1800 W. FOXWOOD DR RAYMORE, MO 64083

BEING A PART OF THE SW 1/4 OF SECTION 8, TOWNSHIP 46 S, RANGE 32 E OF THE 6TH P.M. RAYMORE, CASS COUNTY, MISSOURI

OWNER/DEVELOPER **BURBAR INVESTMENTS** 516 EAGLE GLEN DRIVE RAYMORE, MO 64083

ENGINEER: OLSSON INC. 11600 BROADWAY EXT. OKLAHOMA CITY, OK 73114 CONTACT: MATT CHATHAM PH: (405)242-6612

SURVEYOR: CRAIG HUBBELL BAUGHMAN COMPANY 315 ELLIS WICHITA, KS PH: (316)262-7271

CITY OF RAYMORE

100 N MUNICIPAL CIR RAYMORE, MO 64083 PH: (816)331-0488

SANITARY SEWER:

CITY OF RAYMORE 100 N MUNICIPAL CIR RAYMORE, MO 64083 PH: (816)331-0488



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		SHEET LIST TABLE
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	C1.0	COVER SHEET
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GENERAL NOTES:

- 1. ALL WORK AND CONSTRUCTION OF THIS PROJECT ON PRIVATE PROPERTY SHALL CONFORM TO CITY OF RAYMORE CITY STANDARDS AND SPECIFICATIONS AND THE SPECIFICATIONS/DETAILS SHOWN ON THESE
- 2. ALL WORK AND CONSTRUCTION WITHIN PUBLIC RIGHT OF WAY AND EASEMENTS SHALL CONFORM TO THE TECHNICAL SPECIFICATIONS, STANDARD DETAILS, AND DESIGN CRITERIA FOR PUBLIC IMPROVEMENT PROJECTS OF THE CITY OF RAYMORE, MISSOURI DOT, AND THE GRANTOR OF THE EASEMENT AS APPLICABLE.
- IN CASE OF A CONFLICT BETWEEN VARYING SPECIFICATIONS, THE MOST STRINGENT SHALL APPLY. 4. THE CONTRACTOR SHALL OBTAIN A COPY OF THE LATEST STANDARD SPECIFICATIONS AND DETAILS OF ALL AGENCIES EXERCISING JURISDICTION OVER THIS PROJECT, WHICH ARE INCORPORATED BY REFERENCE ON THESE PLANS. A COPY OF THESE SPECIFICATIONS AND DETAILS SHALL BE MAINTAINED ON THE JOBSITE AT
- 5. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS, STANDARDS, AND SPECIFICATIONS AS APPROVED BY THE APPROPRIATE GOVERNING AGENCY AND OWNER. THE CONTRACTOR SHALL NOT CHANGE OR DEVIATE FROM THESE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE OWNER, ENGINEER, AND GOVERNING AGENCY.
- 6. ALL WORK SHALL CONFORM TO ALL LOCAL, STATE, AND FEDERAL APPLICABLE LAWS AND REGULATIONS. 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL JOB SITE SAFETY ON THE PROJECT. THIS SHALL INCLUDE THE SAFETY OF HIS OWN PERSONNEL, SUBCONTRACTORS, ALL VISITORS TO THE SITE, AND THE GENERAL PUBLIC. ALL JOB SITE SAFETY SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND CODES, AND ENSURE COMPLIANCE INCLUDING, BUT NOT LIMITED TO, THE OCCUPATIONAL
- SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS. 8. THE CONTRACTOR SHALL CONTACT [MISSOURI ONE CALL AT #811] A MININIMUM OF 72 HOURS (EXCLUDING WEEKENDS AND HOLIDAYS) IN ADVANCE OF ANY EXCAVATION.
- 9. ALL MATERIALS SHALL BE NEW UNLESS OTHERWISE INDICATED IN THE PLANS, AND SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- 10. LOCATIONS AND ELEVATIONS OF EXISTING IMPROVEMENTS TO BE MET (OR AVOIDED) BY THE PROPOSED WORK SHALL BE CONFIRMED BY THE CONTRACTOR THROUGH FIELD EXPLORATIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REPORT TO THE ENGINEER ANY DISCREPANCIES BETWEEN HIS MEASUREMENTS AND THESE PLANS.
- 11. THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES SHOWN IN THE PLANS AND/OR SPECIFICATIONS.
- 12. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING ACTUAL QUANTITIES, AND SHALL PROVIDE ALL WORK AND MATERIALS NECESSARY TO CONSTRUCT THE PROJECT IN ITS ENTIRETY.
- 13. CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS NOT DESIGNATED FOR REMOVAL AND THOSE IMPROVEMENTS THAT ARE OUTSIDE THE LIMITS OF THE PROPOSED CONSTRUCTION. CONTRACTOR SHALL TAKE CARE TO AVOID DAMAGE THERETO AND SHALL PROVIDE TEMPORARY FENCING, BARRICADES, SUPPORTS, RESTRAINTS, AND /OR BRACING WHERE REQUIRED TO PROTECT EXISTING IMPROVEMENTS. DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPAIRED AND/OR REPLACED TO EQUAL OR BETTER CONDITION AT THE
- CONTRACTOR'S EXPENSE. 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS NOT OBTAINED BY THE OWNER OR OWNER'S REPRESENTATIVES, AND PAY ALL FEES AS REQUIRED BY THE CONSTRUCTION COVERED IN THESE
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE APPROPRIATE GOVERNING AGENCIES AND LOCAL FIRE DEPARTMENT OF ALL STREET CLOSURES AND EXISTING FIRE HYDRANTS/FIRE SUPPRESSION TAKEN OUT OF SERVICE AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

- 16. THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE SECURITY AND SHALL PROPERLY PROTECT AND BARRICADE THE CONSTRUCTION SITE UNTIL CONSTRUCTION IS COMPLETE. STORAGE, LOSS DUE TO THEFT, OR VANDALISM OF MATERIALS AND EQUIPMENT (SECURED OR UNSECURED) WILL BE SOLELY AT THE
- CONTRACTOR'S EXPENSE. 17. PRIOR TO BEGINNING THE WORK, THE CONTRACTOR SHALL OBTAIN ANY WRITTEN AGREEMENTS FOR INGRESS AND EGRESS TO THE WORK FROM ADJACENT PRIVATE PROPERTY OWNERS. ACCESS TO ANY ADJACENT PRIVATE PROPERTY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD, DURING ALL HOURS OF
- OPERATION FOR THE BUSINESS LOCATED ON THOSE PARCELS. 18. FOR ANY CHANGES OR DEVIATIONS FROM THESE PLANS PROPOSED BY THE CONTRACTOR, SHOP DRAWINGS AND MATERIAL SPECIFICATIONS SHALL BE SUBMITTED TO OWNER/ENGINEER FOR REVIEW AND APPROVAL
- PRIOR TO PLACEMENT OF MATERIAL. 19. CONTRACTOR SHALL PROTECT AND PRESERVE ALL SURVEY CONTROL AND PROPERTY MONUMENTATION. ANY DAMAGED MONUMENTS SHALL RESET BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF
- 20. PRIOR TO MOVING OFF THE JOB SITE THE CONTRACTOR SHALL NOTIFY THE OWNER OR THE OWNER'S REPRESENTATIVE TO PERFORM THE FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.

MISSOURI AT THE CONTRACTOR'S EXPENSE.

- 21. TEMPORARY POWER, TELEPHONE, AND WATER FOR THE SITE IS THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED.
- 22. CONTRACTOR SHALL REFER TO OTHER DRAWINGS ISSUED BY ARCHITECT, STRUCTURAL, ELECTRICAL, AND MECHANICAL ENGINEERS. ENSURE COORDINATION OF EXACT LOCATION AND DIMENSIONS OF BUILDINGS, EXITS, RAMPS, UTILITY ENTRANCE LOCATIONS AND GRADES AROUND THE BUILDING. IMMEDIATELY NOTIFY ENGINEER AND ARCHITECT OF ANY DISCREPANCIES.
- 23. NO BELOW GRADE WORK SHALL BE BACKFILLED (INCLUDING BEDDING MATERIAL ABOVE THE SPRING LINE OF THE PIPE) UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE APPROPRIATE GOVERNING AGENCY, OWNER AND/OR OWNER'S REPRESENTATIVE.
- 24. THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL NECESSARY TO COMPLETE THE WORK. ALL TRAFFIC CONTROL DEVICES AND METHODS OF CONTROLLING TRAFFIC THROUGH CONSTRUCTION ZONES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD, AND ALL REVISIONS THERETO INCLUDING LOCAL AND STATE SUPPLEMENTS. ADDITIONAL WORK IN THE RIGHT-OF-WAY OR TRAFFIC CONTROL
- PERMITS MAY BE NECESSARY AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY. 25. IF UNANTICIPATED HAZARDOUS MATERIALS OF ANY KIND ARE ENCOUNTERED IN THE WORK, THE CONTRACTOR SHALL IMMEDIATELY CEASE ALL CONSTRUCTION OPERATIONS AND NOTIFY THE OWNER AND/OR
- OWNER'S REPRESENTATIVE FOR FURTHER DIRECTION. 26. ALL DEBRIS RESULTING FROM CONSTRUCTION AND DEMOLITION SHALL BE HAULED OFF SITE AND DISPOSED OF PROPERLY AND LEGALLY.
- 27. UNLESS DETAILED OR NOTED OTHERWISE, PROVIDE 1" PRE-MOLDED EXPANSION JOINT MATERIAL WHERE CONCRETE IS POURED AGAINST BUILDING. SET PRE-MOLDED MATERIAL TIGHT AGAINST BUILDING AND/OR 28. A PORTABLE RESTROOM FACILITY WILL BE REQUIRED ON-SITE DURING CONSTRUCTION ACTIVITIES.

29. ALL SPOIL MATERIAL FROM UTILITY TRENCHING SHALL BE REMOVED FROM THE SITE. NO SEPARATE PAYMENT

BID FOR THE UTILITY CONSTRUCTION. 30. PRIOR TO BIDDING, CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.

SHALL BE MADE FOR DISPOSAL OF SPOIL MATERIAL, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE PRICE

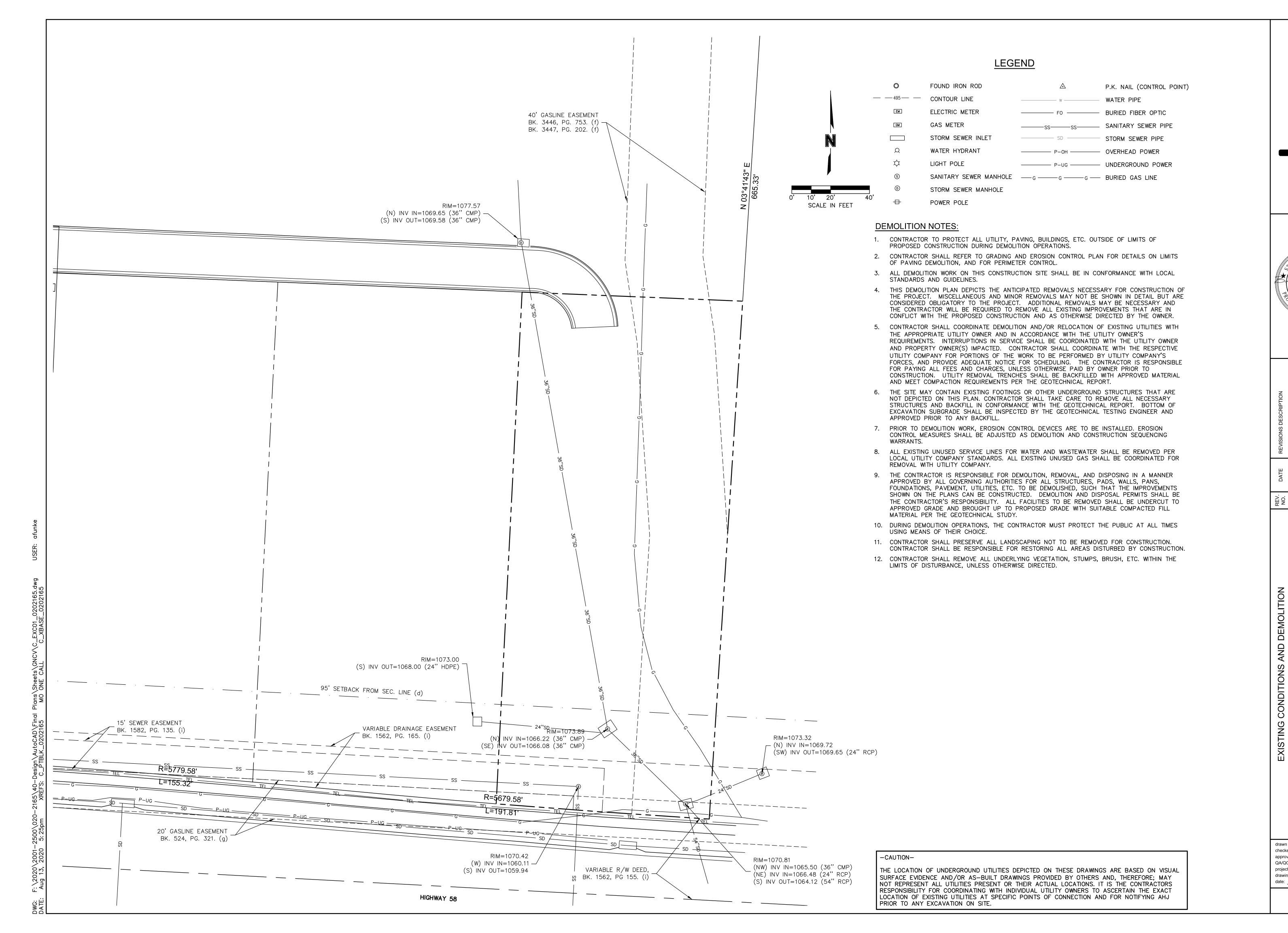


THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE BASED ON VISUAL SURFACE EVIDENCE AND/OR AS-BUILT DRAWINGS PROVIDED BY OTHERS AND, THEREFORE; MAY NOT REPRESENT ALL UTILITIES PRESENT OR THEIR ACTUAL LOCATIONS. IT IS THE CONTRACTORS RESPONSIBILITY FOR COORDINATING WITH INDIVIDUAL UTILITY OWNERS TO ASCERTAIN THE EXACT LOCATION OF EXISTING UTILITIES AT SPECIFIC POINTS OF CONNECTION AND FOR NOTIFYING AHJ PRIOR TO ANY EXCAVATION ON SITE.

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drawn by:

drawing no.: <u>C_TTL01_0202165</u> date: 08.14.2020 SHEET



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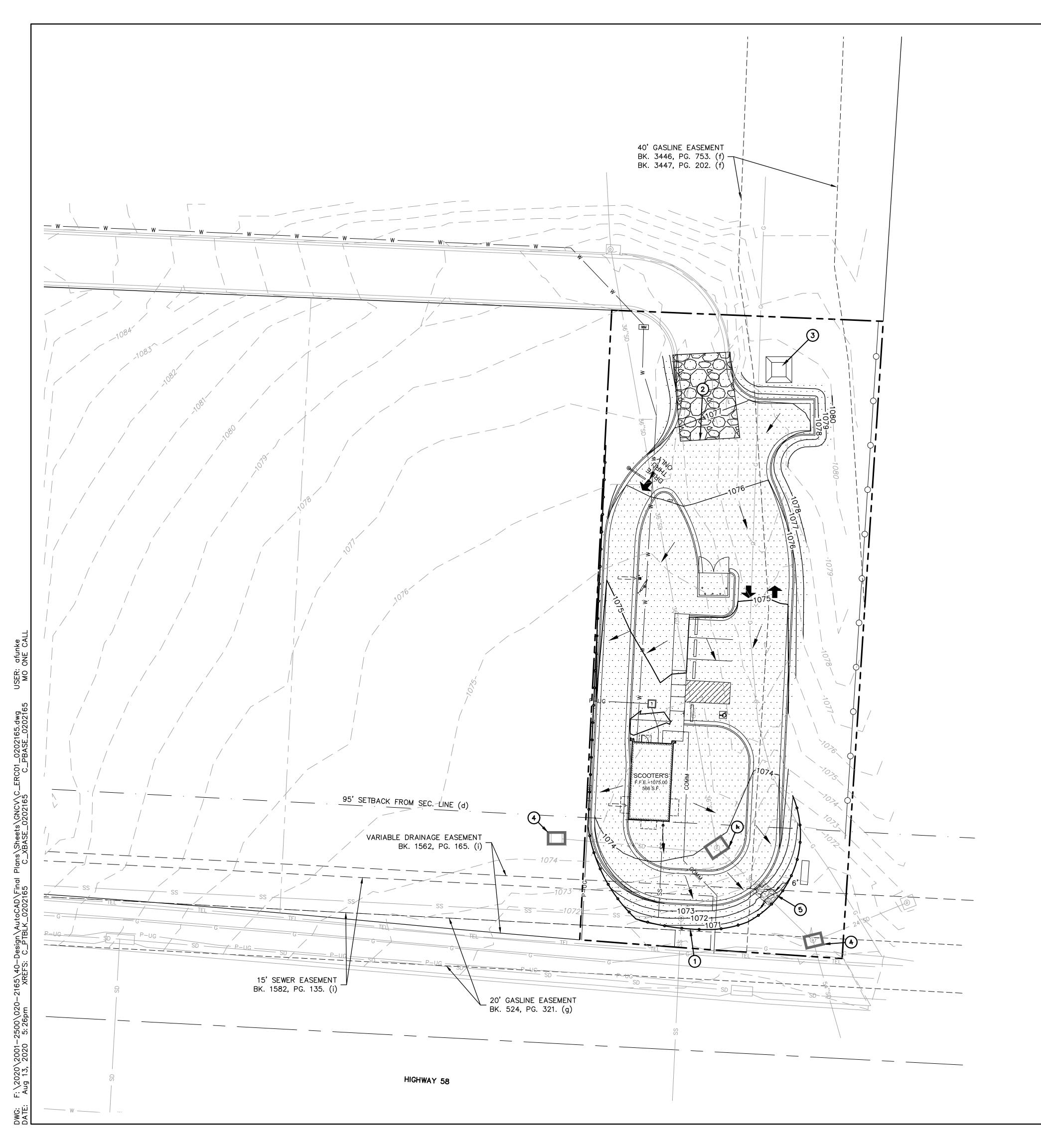
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SHEET



EROSION & SEDIMENT CONTROL NOTES

IN THE EROSION/SEDIMENT CONTROL PLAN.

- 1. THIS PROJECT MAY REQUIRE AN EARTH CHANGE PERMIT AND NOI FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE CITY OF RAYMORE AND MDNR (MISSOURI DEPARTMENT OF NATURAL RESOURCES), RESPECTIVELY.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PUBLIC STREETS, ACCESS ROUTES, AND WATERWAYS IN THE VICINITY OF THE JOB SITE CLEAN AND FREE OF ROCKS, SOIL AND DEBRIS.
- 3. THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENTATION CONTROL "BEST MANAGEMENT PRACTICES" (BMPS) PRIOR TO ANY SITE PREPARATION WORK (E.G., CLEARING, GRUBBING, DEMOLITION, OR EXCAVATION).
- 4. THE PLACEMENT OF EROSION AND SEDIMENT BMPS SHALL BE IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN PREPARED FOR THE PROJECT. CONTRACTOR TO ADJUST QUANTITY, LOCATION, AND TYPE OF EROSION AND SEDIMENT CONTROL BMPS AS NECESSARY FOR THE VARIOUS PHASES OF THE WORK
 - AND AS ACTUAL CONDITIONS WARRANT. CONTRACTOR SHALL CONTINUOUSLY MODIFY THE EROSION AND SEDIMENT CONTROL PLAN WITH CURRENT BMPS IN ACCORDANCE WITH THE CONSTRUCTION STORMWATER PERMIT REQUIREMENTS. ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS EMPLOYED BY THE CONTRACTOR AT HIS DISCRETION WILL NOT BE MEASURED OR PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.
- 5. APPROVED EROSION AND SEDIMENT CONTROL BMPS SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT. UNLESS OTHERWISE REQUIRED BY THE STATE'S CONSTRUCTION STORMWATER PERMIT, AT A MINIMUM THE CONTRACTOR SHALL INSPECT ALL BMPS EVERY 14 DAYS, AND AFTER ALL SIGNIFICANT PRECIPITATION EVENTS I.E. RAINFALL, SNOWMELT. ALL NECESSARY MAINTENANCE AND REPAIR ACTIVITIES SHALL BE COMPLETED WITHIN TWENTY—FOUR (24) HOURS AFTER DIRECTION BY THE INSPECTOR. ACCUMULATED SEDIMENT AND CONSTRUCTION DEBRIS SHALL BE REMOVED WEEKLY FROM ALL BMPS, OR AT ANY TIME THAT SEDIMENT OR CONSTRUCTION DEBRIS ADVERSELY IMPACTS THE FUNCTIONING OF THE BMPS
- OF THE BMPS.

 6. TOPSOIL AND SUITABLE EARTHEN MATERIALS SHALL BE SEGREGATED AND STOCKPILED WITHIN THE LIMITS OF CONSTRUCTION FOR USE ON AREAS TO BE FILLED AND RE-VEGETATED. ANY AND ALL STOCKPILES SHALL BE PLACED IN AN APPROVED LOCATION AND PROTECTED FROM EROSIVE ELEMENTS USING MEASURES SPECIFIED
- 7. SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE MULCHED AND SEEDED WITH A TEMPORARY OR PERMANENT GRASS COVER WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION.
- 8. ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE LIMITS OF CONSTRUCTION DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, PROPERTIES, ETC. RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
- 9. A WATER SOURCE MUST BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND AND FOR MEETING COMPACTION REQUIREMENTS.
- 10. THE CONTRACTOR MUST KEEP ALL POLLUTANTS, INCLUDING SEDIMENT, CONSTRUCTION DEBRIS, AND TRENCH BACKFILL MATERIALS FROM ENTERING THE STORM SEWER SYSTEM.
- 11. ALL SPILLS INCLUDING, BUT NOT LIMITED TO, PETROLEUM PRODUCTS, SOLVENTS, AND CEMENT SHALL BE CLEANED UP IMMEDIATELY. THE LOCAL CITY/COUNTY AND STATE'S GOVERNING AUTHORITY SHALL BE NOTIFIED IMMEDIATELY.
- 12. THE CONTRACTOR SHALL ENSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHT—OF—WAY. ALL MATERIAL EXPORTED FROM THE SITE SHALL BE DISPOSED OF AT A SITE PERMITTED TO ACCEPT SUCH MATERIAL.
- 13. THE USE OF REBAR, STEEL STAKES OR STEEL FENCE POSTS FOR STAKING DOWN STRAW OR HAY BALES, OR TO SUPPORT SILT FENCING USED AS AN EROSION CONTROL MEASURE, IS PROHIBITED.
- 14. THE CLEANING OF CONCRETE DELIVERY TRUCK CHUTES IS RESTRICTED TO APPROVED LOCATIONS ON THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED. ALL CONCRETE WASTE SHALL BE PROPERLY CLEANED UP AND DISPOSED OF AT AN APPROPRIATE LOCATION.

 15. THE CONTRACTOR SHALL CLEAN OUT ALL EXISTING AND PROPOSED INLETS, PIPES AND MANHOLES OF DEBRIS
- AND SEDIMENTATION AT COMPLETION OF SITEWORK. THIS WORK SHALL BE DONE TO THE SATISFACTION OF THE OWNER AND LOCAL AUTHORITIES. ANY CONSTRUCTION DEBRIS OR MUD DROPPED INTO MANHOLES, INLETS, PIPES OR TRACKED ONTO EXISTING ROADWAYS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY HIS CONSTRUCTION.
- 16. TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT ON SEASONAL WEATHER CHANGES.
- 17. DO NOT DISTURB AN AREA UNTIL NECESSARY FOR CONSTRUCTION TO PROCEED.

EROSION CONTROL PLAN LEGEND:

ROCK CONSTRUCTION ENTRANCE

CONCRETE WASHOUT

AREA INLET PROTECTION

KEY NOTES

- 1) INSTALL SILT FENCE (REFERENCE SHEET C3.1)
- 2 TYPICAL CONSTRUCTION ENTRANCE (REFERENCE SHEET C3.1)
- (3) INSTALL CONCRETE WASHOUT (REFERENCE SHEET C3.1)

FLOW ARROW

RIP RAP

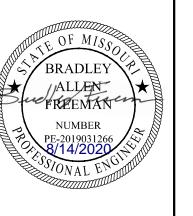
- 4 INSTALL AREA INLET PROTECTION (REFERENCE SHEET C3.1)
- (5) INSTALL RIP RAP (REFERENCE SHEET C3.1)

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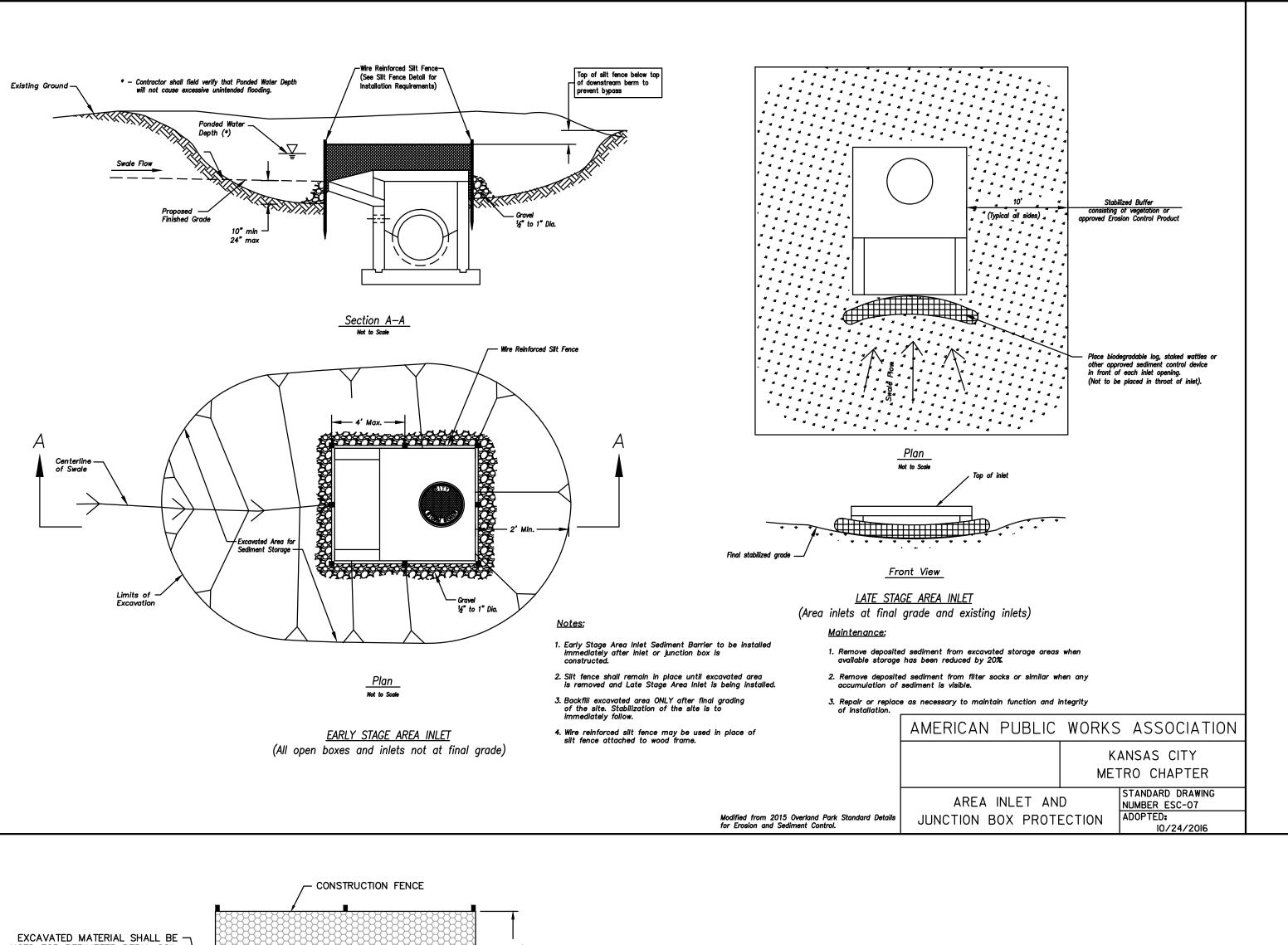
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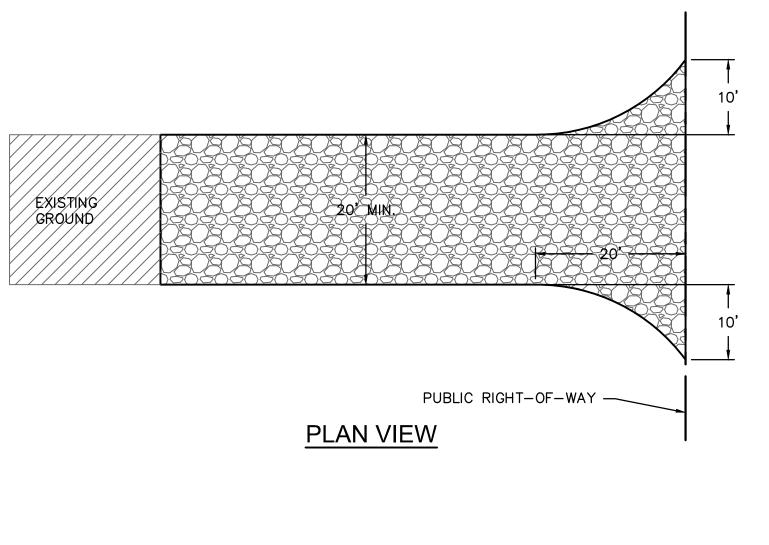
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checked by: CSM
approved by: BAF
QA/QC by: BAF
project no.: 020-2165
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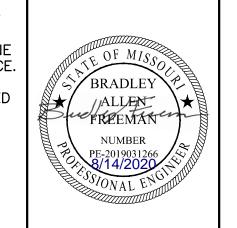
- PUBLIC RIGHT-OF-WAY **EXISTING** ┌ 6" MIN. GROUND

PROFILE

FILTER CLOTH

CONSTRUCTION SPECIFICATIONS

- 1. STONE SIZE-USED 2" STONE, OR RECLAIMED OR RECYCLED EQUIVALENT.
- 2. LENGTH-AS REQUIRED BUT NOT LESS THAN 50 FEET.
- 3. THICKNESS-NOT LESS THAN SIX (6) INCHES.
- 4. WIDTH-TWENTY (20) FEET MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS AND EGRESS OCCUR.
- 5. FILTER CLOTH-WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 6. SURFACE WATER-ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 3:1 SLOPES WILL BE PERMITTED.
- 7. MAINTENANCE-THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 8. WASHING-WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 9. PERIODIC INSPECTION AS NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

USED FOR PERIMETER BERM. SOIL FOR BERM SHALL BE COMPACTED IN THE SAME MANNER AS TRENCH 2"-3" COARSE 2% SLOPE AGGREGATE MIN. 8.0' X 8.0' MIN TO CONTAIN CONCRETE SECTION A-A

CONCRETE WASHOUT AREA INSTALLATION NOTES:

1. CONCRETE WASHOUT AREAS SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE. PLACEMENT SHALL BE A MINIMUM OF 100' FROM DRAINAGEWAYS, BODIES OF WATER AND INLETS.

2. CONCRETE WASHOUT AREA SHALL INCLUDE A FLAT SUBSURFACE PIT

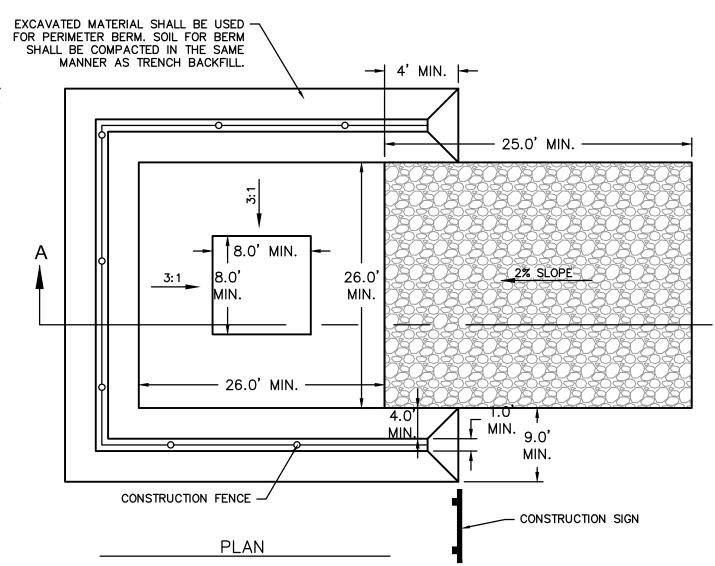
- THAT IS AT LEAST 8.0' X 8.0'. THE SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1. THE DEPTH OF THE PIT SHALL BE AT LEAST 3.0'. THE BERM SURROUNDING THE SIDES AND BACK OF THE CONCRETE WASHOUT AREA SHALL HAVE A HEIGHT OF 1.0'. THE VEHICLE AGGREGATE PAD SHALL BE SLOPED 2% TOWARDS THE CONCRETE WASHOUT AREA. A CONSTRUCTION FENCE SHALL BE INSTALLED ALONG THE TOP OF THE PERIMETER BERM PER THE DETAIL.
- 3. HIGHLY VISIBLE SIGNS SHALL BE PLACED AT THE CONSTRUCTION SITE ENTRANCE, WASHOUT AREA AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION(S) OF THE CONCRETE WASHOUT AREA(S) TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- 4. A ONE-PIECE IMPERVIOUS LINER MAY BE REQUIRED ALONG THE BOTTOM AND SIDES OF THE SUBSURFACE PIT AT THE DESCRETION OF THE CITY INSPECTOR.

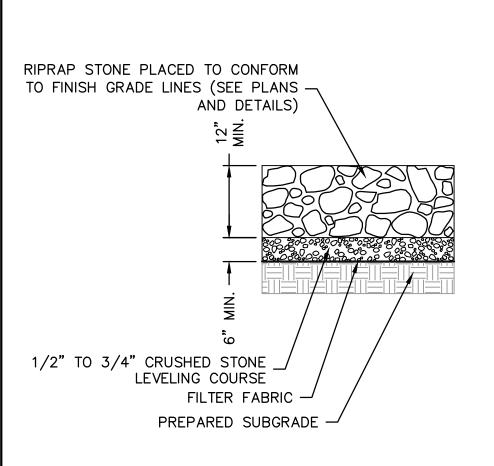
CONCRETE WASHOUT AREA NOT TO SCALE

CONCRETE WASHOUT AREA INSPECTION AND MAINTENANCE

1. THE EROSION CONTROL SUPERVISOR SHALL INSPECT THE CONCRETE WASHOUT AREA AT THE FOLLOWING INTERVALS:

- AFTER INITIAL INSTALLATION. AT LEAST DAILY WHILE THE CONCRETE WASHOUT AREA IS PRESENT ON
- DURING AND AFTER ANY STORM EVENT.
- 2. CONCRETE WASHOUT MATERIALS SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2.0'.
- CONCRETE WASHOUT AREAS SHALL BE ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
- CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF AT AN APPOVED WASTE SITE.
- CONCRETE WASHOUT AREAS SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
- 6. WHEN CONCRETE WASHOUT AREAS ARE REMOVED. EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL AND TOPSOIL, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE AND/OR REMOVAL OF THE CONCRETE WASHOUT AREAS SHALL BE ROUGHENED, SEEDED, MULCHED PER THE CITY'S SPECIFICATIONS.

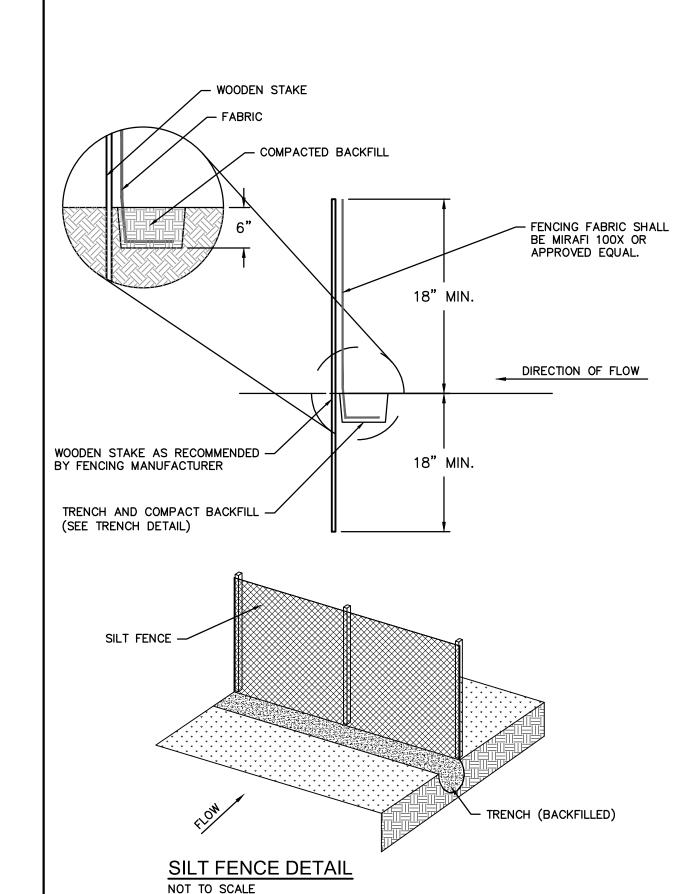




RIPRAP NOTES

- 1. STONE FOR RIPRAP SHALL CONSIST OF QUARRIED ROCK AND BE SOUND, DURABLE AND ANGULAR IN SHAPE.
- 2. SHALE AND STONE WITH SHALE SEAMS ARE NOT ACCEPTABLE.
- 3. STONES SHALL HAVE A MINIMUM THICKNESS OF 18", NO MORE THAN 10 PERCENT SHALL HAVE AN ELONGATION GREATER THAN 3:1, AT LEAST 60 PERCENT OF THE MASS SHALL BE OF PIECES HAVING A VOLUME OF ONE CUBIC FOOT, NO MORE THAN 6 PERCENT OF THE STONES SHALL WEIGH LESS THAN 10 POUNDS.

RIPRAP DETAIL NOT TO SCALE



-CAUTION-

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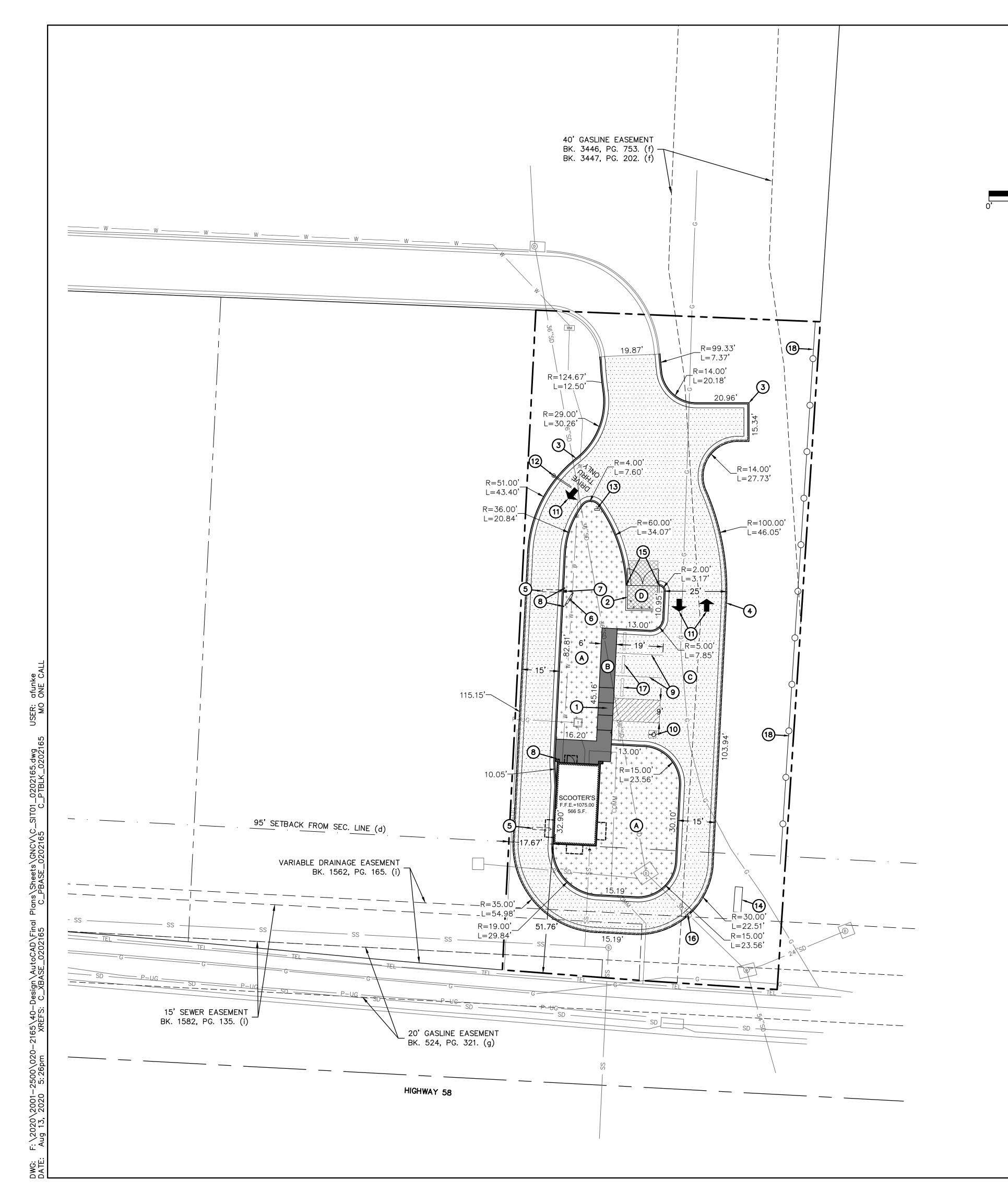
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DET,

CONTROL

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SHEET



SITE PLAN LEGEND

SCALE IN FEET

PROPOSED LANDSCAPE ROCK AREA

PROPOSED CONCRETE SIDEWALK





PROPOSED CONCRETE PAVEMENT (REF. DETAIL SHEET C7.0)

PROPOSED CONCRETE DUMPSTER PAD (REF: DETAIL SHEET C7.0)

(#)KEYNOTES:

- 1) ADA RAMP
- 2 TRASH ENCLOSURE (REFERENCE ARCHITECTURAL PLANS)
- (3) STRAIGHT BACK DRY CURB AND GUTTER (REF. DETAIL SHEET C7.0)
- (4) STRAIGHT BACK WET CURB AND GUTTER (REF DETAIL SHEET C7.0)
- 5 LOOP SENSOR (REF: ARCH PLANS)
- 6 MENU BOARD (REF: ARCH PLANS)
- 7) SPEAKER POST (REF: ARCH PLANS)
- (8) BOLLARD (REF. DETAIL SHEET C7.0)
- 9 PARKING STRIPING
- 10 ADA VAN ACCESSIBLE PARKING WITH ADA SIGNAGE
- 11) PAINTED PAVEMENT MARKINGS (CONFORM TO MUTCD LATEST VERSION)
- 12 HEIGHT CLEARANCE BAR (REF. ARCH PLANS)
- 13 DIRECTIONAL SIGN
- (14) MONUMENT SIGN
- (15) 2' TRANSITION CURB FROM 6" TO 0"
- (16) CONCRETE CURB CUT (REF: DETAIL, SHEET C7.0)
- (17) CONCRETE CURB STOP
- PROPOSED TYPE A 6' PVC SCREEN FENCE TO BE INSTALLED BY OWNER

SITE PLAN NOTES:

- 1. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED ON PLANS.
- 2. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS GRADES AND DIMENSIONS ON SITE AND REPORT ALL MAJOR DISCREPANCIES TO ENGINEER.
- 3. CONSTRUCTION STAGING LOCATION SHALL BE COORDINATED WITH AND APPROVED BY OWNER.
- 4. REFERENCE ARCHITECTURAL PLANS FOR ADDITIONAL BUILDING INFORMATION.
- 5. CONTRACTOR SHALL REFERENCE ARCHITECTURAL PLANS FOR ADDITIONAL SITE ITEMS SUCH AS SIGN AND MENU EQUIPMENT.
- 6. UNLESS PROVIDED FOR IN THE PLANS, CONTRACTOR SHALL DEVELOP A CONCRETE PAVEMENT JOINTING PLAN USING THE PROPOSED SITE PLAN AND SITE CONDITIONS. JOINT LAYOUT SHALL BE IN ACCORDANCE WITH ACI 330R "GUIDE FOR THE DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS," AND STANDARD CONSTRUCTION PRACTICES. JOINT DETAILS SHALL BE IN ACCORDANCE WITH SUDAS SPECIFICATIONS, CONTRACTOR SHALL PROVIDE A PAVEMENT JOINTING PLAN FOR OWNER APPROVAL.
- 7. ALL CONCRETE PAVEMENT SHALL MEET CITY OF RAYMORE SPECIFICATIONS AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI.
- 8. ALL PAVEMENT MARKINGS FOR PARKING STALLS SHALL BE 4" WIDE WHITE MARKINGS, CONFORMING TO AASHTO M248 READY MIXED WHITE TRAFFIC PAINT. (REFERENCE PLANS FOR PAVEMENT MARKINGS).
- 9. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL ACCESSIBLE AREAS AND ROUTES ARE BUILT IN ACCORDANCE WITH THE PLANS AND THE "2010 ADA STANDARDS FOR ACCESSIBLE DESIGN". THE SITE MAY BE INSPECTED BY CITY PERSONNEL FOR COMPLIANCE WITH THE STANDARDS.
- 10. ADA ACCESSIBLE PARKING STALLS AND AISLES SHALL BE CONSTRUCTED WITH A MAXIMUM SLOPE OF 2.00% IN ANY DIRECTION. ADA ACCESSIBLE ROUTES SHALL BE CONSTRUCTED WITH A MAXIMUM CROSS SLOPE OF 2.00% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00% (UNLESS RAMPS AND LANDINGS ARE PROVIDED PER ADA STANDARDS). CURB RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 8.33% (12:1). ACCESSIBLE MANEUVERING AREAS AT DOORS SHALL BE CONSTRUCTED WITH A MAXIMUM 2.00% IN ANY DIRECTION. CONTRACTOR SHALL FIELD VERIFY ADA GRADES AND FORMWORK PRIOR TO PLACING ANY CONCRETE. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY SHOWN ON THE PLANS.
- 11. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF THE EXISTING PAVEMENT.
- 12. THE CONTRACTOR SHALL COORDINATE ALL PAVEMENT TESTING.
- 13. THE PAVING CONTRACTOR SHALL PLACE TRAFFIC RATED CAPS ON ALL CLEAN-OUTS WITHIN PAVED AREAS.
- 14. ALL ACCESSIBLE STALLS TO BE PAINTED AND SIGN INSTALLED.
- 15. MAINTAIN 2% MAXIMUM CROSS SLOPE ON SIDEWALKS UNLESS OTHERWISE NOTED. ALL SIDEWALKS TO BE 4" P.C.C. PAVEMENT UNLESS OTHERWISE NOTED.

-CAUTION-

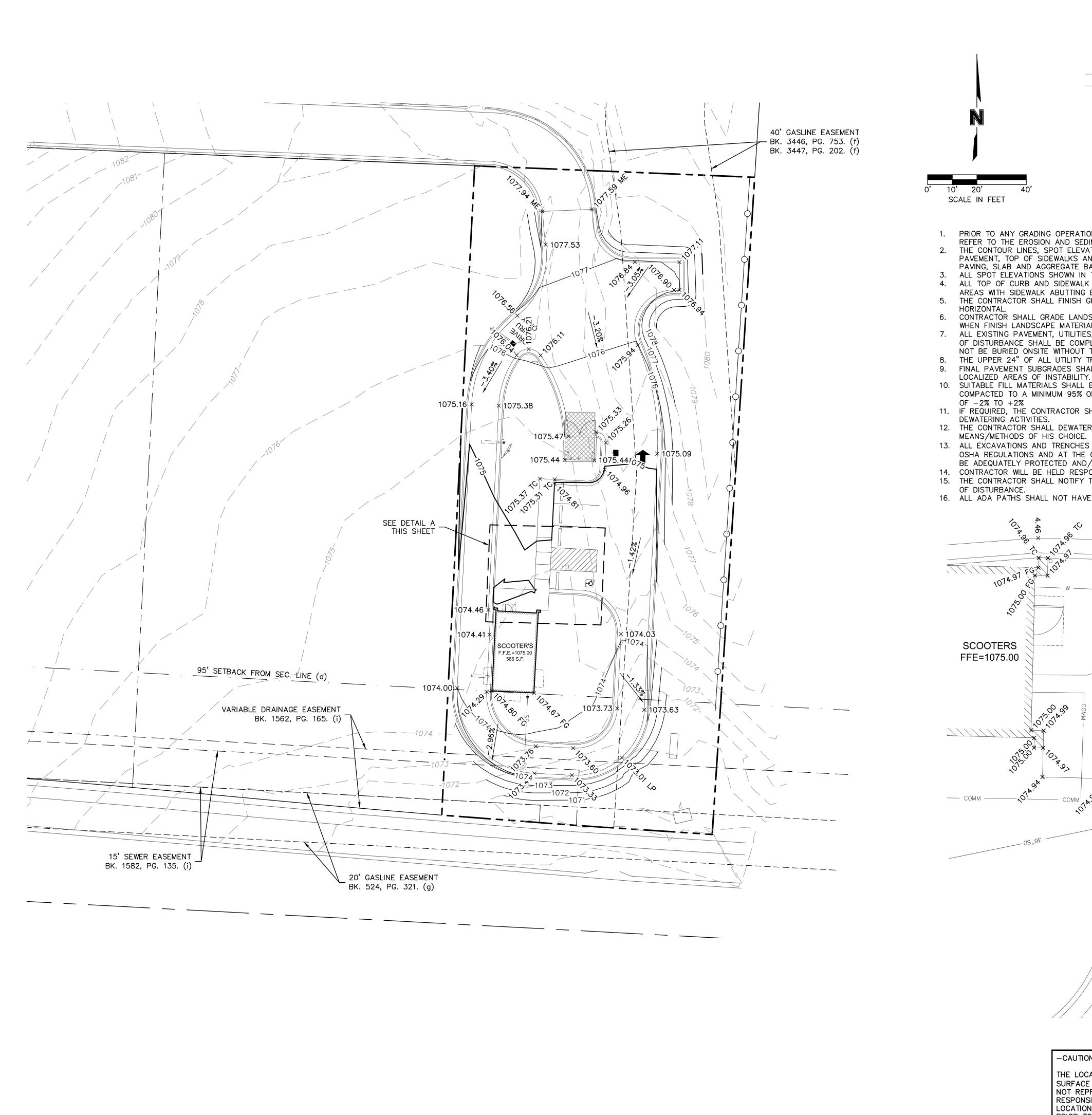
THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE BASED ON VISUAL SURFACE EVIDENCE AND/OR AS-BUILT DRAWINGS PROVIDED BY OTHERS AND, THEREFORE; MAY NOT REPRESENT ALL UTILITIES PRESENT OR THEIR ACTUAL LOCATIONS. IT IS THE CONTRACTORS RESPONSIBILITY FOR COORDINATING WITH INDIVIDUAL UTILITY OWNERS TO ASCERTAIN THE EXACT LOCATION OF EXISTING UTILITIES AT SPECIFIC POINTS OF CONNECTION AND FOR NOTIFYING AHJ PRIOR TO ANY EXCAVATION ON SITE.

ALLEN

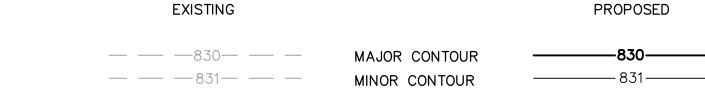
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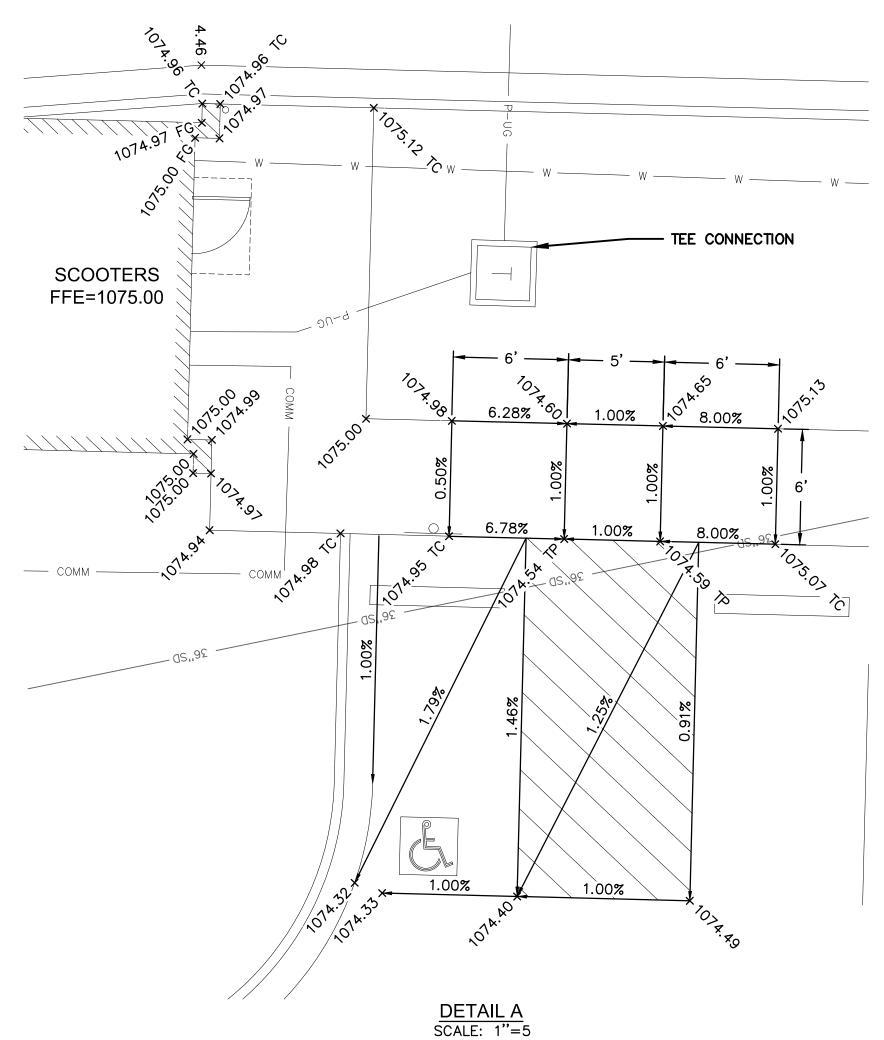
LEGEND



SPOT ELEVATION ABBREVIATIONS

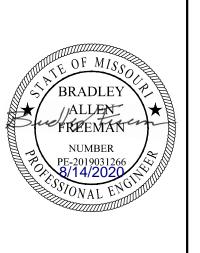
	<u>3FU1</u>	LLLVATION
	X.X %	SLOPE
	TC	TOP OF CURB
/	TP	TOP OF PAVEMEN
	SW	TOP OF SIDEWALK
	FG	FINISHED GRADE
' 20' 40'	ME	MATCH EXISTING
CALE IN FEET	LP	LOW POINT

- 1. PRIOR TO ANY GRADING OPERATIONS, ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE ADEQUATELY IN PLACE. REFER TO THE EROSION AND SEDIMENT CONTROL PLAN FOR REQUIREMENTS.
- THE CONTOUR LINES, SPOT ELEVATIONS AND BUILDING FLOOR ELEVATIONS SHOWN ARE TO FINISH GRADE FOR SURFACE OF PAVEMENT, TOP OF SIDEWALKS AND CURBS, TOP OF FLOOR SLABS, ETC. REFER TO TYPICAL SECTIONS FOR MULCH, SOD, PAVING, SLAB AND AGGREGATE BASE THICKNESS TO DEDUCT FOR SUBGRADE ELEVATIONS.
- 3. ALL SPOT ELEVATIONS SHOWN IN THIS PLAN ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
- 4. ALL TOP OF CURB AND SIDEWALK ELEVATIONS SHALL BE 0.5' ABOVE GUTTER ELEVATIONS UNLESS OTHERWISE NOTED. IN AREAS WITH SIDEWALK ABUTTING BACK OF CURB, TOP OF CURB ELEVATIONS SHALL BE EQUAL TO SIDEWALK ELEVATIONS.
- THE CONTRACTOR SHALL FINISH GRADE SLOPES AS SHOWN NO STEEPER THAN ONE FOOT VERTICAL IN THREE FEET
- CONTRACTOR SHALL GRADE LANDSCAPED AREAS TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND SIDEWALKS WHEN FINISH LANDSCAPE MATERIALS ARE IN PLACE. SLOPE SHALL BE A 2% MINIMUM.
- 7. ALL EXISTING PAVEMENT, UTILITIES, BURIED DEBRIS, RUBBLE, AND/OR STRUCTURES/FOUNDATIONS ENCOUNTERED WITHIN AREAS OF DISTURBANCE SHALL BE COMPLETELY REMOVED PRIOR TO OR DURING EARTHWORK OPERATIONS. WASTED MATERIAL SHALL
- NOT BE BURIED ONSITE WITHOUT THE PRIOR APPROVAL OF THE OWNER. 8. THE UPPER 24" OF ALL UTILITY TRENCHES IN UNPAVED AREAS SHALL BE BACKFILLED WITH COMPACTED COHESIVE SOILS.
- FINAL PAVEMENT SUBGRADES SHALL BE PROOFROLLED IMMEDIATELY PRIOR TO THE PLACEMENT OF THE PAVEMENT TO DETECT
- 10. SUITABLE FILL MATERIALS SHALL BE PLACED IN THIN LIFTS OF 4 TO 8 INCHES LOOSE MEASUREMENT, AND SHALL BE
- COMPACTED TO A MINIMUM 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY (PER ASTM D698) AT A MOISTURE CONTENT
- 11. IF REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL LOCAL AND STATE PERMITS AND AUTHORIZATION TO DISCHARGE FROM
- 12. THE CONTRACTOR SHALL DEWATER ALL EXCAVATIONS AND TRENCHES NEEDED FOR THE CONSTRUCTION OF THE PROJECT USING
- 13. ALL EXCAVATIONS AND TRENCHES SHALL BE SLOPED/SHORED/BRACED FOR PROTECTION OF PERSONNEL IN ACCORDANCE WITH OSHA REGULATIONS AND AT THE CONTRACTORS FULL DISCRETION BASED ON THE SITE CONDITIONS. OPEN EXCAVATIONS SHALL
- BE ADEQUATELY PROTECTED AND/OR FENCED AS NECESSARY AND FOR THE SAFETY OF THE PUBLIC. 14. CONTRACTOR WILL BE HELD RESPONSIBLE FOR SETTLEMENT DUE TO IMPROPER COMPACTION.
- 15. THE CONTRACTOR SHALL NOTIFY THE OWNER/ENGINEER IMMEDIATELY IF ANY GRADING WILL TAKE PLACE BEYOND THE LIMITS
- 16. ALL ADA PATHS SHALL NOT HAVE A CROSS SLOPE EXCEEDING 2%.



-CAUTION-

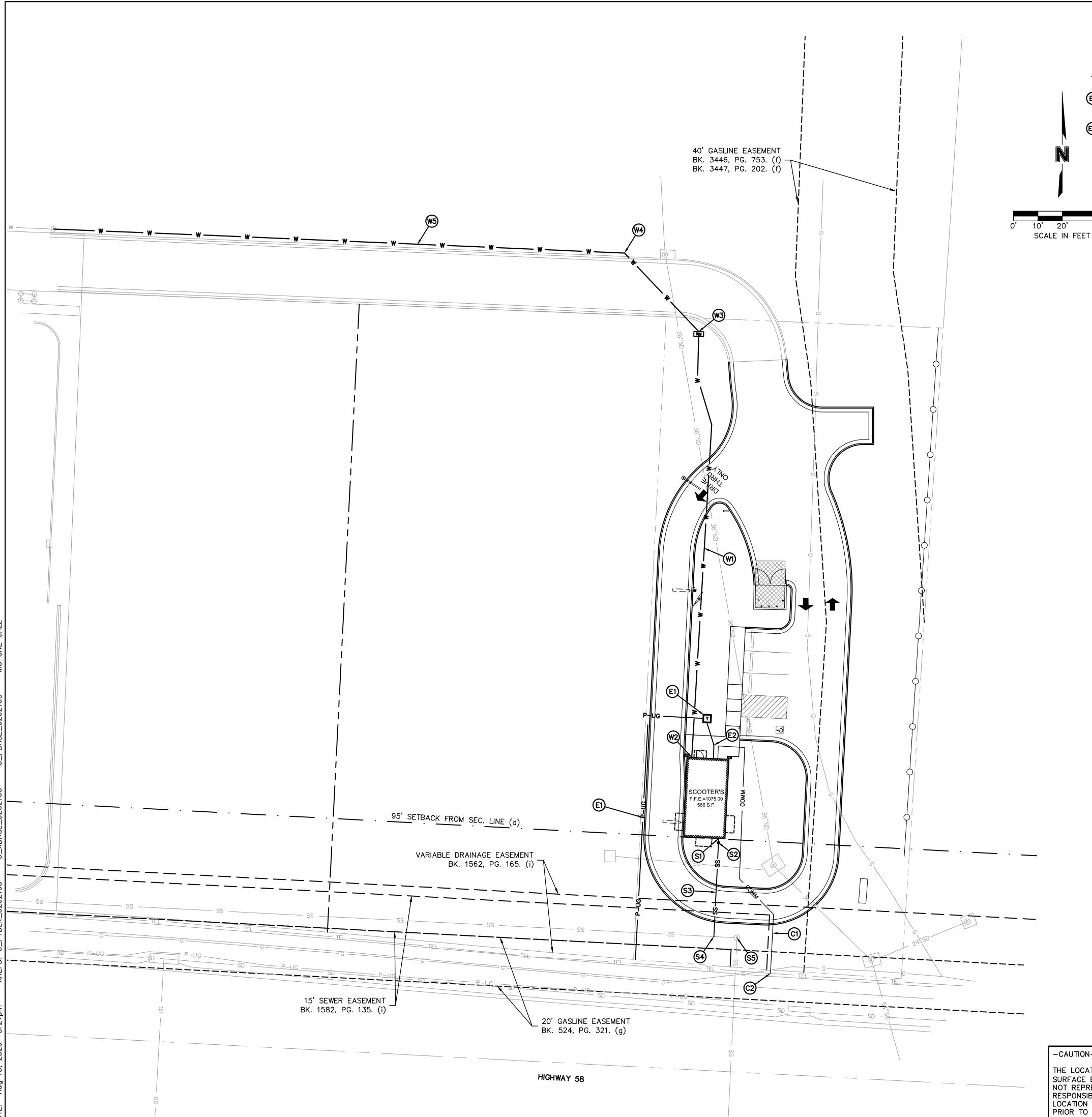
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SCOOTERS COFFEE 800 W. FOXWOOD DR

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ELECTRICAL

- CONNECT TO EXISTING POWER SOURCE. COORDINATE AND VERIFY LOCATION WITH UTILITY PROVIDER.
- INSTALL 15 LF. OF ELECTRICAL SERVICE CONDUIT. COORDINATE CONDUIT SIZE, ROUTING, INSTALLATION AND CONNECTION WITH SERVICE PROVIDER. SEE MEP PLANS FOR CONNECTION.

COMMUNICATION

- INSTALL 114 L.F. OF CONDUIT FOR FIBER OPTIC SERVICE. COORDINATE SIZE (2" MIN.), ROUTING, INSTALLATION AND CONNECTION ' WITH UTILITY PROVIDER.
- CONNECT TO EXISTING COMMUNICATIONS LINE.
 CONTRACTOR SHALL COORDINATE PROPOSED CONNECTION WITH UTILITY PROVIDER.

SANITARY SEWER:

- S1) SANITARY SEWER LOCATION AT BUILDING CONNECTION. INV EL=1070.00
- (S2) INSTALL 6" SANITARY SEWER CLEANOUT.
- (S) INSTALL 40 L.F. 6" PVC PRIVATE SANITARY SEWER LINE @ 1.00% MIN.
- CONNECT TO EXISTING SANITARY SEWER LINE PER CITY OF RAYMORE STANDARDS. INSTALL 6"X8" SADDLE TAP FLOWLINE AT MAIN =1061.21 INSTALL 6" RISER AT 1:1 SLOPE VERIFY INVERT ELEVATIONS AND CONTACT ENGINEER WITH ANY DISCREPANCIES.
- RAISE EXISTING SANITARY MANHOLE TO FINISHED GRADE.

WATER

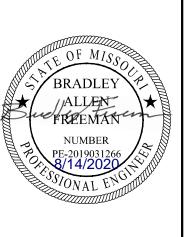
- INSTALL 220 L.F. 1" PVC PRIVATE WATER LINE AND ALL NECESSARY BENDS AND FITTINGS PER CITY OF RAYMORE STANDARDS.
- 1"x1-1/4" REDUCER AT BUILDING CONNECTION (REF. MEP PLANS FOR CONTINUATION)
- INSTALL CITY OF RAYMORE STANDARD 1" WATER METER. COORDINATE LOCATION OF METER AND TAP WITH CITY ENGINEER.
- TAP EXISTING WATER MAIN FOR PROPOSED 1" WATER SERVICE. INSTALL SERVICE SADDLE PER CITY OF RAYMORE STANDARDS PER SEPARATE
- W5) WATER MAIN EXTENSION PER SEPARATE PLANS

UTILITY NOTES:

- 1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AT PROPOSED POINTS OF CONNECTION AND CONFIRM EXACT LOCATIONS/SIZES/MATERIALS OF ALL UTILITY SERVICE LINE HOOKUPS TO THE BUILDING (PER MEP PLANS) PRIOR TO UTILITIES CONSTRUCTION.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING ONSITE MEETINGS WITH THE CITY, GOVERNING AGENCIES, AND UTILITY OWNERS PRIOR TO THE START OF ANY CONSTRUCTION OR INSTALLATION OF UTILITIES.
- 3. THE CONTRACTOR SHALL CONSTRUCT ALL WATER AND SANITARY SEWER SERVICE LINES, AND CONNECTIONS IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OR LOCAL UTILITY PROVIDER.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY SERVICE CONNECTIONS WITH THE APPROPRIATE UTILITY COMPANY/OWNER, AND TO OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED FOR SERVICE CONNECTIONS TO UTILITY MAINS.
- 5. ALL SANITARY AND WATER SERVICE CONSTRUCTION TO BE DONE UNDER A PLUMBER'S PERMIT, AND SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES AND CITY RAYMORE STANDARD SPECIFICATIONS.
- 6. CONTRACTOR TO FIELD VERIFY SANITARY SERVICE SIZE AND ELEVATION. IF CONTRACTOR IS UNABLE TO OBTAIN SLOPE MINIMUM FOR SANITARY, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. CONTRACTOR SHALL NOT EXCEED 10% SLOPE UNLESS PER PLAN OR APPROVED BY JURISDICTIONAL
- 7. UTILITY TRENCHES AND STRUCTURE EXCAVATIONS ARE TO BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND THE PROTECTION OF OTHER UTILITIES IN COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS.
- 8. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PROVIDE TRENCHING FOR ALL UTILITY SERVICE
- CONTRACTOR TO SET AND ADJUST ALL PROPOSED UTILITY STRUCTURES, CLEANOUTS, VALVES, METER PITS, ETC. TO FINISH GRADE. EXISTING ITEMS AFFECTED BY THE WORK SHALL BE ADJUSTED AS REQUIRED TO MATCH FINISH GRADE.
- 10. PRIOR TO INSTALLATION OF WATER SERVICE, CONTRACTOR TO COORDINATE WITH CITY OF EL
- 11. PRIOR TO FINAL ACCEPTANCE ALL WATER MAIN PIPE SHALL BE FLUSHED, PRESSURE TESTED AND DISINFECTED BY THE CONTRACTOR IN ACCORDANCE WITH CITY OF RAYMORE STANDARD SPECIFICATIONS.
- 12. THE CONTRACTOR WILL ASSIST THE CITY IN THE COMPLETION OF THE HYDROSTATIC PRESSURE AND LEAKAGE TESTING. IN THE EVENT OF A TEST FAILURE, THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND MAKE ANY AND ALL REPAIRS TO THE WATER LINE TO ACHIEVE AN ACCEPTABLE TEST RESULT.
- 13. THE MINIMUM DEPTH FOR ALL WATER PIPE SHALL BE FORTY EIGHT (48) INCHES AS MEASURED FROM TOP OF PIPE TO FINISH GRADE.
- 14. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPARTMENT TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO THE SITE AND ADJACENT PROPERTIES. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 15. THE CONTRACTOR SHALL VERIFY ALL VERTICAL AND HORIZONTAL CROSSINGS OF ALL PROPOSED AND EXISTING UTILITIES PRIOR TO INSTALLATION OF UTILITIES. CONTACT THE ENGINEER WITH ANY
- 16. ALL PIPE BEDDING SHALL MEET CITY OF RAYMORE STANDARDS.
- 17. ALL SANITARY SERVICE PIPE, AND FITTINGS SHALL BE ASTM D3034 SDR-26 PVC PIPE OR APPROVED EQUAL.
- 18. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.

-CAUTION-

THE LOCATION OF UNDERGROUND UTILITIES DEPICTED ON THESE DRAWINGS ARE BASED ON VISUAL SURFACE EVIDENCE AND/OR AS-BUILT DRAWINGS PROVIDED BY OTHERS AND, THEREFORE; MAY NOT REPRESENT ALL UTÍLITIES PRESENT OR THEIR ACTUAL LOCATIONS. IT IS THE CONTRACTORS RESPONSIBILITY FOR COORDINATING WITH INDIVIDUAL UTILITY OWNERS TO ASCERTAIN THE EXACT LOCATION OF EXISTING UTILITIES AT SPECIFIC POINTS OF CONNECTION AND FOR NOTIFYING AHJ PRIOR TO ANY EXCAVATION ON SITE.



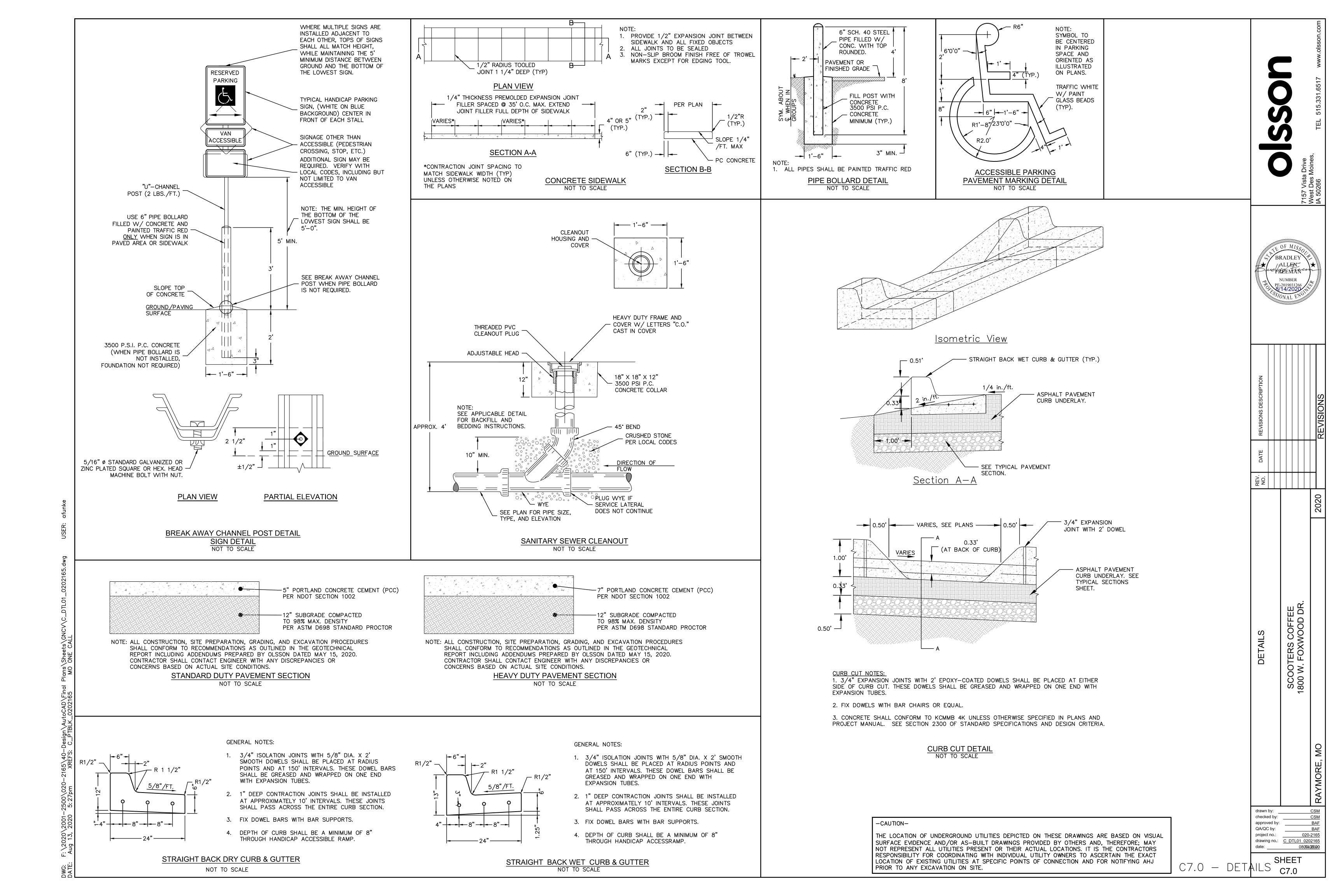
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drawing no.: <u>C_UTL01_0202165</u>

SHEET

08.14.2020



Scooter's Coffee Drive-Thru 1800 W Foxwood Drive Raymore, MO 64083

BUILDING & SITE DATA

APPLICABLE CODES: 2018 INTERNATIONAL BUILDING CODE 2018 UNIFORM PLUMBING CODE 2018 UNIFORM MECHANICAL CODE 2017 NATIONAL ELECTRICAL CODE 2018 INTERNATIONAL FIRE CODE 2009 INTERNATIONAL ENERGY CONSERVATION CODE 2010 ADA STANDARDS (ICC/ANSI A117.1 - 2009) BUILDING INFORMATION TYPE OF CONSTRUCTION VB USE GROUP B OCCUPANCY LOAD 5 FLOOR AREA 545 SF FIRE ALARM / SPRINKLER NOT SPRINKLED BUILDING HEIGHT 1-STORY (19'-0")

GENERAL CONTRACTOR NOTE

ALL SUB-CONTRACTORS SHALL BE PROVIDED WITH A COMPLETE SET OF CONSTRUCTION DOCUMENTS FOR BIDDING AND CONSTRUCTION

DIRECTORY
OWNER: Burner Investments, LLC dba Scooter's Coffee 516 Eagle Glen Drive Raymore, MO 64083 TEL: (816) 876-5010
ARCHITECT: (k) Warman Architecture + Design, PC 1828 Swift, Ste 101 North Kansas City, MO 64116 TEL: (816) 474-2233, FAX: (816) 474-1051 REP: Kathleen Warman
CIVIL ENGINEER: Olsson 11600 Broadway Extension, Suite 300 Oklahoma City, OK 73114 TEL: (405) 242-6612 FAX: (405) 242-6601 REP: Matt Chatham
STRUCTURAL ENGINEER: Norton & Schmidt Consulting Engineers, LLC

MEP ENGINEER:

North Kansas City, MO 64116

311 E 11th Avenue

REP: Eddie Phillips

BC Engineers, Inc. 5720 Reeder Shawnee, KS 66203

TEL: (913) 262-1772, FAX: (913) 262-1773 REP: Mason Stewart / Brett Hermann

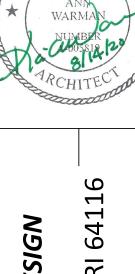
TEL: (816) 421-4232, FAX: (816) 421-1956

DEFERRED SUBMITTALS

. ALL BRAND ID / LOGO SIGNAGE

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WARMAN ARCHITECTURE+DESIGN
1735 SWIFT AVE
NORTH KANSAS CITY, MISSOURI 64116
V. 816.474.2233 F. 816.474.1051



JED FOR PERMIT

WARMAN ARCHITECTURE+DESIGN

1735 SWIFT NORTH KANSAS CITY, MISSOURI 64116 V. 816.474.2233 F. 816.474.1051

FOUNDATIONS

- 1. FOUNDATIONS FOR THIS PROJECT HAVE BEEN DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING VALUE OF 1,500 psf FOR CONTINUOUS FOOTINGS. THE CONTRACTOR SHALL RETAIN A QUALIFIED GEOTECHNICAL ENGINEER TO PERFORM A SOILS INVESTIGATION AND PROVIDE A REPORT WITH RECOMMENDATIONS FOR SITE PREPARATION AND FOUNDATION TYPE WITH DESIGN PARAMETERS. A TESTING LABORATORY (DESIGNATED BY THE OWNER) SHALL ALSO BE RETAINTED TO VERIFY THE SOIL BEARING CAPACITY AND DESIGN PARAMETERS SPECIFIED IN THE REPORT TO BE PREPARED PRIOR TO PLACEMENT OF THE FOUNDATION. COORDINATION & SCHEDULING OF THE TESTING LAB FOR SOIL CAPACITY VERIFICATION AS WELL AS OTHER TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE TESTING LAB FIELD REPRESENTATIVE SHALL NOT LEAVE THE SITE AFTER INSPECTIONS UNTIL THE SUPERINTENDENT FOR THE CONTRACTOR HAS BEEN VERBALLY NOTIFIED OF THE RESULTS OF THE INSPECTION. REPORTS SHALL BE SENT TO THE ARCHITECT/ENGINEER FOR REVIEW. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER.
- 2. DUE TO THE LACK OF SPECIFIC GEOTECHNICAL INFORMATION, THIS SLAB HAS BEEN DESIGNED USING A SUBGRADE MODULUS OF k=150 pci AND DESIGN LOADING OF 100 psf THE DESIGNER IS NOT RESPONSIBLE FOR DIFFERENTIAL SETTLEMENT, SLAB CRACKING, OR OTHER FUTURE DEFECTS RESULTING FROM UNREPORTED CONDITIONS MITIGATING THE ABOVE ASSUMPTIONS.
- 3. IF REQUIRED, ALL FILL SHALL BE ENGINEERED AND PLACED IN ACCORDANCE WITH THE SOILS ENGINEER'S RECOMMENDATIONS.
- 4. ANCHOR BOLTS SHALL BE LOCATED BY MEANS OF A TEMPLATE TO ASSURE PROPER
- 5. REFER TO SECTION 2 OF THE SPECIFICATIONS FOR EXCAVATION, BACKFILL, GRADING, AND ADDITIONAL INFORMATION.

CONCRETE

- 1. ALL CONCRETE AND REINFORCING WORK SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE'S "STANDARD BUILDING CODE REQUIREMENTS OF REINFORCED CONCRETE" (ACI 318) "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301), AND "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION" (ACI
- 2. PROPOSED CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. CONCRETE MIX DESIGNS SHALL MEET THE FOLLOWING REQUIREMENTS:

	MINIMUM 28-DAY STRENGTH	MAXIMUM WATER/CEMENT RATIO	MAXIMUM SLUMP	AIR ENTRAINMENT
FOOTINGS	3000 psi	.48	4"	NONE
INTERIOR SLABS	3500 psi	.43	4"	NONE
EXTERIOR CONCRETE	4000 psi	.40	4"	6% ±1%

- 3. ALL ADMIXTURES SHALL BE APPROVED BY THE ENGINEER. NO WATER SHALL BE ADDED
- AT THE SITE WITHOUT THE ENGINEER'S PERMISSION. 4. FLY ASH SHALL NOT BE USED UNLESS APPROVED IN WRITING BY THE ENGINEER.
- 5. ABSOLUTELY NO CALCIUM CHLORIDE SHALL BE ADDED TO ANY CONCRETE ON THIS
- 6. NO ALUMINUM SHALL BE PLACED IN CONCRETE.
- 7. ALL CONCRETE IS REINFORCED UNLESS SPECIFICALLY NOTED AS UNREINFORCED. REINFORCE ALL CONCRETE NOT OTHERWISE SHOWN WITH THE SAME REINFORCING AS IN SIMILAR SECTIONS OR AREAS.
- 8. CONSTRUCTION JOINTS AND CONTROL JOINTS IN EARTH FORMED SLABS TO BE AS SHOWN ON PLANS. CONTROL JOINTS SHALL BE EITHER TOOLED OR SAW CUT (1 1/2" DEEP OR 1/3 OF THE SLAB THICKNESS, WHICH EVER IS GREATER) WITHIN 8 HOURS OF PLACING CONCRETE. VERIFICATION OF COMPLIANCE IS REQUIRED AND TO BE PERFORMED BY THE TESTING LAB. WHERE NOT SHOWN, LIMIT CONTROLLED AREAS TO BE NOT MORE THAN 144 SQ. FEET OR NO GREATER THAN 12 FEET ON ANY SIDE. CONTROLLED AREAS ARE TO BE APPROXIMATELY SQUARE. THICKENED SLAB AT CONSTRUCTION JOINTS SHALL BE 8" DEEP X 1'-0" WIDE EACH SIDE OF JOINT, PROVIDE 1/2" X 2'-0" LONG SMOOTH DOWELS @ 18" O.C. CENTERED IN THE THICKENED SLAB, WITH 1'-0" LENGTH OF DOWEL ON EACH SIDE OF JOINT.
- 9. DURING HOT WEATHER (80°F AND ABOVE), THE CONTRACTOR SHALL COMPLY WITH THE RECOMMENDATIONS ACI-305 "HOT WEATHER CONCRETE". DURING COLD WEATHER (40°F AND BELOW), THE CONTRACTOR SHALL COMPLY WITH THE RECOMMENDATIONS OF ACI-306 "COLD WEATHER CONCRETE".
- 10. RE: REINFORCING STEEL NOTES, NOTE 8 FOR SLAB-ON-GRADE WWF REINFORCING AND WWF CHAIR SUPPORT REQUIREMENTS.
- 11. ALL ANCHOR BOLTS EMBEDDED IN CONCRETE SHALL HAVE A MINIMUM YIELD STRENGTH OF 36 KSI.
- 12. UNLESS NOTED OTHERWISE, ALL ANCHORS AND DOWELS SHALL BE POSITIONED AND IN PLACE PRIOR TO CONCRETE PLACEMENT. "WET SETTING" OF ANCHORS AND DOWELS IS
- 13. REFER TO SECTION 3 OF THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

REINFORCING STEEL:

- 1. MATERIALS SHALL COMPLY WITH THE FOLLOWING:
- A. REINFORCING STEEL, #4 BARS AND LARGER, SHALL BE ASTM A615, GRADE 60.
- B. REINFORCING STEEL, #3 SHALL BE ASTM A615, GRADE 40.
- C. WELDED WIRE MESH REINFORCING SHALL BE ASTM A185 COLD DRAWN WIRE.
- NOTE: IF REINFORCING STEEL IS TO BE WELDED THAT REINFORCING STEEL SHALL BE ASTM A706, LOW ALLOY, ALL SIZES.
- 2. DETAIL BARS IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED STRUCTURES" (ACI 315), "BUILDING CODE REINFORCED CONCRETE" (ACI 302).
- 3. ACCESSORIES SHALL BE AS SPECIFIED IN THE LATEST EDITION OF "CONCRETE REINFORCING STEEL INSTITUTE HANDBOOK". "CHAIRS" OR OTHER ACCEPTABLE MEANS TO SUPPORT REINFORCING STEEL & WWF ARE REQUIRED. "PULLING-UP" THE WWF IN SLABS ON GRADE, TOPPING SLABS OR SUPPORTED SLABS IS NOT ACCEPTABLE. MAXIMUM SPACING OF ACCESSORIES TO INCLUDE "CHAIRS" OR OTHER REINFORCING SUPPORT DEVICES SHALL BE 2'-0" O.C. MAXIMUM. ALL ACCESSORIES TO HAVE GALVANIZED OR PLASTIC COATED FEET.
- 4. REINFORCING SHALL BE CONTINUOUS AND LAPPED A MINIMUM OF 48 BAR DIAMETERS.
- WELDED WIRE FABRIC SHALL BE LAPPED A MINIMUM OF SIX INCHES.

5. STANDARD CONCRETE COVER OF BARS UNLESS OTHERWISE NOTED SHALL BE:

(ALL COVERAGE NOMINAL BAR DIAMETER MINIMUM.)	3 INCHE
WHERE EARTH FORMED	3/4 INCHE
WALLS AND SLABS (NOT EXPOSED TO EARTH OR WEATHER)	
WALLS AND SLABS (EXPOSED TO EARTH OR WEATHER):	1 1/2 INCHE
#5 AND SMALLER:	2 INCHE
#6 AND LARGER:	2 INCHE
OTHER	

- 6. AT CORNERS OF ALL WALLS AND FOOTINGS, SUPPLY CORNER BARS 4'-0" LONG (2'-0" EACH DIRECTION) IN WALL AND/OR FOOTING, MATCHING SIZE AND SPACING OF HORIZONTAL BARS. WHERE THERE ARE NO VERTICAL BARS IN FACE OF WALL, SUPPLY THREE (3) #4 SUPPORT BARS FOR CORNER BARS.
- 7. AT ALL HOLES IN CONCRETE WALLS AND SLABS, ADD ONE #4 BAR (OPENING DIMENSION PLUS 60 BAR DIAMETERS LONG) AT EACH OF FOUR SIDES AND ADD ONE #4 BAR X 5'-0" DIAGONALLY AT EACH OF THE CORNERS OF THE HOLE.
- 8. ALL SLABS-ON-GRADE SHALL BE REINFORCED WITH 6X6/W2.9X2.9 WELDED WIRE FABRIC UNLESS OTHERWISE NOTED. PLACE WWF IN CENTER OF SLAB. WWF SHALL BE SUPPORTED ON CHAIRS OR OTHER ACCEPTABLE MEANS SPACED NO FURTHER THAN 2'-0" O.C. EACH WAY. "PULLING UP" THE WWF DURING CONCRETE PLACEMENT IS NOT AN ACCEPTABLE PROCEDURE FOR PLACEMENT. VERIFICATION REPORTS FROM THE TESTING LAB OF WWF PLACEMENT ARE REQUIRED.
- 9. AT ALL SLAB CORNERS, UNLESS SUCH CORNER IS RELIEVED BY A CONSTRUCTION JOINT, (3) - #4 X 3'-0" @ 2" O.C. SHALL BE PLACED DIAGONALLY AT THE MID-DEPTH OF THE SLAB.
- 10. REFER TO SECTION 3 OF THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

DIMENSION LUMBER & PLYWOOD

- ALL SAWN LUMBER FRAMING MEMBERS INCLUDING STUDS, JOIST HEADERS, BLOCKING AND OTHER MEMBERS SHOWN SHALL BE DOUGLAS FIR LARCH #2 OR BETTER MEETING THE FOLLOWING STRESSES: Fb = 900 psi; Ft = 575 psi; Fv = 160 psi; Fc (parallel) = 565 psi; Fc =
- 2. ALL WOOD FRAMING MEMBERS REFERENCED AS NOMINAL SIZES, DRESSED S4S. PROVIDE ACTUAL SIZES AS REQUIRED BY PS20. PROVIDE SEASONED LUMBER WITH 19% MAXIMUM MOISTURE CONTENT AT TIME OF DRESSING.
- 3. ALL SAWN LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.
- 4. ALL PLYWOOD PANELS SHALL BE IDENTIFIED WITH THE APPROPRIATE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION (APA) AND SHALL MEET THE REQUIREMENTS OF PRODUCT STANDARD PS-1.
- 5. PLYWOOD PANELS SHALL BE SET WITH FACE GRAIN PERPENDICULAR TO SUPPORTING MEMBERS AND STAGGER END JOINTS 4'-0".
- 1/8" SPACING SHALL BE PROVIDED AT ALL PLYWOOD EDGE AND END JOINTS UNLESS SPECIFICALLY NOTED OTHERWISE BY THE PANEL MANUFACTURER.
- 7. WOOD TRUSSES AND THEIR CONNECTIONS SHALL BE DESIGNED BY THE MANUFACTURER FOR THE LOADS STIPULATED ON THE DRAWINGS. FRAMING PLAN DRAWINGS, PIECE SHOP DRAWINGS AND CALCULATIONS WITH A PROFESSIONAL ENGINEER'S SEAL FOR THE STATE WHERE THE BUILDING IS BEING CONSTRUCTED SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION. CONNECTION PLATES SHALL MEET THE REQUIREMENTS OF THE UNIFORM BUILDING CODE.
- 8. TEMPORARY STABILITY OF WOOD TRUSSES AND GLUE LAMINATED MEMBERS DURING ERECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN CONJUNCTION WITH ALL RECOMMENDATIONS OF THE MANUFACTURER.
- 9. LAMINATED VENEER LUMBER (LVL) SHALL BE OF DIMENSIONS NOTED ON THE DRAWINGS, AND HAVE THE FOLLOWING MINIMUM PROPERTIES; Fb = 2600 psi, Fc (PARALLEL) = 2310 psi, Fc (PERPENDICULAR) = 750 psi, Fv = 285 psi, AND E = 1.9 X E6 psi.
- 10 ALL MULTIPLE LVL MEMBERS SHALL BE NAILED TOGETHER WITH TWO (2) ROWS (1-TOP &
- 1-BOTT.) 16D NAILS AT 12" O.C. OVER THE FULL LENGTH OF THE MEMBERS. 11. WOOD TRUSSES SHALL NOT BE FIELD CUT.
- 12. ALL NAILING NOT INDICATED ON THE DRAWINGS SHALL CONFORM TO THE NAILING SCHEDULE OF THE GOVERNING BUILDING CODE. SPACING, END DISTANCES AND EDGE DISTANCES OF NAILS AND SPIKES SHALL BE SUCH AS TO AVOID THE UNUSUAL SPLITTING
- 13. ALL NAILS SHALL BE COMMON WIRE NAILS, UNLESS NOTED OTHERWISE.
- 14. ALL LIGHT GAGE METAL FRAMING ACCESSORIES NOTED SHALL BE AS MANUFACTURED BY "SIMPSON STRONG TIE" OR APPROVED EQUAL, ATTACH FRAMING ACCESSORIES TO WOOD FRAMING ACCESSORIES TO WOOD FRAMING IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. FOR ACQ TREATED LUMBER CONNECTIONS THE SIMPSON FRAMING
- ACCESSORIES SHALL BE "EXTRA HEAVY GALVANIZED." 15. REFER TO SECTION 8 OF THE SPECIFICATION FOR ADDITIONAL REQUIREMENTS.

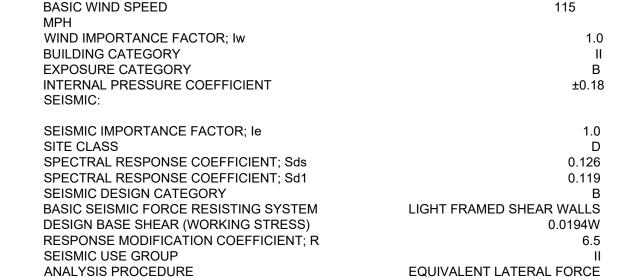
GENERAL STRUCTURAL NOTES

GOVERNING BUILDING CODE: 2012 INTERNATIONAL BUILDING CODE (IBC) AND ITS APPROPRIATE SUPPLEMENTS.

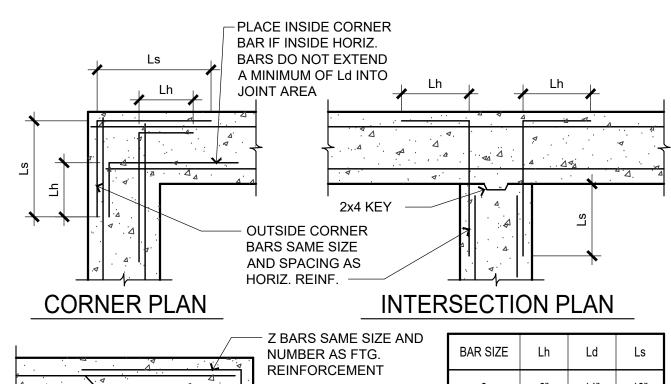
DESIGN LOADS: GRAVITY:

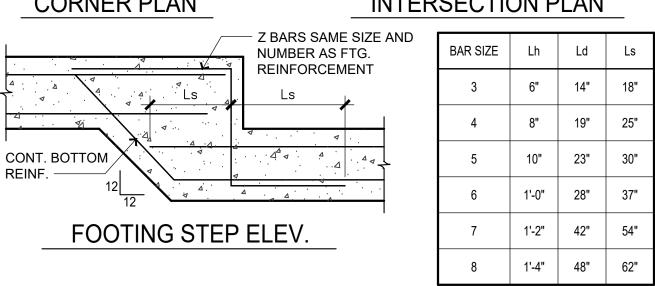
ROOF LIVE LOAD	20 PSF
GROUND SNOW LOAD; Pg	20 PSF
FLAT-ROOF SNOW LOAD; Pf (INCLUDES RAIN ON SNOW)	20 PSF
SNOW EXPOSURE FACTOR; Ce	1.0
SNOW IMPORTANCE FACTOR; Is	1.0
THERMAL FACTOR; Ct	1.0
(SNOW DRIFT LOADING IN ACCORDANCE WITH 2012 IBC)	

WIND:



- 1. THESE NOTES SUPPLEMENT THE SPECIFICATIONS WHICH SHOULD BE REFERRED TO FOR ADDITIONAL INFORMATION. ANY CONFLICT AND/OR CONTRADICTION OF TERMS OR REQUIREMENTS WITH THESE GENERAL NOTES WILL BE RESOLVED BY THE ARCHITECT/ENGINEER IN FAVOR OF THE MORE STRINGENT OR SUPERIOR QUALITY REQUIREMENT.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE PLANS AND FOR COORDINATING ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH THOSE SHOWN ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS. IF ERRORS OR DISCREPANCIES IN THE DIMENSIONS OCCUR, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE
- 3. THE CONTRACTOR SHALL VERIFY ALL ARCHITECTURAL, MECHANICAL AND ELECTRICAL OPENINGS, SIZES, AND LOCATIONS, WITH THE STRUCTURAL DRAWINGS.
- 4. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING AND SHORING AS REQUIRED DURING CONSTRUCTION TO ENSURE THE SAFETY OF ALL INDIVIDUALS
- 5. FURNISH ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHOWN OR INFERRED BY THESE DRAWINGS.



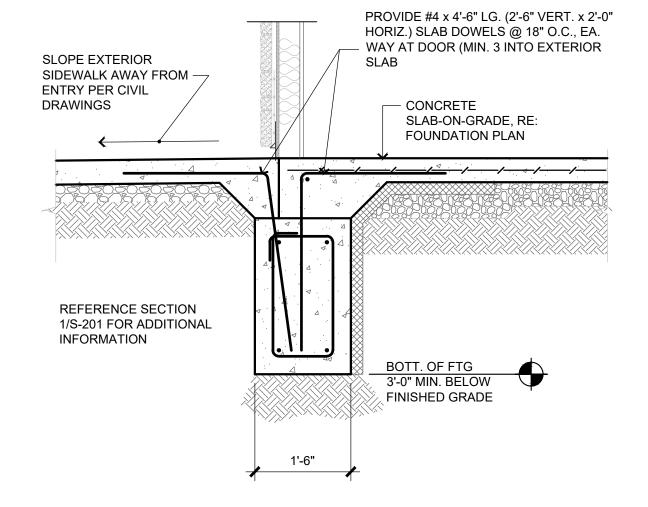


TYPICAL CONCRETE DETAILS

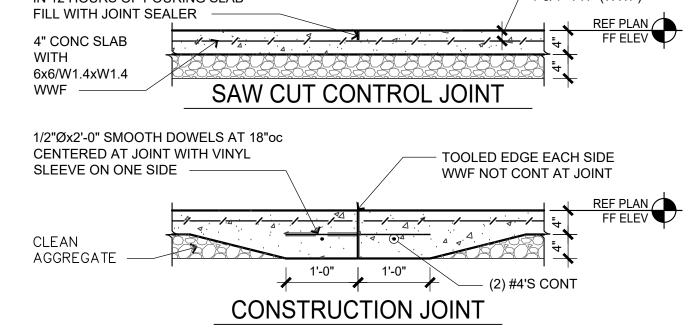
SCALE: 3/4" = 1'-0" S-FN-SD01 SPECIAL INSPECTIONS SCOPE OF INSPECTION FREQUENCY OF INSP. **BUILDING CODE** WORK TASK REFERENCE CONTINUOUS PERIODIC FOOTING DEPTH & DESIGN BEARING 1705.6 CAPACITY SOILS FILL PLACEMENT 1705.6 1705.6 SUBGRADE & SITE PREPARATION CLASSIFICATION & TESTING OF FILL 1705.6 MATERIALS ACI 318: 3.5, 7.1 - 7.7 & REINFORCING STEEL & PLACEMENT IBC 1910.4 ACI 318: 8.1.3, 21.2.8 & **BOLTS INSTALLED IN CONCRETE** IBC 1908.5, 1909.1 ACI 318: CH. 4, 5.2-5.4 & IBC VERIFICATION OF REQ'D MIX 1904.2, 1910.2 & 1910.3 CONCRETE ASTM C 172, C 31; ACI 318: 5. CONCRETE SAMPLING 5.8 & IBC 1910.10 ACI 318: 5.9, 5.10 & IBC 1910.6 CONCRETE PLACEMENT 1910.7, 1910.8

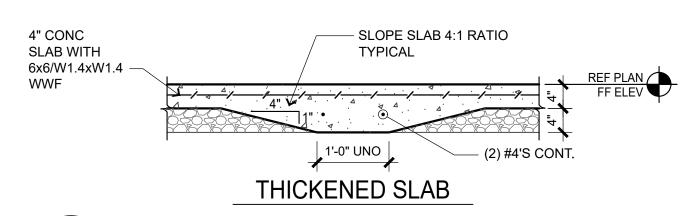
CURING TEMPERATURE & TECHNIQUES 1910.9 A QUALIFIED SPECIAL INSPECTOR WILL BE RETAINED BY THE OWNER TO COMPLETE SPECIAL INSPECTIONS PRIOR TO AND DURING CONSTRUCTION TO CONFORM WITH THE REQUIREMENTS OF THE BUILDING CODE AND THE LOCAL CODE AUTHORITIES. ITEMS REQUIRING SPECIAL INSPECTIONS ARE TABULATED BELOW. REFER TO CODE CHAPTER 17 FOR SPECIFIC REQUIREMENTS FOR EACH INSPECTION TASK.

N<u>orton & Schmidt</u> Consulting Engineers, L.L.C 311 East 11th Avenue North Kansas City, MO 64116 Phone: (816) 421-4232 Fax: (816) 421-1956 www.nortonschmidt.com MO Certificate of Authority E-2008019746 N&S JOB NUMBER: 2020-1637







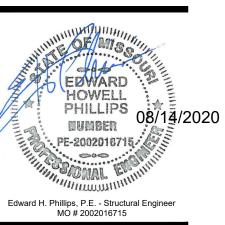


STANDARD 4" SLAB DETAILS SCALE: 3/4" = 1'-0" S-FN-SD04

ACI 318: 5.11 - 5.13 & IBC





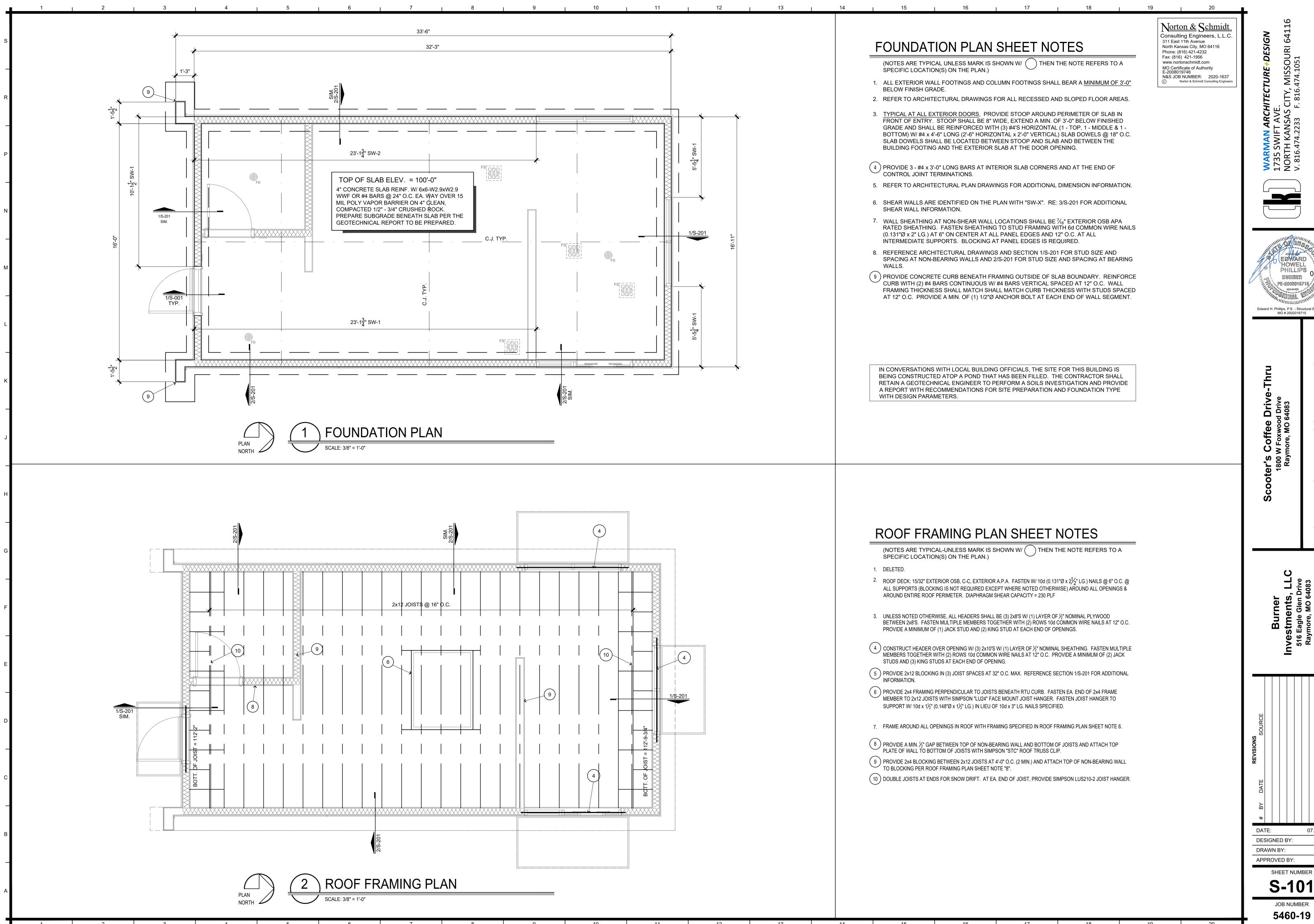


07.27.20 **DESIGNED BY**

> APPROVED BY: EP2 SHEET NUMBER

DRAWN BY:

S-00 JOB NUMBER 5460-19



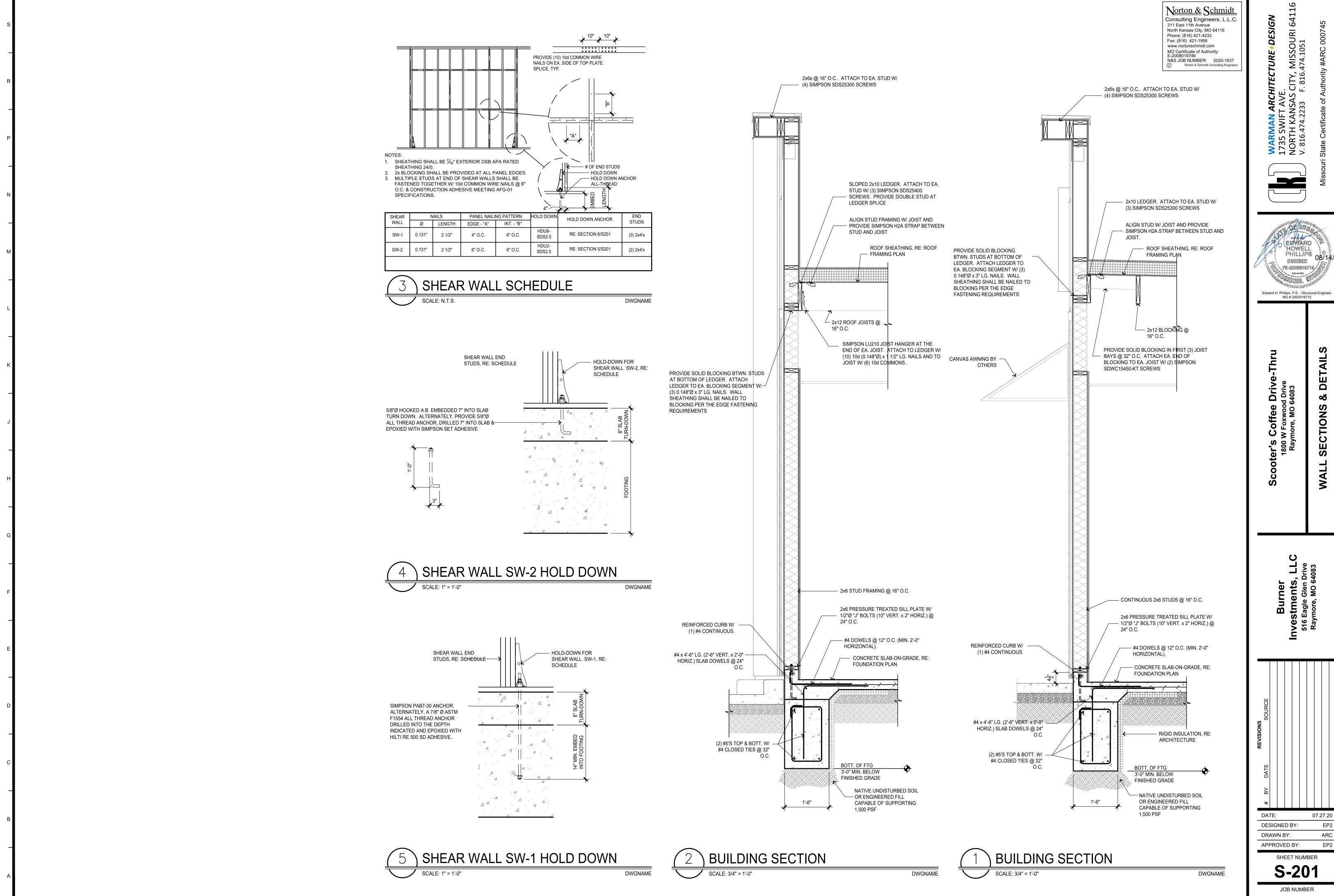
SUMBER PE-2002016715

Edward H. Phillips, P.E. - Structural Engineer

DESIGNED BY:

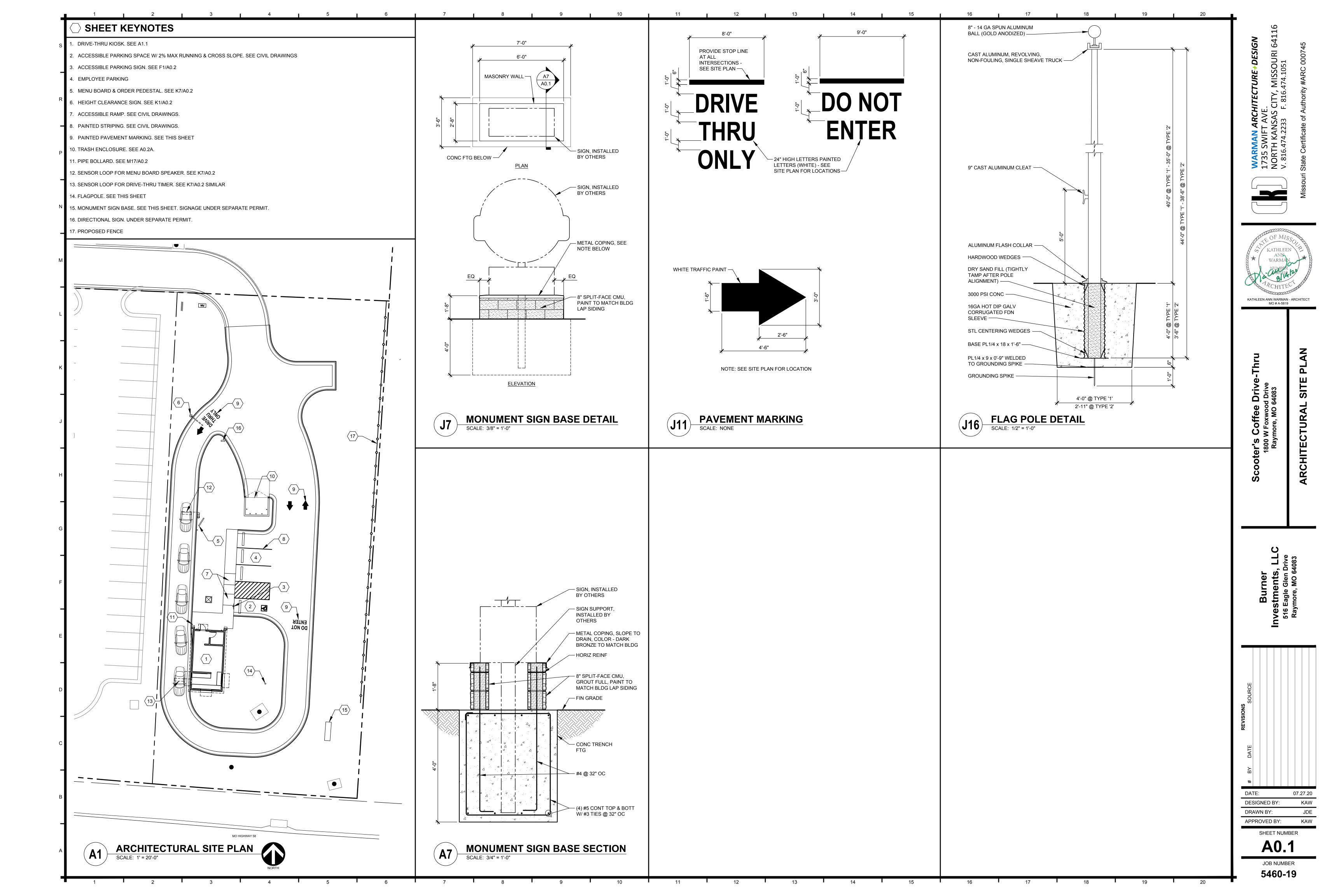
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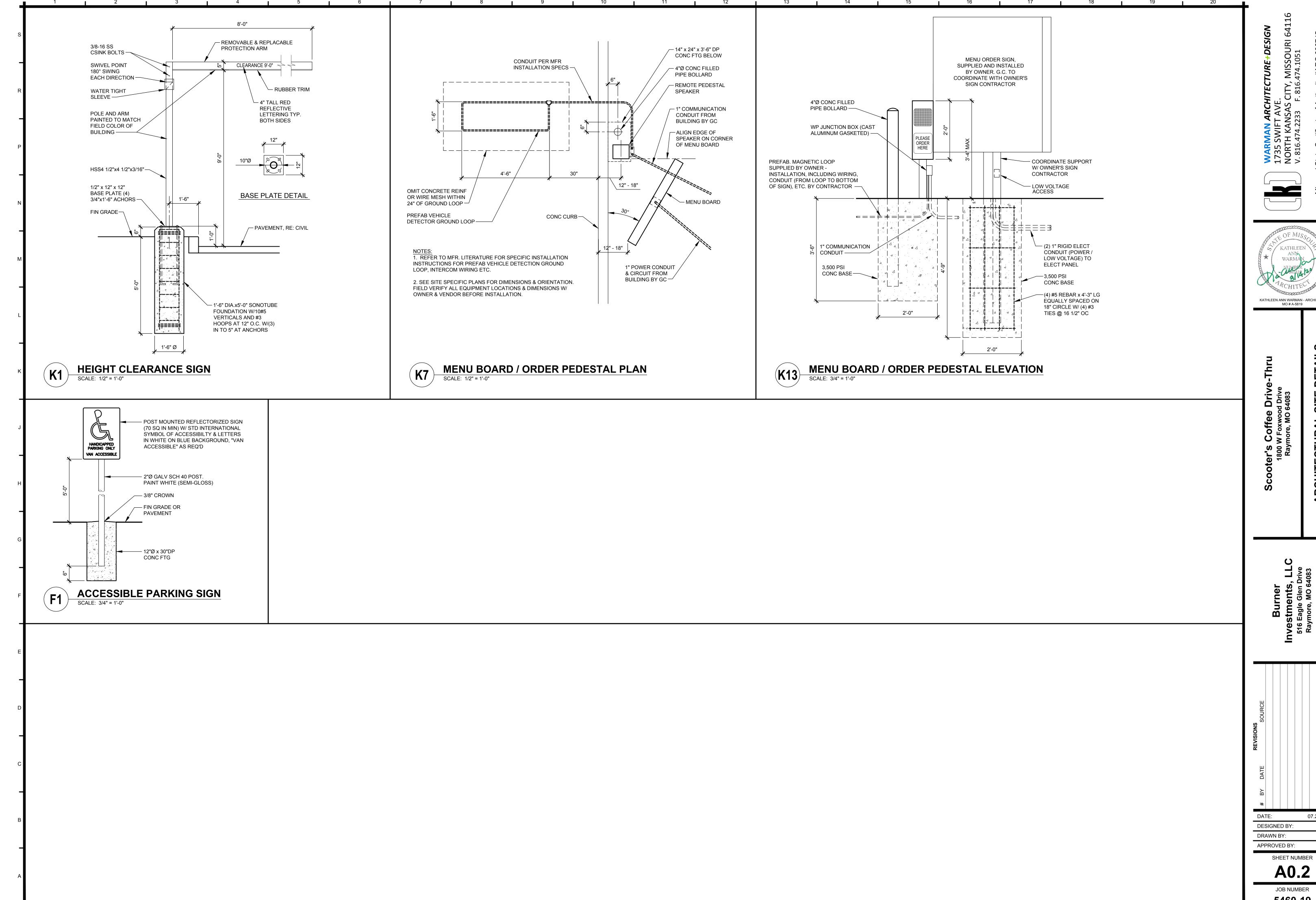
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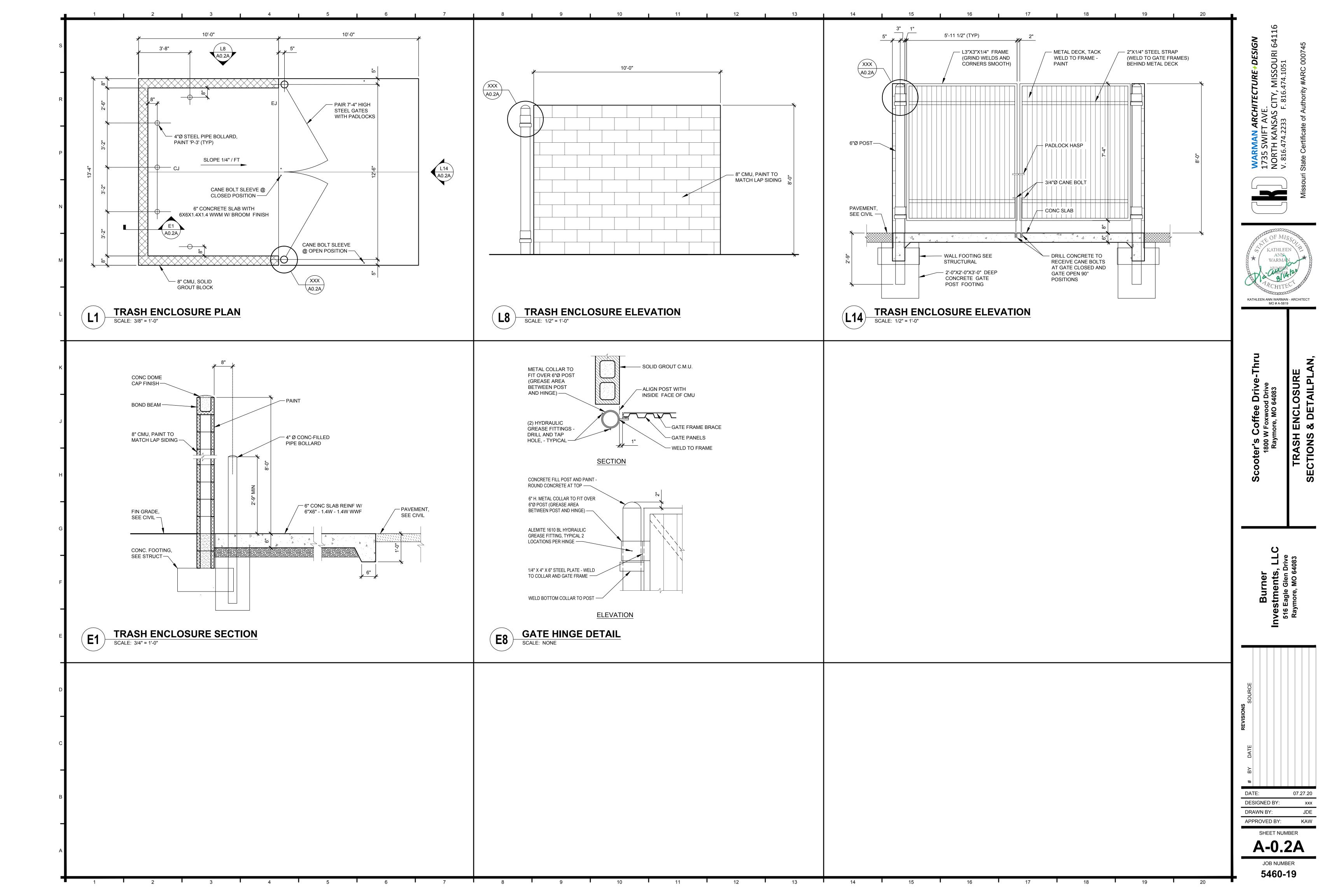




CITY, MISSOURI 641 F. 816.474.1051

KATHLEEN ANN WARMAN - ARCHITECT

JDE



PROJECT GENERAL NOTES
CONTRACTORS SHALL NOT SCALE THESE DRAWINGS FOR CONSTRUCTION PURPOSES. IN THE EVENT OF OMISSION OF NECESSARY DIMENSIONS OR INFORMATION, CONTRACTOR SHALL NOTIFY ARCHITECT. FIGURED AND CALCULATED DIMENSION TAKES PRECEDENCE OVER SCALED MEASUREMENTS. DETAILED DRAWINGS AND LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER
SMALLER SCALE DRAWINGS. ALL PLAN DETAILS AND WALL SECTIONS ARE ASSUMED TO BE TYPICAL CONDITIONS UNLESS DETAILED OR NOTED OTHERWISE.
ALL FINISHED FLOOR ELEVATIONS REFER TO ARCHITECTURAL DRAWINGS ONLY. REFER TO CIVIL DRAWINGS FOR RELATIONSHIP TO PROJECT BENCHMARK(S).
CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS AND GRADES AT JOB SITE. ALL CONTRACTORS SHALL COORDINATE
THEIR WORK WITH OTHERS TRADES AND REPORT DISCREPANCIES, PRIOR TO THEIR CONSTRUCTION, TO THE ARCHITECT FOR REVIEW AND CLARIFICATION OR ACTION.
CONTRACTOR SHALL FIELD VERIFY TYPE OF SOILS. IF CORROSIVE SOILS ARE ENCOUNTERED, TAKE NECESSARY PRECAUTIONS FOR ALL UNDERGROUND WORK.
BIDDERS ARE INSTRUCTED TO CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS AND SITE.
NO STRUCTURE OF ANY KIND TO BE CONSTRUCTED ON, OVER OR PLACED WITHIN THE PUBLIC UTILITY EASEMENTS EXCEPT WOOD, WIRE OR REMOVABLE SECTION TYPE FENCING AND/OR PAVING.
CONTRACTOR TO COORDINATE STAGING AREAS AS REQUIRED WITH LANDLORD AND OWNER.
ANY DAMAGE BY GENERAL CONTRACTOR OR SUBCONTRACTOR TO EXISTING ASPHALT PAVEMENT AND/OR EXISTING LANDSCAPING
SUTSIDE OF CONSTRUCTION LIMITS LINE SHALL BE REPAIRED AT NO COST TO THE OWNER. SIDEWALK ELEVATIONS TO BE COORDINATED WITH SITE AS-BUILT CONDITIONS. ARCHITECT TO BE NOTIFIED OF ANY
SCREPENCIES.
ONTRACTOR SHALL FIELD VERIFY ANY EXISTING SITE CONDITIONS THAT MAY IMPEDE INSTALLATION AND/OR OPERATION OF SUCH.
N APPROVED SET OF NUMERALS, MINIMUM 4" HIGH WITH A STROKE WIDTH SUCH A POSITION LESS THAN 1/2 INCH, SHALL BE LACED ON THE BUILDING. THE NUMBERING SHALL BE PLACED IN AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR OAD FRONTING THE PROPERTY. SAID NUMERALS SHALL CONTRAST WITH THEIR BACKGROUND.
PPROVED NUMBERS OR ADDRESSES SHALL BE MAINTAINED AND AS CURRENTLY PLACED ON BUILDING.
D MATERIALS SHALL BE STORED ON PUBLIC PROPERTY UNLESS AN ENCROACHMENT PERMIT IS FIRST OBTAINED FROM THE
JBLIC WORKS DEPARTMENT. ONTRACTOR SHALL PROVIDE A CONSTRUCTION FENCE FOR PEDESTRIAN PROTECTION ACCORDING TO LOCAL REGULATIONS AND
DING CODE.
IPORARY TOILET FACILITIES SHALL BE PROVIDED.
NTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE SECURITY AND SAFETY OF THE SITE WHILE THE JOB IS IN PROGRESS AND FILL THE JOB IS COMPLETE.
NTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AT ALL TIMES.
DEBRIS SHALL BE REMOVED FROM THE PREMISES DAILY AND WORK AREAS SHALL BE LEFT IN A CLEAN (BROOM) CONDITION AT TIMES.
RACTOR SHALL COMPLY WITH ALL STATE AND LOCAL RULES AND REGULATIONS CONCERNING LICENSING WHICH THE LOCAL CABLE GOVERNING AUTHORITY MAY HAVE ADOPTED.
AL CONTRACTOR SHALL PLACE ORDERS FOR ALL FINISHES, ALL MATERIALS, EQUIPMENT, ETC. AT THE START OF THE CT. SUBSTITUTIONS ARE NOT ACCEPTED FOR ANY ITEM, UNLESS NOTED OTHERWISE. OWNER AND ARCHITECT MUST BE IED OF LEAD TIME PROBLEMS WITHIN THE FIRST TWO WEEKS OF THE PROJECT.
IRED BY JURISDICTION, GENERAL CONTRACTOR WILL PAINT NEW GAS LINE/PIPE.
TRACTOR SHALL VERIFY SIZE, LOCATIONS AND CHARACTERISTICS OF ALL EQUIPMENT TO BE FURNISHED WITH UFACTURERS OR SUPPLIERS BEFORE BEGINNING CONSTRUCTION.
RACTOR SHALL VERIFY SIZE AND LOCATION OF ALL OPENINGS FOR MECHANICAL AND ELECTRICAL EQUIPMENT AND RELATED WITH CONTRACTORS INVOLVED AND EQUIPMENT TO BE FURNISHED. FOR CONSTRUCTION DETAILS NOT SHOWN, USE THE FACTURER'S STANDARD DETAILS OR APPROVED SHOP DRAWINGS / DATA SHEETS IN ACCORDANCE WITH THE PROJECT
IFICATIONS. NG HEIGHTS SCHEDULED ON THE ROOM FINISH SCHEDULE OR THE REFLECTED CEILING PLAN ARE TAKEN FROM THE FINISH R ELEVATION.
LAN DIMENSIONS ARE TO CENTERLINE OF STUD WALLS, FACE OF MASONRY AND CENTERLINE OF COLUMNS, UNLESS NOTED RWISE.
TY ALL ELEVATIONS AND DIMENSIONS OF STRUCTURAL ELEMENTS WITH ARCHITECTURAL DRAWINGS. IN CASE OF CONFLICT, TY THE ARCHITECT. THE CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR THEM. ALL DIMENSIONAL REPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE
NTRACTOR SHALL ADD SUFFICIENT BLOCKING IN STUD WALLS TO SUPPORT ALL ITEMS OR EQUIPMENT SHOWN OR SPECIFIED TO ATTACHED TO THE WALLS. PROVIDE ADDITIONAL STRUCTURAL SUPPORT (ANGLES, CHANNELS, ETC) WITHIN WALLS WHERE GIGHT OF ATTACHED ITEMS OR EQUIPMENT IS TOO GREAT TO BE SUPPORTED BY WALL STUDS. PROVIDE BLOCKING FOR OWNER RNISHED OR INSTALLED ITEMS.
PARTITIONS WHERE INDICATED BY SYMBOL ARE TO EXTEND AND SEAL AGAINST THE BOTTOM OF THE DECK ABOVE.
SE METAL CORNER BEADS ON ALL GYPSUM BOARD EXTERIOR CORNERS.
ORDINATE WITH MECHANICAL CONTRACTOR FOR LOCATIONS OF ALL FLOOR DRAINS.
PLUMBING WET WALLS (EXCLUDING CHASES) SHALL BE COVERED WITH WATER RESISTANT TYPE GYPSUM BOARD, UNLESS TED OTHERWISE.
RANSITION OF DIFFERENT FLOORING MATERIALS AT DOORWAYS SHALL OCCUR AT CENTERLINE OF DOORS TYPICALLY.
PAINT ALL WALL SURFACES, DOOR FRAMES, BULKHEADS AND CEILINGS IN ROOMS WHERE INDICATED ON THE ROOM FINISH SCHEDULE. PAINT BEHIND ALL MOVEABLE ITEMS ADJACENT TO WALLS RECEIVING PAINT AND RELOCATE THEM.
L WEATHER-EXPOSED SURFACES SHALL HAVE A WEATHER RESISTIVE BARRIER TO PROTECT THE INTERIOR WALL COVERING AND TERIOR OPENINGS SHALL BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WATERPROOF.
PORTABLE BRACKET MOUNTED FIRE EXTINGUISHER (VERIFY TYPE AND SIZE WITH LOCAL FIRE MARSHALL) SHALL BE INSTALLED IN CONSPICUOUS LOCATION WHERE IT WILL BE READILY ACCESSIBLE AND SHALL BE ALONG A NORMAL PATH OF TRAVEL. THE FIRE TINGUISHER SHALL BE MOUNTED WITH THE TOP OF EXTINGUISHER NOT MORE THAN 5 FEET FROM THE FLOOR.
EXIT SIGNS MUST BE INTERNALLY ILLUMINATED.
7. PROVIDE EMERGENCY EXIT LIGHTING PROVIDING A VALUE OF ONE FOOT CANDLE AT FLOOR LEVEL.
ADDITIONAL EXIT SIGNS WILL BE PROVIDED AS/IF DIRECTED BY THE CITY INSPECTOR. ANY DECORATIONS USED SHALL BE NON-COMBUSTIBLE OR FLAME PROOFED IN AN APPROPRIATE MANNER
IISHES SHALL NOT EXCEED CLASS A, B OR C AS INDICATED IN THE BUILDING CODE.
VIDE A KNOX BOX FOR FIRE DEPARTMENT ACCESS AND KEY ACCESS, LOCATION AS DETERMINED BY THE FIRE MARSHAL.
AL CONTRACTOR SHALL SECURE PERMITS REQUIRED BY THE FIRE DEPARTMENT PRIOR TO OCCUPYING THIS BUILDING.
RE DEPARTMENT FINAL INSPECTION REQUIRED. GENERAL CONTRACTOR TO VERIFY INSPECTION SCHEDULING REQUIREMENTS AT AST 14 DAYS PRIOR TO COMPLETION OF WORK.

SIBILITY SCHEDULE & NOTES

ROVED BY: KAW
SHEET NUMBER

A0.3

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

0108 APPLICABLE STANDARDS

A. DESCRIPTION

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

WORK MEET OR EXCEED THE

APPROVED BY THE OWNER. 1.3 APPLICABLE STANDARDS LISTED IN THESE SPECIFICATION INCLUDE. BUT ARE NOT NECESSARILY LIMITED TO, STANDARDS

CONSTRUCTION (AITC)

PROMULGATED BY THE FOLLOWING AGENCIES AND ORGANIZATION: AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) AMERICAN INSTITUTE OF TIMBER

TAKE. TO ACCEPT NON-COMPLYING ITEMS SUBJECT

TO AN ADJUSTMENT IN THE CONTRACT AMOUNT AS

- AMERICAN NATIONAL STANDARDS INSTITUTE AMERICAN PLYWOOD ASSOCIATION (APA) AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM
- AMERICAN WELDING SOCIETY (AWS) ARCHITECTURAL ALUMINUM MANUFACTURERS ASSOCIATION (AAMA) ARCHITECTURAL WOODWORK INSTITUTE (AWI) INTERNATIONAL BUILDING CODE (IBC) COMMERCIAL SPECIFICATIONS (CS) CONCRETE REINFORCING STANDARDS
- ASSOCIATION NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMA) NATIONAL BUILDERS HARDWARE ASSOCIATION (NBHA) NATIONAL CONCRETE MASONRY ASSOCIATION

NATIONAL ACOUSTICAL CONTRACTORS

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) NATIONAL SANITATION FOUNDATION (NSF) NATIONAL WOODWORK MANUFACTURERS ASSOCIATION (NWMA)

TILE COUNCIL OF AMERICA (TCA)

UNDERWRITER LABORATORIES (UL)

0171 CLEANING

A. DESCRIPTION:

- 1.1. SCOPE OF WORK: THROUGHOUT THE CONSTRUCTION PERIOD, MAINTAIN THE BUILDING AND SITE IN A STANDARD OF CLEANLINESS AS DESCRIBED IN THIS SECTION. RELATED WORK: IN ADDITION TO STANDARDS
- DESCRIBED IN THIS SECTION, COMPLY WITH ALL REQUIREMENTS FOR CLEANING UP AS DESCRIBED IN VARIOUS OTHER SECTIONS OF THESE SPECIFICATIONS.
- 1.3 FINAL CLEANING:
 - a. DEFINITION: EXCEPT AS OTHERWISE SPECIFICALLY PROVIDED, "CLEAN" (FOR THE PURPOSE OF THIS ARTICLE) SHALL BE INTERPRETED AS MEANING THE LEVEL OF CLEANLINESS GENERALLY PROVIDED BY SKILLED CLEANERS USING COMMERCIAL QUALITY BUILDING MAINTENANCE
 - EQUIPMENT AND MATERIALS. b. GENERAL: PRIOR TO COMPLETION OF THE WORK, REMOVE FROM THE JOB SITE ALL TOOLS, SURPLUS MATERIALS, EQUIPMENT, SCRAP, DEBRIS, AND WASTE
 - c. INTERIOR: VISUALLY INSPECT ALL INTERIOR SURFACES AND REMOVE ALL TRACES OF SOII WASTE MATERIAL, SMUDGES, AND OTHER FOREIGN MATTER. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES. REMOVE ALL PAINT DROPPINGS, SPOTS, STAINS, AND DIRT FROM FINISHED SURFACES. USE ONLY THE SPECIFIED CLEANING MATERIALS AND EQUIPMENT.

0550 -METAL FABRICTIONS

1. WORK INCLUDES MISCELLANEOUS SHOP FABRICATED FERROUS METAL ITEMS, INCLUDING BUT NOT LIMITED TO:

- A. LOOSE STEEL LINTELS B. MISCELLANEOUS FRAMING, SUPPORTS AND TRIM C. ROOF LADDERS
- D. STEEL DECK PANELS 2. MATERIALS

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

3. FABRICATION:

VERIFY DIMENSIONS IN FIELD PRIOR TO SHOP

PRIMER SSPC-PAINT 2, FOR SHOP APPLICATION

- **FABRICATION** FABRICATE ITEMS WITH JOINTS TIGHTLY FITTED AND SECURED.
- C. FIT AND SHOP ASSEMBLE IN LARGEST PRACTICAL SECTIONS FOR DELIVERY TO SITE
- D. PRIME PAINT ITEMS SCHEDULE TO PROVIDE A UNIFORM DRY FILM THICKNESS OF 2.0 MILS.

4. LADDERS:

FACES.

PROVIDED.

- A. FABRICATE LADDERS FOR THE LOCATIONS SHOWN. WITH DIMENSIONS; SPACING, DETAILS AND ANCHORAGE AS INDICATED. COMPLY WITH THE REQUIREMENTS OF ANSI A 14.3, EXCEPT AS OTHERWISE INDICATED.
- 1) UNLESS OTHERWISE SHOWN, PROVIDE 1/2' X 2-1/2" CONTINUOUS STRUCTURAL STEEL FLAT BAR SIDE RAILS WITH EASED EDGES, SPACED 24" APART.
- 2) PROVIDE 3/4" DIAMETER SOLID STRUCTURAL STEEL BAR RANGE, SPACED 12, O.C.

B. FIT RUNGS IN CENTERLINE OF SIDE RAILS, PLUG

WELD AND GRIND SMOOTH ON OUTER RAIL

- C. SUPPORT EACH LADDER AT TOP AND BOTTOM AND AT INTERMEDIATE POINTS, SPACED NOT MORE THAN 5'-0" O.C. USE WELDED OR BOLTED STEEL BRACKETS, DESIGNED FOR ADEQUATE SUPPORT AND ANCHORAGE, AND TO HOLD LADDER CLEAR OF THE WALL SURFACE WITH A MINIMUM OF 7" CLEARANCE WALL TO CENTERLINE OF RUNGS. RETURN RAILS TO WALL OR STRUCTURE
- D. PROVIDE NON-SLIP SURFACE ON TOP OF EACH RUNG, EITHER BY COATING THE RUNG WITH ALUMINUM OXIDE GRANULES SET IN EPOXY RESIN ADHESIVE, OR BY USING A TYPE OF MANUFACTURED RUNG WHICH IS FILLED WITH ALUMINUM OXIDE GROUT.

UNLESS OTHER SECURE HANDHOLDS ARE

0720 - THERMAL INSULATION

- A. GENERAL: PROVIDE THERMAL INSULATION WITH ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION
- 1. INSULATION INTEGRAL WITH ROOFING AND INSULATION IN EXTERIOR WALLS. B. ACCESSORIES: PROVIDE TAPE OR PENETRATION ANCHORS WHERE REQUIRED TO ENSURE
- PERMANENT INSTALLATION.
- 1.1 ROOF INSULATION POLYISOCYANURATE INSULATION BOARD FIRESTONE STANDARD ISO 95+GL (OR EQUAL) COVER BOARD FIRESTONE ASTM C1289 TYPE II, CLASS 4 ISOGARD HD
- COMPOSITE COVER BOARD (OR EQUAL) 1.2 THERMAL BATT INSULATION: PREFORMED GLASS FIBER BATT WITH FSK-25 REFLECTIVE MEMBRANE ON ONE SIDE ASTM C665 TYPE III, CLASS A KNAUF INSULATION ECOBATT
- INSULATION (OR EQUAL). 1.3 TAPE: TO MATCH FOIL SCRIM KRAFT FACE; 2 INCH
- 1.4 EXTRUDED POLYSTYRENE (XPS) RIGID FOAM INSULATION LINDER SLABS ON GRADE ASTM C578 TYPE IV OWENS CORNING FOAMULAR 250 (OR
- 1.5 ACOUSTICAL BATT INSULATION PERFORMED FIBER BATT UNFACED ASTM C665 TYPE I, CLASS A KNAUF INSULATION ECOBATT INSULATION (OR

B. INSTALLATION:

- 1. INSTALL INSULATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS
- 2. TRIM INSULATION NEATLY TO FIT SPACES. INSTALL WITHOUT GAPS OR VOIDS.

7457 CEMENTITIOUS PANELS

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

PART 2 PRODUCTS 3.2. PACK BATT INSULATION IN SHIM SPACES AT

2.1 MANUFACTURERS A. ACCEPTABLE MANUFACTURER

JAMES HARDIE BUILDING PRODUCTS, INC., WHICH IS LOCATED AT: 231 SOUTH LASALLE STREET UNIT 2000, CHICAGO, IL 60606. ASD. TOLL FREE TEL: 866-274-3464; TEL: 312-705-6000; EMAIL: INFO@JAMESHARDIE.COM; WEB: HTTP://WWW.JAMESHARDIEPROS.COM/PRODUCTS

ENGINEERED FOR CLIMATE CONDITIONS.

FOR HOT HUMID AND WET CLIMATES

1. MANUFACTURER'S CLIMATE ZONE PRODUCT: HZ10

WITH A YELLOW TINT PRIMER - SMOOTH FINISH.

B. CODE COMPLIANCE REQUIREMENT FOR SIDING

1. FIBER-CEMENT SIDING, COMPLIES WITH ASTM C

2. FIBER-CEMENT SIDING, COMPLIES WITH ASTM E

3. FIBER-CEMENT SIDING, COMPLIES WITH ASTM E 84

4. FIBER-CEMENT SIDING, COMPLIES WITH ASTM E

ASSEMBLIES LISTED WITH WARNOCK HERSEY.

6. INTERTEK WARNOCK HERSEY PRODUCT LISTING.

2. BREATHABILITY IN ACCORDANCE WITH ASTM E96.

3. TEAR STRENGTH IN ACCORDANCE WITH ASTM

4. WATER RESISTANCE IN ACCORDANCE WITH

5. AIR PENETRATION IN ACCORDANCE WITH

6. HARDIEWRAP WEATHER BARRIER ICC-ES

ALUMINUM OF ELGIN, IL IN THE FOLLOWING

A. TRIMS: REVEAL TRIMS MANUFACTURED BY CUSTOM

PROFILES SUPPLIED BY JAMES HARDIE. ALUMINUM

INCH. ALL REVEAL TRIMS ARE 8 FEET IN LENGTH.

A. FASTENERS: FOR ATTACHING HARDIE REVEAL PANEL

1. WOOD FRAMING, COUNTERSUNK SCREWS: NO. 8

STAINLESS STEEL TO ENSURE RESISTANCE TO

CORROSION, FOR FIELD PAINTING, FASTENERS

SHALL BE TREATED TO ACCEPT PAINT ADHESION.

2. FASTENERS SHALL BE OF HIGH QUALITY

A. DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES

B. IF FRAMING PREPARATION IS THE RESPONSIBILITY

OF ANOTHER INSTALLER, NOTIFY ARCHITECT OF

UNSATISFACTORY PREPARATION BEFORE

A. CLEAN SURFACES THOROUGHLY PRIOR TO

B. PREPARE SURFACES USING THE METHODS

UNDER THE PROJECT CONDITIONS.

PENETRATIONS ARE SEALED.

RECOMMENDED BY THE MANUFACTURER FOR

ACHIEVING THE BEST RESULT FOR THE SUBSTRATE

C. ENSURE THAT DRAINAGE PLANE IN INTACT AND ALL

A. WOOD FRAMING: NOMINAL 2 INCH BY 4 INCH (51 MM BY 102 MM) WOOD FRAMING SELECTED FOR MINIMAL

SHRINKAGE AND COMPLYING WITH LOCAL BUILDING

CODES, INCLUDING THE USE OF WATER-RESISTIVE BARRIERS OR VAPOR BARRIERS WHERE REQUIRED.

MINIMUM 1-1/2 INCHES (38 MM) FACE AND STRAIGHT,

TRUE, OF UNIFORM DIMENSIONS AND PROPERLY

1. INSTALL WATER-RESISTIVE BARRIERS AND

2. REPAIR AND PUNCTURES OR TEARS IN THE

WATER-RESISTIVE BARRIER PRIOR TO THE

CLADDINGS TO DRY SURFACES.

INSTALLATION OF THE SIDING. 3. PROTECT SIDING FROM OTHER TRADES.

HAVE BEEN PROPERLY PREPARED.

BY 0.39 INCH HEAD DIAMETER BY 1-5/8 INCH LONG.

ALLOY 6063-T5 WITH A MINIMUM THICKNESS OF 0.050

3. SURROUND HORIZONTAL END CUT TRANSITION TRIM.

EVALUATION REPORT ESR-2258.

1. SURROUND HORIZONTAL TRIM

4. SURROUND OUTSIDE CORNER TRIM.

5. SURROUND INSIDE CORNER TRIM.

7. SURROUND DRAINAGE FLASHING

10. RECESS HORIZONTAL EDGE TRIM.

12. RECESS OUTSIDE CORNER TRIM.

13. RECESS DRAINAGE FLASHING.

DIRECT TO SHEATHING TO A RAIN

SCREEN PROVIDE THE FOLLOWING:

6. SURROUND J CHANNEL TRIM.

RECESS HORIZONTAL TRIM.

11. RECESS VERTICAL F-TRIM.

9. RECESS VERTICAL TRIM.

2.5 FASTENERS

PART 3 EXECUTION

3.1 EXAMINATION

3.2 PREPARATION

3.3 INSTALLATION

ALIGNED.

6 7 8 9 10 11 12 13 14 15 16

PROCEEDING.

INSTALLATION.

2. SURROUND VERTICAL TRIM.

5. FIBER-CEMENT SIDING, TESTED TO ASTM E330

7. MANUFACTURER'S TECHNICAL DATA SHEET.

A. WEATHER BARRIER: JAMES HARDIE HARDIEWRAP

119 1 HOUR AND 2 HOUR FIRE RESISTIVE

136 AS A NONCOMBUSTIBLE MATERIAL.

FLAME SPREAD INDEX = 0, SMOKE

PROVIDE METAL IMPALING PINS AND /HARDIE-REVEAL-PANEL-SYSTEM RETAINERS TO HOLD THE INSULATION CI ADDING A. CEMENT CLADDING PANELS: HARDIE REVEAL PANEL AS MANUFACTURED BT JAMES HARDIE BUILDING MECHANICALLY OR ADHESIVELY BOND PRODUCTS, INC. $\frac{7}{16}$ INCHES THICK, 3 FEET 11.5 THE RETAINING PINS TO THE INCHES (1206 MM) WIDE BY 7 FEET 11.5 SUBSTRATE IN ACCORDANCE WITH THE INCHES (2426) MM LONG. PRODUCT SHALL BE

MATERIALS:

1186 TYPE A GRADE II.

DEVELOPED INDEX=5.

FOR TRANSVERSE LOADS.

1. THICKNESS, 11 MIL SHEET.

WEATHER BARRIER

FQUAL)

BARRIFR:

AATCC127

TAPPI-T460.

ACCESSORIES

MANUFACTURER'S RECOMMENDATIONS. SPACE PINS AT MAXIMUM 24 INCHES ON 3.3.3. CENTER ALONG THE EDGES AND WITHIN THE FIELD OF THE BLANKET. PLACE

EDGE PINS WITHIN 6 INCHES FROM THE

PRESENT TO SUPPORT THE INSULATION,

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

EDGE OF THE BATT.

3. INSTALLATION OF THERMAL BATT INSULATION:

INSTALL INSULATION WITH VAPOR BARRIER

VAPOR BARRIER SHALL BE CONTINUOUS.

TAPE SEAL TEARS OR CUTS IN VAPOR

PERIMETER OF WINDOW ASSEMBLY TO

MAINTAIN CONTINUITY OF THERMAL

3.3.1. AT LOCATIONS WHERE NO FRAMING IS

BARRIFR

3.3. MECHANICAL FASTENING:

FIRMLY IN PLACE.

TOWARD WARM SIDE OF BUILDING SPACES.

C. R VALUE SCHEDULE:

1.1 PROVIDE INSULATION IN SUFFICIENT THICKNESS SEE INSULATION REQUIREMENTS G0.2

07462 SIDING

PART 1 GENERAL

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

2.1 MANUFACTURERS A. ACCEPTABLE MANUFACTURER: JAMES HARDIE 92691; TOLL FREE TEL: 866-274-3464; TEL: 949-367-4980: FAX: 949-367-4981: EMAIL: REQUEST INFO (INFO@JAMESHARDIE.COM); WEB: WWW.JAMESHARDIECOMMERCIAL.COM

- HARDIEPLANK HZ10 LAP SIDING: 1186 TYPE A GRADE II.
- AS A NONCOMBUSTIBLE MATERIAL. 3. FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 84 FLAME SPREAD INDEX = 0. SMOKE DEVELOPED INDEX = 5.
- 4. CAL-FIRE, FIRE ENGINEERING DIVISION BUILDING MATERIALS LISTING - WILDLAND URBAN INTERFACE (WUI) LISTED PRODUCT.
- 5. NATIONAL EVALUATION REPORT NO. NER 405 (BOCA, ICBO, SBCCI, IBC, IRC).
- 7. MIAMI DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE 07-0418-04 8. US DEPARTMENT OF HOUSING AND URBAN
- 9. CALIFORNIE DSA PA-019. 10. CITY OF NEW YORK M EA 223-93-M. 11. FLORIDA STATE PRODUCT APPROVAL FL889.
- AND HARDIEWRAP FLASHING AND SEAM TAPES (OR LAP SIDING: HARDIEPLANKHZ10 LAP AS B. CODE COMPLIANCE REQUIREMENT FOR WEATHER MANUFACTURED BY JAMES HARDIE BUILDING PRODUCTS, INC.
 - WITH 5 INCHES (127 MM) EXPOSURE. C. TRIM: 1. HARDIETRIM HZ10 BOARDS AS MANUFACTURED
 - 2. HARDIETRIM HZ10 FASCIA BOARDS AS MANUFACTURED BY JAMES HARDIE BUILDING

2.3 FASTENERS

- 1. WOOD FRAMING: 4D COMMON CORROSION RESISTANT NAILS.
- 2. WOOD FRAMING: 6D COMMON CORROSION RESISTANT NAILS. 3. WOOD FRAMING: 8D BOX RING COMMON
- CORROSION RESISTANT NAILS. 4. WOOD FRAMING: 0.089 INCH (2.2 MM) SHANK BY 0.221 INCH (5.6 MM) HEAD BY 2 INCHES (51 MM) CORROSION RESISTANT SIDING NAILS.
- 0.222 INCH (5.6 MM) HEAD BY 2 INCHES
- 7. WOOD FRAMING: 0.091 INCH (2.3 MM) SHANK BY 0.221 INCH (5.6 MM) HEAD BY 1-1/2 INCHES (38 MM) CORROSION RESISTANT SIDING NAILS.
- 0.225 INCH (5.7 MM) HEAD BY 1-1/2 INCHES (38 MM) CORROSION RESISTANT SIDING NAILS. 9. WOOD FRAMING: 0.121 INCH (3 MM) SHANK BY 0.371 INCH (9.44 MM) HEAD BY 1-1/4 INCHES
- 10. WOOD FRAMING: NO. 11 GAUGE 1-1/4 INCHES (38 MM) CORROSION RESISTANT ROOFING
- (38 MM) CORROSION RESISTANT ROOFING 12. WOOD FRAMING: NO. 11 GAUGE 1-3/4 INCHES

1. PRIMER: FACTORY PRIMED BY JAMES HARDIE.

FINISHES A. FACTORY PRIMER: PROVIDE FACTORY APPLIED

UNIVERSAL PRIMER.

PART 3 EXECUTION

- 1.2 WARRANTY
- B. WORKMANSHIP WARRANTY: APPLICATION LIMITED

PART 2 PRODUCTS

BUILDING PRODUCTS, INC., WHICH IS LOCATED AT: 26300 LA ALAMEDA SUITE 400 : MISSION VIEJO, CA

- SIDING 1. FIBER-CEMENT SIDING - COMPLIES WITH STM C 2. FIBER-CEMENT SIDING - COMPLIES WITH STM E 136

- 6. CITY OF LOS ANGELES, RESEARCH REPORT NO.
- DEVELOPMENT MATERIALS RELEASE 1263D.
- 12. TEXAS DEPARTMENT OF INSURANCE PRODUCT **EVALUATION EC-23.**
- 8. TYPE: SELECT CEDARMILL 6-1/4 INCHES (159 MM)
- BY JAMES HARDIE BUILDING PRODUCTS, INC.
- PRODUCTS, INC.
- WOOD FRAMING FASTENERS:
- 5. WOOD FRAMING: 0.093 INCH (2.4 MM) SHANK BY
- (51 MM) CORROSION RESISTANT SIDING NAILS. 6. WOOD FRAMING: 0.093 INCH (2.4 MM) SHANK BY 0.222 INCH (5.6 MM) HEAD BY 2-1/2 INCHES (64 MM) CORROSION RESISTANT NAILS.
- 8. WOOD FRAMING: 0.091 INCH (2.3 MM) SHANK BY
- (32 MM) CORROSION RESISTANT ROOFING
- 11. WOOD FRAMING: NO. 11 GAUGE 1-1/2 INCHES
- (44 MM) CORROSION RESISTANT ROOFING

3.1 PREPARATION A. CLEAN SURFACES THOROUGHLY PRIOR TO INSTALLATION.

B. PREPARE SURFACES USING THE METHODS

- RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS C. INSTALL A WATER-RESISTIVE BARRIER IS REQUIRED IN ACCORDANCE WITH LOCAL BUILDING
- CODE REQUIREMENTS D. THE WATER-RESISTIVE BARRIER MUST BE APPROPRIATELY INSTALLED WITH PENETRATION AND JUNCTION FLASHING IN ACCORDANCE WITH
- LOCAL BUILDING CODE REQUIREMENTS. INSTALLATION- HARDIEPLANK HZ10 LAP SIDING A. INSTALL MATERIALS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION
- INSTRUCTIONS. B. STARTING: INSTALL A MINIMUM 1/2 INCH (6 MM) THICK LATH STARTER STRIP AT THE BOTTOM COURSE OF THE WALL. APPLY PLANKS HORIZONTALLY WITH MINIMUM 1-1/4 INCHES (32 MM) WIDE LAPS AT THE TOP. THE BOTTOM EDGE OF THE FIRST PLANK
- OVERLAPS THE STARTER STRIP. C. ALLOW MINIMUM VERTICAL CLEARANCE BETWEEN THE EDGE OF SIDING AND ANY OTHER MATERIAL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- D. ALIGN VERTICAL JOINTS OF THE PLANKS OVER FRAMING MEMBERS. E. MAINTAIN CLEARANCE BETWEEN SIDING AND
- F. LOCATE SPLICES AT LEAST ONE STUD CAVITY AWAY FROM WINDOW AND DOOR OPENINGS. G. USE OFF-STUD METAL JOINER IN STRICT ACCORDANCE WITH THE MANUFACTURER'S

ADJACENT FINISHED GRADE.

- INSTALLATION INSTRUCTIONS. H. WIND RESISTANCE: WHERE A SPECIFIED LEVEL OF WIND RESISTANCE IS REQUIRED HARDIEPLANK LAP SIDING IS INSTALLED TO FRAMING MEMBERS AND SECURED WITH FASTENERS DESCRIBED IN TABLE NO. 2 IN
- NATIONAL EVALUATION SERVICE REPORT NO. NFR-405. I. FACE NAIL TO SHEATHING. J. LOCATE SPLICES AT LEAST 12 INCHES (305 MM)

0753 - ROOFING SYSTEM

2.01 MANUFACTURERS A. Acceptable Manufacturer - Roofing System: Firestone

AWAY FROM WINDOW AND DOOR OPENINGS.

- Building Products Co., Carmel, IN www.firestonebpco.cor B. Roofing systems manufactured by others may be acceptable provided the roofing system is completely equivalent in materials and warranty conditions and the manufacturer
- meets the following qualifications: Specializing in manufacturing the roofing system to be
- 2. Minimum ten years of experience manufacturing the roofing system to be provided. 3. Able to provide a no dollar limit, single source roof system warranty that is backed by corporate assets in excess of
- one billion dollars. ISO 9002 certified.
- 5. Able to provide polyisocyanurate insulation that is produced in own facilities C. Manufacturer of Insulation and Cover Board: Same
- manufacturer as roof membrane. D. Manufacturer of Metal Roof Edging: Same manufacturer as
- 1. Metal roof edging products by other manufacturers are not acceptable. 2. Field- or shop-fabricated metal roof edgings are not
- 2.02 ROOFING SYSTEM DESCRIPTION
- A. Roofing System: 1. Membrane: Self Adhering Thermoplastic Polyolefin 2. Thickness: As specified elsewhere. 3. Membrane Attachment: Fully adhered.
- 4. Slope: Deck is sloped, but possibly not enough. Provide additional slope to acheive 1/4 inch per foot (1:48) by means of tapered insulation
- 5. Comply with applicable local building code requirements. 6. Provide assembly having Underwriters Laboratories, Inc. (UL) Class A, B, C, Fire Hazard Classification. 7. Provide assembly complying with Factory Mutual
- Corporation (FM) Roof Assembly Classification, FM DS 1-28 and 1-29, and meeting minimum requirements of FM 1-[60, 90, 120, 160] wind uplift rating.
- 1. Total System R Value: 20, minimum. 2. Maximum Board Thickness: 2 inches (50 mm); use as
- many layers as necessary; stagger joints in adjacent System Total Iso Insulation
- R Value* Thickness, nominal 20 R 3.5 inches 25 R 4.5 inches

30 R 5.25 inches

- 35 R 6.25 inches Use of Firestone ISOGARD HD cover board can provide an additional 2.5 R vs. gypsum based cover boards. [Example: 1.66 inch Iso (9.45 R) + 1.66 inch
- Iso (9.45 R) + .5 inch HD Iso cover board (2.5 R) = *Long Term Thermal Resistance (LTTR) values
- provide a 15 Year time weighted average in accordance with ASTM 1289-13. 3. Base Layer: Polyisocyanurate foam board,
- non-composite. a. Attachment: Mechanical fastening, Contact adhesive or Low-rise polyurethane adhesive. 4. Top Layer: Polyisocyanurate foam board, non-composite.
- adhesive or Low-rise polyurethane adhesive C. Cover Board: High Density Polyisocyanurate Cover Board:

a. Attachment: Mechanical fastening, Contact

1. Thickness: 0.5 inch (12.7mm). 2. R-Value: 2.5 based on ASTM tests C158 and C177. a. Attachment: Mechanical fastening, Contact

adhesive or Low-rise polyurethane adhesive

- adhesive or Low-rise polyurethane adhesive. Or Cover Board: Gypsum-Based Cover Board: 1. Thickness: 0.25 inch (6.4mm).
- R-Value: negligible. a. Attachment: Mechanical fastening, Contact

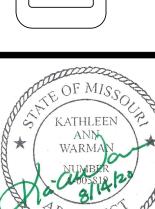
APPROVED BY:

DESIGNED BY:

DRAWN BY:

5460-19

VARI735 9
10RT
816.



KATHLEEN ANN WARMAN - ARCHITECT

07.27.20

SHEET NUMBER

JDE

JOB NUMBER

ASTM F 84

manufacturer.

manufacturer

2.05 METAL ACCESSORIES

Wind Performance

eliminate others

accordance with ASTM E 136.

8. Mold Growth Resistance: Zero growth, when tested in

Retain following elements as applicable to your project,

use only adhesive furnished by roof membrane

Include following elements as applicable to your project,

A. Metal Roof Edging and Fascia: Continuous metal edge

member serving as termination of roof membrane and

N/m), minimum, when tested in accordance with

ANSI/SPRI ES-1 Test Method RE-1, current edition

b. Fascia Pull-Off Resistance: At least the minimum

required when tested in accordance with ANSI/SPRI ES-

Provide product listed in current Factory Mutual

Membrane Pull-Off Resistance: 100 lbs/ft (1460

retainer for metal fascia; watertight with no exposed

fasteners; mounted to roof edge nailer.

Test Method RE-2, current edition.

Fascia Face Height: 5 inches (127 mm).

allowing for free thermal cycling of fascia.

injection molded EPDM splices to allow thermal

coated commercial type galvanized steel with

10 Fasteners: Factory-provided corrosion resistant

13. Accessories: Provide matching brick wall cap,

B. Parapet Copings: Formed metal coping with galvanized

type joints with concealed splice plates; mechanically

steel anchor/support cleats for capping any parapet wall:

At least the minimum required when tested in

2. Description: Coping sections allowed to expand and

mechanical pressure from hardened stainless steel

sealant strips capable of providing watertight seal.

a. Wall Width: As indicated on the drawings.

actory-installed protective plastic film.

72 inches (1820 mm) on center.

intersection, and end pieces.

2.06 ACCESSORY MATERIALS

contract freely while locked in place on anchor cleats by

springs factory attached to anchor cleats: 8 inch (200 mm)

wide splice plates with factory applied dual non-curing

3. Material and Finish: 24 gage, 0.024 inch (0.06 mm) thick

standard color; matching concealed joint splice plates;

b. Piece Length: Minimum 144 inches (3650 mm).

5. Anchor/Support Cleats: 20 gage, 0.036 inch (0.9 mm)

Curved Application: Factory fabricated in true

thick prepunched galvanized cleat with 12 inch (305 mm)

6. Special Shaped Components: Provide factory-fabricated

miters, corners, intersections, curves, pier caps, and end

pieces necessary for complete installation, including

caps; minimum 14 inch (355 mm) long legs on corner,

7. Fasteners: Factory-furnished: electrolytically compatible:

A. Wood Nailers: PS 20 dimension lumber, Structural Grade

No. 2 or better Southern Pine, Douglas Fir; or PS 1, APA

Exterior Grade plywood; pressure preservative treated.

2. Thickness: Same as thickness of roof insulation.

actual substrate used; no exposed fasteners.

minimum pull out resistance of 240 pounds (109 kg) for

wide stainless steel spring mechanically locked to cleat at

galvanized steel with Kynar 500 finish in manufacturer's

accordance with ANSI/SPRI ES-1 Test Method RE-3,

Provide product listed in current Factory Mutual

fasteners, with drivers; no exposed fasteners permitted.

11. Special Shaped Components: Provide factory-fabricated

niters, scuppers, and end caps; minimum 14 inch (35)

downspout, extenders, and other special fabrications as

watertight, maintenance free, without exposed fasteners; but

pieces necessary for complete installation, including

Curved Applications: Factory modified.

mm) long legs on corner pieces

fastened as indicated: Firestone PTCF

12.Scuppers: Welded watertight.

shown on the drawings.

Wind Performance:

Dimensions:

5. Length: 144 inches (3650 mm).

expansion

pre-punched holes.

1-270 wind uplift rating.

C. Insulation Fasteners: Type and size as required by roof

accordance with ASTM D 3273 for minimum of 4 weeks.

rated roofing assemblies

1. Thickness: 0.060 inch (1.15 mm) plus/minus 10 percent, with coating thickness over reinforcement of 0.021 inch (0.54 mm) plus/minus 10 percent.

2. Puncture Resistance: 300 lbf (1,334 N), minimum, when tested in accordance FTM 101C Method 2031. 3. Solar Reflectance: 0.74, minimum, when tested in accordance with ASTM C 1549. [white]

4. Color: White (or Tan or Gray by special order only) 5. Acceptable Product: UltraPly TPO SA with Secure Bond technology by Firestone. 3. Membrane Fasteners: Type and size as required by roof

membrane manufacturer for roofing system and warranty to

be provided; use only fasteners furnished by roof membrane C. Curb and Parapet Flashing: Same material as membrane, with encapsulated edge which eliminates need for seam sealing the flashing-to-roof splice; precut to 18 inches (457

D. Formable Flashing: Non-reinforced, flexible, heat weldable sheet, composed of thermoplastic polyolefin polymer and

ethylene propylene rubbe

. Thickness: 0.060 inch (1.52 mm) plus/minus 10 percent. 2. Tensile Strength: 1550 psi (10.7 MPa). minimum. when tested in accordance with ASTM D 638 after heat aging 3. Elongation at Break: 650 percent, minimum, when tested

in accordance with ASTM D 638 after heat aging. 4. Tearing Strength: 12 lbf (53 N), minimum, when tested in accordance with ASTM D 1004 after heat aging. 5. Color: Same as field membrane.

6. Acceptable Product: UltraPly TPO Flashing by Firestone. E. Tape Flashing: 5-1/2 inch (140 mm) nominal wide TPO membrane laminated to cured rubber polymer seaming tape, overall thickness 0.065 inch (1.6 mm) nominal; TPO

QuickSeam Flashing by Firestone F. Pourable Sealer: Two-part polyurethane, two-color for reliable mixing: Pourable Sealer by Firestone.

G. Seam Plates: Steel with barbs and Galvalume coating; corrosion-resistance complying with FM 4470.

H. Termination Bars: Aluminum bars with integral caulk ledge; 1.3 inches (33 mm) wide by 0.10 inch (2.5 mm) thick; irestone Termination Bar by Firestone Cut Edge Sealant: Synthetic rubber-based, for use where

membrane reinforcement is exposed; UltraPly TPO Cut Edge Sealant by Firestone . General Purpose Sealant: EPDM-based, one part, white

general purpose sealant; UltraPly TPO General Purpose K. Molded Flashing Accessories: Unreinforced TPO membrane

pre-molded to suit a variety of flashing details, including pipe boots, inside corners, outside corners, etc.; UltraPly TPO Small and Large Pipe Flashing by Firestone. Roof Walkway Pads: Non-reinforced TPO walkway pads,

0.130 inch (3 mm) by 30 inches (760 mm) by 40 feet (12.19 m) long with patterned traffic bearing surface; UltraPly TPO Walkway Pads by Firestone M. Yellow Safety Strip: To designate areas of caution on the

roof or around rooftop objects. 5.5 inches wide (140 mm) by 100 feet long (30 m) strip and nominal 30 mil (0.76 mm) thick vellow TPO membrane laminated to a white, cured, seam ape. Compatible with TPO and EPDM; QuickSeam Yellow Safety Strip by Firestone.

2.04 ROOF INSULATION AND COVER BOARDS A. Polvisocvanurate Board Insulation: Closed cell polyisocyanurate foam with black glass reinforced mat aminated to faces, complying with ASTM C 1289 Type II

Class 1, with the following additional characteristics: Owens Corning Densdeck or better: i nickness: As indicated eisewhere

2. Size: 48 inches (1220 mm) by 96 inches (2440 mm), 3. Exception: Insulation to be attached using adhesive or

asphalt may be no larger than 48 inches (1220 mm) by 48 inches (1220 mm), nominal. 4. R-Value (LTTR): 1.0 inch (25 mm) Thickness: 5.7 R,

5. Compressive Strength: 20 psi (138 kPa) when tested in

accordance with ASTM C 1289. 6. Ozone Depletion Potential: Zero; made without CFC or

HCFC blowing agents. 7. Recycled Content: 19 percent post-consumer and 15

percent post-industrial, average. 8. Acceptable Product: ISO 95+ polyiso board insulation by

8. Acceptable Product: Resista polviso board insulation by

Firestone (optional mold resistant material per ASTM D3273) ose one/ eliminate one. Match with ROOFING SYSTEM

DESCRIPTION choice above;

. High Density Polyisocyanurate Cover Board: Non-combustible, water resistant high density, closed cell polyisocyanurate core with coated glass mat facers, complying with ASTM D 1623, and with the following additional characteristics:

1. Size: 48 inches (1220 mm) by 96 inches (2440 mm),

 Exception: Board to be attached using adhesive or asphalt may be no larger than 48 inches (1220 mm) by 48 inches (1220 mm), nominal.

2. Thickness: 0.5 inch (12.7mm). 3. R-Value: 2.5 R based on ASTM tests C158 and C177.

4. Surface Water Absorption: <3%, maximum, when tested in accordance with ASTM C 209. 5. Compressive Strength: 120psi, when tested in

accordance with ASTM 1621. 6. Density: 5pcf, when tested in accordance with ASTM

7. Factory Mutual approved for use with FM 1-60 and 1-90

rated roofing assemblies. 8. Mold Growth Resistance: Passed, when tested in

accordance with ASTM D 3273. 9. Acceptable Product: ISOGARD HD Cover Board by

B. Gypsum-Based Cover Board: Non-combustible, water resistant gypsum core with embedded glass mat facers, complying with ASTM C 1177/C 1177M, and with the

following additional characteristics:

1. Size: 48 inches (1220 mm) by 96 inches (2440 mm), Exception: Board to be attached using adhesive or

asphalt may be no larger than 48 inches (1220 mm) by 48 inches (1220 mm), nominal. 2. Thickness: 0.25 inch (6.4mm).

in accordance with ASTM C 473. 4. Spanning Capability: As recommended by manufacturer

for maximum flute spans.

3. Surface Water Absorption: 2.5 g, maximum, when tested

0760 - FLASHING & SHEET METAL

Surface Burning Characteristics: Flame spread of 0. A. GENERAL: PROVIDE FLASHING AND SHEET smoke developed of 0, when tested in accordance with METAL. REGLETS. AND ACCESSORIES AS REQUIRED FOR ROOF REPAIRS AS REQUIRED 6. Combustibility: Non-combustible, when tested in FOR COMPLETE, WEATHERTIGHT

INSTALLATION.

7. Factory Mutual approved for use with FM 1-60 and 1-90 STANDARDS: CONFORM TO SMACNA "ARCHITECTURAL SHEET METAL MANUAL" REQUIREMENTS FOR FLASING AND SHEET C. DESIGN REQUIREMENTS: ALLOW FOR

MOVEMENT OF COMPONENTS WITHOUT CAUSING BUCKLING, FAILURE OF JOINT SEALS, membrane manufacturer for roofing system and warranty to UNDUE STRESS OF FASTENERS OR OTHER be provided; use only fasteners furnished by roof membrane DETRIMENTAL EFFECTS WHEN SUBJECT TO 100 YEAR SEASONAL TEMPERATURE RANGES D. Insulation Adhesive: Type as required by roof membrane D. SUBMITTALS: FURNISH PRODUCT DATA FOR

manufacturer for roofing system and warranty to be provided: MANUFACTURED PRODUCTS. E. WARRANTY: CORRECT FAILURE OF METAL FLASHING SYSTEM TO RESIST PENETRATION OF WATER AND DAMAGE FROM WIND: WARRANTY PERIOD TWO YEARS.

> F. FLASHING AND SHEET METAL: MATCH EXISTING, BUT NOT LESS THAN FLOLLOWING GALVANIZED METAL FLASHING: ASTM A526 GALVANIZED STEEL WITH MINIMUM 0.02 COOPER, AND WITH MINIMUM G90 GALVANIZED COATING: MINIMUM 20 GAGE.

2. PREFINISHED METAL FLASHING: 20 GAGE GALVANIZED STEEL WITH FACTORY FINISHED KYNAR 500 TYPE FLUOROPOLYMER COATING AND STIPPABLE PROTECTIVE FILM; COLOR AS SELECTED FROM MANUFACTURER'S FULL RANGE OF COLORS

Research Corporation Approval Guide with at least FM 2. Description: Two-piece; 45 degree sloped galvanized FOR OTHER ALUMINUM COMPONENTS; steel sheet edge member securing top and bottom edges

of formed metal fascia; Firestone EdgeGard. 4. Edge Member Height Above Nailer: 1-1/4 inches (31 PERFORMANCE; 0,050" (28 GAGE)

6. Functional Characteristics: Fascia retainer supports while 7. Aluminum Bar: Continuous 6063-T6 alloy aluminum extrusion with pre-punched slotted holes; miters welded; G. REGLETS: FRY/SPRINGLOK OR MM 8. Anchor Bar Cleat: 20 gage, 0.036 inch (0.9 mm) G90 SAME METAL AS ADJACENT FLASHING AND

SHEET METAL. H. METAL TO METAL SEALANT: BUTYL TYPE: NOT-STAINING, NON-CORROSIVE, NON-SHRINKING, NON-SAGGING

INSTALLATION: COMPLY WITH SMACNA MANUAL

AND LINES ACCURATE TO PROFILES AS INDICATED ON DRAWINGS.

0790 - CAULKING & SEALANTS

Research Corporation Approval Guide with at least FM A. DESCRIPTION:

WORK INCLUDED: SUPPLY AND INSTALL ALL CAULKING AND SEALANTS WORK AS SHOWN ON

a. ALUMINUM ENTRANCE SYSTEM & WINDOWS-SPECIFIED UNDER SECTION 0815 ALUMINUM ENTRANCE SYSTEM.

b. TOILET FIXTURES: CAULK BY PLUMBING CONTRACTOR, COLOR- WHITE.

OF CAULK. e. TILE CORNERS CAULK BY GENERAL CONTRACTOR, COLOR - TBD

CONTRACTOR, COLOR -TBD

GENERAL CONTRACTOR, COLOR- CLEAR. i. PAPER TOWEL DISPENSER: CAULK BY GENERAL CONTRACTOR, COLOR-CLEAR,

CONTRACTOR, COLOR- CLEAR

k. HOOD WALLS: CAULK BY GENERAL CONTRACTOR, COLOR- TBD

 PASS THRU: CAULK BY GENERAL CONTRACTOR, COLOR- TBD CONTRACTOR, COLOR - TBD

. Width: 3-1/2 inches (90 mm), nominal minimum, or as B. MATERIAI S wide as the nailing flange of the roof accessory to be 1.1. GENERAL INTERIOR CAULK: ONE PART ACRYLIC LATEX CAULK. 90% SOLIDS MINIMUM. USE AS PURPOSE INTERIOR SEALANT). ACCEPTABLE MANUFACTURER: DOW CORNING. 1.2. JOINT BACKING: COMPRESSIBLE ROD OF MATERIAL

JOINT CLEANER, SEALERS, AND PRIMER SHALL BE USED AS RECOMMENDED BY MANUFACTURER.

1.1. JOINT BACKING MATERIAL SHALL BE A WIDTH GREATER THAN THE JOINT, AS RECOMMENDED BY THE MANUFACTURER, TO GUARANTEE A TIGHT FIT WHEN FORCED INTO PLACE.

1.2 APPLY MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS: OBSERVE MANUFACTURER'S REQUIREMENTS REGARDING TEMPERATURE CONTROL, USABILITY OF MATERIALS, AND PROTECTION OF ADJACENT SURFACES.

MAKING SEALING SURFACE SLIGHTLY CONCAVE FREE OF WRINKLES AND SKIPS: UNIFORMLY SMOOTH AND WITH PERFECT ADHESION ALONG BOTH SIDES OF JOINT PROTECT ADJACENT SURFACES FROM EXCESS MATERIALS LEAVE JOINTS IN A CLEAN NEAT CONDITION. DEFECTIVE JOINTS SHALL BE REMOVED. CLEANED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.SET THRESHOLDS IN FULL BED OF CAULKING AND ANCHOR WITH EXPANSION ANCHORS.

0810 HOLLOW METAL DOORS & FRAMES

A. DESCRIPTION

3. ALUMINUM FLASHING: ASTM B209, ALLOY AS REQUIRED TO MATCH FINISH SPECIFIED

THICKNESS MINIMUM 0.050" SOFT TEMPER. 4. STAINLESS STEEL SHEET METAL; ASTM A666, 2D ANNEALED FINISH, SOFT TEMPER EXCEPT WHERE HARDER TEMPER IS REQUIRED FOR FORMING OF

TYPICAL. 5. COPPER SHEET METAL: ASTM B370, COLD ROLLED 16OZ. (0.0216") THICK; SOFT TEMPER WHERE REQUIRED FOR FORMING. SYSTEM/SNAP-TITE REGLETS; FABRICATE OF

UNTRA-VIOLET AND OZONE RESISTANT.

1. INSTALL METAL FLASHING AND SHEET METAL IN ACCORDANCE WITH SMACNA ARCHITECTURAL SHEET METAL MANUAL; TIGHT IN PLACE, WITH CORNERS SQUARE SURFACES TRUE AND STRAIGHT IN PLANES,

2. INSTALL SEALANTS WHERE REQUIRED TO PREVENT DIRECT WEATHER PENETRATION. 3. COMPLETE INSTALLATION SHALL BE FREE OF RATTLES, NOISE DUE TO THERMAL AND

AIR MOVEMENT AND WIND WHISTLES.

DRAWINGS AND SPECIFIED HEREIN. THIS SHALL INCLUDE, BUT NOT IS LIMITED TO, THE FOLLOWING:

c. WATER OR WASTE PENETRATIONS: CAULK BY PLUMBING CONTRACTOR, COLOR- WHITE

d. COMPRESSION CUP MAY BE PROVIDED IN LIEU

f. TILE AT COOLER WALLS: CAULK BY GENERAL

g. TILE AT CEILING GRID: CAULK BY GENERAL CONTRACTOR, COLOR-TBD h. VANITY TOPS & WAITRESS STATION: CAULK BY

i. HOLLOW METAL DOORS: CAULK BY GENERAL

m. EXTERIOR SEALANTS: SEALANT BY GENERAL

RECOMMENDED BY MANUFACTURER (AS GENERAL AS RECOMMENDED BY SEALANT MANUFACTURER FOR JOINT TYPES AND WIDTHS INDICATED ON

CONSTRUCTION DRAWINGS.

0850 - PASS-THRU WINDOW

MANUAL OPERATED, SELF-CLOSING, BI-PARTING PASS-THRU WINDOW IN ANODIZED ALUMINUM FRAME PRE-GLAZED WINDOW, SEE EXTERIOR ELEVATION AND DOOR AND WINDOW SCHEDULE FOR ADDITION

1.2. COORDINATION: HARDWARE TEMPLATES AND

MILLWORK WOOD DOOR SUPPLIER TO

1.1. ALL HARDWARE TO MEET REQUIREMENTS LISTED

MOUNT ALL HARDWARE UNITS AT HEIGHTS

BUILDERS HARDWARF" BY NBHA, EXCEPT AS

OTHERWISE SPECIFICALLY INDICATED OR

REQUIRED TO COMPLY WITH GOVERNING

a. LOCK SETS AND LATCH SETS- 40"

INSTALL HARDWARE ITEMS COMPLYING WITH

RECOMMENDATIONS. REMOVE HARDWARE FROM

SURFACES TO BE FINISHED AFTER INSTALLATION

ADJUST EACH OPERATING ITEM OF HARDWARE TO

LUBRICATE MOVING PARTS AS RECOMMENDED BY

ACCORDANCE WITH MANUFACTURER'S WRITTEN

RECOMMENDATIONS. FIT WEATHER-STRIPPING

TIGHTLY AT CORNERS TO MAINTAIN CONTINUITY

1.1. FURNISH AND INSTALL ALL GLASS INDICATED ON THE

a. (TT-P-781), TYPE 1 OR TYPE 2 MINIMUM AND

ACCESSORIES SUCH AS POINTS, SETTING BLOCKS,

SHIMS, STOP BEADS, ANGLES, WIRING SPRING

CLIPS SHALL BE THE TYPE RECOMMENDED BY THE

DRAWINGS AND SPECIFIED HEREIN

GLASS MANUFACTURER.

1.1. 5/8 " TEMPERED INSULATING GLASS IN EXTERIOR

1.2. 1" TEMPERED INSULATING GLASS @ EXTERIOR

1.3. 1/4" TEMPERED GLASS @ INTERIOR LOCATIONS.

1.4. PROVIDE 35% DUAL REFLECTIVE WINDOW FILM ON 2ND

1.1. PERFORM ALL GLAZING WORK IN ACCORDANCE WITH

ALL GLASS FACTORY LABELED ON EACH PANE.

THE ACTUAL OPENINGS. GLASS SHALL BE

INSPECT WINDOWS AND OTHER FRAMES TO

ACCURATELY CUT TO FIT THESE OPENINGS.

THE MINIMUM STANDARDS OF THE FLAT GLASS

JOBBERS ASSOCIATION (FGJA) GLAZING MANUAL.

DIMENSIONS SHOWN ON DRAWINGS ARE GIVEN ONLY

AS A GUIDE FOR ESTIMATING PURPOSES, AND ACTUAL

DETERMINE THAT THE FRAMES, SASH AND STOPS ARE

SET TRUE AND STRAIGHT. SASH RABBETS AND STOPS

SHALL BE CLEAN AND DRY AT THE TIME OF GLAZING.

COMPOUND WILL NOT READILY ADHERE OR WHICH

WILL TEND TO DELAMINATE FROM THE METAL AND

BEFORE GLAZING METAL SASH REMOVE ANY OIL

LACQUER, OR OTHER MATERIAL TO WHICH THE

CAUSE A LEAK THROUGH THE GLAZING SEAL.

SIZE SHALL BE DETERMINED BY MEASUREMENT OF

AND STORE UNTIL SURFACE FINISH IS APPLIED;

INSURE PROPER OPERATION OF FUNCTION OF

INSTALL ALL WEATHER-STRIPPING IN STRICT

CLEAN HARDWARE AS RECOMMENDED BY

AROUND PERIPHERY OF DOOR.

b. FXIT DEVICE CROSSBAR- 37"

c. CENTER OF DOOR PULL- 42"

d. CENTER OF PUSH PLATE- 48

MANUFACTURER'S INSTRUCTIONS AND

e. DEADLOCK-60"

THEN REINSTALL

MANUFACTURER.

MANUFACTURER.

0880 GLASS & GLAZING

1.1. GLAZING COMPOUND:

ALUMINUM DOORS

SURFACE (INSIDE).

LOCATIONS

D. INSTALLATION

A DESCRIPTION

B. MATERIALS

RECOMMENDED IN "RECOMMEND LOCATIONS FOR

HANDICAPPED REGULATIONS. THESE SHALL BE AS

SCHEDULES SHALL BE SENT TO HOLLOW METAL

COORDINATE THE NECESSARY PREPARATION.

INFORMATION, UNIT AS MANUFACTURED BY:

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

0870 FINISH HARDWARE

A. DESCRIPTION

B. PRODUCTS

NOTED

C. INSTALLATION

FOLLOWS:

1.1. INSTALL ALL FINISH HARDWARE ON DOORS INDICATED ON DOOR SCHEDULE.

1.1. REFER TO DOOR SCHEDULE FOR LOCATIONS AND TYPES OF DOORS REQUIRED. B PRODUCTS

1.1. HOLLOW METAL FRAMES- GENERAL a. COLD ROLLED 18 GAUGE LABELED FRAMES WHERE REQUIRED. b. FRAMES SHALL RECEIVE TWO COATS OF RUST INHIBITIVE PRIMER. PROVIDE THREE (3) RUBBER BUMPERS AT EACH DOOR

c. ALL FRAMES TO BE WELDED HOLLOW METAL d. APPROVED MANUFACTURERS: STEELCRAFT CECO, TRUSSBILT, AMWELD, AND FENESTRA HOLLOW METAL FRAMES - WELDED (INTERIOR & FXTFRIOR)

a. SAW MITER AND CONTINUOUSLY WELD CORNER JOINTS FOR FULL JAMB DEPTH AND WIDTH OF FRAME AND TRIM CONTACT EDGES SHALL BE CLOSED TIGHT WELDS ON EXPOSED SURFACES DRESSED SMOOTH AND FLUSH, PRIME COAT PAINT.

 b. PROVIDE CHAMBER AT HINGE CUTOUTS TO ALLOW ATTACHMENT OF HINGES AFTER FRAME IS FILLED WITH GROUT HOLLOW METAL DOORS

INDICATED ON DOOR SCHEDULE b. CORE SHALL CONSIST OF STRUCTURAL HONEYCOMB OR SOLID POLYSTYRENE CORE BANDED TO BOTH FACES. c. APPROVED MANUFACTURERS: STEELCRAFT,

a. DOORS SHALL BE FLUSH DESIGN, OF SIZE

CECO, TRUSSBILT, AMWELD, AND FENESTRA C. INSTALLATION 1.1. FRAMES, WHICH ARE SCHEDULED FOR LABEL CONSTRUCTION, SHALL BE INSTALLED USING UL-APPROVED ANCHORING. FRAMES SHALL BE PROPERLY PREPARED TO RECEIVE UL-APPROVED

HARDWARE AND SHALL HAVE PROPER LABEL ATTACHED AT THE FACTORY ALL FRAMES SHALL BE COMPLETED WITH JAMB ANCHORS FOR ATTACHING TO MASONRY WALLS.

OR OTHER ANCHORS, AS REQUIRED BY THE PARTICULAR INSTALLATION. 1.3. AT THE TIME OF INSTALLATION, THE DOOR JAMBS SHOULD BE HELD ½ " OFF THE EXISTING

CONCRETE FLOOR, BEFORE FLOOR TILE IS INSTALLED 1.4. INSTALL ALL HOLLOW METAL DOORS AND FRAMES

SPECIFICATIONS 1.5. FILL ALL WELDED FRAMES WITH MORTAR.

ACCORDING TO MANUFACTURER'S

0815 ALUMINUM WINDOW SYSTEMS

A. DESCRIPTION 1.1. FURNISH AND INSTALL ALL GLAZING, GLASS AND DOOR FRAMES, BARRIER BARS, AND EXTERIOR WINDOW WALL SYSTEM, INCLUDING ALL HARDWARE, ACCESSORIES, AND CAULKING, REQUIRED FOR A COMPLETE WATERTIGHT INSTALLATION AS DETAILED ON THE DRAWINGS

AND HEREINAFTER SPECIFIED. B. PRODUCTS 1.1. ALUMINUM COMPONENTS: 22.000 PSI PER ULTIMATE TENSILE STRENGTH ALLOY, NOT LESS THAN 0.125 " WALL THICKNESS. 1-3/4 " X 4.5"

FRAME SIZE. 1.2. FASTENING: ALUMINUM, STAINLESS STEEL OR CADMIUM PLATED CARBON STEEL WEATHERSTOP DOOR OPENINGS WITH BLACK PLOY-PILE WEATHER-STRIPPING

1.4. GLASS STOPS: WITHOUT VISIBLE FASTENINGS SNAP-IN TYPE BLACK, FOR PUTTY LESS GLAZING. HARDWARE: REFER TO DOCUMENTS FINISH: REFER TO DOCUMENTS

1.7. DOORS TO BE MEDIUM STILE TO MEET APPLICABLE AAMA REQUIREMENTS CONCERNING SILLS AND STRENGTHS. CAULKING COLOR TO MATCH FRAME.

1.9. MANUFACTURERS a. DOORS AND FRAMES: KAWNEER OR VISTAWALI. C. INSTALLATION 1.1. FABRICATE AND INSTALL EXTERIOR UNITS TO

WITHSTAND WIND PRESSURE LOAD OF 26 POUNDS

PER SQUARE FOOT OVER ENTIRE FRAME, AND

PANEL AREA. ACTING INWARD AND OUTWARD.

0925 GYPSUM DRYWALL

A. DESCRIPTION 1.1. PROVIDE ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE INSTALLATION OF THE GYPSUM WALLBOARD AND METAL STUD FRAMING SYSTEM

INDICATED. 1.2. COMPLY WITH ALL APPLICABLE REQUIREMENTS OF "AMERICAN STANDARDS SPECIFICATION FOR THE APPLICATION AND FINISHING OF GYPSUM WALLBOARD" BY THE AMERICAN STANDARDS ASSOCIATION, EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE CALLED FOR HEREIN, IN LOCAL CODES OR BY MANUFACTURER OF WALLBOARD

MAINTAIN TEMPERATURE OF DRYWALL SPACE IN RANGE OF 55 DEGREES TO 90 DEGREES E UNTIL BUILDING IS ENTIRELY CLOSED AND VENTILATED. AS REQUIRED TO ELIMINATE EXCESSIVE MOISTURE BUILD UP IN THE BUILDING. B. PRODUCTS

a. RUNNER: MINIMUM 20 GAUGE EXTERIOR WALI GALVANIZED STEEL WITH LEGS NOT LESS THAN ONE INCH HIGH. SLIGHTLY BENT IN TO HOLD THE STUDS BY FRICTION b. STUDS: 20 GAUGE 6", 3-5/8", 2-1/2", AND 1-1/2" PUNCHED, SCREW-TYPE, MINIMUM ASTM C645 HOT DIPPED STEEL OR ELECTRO-GAI VANIZED

IN THE DOOR SCHEDULE UNLESS OTHERWISE STEEL. WITH FLANGES NOT LESS THAN 1-1/4" SIDE STUD DEPTH SHALL BE AS REQUIRED FOR 1.2. ALL ALUMINUM ENTRANCE SYSTEM HARDWARE ROLLING GRILLES & OVERHEAD FIRE DOORS & WALL-FINISHED THICKNESS ON DRAWINGS. c. FURRING CHANNELS: ASTM C 645, 22 GAUGE SHUTTER HARDWARE IS BY MANUFACTURER. HAT SHAPED d. MANUFACTURERS: CELOTEX,FLINTKOTE,

1.1. METAL FRAMING SYSTEM

GYPSUM, WHELLING CORRUGATING CO. GYPSUM WALLBOARD a. GYPSUM WALLBOARD: USE 5/8" TYPE X THROUGHOUT, UNLESS OTHERWISE INDICATED b MOISTURE RESISTANT WALLBOARD: USE 5/8" ON ALL WET WALLS IN RESTROOMS, UTILITY, AND

JOHNS-MANVILLE, KAISER, NATIONAL GYPSUM, US

KITCHEN. c. HARDWARE AND ACCESSORIES REQUIRED FOR COMPLETE INSTALLATION TO BE PROVIDED BY THE CONTRACTOR INCLUDING THE FOLLOWING: d. CORNER BEAD, "L" TYPE METAL TRIM AT EXPOSED DRYWALL EDGES AND WHERE DRYWALL ABUTS DISSIMILAR CONSTRUCTION.

e. RESILIENT CHANNELS AND FURRING CHANNELS AS REQUIRED. f.JOINT FINISHING MATERIALS TO BE MANUFACTURER'S BEST-RECOMMENDED MATERIALS FOR A THREE COMPOUND TREATMENT. g. APPROVED DRYWALL MANUFACTURERS:

CELOTEX, FLINTKOTE, GEORGIA-PACIFIC, JOHNS-MANVILLE, KAISER GYPSUM, NATIONAL GYPSUM, US GYPSUM. C. INSTALLATION

FRAMING: ANCHORAGE RUNNER SHALL BE ALIGNED ACCURATELY AT FLOOR AND CEILING AND SECURELY ANCHORED APPROXIMATELY TWO (2) INCHES FROM THE RUNNER ENDS. FLOOR RUNNER AND CEILING RUNNER SHALL BE SECURED MAXIMUM 24" O.C.

1.2 TAPING & FINISHING a. MIX JOINT AND FINISHING COMPOUND PER MANUFACTURER'S DIRECTIONS. b. CENTER TAPE OVER JOINT AND EMBED IN UNIFORM LAYER OF JOINT COMPOUND OF SUFFICIENT WIDTH AND DEPTH TO PROVIDE FIRM AND COMPLETE BOND. APPLY SKIN COAT OVER

EMBEDDED TAPE

c. TREAT ANGLES WITH REINFORCING TAPE FOLDED TO CONFORM TO ADJACENT SURFACES AND STRAIGHT TRUE ANGLES. d. ALLOW COMPOUND TO THOROUGHLY DRY FOR AT LEAST 24 HOURS e. OVER JOINT COMPOUND AND TAPE, APPLY COAT OF FINISHING COMPOUND. SPREAD EVENLY AND

FEATHER OUT BEYOND EDGE OF BOARD. AFTER FIRST FINISHING COAT IS THOROUGHLY DRY (A) LEAST 24 HOURS), COVER WITH SECOND COAT, WITH EDGES FEATHERED OUT SLIGHTLY BEYOND PRECEDING COAT. f. GIVE ALL DIMPLES AT FASTENER HEADS, AND ALL MARRED SPOTS ON SURFACE OF BOARD, ONE

COAT JOINT COMPOUND AND TWO COATS FINISHING COMPOUND APPLIED, AS EACH COAT IS APPLIED TO JOINTS. g. INSTALL METAL CORNER REINFORCEMENT AT ALL EXTERNAL CORNERS, EXCEPT ENDS OF HOOD WALL. CONCEAL FLANGES OR METAL REINFORCEMENT WITH AT LEAST TWO COATS OF COMPOUND. WHEN COMPLETED COMPOUND SHALL EXTEND APPROXIMATELY 8 INCHES TO 10 INCHES ON EACH SIDE OF METAL NOSING. h. AFTER EACH APPLICATION OF JOINT OR FINISHING COMPOUND HAS DRIED, LIGHTLY SAND ALL JOINTS. LEAVE ALL BOARD AND TREATED

AREAS UNIFORMLY SMOOTH AND READY FOR

TEXTURING. DO NOT ROUGH PAPER.

OF ACOUSTICAL CEILINGS.

CEILING UNITS.

0950 ACOUSTICAL TREATMENT A. GENERAL: PROVIDE ACOUSTICAL CEILINGS INCLUDING SUSPENSION SYSTEM. TRIM AND ACCESSORIES AS REQUIRED FOR COMPLETE FINISHED INSTALLATION. B. STANDARDS: CONFORM TO ASTM C635 FOR METAL SUSPENSION SYSTEM AND ASTM C636 FOR INSTALLATION

C. PERFORMANCE REQUIREMENTS: PROVIDE PRODUCTS LISTED BY UNDERWRITERS LABORATORIES (UL) 1. FLAME SPREAD/ MODE DENSITY: PROVIDE PRODUCTS MEETING CODE REQUIREMENTS FOR MAXIMUM 25 FLAME SPREAD AND SMOKE DEVELOPED INDEX 50 OR LESS. D. SEISMIC REQUIREMENTS: COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS FOR SEISMIC BRACING OF CEILING 1.3. SUSPENSION SYSTEM, AND WITH ASTM E580. E. SUBMITTALS: SUBMIT PRODUCT DATA. SHOP DRAWINGS

INDICATION LAYOUT, AND SAMPLES OF GRID, TRIM AND

INSTALLER: FIRM WITH MINIMUM THREE YEARS

SUCCESSFUL EXPERIENCE IN PROJECTS OF SIMILAR TYPE AND SCOPE: ACCEPTANCE TO MANUFACTURER OF ACOUSTICAL UNITS. G. PROJECT CONDITION: DO NOT INSTALL CEILING UNTIL BUILDING IS ENCLOSED, SUFFICIENT HEAT IS PROVIDED, DUST GENERATING ACTIVITIES HAVE TERMINATED AND OVERHEAD MECHANICAL WORK IS COMPLETED, TESTED

AND APPROVED: ALLOW WET WORK TO DRY PRIOR TO INSTALLATION H. ACOUSTICAL UNITS: TYPES AND MANUFACTURERS AS INDICTED ON DRAWINGS. SUSPENSION SYSTEM: AS INDICTED ON DRAWINGS. PREPARATION: MEASURE CEILING AREA AND ESTABLISH LAYOUT OF ACOUSTICAL UNITS TO BALANCE PROPER WIDTHS AT OPPOSITE EDGES OF EACH CEILING: DO NOT USE LESS THAN HALF WIDTH UNITS AT BORDERS.

1. COORDINATE WITH OTHER WORK SUPPORTED BY OR

PENETRATING THROUGH CEILINGS, INCLUDING LIGHT

INSTALLATION: COMPLY WITH MANUFACTURER RECOMMENDATIONS, ASTM C636, AND APPLICABLE REQUIREMENTS FOR FIRE RATINGS.

1. FINISHED CEILINGS: TRUE TO LINES AND LEVELS AND FREE FROM WARPED, SOILED OR DAMAGED GRID OR ACOUSTICAL 2. INSTALL CEILING SYSTEMS IN A

MANNER CAPABLE OF SUPPORTING SUPERIMPOSED LOADS, WITH MAXIMIM PERMISSIBLE DEFLECTION OF 1/8" IN 10'-0". 3. ENSURE SUSPENSION SYSTEM IS LOCATED TO ACCOMMODATE

FITTINGS AND UNITS OF EQUIPMENT WHICH IS TO BE PLACED AFTER INSTALLATION OF CEILING GRID. 4 WHERE DUCTS OR OTHER FOUIPMENT PREVENT REGULAR SPACING OF HANGERS. REINFORCE NEAREST ADJACENT HANGERS AND RELATED CARRYING CHANNELS AS REQUIRED TO SPAN REQUIRED

DISTANCE 5. INSTALL EDGE MOLDINGS AT INTERSECTION OF CELING AND VERTICAL SURFACES, USING MAXIMUM LENGTHS, STRAIGHT, TRUE TO LINE AND LEVEL: MITER CORNERS. 6. FIT ACOUSTICAL UNITS IN PLACE,

DEFLCTS DETRIMENTAL TO APPEARANCE AND FUNCTION, LAY **DIRECTIONALLY PATTERNED UNITS** ONE WAY WITH PATTERN AS DIRECTED. FIT BORDER UNITS NEATLY AGAINST ABUTTING SURFACES.

FREE FROM DAMAGED EDGES OR

PLANE AND FREE FROM TWIST, WARP AND DENTS 8. INSTALL HOLD-DOWN CLIPS WHERE REQUIRED BY APPLICABLE CODES AND WHERE CEILING IS WITHIN 20'-0"

OF AND EXTERIOR DOOR. ADJUSTMENT: ADJUST SAGS OR TWISTS WHICH DEVELOP IN CEILING SYSTEM AND

CEILING IS WITHIN 20'-0" OR AN EXTERIOR

7. INSTALL UNITS LEVEL. IN UNIFORM

0990 PAINTING

DOOR.

A. DESCRIPTION 1.1. THE CONTRACTOR SHALL DO ALL INTERIOR AND EXTERIOR PAINTING INDICATED ON THE DRAWINGS, INCLUDING WOOD, MASONRY, GYPSUM BOARD FERROUS METALS, PRIME COATED METAL SURFACES. REGISTERS, AND GRILLES

1.2. EXAMINE ALL SUBSURFACES TO RECEIVE WORK AND REPORT TO THE GENERAL CONTRACTOR WITH A COPY TO THE TENANT, ALL CONDITIONS **DETRIMENTAL TO WORK** COMMENCEMENT OF WORK WILL BE CONSTRUED AS ACCEPTANCE OF ALL SUBSURFACES

DELIVER MATERIALS AND EQUIPMENT IN ONE PLACE WHERE DIRECTED BY THE GENERAL CONTRACTOR'S FOREMAN. PROTECT FLOORS AND WALLS OF STORAGE ROOM REMOVE OILY RAGS, WASTE ETC. FROM BUILDING EVERY NIGHT AND UNDER NO CIRCUMSTANCES ALLOW THEM TO ACCUMULATE.

PRODUCTS 1.1. ALL MATERIALS SHALL BE OF THE BEST GRADE: REFER TO FINISHES. INSTALLATION

1.1. THE CONTRACTOR SHALL EXAMINE ALL SURFACES TO BE FINISHED AND MAKE CERTAIN THAT THINGS CAN BE PUT IN PROPER CONDITION FOR FINISHING BY CUSTOMARY CLEANING, SANDING OR PUTTYING. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR PRODUCING A SATISFACTORY JOB WITH THE MATERIALS SPECIFIED. 1.2. WORKMANSHIP SHALL BE OF THE

VERY BEST; ALL MATERIALS EVENLY SPREAD AND SMOOTHLY FLOWED ON GIVING A UNIFORM SHEEN AND COLOR WITHOUT RUNS AND SAGS. TRANSPARENT FINISHES SHALL HAVE ALL COATS BRUSHED OUT SMOOTH. SPRAYING IS ACCEPTABLE FOR PRIME COATS ONLY. ONLY SKILLED PAINTERS SHALL BE EMPLOYED AND ALL MATERIALS SHALL BE APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S DIRECTIONS. EXCEPT AS OTHERWISE SPECIFIED, ONLY ONE MANUFACTURER'S MATERIALS SHALL BE USED IN EACH OF THE FINISHES SPECIFIED. ALL SURFACES TO BE PAINTED OR ENAMELED SHALL BE CLEANED FREE

PITCH STREAKS, AND SAPPY SPOTS SHALL FIRST BE TOUCHED UP WITH SHELLAC WHERE FINISH CALLS FOR PAINT OR ENAMEL ALL NECESSARY PUTTYING OF NAIL HOLES, CRACKS ETC SHALL BE DONE AFTER THE FIRST COAT, WITH PUTTY

OF A COLOR TO MATCH THAT OF THE

OF LOOSE DIRT AND DUST BEFORE

PAINTING IS STARTED. ALL KNOTS.

ALL UNDERCOATS OF PAINT AND ENAMEL SHALL BE TINTED TO THE APPROXIMATE SHADE OF THE FINAL COAT. ALL SUCTION SPOTS OR HOT SPOTS IN CEMENT, AFTER THE APPLICATION OF THE FIRST COAT SHALL BE TOUCHED UP BEFORE APPLYING THE SECOND COAT. CONTRACTOR SHALL SECURE COLOR SCHEDULE FOR ROOMS BEFORE PRIMING WALLS. FIXTURES, HVAC EQUIPMENT AND PARTITIONS SYSTEMS. 1.6. TOPS AND BOTTOMS OF ALL DOORS

> OF DOOR. 1.7. ALL PAINTING SHALL BE DONE TO CONFORM TO LOCAL HEALTH DEPARTMENT REGULATIONS.

SHALL BE FINISHED SAME AS BALANCE

1.8. PAINTING SCHEDULE: THE FOLLOWING SPECIFICATIONS FOR FINISHING IS NOT INTENDED TO MENTION EVERY PARTICULAR ITEM WHICH WILL RECEIVE PAINTERS FINISH, BUT IS INTENDED TO ESTABLISH TYPE AND QUALITY OF FINISH WHICH WILL BE REQUIRED ON VARIOUS MATERIALS INTERIOR AND EXTERIOR FERROUS METAL (INCLUDING ELECTRICAL PANELS AT LITILITY AREA). FIRST COAT- RUST INHIBITED PRIMER SECOND COAT- ENAMEL UNDERCOAT

ENAMEL. WOOD: FIRST COAT- POLYURETHANE VARNISH, SATIN FINISH, SANDED. SECOND COAT- POLYURETHANE VARNISH, SATIN FINISH, SANDED. THIRD COAT- POLYURETHANE VARNISH. SATIN FINISH, SANDED. RECESSED LIGHT TRIMS: DIFFUSERS AND SPEAKER GRILLES 2 COATS.

1.9. COLOR SCHEDULE: REFER TO FINISH

SCHEDULE. ANY QUESTIONS OR

UNCLEAR COLOR SPECIFICATIONS

THIRD COAT- ALKYD SATIN FINISH

SHOULD BE DIRECTED TO THE TENANT OR ITS REPRESENTATIVE)998 FIBERGLASS REINFORCED PLASTIC PANELS (FRP)

A. DESCRIPTION 1.1. SUBMITTALS

a. SAMPLES: TWO 8" X 10" SAMPLES OF EACH PANEL, ONE 10" PIECE OF EACH TYPE OF TRIM AND MOLDING. SAMPLE FASTENERS. b. DETAILED INSTALLATION GUIDE FORM

. PRODUCTS 1.1. FRP PANELS: GLASBORD- P AS MANUFACTURED BY KEMLITE INDUSTRIES, INC. OR EQUAL COLOR- WHITE

CLEAN WALL SURFACE OF ALL FOREIGN

MANUFACTURER'S RECOMMENDATIONS

INSTALL SEAMS PLUMB AND NOT LESS

MATERIAL AND PREPARE SURFACE AS REQUIRED BY FRP MANUFACTURER. INSTALLATION INSTALL PANELS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION GUIDE

1.2. APPLY ADHESIVE IN ACCORDANCE WITH

THAN 6" FROM CORNERS. HORIZONTAL SEAMS NOT PERMITTED. REMOVE EXCESS ADHESIVE PROMPTLY; REPLACE PANELS, WHICH CANNOT BE COMPLETELY CLEANED.

10280 WASHROOM ACCESSORIE

PART 1 GENERAL

1.1. SECTION INCLUDES A. WASHROOM ACCESSORIES AS SCHEDULED IN THIS SECTION AND AS INDICATED ON THE DRAWINGS. 1.2 QUALITY ASSURANCE A. SINGLE SOURCE REQUIREMENTS: TO THE

GREATEST EXTENT POSSIBLE PROVIDE

B. ACCESSIBILITY REQUIREMENTS: COMPLY

WITH REQUIREMENTS APPLICABLE IN THE

PRODUCTS FROM A SINGLE MANUFACTURER.

JURISDICTION OF THE PROJECT INCLUDING BUT NOT LIMITED TO ADA AND ICC/ANSI A117.1 REQUIREMENTS AS APPLICABLE. 1.3 WARRANTY A. MANUFACTURER'S WARRANTY FOR WASHROOM ACCESSORIES: MANUFACTURER'S STANDARD 1 YEAR

WARRANTY FOR MATERIAL AND

WORKMANSHIP. PART 2 PRODUCTS

2.1 MANUFACTURER A. BASIS OF DESIGN PRODUCTS: BASED ON THE QUALITY AND PERFORMANCE REQUIREMENTS OF THE PROJECT SPECIFICATIONS ARE BASED SOLELY ON THE PRODUCTS OF BOBRICK WASHROOM EQUIPMENT, INC.. WWW.BOBRICK.COM. LOCATION OF MANUFACTURING SHALL BE

THE UNITED STATES. 2.2 TOILET ACCESSORY SCHEDULE A. SINGLE-USER WASHROOM, STANDARD 1. TA-1: B-5806 SERIES CONCEALED MOUNTING GRAB BAR - 1-1/4 INCH DIAMETER. 2. TA-5: B-2111 CLASSIC SERIES

WALL-MOUNTED SOAP DISPENSER. PART 3 EXECUTION

DRAWINGS.

3.1 INSTALLATION

A. INSTALL PRODUCTS IN STRICT COMPLIANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS, INCLUDING THE FOLLOWING: 1. VERIFY BLOCKING HAS BEEN INSTALLED PROPERLY. 2. VERIFY LOCATION DOES NOT INTERFERE WITH DOOR SWINGS OR USE OF FIXTURES. 3. COMPLY WITH MANUFACTURER'S RECOMMENDATIONS FOR BACKING AND PROPER SUPPORT. 4. USE FASTENERS AND ANCHORS SUITABLE FOR SUBSTRATE AND PROJECT CONDITIONS. 5. INSTALL UNITS RIGID, STRAIGHT, PLUMB, AND LEVEL, IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION

AND FITTING TO ROOM FINISH. 7. TEST FOR PROPER OPERATION. 3.2 CLEANING AND PROTECTION A. CLEAN EXPOSED SURFACES OF COMPARTMENTS, HARDWARE, AND FITTINGS USING METHODS ACCEPTABLE TO THE MANUFACTURER. B. TOUCH-UP, REPAIR OR REPLACE DAMAGED

INSTRUCTIONS AND APPROVED SHOP

6. CONCEAL EVIDENCE OF DRILLING, CUTTING,

PRODUCTS UNTIL SUBSTANTIAL COMPLETION.

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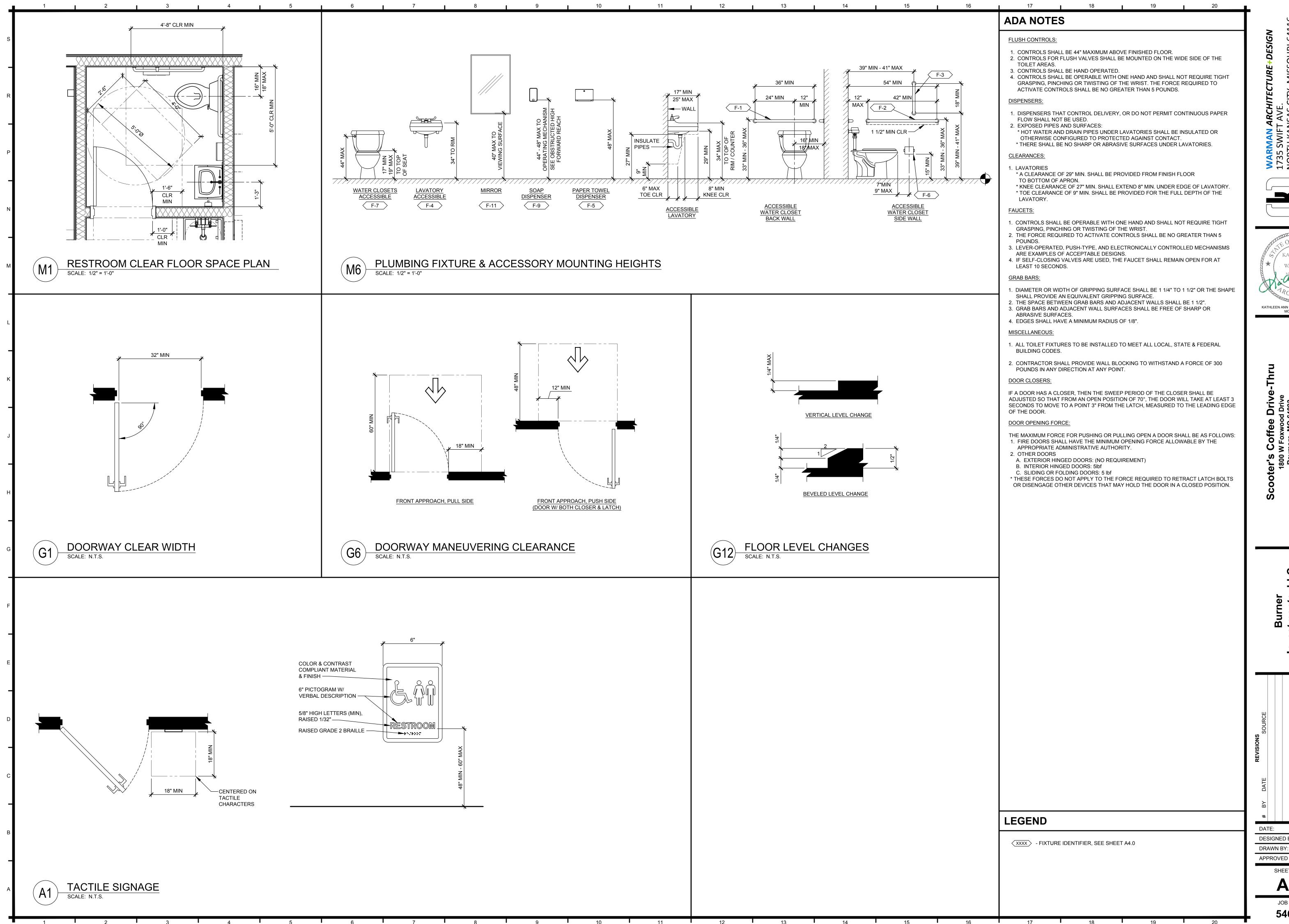
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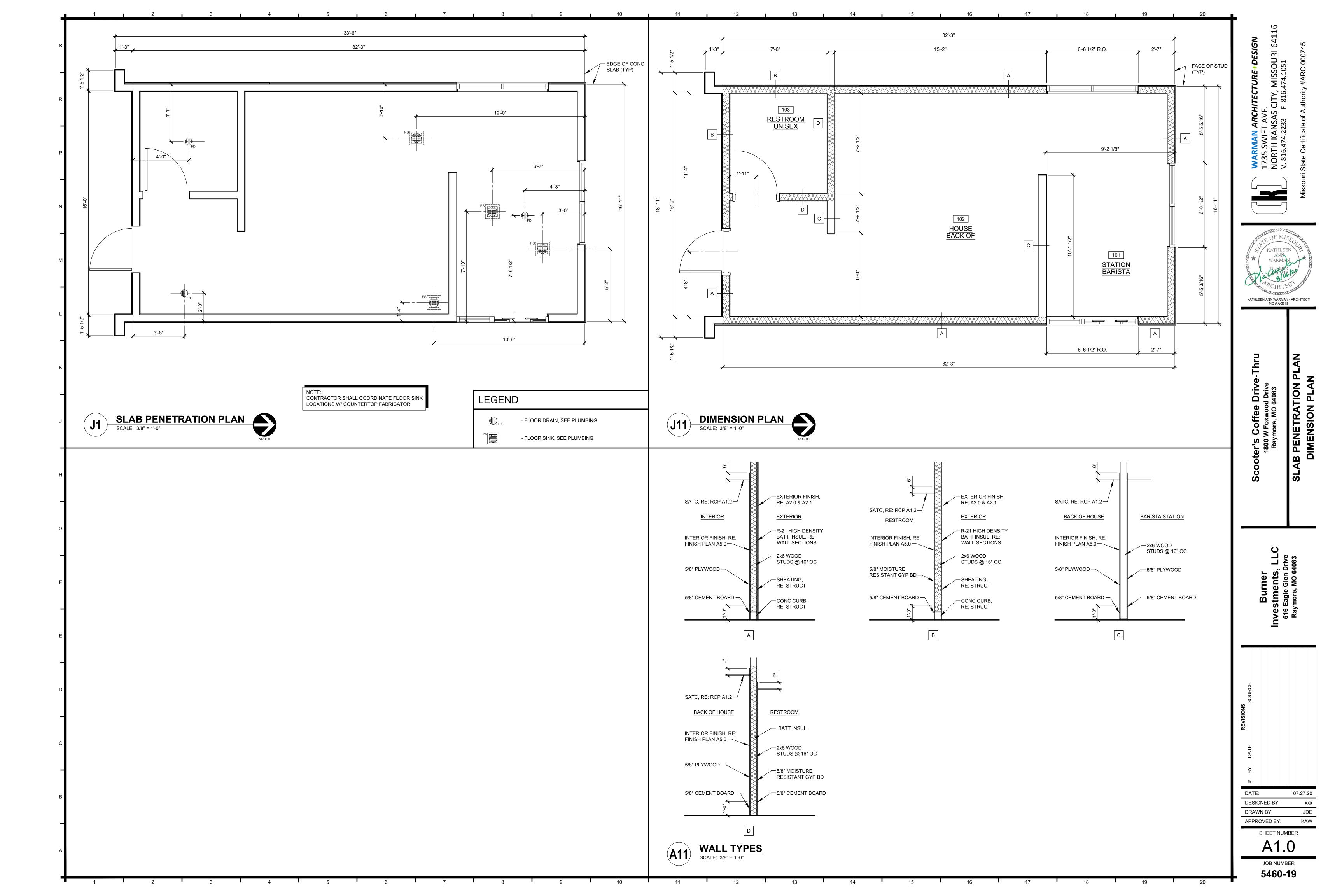
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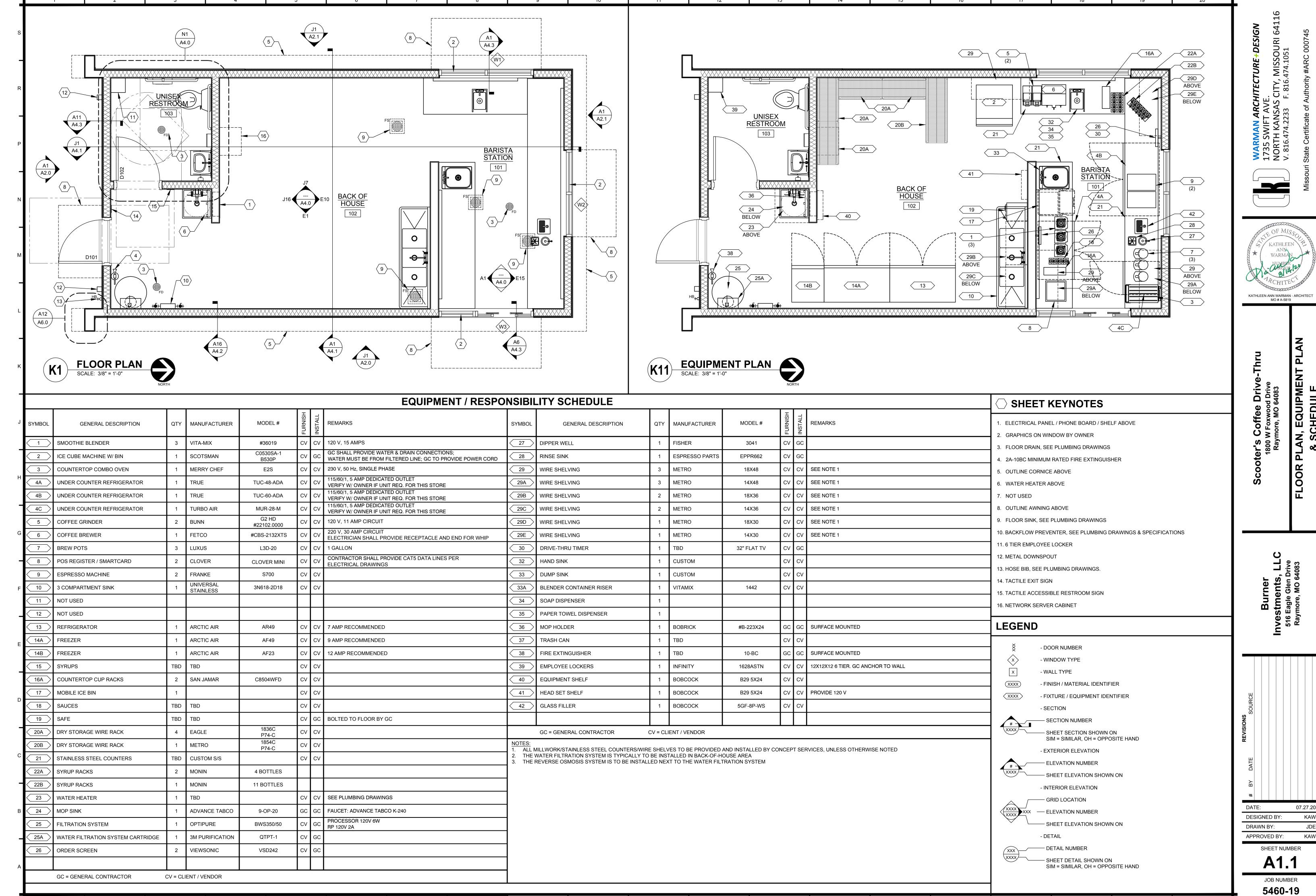
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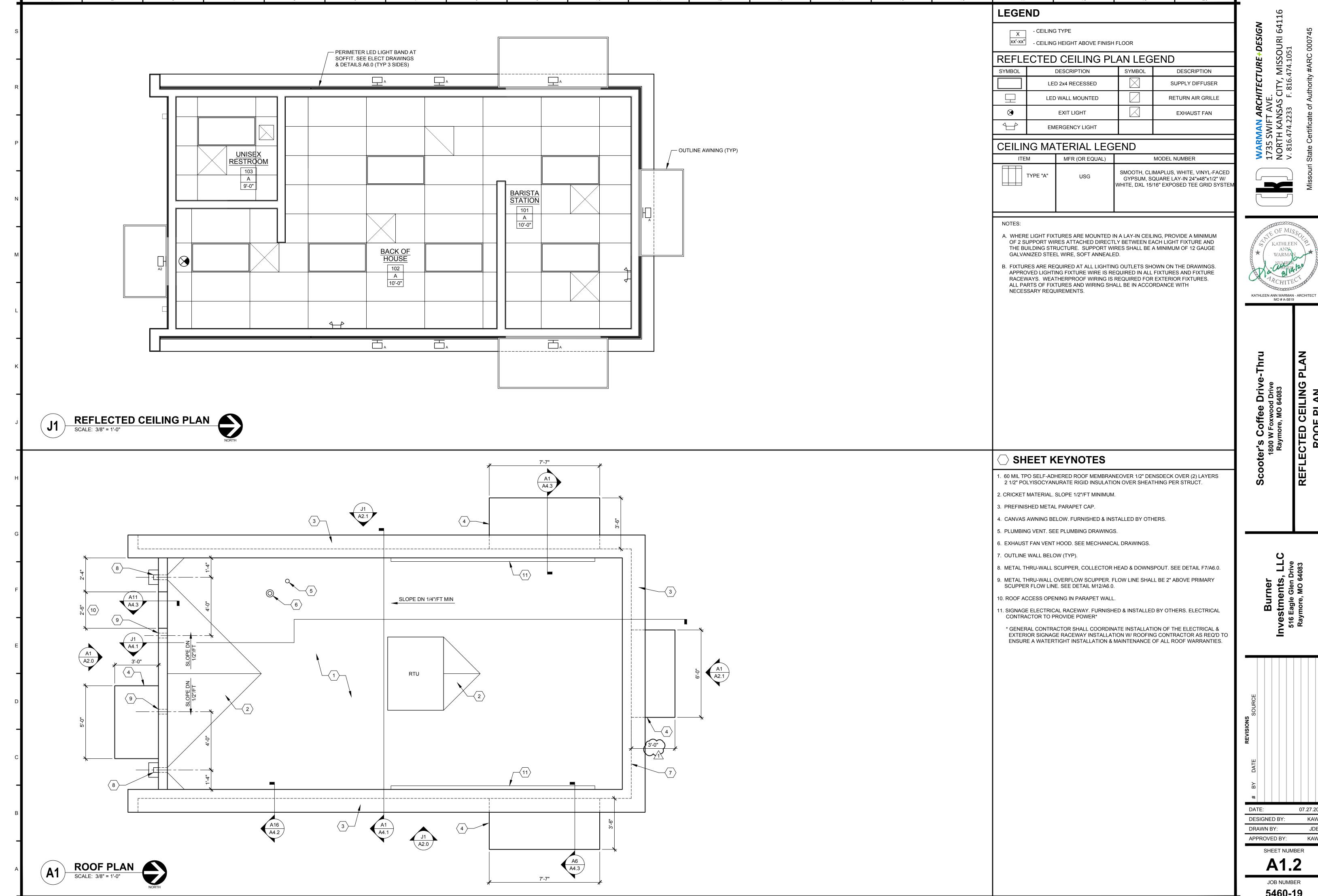
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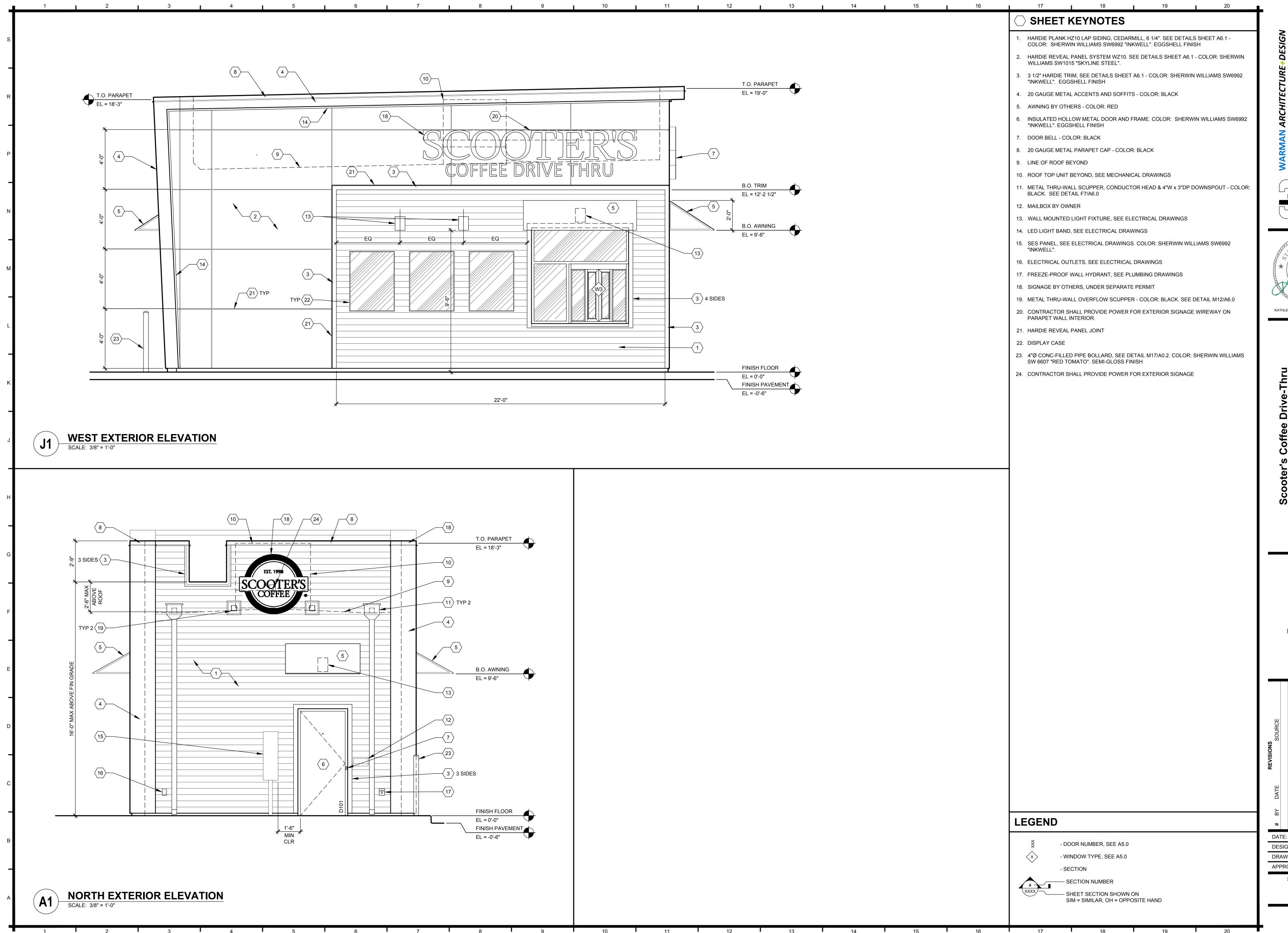
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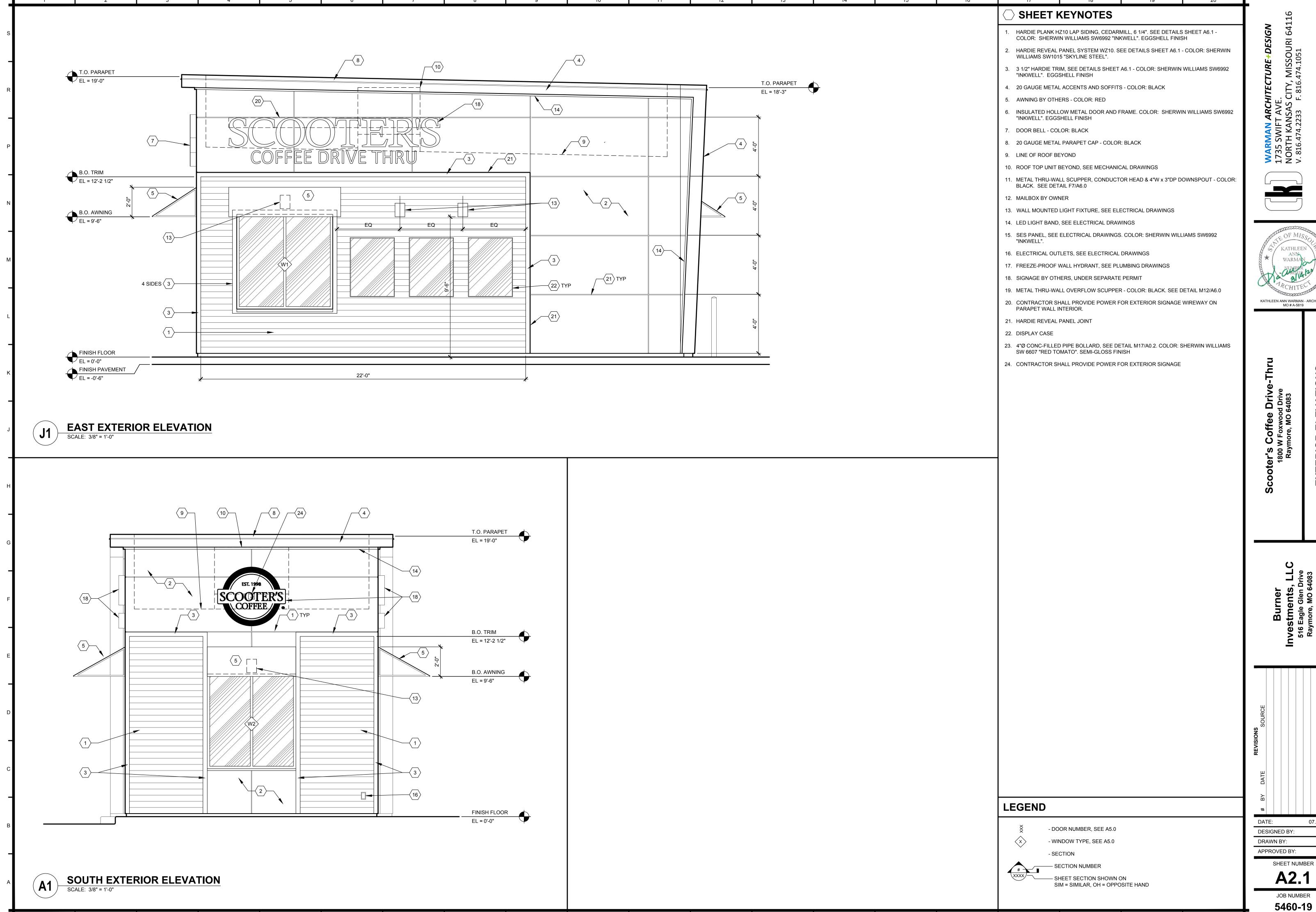
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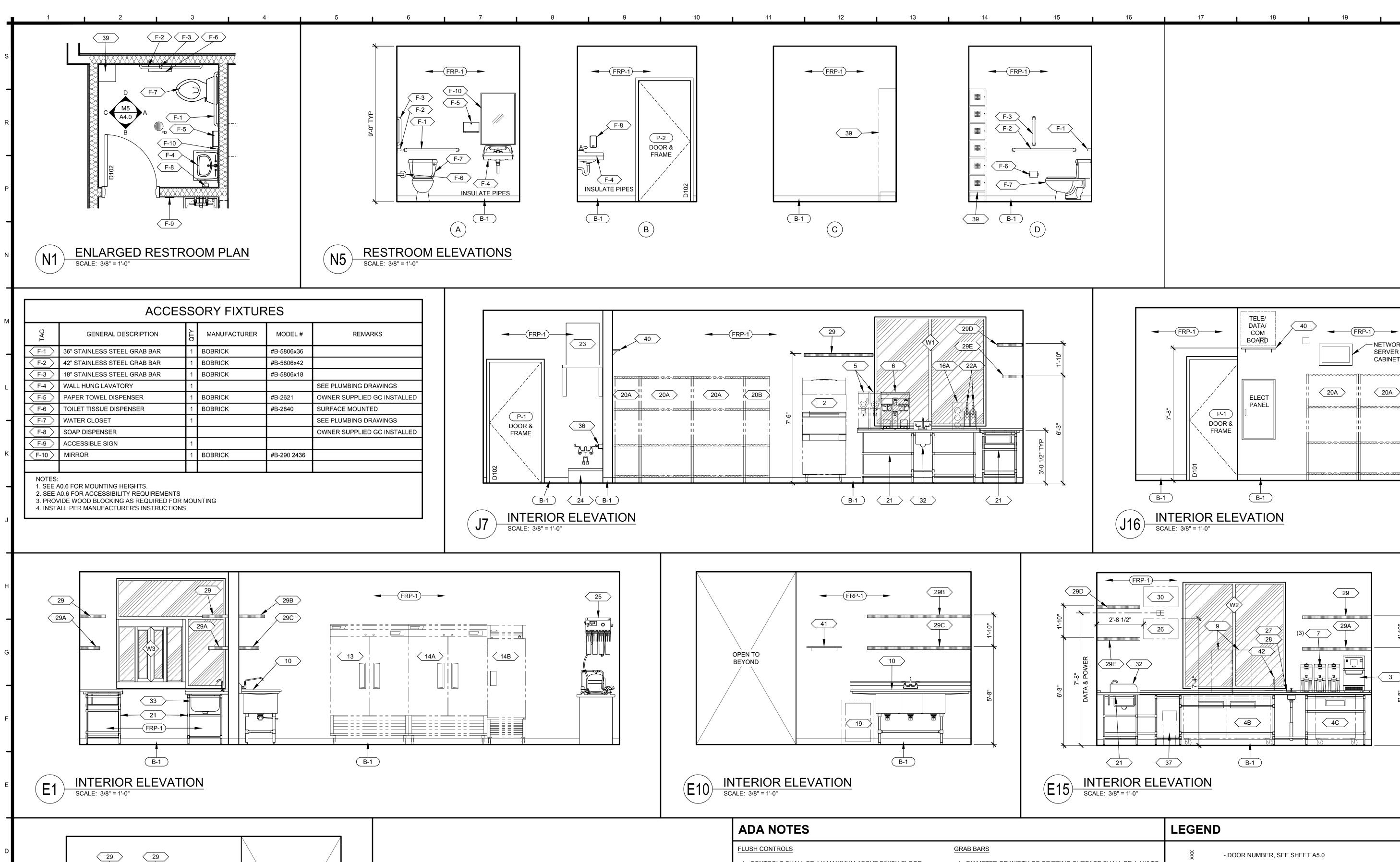
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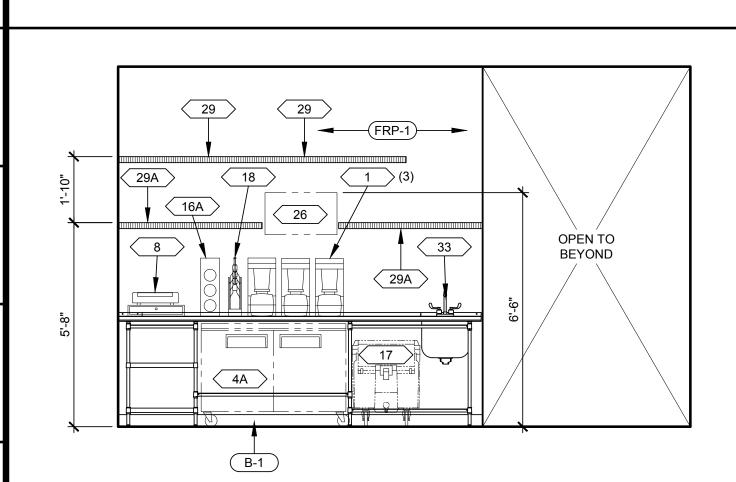
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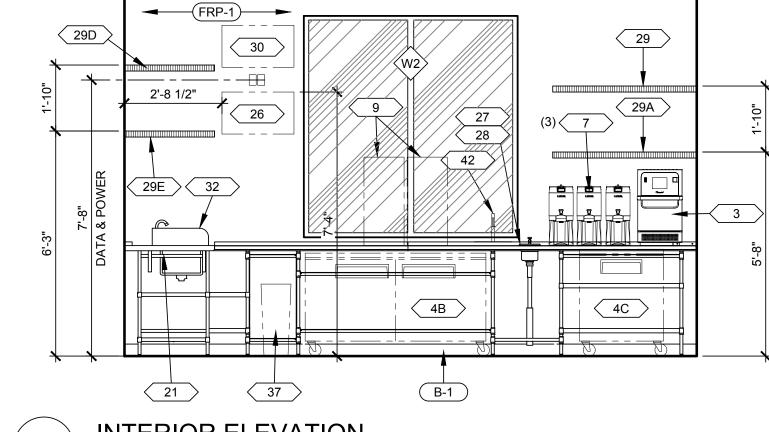
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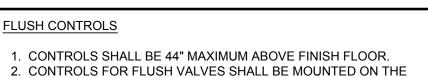




INTERIOR ELEVATION

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





WIDE SIDE OF THE TOILET AREAS. 3. CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. 4. CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBF.

<u>DISPENSERS</u>

I. DISPENSERS THAT CONTROL DELIVERY, OR DO NOT PERMIT CONTINUOUS PAPER FLOW SHALL NOT BE USED.

FAUCETS

- 1. CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF
- THE WRIST. . THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO
- GREATER THAN 5 LBF. B. LEVER-OPERATED, PUSH-TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE
- 4. IF SELF-CLOSING VALVES ARE USED, THE FAUCET SHALL REMAIN OPEN FOR AT LEAST 10 SECONDS

- 1. DIAMETER OR WIDTH OF GRIPPING SURFACE SHALL BE 1 1/4" TO 1 1/2" OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE.
- 2. THE SPACE BETWEEN GRAB BARS AND ADJACENT WALLS SHALL BE 1 1/2".
- 3. GRAB BARS AND ADJACENT WALL SURFACES SHALL BE FREE OF SHARP OR ABRASIVE SURFACES.
- 4. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8".

MISCELLANEOUS

- 1. ALL TOILET FIXTURES TO BE INSTALLED TO MEET ALL LOCAL,
- STATE AND FEDERAL BUILDING CODES.
- 2. CONTRACTOR SHALL PROVIDE WALL BLOCKING TO WITHSTAND A FORCE OF 300 LBS IN ANY DIRECTION AT ANY POINT.
- 3. HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT
- AGAINST CONTACT. 4. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER
- LAVATORIES.

- WINDOW TYPE, SEE SHEET A5.0
- FINISH / MATERIAL IDENTIFIER, SEE SHEET A5.0
 - FIXTURE / EQUIPMENT IDENTIFIER, SEE SHEET A1.1
 - RESTROOM FIXTURE / ACCESSORY IDENTIFIER, SEE
 - SCHEDULE THIS SHEET
 - INTERIOR ELEVATION
- GRID LOCATION

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> APPROVED BY: SHEET NUMBER

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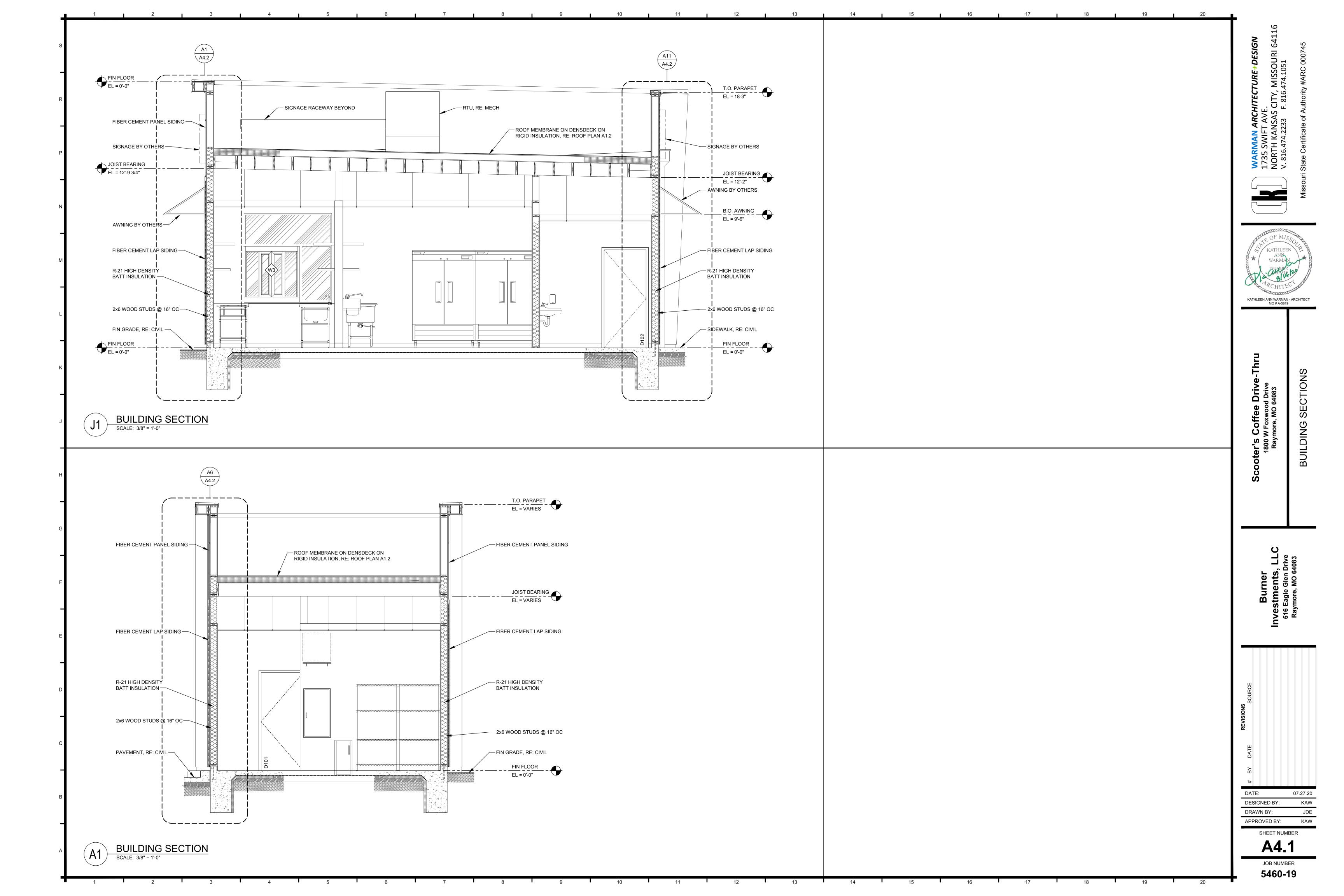
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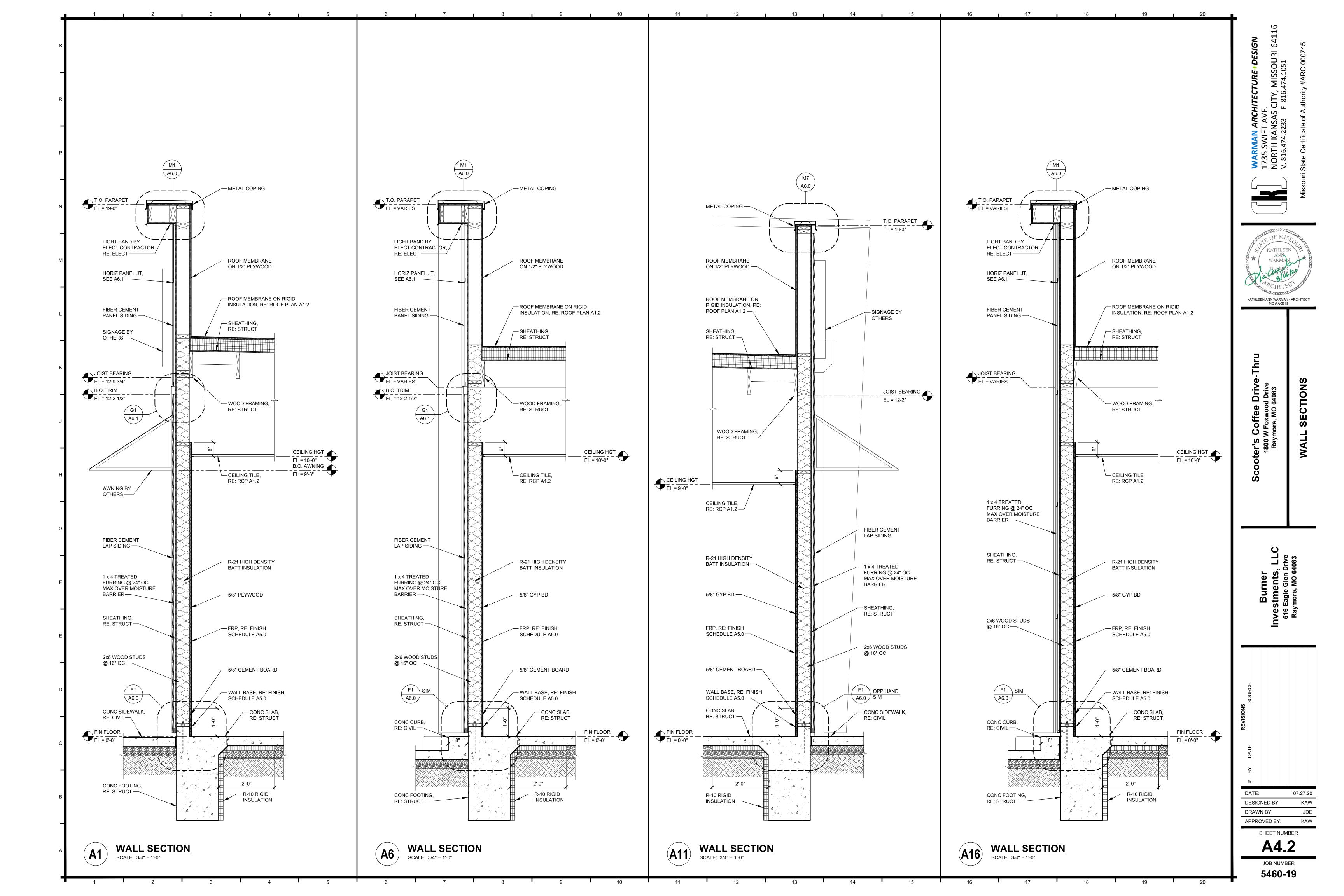
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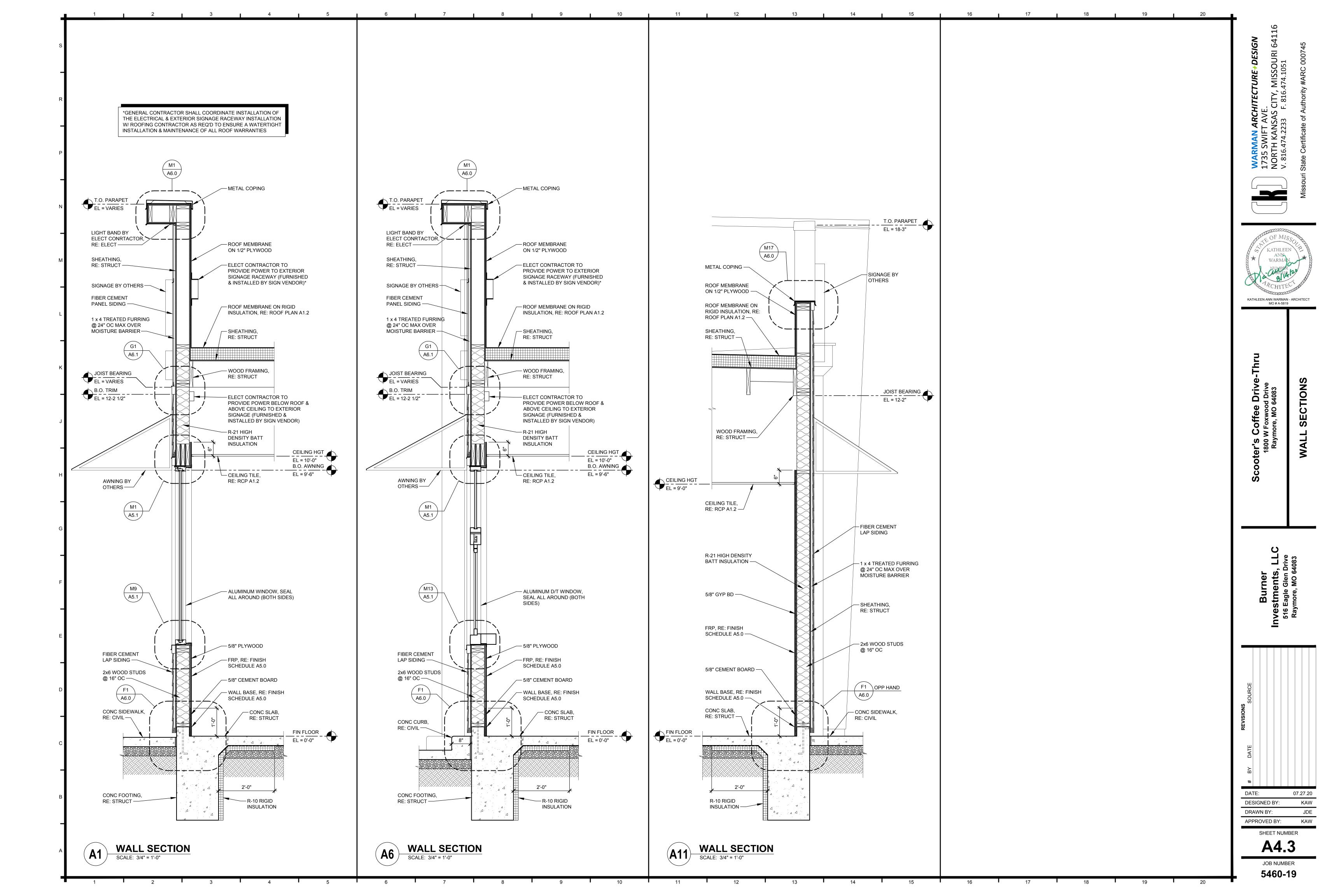
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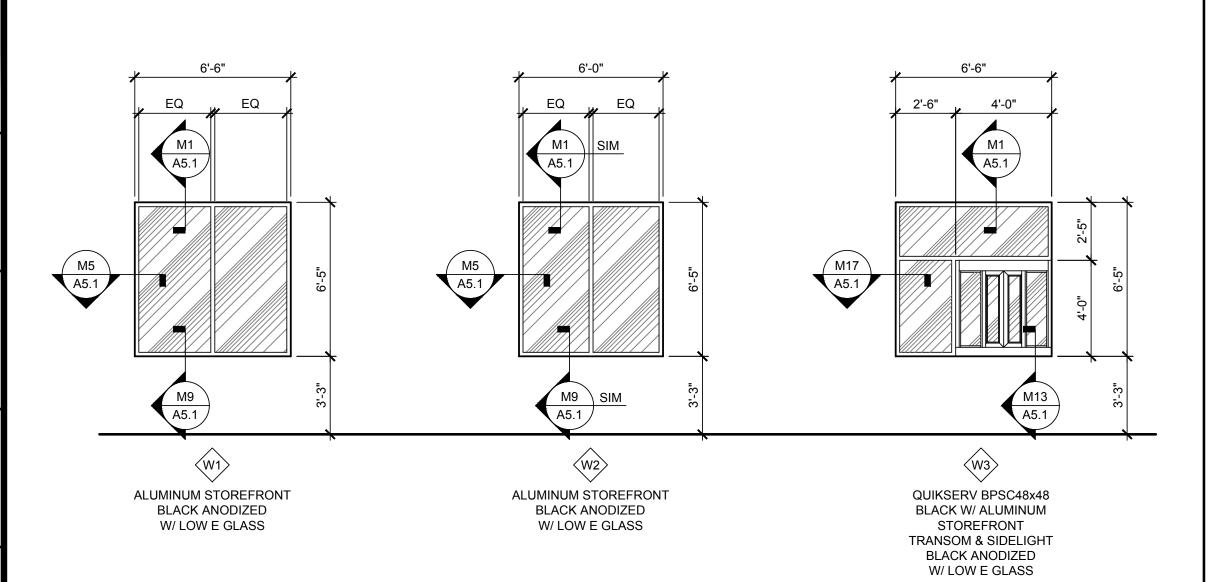
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	DOOR SCHEDULE												
NO	DOOR FRAME												
DOOR	TYPE		SIZE		SIZE		NAA TU			DETAIL		HARDWARE SET NO	NOTES
00	⊥	WD	HGT	THK	MAT'L	MAT'L	HEAD	JAMB	THRESH				
D101	Α	3'-0"	7'-0"	1 3/4"	IHM	НМ	G9/A5.1	G13/A5.1	G17/A5.1	01	1		
D102	В	3'-0"	7'-0"	1 3/4"	НМ	НМ	G1/A5.1	G5/A5.1	02	1			
HM -	ABBREVIATIONS: HM - HOLLOW METAL IHM - INSULATED HOLLOW METAL												
	OOR NOTES DOORS AND FRAMES TO BE PRIMED & PAINTED. SEE FINISH SCHEDULE THIS SHEET										1 /•		

GC TO VERIFY THAT EGRESS DOOR & HARDWARE COMPLIES WITH ACCESSIBILITY

TO CLOSE FROM AN OPEN POSITION OF 90 DEGREES TO WITHIN 3" OF LATCH.

BARS, OR PUSH PULL ACTIVATION BARS. SEE SPECIFICATIONS.

OPERATE, FIRE DOORS 15 LBS. MAXIMUM PRESSURE TO OPERATE

PROVIDE DOOR BOTTOMS AND EXIT SADDLES ON ALL EXTERIOR DOORS.

ENTRY DOOR TO BE MARKED "THIS DOOR TO REMAIN UNLOCKED AT ALL TIMES DURING

ALL DOORS SHALL OPERATE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC

DOOR CLOSER, IF PRESENT, MUST BE SET SO THAT IT TAKES DOOR AT LEAST 3 SECONDS

THE WIDTH OF THE OF THE LEVEL AREA ON THE SIDE OF WHICH THE DOOR SWINGS SHALL EXTEND 24" PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18" PAST

). ALL EGRESS/EXIT DOORS SHALL BE OF THE PIVOTED OR SIDE-HINGED SWINGING TYPE PER

EFFORTS TO OPERATE DOORS WITHIN PRESSURES ALLOWED: INTERIOR DOORS 5LBS. MAXIMUM PRESSURE TO OPERATE, EXTERIOR DOORS 8.5 LBS. MAXIMUM PRESSURE TO

ALL EXITS ARE TO BE OPERABLE FROM INSIDE WITHOUT THE USE OF KEY OR SPECIAL

REQUIREMENTS.

KNOWLEDGE.

SECTION 1008.12.

OPEN BUSINESS HOURS".

THE STRIKE EDGE FOR INTERIOR DOORS.

1. GC TO VERIFY QUANTITY OF MASTER KEYS TO PROVIDE

	DOOR HARDWARE SCHEDULE									
IARDW.	ARDWARE SET NUMBER NO 01									
QTY	PART	DESCRIPTION								
1/2 PR	BUTT HINGES	FULL MORTISE BB1279-450 4.5" x 4.5", US26D/652, 5 KNUCKLE NON-REMOVABLE PIN								
1	CLOSER	LCN 1450 SURFACE MOUNTED, PUSH SIDE, ALUM FINISH (689)								
1	THRESHOLD	LOW PROFILE 2008_PK								
1	DOOR SWEEP	36" 225_V DOOR BOTTOM SWEEP								
1	WEATHER STRIP	AT DOOR PERIMETER								
1	VIEWER	698PB619 WIDE-ANGLE (190 - 200°)								
1	KICKPLATE	34" x 30" STAINLESS STEEL, PUSH SIDE ONLY								
1	DOOR HOLD OPEN	DOOR MOUNTED - TURN LOCK ON OUTSIDE								

			4
1	WEATHER STRIP	AT DOOR PERIMETER	PEMKO
1	VIEWER	698PB619 WIDE-ANGLE (190 - 200°)	
1	KICKPLATE	34" x 30" STAINLESS STEEL, PUSH SIDE ONLY	
1	DOOR HOLD OPEN	DOOR MOUNTED - TURN LOCK ON OUTSIDE	
1	LOCKSET	LEVER TYPE W/ DEAD BOLT THUMB TURN INSIDE ONLY, SATIN CHROME FINISH	SCHLAGE
HARDW	ARE SET NUMBER NO	02	
QTY	PART	DESCRIPTION	MFR (OR EQUAL)
1 1/2 PR	BUTT HINGES	FULL MORTISE BB1191-ANSI-A2112 4" x 4", BRASS W/ S/S PIN, US26D	HAGER
1	LOCKSET	PRIVACY LEVER TYPE W/ LARGE OCCUPANCY INDICATOR (626)	INDICATOR LOCK CO
1	CLOSER	LCN 1450 SURFACE MOUNTED, PULL SIDE, ALUM FINISH (689)	LCN
1	KICKPLATE	34" x 12" STAINLESS STEEL, PUSH SIDE ONLY	
1	DOOR HOLD OPEN	DOOR MOUNTED	

(OR EQUAL)

HAGER

PEMKO

LCN PEMKO PEMKO

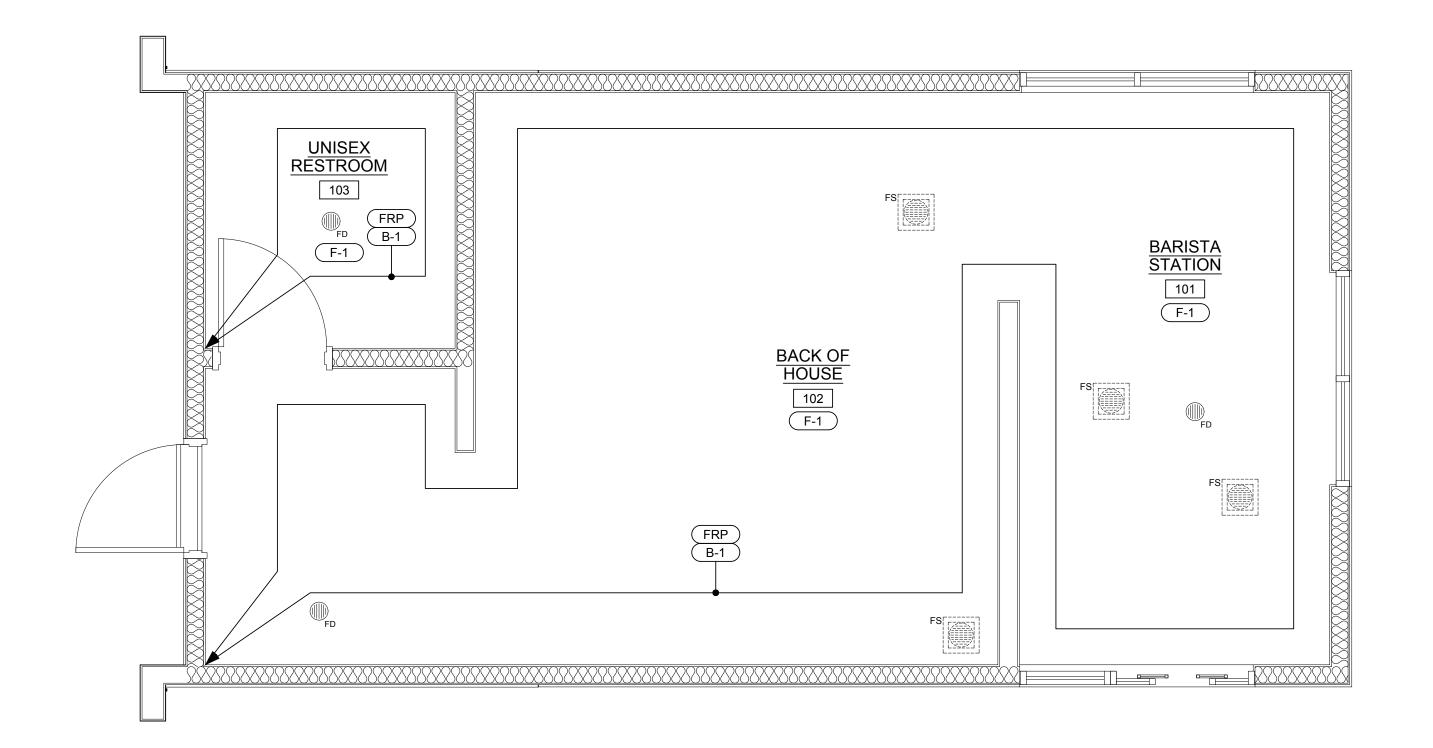
WINDOW TYPES

	FINISH SCHEDULE											
TAG	MATERIAL / DESCRIPTION	MANUFACTURER	STYLE / PATTERN / COLOR	REMARKS								
FRP-1	FIBER REINFORCED PLASTIC	CRANE COMPOSITES	WHITE (GLASBOARD W/ SURFASEAL)									
B-1	VINYL WALL BASE	JOHNSONITE	40 BLACK B (4" H x .80" THICK)									
F-1	CONCRETE SEALER	SHERWIN WILLIAMS	LEVEL 2 FINISH, SHER-HARD CLEAR SEALER									
F-2	QUARRY TILE	DALTILE	DIAMOND TREAD (SANDED GROUT)	ALTERNATE AS REQ'D								
P-1	PAINT	SHERWIN WILLIAMS	SW7070 - SITE WHITE	INTERIOR DOOR INSIDE OF EXTERIOR DOOR								
P-2	PAINT	SHERWIN WILLIAMS	SW6992 - INKWELL	OUTSIDE OF EXTERIOR DOOR								
P-3	PAINT	SHERWIN WILLIAMS	SW6871 - POSITIVE RED	PIPE BOLLARDS								

NO ALTERATIONS ON FINISHES WITHOUT CORPORATE APPROVAL

GENERAL NOTES

- A. REFER TO WALL SECTIONS AND ELEVATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- B. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES.
- C. ALL FINISHES SHALL MEET FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS FOR THEIR USE, AS REQUIRED BY LOCAL CODES.
- D. WALLS & CEILING: SMOOTH, DURABLE, NONABSORBENT, WASHABLE.
- E. G.C SHALL CAULK JOINT BETWEEN CEILING GRID & FRP WALL PANELS IN ALL KITCHEN, JANITOR AND OFFICE AREAS.
- F. ALL HOLLOW METAL DOORS AND FRAMES (U.N.O.), SHALL BE PRIMED & PAINTED.
- G. INSTALL MATERIAL OF LONGEST PRACTICAL LENGTHS & SIZES TO MINIMIZE THE NUMBER OF JOINTS. GC SHALL APPLY DIAMOND 35 SEALANT & WAX TO ALL QUARRY TILE & COVE BASE. GC TO VERIFY W/ OWNER THE TIMING & APPLICATION OF SEALER
- H. ALL FINISHES & FINISH MATERIALS, COLORS OR TEXTURES SHALL BE VERIFIED BY ARCHITECT PRIOR TO INSTALLATION, FABRICATION OR ORDERING.
- THE ARCHITECT ASSUMES THE GENERAL CONTRACTOR HAS INCLUDED IN HIS BID THE HIGHEST QUALITY & GREATEST QUANTITY FOR THE PURPOSE OF RESOLVING ANY CONFLICTS IN THE CONSTRUCTION DOCUMENTS WHICH ARE IMPLIED OR UNDEFINED.
- J. ALL EXPOSED UNFINISHED METAL AND WOOD SHALL BE PAINTED AS PER SPECIFICATION. PAINT TO MATCH ADJACENT COLOR.
- K. ANY DECORATIONS USED SHALL BE NON-COMBUSTIBLE OR FLAME PROOFED IN AN APPROVED MANNER.
- .. THE CONTRACTOR SHALL PROTECT ALL ADJACENT MATERIALS AND EQUIPMENT AGAINST DAMAGE FROM SPILLAGE, DRIPPING AND SPATTER OF COATING MATERIALS. REPLACE DAMAGED TILE AS REQUIRED. ALL BUILDING MATERIALS AND EQUIPMENT SHALL BE LEFT CLEAN WITH ALL DAMAGED SURFACES CORRECTED. PROVIDE "WET PAINT" SIGNS TO INDICATE NEWLY PAINTED SURFACES
- M. ALL GROUT TO CONTAIN ACRYLIC ADDITIVE SEALER.



DOOR TYPES

SILENCER

AT DOOR PERIMETER

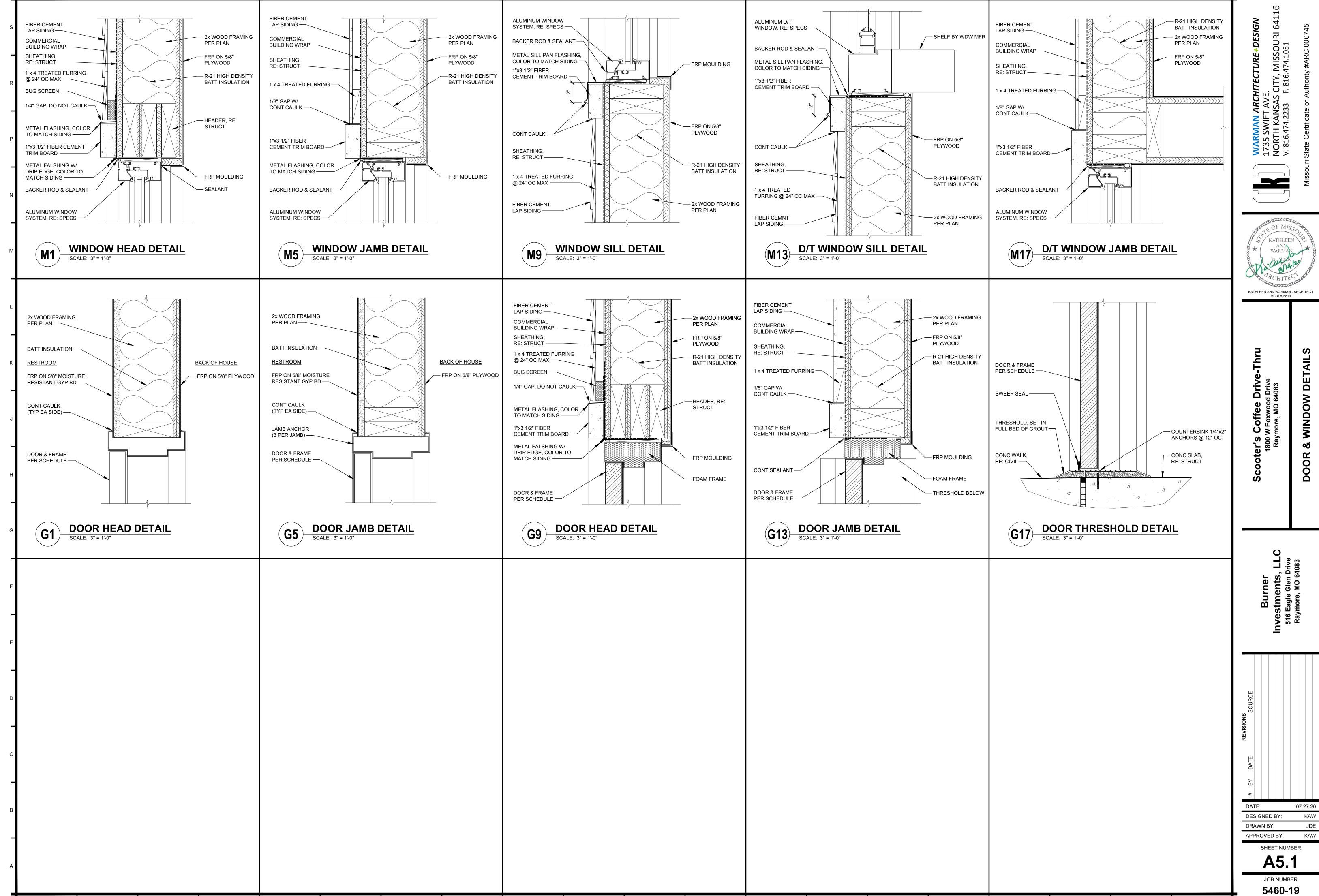
FLOOR FINISH PLAN

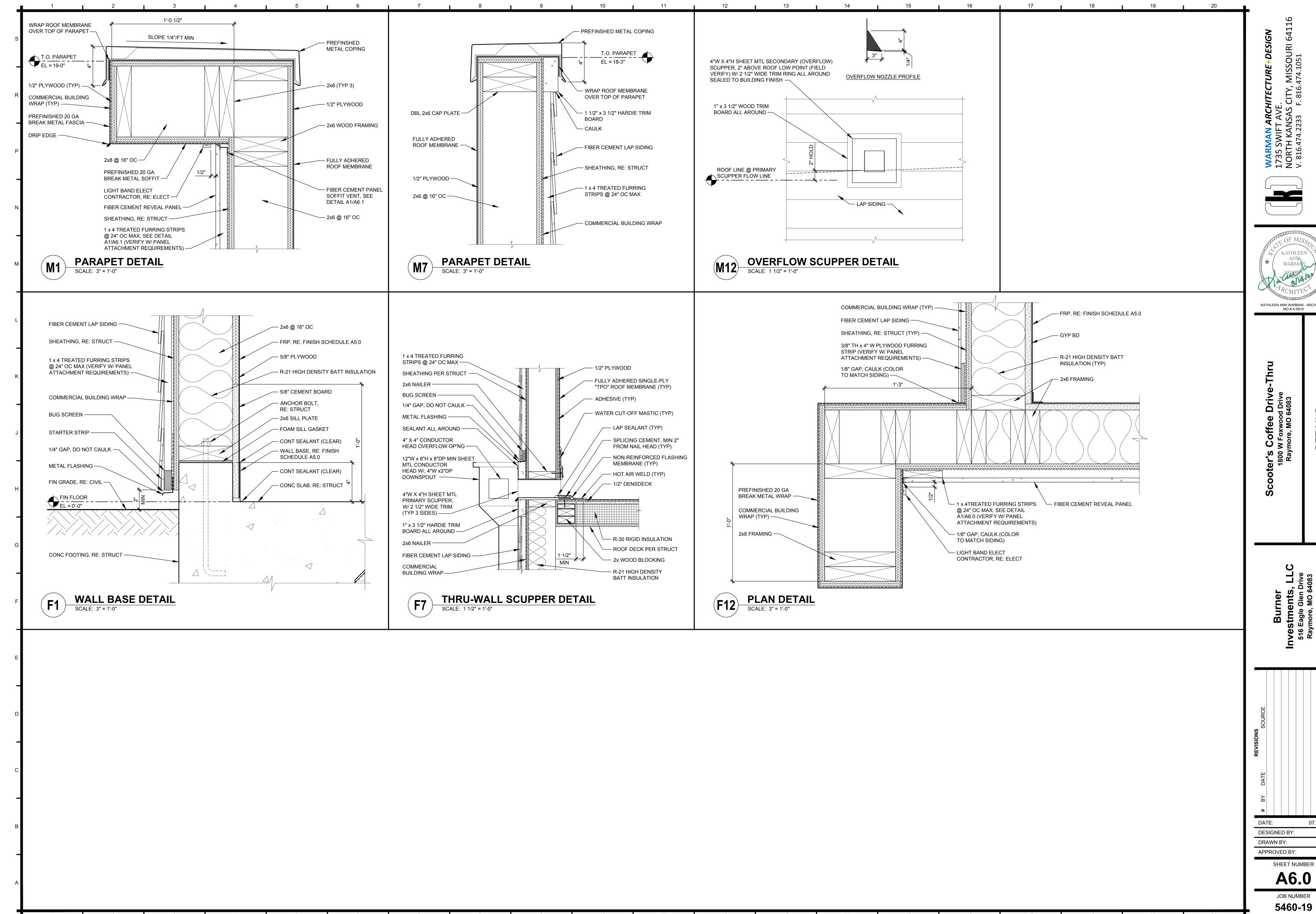
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KATHLEEN ANN WARMAN - ARCHITECT

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JOB NUMBER



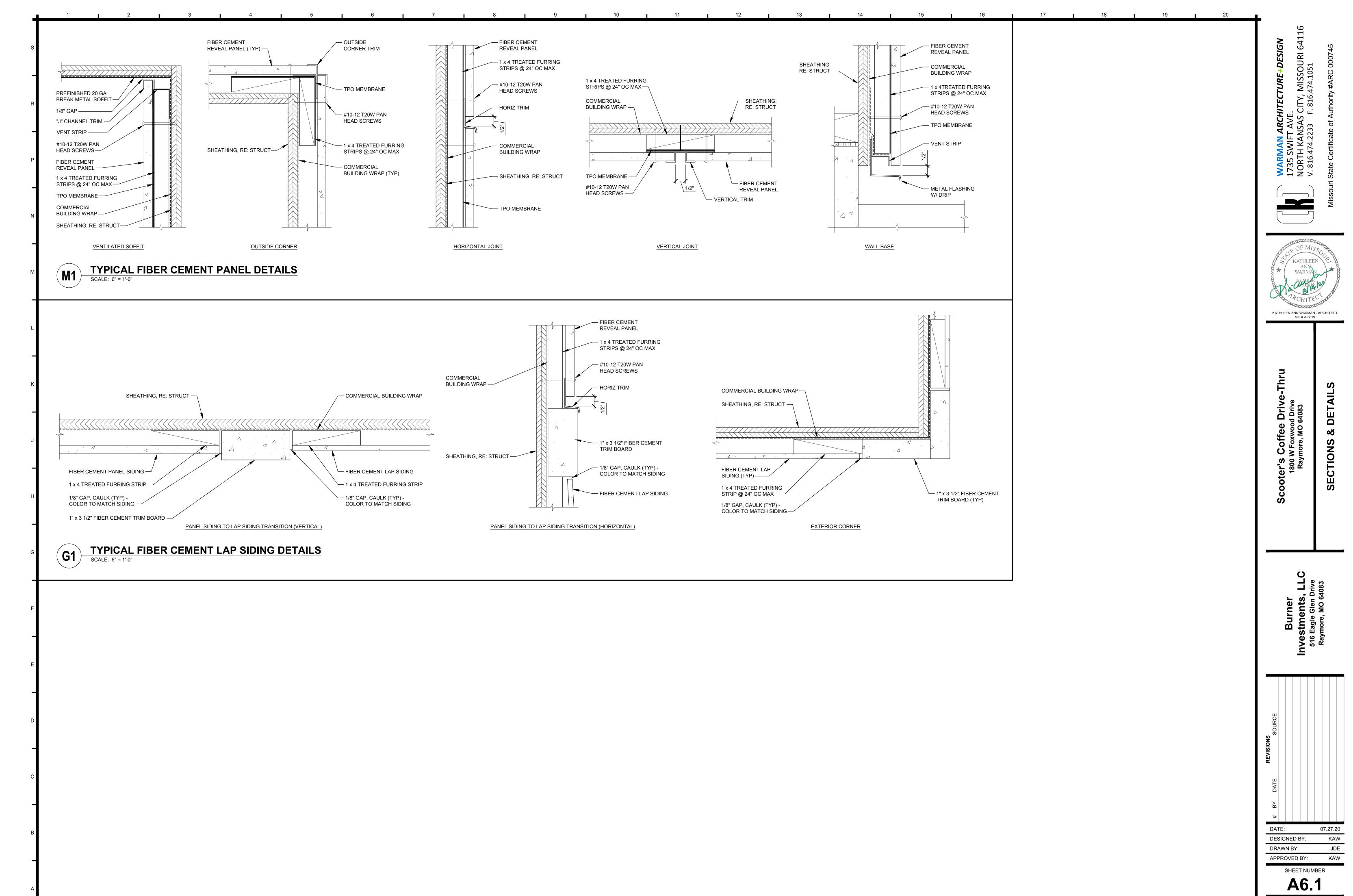


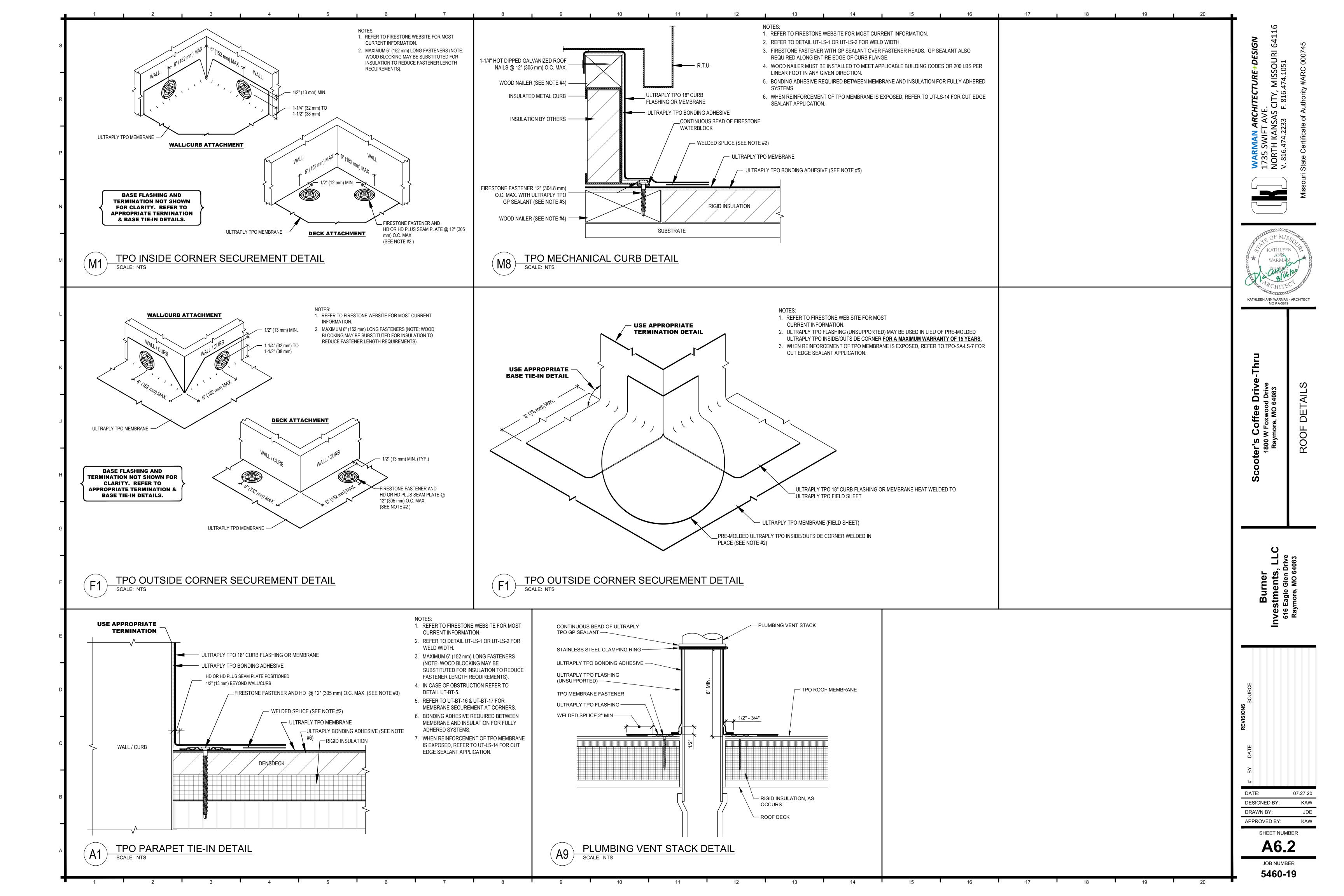
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B. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATES OF COMPLIANCE OR APPROVAL AS REQUIRED BY THE AUTHORITIES.

C. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.

D. ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK.

E. DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, PIPE, DUCT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERING SHALL BE REMOVED BEFORE FINAL ACCEPTANCE.

F. PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILINGS, AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY WILL BE MAINTAINED.

G. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.

2. OPERATION AND MAINTENANCE MANUALS:

A. DURING THE COURSE OF CONSTRUCTION, COLLECT AND COMPILE OPERATING INSTRUCTIONS, WIRING DIAGRAMS, CATALOG CUTS, LUBRICATION AND PREVENTIVE MAINTENANCE INSTRUCTIONS, PARTS LISTS, ETC. FOR ALL EQUIPMENT FURNISHED UNDER THIS CONTRACT.

B. ALL LITERATURE AND INSTRUCTIONS SHIPPED WITH THE EQUIPMENT SHALL BE SAVED FOR INCLUSION IN THE OPERATION AND MAINTENANCE MANUALS.

C. ALL LITERATURE LISTED ABOVE AND ALL PAPERS LISTING WARRANTIES, ETC. SHALL BE BOUND IN A 3-RING BINDER AND LABELED WITH THE PROJECT NAME, ADDRESS, ARCHITECT, ENGINEER, CONTRACTORS, ETC.

3. MANUFACTURERS

A. MANUFACTURERS, MODEL NUMBERS, ETC. INDICATED OR SCHEDULED ON THE DRAWINGS SHALL BE INTERPRETED AS HAVING ESTABLISHED A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION. ARTICLES, FIXTURES, ETC. OF EQUAL QUALITY BY MANUFACTURERS SHALL BE ACCEPTABLE, SUBJECT TO STRUCTURAL AND ELECTRICAL CONSTRAINTS OF THE PROJECT DESIGN, UNLESS NOTED OTHERWISE.

4. MOTORS:

A. PROVIDE THERMAL OVERLOAD PROTECTION FOR EACH MOTOR PROVIDED BY THIS WORK.

5. TESTING, BALANCING, AND CLEANING:

HOURS, WITH NO LEAKS.

A. ALL PIPING SHALL BE TESTED FOR LEAKS BEFORE BEING CONCEALED IN WALL CONSTRUCTION OR COVERED WITH INSULATION.

B. SEWER AND VENT PIPING SHALL BE HYDROSTATICALLY TESTED WITH NO LESS THAN 10 FEET OF HEAD FOR A PERIOD OF NOT LESS THAN 15 MINUTES, PER THE LOCAL PLUMBING CODE, WITH NO LEAKS.

C. DOMESTIC WATER PIPING SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF NOT LESS THAN 1-1/2 TIMES THE OPERATING PRESSURE, BUT NOT LESS THAN 60 PSI, FOR A PERIOD OF NOT LESS THAN 2

D. BEFORE DOMESTIC WATER PIPING IS PLACED IN SERVICE, ALL DOMESTIC WATER DISTRIBUTION SYSTEMS, INCLUDING THOSE FOR COLD WATER AND HOT WATER SYSTEMS, SHALL BE FLUSHED, STERILIZED AND CHLORINATED IN ACCORDANCE WITH HEALTH DEPARTMENT REGULATIONS. THE SYSTEMS SHALL BE THOROUGHLY FLUSHED OF ALL DIRT AND FOREIGN MATTER, THEN FILLED WITH WATER TREATED WITH 50 PPM OF CHLORINE. DURING THE FILLING PROCESS, VALVES AND FAUCETS SHALL BE OPENED SEVERAL TIMES TO ASSURE TREATMENT OF THE ENTIRE SYSTEM. THE TREATED WATER SHALL BE LEFT IN THE SYSTEM FOR 24 HOURS AFTER WHICH TIME THE SYSTEM SHALL BE FLUSHED; IF THE RESIDUAL CHLORINE IS NOT LESS THAN 10 PPM, THE FLUSHING SHALL BE REPEATED. AFTER STERILIZATION, SAMPLES OF WATER IN THE SYSTEM SHALL BE APPROVED BY THE BOARD OF HEALTH.

E. DUCTWORK AND PIPING SHALL BE BALANCED BY QUALIFIED BALANCING PERSONNEL WHO HAVE PREVIOUS EXPERIENCE WITH BALANCING PROCEDURES AND ARE FAMILIAR WITH TESTING AND BALANCING PROCEDURES OF THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB).

1) BALANCING SHALL INCLUDE THE BALANCING OF THE EQUIPMENT AND AIR DISTRIBUTION SYSTEMS TO PROVIDE DESIGN QUANTITIES INDICATED AND VERIFICATION OF PERFORMANCE OF ALL EQUIPMENT AND AUTOMATIC CONTROLS.

2) WITH IN 30 DAYS OF THE COMPLETION OF THE TESTING AND BALANCING WORK, SUBMIT THE TEST AND BALANCING REPORT BEARING THE SIGNATURE OF THE TEST AND BALANCE ENGINEER. THE REPORTS SHALL BE CERTIFIED PROOF THAT THE SYSTEMS HAVE BEEN TESTED, ADJUSTED, AND BALANCED IN ACCORDANCE WITH THE REFERENCED STANDARDS; ARE AN ACCURATE REPRESENTATION OF HOW THE SYSTEMS HAVE BEEN INSTALLED AND ARE OPERATING. REPORTS SHALL BE BOUND IN A VINYL BINDER AND THE BINDER LABELED OR MAY BE AN ELECTRONIC PDF SUBMITTAL.

F. NATURAL GAS PIPING SHALL BE PNEUMATICALLY TESTED AT A PRESSURE OF NOT LESS THAN 1-1/2 TIMES THE OPERATING PRESSURE, BUT NOT LESS THAN 50 PSI, FOR A PERIOD OF NOT LESS THAN 2 HOURS, WITH NO LEAKS.

6. PIPING:

PIPING:

A. DOMESTIC COLD AND HOT WATER (ABOVEGROUND).

 PEX, HIGH-DENSITY CROSS-LINKED POLYETHYLENE TUBING SHALL BE MANUFACTURED TO THE REQUIREMENTS OF ASTM F876 AND MEET THE STANDARD GRADE HYDROSTATIC PRESSURE RATINGS FROM PLASTIC PIPE INSTITUTE IN ACCORDANCE WITH TR-4/03.

a) PEX-A AND PEX-B MEETING ANSI/NSF61 AND ANSI/NSF372 STANDARDS FOR POTABLE WATER SAFETY AND LEAD-FREE STANDARDS AND MUST BE MARKED WITH "PW-G", "NSF-61-G" OR OTHER NSF-APPROVED MARKING. ASTM F2023 FOR USE WITH CHLORINATED WATER.

b) PEX MECHANICAL, CRIMP/INSERT OR EXPANSION FITTINGS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PIPE SIZES GIVEN ON THE DRAWINGS ARE NOMINAL COPPER PIPE SIZE, INCREASE PEX PIPING SIZE TO EQUAL OR EXCEED COPPER PIPE INSIDE DIAMETER FOR SUPPLY MAINS.

B. DOMESTIC COLD WATER (UNDERGROUND).

1) PEX, HIGH-DENSITY CROSS-LINKED POLYETHYLENE TUBING SHALL BE MANUFACTURED TO THE REQUIREMENTS OF ASTM F876 AND MEET THE STANDARD GRADE HYDROSTATIC PRESSURE RATINGS FROM PLASTIC PIPE INSTITUTE IN ACCORDANCE WITH TR-4/03.

a) PEX-A AND PEX-B MEETING ANSI/NSF61 AND ANSI/NSF372 STANDARDS FOR POTABLE WATER SAFETY AND LEAD-FREE STANDARDS AND MUST BE MARKED WITH "PW-G", "NSF-61-G" OR OTHER NSF-APPROVED MARKING. ASTM F2023 FOR USE WITH CHLORINATED WATER.

b) PEX MECHANICAL, CRIMP/INSERT OR EXPANSION FITTINGS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PIPE SIZES GIVEN ON THE DRAWINGS ARE NOMINAL COPPER PIPE SIZE,

INCREASE PEX PIPING SIZE TO EQUAL OR EXCEED COPPER PIPE INSIDE DIAMETER FOR SUPPLY MAINS.

C. DOMESTIC WATER SERVICE, 1"-3"

1) TYPE K SOFT DRAWN COPPER TUBING, ASTM B-88.

a) Cast Copper Alloy Fittings for Flared Copper Tube, ASME/ANSI B16.26:

D. SANITARY SEMER, AND VENTS (UNDERGROUND, INTERIOR TO BUILDING).

1) POLYVINYLCHLORIDE (PVC) DWV PIPE, SCHEDULE 40, SOLVENT JOINT (WHERE APPROVED BY LOCAL

2) SERVICE WEIGHT, BELL-AND-SPIGOT, COATED CAST IRON, ASTM A-74.

3) ACRYLONITRILE-BUTADIENE-STYRENE (ABS) SEWER PIPE, ASTM D 2751-83a SDR 23.5, SOLVENT-CEMENTED JOINTS.

4) "NO-HUB" CAST IRON, NEOPRENE GASKETS, STAINLESS STEEL CLAMPS.

E. NATURAL GAS.

1) BLACK STEEL PIPE, SCHEDULE 40, ASTM A53.

a) PIPE 2" AND SMALLER; 150 LB. MALLEABLE IRON, THREADED FITTINGS.

b) PIPE 2" AND SMALLER; VIEGA MEGAPRESS FOR WATER AND GAS. CSA LC4, TSSA/ASME B31

FOR USE WITH ASTM A53 SCHEDULE 40 BLACK IRON PIPE.

c) PIPE 2-1/2" AND LARGER, WELDED.d) PLUG VALVE: ROCKWELL NORDSTROM FIGURE NO. 142 OR 143.

e) BALL VALVE: ROCKMELL NORDSTROM FIGURE NO. 142 OR 143.

MECHANICAL SPECIFICATIONS (CONTINUED)

F. SANITARY SEMER AND VENTS (EXTERIOR TO BUILDING).

1) SERVICE WEIGHT, BELL-AND-SPIGOT, COATED CAST IRON, ASTM A-74.
2) DUCTILE IRON GRAVITY SEWER PIPE & FITTINGS, ASTM A746/747, CLASS 50 OR 51, SEALCOATED,

MECHANICAL OR PUSH-ON JOINTS, DIP COATING, NEOPRENE OR SYNTHETIC RUBBER GASKETS.

3) ACRYLONITRILE-BUTADIENE-STYRENE (ABS) SEWER PIPE, SDR-23.5 OR SCHEDULE 40, SOLVENT JOINT (WHERE APPROVED BY LOCAL CODES).

4) POLYVINYLCHLORIDE (PVC) PIPE, SDR-26, SOLVENT OR ELASTOMERIC JOINT (WHERE APPROVED BY LOCAL CODES).

G. SANITARY SEMER. AND VENTS (ABOVEGROUND).

1) SERVICE WEIGHT, BELL-AND-SPIGOT, COATED CAST IRON, ASTM A-74.

2) DMY, MROUGHT COPPER, ANSI B-16.29.

3) GALVANIZED STEEL PIPE, WITH MALLEABLE IRON, THREADED FITTINGS, DRAINAGE PATTERN FOR SEWERS.

4) "NO-HUB" CAST IRON, NEOPRENE GASKETS, STAINLESS STEEL CLAMPS.

5) POLYVINYLCHLORIDE (PVC) DWV PIPE, SCHEDULE 40, SOLVENT JOINT (WHERE APPROVED BY LOCAL CODES). (NOT FOR USE IN A RETURN AIR PLENUM)

H. CONDENSATE DRAINS & INDIRECT WASTE (ABOVEGROUND).

DMV, MROUGHT COPPER, ANSI B-16.29.
 POLYVINYLCHLORIDE (PVC) DMV PIPE, SCHEDULE 40, SOLVENT JOINT.

I. ALL PIPE HANGERS AND SUPPORTS SHALL BE STANDARD PRODUCTS OF GRINNELL, FEE AND MASON, OR ELCEN. HANGER SPACING SHALL BE IN ACCORDANCE WITH MSS-SP-69.

J. SLEEVES

 PROVIDE, SET, AND PROPERLY LOCATE PIPE SLEEVES AS REQUIRED FOR THIS WORK. ALL SLEEVES SHALL BE OF SUFFICIENT SIZE TO PERMIT PIPE MOVEMENT DUE TO EXPANSION AND CONTRACTION AND TO ACCOMMODATE PIPE INSULATION.

2) INTERIOR PARTITIONS: 16 GAGE GALVANIZED STEEL, PACK BETWEEN PIPE AND SLEEVE WITH FIRE SAFING AND CAULK AT EACH END WITH FIRE RESISTANT SEALANT.

3) ROOF: PROSET OR EQUAL, MANUFACTURED PVC SCHEDULE 40 PIPE SLEEVE WITH WATERPROOF SEAL.
COORDINATE WITH ROOFING CONTRACTOR AND FLASH AS REQUIRED TO MAINTAIN ROOF WARRANTY.

4) PLUMBING VENTS: FLASH ROOF VENT INTO ROOFING SYSTEM AS REQUIRED BY THE ROOFING CONTRACTOR TO MAINTAIN EXISTING ROOF WARRANTY. ALL PLUMBING VENT TERMINALS SHALL TERMINATE A MINIMUM OF 12" ABOVE ROOF OR EQUAL TO HEIGHT OF PARAPET, WHICHEVER IS GREATER.

K. PROVIDE CHROME PLATED ESCUTCHEONS ON ALL PIPE ENTERING FINISHED AREAS.

7. INSULATION AND DUCT LINING:

A. ALL INSULATIONS AND ACCESSORIES SHALL HAVE A FIRE HAZARD CLASSIFICATION WITH A FLAME SPREAD RATING OF NOT OVER 25, A FUEL CONTRIBUTION RATING OF NOT OVER 50, AND A SMOKE DEVELOPED RATING OF NOT OVER 50, IN ACCORDANCE WITH NFPA.

B. PIPE INSULATION - ABOVE GRADE:

1) THE PIPING INSULATION USED SHALL HAVE A THERMAL CONDUCTIVITY OF 0.27 Btu PER in/hr*sqft*F° OR LESS.

2) FIBERGLASS INSULATION WITH FACTORY APPLIED VAPOR BARRIER, ASJ JACKET, FACTORY APPLIED PRESSURE SEALING LONGITUDE LAP JOINT, NO STAPLES, ZESTON PREMOLDED PVC FITTING COVERS. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

3) FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION, UNSLIT OR PRESLIT WITH PRESSURE SENSITIVE ADHESIVE SYSTEM FOR CLOSURE AND VAPOR SEALING, EQUAL TO ARMSTRONG AP ARMAFLEX OR ARMAFLEX 2000.

4) FOR NON CIRCULATING SYSTEMS, THE FIRST 8 FEET OF INLET AND OUTLET PIPING BETWEEN THE TANK AND THE HEAT TRAP (INCLUDING THE HEAT TRAP) MUST BE INSULATED.

5) INSULATION SCHEDULE:

a) DOMESTIC COLD WATER 1/2" b) DOMESTIC HOT WATER 1-1/2"

C. DUCTMORK: ACOUSTICAL INSULATION.1) DUCT LINING: 2 LB/CF, THICKNESS AS SCHEDULED, AIR STREAM SIDE COATED, INSTALL PER

SMACNA STANDARDS.

a) DUCT LINING SCHEDULE:

(2) RECTANGULAR RETURN AIR DUCT

RECOMMENDATIONS.

(1) RECTANGULAR SUPPLY DUCT

D. DUCTWORK: THERMAL INSULATION.
 1) DUCT COVERING: 3/4 LB/CF, FIBERGLASS BLANKET WITH FACTORY APPLIED VAPOR BARRIER AND FACING, THICKNESS AS SCHEDULED, INSTALLATION IN ACCORDANCE WITH MANUFACTURERS

1/2": THROUGHOUT THE FIRST 10 FEET OF DUCT.

1/2": THROUGHOUT THE FIRST 10 FEET OF DUCT.

a) DUCT COVERING SCHEDULE: MINIMUM R-6

(1) ROUND SUPPLY DUCT 2"
(2) RECTANGULAR SUPPLY DUCT 2"
(3) RETURN AIR DUCT 2"

8. PLUMBING:

A. PROVIDE AN APPROVED WATER HAMMER ARRESTOR FOR EACH PLUMBING FIXTURE SUPPLY AS REQUIRED BY FIXTURE MANUFACTURER.

B. ALL EXPOSED PIPE SHALL BE CHROME PLATED BRASS PIPE, NO FERROUS PIPE.

C. PROVIDE CLEANOUTS AT EACH CHANGE OF DIRECTION AND AT 100 FOOT INTERVALS IN STRAIGHT RUNS.

D. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES AND TRAPS.

E. CLEANOUTS:

1) VINYL TILE FLOOR: JR SMITH #4140, OR EQUAL.

QUARRY TILE FLOOR: JR SMITH #4200, OR EQUAL.
 CARPETED FLOOR: JR SMITH #4020-Y, OR EQUAL.
 UNFINISHED FLOOR: JR SMITH #4020, OR EQUAL.

5) WALL: JR SMITH #4472, OR EQUAL, 24" ABOVE THE FLOOR.

6) GRADE: JR SMITH #4256, OR EQUAL, WITH HEAVY DUTY CAST IRON BODY AND COVER.

F. PROVIDE DIELECTRIC UNIONS WITH APPROPRIATE END CONNECTIONS TO MATCH THE PIPE SYSTEM IN WHICH INSTALLED (SCREWED, SOLDERED, OR FLANGED). PROVIDE DIELECTRIC UNIONS ON ALL PIPING CONNECTIONS TO HOT WATER HEATERS AND EXPANSION TANKS.

G. ALL SEMER PIPING LOCATED INSIDE THE BUILDING SHALL BE INSTALLED WITH THE FOLLOWING SLOPES.

1) INSTALL 2-1/2" AND SMALLER PIPE AT 1/4" PER FOOT FALL

2) INSTALL 3" AND LARGER PIPE AT 1/8" PER FOOT FALL.

H. ALL SEWER PIPING LOCATED EXTERIOR TO THE BUILDING SHALL BE INSTALLED WITH THE FOLLOWING SLOPES.

1) INSTALL 4" AND LARGER PIPE AT A MINIMUM OF 2% SLOPE.

2) INSTALL 6" AND LARGER PIPE AT A MINIMUM OF 1% SLOPE.

G. MATER HEATERS:

 EVERY WATER HEATER SHALL HAVE AN APPROVED MEANS INSTALLED ON THE COLD WATER SUPPLY LINE ABOVE THE EQUIPMENT TO PREVENT SIPHONING OF AN STORAGE HEATER OR TANK.
 BOTTOM FED WATER HEATERS AND TANKS CONNECT TO WATER HEATERS SHALL HAVE A VACCUM

RELIEF VALVE INSTALLED. ANSI Z21.22.

3) STORAGE HEATERS OPERATING ABOVE ATMOSPHERIC PRESSURE SHALL HAVE AN APPROVED PRESSURE RELIEF VALVE AND/OR TEMPERATURE RELIEF VALVE.

MECHANICAL SPECIFICATIONS (CONTINUED)

9. DUCTWORK

A. ALL DUCTWORK, UNLESS OTHERWISE INDICATED, SHALL BE FABRICATED FROM GALVANIZED SHEET STEEL COMPLYING WITH ASTM A 527, LOCKFORMING QUALITY, WITH G 60 ZINC COATING IN ACCORDANCE WITH ASTM A 525; AND MILL PHOSPHATIZED FOR EXPOSED LOCATIONS.

B. DUCTWORK, METAL GAUGES, REINFORCING, ETC. SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION FOR A 2 INCH WATER GAUGE STATIC PRESSURE.

C. ALL FITTINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION.

D. SEAL ALL CONCEALED DUCTWORK JOINTS WITH NON-HARDENING, NON-MIGRATING MASTIC SEALANT, AS RECOMMENDED FOR SEALING SEAMS AND JOINTS IN DUCTWORK. OIL BASE CAULKING AND GLAZING COMPOUNDS SHALL NOT BE ACCEPTABLE. DUCTS SHALL BE SEALED TO THE CLASS LEVEL LISTED BELOW.

1) UNCONDITIONED SPACES CLASS B CLASS A CLASS C CLASS B
1) CONDITIONED SPACES (PLENUM) CLASS C CLASS B CLASS B CLASS C

SUPPLY < 2" M.C. SUPPLY > 2" M.C. EXHAUST

RETURN

E. DUCT SIZES SHOWN ON THE DRAWINGS ARE SHEETMETAL SIZES, ALLOWANCE FOR DUCT LINER HAS BEEN MADE WHERE APPLICABLE.

10. FLEXIBLE DUCT:

A. ATCO #086 (R-6), OR EQUAL

B. FACTORY APPLIED INSULATION AND VAPOR BARRIER, 1-1/2" THICK.

C. MAXIMUM LENGTH OF 6'-0"

11. EXHAUST FANS:

A. CENTRIFUGAL CEILING EXHAUSTERS SHALL BE ELECTRICALLY POWERED CENTRIFUGAL TYPE FAN SUITABLE FOR MOUNTING IN THE CEILING WITH A PERFORATED OFF-WHITE METAL GRILLE WITH A THUMBSCREW ATTACHMENT FOR EASY ACCESS TO FAN HOUSING. UNIT SHALL CONSIST OF A GALVANIZED STEEL HOUSING LINED WITH ACOUSTICAL INSULATION AND SHALL INCLUDE AN INTEGRAL BACKDRAFT DAMPER ON FAN DISCHARGE. MOTOR SHALL BE A PERMANENT SPLIT-CAPACITOR TYPE MOTOR, PERMANENTLY LUBRICATED, WITH THERMAL OVERLOAD PROTECTION. PROVIDE DISCONNECT SWITCH OR OTHER MEANS OF DISCONNECT AT MOTOR IN FAN HOUSING.

12. ROOFTOP UNITS:

A. UNIT SHALL BE FACTORY-ASSEMBLED AND TESTED, DESIGNED FOR ROOF INSTALLATION, AND SHALL CONSIST OF COMPRESSOR(S), CONDENSERS, EVAPORATOR COILS, CONDENSER AND EVAPORATOR FANS, CONDENSER FANS TO BE SEQUENCED. REFRIGERATION CONTROLS, GAS FIRED HEAT EXCHANGER, FILTERS, AND DAMPERS. CAPACITIES AND ELECTRICAL CHARACTERISTICS SHALL BE AS SCHEDULED ON THE DRAWINGS.

B. COMPRESSOR(S): UNIT SHALL INCLUDE VIBRATION ISOLATORS AND CRANKCASE HEATER. REFRIGERANT CIRCUIT SHALL INCLUDE A FILTER DRYER, SIGHT GLASS, COMPRESSOR SERVICE VALVES, AND LIQUID LINE SERVICE VALVES.

C. SAFETY CONTROLS SHALL INCLUDE:

a) LOM PRESSURE CUTOUT, MANUAL RESET.

b) HIGH PRESSURE CUTOUT, MANUAL RESET.c) COMPRESSOR MOTOR OVERLOAD PROTECTION, MANUAL RESET

d) ANTI-RECYCLING TIMING DEVICE.

e) ADJUSTABLE LOW-AMBIENT LOCKOUTf) OIL PRESSURE SMITCH.

D. REFRIGERANT COIL: ALUMINUM FINS BONDED TO SEAMLESS COPPER TUBE BY MEANS OF MECHANICAL EXPANSION. AN EQUALIZING TYPE VERTICAL DISTRIBUTOR SHALL ENSURE EACH COIL CIRCUIT RECEIVES THE SAME AMOUNT OF REFRIGERANT.

E. ECONOMIZER SHALL CONSIST OF RETURN AIR DAMPER, OUTDOOR AIR DAMPER, AND BAROMETRIC RELIEF DAMPER. PROVIDE POWERED EXHAUST FAN WITH MANUFACTURER'S STANDARD CONTROLS FOR UNITS SCHEDULED ON THE DRAWINGS.

F. ELECTRIC HEATER SHALL BE INSTALLED INTERNAL TO THE ROOFTOP UNIT. HEATING ELEMENTS SHALL BE CONSTRUCTED OF HEAVY DUTY NICKEL CHROMIUM. EACH HEATER SHALL HAVE AUTOMATICALLY RESET HIGH LIMIT CONTROL OPERATING THROUGH HEATING ELEMENT CONTACTORS. EACH HEATER SHALL BE INDIVIDUALLY FUSED AND SHALL COMPLY WITH ALL NEC REQUIREMENTS. HEATERS SHALL BE UL

G. ROOFTOP UNITS SHALL BE WIRED TO SHUTDOWN ON A SIGNAL FROM THE SMOKE DETECTORS AND SHALL AUTOMATICALLY RESET WHEN THE SMOKE DETECTORS ARE RESET.

13. CONTROL MIRING:

A. ELECTRICAL WIRING AND WIRING CONNECTIONS REQUIRED FOR THE INSTALLATION OF THE TEMPERATURE CONTROL SYSTEM, SHALL BE PROVIDED BY THIS CONTRACTOR, UNLESS SPECIFICALLY SHOWN ON THE ELECTRICAL DRAWINGS OR SPECIFICATIONS.

B. INSTALL CONTROL WIRING, WITHOUT SPLICES BETWEEN TERMINAL POINTS, COLOR CODED. INSTALL IN NEAT WORKMANLIKE MANNER, SECURELY FASTENED. INSTALL IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND THE ELECTRICAL SPECIFICATIONS.

1) INSTALL CIRCUITS OVER 25 VOLT WITH COLOR CODED NUMBER 12 WIRE

2) INSTALL CIRCUITS UNDER 25 VOLT WITH COLOR CODED NUMBER 18 WIRE WITH 0.031 INCH HIGH TEMPERATURE 105 DEGREES F PLASTIC INSULATION ON EACH CONDUCTOR AND PLASTIC SHEATH OVER

3) INSTALL ELECTRONIC CIRCUITS WITH COLOR CODED NUMBER 22 WIRE WITH 0.023 INCH POLYETHYLENE INSULATION ON EACH CONDUCTOR WITH PLASTIC JACKETED COPPER SHIELD OVER

4) INSTALL LOW VOLTAGE CIRCUITS, LOCATED IN CONCRETE SLABS AND MASONRY WALLS, OR EXPOSED IN OCCUPIED AREAS, IN ELECTRIC CONDUIT.

5) ALL WIRING IN AREAS USED AS AIR PLENUMS SHALL BE IN ELECTRIC CONDUIT EXCEPT THAT LOW

VOLTAGE WIRING MAY BE TEFLON COATED, ALUMINUM SHEATHED CABLE OR OTHER WIRE

SPECIFICALLY APPROVED FOR INSTALLATION IN AIR PLENUMS, WHERE ACCEPTABLE BY LOCAL CODES.

6) ALL WIRING IN AREAS NOT USED FOR AIR MOVEMENT SHALL BE IN ELECTRIC METALLIC TUBING

EXCEPT LOW VOLTAGE WIRING MAY BE IN APPROVED SIGNAL CABLE WHERE ACCEPTED BY LOCAL

CODES.

C. THERMOSTATIC CONTROLS TO HAVE A 5°F DEADBAND AND SETPOINT OVERLAP RESTRICTIONS.

1) TEMPERATURE CONTROLS SETBACK TO BE 55°F (HEAT) AND 85° (COOL), 2-HOUR OCCUPANT OVERRIDE, 10-HOUR BACKUP.

BC PROJECT #: 20604
MISSOURI PE COA #2009003629

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8/14/2020

INITIAL OF MISS

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KNUDSEN

NUMBER

PE-2004026504

/more, MO 64083

P

M

Burner /estments, LLC

BY DATE SOURCE

DESIGNED BY: MS/BH
DRAWN BY: MS/BH
APPROVED BY: EK/DS
SHEET NUMBER

JOB NUMBER

- COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT INTERFERENCES.
- 2. THIS CONTRACTOR SHALL PERFORM ALL WORK INDICATED AND/OR AS REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE MECHANICAL SYSTEMS.
- 3. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DIFFUSERS.
- 4. INSTALL ALL DUCT, PIPE, ETC. AS HIGH AS POSSIBLE.
- 5. DUCT SIZES SHOWN ARE ACTUAL SHEET METAL SIZES AND INCLUDE AN ALLOWANCE FOR DUCT LINER WHERE APPLICABLE.
- 6. PROVIDE FLEXIBLE CONNECTION BETWEEN DUCTWORK AND ROOFTOP UNITS, EXHAUST FANS, AND OTHER MOTORIZED EQUIPMENT.
- 7. NO DUCT SHALL BE ROUTED OVER THE TOP OF ELECTRICAL PANELS.

MECHANICAL PLAN NOTES:

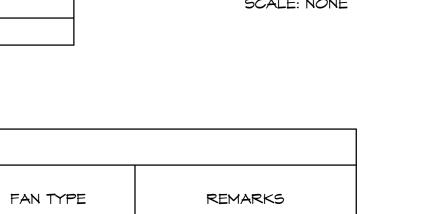
MARK

- 6" PEXHAUST DUCT UP TO MEATHER HEAD. SEAL PENETRATIONS MEATHERTIGHT.
- SUPPORT FAN FROM STRUCTURE AS REQUIRED BY THE MANUFACTURER.
- MAINTAIN A MINIMUM OF 10' CLEARANCE BETWEEN O.A. INTAKES AND EXHAUSTS, PLUMBING VENTS, ETC.
- TRANSITION AND CONNECT SUPPLY/RETURN DUCTS TO ROOFTOP UNIT DUCT DROPS WITH FLEX CONNECTORS AS REQUIRED.

	OUTDOOR AIR CALCULATIONS											
UNIT	CLASS	SQ. FT.	PEOPLE/ SQ. FT.	CFM/ SQ. FT.	CFM/ PERSON	CFM						
RTU-1	KITCHEN	420	20/1000		15	126						
					TOTAL	126						

	DIFFUSER SCHEDULE											
MARK	MFGR	MODEL	NECK SIZE	FACE SIZE	FINISH	REMARKS						
SD-1	TITUS	TM5/3	10"Ф	24"x24"	MHITE	-						
SD-2		1	6"Ф	*		-						
RG-1	V	PAR/3	22"×22"	24"×24"	†	-						

CFM



-SPIN IN WITH

DUCT. 6' MAX.

-DIFFUSER

DIFFUSER DETAIL

VOLUME DAMPER

LAY-IN CEILING

EF-1 750 | 120/1/60 | 29 W COOK GC-128 0.1 CEILING EXH. PROVIDE CEILING GRILLE, INTEGRAL BACK DRAFT DAMPER, VARI-SPEED CONTROLLER (NEAR FAN AND ABOVE CEILING), NON-FUSED DISCONNECT, AND WEATHER HEAD FOR ALL UNITS.

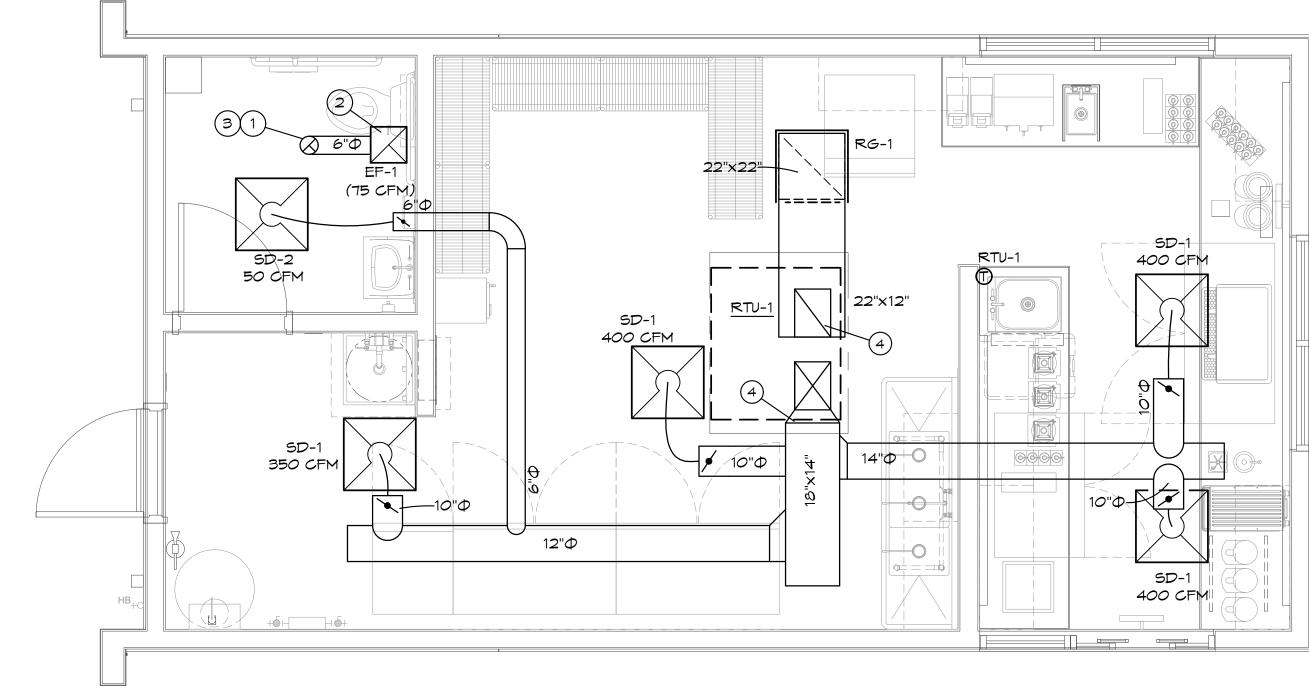
ELECTRICAL

VOLT/Ф/HZ PWR

EXHAUST FAN SCHEDULE

STATIC P. | RPM

IN. MG.





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

MECHANICAL SYMBOLS

NEW SUPPLY DIFFUSER NEW RETURN AIR GRILLE EXHAUST GRILLE/FAN

THERMOSTAT, MOUNTED AT 48" AFF

NEW DUCTMORK SIZE OF RECTANGULAR DUCT SIZE OF ROUND DUCT

FLEXIBLE DUCTMORK

FLOOR PLAN NOTE DESIGNATION SUPPLY AIR

EXHAUST AIR

TRANSITION IN DUCT SIZE MANUAL VOLUME DAMPER

RETURN AIR

SUPPLY AIR DUCT UP/DOWN RETURN AIR DUCT UP/DOWN

CHANGE IN ELEVATION UP (UP) DOWN (DN) IN DIRECTION OF FLOW

EXHAUST AIR DUCT UP/DOWN

SCHEDULED MECHANICAL EQUIPMENT

	ROOFTOP UNIT SCHEDULE																			
			NOM.	EVAP.	EXT. STATIC P.	O	OOLING			HEATING (H	IEAT PUMP)		ELECT			MINIMUM	TOTAL			
MARK	MFGR	MODEL NO.	TONS	CFM	ا مامادا ا	TOTAL BTUH	SENS. BTUH	AMB.	EVAP. EAT DB/MB	BTUH OUTPUT	HSPF	VOLT/Ф/HZ	BLOWER MOTOR	MIN. MCA (AMPS)	MIN. MOCP (AMPS)	OUTDOOR AIR (CFM)		SEER	FREON	REMARKS
RTU-1	TRANE	4MCY4048	4	1,600	0.5	45,500	45,500	95	80/67	42,500	8	208/3/60	1 HP	50	60	126	500	14.2	R-410a	-

NOTES: 1. PROVIDE OUTDOOR AIR ECONOMIZER AND FILTER KIT, TIME DELAY ON COMPRESSOR RE-START, CRANKCASE HEATER, BAROMETRIC RELIEF DAMPER, AND COMPRESSOR

- LOCK-OUT WITH AMBIENT BELOW 55 °F FOR COOLING, AND SINGLE POINT POWER ENTRY KIT FOR EACH UNIT. OUTDOOR AIR DAMPER TO FULLY CLOSE W/ FAN SHUTDOWN. 2. EXTERNAL STATIC PRESSURE LISTED REPRESENTS STATIC PRESSURE REQUIRED FOR DUCTWORK AND DIFFUSERS OUTSIDE THE HVAC UNIT COMPLETELY INDEPENDENT OF ANY PRESSURE DROP THROUGH THE HVAC EQUIPMENT INCLUDING BUT NOT LIMITED TO FILTERS, COILS AND ECONOMIZERS. THE FAN AND MOTOR SHALL BE SIZED APPROPRIATELY TO MEET THIS DEFINITION OF EXTERNAL STATIC PRESSURE.
- 3. PROVIDE 7-DAY PROGRAMMABLE HEAT/COOL/AUTO CHANGEOVER THERMOSTAT, ECONOMIZER DAMPER SHALL CLOSE DURING UNOCCUPIED HOURS.
- 4. PROVIDE 14" HIGH (AT LOWEST POINT) PRE-FABRICATED INSULATED ROOF CURB WITH SLOPE TO MATCH SLOPE OF ROOF.
- 5. MECHANICAL CONTRACTOR SHALL COORDINATE ALL UNIT MOCP'S OF ACTUAL INSTALLED EQUIPMENT WITH ELECTRICAL CONTRACTOR.
- 6. PROVIDE LOW AMBIENT CONTROL TO 5°F.
- 7. PROVIDE WITH SINGLE POINT KIT AUX ELECTRIC HEAT 6.0KW.

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MP-001 JOB NUMBER 5460-19

APPROVED BY: EK/DS

SHEET NUMBER

MS/BH

DESIGNED BY:

DRAWN BY:

8/14/2020

Coffee W Foxwood

PLUMBING GENERAL NOTES:

- 1. INSTALL ALL PIPE, ETC. AS HIGH AS POSSIBLE.
- 2. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT INTERFERENCES.
- 3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF FIXTURES.
- 4. REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR REQUIREMENTS FOR SUPPORTING PIPING, EQUIPMENT, ETC. FROM THE STRUCTURE. PROVIDE ADDITIONAL STEEL AS REQUIRED TO PROPERLY SUPPORT SYSTEMS FROM THE STRUCTURE.
- PROVIDE 1" SCHEDULE 40 PVC CONDENSATE DRAIN PIPE FOR EACH ROOFTOP UNIT LAID DIRECTLY ON ROOF TO NEAREST ROOF DRAIN. PROVIDE WATER TRAP AND CLEAN OUTS AS DETAILED. SECURE PVC PIPE TO DRAIN WITH NYLON STRAP.
- 6. NO PIPING SHALL BE ROUTED OVER THE TOP OF ELECTRICAL PANELS.
- 7. CONTRACTOR TO TEST WATER PRESSURE ON SITE AND PROVIDE PRESSURE REDUCING VALVE ON WATER SERVICE IF PRESSURE IS OVER 80 PSI.

1	TCHEN EQUIP. CHEDULE
ND	ITEM
2	ice maker
6	coffee brewer
9	espresso/cappuccino maker

PLUMBING FIXTURE SCHEDULE (OR EQUAL):

- HMC HANDICAP WATER CLOSET: TOTO, #CST744EL(R)N, "DRAKE CLOSE COUPLED TOILET", 1.28 GALLON FLUSH, 16-1/2" HIGH ELONGATED BOWL, FLOOR MOUNTED, FLOOR OUTLET, TANK TYPE, VITREOUS CHINA, SIPHON-JET ACTION, #SC534 OPEN FRONT SEAT WITH CHECK HINGE AND LESS COVER, CHROME PLATED ANGLE STOP AND RISER. HANDLE ON WIDE SIDE OF FIXTURE.
- HANDICAP LAVATORY, WALL HUNG: AMERICAN STANDARD, #0355.012, "LUCERNE", 20"X 18", VITREOUS CHINA, FRONT OVERFLOW, #2385.130 VANDAL-RESISTANT FAUCET WITH SINGLE METAL LEVER HANDLE #7723.018 OFFSET GRID ELBOW DRAIN AND 1-1/4" TAILPIECE, CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT (MOUNTED PARALLEL WITH WALL), CHROME PLATED ANGLE STOPS AND RISERS, INSULATE EXPOSED DRAIN, MATER SUPPLIES, AND VALVES WITH PROWRAP SEAMLESS MOLDED CLOSED CELL VINYL INSULATION.
- MB MOP BASIN: FIAT, #MSB-2424, MOLDED STONE MOP BASIN, 2" DRAIN, 24"x 24" BASIN, VINYL BUMPER GUARD, STERN WILLIAMS #T-10-VB FAUCET, SPRING CHECKS, VACUUM BREAKER, INTEGRAL STOPS, WALL BRACE & PAIL HOOK, WALL BRACKET WITH 30" HOSE.
- HOT WATER EXPANSION TANK: AMTROL, #ST-5, 2 GALLON EXPANSION TANK MITH DIAPHRAGM.
- WATER HEATER: AO SMITH #DEL-40, 40 GALLON STORAGE, 240 VOLT, SINGLE PHASE, (2) 4500 WATT ELEMENTS, NON SIMULTANEOUS, ASME TEMPERATURE AND PRESSURE RELIEF VALVE.
- REVERSE OSMOSIS WATER FILTRATION SYSTEM: PROVIDED BY OTHERS. CONNECT TO FILTERED COLD WATER AS REQUIRED. PROVIDE HOSE & PIPING AS REQUIRED TO MAKE CONNECTIONS.
- WATER FILTER: PROVIDED BY OTHERS. CONNECT TO COLD WATER AS REQUIRED. PROVIDE HOSE & PIPING AS REQUIRED TO MAKE CONNECTIONS.
- FLOOR SINK: SIOUX CHIEF:, #861 SQUARE PVC FLOOR SINK WITH STAINLESS STEEL MESH DEBRIS SCREEN, PVC HALF OPEN STRAINER.
- FLOOR DRAIN: SIOUX CHIEF, #842, PVC FLOOR DRAIN WITH ADJUSTABLE
- TOP AND CAST BRASS STRAINER.
- FD1 FLOOR DRAIN: SIOUX CHIEF, #842, PVC FLOOR DRAIN WITH ADJUSTABLE TOP AND CAST BRASS STRAINER. PROVIDE WITH #2692 QUAD CLOSE TRAP SEAL DEVICE.
- DUMP SINK: PROVIDED BY OTHERS, INSTALLED BY CONTRACTOR. PROVIDE 1-1/2" TAILPIECE, WASTE PIPING, CHROME PLATED ANGLE STOPS AND RISERS.
- 3-COMPARTMENT SINK: PROVIDED BY OTHERS, INSTALLED BY CONTRACTOR PROVIDE (3) 1-1/2" TAILPIECES, WASTE MANIFOLD PIPING, CHROME PLATED ANGLE STOPS AND RISERS.
- HAND SINK: PROVIDED BY OTHERS, INSTALLED BY CONTRACTOR. PROVIDE 1-1/2" TAILPIECE, WASTE PIPING, CHROME PLATED ANGLE STOPS AND RISERS.
- FPWH FREEZEPROOF WALL HYDRANT: JR SMITH #5609, 3/4" SIZE, NICKEL-BRONZE FACE, KEY OPERATED, INTEGRAL VACUUM BREAKER.

PIPING DOWNSTREAM OF BFP.

- REDUCED ZONE PRESSURE BACKFLOW PREVENTOR: WATTS #LF009, LEAD FREE BRONZE BODY CONSTRUCTION, TWO, IN-LINE INDEPENDENT CHECK VALVES, REPLACEABLE CHECK SEATS WITH AN INTERMEDIATE RELIEF VALVE, AND BALL VALVE TEST COCKS.
- BACKFLOW PREVENTOR: WATTS #SD-3, ASSE 1022 LISTED DUAL CHECK VALVE WITH ATMOSPHERIC PORT & STRAINER FOR CARBONATED BEVERAGE MACHINES. USC APPROVED RPZ ACTING AS AN ISOLATION BFP. NO COPPER
- MIXING VALVE: WATTS, #LFUSG-B, THERMOSTATIC CONTROLLED MIXING VALVE. LEAD FREE BRONZE BODY, LOCKED TEMPERATURE ADJUSTMENT CAP (VANDAL RESISTANT), COPPER ENCAPSULATED THERMOSTAT ASSEMBLY WITH BRASS SHUTTLE, STAINLESS STEEL SPRINGS, INTEGRAL CHECK VALVES ON HOT AND COLD INLETS. (SET TO 110°F). ASSE 1070 LISTED.
- <u>DM-1</u> DIPPERWELL SINK: PROVIDED BY OTHERS, INSTALLED BY CONTRACTOR. PROVIDE 1-1/2" TAILPIECE, WASTE PIPING, CHROME PLATED ANGLE STOPS AND RISERS.
- RS-1 RINSER SINK: PROVIDED OTHERS, INSTALLED BY CONTRACTOR. PROVIDE 1-1/2" TAILPIECE, WASTE PIPING, CHROME PLATED ANGLE STOPS AND RISERS.

PLUMBING FIXTURE BRANCH PIPING SCHEDULE						
FIXTURE	WASTE	VENT	CM	HM		
WATER CLOSET (TANK TYPE)	4"	2"	1/2"			
LAVATORY	I-I/4"	I-I/4"	1/2"	1/2"		
SINK	I-I/2"	I-I/2"	1/2"	1/2"		
FLOOR DRAIN/SINK	2"	2"				
MOP BASIN	2"	2"	1/2"	1/2"		

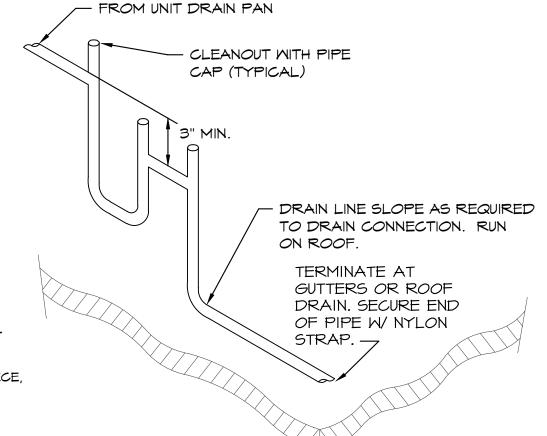
NOTE: INDIVIDUAL VENTS FOR FIXTURES ON PLANS AND RISER DIAGRAMS HAVE BEEN INCREASED WHERE HORIZONTAL VENT LENGTH IS IN EXCESS OF THE MAXIMUM DISTANCE INDICATED BY THE CODE.

PLUMBING PLAN NOTES:

- REFER TO CIVIL DRAWING FOR CONTINUATION OF 4" SANITARY WASTE PIPING. MAINTAIN MINIMUM 30" COVER.
- REFER TO CIVIL DRAWING FOR CONTINUATION OF 1" DOMESTIC CM PIPING. MAINTAIN MINIMUM 42" COVER.
- LOCATION OF 4" VTR. VERIFY 10' CLEARANCE FROM ALL OUTDOOR AIR INTAKES. SEAL PENETRATION WEATHERTIGHT.
- PROVIDE $\frac{1}{2}$ " FILTERED WATER WITH SHUT-OFF VALVE DOWN IN WALL TO ICE MAKER AND COFFEE BREWER. VERIFY EQUIPMENT HAS AIRGAP. IF NO AIRGAP IS FOUND, INSTALL BFP AS REQUIRED BY LOCAL JURISDICTION. PROVIDE 3/4" INDIRECT DRAIN FROM ICE MAKER TO FLOOR DRAIN AS REQUIRED.
- INSTALL SHUT-OFF VALVE AND 1" RPZ BFP AS REQUIRED. ROUTE DISCHARGE PIPING TO FLOOR DRAIN WITH AIR GAP.
- ROUTE 1-1/2" DRAIN FROM EACH BOWL OF 3 COMP. SINK TO 2" MANIFOLD AND DISCHARGE AT FLOOR SINK WITH AIR GAP AS REQUIRED.
- CONNECT RO PIPING TO KITCHEN EQUIPMENT WITH AS REQUIRED. VERIFY EQUIPMENT HAS AIRGAP. IF NO AIRGAP IS FOUND, INSTALL BFP AS REQUIRED BY LOCAL
- CW PIPING TO BE ROUTED UNDER COUNTER.
- CONNECT 1/2" CM TO MATER FILTER AS REQUIRED.
- INSTALL WATER HEATER, SECURED TO WALL ABOVE MOP BASIN AS REQUIRED.
- ROUTE PIPING ON INTERIOR SIDE OF WALL FOR FREEZE PROTECTION.
- ROUTE 1" CONDENSATE FROM ROOFTOP UNIT TO NEAREST SCUPPER AS REQUIRED AND AS PER DETAIL.
- ROUTE DRAIN PIPING TO FLOOR SINK WITH AIR GAP AS REQUIRED.
- CONNECT CM PIPING TO RINSER SINK AND ROUTE DRAIN TO FLOOR SINK WITH AIR GAP AS REQUIRED.
- CONNECT CM PIPING TO DIPPERWELL SINK AND ROUTE DRAIN TO FLOOR SINK WITH AIR GAP AS REQUIRED.
- CAP 1" IRRIGATION PIPE FOR FUTURE CONNECTION. MAINTAIN MIN. 42" COVER.
- PROVIDE 1" RPZ FOR IRRIGATION BELOW MAIN WATER SERVICE BACKFLOW, ROUTE DISCHARGE PIPING TO FLOOR DRAIN WITH AIR GAP.
- CONNECT GAS TO EQUIPMENT AS REQUIRED AND AS DETAILED.
- GAS PIPING UP THROUGH ROOF. SEAL PENETRATION MEATHERTIGHT AS REQUIRED.

ROOF

L(I.E.= 1071.50') -----RTU-1 **L----**18" ABOVE GRADE PLUMBING FLOOR PLAN



CONDENSATE DRAIN DETAIL (RTU)

PLUMBING SYMBOLS

- 	SOIL AND WASTE PIPING BELOW FLOOR/GRADE
	SOIL AND WASTE PIPING ABOVE FLOOR/GRADE
	SANITARY VENT PIPING ABOVE GRADE
	SANITARY VENT PIPING BELOW GRADE
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING
	PIPING TURNING DOWN
	PIPING TURNING UP
	TEE TOP CONNECTION
	INION

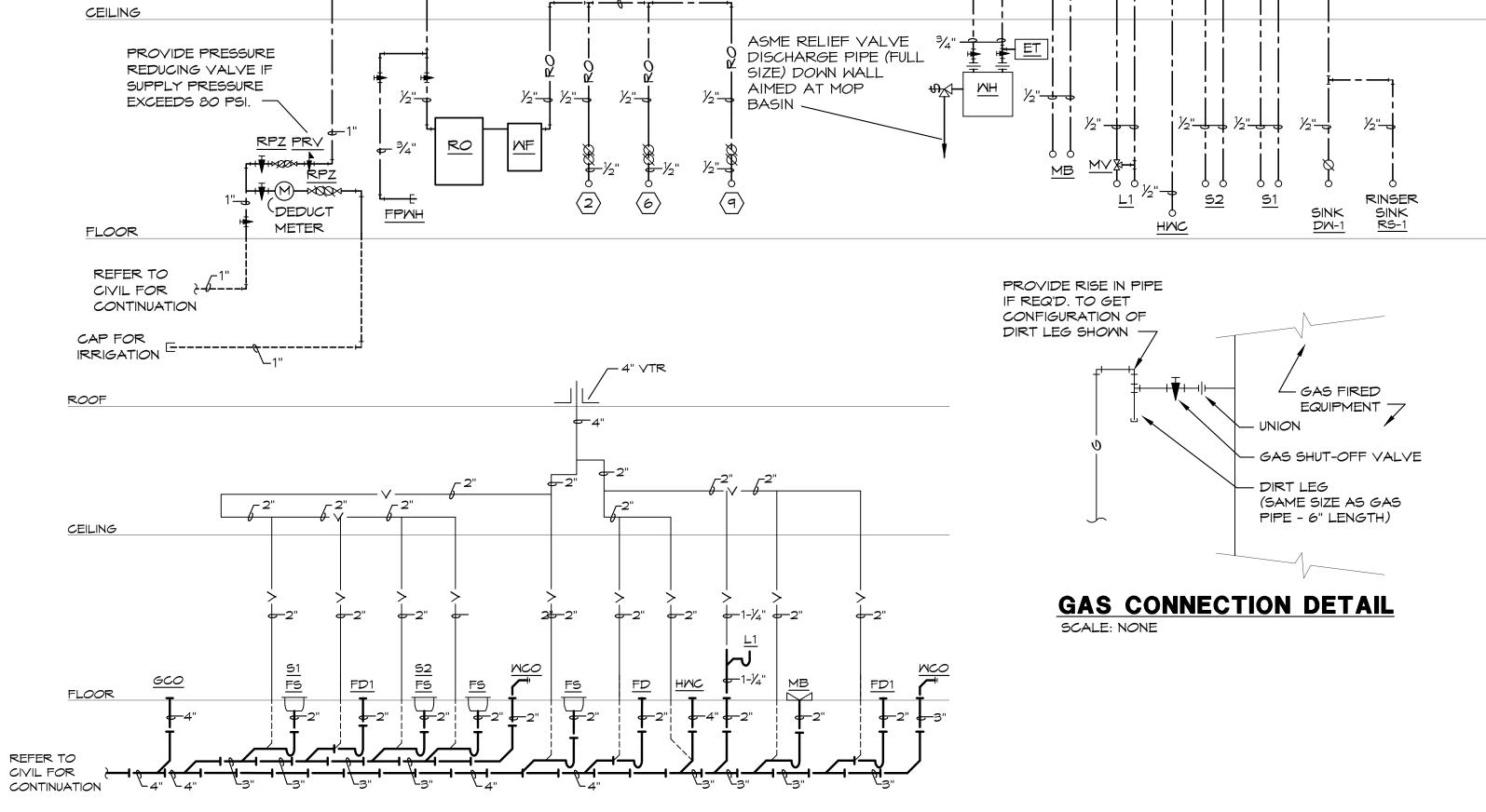
BACKFLOW PREVENTER

$FD_{ extstyle \oslash}$	FLOOR DRAIN
FCO O	FLOOR CLEAN OUT
MCO +	MALL CLEAN OUT
	VALVE
_	PRESSURE REGULATOR
$-\!$	CHECK VALVE

600 O

MATCH MARKS ON PLUMBING RISER DIAGRAM FILTERED WATER RO WATER GAS PIPING <u>—</u> G—

GRADE CLEAN OUT



PEX PIPING REQUIREMENTS

PIPE SIZES GIVEN ON THE DRAWINGS ARE NOMINAL COPPER PIPE SIZE. IF PEX PIPING IS USED, INCREASE PEX PIPING ONE SIZE ABOYE LISTED SIZES AS REQUIRED TO EQUAL OR EXCEED COPPER PIPE INSIDE DIAMETER

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MP-002 JOB NUMBER 5460-19

APPROVED BY:

8/14/2020 KNUDSEN

Off Fox

08.14.20 **DESIGNED BY:** MS/BH DRAWN BY: MS/BH

EK/DS

SHEET NUMBER

B. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATES OF COMPLIANCE OR APPROVAL AS REQUIRED BY THE AUTHORITIES.

C. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST APPROVED EDITION OF THE NATIONAL ELECTRIC CODE (NEC.). AND ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE

GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE. D. ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK.

E. DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, CONDUIT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNDAMAGED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERING SHALL BE REMOVED BEFORE FINAL

F. PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILINGS, AND ROOFS AS NECESSARY, PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY

G. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.

2. OPERATION AND MAINTENANCE MANUALS:

A. DURING THE COURSE OF CONSTRUCTION, COLLECT AND COMPILE OPERATING INSTRUCTIONS, WIRING DIAGRAMS, CATALOG CUTS, LUBRICATION AND PREVENTIVE MAINTENANCE INSTRUCTIONS, PARTS LISTS, ETC. FOR ALL EQUIPMENT FURNISHED UNDER THIS CONTRACT.

IN THE OPERATION AND MAINTENANCE MANUALS. C. ALL LITERATURE LISTED ABOVE AND ALL PAPERS LISTING WARRANTIES, ETC. SHALL BE BOUND IN A

B. ALL LITERATURE AND INSTRUCTIONS SHIPPED WITH THE EQUIPMENT SHALL BE SAVED FOR INCLUSION

3-RING BINDER AND LABELED WITH THE PROJECT NAME, ADDRESS, ARCHITECT, ENGINEER, CONTRACTORS, ETC.

3. MANUFACTURERS:

A. MANUFACTURERS, MODEL NUMBERS, ETC. INDICATED OR SCHEDULED ON THE DRAWINGS SHALL BE INTERPRETED AS HAVING ESTABLISHED A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION. ARTICLES, FIXTURES, ETC. OF EQUAL QUALITY BY MANUFACTURERS SHALL BE ACCEPTABLE, SUBJECT TO STRUCTURAL AND ELECTRICAL CONSTRAINTS OF THE PROJECT DESIGN,

A. ALL CIRCUITS SHALL BE TESTED FOR CONTINUITY, SHORTS, AND GROUNDS BEFORE CONNECTING TO THE PROPER PHASE AS DESIGNED TO BALANCE THE LOADING BETWEEN PHASES.

B. POWER AND LIGHTING PANELS SHALL BE PROPERLY PHASED TO DISTRIBUTE THE LOAD AND SHALL BE CONNECTED AND ADJUSTED TO OPERATE AS SPECIFIED.

C. ALL MOTORS AND SIMILAR EQUIPMENT SHALL BE CHECKED FOR PROPER PHASE ROTATION AND OPERATION.

5. RACEMAYS: A. CONDUIT INSIDE THE BUILDING SHALL BE METALLIC TUBING (EMT), BEARING THE UL LABEL, WITH

COMPRESSION TYPE FITTINGS OR SCREW SET FITTINGS. B. CONDUIT EXPOSED TO THE MEATHER, INSTALLED UNDERGROUND, IN CONCRETE, OR USED FOR SERVICE

ENTRANCE SHALL BE STANDARD RIGID CONDUIT (GALVANIZED) WITH THREADED FITTINGS. C. UNDERGROUND CONDUIT MAY BE POLYVINYL CHLORIDE WITH A DEFLECTION TEMPERATURE, UNDER LOAD AT 264 PSI, OF 78 DEGREES C, AND A TENSILE STRENGTH OF 5,200 PSI. JOINTS SHALL BE FLUSH SOLVENT MELDED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONDUIT SHALL BE EQUAL TO CARLON POWER AND COMMUNICATIONS DUCT TYPE DB (DIRECT BURIAL). CONDUIT AND FITTINGS

D. FLEXIBLE METAL CONDUIT SHALL ONLY BE USED FOR CONNECTIONS TO MOTORS, FRANSFORMERS, AND LIGHT FIXTURES. MAXIMUM LENGTH SHALL BE 6'-0".

SHALL BE PRODUCED BY THE SAME MANUFACTURER.

6. CONDUCTORS

A. WIRES SHALL BE CONTINUOUS WITHOUT SPLICES OR TAPS IN CONDUIT RUNS. ALL SPLICES SHALL BE MADE IN JUNCTION, PULL, OR OUTLET BOXES. ALL WIRE SHALL BE INSTALLED IN CONDUIT WIREWAYS, OR OTHER PROTECTIVE COVER SANCTIONED BY CODES.

B. CONDUCTORS FOR LIGHTING AND POWER SHALL BE COPPER, MINIMUM NO. 12 A.W.G., 600 VOLT.

C. NO. 10 GAUGE AND SMALLER CONDUCTORS SHALL BE TYPE THMN (MET LOCATIONS) OR THHN (DRY LOCATIONS), SOLID CONDUCTOR, UNLESS OTHERWISE INDICATED.

D. NO. 8 GAUGE AND LARGER CONDUCTORS SHALL BE TYPE THMN (WET LOCATIONS) OR THHN (DRY LOCATIONS), STRANDED, UNLESS OTHERWISE INDICATED.

E. SERVICE ENTRANCE AND PANEL FEEDER CONDUCTORS, NO. 3 GAUGE AND LARGER SHALL BE TYPE XHHM-2 (MET LOCATIONS) OR THHN (DRY LOCATIONS), STRANDED COPPER, UNLESS OTHERWISE INDICATED.

A. MC CABLE SHALL CONSIST OF INTERLOCK ARMORED CABLE MADE OF THREE OR FOUR TYPE

THHN SOLID (#8 AMG AND LARGER MAY BE STRANDED) COPPER CONDUCTORS INSULATED WITH HEAT AND MOISTURE RESISTANT POLYVINYL CHLORIDE (PVC), WITH NYLON OR EQUIVALEN UL LISTED JACKET, PER UL STANDARD 83. THE THREE CONDUCTORS SHALL BE TWISTED TOGETHER WITH THE COPPER GROUNDING CONDUCTOR, SUITABLE FILLERS, AND WRAPPED IN BINDER TAPE. THE ASSEMBLY SHALL BE ARMORED WITH SPIRALLY WRAPPED INTERLOCKED ARMOR OR ALUMINUM OR GALVANIZED STEEL.

B. CABLES SHALL BE TESTED IN ACCORDANCE WITH UL STANDARD 1569 FOR TYPE MC CABLE AND RATED AT 600 VOLTS, 90 DEG. C FOR DRY LOCATIONS AND 75 DEG. C FOR WET LOCATIONS

8. MIRING DEVICES:

A. WALL SMITCHES SHALL BE SPECIFICATION GRADE, QUIET TYPE, FLUSH TOGGLE SMITCH, RATED FOR 20 AMPS, WITH THERMOPLASTIC COVER PLATES.

1) SINGLE POLE: HUBBELL #CS1221-X, OR EQUAL 2) THREE WAY: HUBBELL #CS1223-X, OR EQUAL

B. RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX, GROUNDING, THREE-WIRE TYPE, RATED FOR 20 AMPS, WITH THERMOPLASTIC COVER PLATES. HUBBELL #CR5352-X, OR EQUAL

C. GROUND FAULT INTERRUPTER RECEPTACLES (GFI) SHALL BE HUBBELL #GF20-XL. DEVICE COVER PLATES SHALL BE AS HEREINBEFORE SPECIFIED.

D. ISOLATED GROUND RECEPTACLES (IG) SHALL BE HUBBELL #CR5352IG, ORANGE COLOR. DEVICE COVER PLATES SHALL BE AS HEREINBEFORE SPECIFIED.

E. RECEPTACLES OUTSIDE BUILDING AND WHERE NOTED AS WEATHERPROOF, SHALL BE LISTED WEATHER-RESISTANT' HUBBEL #GFTR20-X OR EQUAL AND SHALL BE INSTALLED IN A WEATHERPROOF ENCLOSURE WHICH SHALL BE INTERMATIC #WP1010MC OR #WP1010HMC DIECAST METAL WEATHERPROOF RECEPTACLE COVER. COVER SHALL BE WEATHER PROOF RATED WHILE IN USE.

F. EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT TYPE PER NEC 2008. DEVICES SHALL BE HUBBELL #DR20XWRTR, OR EQUAL.

G. VERIFY DEVICES AND DEVICE COVERPLATES COLOR WITH ARCHITECT.

A. HOT DIPPED GALVANIZED STEEL BOXES. PROVIDE TYPE TO SUIT CONDITIONS FOR INSTALLATION. B. ALL BOXES SHALL BE FLUSH MOUNTED, UNLESS INDICATED OTHERWISE.

ELECTRICAL SPECIFICATIONS (CONTINUED)

10. PANELBOARDS

A. FURNISH AND INSTALL CIRCUIT BREAKER PANELBOARDS AS SHOWN ON THE DRAWINGS. PANELBOARDS SHALL BE LISTED BY UL AND SO LABELED, AND SHALL BE FULLY RATED FOR THE VOLTAGE AND CURRENT CAPACITY INDICATED ON THE PANEL SCHEDULE. PANELBOARDS SHALL BE EQUAL TO GENERAL ELECTRIC TYPE AQ WITH BOLT IN TYPE BREAKERS. PANELBOARD LUGS SHALL BE RATED AT 75° C.

1) CIRCUIT BREAKER INTERRUPTING CAPACITIES SHALL MEET OR EXCEED THE AVAILABLE RMS SYMMETRICAL FAULT CURRENTS INDICATED AND AS REQUIRED TO MEET OR EXCEED THE AVAILABLE FAULT CURRENT FROM LOCAL UTILITY.

B. CIRCUIT BREAKERS SHALL MEET APPLICABLE PORTIONS OF UL STANDARD 489 AND NEMA AB-L. CIRCUIT BREAKERS SHALL BE BOLT-ON GROUP MOUNTED AMBIENT MAGNETIC WITH COMMON TRIP ULL RATED TO CARRY 80% OF NAMEPLATE RATING CONTINUOUSLY IN FREE AIR AT 40° C. CIRCUIT BREAKERS SHALL BE TRIP INDICATING AND FULLY INTERCHANGEABLE WITHOUT DISTURBING ADJACENT UNITS. WIRE TERMINALS SHALL BE RATED 75 DEGREES C. THE OPERATING MECHANISM SHALL BE TRIP-FREE SO THAT CONTACTS CANNOT BE HELD CLOSED AGAINST ANY ABNORMAL OVERCURRENT OR SHORT CIRCUIT

a) BREAKERS SHALL MEET APPLICABLE NEMA AND/OR UL SPECIFICATIONS.

C. PANELBOARD BOXES SHALL BE GALVANIZED SHEET STEEL WITH AMPLE WIRING GUTTER SPACE IN ACCORDANCE WITH NEC. FRONTS SHALL BE OF SHEET STEEL PAINTED LIGHT GREY OVER A SUITABLE RUST INHIBITOR PRIMER. PANELBOARDS SHALL BE EQUIPPED WITH ONE PIECE DOOR. CYLINDER TUMBLER TYPE LOCK, DIRECTORY CARD-HOLDER AND QUARTER-TURN ADJUSTABLE TRIM CLAMPS

D. PANELBOARD INTERIORS SHALL CONSIST OF REINFORCED GALVANIZED SHEET STEEL FRAMES WITH ALUMINUM BUS BARS AND CIRCUIT BREAKERS, PROPERLY SUPPORTED TO PREVENT VIBRATIONS AND BREAKAGE IN HANDLING. BUS BARS SHALL BE SEQUENCE PHASED. PANELBOARD SHALL HAVE A FULL SIZED SOLID ALUMINUM NEUTRAL AND GROUND BUS.

E. BUS BAR BRACING SHALL BE UL LISTED AS INDICATED ON DRAWINGS. ADDITIONAL BRACING SHALL BE PROVIDED AS REQUIRED TO MEET OR EXCEED INDICATED AVAILABLE FAULT

F. DIRECTORY CARDS SHALL BE COMPLETELY FILLED IN BY TYPEWRITER, LISTING CIRCUIT NUMBERS AND LOAD SERVED, INCLUDING EXISTING CIRCUITS. CIRCUIT BREAKERS SHALL BE IDENTIFIED BY CIRCUIT NUMBER I ABELS AS HEREINBEFORE SPECIFIED

A. DISCONNECTS SHALL BE EXTERNALLY OPERATED, QUICK-MAKE, QUICK-BREAK, SAFETY, WITH PROVISIONS FOR PAD LOCKING. FUSED AND NON-FUSED DISCONNECT SWITCHES SHALL BE PROVIDED AS INDICATED. B. INDOOR SMITCHES SHALL BE NEMA I AND OUTDOOR SMITCHES SHALL BE NEMA 3R, UNLESS INDICATED

12. FUSES:

13. LIGHT FIXTURES:

14. SLEEVES:

15. GROUNDING

OTHERWISE.

A. FUSES PROTECTING CIRCUIT BREAKER PANELS SHALL BE CURRENT LIMITING U.L. CLASS RK-1 FUSES WITH 200,000 AMPERES RMS SYM INTERRUPTING CAPACITY. FUSING ELEMENTS SHALL BE SILVER FOR RATINGS ABOVE 60 AMPERES.

B. ALL OTHER FUSES SHALL BE U.L. CLASS RK-5, DUAL-ELEMENT WITH A MINIMUM TIME-DELAY OF 10 SECONDS AT 500% RATING. FUSES SHALL HAVE CURRENT-LIMITING SHORT-CIRCUIT LINKS AND 200,000 AMPERES RMS SYM INTERRUPTING CAPACITY. FUSING ELEMENTS SHALL BE COPPER.

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

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

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

D. ALL FLUORESCENT LAMPS SHALL BE 3500 K COLOR TEMPERATURE WITH A MINIMUM COLOR RENDERING INDEX (CRI) OF 82 OR AS INDICATED ON LIGHT FIXTURE SCHEDULE.

A. PROVIDE, SET, AND PROPERLY LOCATE PIPE SLEEVES AS REQUIRED FOR THIS WORK.

B. INTERIOR PARTITIONS: 16 GAGE GALVANIZED STEEL, PACK BETWEEN CONDUIT AND SLEEVE WITH FIRE SAFING AND CAULK AT EACH END WITH FIRE RESISTANT SEALANT.

C. ROOF: PROSET OR EQUAL, MANUFACTURED PVC SCHEDULE 40 PIPE SLEEVE WITH WEATHERPROOF SEAL. COORDINATE WITH ROOFING CONTRACTOR AND FLASH AS REQUIRED TO MAINTAIN ROOF WARRANTY.

A. GROUND ALL ELECTRICAL APPARATUS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC.) 250, AND ANY LOCAL REQUIREMENTS. INSURE CONTINUOUS BOND WHERE FLEXIBLE CONDUIT IS USED. PROVIDE BONDING JUMPER INSIDE ALL FLEXIBLE CONDUIT.

B. BOND METAL PIPING SYSTEMS IN COMPLIANCE WITH NEC 250.4(A)(4).

ELECTRICAL GENERAL NOTES:

CONTRACTOR PRIOR TO ROUGH-IN.

1. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT INTERFERENCES.

2. IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO PROPERLY BALANCE ALL BRANCH CIRCUITS BETWEEN THE PHASES OF THE SYSTEM REGARDLESS OF CIRCUITING INDICATED.

3. ALL EXPOSED RACEWAYS SHALL BE IN EMT CONDUIT, MC CABLE IS NOT PERMITTED IN EXPOSED AREAS.

4. ELECTRICAL CONTRACTOR TO COORDINATE MANUFACTURER ELECTRICAL REQUIREMENTS FOR HVAC EQUIPMENT BEING FURNISHED WITH MECHANICAL

5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF LIGHT FIXTURES AND DEVICES.

6. REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR REQUIREMENTS FOR SUPPORTING TRANSFORMERS, EQUIPMENT, ETC. FROM THE STRUCTURE. PROVIDE ADDITIONAL STEEL AS REQUIRED TO PROPERLY SUPPORT SYSTEMS FROM THE STRUCTURE.

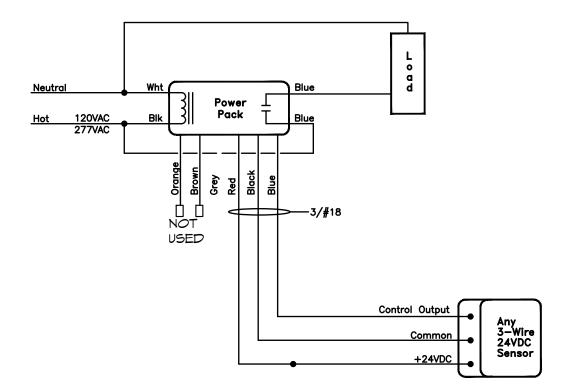
7. EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL PER NEC 200.4.

8. KITCHEN EQUIPMENT - VERIFY ALL ELECTRICAL REQUIREMENTS AND ROUGH-IN LOCATION PRIOR TO WORK.

9. ALL BRANCH CIRCUITS SHALL BE SIZED TO ALLOW FOR A MAXIMUM OF 3% VOLTAGE DROP. ALL FEEDERS SHALL BE SIZED TO ALLOW FOR A MAXIMUM OF 2% VOLTAGE DROP. ELECTRICAL CONTRACTOR SHALL VERIFY WIRING INDICATED IS SUFFICIENT AND INCREASE CONDUCTOR SIZE AS REQUIRED BASED OFF ACTUAL INSTALLED LENGTH OF CONDUCTORS.

ELECTRICAL EQUIPMENT SCHEDULE

GENERAL DESCRIPTION SUGGESTED MAKE & MODEL # **SMOOTHIE BLENDER** VITA-MIX #36019 ICE MAKER SCOTSMAN C0530SA-1/B530P COUNTERTOP COMBO OVEN MERRY CHEF E2S UNDER COUNTER REFRIGERATOR TRUE #TUC-48-ADA UNDER COUNTER REFRIGERATOR TRUE #TUC-60-ADA UNDER COUNTER REFRIGERATOR TURBO AIR #MUR-28-M **COFFEE GRINDER** BUNN #G2 HD #22102.0000 **COFFEE BREWER** FETCO #CBS-2132XTS (1 GAL) POS REGISTER / SMARTCARD CLOVER #MINI CLOVER ESPRESSO / CAPPUCCINO MAKER FRANKE #S700 REFRIGERATOR ARCTIC AIR #AR 49 (14A) **FREEZER** ARCTIC AIR #AF 49 FREEZER ARCTIC AIR #AF 23 FILTRATION SYSTEM OPTIPURE #BWS350/50 ORDER SCREEN VIEW SONIC #VSD242 **DRIVE THRU TIMER** 32" TV **HEADSET SHELF DUPLEX RECEPTACLE**



ELECTRICAL SYMBOLS LIST

CIRCUITING & NOTES

SPECIAL MOUNTING HEIGHT FOR ASSOCIATED DEVICE (CENTERLINE OF DEVICE) GROUND FAULT CIRCUIT INTERRUPTER DEVICE WEATHERPROOF ENCLOSURE ON DEVICE WEATHERPROOF RESISTANT DEVICE ELECTRICAL FLOOR PLAN NOTE WITH DESIGNATION CONDUIT CONCEALED WHERE POSSIBLE OR AS NOTED, ARROWS INDICATE HOME RUN TO PANEL. CIRCUIT NUMBERS INDICATED #12 MIRE IN CONDUIT, UNLESS NOTED OTHERMISE ON DRAWINGS OR SPECIFICATION GROUNDING CONDUCTOR, #12 WIRE UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATION

<u>LIGHTING</u> EMERGENCY TWIN HEAD LIGHT FIXTURE EXIT LIGHT WITH DIRECTIONAL ARROWS INDICATED FLUORESCENT STRIP FIXTURE WITH TYPE DESIGNATION FLUORESCENT FIXTURE WITH TYPE DESIGNATION NIGHT LIGHT, CONNECT TO UNSWITCHED CIRCUIT CEILING OR RECESSED FIXTURE WITH TYPE DESIGNATION WALL MOUNTED FIXTURE WITH TYPE DESIGNATION

CONDUIT ROUTED UNDER FLOOR/GRADE

POWER DEVICES DUPLEX RECEPTACLE, BOTTOM OF BOX AT 16" AFF, UNLESS NOTED

FOURPLEX RECEPTACLE, BOTTOM OF BOX AT 16" AFF, UNLESS NOTED OTHERWISE DEVICE MOUNTED ABOVE COUNTER AND/OR SPLASH GUARD HEAVY DUTY OUTLET - NEMA CONFIGURATION SIZE PER EQUIPMENT MANUFACTURER'S RECOMMENDATION

PANEL BOARD, TOP OF BOX 6'-0" AFF JUNCTION BOX

NON-FUSED DISCONNECT SWITCH

FUSED DISCONNECT SMITCH MOTOR WITH DESIGNATION

CONTROLS INTERMATIC #EK4136S, STEM MOUNT PHOTOCELL, UNIVERSAL VOLTAGE, LOCATED ON ROOF IN SHADED AREA FACING NORTH SINGLE POLE WALL SWITCH, TOP OF BOX AT 48" AFF TWO POLE WALL SWITCH, TOP OF BOX AT 48" AFF MANUAL MOTOR STARTER WITH OVERLOADS WALL MOUNTED 0-10V DIMMER, TOP OF BOX AT 48" AFF

COMMUNICATIONS

CONDUCTOR COILED AT SENSOR.

. DUAL TECHNOLOGY/ULTRASONIC CEILING SENSORS SHALL BE MOUNTED 6' FROM SUPPLY/EXHAUST AIR DIFFUSERS. 2. LOM VOLTAGE CEILING SENSORS SHALL BE PROVIDED WITH 6' SLACK

INFRARED OCCUPANCY SENSOR, ACUITY #MST-PDT, TOP OF BOX AT

DATA/TELEPHONE OUTLET WITH 3/2" CONDUIT STUBBED UP TO ABOVE

ACCESSIBLE CEILING, BOTTOM OF BOX AT 16", UNLESS NOTED

DUAL TECHNOLOGY CEILING MOUNT OCCUPANCY SENSORS, ACUITY #CM-PDT-10 OCCUPANCY SENSOR POWER PACK, ACUITY #PP20 OR EQUAL, PROVIDE LOW VOLTAGE WIRING TO OCCUPANCY SENSORS AND MOMENTARY SWITCHES

OTHERWISE. PROVIDE WITH PULL STRING

CEILING OCCUPANCY SENSOR WIRING DIAGRAM SCALE: NONE

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 $\sum_{i=1}^{4}$

8/13/2020 HERMANN NUMBER PE-201803561

08.14.20 **DESIGNED BY:**

DRAWN BY: APPROVED BY: EK/DS SHEET NUMBER

16 DUPLEX RECEPTACLE MOUNTED ABOVE HEADSET SHELF. VERIFY EXACT LOCATION.

SPST 8 POLE LIGHTING CONTACTOR SQUARE D TIMECLOCK LG80-V02 20A-8 POLE, NEMA 1 ENCLOSURE

EXTERIOR LIGHTING CONTROL DIAGRAM

	OUTSIDE	INSIDE
PROVIDE CONCRETE PAD PER UTILITY CO STANDARDS UTILITY XFMR	NEMA 3R 200A DISC. SMITCH FUSED AT 200 AMPS CONTAINED METER	PANEL P 120/208V 3\$\text{q}\$, 4W 200A MLO PRIOR TO START OF WORK COORDINATE ALL ELECTRICAL SERVICE WORK WITH CARMEN GEIER \$16-737-7777 EXT. 14402 CARMEN.GEIRER@EVERGY.COM
·	#4 CU TO FOUNDATION ————————————————————————————————————	#6 CU GROUND TO DRIVEN GROUND ROD PER NEC 250

ELECTRICAL RISER DIAGRAM

	PANEL: P	VOLTS: 120/208V			PH:	ЗФ	MIRE:	4M	LOCATION:		BACK MALL			MOUNTING: FLUSH	
	BUS: 225A	MAIN:	200A	MLO	IC:	10,0	000	RMS SY	M AMPS					FEEDER: SEE RISER DIAGR	MA.
CKT	DESCRIPTION	AMPS	POLE	MIRE	ФА	ФВ	ФС	ФА	ФВ	ФС	MIRE	POLE	AMPS	DESCRIPTION	CK NC
1	INTERIOR LIGHTING	20	1	12	348			1,200			12	1	20	EXTERIOR LIGHTING	2
3	SIGNAGE	20	1	12		1,200			1,200		12	1	20	SIGNAGE	4
5	SIGNAGE	20	1	12			1,200			1,200	12	1	20	SIGNAGE	6
7	SMOOTHIE BLENDER #1	20	1	12	1,800			1,824			12	1	20	ICE MACHINE #2	8
9	SMOOTHIE BLENDER #1	20	1	12		1,800			500		12	1	20	ORDER SCREEN #26/DT TIMER #30	10
11	UC FRIDGE #4A [GF]	20	1	12			300			3,000	10	2	30	COUNTERTOP COMBO OVEN #3	12
13	UC FRIDGE #4B [GF]	20	1	12	288			3,000							14
15	COFFEE GRINDER #5	20	1	12		1,080			2,700		10	2	30	COFFEE BREWER #6	16
17	COFFEE GRINDER #5	20	1	12			1,080			2,700					18
19	POS #8	20	1	12	500			500			12	1	20	COUNTER QUAD	20
21	SPARE	20	1						2,200		10	2	30	ESPRESSO MAKER #9	22
23	SPARE	20	1							2,200					24
25	GENERAL OUTLETS	20	1	12	180			1,440			12	1	20	FREEZER #14A [GF]	26
27	FREEZER #14B [GF]	20	1	12		1,080			840		12	1	20	REFRIGERATOR #13 [GF]	28
29	LIGHTING TIME CLOCK	20	1	12			250			1,200	10	1	20	DIRECTIONAL SIGNAGE	30
31	MATER HEATER	20	1	12	500							1	20	SPARE	32
33	POLE LIGHTS	20	1	10		339			500		12	1	20	INTERCOM/MENU BOARD	34
35	EXTERIOR RECEPTS	20	1	12			720			1,800	12	1	20	AIR CURTAIN	36
37					3,120			540			12	1	20	MINDOM RECS	38
39	RTU-1	40	3	8		3,120			500		12	1	20	IRRIGATION REC	40
41							3,120			720	12	1	20	TELEPHONE QUADS	42
43	SPARE	20	1					500			12	1	20	UC FRIDGE #4C [GF]	44
45	WATER FILTRATION #25	20	1	12		180			2,200		10	2	30	ESPRESSO MAKER #9	46
47	SMOOTHIE BLENDER #1	20	1	12			1,800			2,200					48
49	MONUMENT SIGN	20	1	10	1,200			500			12	1	20	NETWORK SERVICE CABINET	50
51	FLAG POLE LIGHTS	20	1	12		52						1	20	SPARE	52
53	SPARE	20	1									1	20	SPARE	54
55	BUSSED SPACE													BUSSED SPACE	56
57	BUSSED SPACE													BUSSED SPACE	58
59	BUSSED SPACE													BUSSED SPACE	60
OTES	Э:	•		•	7,936	8,851	8,470	9,504	10,640	15,020		•			•
[GF]-GFC BRKR, [HL]+HANDLE LOCK					17,4	17,440 19,491			23,490 TO			FOTAL CONNECTED LOAD:		CTED LOAD: 60,421	VA
												N	EC DEN	1AND LOAD: 51,298	VA

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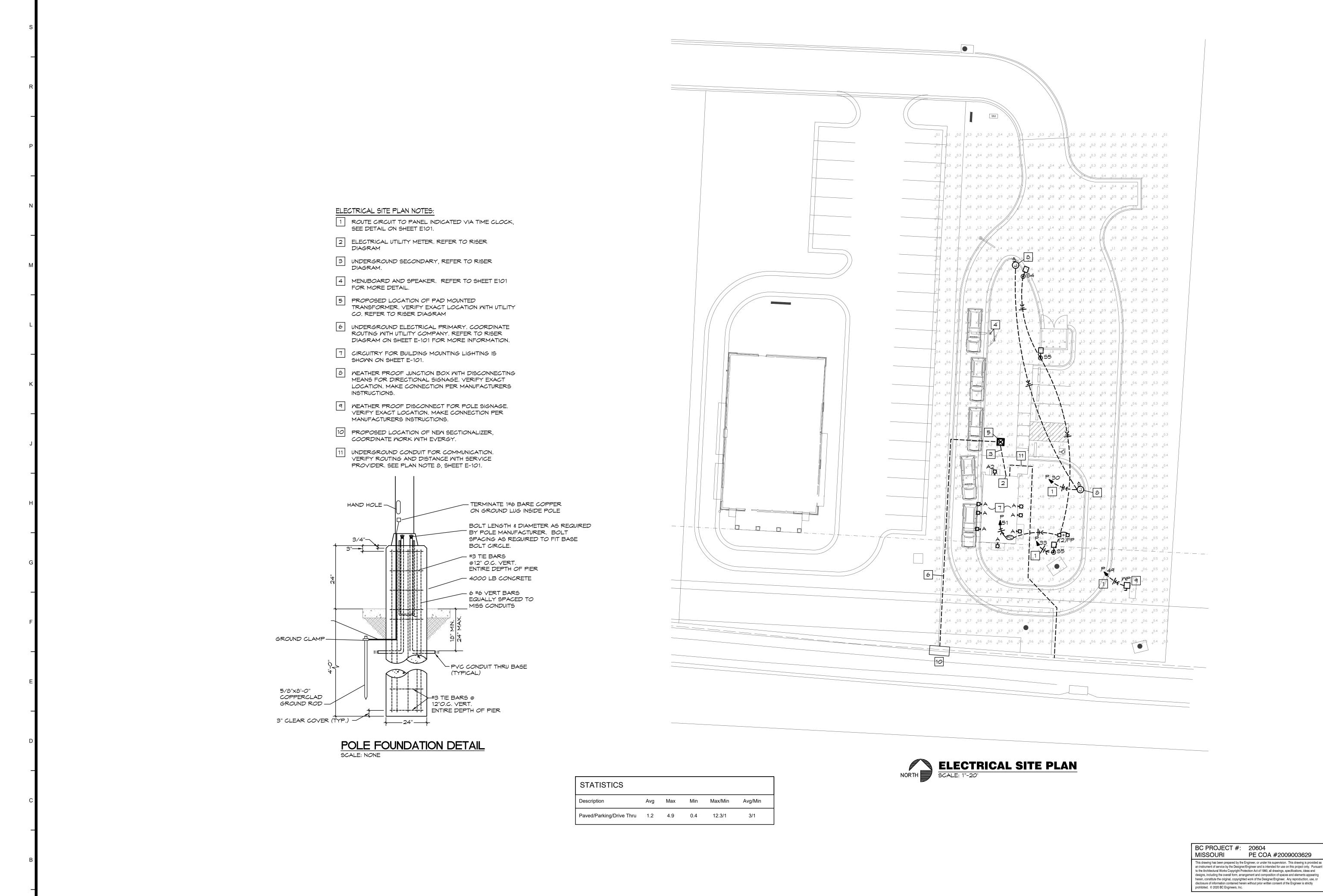
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DESIGNED BY: DRAWN BY:

APPROVED BY:

08.14.20

8/13/2020





8/13/2020

Coffee W Foxwood

DESIGNED BY: DRAWN BY: APPROVED BY: EK/DS

SHEET NUMBER E-201

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