANCE OR THE DATE THE RESTAURANT IS OPENED FOR BUSINESS BY THE OWNER.

SECTION 030000 - CAST-IN-PLACE CONCRETE

REFER TO STRUCTURAL DRAWINGS FOR SPECIFICATION

SECTION 048100 - UNIT MASONRY

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES UNIT MASONRY ASSEMBLIES CONSISTING OF THE FOLLOWING:
1. MODIFICATION OF EXISTING CONCRETE MASONRY UNITS IF REQUIRED.
  2. SEE DIVISION 5 SECTION "METAL FABRICATIONS" FOR FURNISHING STEEL LINTELS INSTALLED IN UNIT MASONRY ASSEMBLIES
- B. SEE DIVISION 07 SECTION "SHEET METAL FLASHING AND TRIM" FOR FURNISHING MANUFACTURED REGLETS INSTALLED IN MASONRY JOINTS FOR METAL FLASHING.

1.2 PROJECT CONDITIONS

- A. COLD-WEATHER REQUIREMENTS: DO NOT USE FROZEN SUBSTRATES. REMOVE AND REPLACE UNIT MASONRY DAMAGED BY FROST OR BY FREEZING CONDITIONS. COMPLY WITH COLD-WEATHER CONSTRUCTION REQUIREMENTS CONTAINED IN ACI 530.1/ASCE 6/TMS 602.
- B. HOT-WEATHER REQUIREMENTS: WHEN AMBIENT TEMPERATURE EXCEEDS 100 DEG F, OR 90 DEG F WITH A WIND VELOCITY GREATER THAN 8 MPH, DO NOT SPREAD MORTAR BEDS MORE THAN 48 INCHES AHEAD OF MASONRY. SET MASONRY UNITS WITHIN ONE MINUTE OF SPREADING MORTAR. COMPLY WITH HOT-WEATHER CONSTRUCTION REQUIREMENTS CONTAINED IN ACI 530.1/ASCE 6/TMS 602.

PART 2 - PRODUCTS

2.1 MANUFACTURER, COLOR, AND TEXTURE

- A. AS SPECIFIED ON DRAWINGS.

2.2 MASONRY UNITS

- A. CONCRETE MASONRY UNITS: ASTM C 90.
1. UNIT COMPRESSIVE STRENGTH: 2800 PSI MINIMUM, AVERAGE NET-AREA COMPRESSIVE STRENGTH.
  2. WEIGHT CLASSIFICATION: NORMAL WEIGHT BELOW GRADE AND ABOVE GRADE FOR EXTERIOR EXPOSURE.
  3. SPECIAL SHAPES: PROVIDE FOR LINTELS, CORNERS, JAMBS, SASH, CONTROL JOINTS, HEADERS, BONDING, AND OTHER SPECIAL CONDITIONS.
  4. INTEGRAL WATER REPELLENT: PROVIDE UNITS MADE WITH LIQUID POLYMERIC, INTEGRAL WATER REPELLENT ADMIXTURE THAT DOES NOT FLEXURAL BOND STRENGTH FOR EXPOSED UNITS.
    - a. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS
1. ACM CHEMISTRIES; RAINLOC
  2. BASF; RHEOPEL PLUS
  3. W.R. GRACE & CO.; DRY-BLOCK
- B. BRICK, GENERAL:
1. PROVIDE UNITS WITHOUT CORES OR FROGS AND WITH EXPOSED SURFACES FINISHED FOR ENDS OF SILLS AND CAPS AND FOR SIMILAR APPLICATIONS THAT WOULD OTHERWISE EXPOSE UNFINISHED BRICK SURFACES.
  2. PROVIDE SPECIAL SHAPES FOR APPLICATIONS REQUIRING BRICK OF SIZE, FORM, COLOR, AND TEXTURE ON EXPOSED SURFACES THAT CANNOT BE PRODUCED BY SAWING.
- C. FACE BRICK: ASTM C 216, GRADE SW, TYPE FBS.

1. UNIT COMPRESSIVE STRENGTH: 4400 PSI MINIMUM AVERAGE, NET-AREA COMPRESSIVE STRENGTH.
2. INITIAL RATE OF ABSORPTION: LESS THAN 20 G/30 SQ. IN. PER MINUTE WHEN TESTED PER ASTM C 67.
3. EFFLORESCENCE: WHEN TESTED PER ASTM C 67 AND BRICK IS RATED "NOT EFFLORESCED."
4. SURFACE COLORING: BRICK WITH SURFACE COLORING, OTHER THAN FLASHED OR SAND-FINISHED BRICK, WILL WITHSTAND 50 CYCLES OF FREEZING AND THAWING PER ASTM C 67 WITH NO OBSERVABLE DIFFERENCE IN THE APPLIED FINISH WHEN VIEWED FROM 10 FEET.
5. SIZE: AS INDICATED ON DRAWINGS.

2.3 MORTAR AND GROUT MATERIALS

- A. PORTLAND CEMENT: ASTM C 150, TYPE I OR II, EXCEPT TYPE III MAY BE USED FOR COLD-WEATHER CONSTRUCTION.
- B. HYDRATED LIME: ASTM C 207, TYPE S.
- C. AGGREGATE FOR MORTAR: ASTM C 144; EXCEPT FOR JOINTS LESS THAN 1/4 INCH THICK, USE AGGREGATE GRADED WITH 100 PERCENT PASSING THE NO. 16 SIEVE.
- D. AGGREGATE FOR GROUT: ASTM C 404.
- E. MORTAR PIGMENTS: AS SPECIFIED ON DRAWINGS.
- F. WATER: POTABLE.

2.4 REINFORCING STEEL

- A. UNCOATED STEEL REINFORCING BARS: ASTM A 615; ASTM A 615M.
- B. MASONRY JOINT REINFORCEMENT: ASTM A 951; MILL GALVANIZED, CARBON-STEEL WIRE FOR INTERIOR WALLS AND HOT-DIP GALVANIZED, CARBON-STEEL WIRE FOR EXTERIOR WALLS.
4. WIRE SIZE FOR SIDE RODS: W1.7 OR 0.148-INCH DIAMETER.
  5. WIRE SIZE FOR CROSS RODS: W1.7 OR 0.148-INCH DIAMETER.
  6. SINGLE-WYTHE MASONRY: USE EITHER LADDER OR TRUSS TYPE WITH SINGLE PAIR OF SIDE RODS AND CROSS RODS SPACED NOT MORE THAN 16 INCHES O.C.

2.5 TIES AND ANCHORS

- A. MATERIALS, GENERAL: AS FOLLOWS, UNLESS OTHERWISE INDICATED.
1. GALVANIZED, CARBON-STEEL WIRE: ASTM A 82; WITH ASTM A 153, CLASS B-2 COATING FOR EXTERIOR WALLS AND CLASS 1 COATING FOR INTERIOR WALLS.
  2. GALVANIZED STEEL SHEET: ASTM A 366 COLD-ROLLED, CARBON-STEEL SHEET HOT-DIP GALVANIZED AFTER FABRICATION TO COMPLY WITH ASTM A 153 AT EXTERIOR WALLS; AND ASTM A 653, 660, COMMERCIAL-QUALITY, STEEL SHEET ZINC COATED BY HOT-DIP PROCESS ON CONTINUOUS LINES BEFORE FABRICATION AT INTERIOR WALLS.
- B. ADJUSTABLE MASONRY-VENEER ANCHORS
1. PROVIDE 2-PIECE ASSEMBLIES THAT ALLOW VERTICAL OR HORIZONTAL ADJUSTMENT BUT RESIST TENSION AND COMPRESSION FORCES PERPENDICULAR TO WALL, FOR ATTACHMENT OVER SHEATHING TO WOOD OR METAL STUDS, AND THAT ARE CAPABLE OF WITHSTANDING A 100-LBF LOAD IN BOTH TENSION AND COMPRESSION WITHOUT DEFORMING OR DEVELOPING PLAY IN EXCESS OF 0.05 INCH.

2.6 EMBEDDED FLASHING MATERIALS

- A. CONCEALED FLASHING: FOR FLASHING PARTLY EXPOSED TO THE EXTERIOR, USE METAL FLASHING SPECIFIED ABOVE. FOR FLASHING NOT EXPOSED TO THE EXTERIOR, USE THE FOLLOWING, UNLESS OTHERWISE INDICATED:

1. COPPER-LAMINATED FLASHING: MANUFACTURER'S STANDARD LAMINATED FLASHING CONSISTING OF 7-0Z/SQ. FT. SHEET COPPER BONDED WITH ASPHALT BETWEEN 2 LAYERS OF GLASS-FIBER CLOTH.

2.7 MISCELLANEOUS MASONRY ACCESSORIES

- A. COMPRESSIBLE FILLER: PREMOLDED FILLER STRIPS COMPLYING WITH ASTM D 1056, GRADE 2A1; COMPRESSIBLE UP TO 35 PERCENT; FORMULATED FROM NEOPRENE.
- B. RECTANGULAR PLASTIC WEEP/VENT TUBING: CLEAR BUTYRATE, 3/8 BY 1-1/2 BY 3-1/2 INCHES.

2.8 MASONRY CLEANERS

- A. PROPRIETARY ACIDIC CLEANER: MANUFACTURER'S STANDARD-STRENGTH CLEANER DESIGNED FOR REMOVING MORTAR/GROUT STAINS, EFFLORESCENCE, AND OTHER NEW CONSTRUCTION STAINS FROM NEW MASONRY WITHOUT DISCOLORING OR DAMAGING SURFACES. USE PRODUCT APPROVED FOR INTENDED USE BY CLEANER MANUFACTURER AND MANUFACTURER OF MASONRY UNITS BEING CLEANED.

2.9 CAVITY DRAINAGE MATERIAL

- A. FREE-DRAINING MESH, MADE FROM POLYMER STRANDS THAT WILL NOT DEGRADE WITHIN THE WALL CAVITY.
1. PROVIDE ONE OF THE FOLLOWING CONFIGURATIONS:
    - a. STRIPS, FULL-DEPTH OF CAVITY AND 10 INCHES (250 MM) WIDE, WITH DOVETAIL SHAPED NOTCHES 7 INCHES (175 MM) DEEP.
    - b. STRIPS, NOT LESS THAN 1-1/2 INCHES (38 MM) THICK AND 10 INCHES (250 MM) WIDE, WITH DIMPLED SURFACE DESIGNED TO CATCH MORTAR DROPPINGS AND PREVENT WEEP HOLES FROM BEING CLOGGED WITH MORTAR.
    - c. SHEETS OR STRIPS FULL DEPTH OF CAVITY AND INSTALLED TO FULL HEIGHT OF CAVITY.
  2. AVAILABLE PRODUCTS:
    - a. ADVANCED BUILDING PRODUCTS INC.; MORTAR BREAK OR MORTAR BREAK II.
    - b. ARCHOVATIONS, INC.; CAVCLEAR MASONRY MAT.
    - c. DAYTON SUPERIOR CORPORATION, DUR-O-WAL DIVISION; POLYTITE MORTARSTOP.
    - d. MORTAR NET USA, LTD.; MORTAR NET.

2.10 MORTAR AND GROUT MIXES

- A. GENERAL: DO NOT USE ADMIXTURES, UNLESS OTHERWISE INDICATED. DO NOT USE CALCIUM CHLORIDE IN MORTAR OR GROUT.
- B. MORTAR FOR UNIT MASONRY: COMPLY WITH ASTM C 270, PROPORTION SPECIFICATION.
- C. GROUT FOR UNIT MASONRY: COMPLY WITH ASTM C 476.
1. PROVIDE GROUT WITH A SLUMP OF 8 TO 11 INCHES AS MEASURED ACCORDING TO ASTM C 143.
- D. WATER REPELLENT ADMIXTURE: LIQUID WATER-REPELLENT MORTAR ADMIXTURE INTENDED FOR USE WITH CMU'S CONTAINING INTEGRAL WATER REPELLENT BY SAME MANUFACTURER.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. CUT MASONRY UNITS WITH MOTOR-DRIVEN SAWS. ALLOW UNITS CUT WITH WATER-COOLED SAWS TO DRY BEFORE PLACING, UNLESS WETTING OF UNITS IS SPECIFIED. INSTALL CUT UNITS WITH CUT SURFACES AND, WHERE POSSIBLE, CUT EDGES CONCEALED.
- B. SELECT AND ARRANGE UNITS FOR EXPOSED UNIT MASONRY TO PRODUCE A UNIFORM BLEND OF COLORS AND TEXTURES.
- C. WETTING OF UNITS: WET BRICK BEFORE LAYING IF THE INITIAL RATE OF ABSORPTION EXCEEDS 30 G/30 SQ. IN. PER MINUTE WHEN TESTED PER ASTM C 67. ALLOW UNITS TO ABSORB WATER SO THEY ARE DAMP BUT NOT WET AT TIME OF LAYING. DO NOT WET CONCRETE MASONRY UNITS.
- D. COMPLY WITH TOLERANCES IN ACI 530.1/ASCE 6/TMS 602 AND THE FOLLOWING:
1. FOR CONSPICUOUS VERTICAL LINES, SUCH AS EXTERNAL CORNERS, DOOR JAMBS, REVEALS, AND EXPANSION AND CONTROL JOINTS, DO NOT VARY FROM PLUMB BY MORE THAN 1/4 INCH IN 20 FEET OR 1/2 INCH MAXIMUM.
  2. FOR CONSPICUOUS HORIZONTAL LINES, SUCH AS LINTELS, SILLS, PARAPETS, AND REVEALS, DO NOT VARY FROM LEVEL BY MORE THAN 1/4 INCH IN 20 FEET, OR 1/2 INCH MAXIMUM.

3.2 LAYING MASONRY WALLS

- A. LAY OUT WALLS IN ADVANCE FOR ACCURATE SPACING OF SURFACE BOND PATTERNS WITH UNIFORM JOINT THICKNESSES AND FOR ACCURATE LOCATION OF OPENINGS, MOVEMENT-TYPE JOINTS, RETURNS, AND OFFSETS. AVOID USING LESS-THAN-HALF-SIZE UNITS, PARTICULARLY AT CORNERS, JAMBS, AND, WHERE POSSIBLE, AT OTHER LOCATIONS.
1. CONCRETE MASONRY UNITS: ONE-HALF RUNNING BOND.
  2. FACE BRICK: AS INDICATED ON DRAWINGS.

3.3 JOINTING

- A. TOOL EXPOSED JOINTS SLIGHTLY CONCAVE WHEN THUMBPRINT HARD, USING A JOINTER LARGER THAN JOINT THICKNESS, UNLESS OTHERWISE INDICATED.

3.4 CAVITIES

- A. KEEP CAVITIES CLEAN OF MORTAR DROPPINGS AND OTHER MATERIALS DURING CONSTRUCTION.

3.5 ANCHORING MASONRY

- A. ANCHOR MASONRY VENEERS TO WALL FRAMING WITH MASONRY-VENEER ANCHORS TO COMPLY WITH THE FOLLOWING REQUIREMENTS:
1. FASTEN EACH ANCHOR SECTION THROUGH TO WALL FRAMING WITH TWO METAL FASTENERS OF TYPE INDICATED.
  2. SPACE ANCHORS AS INDICATED, BUT NOT MORE THAN 16 INCHES O.C. VERTICALLY AND 16 INCHES O.C. HORIZONTALLY WITH NOT LESS THAN 1 ANCHOR FOR EACH 1.77 SQ. FT. OF WALL AREA. INSTALL ADDITIONAL ANCHORS WITHIN 12 INCHES OF OPENINGS AND AT INTERVALS, NOT EXCEEDING 36 INCHES, AROUND PERIMETER.

3.6 FLASHING, WEEP HOLES AND VENTS

- A. GENERAL: INSTALL EMBEDDED FLASHING AND WEEP HOLES IN MASONRY AT SHELF ANGLES, LINTELS, LEDGES, OTHER OBSTRUCTIONS TO DOWNWARD FLOW OF WATER IN WALL, AND WHERE INDICATED.
1. EXTEND FLASHING 4 INCHES AT ENDS AND TURN FLASHING UP NOT LESS THAN 2 INCHES TO FORM A PAN.
- B. INSTALL WEEP HOLES IN THE HEAD JOINTS IN EXTERIOR WYTHES OF THE FIRST COURSE OF MASONRY IMMEDIATELY ABOVE EMBEDDED FLASHING. INSTALL VENTS IN VERTICAL HEAD JOINTS AT THE TOP OF EACH CONTINUOUS CAVITY AT SPACING INDICATED.
1. USE RECTANGULAR PLASTIC TUBING TO FORM WEEP HOLES.
  2. SPACE WEEP HOLES 24 INCHES O.C.
  3. TRIM WICKING MATERIAL USED IN WEEP HOLES FLUSH WITH OUTSIDE FACE OF WALL AFTER MORTAR HAS SET.

- 3.7 CLEANING
- A. CLEAN UNIT MASONRY BY DRY BRUSHING TO REMOVE MORTAR FINS AND SMEARS BEFORE TOOLING JOINTS, AS WORK PROGRESSES.
- B. AFTER MORTAR IS THOROUGHLY SET AND CURED, CLEAN EXPOSED MASONRY AS FOLLOWS:
1. PROTECT ADJACENT SURFACES FROM CONTACT WITH CLEANER.
  2. WET WALL SURFACES WITH WATER BEFORE APPLYING CLEANERS; REMOVE CLEANERS PROMPTLY BY RINSING SURFACES THOROUGHLY WITH CLEAR WATER.
  3. CLEAN MASONRY WITH A PROPRIETARY ACIDIC CLEANER APPLIED ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.8 MASONRY WASTE DISPOSAL

- A. WASTE DISPOSAL: DISPOSE OF CLEAN MASONRY WASTE, INCLUDING BROKEN MASONRY UNITS, WASTE MORTAR AND EXCESS OR SOIL-CONTAMINATED SAND, AND OTHER MASONRY WASTE, AND LEGALLY DISPOSE OF OFF OWNER'S PROPERTY.

SECTION 051200 - STRUCTURAL STEEL FRAMING

REFER TO STRUCTURAL DRAWINGS FOR SPECIFICATION

SECTION 054000 - COLD FORMED METAL FRAMING

REFER TO STRUCTURAL DRAWINGS FOR SPECIFICATION

SECTION 055000 - METAL FABRICATIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES THE FOLLOWING:
1. MISCELLANEOUS STEEL FRAMING AND SUPPORTS.
  2. LOOSE BEARING AND LEVELING PLATES.
  3. STEEL LADDERS.
  4. LOOSE STEEL LINTELS. (REFER TO STRUCTURAL DRAWINGS FOR LOOSE STEEL LINTEL SPECIFICATION)
  5. SHELF ANGLES.
  6. TRASH ENCLOSURE GATES.
  7. CATCH BASIN FRAME AND GRATE. (REFER TO CIVIL PLANS.)
  8. PIPE GUARDS.
  9. PIPE BOLLARDS.

PART 2 - PRODUCTS

2.1 METALS

- A. METAL SURFACES, GENERAL: PROVIDE MATERIALS WITH SMOOTH, FLAT SURFACES WITHOUT BLEMISHES.
- B. FERROUS METALS:
1. STEEL PLATES, SHAPES, AND BARS: ASTM A 36.
  2. STEEL PIPE: ASTM A 53, STANDARD WEIGHT (SCHEDULE 40), UNLESS ANOTHER WEIGHT IS INDICATED OR REQUIRED BY STRUCTURAL LOADS.

2.2 PAINT

- A. SHOP PRIMER FOR FERROUS METAL (INTERIOR APPLICATIONS): FAST-CURING, LEAD- AND CHROMATE-FREE, UNIVERSAL MODIFIED-ALKYD PRIMER COMPLYING WITH PERFORMANCE REQUIREMENTS IN FS-TT-P-664 AND COMPATIBLE WITH FINISH PAINT SYSTEMS INDICATED.

2.3 FABRICATION

- A. CONNECTIONS, GENERAL: USE CONNECTIONS THAT MAINTAIN STRUCTURAL VALUE OF JOINED PIECES.
1. SHEAR AND PUNCH METALS CLEANLY AND ACCURATELY. REMOVE BURRS.
  2. WELD CORNERS AND SEAMS CONTINUOUSLY. USE MATERIALS AND METHODS THAT MINIMIZE DISTORTION AND DEVELOP STRENGTH AND CORROSION RESISTANCE OF BASE METALS. OBTAIN FUSION WITHOUT UNDERCUT OR OVERLAP. REMOVE WELDING FLUX IMMEDIATELY. FINISH EXPOSED WELDS SMOOTH AND BLENDED.
  3. FABRICATE JOINTS THAT WILL BE EXPOSED TO WEATHER IN A MANNER TO EXCLUDE WATER, OR PROVIDE WEEP HOLES.
  4. FORM EXPOSED CONNECTIONS WITH HAIRLINE JOINTS, FLUSH AND SMOOTH, USING CONCEALED FASTENERS WHERE POSSIBLE. LOCATE JOINTS WHERE LEAST CONSPICUOUS.
- B. STEEL LADDERS: COMPLY WITH ANSI A14.3, UNLESS OTHERWISE INDICATED.
- C. CATCH BASIN FRAME AND GRATE: PROVIDE CATCH BASIN FRAME WITH TYPE "A" GRATE.
- D. PIPE BOLLARDS: FABRICATE FROM SCHEDULE 40 STEEL PIPE.
- E. TRASH ENCLOSURE GATES: AS SPECIFIED AND DETAILED ON DRAWINGS.

2.4 FINISHES

- A. FINISH METAL FABRICATIONS AFTER ASSEMBLY. COMPLY WITH NAAMM'S "METAL FINISHES MANUAL FOR ARCHITECTURAL AND METAL PRODUCTS" FOR RECOMMENDATIONS FOR APPLYING AND DESIGNATING FINISHES. SHOP PRIME FERROUS-METAL ITEMS NOT INDICATED TO BE GALVANIZED.

PART 3 - EXECUTION

3.1 INSTALLATION

1. GENERAL: PROVIDE ANCHORAGE DEVICES AND FASTENERS WHERE METAL FABRICATIONS ARE REQUIRED TO BE FASTENED TO IN-PLACE CONSTRUCTION.
  2. FIT EXPOSED CONNECTIONS ACCURATELY THROUGH. WELD CONNECTIONS, UNLESS OTHERWISE INDICATED. DO NOT WELD, CUT, OR ABRADE GALVANIZED SURFACES.
- B. BOLLARDS:
1. ANCHOR IN CONCRETE WITH PIPE SLEEVES PRESET AND ANCHORED INTO CONCRETE. FILL SPACE BETWEEN AND SLEEVE SOLIDLY WITH NONSHRINK, NONMETALLIC GROUT.
  2. FILL BOLLARDS SOLIDLY WITH CONCRETE, MOUNDING TOP SURFACE.
- C. TOUCH UP SURFACES AND FINISHES AFTER ERECTION.
1. PAINTED SURFACES: CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS AND TOUCH UP PAINT WITH THE SAME MATERIAL AS USED FOR SHOP PAINTING.

SECTION 061000 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES THE FOLLOWING:
1. WOOD FRAMING (REFER TO STRUCTURAL DRAWINGS FOR WOOD FRAMING SPECIFICATIONS)
  2. WOOD SUPPORTS
  3. WOOD BLOCKING
  4. WOOD CANTS
  5. WOOD NAILERS
  6. WOOD FURRING
  7. WOOD GROUNDS
  8. WOOD SHEATHING (REFER TO STRUCTURAL DRAWINGS FOR WOOD SHEATHING SPECIFICATIONS)
  9. PLYWOOD BACKING PANELS

10.BUILDING WRAP

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. LUMBER: DOC PS 20 AND APPLICABLE RULES OF GRADING AGENCIES CERTIFIED BY THE AMERICAN LUMBER STANDARDS COMMITTEE BOARD OF REVIEW.
1. FACTORY MARK EACH PIECE OF LUMBER WITH GRADE STAMP OF GRADING AGENCY.
  2. FOR EXPOSED LUMBER INDICATED TO RECEIVE A STAINED OR NATURAL FINISH, MARK GRADE STAMP ON END OR BACK OF EACH PIECE OR OMIT GRADE STAMP AND PROVIDE CERTIFICATES OF GRADE COMPLIANCE ISSUED BY GRADING AGENCY.
  3. PROVIDE DRY LUMBER WITH 15 PERCENT MAXIMUM MOISTURE CONTENT AT TIME OF DRESSING FOR 2-INCH NOMINAL THICKNESS OR LESS, UNLESS OTHERWISE INDICATED.
- B. ENGINEERED WOOD PRODUCTS: ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION AND FOR WHICH CURRENT MODEL CODE RESEARCH OR EVALUATION REPORTS EXIST THAT SHOWS COMPLIANCE WITH BUILDING CODE IN EFFECT FOR PROJECT.
- C. WOOD STRUCTURAL PANELS:
1. PLYWOOD: DOC PS 1.
  2. ORIENTED STRAND BOARD: DOC PS 2.

2.2 WOOD-PRESERVATIVE-TREATED LUMBER

- A. PRESERVATIVE TREATMENT BY PRESSURE PROCESS: AWPA C2 (LUMBER) AND AWPA C9 (PLYWOOD), EXCEPT THAT LUMBER THAT IS NOT IN CONTACT WITH THE GROUND AND IS CONTINUOUSLY PROTECTED FROM LIQUID WATER MAY BE TREATED ACCORDING TO AWPA C31 WITH INORGANIC BORON (SBX).
- B. PRESSURE TREAT ALL LUMBER DESIGNATED AS 'TREATED' ON THE DRAWINGS AND/OR OTHER SECTIONS OF THESE SPECIFICATIONS TO CONFORM TO AWPA STANDARD C2. THE PRESENCE OF AWPB QUALITY MARK LP2 SHALL BE ACCEPTABLE AS EVIDENCE OF CONFORMANCE TO THIS SPECIFICATION.

2.3 DIMENSION LUMBER

- A. GENERAL: OF GRADES INDICATED ACCORDING TO THE AMERICAN LUMBER STANDARDS COMMITTEE NATIONAL GRADING RULE PROVISIONS OF THE GRADING AGENCY INDICATED.
- B. NON-LOAD-BEARING INTERIOR PARTITIONS: NO. 2 GRADE AND ANY OF THE FOLLOWING SPECIES:
1. MIXED SOUTHERN PINE; SPIB.
  2. NORTHERN SPECIES; NLGA.
  3. WESTERN WOODS; WCLIB OR WWPFA.

2.4 MISCELLANEOUS LUMBER

- A. PROVIDE MISCELLANEOUS LUMBER FOR SUPPORT OR ATTACHMENT OF OTHER CONSTRUCTION, INCLUDING THE FOLLOWING:
1. ROOFTOP EQUIPMENT BASES AND SUPPORT CURBS.
  2. BLOCKING
  3. CANTS
  4. NAILERS
  5. FURRING
  6. GROUNDS
- B. FOR ITEMS OF DIMENSION LUMBER SIZE, PROVIDE NO. 2 GRADE LUMBER WITH 15 PERCENT MAXIMUM MOISTURE CONTENT.

2.5 ENGINEERED WOOD PRODUCTS

- A. LAMINATED-VENEER LUMBER: COMPOSITE OF WOOD VENEERS WITH GRAIN PRIMARILY PARALLEL TO MEMBER LENGTHS, MANUFACTURED WITH EXTERIOR-TYPE ADHESIVE COMPLYING WITH ASTM D 2559. ALLOWABLE DESIGN VALUES DETERMINED ACCORDING TO ASTM D 5456.

2.6 PLYWOOD BACKING PANELS

- A. TELEPHONE AND ELECTRICAL EQUIPMENT BACKING PANELS: DOC PS 1, EXPOSURE 1, C-D PLUGGED, FIRE-RETARDANT TREATED, IN THICKNESS INDICATED OR, IF NOT INDICATED, NOT LESS THAN 1/2-INCH THICK.

2.7 MISCELLANEOUS MATERIALS

- A. FASTENERS:
1. WHERE ROUGH CARPENTRY IS EXPOSED TO WEATHER, IN GROUND CONTACT, OR IN AREA OF HIGH RELATIVE HUMIDITY, PROVIDE FASTENERS WITH HOT-DIP ZINC COATING COMPLYING WITH ASTM A 153.
- B. METAL FRAMING ANCHORS: MADE FROM HOT-DIP, ZINC-COATED STEEL SHEET COMPLYING WITH ASTM A 653 G60 COATING DESIGNATION.
- C. BUILDING WRAP: AIR RETARDER SHEETING MADE FROM POLYOLEFINS; CROSS LAMINATED FILMS, WOVEN STRANDS, OR SPUN-BONDED FIBERS; COATED OR UNCOATED, WITH OR WITHOUT PERFORATIONS; AND COMPLYING WITH ASTM E 1677, TYPE 1.
1. MANUFACTURERS: TYVEK COMMERCIAL WRAP, BY DUPONT COMPANY, WILMINGTON, DE.
- D. SHEATHING TAPE: PRESSURE-SENSITIVE PLASTIC TAPE FOR SEALING JOINTS AND PENETRATIONS IN SHEATHING AND RECOMMENDED BY SHEATHING MANUFACTURER FOR USE WITH TYPE OF SHEATHING REQUIRED.
- E. SILL-SEALER GASKETS: GLASS-FIBER-RESILIENT INSULATIN, FABRICATED IN STRIP FORM, FOR USE AS A SILL SEALER, 1-INCH NOMINAL THICKNESS, COMPRESSIBLE TO 1/32 INCH; SELECTED FROM MANUFACTURER'S STANDARD WIDTHS TO SUIT WIDTH OF SILL MEMBERS INDICATED.
- F. TERMITE SHIELD: PROVIDE 20 GAGE SHEET METAL WITH A HOT-DIP ZINC COATING AT ALL EXTERIOR WALLS. MECHANICALLY BRAKE TO CONFIGURATION INDICATED.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. SET ROUGH CARPENTRY TO REQUIRED LEVELS AND LINES, WITH MEMBERS PLUMB, TRUE TO LINE, CUT, AND FITTED. FIT ROUGH CARPENTRY TO OTHER CONSTRUCTION; SCRIBE AND COPE AS NEEDED FOR ACCURATE FIT. LOCATE FURRING, NAILERS, BLOCKING, GROUNDS, AND SIMILAR SUPPORTS TO COMPLY WITH REQUIREMENTS FOR ATTACHING OTHER CONSTRUCTION.
- B. APPLY FIELD TREATMENT COMPLYING WITH AWPA M4 TO CUT SURFACES OF PRESERVATIVE-TREATED LUMBER AND PLYWOOD.
- C. SECURELY ATTACH ROUGH CARPENTRY WORK TO SUBSTRATE BY ANCHORING AND FASTENING AS INDICATED.
- D. FRAMING STANDARD: COMPLY WITH AFPA'S "MANUAL FOR WOOD FRAME CONSTRUCTION," UNLESS OTHERWISE INDICATED.
- E. FRAMING WITH ENGINEERED WOOD PRODUCTS: INSTALL ENGINEERED WOOD PRODUCTS TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
- F. COMPLY WITH APPLICABLE RECOMMENDATIONS CONTAINED IN APA FORM NO. E30K, "APA DESIGN/CONSTRUCTION GUIDE: RESIDENTIAL & COMMERCIAL," FOR TYPES OF STRUCTURAL-USE PANELS AND APPLICATIONS INDICATED.
- G. BUILDING WRAP APPLICATION: COVER WALL SHEATHING WITH BUILDING WRAP AS INDICATED. COVER UPSTANDING FLASHING WITH 4-INCH OVERLAP. SEAL SEAMS, EDGES, AND PENETRATIONS WITH TAPE. INSERT STORING & TRUSS INSTALLATION FROM 24X36 SPECS.

SECTION 064023 - INTERIOR ARCHITECTURAL WOODWORK

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES INTERIOR WOODWORK INCLUDING FOR THE FOLLOWING APPLICATIONS:
1. STANDING AND RUNNING TRIM.
  2. SOLID SURFACING-MATERIAL WINDOW STOOLS.
  3. PLASTIC LAMINATE WOOD SHELF AND BRACKETS.
  4. SHOP FINISHING OF WOODWORK.
- B. INTERIOR ARCHITECTURAL WOODWORK INCLUDES WOOD FURRING, BLOCKING, SHIMS, AND HANGING STRIPS UNLESS CONCEALED WITHIN OTHER CONSTRUCTION BEFORE WOODWORK INSTALLATION.

Christopher W. White  
Architect AR #3086  
5801 E. 41st St., Suite 712  
Tulsa, Oklahoma



10-29-21

Revisions:

- C. SEE DIVISION 9 SECTION "PAINTING" FOR FIELD FINISHING.

1.2 SUBMITTALS

- A. SAMPLES:
1. LUMBER AND PANEL PRODUCTS FOR TRANSPARENT FINISH, FOR EACH SPECIES AND CUT, FINISHED ON GRADE AND TO THE EDGE.
  2. LUMBER AND PANEL PRODUCTS WITH SHOP-APPLIED OPAQUE FINISH, FOR EACH FINISH SYSTEM AND COLOR, WITH EXPOSED SURFACE FINISHED.
  3. PLASTIC-LAMINATES, FOR EACH TYPE, COLOR, PATTERN, AND SURFACE FINISH.
  4. SOLID-SURFACING MATERIALS.

1.3 QUALITY ASSURANCE

- A. QUALITY STANDARD: UNLESS OTHERWISE INDICATED, COMPLY WITH AWI'S "ARCHITECTURAL WOODWORK QUALITY STANDARDS" FOR GRADES OF INTERIOR ARCHITECTURAL WOODWORK, CONSTRUCTION, FINISHES, AND OTHER REQUIREMENTS.
1. PROVIDE AWI CERTIFICATION LABELS OR COMPLIANCE CERTIFICATE INDICATING THAT WOODWORK COMPLIES WITH REQUIREMENTS OF GRADES SPECIFIED.

1.4 PROJECT CONDITIONS

- A. ENVIRONMENTAL LIMITATIONS: DO NOT DELIVER OR INSTALL WOODWORK UNTIL BUILDING IS ENCLOSED, WET WORK IS COMPLETE, AND HVAC SYSTEM IS OPERATING AND MAINTAINING TEMPERATURE AND RELATIVE HUMIDITY AT OCCUPANCY LEVELS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

White Design Group, P.C.  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

New Restaurant Conversion For:  
Arby's - 1632 AR-25 Bypass  
Heber Springs, Arkansas



PART 2 - PRODUCTS

- 2.1 MATERIALS
- A. WOOD FOR TRANSPARENT FINISH:
- 1.SPECIES AND CUT: REFER TO DÉCOR DRAWING.
- B. WOOD FOR OPAQUE FINISH:
- 1.SPECIES: REFER TO DÉCOR DRAWING.
- C. WOOD PRODUCTS:
- 1.HARDBOARD: AHA A135-4.
2. MEDIUM-DENSITY FIBERBOARD: ANSI A208.2, GRADE MD-EXTERIOR GLUE.
3. PARTICLEBOARD: ANSI A208.1, GRADE M-2-EXTERIOR GLUE.
- 4.SOFTWOOD PLYWOOD: DOC PS 1, MEDIUM DENSITY OVERLAY.
5. HARDWOOD PLYWOOD AND FACE VENEERS: HPVA HP-1.
- D. HIGH-PRESSURE DECORATIVE LAMINATE: NEMA LD 3.
1. MANUFACTURERS AND PRODUCTS: PLEASE REFER TO DÉCOR DRAWINGS.
- E. SOLID-SURFACING MATERIAL: HOMOGENEOUS SOLID SHEETS OF FILLED PLASTIC RESIN COMPLYING WITH ANSI Z124.3, FOR TYPE 5 OR TYPE 6 MATERIAL AND PERFORMANCE REQUIREMENTS, WITHOUT A PRECOMPLETED FINISH.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
- a. DU PONT POLYMERS; CORIAN.

- 2.2 INSTALLATION MATERIALS
- A. FURRING, BLOCKING, SHIMS, AND HANGING STRIPS: SOFTWOOD OR HARDWOOD LUMBER, KILN-DRIED TO LESS THAN 15 PERCENT MOISTURE CONTENT.
- 2.3 FABRICATION

- A. GENERAL: COMPLETE FABRICATION TO MAXIMUM EXTENT POSSIBLE BEFORE SHIPMENT TO PROJECT SITE. WHERE NECESSARY FOR FITTING AT SITE, PROVIDE ALLOWANCE FOR SCRIBING, TRIMMING, AND FITTING.
1. INTERIOR WOODWORK GRADE: CUSTOM COMPLYING WITH THE REFERENCED QUALITY STANDARD.
2. SHOP CUT OPENINGS TO MAXIMUM EXTENT POSSIBLE. SAND EDGES OF CUTOUTS TO REMOVE SPLINTERS AND BURRS.
3. FOR TRIM ITEMS WIDER THAN AVAILABLE LUMBER, USE VENEERED CONSTRUCTION. DO NOT GLUE FOR WIDTH.
4. BACKOUT OR GROOVE BACKS OF FLAT TRIM MEMBERS AND KERF BACKS OF OTHER WIDE, FLAT MEMBERS, EXCEPT FOR MEMBERS WITH ENDS EXPOSED IN FINISHED WORK.
- B. SOLID-SURFACING-MATERIAL WINDOW STOOLS:
1. SOLID-SURFACING-MATERIAL THICKNESS: AS INDICATED ON DRAWINGS.
2. COLORS, PATTERNS, AND FINISHES: AS INDICATED ON DRAWINGS.
- C. PLASTIC-LAMINATE WOOD SHELF:
1. SIZE: AS INDICATED ON DRAWINGS.
2. COLOR AND PATTERN: AS INDICATED ON DRAWINGS.
- 2.4 SHOP FINISHING

- A. FINISH ARCHITECTURAL WOODWORK AT FABRICATION SHOP. DEFER ONLY FINAL TOUCHUP, CLEANING, AND POLISHING UNTIL AFTER INSTALLATION.
- B. BACKPRIMING: APPLY ONE COAT OF SEALER OR PRIMER, COMPATIBLE WITH FINISH COATS, TO CONCEALED SURFACES OF WOODWORK. APPLY TWO COATS TO BACK OF PANELING.
- C. TRANSPARENT FINISH: COMPLY WITH REQUIREMENTS INDICATED BELOW FOR GRADE, FINISH SYSTEM, STAINING, AND SHEEN, WITH SHEEN MEASURED ON 60-DEGREE GLOSS METER PER ASTM D 523:
1. GRADE: CUSTOM.
2. AWI FINISH SYSTEM: TR-6, CATALYZED POLYURETHANE.
3. STAINING: AS INDICATED ON DÉCOR DRAWINGS.
4. SHEEN: AS INDICATED ON DÉCOR DRAWINGS.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. CONDITION WOODWORK TO AVERAGE PREVAILING HUMIDITY CONDITIONS IN INSTALLATION AREAS AND EXAMINE AND COMPLETE WORK AS REQUIRED, INCLUDING REMOVAL OF PACKING AND BACKPRIMING BEFORE INSTALLATION.
- B. QUALITY STANDARD: INSTALL WOODWORK TO COMPLY WITH AWI SECTION 1700 FOR THE SAME GRADE SPECIFIED IN THIS SECTION FOR TYPE OF WOODWORK INVOLVED.
- C. INSTALL WOODWORK LEVEL, PLUMB, TRUE, AND STRAIGHT TO A TOLERANCE OF 1/8 INCH IN 96 INCHES (3 MM IN 2400 MM). SHIM AS REQUIRED WITH CONCEALED SHIMS.
- D. SCRIBE AND CUT WOODWORK TO FIT ADJOINING WORK, AND REFINISH CUT SURFACES, AND REPAIR DAMAGED FINISH AT CUTS.
- E. ANCHOR WOODWORK TO ANCHORS OR BLOCKING BUILT IN OR DIRECTLY ATTACHED TO SUBSTRATES. SECURE WITH COUNTERSUNK, CONCEALED FASTENERS AND BLIND NAILING AS REQUIRED FOR COMPLETE INSTALLATION. USE FINE FINISHING NAILS OR FINISHING SCREWS FOR EXPOSED FASTENING, COUNTERSUNK AND FILLED FLUSH WITH WOODWORK AND MATCHING FINAL FINISH IF TRANSPARENT FINISH IS INDICATED.
- F. STANDING AND RUNNING TRIM: INSTALL WITH MINIMUM NUMBER OF JOINTS POSSIBLE, USING FULL-LENGTH PIECES (FROM MAXIMUM LENGTH OF LUMBER AVAILABLE) TO GREATEST EXTENT POSSIBLE. FILL GAPS, IF ANY, BETWEEN TOP OF BASE AND WALL WITH PLASTIC WOOD FILLER, SAND SMOOTH, AND FINISH SAME AS WOOD BASE IF FINISHED.
- G. REPAIR DAMAGED OR DEFECTIVE WOODWORK WHERE POSSIBLE TO ELIMINATE FUNCTIONAL OR VISUAL DEFECTS. WHERE NOT POSSIBLE TO REPAIR, REPLACE WOODWORK. ADJUST JOINERY FOR UNIFORM APPEARANCE.
- H. FINISHING: FELD FINISH INTERIOR ARCHITECTURAL WOODWORK ITEMS AS SPECIFIED IN DIVISION 9 SECTION "PAINTING".

SECTION 066400 - PLASTIC PANELING

PART 1 - GENERAL

- 1.1 SUMMARY
- A. SECTION INCLUDES GLASS-FIBER REINFORCED PLASTIC (FRP) WALL PANELING AND TRIM ACCESSORIES.
- 1.2 SUBMITTALS
- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. SAMPLES: FOR PLASTIC PANELING AND TRIM ACCESSORIES.
- 1.3 QUALITY ASSURANCE
- A. SURFACE-BURNING CHARACTERISTICS: AS DETERMINED BY TESTING IDENTICAL PRODUCTS ACCORDING TO ASTM E 84 BY A QUALIFIED TESTING AGENCY. IDENTIFY PRODUCTS WITH APPROPRIATE MARKINGS OF APPLICABLE TESTING AGENCY.
1. FLAME-SPREAD INDEX: 25 OR LESS.
2. SMOKE-DEVELOPED INDEX: 450 OR LESS.

PART 2 - PRODUCTS

2.1 PLASTIC SHEET PANELING

- A. GENERAL: GELCOAT-FINISHED, GLASS-FIBER REINFORCED PLASTIC PANELS COMPLYING WITH ASTM D 5319.
1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
- a. KEMILITE COMPANY INC.
- b. MARLITE.
- c. NUDO PRODUCTS, INC.
2. NOMINAL THICKNESS: NOT LESS THAN 0.075 INCH (1.9 MM).
3. SURFACE FINISH: PEBBLED.
4. COLOR: WHITE.
- 2.2 ACCESSORIES

- A. TRIM ACCESSORIES: MANUFACTURER'S STANDARD ONE-PIECE VINYL EXTRUSIONS DESIGNED TO RETAIN AND COVER EDGES OF PANELS. PROVIDE DIVISION BARS, INSIDE CORNERS, OUTSIDE CORNERS, AND CAPS AS NEEDED TO CONCEAL EDGES.
1. COLOR: WHITE.
- B. ADHESIVE: AS RECOMMENDED BY PLASTIC PANELING MANUFACTURER.
1. VOC CONTENT: 50 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
- C. SEALANT: SINGLE-COMPONENT, MILDEW-RESISTANT, NEUTRAL-CURING SILICONE SEALANT RECOMMENDED BY PLASTIC PANELING MANUFACTURER AND COMPLYING WITH REQUIREMENTS IN DIVISION 07 SECTION "JOINT SEALANTS."
1. VOC CONTENT: 250 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

PART 3 - EXECUTION

3.1 PREPARATION

- A. CLEAN SUBSTRATES OF SUBSTANCES THAT COULD IMPAIR BOND OF ADHESIVE, INCLUDING OIL, GREASE, DIRT, AND DUST.
- B. CONDITION PANELS BY UNPACKING AND PLACING IN INSTALLATION SPACE BEFORE INSTALLATION ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- C. LAY OUT PANELING BEFORE INSTALLING. LOCATE PANEL JOINTS TO PROVIDE EQUAL PANELS AT ENDS OF WALLS NOT LESS THAN HALF THE WIDTH OF FULL PANELS SO THAT TRIMMED PANELS AT CORNERS ARE NOT LESS THAN 12 INCHES (300 MM) WIDE.
- 3.2 INSTALLATION

- A. INSTALL PLASTIC PANELING ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- B. INSTALL PANELS IN A FULL SPREAD OF ADHESIVE.
- C. INSTALL TRIM ACCESSORIES WITH ADHESIVE AND NAILS. DO NOT FASTEN THROUGH PANELS.
- D. FILL GROOVES IN TRIM ACCESSORIES WITH SEALANT BEFORE INSTALLING PANELS AND BED INSIDE CORNER TRIM IN A BEAD OF SEALANT.
- E. MAINTAIN UNIFORM SPACE BETWEEN PANELS AND WALL FIXTURES. FILL SPACE WITH SEALANT.
- F. REMOVE EXCESS SEALANT AND SMEARS AS PANELING IS INSTALLED. CLEAN WITH SOLVENT RECOMMENDED BY SEALANT MANUFACTURER AND THEN WIPE WITH CLEAN DRY CLOTHS UNTIL NO RESIDUE REMAINS.

SECTION 072100 - THERMAL INSULATION

PART 1 - GENERAL

- 1.1 SUMMARY
- A. THIS SECTION INCLUDES THE FOLLOWING:
1. PERIMETER INSULATION UNDER SLABS-ON-GRADE.
2. CAVITY-WALL INSULATION.
3. CONCEALED BUILDING INSULATION.
4. VAPOR RETARDERS (BELOW SLAB).
5. SOUND ATTENUATION INSULATION.
- B. FOR BUILT-UP ROOF INSULATION, REFER TO SECTION 075213.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. IN OTHER PART 2 ARTICLES WHERE TITLES BELOW INTRODUCE LISTS, THE FOLLOWING REQUIREMENTS APPLY TO PRODUCT SELECTION:
1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS; PROVIDE PRODUCTS BY ONE OF THE MANUFACTURERS SPECIFIED.
- 2.2 FOAM-PLASTIC BOARD INSULATION
- A. EXTRUDED-POLYSTYRENE BOARD INSULATION: ASTM C 578, TYPE IV, 1.60 LB/CU. FT. (26 KG/CU. M) WITH MAXIMUM FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF 75 AND 450, RESPECTIVELY:
1. MANUFACTURERS:
- a.DOW CHEMICAL COMPANY.
- a. OWENS CORNING.

2.3 GLASS-FIBER BLANKET INSULATION

- A. MANUFACTURERS:
1. CERTAINTED CORPORATION.
2. JOHNS MANVILLE.
3. OWENS CORNING.
- B. UNFACED, GLASS-FIBER BLANKET INSULATION: ASTM C 665, TYPE I (BLANKETS WITHOUT MEMBRANE FACING); CONSISTING OF FIBERS, WITH MAXIMUM FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF 25 AND 50, RESPECTIVELY; PASSING ASTM E 136 FOR COMBUSTION CHARACTERISTICS.
- C. WHERE GLASS-FIBER BLANKET INSULATION IS INDICATED BY THE FOLLOWING THICKNESSES, PROVIDE BLANKETS IN BATT OR ROLL FORM WITH THERMAL RESISTANCES INDICATED:
1. 3-1/2 INCHES (89 MM) THICK WITH A THERMAL RESISTANCE OF 11 DEG F X H X SQ. FT./BTU AT 75 DEG F (1.9 K X SQ. M/W AT 24 DEG C).
2. 3-5/8 INCHES (92 MM) THICK WITH A THERMAL RESISTANCE OF 11 DEG F X H X SQ. FT./BTU AT 75 DEG F (1.9 K X SQ. M/W AT 24 DEG C).
3. 5-1/2 INCHES (140 MM) THICK WITH A THERMAL RESISTANCE OF 19 DEG F X H X SQ. FT./BTU AT 75 DEG F (3.3 K X SQ. M/W AT 24 DEG C).
4. 6-1/2 INCHES (165 MM) THICK WITH A THERMAL RESISTANCE OF21 DEG F X H X SQ. FT./BTU AT 75 DEG F (3.7 K X SQ. M/W AT 24 DEG C).

2.4 VAPOR RETARDERS & BARRIERS

- A. POLYETHYLENE VAPOR RETARDERS & BARRIERS: ASTM D 4397, 10 MILS THICK, BELOW CONCRETE SLABS.
- B. VAPOR-RETARDER TAPE: PRESSURE-SENSITIVE TAPE OF TYPE RECOMMENDED BY VAPOR-RETARDER MANUFACTURER FOR SEALING JOINTS AND PENETRATIONS IN VAPOR RETARDER.
- C. POLYETHYLENE VAPOR BARRIR: ASTM D 4397, 2 MILS THICK AS VAPOR BARRIER IN WALLS.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. COMPLY WITH INSULATION MANUFACTURER'S WRITTEN INSTRUCTIONS APPLICABLE TO PRODUCTS AND APPLICATION INDICATED.
- B. INSTALL INSULATION THAT IS UNDAMAGED, DRY, AND UNISOLED AND THAT HAS NOT BEEN LEFT EXPOSED AT ANY TIME TO ICE, RAIN, AND SNOW.
- C. EXTEND INSULATION IN THICKNESS INDICATED TO ENVELOP ENTIRE AREA TO BE INSULATED. CUT AND FIT TIGHTLY AROUND OBSTRUCTIONS AND FILL VOIDS WITH INSULATION. REMOVE PROJECTIONS THAT INTERFERE WITH PLACEMENT.
- D. WATER-PIPING COORDINATION: IF WATER PIPING IS LOCATED WITHIN INSULATED EXTERIOR WALLS, COORDINATE LOCATION OF PIPING TO ENSURE THAT IT IS PLACED ON WARM SIDE OF INSULATION AND INSULATION ENCAPSULATES PIPING.
- E. FOR PREFORMED INSULATING UNITS, PROVIDE SIZES TO FIT APPLICATIONS INDICATED AND SELECTED FROM MANUFACTURER'S STANDARD THICKNESSES, WIDTHS, AND LENGTHS. APPLY SINGLE LAYER OF INSULATION UNITS TO PRODUCE THICKNESS INDICATED UNLESS

MULTIPLE LAYERS ARE OTHERWISE SHOWN OR REQUIRED TO MAKE UP TOTAL THICKNESS.

3.2 INSTALLATION OF PERIMETER AND UNDER-SLAB INSULATION

- A. ON VERTICAL SURFACES, SET INSULATION UNITS IN ADHESIVE APPLIED ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. USE ADHESIVE RECOMMENDED BY INSULATION MANUFACTURER.
1. IF NOT OTHERWISE INDICATED, EXTEND INSULATION A MINIMUM OF 24 INCHES (610 MM) BELOW EXTERIOR GRADE LINE.
- B. ON HORIZONTAL SURFACES, LOOSELY LAY INSULATION UNITS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. STAGGER END JOINTS AND TIGHTLY ABUT INSULATION UNITS.
- C. PROTECT BELOW-GRADE INSULATION ON VERTICAL SURFACES FROM DAMAGE DURING BACKFILLING BY APPLYING PROTECTION COURSE WITH JOINTS BUTTED. SET IN ADHESIVE ACCORDING TO INSULATION MANUFACTURER'S WRITTEN INSTRUCTIONS.
- D. PROTECT TOP SURFACE OF HORIZONTAL INSULATION FROM DAMAGE DURING CONCRETE WORK BY APPLYING PROTECTION COURSE WITH JOINTS BUTTED.

3.3 INSTALLATION OF GENERAL BUILDING INSULATION

- A. SET VAPOR-RETARDER-FACED UNITS WITH VAPOR RETARDER BARRIER TO WARM-IN-WINTER SIDE OF CONSTRUCTION, UNLESS OTHERWISE INDICATED.
1. TAPE JOINTS AND RUPTURES IN VAPOR RETARDER BARRIER, AND SEAL EACH CONTINUOUS AREA OF INSULATION TO SURROUNDING CONSTRUCTION TO ENSURE AIRTIGHT INSTALLATION.
- B. INSTALL MINERAL-FIBER INSULATION IN CAVITIES FORMED BY FRAMING MEMBERS ACCORDING TO THE FOLLOWING REQUIREMENTS:
1. USE INSULATION WIDTHS AND LENGTHS THAT FILL THE CAVITIES FORMED BY FRAMING MEMBERS. IF MORE THAN ONE LENGTH IS REQUIRED TO FILL CAVITY, PROVIDE LENGTHS THAT WILL PRODUCE A SNUG FIT BETWEEN ENDS.
2. PLACE INSULATION IN CAVITIES FORMED BY FRAMING MEMBERS TO PRODUCE A FRICTION FIT BETWEEN EDGES OF INSULATION AND ADJOINING FRAMING MEMBERS.
3. MAINTAIN 3-INCH (76-MM) CLEARANCE OF INSULATION AROUND RECESSED LIGHTING FIXTURES.

3.4 INSTALLATION OF INSULATION IN CEILINGS & WALLS FOR SOUND ATTENUATION

- A. INSTALL 3" THICK, UNFACED GLASS-FIBER BLANKET INSULATION OVER CEILINGS SO THAT INSULATION EXTENDS OVER ENTIRE CEILING, AND INTERIOR WALLS AS INDICATED IN THE PLANS.

3.5 INSTALLATION OF VAPOR RETARDERS & VAPOR BARRIERS

- A. GENERAL: EXTEND VAPOR RETARDER TO EXTREMITIES OF AREAS TO BE PROTECTED FROM VAPOR TRANSMISSION. SECURE IN PLACE WITH ADHESIVES OR OTHER ANCHORAGE SYSTEM AS INDICATED. EXTEND VAPOR RETARDER TO COVER MISCELLANEOUS VOIDS IN INSULATED SUBSTRATES.
- B. SEAL VERTICAL JOINTS IN VAPOR RETARDERS OVER FRAMING BY LAPPING NOT LESS THAN TWO WALL STUDS. FASTEN VAPOR RETARDERS TO WOOD FRAMING AT TOP, END, AND, BOTTOM EDGES; AT PERIMETER OF WALL OPENINGS; AND AT LAP JOINTS. SPACE FASTENERS 16 INCHES (400 MM) O.C.
- C. SEAL JOINTS CAUSED BY PIPES, CONDUITS, ELECTRICAL BOXES, AND SIMILAR ITEMS PENETRATING VAPOR RETARDERS WITH VAPOR-RETARDER TAPE TO CREATE AN AIRTIGHT SEAL BETWEEN PENETRATING OBJECTS AND VAPOR RETARDER.
- D. REPAIR TEARS OR PUNCTURES IN VAPOR RETARDERS IMMEDIATELY BEFORE CONCEALMENT BY OTHER WORK. COVER WITH VAPOR-RETARDER TAPE OR ANOTHER LAYER OF VAPOR RETARDER.

SECTION 072419 - WATER-DRAINAGE EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)

PART 1 - GENERAL

1.1 SUMMARY

- A. SECTION INCLUDES WATER-DRAINAGE EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) APPLIED OVER WATER-RESISTIVE COATING OVER SHEATHING.

1.2 PERFORMANCE REQUIREMENTS

- A. CLASS PB EIFS: PHYSICAL PROPERTIES AND STRUCTURAL PERFORMANCE THAT COMPLY WITH ICC-ES AC208.
1. DRAINAGE: ACCORDING TO ICC-ES AC235.

1.3 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE AND COMPONENT OF EIFS INDICATED.
- B. SAMPLES: FOR EACH EXPOSED PRODUCT AND FOR EACH COLOR AND TEXTURE SPECIFIED.

1.4 QUALITY ASSURANCE

- A. INSTALLER QUALIFICATIONS: AN INSTALLER WHO IS CERTIFIED IN WRITING BY EIFS MANUFACTURER AS QUALIFIED TO INSTALL MANUFACTURER'S SYSTEM USING TRAINED WORKERS.
- B. SOURCE LIMITATIONS: OBTAIN EIFS FROM SINGLE SOURCE FROM SINGLE EIFS MANUFACTURER AND FROM SOURCES APPROVED BY EIFS MANUFACTURER AS COMPATIBLE WITH SYSTEM COMPONENTS.
- C. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT THE PROJECT SITE AT A DATE AND TIME TO BE ESTABLISHED.
- D. WARRANTY: PROVIDE MANUFACTURER'S STANDARD 10 YEAR WARRANTY ON MATERIALS.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY THE SPECIFIED MANUFACTURER AS FOLLOWS THE FOLLOWING:
1. DRYVIT SYSTEMS, INC.: OUTSULATION PLUS SYSTEM

2.2 MATERIALS

- A. COMPATIBILITY: PROVIDE WATER-RESISTIVE COATING, ADHESIVE, FASTENERS, BOARD INSULATION, REINFORCING MESHES, BASE- AND FINISH-COAT SYSTEMS, SEALANTS, AND ACCESSORIES THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH SUBSTRATES AND APPROVED FOR USE BY EIFS MANUFACTURER FOR PROJECT.
- B. WATER-RESISTIVE COATINGS: EIFS MANUFACTURER'S STANDARD FORMULATION AND ACCESSORIES FOR USE AS WATER/WEATHER-RESISTIVE BARRIERS, COMPATIBLE WITH SUBSTRATE, AND COMPLYING WITH PHYSICAL AND PERFORMANCE CRITERIA OF ICC-ES AC212.
- C. FLEXIBLE-MEMBRANE FLASHING: COLD-APPLIED, FULLY SELF-ADHERING, SELF-HEALING, RUBBERIZED-ASPHALT AND POLYETHYLENE-FILM COMPOSITE SHEET OR TAPE AND PRIMER; EIFS MANUFACTURER'S STANDARD OR PRODUCT RECOMMENDED IN WRITING BY EIFS MANUFACTURER.
- D. INSULATION ADHESIVE: STANDARD FORMULATION.
- E. MOLDED, RIGID CELLULAR POLYSTYRENE BOARD INSULATION: COMPLY WITH ASTM C 578, TYPE I; EIFS MANUFACTURER'S REQUIREMENTS; AND EIMA'S "EIMA GUIDELINE SPECIFICATION FOR EXPANDED POLYSTYRENE (EPS) INSULATION BOARD."
1. CHANNELLED BOARD INSULATION: EIFS MANUFACTURER'S STANDARD FACTORY-FABRICATED PROFILE WITH LINEAR, VERTICAL DRAINAGE CHANNELS, SLOTS, OR WAVES ON THE BACK SIDE OF BOARD.
2. FOAM SHAPES: PROVIDE WITH PROFILES AND DIMENSIONS INDICATED ON DRAWINGS.
- F. REINFORCING MESH: BALANCED, ALKALI-RESISTANT, OPEN-WEAVE, GLASS-FIBER MESH; COMPLYING WITH ASTM D 578 AND THE FOLLOWING:
1. STANDARD-IMPACT REINFORCING MESH: NOT LESS THAN 4.0 OZ./SQ. YD. (136 G./SQ. M).
2. DETAIL REINFORCING MESH: NOT LESS THAN 4.0 OZ./SQ. YD. (136 G./SQ. M).
- G. BASE-COAT MATERIALS: STANDARD FORMULATION.
- H. FINISH-COAT MATERIALS: FACTORY-MIXED, STANDARD ACRYLIC-BASED COATING WITH ENHANCED MILDEW RESISTANCE.
1. COLORS: AS INDICATED ON THE DRAWINGS.
- I. TRIM ACCESSORIES: STARTER TRACK MANUFACTURED FROM UV-STABILIZED PVC AND COMPLYING WITH ASTM D 1784 AND ASTM C 1063.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. COMPLY WITH EIFS MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLATION OF EIFS AS APPLICABLE TO EACH TYPE OF SUBSTRATE INDICATED.
- B. WATER-RESISTIVE COATINGS: APPLY OVER SUBSTRATES TO PROTECT SUBSTRATES FROM DEGRADATION AND TO PROVIDE WATER-/WEATHER-RESISTIVE BARRIER.
- C. FLEXIBLE-MEMBRANE FLASHING: INSTALL OVER WEATHER-RESISTIVE BARRIER, APPLIED AND LAPPED TO SHED WATER; SEAL AT OPENINGS, PENETRATIONS, TERMINATIONS, AND WHERE INDICATED BY EIFS MANUFACTURER'S WRITTEN INSTRUCTIONS TO PROTECT WALL ASSEMBLY FROM DEGRADATION. PRIME SUBSTRATES, IF REQUIRED, AND INSTALL FLASHING TO COMPLY WITH EIFS MANUFACTURER'S WRITTEN INSTRUCTIONS AND DETAILS.
- D. TRIM: APPLY TRIM ACCESSORIES AT LOCATIONS INDICATED ON DRAWINGS.
- E. BOARD INSULATION: ADHESIVELY ATTACH TO SUBSTRATE USING VERTICAL NOTCHED TROWEL CONFIGURATION FOR DRAINAGE.
- F. BASE COAT: APPLY TO EXPOSED SURFACES OF INSULATION AND FOAM SHAPES IN MINIMUM THICKNESS RECOMMENDED IN WRITING BY EIFS MANUFACTURER, BUT NOT LESS THAN 1/16-INCH (1.6-MM) DRY-COAT THICKNESS.
- G. REINFORCING MESH: COMPLETELY EMBED MESH IN WET BASE COAT, APPLYING ADDITIONAL BASE-COAT MATERIAL IF NECESSARY, SO REINFORCING-MESH COLOR AND PATTERN ARE NOT VISIBLE.
1. STANDARD-IMPACT REINFORCING MESH UNLESS OTHERWISE INDICATED.
- H. FINISH COAT: APPLY OVER DRY BASE COAT, MAINTAINING A WET EDGE AT ALL TIMES FOR UNIFORM APPEARANCE. IN THICKNESS REQUIRED BY EIFS MANUFACTURER TO PRODUCE A UNIFORM FINISH OF COLOR AND TEXTURE MATCHING APPROVED SAMPLE AND FREE OF COLD JOINTS, SHADOW LINES, AND TEXTURE VARIATIONS.
1. TEXTURE: AS INDICATED ON THE DRAWINGS.
- 3.2 FIELD QUALITY CONTROL

- A. TESTING AGENCY: OWNER MAY ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM TESTS AND INSPECTIONS.
- B. EIFS TESTS AND INSPECTIONS: FOR THE FOLLOWING:
1. ACCORDING TO ICC-ES AC235.
- C. REMOVE AND REPLACE EIFS WHERE TEST RESULTS INDICATE THAT EIFS DO NOT COMPLY WITH SPECIFIED REQUIREMENTS.
- D. PREPARE TEST AND INSPECTION REPORTS.

SECTION 075213 - ATACTIC-POLYPROPYLENE (APP) MODIFIED BITUMINOUS MEMBRANE ROOFING (APPROVED ALTERNATE ROOFING. G.C. IS TO CONFIRM WITH OWNER/FRANCHISEE IF G.C. IS TO PROVIDE A BID WITH THIS OPTION. THE STANDARD ROOFING IS TO BE THE THERMOPLASTIC MEMBRANE ROOFING SPECIFIED IN SECTION 075400.)

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES APP-MODIFIED BITUMINOUS MEMBRANE ROOFING.

1.2 DEFINITIONS

- A. HOT ROOFING: ASPHALT: ROOFING ASPHALT HEATED TO ITS EQUIVISCIOUS TEMPERATURE, THE TEMPERATURE AT WHICH ITS VISCOSITY IS 125 CENTIPOISE FOR MOP-APPLIED ROOFING ASPHALT AND 75 CENTIPOISE FOR MECHANICAL SPREADER-APPLIED ROOFING ASPHALT, WITHIN A RANGE OF PLUS OR MINUS 25 DEG F (14 DEG C), MEASURED AT THE MOP CART OR MECHANICAL SPREADER IMMEDIATELY BEFORE APPLICATION.

1.3 SUBMITTALS

- A. SUBMITTAL DATA: FOR EACH PRODUCT INDICATED.
- B. SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.
- C. SAMPLES: FOR EACH PRODUCT INCLUDED IN ROOFING SYSTEM.
- 1.4 QUALITY ASSURANCE

- A. INSTALLER QUALIFICATIONS: A QUALIFIED INSTALLER, APPROVED BY MANUFACTURER TO INSTALL MANUFACTURER'S PRODUCTS.
- B. SOURCE LIMITATIONS: OBTAIN COMPONENTS FOR ROOFING SYSTEM FROM ROOFING SYSTEM MANUFACTURER.
- C. FIRE-TEST-RESPONSE CHARACTERISTICS: PROVIDE ROOFING MATERIALS WITH THE FIRE-TEST-RESPONSE CHARACTERISTICS INDICATED AS DETERMINED BY TESTING IDENTICAL PRODUCTS PER TEST METHOD BELOW BY UL, FMG, OR ANOTHER TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
1. EXTERIOR FIRE-TEST EXPOSURE: CLASS A, ASTM E 108, FOR APPLICATION AND ROOF SLOPES INDICATED.
- D. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT THE PROJECT SITE AT A DATE AND TIME TO BE ESTABLISHED.

1.5 WARRANTY

- A. SPECIAL WARRANTY: US INTEC'S "NO DOLLAR LIMIT (NDL) GUARANTEE" - NEW INTEC NDL GUARANTEE: 12. A FULL REPAIR OR REPLACEMENT, NO LIMITS GUARANTEE, FOR 12 YEARS FROM DATE OF SUBSTANTIAL COMPLETION AGAINST FAILURE OF MATERIALS OR WORKMANSHIP.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
1. APP-MODIFIED BITUMINOUS MEMBRANE ROOFING:
- a. GAP MATERIALS CORP., APP TORCH APPLIED 6B-2B-N (2) PLY WITH NAILABLE DECK (B-SP-400-N).

2.2 APP-MODIFIED ASPHALT-SHEET MATERIALS

- A. ROOFING MEMBRANE SHEET: ASTM D 6222, GRADE S, TYPE I OR II, POLYESTER-REINFORCED, APP-MODIFIED ASPHALT SHEET; SMOOTH SURFACED; SUITABLE FOR APPLICATION METHOD SPECIFIED.
- B. ROOFING MEMBRANE CAP SHEET: ASTM D 6222, GRADE G, TYPE I OR II, POLYESTER-REINFORCED, APP-MODIFIED ASPHALT SHEET; GRANULAR SURFACED; SUITABLE FOR APPLICATION METHOD SPECIFIED, AND AS FOLLOWS:
1. GRANULE COLOR: WHITE.
- 2.3 BASE-SHEET MATERIALS

- A. SHEATHING PAPER: RED-ROBIN TYPE, MINIMUM 3 LB/100 SQ. FT. (0.16 KG/SQ. M).
- B. BASE SHEET: ASTM D 4897, TYPE II, VENTING, NONPERFORATED, HEAVYWEIGHT, ASPHALT-IMPREGNATED AND -COATED, GLASS-FIBER BASE SHEET WITH COARSE GRANULAR SURFACING OR EMBOSSED VENTING CHANNELS ON BOTTOM SURFACE.
- 2.4 BASE FLASHING SHEET MATERIALS
- A. BACKER SHEET: ASTM D 6222, GRADE S, TYPE I OR II, POLYESTER-REINFORCED, APP-MODIFIED ASPHALT SHEET; SMOOTH SURFACED; SUITABLE FOR APPLICATION METHOD SPECIFIED.
- B. FLASHING SHEET: ASTM D 6222, GRADE G, TYPE I OR II, POLYESTER-REINFORCED, APP-MODIFIED ASPHALT SHEET; GRANULAR SURFACED; SUITABLE FOR APPLICATION METHOD SPECIFIED, AND AS FOLLOWS:
1. GRANULE COLOR: WHITE.

2.5 AUXILIARY ROOFING MEMBRANE MATERIALS

- A. GENERAL: AUXILIARY MATERIALS RECOMMENDED BY ROOFING SYSTEM MANUFACTURER FOR INTENDED USE AND COMPATIBLE WITH ROOFING MEMBRANE.
- B. ASPHALT PRIMER: ASTM D 41.
- C. ROOFING ASPHALT: ASTM D 312, TYPE III OR IV AS RECOMMENDED BY ROOFING SYSTEM MANUFACTURER FOR APPLICATION.
- D. ASPHALT ROOFING CEMENT: ASTM D 4586, ASBESTOS FREE, OF CONSISTENCY REQUIRED BY ROOFING SYSTEM MANUFACTURER FOR APPLICATION.
- E. FASTENERS: FACTORY-COATED STEEL FASTENERS AND METAL OR PLASTIC PLATES MEETING CORROSION-RESISTANCE PROVISIONS IN FMG 4470, DESIGNED FOR FASTENING ROOFING MEMBRANE COMPONENTS TO SUBSTRATE, TESTED BY MANUFACTURER FOR REQUIRED PULLOUT STRENGTH, AND ACCEPTABLE TO ROOFING SYSTEM MANUFACTURER.

2.6 ROOF INSULATION

- A. POLYISOCYANURATE BOARD INSULATION: ASTM C 1289, TYPE II, FELT OR GLASS-FIBER MAT FACER ON BOTH MAJOR SURFACES.
- B. TAPERED INSULATION: PROVIDE FACTORY-TAPERED INSULATION BOARDS FABRICATED TO SLOPE OF 1/4 INCH PER 12 INCHES (1:48), UNLESS OTHERWISE INDICATED.
- C. PROVIDE PREFORMED SADDLES, CRICKETS, TAPERED EDGE STRIPS, AND OTHER INSULATION SHAPES WHERE INDICATED FOR SLOPING TO DRAIN. FABRICATE TO SLOPES INDICATED.

2.7 INSULATION ACCESSORIES

- A. FASTENERS: FACTORY-COATED STEEL FASTENERS AND METAL OR PLASTIC PLATES MEETING CORROSION-RESISTANCE PROVISIONS IN FMG 4470, DESIGNED FOR FASTENING ROOF INSULATION TO SUBSTRATE, AND ACCEPTABLE TO ROOFING SYSTEM MANUFACTURER.
- B. INSULATION CANT STRIPS: ASTM C 208, TYPE II, GRADE 1, CELLULOSIC-FIBER INSULATION BOARD.
- C. WOOD NAILER STRIPS: COMPLY WITH REQUIREMENTS IN DIVISION 06 "ROUGH CARPENTRY."
- D. TAPERED EDGE STRIPS: ASTM C 208, TYPE II, GRADE 1, CELLULOSIC-FIBER INSULATION BOARD.
- E. COVER BOARD: ASTM C 208, TYPE II, GRADE 1, CELLULOSIC-FIBER INSULATION BOARD, 1/2 INCH (13 MM) THICK.

PART 3 - EXECUTION

3.1 SUBSTRATE BOARD INSTALLATION

- A. INSTALL SUBSTRATE BOARDS WITH LONG JOINTS IN CONTINUOUS STRAIGHT LINES, PERPENDICULAR TO ROOF SLOPES WITH END JOINTS STAGGERED BETWEEN ROWS. BUTT SUBSTRATE BOARDS TOGETHER.
1. FASTEN SUBSTRATE BOARD TO TOP FLANGES OF STEEL DECK ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.2 INSULATION INSTALLATION

- A. COMPLY WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING ROOF INSULATION.
- B. INSULATION CANT STRIPS: INSTALL AND SECURE PREFORMED 45-DEGREE INSULATION CANT STRIPS AT JUNCTURES OF ROOFING MEMBRANE SYSTEM WITH VERTICAL SURFACES OR ANGLE CHANGES GREATER THAN 45 DEGREES.
- C. INSTALL TAPERED INSULATION UNDER AREA OF ROOFING TO CONFORM TO SLOPES INDICATED.
- D. INSTALL ONE OR MORE LAYERS OF INSULATION UNDER AREA OF ROOFING TO ACHIEVE REQUIRED THICKNESS. WHERE OVERALL INSULATION THICKNESS IS 2 INCHES (50 MM) OR GREATER, INSTALL 2 OR MORE LAYERS WITH JOINTS OF EACH SUCCEEDING LAYER STAGGERED FROM JOINTS OF PREVIOUS LAYER A MINIMUM OF 6 INCHES (150 MM) IN EACH DIRECTION.
- E. INSTALL TAPERED EDGE STRIPS AT PERIMETER EDGES OF ROOF THAT DO NOT TERMINATE AT VERTICAL SURFACES.
- F. MECHANICALLY FASTENED AND ADHERED INSULATION: INSTALL EACH LAYER OF INSULATION AND SECURE FIRST LAYER OF INSULATION TO DECK USING MECHANICAL FASTENERS SPECIFICALLY DESIGNED AND SIZED FOR FASTENING SPECIFIED BOARD-TYPE ROOF INSULATION TO DECK TYPE.
1. INSTALL SUBSEQUENT LAYERS OF INSULATION IN A SOLID MOPPING OF HOT ROOFING ASPHALT.
- G. INSTALL COVER BOARDS OVER INSULATION WITH LONG JOINTS IN CONTINUOUS STRAIGHT LINES WITH END JOINTS STAGGERED BETWEEN ROWS. LOOSELY BUTT COVER BOARDS TOGETHER AND FASTEN TO ROOF DECK.

3.3 ROOFING MEMBRANE INSTALLATION

- A. INSTALL ROOFING MEMBRANE SYSTEM ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS AND APPLICABLE RECOMMENDATIONS OF ARMA/NRCA'S "QUALITY CONTROL GUIDELINES FOR THE APPLICATION OF POLYMER MODIFIED BITUMEN ROOFING."
- B. WHERE ROOF SLOPE EXCEEDS 1/2 INCH PER 12 INCHES (1:24), INSTALL ROOFING MEMBRANE SHEETS PARALLEL WITH SLOPE.
1. BACKNAIL ROOFING MEMBRANE SHEETS TO NAILER STRIPS. SUBSTRATE ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
- C. COORDINATE INSTALLING ROOFING SYSTEM SO INSULATION AND OTHER COMPONENTS OF THE ROOFING MEMBRANE SYSTEM NOT PERMANENTLY EXPOSED ARE NOT SUBJECTED TO PRECIPITATION OR LEFT UNCOVERED AT THE END OF THE WORKDAY OR WHEN RAIN IS FORECAST.
- D. SUBSTRATE-JOINT PENETRATIONS: PREVENT ROOFING ASPHALT FROM PENETRATING SUBSTRATE JOINTS, ENTERING BUILDING, OR DAMAGING ROOFING SYSTEM COMPONENTS OR ADJACENT BUILDING CONSTRUCTION.
- E. LOOSELY LAY ONE COURSE OF SHEATHING PAPER, LAPPING EDGES AND ENDS A MINIMUM OF 2 INCHES (50 MM) AND 6 INCHES (150 MM), RESPECTIVELY.
- F. INSTALL ONE LAPPED COURSE OF BASE SHEET, EXTENDING SHEET OVER AND TERMINATING BEYOND CANTS. ATTACH BASE SHEET AS FOLLOWS:
1. ICC-ES AC235.
- G. INSTALL MODIFIED BITUMINOUS ROOFING MEMBRANE SHEET AND CAP SHEET ACCORDING TO ROOFING MANUFACTURER'S WRITTEN INSTRUCTIONS, STARTING AT LOW POINT OF ROOFING SYSTEM. EXTEND ROOFING MEMBRANE SHEETS OVER AND TERMINATE BEYOND CANTS, INSTALLING AS FOLLOWS:
1. UNROLL ROOFING MEMBRANE SHEETS AND ALLOW THEM TO RELAX FOR MINIMUM TIME PERIOD REQUIRED BY MANUFACTURER.
2. TORCH



**White Design Group, P.C.**  
**Restaurant and Interiors Consulting**  
 5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

10-29-21

**Revisions:**

**Arby's - 1632 AR-25 Bypass**

Arkansas

Heber Springs,

**Sheet Content**  
 Specifications

**Sheet Number**  
 SP-4

**Date:** 10-29-21

**10-29-21**



- E. ROOF-PENETRATION FLASHING: COORDINATE INSTALLATION OF ROOF-PENETRATION FLASHING WITH INSTALLATION OF ROOFING AND OTHER ITEMS PENETRATING ROOF. INSTALL FLASHING AS FOLLOWS:
1. TURN LEAD FLASHING DOWN INSIDE VENT PIPING, BEING CAREFUL NOT TO BLOCK VENT PIPING WITH FLASHING.
2. SEAL WITH ELASTOMERIC SEALANT AND CLAMP FLASHING TO PIPES PENETRATING ROOF EXCEPT FOR LEAD FLASHING ON VENT PIPING.

SECTION 077200 - ROOF ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES THE FOLLOWING:

1. ROOF HATCHES.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF ROOF ACCESSORY INDICATED.
- B. SHOP DRAWINGS: SHOW FABRICATION AND INSTALLATION DETAILS FOR ROOF ACCESSORIES.
- C. SAMPLES: FOR EACH TYPE OF EXPOSED FACTORY-APPLIED COLOR FINISH REQUIRED AND FOR EACH TYPE OF ROOF ACCESSORY INDICATED, PREPARED ON SAMPLES OF SIZE TO ADEQUATELY SHOW COLOR.

1.3 QUALITY ASSURANCE

- A. SHEET METAL STANDARD: COMPLY WITH SMACNA'S "ARCHITECTURAL SHEET METAL MANUAL" DETAILS FOR FABRICATION OF UNITS, INCLUDING FLANGES AND CAP FLASHING TO COORDINATE WITH TYPE OF ROOFING INDICATED.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. AVAILABLE MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, MANUFACTURERS LISTED IN OTHER PART 2 ARTICLES.

2.2 METAL MATERIALS

- A. GALVANIZED STEEL SHEET: ASTM A 653/A 653M, G90 (Z275) COATED AND MILL PHOSPHATIZED FOR FIELD PAINTING.

2.3 ROOF HATCHES

- A. ROOF HATCHES: FABRICATE ROOF HATCHES WITH INSULATED DOUBLE-WALL LIDS AND INSULATED DOUBLE-WALL CURB FRAME WITH INTEGRAL DECK MOUNTING FLANGE AND LID FRAME COUNTERFLASHING. FABRICATE WITH WELDED OR MECHANICALLY FASTENED AND SEALED CORNER JOINTS. PROVIDE CONTINUOUS WEATHERTIGHT PERIMETER GASKETING AND EQUIP WITH CORROSION-RESISTANT OR HOT-DIP GALVANIZED HARDWARE.
1. MANUFACTURERS:
- a. BILCO COMPANY (THE).
2. CURB AND LID MATERIAL: STAINLESS-STEEL SHEET, 0.078 INCH (1.98 MM) THICK.
- a. FINISH: MILL.
3. INSULATION: GLASS-FIBER OR POLYISOCYANURATE BOARD.
4. INTERIOR LID LINER: MANUFACTURER'S STANDARD METAL LINER OF SAME MATERIAL AND FINISH AS OUTER METAL LID.
5. EXTERIOR CURB LINER: MANUFACTURER'S STANDARD METAL LINER OF SAME MATERIAL AND FINISH AS METAL CURB.
6. FABRICATE UNITS TO MINIMUM HEIGHT OF 12 INCHES (300 MM), UNLESS OTHERWISE INDICATED.
7. SLOPING ROOFS: WHERE SLOPE OR ROOF DECK EXCEEDS 1:48, FABRICATE HATCH CURBS WITH HEIGHT CONSTANT.
8. HARDWARE: GALVANIZED STEEL OR STAINLESS-STEEL SPRING LATCH WITH TURN HANDLES, BUTT- OR PINTLE-TYPE HINGE SYSTEM, AND PADLOCK HASPS INSIDE AND OUTSIDE.
9. LADDER SAFETY POST: MANUFACTURER'S STANDARD LADDER SAFETY POST. POST TO LOCK IN PLACE ON FULL EXTENSION. PROVIDE RELEASE MECHANISM TO RETURN POST TO CLOSED POSITION.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. GENERAL: INSTALL ROOF ACCESSORIES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. ANCHOR ROOF ACCESSORIES SECURELY IN PLACE AND CAPABLE OF RESISTING FORCES SPECIFIED. USE FASTENERS, SEPARATORS, SEALANTS, AND OTHER MISCELLANEOUS ITEMS AS REQUIRED FOR COMPLETING ROOF ACCESSORY INSTALLATION. INSTALL ROOF ACCESSORIES TO RESIST EXPOSURE TO WEATHER WITHOUT FAILING, RATTLING, LEAKING, AND FASTENER ENGAGEMENT.
- B. INSTALL ROOF ACCESSORIES TO FIT SUBSTRATES AND TO RESULT IN WATERTIGHT PERFORMANCE.
- C. METAL PROTECTION: WHERE DISSIMILAR METALS WILL CONTACT EACH OTHER OR CORROSIVE SUBSTRATES, PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH BITUMINOUS COATING OR BY OTHER PERMANENT SEPARATION AS RECOMMENDED BY MANUFACTURER.
1. COAT CONCEALED SIDE OF UNCOATED ALUMINUM OR STAINLESS-STEEL ROOF ACCESSORIES WITH BITUMINOUS COATING WHERE IN CONTACT WITH WOOD, FERROUS METAL, OR CEMENTITIOUS CONSTRUCTION.
2. UNDERLAYMENT: WHERE INSTALLING EXPOSED-TO-VIEW COMPONENTS OF ROOF ACCESSORIES DIRECTLY ON CEMENTITIOUS OR WOOD SUBSTRATES, INSTALL A COURSE OF FELT UNDERLAYMENT AND COVER WITH A SLIP SHEET, OR INSTALL A COURSE OF POLYETHYLENE UNDERLAYMENT.
3. BED FLANGES IN THICK COAT OF ASPHALT ROOFING CEMENT WHERE REQUIRED BY ROOF ACCESSORY MANUFACTURERS FOR WATERPROOF PERFORMANCE.
- D. INSTALL ROOF ACCESSORIES LEVEL, PLUMB, TRUE TO LINE AND ELEVATION, AND WITHOUT WARPING, JOGS IN ALIGNMENT, EXCESSIVE OIL CANNING, BUCKLING, OR TOOL MARKS.
- E. SEAL JOINTS WITH ELASTOMERIC OR BUTYL SEALANT AS REQUIRED BY MANUFACTURER OF ROOF ACCESSORIES.

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES JOINT SEALANTS FOR THE FOLLOWING APPLICATIONS, INCLUDING THOSE SPECIFIED BY REFERENCE TO THIS SECTION:
1. EXTERIOR JOINTS IN VERTICAL SURFACES AND HORIZONTAL NONTRAFFIC SURFACES.
2. EXTERIOR JOINTS IN HORIZONTAL TRAFFIC SURFACES.
3. INTERIOR JOINTS IN VERTICAL SURFACES AND HORIZONTAL NONTRAFFIC SURFACES.
4. INTERIOR JOINTS IN HORIZONTAL TRAFFIC SURFACES.
- B. SEE DIVISION 32 SECTION "CONCRETE PAVING JOINT SEALANTS" FOR SEALING JOINTS IN PAVEMENTS, WALKWAYS, AND CURBING.
- C. SEE DIVISION 08 SECTION "GLAZING" FOR GLAZING SEALANTS.

1.2 PERFORMANCE REQUIREMENTS

- A. PROVIDE ELASTOMERIC JOINT SEALANTS THAT ESTABLISH AND MAINTAIN WATERTIGHT AND AIRTIGHT CONTINUOUS JOINT SEALS WITHOUT STAINING OR DETERIORATING JOINT SUBSTRATES.

- B. PROVIDE JOINT SEALANTS FOR INTERIOR APPLICATIONS THAT ESTABLISH AND MAINTAIN AIRTIGHT AND WATER-RESISTANT CONTINUOUS JOINT SEALS WITHOUT STAINING OR DETERIORATING JOINT SUBSTRATES.
- 1.3 SUBMITTALS
- A. PRODUCT DATA: FOR EACH JOINT-SEALANT PRODUCT INDICATED.
- B. SAMPLES: FOR EACH TYPE AND COLOR OF JOINT SEALANT REQUIRED, PROVIDE SAMPLES WITH JOINT SEALANTS IN 1/2-INCH- (13-MM-) WIDE JOINTS FORMED BETWEEN TWO 6-INCH- (150-MM-) LONG STRIPS OF MATERIAL MATCHING THE APPEARANCE OF EXPOSED SURFACES ADJACENT TO JOINT SEALANTS.

1.4 QUALITY ASSURANCE

- A. PRECONSTRUCTION FIELD-ADHESION TESTING: BEFORE INSTALLING ELASTOMERIC SEALANTS, FIELD TEST THEIR ADHESION TO PROJECT JOINT SUBSTRATES ACCORDING TO THE METHOD IN ASTM C 1193 THAT IS APPROPRIATE FOR THE TYPES OF PROJECT JOINTS.

1.5 WARRANTY

- A. SPECIAL INSTALLER'S WARRANTY: INSTALLER'S STANDARD FORM IN WHICH INSTALLER AGREES TO REPAIR OR REPLACE ELASTOMERIC JOINT SEALANTS THAT DO NOT COMPLY WITH PERFORMANCE AND OTHER REQUIREMENTS SPECIFIED IN THIS SECTION WITHIN SPECIFIED WARRANTY PERIOD.
1. WARRANTY PERIOD: TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION.
- B. SPECIAL MANUFACTURER'S WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH ELASTOMERIC SEALANT MANUFACTURER AGREES TO FURNISH ELASTOMERIC JOINT SEALANTS TO REPAIR OR REPLACE THOSE THAT DO NOT COMPLY WITH PERFORMANCE AND OTHER REQUIREMENTS SPECIFIED IN THIS SECTION WITHIN SPECIFIED WARRANTY PERIOD.
1. WARRANTY PERIOD: 20 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. IN OTHER PART 2 ARTICLES WHERE SUBPARAGRAPH TITLES BELOW INTRODUCE LISTS, THE FOLLOWING REQUIREMENTS APPLY FOR PRODUCT SELECTION:
- B. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PRODUCTS BY ONE OF THE MANUFACTURERS SPECIFIED.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE THE PRODUCT OR AN EQUIVALENT PRODUCT BY ONE OF THE MANUFACTURERS SPECIFIED FOR THAT TYPE OF SEALANT.
- C. MANUFACTURERS - GENERAL
1. SILICONE SEALANT: TREMCO.
2. POLYURETHANE SEALANT: TREMCO.
3. BUTYL RUBBER SEALANT: TREMCO.
4. AND AS SPECIFIED HEREIN.
- 2.2 MATERIALS, GENERAL

- A. COMPATIBILITY: PROVIDE JOINT SEALANTS, BACKINGS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY SEALANT MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.
- B. COLORS OF EXPOSED JOINT SEALANTS: AS INDICATED ON DRAWINGS. IF NOT INDICATED, AS SELECTED BY OWNER'S REPRESENTATIVE FROM MANUFACTURERS FULL RANGE OF COLORS.

2.3 ELASTOMERIC JOINT SEALANTS

- A. ELASTOMERIC SEALANTS, GENERAL: ASTM C 920.
1. CONTINUOUS-IMMERSION SEALANTS: FOR IMMERSION IN WATER, PRODUCTS TESTED ACCORDING TO ASTM C 1247, INCLUDING INITIAL SIX-WEEK IMMERSION PERIOD AND TWO ADDITIONAL IMMERSION FOUR WEEK IMMERSION PERIOD(S), WITHOUT FAILING IN ADHESION OR COHESION WHEN TESTED WITH SUBSTRATES INDICATED.
2. SEALANTS FOR CONTACT WITH FOOD: COMPLY WITH 21 CFR 177.2600.
- B. LOW-MODULUS NONACID-CURING SILICONE SEALANT: DOW CORNING CORP., 790 SILICONE BUILDING SEALANT.
1. TYPE AND GRADE: S (SINGLE COMPONENT) AND NS (NONSAG).
2. CLASS: 25.
3. ADDITIONAL MOVEMENT CAPABILITY: CAPABLE OF 100 PERCENT MOVEMENT IN EXTENSION AND 50 PERCENT MOVEMENT IN COMPRESSION WHEN TESTED FOR ADHESION AND COHESION UNDER MAXIMUM CYCLIC MOVEMENT PER ASTM C 719.
4. EXPOSURE: USE NT (NONTRAFFIC).
5. SUBSTRATES: USES M, G, A, AND, AS APPLICABLE TO JOINT SUBSTRATES INDICATED, O.
6. NONSTAINING TO POROUS SUBSTRATES WHEN TESTING PER ASTM C 1248 FOR SUBSTRATES INDICATED.
- C. MEDIUM-MODULUS NEUTRAL-CURING SILICONE SEALANT: DOW CORNING CORP., 795 SILICONE BUILDING SEALANT.
1. TYPE AND GRADE: S (SINGLE COMPONENT) AND NS (NONSAG).
2. CLASS: 25.
3. EXPOSURE: USE NT (NONTRAFFIC).
4. SUBSTRATES: USES M, G & A.
5. NONSTAINING TO POROUS SUBSTRATES WHEN TESTING PER ASTM C 1248 FOR SUBSTRATES INDICATED.
- D. MILDEW-RESISTANT SILICONE SEALANT: DOW CORNING CORP., 786 MILDEW-RESISTANT SILICONE SEALANT.
1. TYPE AND GRADE: S (SINGLE COMPONENT) AND NS (NONSAG).
2. CLASS: 25.
3. EXPOSURE: USE NT (NONTRAFFIC).
4. SUBSTRATES: USES G, A AND, AS APPLICABLE TO JOINT SUBSTRATES INDICATED, O.
- E. POURABLE SILICONE SEALANT: DOW CORNING CORP., 890-SL SELF-LEVELING SILICONE JOINT SEALANT.

1. TYPE AND GRADE: S (SINGLE COMPONENT) AND P (POURABLE)
2. CLASS: 25.
3. ADDITIONAL MOVEMENT CAPABILITY: 100 PERCENT MOVEMENT IN EXTENSION AND 50 PERCENT IN COMPRESSION WHEN TESTED FOR ADHESION AND COHESION UNDER MAXIMUM CYCLIC MOVEMENT PER ASTM C 719.
4. EXPOSURE: USE T (TRAFFIC).
5. SUBSTRATES: M AND, AS APPLICABLE TO JOINT SUBSTRATES INDICATED, O.
- F. MULTICOMPONENT NONSAG URETHANE SEALANT: SONNEBORN BUILDING PRODUCTS DIVISION, CHEMREX, INC., SONOLASTIC SL 2.
1. TYPE AND GRADE: M (MULTICOMPONENT) AND NS (NONSAG).
2. CLASS: 25.
3. ADDITIONAL MOVEMENT CAPABILITY: 50 PERCENT MOVEMENT IN EXTENSION AND 50 PERCENT IN COMPRESSION WHEN TESTED FOR ADHESION AND COHESION UNDER MAXIMUM CYCLIC MOVEMENT PER ASTM C 719.
4. EXPOSURE: USE NT (NONTRAFFIC) AND T (TRAFFIC).
5. SUBSTRATES: M, G, A, AND, AS APPLICABLE TO JOINT SUBSTRATES INDICATED, O.
- G. MULTICOMPONENT POURABLE URETHANE SEALANT: SONNEBORN BUILDING PRODUCTS DIVISION, CHEMREX, INC., SONOLASTIC SL 2.
1. TYPE AND GRADE: M (MULTICOMPONENT) AND P (POURABLE).
2. CLASS: 25.
3. EXPOSURE: T (TRAFFIC).
4. SUBSTRATE: USE M.
- H. SINGLE-COMPONENT NONSAG URETHANE SEALANT: SONNEBORN BUILDING PRODUCTS DIVISION, CHEMREX, INC., SONOLASTIC NP 1.
1. TYPE AND GRADE: S (SINGLE COMPONENT) AND NS (NONSAG).
2. CLASS: 25.
3. EXPOSURE: NT (NONTRAFFIC).
4. SUBSTRATES: M, G, A, AND, AS APPLICABLE TO JOINT SUBSTRATES INDICATED, O.

- I. SINGLE-COMPONENT POURABLE URETHANE SEALANT: SONNEBORN BUILDING PRODUCTS DIVISION, CHEMREX, INC., SONOLASTIC SL 1.
1. TYPE AND GRADE: S (SINGLE COMPONENT) AND P (POURABLE).
2. CLASS: 25.
3. EXPOSURE: T (TRAFFIC)
4. SUBSTRATE: M.

2.4 SOLVENT-RELEASE JOINT SEALANTS

- A. BUTYL-RUBBER-BASED SOLVENT-RELEASE JOINT SEALANT: ASTM C 1085, PECORA CORPORATION; BC-158 BUTYL RUBBER SEALANT.
1. TYPE AND GRADE: S (SINGLE COMPONENT) AND NS (NONSAG).
2. CLASS: 25.
3. EXPOSURE: NT (NONTRAFFIC).

2.5 JOINT-SEALANT BACKING

- A. GENERAL: PROVIDE SEALANT BACKINGS OF MATERIAL AND TYPE THAT ARE NONSTAINING; ARE COMPATIBLE WITH JOINT SUBSTRATES, SEALANTS, PRIMERS, AND OTHER JOINT FILLERS; AND ARE APPROVED FOR APPLICATIONS INDICATED BY SEALANT MANUFACTURER BASED ON FIELD EXPERIENCE AND LABORATORY TESTING.
- B. CYLINDRICAL SEALANT BACKINGS: ASTM C 1930, OF SIZE AND DENSITY TO CONTROL SEALANT DEPTH AND OTHERWISE CONTRIBUTE TO PRODUCING OPTIMUM SEALANT PERFORMANCE:
1. TYPE: C (CLOSED-CELL MATERIAL WITH A SURFACE SKIN).
- C. ELASTOMERIC TUBING SEALANT BACKINGS: NEOPRENE, BUTYL, EPDM, OR SILICONE TUBING COMPLYING WITH ASTM D 1056, NONABSORBENT TO WATER AND GAS, AND CAPABLE OF REMAINING RESILIENT AT TEMPERATURES DOWN TO MINUS 26 DEG F. PROVIDE PRODUCTS WITH LOW COMPRESSION SET AND OF SIZE AND SHAPE TO PROVIDE A SECONDARY SEAL, TO CONTROL SEALANT DEPTH, AND TO OTHERWISE CONTRIBUTE TO OPTIMUM SEALANT PERFORMANCE.
- D. BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT MANUFACTURER FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT WHERE SUCH ADHESION WOULD RESULT IN SEALANT FAILURE. PROVIDE SELF-ADHESIVE TAPE WHERE APPLICABLE.

2.6 MISCELLANEOUS MATERIALS

- A. PRIMER: MATERIAL RECOMMENDED BY JOINT-SEALANT MANUFACTURER WHERE REQUIRED FOR ADHESION OF SEALANT TO JOINT SUBSTRATES INDICATED, AS DETERMINED FROM PRECONSTRUCTION JOINT-SEALANT-SUBSTRATE TESTS AND FIELD TESTS.
- B. CLEANERS FOR NONPOROUS SURFACES: CHEMICAL CLEANERS ACCEPTABLE TO MANUFACTURERS OF SEALANTS AND SEALANT BACKING MATERIALS, FREE OF OILY RESIDUES OR OTHER SUBSTANCES CAPABLE OF STAINING OR HARMING JOINT SUBSTRATES AND ADJACENT NONPOROUS SURFACES IN ANY WAY, AND FORMULATED TO PROMOTE OPTIMUM ADHESION OF SEALANTS TO JOINT SUBSTRATES.
- C. MASKING TAPE: NONSTAINING, NONABSORBENT MATERIAL COMPATIBLE WITH JOINT SEALANTS AND SURFACES ADJACENT TO JOINTS.

PART 3 - EXECUTION

3.1 PREPARATION

- A. SURFACE CLEANING OF JOINTS: CLEAN OUT JOINTS IMMEDIATELY BEFORE INSTALLING JOINT SEALANTS.
1. REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE WITH ADHESION OF JOINT SEALANT.
2. CLEAN POROUS JOINT SUBSTRATE SURFACES BY BRUSHING, GRINDING, BLAST CLEANING, MECHANICAL ABRADING, OR A COMBINATION OF THESE METHODS TO PRODUCE A CLEAN, SOUND SUBSTRATE CAPABLE OF DEVELOPING OPTIMUM BOND WITH JOINT SEALANTS. REMOVE LOOSE PARTICLES REMAINING AFTER CLEANING OPERATIONS ABOVE BY VACUUMING OR BLOWING OUT JOINTS WITH OIL-FREE COMPRESSED AIR.
3. REMOVE LAITANCE AND FORM-RELEASE AGENTS FROM CONCRETE.
4. CLEAN NONPOROUS SURFACES WITH CHEMICAL CLEANERS OR OTHER MEANS THAT DO NOT STAIN, HARM SUBSTRATES, OR LEAVE RESIDUES CAPABLE OF INTERFERING WITH ADHESION OF SEALANTS TO JOINT SUBSTRATES.
- B. JOINT PRIMING: PRIME JOINT SUBSTRATES, WHERE RECOMMENDED IN WRITING BY JOINT-SEALANT MANUFACTURER, BASED ON PRECONSTRUCTION JOINT-SEALANT-SUBSTRATE TESTS OR PRIOR EXPERIENCE. APPLY PRIMER TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS. CONFINE PRIMERS TO AREAS OF JOINT-SEALANT BOND; DO NOT ALLOW SPILLAGE OR MIGRATION ONTO ADJOINING SURFACES.
- C. MASKING TAPE: USE MASKING TAPE WHERE REQUIRED TO PREVENT CONTACT OF SEALANT WITH ADJOINING SURFACES THAT OTHERWISE WOULD BE PERMANENTLY STAINED OR DAMAGED BY SUCH CONTACT OR BY CLEANING METHODS REQUIRED TO REMOVE SEALANT SMEARS. REMOVE TAPE IMMEDIATELY AFTER TOOLING WITHOUT DISTURBING JOINT SEAL.
- D. SEALANT INSTALLATION: COMPLY WITH RECOMMENDATIONS IN ASTM C 1193 FOR USE OF JOINT SEALANTS AS APPLICABLE TO MATERIALS, APPLICATIONS, AND CONDITIONS INDICATED.
- E. ACOUSTICAL SEALANT APPLICATION STANDARD: COMPLY WITH RECOMMENDATIONS IN ASTM C 919 FOR USE OF JOINT SEALANTS IN ACOUSTICAL APPLICATIONS AS APPLICABLE TO MATERIALS, APPLICATIONS, AND CONDITIONS INDICATED.
- F. INSTALL SEALANT BACKINGS OF TYPE INDICATED TO SUPPORT SEALANTS DURING APPLICATION AND AT POSITION REQUIRED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS OF INSTALLED SEALANTS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY.
1. DO NOT LEAVE GAPS BETWEEN ENDS OF SEALANT BACKINGS.
2. DO NOT STRETCH, TWIST, PUNCTURE, OR TEAR SEALANT BACKINGS.
3. REMOVE ABSORBENT SEALANT BACKINGS THAT HAVE BECOME WET BEFORE SEALANT APPLICATION AND REPLACE THEM WITH DRY MATERIALS.
- G. INSTALL BOND-BREAKER TAPE BEHIND SEALANTS WHERE SEALANT BACKINGS ARE NOT USED BETWEEN SEALANTS AND BACKS OF JOINTS.
1. PLACE SEALANTS SO THEY DIRECTLY CONTACT AND FULLY WET JOINT SUBSTRATES.
2. COMPLETELY FILL RECESSES IN EACH JOINT CONFIGURATION.
3. PRODUCE UNIFORM, CROSS-SECTIONAL SHAPES AND DEPTHS RELATIVE TO JOINT WIDTHS THAT ALLOW OPTIMUM SEALANT MOVEMENT CAPABILITY.
- H. TOOLING OF NONSAG SEALANTS: IMMEDIATELY AFTER SEALANT APPLICATION AND BEFORE SKINNING OR CURING BEGINS, TOOL SEALANTS ACCORDING TO REQUIREMENTS SPECIFIED BELOW TO FORM SMOOTH, UNIFORM BEADS OF CONFIGURATION INDICATED; TO ELIMINATE AIR POCKETS; AND TO ENSURE CONTACT AND ADHESION OF SEALANT WITH SIDES OF JOINT.
1. REMOVE EXCESS SEALANT FROM SURFACES ADJACENT TO JOINTS.
2. USE TOOLING AGENTS THAT ARE APPROVED IN WRITING BY SEALANT MANUFACTURER AND THAT DO NOT DISCOLOR SEALANTS OR ADJACENT SURFACES.
3. JOINT CONFIGURATION: CONCAVE JOINT CONFIGURATION PER FIGURE 5A IN ASTM C 1193, UNLESS OTHERWISE INDICATED.

- I. INSTALLATION OF PREFORMED SILICONE-SEALANT SYSTEM.
1. APPLY MASKING TAPE TO EACH SIDE OF JOINT, OUTSIDE OF AREA TO BE COVERED BY SEALANT SYSTEM.
2. COMPLETE INSTALLATION OF HORIZONTAL JOINTS BEFORE INSTALLING VERTICAL JOINTS. LAP VERTICAL JOINTS OVER HORIZONTAL JOINTS. AT END OF JOINTS, CUT SILICONE EXTRUSION WITH A RAZOR KNIFE.
- J. CLEAN EXCESS SEALANT OR SEALANT SMEARS ADJACENT TO JOINTS AS THE WORK PROGRESSES BY METHODS AND WITH CLEANING MATERIALS APPROVED IN WRITING BY MANUFACTURERS OF JOINT SEALANTS AND OF PRODUCTS IN WHICH JOINTS OCCUR.

3.2 JOINT-SEALANT SCHEDULE

- A. EXTERIOR JOINTS:
1. GENERAL USE:URETHANE, MULTI COMPONENT, NONSAG.
2. WOOD/WOOD, WOOD/BRICK: URETHANE, MULTI COMPONENT, NONSAG.
3. METAL/METAL, METAL/WOOD: URETHANE, MULTI COMPONENT, NONSAG.
4. BRICK/BRICK: URETHANE, MULTI COMPONENT, NONSAG.
5. UNDER METAL DOOR THRESHOLDS: BUTYL RUBBER, SNGL COMPONENT, NONSAG.
6. HORIZONTAL WEARING SURFACES: SEE DIVISION 2 SECTION "PAVEMENT JOINT SEALANTS"

7. GLAZING: SILICONE, SINGLE COMPONENT, NONSAG.
- B. INTERIOR JOINTS:
1. GENERAL USE:URETHANE, SINGLE COMPONENT, NONSAG.
2. PLUMBING FIXTURES, COUNTERTOPS, WET AREAS: SILICONE, SINGLE COMPONENT, NONSAG, MILDEW RESISTANT.
3. CERAMIC TILE: SILICONE, SINGLE COMPONENT, NONSAG, MILDEW RESISTANT.
4. HORIZONTAL WEARING SURFACES: URETHANE, SINGLE COMPONENT, POURABLE OR NONSAG.
5. UNDER DOOR THRESHOLDS: BUTYL RUBBER, SINGLE COMPONENT, NONSAG.

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. SECTION INCLUDES:
1. STANDARD HOLLOW METAL DOORS AND FRAMES.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. SCHEDULE: PREPARED BY OR UNDER THE SUPERVISION OF SUPPLIER, USING SAME REFERENCE NUMBERS FOR DETAILS AND OPENINGS AS THOSE ON DRAWINGS.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
1. AMWELD BUILDING PRODUCTS, LLC.
2. CECO DOOR PRODUCTS; AN ASSA ABLOY GROUP COMPANY.
3. CURRIES COMPANY; AN ASSA ABLOY GROUP COMPANY.
4. STEELCRAFT; AN INGERSOLL-RAND COMPANY.

2.2 MATERIALS

- A. COLD-ROLLED STEEL SHEET: ASTM A 1008/A 1008M, CS, TYPE B; SUITABLE FOR EXPOSED APPLICATIONS.
- B. METALLIC-COATED STEEL SHEET: ASTM A 653/A 653M, COMMERCIAL STEEL (CS), TYPE B; WITH MINIMUM A40 (ZF120) METALLIC COATING.
- C. FRAME ANCHORS: ASTM A 591/A 591M, COMMERCIAL STEEL (CS), 40Z (12G) COATING DESIGNATION; MILL PHOSPHATIZED.
1. FOR ANCHORS BUILT INTO EXTERIOR WALLS, STEEL SHEET COMPLYING WITH ASTM A 1008/A 1008M OR ASTM A 1011/A 1011M, HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M, CLASS B.
- D. INSERTS, BOLTS, AND FASTENERS: HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M.
- E. GROUT: ASTM C 476, EXCEPT WITH A MAXIMUM SLUMP OF 4 INCHES (102 MM), AS MEASURED ACCORDING TO ASTM C 143/C 143M.
- F. MINERAL-FIBER INSULATION: ASTM C 665, TYPE I.
- G. GLAZING: DIVISION 08 SECTION "GLAZING."

2.3 STANDARD HOLLOW METAL DOORS

- A. GENERAL: COMPLY WITH ANSI/SDI A250.8.
1. DESIGN: FLUSH PANEL.
2. CORE CONSTRUCTION: MANUFACTURER'S STANDARD POLYSTYRENE OR POLYURETHANE.
- a. THERMAL-RATED (INSULATED) DOORS: R-VALUE OF NOT LESS THAN 19 WHEN TESTED ACCORDING TO ASTM C 1363.
3. VERTICAL EDGES FOR SINGLE-ACTING DOORS: SQUARE EDGE.
4. TOP AND BOTTOM EDGES: CLOSED WITH FLUSH OR INVERTED 0.042-INCH- (1.0-MM-) THICK, END CLOSURES OR CHANNELS OF SAME MATERIAL AS FACE SHEETS.
5. TOLERANCES: SDI 117, "MANUFACTURING TOLERANCES FOR STANDARD STEEL DOORS AND FRAMES."
- B. EXTERIOR DOORS: FACE SHEETS FABRICATED FROM METALLIC-COATED STEEL SHEET. COMPLY WITH ANSI/SDI A250.8 FOR LEVEL AND MODEL AND ANSI/SDI A250.4 FOR PHYSICAL PERFORMANCE LEVEL:
1. LEVEL 1 AND PHYSICAL PERFORMANCE LEVEL C (STANDARD DUTY).
- a. WIDTH: 1-3/4 INCHES (44.5 MM) OR AS INDICATED ON DRAWINGS.
2. LEVEL 3 AND PHYSICAL PERFORMANCE LEVEL A (EXTRA HEAVY DUTY), MODEL 1 (FULL FLUSH).
- C. HARDWARE REINFORCEMENT: ANSI/SDI A250.6.

2.4 STANDARD HOLLOW METAL FRAMES

- A. GENERAL: COMPLY WITH ANSI/SDI A250.8.
- B. EXTERIOR FRAMES: FABRICATED FROM METALLIC-COATED STEEL SHEET.
1. FABRICATE FRAMES WITH MITERED OR COPED CORNERS.
2. FABRICATE FRAMES AS KNOCKED DOWN UNLESS OTHERWISE INDICATED.
3. FABRICATE FRAMES WITH MITERED OR COPED CORNERS.
4. FRAMES FOR WOOD DOORS: 0.067-INCH- (1.7-MM-) THICK STEEL SHEET.
- C. HARDWARE REINFORCEMENT: ANSI/SDI A250.6.

2.5 FRAME ANCHORS

- A. JAMB ANCHORS:
1. MASONRY TYPE: ADJUSTABLE STRAP-AND-STIRRUP OR T-SHAPED ANCHORS TO SUIT FRAME SIZE, NOT LESS THAN 0.042 INCH (1.0 MM) THICK, WITH CORRUGATED OR PERFORATED STRAPS NOT LESS THAN 2 INCHES (50 MM) WIDE BY 10 INCHES (250 MM) LONG, OR WIRE ANCHORS NOT LESS THAN 0.177 INCH (4.5 MM) THICK.
2. STUD-WALL TYPE: DESIGNED TO ENGAGE STUD, WELDED TO BACK OF FRAMES; NOT LESS THAN 0.042 INCH (1.0 MM) THICK.
3. COMPRESSION TYPE FOR DRYWALL SLIP-ON FRAMES: ADJUSTABLE COMPRESSION ANCHORS.
- B. FLOOR ANCHORS: FORMED FROM SAME MATERIAL AS FRAMES, NOT LESS THAN 0.042 INCH (1.0 MM) THICK, AND AS FOLLOWS:
1. MONOLITHIC CONCRETE SLABS: CLIP-TYPE ANCHORS, WITH TWO HOLES TO RECEIVE FASTENERS.

2.6 FABRICATION

- A. TOLERANCES: FABRICATE HOLLOW METAL WORK TO TOLERANCES INDICATED IN SDI 117.
- B. HOLLOW METAL DOORS:
1. EXTERIOR DOORS: PROVIDE WEEP-HOLE OPENINGS IN BOTTOM OF EXTERIOR DOORS. SEAL JOINTS IN TOP EDGES OF DOORS AGAINST WATER PENETRATION.
- C. HOLLOW METAL FRAMES: WHERE FRAMES ARE FABRICATED IN SECTIONS, PROVIDE ALIGNMENT PLATES OR ANGLES AT EACH JOINT, FABRICATED OF SAME THICKNESS METAL AS FRAMES.
1. WELDED FRAMES: WELD FLUSH FACE JOINTS CONTINUOUSLY; GRIND, FILL, DRESS, AND MAKE SMOOTH, FLUSH, AND INVISIBLE.
2. PROVIDE COUNTERSUNK, FLAT- OR OVAL-HEAD EXPOSED SCREWS AND BOLTS FOR EXPOSED FASTENERS UNLESS OTHERWISE INDICATED.
3. GROUT GUARDS: WELD GUARDS TO FRAME AT BACK OF HARDWARE MORTISES IN FRAMES TO BE GROUTED.
4. FLOOR ANCHORS: WELD ANCHORS TO BOTTOM OF JAMBS AND MULLIONS WITH AT LEAST FOUR SPOT WELDS PER ANCHOR.
5. JAMB ANCHORS: PROVIDE NUMBER AND SPACING OF ANCHORS AS FOLLOWS:
- a. MASONRY TYPE: LOCATE ANCHORS NOT MORE THAN 18 INCHES (457 MM) FROM TOP AND BOTTOM OF FRAME. SPACE ANCHORS NOT MORE THAN 32 INCHES (813

- MM) O.C. AND AS FOLLOWS:
- 1) THREE ANCHORS PER JAMB FROM 60 TO 90 INCHES (1524 TO 2286 MM) HIGH.
- b. STUD-WALL TYPE: LOCATE ANCHORS NOT MORE THAN 18 INCHES (457 MM) FROM TOP AND BOTTOM OF FRAME. SPACE ANCHORS NOT MORE THAN 32
- INCHES (813 MM) O.C. AND AS FOLLOWS:
- 1) FOUR ANCHORS PER JAMB FROM 60 TO 90 INCHES (1524 TO 2286 MM) HIGH.
- c. COMPRESSION TYPE: NOT LESS THAN TWO ANCHORS IN EACH JAMB.
- d. POSTINSTALLED EXPANSION TYPE: LOCATE ANCHORS NOT MORE THAN 6 INCHES (152 MM) FROM TOP AND BOTTOM OF FRAME. SPACE ANCHORS NOT MORE THAN 26 INCHES (660 MM) O.C.
6. DOOR SILENCERS: EXCEPT ON WEATHER-STRIPPED DOORS, DRILL STOPS TO RECEIVE DOOR SILENCERS.
- a. SINGLE-DOOR FRAMES: THREE DOOR SILENCERS.
- D. HARDWARE PREPARATION: FACTORY PREPARE HOLLOW METAL WORK TO RECEIVE TEMPLATED MORTISED HARDWARE ACCORDING TO THE DOOR HARDWARE SCHEDULE AND TEMPLATES FURNISHED AS SPECIFIED IN DIVISION 08 SECTION "DOOR HARDWARE."
1. LOCATE HARDWARE AS INDICATED, OR IF NOT INDICATED, ACCORDING TO ANSI/SDI A250.8.
2. REINFORCE DOORS AND FRAMES TO RECEIVE NONTEMPLATED, MORTISED AND SURFACE-MOUNTED DOOR HARDWARE.
3. COMPLY WITH APPLICABLE REQUIREMENTS IN ANSI/SDI A250.6 AND ANSI/DHI A115 SERIES SPECIFICATIONS FOR PREPARATION OF HOLLOW METAL WORK FOR HARDWARE.
4. COORDINATE LOCATIONS OF CONDUIT AND WIRING BOXES FOR ELECTRICAL CONNECTIONS WITH DIVISION 26 ELECTRICAL SECTIONS.

2.7 STEEL FINISHES

- A. PRIME FINISH: APPLY MANUFACTURER'S STANDARD PRIMER IMMEDIATELY AFTER CLEANING AND PRETREATING:
1. SHOP PRIMER: ANSI/SDI A250.10.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. HOLLOW METAL FRAMES: COMPLY WITH ANSI/SDI A250.11.
1. SET FRAMES ACCURATELY IN POSITION, PLUMBED, ALIGNED, AND BRACED SECURELY UNTIL PERMANENT ANCHORS ARE SET. AFTER WALL CONSTRUCTION IS COMPLETE, REMOVE TEMPORARY BRACES, LEAVING SURFACES SMOOTH AND UNDAMAGED.
- a. INSTALL DOOR SILENCERS IN FRAMES BEFORE GROUTING.
- b. REMOVE TEMPORARY BRACES NECESSARY FOR INSTALLATION ONLY AFTER FRAMES HAVE BEEN PROPERLY SET AND SECURED.
- c. CHECK PLUMBNESS, SQUARENESS, AND TWIST OF FRAMES AS WALLS ARE CONSTRUCTED. SHIM AS NECESSARY TO COMPLY WITH INSTALLATION TOLERANCES.
2. FLOOR ANCHORS: PROVIDE FLOOR ANCHORS FOR EACH JAMB AND MULLION THAT EXTENDS TO FLOOR, AND SECURE WITH POSTINSTALLED EXPANSION ANCHORS.
- a. FLOOR ANCHORS MAY BE SET WITH POWDER-ACTUATED FASTENERS INSTEAD OF POSTINSTALLED EXPANSION ANCHORS IF SO INDICATED AND APPROVED ON SHOP DRAWINGS.
3. METAL-STUD PARTITIONS: SOLIDLY PACK MINERAL-FIBER INSULATION BEHIND FRAMES.
4. MASONRY WALLS: COORDINATE INSTALLATION OF FRAMES TO ALLOW FOR SOLIDLY FILLING SPACE BETWEEN FRAMES AND MASONRY WITH GROUT.
5. IN-PLACE CONCRETE OR MASONRY CONSTRUCTION: SECURE FRAMES IN PLACE WITH POSTINSTALLED EXPANSION ANCHORS. COUNTERSINK ANCHORS, AND FILL AND MAKE SMOOTH, FLUSH, AND INVISIBLE ON EXPOSED FACES.
6. IN-PLACE GYPSUM BOARD PARTITIONS: SECURE FRAMES IN PLACE WITH POSTINSTALLED EXPANSION ANCHORS THROUGH FLOOR ANCHORS AT EACH JAMB. COUNTERSINK ANCHORS, AND FILL AND MAKE SMOOTH, FLUSH, AND INVISIBLE ON EXPOSED FACES.
7. INSTALLATION TOLERANCES: ADJUST HOLLOW METAL DOOR FRAMES FOR SQUARENESS, ALIGNMENT, TWIST, AND PLUMB TO THE FOLLOWING TOLERANCES:
- a. SQUARENESS: PLUS OR MINUS 1/16 INCH (1.6 MM), MEASURED AT DOOR RABBIT ON A LINE 90 DEGREES FROM JAMB PERPENDICULAR TO FRAME HEAD.
- b. ALIGNMENT: PLUS OR MINUS 1/16 INCH (1.6 MM), MEASURED AT JAMBS ON A HORIZONTAL LINE PARALLEL TO PLANE OF WALL.
- c. TWIST: PLUS OR MINUS 1/16 INCH (1.6 MM), MEASURED AT OPPOSITE FACE CORNERS OF JAMBS ON PARALLEL LINES, AND PERPENDICULAR TO PLANE OF WALL.
- d. PLUMBNESS: PLUS OR MINUS 1/16 INCH (1.6 MM), MEASURED AT JAMBS AT FLOOR.
- B. HOLLOW METAL DOORS: FIT HOLLOW METAL DOORS ACCURATELY IN FRAMES, WITHIN CLEARANCES SPECIFIED BELOW. SHIM AS NECESSARY.
1. NON-FIRE-RATED STANDARD STEEL DOORS:
- a. JAMBS AND HEAD: 1/8 INCH (3 MM) PLUS OR MINUS 1/16 INCH (1.6 MM).
- b. BETWEEN EDGES OF PAIRS OF DOORS: 1/8 INCH (3 MM) PLUS OR MINUS 1/16 INCH (1.6 MM).
- c. BETWEEN BOTTOM OF DOOR AND TOP OF THRESHOLD: MAXIMUM 3/8 INCH (9.5 MM).
- d. BETWEEN BOTTOM OF DOOR AND TOP OF FINISH FLOOR (NO THRESHOLD): MAXIMUM 3/4 INCH (19 MM).

3.2 ADJUSTING AND CLEANING

- A. FINAL ADJUSTMENTS: CHECK AND READJUST OPERATING HARDWARE ITEMS IMMEDIATELY BEFORE FINAL INSPECTION. LEAVE WORK IN COMPLETE AND PROPER OPERATING CONDITION. REMOVE AND REPLACE DEFECTIVE WORK, INCLUDING HOLLOW METAL WORK THAT IS WARPED, BOWED, OR OTHERWISE UNACCEPTABLE.
- B. PRIME-COAT TOUCHUP: IMMEDIATELY AFTER ERECTION, SAND SMOOTH RUSTED OR DAMAGED AREAS OF PRIME COAT AND APPLY TOUCHUP OF COMPATIBLE AIR-DRYING, RUST-INHIBITIVE PRIMER.
- METALLIC-COATED SURFACES: CLEAN ABRADED AREAS AND REPAIR WITH GALVANIZING REP.

SECTION 081416 - FLUSH WOOD DOORS

PART 1 - GENERAL



PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
- EGGERS INDUSTRIES.
  - MARSHFIELD DOOR SYSTEMS, INC.
  - MOHAWK FLUSH DOORS, INC.; A MASONITE COMPANY.

- 2.2 DOOR CONSTRUCTION, GENERAL
- A. LOW-EMITTING MATERIALS: PROVIDE DOORS MADE WITH ADHESIVES AND COMPOSITE WOOD PRODUCTS THAT DO NOT CONTAIN UREA FORMALDEHYDE.
- B. WDMA I.S.1-A PERFORMANCE GRADE:
- HEAVY DUTY UNLESS OTHERWISE INDICATED.
- C. PARTICLEBOARD-CORE DOORS:
- PARTICLEBOARD: ANSI A208.1, [GRADE LD-1] [OR] [GRADE LD-2] [, MADE WITH BINDER CONTAINING NO UREA-FORMALDEHYDE RESIN].
  - BLOCKING: PROVIDE WOOD BLOCKING IN PARTICLEBOARD-CORE DOORS AS NEEDED TO ELIMINATE THROUGH-BOLTING HARDWARE.
- D. STRUCTURAL-COMPOSITE-LUMBER-CORE DOORS:
- STRUCTURAL COMPOSITE LUMBER: WDMA I.S.10.
    - SCREW WITHDRAWAL, FACE: 700 LBF (3100 N).
    - SCREW WITHDRAWAL, EDGE: 400 LBF (1780 N).
- 2.3 PLASTIC-LAMINATE-FACED DOORS
- A. INTERIOR SOLID-CORE DOORS
- GRADE: CUSTOM
  - PLASTIC-LAMINATE FACES: HIGH-PRESSURE DECORATIVE LAMINATES COMPLYING WITH NEMA LD 3, GRADE HGS.
  - COLORS, PATTERNS, AND FINISHES: AS INDICATED ON THE DÉCOR DRAWINGS.
  - EXPPOSED VERTICAL EDGES: PLASTIC LAMINATE THAT MATCHES FACES.
  - CORE: PARTICLEBOARD.
  - CONSTRUCTION: THREE PLYS. STILES AND RAILS ARE BONDED TO CORE, THEN ENTIRE UNIT ABRASIVE PLANED BEFORE FACES ARE APPLIED.

2.4 FABRICATION

- A. FACTORY FIT DOORS TO SUIT FRAME-OPENING SIZES INDICATED. COMPLY WITH CLEARANCE REQUIREMENTS OF REFERENCED QUALITY STANDARD FOR FITTING UNLESS OTHERWISE INDICATED.
- B. FACTORY MACHINE DOORS FOR HARDWARE THAT IS NOT SURFACE APPLIED.
- C. OPENINGS: CUT AND TRIM OPENINGS THROUGH DOORS IN FACTORY.
- LIGHT OPENINGS: TRIM OPENINGS WITH MOLDINGS OF MATERIAL AND PROFILE INDICATED.
  - GLAZING: FACTORY INSTALL GLAZING IN DOORS INDICATED TO BE FACTORY FINISHED. COMPLY WITH APPLICABLE REQUIREMENTS IN DIVISION 08 SECTION "GLAZING."
  - LOUVERS: FACTORY INSTALL LOUVERS IN PREPARED OPENINGS.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. HARDWARE: FOR INSTALLATION, SEE DIVISION 08 SECTION "DOOR HARDWARE."
- B. INSTALLATION INSTRUCTIONS: INSTALL DOORS TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND THE REFERENCED QUALITY STANDARD, AND AS INDICATED.
- C. JOB-FITTED DOORS: ALIGN AND FIT DOORS IN FRAMES WITH UNIFORM CLEARANCES AND BEVELS; DO NOT TRIM STILES AND RAILS IN EXCESS OF LIMITS SET BY MANUFACTURER OR PERMITTED FOR FIRE-RATED DOORS. MACHINE DOORS FOR HARDWARE: SEAL EDGES OF DOORS, EDGES OF CUTOUTS, AND MORTISES AFTER FITTING AND MACHINING.
- CLEARANCES: PROVIDE 1/8 INCH (3.2 MM) AT HEADS, JAMBS, AND BETWEEN PAIRS OF DOORS. PROVIDE 1/8 INCH (3.2 MM) FROM BOTTOM OF DOOR TO TOP OF DECORATIVE FLOOR FINISH OR COVERING UNLESS OTHERWISE INDICATED. WHERE THRESHOLD IS SHOWN OR SCHEDULED, PROVIDE 1/4 INCH (6.4 MM) FROM BOTTOM OF DOOR TO TOP OF THRESHOLD UNLESS OTHERWISE INDICATED.

SECTION 083113 - ACCESS DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES ACCESS DOORS AND FRAMES FOR CEILINGS.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF ACCESS DOOR AND FRAME INDICATED.
- B. SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.

1.3 QUALITY ASSURANCE

- A. SIZE AND LOCATION VERIFICATION: DETERMINE SPECIFIC LOCATIONS AND SIZES FOR ACCESS DOORS NEEDED TO GAIN ACCESS TO CONCEALED EQUIPMENT, AND INDICATE ON THE DRAWINGS.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. STEEL PLATES, SHAPES, AND BARS: ASTM A 36.
- HOT-DIP GALVANIZED STEEL: COAT TO COMPLY WITH ASTM A 123 FOR STEEL AND IRON PRODUCTS AND ASTM A 153 FOR STEEL AND IRON HARDWARE.
- B. STEEL SHEET:
- ELECTROLYTIC ZINC-COATED: ASTM A 591 COMMERCIAL STEEL (CS) WITH CLASS C COATING AND PHOSPHATE TREATMENT TO PREPARE SURFACE FOR PAINTING.
  - DRYWALL BEARDS: EDGE TRIM FORMED FROM 0.0299-INCH (0.76-MM) ZINC-COATED STEEL SHEET FORMED TO RECEIVE JOINT COMPOUND AND IN SIZE TO SUIT THICKNESS OF GYPSUM WALL AND/OR CEILING PANELS INDICATED.

2.2 ACCESS DOORS AND FRAMES

- A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
- LARSEN'S MANUFACTURING COMPANY.
  - FLUSH ACCESS DOORS AND TRIMLESS FRAMES:
1. MATERIAL: PRIME-PAINTED STEEL SHEET.
- SURFACE TYPE: GYPSUM BOARD.
  - LOCATIONS: WALLS AS INDICATED.
  - DOOR: MINIMUM 0.060-INCH THICK SHEET METAL SET FLUSH WITH SURROUNDING FINISH SURFACES TO RECEIVE GYPSUM BOARD FACE.
  - FRAME: MINIMUM 0.060-INCH THICK SHEET METAL WITH BEAD FOR TYPE OF SURFACE INDICATED.
  - HINGES: CONTINUOUS PIANO HINGE.
  - LATCH: SCREWDRIVER-OPERATED CAM LATCH.
  - LOCK: KEY-OPERATED CYLINDER LOCK.

2.3 FABRICATION

- A. LATCHING MECHANISMS: FURNISH NUMBER REQUIRED TO HOLD DOORS IN FLUSH, SMOOTH PLANE WHEN CLOSED.
- FOR RECESSED PANEL DOORS, PROVIDE ACCESS SLEEVES FOR EACH LOCKING DEVICE. FURNISH PLASTIC GROMMETS AND INSTALL IN HOLES CUT THROUGH FINISH.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. ADVISE INSTALLERS OF OTHER WORK ABOUT SPECIFIC REQUIREMENTS RELATING TO ACCESS DOOR AND FLOOR DOOR INSTALLATION, INCLUDING SIZES OF OPENINGS TO RECEIVE ACCESS DOOR AND FRAME, AS WELL AS LOCATIONS OF SUPPORTS, INSERTS, AND ANCHORING DEVICES.
- B. SET FRAMES ACCURATELY IN POSITION AND ATTACH SECURELY TO SUPPORTS WITH PLANE OF FACE PANELS ALIGNED WITH ADJACENT FINISH SURFACES.
- C. INSTALL ACCESS DOORS WITH TRIMLESS FRAMES FLUSH WITH ADJACENT FINISH SURFACES OR RECESSED TO RECEIVE FINISH MATERIAL.
- D. ADJUST DOORS AND HARDWARE AFTER INSTALLATION FOR PROPER OPERATION.

SECTION 084113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 SUMMARY

- A. SECTION INCLUDES:
- EXTERIOR AND INTERIOR STOREFRONT FRAMING.

1.2 PERFORMANCE REQUIREMENTS

- A. GENERAL PERFORMANCE: ALUMINUM-FRAMED SYSTEMS SHALL WITHSTAND THE EFFECTS OF THE FOLLOWING PERFORMANCE REQUIREMENTS WITHOUT EXCEEDING PERFORMANCE CRITERIA OR FAILURE DUE TO DEFECTIVE MANUFACTURE, FABRICATION, INSTALLATION, OR OTHER DEFECTS IN CONSTRUCTION:
- MOVEMENTS OF SUPPORTING STRUCTURE INDICATED ON DRAWINGS INCLUDING, BUT NOT LIMITED TO, STORY DRIFT AND DEFLECTION FROM UNIFORMLY DISTRIBUTED AND CONCENTRATED LIVE LOADS.
  - DIMENSIONAL TOLERANCES OF BUILDING FRAME AND OTHER ADJACENT CONSTRUCTION.
  - FAILURE INCLUDES THE FOLLOWING:
    - DEFLECTION EXCEEDING SPECIFIED LIMITS.
    - THERMAL STRESSES TRANSFERRING TO BUILDING STRUCTURE.
    - FRAMING MEMBERS TRANSFERRING STRESSES, INCLUDING THOSE CAUSED BY THERMAL AND STRUCTURAL MOVEMENTS TO GLAZING.
    - NOISE OR VIBRATION CREATED BY WIND AND BY THERMAL AND STRUCTURAL MOVEMENTS.
    - LOOSENING OR WEAKENING OF FASTENERS, ATTACHMENTS, AND OTHER COMPONENTS.
    - FAILURE OF OPERATING UNITS.
- B. WIND LOADS: AS INDICATED ON DRAWINGS.

1.3 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. SHOP DRAWINGS: FOR ALUMINUM-FRAMED SYSTEMS. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.
- INCLUDE DETAILS OF PROVISIONS FOR SYSTEM EXPANSION AND CONTRACTION AND FOR DRAINAGE OF MOISTURE IN THE SYSTEM TO THE EXTERIOR.
- C. SAMPLES: FOR EACH TYPE OF EXPOSED FINISH REQUIRED.

1.4 QUALITY ASSURANCE

- A. INSTALLER QUALIFICATIONS: MANUFACTURER'S AUTHORIZED REPRESENTATIVE WHO IS TRAINED AND APPROVED FOR INSTALLATION OF UNITS REQUIRED FOR THIS PROJECT.
- B. ENGINEERING RESPONSIBILITY: PREPARE DATA FOR ALUMINUM-FRAMED SYSTEMS, INCLUDING SHOP DRAWINGS, BASED ON TESTING AND ENGINEERING ANALYSIS OF MANUFACTURER'S STANDARD UNITS IN SYSTEMS SIMILAR TO THOSE INDICATED FOR THIS PROJECT.
- C. PRODUCT OPTIONS: INFORMATION ON DRAWINGS AND IN SPECIFICATIONS ESTABLISHES REQUIREMENTS FOR SYSTEMS' AESTHETIC EFFECTS AND PERFORMANCE CHARACTERISTICS. AESTHETIC EFFECTS ARE INDICATED BY DIMENSIONS, ARRANGEMENTS, ALIGNMENT, AND PROFILES OF COMPONENTS AND ASSEMBLIES AS THEY RELATE TO SIGHTLINES, TO ONE ANOTHER, AND TO ADJOINING CONSTRUCTION. PERFORMANCE CHARACTERISTICS ARE INDICATED BY CRITERIA SUBJECT TO VERIFICATION BY ONE OR MORE METHODS INCLUDING PRECONSTRUCTION TESTING, FIELD TESTING, AND IN-SERVICE PERFORMANCE.
- D. ACCESSIBLE ENTRANCES: COMPLY WITH APPLICABLE PROVISIONS IN THE U.S. ARCHITECTURAL & TRANSPORTATION BARRIERS COMPLIANCE BOARD'S ADA-ABA ACCESSIBILITY GUIDELINES AND ICC/ANSI A117.1.
- E. SOURCE LIMITATIONS FOR ALUMINUM-FRAMED SYSTEMS: OBTAIN FROM SINGLE SOURCE FROM SINGLE MANUFACTURER.
- F. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT A DATE AND TIME TO BE ESTABLISHED.

1.5 WARRANTY

- A. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF ALUMINUM-FRAMED SYSTEMS THAT DO NOT COMPLY WITH REQUIREMENTS OR THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. BASIS-OF-DESIGN PRODUCT: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCT INDICATED ON DRAWINGS.
- YKK AP AMERICA INC.

2.2 MATERIALS

- A. ALUMINUM: ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER FOR TYPE OF USE AND FINISH INDICATED.
- SHEET AND PLATE: ASTM B 209.
  - EXTRUDED BARS, RODS, PROFILES, AND TUBES: ASTM B 221
  - EXTRUDED STRUCTURAL PIPE AND TUBES: ASTM B 429.
  - STRUCTURAL PROFILES: ASTM B 308/B 308M.
  - WELDING RODS AND BARE ELECTRODES: AWS A5.10/A5.10M.
- B. STEEL REINFORCEMENT: MANUFACTURER'S STANDARD ZINC-RICH, CORROSION-RESISTANT PRIMER, COMPLYING WITH SSPC-PS GUIDE NO. 12.00; APPLIED IMMEDIATELY AFTER SURFACE PREPARATION AND PRETREATMENT. SELECT SURFACE PREPARATION METHODS ACCORDING TO RECOMMENDATIONS IN SSPC-SP COM AND PREPARE SURFACES ACCORDING TO APPLICABLE SSPC STANDARD.
- STRUCTURAL SHAPES, PLATES, AND BARS: ASTM A 36/A 36M.
  - COLD-ROLLED SHEET AND STRIP: ASTM A 1008/A 1008M.
  - HOT-ROLLED SHEET AND STRIP: ASTM A 1011/A 1011M.

2.3 FRAMING SYSTEMS

- A. FRAMING MEMBERS: MANUFACTURER'S STANDARD EXTRUDED-ALUMINUM FRAMING MEMBERS OF THICKNESS REQUIRED AND REINFORCED AS REQUIRED TO SUPPORT IMPOSED LOADS.
- CONSTRUCTION: THERMALLY BROKEN.
  - GLAZING SYSTEM: RETAINED MECHANICALLY WITH GASKETS ON FOUR SIDES.
  - GLAZING PLANE: AS INDICATED.
- B. BRACKETS AND REINFORCEMENTS: MANUFACTURER'S STANDARD HIGH-STRENGTH ALUMINUM WITH NONSTAINING, NONFERROUS SHIMS FOR ALIGNING SYSTEM COMPONENTS.
- C. FASTENERS AND ACCESSORIES: MANUFACTURER'S STANDARD CORROSION-RESISTANT, NONSTAINING, NONBLEEDING FASTENERS AND ACCESSORIES COMPATIBLE WITH ADJACENT MATERIALS.
- USE SELF-LOCKING DEVICES WHERE FASTENERS ARE SUBJECT TO LOOSENING OR TURNING OUT FROM THERMAL AND STRUCTURAL MOVEMENTS, WIND LOADS, OR VIBRATION.
  - REINFORCE MEMBERS AS REQUIRED TO RECEIVE FASTENER THREADS.
- D. CONCEALED FLASHING: MANUFACTURER'S STANDARD CORROSION-RESISTANT, NONSTAINING, NONBLEEDING FLASHING COMPATIBLE WITH ADJACENT MATERIALS.
- E. FRAMING SYSTEM GASKETS AND SEALANTS: MANUFACTURER'S STANDARD, RECOMMENDED BY MANUFACTURER FOR JOINT TYPE.
- PROVIDE SEALANTS FOR USE INSIDE OF THE WEATHERPROOFING SYSTEM THAT HAVE A VOC CONTENT OF 250 g/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

2.4 GLAZING SYSTEMS

- A. GLAZING: AS SPECIFIED IN DIVISION 08 SECTION "GLAZING."
- B. GLAZING GASKETS: MANUFACTURER'S STANDARD COMPRESSION TYPES; REPLACEABLE, WOLDED OR EXTRUDED, OF PROFILE AND HARDNESS REQUIRED TO MAINTAIN WATERTIGHT SEAL.
- C. SPACERS AND SETTING BLOCKS: MANUFACTURER'S STANDARD ELASTOMERIC TYPE.

2.5 ENTRANCE DOOR SYSTEMS

- A. ENTRANCE DOORS: MANUFACTURER'S STANDARD GLAZED ENTRANCE DOORS FOR MANUAL-SWING OPERATION.
- DOOR CONSTRUCTION: 1-3/4-INCH (44.5-MM) OVERALL THICKNESS, WITH MINIMUM 0.125-INCH- (3.2-MM-) THICK, EXTRUDED-ALUMINUM TUBULAR RAIL AND STILE MEMBERS. MECHANICALLY FASTEN CORNERS WITH REINFORCING BRACKETS THAT ARE FULLY PENETRATED AND FILLET WELDED OR THAT INCORPORATE CONCEALED TIE RODS.
    - THERMAL CONSTRUCTION: HIGH-PERFORMANCE PLASTIC CONNECTORS SEPARATE ALUMINUM MEMBERS EXPOSED TO THE EXTERIOR FROM MEMBERS EXPOSED TO THE INTERIOR.
  - DOOR DESIGN: AS INDICATED.
    - ACCESSIBLE DOORS: SMOOTH SURFACED FOR WIDTH OF DOOR IN AREA WITHIN 10 INCHES (255 MM) ABOVE FLOOR OR GROUND PLANE.
  - GLAZING STOPS AND GASKETS: MANUFACTURER STANDARD, SNAP-ON, EXTRUDED-ALUMINUM STOPS AND PREFORMED GASKETS.
    - PROVIDE NONREMOVABLE GLAZING STOPS ON OUTSIDE OF DOOR.
- B. ENTRANCE DOOR HARDWARE: AS SPECIFIED AND ON THE DRAWINGS AS INDICATED.

2.6 ENTRANCE DOOR HARDWARE

- A. GENERAL: PROVIDE ENTRANCE DOOR HARDWARE AND ENTRANCE DOOR HARDWARE SETS INDICATED IN DOOR AND FRAME SCHEDULE FOR EACH ENTRANCE DOOR TO COMPLY WITH REQUIREMENTS IN THIS SECTION.
- ENTRANCE DOOR HARDWARE SETS: PROVIDE QUANTITY, ITEM, SIZE, FINISH OR COLOR INDICATED.
  - OPENING-FORCE REQUIREMENTS:
    - EGRESS DOORS: NOT MORE THAN 15 LBF (67N) TO RELEASE THE LATCH AND NOT MORE THAN 30 LBF (133N) TO SET THE DOOR IN MOTION AND NOT MORE THAN 15 LBF (67N) TO OPEN THE DOOR TO ITS MINIMUM REQUIRED WIDTH.
    - ACCESSIBLE INTERIOR DOORS: NOT MORE THAN 5 LBF (22.2 N) TO FULLY OPEN DOOR.
  - LATCHES AND EXIT DEVICES: NOT MORE THAN 15 LBF (67 N) REQUIRED TO RELEASE LATCH.
- B. BUTT HINGES: BHMA A156.1, GRADE 1, RADIUS CORNER.
- NONREMOVABLE PINS: PROVIDE SET SCREW IN HINGE BARREL THAT, WHEN TIGHTENED INTO A GROOVE IN HINGE PIN, PREVENTS REMOVAL OF PIN WHILE ENTRANCE DOOR IS CLOSED.
  - EXTERIOR HINGES: AS INDICATED ON THE DRAWING.
  - QUANTITIES:
    - FOR DOORS UP TO 87 INCHES (2210 MM) HIGH, PROVIDE 3 HINGES PER LEAF.
- C. PANIC EXIT DEVICES: BHMA A156.3, GRADE 1, LISTED AND LABELED BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, FOR PANIC PROTECTION, BASED ON TESTING ACCORDING TO UL 305, AND AS INDICATED ON THE DRAWING.
- D. CYLINDERS: BHMA A156.5, GRADE 1.
- KEYING: MASTER KEY SYSTEM. PERMANENTLY INSCRIBE EACH KEY WITH A VISUAL KEY CONTROL NUMBER AND INCLUDE NOTATION "DO NOT DUPLICATE".
  - STRIKES: PROVIDE STRIKE WITH BLACK-PLASTIC DUST BOX FOR EACH LATCH OR LOCK BOLT; FABRICATED FOR ALUMINUM FRAMING.
- F. OPERATING TRIM: BHMA A156.6.
- G. CLOSERS: BHMA A156.4, GRADE 1, WITH ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION, SIZED AS REQUIRED BY DOOR SIZE, EXPOSURE TO WEATHER, AND ANTICIPATED FREQUENCY OF USE; ADJUSTABLE TO MEET FIELD CONDITIONS AND REQUIREMENTS FOR OPENING FORCE.
- H. DOOR STOPS: BHMA A156.16, GRADE 1, FLOOR OR WALL MOUNTED, AS APPROPRIATE FOR DOOR LOCATION INDICATED, WITH INTEGRAL RUBBER BUMPER.
- I. WEATHER STRIPPING: MANUFACTURER'S STANDARD REPLACEABLE COMPONENTS.
- J. WEATHER SWEEPS: MANUFACTURER'S STANDARD EXTERIOR-DOOR BOTTOM SWEEP WITH CONCEALED FASTENERS ON MOUNTING STRIP.
- K. SILENCERS: BHMA A156.16, GRADE 1.
- L. THRESHOLDS: BHMA A156.21, RAISED THRESHOLDS BEVELED WITH A SLOPE OF NOT MORE THAN 1:2, WITH MAXIMUM HEIGHT OF 1/2 INCH (13 MM).

2.7 ACCESSORY MATERIALS

- A. BITUMINOUS PAINT: COLD-APPLIED, ASPHALT-MASTIC PAINT COMPLYING WITH SSPC-PAINT 12 REQUIREMENTS EXCEPT CONTAINING NO ASBESTOS; FORMULATED FOR 30-MIL (0.762-MM) THICKNESS PER COAT.

2.8 FABRICATION

- A. FORM OR EXTRUDE ALUMINUM SHAPES BEFORE FINISHING.
- B. WELD IN CONCEALED LOCATIONS TO GREATEST EXTENT POSSIBLE TO MINIMIZE DISTORTION OR DISCOLORATION OF FINISH. REMOVE WELD SPATTER AND WELDING OXIDES FROM EXPOSED SURFACES BY DESCALING OR GRINDING.
- C. FRAMING MEMBERS, GENERAL: FABRICATE COMPONENTS THAT, WHEN ASSEMBLED, HAVE THE FOLLOWING CHARACTERISTICS:
- PROFILES THAT ARE SHARP, STRAIGHT, AND FREE OF DEFECTS OR DEFORMATIONS.
  - ACCURATELY FITTED JOINTS WITH ENDS COPED OR MITERED.
  - MEANS TO DRAIN WATER PASSING JOINTS, CONDENSATION WITHIN FRAMING MEMBERS, AND MOISTURE MIGRATING WITHIN THE SYSTEM TO EXTERIOR.
  - PHYSICAL AND THERMAL ISOLATION OF GLAZING FROM FRAMING MEMBERS.
  - ACCOMMODATIONS FOR THERMAL AND MECHANICAL MOVEMENTS OF GLAZING AND FRAMING TO MAINTAIN REQUIRED GLAZING EDGE CLEARANCES.
  - PROVISIONS FOR FIELD REPLACEMENT OF GLAZING FROM EXTERIOR.
  - FASTENERS, ANCHORS, AND CONNECTION DEVICES THAT ARE CONCEALED FROM VIEW TO GREATEST EXTENT POSSIBLE.
- D. MECHANICALLY GLAZED FRAMING MEMBERS: FABRICATE FOR FLUSH GLAZING WITHOUT PROJECTING STOPS.
- E. ENTRANCE DOOR FRAMES: REINFORCE AS REQUIRED TO SUPPORT LOADS IMPOSED BY DOOR OPERATION AND FOR INSTALLING ENTRANCE DOOR HARDWARE.
- F. ENTRANCE DOORS: REINFORCE DOORS AS REQUIRED FOR INSTALLING ENTRANCE DOOR HARDWARE.

2.9 ALUMINUM FINISHES

- A. BAKED-ENAMEL OR POWDER-COAT FINISH: AAMA 2603 EXCEPT WITH A MINIMUM DRY FILM THICKNESS OF 1.5 MILS (0.04 MM).
- COLOR AND GLOSS: AS INDICATED BY MANUFACTURER'S DESIGNATIONS.
- B. HIGH-PERFORMANCE ORGANIC FINISH: 3 OR 4 COAT FLUOROPOLYMER FINISH COMPLYING WITH AAMA 2605 AND CONTAINING NOT LESS THAN 70 PERCENT PVDF RESIN BY WEIGHT IN BOTH COLOR COAT AND CLEAR TOPCOAT.
- COLOR AND GLOSS: AS INDICATED ON THE DRAWINGS.
- PART 3 - EXECUTION
- 3.1 INSTALLATION
- A. GENERAL:
- COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
  - DO NOT INSTALL DAMAGED COMPONENTS.
  - FIT JOINTS TO PRODUCE HAIRLINE JOINTS FREE OF BURRS AND DISTORTION.
  - RIGIDLY SECURE NONMOVEMENT JOINTS.
  - INSTALL ANCHORS WITH SEPARATORS AND ISOLATORS TO PREVENT METAL CORROSION AND ELECTROLYTIC DETERIORATION.
  - SEAL JOINTS WATERTIGHT UNLESS OTHERWISE INDICATED.
- B. METAL PROTECTION:
- WHERE ALUMINUM WILL CONTACT DISSIMILAR METALS, PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH PRIMER OR APPLYING SEALANT OR TAPE, OR BY INSTALLING NONCONDUCTIVE SPACERS AS RECOMMENDED BY MANUFACTURER FOR THIS PURPOSE.
  - WHERE ALUMINUM WILL CONTACT CONCRETE OR MASONRY, PROTECT AGAINST CORROSION BY PAINTING CONTACT SURFACES WITH BITUMINOUS PAINT.

- C. INSTALL COMPONENTS TO DRAIN WATER PASSING JOINTS, CONDENSATION OCCURRING WITHIN FRAMING MEMBERS, AND MOISTURE MIGRATING WITHIN THE SYSTEM TO EXTERIOR.
- D. SET CONTINUOUS SILL MEMBERS AND FLASHING IN FULL SEALANT BED AS SPECIFIED IN DIVISION 07 SECTION "JOINT SEALANTS" TO PRODUCE WEATHERTIGHT INSTALLATION.
- E. INSTALL COMPONENTS PLUMB AND TRUE IN ALIGNMENT WITH ESTABLISHED LINES AND GRADES, AND WITHOUT WARP OR RACK.
- F. INSTALL GLAZING AS SPECIFIED IN DIVISION 08 SECTION "GLAZING."
- G. ENTRANCE DOORS: INSTALL DOORS TO PRODUCE SMOOTH OPERATION AND TIGHT FIT AT CONTACT POINTS.
- EXTERIOR DOORS: INSTALL TO PRODUCE WEATHERTIGHT ENCLOSURE AND TIGHT FIT AT WEATHER STRIPPING.
  - FIELD-INSTALLED ENTRANCE DOOR HARDWARE: INSTALL SURFACE-MOUNTED ENTRANCE DOOR HARDWARE ACCORDING TO ENTRANCE DOOR HARDWARE MANUFACTURERS' WRITTEN INSTRUCTIONS USING CONCEALED FASTENERS TO GREATEST EXTENT POSSIBLE.
- 3.2 FIELD QUALITY CONTROL

- A. REPAIR OR REMOVE WORK IF TEST RESULTS AND INSPECTIONS INDICATE THAT IT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS.
- B. ALUMINUM-FRAMED ASSEMBLIES WILL BE CONSIDERED DEFECTIVE IF THEY DO NOT PASS TESTS AND INSPECTIONS.
- SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES THE FOLLOWING:
- COMMERCIAL DOOR HARDWARE.
  - CYLINDERS FOR DOORS SPECIFIED IN OTHER SECTIONS.
- B. SEE DIVISION 08 DOOR SECTIONS FOR DOOR SILENCERS.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. SAMPLES: FOR EACH EXPOSED FINISH.
- C. OTHER ACTION SUBMITTALS:
- DOOR HARDWARE SETS: PREPARED BY OR UNDER THE SUPERVISION OF INSTALLER, DETAILING FABRICATION AND ASSEMBLY OF DOOR HARDWARE, AS WELL AS PROCEDURES AND DIAGRAMS.
    - FORMAT: USE SAME SCHEDULING SEQUENCE AND FORMAT AND USE SAME DOOR NUMBERS AS IN THE CONTRACT DOCUMENTS.
    - CONTENT: INCLUDE THE FOLLOWING INFORMATION:
      - IDENTIFICATION NUMBER, LOCATION, HAND, FIRE RATING, AND MATERIAL OF EACH DOOR AND FRAME.
      - TYPE, STYLE, FUNCTION, SIZE, QUANTITY, AND FINISH OF EACH DOOR HARDWARE ITEM. INCLUDE DESCRIPTION AND FUNCTION OF EACH LOCKSET AND EXIT DEVICE.
      - COMPLETE DESIGNATIONS OF EVERY ITEM REQUIRED FOR EACH DOOR OR OPENING INCLUDING NAME AND MANUFACTURER.
  - KEYING SCHEDULE: PREPARED BY OR UNDER THE SUPERVISION OF INSTALLER, DETAILING OWNER'S FINAL KEYING INSTRUCTIONS FOR LOCKS.

1.3 QUALITY ASSURANCE

- A. INSTALLER QUALIFICATIONS: AN EMPLOYER OF WORKERS TRAINED AND APPROVED BY LOCK MANUFACTURER.
- INSTALLER'S RESPONSIBILITIES INCLUDE SUPPLYING AND INSTALLING DOOR HARDWARE AND PROVIDING A QUALIFIED ARCHITECTURAL HARDWARE CONSULTANT AVAILABLE DURING THE COURSE OF THE WORK TO CONSULT WITH CONTRACTOR, ARCHITECT, AND OWNER ABOUT DOOR HARDWARE AND KEYING.
- B. ARCHITECTURAL HARDWARE CONSULTANT QUALIFICATIONS: A PERSON WHO IS CURRENTLY CERTIFIED BY DHI AS AN ARCHITECTURAL HARDWARE CONSULTANT AND WHO IS EXPERIENCED IN PROVIDING CONSULTING SERVICES FOR DOOR HARDWARE INSTALLATIONS THAT ARE COMPARABLE IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR THIS PROJECT.
- C. KEYING CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE TO COMPLY WITH REQUIREMENTS IN DIVISION 01 SECTION "PROJECT MANAGEMENT AND COORDINATION." INCORPORATE KEYING CONFERENCE DECISIONS INTO FINAL KEYING SCHEDULE AFTER REVIEWING DOOR HARDWARE KEYING SYSTEM.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. DELIVER KEYS TO MANUFACTURER OF KEY CONTROL SYSTEM FOR SUBSEQUENT DELIVERY TO OWNER.
- B. DELIVER KEYS AND PERMANENT CORES TO OWNER BY REGISTERED MAIL OR OVERNIGHT PACKAGE SERVICE.

1.5 COORDINATION

- A. TEMPLATES: DISTRIBUTE DOOR HARDWARE TEMPLATES FOR DOORS, FRAMES, AND OTHER WORK SPECIFIED TO BE FACTORY PREPARED FOR INSTALLING DOOR HARDWARE. CHECK SHOP DRAWINGS OF OTHER WORK TO CONFIRM THAT ADEQUATE PROVISIONS ARE MADE FOR LOCATING AND INSTALLING DOOR HARDWARE TO COMPLY WITH INDICATED REQUIREMENTS.

1.6 WARRANTY

- A. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF DOOR HARDWARE THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.
- WARRANTY PERIOD: THREE YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. GENERAL: PROVIDE DOOR HARDWARE FOR EACH DOOR TO COMPLY WITH REQUIREMENTS IN THIS SECTION, DOOR HARDWARE SETS INDICATED IN DOOR SCHEDULE ON THE DRAWINGS, AND THE DOOR HARDWARE SCHEDULE AT THE END OF PART 3.
- DOOR HARDWARE SETS: PROVIDE QUANTITY, ITEM, SIZE, FINISH AND COLOR INDICATED AND NAMED MANUFACTURERS' PRODUCTS.

2.2 HINGES AND PIVOTS

- A. GENERAL: FULL MORTISE, RADIUS CORNERS, FIVE (5) KNUCKLE BALL BEARING, HEAVYWEIGHT, 4-1/2 BY 4-1/2 INCHES, BUTTON TIP 6 PIN. EXCEPT FOR HINGES TO BE INSTALLED ENTIRELY (BOTH LEAVES) INTO WOOD DOORS AND FRAMES, PROVIDE ONLY TEMPLATE-PRODUCED UNITS.
- B. HINGE BASE METAL: AS INDICATED IN DOOR HARDWARE SCHEDULE AT THE END OF PART 3, OR IF NOT INDICATED, PROVIDE THE FOLLOWING:
- EXTERIOR HINGES: STAINLESS STEEL, WITH STAINLESS-STEEL PIN.
  - INTERIOR HINGES: STEEL, WITH STEEL PIN STAINLESS STEEL, WITH STAINLESS-STEEL PIN.
- C. NONREMOVABLE PINS: PROVIDE SET SCREW IN HINGE BARREL THAT PREVENTS REMOVAL OF PIN WHILE DOOR IS CLOSED; FOR OUTSWINGING EXTERIOR DOORS.
- D. SCREWS: PHILLIPS FLAT-HEAT SCREWS; SCREW HEADS FINISHED TO MATCH SURFACE OF HINGES.
- METAL DOORS AND FRAMES: MACHINE SCREWS (DRILLED AND TAPPED HOLES).
  - WOOD DOORS AND FRAMES: WOOD SCREWS.

2.3 MECHANICAL LOCKS AND LATCHES

- A. LOCKSET DESIGN: AS SCHEDULED.
- B. DUMMY TRIM: MATCH LEVER LOCK TRIM AND ESCUTCHEONS.
- C. LOCK THROW: COMPLY WITH LABELED FIRE DOOR REQUIREMENTS.
- D. BACKSET: 2-3/4", UNLESS OTHERWISE INDICATED.

- 2.4 EXIT DEVICES
- A. PANIC EXIT DEVICES: LISTED AND LABELED FOR PANIC PROTECTION, BASED ON TESTING ACCORDING TO UL 305.
- B. FIRE EXIT DEVICES: COMPLYING WITH NFPA 80 THAT ARE LISTED AND LABELED FOR FIRE AND PANIC PROTECTION, BASED ON TESTING ACCORDING TO UL 305 AND NFPA 252.
- C. DUMMY PUSH BAR: NONFUNCTIONING PUSH BAR MATCHING FUNCTIONAL PUSH BAR.
- D. OUTSIDE TRIM: PULL WITH CYLINDER; MATERIAL, FINISH AND DESIGN TO MATCH LOCKSETS AND LATCHSETS, UNLESS OTHERWISE INDICATED.
- E. THROUGH BOLTS: FOR EXIT DEVICES AND TRIM ON METAL DOORS.

2.5 OPERATING TRIM

- A. PUSH-PULL DESIGN: AS INDICATED ON DRAWINGS.

2.6 CLOSERS

- A. SURFACE MOUNTED CLOSERS: AS INDICATED ON DRAWINGS.
- B. CLOSER HOLDER RELEASE DEVICES: BHMA A156.15.
- C. SIZE OF UNITS: FACTORY-SIZED, ADJUSTABLE TO MEET FIELD CONDITIONS AND REQUIREMENTS FOR OPENING FORCE.

2.7 PROTECTIVE TRIM UNITS

- A. SIZED 2 INCHES LESS THAN DOOR WIDTH, BEVELED 3 SIDES, BY HEIGHT SCHEDULED OR INDICATED. FASTEN WITH EXPOSED MACHINE OR SELF-TAPPING SCREWS, COUNTERSUNK, FINISH TO MATCH PLATE.
- MATERIAL: METAL.

2.8 STOPS AND HOLDERS

- A. STOPS AND HOLDERS: PROVIDE FLOOR STOPS FOR DOORS, UNLESS WALL OR OTHER TYPE STOPS ARE SCHEDULED OR INDICATED. DO NOT MOUNT FLOOR STOPS WHERE THEY WILL IMPEDE TRAFFIC. WHERE FLOOR OR WALL STOPS ARE NOT APPROPRIATE, PROVIDE OVERHEAD HOLDERS.
- B. SILENCERS FOR DOOR FRAMES: NEOPRENE OR RUBBER; FABRICATED FOR DRILLED-IN APPLICATION TO FRAME.
- 2.9 DOOR GASKETING AND THRESHOLDS
- A. DOOR GASKETING: PROVIDE CONTINUOUS POLYURETHANE WEATHER-STRIP GASKETING ON EXTERIOR DOORS AND PROVIDE SMOKE, LIGHT, OR SOUND GASKETING ON INTERIOR DOORS WHERE INDICATED OR SCHEDULED. PROVIDE NONCORROSIVE FASTENERS FOR EXTERIOR APPLICATIONS AND ELSEWHERE AS INDICATED.
- AIR LEAKAGE: NOT TO EXCEED 0.50 CFM PER FOOT OF CRACK LENGTH FOR GASKETING OTHER THAN FOR SMOKE CONTROL, AS TESTED ACCORDING TO ASTM E 283.
  - SMOKE-LABELED GASKETING: ASSEMBLIES COMPLYING WITH NFPA 105 THAT ARE LISTED AND LABELED, BASED ON TESTING ACCORDING TO UL 1784.
  - FIRE-LABELED GASKETING: ASSEMBLIES COMPLYING WITH NFPA 80 THAT ARE LISTED AND LABELED, BASED ON TESTING ACCORDING TO UL 10B OR NFPA 252.
  - SOUND-RATED GASKETING: ASSEMBLIES THAT ARE LISTED AND LABELED BASED ON TESTING ACCORDING TO ASTM E 1408.
5. GASKETING MATERIALS: COMPLY WITH ASTM D 2000 AND AAMA 701/702.
- B. THRESHOLDS: OF TYPE SCHEDULED OR INDICATED.

2.10 CYLINDERS, KEYING, AND STRIKES

- A. CYLINDERS: TUMBLER TYPE, CONSTRUCTED FROM BRASS OR BRONZE, STAINLESS STEEL, OR NICKEL SILVER.
- NUMBER OF PINS: SEVEN
  - HIGH-SECURITY GRADE: BHMA GRADE 1A, LISTED AND LABELED AS COMPLYING WITH UL 437 (SUFFIX A).
  - PERMANENT CORES: MANUFACTURER'S STANDARD; FINISH FACE TO MATCH LOCKSET; INTERCHANGEABLE CORES.
  - CONSTRUCTION CORES: PROVIDE CONSTRUCTION CORES THAT ARE REPLACEABLE BY PERMANENT CORES. PROVIDE 5 CONSTRUCTION MASTER KEYS.
    - REPLACE CONSTRUCTION CORES WITH PERMANENT CORES, AS INDICATED IN KEYING SCHEDULE AND AS DIRECTED BY OWNER.
    - FURNISH PERMANENT CORES TO OWNER FOR INSTALLATION.
- B. KEYING SYSTEM: FACTORY-REGISTERED KEYING SYSTEM; MASTER KEY SYSTEM.
- KEYS: PROVIDE NICKEL-SILVER KEYS PERMANENTLY INSCRIBED WITH A VISUAL KEY CONTROL NUMBER AND "DO NOT DUPLICATE" NOTATION. IN ADDITION TO ONE EXTRA BLANK KEY FOR EACH LOCK, PROVIDE THREE CHANGE KEYS AND FIVE MASTER KEYS.
- D. KEY CONTROL SYSTEM: INCLUDE KEY-HOLDING HOOKS, LABELS, KEY TAGS WITH SELF-LOCKING KEY HOLDERS, ENVELOPES, AND MARKERS. CONTAIN SYSTEM IN WALL-MOUNTED TYPE METAL CABINET WITH BAKED-ENAMEL FINISH. INCLUDE CROSS-INDEX SYSTEM SET UP BY KEY CONTROL MANUFACTURER, WITH CARD INDEX.
- E. STRIKES: MANUFACTURER'S STANDARD STRIKE WITH STRIKE BOX FOR EACH LATCH OR LOCK BOLT, WITH CURVED TIP EXTENDED TO PROTECT FRAME, FINISHED TO MATCH DOOR HARDWARE SET.

2.11 FABRICATION

- A. BASE METALS: FURNISH METALS OF A QUALITY EQUAL TO OR GREATER THAN THAT OF SPECIFIED DOOR HARDWARE UNITS AND BHMA A156.18 FOR FINISHES. DO NOT FURNISH MANUFACTURER'S STANDARD MATERIALS IF DIFFERENT FROM SPECIFIED STANDARD.
- B. FASTENERS: PHILLIPS FLAT-HEAT SCREWS WITH FINISHED HEADS TO MATCH SURFACE OF DOOR HARDWARE. UNLESS OTHERWISE INDICATED, PROVIDE STEEL MACHINE OR WOOD SCREWS OR SETS THROUGH BOLTS FOR FIRE-RATED APPLICATIONS.
- C. SPACERS OR SEX BOLTS: FOR THROUGH BOLTING OF HOLLOW METAL DOORS.
- D. FASTENERS FOR WOOD DOORS: COMPLY WITH REQUIREMENTS OF DHI WDHS.2, "RECOMMENDED



SECTION 092900 - GYPSUM BOARD

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES THE FOLLOWING:
1. INTERIOR GYPSUM BOARD, WALL AND CEILINGS.
  2. TILE BACKING PANELS.
  3. CEMENTITIOUS BACKER UNITS.

1.2 SUBMITTALS

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

1.3 QUALITY ASSURANCE

- A. FIRE-RESISTANCE-RATED ASSEMBLIES: FOR FIRE-RESISTANCE-RATED ASSEMBLIES, PROVIDE MATERIALS AND CONSTRUCTION IDENTICAL TO THOSE TESTED IN ASSEMBLY INDICATED ACCORDING TO ASTM E 119 BY AN INDEPENDENT TESTING AGENCY.
- B. STC-RATED ASSEMBLIES: FOR STC-RATED ASSEMBLIES, PROVIDE MATERIALS AND CONSTRUCTION IDENTICAL TO THOSE TESTED IN ASSEMBLY INDICATED ACCORDING TO ASTM E 90 AND CLASSIFIED ACCORDING TO ASTM E 413 BY AN INDEPENDENT TESTING AGENCY.

PART 2 - PRODUCTS

2.1 INTERIOR GYPSUM BOARD

- A. GENERAL: COMPLYING WITH ASTM C 36/C 36M OR ASTM C 1396/C 1396M, AS APPLICABLE TO TYPE OF GYPSUM BOARD INDICATED AND WHICHEVER IS MORE STRINGENT.
1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
- a.AMERICAN GYPSUM CO.
  - b.BPB AMERICA INC.
  - c.G-P GYPSUM.
  - d. LAFARGE NORTH AMERICA INC.
  - e. NATIONAL GYPSUM COMPANY.
  - f. PABCO GYPSUM.
  - g. TEMPLE.
  - h. USG CORPORATION.
- B. REGULAR TYPE:
1. THICKNESS: 1/2 INCH (12.7 MM).
  2. LONG EDGES: TAPERED.
- C. TYPE X:
1. THICKNESS: 5/8 INCH (15.9 MM).
  2. LONG EDGES: TAPERED.
- D. CEILING TYPE: MANUFACTURED TO HAVE MORE SAG RESISTANCE THAN REGULAR-TYPE GYPSUM BOARD.
1. THICKNESS: 1/2 INCH (12.7 MM).
  2. LONG EDGES: TAPERED.
- E. MOISTURE- AND MOLD-RESISTANT TYPE: WITH MOISTURE- AND MOLD-RESISTANT CORE AND SURFACES.
1. CORE: 5/8 INCH (15.9 MM), TYPE MR.
  2. LONG EDGES: TAPERED.
- 2.2 TILE BACKING PANELS

- A. WATER-RESISTANT GYPSUM BACKING BOARD: ASTM C 630/C 630M OR ASTM C 1396/C 1396M.
1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
- a. AMERICAN GYPSUM CO.
  - b. BPB AMERICA INC.
  - c. G-P GYPSUM.
  - d. LAFARGE NORTH AMERICA INC.
  - e. NATIONAL GYPSUM COMPANY.
  - f. PABCO GYPSUM.
  - g. TEMPLE.
  - h. USG CORPORATION.
- B. CEMENTITIOUS BACKER UNITS: ANSI A108.1.
1. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
    - a. CUSTOM BUILDING PRODUCTS; WONDERBOARD.
    - b. FINPAN, INC.; UTIL-A-CRETE CONCRETE BACKER BOARD.
    - c. USG CORPORATION; DUROCK CEMENT BOARD.  2. THICKNESS: AS INDICATED ON DRAWINGS.

2.3 TRIM ACCESSORIES

- A. INTERIOR TRIM: ASTM C 1047.
1. MATERIAL: GALVANIZED OR ALUMINUM-COATED STEEL SHEET.
2. SHAPES:
- a. CORNERBEAD.
  - b. BULLNOSE BEAD.
  - c. LC-BEAD: J-SHAPED; EXPOSED LONG FLANGE RECEIVES JOINT COMPOUND.
  - d. L-BEAD: L-SHAPED; EXPOSED LONG FLANGE RECEIVES JOINT COMPOUND.
  - e. U-BEAD: J-SHAPED; EXPOSED SHORT FLANGE DOES NOT RECEIVE JOINT COMPOUND.
  - f. CURVED-EDGE CORNERBEAD: WITH NOTCHED OR FLEXIBLE FLANGES.
- B. ALUMINUM TRIM: EXTRUDED ACCESSORIES OF PROFILES AND DIMENSIONS INDICATED.
1. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
- a. FRY REGLET CORP.
  - b. GORDON, INC.
  - c. PITTCO INDUSTRIES.
2. ALUMINUM: ALLOY AND TEMPER WITH NOT LESS THAN THE STRENGTH AND DURABILITY PROPERTIES OF ASTM B 221 (ASTM B 221M), ALLOY 6063-T5.
3. FINISH: CORROSION-RESISTANT PRIMER COMPATIBLE WITH JOINT COMPOUND AND FINISH MATERIALS SPECIFIED.

2.4 JOINT TREATMENT MATERIALS

- A. GENERAL: COMPLY WITH ASTM C 475/C 475M.
- B. JOINT TAPE:
1. INTERIOR GYPSUM WALLBOARD: PAPER.
  2. TILE BACKING PANELS: AS RECOMMENDED BY PANEL MANUFACTURER.
- C. JOINT COMPOUND FOR INTERIOR GYPSUM WALLBOARD: FOR EACH COAT USE FORMULATION THAT IS COMPATIBLE WITH OTHER COMPOUNDS APPLIED ON PREVIOUS OR FOR SUCCESSIVE COATS.
1. PREFILLING: AT OPEN JOINTS, ROUNDED OR BEVELED PANEL EDGES, AND DAMAGED SURFACE AREAS, USE SETTING-TYPE TAPING COMPOUND.
  2. EMBEDDING AND FIRST COAT: FOR EMBEDDING TAPE AND FIRST COAT ON JOINTS, FASTENERS, AND TRIM FLANGES, USE SETTING-TYPE TAPING COMPOUND.
    - a. USE SETTING-TYPE COMPOUND FOR INSTALLING PAPER-FACED METAL TRIM ACCESSORIES.
  3. FILL COAT: FOR SECOND COAT, USE SETTING-TYPE, SANDABLE TOPPING COMPOUND.
  4. FINISH COAT: FOR THIRD COAT, USE SETTING-TYPE, SANDABLE TOPPING COMPOUND.
- D. JOINT COMPOUND FOR TILE BACKING PANELS:
1. WATER-RESISTANT GYPSUM BACKING BOARD: USE SETTING-TYPE TAPING COMPOUND AND SETTING-TYPE, SANDABLE TOPPING COMPOUND.
  2. CEMENTITIOUS BACKER UNITS: AS RECOMMENDED BY BACKER UNIT MANUFACTURER.

2.5 AUXILIARY MATERIALS

- A. GENERAL: PROVIDE AUXILIARY MATERIALS THAT COMPLY WITH REFERENCED INSTALLATION STANDARDS AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- B. STEEL DRILL SCREWS: ASTM C 1002, UNLESS OTHERWISE INDICATED.
1. USE SCREWS COMPLYING WITH ASTM C 954 FOR FASTENING PANELS TO STEEL MEMBERS FROM 0.033 TO 0.112 INCH (0.84 TO 2.84 MM) THICK.
  2. FOR FASTENING CEMENTITIOUS BACKER UNITS, USE SCREWS OF TYPE AND SIZE RECOMMENDED BY PANEL MANUFACTURER.
- C. SOUND ATTENUATION BLANKETS: ASTM C 665, TYPE I (BLANKETS WITHOUT MEMBRANE FACING) PRODUCED BY COMBINING THERMOSETTING RESINS WITH MINERAL FIBERS MANUFACTURED FROM GLASS, SLAG WOOL, OR ROCK WOOL.
1. FIRE-RESISTANCE-RATED ASSEMBLIES: COMPLY WITH MINERAL-FIBER REQUIREMENTS OF ASSEMBLY.
- D. ACOUSTICAL SEALANT: AS SPECIFIED IN DIVISION 07 SECTION "JOINT SEALANTS."
1. PROVIDE SEALANTS THAT HAVE A VOC CONTENT OF 250 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
- E. THERMAL INSULATION: AS SPECIFIED IN DIVISION 07 SECTION "THERMAL INSULATION."
- F. VAPOR RETARDER: AS SPECIFIED IN DIVISION 07 SECTION "THERMAL INSULATION."

PART 3 - EXECUTION

3.1 APPLYING AND FINISHING PANELS, GENERAL

- A. COMPLY WITH ASTM C 840.
- B. EXAMINE PANELS BEFORE INSTALLATION. REJECT PANELS THAT ARE WET, MOISTURE DAMAGED, AND MOLD DAMAGED.
- C. ISOLATE PERIMETER OF GYPSUM BOARD APPLIED TO NON-LOAD-BEARING PARTITIONS AT STRUCTURAL ABUTMENTS, EXCEPT FLOORS. PROVIDE 1/4- TO 1/2-INCH- (6.4- TO 12.7-MM-) WIDE SPACES AT THESE LOCATIONS, AND TRIM EDGES WITH EDGE TRIM WHERE EDGES OF PANELS ARE EXPOSED. SEAL JOINTS BETWEEN EDGES AND ABUTTING STRUCTURAL SURFACES WITH ACOUSTICAL SEALANT.
- D. WOOD FRAMING: INSTALL GYPSUM PANELS OVER WOOD FRAMING, WITH FLOATING INTERNAL CORNER CONSTRUCTION. DO NOT ATTACH GYPSUM PANELS ACROSS THE FLAT GRAIN OF WIDE-DIMENSION LUMBER, INCLUDING FLOOR JOISTS AND HEADERS. FLOAT GYPSUM PANELS OVER THESE MEMBERS, OR PROVIDE CONTROL JOINTS TO COUNTERACT WOOD SHRINKAGE.

3.2 APPLYING INTERIOR GYPSUM BOARD

- A. INSTALL INTERIOR GYPSUM BOARD IN THE FOLLOWING LOCATIONS:
1. REGULAR TYPE: AS INDICATED ON DRAWINGS.
  2. TYPE X: AS INDICATED ON DRAWINGS.
3. CEILING TYPE: AS INDICATED ON DRAWINGS.
4. MOISTURE- AND MOLD-RESISTANT TYPE: AS INDICATED ON DRAWINGS.

3.3 APPLYING TILE BACKING PANELS

- A. WATER-RESISTANT GYPSUM BACKING BOARD: INSTALL WHERE INDICATED. INSTALL WITH 1/4-INCH (6.4-MM) GAP WHERE PANELS ABUT OTHER CONSTRUCTION OR PENETRATIONS.
- B. CEMENTITIOUS BACKER UNITS: ANSI A108.1, AT INDICATED TILE.
- C. AREAS NOT SUBJECT TO WETTING: INSTALL REGULAR-TYPE GYPSUM WALLBOARD PANELS TO PRODUCE A FLAT SURFACE EXCEPT AT LOCATIONS INDICATED TO RECEIVE WATER-RESISTANT PANELS.
- D. WHERE TILE BACKING PANELS ABOUT OTHER TYPES OF PANELS IN SAME PLANE, SHIM SURFACES TO PRODUCE A UNIFORM PLANE ACROSS PANEL SURFACES.

3.4 INSTALLING TRIM ACCESSORIES

- A. GENERAL: FOR TRIM WITH BACK FLANGES INTENDED FOR FASTENERS, ATTACH TO FRAMING WITH SAME FASTENERS USED FOR PANELS. OTHERWISE, ATTACH TRIM ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- B. CONTROL JOINTS: INSTALL CONTROL JOINTS AT LOCATIONS INDICATED ON DRAWINGS, INCLUDING ARBY'S DÉCOR DRAWINGS.
- C. INTERIOR TRIM: INSTALL IN THE FOLLOWING LOCATIONS:
1. CORNERBEAD: USE AT OUTSIDE CORNERS.
  2. BULLNOSE BEAD: USE AT OUTSIDE CORNERS.
3. LC-BEAD: USE AT EXPOSED PANEL EDGES.
4. L-BEAD: USE WHERE INDICATED.
- 5 U-BEAD: USE AT EXPOSED PANEL EDGES WHERE INDICATED.
- D. ALUMINUM TRIM: INSTALL IN LOCATIONS INDICATED ON DRAWINGS.

3.5 FINISHING GYPSUM BOARD

- A. GENERAL: TREAT GYPSUM BOARD JOINTS, INTERIOR ANGLES, EDGE TRIM, CONTROL JOINTS, PENETRATIONS, FASTENER HEADS, SURFACE DEFECTS, AND ELSEWHERE AS REQUIRED TO PREPARE GYPSUM BOARD SURFACES FOR DECORATION. PROMPTLY REMOVE RESIDUAL JOINT COMPOUND FROM ADJACENT SURFACES.
- B. PREFILL OPEN JOINTS, ROUNDED OR BEVELED EDGES, AND DAMAGED SURFACE AREAS.
- C. APPLY JOINT TAPE OVER GYPSUM BOARD JOINTS, EXCEPT THOSE WITH TRIM HAVING FLANGES NOT INTENDED FOR TAPE.
- D. GYPSUM BOARD FINISH LEVELS: FINISH PANELS TO LEVELS INDICATED BELOW:
1. LEVEL 2: PANELS THAT ARE SUBSTRATE FOR TILE WHERE INDICATED ON DRAWINGS.
  2. LEVEL 3: WHERE INDICATED ON DRAWINGS.
  3. LEVEL 4: AT PANEL SURFACES THAT WILL BE EXPOSED TO VIEW, UNLESS OTHERWISE INDICATED.
    - a. PRIMER AND ITS APPLICATION TO SURFACES ARE SPECIFIED IN OTHER DIVISION 09 SECTIONS.
- E. CEMENTITIOUS BACKER UNITS: FINISH ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.6 APPLYING TEXTURE FINISHES

- A. SURFACE PREPARATION AND PRIMER: PREPARE AND APPLY PRIMER TO GYPSUM PANELS AND OTHER SURFACES RECEIVING FINISHES. APPLY PRIMER TO SURFACES THAT ARE CLEAN, DRY, AND SMOOTH.

3.7 PROTECTION

- A. PROTECT INSTALLED PRODUCTS FROM DAMAGE FROM WEATHER, CONDENSATION, DIRECT SUNLIGHT, CONSTRUCTION, AND OTHER CAUSES DURING REMAINDER OF THE CONSTRUCTION PERIOD.
- B. REMOVE AND REPLACE PANELS THAT ARE WET, MOISTURE DAMAGED, AND MOLD DAMAGED.
1. INDICATIONS THAT PANELS ARE WET OR MOISTURE DAMAGED INCLUDE, BUT ARE NOT LIMITED TO, DISCOLORATION, SAGGING, OR IRREGULAR SHAPE.
  2. INDICATIONS THAT PANELS ARE MOLD DAMAGED INCLUDE, BUT ARE NOT LIMITED TO, FUZZY OR SPLOTCHY SURFACE CONTAMINATION AND DISCOLORATION.

SECTION 093000 - TILING

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES THE FOLLOWING:
1. CERAMIC MOSAIC TILE.
  2. QUARRY TILE.
  3. GLAZED WALL TILE.
  4. METAL EDGE STRIPS INSTALLED AS PART OF TILE INSTALLATIONS.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH PRODUCT INDICATED.
- B. SHOP DRAWINGS: SHOW LOCATIONS OF EACH TYPE OF TILE AND TILE PATTERN. SHOW WIDTHS, DETAILS, AND LOCATIONS OF EXPANSION, CONTRACTION, CONTROL, AND ISOLATION JOINTS.
- C. SAMPLES:
1. EACH TYPE, COMPOSITION, COLOR, AND FINISH OF TILE AND GROUT.

1.3 EXTRA MATERIALS

- A. FURNISH EXTRA MATERIALS DESCRIBED BELOW THAT MATCH PRODUCTS INSTALLED AND THAT ARE PACKAGED WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.
1. TILE AND TRIM UNITS: FURNISH QUANTITY OF FULL-SIZE UNITS EQUAL TO 3 PERCENT OF AMOUNT INSTALLED, FOR EACH TYPE, COMPOSITION, COLOR, PATTERN, AND SIZE INDICATED.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. IN OTHER PART 2 ARTICLES WHERE TITLES BELOW INTRODUCE LISTS, THE FOLLOWING REQUIREMENTS APPLY FOR PRODUCT SELECTION:
1. AVAILABLE PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE PRODUCTS SPECIFIED.

2.2 TILE PRODUCTS

- A. MANUFACTURERS:
1. AMERICAN OLEAN; DIV. OF DAL-TILE INTERNATIONAL CORP.
  2. DALTILE, DIV. OF DAL-TILE INTERNATIONAL INC.
  3. CUSTOM BUILDING PRODUCTS (GROUT).
- B. ANSI CERAMIC TILE STANDARD: PROVIDE STANDARD GRADE TILE THAT COMPLIES WITH ANSI A137.1, "SPECIFICATIONS FOR CERAMIC TILE," FOR TYPES, COMPOSITIONS, AND OTHER CHARACTERISTICS INDICATED.
- C. PROVIDE TILE, GROUT AND OTHER ACCESSORY ITEMS AS INDICATED ON THE DRAWINGS AND ARBY'S "DÉCOR" PLANS.

2.3 ACCESSORY MATERIALS

1. LATEX-PORTLAND CEMENT PRODUCT: FLEXIBLE MORTAR WITH ACRYLIC-LATEX ADDITIVE.
- a. PRODUCTS:
- 1) MAPEI CORPORATION; PRP 315.
  - 2) SOUTHERN GROUTS & MORTARS, INC.; SOUTHCRETE 1100.

2.4 SETTING AND GROUTING MATERIALS

- A. MANUFACTURERS:
1. CUSTOM BUILDING PRODUCTS.
- B. PORTLAND CEMENT MORTAR (THICKEST) INSTALLATION MATERIALS: ANSI A108.1A.
- C. DRY-SET PORTLAND CEMENT MORTAR (THIN SET): ANSI A118.1.
1. FOR WALL APPLICATIONS, PROVIDE NONSAGGING MORTAR.
- D. LATEX-PORTLAND CEMENT MORTAR (THIN SET): ANSI A118.4.
1. PREPACKAGED DRY-MORTAR MIX CONTAINING DRY ADDITIVE TO WHICH ONLY WATER MUST BE ADDED.
  2. PREPACKAGED DRY-MORTAR MIX COMBINED WITH LIQUID-LATEX ADDITIVE.
  3. FOR WALL APPLICATIONS, PROVIDE NONSAGGING MORTAR.
- E. CHEMICAL-RESISTANT, WATER-CLEANABLE, TILE-SETTING AND -GROUTING EPOXY: ANSI A118.3.
- F. STANDARD SANDED CEMENT GROUT: ANSI A118.6, COLOR AS INDICATED ON ARBY'S "DÉCOR" PLANS.
- G. STANDARD UNSANDED CEMENT GROUT: ANSI A118.6, COLOR AS INDICATED ON ARBY'S "DÉCOR" PLANS.
- H. POLYMER-MODIFIED TILE GROUT: ANSI A118.7, COLOR AS INDICATED ON ARBY'S "DÉCOR" PLANS.
1. POLYMER TYPE: DRY, REDISPERSIBLE FORM, PREPACKAGED WITH OTHER DRY INGREDIENTS.
  2. POLYMER TYPE: LIQUID-LATEX FORM FOR ADDITION TO PREPACKAGED DRY-GROUT MIX.

2.5 MISCELLANEOUS MATERIALS

- A. ELASTOMERIC SEALANTS: ELASTOMERIC SEALANTS OF BASE POLYMER AND CHARACTERISTICS INDICATED THAT COMPLY WITH APPLICABLE REQUIREMENTS IN DIVISION 07 SECTION "JOINT SEALANTS."
- B. TROWELABLE UNDERLAYMENTS AND PATCHING COMPOUNDS: LATEX-MODIFIED, PORTLAND CEMENT-BASED FORMULATION PROVIDED OR APPROVED BY MANUFACTURER OF TILE-SETTING MATERIALS.
- C. METAL EDGE STRIPS: ANGLE OR L-SHAPE, WHITE ZINC ALLOY EXPOSED-EDGE MATERIAL.
- D. GROUT SEALER: MANUFACTURER'S STANDARD SILICONE PRODUCT FOR SEALING GROUT JOINTS THAT DOES NOT CHANGE COLOR OR APPEARANCE OF GROUT.

PART 3 - EXECUTION

3.1 PREPARATION

- A. REMOVE COATINGS, INCLUDING CURING COMPOUNDS AND OTHER SUBSTANCES THAT CONTAIN SOAP, WAX, OIL, OR SILICONE, THAT ARE INCOMPATIBLE WITH TILE-SETTING MATERIALS.
- B. FILL CRACKS, HOLES, AND DEPRESSIONS WITH TROWELABLE LEVELING AND PATCHING COMPOUND ACCORDING TO TILE-SETTING MATERIAL MANUFACTURER'S WRITTEN INSTRUCTIONS.
- C. REMOVE PROTRUSIONS, BUMPS, AND RIDGES BY SANDING OR GRINDING.
- D. BLENDING: FOR TILE EXHIBITING COLOR VARIATIONS, USE FACTORY BLENDED TILE OR BLEND TILES AT PROJECT SITE BEFORE INSTALLING.
- E. FIELD-APPLIED TEMPORARY PROTECTIVE COATING: WHERE INDICATED UNDER TILE TYPE OR NEEDED TO PREVENT GROUT FROM STAINING OR ADHERING TO EXPOSED TILE SURFACES, PRECOAT THEM WITH CONTINUOUS FILM OF TEMPORARY PROTECTIVE COATING, TAKING CARE NOT TO COAT UNEXPOSED TILE SURFACES.

3.2 INSTALLATION, GENERAL

- A. ANSI TILE INSTALLATION STANDARDS: COMPLY WITH PARTS OF ANSI A108 SERIES "SPECIFICATIONS FOR INSTALLATION OF CERAMIC TILE" THAT APPLY TO TYPES OF SETTING AND GROUTING MATERIALS AND TO METHODS INDICATED IN CERAMIC TILE INSTALLATION SCHEDULES.
- B. TCA INSTALLATION GUIDELINES: TCA'S "HANDBOOK FOR CERAMIC TILE INSTALLATION," COMPLY WITH TCA INSTALLATION METHODS INDICATED IN CERAMIC TILE INSTALLATION SCHEDULES.
- C. EXTEND TILE WORK INTO RECESSES AND UNDER OR BEHIND EQUIPMENT AND FIXTURES TO FORM COMPLETE COVERING WITHOUT INTERRUPTIONS, UNLESS OTHERWISE INDICATED. TERMINATE WORK NEATLY AT OBSTRUCTIONS, EDGES, AND CORNERS WITHOUT DISRUPTING PATTERN OR JOINT ALIGNMENTS.
- D. ACCURATELY FORM INTERSECTIONS AND RETURNS. PERFORM CUTTING AND DRILLING OF TILE WITHOUT MARRING VISIBLE SURFACES. GRIND CUT EDGES OF TILE ABUTTING TRIM, FINISH, OR BUILT-IN ITEMS. FIT TILE CLOSELY TO ELECTRICAL OUTLETS, PIPING, FIXTURES, AND OTHER PENETRATIONS SO PLATES, COLLARS, OR COVERS OVERLAP TILE.
- E. JOINTING PATTERN: LAY TILE IN GRID PATTERN, AS INDICATED. ALIGN JOINTS WHEN ADJOINING TILES ON FLOOR, BASE, WALLS, AND TRIM ARE SAME SIZE. LAY OUT TILE WORK AND CENTER TILE FIELDS IN BOTH DIRECTIONS IN EACH SPACE OR ON EACH WALL AREA. ADJUST TO MINIMIZE TILE CUTTING. PROVIDE UNIFORM JOINT WIDTHS, UNLESS OTHERWISE INDICATED.
- F. LAY OUT TILE WAINSCOTS TO NEXT FULL TILE BEYOND DIMENSIONS INDICATED.
- G. EXPANSION JOINTS: LOCATE EXPANSION JOINTS AND OTHER SEALANT-FILLED JOINTS

- DURING INSTALLATION OF SETTING MATERIALS, MORTAR BEDS, AND TILE. DO NOT SAW-CUT JOINTS AFTER INSTALLING TILES.
1. LOCATE JOINTS IN TILE SURFACES DIRECTLY ABOVE JOINTS IN CONCRETE SUBSTRATES.
  2. PREPARE JOINTS AND APPLY SEALANTS TO COMPLY WITH REQUIREMENTS IN DIVISION 07 SECTION "JOINT SEALANTS."
- H. GROUT TILE TO COMPLY WITH REQUIREMENTS OF ANSI A108.10, UNLESS OTHERWISE INDICATED.
1. FOR CHEMICAL-RESISTANT EPOXY GROUTS, COMPLY WITH ANSI A108.6.

SECTION 095113 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES ACOUSTICAL PANELS AND EXPOSED SUSPENSION SYSTEMS FOR CEILINGS.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. SAMPLES: FOR EACH EXPOSED FINISH.

1.3 QUALITY ASSURANCE

1. SURFACE-BURNING CHARACTERISTICS: ACOUSTICAL PANELS COMPLYING WITH ASTM E 1264 FOR CLASS A MATERIALS, WHEN TESTED PER ASTM E 84.
  - a. SMOKE-DEVELOPED INDEX: 450 OR LESS.
- C. SEISMIC STANDARD: COMPLY WITH THE FOLLOWING:
  1. STANDARD FOR CEILING SUSPENSION SYSTEMS REQUIRING SEISMIC RESTRAINT: COMPLY WITH ASTM E 580.
  2. CISCA'S RECOMMENDATIONS FOR ACOUSTICAL CEILINGS: COMPLY WITH CISCA'S "RECOMMENDATIONS FOR DIRECT-HUNG ACOUSTICAL TILE AND LAY-IN PANEL CEILINGS-SEISMIC ZONES 0-2."
  3. CISCA'S GUIDELINES FOR SYSTEMS REQUIRING SEISMIC RESTRAINT: COMPLY WITH CISCA'S "GUIDELINES FOR SEISMIC RESTRAINT OF DIRECT-HUNG SUSPENDED CEILING ASSEMBLIES-SEISMIC ZONES 3 & 4."
  4. ASCE 7, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES": SECTION 9, "EARTHQUAKE LOADS."
- D. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE AT A DATE AND TIME TO BE ESTABLISHED.

1.4 EXTRA MATERIALS

- A. FURNISH EXTRA MATERIALS DESCRIBED BELOW THAT MATCH PRODUCTS INSTALLED AND THAT ARE PACKAGED WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.
1. ACOUSTICAL CEILING PANELS: FULL-SIZE PANELS EQUAL TO 2.0 PERCENT OF QUANTITY INSTALLED.
  2. SUSPENSION SYSTEM COMPONENTS: QUANTITY OF EACH EXPOSED COMPONENT EQUAL TO 2.0 PERCENT OF QUANTITY INSTALLED.

PART 2 - PRODUCTS

- 2.1 ACOUSTICAL PANEL CEILINGS, GENERAL
- A. ACOUSTICAL PANEL STANDARD: COMPLY WITH ASTM E 1264.
- B. METAL SUSPENSION SYSTEM STANDARD: COMPLY WITH ASTM C 635.
- C. ATTACHMENT DEVICES: SIZE FOR FIVE TIMES THE DESIGN LOAD INDICATED IN ASTM C 635, TABLE 1, "DIRECT HUNG," UNLESS OTHERWISE INDICATED. COMPLY WITH SEISMIC DESIGN REQUIREMENTS.
- D. WIRE HANGERS, BRACES, AND TIES: ZINC-COATED CARBON-STEEL WIRE; ASTM A 641/A 641M, CLASS 1 ZINC COATING, SOFT TEMPER.
1. SIZE: SELECT WIRE DIAMETER SO ITS STRESS AT 3 TIMES HANGER DESIGN LOAD (ASTM C 635, TABLE 1, "DIRECT HUNG") WILL BE LESS THAN YIELD STRESS OF WIRE, BUT PROVIDE NOT LESS THAN 0.106-INCH- (2.69-MM-) DIAMETER WIRE.
- E. SEISMIC PERIMETER STABILIZER BARS, SEISMIC STRUTS, AND SEISMIC CLIPS WHERE REQUIRED.
- F. METAL EDGE MOLDINGS AND TRIM: TYPE AND PROFILE INDICATED OR, IF NOT INDICATED, MANUFACTURER'S STANDARD MOLDINGS FOR EDGES AND PENETRATIONS THAT COMPLY WITH SEISMIC DESIGN REQUIREMENTS; FORMED FROM SHEET METAL OF SAME MATERIAL, FINISH, AND COLOR AS THAT USED FOR EXPOSED FLANGES OF SUSPENSION SYSTEM RUNNERS.

2.2 ACOUSTICAL PANELS FOR ACOUSTICAL PANEL CEILING

- A. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
1. ARMSTRONG WORLD INDUSTRIES, INC
  2. USG INTERIORS, INC.
- B. BASIS-OF-DESIGN PRODUCT: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE THE PRODUCT INDICATED ON DRAWINGS:

2.3 METAL SUSPENSION SYSTEM FOR ACOUSTICAL PANEL CEILING

- A. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
1. ARMSTRONG WORLD INDUSTRIES, INC.; PRELUDE XL 15/16 INCH EXPOSED TEE.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. COMPLY WITH ASTM C 636 AND SEISMIC DESIGN REQUIREMENTS INDICATED, PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND CISCA'S "CEILING SYSTEMS HANDBOOK."
- B. MEASURE EACH CEILING AREA AND ESTABLISH LAYOUT OF ACOUSTICAL PANELS TO BALANCE BORDER WIDTHS AT OPPOSITE EDGES OF EACH CEILING. AVOID USING LESS-THAN-HALF-WIDTH PANELS AT BORDERS.
- C. SUSPEND CEILING HANGERS FROM BUILDING'S STRUCTURAL MEMBERS, PLUMB AND FREE FROM CONTACT WITH INSULATION OR OTHER OBJECTS WITHIN CEILING PLENUM. SPLAY HANGERS ONLY WHERE REQUIRED AND, IF PERMITTED WITH FIRE-RESISTANCE-RATED CEILINGS, TO MISS OBSTRUCTIONS; OFFSET RESULTING HORIZONTAL FORCES BY BRACING, COUNTERPLAYING, OR OTHER EQUALLY EFFECTIVE MEANS. WHERE WIDTH OF DUCTS AND OTHER CONSTRUCTION WITHIN CEILING PLENUM PRODUCES HANGER SPACINGS THAT INTERFERE WITH LOCATION OF HANGERS, USE TRAPEZES OR EQUIVALENT DEVICES. WHEN STEEL FRAMING DOES NOT PERMIT INSTALLATION OF HANGER WIRES AT SPACING REQUIRED, INSTALL CARRYING CHANNELS OR OTHER SUPPLEMENTAL SUPPORT FOR ATTACHMENT OF HANGER WIRES.
- D. INSTALL EDGE MOLDINGS AND TRIM OF TYPE INDICATED AT PERIMETER OF ACOUSTICAL CEILING AREA AND WHERE NECESSARY TO CONCEAL EDGES OF ACOUSTICAL PANELS. SCREW ATTACH MOLDINGS TO SUBSTRATE AT INTERVALS NOT MORE THAN 16 INCHES (400 MM) O.C. AND NOT MORE THAN 3 INCHES (75 MM) FROM ENDS, LEVELING WITH CEILING SUSPENSION SYSTEM TO A TOLERANCE OF 1/8 INCH IN 12 FEET (3.2 MM IN 3.6 M). MITER CORNERS ACCURATELY AND CONNECT SECURELY.
- E. INSTALL SUSPENSION SYSTEM RUNNERS SO THEY ARE SQUARE AND SECURELY INTERLOCKED WITH ONE ANOTHER. REMOVE AND REPLACE DENTED, BENT, OR KINKED MEMBERS.
- F. INSTALL ACOUSTICAL PANELS WITH UNDAMAGED EDGES AND FIT ACCURATELY INTO SUSPENSION SYSTEM RUNNERS AND EDGE MOLDINGS. SCRIBE AND CUT PANELS AT BORDERS AND PENETRATIONS TO PROVIDE A NEAT, PRECISE FIT.



10-29-21

Revisions:

SECTION 097200 - WALL COVERINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. SECTION INCLUDES:
1. VINYL WALL COVERING.
- B. OWNER-FURNISHED MATERIALS: AS INDICATED ON ARBY'S "DÉCOR" DRAWINGS.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. SHOP DRAWINGS: SHOW LOCATION AND EXTENT OF EACH WALL-COVERING TYPE.
- C. SAMPLES: FOR EACH TYPE OF WALLCOVERING, AND FOR EACH COLOR, TEXTURE, AND PATTERN REQUIRED.
- D. MAINTENANCE DATA: FOR WALL COVERINGS TO INCLUDE IN MAINTENANCE MANUALS.

1.3 QUALITY ASSURANCE

- A. FIRE-TEST-RESPONSE CHARACTERISTICS: AS DETERMINED BY TESTING IDENTICAL WALL COVERINGS APPLIED WITH IDENTICAL ADHESIVES TO SUBSTRATES ACCORDING TO TEST METHOD INDICATED BELOW BY A QUALIFIED TESTING AGENCY. IDENTIFY PRODUCTS WITH APPROPRIATE MARKINGS OF APPLICABLE TESTING AGENCY.
1. SURFACE-BURNING CHARACTERISTICS: AS FOLLOWS, PER ASTM E 84:
    - a. FLAME-SPREAD INDEX: 25 OR LESS.
    - b. SMOKE-DEVELOPED INDEX: 450 OR LESS.
  2. FIRE-GROWTH CONTRIBUTION: TEXTILE WALL COVERINGS TESTED ACCORDING TO NFPA 265 AND COMPLYING WITH TEST PROTOCOL AND CRITERIA IN THE 2003 IBC.

1.4 EXTRA MATERIALS

- A. FURNISH EXTRA MATERIALS THAT MATCH PRODUCTS INSTALLED AND THAT ARE PACKAGED WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.
1. WALL-COVERING MATERIALS: FOR EACH TYPE, FULL-SIZE UNITS EQUAL TO 5 PERCENT OF AMOUNT INSTALLED.

PART 2 - PRODUCTS

2.1 WALL COVERINGS

- A. GENERAL: PROVIDE ROLLS OF EACH TYPE OF WALL COVERING FROM SAME PRINT RUN OR DYE LOT.

2.2 VINYL WALL COVERING

- A. VINYL WALL-COVERING STANDARDS: PROVIDE MILDEW-RESISTANT PRODUCTS COMPLYING WITH THE FOLLOWING:
1. PRODUCTS: AS INDICATED ON DÉCOR DRAWINGS.
  2. FS CCC-W-408D AND CFFA-W-101-D FOR TYPE II, MEDIUM-DUTY PRODUCTS.
  3. ASTM F 793 FOR STRIPPABLE WALL COVERINGS THAT QUALIFY AS CATEGORY V, TYPE II, COMMERCIAL SERVICEABILITY PRODUCT.

White Design Group, P.C.  
Restaurant and Interiors Consulting  
5801 EAST 41ST STREET, SUITE 712, TULSA, OKLAHOMA 74135

New Restaurant Conversion For:  
Arby's - 1632 AR-25 Bypass  
Heber Springs, Arkansas

Sheet Content

Specifications

Sheet Number

SP-7

Date: 10-29-21



2.3 ACCESSORIES

- A. ADHESIVE: MILDEW-RESISTANT, NONSTAINING, STRIPPABLE ADHESIVE, FOR USE WITH SPECIFIC WALL COVERING AND SUBSTRATE APPLICATION; AS RECOMMENDED IN WRITING BY WALL-COVERING MANUFACTURER.
- B. PRIMER/SEALER: MILDEW RESISTANT, COMPLYING WITH REQUIREMENTS IN DIVISION 09 SECTION "INTERIOR PAINTING" AND RECOMMENDED IN WRITING BY WALL-COVERING MANUFACTURER FOR INTENDED SUBSTRATE.
- C. SEAM TAPE: AS RECOMMENDED IN WRITING BY WALL-COVERING MANUFACTURER.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. CLEAN SUBSTRATES OF SUBSTANCES THAT COULD IMPAIR BOND OF WALL COVERING, INCLUDING DIRT, OIL, GREASE, MOLD, MILDEW, AND INCOMPATIBLE PRIMERS.
- B. PREPARE SUBSTRATES TO ACHIEVE A SMOOTH, DRY, CLEAN, STRUCTURALLY SOUND SURFACE FREE OF FLAKING, UNSOUND COATINGS, CRACKS, AND DEFECTS.
1. MOISTURE CONTENT: MAXIMUM OF 5 PERCENT ON NEW PLASTER, CONCRETE, AND CONCRETE MASONRY UNITS WHEN TESTED WITH AN ELECTRONIC MOISTURE METER.
2. GYPSUM BOARD: PRIME WITH PRIMER AS RECOMMENDED IN WRITING BY PRIMER/SEALER MANUFACTURER AND WALL-COVERING MANUFACTURER.
3. PAINTED SURFACES: TREAT AREAS SUSCEPTIBLE TO PIGMENT BLEEDING.
- C. REMOVE HARDWARE AND HARDWARE ACCESSORIES, ELECTRICAL PLATES AND COVERS, LIGHT FIXTURE TRIMS, AND SIMILAR ITEMS.
- D. ACCLIMATIZE WALL-COVERING MATERIALS BY REMOVING THEM FROM PACKAGING IN THE INSTALLATION AREAS NOT LESS THAN 24 HOURS BEFORE INSTALLATION.
- E. INSTALL WALL LINER, WITH NO GAPS OR OVERLAPS, WHERE REQUIRED BY WALL-COVERING MANUFACTURER. FORM SMOOTH WRINKLE-FREE SURFACE FOR FINISHED INSTALLATION. DO NOT BEGIN WALL-COVERING INSTALLATION UNTIL WALL LINER HAS DRIED.
- F. CUT WALL-COVERING STRIPS IN ROLL NUMBER SEQUENCE. CHANGE ROLL NUMBERS AT PARTITION BREAKS AND CORNERS.
- G. INSTALL STRIPS IN SAME ORDER AS CUT FROM ROLL.
- H. INSTALL WALL COVERING WITH NO GAPS OR OVERLAPS, NO LIFTED OR CURLING EDGES, AND NO VISIBLE SHRINKAGE.
- I. MATCH PATTERN 72 INCHES (1830 MM) ABOVE THE FINISH FLOOR.
- J. INSTALL SEAMS VERTICAL AND PLUMB AT LEAST 6 INCHES (150 MM) FROM OUTSIDE CORNERS AND 3 INCHES FROM INSIDE CORNERS UNLESS A CHANGE OF PATTERN OR COLOR EXISTS AT CORNER. NO HORIZONTAL SEAMS ARE PERMITTED.
- K. FULLY BOND WALL COVERING TO SUBSTRATE. REMOVE AIR BUBBLES, WRINKLES, BLISTERS, AND OTHER DEFECTS.
- L. TRIM EDGES AND SEAMS FOR COLOR UNIFORMITY, PATTERN MATCH, AND TIGHT CLOSURE. BUTT SEAMS WITHOUT ANY OVERLAY OR SPACING BETWEEN STRIPS.
- M. REMOVE EXCESS ADHESIVE AT FINISHED SEAMS, PERIMETER EDGES, AND ADJACENT SURFACES.
- N. REINSTALL HARDWARE AND HARDWARE ACCESSORIES, ELECTRICAL PLATES AND COVERS, LIGHT FIXTURE TRIMS, AND SIMILAR ITEMS.

SECTION 099113 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES SURFACE PREPARATION AND THE APPLICATION OF PAINT SYSTEMS ON THE FOLLOWING EXTERIOR SUBSTRATES:
- 1.CONCRETE.
- 2.CLAY MASONRY.
3. CONCRETE MASONRY UNITS (CMU).
4. STEEL
5. GALVANIZED METAL.
6. ALUMINUM (NOT ANODIZED OR OTHERWISE COATED).
7. WOOD.
8. PLASTIC TRIM FABRICATIONS.
9. EXTERIOR PORTLAND CEMENT (STUCCO).

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. SAMPLES: FOR EACH FINISH AND FOR EACH COLOR AND TEXTURE REQUIRED.

1.3 QUALITY ASSURANCE

- A. MPI STANDARDS:
1. PRODUCTS: COMPLYING WITH MPI STANDARDS INDICATED AND LISTED IN "MPI APPROVED PRODUCTS LIST."
2. PREPARATION AND WORKMANSHIP: COMPLY WITH REQUIREMENTS IN "MPI ARCHITECTURAL PAINTING SPECIFICATION MANUAL" FOR PRODUCTS AND PAINT SYSTEMS INDICATED.

1.4 EXTRA MATERIALS

- A. FURNISH EXTRA MATERIALS DESCRIBED BELOW THAT ARE FROM SAME PRODUCTION RUN (BATCH MIX) AS MATERIALS APPLIED AND THAT ARE PACKAGED FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.
1. QUANTITY: FURNISH AN ADDITIONAL 5 PERCENT, BUT NOT LESS THAN 1 GAL. (3.8 L) OF EACH MATERIAL AND COLOR APPLIED.

PART 2 - PRODUCTS

2.1 PAINT, GENERAL

- A. MATERIAL COMPATIBILITY:
1. PROVIDE MATERIALS FOR USE WITHIN EACH PAINT SYSTEM THAT ARE COMPATIBLE WITH ONE ANOTHER AND SUBSTRATES INDICATED, UNDER CONDITIONS OF SERVICE AND APPLICATION AS DEMONSTRATED BY MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.
2. FOR EACH COAT IN A PAINT SYSTEM, PROVIDE PRODUCTS RECOMMENDED IN WRITING BY MANUFACTURERS OF TOPCOAT FOR USE IN PAINT SYSTEM AND ON SUBSTRATE INDICATED.
- B. COLORS: AS INDICATED IN THE DRAWINGS.

2.2 BLOCK FILLERS

- A. INTERIOR/EXTERIOR LATEX BLOCK FILLER: MPI #4.

2.3 PRIMERS/SEALERS

- A. ALKALI-RESISTANT PRIMER: MPI #3.
- B. BONDING PRIMER (WATER BASED): MPI #17.
- C. BONDING PRIMER (SOLVENT BASED): MPI #69.

2.4 METAL PRIMERS

- A. ALKYD ANTICORROSIVE METAL PRIMER: MPI #79.
- B. QUICK-DRYING ALKYD METAL PRIMER: MPI #76.
- C. CEMENTITIOUS GALVANIZED-METAL PRIMER: MPI #26.
- D. WATERBORNE GALVANIZED-METAL PRIMER: MPI #134.
- E. QUICK-DRYING PRIMER FOR ALUMINUM: MPI #95.

2.5 WOOD PRIMERS

- A. EXTERIOR LATEX WOOD PRIMER: MPI #6.
- B. EXTERIOR ALKYD WOOD PRIMER: MPI #5.
- C. EXTERIOR OIL WOOD PRIMER: MPI #7.

2.6 EXTERIOR LATEX PAINTS

- A. EXTERIOR LATEX (FLAT): MPI #10 (GLOSS LEVEL 1).
- B. EXTERIOR LATEX (SEMGLOSS): MPI #11 (GLOSS LEVEL 5).
- C. EXTERIOR LATEX (GLOSS): MPI #119 (GLOSS LEVEL 6, EXCEPT MINIMUM GLOSS OF 65 UNITS AT 60 DEG).

2.7 EXTERIOR ALKYD PAINTS

- A. EXTERIOR ALKYD ENAMEL (FLAT): MPI #8 (GLOSS LEVEL 1).
- B. EXTERIOR ALKYD ENAMEL (SEMGLOSS): MPI #94 (GLOSS LEVEL 5).
- C. EXTERIOR ALKYD ENAMEL (GLOSS): MPI #9 (GLOSS LEVEL 6).

2.8 ALUMINUM PAINT

- A. ALUMINUM PAINT: MPI #1.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. EXAMINE SUBSTRATES AND CONDITIONS, WITH APPLICATOR PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR MAXIMUM MOISTURE CONTENT AND OTHER CONDITIONS AFFECTING PERFORMANCE OF WORK.
- B. MAXIMUM MOISTURE CONTENT OF SUBSTRATES: WHEN MEASURED WITH AN ELECTRONIC MOISTURE METER AS FOLLOWS:
- 1.CONCRETE: 12 PERCENT.
- 2.MASONRY (CLAY AND CMU): 12 PERCENT.
3. WOOD: 15 PERCENT.
4. PLASTER: 12 PERCENT.
- C. VERIFY SUITABILITY OF SUBSTRATES, INCLUDING SURFACE CONDITIONS AND COMPATIBILITY WITH EXISTING FINISHES AND PRIMERS.
- D. BEGIN COATING APPLICATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED AND SURFACES ARE DRY.
- 1.BEGINNING COATING APPLICATION CONSTITUTES CONTRACTOR'S ACCEPTANCE OF SUBSTRATES AND CONDITIONS.

3.2 PREPARATION AND APPLICATION

- A.COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS IN "MPI ARCHITECTURAL PAINTING SPECIFICATION MANUAL" APPLICABLE TO SUBSTRATES AND PAINT SYSTEMS INDICATED.
- B. CLEAN SUBSTRATES OF SUBSTANCES THAT COULD IMPAIR BOND OF PAINTS, INCLUDING DIRT, OIL, GREASE, AND INCOMPATIBLE PAINTS AND ENCAPSULANTS.
1. REMOVE INCOMPATIBLE PRIMERS AND REPRIME SUBSTRATE WITH COMPATIBLE PRIMERS AS REQUIRED TO PRODUCE PAINT SYSTEMS INDICATED.
- C.APPLY PAINTS TO PRODUCE SURFACE FILMS WITHOUT CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, ROLLER TRACKING, RUNS, SAGS, ROPINESS, OR OTHER SURFACE IMPERFECTIONS. CUT IN SHARP LINES AND COLOR BREAKS.
- D. PROTECT WORK OF OTHER TRADES AGAINST DAMAGE FROM PAINT APPLICATION. CORRECT DAMAGE TO WORK OF OTHER TRADES BY CLEANING, REPAIRING, REPLACING, AND REFINISHING, AS APPROVED BY ARCHITECT, AND LEAVE IN AN UNDAMAGED CONDITION.
- E. AT COMPLETION OF CONSTRUCTION ACTIVITIES OF OTHER TRADES, TOUCH UP AND RESTORE DAMAGED OR DEFACED PAINTED SURFACES.

3.3 EXTERIOR PAINTING SCHEDULE - REFER TO ELEVATIONS SHEET

- A. CONCRETE SUBSTRATES, NONTRAFFIC SURFACES:
1. LATEX SYSTEM: MPI EXT 3.1A.
- a.PRIME COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- b.INTERMEDIATE COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR LATEX (FLAT).
2. LATEX OVER ALKALI-RESISTANT PRIMER SYSTEM: MPI EXT 3.1K.
- a.PRIME COAT: ALKALI-RESISTANT PRIMER.
- b.INTERMEDIATE COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR LATEX (FLAT).
- B. CONCRETE SUBSTRATES, TRAFFIC SURFACES:
1. LATEX FLOOR PAINT SYSTEM: MPI EXT 3.2A.
- a.PRIME COAT: INTERIOR/EXTERIOR LATEX FLOOR AND PORCH PAINT (LOW GLOSS).
- b.INTERMEDIATE COAT: INTERIOR/EXTERIOR LATEX FLOOR AND PORCH PAINT (LOW GLOSS).
- c.TOPCOAT: INTERIOR/EXTERIOR LATEX FLOOR AND PORCH PAINT (LOW GLOSS).
2. ALKYD FLOOR ENAMEL SYSTEM: MPI EXT 3.2D.
- a.PRIME COAT: EXTERIOR/INTERIOR ALKYD FLOOR ENAMEL (GLOSS).
- b.INTERMEDIATE COAT: EXTERIOR/INTERIOR ALKYD FLOOR ENAMEL (GLOSS).
- c.TOPCOAT: EXTERIOR/INTERIOR ALKYD FLOOR ENAMEL (GLOSS).
- C. CLAY-MASONRY SUBSTRATES:
1. LATEX SYSTEM: MPI EXT 4.1A.
- a.PRIME COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- b.INTERMEDIATE COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR LATEX [(FLAT)] [(SEMGLOSS)] [(GLOSS)].
- D. CMU SUBSTRATES:
1. LATEX SYSTEM: MPI EXT 4.2A.
- a.PRIME COAT: INTERIOR/EXTERIOR LATEX BLOCK FILLER.
- b.INTERMEDIATE COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR LATEX [(FLAT)] [(SEMGLOSS)] [(GLOSS)].
2. LATEX OVER ALKALI-RESISTANT PRIMER SYSTEM: MPI EXT 4.2L.
- a.PRIME COAT: ALKALI-RESISTANT PRIMER.
- b.INTERMEDIATE COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR LATEX [(FLAT)] [(SEMGLOSS)] [(GLOSS)].

E. STEEL SUBSTRATES:

1. ALKYD SYSTEM: MPI EXT 5.1D.
- a.PRIME COAT: ALKYD ANTICORROSIVE METAL PRIMER.
- b.INTERMEDIATE COAT: EXTERIOR ALKYD ENAMEL MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR ALKYD ENAMEL [(FLAT)] [(SEMGLOSS)] [(GLOSS)].
- F. GALVANIZED-METAL SUBSTRATES:
1. ALKYD SYSTEM: MPI EXT 5.3B.
- a.PRIME COAT: CEMENTITIOUS GALVANIZED-METAL PRIMER.
- b.INTERMEDIATE COAT: EXTERIOR ALKYD ENAMEL MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR ALKYD ENAMEL [(FLAT)] [(SEMGLOSS)] [(GLOSS)].

G. ALUMINUM SUBSTRATES:

1. ALKYD SYSTEM: MPI EXT 5.4F.
- a.PRIME COAT: QUICK-DRYING PRIMER FOR ALUMINUM.
- b.INTERMEDIATE COAT: EXTERIOR ALKYD ENAMEL MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR ALKYD ENAMEL [(FLAT)] [(SEMGLOSS)] [(GLOSS)].
- H. DIMENSION LUMBER SUBSTRATES, NONTRAFFIC SURFACES: INCLUDING FENCING.
1. ALKYD SYSTEM: MPI EXT 6.2C.
- a.PRIME COAT: EXTERIOR ALKYD WOOD PRIMER.
- b.INTERMEDIATE COAT: EXTERIOR ALKYD ENAMEL MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR ALKYD ENAMEL (FLAT).

- I. PLASTIC TRIM FABRICATION SUBSTRATES:
1. LATEX SYSTEM: MPI EXT 6.8A.
- a.PRIME COAT: BONDING PRIMER (WATER BASED).
- b.INTERMEDIATE COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR LATEX (FLAT).
2. ALKYD SYSTEM: MPI EXT 6.8B.
- a.PRIME COAT: BONDING PRIMER (SOLVENT BASED).
- b.INTERMEDIATE COAT: EXTERIOR ALKYD ENAMEL MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR ALKYD ENAMEL (FLAT).

J. STUCCO SUBSTRATES:

1. LATEX SYSTEM: MPI EXT 9.1A.
- a.PRIME COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- b.INTERMEDIATE COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- c. TOPCOAT: EXTERIOR LATEX (FLAT).
2. LATEX OVER ALKALI-RESISTANT PRIMER SYSTEM: MPI EXT 9.1J.
- a.PRIME COAT: ALKALI-RESISTANT PRIMER.
- b.INTERMEDIATE COAT: EXTERIOR LATEX MATCHING TOPCOAT.
- c.TOPCOAT: EXTERIOR LATEX (FLAT).

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES SURFACE PREPARATION AND THE APPLICATION OF PAINT SYSTEMS ON THE FOLLOWING INTERIOR SUBSTRATES:
1. STEEL.
2. GALVANIZED METAL.
3. ALUMINUM (NOT ANODIZED OR OTHERWISE COATED).
4. WOOD.
5. GYPSUM BOARD.
6. SPRAY-TEXTURED CEILINGS.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. SAMPLES: FOR EACH FINISH AND FOR EACH COLOR AND TEXTURE REQUIRED.

1.3 QUALITY ASSURANCE

- A. MPI STANDARDS:
1. PRODUCTS: COMPLYING WITH MPI STANDARDS INDICATED AND LISTED IN "MPI APPROVED PRODUCTS LIST."
2. PREPARATION AND WORKMANSHIP: COMPLY WITH REQUIREMENTS IN "MPI ARCHITECTURAL PAINTING SPECIFICATION MANUAL" FOR PRODUCTS AND PAINT SYSTEMS INDICATED.
- 1.4 EXTRA MATERIALS
- A. FURNISH EXTRA MATERIALS DESCRIBED BELOW THAT ARE FROM SAME PRODUCTION RUN (BATCH MIX) AS MATERIALS APPLIED AND THAT ARE PACKAGED FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.
1. QUANTITY: FURNISH AN ADDITIONAL 5 PERCENT, BUT NOT LESS THAN 1 GAL. (3.8 L) OF EACH MATERIAL AND COLOR APPLIED.

PART 2 - PRODUCTS

2.1 PAINT, GENERAL

- A. MATERIAL COMPATIBILITY:
1. PROVIDE MATERIALS FOR USE WITHIN EACH PAINT SYSTEM THAT ARE COMPATIBLE WITH ONE ANOTHER AND SUBSTRATES INDICATED, UNDER CONDITIONS OF SERVICE AND APPLICATION AS DEMONSTRATED BY MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.
2. FOR EACH COAT IN A PAINT SYSTEM, PROVIDE PRODUCTS RECOMMENDED IN WRITING BY MANUFACTURERS OF TOPCOAT FOR USE IN PAINT SYSTEM AND ON SUBSTRATE INDICATED.
- B. VOC CONTENT OF FIELD-APPLIED INTERIOR PAINTS AND COATINGS: PROVIDE PRODUCTS THAT COMPLY WITH THE FOLLOWING LIMITS FOR VOC CONTENT, EXCLUSIVE OF COLORANTS ADDED TO A TINT BASE, WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24); THESE REQUIREMENTS DO NOT APPLY TO PAINTS AND COATINGS THAT ARE APPLIED IN A FABRICATION OR FINISHING SHOP:
1. FLAT PAINTS, COATINGS, AND PRIMERS: VOC CONTENT OF NOT MORE THAN 50 G/L.
2. NONFLAT PAINTS, COATINGS, AND PRIMERS: VOC CONTENT OF NOT MORE THAN 150 G/L.
3. ANTI-CORROSIVE AND ANTI-RUST PAINTS APPLIED TO FERROUS METALS: VOC NOT MORE THAN 250 G/L.
4. FLOOR COATINGS: VOC NOT MORE THAN 100 G/L.
5. SHELLACS, CLEAR: VOC NOT MORE THAN 730 G/L.
6. SHELLACS, PIGMENTED: VOC NOT MORE THAN 550 G/L.
7. FLAT TOPCOAT PAINTS: VOC CONTENT OF NOT MORE THAN 50 G/L.
8. NONFLAT TOPCOAT PAINTS: VOC CONTENT OF NOT MORE THAN 150 G/L.
9. ANTI-CORROSIVE AND ANTI-RUST PAINTS APPLIED TO FERROUS METALS: VOC NOT MORE THAN 250 G/L.
10. FLOOR COATINGS: VOC NOT MORE THAN 100 G/L.
11. SHELLACS, CLEAR: VOC NOT MORE THAN 730 G/L.
12. SHELLACS, PIGMENTED: VOC NOT MORE THAN 550 G/L.
13. PRIMERS, SEALERS, AND UNDERCOATERS: VOC CONTENT OF NOT MORE THAN 200 G/L.
14. DRY-FOG COATINGS: VOC CONTENT OF NOT MORE THAN 400 G/L.
15. ZINC-RICH INDUSTRIAL MAINTENANCE PRIMERS: VOC CONTENT OF NOT MORE THAN 340 G/L.
16. PRE-TREATMENT WASH PRIMERS: VOC CONTENT OF NOT MORE THAN 420 G/L.

- C. CHEMICAL COMPONENTS OF FIELD-APPLIED INTERIOR PAINTS AND COATINGS: PROVIDE TOPCOAT PAINTS AND ANTI-CORROSIVE AND ANTI-RUST PAINTS APPLIED TO FERROUS METALS THAT COMPLY WITH THE FOLLOWING CHEMICAL RESTRICTIONS; THESE REQUIREMENTS DO NOT APPLY TO PAINTS AND COATINGS THAT ARE APPLIED IN A FABRICATION OR FINISHING SHOP:
1. AROMATIC COMPOUNDS: PAINTS AND COATINGS SHALL NOT CONTAIN MORE THAN 1.0 PERCENT BY WEIGHT OF TOTAL AROMATIC COMPOUNDS (HYDROCARBON COMPOUNDS CONTAINING ONE OR MORE BENZENE RINGS).
2. RESTRICTED COMPONENTS: PAINTS AND COATINGS SHALL NOT CONTAIN ANY OF THE FOLLOWING:

- a. ACROLEIN.
- b. ACRYLONITRILE.
- c. ANTIMONY.
- d. BENZENE.
- e. BUTYL BENZYL PHTHALATE.
- f. CADMIUM.
- g. DI (2-ETHYLHEXYL) PHTHALATE.
- h. DI-N-BUTYL PHTHALATE.
- i. DI-N-OCTYL PHTHALATE.
- j. 1,2-DICHLOROBENZENE.
- k. DIETHYL PHTHALATE.
- l. DIMETHYL PHTHALATE.
- m. ETHYLBENZENE.
- n. FORMALDEHYDE.
- o. HEXAVALENT CHROMIUM.
- p. ISOPHORONE.
- q. LEAD.
- r. MERCURY.
- s. METHYL ETHYL KETONE.
- t. METHYL ISOBUTYL KETONE.
- u. METHYLENE CHLORIDE.
- v. NAPHTHALENE.
- w. TOLUENE (METHYLBENZENE).
- x. 1,1,1-TRICHLOROETHANE.
- y. VINYL CHLORIDE.
- D. COLORS: AS INDICATED ON THE DRAWINGS.

2.2 BLOCK FILLERS

- A. INTERIOR/EXTERIOR LATEX BLOCK FILLER: MPI #4.

2.3 PRIMERS/SEALERS

- A. INTERIOR LATEX PRIMER/SEALER: MPI #50.
- B. INTERIOR ALKYD PRIMER/SEALER: MPI #45.
- C. WOOD-KNOT SEALER: SEALER RECOMMENDED IN WRITING BY TOPCOAT MANUFACTURER FOR USE IN PAINT SYSTEMS INDICATED.

2.4 METAL PRIMERS

- A. ALKYD ANTICORROSIVE METAL PRIMER: MPI #79.
- B. QUICK-DRYING ALKYD METAL PRIMER: MPI #76.
- C. RUST-INHIBITIVE PRIMER (WATER BASED): MPI #107.
- D. CEMENTITIOUS GALVANIZED-METAL PRIMER: MPI #26.
- E. WATERBORNE GALVANIZED-METAL PRIMER: MPI #134.
- F. VINYL WASH PRIMER: MPI #80.
- G. QUICK-DRYING PRIMER FOR ALUMINUM: MPI #95.

2.5 WOOD PRIMERS

- A. INTERIOR LATEX-BASED WOOD PRIMER: MPI #39.

2.6 LATEX PAINTS

- A. INTERIOR LATEX (FLAT): MPI #53 (GLOSS LEVEL 1).
- B. INTERIOR LATEX (LOW SHEEN): MPI #44 (GLOSS LEVEL 2).
- C. INTERIOR LATEX (EGGSHELL): MPI #52 (GLOSS LEVEL 3).
- D. INTERIOR LATEX (SATIN): MPI #43 (GLOSS LEVEL 4).
- E. INTERIOR LATEX (SEMGLOSS): MPI #11 (GLOSS LEVEL 5).
- F. INTERIOR LATEX (GLOSS): MPI #114 (GLOSS LEVEL 6, EXCEPT MINIMUM GLOSS OF 65 UNITS AT 60 DEG).
- G. HIGH-PERFORMANCE ARCHITECTURAL LATEX (LOW SHEEN): MPI #138 (GLOSS LEVEL 2).
- H. HIGH-PERFORMANCE ARCHITECTURAL LATEX (EGGSHELL): MPI #139 (GLOSS LEVEL 3).
- I. HIGH-PERFORMANCE ARCHITECTURAL LATEX (SATIN): MPI #140 (GLOSS LEVEL 4).
- J. HIGH-PERFORMANCE ARCHITECTURAL LATEX (SEMGLOSS): MPI #141 (GLOSS LEVEL 5).
- K. EXTERIOR LATEX (FLAT): MPI #10 (GLOSS LEVEL 1).
- L. EXTERIOR LATEX (SEMGLOSS): MPI #11 (GLOSS LEVEL 5).
- M. EXTERIOR LATEX (GLOSS): MPI #119 (GLOSS LEVEL 6, EXCEPT MINIMUM GLOSS OF 65 UNITS AT 60 DEG).

2.7 ALKYD PAINTS

- A. INTERIOR ALKYD (FLAT): MPI #49 (GLOSS LEVEL 1).
- B. INTERIOR ALKYD (EGGSHELL): MPI #51 (GLOSS LEVEL 3).
- C. INTERIOR ALKYD (SEMGLOSS): MPI #47 (GLOSS LEVEL 5).
- D. INTERIOR ALKYD (GLOSS): MPI #48 (GLOSS LEVEL 6).

2.8 QUICK-DRYING ENAMELS

- A. QUICK-DRYING ENAMEL (SEMGLOSS): MPI #81 (GLOSS LEVEL 5).
- B. QUICK-DRYING ENAMEL (HIGH GLOSS): MPI #96 (GLOSS LEVEL 7).

2.9 TEXTURED COATING

- A. LATEX STUCCO AND MASONRY TEXTURED COATING: MPI #42.

2.10 ALUMINUM PAINT

- A. ALUMINUM PAINT: MPI #1.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. EXAMINE SUBSTRATES AND CONDITIONS, WITH APPLICATOR PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR MAXIMUM MOISTURE CONTENT AND OTHER CONDITIONS AFFECTING PERFORMANCE OF WORK.
- B. MAXIMUM MOISTURE CONTENT OF SUBSTRATES: WHEN MEASURED WITH AN ELECTRONIC MOISTURE METER AS FOLLOWS:
1. WOOD: 15 PERCENT.
2. GYPSUM BOARD: 12 PERCENT.
- C. VERIFY SUITABILITY OF SUBSTRATES, INCLUDING SURFACE CONDITIONS AND COMPATIBILITY WITH EXISTING FINISHES AND PRIMERS.
- D. BEGIN COATING APPLICATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED AND SURFACES ARE DRY.
1. BEGINNING COATING APPLICATION CONSTITUTES CONTRACTOR'S ACCEPTANCE OF SUBSTRATES AND CONDITIONS.

3.2 PREPARATION AND APPLICATION

- A. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS IN "MPI ARCHITECTURAL PAINTING SPECIFICATION MANUAL" APPLICABLE TO SUBSTRATES INDICATED.
- B. CLEAN SUBSTRATES OF SUBSTANCES THAT COULD IMPAIR BOND OF PAINTS, INCLUDING DIRT, OIL, GREASE, AND INCOMPATIBLE PAINTS AND ENCAPSULANTS.
1. REMOVE INCOMPATIBLE PRIMERS AND REPRIME SUBSTRATE WITH COMPATIBLE PRIMERS AS REQUIRED TO PRODUCE PAINT SYSTEMS INDICATED.
- C. APPLY PAINTS TO PRODUCE SURFACE FILMS WITHOUT CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, ROLLER TRACKING, RUNS, SAGS, ROPINESS, OR OTHER SURFACE IMPERFECTIONS. CUT IN SHARP LINES AND COLOR BREAKS.
- D. PAINTING MECHANICAL AND ELECTRICAL WORK: PAINT ITEMS EXPOSED IN EQUIPMENT ROOMS AND OCCUPIED SPACES INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
1. MECHANICAL WORK:
- a. UNINSULATED METAL PIPING.
- b. UNINSULATED PLASTIC PIPING.
- c. PIPE HANGERS AND SUPPORTS.
- d. TANKS THAT DO NOT HAVE FACTORY-APPLIED FINAL FINISHES.
- e. VISIBLE PORTIONS OF INTERNAL SURFACES OF METAL DUCTS, WITHOUT LINER, BEHIND AIR INLETS AND OUTLETS.
- f. DUCT, EQUIPMENT, AND PIPE INSULATION HAVING COTTON OR CANVAS INSULATION COVERING OR OTHER PAINTABLE JACKET MATERIAL.
- g. MECHANICAL EQUIPMENT THAT IS INDICATED TO HAVE A FACTORY-PRIMED FINISH FOR FIELD PAINTING.
2. ELECTRICAL WORK:
- a. SWITCHGEAR.
- b. PANELBOARDS.
- c. ELECTRICAL EQUIPMENT THAT IS INDICATED TO HAVE A FACTORY-PRIMED FINISH FOR FIELD PAINTING.
- E. PROTECT WORK OF OTHER TRADES AGAINST DAMAGE FROM PAINT APPLICATION. CORRECT DAMAGE TO WORK OF OTHER TRADES BY CLEANING, REPAIRING, REPLACING, AND REFINISHING, AS APPROVED BY ARCHITECT, AND LEAVE IN AN UNDAMAGED CONDITION.
- F. AT COMPLETION OF CONSTRUCTION ACTIVITIES OF OTHER TRADES, TOUCH UP AND RESTORE DAMAGED OR DEFACED PAINTED SURFACES.

3.3 INTERIOR PAINTING SCHEDULE - REFER TO DECOR DRAWINGS

A. CLAY-MASONRY SUBSTRATES:

- B. STEEL SUBSTRATES:
1. QUICK-DRYING ENAMEL SYSTEM: MPI INT 5.1A.
- a. PRIME COAT: QUICK-DRYING ALKYD METAL PRIMER.
- b. INTERMEDIATE COAT: QUICK-DRYING ENAMEL MATCHING TOPCOAT.
- c. TOPCOAT: QUICK-DRYING ENAMEL (SEMGLOSS).
2. WATER-BASED DRY-FALL SYSTEM: MPI INT 5.1C.
- a. PRIME COAT: ALKYD ANTICORROSIVE METAL PRIMER.
- b. TOPCOAT: LATEX DRY FOG/FALL.
3. ALKYD DRY-FALL SYSTEM: MPI INT 5.1D.
- a. PRIME COAT: ALKYD ANTICORROSIVE METAL PRIMER.
- b. TOPCOAT: INTERIOR ALKYD DRY FOG/FALL.
4. LATEX OVER ALKYD PRIMER SYSTEM: MPI INT 5.1Q.
- a. PRIME COAT: ALKYD ANTICORROSIVE METAL PRIMER.
- b. INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR LATEX [(FLAT)] [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMGLOSS)] [(GLOSS)].
5. ALKYD SYSTEM: MPI INT 5.1E.
- a. PRIME COAT: ALKYD ANTICORROSIVE METAL PRIMER.
- b. INTERMEDIATE COAT: INTERIOR ALKYD MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR ALKYD [(FLAT)] [(EGGSHELL)] [(SEMGLOSS)] [(GLOSS)].
6. ALUMINUM PAINT SYSTEM: MPI INT 5.1M.
- a. PRIME COAT: ALKYD ANTICORROSIVE METAL PRIMER.
- b. INTERMEDIATE COAT: ALUMINUM PAINT.
- c. TOPCOAT: ALUMINUM PAINT.
7. HIGH-PERFORMANCE ARCHITECTURAL LATEX SYSTEM: MPI INT 5.1R.
- a. PRIME COAT: ALKYD ANTICORROSIVE METAL PRIMER.
- b. INTERMEDIATE COAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX MATCHING TOPCOAT.
- c. TOPCOAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMGLOSS)].

C. GALVANIZED-METAL SUBSTRATES:

1. WATER-BASED DRY-FALL SYSTEM: MPI INT 5.3H.
- a. PRIME COAT: WATERBORNE DRY FALL.
- b. TOPCOAT: WATERBORNE DRY FALL.
2. ALKYD DRY-FALL SYSTEM: MPI INT 5.3F.
- a. PRIME COAT: CEMENTITIOUS GALVANIZED-METAL PRIMER.
- b. TOPCOAT: INTERIOR ALKYD DRY FOG/FALL.
3. LATEX SYSTEM: MPI INT 5.3A.
- a. PRIME COAT: CEMENTITIOUS GALVANIZED-METAL PRIMER.
- b. INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR LATEX [(FLAT)] [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMGLOSS)] [(GLOSS)].
4. LATEX OVER WATERBORNE PRIMER SYSTEM: MPI INT 5.3J.
- a. PRIME COAT: WATERBORNE GALVANIZED-METAL PRIMER.
- b. INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR LATEX [(FLAT)] [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMGLOSS)] [(GLOSS)].
5. ALKYD SYSTEM: MPI INT 5.3C.
- a. PRIME COAT: CEMENTITIOUS GALVANIZED-METAL PRIMER.
- b. INTERMEDIATE COAT: INTERIOR ALKYD MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR ALKYD [(FLAT)] [(EGGSHELL)] [(SEMGLOSS)] [(GLOSS)].
6. ALUMINUM PAINT SYSTEM: MPI INT 5.3G.
- a. PRIME COAT: CEMENTITIOUS GALVANIZED-METAL PRIMER.
- b. INTERMEDIATE COAT: ALUMINUM PAINT.
- c. TOPCOAT: ALUMINUM PAINT.
7. HIGH-PERFORMANCE ARCHITECTURAL LATEX SYSTEM: MPI INT 5.3M.
- a. PRIME COAT: WATERBORNE GALVANIZED-METAL PRIMER.
- b. INTERMEDIATE COAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX MATCHING TOPCOAT.
- c. TOPCOAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMGLOSS)].

D. ALUMINUM (NOT ANODIZED OR OTHERWISE COATED) SUBSTRATES:

1. LATEX SYSTEM: MPI INT 5.4H.
- a. PRIME COAT: QUICK-DRYING PRIMER FOR ALUMINUM.
- b. INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR LATEX [(FLAT)] [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMGLOSS)] [(GLOSS)].
2. ALKYD OVER VINYL WASH PRIMER SYSTEM: MPI INT 5.4A.
- a. PRIME COAT: VINYL WASH PRIMER.
- b. INTERMEDIATE COAT: INTERIOR ALKYD MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR ALKYD [(FLAT)] [(EGGSHELL)] [(SEMGLOSS)] [(GLOSS)].
3. ALKYD SYSTEM: MPI INT 5.4D.
- a. PRIME COAT: VINYL WASH PRIMER.
- b. INTERMEDIATE COAT: ALUMINUM PAINT.
- c. TOPCOAT: ALUMINUM PAINT.
4. HIGH-PERFORMANCE ARCHITECTURAL LATEX SYSTEM: MPI INT 5.4F.
- a. PRIME COAT: QUICK-DRYING PRIMER FOR ALUMINUM.
- b. INTERMEDIATE COAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX MATCHING TOPCOAT.
- c. TOPCOAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMGLOSS)].

E. DRESSED LUMBER SUBSTRATES: INCLUDING ARCHITECTURAL WOODWORK, DOORS.

1. LATEX SYSTEM: MPI INT 6.3T.
- a. PRIME COAT: INTERIOR LATEX-BASED WOOD PRIMER.
- b. INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR LATEX [(SEMGLOSS)] [(GLOSS)].
2. LATEX OVER ALKYD PRIMER SYSTEM: MPI INT 6.3U.
- a. PRIME COAT: INTERIOR ALKYD PRIMER/SEALER.
- b. INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR LATEX [(SEMGLOSS)] [(GLOSS)].
3. ALKYD SYSTEM: MPI INT 6.3B.
- a. PRIME COAT: INTERIOR ALKYD PRIMER/SEALER.
- b. INTERMEDIATE COAT: INTERIOR ALKYD MATCHING TOPCOAT.
- c. TOPCOAT: INTERIOR ALKYD [(EGGSHELL)] [(SEMGLOSS)] [(GLOSS)].
4. HIGH-PERFORMANCE ARCHITECTURAL LATEX SYSTEM: MPI INT 6.3A.
- a



4. HIGH-PERFORMANCE ARCHITECTURAL LATEX SYSTEM: MPI INT 6.4S.
- PRIME COAT: INTERIOR LATEX-BASED WOOD PRIMER.
  - INTERMEDIATE COAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX MATCHING TOPCOAT.
  - TOPCOAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMIGLOSS)].
- G. DIMENSION LUMBER SUBSTRATES, NONTRAFFIC SURFACES: INCLUDING EXPOSED JOISTS OR EXPOSED BEAMS.
- LATEX SYSTEM: MPI INT 6.2D.
    - PRIME COAT: INTERIOR LATEX-BASED WOOD PRIMER.
    - INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
    - TOPCOAT: INTERIOR LATEX [(FLAT)] [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMIGLOSS)] [(GLOSS)].  - LATEX OVER ALKYD PRIMER SYSTEM: MPI INT 6.2A.
    - PRIME COAT: INTERIOR ALKYD PRIMER/SEALER.
    - INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
    - TOPCOAT: INTERIOR LATEX [(FLAT)] [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMIGLOSS)] [(GLOSS)].  - ALKYD SYSTEM: MPI INT 6.2C.
    - PRIME COAT: INTERIOR ALKYD PRIMER/SEALER.
    - INTERMEDIATE COAT: INTERIOR ALKYD MATCHING TOPCOAT.
    - TOPCOAT: INTERIOR ALKYD [(FLAT)] [(EGGSHELL)] [(SEMIGLOSS)] [(GLOSS)].  - HIGH-PERFORMANCE ARCHITECTURAL LATEX SYSTEM: MPI INT 6.2B.
    - PRIME COAT: INTERIOR ALKYD PRIMER/SEALER.
    - INTERMEDIATE COAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX MATCHING TOPCOAT.
    - TOPCOAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMIGLOSS)].
- H. GYPSUM BOARD SUBSTRATES:
- LATEX SYSTEM: MPI INT 9.2A.
    - PRIME COAT: INTERIOR LATEX [PRIMER/SEALER] [MATCHING TOPCOAT].
    - INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
    - TOPCOAT: INTERIOR LATEX [(FLAT)] [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMIGLOSS)] [(GLOSS)].  - ALKYD OVER LATEX PRIMER SYSTEM: MPI INT 9.2C.
    - PRIME COAT: INTERIOR LATEX PRIMER/SEALER.
    - INTERMEDIATE COAT: INTERIOR ALKYD MATCHING TOPCOAT.
    - TOPCOAT: INTERIOR ALKYD [(FLAT)] [(EGGSHELL)] [(SEMIGLOSS)] [(GLOSS)].  - HIGH-PERFORMANCE ARCHITECTURAL LATEX SYSTEM: MPI INT 9.2B.
    - PRIME COAT: INTERIOR LATEX PRIMER/SEALER.
    - INTERMEDIATE COAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX MATCHING TOPCOAT.
    - TOPCOAT: HIGH-PERFORMANCE ARCHITECTURAL LATEX [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMIGLOSS)].
- I. SPRAY-TEXTURED CEILING SUBSTRATES:
- LATEX (FLAT) SYSTEM: MPI INT 9.1A, SPRAY APPLIED.
    - PRIME COAT: INTERIOR LATEX [PRIMER/SEALER] [(FLAT)].
    - TOPCOAT: INTERIOR LATEX (FLAT).  - LATEX SYSTEM: MPI INT 9.1E, SPRAY APPLIED.
    - PRIME COAT: INTERIOR LATEX MATCHING TOPCOAT.
    - INTERMEDIATE COAT: INTERIOR LATEX MATCHING TOPCOAT.
    - TOPCOAT: INTERIOR LATEX [(FLAT)] [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMIGLOSS)].  - LATEX OVER ALKYD PRIMER SYSTEM: MPI INT 9.1B.
    - PRIME COAT: INTERIOR ALKYD PRIMER/SEALER.
    - TOPCOAT: INTERIOR LATEX [(FLAT)] [(LOW SHEEN)] [(EGGSHELL)] [(SATIN)] [(SEMIGLOSS)] [(GLOSS)].  - ALKYD (FLAT) SYSTEM: MPI INT 9.1C.
    - PRIME COAT: INTERIOR ALKYD (FLAT).
- SECTION 102113 - TOILET COMPARTMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES PLASTIC-LAMINATE UNITS AS FOLLOWS:
- TOILET ENCLOSURES: OVERHEAD BRACED, FLOOR ANCHORED, CEILING HUNG, FLOOR AND CEILING ANCHORED.
  - URINAL SCREENS: WALL HUNG.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. SAMPLES: FOR EACH EXPOSED FINISH.

PART 2 - PRODUCTS

2.1 ACCESSORIES

- A. HARDWARE AND ACCESSORIES: MANUFACTURER'S STANDARD DESIGN, HEAVY-DUTY OPERATING HARDWARE AND ACCESSORIES.
- MATERIAL: STAINLESS STEEL.
- B. OVERHEAD BRACING: MANUFACTURER'S STANDARD CONTINUOUS, EXTRUDED-ALUMINUM HEAD RAIL WITH ANTIGRIP PROFILE AND IN MANUFACTURER'S STANDARD FINISH.
- C. ANCHORAGES AND FASTENERS: MANUFACTURER'S STANDARD EXPOSED FASTENERS OF STAINLESS STEEL FINISHED TO MATCH HARDWARE, WITH THEFT-RESISTANT-TYPE HEADS. PROVIDE SEX-TYPE BOLTS FOR THROUGH-BOLT APPLICATIONS. FOR CONCEALED ANCHORS, USE HOT-DIP GALVANIZED OR OTHER RUST-RESISTANT, PROTECTIVE-COATED STEEL.

2.2 FABRICATION

- A. OVERHEAD-BRACED UNITS: PROVIDE MANUFACTURER'S STANDARD CORROSION-RESISTANT SUPPORTS, LEVELING MECHANISM, FASTENERS, AND ANCHORS AT PILASTERS TO SUIT FLOOR CONDITIONS. MAKE PROVISIONS FOR SETTING AND SECURING CONTINUOUS HEAD RAIL AT TOP OF EACH PILASTER. PROVIDE SHOES AT PILASTERS TO CONCEAL SUPPORTS AND LEVELING MECHANISM.
- B. DOORS: UNLESS OTHERWISE INDICATED, PROVIDE 24-INCH- (610-MM-) WIDE IN-SWINGING DOORS FOR STANDARD TOILET COMPARTMENTS AND 36-INCH- (914-MM-) WIDE OUT-SWINGING DOORS WITH A MINIMUM 32-INCH- (813-MM-) WIDE CLEAR OPENING FOR COMPARTMENTS INDICATED TO BE ACCESSIBLE TO PEOPLE WITH DISABILITIES.
- HINGES: MANUFACTURER'S STANDARD SELF-CLOSING TYPE THAT CAN BE ADJUSTED TO HOLD DOORS OPEN AT ANY ANGLE UP TO 90 DEGREES.
  - LATCH AND KEEPER: MANUFACTURER'S STANDARD SURFACE-MOUNTED LATCH UNIT DESIGNED FOR EMERGENCY ACCESS AND WITH COMBINATION RUBBER-FACED DOOR STRIKE AND KEEPER. PROVIDE UNITS THAT COMPLY WITH ACCESSIBILITY REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AT COMPARTMENTS INDICATED TO BE ACCESSIBLE TO PEOPLE WITH DISABILITIES.
  - COAT HOOK: MANUFACTURER'S STANDARD COMBINATION HOOK AND RUBBER-TIPPED BUMPER, SIZED TO PREVENT DOOR FROM HITTING COMPARTMENT-MOUNTED ACCESSORIES.
  - DOOR BUMPER: MANUFACTURER'S STANDARD RUBBER-TIPPED BUMPER AT OUT-SWINGING DOORS.
  - DOOR PULL: MANUFACTURER'S STANDARD UNIT AT OUT-SWINGING DOORS THAT COMPLIES WITH ACCESSIBILITY REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION. PROVIDE UNITS ON BOTH SIDES OF DOORS AT COMPARTMENTS INDICATED TO BE ACCESSIBLE TO PEOPLE WITH DISABILITIES.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. GENERAL: COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. INSTALL UNITS RIGID, STRAIGHT, LEVEL, AND PLUMB. SECURE UNITS IN POSITION WITH

MANUFACTURER'S RECOMMENDED ANCHORING DEVICES.

- MAXIMUM CLEARANCES:
  - PILASTERS AND PANELS: 1/2 INCH (13 MM).
  - PANELS AND WALLS: 1 INCH (25 MM).
- STIRRUP BRACKETS: SECURE PANELS TO WALLS AND TO PILASTERS WITH NOT LESS THAN THREE BRACKETS ATTACHED AT MIDPOINT AND NEAR TOP AND BOTTOM OF PANEL.
  - LOCATE WALL BRACKETS SO HOLES FOR WALL ANCHORS OCCUR IN MASONRY OR TILE JOINTS.
  - ALIGN BRACKETS AT PILASTERS WITH BRACKETS AT WALLS.

3.2 ADJUSTING

- A. HARDWARE ADJUSTMENT: ADJUST AND LUBRICATE HARDWARE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROPER OPERATION. SET HINGES ON IN-SWINGING DOORS TO HOLD DOORS OPEN APPROXIMATELY 30 DEGREES FROM CLOSED POSITION WHEN UNLATCHED. SET HINGES ON OUT-SWINGING DOORS TO RETURN DOORS TO FULLY CLOSED POSITION.

SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES THE FOLLOWING:
- PUBLIC-USE WASHROOM ACCESSORIES.
- B. OWNER-FURNISHED MATERIAL: AS INDICATED ON THE DRAWINGS.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- PRODUCT SCHEDULE:
- IDENTIFY LOCATIONS USING ROOM DESIGNATIONS INDICATED ON DRAWINGS.
  - IDENTIFY PRODUCTS USING DESIGNATIONS INDICATED ON DRAWINGS.

PART 2 - PRODUCTS

2.1 PUBLIC-USE WASHROOM ACCESSORIES

- A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY THE FOLLOWING:
- BOBRICK WASHROOM EQUIPMENT, INC.
- B. TOILET TISSUE (ROLL) DISPENSER AS INDICATED ON THE DRAWINGS.
- C. PAPER TOWEL (FOLDED) DISPENSER AS FURNISHED BY THE OWNER.
- D. WASTE RECEPTACLE AS FURNISHED BY THE OWNER.
- E. GRAB BARS AS INDICATED ON THE DRAWINGS.
- F. SANITARY-NAPKIN DISPOSAL UNIT AS INDICATED ON THE DRAWINGS.
- G. MIRROR UNIT AS INDICATED ON THE DRAWINGS.

2.2 FABRICATION

- A. KEYS: PROVIDE UNIVERSAL KEYS FOR INTERNAL ACCESS TO ACCESSORIES FOR SERVICING AND RESUPPLYING. PROVIDE MINIMUM OF SIX KEYS TO OWNER'S REPRESENTATIVE.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. INSTALL ACCESSORIES ACCORDING TO MANUFACTURERS' WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

SECTION 104416 - FIRE EXTINGUISHERS

PART 1 - GENERAL

1.1 SUMMARY

- A. SECTION INCLUDES PORTABLE, HAND-CARRIED FIRE EXTINGUISHERS AND MOUNTING BRACKETS FOR FIRE EXTINGUISHERS.

1.2 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
- B. OPERATION AND MAINTENANCE DATA.
- C. WARRANTY: SAMPLE OF SPECIAL WARRANTY.

1.3 QUALITY ASSURANCE

- A. NFPA COMPLIANCE: FABRICATE AND LABEL FIRE EXTINGUISHERS TO COMPLY WITH NFPA 10, "PORTABLE FIRE EXTINGUISHERS."
- B. FIRE EXTINGUISHERS: LISTED AND LABELED FOR TYPE, RATING, AND CLASSIFICATION BY AN INDEPENDENT TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

1.4 WARRANTY

- A. SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE FIRE EXTINGUISHERS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.
- FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
    - FAILURE OF HYDROSTATIC TEST ACCORDING TO NFPA 10.
    - FAULTY OPERATION OF VALVES OR RELEASE LEVERS.
  - WARRANTY PERIOD: SIX YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

PART 2 - PRODUCTS

2.1 PORTABLE, HAND-CARRIED FIRE EXTINGUISHERS

- A. FIRE EXTINGUISHERS: TYPE, SIZE, AND CAPACITY FOR EACH WITH MOUNTING BRACKET.
- MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
    - ANSUL INCORPORATED; TYCO INTERNATIONAL LTD.
    - J. L. INDUSTRIES, INC.; A DIVISION OF ACTIVAR CONSTRUCTION PRODUCTS GROUP.
    - KIDDE RESIDENTIAL AND COMMERCIAL DIVISION; SUBSIDIARY OF KIDDE PLC.
    - LARSEN'S MANUFACTURING COMPANY.
  - INSTRUCTION LABELS: INCLUDE PICTORIAL MARKING SYSTEM COMPLYING WITH NFPA 10, APPENDIX B.
- B. MULTIPURPOSE DRY-CHEMICAL TYPE 4-A: 60-B-C, 10 LB., 4.5 KG. UL-RATED NOMINAL CAPACITY, WITH MONOAMMONIUM PHOSPHATE-BASED DRY CHEMICAL IN MANUFACTURER'S STANDARD ENAMELED CONTAINER.

2.2 MOUNTING BRACKETS

- A. MOUNTING BRACKETS: MANUFACTURER'S STANDARD GALVANIZED STEEL, DESIGNED TO SECURE FIRE EXTINGUISHER TO WALL OR STRUCTURE, OF SIZES REQUIRED FOR TYPES AND CAPACITIES OF FIRE EXTINGUISHERS INDICATED, WITH PLATED OR RED BAKED-ENAMEL FINISH.
- B. IDENTIFICATION: LETTERING COMPLYING WITH AUTHORITIES HAVING JURISDICTION FOR LETTER STYLE, SIZE, SPACING, AND LOCATION. LOCATE AS INDICATED ON THE DRAWINGS.

- IDENTIFY BRACKET-MOUNTED FIRE EXTINGUISHERS WITH THE WORDS "FIRE EXTINGUISHER" IN RED LETTER DECALS APPLIED TO MOUNTING SURFACE.
  - ORIENTATION: VERTICAL.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. EXAMINE FIRE EXTINGUISHERS FOR PROPER CHARGING AND TAGGING.
- REMOVE AND REPLACE DAMAGED, DEFECTIVE, OR UNDERCHARGED FIRE EXTINGUISHERS.
- B. INSTALL FIRE EXTINGUISHERS AND MOUNTING BRACKETS IN LOCATIONS INDICATED AND IN COMPLIANCE WITH REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
- MOUNTING BRACKETS: 54 INCHES (1372 MM) ABOVE FINISHED FLOOR TO TOP OF FIRE EXTINGUISHER, OR AT HEIGHTS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
- C. MOUNTING BRACKETS: FASTEN MOUNTING BRACKETS TO SURFACES, SQUARE AND PLUMB, AT LOCATIONS INDICATED.

SECTION 114000 - FOODSERVICE EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. THIS SECTION INCLUDES EQUIPMENT FOR FOODSERVICE AND RELATED EQUIPMENT INDICATED ON THE DRAWINGS.

1.2 SUBMITTALS

- A. COORDINATION DRAWINGS: FOR FOODSERVICE FACILITIES.
- INDICATE LOCATIONS OF FOODSERVICE EQUIPMENT AND CONNECTIONS TO UTILITIES.
  - KEY EQUIPMENT USING SAME DESIGNATIONS AS INDICATED ON DRAWINGS.
  - INCLUDE PLANS AND ELEVATIONS; CLEARANCE REQUIREMENTS FOR EQUIPMENT ACCESS AND MAINTENANCE; DETAILS OF SUPPORT FOR EQUIPMENT; AND UTILITY SERVICE CHARACTERISTICS.

1.3 QUALITY ASSURANCE

- A. NSF STANDARDS: EQUIPMENT SHALL BEAR NSF CERTIFICATION MARK OR UL CLASSIFICATION MARK CERTIFYING COMPLIANCE WITH APPLICABLE NSF/ANSI STANDARDS.
- B. UL CERTIFICATION: PROVIDE ELECTRIC AND FUEL-BURNING EQUIPMENT AND COMPONENTS THAT ARE EVALUATED BY UL FOR FIRE, ELECTRIC SHOCK, AND CASUALTY HAZARDS ACCORDING TO APPLICABLE SAFETY STANDARDS AND THAT ARE UL CERTIFIED FOR COMPLIANCE AND LABELED FOR INTENDED USE.
- C. REGULATORY REQUIREMENTS: INSTALL EQUIPMENT TO COMPLY WITH THE FOLLOWING:
- ASHRAE 15, "SAFETY CODE FOR MECHANICAL REFRIGERATION."
  - NFPA 54, "NATIONAL FUEL GAS CODE."
  - NFPA 70, "NATIONAL ELECTRICAL CODE."
  - NFPA 96, "VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS."
- D. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE AT A DATE AND TIME TO BE ESTABLISHED.

1.4 PROJECT CONDITIONS

- A. COORDINATE FOODSERVICE EQUIPMENT LAYOUT AND INSTALLATION WITH OTHER WORK, INCLUDING LIGHTING FIXTURES, HVAC EQUIPMENT, FIRE-SUPPRESSION SYSTEM COMPONENTS, AND UTILITY SERVICE CONNECTIONS.

PART 2 - PRODUCTS

- DESCRIPTION OF WORK
- A. OWNER FURNISHED EQUIPMENT IS INDICATED ON DRAWINGS AND INCLUDES THE FOLLOWING:
- KITCHEN PREPARATION EQUIPMENT.
  - KITCHEN SERVING EQUIPMENT.
  - WALK-IN COOLER AND FREEZER.
  - EXHAUST HOOD.
  - STORAGE SHELVING.
  - MISCELLANEOUS KITCHEN EQUIPMENT.
- B. A SEPARATE CONTRACT WILL BE ISSUED BY THE OWNER FOR INSTALLATION OF THE DRIVE-THRU ORDER SYSTEM. CONTRACTOR IS ONLY TO INSTALL BURIED SENSOR LOOP IN PAVEMENT.
- B. A SEPARATE CONTRACT WILL BE ISSUED BY THE OWNER FOR INSTALLATION OF EXTERIOR SIGNAGE INCLUDING:
- ARBY'S POLE SIGN WITH NECESSARY FOUNDATION.
  - DRIVE-THRU MENU BOARD AND DIRECTIONAL SIGNS WITH NECESSARY FOUNDATION.
  - ARBY'S BUILDING SIGN.
  - VEHICLE DETECTOR LOOP.
  - CASH REGISTERS WITH CASH DRAWERS.
  - PRINTER.
  - CABLE ASSEMBLIES.
  - VIDEO MONITORS.
  - PROCESSOR.

2.2 PRODUCT HANDLING:

- A. UPON DELIVERY OF THE EQUIPMENT, UNLOAD AND STORE UNTIL INSTALLATION. PROVIDE PROTECTION FROM EXPOSURE TO WEATHER AND CONTINUING CONSTRUCTION.

2.3 MISCELLANEOUS MATERIALS

- A. INSTALLATION ACCESSORIES, GENERAL: NSF CERTIFIED FOR END-USE APPLICATION INDICATED.
- B. ELASTOMERIC JOINT SEALANT: ASTM C 920; TYPE S (SINGLE COMPONENT), GRADE NS (NONNSG), CLASS 25; USE NT (NONTRAFFIC) RELATED TO EXPOSURE, AND USE M, G, A, OR O AS APPLICABLE TO JOINT SUBSTRATES INDICATED.
- PUBLIC HEALTH AND SAFETY REQUIREMENTS:
    - SEALANT IS CERTIFIED FOR COMPLIANCE WITH NSF STANDARDS FOR END-USE APPLICATION INDICATED.
    - WASHED AND CURED SEALANT COMPLIES WITH THE FDA'S REGULATIONS FOR USE IN AREAS THAT COME IN CONTACT WITH FOOD.
  - CYLINDRICAL SEALANT BACKING: ASTM C 1330, TYPE C, CLOSED-CELL POLYETHYLENE, IN DIAMETER LARGER THAN JOINT WIDTH.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. INSTALL FOODSERVICE EQUIPMENT LEVEL AND PLUMB, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- CONNECT EQUIPMENT TO UTILITIES.
  - PROVIDE CUTOUTS IN EQUIPMENT, NEATLY FORMED, WHERE REQUIRED TO RUN SERVICE LINES THROUGH EQUIPMENT TO MAKE FINAL CONNECTIONS.
- B. COMPLETE EQUIPMENT ASSEMBLY WHERE FIELD ASSEMBLY IS REQUIRED.
- PROVIDE CLOSED BUTT AND CONTACT JOINTS THAT DO NOT REQUIRE A FILLER.
  - GRIND FIELD WELDS ON STAINLESS-STEEL EQUIPMENT SMOOTH, AND POLISH TO MATCH

Christopher W. White  
Architect AR #3086  
5801 E. 41st St., Suite 712  
Tulsa, Oklahoma



10-29-21

Revisions:

- ADJACENT FINISH.
- C. INSTALL EQUIPMENT WITH ACCESS AND MAINTENANCE CLEARANCES THAT COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION.
- D. INSTALL CABINETS AND SIMILAR EQUIPMENT IN A BED OF SEALANT.
- E. INSTALL CLOSURE-TRIM STRIPS AND SIMILAR ITEMS REQUIRING FASTENERS IN A BED OF SEALANT.
- F. INSTALL JOINT SEALANT IN JOINTS BETWEEN EQUIPMENT AND ABUTTING SURFACES WITH CONTINUOUS JOINT BACKING, UNLESS OTHERWISE INDICATED. PRODUCE AIRTIGHT, WATERTIGHT, VERMIN-PROOF, SANITARY JOINTS.
- 3.2 CLEANING AND PROTECTING

- A. AFTER COMPLETING INSTALLATION OF EQUIPMENT, REPAIR ANY DAMAGED FINISHES.
- B. CLEAN AND ADJUST EQUIPMENT AS REQUIRED TO PRODUCE READY-FOR-USE CONDITION.
- C. PROTECT EQUIPMENT FROM DAMAGE DURING REMAINDER OF THE CONSTRUCTION PERIOD.