collins | webb ARCHITECTURE
307B SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

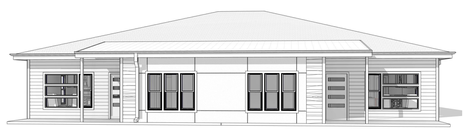
PERMIT DOCUMENTS

24 AUGUST 2023

COLLINS WEBB #: 21075













OWNER

GRIFFIN RILEY PROPERTY GROUP
21 SE 29TH TERRACE
LEE'S SUMMIT, MO 64082
P: 816.366.7900
www.griffinriley.com

ARCHITECT

COLLINS | WEBB ARCHITECTURE
307B SW MARKET STREET
LEE'S SUMMIT, MISSOURI 64063
P: 816.249.2270
www.collinsandwebb.com

ELECTRICAL ENGINEER

JSC ENGINEERS
1925 CENTRAL ST
KANSAS CITY, MO 64108
P: 816.272.5289
JSCENGINEERS.COM

STRUCTURAL ENGINEER

STAND STRUCTURAL ENGINEERING INC.
8234 ROBINSON STREET
OVERLAND PARK, KS 662074
P: 913.214.2169
www.stand-sei.com

CIVIL ENGINEER

SCHLAGEL ASSOCIATES
14920 W. 107TH STREET
LENEXA KS, 66215
P: 913.492.5158
www.Schlagelassociates.com

STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016024008
ARCHITECT
12/29/2025

ARCHITECTURAL ABBREVIATIONS

&	AND
<	ANGLE
AB	ANCHOR BOLT
ACOUS/ACST	ACOUSTICAL)
ACT	ACOUSTICAL CEILING TILE
ACP	ACOUSTICAL CEILING PANEL
ACS PNL	ACCESS PANEL
AD	AREA DRAIN
ADDL	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJUSTABLE
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AFS	ABOVE FINISH SLAB
AGGR	AGGREGATE
ALUM, AL	ALUMINUM
ALT	ALTERNATE
ANOD	ANODIZED
APPROX	APPROXIMATE(LY)
ARCH	ARCHITECT(URAL)
ASPH	ASPHALT
ASPH	AT
AVG	AVERAGE
BB	BULLETIN BOARD
BD	BOARD
BTWN	BETWEEN
BITUM	BITUMINOUS
BLK / BLKG	BLOCK / BLOCKING
BLDG	BUILDING
BM	BENCHMARK
BMD	BOTTOM OF METAL DECK
BO	BOTTOM OF / BY OTHERS
BOT	BOTTOM
BOS	BOTTOM OF STEEL
BRG	BEARING
BSMT	BASEMENT
BUR	BUILT UP ROOFING SYSTEM
[	CHANNEL
CAB	CABINET
CPT	CARPET
CI	CAST IRON
CB	CATCH BASIN
CCR	CARD CONTROL READER
CSWK	CASEWORK
CCT	CUBICLE CURTAIN TRACK
CCTV	CLOSED CIRCUIT TELEVISION
CSP	COMBINATION STAND PIPE
CG	CORNER GUARD
CEM	CEMENT, CEMENTITIOUS
CER	CERAMIC
CT	CERAMIC TILE
CH BD	CHALKBOARD
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CLO	CLOSET
CMU	CONCRETE MASONRY UNIT
CRSC	COLD ROLLED STEEL CHANNEL
CW	COLD WATER
COL	COLUMN
CNTR	COUNTER
CSK	COUNTERSUNK
CONC	CONCRETE
CONF	CONFERENCE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CJ	CONTROL JOINT
CG	CORNER GUARD
CORR	CORRUGATED, CORRIDOR
CU	CUBIC
D	DEPTH
DBL	DOUBLE
DBL ACT	DOUBLE ACTING
DEG	DEGREE
DEMO	DEMOLISH
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIFF	DIFFUSER
DIM	DIMENSION
DIM PT	DIMENSION POINT
DISP	DISPENSER
DIST	DISTANCE
DK	DECK
DN	DOWN
DR	DRAIN, DOOR
DS	DOWNSPOUT
DSP	DRY STANDPIPE
DT	DRAPERY TRACK
DTL	DETAIL
DW	DISHWASHER
DWG / DWGS	DRAWING / DRAWINGS

E	EAST
EA	EACH
EDR	EQUIPMENT DRAWING
EG	EDGE GUARD
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELAST	ELASTOMERIC
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
ENGR	ENGINEER
EOS	EDGE OF SLAB
EP	ELECTRICAL PANEL
EPB	ELECTRICAL PANEL BOARD
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EQ	EQUAL
EQL SP	EQUALLY SPACED
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ESCAL	ESCALATOR
EST	ESTIMATED(D)
EWC	ELECTRIC WATER COOLER
EXC	EXCAVATED
EXH	EXHAUST
EXIST, (E)	EXISTING
EXP	EXPANSION
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
EX-BR	EXISTING BRICK
F/F	FACE TO FACE
FA	FIRE ALARM
FAS	FIRE ALARM STATION
FB	FLAT BAR
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FEC	FIRE EXTINGUISHER CABINET
FE	FIRE EXTINGUISHER
FF	FINISH FACE
FG	FINISH GRADE
FHC	FIRE HOSE CABINET
FH/FEC	FIRE HOSE / EXTINGUISHER CABINET
FHMS	FLAT HEAD MACHINE SCREW
FHWS	FLAT HEAD WOOD SCREW
FHY	FIRE HYDRANT
FIN	FINISH, FINISHED
FLAM	FLAMMABLE
FLASH	FLASHING
FLEX	FLEXIBLE
FLR	FLOOR
FLUOR	FLUORESCENT
FO	FACE OF
FRT	FIRE RETARDANT TREATMENT
FRZ	FREEZER
FSB	FOLDING SHOWER BENCH
FSTNR	FASTENER
FT	FOOT, FEET
FTG	FOOTING
FURN	FURNITURE
FXTR	FIXTURE
G	GAS
GA	GAUGE, GAGE
GAL	GALLON
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFRC	GLASS FIBER REINFORCED CONCRETE
GFRG	GLASS FIBER REINFORCED GYPSUM
GL	GLASS, GL
GLU LAM	GLUE LAMINATED
GLZ	GLAZING
GR	GRADE OR GRADING
GVL	GRAVEL
GYP	GYPSUM
GYP BD	GYPSUM BOARD
GYP PLAS	GYPSUM PLASTER
H	HIGH
HB	HOSE BIBB
HC	HOLLOW CORE
HD	HEAD
HDBD	HARDBOARD
HDW, HDWR	HARDWARE
HDWD	HARDWOOD
HGT, HT	HEIGHT
HM	HOLLOW METAL
HNDRL	HANDRAIL
HORIZ	HORIZONTAL
HPT	HIGH POINT
HR	HOUR
HVAC	HEATING-VENTILATION-AIR CONDITIONING
HW	HOT WATER

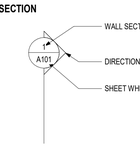
ID	INSIDE DIAMETER
IN	INCH
INCAND	INCANDESCENT
INCL	INCLUDE, INCLUDING
INFO	INFORMATION
INSUL	INSULATION
INTR	INTERIOR
INV	INVERT
IVT	INTRAVENOUS TRACK
JAN	JANITOR
JST	JOIST
JT	JOINT
KG	KILOGRAM
KIT	KITCHEN
KPL	KICK PLATE
KS	KNEE SPACE
L	LENGHT, LONG
LAB	LABORATORY
LAM	LAMINATE, LAMINATION
LAV	LAVATORY
LB	POUND
LED	LIGHT EMITTING DIODE
LF	LINEAR FOOT
LG	LENGTH
LIN	LINEAR
LL	LEAD LINED
LPT	LOW POINT
LT	LIGHT
LT WT	LIGHT WEIGHT
LTG	LIGHTING
LVR	LOUVER
M	METERS
MACH	MACHINE
MATL	MATERIAL
MATV	MASTER ANTENNA TELEVISION SYSTEM
MAX	MAXIMUM
MB	MACHINE BOLT
MC	MEDICINE CABINET
MDO	MEDIUM DENSITY OVERLAY
MECH	MECHANICAL
MED	MEDIUM
MET, MTL	METAL
MEMB	MEMBRANE
MFR / MFG	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLDG	MOLDING
MM	MILLIMETERS
MO	MASONRY OPENING
MOD	MODULE, MODULAR
MTD	MOUNTED
MTG	MOUNTING
MVBL	MOVABLE
MULL	MULLION
(N)	NEW
N	NORTH
NA	NOT APPLICABLE
NAT	NATURAL
NE	NORTHEAST
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NRC	NOICE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
NW	NORTHWEST
OC	ON CENTER
OA	OVERALL
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED-CONTRACTOR INSALLED
OFOI	OWNER FURNISHED-OWNER INSTALLED
OPNG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
OVHD	OVERHEAD
OZ	OUNCE

PA	PUBLIC ADDRESS
PART	PARTIAL
PBD	PARTICLEBOARD
PBX	PRIVATE TELEPHONE EXCHANGE
PCF	POUNDS PER CUBIC FOOT
PCI	POUNDS PER CUBIC INCH
PERF	PERFORATED
PERIM	PERIMETER
PERM	PERMANENT
PERP	PERPENDICULAR
PI	POINT OF INTERSECTION
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER, PLASTIC
PLBG	PLUMBING
PLF	POUNDERS PER LINEAR FOOT
PLYWD	PLYWOOD
PNEU	PNEUMATIC
PNL	PANEL
PNL BD	PANEL BOARD
PNT, P	PAINT
PORT	PORTABLE
PP	PUSH PLATE
PPM	PARTS PER MILLION
PR	PAIR
PRCST	PRECAST
PREP	PREPARATION
PREFAB	PREFABRICATION
PRKG	PARKING
PROJ	PROJECT
PROP	PROPERTY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT / PTD	POINT, PAINT / PAINTED
PTN	PARTITION
PTS	PNEUMATIC TUBE STATION
PVC	POLYVINYL CHLORIDE
PVG	PAVING
PVMT	PAVEMENT
PWR	POWER
QT	QUARRY TILE
QTR	QUARTER
QTY	QUANTITY
R	RISER
RA	RETURN AIR
RAD	RADIUS
RB	RESILIENT BASE
RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
RD	ROOF DRAIN
RECT	RECTANGULAR
REF	REFERENCE
REFR	REFRIGERATOR
REG	REGISTER
REINF	REINFORCE (D) (ING) (MENT)
REQD	REQUIRED
REQT	REQUIREMENT
RESIL	RESILIENT
RET	RETURN
REV	REVISION
RF	RESILIENT FLOORING
RH	RIGHT HAND
RHMS	ROUND HEAD MACHINE SCREW
RHWS	ROUND HEAD WOOD SCREW
RM	ROOM
RND	ROUND
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RWL	RAIN WATER LEADER
S	SOUTH
SA	SUPPLY AIR
SB	SPLASH BLOCK
SC	SOLID CORE
SCHED	SCHEDULE
SCRN	SCREEN
SD	STORM DRAIN
SE	SOUTHEAST
SECT	SECTION
SEG	SEGMENT
SEP	SEPARATION OR SEPARATE
SEP JT	SEPARATION JOINT
SHT	SHEET, SHEETING
SHWR	SHOWER
SHV	SHELVES, SHELVING
SIM	SIMILAR
SK	SINK
SMS	SHEET METAL SCEW
SP	SPACE, SPACED, SPACING
SPEC	SPECIFICATION

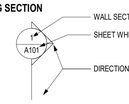
SPKLR	SPRINKLER
SPKR	SPEAKER
SQ	SQUARE
SS	SANITARY SEWER
SSK	SERVICE SINK
SST	STAINLESS STEEL
ST	STREET
STA	STATION
STAG	STAGGERED
STC	SOUND TRANSMISSION COEFFICIENT
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
STS	SELF-TAPPING STEEL
SUSP	SUSPENDED
SUSP CLG	SUSPENDED CEILING
SVCE	SERVICE
SW	SOUTHWEST
SYMM	SYMMETRICAL
SYST	SYSTEM
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TC	TOP OF CONCRETE, TOP OF CURB
TD	TRENCH DRAIN
TEL	TELEPHONE
TEMP	TEMPORARY
THERM	THERMAL
THK	THICK, THICKNESS
THRES	THRESHOLD
THRU	THROUGH
TMPD GL	TEMPERED GLASS
TO	TOP OF
TOR	TOP OF RAILING
TOS	TOP OF STEEL
TOT	TOTAL
TOW	TOP OF WALL
TP	TOP OF PAVEMENT
TPH	TOILET PAPER HOLDER
TRANS	TRANSPARENT
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TYP	TYPICAL
TW	TOP OF WALL
UC	UNDER COUNTER
UL	UNDERWRITERS LABORATORIES
UNF	UNFINISHED
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTABLE POWER SUPPLY
UR	URINAL
UTIL	UTILITY
VAC	VACUUM
VB	VALVE BOX
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIT	VIREOUS
VP	VENT PIPE
VOL	VOLUME
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
W/O	WITHOUT
WW	WALL TO WALL
WAINS	WAINSCOT
WC	WATER CLOSET, WALL COVERING
WD	WOOD
WDW	WINDOW
WGL	WIRE GLASS
WHCHR	WHEELCHAIR
WM	WIRE MESH
WO	WHERE OCCURS
WP	WATERPROOF
WPT	WORKING POINT
WR	WATER RESISTANT
WSCT	WAINSCOT
WSP	WET STANDPIPE
WT	WEIGHT
WTHPRF	WEATHERPROOF
WTRPRF	WATERPROOF
WWF	WELDED WIRE FRABRIC
WWM	WELDED WIRE MESH
XFMR	TRANSFORMER
YD	YARD

TYPICAL ARCHITECTURAL REFERENCE SYMBOLS

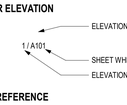
WALL SECTION



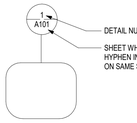
BUILDING SECTION



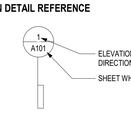
EXTERIOR ELEVATION



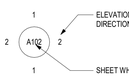
DETAIL REFERENCE



SECTION DETAIL REFERENCE



INTERIOR ELEVATION REFERENCE



PARTITION TYPE IDENTIFICATION MARK



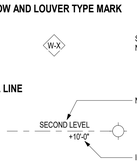
EQUIPMENT/ACCESSORY IDENTIFICATION MARK



DOOR IDENTIFICATION MARK



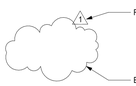
WINDOW AND LOUVER TYPE MARK



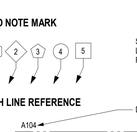
LEVEL LINE



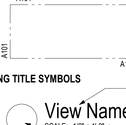
ROOM NAME AND NUMBER



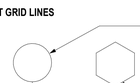
REVISION EXTENT



KEYED NOTE MARK



MATCH LINE REFERENCE



DRAWING TITLE SYMBOLS



LAYOUT GRID LINES



NORTH ARROW REFERENCE

GENERAL

SHEET NUMBER	SHEET NAME
CS	COVER SHEET REUNION
G001	GENERAL INFORMATION
G002	ACCESSIBILITY GUIDELINES
G111	LIFE SAFETY INFORMATION - APARTMENTS
G121	WALL TYPES
G500	GENERAL PROJECT SPECIFICATIONS
G501	GENERAL PROJECT SPECIFICATIONS
G502	GENERAL PROJECT SPECIFICATIONS

STRUCTURAL

SHEET NUMBER	SHEET NAME
S001	STRUCTURAL GENERAL NOTES IBC
S002	STRUCTURAL GENERAL NOTES IRC
S030	TYPICAL DETAIL - CONCRETE
S050	TYPICAL DETAILS - STEEL
S060	TYPICAL DETAILS - WOOD FRAMING
S061	TYPICAL DETAILS - WOOD ROOF TRUSS
S062	TYPICAL DETAILS - WOOD BRACED WALLS
S063	TYPICAL DETAILS - WOOD SHEAR WALLS
S101A	FOUNDATION & WALL PLANS - BUILDING A
S101A-1	ROOF FRAMING PLAN - BUILDING A
S101B1	FOUNDATION & WALL PLANS - BUILDING B1
S101B1-1	ROOF FRAMING PLAN - BUILDING B1
S101B2	FOUNDATION & ROOF FRAMING PLANS - BUILDING B2
S101C	FOUNDATION & WALL PLANS - BUILDING C
S101C-1	ROOF FRAMING PLAN - BUILDING C
S101D	FOUNDATION & WALL PLAN - BUILDING D
S101D-1	ROOF FRAMING PLAN - BUILDING D
S101K	FOUNDATION, WALL, AND ROOF FRAMING PLAN - CLUBHOUSE
S102K	FOUNDATION & ROOF FRAMING PLAN - MAINTENANCE GARAGE
S500	FOUNDATION SECTIONS
S520	FRAMING SECTIONS

ARCHITECTURAL

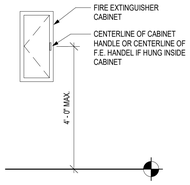
SHEET NO.	SHEET NAME
A100	ARCHITECTURAL SITE PLAN
A101 K	SITE PLAN - CLUBHOUSE AREA
A102 K	FLOOR PLANS - CLUBHOUSE & MAINTENANCE BUILDING
A131	KITCHEN ENLARGED PLANS AND ELEVATIONS
A132	BATHROOM ENLARGED PLANS AND ELEVATIONS
A201 K	EXTERIOR ELEVATIONS - CLUBHOUSE
A201 L	EXTERIOR ELEVATIONS - MAINTENANCE GARAGE
A303	EXTERIOR WALL SECTIONS + DETAILS
A351	WALL CLADDING DETAILS - STOTHERM STUCCO
A352	WALL CLADDING DETAILS - NEWTECHWOOD
A353	WALL CLADDING DETAILS - LP SMARTLAP & BATT
A354	WALL CLADDING DETAILS - ELDORADO STONE
A355	WALL CLADDING DETAILS - ELDORADO STONE 2
A501	DOOR / WINDOW SCHEDULE + DETAILS
A901	FINISH SCHEDULE

MEP

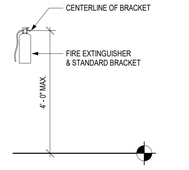
SHEET NUMBER	SHEET NAME
E001	ELECTRICAL SPECIFICATIONS & SYMBOLS
E002	ELECTRICAL SITE PHOTOMETRIC
E100A	ELECTRICAL SITE PLAN
E100C	ELECTRICAL SITE LIGHTING PLAN
E100D	ELECTRICAL SITE LIGHTING DETAILS
E100E	ELECTRICAL SITE LIGHTING DETAILS
E100F	ELECTRICAL SITE LIGHTING DETAILS
E100G	ELECTRICAL SITE LIGHTING DETAILS
E101AB	1ST FLOOR OVERALL PLANS BUILDINGS A & B, B2
E101CD	1ST FLOOR OVERALL PLANS BUILDINGS C & D
E121A	UNIT PLAN A LIGHTING & POWER PLANS
E121AR	UNIT PLAN A REVERSED LIGHTING & POWER PLANS
E122B	UNIT PLAN B LIGHTING & POWER PLANS
E122BR	UNIT PLAN B REVERSED LIGHTING & POWER PLANS
E123C	UNIT PLAN C LIGHTING & POWER PLANS
E123CR	UNIT PLAN C REVERSED LIGHTING & POWER PLANS
M001	MECHANICAL SPECIFICATIONS, SCHEDULES, & SYMBOLS
M101K	MECHANICAL PLANS - CLUBHOUSE AND MAINTENANCE GARAGE
E101K	LIGHTING PLAN - CLUBHOUSE & MAINTENANCE GARAGE
E102K	POWER PLAN -CLUBHOUSE & MAINTENANCE GARAGE
E200	ELECTRONIC SCHEDULES AND DIAGRAMS
E201	PANELBOARD SCHEDULES
P001	PLUMBING SPECIFICATIONS AND SYMBOLS
P101K	WASTE AND VENT PLAN CLUBHOUSE
P102K	WATER AND GAS PLAN CLUBHOUSE

GENERAL INFORMATION NOTES:

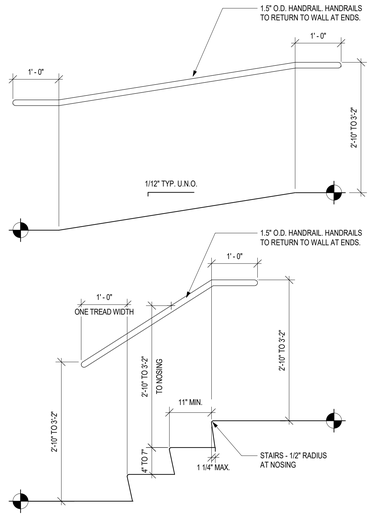
1. UNLESS OTHERWISE INDICATED, ALL MATERIALS AND EQUIPMENT ON THE DRAWINGS IS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
2. COORDINATE ALL CONSTRUCTION PRIOR TO BEGINNING WORK AND SUBMIT PROPOSED WORK SCHEDULE TO THE OWNER & ARCHITECT FOR APPROVAL.
3. CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES, SECURE AND PAY FOR ALL PERMITS, FEES, TAXES, INSPECTIONS & TESTING REQUIRED FOR COMPLETE RELATED WORK. THE GENERAL CONTRACTOR SHALL ALSO BE IN CHARGE OF THE OPERATION FROM THE TIME OF COMMENCEMENT UNTIL THE COMPLETION OF WORK AND TO WHOM ALL ORDERS AND DIRECTIONS SHALL BE GIVEN.
4. ALL TRADES SHALL BE RESPONSIBLE TO READ ALL DRAWINGS, DETAILS, & PLANS ASSOCIATED WITH ALL PACKAGES INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING ASSOCIATED WITH THIS PROJECT TO ENSURE PROPER COORDINATION. IF ANY CONFLICTS EXIST, THAT TRADE SHALL NOTIFY THE CONTRACTOR OF THE SAME PRIOR TO CONSTRUCTION WHO SHALL IN TURN NOTIFY THE G.C.
5. ALL MATERIALS SHOWN OR CALLED FOR ON THESE CONSTRUCTION DOCUMENTS TO BE NEW AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
6. THE GENERAL CONTRACTOR SHALL SUPPLY DETAILED COMPARISON OF SUBSTITUTION ITEMS REQUESTED FOR ARCHITECT APPROVAL. COMPARISON INFORMATION SHALL INCLUDE & NOT LIMITED TO SIGNIFICANT PRODUCT QUALITIES WHICH MAY ALTER VISUAL AND/OR PERFORMANCE OF A PRODUCT INCLUDING WEIGHT, SIZE, DURABILITY, & SPECIFIC FEATURES & REQUIREMENTS OF SUCH PRODUCT.
7. ELECTRICAL CONTRACTOR TO PROVIDE ALL SMOKE DETECTORS, EXIT SIGNS, EMERGENCY LIGHT AND FIRE ALARM SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES.
8. ALL CONTRACTORS AND THEIR SUPERVISORY PERSONNEL SHALL REVIEW THE GENERAL AND SUPPLEMENTARY CONDITIONS TO THE CONTRACT.
9. ALL WORK SHALL CONFORM WITH APPLICABLE BUILDING CODES, REGULATIONS AND ORDINANCES.
10. CONTRACTOR OR OWNER SHALL OBTAIN ALL REQUIRED BUILDING AND OCCUPANCY PERMITS.
11. CONTRACTOR SHALL BECOME FULLY ACQUAINTED WITH CONDITIONS RELATED TO THE WORK.
12. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, AND SEQUENCES OF CONSTRUCTION AND THE SAFETY OF ALL CONSTRUCTION PERSONNEL AND VISITORS.
13. DRAWINGS CONTAINED IN THIS SET SHALL NOT BE REPRODUCED FOR SHOP DRAWINGS. COPIES OF THESE DRAWINGS SUBMITTED AS SHOP DRAWINGS WILL BE REJECTED AND RETURNED TO THE CONTRACTOR.
14. EACH INSTALLER MUST EXAMINE SUBSTRATE AND/OR CONDITIONS UNDER WHICH THE WORK WILL BE INSTALLED AND REPORT TO THE CONTRACTOR IN WRITING ANY CONDITIONS DETRIMENTAL TO THE PROPER AND TIMELY EXECUTION OF THAT INSTALLERS WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED. COMMENCING WITH INSTALLATION SHALL CONSTITUTE ACCEPTANCE OF THE SUBSTRATE AND/OR CONDITIONS.
15. DO NOT SCALE DRAWINGS: FOLLOW WRITTEN DIMENSIONS AND NOTES. CONTACT ARCHITECT FOR CLARIFICATIONS, IF REQUIRED.
16. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF STUD/STRUCTURE (FOS), FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS OTHERWISE NOTED OR INDICATED.
17. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS. REFER TO WALL TYPES SHEET FOR THICKENSSES.
18. ALL MASONRY WALL THICKNESSES ACTUAL DIMENSIONS REFER TO WALL TYPES SHEET.
19. "TYPICAL", AS USED IN THESE DOCUMENTS, SHALL MEAN THAT THE CONDITION OR DIMENSION IS REPRESENTATIVE OF, OR THE SAME, FOR SIMILAR CONDITIONS THROUGHOUT.
20. IF THERE IS A DISCREPANCY BETWEEN SMALL SCALE AND LARGE SCALE DRAWINGS, (PLAN, SECTION, & DETAIL DRAWINGS, ETC.) - CONTACT ARCHITECT FOR CLARIFICATION. FOR BIDDING PURPOSES: THE MOST EXPENSIVE AND/OR STRICTEST REQUIREMENTS SHALL GOVERN. FOR CLARIFICATIONS DURING CONSTRUCTION: THE MOST EXPENSIVE AND/OR STRICTEST REQUIREMENTS, AS INDICATED BY THE ARCHITECT, SHALL GOVERN
21. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS - CONTACT ARCHITECT FOR CLARIFICATION. FOR BIDDING PURPOSES: THE MOST EXPENSIVE AND/OR STRICTEST REQUIREMENTS SHALL GOVERN. FOR CLARIFICATIONS DURING CONSTRUCTION: THE MOST EXPENSIVE AND/OR STRICTEST REQUIREMENTS, AS INDICATED BY THE ARCHITECT, SHALL GOVERN.
22. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS SHALL BE REPORTED TO THE ARCHITECT IN WRITING FOR RESOLUTION, PRIOR TO PROCEEDING WITH THE WORK.
23. ANY AND ALL DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT IN WRITING FOR RESOLUTION, PRIOR TO PROCEEDING WITH THE WORK. IN THESE INSTANCES: NO CHANGE ORDERS OR EXTENSIONS OF TIME WILL BE ALLOWED OR ACCEPTED FOR PROCEEDING WITH THE WORK WITHOUT THE ARCHITECT'S WRITTEN DIRECTION AND APPROVAL. ALSO - CONTRACTOR MUST REPAIR AND/OR REPLACE ANY UNAUTHORIZED WORK, AS INDICATED BY THE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER.
24. ALL DISSIMILAR METAL MATERIALS SHALL BE ISOLATED WITH AN APPROVED NONMETAL ISOLATION MATERIAL.
25. OPEN EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALL PANELS, AND AT PENETRATIONS OF UTILITIES THROUGH THE BUILDING ENVELOPE, ETC. – SHALL BE SEALED, CAULKED, FLASHED OR WEATHER-STRIPPED AS REQUIRED FOR COMPATIBILITY WITH ADJACENT MATERIALS & TO ELIMINATE AIR LEAKAGE AND WATER ENTRY.
26. PROVIDE SEALANT AND/OR CAULKING BETWEEN DISSIMILAR ADJOINING INTERIOR MATERIALS. (I.E. WINDOW SILLS TO GYP. BD., ACT CEILINGS TO MASONRY WALLS, ETC.)
27. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO FINISH JAMB, ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE OF THE DOOR TO THE INTERSECTING WALL.
28. CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES AND THEIR SERVICE CONNECTIONS WITH THE PROPER UTILITY COMPANY.
29. CONTRACTOR SHALL COORDINATE SIZE, LOCATIONS AND NUMBER OF ALL ROOF OPENINGS AND ROOF ACCESSORIES WITH ALL OTHER TRADES. REFER TO THE ARCHITECTURAL, STRUCTURAL, PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS.
30. LOCATIONS AND SIZES OF ALL CONCRETE MECHANICAL AND ELECTRICAL PADS SHALL BE COORDINATED BY THE MECHANICAL AND ELECTRICAL CONTRACTORS, WITH THE SELECTED EQUIPMENT MANUFACTURER/SUPPLIER; AND ARE TO BE APPROVED BY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
31. EXCEPT AT FIRE-RATED PARTITIONS, ALL WALL AND COLUMN GYPSUM BOARD FACING SHALL BE HELD AT 5/8 INCH BELOW STRUCTURE, UNLESS DETAILED OR NOTED OTHERWISE.
32. ALL CEILING HEIGHTS AS SHOWN ON PLANS AND DETAILS ARE FROM SLAB OR TILE FLOOR (FINISHED FLOOR) TO FINISH CEILING.
33. PROVIDE INDEPENDENT FRAMING & ATTACHMENTS TO THE STRUCTURE – ADEQUATE TO SUPPORT THE CEILING SYSTEM, LIGHT FIXTURES, DUCTS, DIFFUSERS, SPRINKLER PIPING AND BUS DUCTS.
34. ALL CLOSETS AND ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FINISHES AS ADJOINING SPACES.
35. CONTRACTOR TO INSTALL WOOD BLOCKING AND PLYWOOD AS REQUIRED FOR THE MOUNTING OF ALL TOILET ACCESSORIES, MILLWORK/ CASEWORK, HANDRAILS, FIRE EXTINGUISHERS, WALL SPEAKERS, POSTER CASES, TELEVISIONS, ELECTRICAL PANELS, FIRE ALARMS, MEP ITEMS, AND AV EQUIPMENT, ETC.
36. REFER TO SPECIFICATIONS FOR ALL REQUIRED TESTING AND INSPECTIONS.
37. ANY/ ALL PROPRI



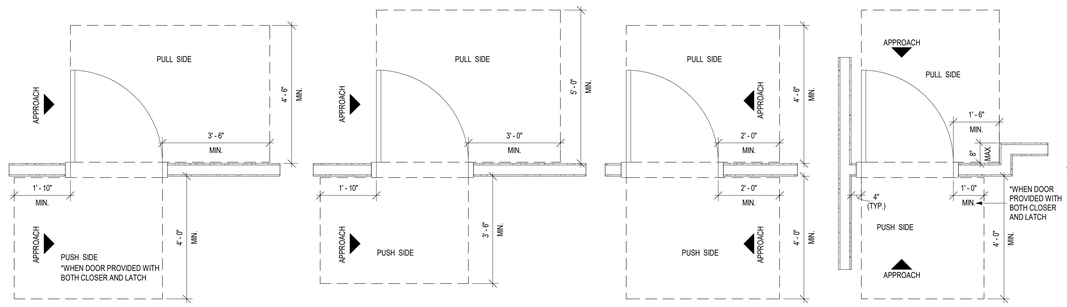
J10 FE CABINET
1/2" = 1'-0"



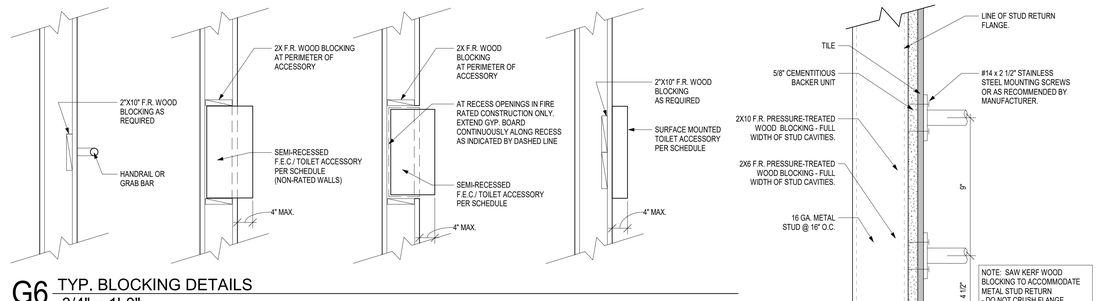
G10 FIRE EXTINGUISHER
1/2" = 1'-0"



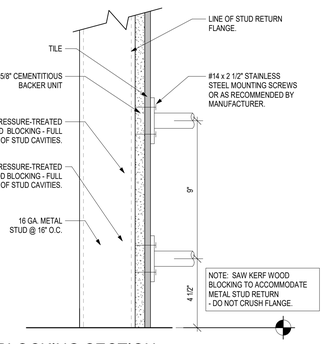
G9 HANDRAIL @ STAIRS AND RAMPS
3/4" = 1'-0"



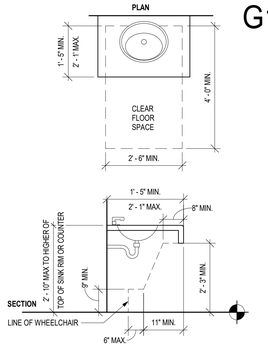
J6 TYP. DOOR APPROACH CLEARANCES
1/2" = 1'-0"



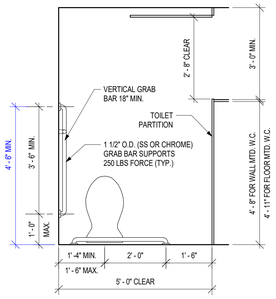
G6 TYP. BLOCKING DETAILS
3/4" = 1'-0"



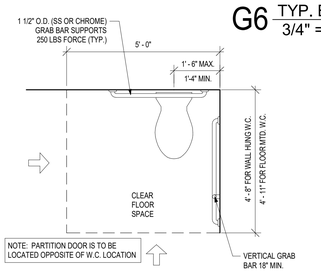
G2 BLOCKING SECTION
3" = 1'-0"



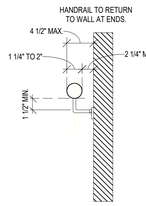
E12 SINK IN COUNTER CLEARANCES
1/2" = 1'-0"



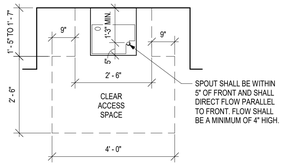
E10 ACCESSIBLE TOILET STALL
1/2" = 1'-0"



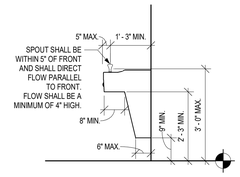
E8 ACCESSIBLE CLEAR FLOOR SPACE
1/2" = 1'-0"



E6 HANDRAIL CLEARANCES
1 1/2" = 1'-0"



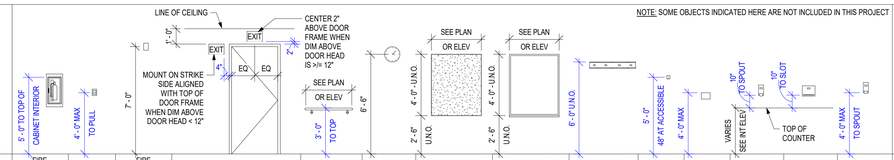
E4 E.W.C. - CLEAR SPACE
1/2" = 1'-0"



E2 E.W.C. - SECTION
1/2" = 1'-0"

MISCELLANEOUS ACCESSORY TYPICAL MOUNTING HEIGHTS

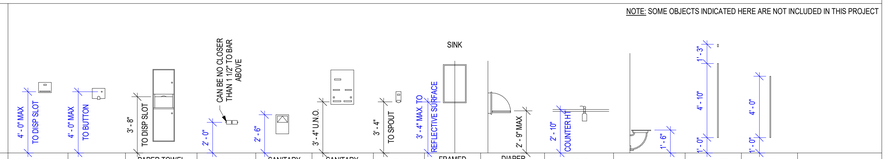
NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT



FINISH FLOOR														
ACCESSORY TYPE	FIRE EXTINGUISHER CABINET	MANUAL FIRE PULL	FIRE STROBE/LIGHT/ AUDIBLE ALARM	WALL MOUNTED EXIT SIGN	WALL MOUNTED HANDRAIL	WALL CLOCK	FABRIC COVERED TACK BOARD	MARKER BOARD	MOP & BROOM HOLDER	ROBE HOOK	ELAPSED TIME CLOCK	SOAP DISPENSER	PAPER TOWEL DISPENSER	ALCOHOL DISPENSER
COMMENTS	SEMI RECESSED	SURFACE MOUNTED	SURFACE MOUNTED	WALL MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED

TOILET ACCESSORY TYPICAL MOUNTING HEIGHTS

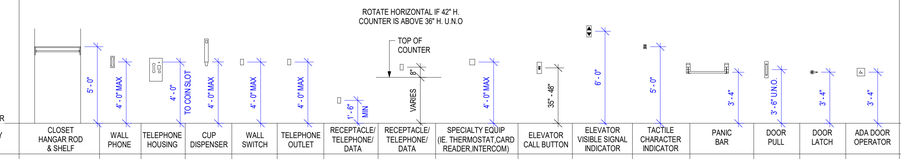
NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT



FINISH FLOOR														
ACCESSORY TYPE	PAPER TOWEL DISPENSER	POWER HAND DRYER	PAPER TOWEL DISPENSER & TRASH RECEPTACLE	TOILET TISSUE DISPENSER	SANITARY NAPKIN DISPOSAL	SANITARY NAPKIN DISPENSER	RECESSED & SURFACE	VANITY SOAP DISPENSER	FRAMED VANITY MIRROR	DIAPER CHANGING STATION	SOAP DISPENSER	COUNTERTOP MOUNTED	FOLDING SHOWER SEAT	TOILET PARTITION	URINAL SCREEN
COMMENTS	SURFACE MOUNTED	SURFACE MOUNTED	SEMI RECESSED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	COUNTERTOP MOUNTED	SURFACE MOUNTED	WALL MOUNTED	WALL MOUNTED

MISCELLANEOUS ACCESSORY TYPICAL MOUNTING HEIGHTS

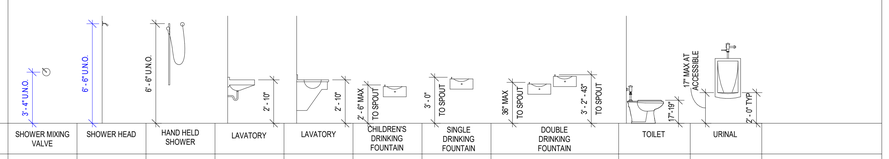
NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT



FINISH FLOOR																
ACCESSORY TYPE	CLOSET HANGAR ROD & SHELF	WALL PHONE	TELEPHONE HOUSING	CUP DISPENSER	WALL SWITCH	TELEPHONE OUTLET	RECEPTACLE/ TELEPHONE/ DATA	RECEPTACLE/ TELEPHONE/ DATA	SPECIALTY EQUIP (IE. THERMOSTAT, CARD READER,INTERCOM)	ELEVATOR CALL BUTTON	ELEVATOR VISIBLE SIGNAL INDICATOR	TACTILE CHARACTER INDICATOR	PANIC BAR	DOOR PULL	DOOR LATCH	ADA DOOR OPERATOR
COMMENTS	WALL MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	VARIES

PLUMBING FIXTURE TYPICAL MOUNTING HEIGHTS

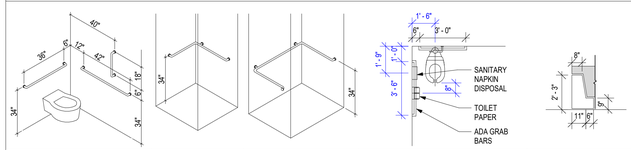
NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT



FINISH FLOOR																
ACCESSORY TYPE	SHOWER MIXING VALVE	SHOWER HEAD	HAND HELD SHOWER	LAVATORY	LAVATORY	CHILDREN'S DRINKING FOUNTAIN	SINGLE DRINKING FOUNTAIN	DOUBLE DRINKING FOUNTAIN						TOILET	URINAL	
COMMENTS	WALL MOUNTED	WALL MOUNTED	WALL MOUNTED	WALL MOUNTED	COUNTER MOUNTED	WALL MOUNTED	WALL MOUNTED	WALL MOUNTED						WALL/FLOOR MOUNTED	WALL MOUNTED	

GRAB BAR TYPICAL MOUNTING HEIGHTS & TOILET ACCESSORY PLANS

NOTE: SOME OBJECTS INDICATED HERE ARE NOT INCLUDED IN THIS PROJECT



ADA TOILET GRAB BAR	SHOWER STALL GRAB BAR	ROLL-IN SHOWER STALL GRAB BAR	TYPICAL ACCESSORIES AT ACCESSIBLE TOILET	TYPICAL ADA SINK ENCLOSURE PANEL CLEARANCE
SURFACE MOUNTED	SURFACE MOUNTED	SURFACE MOUNTED	NOTE: SANITARY NAPKIN DISPOSAL AT WOMEN'S & UNISEX ONLY	

A11 TYP. MOUNTING HEIGHTS
1/4" = 1'-0"

GENERAL NOTES: ACCESSIBILITY GUIDELINES

1. NOTE: ALL DIMENSIONS ARE MEASURED FROM FLOOR, UNLESS NOTED OR SHOWN OTHERWISE.
2. ADA UNOBSTRUCTED REACH RANGES: ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
3. ELEVATORS: STANDARD CALL BUTTONS: 35" TO 48" TO C.L. & PROTRUDE 1" MAX. ADA CALL BUTTONS: 42" TO C.L. (TYP.) & 48" MAX. (3/4" SMALLEST DIM.). ADA VISIBLE SIGNALS: 72" MIN. TO C.L. (2 1/2" SMALLEST DIM.). TACTILE SIGNAL ON HOISTWAY: 60" TO BASE OF CHARACTERS W/ TACTILE STAR & 2" HIGH CHARACTERS.
4. DOOR HARDWARE (TO CENTER OF HARDWARE): STANDARD MOUNTING HEIGHTS: PUSH PLATES = 42", PULL HANDLES = 42", KNOBS/ LEVERS = 40", PANIC EXIT = 42" CENTERLINE OF BAR. KICKPLATES: WIDTH = DOOR WIDTH MINUS 2", CENTER, HEIGHT = 16" FROM B.O. DOOR. THRESHOLDS: STANDARD = 1/2" MAX. AT EXT. SLIDING DOORS = 3/4" MAX., ADA HARDWARE = 34" MIN. TO 48" MAX.
5. DRINKING FOUNTAINS & EWC'S (TO SPOUT): STANDARD = 40" TYP., 42" MAX. ADA =36" MAX. (27" MIN. CLEAR KNEE SPACE)
6. COUNTERTOPS (TO SINK RIM/ COUNTERTOP): ADA = 28" MIN. TO 34" MAX.
7. WATER CLOSETS (TO TOP OF SEAT): STANDARD = 14" TO 15". ADA (TO TOP OF SEAT) = 17" TO 19". ADA FLUSH CONTROLS = 44" MAX.
8. URINALS (TO RIM): STANDARD = 24" MAX. ADA =17" MAX. ADA FLUSH CONTROLS = 44" MAX.
9. LAVATORIES (TO SINK RIM/ COUNTERTOP): STANDARD = 36" MAX. ADA = 34" MAX. (29" MIN. CLEAR KNEE SPACE)
10. MIRRORS (TO B.O. REFLECTIVE SURFACE): STANDARD = VARIES. ADA = 40" MAX.
11. GRAB BARS - ADA (TO TOP OF BAR): WATER CLOSETS = 33" MIN. TO 36" MAX. SHOWERS = 33" MIN. TO 36" MAX. (FROM B.O.SHOWER). BATHTUBS: TOP BAR = 33" MIN. TO 36" MAX. BOT. BAR = 9" ABOVE T.O. TUB
12. SHOWER HEADS (FROM FLOOR TO HEAD): STANDARD = 72" TO 84". ADA = SPRAY UNIT W/ HOSE 60" LONG MIN. ADA = FIXED SHOWER HEAD = 48" AFF.
13. SHOWER CONTROLS (TO CONTROL AREA): STANDARD = 48" MAX. (TO TOP). ADA = 38" MIN. TO 48" MAX.
14. SHOWER ROD (FROM FLOOR TO C.L.): STANDARD = 78" MAX.
15. TOILET ROOM PARTITIONS: TOILETS = 12" TO BOT. & 70" TO TOP. URINALS = 18" TO BOT. & 60" TO TOP
16. TOILET PAPER DISPENSERS (TO C.L. OF OUTLET): STANDARD = 24". ADA = 19" MIN. TO 24" MAX.
17. WALL MOUNTED SOAP DISPENSERS (TO C. L. OF PUSH BUTTON): STANDARD = 40". ADA = VARIES. RE: OBSTRUCTED AND UNOBSTRUCTED REACH RANGES. ADA SIDE REACH = 46" MAX. ABOVE SINK IN COUNTER.
18. PAPER TOWEL DISPENSER/ WASTE RECEPTACLE (TO TOWEL SLOT): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
19. WARM AIR HAND DRYER (TO PUSH SWITCH): STANDARD = 44" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
20. SANITARY NAPKIN DISPENSER (TO C.L. OF COIN SLOT): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
21. SANITARY NAPKIN DISPOSAL (TO TOP OF UNIT): STANDARD = 28" MAX. ADA = 19" MIN. TO 24" MAX. (TO OPNG.)
22. TOILET SEAT COVER DISPENSERS (TO OPNG.): STANDARD = 40" MAX. ADA FORWARD REACH = 48" MAX. & 15" MIN. ADA SIDE REACH = 48" MAX. & 15" MIN.
23. SHELVES: ADA = 48" MAX.
24. COAT HOOKS: STANDARD = 68". ADA = 48" MAX.
25. CHALKBOARDS, TACKBOARDS,& MARKERBOARDS: STANDARD = 32" TO 39" (TO B.O. BOARD OR CHALKTRAY). STANDARD = 80" (RECOMMENDED, TO T.O. BOARD)
26. THERMOSTATS & CONTROL DEVICES (TO TOP): ADA FORWARD REACH = 48" MAX. ADA SIDE REACH = 48" MAX.
27. LIGHT SWITCHES & CARD READERS (TO C.L.): LOCATE 6" FROM DOOR JAMB. ADA = 48" MAX.
28. CONVENIENCE RECEPTACLES – ELECTRICAL/ TELEPHONE/ DATA (TO C.L.): STANDARD = 18". ADA = 15" MIN.
29. EXIT LIGHTS - WALL MOUNTED: 2" MIN. BELOW CEILING. 2" MIN. ABOVE DOOR FRAME. EQUAL SPACE FROM CEILING TO TOP OF FRAME.
30. FIRE EXTINGUISHERS (TO TOP, U.N.O.): GROSS WT. 40 LBS. OR LESS = 60" MAX. GROSS WT. MORE THAN 40 LBS. = 42" MAX. ADA = 40" MAX. (B.O. CABINET)
31. FIRE ALARM PULL STATIONS (TO LEVER): STANDARD = 48" MAX. ADA FORWARD REACH = 48" MAX. ADA SIDE REACH = 48" MAX.
32. SMOKE AND/OR HEAT DETECTORS: STANDARD = CEILING HEIGHT
33. HORN/ SPEAKER/ VISUAL SIGNALS: STANDARD = 80" AFF. OR 6" BELOW CEILING - WHICHEVER IS LOWER.
34. ROOM SIGNAGE (TO C.L.): STANDARD = 60" HIGH AFF. & WITHIN 18" OFLATCH SIDE OF DOOR

CWA ARCHITECTURE
collins|webb
2078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016004008
ARCHITECT
9/24/23

PROFESSIONAL SEAL

G002

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

ACCESSIBILITY GUIDELINES

1/29/2025 8:41:17 AM

BUILDING A - GENERAL INFORMATION:

OCCUPANCY CLASSIFICATION: R-2
NO. OF STORIES = 1
BUILDING HT. = 18'-3"
BASEMENT = NO
LIVING AREA = 5,320 SF
USE = MULTI-FAMILY
NO. OF UNITS = 4
STANDPIPE/SPRINKLER = NOT REQUIRED
SMOKE DETECTORS = REQ'D PER 2018 IRC SECTION R314.1

BUILDING B1 - GENERAL INFORMATION:

OCCUPANCY CLASSIFICATION: R-2
NO. OF STORIES = 1
BUILDING HT. = 18'-4"
BASEMENT = NO
LIVING AREA = 5,377 SF
USE = MULTI-FAMILY
NO. OF UNITS = 4
STANDPIPE/SPRINKLER = NOT REQUIRED
SMOKE DETECTORS = REQ'D PER 2018 IRC SECTION R314.1

BUILDING B2 - GENERAL INFORMATION:

OCCUPANCY CLASSIFICATION: R-2
NO. OF STORIES = 1
BUILDING HT. = 18'-8"
BASEMENT = NO
LIVING AREA = 2,439 SF
USE = MULTI-FAMILY
NO. OF UNITS = 2
STANDPIPE/SPRINKLER = NOT REQUIRED
SMOKE DETECTORS = REQ'D PER 2018 IRC SECTION R314.1

BUILDING C - GENERAL INFORMATION:

OCCUPANCY CLASSIFICATION: R-2
NO. OF STORIES = 1
BUILDING HT. = 19'-0"
BASEMENT = NO
LIVING AREA = 6,086 SF
USE = MULTI-FAMILY
NO. OF UNITS = 4
STANDPIPE/SPRINKLER = NOT REQUIRED
SMOKE DETECTORS = REQ'D PER 2018 IRC SECTION R314.1

BUILDING D - GENERAL INFORMATION:

OCCUPANCY CLASSIFICATION: R-2
NO. OF STORIES = 1
BUILDING HT. = 19'-0"
BASEMENT = NO
LIVING AREA = 6,005 SF
USE = MULTI-FAMILY
NO. OF UNITS = 4
STANDPIPE/SPRINKLER = NOT REQUIRED
SMOKE DETECTORS = REQ'D PER 2018 IRC SECTION R314.1

CLUBHOUSE - GENERAL INFORMATION:

CONSTRUCTION TYPE: VB
OCCUPANCY CLASSIFICATION: A-3
USE = COMMUNITY HALL
OCCUPANT LOAD = 97
ALLOWABLE NO. OF STORIES = 1 — ACTUAL NO. OF STORIES = 1
ALLOWABLE BUILDING HT. = 40'-0" — ACTUAL BUILDING HT. = 20'-0"
ALLOWABLE LIVING AREA = 6,000 SF — ACTUAL LIVING AREA = 3,045 SF
NO. OF EXITS REQ'D = 2 — NO. OF EXIST PROVIDED = 5
EGRESS WIDTH REQ'D = 32" — EGRESS WIDTH PROVIDED = 34"
STANDPIPE/SPRINKLER = NOT REQUIRED
SMOKE DETECTORS = REQ'D PER 2018 IBC SECTION 907.2.9

WALL PRIORITY LEGEND

NOTE: *THIS LEGEND IS FOR GRAPHIC REPRESENTATION ONLY.*

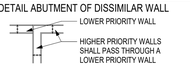
FOUR HOUR FIRE WALL (**4FW**)
THREE HOUR FIRE WALL (**3FW**)
TWO HOUR FIRE WALL (**2FW**)
FOUR HOUR FIRE BARRIER (**4FB**)
THREE HOUR FIRE BARRIER (**3FB**)

TWO HOUR FIRE BARRIER (**2FB**) *(INCLUDES THE FOLLOWING)*
- TWO HOUR SHAFT ENCLOSURE (**2SE**)

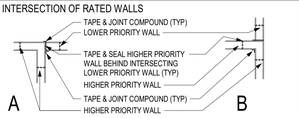
ONE HOUR FIRE BARRIER (**1FB**) *(INCLUDES THE FOLLOWING)*
- ONE HOUR SHAFT ENCLOSURE (**1SE**)

SMOKE TIGHT PARTITION (**X**) *(INCLUDES THE FOLLOWING)*
- SMOKE TIGHT PARTITION TO SMOKE TIGHT CEILING (**XC**)
- SMOKE TIGHT PARTITION WITHIN PLENUM ABOVE CEILING (**XP**)
- SMOKE TIGHT PARTITION SEPARATION OF INTERSTITIAL SPACES (**XI**)

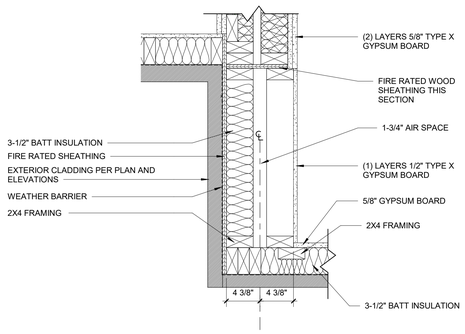
DETAIL ABUTMENT OF DISSIMILAR WALL



INTERSECTION OF RATED WALLS



NOTES:
1. REFER TO WALL TYPES ON SHEET G121-TI FOR WALL COMPONENTS, NUMBER OF GYPSUM BOARD LAYERS, TYPE OF GYPSUM BOARD, AND OTHER SIMILAR INFO.
2. THE HIGHER PRIORITY WALL SHALL PASS THROUGH THE LOWER PRIORITY WALL.
3. TAPING AND SEALING OF HIGHER PRIORITY WALLS SHALL BE CONTINUOUS.
4. ALTERNATE LAYERS OF GYPSUM BOARD SHALL OVERLAP AT CORNER INTERSECTIONS OF MULTI-LAYERED RATED GYPSUM BOARD PARTITIONS.



H9 CORNER DETAIL AT UNIT SEPERATION WALL
1 1/2" = 1'-0"

F9 CORNER DETAIL AT UNIT SEPERATION WALL
1 1/2" = 1'-0"

FIRE & SMOKE RESISTIVE LEGEND DEFINITIONS

FIRE WALLS (FW)

DEFINITION
A FIRE RATED WALL THAT IS CONTINUOUS VERTICALLY FROM FOUNDATION TO ROOF TO SEPARATE CONSTRUCTION INTO SEPARATE BUILDINGS.

USE
FIRE WALLS SERVE TO CREATE SEPARATE BUILDINGS FOR THE FOLLOWING REASONS:
- CONSTRUCTION TYPE VARIES FROM ONE BUILDING TO ANOTHER.
- COMPLIANCE WITH MAXIMUM ALLOWABLE AREA REQUIREMENTS.
- TO SEPARATE BUILDINGS WITH DIFFERENT LEVELS OF FIRE PROTECTION.
- TO ADDRESS A PROPERTY LINE DEFINING DIFFERENT OWNERSHIP.

SPECIAL CONSIDERATIONS
- THE FIRE WALL REQUIRES SUFFICIENT STRUCTURAL STABILITY UNDER FIRE CONDITIONS TO ALLOW THE COLLAPSE OF CONSTRUCTION ON EITHER SIDE WITHOUT COLLAPSE OF THE WALL.
- OPENINGS ARE REQUIRED TO BE PROTECTED.
- OPENINGS ARE LIMITED BASED ON A PERCENTAGE OF WALL LENGTH.
- EXTENDING THE FIRE WALL THROUGH THE ROOF WITH A PARAPET IS REQUIRED FOR SOME CONSTRUCTION CLASSIFICATIONS.
- THE REQUIRED FIRE RATING OF A FIRE WALL IS BASED ON OCCUPANCY GROUPS AND CLASS OF CONSTRUCTION.
- HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH AND CLOSER.

FIRE BARRIERS (FB)

DEFINITION
A FIRE RATED WALL CONSTRUCTED TO RESTRICT THE SPREAD OF FIRE. CONTINUITY SHALL BE MAINTAINED FROM TOP OF FLOOR TO UNDERSIDE OF THE FLOOR OR ROOF DECK ABOVE.

USE
FIRE BARRIERS HAVE THE FOLLOWING APPLICATIONS.
- TO CREATE HORIZONTAL EXITS.
- TO SEPARATE EXIT PASSAGEWAYS.
- OCCUPANCY SEPARATIONS.
- TO SEPARATE INCIDENTAL USE AREAS.
- ISOLATION OF HAZARDS.
- TO SEPARATE ROOMS WITH DIFFERENT LEVELS OF FIRE PROTECTION.
- SMOKE BARRIERS AND SHAFT ENCLOSURES ARE FIRE BARRIERS. SEE ADDITIONAL REQUIREMENTS.

SPECIAL CONSIDERATIONS
- WITHIN SOME CONSTRUCTION CLASSIFICATIONS, CONSTRUCTION THAT PROVIDES STRUCTURAL SUPPORT OF A FIRE BARRIER IS REQUIRED TO BE OF THE SAME HOURLY FIRE RATING AS THE FIRE BARRIER, OR BETTER.
- OPENINGS ARE REQUIRED TO BE PROTECTED.
- HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH AND CLOSER.

SHAFT ENCLOSURES (SE)

DEFINITION
A SHAFT ENCLOSURE IS A FIRE BARRIER FORMING THE BOUNDARY OF A VERTICAL SHAFT.

USE
PROTECT OPENINGS IN FIRE RATED FLOOR/CEILING ASSEMBLIES.

SPECIAL CONSIDERATIONS
- PENETRATIONS IN SHAFT ENCLOSURES ARE PROHIBITED UNLESS NECESSARY FOR THE FUNCTION OF THE SHAFT. WHERE ALLOWED, OPENINGS ARE REQUIRED TO BE PROTECTED.
- DUCT PENETRATIONS REQUIRE COMBINATION SMOKE AND FIRE DAMPERS EXCEPT FOR EXISTING CONDITIONS THAT ARE GRANDFATHERED.
- HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH, CLOSER, AND PERIMETER SMOKE SEALS.

FIRE PARTITIONS (FP)

DEFINITION
A FIRE RATED PARTITION THAT IS USED FOR THE APPLICATIONS LISTED BELOW. IT SHALL BE CONTINUOUS FROM TOP OF FLOOR TO UNDERSIDE OF A FIRE-RATED FLOOR/CEILING OR ROOF/CEILING ASSEMBLY. WHERE ALLOWED BY CODE EXCEPTION, A FIRE PARTITION SHALL BE ALLOWED TO TERMINATE AT THE UPPER MEMBRANE OF A FIRE RATED CEILING

USE
FIRE PARTITIONS ARE USED IN CERTAIN OCCUPANCIES TO DO THE FOLLOWING.
- SEPARATE DWELLING UNITS
- SEPARATE SLEEPING SPACES
- SEPARATE CORRIDORS FROM ADJACENT SPACES
- SEPARATE ELEVATOR LOBBIES
- SEPARATE TENANT SPACES IN COVERED MALL BUILDINGS

SPECIAL CONSIDERATIONS
- OPENINGS ARE REQUIRED TO BE PROTECTED.
- HARDWARE FOR SWING DOORS SHALL INCLUDE A LATCH AND CLOSER.

BEARING WALLS (BW)

DEFINITION
AN INTERIOR OR EXTERIOR WALL DESIGNED TO SUPPORT FLOOR OR ROOF LOADS. A BEARING WALL IS FIRE-RATED ONLY TO MAINTAIN THE INTEGRITY OF ITSELF AS A FIRE RATED STRUCTURAL ELEMENT. THE WALL DOES NOT SERVE AS A FIRE SEPARATION FROM ONE SIDE TO THE OTHER SIDE.

USE
A VERTICAL, LOAD BEARING STRUCTURAL ELEMENT.

SPECIAL CONSIDERATIONS
- DOORS AND WINDOWS ARE NOT REQUIRED TO BE RATED.
- HVAC DUCT PENETRATIONS ARE NOT REQUIRED TO BE FIRE-DAMPERED.
- PLUMBING, ELECTRICAL, SPRINKLER SYSTEM, AND CABLE PENETRATIONS ARE REQUIRED TO BE FIRE-STOPPED WITH FIRE SEALANT AT BOTH SIDES, FOR WALLS CONSTRUCTED OF HOLLOW CMU OR STUD FRAMING.

GENERAL NOTES

1. THE FOLLOWING INFORMATION SERVES TO PROVIDE BUILDING OWNERS WITH CONCISE DEFINITIONS OF WALL TYPES RELATED TO LIFE SAFETY ISSUES. THIS INFORMATION IS NOT MEANT TO BE A SUBSTITUTE FOR APPLICABLE BUILDING CODES.
2. WHEN A WALL HAS MORE THAN ONE CLASSIFICATION, THE MOST RESTRICTIVE REQUIREMENTS FOR EACH CLASSIFICATION SHALL APPLY.
3. FOR NEW CONSTRUCTION, PERIMETER SMOKE-SEALS MAY BE REQUIRED AT FIRE RATED DOORS IN CERTAIN OCCUPANCIES.

GENERAL DESCRIPTION

PROJECT NAME: REUNION AT BLACKWELL
PROJECT LOCATION: LEE'S SUMMIT, MISSOURI
COUNTY: JACKSON
COLLINS WEBB ARCHITECTURE
307B SW MARKET STREET
LEES SUMMIT, MISSOURI 64063

APPLICABLE CODES:
2018 INTERNATIONAL RESIDENTIAL CODE (TOWNHOMES)
2018 INTERNATIONAL BUILDING CODE (CLUBHOUSE)
2018 INTERNATIONAL PLUMBING CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL FUEL GAS CODE
2018 INTERNATIONAL FIRE CODE
2017 NATIONAL ELECTRICAL CODE
ICC/ANSI A117.1-2009, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

FIRE EXTINGUISHERS

1. PROVIDE PORTABLE FIRE EXTINGUISHERS IN OCCUPANCIES AND LOCATIONS AS REQUIRED BY THE FIRE PREVENTION CODE.
2. PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED, INSPECTED, AND MAINTAINED IN ACCORDANCE WITH NFPA 10, STANDARD FOR PORTABLE FIRE EXTINGUISHERS.

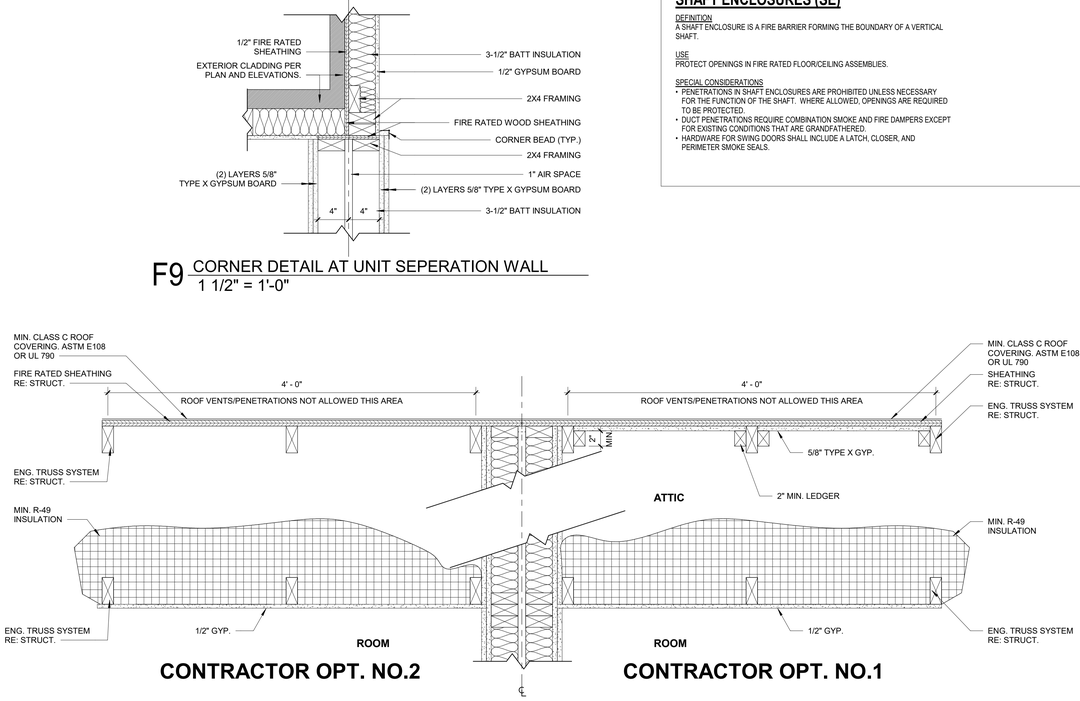
CEILING HEIGHT NOTES: (IBC 1208)

1. OCCUPIABLE SPACE, HABITABLE SPACES, AND CORRIDORS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0" A.F.F.
2. BATHROOMS, TOILET ROOMS, KITCHENS, STORAGE ROOMS, AND LAUNDRY ROOMS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0" A.F.F.

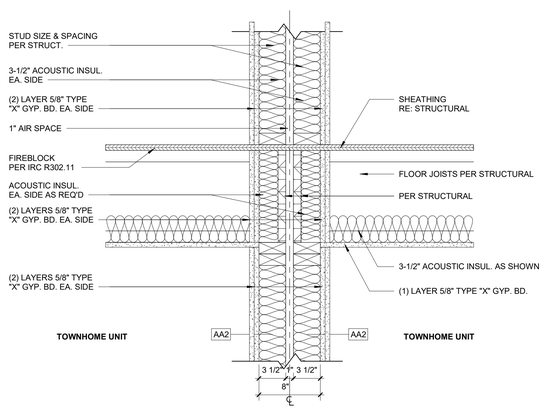
   EXCEPTION 2: IF ANY ROOM IN A BUILDING HAS A SLOPED CEILING, THE PRESCRIBED CEILING HEIGHT FOR THE ROOM IS REQUIRED IN ONE-HALF THE AREA THEREOF. ANY PORTION OF THE ROOM MEASURED LESS THAN 5'-0" FROM THE FLOOR TO THE CEILING SHALL NOT BE INCLUDED IN ANY COMPUTATION OF THE MINIMUM AREA THEREOF.

FIRE SPRINKLER NOTE: (IRC R302)

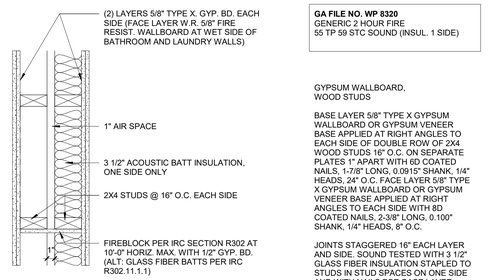
1. FIRE SPRINKLER NOT REQUIRED IF EXTERIOR WALLS OF DWELLINGS ARE SEPERATED BY FIVE FEET OR MORE IF WALL IS UNRATED. IF WALL IS RATED (1 HR) NO SEPERATION IS REQUIRED.



C10 ROOF AND UNIT SEPARATION WALL CONTINUITY DETAIL
1 1/2" = 1'-0"

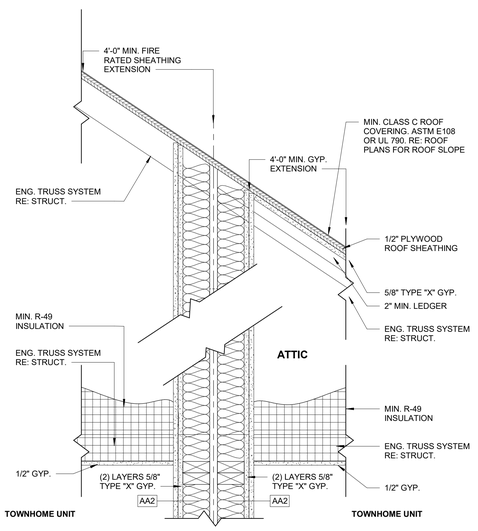


A9 2-HR FLOOR/ UNIT SEPARATION WALL DETAIL
1 1/2" = 1'-0"



GA FILE NO. WP 8320
GENERIC 2 HOUR FIRE
55 TP 59 STC SOUND (INSUL. 1 SIDE)

D3 2-HR UNIT SEPARATION WALL - (TYPE AA2)
1 1/2" = 1'-0"



A4 ROOF AT 2-HR UNIT SEPARATION WALL
1 1/2" = 1'-0"

collins|webb ARCHITECTURE
307B SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

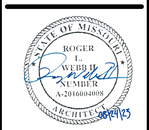
PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:



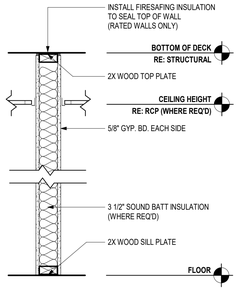
PROFESSIONAL SEAL

G111

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

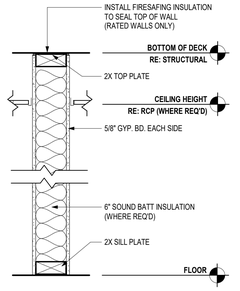
LIFE SAFETY INFORMATION - APARTMENTS

1/29/2025 8:41:27 AM



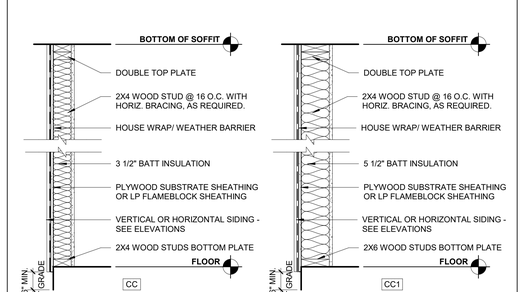
WALL TYPE AA

TYPE	WALL DESCRIPTION
AA	• 2X4 WOOD STUD @ 16" O.C. TO DECK ABOVE • 5/8" TYPE "X" GYP. BD. EACH SIDE TO DECK ABOVE • NO SOUND BATT INSUL. • NON RATED
AA1	• 2X4 WOOD STUD @ 16" O.C. TO DECK ABOVE • 5/8" TYPE "X" GYP. BD. ONE SIDE • NO SOUND BATT INSUL. • NON RATED
AA2	• (2) 2X4 WOOD STUD @ 16" O.C. TO DECK ABOVE • 1" AIR GAP BETWEEN • (2) LAYERS 5/8" TYPE "X" GYP. BD. EACH SIDE TO DECK ABOVE • SOUND BATT INSUL. ONE SIDE • 2 HOUR RATED RE: WP8320 (SEE D3/G111 FOR ILLUSTRATION OF ASSEMBLY)



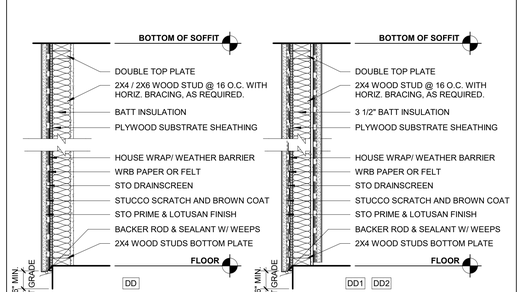
WALL TYPE BB

TYPE	WALL DESCRIPTION
BB	• 2X6 WOOD STUD @ 16" O.C. TO DECK ABOVE • 5/8" TYPE "X" GYP. BD. EACH SIDE TO DECK ABOVE • BATT INSUL. • NON RATED



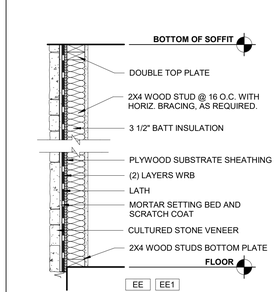
WALL TYPE CC

TYPE	WALL DESCRIPTION
CC	•2X4 STUD @ 16" O.C. •5/8" TYPE "X" GYP. BD. ONE SIDE •3-1/2" BATT INSUL. TO FULL HEIGHT OF WALL •HOUSE WRAP/ WEATHER BARRIER • EXT. VERTICAL SIDING WITH SUBSTRATE SHEATHING: INSTALL PER MFR DETAILS • NON RATED
CC1	• 2X6 STUD @ 16" O.C. •5/8" TYPE "X" GYP. BD. ONE SIDE •5-1/2" BATT INSUL. TO FULL HEIGHT OF WALL •HOUSE WRAP/ WEATHER BARRIER • EXT. VERTICAL OR HORIZONTAL SIDING WITH SUBSTRATE SHEATHING: INSTALL PER MFR DETAILS. - SEE ELEVATIONS • NON RATED



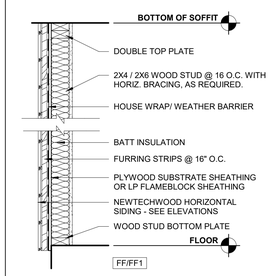
WALL TYPE DD

TYPE	WALL DESCRIPTION
DD	• 2X4 STUD @ 16" O.C. • 1/2" TYPE "X" GYP. BD. ONE SIDE • 3-1/2" BATT INSUL. TO FULL HEIGHT OF WALL • 1-SIDED SUBSTRATE SHEATHING • HOUSE WRAP/ WEATHER BARRIER • CODE COMPLIANT SELF-FURRED GALVANIZED DIAMOND MESH METAL LATHE • CODE COMPLIANT WRB PAPER OR FELT • DRAINAGE MAT - STO DRAINSCREEN® • STUCCO SCRATCH COAT - STOPOWERWALL® STUCCO • STUCCO BROWN COAT - STOPOWERWALL® STUCCO • PRIMER COATING - STOPRIME® • FINISH - STOLIT® LOTUSAN - COLOR 37203 • NON RATED
DD1	• 2X6 STUD @ 16" O.C. • 5-1/2" BATT INSUL. TO FULL HEIGHT OF WALL • 1-SIDED SUBSTRATE SHEATHING - BOTH SIDES • HOUSE WRAP/ WEATHER BARRIER - BOTH SIDES • CODE COMPLIANT WRB PAPER OR FELT - BOTH SIDES • DRAINAGE MAT - STO DRAINSCREEN® - BOTH SIDES • CODE COMPLIANT SELF-FURRED GALVANIZED DIAMOND MESH METAL LATHE - BOTH SIDES • STUCCO SCRATCH COAT - STOPOWERWALL® STUCCO - BOTH SIDES • STUCCO BROWN COAT - STOPOWERWALL® STUCCO - BOTH SIDES • PRIMER COATING - STOPRIME® - BOTH SIDES • FINISH - STOLIT® LOTUSAN - COLOR 37203 - BOTH SIDES • NON RATED
DD2	• 2X4 STUD @ 16" O.C. • 3-1/2" BATT INSUL. TO FULL HEIGHT OF WALL • 1-SIDED SUBSTRATE SHEATHING - BOTH SIDES • HOUSE WRAP/ WEATHER BARRIER - BOTH SIDES • CODE COMPLIANT WRB PAPER OR FELT - BOTH SIDES • DRAINAGE MAT - STO DRAINSCREEN® - BOTH SIDES • CODE COMPLIANT SELF-FURRED GALVANIZED DIAMOND MESH METAL LATHE - BOTH SIDES • STUCCO SCRATCH COAT - STOPOWERWALL® STUCCO - BOTH SIDES • STUCCO BROWN COAT - STOPOWERWALL® STUCCO - BOTH SIDES • PRIMER COATING - STOPRIME® - BOTH SIDES • FINISH - STOLIT® LOTUSAN - COLOR 37203 - BOTH SIDES • NON RATED



WALL TYPE EE

TYPE	WALL DESCRIPTION
EE	• 2X4 STUD @ 16" O.C. • 1/2" TYPE "X" GYP. BD. ONE SIDE • 3-1/2" BATT INSUL. TO FULL HEIGHT OF WALL • HOUSE WRAP/ WEATHER BARRIER • MORTAR SETTING BED AND SCRATCH COAT • CULTURED STONE VENEER - ELDORADO STONE - CUT COARSE STONE - SEASHELL: INSTALL PER MFR DETAILS • NON RATED
EE1	• 2X6 STUD @ 16" O.C. • 1/2" TYPE "X" GYP. BD. ONE SIDE • 3-1/2" BATT INSUL. TO FULL HEIGHT OF WALL • HOUSE WRAP/WEATHER BARRIER • MORTAR SETTING BED AND SCRATCH COAT • CULTURED STONE VENEER - ELDORADO STONE - CUT COARSE STONE - SEASHELL: INSTALL PER MFR DETAILS • NON RATED



WALL TYPE FF

TYPE	WALL DESCRIPTION
FF	• 2X4 STUD @ 16" O.C. • 1/2" TYPE "X" GYP. BD. ONE SIDE • 3-1/2" BATT INSUL. TO FULL HEIGHT OF WALL • HOUSE WRAP/ WEATHER BARRIER • EXT. NEWTECHWOOD HORIZONTAL SIDING WITH SUBSTRATE SHEATHING: INSTALL PER MFR DETAILS • NON RATED
FF1	• 2X6 STUD @ 16" O.C. • 1/2" TYPE "X" GYP. BD. ONE SIDE •5-1/2" BATT INSUL. TO FULL HEIGHT OF WALL • HOUSE WRAP/ WEATHER BARRIER • EXT. NEWTECHWOOD HORIZONTAL SIDING WITH SUBSTRATE SHEATHING: INSTALL PER MFR DETAILS • NON RATED

WALL TYPE NOTES:

1. DRYWALL PARTITIONS SHOULD BE CONSTRUCTED IN ACCORDANCE WITH ASTM E497 - STANDARD PRACTICE FOR INSTALLING SOUND ISOLATING GYPSUM BOARD PARTITIONS, AND ASTM C919 - STANDARD PRACTICE FOR USE OF SEALANTS IN ACOUSTICAL APPLICATIONS. ALL SOUND BARRIER PARTITIONS SHOULD EXTEND FROM FLOOR TO STRUCTURE UNLESS STATED OTHERWISE. METAL STUDS SHALL BE RIGIDLY ATTACHED ONLY AT HEAD AND FOOT. STRUCTURAL CROSS BRACING MUST NOT RIGIDLY CONNECT TO BOTH METAL STUD WALLS.
2. RE: LIFE SAFETY PLAN(S) FOR RATED WALL LOCATIONS.
3. RE: WALL TYPE DETAIL SHEET FOR TYPICAL WALL DETAILS AND ADDITIONAL WALL TYPE INFORMATION.
4. FOR TYPICAL TOP OF WALL CONDITIONS AT JOISTS AND BEAMS, REFER TO THE CLOSURE DETAILS ON THE WALL TYPE DETAILS SHEET.
5. WHERE "FIRE-RATED SEALANT" IS INDICATED ON WALL TYPES: PROVIDE FIRE-RATED SEALANT ABOVE TOP TRACK, UNDER BOTTOM TRACK, AT ALL PENETRATIONS (BOTH SIDES), AND AS REQUIRED BY FIRE RATING UL NUMBER.
6. EXTEND FIRE-RATED WALL CONSTRUCTION BEHIND RECESSED OR BUILT-IN EQUIPMENT, SUCH AS FIRE EXTINGUISHER CABINETS (FEC), ELECTRICAL WATER COOLERS (EWC), ELECTRICAL PANELS, ETC., UNLESS NOTED OTHERWISE.
7. PROVIDE AND INSTALL ALL STIFFENERS, BRACING, BACK-UP PLATES AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK AND OF ALL FLOOR MOUNTED OR SUSPENDED MECHANICAL, ELECTRICAL OR LABORATORY EQUIPMENT.
8. WHERE HVAC OR OTHER MECHANICAL, ELECTRICAL AND PLUMBING ITEMS PENETRATE PARTITIONS: STUDS SHALL BE BRACED AND FRAMED TO STRUCTURE AS REQUIRED TO PROVIDE ADEQUATE SUPPORT. ALL PENETRATIONS THROUGH ACOUSTICAL AND FIRE RATED WALLS SHALL BE SEALED TO PROVIDE FIRE, SMOKE, AND/OR ACOUSTICAL ISOLATION OF SPACES WITH APPROPRIATE ACOUSTICAL/ FIRESTOP MATERIAL.
9. THERE SHALL BE NO BACK-TO-BACK ELECTRICAL, TELEPHONE, OR OTHER OUTLETS, EXCEPT WHERE SPECIFICALLY SHOWN.
10. WALL BASE IS NOT SHOWN ON ALL WALL TYPES FOR CLARITY. REFER TO FINISH SCHEDULE.
11. PROVIDE GLASS-MAT, WATER RESISTANT BACKING BOARD AT ALL WET LOCATIONS.
12. EXCEPT AT FIRE-RATED PARTITIONS, ALL WALL AND COLUMN GYPSUM BOARD FACING SHALL BE HELD AT 5/8 INCH BELOW STRUCTURE, UNLESS NOTED OR SHOWN OTHERWISE.
13. PROVIDE AND INSTALL BLOCKING REQUIRED FOR ALL A.V. EQUIPMENT. G.C. TO COORDINATE WITH TI CONSULTANT FOR FINAL LOCATIONS AND SIZE REQUIREMENTS.
14. COMPRESSIBLE FILLER - ACCEPTABLE MATERIALS WOULD BE FIBERGLASS INSULATION OR FIRESTOPPING. VOIDS TO BE COMPLETELY FILLED AND A FIRESTOP SEALANT OVER ANY ENDS. THIS IS TYPICAL FOR ALL ACOUSTICAL WALL ASSEMBLIES WHERE "COMPRESSIBLE FILLER" IS CALLED FOR. THERE CAN BE NO VOIDS IN THE INSTALLATION.
15. MUD AND TAPE ALL 1ST AND 2ND LAYER GYP. BOARD JOINTS. PROVIDE 3RD LAYER FINISH PER GENERAL NOTES: FLOOR PLAN.
16. PROVIDE HORIZONTAL LATERAL BRACING WIRE WELDED TO STUD FOR ALL WALLS, AT APPROPRIATE GAGE AND SPACING SPECIFIED BY SUPPLIER.

collins webb ARCHITECTURE
8078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016004008
ARCHITECT
1/29/25

PROFESSIONAL SEAL

G121

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

WALL TYPES

1/29/2025 8:41:28 AM

SPECIFICATIONS - PRODUCT & INSTALLATION GENERAL REQUIREMENTS

GENERAL REQUIREMENTS APPLICABLE TO ALL MATERIALS FOR THE PROJECT:

1.NO SUBSTITUTIONS OF MATERIALS WITHOUT COMPLETION OF A SUBSTITUTION REQUEST FORM & APPROVAL OF SUBSTITUTION BY BOTH ARCHITECT & OWNER PROJECT MANAGER. FORM CAN BE REQUESTED FROM ARCHITECT.
2. A CONDENSED SET OF SPECIFICATIONS ARE PROVIDED FOR THE PROJECT. STRICT ADHERANCE TO MANUFACTURER REQUIREMENTS AND INSTALLATION ARE REQUIRED TO BE FOLLOWED WITH SECTIONS PROVIDED WITHIN. IF REQUIRED THE ARCHITECT WILL ISSUE ADDITIONAL SECTIONS TO PROVIDE CLARITY TO PRODUCTS OR INSTALLATION REQUIREMENTS.

DIVISION 1 - GENERAL REQUIREMENTS

1. 1 SEE ADMINISTRATIVE SPECIFICATION FOR GENERAL REQUIREMENTS RELATED TO ADMINISTATION OF THIS CONTRACT.

A. CONTRACTOR LICENSES

1. THE CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED IN THE PROJECT SHALL BE REQUIRED TO OBTAIN AND PAY FOR ALL NECESSARY LICENSES AS REQUIRED BY ANY LAW OR AGENCIES HAVING JURISDICTION (AHJ) OVER THE PROJECT.

B. BUILDING PERMITS

1. THE GENERAL CONTRACTOR WILL PAY FOR ALL PERMITS REQUIRED BY ANY AGENCY HAVING JURISDICTION (AHJ) OVER THE PROJECT FOR ALL WORK TO BE PREFORMED BY THE GENERAL CONTRACTOR.

C. UTILITY FEES

1. THE CONTRACTOR SHALL PAY THE NECESSARY FEES TO CONNECT TO EXISTING UTILITIES AT THE PROPERTY LINE OR IN ADJACENT STREETS AND RIGHT OF WAY AS SPECIFIED, NECESSARY, AND/OR INCLUDED IN THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL PAY ALL UTILITY COSTS (BILLS) DURING CONSTRUCTION UNTIL OWNER TAKES POSSESSION OF THE FACILITY OR THE FACILITY IS CERTIFIED AS SUBSTANTIALLY COMPLETE.

D. PROTECTION OF FINISHED WORK

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT FINISHED SURFACES. PROTECTION FOR FINISHES SUCH AS DOORS, WALLS AND FLOORS SHOULD BE PROVIDED AS REQUIRED. ANY DAMAGES TO THESE AREAS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE.

E. GENERAL CONDITIONS

1. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN DRAWINGS AND ANY DISCREPANCY OR CONFLICT BETWEEN ANY DRAWING AND ANY SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. NOTWITHSTANDING, DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ARCHITECT'S AND/ OWNERS ATTENTION AND CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF THE WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH ARCHITECT'S INTERPRETATION.
2. THE GENERAL CONTRACTOR SHALL KEEP A COMPLETE SET OF DOCUMENTS ON THE PROJECT SITE AT ALL TIMES FOR REFERENCE DURING CONSTRUCTION.
3. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE CONTRACTOR'S BEST SKILLS AND ATTENTION. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER CONSTRUCTION MEANS AND METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
4. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HAVE CONTROL OVER ALL JOB SITE SAFETY PROCEDURES AND POLICIES. THE GENERAL CONTRACTOR SHALL HAVE A SAFETY COORDINATOR AND BE RESPONSIBLE TO HOLD REGULARLY SCHEDULED SAFETY TRAINING WITH ALL JOB SITE PERSONNEL, INCLUDING ALL SUB CONTRACTOR PERSONNEL.
5. NEITHER THE ARCHITECT'S OR THE OWNERS INSPECTION NOR FAILURE TO INSPECT SHALL RELIEVE THE CONTRACTOR OF ANY OBLIGATION HEREUNDER. IF ANY WORK FAILS TO CONFORM TO THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL PROMPTLY REMEDY AND/OR REPLACE THE SAME AT THE CONTRACTOR'S EXPENSE. NO ACCEPTANCE OR PAYMENT BY THE OWNER OR ARCHITECT SHALL CONSTITUTE A WAIVER OF THE FOREGOING AND NOTHING HEREIN SHALL EXCLUDE OR LIMIT ANY WARRANTIES IMPLIED BY LAW.
6. THE GENERAL CONTRACTOR SHALL SO CONDUCT ITS OPERATIONS AS NOT TO UNREASONABLY INTERFERE WITH TRAFFIC ON PUBLIC THOROUGHFARES ADJACENT OR NEAR TO THE PROJECT SITE.
7. DO NOT SCALE DRAWINGS.

F. PROJECT REQUIREMENTS

1. THE GENERAL CONTRACTOR REPRESENTS THAT IT POSSESSES THE SKILLS REQUIRED FOR THE WORK, ASSUMES THE RESPONSIBILITIES OF AN EMPLOYER FOR PERFORMANCE OF THE WORK, AND ACTS AS AN EMPLOYER OF ONE OR MORE EMPLOYEES BY PAYING WAGES, DIRECTING ACTIVITIES AND PERFORMING OTHER SIMILAR FUNCTIONS. THE GENERAL CONTRACTOR IS AN INDEPENDENT CONTRACTOR, FREE TO DETERMINE THE MANNER IN WHICH THE WORK IS PERFORMED.
2. THE GENERAL CONTRACTOR SHALL PROVIDE, AND MAINTAIN IN GOOD WORKING ORDER, THE FOLLOWING ITEMS FOR USE BY THE PROJECT SUPERINTENDENT DAILY DURING THE ENTIRE DURATION OF THE PROJECT:
   A. LAPTOP WITH INTERNET ACCESS.
   B. DIGITAL CAMERA WITH DATE STAMP CAPABILITY AND WITH PROPER CABLES TO ATTACH TO LAPTOP.
   C. EMAIL ACCESS THROUGH THE LAPTOP.
   D. A PRINTER/SCANNER/FAX MACHINE WITH PROPER CABLES TO ATTACH TO LAPTOP.
   E. CELL PHONE.
   F. PROJECT INTERNET CLOUD BASED SITE FOR MANAGEMENT OF PROJECT INFORMATION. SITE WILL BE USED FOR SUBMITTAL OF SHOP DRAWINGS, RFI'S & PHOTOS. SITE SHALL BE PROCORE OR EQUAL FUNCTIONALITY.
3. THE GENERAL CONTRACTOR SHALL HAVE A CONSTRUCTION SUPERINTENDENT ASSIGNED TO THIS PROJECT, AND THIS SUPERINTENDENT SHALL BE ON SITE EVERY DAY THERE IS ANY CONSTRUCTION ON THIS PROJECT. THE SUPERINTENDENT SHALL BE REACHABLE BY PHONE DURING NORMAL BUSINESS HOURS, ONCE ASSIGNED, THE SUPERINTENDENT SHALL NOT BE REMOVED OR REPLACED WITHOUT WRITTEN APPROVAL FROM OWNER & ARCHITECT, UNLESS SPECIFICALLY REQUESTED TO BE REPLACED BY OWNER.
4. THE SUPERINTENDENT WILL BE REQUIRED TO PROVIDE PHOTOGRAPHS (VIA EMAIL USING A DIGITAL CAMERA) TO THE OWNER & ARCHITECT EACH FRIDAY BY NOON CST, SHOWING THE PROGRESS OF CONSTRUCTION. THE GENERAL CONTRACTOR IS ENCOURAGED TO TAKE PHOTOS SEVERAL TIMES EACH WEEK TO HELP MAINTAIN PROOF OF CONSTRUCTION PROGRESS, RECORD UNCOVERED CONDITIONS, RECORD CONDITION AND AMOUNTS OF VENDOR GOODS UPON RECEIPT, AND RECORD CONSTRUCTION THAT VARIES FROM THE CD'S (AS PART OF THE AS-BUILTS). ALL PHOTOS WILL HAVE A 'DATE STAMP'.

G. INSPECTIONS/OBSERVATIONS

1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OVERSEE CONSTRUCTION OF THE PROJECT, CONTINUALLY
   INSPECTING THE WORK, MATERIALS, AND WORKMANSHIP PROVIDED BY ALL OF HIS TRADESMEN, SUBCONTRACTORS, AND SUPPLIERS. EXCELLENCE IN QUALITY OF CONSTRUCTION CAN ONLY BE ACHIEVED IF THE CONTRACTOR ENFORCES HIGH STANDARDS OF ACCEPTABILITY. THE GENERAL CONTRACTOR CANNOT DELEGATE HIS RESPONSIBILITY TO THE SUBCONTRACTORS, BUT MUST CONTINUALLY MONITOR THE WORK OF EACH TRADE ON THE PROJECT.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE AND SCHEDULE ALL AGENCIES HAVING JURISDICTION (AHJ) INSPECTIONS NECESSARY TO OBTAIN THE CERTIFICATE OF OCCUPANCY (CERTIFICATE OF COMPLIANCE). PRIOR TO THE DATE OF THE AGENCY INSPECTION, THE GENERAL CONTRACTOR SHOULD INSPECT THE PROJECT TO INSURE THAT CONSTRUCTION COMPLIES WITH THE AGENCY REQUIREMENTS. SCHEDULING FINAL INSPECTIONS WITH AGENCY REPRESENTATIVES WHEN THE PROJECT IS NOT COMPLETE MUST BE AVOIDED. COPIES OF FINAL INSPECTIONS MUST BE PROVIDED TO OWNER & ARCHITECT AS THEY ARE AVAILABLE.
3. PRIOR TO REQUESTING THE SUBSTANTIAL COMPLETION INSPECTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OWN PRE-SUBSTANTIAL COMPLETION INSPECTION OF THE CONSTRUCTION FOR QUALITY OF CONSTRUCTION AND COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.
4. THE FOLLOWING PEOPLE SHOULD BE IN ATTENDANCE FOR THE SUBSTANTIAL COMPLETION INSPECTION:
   A. GENERAL CONTRACTOR
   B. GENERAL CONTRACTOR SUPERINTENDENT
   C. MECHANICAL CONTRACTOR
   D. ELECTRICAL CONTRACTOR
   E. PLUMBING CONTRACTOR
   F. PAINTING CONTRACTOR
   H. FLOORING CONTRACTOR
5. ITEMS TO BE SUBMITTED AS A PREREQUISITE TO THE REQUEST FOR THE CERTIFICATE OF SUBSTANTIAL COMPLETION AND OWNER / ARCHITECT OBSERVATION OF ITEMS TO BE COMPLETED AND CORRECTED.
   A. GENERAL CONTRACTOR'S PUNCH LISTS
   B. HVAC TEST AND BALANCE REPORT
   C. SPRINKLER SYSTEM ACCEPTANCE INSPECTION REPORT
   D. COPY OF VIDEO OF COMPLETED SEWER SYSTEM
6. AT THE REVIEW TEAM SHOULD PROCEED IN AN ORGANIZED MANNER THROUGHOUT THE BUILDING INSPECTING EACH SPACE OR ROOM. THE PUNCH LIST GENERATED BY THE SUBSTANTIAL COMPLETION INSPECTION TOUR IS TO BE PREPARED BY THE CONTRACTOR. ALONG WITH THE PUNCH LIST, THE ARCHITECT SHALL PREPARE THE "CERTIFICATE OF SUBSTANTIAL COMPLETION."
7. IMMEDIATELY AFTER RECEIPT OF THE PUNCH LIST, THE GENERAL CONTRACTOR AND SUBCONTRACTORS ARE EXPECTED TO BEGIN CORRECTION OF THE OUTSTANDING ITEMS. AFTER COMPLETION OF PUNCHLIST, THE CONTRACTOR SHALL NOTIFY OWNER & ARCHITECT IN WRITTING THAT FULL LIST OF ITEMNS TO BE COMPLETED AND OR CORRECT IS FINALIZED.

H. RECORD (CLOSE-OUT) DOCUMENTS

1. THE OWNER REQUIRES THE GENERAL CONTRACTOR AND SUBCONTRACTORS TO MAINTAIN AN ACCURATE, CURRENT SET OF RECORD DOCUMENTS (AS-BUILTS) AS CONSTRUCTION PROGRESSES. ALL PERTINENT INFORMATION RELATING TO THE PROJECT MUST BE TIMELY MAINTAINED ON THE AS-BUILTS. THE AS-BUILTS MUST BE MAINTAINED ON-SITE IN THE GENERAL CONTRACTOR'S OFFICE AND WILL NOT BE USED FOR ANY OTHER PURPOSE. SINCE THE OWNER WILL OWN AND OPERATE THE FACILITY, IT IS IMPERATIVE THAT ALL PARTIES MAINTAIN ACCURATE INFORMATION REGARDING THE ACTUAL CONSTRUCTION OF THE PROJECT.
   ALL DEVIATIONS FROM THE CONTRACT SET OF DRAWINGS MUST BE NOTED ON THE AS-BUILTS IN RED WITH CLOUDS FOR CLEAR IDENTIFICATION. THE OWNER WILL REVIEW THE AS-BUILTS FOR ACCURACY AND COMPLETENESS MONTHLY, DURING THE PAYMENT APPLICATION REVIEW PROCESS. FAILURE TO POST CHANGES TO THE PROJECT ON THE AS-BUILTS AS IDENTIFIED DURING THE ON-SITE MONTHLY REVIEW WILL BE CAUSE TO SUSPEND PAYMENT UNTIL RECTIFIED. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENFORCE THE TIMELY POSTING OF AS-BUILT CHANGES WITH THE SUBCONTRACTORS.

I. FINAL CLOSE-OUT OF THE PROJECT

1. WITHIN THIRTY (30) CALENDAR DAYS AFTER THE FINAL PROJECT SUBSTANTIAL COMPLETION, THE GENERAL CONTRACTOR SHALL COMPILE ALL CLOSE-OUT DOCUMENTS AND SUBMIT THEM TO THE OWNER FOR REVIEW. IF THE CONTRACTOR FAILS TO COMPLETE ITS REQUIREMENTS WITHIN THIS TIMELINE NOTED ABOVE THE CONTRACTOR MAY BE SUBJECT TO ADDITONAL ADMINISTATION FEES.

J. CLOSE-OUT DOCUMENTS

1. THE CATEGORIES LISTED BELOW SHOULD BE SUBMITTED AT THE SAME TIME.
   A. A DISK WITH ALL PHOTOS TAKEN DURING CONSTRUCTION.
   B. CHANGE ORDERS AND ALL ADDENDA ATTACHED AND POSTED TO THE AS-BUILT DRAWINGS.
   C. AS-BUILT DRAWINGS: ONE HARD COPY TO REMAIN ON SITE AND IN PLAN TUBE; ONE ELECTRONIC COPY TO BE SENT WITH CLOSE-OUT PAPERWORK.
   D. MATERIALS SELECTION DATA - PROVIDE ALL APPROVED SUBMITTALS.
   E. OPERATION AND MAINTENANCE MANUALS (O&M) - PROVIDE O&M MANUALS BOXED AND BOUND. THIS ITEM IS OF SIGNIFICANT IMPORTANCE TO MSI FUTURE MAINTENANCE ACTIVITIES.
   F. ALL HVAC TEST AND BALANCE REPORTS.
   H. RELEASE OF LIEN (AIA FORM 706A). PAYMENT OF DEBT (AIA FORM 706),
      I. WARRANTIES, CERTIFICATES, AFFIDAVITS:
      2. ALL INFORMATION INCLUDED IN THIS CATEGORY WILL BE FURNISHED IN ONE (1) COPY AND BOUND IN A STURDY THREE-RING BINDER WITH A LABEL ON THE OUTSIDE READING "GENERAL CLOSE-OUT DOCUMENTS" TO INCLUDE AN INDEX OF THE CONTENTS. ALL AIA DOCUMENTS WILL BE ORIGINAL (WITH RED LETTERING ON THE BOTTOM OF THE FORM) AND NOTARIZED. IF THE ELECTRONIC VERSION IS USED A COPY WITH ORIGINAL SIGNATURES WILL BE SUBMITTED. THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR WILL HAVE SEPARATE TABS IDENTIFYING EACH BY NAME. THE GENERAL CONTRACTOR WILL LIST EACH SUBCONTRACTOR ALPHABETICALLY AND WILL CHECK TO INSURE THAT A "RELEASE OF LIEN" - AIA FORM G706A AND A "PAYMENT OF DEBT-AIA FORM G706 IS INCLUDED FOR HIMSELF AND EACH SUBCONTRACTOR. THE GENERAL CONTRACTOR WILL INCLUDE A "CONSENT OF SURETY" - AIA FORM G707. IN ADDITION, THE GENERAL CONTRACTOR WILL INCLUDE BEHIND HIS TAB THE FOLLOWING INFORMATION:
         A. A LIST OF NAMES, BUSINESS ADDRESSES, PHONE NUMBERS AND EMAIL ADRESSES FOR THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR.
         B. AN ANNOTATED COPY OF THE SUBSTANTIAL COMPLETION PUNCH LIST INDICATING ACTION TAKEN ON EACH ITEM.
         C. WARRANTIES, CERTIFICATES AND AFFIDAVITS SHALL BE INCLUDED FOR ANY EQUIPMENT, MATERIALS OR SYSTEMS, COMBINED WITH ALL OF THE ABOVE INFORMATION AND PLACED BEHIND THE TAB OF THE CONTRACTOR THAT ISSUED IT.

DIVISION 4 - MASONRY

04 0550 - MASONRY VENEERS & SIMULATED STONES

A. SUBMITTALS: SHOP DRAWINGS AND CALCULATIONS INDICATING PRODUCTS TYPES AND LAYOUT, VERTICAL AND HORIZONTAL DIMENSIONS, EDGE CONDITIONS, AND CONNECTION DETAILS TO SUBSTRATES. PROVIDE GROUT TYPES AND COLOR SAMPLES.

B. BASIS OF DESIGN: CANYON LEDGE PROFILE AS MANUFACTURED BY CANYON STONE INC. MATCH THE MODULAR CONFIGURATIONS INDICATED IN THE CONSTRUCTION DOCUMENTS.

C. MATERIALS
1. MORTAR: TYPE "N" TINTED TO A COLOR SELECTED BY THE ARCHITECT.
2. METAL LATH SHALL BE MINIMUM 2.5 LB. PAPER BACKED GALVANIZED METAL LATH (DIAMOND MESH) ATTACHED WITH 1-1/4" TYPE S-12 GALVANIZED NAILS. GALVANIZED FLASHING MAY ALSO BE USED.
3. IN WALL AND CAP FLASHING SHALL BE CARLISLE "PRE-KLEENED" EPDM OR COMPARABLE PRODUCTS MANUFACTURED BY W.R. GRACE OR ALCO.
4. BUILDING FELT TO BE 15# ASPHALT IMPREGNATED BUILDING FELT OVER WEATHER BARRIER OVER WALL SHEATHING.

C. FABRICATIONS: FABRICATE ITEMS IN LARGEST PRACTICAL SECTIONS FOR DELIVERY TO SITE.

F. INSTALLATION:
1. FOLLOW MANUFACTURER RECOMMENDED INSTALLATION INSTRUCTIONS TO MAINTAIN WARRANTY.
2. APPLY MORTAR 1/2" TO 3/4" THICK TO PREPARED SURFACE AREA USING A PLASTERERS OR MASONS TROWEL AND LAY SIMULATED STONE UNITS LEVEL AND TRUE TO LINE IN FULL BEDS OF MORTAR. ALL JOINTS MUST BE COMPLETELY FILLED. APPLY ONLY ENOUGH MORTAR TO ALLOW STONES TO BE SET BEFORE MORTAR BEGINS TO HARDEN.
3. ALL JOINTS IN SIMULATED STONE WORK SHALL NOT EXCEED AN AVERAGE OF 1/2" IN WIDTH.
4. RETAIN 1/2" DEEP X 1/4" WIDE SEALANT JOINTS AT PERIMETER OF EXTERIOR DOORS, WINDOW FRAMES AND OTHER WALL OPENINGS.
5. DO NOT ALLOW MORTAR DROPPINGS TO HARDEN ON EXPOSED SURFACES.
6. WALLS SHALL BE COVERED WITH 15 LB. BUILDING FELT AND GALVANIZED METAL LATH SHALL BE INSTALLED PRIOR TO APPLICATION OF THE MORTAR BASE. MORTAR BASE MAY BE APPLIED DIRECTLY TO MASONRY BACK-UP.

DIVISION 5 - METALS

05 5000 - METAL RAILINGS

A. SUBMITTALS:
PRODUCT DATA AND SHOP DRAWINGS WITH PLANS ELEVATIONS AND SEECTIONS INDICATING MEMBER SIZES AND LAYOUT, VERTICAL AND HORIZONTAL DIMENSIONS, EDGE CONDITIONS, AND CONNECTION DETALS. INCLUDE DETAILS OF EQUIPMENT ASSEMBLIES. INDICATE DIMENSIONS, WEIGHTS, LOADS, REQUIRED CLEARANCES, METHOD OF FIELD ASSEMBLY, COMPONENTS, AND LOCATION AND SIZE OF EACH FIELD CONNECTION. SAMPLES FOR INITIAL SELECTION: FOR EACH TYPE OF EXPOSED FINISH.
1. DELEGATED-DESIGN SUBMITTAL: FOR HANDRAIL AND GUARDRAIL SYSTEMS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

B. DESIGN: METAL TUBE RAILINGS SHALL BE DESIGNED BY FABRICATOR TO SUPPORT CODE-REQUIRED LOADING AND TO MATCH THE CONFIGURATIONS INDICATED IN THE CONSTRUCTION DOCUMENTS. SEE DRAWINGS FOR REQUIRED RAILING ELEVATIONS.

C. FIELD CONDITIONS:
1. FIELD MEASUREMENTS: VERIFY ACTUAL LOCATIONS OF WALLS AND OTHER CONSTRUCTION CONTIGUOUS WITH METAL FABRICATIONS BY FIELD MEASUREMENTS BEFORE FABRICATION.

D. PERFORMANCE REQUIREMENTS:
1. A. DELEGATED DESIGN: ENGAGE A QUALIFIED PROFESSIONAL ENGINEER,TO DESIGN RAILINGS, INCLUDING ATTACHMENT TO BUILDING CONSTRUCTION.
   B. STRUCTURAL PERFORMANCE: RAILINGS, INCLUDING ATTACHMENT TO BUILDING CONSTRUCTION, SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED:
2. HANDRAILS AND TOP RAILS OF GUARDS:
   A. UNIFORM LOAD OF 50 LBF/ FT. (0.73 KN/M) APPLIED IN ANY DIRECTION.
   B. CONCENTRATED LOAD OF 200 LBF (0.89 KN) APPLIED IN ANY DIRECTION.
   C. UNIFORM AND CONCENTRATED LOADS NEED NOT BE ASSUMED TO ACT CONCURRENTLY.

E. FASTENERS:
1. FASTENERS FOR ANCHORING RAILINGS TO OTHER CONSTRUCTION: SELECT FASTENERS OF TYPE, GRADE, AND CLASS REQUIRED TO PRODUCE CONNECTIONS SUITABLE FOR ANCHORING RAILINGS TO OTHER TYPES OF CONSTRUCTION INDICATED AND CAPABLE OF WITHSTANDING DESIGN LOADS.

F. MISCELLANEOUS MATERIALS:
1. METAL SURFACES, GENERAL: PROVIDE MATERIALS WITH SMOOTH SURFACES, WITHOUT SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, STAINS, DISCOLORATIONS, OR BLEMISHES.
2. BRACKETS, FLANGES, AND ANCHORS: CAST OR FORMED METAL OF SAME TYPE OF MATERIAL AND FINISH AS SUPPORTED RAILS UNLESS OTHERWISE INDICATED.
3. PIPE: ASTM A 53/A 53M, TYPE F OR TYPE S, GRADE A, STANDARD WEIGHT (SCHEDULE 40), UNLESS ANOTHER GRADE AND WEIGHT ARE REQUIRED BY STRUCTURAL LOADS.

G. FABRICATION:
1. GENERAL: FABRICATE RAILINGS TO COMPLY WITH REQUIREMENTS INDICATED FOR DESIGN, DIMENSIONS, MEMBER SIZES AND SPACING, DETAILS, FINISH, AND ANCHORAGE , BUT NOT LESS THAN THAT REQUIRED TO SUPPORT STRUCTURAL LOADS.
2. CUT, DRILL, AND PUNCH ALUMINUM CLEANLY AND ACCURATELY. REMOVE BURRS AND EASE EDGES TO A RADIUS OF APPROXIMATELY 1/32 INCH (1 MM) UNLESS OTHERWISE INDICATED. REMOVE SHARP OR ROUGH AREAS ON EXPOSED SURFACES.
3. FABRICATE CONNECTIONS THAT ARE EXPOSED TO WEATHER IN A MANNER THAT EXCLUDES WATER. PROVIDE WEEP HOLES WHERE WATER MAY ACCUMULATE.
4. WELDED CONNECTIONS: USE FULLY WELDED JOINTS FOR PERMANENTLY CONNECTING RAILING COMPONENTS. COMPLY WITH REQUIREMENTS FOR WELDED CONNECTIONS IN "FABRICATION" ARTICLE WHETHER WELDING IS PERFORMED IN THE SHOP OR IN THE FIELD.

H. FINISH:
1. FOR NONGALVANIZED-STEEL RAILINGS, PROVIDE NONGALVANIZED FERROUS-METAL FITTINGS, BRACKETS, FASTENERS AND SLEEVES: HOWEVER, GALVANIZE ANCHORS TO BE EMBEDDED IN EXTERIOR CONC OR MASONRY.
2. PREPARATION FOR SHOP PRIMING: PREPARE UNCOATED FERROUS-METAL SURFACES TO COMPLY WITH SSPC-SP 3, "POWER TOOL CLEANING."
3. PRIMER APPLICATION: APPLY SHOP PRIMER TO PREPARED SURFACES OF RAILINGS UNLESS OTHERWISE INDICATED. COMPLY WITH REQUIREMENTS IN SSPC-PA 1, "SHOP, FIELD, AND MAINTENANCE PAINTING OF STEEL," FOR SHOP PAINTING. PRIMER NEED NOT BE APPLIED TO SURFACES TO BE EMBEDDED IN CONC OR MAS.

I. INSTALLATION:
1. SUPPLY COMPONENTS REQUIRED FOR ANCHORAGE FABRICATED FROM SAME MATERIAL AND FINISH AS FABRICATION UNLESS NOTED OTHERWISE. SHIM AND LEVEL FABRICATIONS AS NECESSARY. COAT CONCEALED SURFACES OF ALUMINUM FABRICATIONS IN CONTACT WITH CONCRETE, GROUT, MASONRY, WOOD, OR DISSIMILAR METALS WITH BITUMINOUS PAINT.
2. FIT EXPOSED CONNECTIONS TOGETHER TO FORM TIGHT, HAIRLINE JOINTS.
3. PERFORM CUTTING, DRILLING, AND FITTING REQUIRED FOR INSTALLING RAILINGS. SET RAILINGS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION; MEASURED FROM ESTABLISHED LINES AND LEVELS AND FREE OF RACK.
   1. DO NOT WELD CUT, OR ABRADE SURFACES OF RAILING COMPONENTS THAT ARE COATED OR FINISHED AFTER FABRICATION AND THAT ARE INTENDED FOR FIELD CONNECTION BY MECHANICAL OR OTHER MEANS WITHOUT FURTHER CUTTING OR FITTING.
   2. SET POSTS PLUMB WITHIN A TOLERANCE OF 1/16 INCH IN 3 FEET.
4. CONTROL OF CORROSION: PREVENT GALVANIC ACTION AND OTHER FORMS OF CORROSION BY INSULATING METALS AND OTHER MATERIALS FROM DIRECT CONTACT WITH INCOMPATIBLE MATERIALS.
5. ADJUST RAILINGS BEFORE ANCHORING TO ENSURE MATCHING ALIGNMENT AT ABUTTING JOINTS.
6. FASTENING TO IN-PLACE CONSTRUCTION: USE ANCHORAGE DEVICES AND FASTENERS WHERE NECESSARY FOR SECURING RAILINGS AND FOR PROPERLY TRANSFERRING LOADS TO IN-PLACE CONSTRUCTION.
7. PROTECT FINISHES OF RAILINGS FROM DAMAGE DURING CONSTRUCTION PERIOD WITH TEMPORARY PROTECTIVE COVERINGS APPROVED BY RAILING MANUFACTURER. REMOVE PROTECTIVE COVERINGS AT TIME OF SUBSTANTIAL COMPLETION.

DIVISION 5 - METALS

05 5213 - PIPE AND TUBE RAILINGS

A. SUBMITTALS:
PRODUCT DATA AND SHOP DRAWINGS WITH PLANS ELEVATIONS AND SEECTIONS INDICATING MEMBER SIZES AND LAYOUT, VERTICAL AND HORIZONTAL DIMENSIONS, EDGE CONDITIONS, AND CONNECTION DETALS. INCLUDE DETAILS OF EQUIPMENT ASSEMBLIES. INDICATE DIMENSIONS, WEIGHTS, LOADS, REQUIRED CLEARANCES, METHOD OF FIELD ASSEMBLY, COMPONENTS, AND LOCATION AND SIZE OF EACH FIELD CONNECTION. SAMPLES FOR INITIAL SELECTION: FOR EACH TYPE OF EXPOSED FINISH.
1. DELEGATED-DESIGN SUBMITTAL: FOR HANDRAIL AND GUARDRAIL SYSTEMS, INCLUDING ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

B. DESIGN: METAL TUBE RAILINGS SHALL BE DESIGNED BY FABRICATOR TO SUPPORT CODE-REQUIRED LOADING AND TO MATCH THE CONFIGURATIONS INDICATED IN THE CONSTRUCTION DOCUMENTS. SEE DRAWINGS FOR REQUIRED RAILING ELEVATIONS.

C. FIELD CONDITIONS:
1. FIELD MEASUREMENTS: VERIFY ACTUAL LOCATIONS OF WALLS AND OTHER CONSTRUCTION CONTIGUOUS WITH METAL FABRICATIONS BY FIELD MEASUREMENTS BEFORE FABRICATION.

D. PERFORMANCE REQUIREMENTS:
1. A. DELEGATED DESIGN: ENGAGE A QUALIFIED PROFESSIONAL ENGINEER,TO DESIGN RAILINGS, INCLUDING ATTACHMENT TO BUILDING CONSTRUCTION.
   B. STRUCTURAL PERFORMANCE: RAILINGS, INCLUDING ATTACHMENT TO BUILDING CONSTRUCTION, SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED:
2. HANDRAILS AND TOP RAILS OF GUARDS:
   A. UNIFORM LOAD OF 50 LBF/ FT. (0.73 KN/M) APPLIED IN ANY DIRECTION.
   B. CONCENTRATED LOAD OF 200 LBF (0.89 KN) APPLIED IN ANY DIRECTION.
   C. UNIFORM AND CONCENTRATED LOADS NEED NOT BE ASSUMED TO ACT CONCURRENTLY.

E. FASTENERS:
1. FASTENERS FOR ANCHORING RAILINGS TO OTHER CONSTRUCTION: SELECT FASTENERS OF TYPE, GRADE, AND CLASS REQUIRED TO PRODUCE CONNECTIONS SUITABLE FOR ANCHORING RAILINGS TO OTHER TYPES OF CONSTRUCTION INDICATED AND CAPABLE OF WITHSTANDING DESIGN LOADS.

F. MISCELLANEOUS MATERIALS:
1. METAL SURFACES, GENERAL: PROVIDE MATERIALS WITH SMOOTH SURFACES, WITHOUT SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, STAINS, DISCOLORATIONS, OR BLEMISHES.
2. BRACKETS, FLANGES, AND ANCHORS: CAST OR FORMED METAL OF SAME TYPE OF MATERIAL AND FINISH AS SUPPORTED RAILS UNLESS OTHERWISE INDICATED.
3. PIPE: ASTM A 53/A 53M, TYPE F OR TYPE S, GRADE A, STANDARD WEIGHT (SCHEDULE 40), UNLESS ANOTHER GRADE AND WEIGHT ARE REQUIRED BY STRUCTURAL LOADS.

G. FABRICATION:
1. GENERAL: FABRICATE RAILINGS TO COMPLY WITH REQUIREMENTS INDICATED FOR DESIGN, DIMENSIONS, MEMBER SIZES AND SPACING, DETAILS, FINISH, AND ANCHORAGE , BUT NOT LESS THAN THAT REQUIRED TO SUPPORT STRUCTURAL LOADS.
2. CUT, DRILL, AND PUNCH ALUMINUM CLEANLY AND ACCURATELY. REMOVE BURRS AND EASE EDGES TO A RADIUS OF APPROXIMATELY 1/32 INCH (1 MM) UNLESS OTHERWISE INDICATED. REMOVE SHARP OR ROUGH AREAS ON EXPOSED SURFACES.
3. FABRICATE CONNECTIONS THAT ARE EXPOSED TO WEATHER IN A MANNER THAT EXCLUDES WATER. PROVIDE WEEP HOLES WHERE WATER MAY ACCUMULATE.
4. WELDED CONNECTIONS: USE FULLY WELDED JOINTS FOR PERMANENTLY CONNECTING RAILING COMPONENTS. COMPLY WITH REQUIREMENTS FOR WELDED CONNECTIONS IN "FABRICATION" ARTICLE WHETHER WELDING IS PERFORMED IN THE SHOP OR IN THE FIELD.

H. FINISH:
1. FOR NONGALVANIZED-STEEL RAILINGS, PROVIDE NONGALVANIZED FERROUS-METAL FITTINGS, BRACKETS, FASTENERS AND SLEEVES: HOWEVER, GALVANIZE ANCHORS TO BE EMBEDDED IN EXTERIOR CONC OR MASONRY.
2. PREPARATION FOR SHOP PRIMING: PREPARE UNCOATED FERROUS-METAL SURFACES TO COMPLY WITH SSPC-SP 3, "POWER TOOL CLEANING."
3. PRIMER APPLICATION: APPLY SHOP PRIMER TO PREPARED SURFACES OF RAILINGS UNLESS OTHERWISE INDICATED. COMPLY WITH REQUIREMENTS IN SSPC-PA 1, "SHOP, FIELD, AND MAINTENANCE PAINTING OF STEEL," FOR SHOP PAINTING. PRIMER NEED NOT BE APPLIED TO SURFACES TO BE EMBEDDED IN CONC OR MAS.

I. INSTALLATION:
1. SUPPLY COMPONENTS REQUIRED FOR ANCHORAGE FABRICATED FROM SAME MATERIAL AND FINISH AS FABRICATION UNLESS NOTED OTHERWISE. SHIM AND LEVEL FABRICATIONS AS NECESSARY. COAT CONCEALED SURFACES OF FABRICATIONS IN CONTACT WITH CONCRETE, GROUT, MASONRY, WOOD, OR DISSIMILAR METALS WITH BITUMINOUS PAINT.
2. FIT EXPOSED CONNECTIONS TOGETHER TO FORM TIGHT, HAIRLINE JOINTS.
3. PERFORM CUTTING, DRILLING, AND FITTING REQUIRED FOR INSTALLING RAILINGS. SET RAILINGS ACCURATELY IN LOCATION, ALIGNMENT, AND ELEVATION; MEASURED FROM ESTABLISHED LINES AND LEVELS AND FREE OF RACK.
   1. DO NOT WELD CUT, OR ABRADE SURFACES OF RAILING COMPONENTS THAT ARE COATED OR FINISHED AFTER FABRICATION AND THAT ARE INTENDED FOR FIELD

SPECIFICATIONS - PRODUCT & INSTALLATION GENERAL REQUIREMENTS

DIVISION 7 - THERMAL AND MOISTURE PROTECTION (CONTINUED)

07 6200 - SHEET METAL FLASHING AND TRIM (CONTINUED)

E. PRODUCTS
PRE-FINISHED ALUMINUM: ASTM B209 (ASTM B209M): 20 GAGE. (0.032 INCH) THICK; PLAIN FINISH
SHOP PRE-COATED WITH MODIFIED SILICONE COATING.
1. FLUOROPOLYMER COATING: HIGH PERFORMANCE ORGANIC FINISH, AAMA 2604; MULTIPLE COAT, THERMALLY CURED FLUOROPOLYMER FINISH SYSTEM.
2. COLOR: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS.

F. FABRICATION
1. FORM SECTIONS TRUE TO SHAPE, ACCURATE IN SIZE, SQUARE, AND FREE FROM DISTORTION OR DEFECTS.
2. FORM PIECES IN LONGEST POSSIBLE LENGTHS.
3. HEM EXPOSED EDGES ON UNDERSIDE 1/2 INCH; MITER AND SEAM CORNERS.
4. FORM MATERIAL WITH FLAT LOCK SEAMS, EXCEPT WHERE OTHERWISE INDICATED; AT MOVING JOINTS, USE SEALED LAPPED, BAYONET-TYPE OR INTERLOCKING HOOKED SEAM.
5. FABRICATE FLASHINGS TO ALLOW TOE TO EXTEND 2 INCHES OVER ROOFING GRAVEL. RETURN AND BRAKE EDGES.

G. ACCESSORIES
1. FASTENERS: GALVANIZED STEEL, WITH SOFT NEOPRENE WASHERS.
2. PRIMER: ZINC CHROMATE TYPE.
3. CONCEALED SEALANTS: NON-CURING BUTYL SEALANT.
4. EXPOSED SEALANTS: ASTM C920; ELASTOMERIC SEALANT, WITH MINIMUM MOVEMENT CAPABILITY AS
5. RECOMMENDED BY MANUFACTURER FOR SUBSTRATES TO BE SEALED; COLOR TO MATCH ADJACENT MATERIAL.

H. INSTALLATION
1. SECURE FLASHINGS IN PLACE USING CONCEALED FASTENERS, AND USE EXPOSED FASTENERS ONLY WHERE PERMITTED.
2. APPLY PLASTIC CEMENT COMPOUND BETWEEN METAL FLASHINGS AND FELT FLASHINGS.
3. FIT FLASHINGS TIGHT IN PLACE; MAKE CORNERS SQUARE, SURFACES TRUE AND STRAIGHT IN PLANES, AND LINES ACCURATE TO PROFILES.
4. SEAL METAL JOINTS WATERTIGHT.

07 8100 - APPLIED FIREPROOFING
A. SUBMITTALS: PRODUCT DATA: PROVIDE DATA INDICATING PRODUCT CHARACTERISTICS.
1. TEST REPORTS: REPORTS FROM REPUTABLE INDEPENDENT TESTING AGENCIES FOR PROPOSED PRODUCTS, INDICATING COMPLIANCE WITH SPECIFIED CRITERIA, CONDUCTED UNDER CONDITIONS SIMILAR TO THOSE ON PROJECT, AS FOLLOWS:
A. BOND STRENGTH.
B. BOND IMPACT.
C. COMPRESSIVE STRENGTH.
D. FIRE TESTS USING SUBSTRATE MATERIALS SIMILAR THOSE ON PROJECT.
2. MANUFACTURER'S INSTALLATION INSTRUCTIONS: INDICATE SPECIAL PROCEDURES.
3. MANUFACTURER'S QUALIFICATION STATEMENT.

B. FIELD CONDITIONS:
1. DO NOT APPLY FIREPROOFING WHEN TEMPERATURE OF SUBSTRATE MATERIAL AND SURROUNDING AIR IS BELOW 40 DEGREES F OR WHEN TEMPERATURE IS PREDICTED TO BE BELOW SAID TEMPERATURE FOR 24 HOURS AFTER APPLICATION.
2. PROVIDE VENTILATION IN AREAS TO RECEIVE FIREPROOFING DURING APPLICATION AND 24 HOURS AFTERWARD, TO DRY APPLIED MATERIAL.
3. PROVIDE TEMPORARY ENCLOSURE TO PREVENT SPRAY FROM CONTAMINATING AIR.

C. WARRANTY:
1. CORRECT DEFECTIVE WORK WITHIN A TWO YEAR PERIOD AFTER DATE OF SUBSTANTIAL COMPLETION.
A. INCLUDE COVERAGE FOR FIREPROOFING TO REMAIN FREE FROM CRACKING, CHECKING, DUSTING, FLAKING, SPALLING, SEPARATION, AND BLISTERING.
B. REINSTALL OR REPAIR FAILURES THAT OCCUR WITHIN WARRANTY PERIOD.

D. MANUFACTURERS:
1. GCP APPLIED TECHNOLOGIES : WWW.GCPAT.COM/FIREPROOFING
2. ISOLATEK INTERNATIONAL CORP : WWW.ISOLATEK.COM
3. SOUTHWEST FIREPROOFING PRODUCTS COMPANY : WWW.SFRM.COM.

E. MATERIALS:
1. PROVIDE ASSEMBLIES AS INDICATED ON DRAWINGS.
2. PROVIDE FIRE RESISTANCE RATINGS FOR FOLLOWING BUILDING ELEMENTS AS REQUIRED BY LOCAL BUILDING CODE:
A. PRIMARY STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, AND TRUSSES: [1 HOUR].
B. BEARING WALLS, INTERIOR: [1 HOUR].
C. FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: [1 HOUR].
D. ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: [1HOUR].

F. MATERIALS: APPLIED FIREPROOFING MATERIAL FOR INTERIOR APPLICATIONS, CONCEALED: MANUFACTURER'S STANDARD FACTORY MIXED MATERIAL, WHICH WHEN COMBINED WITH WATER IS CAPABLE OF PROVIDING INDICATED FIRE RESISTANCE, AND COMPLYING WITH FOLLOWING REQUIREMENTS:
1. COMPOSITION: GYPSUM-BASED; NOT MINERAL-FIBER-BASED.
2. BOND STRENGTH: 150 POUNDS PER SQUARE FOOT, MINIMUM, WHEN TESTED IN ACCORDANCE WITH ASTM E736/E736M WHEN SET AND DRY.
3. DRY DENSITY: AS REQUIRED BY FIRE RESISTANCE DESIGN.
4. COMPRESSIVE STRENGTH: 8.33 POUNDS PER SQUARE INCH, MINIMUM.
5. EFFECT OF IMPACT ON BONDING: NO CRACKING, SPALLING OR DELAMINATION, WHEN TESTED IN ACCORDANCE WITH ASTM E760/E760M.
6. CORROSIVITY: NO EVIDENCE OF CORROSION, WHEN TESTED IN ACCORDANCE WITH ASTM E937/E937M.
7. SURFACE BURNING CHARACTERISTICS: MAXIMUM FLAME SPREAD INDEX OF 0 (ZERO) and MAXIMUM SMOKE DEVELOPED INDEX OF 0 (ZERO), WHEN TESTED IN ACCORDANCE WITH ASTM E84.

G. ACCESSORIES:
1. PRIMER ADHESIVE: OF TYPE RECOMMENDED BY APPLIED FIREPROOFING MANUFACTURER.
2. OVERCOAT: AS RECOMMENDED BY MANUFACTURER OF APPLIED FIREPROOFING MATERIAL.
3. METAL LATH: EXPANDED METAL LATH; MINIMUM WEIGHT OF 1.7 PSF, GALVANIZED FINISH.
4. WATER: CLEAN, POTABLE.

H. INSTALLATION:
1. VERIFY THAT SURFACES ARE READY TO RECEIVE FIREPROOFING.
2. VERIFY THAT DUCTS, PIPING, EQUIPMENT, OR OTHER ITEMS THAT WOULD INTERFERE WITH APPLICATION OF FIREPROOFING HAVE NOT BEEN INSTALLED.
3. VERIFY THAT VOIDS AND CRACKS IN SUBSTRATE HAVE BEEN FILLED.
4. VERIFY THAT PROJECTIONS HAVE BEEN REMOVED WHERE FIREPROOFING WILL BE EXPOSED TO VIEW AS A FINISH MATERIAL.
5. PERFORM TESTS AS RECOMMENDED BY FIREPROOFING MANUFACTURER IN APPLICATIONS WHERE ADHESION OF FIREPROOFING TO SUBSTRATE IS IN QUESTION.
6. REMOVE INCOMPATIBLE MATERIALS THAT COULD EFFECT BOND BY SCRAPING, BRUSHING, SCRUBBING, OR SANDBLASTING.
7. PREPARE SUBSTRATES TO RECEIVE FIREPROOFING IN STRICT ACCORDANCE WITH INSTRUCTIONS OF FIREPROOFING MANUFACTURER.
8. APPLY FIREPROOFING MANUFACTURER'S RECOMMENDED BONDING AGENT ON PRIMED STEEL.
9. INSTALL METAL LATH OVER STRUCTURAL MEMBERS AS INDICATED OR AS REQUIRED BY UL ASSEMBLY DESIGN NUMBERS.
10. APPLY FIREPROOFING IN UNIFORM THICKNESS AND DENSITY AS NECESSARY TO ACHIEVE REQUIRED RATINGS.
11. INSPECT INSTALLED FIREPROOFING AFTER APPLICATION AND CURING FOR INTEGRITY, PRIOR TO ITS CONCEALMENT.
12. ENSURE THAT ACTUAL THICKNESSES, DENSITIES, AND BOND STRENGTHS MEET REQUIREMENTS FOR SPECIFIED RATINGS AND REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION (AHJ).
13. REMOVE EXCESS MATERIAL, OVERSPRAY, DROPPINGS, AND DEBRIS.
14. REMOVE FIREPROOFING FROM MATERIALS AND SURFACES NOT REQUIRED TO BE FIREPROOFED.

07 4113 - ROOFING MATERIALS & ACCESSORIES
A. SUBMITTALS: PROVIDE DATA ON SHAPE OF COMPONENTS, MATERIALS AND FINISHES, ANCHOR TYPES AND LOCATIONS.

B. SHOP DRAWINGS: INDICATE CONFIGURATION AND DIMENSION OF COMPONENTS, ADJACENT CONSTRUCTION, REQUIRED CLEARANCES AND TOLERANCES, AND OTHER AFFECTED WORK.

C. WARRANTY: SPECIAL WARRANTY: MANUFACTURER'S STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF SYSTEMS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.
1. WARRANTY PERIOD: TWO YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

D. PRODUCTS:
A. ROOF EDGE FLASHINGS: FACTORY FABRICATED TO SIZES REQUIRED; CORNERS MITERED; CONCEALED FASTENERS.
1. CONFIGURATION: FASCIA, CANT, AND EDGE SECUREMENT FOR ROOF MEMBRANE.
2. PULL-OFF RESISTANCE: TESTED IN ACCORDANCE WITH ANSI/SPRI/FM 4435/ES-1 USING TEST METHODS RE-1 AND RE-2 TO POSITIVE AND NEGATIVE DESIGN WIND PRESSURE AS DEFINED BY APPLICABLE LOCAL BUILDING CODE.
B. COPINGS: FACTORY FABRICATED TO SIZES REQUIRED; CORNERS MITERED; CONCEALED FASTENERS.
1. CONFIGURATION: CONCEALED CONTINUOUS HOLD DOWN CLEAT AT BOTH LEGS; INTERNAL SPLICE PIECE AT JOINTS OF SAME MATERIAL, THICKNESS, AND FINISH AS CAP; CONCEALED STAINLESS STEEL FASTENERS.
2. PULL-OFF RESISTANCE: TESTED IN ACCORDANCE WITH ANSI/SPRI/FM 4435/ES-1 USING TEST METHOD RE-3 TO POSITIVE AND NEGATIVE DESIGN WIND PRESSURE AS DEFINED BY APPLICABLE LOCAL BUILDING CODE.
3. 24 GA. GALVALUME WITH KYNAR 500, 2.0 MILS THICK FLUOROCARBON FINISH.
C. ROOF PENETRATION SEALING SYSTEMS: PREMANUFACTURED COMPONENTS AND ACCESSORIES AS REQUIRED TO PRESERVE INTEGRITY OF ROOFING SYSTEM AND MAINTAIN ROOF WARRANTY; SUITABLE FOR CONDUITS AND ROOFING SYSTEM TO BE INSTALLED; DESIGNED TO ACCOMMODATE EXISTING PENETRATIONS WHERE APPLICABLE.

E. FINISHES:
A. PVDF (POLYVINYLIDENE FLUORIDE) COATING: SUPERIOR PERFORMANCE ORGANIC FINISH, AAMA 2605; MULTIPLE COAT, THERMALLY CURED FLUOROPOLYMER FINISH SYSTEM; COLOR AS INDICATED.

F. INSTALLATION:
A. INSTALL COMPONENTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND NRCA (RM) APPLICABLE REQUIREMENTS.
B. SEAL JOINTS WITHIN COMPONENTS WHEN REQUIRED BY COMPONENT MANUFACTURER.
C. COORDINATE INSTALLATION OF COMPONENTS OF THIS SECTION WITH INSTALLATION OF ROOFING MEMBRANE AND BASE FLASHINGS.

07 8400 - FIRESTOPPING
A. SUBMITTALS: PRODUCT DATA: PROVIDE DATA ON PRODUCT CHARACTERISTICS, PERFORMANCE RATINGS, AND LIMITATIONS.

B. MANUFACTURERS:
1. 3M FIRE PROTECTION PRODUCTS: HTTPS://WWW.3M.COM/3M/EN_US/P/C/BUILDING-MATERIALS/FIRE-PROTECTION/
2. HILTI, INC : HTTPS://WWW.HILTI.COM/C/CLS_FIRESTOP_PROTECTION_7131

C. MATERIALS:
1. FIRESTOPPING MATERIALS: ANY MATERIALS MEETING REQUIREMENTS.
2. PRIMERS: SLEEVES, FORMS, INSULATION, PACKING, STUFFING, AND ACCESSORIES: PROVIDE TYPE OF MATERIALS AS REQUIRED FOR TESTED FIRESTOPPING ASSEMBLY.
3. FIRE RATINGS: REFER TO DRAWINGS FOR REQUIRED SYSTEMS AND RATINGS.

D. ASSEMBLY REQUIREMENTS:
1. HEAD-OF-WALL JOINT SYSTEM FIRESTOPPING AT JOINTS BETWEEN FIRE-RATED WALL ASSEMBLIES AND NON-RATED HORIZONTAL ASSEMBLIES: USE SYSTEM THAT HAS BEEN TESTED ACCORDING TO ASTM E2837 TO HAVE FIRE RESISTANCE F RATING EQUAL TO REQUIRED FIRE RATING OF FLOOR OR WALL, WHICHEVER IS GREATER.
2. FLOOR-TO-FLOOR, WALL-TO-WALL, AND WALL-TO-FLOOR JOINTS, EXCEPT PERIMETER, WHERE BOTH ARE FIRE-RATED: USE SYSTEM THAT HAS BEEN TESTED ACCORDING TO ASTM E1966 OR UL 2079 TO HAVE FIRE RESISTANCE " F" RATING EQUAL TO REQUIRED FIRE RATING OF THE ASSEMBLY IN WHICH THE JOINT OCCURS.
3. THROUGH PENETRATION FIRESTOPPING: USE SYSTEM THAT HAS BEEN TESTED ACCORDING TO ASTM E814 TO HAVE FIRE RESISTANCE F RATING EQUAL TO REQUIRED FIRE RATING OF PENETRATED ASSEMBLY.

E. INSTALLATION:
1. INSTALLATIONS SHALL CONFORM TO UL REQUIREMENTS OF THE ASSEMBLY WHICH FIRESTOPPING IS TO BECOME PART OF THE BUILT ASSEMBLY.

07 9200 - JOINT SEALANTS
A. SUBMITTALS: PRODUCT DATA, AND SCHEDULE OF LOCATIONS FOR EACH TYPE OF SEALANT SUBMITTED.

B. JOINT-SEALANT SCHEDULE: INCLUDE THE FOLLOWING INFORMATION:
1. JOINT-SEALANT APPLICATION, JOINT LOCATION, AND DESIGNATION.
2. JOINT-SEALANT MANUFACTURER AND PRODUCT NAME.
3. JOINT-SEALANT FORMULATION.
4. JOINT-SEALANT COLOR.

C. ENVIRONMENTAL LIMITATIONS: DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS WHEN AMBIENT AND SUBSTRATE TEMPERATURE CONDITIONS ARE OUTSIDE LIMITS PERMITTED BY JOINT SEALANT MANUFACTURER OR ARE BELOW 40 deg F (4.4 deg C).

D. COMPATIBILITY: PROVIDE JOINT SEALANTS, JOINT FILLERS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER SERVICE AND APPLICATION CONDITIONS.

E. JOINT SEALANTS:
1. COLORS OF EXPOSED JOINT SEALANTS: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
2. INTERIOR JOINTS IN CERAMIC TILE AND OTHER HARD SURFACES IN KITCHENS, TOILET ROOMS, AND AROUND PLUMBING FIXTURES: SINGLE COMPONENT, MILDEW-RESISTANT SILICONE SEALANT, ASTM C 920, TYPE S; GRADE NS; CLASS 25; USES NT, G, A, AND O; FORMULATED WITH FUNGICIDE.
3. INTERIOR JOINTS AROUND PERIMETERS OF DOORS AND FRAMES: LATEX SEALANT, SINGLE COMPONENT, NONSAG, MILDEW-RESISTANT, PAINTABLE, ACRYLIC EMULSION SEALANT COMPLYING WITH ASTM C 834.
4. ACOUSTICAL SEALANT FOR EXPOSED INTERIOR JOINTS: NONSAG, PAINTABLE, NONSTAINING, LATEX SEALANT COMPLYING WITH ASTM C 834.
5. ACOUSTICAL SEALANT FOR CONCEALED JOINTS: NONDRYING, NONHARDENING, NONSKINNING, NONSTAINING, GUNNABLE, SYNTHETIC-RUBBER SEALANT RECOMMENDED FOR SEALING INTERIOR CONCEALED JOINTS TO REDUCE TRANSMISSION OF AIRBORNE SOUND.
6. EXTERIOR CONCRETE PANELS, NATURAL STONES, MASONRY, ALUMINUM CURTAINWALLS, METAL PANELS AND WINDOW PERIMETERS.
BASIS OF DESIGN PRODUCTS:
A. TREMCO INCORPORATED; SPECTREM 1.
B. DOW CORNING CORPORATION; 790.
C. PECORA CORPORATION; 890NST.
7. EXTERIOR JOINTS IN HORIZONTAL TRAFFIC SURFACES.
ISOLATION AND CONTRACTION JOINTS IN CAST-IN-PLACE CONCRETE SLABS.
URETHANE JOINT SEALANT: MULTICOMPONENT, NONSAG, TRAFFIC GRADE, CLASS 25.
8. FIRESTOP SEALANTS:INSTALL AT FIRE RATED ASSEMBLIES AND AS DIRECTED WITHIN UL REFERENCES
BASIS OF DESIGN PRODUCTS:
A. HILTI
B. 3M

E. JOINT SEALANT BACKING:
1. GENERAL: PROVIDE SEALANT BACKINGS OF MATERIAL THAT ARE NONSTAINING; ARE COMPATIBLE WITH JOINT SUBSTRATES, SEALANTS, PRIMERS, AND OTHER JOINT FILLERS; AND ARE APPROVED FOR APPLICATIONS INDICATED BY SEALANT MANUFACTURER BASED ON FIELD EXPERIENCE AND LABORATORY TESTING.
2. CYLINDRICAL SEALANT BACKINGS: ASTM C 1330, TYPE C (CLOSED-CELL MATERIAL WITH A SURFACE SKIN), AND OF SIZE AND DENSITY TO CONTROL SEALANT DEPTH AND OTHERWISE CONTRIBUTE TO PRODUCING OPTIMUM SEALANT PERFORMANCE.
3. BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT MANUFACTURER FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT. PROVIDE SELF-ADHESIVE TAPE WHERE APPLICABLE.

F. MISCELLANEOUS MATERIALS
1. PRIMER: MATERIAL RECOMMENDED BY JOINT-SEALANT MANUFACTURER WHERE REQUIRED FOR ADHESION OF SEALANT TO JOINT SUBSTRATES INDICATED, AS DETERMINED FROM PRECONSTRUCTION JOINT-SEALANT-SUBSTRATE TESTS AND FIELD TESTS.
2. CLEANERS FOR NONPOROUS SURFACES: CHEMICAL CLEANERS ACCEPTABLE TO MANUFACTURERS OF SEALANTS AND SEALANT BACKING MATERIALS, FREE OF OILY RESIDUES OR OTHER SUBSTANCES CAPABLE OF STAINING OR IMPAIRING JOINT SUBSTRATES AND SEALANT PERFORMANCE. USE CLEANERS IN ANY WAY, AND FORMULATED TO PROMOTE OPTIMUM ADHESION OF SEALANTS TO JOINT SUBSTRATES.
3. BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT MFR. FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT.
4. MASKING TAPE: NONSTAINING, NONABSORBENT MATERIAL COMPATIBLE WITH JOINT SEALANTS AND SURFACES ADJACENT TO JOINTS.

G. INSTALLATION: COMPLY WITH ASTM C 1193; ASTM C 919 FOR ACOUSTICAL JOINTS; AND AS FOLLOWS:
1. REMOVE ALL LOOSE MATERIAL, CLEAN AND PRIME JOINTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, AND PROTECT ADJACENT SURFACES.
2. INSTALL BOND-BREAKER TAPE WHERE JOINT BACKINGS ARE NOT USED.
3. INSTALL SEALANT TOOLED CONCAVE, FREE OF AIR POCKETS, FOREIGN EMBEDDED MATTER, RIDGES, AND SAGS, AND PROTECT UNTIL FULLY CURED. SEALANT WITH DUST AND DEBRIS EMBEDDED IN SURFACE SHALL BE CAUSE FOR REJECTION.

DIVISION 8 - OPENINGS

08 0671 - DOOR HARDWARE
A. SUBMITTALS: PRODUCT DATA AND HARDWARE SCHEDULE INDICATING HARDWARE ITEM, FINISH, AND QUANTITY LOCATED ON EACH DOOR WITH DOOR AND HARDWARE SET NUMBERING CORRESPONDING TO THOSE USED IN CONSTRUCTION DOCUMENTS. REFER TO ARCHITECTURAL PLANS AND HARDWARE SCHEDULES PROVIDED.
1. HARDWARE SUPPLIER SHALL SUBMIT FOUR COPIES OF FINAL HARDWARE SCHEDULE AT EARLIEST POSSIBLE DATE PARTICULARLY WHERE ACCEPTANCE OF HARDWARE SCHEDULE MUST PRECEDE FABRICATION OF OTHER WORK WHICH IS CRITICAL IN THE PROJECT CONSTRUCTION SCHEDULE. INCLUDE WITH SCHEDULE SHOP DRAWINGS OF OTHER WORK AFFECTED BY BUILDERS HARDWARE, AND OTHER INFORMATION ESSENTIAL TO THE COORDINATE REVIEW OF HARDWARE SCHEDULE.
2. KEYING SCHEDULE: SUBMIT SEPARATE DETAILED SCHEDULE INDICATING CLEARLY HOW THE OWNER'S FINAL INSTRUCTIONS ON KEYING OF LOCKS HAS BEEN FULFILLED. ALL KEYING SHALL BE COORDINATED WITH THE OWNER.

B. PRODUCTS: REFER TO HARDWARE SCHEDULE AND ARCHITECTURAL DRAWINGS.
1. STRIKES. PROVIDE MANUFACTURER'S STANDARD WROUGHT BOX STRIKE FOR EACH LATCH OR LOCK BOLT, WITH CURVED LIP EXTENDED TO PROTECT FRAME. FINISH TO MATCH HARDWARE SET. PROVIDE STANDARD (OPEN) STRIKE PLATES FOR INTERIOR DOORS WHERE WOOD DOOR FRAMES ARE USED.
2. IN GENERAL, HARDWARE FINISH SHALL BE US15 (SATIN NICKEL) UNLESS SPECIFIED DIFFERENTLY ON HARDWARE SCHEDULE.
3. SUPPLY CAL ROYAL HDFS3 FLEXIBLE DOOR STOPS IN THE APARTMENT DWELLING UNITS. USE 2 IVHP-23 HINGE STOPS WHERE FLEXIBLE STOPS CANNOT BE USED.
4. SUPPLY OUT SWINGING EXTERIOR DOORS WITH NON REMOVABLE PINS.

C. INSTALLATION:
1. MOUNT HARDWARE UNITS AT HEIGHTS INDICATED IN "RECOMMENDED LOCATIONS FOR BUILDERS HARDWARE FOR STANDARD STEEL DOORS AND FRAMES" BY THE DOOR AND HARDWARE INSTITUTE, EXCEPT AS SPECIFICALLY INDICATED OR REQUIRED TO COMPLY WITH GOVERNING REGULATIONS. AND EXCEPT AS MAY BE OTHERWISE DIRECTED BY ARCHITECT. MOUNT HARDWARE IN UNITS DESIGNATED FOR USE BY THE HANDICAPPED AT HEIGHTS RECOMMENDED FOR USE BY THE HANDICAPPED.
2. INSTALL EACH HARDWARE ITEM IN COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. WHERE CUTTING AND FITTING IS REQUIRED TO INSTALL HARDWARE ONTO OR INTO SURFACES WHICH ARE LATER TO BE PAINTED OR FINISHED IN ANOTHER WAY, COORDINATE REMOVAL, STORAGE AND
REINSTALLATION OR APPLICATION OF SURFACE PROTECTIONS WITH FINISHING WORK SPECIFIED IN THE DIVISION 9 SECTIONS. DO NOT INSTALL SURFACE MOUNTED ITEMS UNTIL FINISHES HAVE BEEN COMPLETED ON THE SUBSTRATE.
3. SET UNITS LEVEL, PLUMB AND TRUE TO LINE AND LOCATION. ADJUST AND REINFORCE THE ATTACHMENT SUBSTRATE AS NECESSARY FOR PROPER INSTALLATION AND OPERATION.
4.DRILL AND COUNTERSINK UNITS WHICH ARE NOT FACTORY PREPARED FOR ANCHORAGE FASTENERS. SPACE FASTENERS AND ANCHORS IN ACCORDANCE WITH INDUSTRY STANDARDS.
5.METAL THRESHOLDS SHALL BE SET IN A SOLID BED OF NON STAINING THIOKOL BASE CAULKING.
6. ADJUST AND CHECK EACH OPERATING ITEM OF HARDWARE AND EACH DOOR, TO ENSURE PROPER OPERATION OR FUNCTION OF EVERY UNIT. REPLACE UNITS WHICH CANNOT BE ADJUSTED TO OPERATE FREELY AND SMOOTHLY AS INTENDED FOR THE APPLICATION MADE.
7.FINAL ADJUSTMENT: WHEREVER HARDWARE INSTALLATION IS MADE MORE THAN ONE MONTH PRIOR TO ACCEPTANCE OR OCCUPANCY OF A SPACE OR AREA, RETURN TO THE WORK DURING THE WEEK PRIOR TO ACCEPTANCE OR OCCUPANCY, AND MAKE FINAL CHECK AND ADJUSTMENT OF ALL HARDWARE ITEMS IN SUCH SPACE OR AREA. CLEAN OPERATING ITEMS AS NECESSARY TO RESTORE PROPER FUNCTION AND FINISH OF HARDWARE AND DOORS. ADJUST DOOR CONTROL DEVICES TO COMPENSATE FOR FINAL OPERATION OF HEATING AND VENTILATING EQUIPMENT.

C. HARDWARE SCHEDULE

SET #1. UNIT ENTRY DOORS
1 EACH HINGE BB81 4 X 4
2 EACH SPRING HINGES SP81 4 X 4
1 EACH ENTRANCE LOCK SD116 MEM
1 EACH SINGLE CYLINDER DEADBOLT KV116
1 EACH DOOR VIEWER DD01-180UL

SET #2. PATIO DOORS
1 EACH HINGE BB81 4 X 4
2 EACH SPRING HINGES SP81 4 X 4
1 EACH ENTRANCE LOCK SD116 MEM
1 EACH SINGLE CYLINDER DEADBOLT KV116

SET #3. SINGLE SWING CLOSET DOORS
3 EACH HINGES BB81 4 X 4
1 EACH PASSAGE LATCH SD126 MEM

SET #4. BATHROOM / BEDROOM DOORS
3 EACH HINGES BB81 4 X 4
1 EACH PRIVACY LOCK SD176 MEM

SET #5. PAIR SWING LAUNDRY DOORS
6 EACH HINGES BB81 4 X 4
2 EACH DUMMY TRIM SD211 MEM
2 EACH BALL CATCH DB1
BALANCE OF HARDWARE BY DOOR SUPPLIER

DIVISION 8 - OPENINGS (CONTINUED)

08 0671 - DOOR HARDWARE (CONTINUED)

C. HARDWARE SCHEDULE (CONTINUED)

SET #6. GARAGE
3 EACH HINGES BB81 4-1/2X 4-1/2
1 EACH STORE ROOM LOCK SD115 MEM
1 EACH CLOSER 7101-PA
1 EACH SMOKE GASKET 5050
1 EACH THRESHOLD 425E
1 EACH WALL STOP WB26

SET #7. CLOSET BIFOLD DOORS
BULK HARDWARE TO BE PROVIDED BY MANUFACTURER
1 EACH DUMMY TRIM

SET #8. CLOSET BYPASS SLIDING DOORS
BULK HARDWARE TO BE PROVIDED BY MANUFACTURER
1 EACH DUMMY TRIM

08 1113 - HOLLOW METAL DOORS AND FRAMES
A. SUBMITTALS: PRODUCT DATA AND SHOP DRAWINGS WITH DETAILS OF EACH OPENING, SHOWING ELEVATIONS, GLAZING, FRAME PROFILES, AND ANY INDICATED FINISH REQUIREMENTS.

B. HOLLOW METAL DOOR AND FRAME MANUFACTURERS:
1. CECO DOOR, AN ASSA ABLOY GROUP COMPANY: WWW.ASSAABLOYDSS.COM.
2. DE LA FONTAINE INC: WWW.DELAFONTAINE.COM
3. REPUBLIC DOORS, AN ALLEGION BRAND: WWW.REPUBLICDOOR.COM
4. STEELCRAFT, AN ALLEGION BRAND: WWW.ALLEGION.COM

C. SOUND-RATED HOLLOW METAL DOORS AND FRAMES:
1. OVERLY DOOR COMPANY: WWW.OVERLY.COM

D. DESIGN CRITERIA:
1. STEEL USED FOR FABRICATION OF DOORS AND FRAMES SHALL COMPLY WITH ONE OR MORE OF THE FOLLOWING REQUIREMENTS: GALVANNEALED STEEL CONFORMING TO ASTM A653/A653M, COLD-ROLLED STEEL CONFORMING TO ASTM A1008/A1008M, OR HOT-ROLLED PICKLED AND OILED (HRPO) STEEL CONFORMING TO ASTM A1011/A1011M, COMMERCIAL STEEL (CS) TYPE B FOR EACH.
2. TYPICAL DOOR FACE SHEETS: FLUSH.
3. GLAZED LIGHTS: NON-REMOVABLE STOPS ON NON-SECURE SIDE; SIZES AND CONFIGURATIONS AS INDICATED ON DRAWINGS. STYLE: MANUFACTURER'S STANDARD.
4. HARDWARE PREPARATIONS: SELECTIONS AND LOCATIONS: COMPLY WITH NAAMM HMMA 830 AND NAAMM HMMA 831 OR BHMA A156.115 AND ANSI/SDI A250.8 (SDI-100) IN ACCORDANCE WITH SPECIFIED REQUIREMENTS.
5. ZINC COATING FOR TYPICAL INTERIOR AND/OR EXTERIOR LOCATIONS. PROVIDE METAL COMPONENTS ZINC-COATED (GALVANIZED) AND/OR ZINC-IRON ALLOY-COATED (GALVANNEALED) BY THE HOT-DIP PROCESS IN ACCORDANCE WITH ASTM A653/A653M, WITH MANUFACTURER'S STANDARD COATING THICKNESS, UNLESS NOTED OTHERWISE FOR SPECIFIC HOLLOW METAL DOORS AND FRAMES.
6. HOLLOW METAL PANELS: SAME CONSTRUCTION, PERFORMANCE, AND FINISH AS DOORS.
7. COMBINED REQUIREMENTS: IF A PARTICULAR DOOR AND FRAME UNIT IS INDICATED TO COMPLY WITH MORE THAN ONE TYPE OF REQUIREMENT, COMPLY WITH THE SPECIFIED REQUIREMENTS FOR EACH TYPE; FOR INSTANCE, AN EXTERIOR DOOR THAT IS ALSO INDICATED AS BEING SOUND-RATED MUST COMPLY WITH THE REQUIREMENTS SPECIFIED FOR EXTERIOR DOORS AND FOR SOUND-RATED DOORS; WHERE TWO REQUIREMENTS CONFLICT, COMPLY WITH THE MOST STRINGENT.

E. HOLLOW METAL DOOR:
1. EXTERIOR DOORS: THERMALLY INSULATED.
A. ASED ON SDI STANDARDS: ANSI/SDI A250.8 (SDI-100).
B. LEVEL 1 - STANDARD-DUTY.
C. PHYSICAL PERFORMANCE LEVEL C, 250,000 CYCLES; IN ACCORDANCE WITH ANSI/SDI A250.4.
D. MODEL 1 - FULL FLUSH.
E. DOOR FACE METAL THICKNESS: 20 GAGE, 0.032 INCH, MINIMUM.
F. DOOR CORE MATERIAL: MANUFACTURERS STANDARD CORE MATERIAL/CONSTRUCTION AND IN COMPLIANCE WITH REQUIREMENTS.
G. DOOR THICKNESS: 1-3/4 INCH, NOMINAL.
H. TOP CLOSURES FOR OUTSWINGING DOORS: FLUSH WITH TOP OF FACES AND EDGES.
I. WEATHERSTRIPPING: REFER TO SECTION 08 7100.
J. DOOR FINISH: FACTORY PRIMED AND FIELD FINISHED.

2. INTERIOR DOORS, NON-FIRE RATED:
A. BASED ON SDI STANDARDS: ANSI/SDI A250.8 (SDI-100).
B. LEVEL 1 - STANDARD-DUTY.
C. PHYSICAL PERFORMANCE LEVEL C, 250,000 CYCLES; IN ACCORDANCE WITH ANSI/SDI A250.4.
D. MODEL 1 - FULL FLUSH.
E. DOOR FACE METAL THICKNESS: 20 GAGE, 0.032 INCH, MINIMUM.
F. DOOR THICKNESS: 1-3/4 INCH, NOMINAL.
G. DOOR FINISH: FACTORY PRIMED AND FIELD FINISHED.

3. FIRE-RATED DOORS:
A. BASED ON SDI STANDARDS: ANSI/SDI A250.8 (SDI-100).
B. LEVEL 1 - STANDARD-DUTY.
C. PHYSICAL PERFORMANCE LEVEL C, 250,000 CYCLES; IN ACCORDANCE WITH ANSI/SDI A250.4.
D. MODEL 1 - FULL FLUSH.
E. DOOR FACE METAL THICKNESS: 20 GAGE, 0.032 INCH. MINIMUM.
F. FIRE RATING: AS INDICATED ON DOOR SCHEDULE. TESTED IN ACCORDANCE WITH UL 10C AND NFPA 252 ("POSITIVE PRESSURE FIRE TESTS").
G. TEMPERATURE-RISE RATING (TRR) ACROSS DOOR THICKNESS: IN ACCORDANCE WITH LOCAL BUILDING CODE AND AUTHORITIES HAVING JURISDICTION.
H. PROVIDE UNITS LISTED AND LABELED BY UL (DIR) OR ITS (DIR). ATTACH FIRE RATING LABEL TO EACH FIRE RATED UNIT.
I. SMOKE AND DRAFT CONTROL DOORS (INDICATED WITH LETTER "S" ON DRAWINGS AND/OR DOOR SCHEDULE): SELF-CLOSING OR AUTOMATIC CLOSING DOORS IN ACCORDANCE WITH NFPA 80 AND NFPA 105, WITH FIRE-RESISTANCE-RATED WALL CONSTRUCTION RATED THE SAME OR GREATER THAN THE FIRE-RATED DOORS, AND THE FOLLOWING:
1. MAXIMUM AIR LEAKAGE: 3.0 CFM/SQ FT OF DOOR OPENING AT 0.10 INCH W.G. PRESSURE, W

SPECIFICATIONS - PRODUCT & INSTALLATION GENERAL REQUIREMENTS

09 6500 - RESILIENT FLOORING AND WALL BASE

A. SUBMITTALS: PRODUCT DATA AND (1) SAMPLES OF EACH TILE AND BASE SPECIFIED FOR VERIFICATION PURPOSES.

B. BASIS OF DESIGN:
1. METROFLOR,KONECTO PLANK, PROJECT 54012 OR APPROVED EQUAL.

C. ATTIC STOCK: FURNISH ONE (1) BOX FOR EACH 50 BOXES OR FRACTION THEREOF OF EACH TYPE OF FLOOR TILE AND 20' OF EACH COLOR AND TYPE OF WALL BASE PACKAGED WITH PROTECTIVE COVERING AND LABELED FOR STORAGE.

D. RESILIENT TILE PRODUCTS: PROVIDE FLOOR TILE IN TYPE AND SIZES INDICATED IN THE CONSTRUCTION DOCUMENTS COMPLYING WITH THE FOLLOWING:

E. RESILIENT WALL BASE: ASTM TYPE TS (RUBBER, VULCANIZED THERMOSET) 1/8" THICK, FURNISHED IN COILS IN STYLES AND SIZES INDICATED IN THE CONSTRUCTION DOCUMENTS WITH JOB-FORMED INSIDE AND OUTSIDE CORNERS.

F. INSTALLATION ACCESSORIES:
1. LEVELING AND PATCHING COMPOUNDS: LATEX-MODIFIED, PORTLAND CEMENT, OR BLENDED HYDRAULIC CEMENT-BASED FORMULATION PROVIDED OR APPROVED BY FLOORING MANUFACTURER TO SUIT RESILIENT PRODUCTS AND SUBSTRATE CONDITIONS
2. ADHESIVES: WATER-RESISTANT TYPE RECOMMENDED BY MANUFACTURER TO SUIT RESILIENT PRODUCTS AND SUBSTRATE CONDITIONS. SPREAD ONLY ENOUGH ADHESIVE TO PERMIT INSTALLATION OF MATERIALS BEFORE INITIAL SET.
3. MOLDINGS, TRANSITION AND EDGE STRIPS: SAME MATERIAL AS FLOORING.

G. INSTALLATION:
1. PREPARE CONCRETE SUBSTRATES PER ASTM F 710. VERIFY THAT SUBSTRATES ARE DRY AND FREE OF CURING COMPOUNDS, SEALERS AND HARDENERS.
2. LAY OUT TILES SO WIDTHS AT OPPOSITE EDGES OF ROOM ARE EQUAL AND NOT LESS THAN HALF-WIDTH.
3. LAY TILES IN PATTERNS INDICATED WITH GRAIN DIRECTION ALTERNATING IN ADJACENT TILES, UNLESS NOTED OTHERWISE.
4. CLEAN, SEAL, AND WAX RESILIENT FLOORING IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

H. WALL BASE AND ACCESSORY INSTALLATION:
1. CONFIRM THAT SOLID BACKING IS PROVIDED BEHIND ALL WALL BASE. AREAS WHERE GYPSUM BOARD IS HELD MORE THAN 1/2" ABOVE SLAB SHALL BE FILLED IN PRIOR TO BASE INSTALLATION.
2. INSTALL WALL BASE WITH MANUFACTURER'S RECOMMENDED ADHESIVE IN MAXIMUM LENGTHS POSSIBLE. APPLY TO WALLS, COLUMNS, PILASTERS, CASEWORK, AND OTHER PERMANENT FIXTURES.
3. INSTALL TRANSITION STRIPS WHERE FLOORING MATERIALS MEET OR WHERE EDGE OF TILE IS EXPOSED AS INDICATED IN THE FINISH SCHEDULE.

09 6813 - TILE CARPETING

A. SUBMITTALS: PRODUCT DATA AND SAMPLES OF EACH CARPET PRODUCT INDICATED. SUBMIT ACTUAL TILE SAMPLES OF EACH CARPET REQUIRED

B. WARRANTY: PROVIDE SPECIAL PROJECT WARRANTY, SIGNED BY CONTRACTOR, INSTALLER AND MANUFACTURER (CARPET MILL), AGREEING TO REPAIR OR REPLACE DEFECTIVE MATERIALS AND WORKMANSHIP OF CARPETING WORK DURING 1-YEAR WARRANTY PERIOD FOLLOWING SUBSTANTIAL COMPLETION. ATTACH COPIES OF PRODUCT WARRANTIES.

C. ATTIC STOCK: FURNISH FULL-WIDTH CARPET EQUAL TO 5% OF EACH TYPE AND COLOR CARPET INSTALLED, PACKAGED WITH PROTECTIVE COVERING AND LABELED FOR STORAGE.

D. PRODUCTS: PROVIDE CARPET IN PATTERNS AND COLORS AND WITH BACKINGS AS INDICATED IN THE CONSTRUCTION DOCUMENTS WITH CRITICAL RADIANT FLUX CLASSIFICATION CLASS I, NOT LESS THAN 0.45 W/SQ. CM PER ASTM E 648. ORDER ALL MATERIALS FROM THE SAME FACTORY DYE LOT.

E. INSTALLATION ACCESSORIES:
1.TROWELABLE LEVELING AND PATCHING COMPOUNDS: LATEX-MODIFIED, HYDRAULIC-CEMENT-BASED FORMULATION PROVIDED OR RECOMMENDED BY CARPET MANUFACTURER.
2. ADHESIVES: WATER-RESISTANT, MILDEW-RESISTANT, NONSTAINING TYPE TO SUIT PRODUCTS AND SUBFLOOR CONDITIONS INDICATED, THAT COMPLIES WITH FLAMMABILITY REQUIREMENTS FOR INSTALLED CARPET AND IS RECOMMENDED OR PROVIDED BY CARPET MANUFACTURER.
3. SEAM ADHESIVE: HOT-MELT ADHESIVE TAPE OR SIMILAR PRODUCT RECOMMENDED BY CARPET MANUFACTURER FOR SEALING AND TAPING SEAMS AND BUTTING CUT EDGES AT BACKING TO FORM SECURE SEAMS AND TO PREVENT PILE LOSS AT SEAMS.
4. TACKLESS CARPET STRIPPING: WATER RESISTANT PLYWOOD STRIPS, 3/8" THICK WITH ANGULAR PINS PROTRUDING FROM TOP DESIGNED TO GRIP AND HOLD STRETCHED CARPET AT THE BACKING. PROVIDE STRIPPING WITH 2 ROWS OF PINS.
5. CARPET EDGE GUARD: EXTRUDED ALUMINUM BEND DOWN TYPE EDGE GUARD, WITH CONCEALED GRIPPER TEETH AND MINIMUM 1-1/2" WIDE PUNCHED ANCHORAGE FLANGE AND MINIMUM 5/8" WIDE FACE

F. INSTALLATION:
1. GENERAL: COMPLY WITH CRI'S "CRI CARPET INSTALLATION STANDARD" AND WITH CARPET MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS FOR PREPARING SUBSTRATES.
2. USE TROWELABLE LEVELING AND PATCHING COMPOUNDS, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, TO FILL CRACKS, HOLES, DEPRESSIONS, AND PROTRUSIONS IN SUBSTRATES. FILL OR LEVEL CRACKS, HOLES AND DEPRESSIONS 1/8 INCH WIDE OR WIDER, AND PROTRUSIONS MORE THAN 1/32 INCH, UNLESS MORE STRINGENT REQUIREMENTS ARE REQUIRED BY MANUFACTURER'S WRITTEN INSTRUCTIONS.
3.BROOM AND VACUUM CLEAN SUBSTRATES TO BE COVERED IMMEDIATELY BEFORE INSTALLING CARPET.
4.LAY CARPET TILE IN PATTERN AS INDICATED ON CONSTRUCTION DOCUMENTS AND SO WIDTHS AT OPPOSITE EDGES OF ROOM ARE EQUAL AND NOT LESS THAN HALF-WIDTH.
5.TRIM CARPET NEATLY AND TIGHT TO WALLS AND AROUND INTERRUPTIONS.
6.INSTALL PATTERN PARALLEL TO WALLS AND BORDERS UNLESS OTHERWISE INDICATED.
7.DO NOT BRIDGE BUILDING EXPANSION JOINTS WITH CARPET.
8. CUT AND FIT CARPET TO BUTT TIGHTLY TO VERTICAL SURFACES, PERMANENT FIXTURES, AND BUILT-IN FURNITURE INCLUDING CABINETS, PIPES, OUTLETS, EDGINGS, THRESHOLDS, AND NOSINGS. BIND OR SEAL CUT EDGES AS RECOMMENDED BY CARPET MANUFACTURER.
9. EXTEND CARPET INTO TOE SPACES, DOOR REVEALS, CLOSETS, OPEN-BOTTOMED OBSTRUCTIONS, REMOVABLE FLANGES, ALCOVES, AND SIMILAR OPENINGS.
10. MAINTAIN REFERENCE MARKERS, HOLES, AND OPENINGS THAT ARE IN PLACE OR MARKED FOR FUTURE CUTTING BY REPEATING ON CARPET AS MARKED ON SUBFLOOR. USE NONPERMANENT, NONSTAINING MARKING DEVICE.
11. PROTECT CARPET AGAINST DAMAGE FROM CONSTRUCTION OPERATIONS AND PLACEMENT OF EQUIPMENT AND FIXTURES DURING THE REMAINDER OF CONSTRUCTION PERIOD. USE PROTECTION METHODS RECOMMENDED IN WRITING BY CARPET MANUFACTURER.
12. INSTALL TRANSITION STRIPS AT CARPET TERMINATIONS AS SPECIFIED ON THE CONSTRUCTION DOCUMENTS.

09 6816 - SHEET CARPETING

A. SUBMITTALS: PRODUCT DATA AND SAMPLES OF EACH CARPET PRODUCT INDICATED. SUBMIT 18" X 27" SAMPLES OF EACH CARPET REQUIRED, AND 6" LENGTHS OF EXPOSED EDGE STRIPPING.

B. WARRANTY: PROVIDE SPECIAL PROJECT WARRANTY, SIGNED BY CONTRACTOR, INSTALLER AND MANUFACTURER (CARPET MILL), AGREEING TO REPAIR OR REPLACE DEFECTIVE MATERIALS AND WORKMANSHIP OF CARPETING WORK DURING 1-YEAR WARRANTY PERIOD FOLLOWING SUBSTANTIAL COMPLETION. ATTACH COPIES OF PRODUCT WARRANTIES.

C. ATTIC STOCK: FULL-SIZE UNITS EQUAL TO 5 PERCENT OF AMOUNT INSTALLED FOR EACH TYPE INDICATED, BUT NOT LESS THAN 10 SQ. YD.

D. PRODUCTS:
A. APARTMENT UNIT CARPET SHALL BE SUPPLIED AND INSTALLED UNDER AN ALLOWANCES OF $8.00/SQUARE YARD FOR THE PURCHASE AND DELIVERY OF THE CARPET MATERIAL ONLY.
1. COSTS FOR THE PAD ACCESSORIES, TAXES, LABOR, ETC. ARE NOT INCLUDED IN THE ALLOWANCES STATED ABOVE BUT SHALL BE INCLUDED IN THE BID PRICE FOR A COMPLETE INSTALLATION.
B. CARPET PAD SHALL BE 1/2" - 6# DENSITY REBOND PAD AS REQUIRED FOR A COMPLETE INSTALLATION.

E. INSTALLATION ACCESSORIES:
1.TROWELABLE LEVELING AND PATCHING COMPOUNDS: LATEX-MODIFIED, HYDRAULIC-CEMENT-BASED FORMULATION PROVIDED OR RECOMMENDED BY CARPET MANUFACTURER.
2. ADHESIVES: WATER-RESISTANT, MILDEW-RESISTANT, NONSTAINING TYPE TO SUIT PRODUCTS AND SUBFLOOR CONDITIONS INDICATED, THAT COMPLIES WITH FLAMMABILITY REQUIREMENTS FOR INSTALLED CARPET AND IS RECOMMENDED OR PROVIDED BY CARPET MANUFACTURER.
3. SEAM ADHESIVE: HOT-MELT ADHESIVE TAPE OR SIMILAR PRODUCT RECOMMENDED BY CARPET MANUFACTURER FOR SEALING AND TAPING SEAMS AND BUTTING CUT EDGES AT BACKING TO FORM SECURE SEAMS AND TO PREVENT PILE LOSS AT SEAMS.
4. TACKLESS CARPET STRIPPING: WATER RESISTANT PLYWOOD STRIPS, 3/8" THICK WITH ANGULAR PINS PROTRUDING FROM TOP DESIGNED TO GRIP AND HOLD STRETCHED CARPET AT THE BACKING. PROVIDE STRIPPING WITH 2 ROWS OF PINS.
5. CARPET EDGE GUARD: EXTRUDED ALUMINUM BEND DOWN TYPE EDGE GUARD, WITH CONCEALED GRIPPER TEETH AND MINIMUM 1-1/2" WIDE PUNCHED ANCHORAGE FLANGE AND MINIMUM 5/8" WIDE FACE

F. INSTALLATION:
1. GENERAL: COMPLY WITH CRI'S "CRI CARPET INSTALLATION STANDARD" AND WITH CARPET MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS FOR PREPARING SUBSTRATES.
2. USE TROWELABLE LEVELING AND PATCHING COMPOUNDS, ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, TO FILL CRACKS, HOLES, DEPRESSIONS, AND PROTRUSIONS IN SUBSTRATES. FILL OR LEVEL CRACKS, HOLES AND DEPRESSIONS 1/8 INCH WIDE OR WIDER, AND PROTRUSIONS MORE THAN 1/32 INCH, UNLESS MORE STRINGENT REQUIREMENTS ARE REQUIRED BY MANUFACTURER'S WRITTEN INSTRUCTIONS.
3.BROOM AND VACUUM CLEAN SUBSTRATES TO BE COVERED IMMEDIATELY BEFORE INSTALLING CARPET.
4.UNIT INSTALLATION, STRETCH-IN INSTALLATION WITH PAD.
5.COMPLY WITH CARPET MANUFACTURER'S WRITTEN INSTRUCTIONS AND SHOP DRAWINGS FOR SEAM LOCATIONS AND DIRECTION OF CARPET; MAINTAIN UNIFORMITY OF CARPET DIRECTION AND LAY OF PILE. AT DOORWAYS, CENTER SEAMS UNDER THE DOOR IN CLOSED POSITION.
6.INSTALL PATTERN PARALLEL TO WALLS AND BORDERS UNLESS OTHERWISE INDICATED.
7.DO NOT BRIDGE BUILDING EXPANSION JOINTS WITH CARPET.
8. CUT AND FIT CARPET TO BUTT TIGHTLY TO VERTICAL SURFACES, PERMANENT FIXTURES, AND BUILT-IN FURNITURE INCLUDING CABINETS, PIPES, OUTLETS, EDGINGS, THRESHOLDS, AND NOSINGS. BIND OR SEAL CUT EDGES AS RECOMMENDED BY CARPET MANUFACTURER.
9. EXTEND CARPET INTO TOE SPACES, DOOR REVEALS, CLOSETS, OPEN-BOTTOMED OBSTRUCTIONS, REMOVABLE FLANGES, ALCOVES, AND SIMILAR OPENINGS.
10. MAINTAIN REFERENCE MARKERS, HOLES, AND OPENINGS THAT ARE IN PLACE OR MARKED FOR FUTURE CUTTING BY REPEATING ON CARPET AS MARKED ON SUBFLOOR. USE NONPERMANENT, NONSTAINING MARKING DEVICE.
11. PROTECT CARPET AGAINST DAMAGE FROM CONSTRUCTION OPERATIONS AND PLACEMENT OF EQUIPMENT AND FIXTURES DURING THE REMAINDER OF CONSTRUCTION PERIOD. USE PROTECTION METHODS RECOMMENDED IN WRITING BY CARPET MANUFACTURER.

09 9000 - PAINTING AND COATING

A. SUBMITTALS: PRODUCT DATA AND THREE (3) DRAW-DOWN SAMPLES OF EACH COLOR AND SHEEN SPECIFIED.

B. ATTIC STOCK: FURNISH ONE (1) GALLON OF EACH PAINT COLOR AND SHEEN, IN CONTAINERS, PROPERLY LABELED AND SEALED.

C. PRODUCTS: PROVIDE MANUFACTURER'S BEST QUALITY PAINTS OF COLOR AND SHEEN AS INDICATED IN THE CONSTRUCTION DOCUMENTS THAT ARE FORMULATED AND RECOMMENDED BY MANUFACTURER FOR APPLICATION INDICATED. PROVIDE MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH SUBSTRATES.

D. PAINT SYSTEMS:
1. ALL PAINT, STAIN, AND VARNISH SHALL BE PRODUCTS OF DEVOE, KWAL, SHERWIN WILLIAMS, PPG INDUSTRIES, PRATT & LAMBERT OR APPROVED EQUAL
2. ALL MATERIAL SHALL BE OF THE STANDARD RESIDENTIAL GRADE OF THE TYPES DESIGNATED.
3. ALL MATERIAL SHALL BE DELIVERED TO THE JOB SITE IN THE ORIGINAL, UNOPENED, LABELED CONTAINERS. COLORS NOT SPECIFICALLY CALLED FOR IN THE PAINT SCHEDULE WILL BE SELECTED BY THE ARCHITECT.

09 9000 - PAINTING AND COATING (CONTINUED)

E. APPLICATION / INSTALLATION:
1. EQUIPMENT: APPLY COATINGS BY BRUSH, ROLLER, SPRAY, OR OTHER APPLICATORS ACCORDING TO COATING MANUFACTURER'S WRITTEN INSTRUCTIONS. WHEN SPRAYED, EXTERIOR COATINGS SHALL BE BACK-ROLLED FOLLOWING SPRAY APPLICATION. USE ROLLERS FOR FINISH COAT ON INTERIOR WALLS AND CEILINGS.
2. PIGMENTED (OPAQUE) FINISHES: COMPLETELY COVER SURFACES TO PROVIDE A SMOOTH, OPAQUE SURFACE OF UNIFORM APPEARANCE. PROVIDE A FINISH FREE OF CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, RUNS, SAGS, ROPINESS, OR OTHER SURFACE IMPERFECTIONS.
3. APPLY PRODUCTS PER MANUFACTURER RECOMMENDED GUIDELINES. PRODUCT COVERAGE MINIMUM ONE COAT OF PRIMER AND TWO FINAL COATS ON MATERIALS.APPLY PRODUCTS TO MATERIALS APPROVED BY MANUFCTURER.PRODUCT DATA SHEETS.

A. Exterior Work:

1. ALL EXTERIOR GALVANIZED METAL FLASHINGS, CONNECTORS, ETC.	ONE COAT COMMERCIAL METAL ETCH. ONE COAT EXTERIOR METAL PRIMER. TWO COATS EXTERIOR SEMI-GLOSS METAL PAINT.
2. ALL EXPOSED STEEL FRAMES, ANGLES, ETC.	TWO COATS SEMI-GLOSS METAL PAINT. (PRIME COAT CHANNELS, POSTS, RAILINGS, BEAMS, ETC. SURFACES THAT ARE NOT PRIMED.)
3. ALL EXPOSED MISC. FERROUS METAL ITEMS INCLUDING RAILS, PLATES, ANGLES, BOLTS, GRATES, CONDUITS, POSTS, PIPING, ETC.	TWO COATS SEMI-GLOSS METAL PAINT. (PRIME COAT SURFACES THAT ARE NOT PRIMED.)
4. ALL UNPRIMED EXTERIOR MILLWORK, TRIM, SMOOTH WOOD MATERIALS, ETC. SEMI-GLOSS PAINT.	PRIME AND BACK LATEX PRIMER. TWO COATS OF EXTERIOR LATEX SATIN OR
5. PRIMED MILLWORK AND TRIM.	TOUCH-UP PRIME. TWO COATS OF EXTERIOR 100% SATIN OR SEMI-GLOSS ACRYLIC LATEX PAINT.
6. ROUGH SAWN TRIM, BEAMS, COLUMNS, ETC.	ONE COAT PRIMER. TWO COATS EXTERIOR HEAVY BODIED STAIN.
7. PRIMED METAL ENTRY DOORS, FRENCH DOORS AND METAL FRAMES, GARAGE DOORS.	PATCH DENTS, TOUCH UP PRIMER. TWO COATS OF OIL BASE SEMI-GLOSS PAINT INSIDE AND OUTSIDE.
8. ANY OTHER PAINTING REQUIRED BY THE DRAWINGS.	TWO COATS TO MATCH ADJACENT SURFACES.

B. INTERIOR WORK:

1. GYPSUM BOARD WALLS EXCEPT IN KITCHENS, BATHROOMS, LAUNDRIES AND COMMON AREA CORRIDORS, UNLESS SCHEDULED FOR WALLCOVERING	ONE COAT OF PRIME LATEX PAINT AND ONE FINISH COAT OF LATEX EGGSHELL WALL PAINT. (TWO COATS IF REQUIRED TO ACHIEVE FULL COVERAGE.) ONE WALL IN EACH APARTMENT UNIT LIVING SPACE AND EACH BEDROOM SHALL BE PAINTED ACCENT COLORS.
2. GYPSUM BOARD WALLS IN KITCHENS, BATHROOMS AND LAUNDRIES UNLESS SCHEDULED FOR WALLCOVERING OR TILE.	ONE COAT OF EPOXY COMPATABLE PRIMER PAINT AND ONE FINISH COAT OF EPOXY EGGSHELL WALL PAINT. (TWO COATS IF REQUIRED TO ACHIEVE FULL COVERAGE.)
3. GYPSUM BOARD WALLS IN COMMON AREA CORRIDORS	ONE COAT OF PRIME LATEX PAINT AND ONE FINISH COAT OF SCRUBBABLE LATEX FLAT WALL PAINT. (TWO COATS IF REQUIRED TO ACHIEVE FULL COVERAGE.)
4. GYPSUM BOARD CEILINGS.	TWO COATS OF LATEX FLAT PAINT. TWO COATS OF CLASS II VAPOR RETARDER PAINT AT CEILINGS ADJACENT TO ATTICS.
5. DOOR CASINGS, BASE, WOOD, MILL-WORK, ETC. (PRE-PRIMED.)	ONE PRIME COAT OF LATEX PAINT, ONE COAT LATEX PAINT AND ONE FINISH COAT OF LATEX SEMI-GLOSS PAINT.
6. PRIMED HARDWOOD DOORS.	ONE COAT OF LATEX PAINT AND ONE FINISH COAT OF LATEX SEMI-GLOSS PAINT.
7. ALL MISCELLANEOUS FERROUS METAL, INCLUDING GRILLES, REGISTERS, ETC.	TWO COATS METAL PAINT TO MATCH ADJACENT SURFACES UNLESS FACTORY PREFINISHED WHITE
8. ANY OTHER PAINTING WORK REQUIRED BY THE DRAWINGS.	FINISH TO MATCH SIMILAR CONDITIONS.

09 3000 - TILING

A. SUBMITTALS: PRODUCT DATA FOR SETTING AND GROUTING MATERIALS AND THREE (3) SAMPLES OF EACH TILE SPECIFIED FOR VERIFICATION PURPOSES.

B. ATTIC STOCK: FURNISH 2% OF EACH TYPE OF CERAMIC TILE PACKAGED WITH PROTECTIVE COVERING AND LABELED FOR STORAGE.

C. BASIS OF DESIGN: SEE DRAWING SCHEDULES.

D. TILE: COMPLY WITH STANDARD GRADE REQUIREMENTS IN ANSI A137.1 "SPECIFICATIONS FOR CERAMIC TILE" FOR PRODUCTS AND SIZES INDICATED IN THE CONSTRUCTION DOCUMENTS.

E. INSTALLATION MATERIALS:
1. THIN-SET MORTAR:
A. TYPICAL INTERIOR INSTALLATIONS: LATEX/POLYMER MODIFIED PORTLAND CEMENT COMPLYING WITH ANSI A108.5 AND ANSI 118.4.
2. GROUT,UNSANDED FOR JOINTS 1/16" WIDTH OR LESS, SANDED FOR JOINTS GREATER THAN 1/16" IN COLOR INDICATED IN SCHEDULE OR TO BE SELECTED BY ARCHITECT AND OWNER.
A. TYPICAL INTERIOR INSTALLATIONS: STANDARD CEMENT GROUT WITH INTEGRAL STAIN INHIBITORS (TEC ACCUCOLOR XT, OR EQUAL)
3. SETTING BED ACCESSORIES: ANSI A 108.1A.

F. INSTALLATION METHODS: COMPLY WITH TILE INSTALLATION STANDARDS IN ANSI'S "SPECIFICATIONS FOR THE INSTALLATIONS OF CERAMIC TILE" AND TCA'S "HANDBOOK FOR CERAMIC TILE INSTALLATION" THAT APPLY TO THE MATERIALS AND METHODS INDICATED BELOW:

G.TERMINATIONS:
1. WHERE CUT TILE IS SPECIFIED AS THE TOP COURSE ON WALL WAINSCOTING OR WALL BASE WITH AN EXPOSED TOP EDGE, THE FACTORY EDGE SHALL BE USED AS THE EXPOSED EDGE.

H. CONFLICTS: IF NOT ADDRESSED ON DRAWINGS, WHERE ELECTRICAL DEVICES OR TOILET ACCESSORIES STRADDLE THE TRANSITION FROM THE TOP EDGE OF WAINSCOT WALL TILE TO GYPSUM BOARD SUBSTRATE, CONTACT ARCHITECT FOR RESOLUTION.

I. GROUT JOINTS:
1. JOINT SIZE: SET TILE WITH THE SMALLEST GROUT JOINT ACHIEVABLE AND AS RECOMMENDED BY THE MFR. BASED ON THE TILE PRODUCT AND SUBSTRATE CONDITIONS, UNLESS NOTED OTHERWISE.
2. TILE PATTERN: LAY TILE IN PATTERNS AS INDICATED IN THE CONSTRUCTION DOCUMENTS. ALIGN JOINTS WHERE ADJOINING TILES ON FLOOR, BASE, WALLS, AND TRIM ARE THE SAME SIZE, UNLESS INDICATED OTHERWISE.
3. INSTALLATION: INSTALL GROUT PER MANUFACTURER'S INSTRUCTIONS, EXERCISING CARE TO AVOID REMOVAL OF GROUT COLOR BY USE OF EXCESS WATER DURING INSTALLATION. FADED GROUT APPEARANCE SHALL BE CAUSE FOR REJECTION.
4. SEALER: AFTER FULLY CURED, GROUT SHALL BE SEALED WITH TWO (2) COATS OF COMMERCIAL QUALITY PENETRATING SILICONE SEALER.

09 5100 - ACOUSTICAL CEILINGS

A. SUBMITTALS: PRODUCT DATA ONLY

B. ATTIC STOCK: FURNISH 2% OF EACH TYPE OF CEILING TILE PACKAGED WITH PROTECTIVE COVERING AND LABELED FOR STORAGE.

C. ACOUSTICAL TILE PRODUCTS: PROVIDE CEILING TILE IN TYPE AND SIZES INDICATED IN THE CONSTRUCTION DOCUMENTS COMPLYING WITH ASTM E 1264, CLASS A MATERIALS, TESTED PER ASTM E 84.

D. SUSPENSION SYSTEM: PROVIDE HEAVY DUTY, DIRECT-HUNG, SUSPENSION SYSTEMS AS INDICATED IN THE CONSTRUCTION DOCUMENTS COMPLYING WITH ASTM C 635. FURNISH ALUMINUM GRID IN SHOWERS, KITCHENS, AND OTHER HIGH-HUMIDITY AREAS.
1. ATTACHMENT DEVICES: SIZE FOR FIVE (5) TIMES THE DESIGN LOAD INDICATED IN ASTM C 635, TABLE 1, DIRECT HUNG UNLESS OTHERWISE INDICATED.
2. WIRE HANGERS, BRACES, AND TIES: ZINC-COATED CARBON-STEEL WIRE; ASTM A 641/ (A 641 M), CLASS 1 ZINC COATING, SOFT TEMPER WITH A YIELD STRENGTH AT LEAST THREE (3) TIMES THE HANGER DESIGN LOAD (ASTM C 635, TABLE 1, DIRECT HUNG), BUT NOT LESS THAN 0.135" DIAMETER WIRE.
3. SEISMIC STRUTS: MANUFACTURER'S STANDARD PRODUCT DESIGNED TO ACCOMMODATE SEISMIC FORCES.
4. HOLD-DOWN CLIPS: PROVIDE HOLD-DOWN CLIPS ON CEILING TILE IN ENTRANCE VESTIBULES, COMPUTER ROOMS EMPLOYING DRY CHEMICAL FIRE-SUPPRESSION SYSTEMS, AND OTHER AREAS AS INDICATED.

F. INSTALLATION: COMPLY WITH ASTM C 636 AND CISCA'S "CEILING SYSTEMS HANDBOOK".
1. SEQUENCE: WORK TO ENSURE ACOUSTICAL CEILINGS ARE NOT INSTALLED UNTIL BUILDING IS ENCLOSED, SUFFICIENT HEAT IS PROVIDED, DUST GENERATION ACTIVITIES HAVE TERMINATED, AND OVERHEAD WORK IS COMPLETED, TESTED, AND APPROVED.
2. INSTALL CEILING GRID AS INDICATED TO BE SYMMETRICAL ABOUT BOTH AXES OF EACH ROOM USING NOT LESS THAN HALF-SIZE TILE UNLESS INDICATED OTHERWISE ON THE REFLECTED CEILING PLAN.
3. SUPPORT SUSPENSION SYSTEM INDEPENDENTLY OF DUCTS, PIPES, AND CONDUITS.
4. SUPPORT FIXTURE LOADS USING SUPPLEMENTARY HANGERS LOCATED WITHIN 6" OF EACH CORNER OR SUPPORT FIXTURES INDEPENDENTLY.
5. PROVIDE MATCHING PERIMETER MOLDING INSTALLED IN BEAD OF ACOUSTICAL SEALANT AT ALL LOCATIONS WHERE CEILING INTERSECTS VERTICAL SURFACES. USE MATCHING PRE-FORMED CLOSURES AT ROUND OR CURVED OBSTRUCTIONS.
6. FIELD-CUT EDGES SHALL MATCH PROFILE OF FACTORY EDGES.

DIVISION 10 - SPECIALTIES

10 2800 TOILET AND BATH ACCESSORIES

A. REFERENCE CONSTRUCTION DRAWINGS & SCHEDULES FOR TYPE, QUANTITY, AND LOCATIONS OF TOILET AND BATH ACCESSORIES.

B. SUBMITTALS
1. PRODUCT DATA: MANUFACTURER'S DATA SHEETS ON EACH PRODUCT TO BE USED, INCLUDING:
2. PREPARATION INSTRUCTIONS AND RECOMMENDATIONS.
3. STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS.
4. INSTALLATION METHODS.

B. INSTALLATION:
1. INSTALLER MUST EXAMINE SUBSTRATES, PREVIOUSLY INSTALLED INSERTS AND ANCHORAGES NECESSARY FOR MOUNTING OF TOILET ACCESSORIES, AND OTHER CONDITIONS UNDER WHICH INSTALLATION IS TO OCCUR, AND MUST NOTIFY CONTRACTOR IN WRITING OF CONDITIONS DETRIMENTAL TO PROPER AND TIMELY COMPLETION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN MANNER ACCEPTABLE TO INSTALLER.
2. INSTALL ACCESSORIES ACCORDING TO RESPECTIVE MANUFACTURERS' WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. I NSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED. ADHESIVE INSTALLATIONS ARE NOT PERMITTED.
3. MOUNTING HEIGHTS SHALL BE AS RECOMMENDED BY THE ACCESSORY MANUFACTURER AND AT HEIGHTS RECOMMENDED BY USE FOR PHYSICALLY HANDICAPPED TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT.
4. GRAB BARS: INSTALL TO WITHSTAND A DOWNWARD LOAD OF AT LEAST 250 LBF, WHEN TESTED ACCORDING TO ASTM F 446.
5. ADJUST ACCESSORIES FOR PROPER OPERATION AND VERIFY THAT MECHANISMS FUNCTION SMOOTHLY.
6. CLEAN AND POLISH ALL EXPOSED SURFACES AFTER REMOVING PROTECTIVE COATINGS.

10 3000 SOLID PLASTIC TOILET COMPARTMENTS
A. REFERENCE CONSTRUCTION DRAWINGS & SCHEDULES FOR TYPE, QUANTITY, AND LOCATIONS OF TOILET AND BATH ACCESSORIES.
B. PRODUCTS
BASIS OF DESIGN: ECLIPSE TOILET PARTITIONS AS MANUFACTURED BY AND SUPPLIED BY SCRANTON
1. STYLE: FLOOR MOUNTED OVERHEAD-BRACED TOILET COMPARTMENTS
2. DOORS AND PANELS: HIGH DENSITY POLYETHYLENE (HDPE), FABRICATED FROM SEQ CHAPTER 1 EXTRUDED POLYMER RESINS, FORMING SINGLE THICKNESS PANEL.
A. WATERPROOF AND NONABSORBENT, WITH SELF-LUBRICATING SURFACE, RESISTANT TO MARKS BY PENS, PENCILS, MARKERS, AND OTHER WRITING INSTRUMENTS.
B. THICKNESS: 1 INCH (25 MM).
C. EDGES: SHIPLAP.
3. PANEL COLOR: TRADITIONAL SERIES:1. SHALE - ORANGE PEEL.
4. DOORS AND PANELS: HIGH PRIVACY: HEIGHT: 62 INCHES (1575 MM) HIGH AND MOUNTED AT 8 TO 14 INCHES (203 TO 356 MM) ABOVE THE FINISHED FLOOR.

C. SUBMITTALS
1. PRODUCT DATA: MANUFACTURER'S DATA SHEETS ON EACH PRODUCT TO BE USED, INCLUDING:
2. PREPARATION INSTRUCTIONS AND RECOMMENDATIONS.
3. STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS.
4. INSTALLATION METHODS.
5. SHOP DRAWINGS: PROVIDE LAYOUT DRAWINGS AND INSTALLATION DETAILS WITH LOCATION AND TYPE OF HARDWARE REQUIRED.
6. SELECTION SAMPLES: FOR EACH FINISH PRODUCT SPECIFIED, TWO COMPLETE SETS OF COLOR CHIPS REPRESENTING MANUFACTURER'S FULL RANGE OF AVAILABLE COLORS AND PATTERNS.

D. POSTS, RAILS AND HARDWARE:
1. METAL POSTS: 82.75 INCHES (2102 MM) HIGH, HEAVY DUTY EXTRUDED ALUMINUM, CLEAR ANODIZED FINISH, FASTENED TO FOOT WITH STAINLESS STEEL TAMPER RESISTANT SCREW.
2. HIDDEN SHOE (FOOT): ONE-PIECE MOLDED POLYETHYLENE INVISIBLE SHOE INSERTED INTO METAL POST AND SECURED TO METAL POST WITH STAINLESS STEEL TAMPER RESISTANT SCREW.
3. HEADRAIL CAP AND CORNER CAP: ONE-PIECE MOLDED POLYETHYLENE SECURED TO METAL POST WITH STAINLESS STEEL TAMPER RESISTANT SCREW; ADJUSTABLE TO LEVEL HEADRAIL TO FINISHED FLOOR.
4. WALL BRACKETS: CONTINUOUS HEAVY DUTY EXTRUDED ALUMINUM, CLEAR ANODIZED FINISH, INSERTED INTO SLOTTED PANEL AND FASTENED TO PANELS WITH STAINLESS STEEL TAMPER RESISTANT SCREWS.
5. HEADRAIL: HEAVY DUTY EXTRUDED ALUMINUM, CLEAR ANODIZED FINISH, SECURED TO WALL WITH STAINLESS STEEL TAMPER SCREWS.
6. DOOR HARDWARE:
A. HINGES: EDGE-MOUNTED HELIX STYL-E STAINLESS STEEL CONTINUOUS HINGE. CLOSING DEGREE: 5 DEGREES. COMES TO A FULL CLOSE ON ITS OWN WEIGHT.
B.OCCUPANCY INDICATOR LATCH AND HOUSING: MATERIAL: SATIN STAINLESS STEEL. OCCUPANCY INDICATORS: GREEN FOR OCCUPIED AND RED NOT OCCUPIED. SLIDE BOLT AND BUTTON.
C.COAT HOOK AND DOOR BUMPER COMBINATION: MATERIAL: CHROME PLATED ZAMAK. HANDICAP DOOR: EQUIP WITH SECOND DOOR PULL AND DOOR STOP.
D. DOOR PULLS: CHROME PLATED ZAMAK.

E. INSTALLATION:
1. CLEAN SURFACES THOROUGHLY PRIOR TO INSTALLATION.
2. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SHOP DRAWINGS.
3. INSTALL PARTITIONS RIGID, STRAIGHT, PLUMB, AND LEVEL.
4. LOCATE BOTTOM EDGE OF DOORS AND PANELS INCHES ABOVE FINISHED FLOOR.
5. CLEARANCE AT VERTICAL EDGES OF DOORS SHALL BE UNIFORM TOP TO BOTTOM AND SHALL NOT EXCEED 3/8

03_Abbreviation Schedule	
Abbreviation	Abbreviation Name
+/-	PLUS OR MINUS
ADDNL	ADDITIONAL
ADJ	ADJACENT
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
AR	ANCHOR ROD
ARCH	ARCHITECT OR ARCHITECTURAL
B/	BOTTOM OF
B/W	BETWEEN
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BRG	BEARING
BWP	BRACED WALL PANEL
CFS	COLD FORMED STEEL
CHKD	CHECKED
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CTR	CENTER
db	DIA OF REINF BAR, DIA OF BOLT
DBA	DEFORMED BAR ANCHOR
DIA or Ø	DIAMETER
DIAG	DIAGONAL
DIR	DIRECTION
DWL	DOWEL
EA	EACH
EE	EXTENDED END
EJ	EXPANSION JOINT
ELEV	ELEVATION
EN	EDGE NAILING
ENGR	ENGINEER
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EQ	EQUAL
EW	EACH WAY
EXIST	EXISTING
EXT	EXTERIOR
FDN	FOUNDATION
FLG	FLANGE
FLR	FLOOR
FS	FAR SIDE
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
HORIZ	HORIZONTAL
HSA	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL SECTION
IF	INSIDE FACE
INT	INTERIOR
JST	JOIST
K	KIPS (1000 LBS)
LCE	COMPRESSION EMBEDMENT LENGTH
LCS	COMPRESSION LAP SPLICE LENGTH
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSH	LONG SLOTTED HOLE
LTE	TENSION EMBEDMENT LENGTH
LTS	TENSION LAP SLICE LENGTH
LW	LIGHTWEIGHT
MFCR	MANUFACTURER
MTL	METAL
NIC	NOT IN CONTRACT
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OF	OUTSIDE FACE
OPP	OPPOSITE
OVS	OVERSIZED
P/C	PRECAST
PAF	POWDER ACTUATED FASTENER
PAR	PARALLEL
PEMB	PRE-ENGINEERED METAL BUILDING
PEN	PENETRATION
PERP	PERPENDICULAR
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PREFAB	PREFABRICATED
PRELIM	PRELIMINARY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
RC	REINFORCED CONCRETE
RE:	REFER TO
REINF	REINFORCING
REQD	REQUIRED
RF	RIGID FRAME
SC	SLIP CRITICAL
SDS	SELF DRILLING SCREW
SIM	SIMILAR
SLV	SHORT LEG VERTICAL
SOG	SLAB ON GRADE
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STIR	STIRRUPS
STL	STEEL
SW	SHEAR WALL
SYM	SYMMETRIC
T&B	TOP AND BOTTOM
T/	TOP OF
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W/	WITH
W/O	WITHOUT
WF	WIDE FLANGE
WP	WORK POINT
WWR	WELDED WIRE REINFORCEMENT

STRUCTURAL DESIGN CRITERIA (2018 IBC AND ASCE 7-16):

1. BUILDING OCCUPANCY RISK CATEGORY II.

2. LIVE LOADS [UNIFORM (PSF) / POINT LOADS (KIPS)]:
   -- ROOF: ..... 20 PSF / 300#
   -- GROUND LEVEL SLAB ..... 100 PSF / 2.0 K

3. ROOF SNOW LOAD:
   -- GROUND SNOW LOAD (Pg): ..... 20 PSF
   -- FLAT ROOF SNOW LOAD (Pf): ..... 15.4 PSF
   -- MIN UNIFORM ROOF SNOW LOAD (Pm): ..... 20 PSF (NO DRIFT OR RAIN)
   -- RAIN ON SNOW SURCHARGE (Prs) ..... 5.0 PSF
   -- SNOW EXPOSURE FACTOR (Ce): ..... 1.0, EXPOSURE B
   -- SNOW LOAD IMPORTANCE FACTOR (Is): 1.0
   -- THERMAL FACTOR (Ct): ..... 1.1 (just above freezing)
   -- SLOPE FACTOR (CS): ..... 1.0 (for ¼ per foot roofs)

4. WIND DESIGN DATA:
   -- BASIC WIND SPEED (3 SEC GUST): ..... 115 MPH
   -- WIND EXPOSURE: ..... B
   -- GROUND ELEVATION ABOVE SEA LEVEL ..... 1,009 FT
   -- DIRECTIONALITY FACTOR (Kd) 0.85
   -- INTERNAL PRESSURE COEFF. ..... +/- 0.18
   -- COMPONENTS AND CLADDING WIND (ULTIMATE 1.0"W) PRESSURES (BASED ON TRIB 10 S.F., EXP. B. MAY BE REDUCED FOR COMPONENTS WITH LARGER TRIB PER BLDG CODE):
   WALLS AT CORNERS & EDGES: ..... +20 / -26 PSF
   ALL OTHER MAIN WALL CONDITIONS: ..... +20 / -21 PSF
   ROOF AREA 1: ..... +16 / -36 PSF
   ROOF AREA 2e: ..... +16 / -36 PSF
   ROOF AREA 2n: ..... +16 / -53 PSF
   ROOF AREA 2r: ..... +16 / -53 PSF
   ROOF AREA 3e: ..... +16 / -53 PSF
   ROOF AREA 3r: ..... +16 / -62 PSF
   *REFERENCE ASCE 7-16 FIG 30.3-2B FOR AREA LOCATIONS

5. EARTHQUAKE DESIGN DATA:
   -- SEISMIC IMPORTANCE FACTOR (Ie): 1.0
   -- MAPPED SPECTRAL RESP ACCEL (Ss / S1): ..... 0.1 / 0.068
   -- SITE CLASS: ..... D
   -- SPECTRAL RESPONSE COEFF (Sds / Sd1): ..... 0.106 / 0.109
   -- SEISMIC DESIGN CATEGORY: ..... B
   -- SEISMIC FORCE RESISTING SYSTEM: ..... R=6.5, LIGHT FRAMING
   -- DESIGN BASE SHEAR: ..... 3.5 K (ASD)
   -- SEISMIC RESPONSE COEFF (Cs): 0.0164
   -- ANALYSIS PROCEDURE: ..... ELF

6. RAIN LOAD DATA:
   -- 15-MIN RAIN INTENSITY: ..... 7.49 IN/HR
   -- 60-MIN RAIN INTENSITY: ..... 3.52 IN/HR

DESIGN ASSUMES APPROPRIATE ROOF SLOPE AND DRAINAGE (INCLUDING OVERFLOWS) ARE PROVIDED. ROOF IS DESIGNED FOR LIVE LOAD INDICATED ABOVE

7. GUARD RAILS: ..... 50 PLF, AND/OR 200# CONCENTRATED LOAD APPLIED IN ANY DIRECTION.

STRUCTURAL GENERAL NOTES:

1. DESIGN AND CONSTRUCTION SHALL CONFORM TO THE "INTERNATIONAL BUILDING CODE, 2018 EDITION" AS AMENDED BY THE CITY OF LEE SUMMIT, MO. REFER TO THE SPECIAL STRUCTURAL INSPECTION NOTES FOR ADDITIONAL REQUIREMENTS.

2. CONTRACTOR TO VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO COMMENCING WORK.

3. IF DISCREPANCIES EXIST BETWEEN STRUCTURAL PLANS, ARCHITECTURAL PLANS, OTHER PLANS, OR SPECIFICATIONS, THE CONTRACTOR OR SUBCONTRACTOR SHALL PROVIDE A WRITTEN REQUEST FOR CLARIFICATION FROM THE ARCHITECT AND/OR ENGINEER PRIOR TO PROCEEDING WITH THE WORK.

4. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO EXECUTE AND DETERMINE FINAL ERECTION PROCEDURES, SEQUENCING AND TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUYING OR TIE DOWNS WHICH MIGHT BE NECESSARY.

5. THE STRUCTURE AND FOUNDATIONS ARE NOT DESIGNED FOR FUTURE EXPANSION.

6. FABRICATORS AND SUPPLIERS SHALL CLEARLY NOTE AND HIGHLIGHT CHANGES MADE IN SHOP DRAWINGS, WHICH DO NOT COMPLY WITH THE CONTRACT DOCUMENTS.

7. COLUMNS, BEAMS, JOISTS, OR TRUSSES SHALL NOT BE FIELD CUT OR TRIMMED FOR ANY REASON WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.

8. HOLES, PIPES, SLEEVES, ETC. NOT SHOWN ON THE DRAWINGS MUST BE REVIEWED BY THE ARCHITECT/ENGINEER BEFORE PLACEMENT THROUGH STRUCTURAL MEMBERS.

9. IF MECHANICAL AND ELECTRICAL EQUIPMENT SIZES, WEIGHTS, OR LOCATIONS DO NOT COINCIDE WITH EQUIPMENT SHOWN ON THE PLANS, COORDINATE ADJUSTMENTS WITH THE ARCHITECT.

10. NO AREA OF THE STRUCTURE SHALL BE LOADED WITH CONSTRUCTION MATERIALS OR EQUIPMENT THAT EXCEEDS FINAL DESIGN CRITERIA.

11. BEAMS, COLUMNS, WALLS AND FOOTING CENTERS SHALL BE CENTERED UNDER SUPPORTING MEMBERS (TYPICAL UNLESS NOTED OTHERWISE).

12. DELEGATED DESIGN - DEFERRED SUBMITTALS SHALL BE SIGNED/ SEALED PRIOR TO SUBMITTAL FOR REVIEW. THESE INCLUDE:
A. PRE-ENGINEERED CANOPIES
B. PRE-ENGINEERED ROOF TRUSSES

SUBMIT THESE SHOP DRAWINGS AND CALCULATIONS SEALED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE JURISDICTION OF THE PROJECT SHALL BE FURNISHED TO THE ENGINEER OF RECORD FOR REVIEW. CONTRACTOR SHALL SUBMIT COPIES OF DEFERRED SUBMITTALS TO THE BUILDING DEPARTMENT AFTER ARCH'ENG REVIEW.

13. TYPICAL DETAILS ARE SHOWN ON SHEETS DESIGNATED "S0XX". THE INCLUDED TYPICAL DETAILS MAY OR MAY NOT BE CUT / REFERENCED ON PLANS OR SECTIONS BUT ARE TO BE USED AS APPLICABLE.

SUBMITTALS:

1. GENERAL CONTRACTOR TO PROVIDE A SHOP DRAWING SUBMITTAL LOG ITEMIZING ALL PROPOSED SUBMITTALS FOR APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD.

2. ALL SHOP DRAWINGS SHALL BE CHECKED BY THE FABRICATOR AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER OF RECORD. SHOP DRAWING REVIEW BY ENGINEER IS LIMITED TO VERIFYING GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES FROM THE CONTRACT DOCUMENTS, DIMENSIONAL ERRORS, COORDINATION ERRORS, OR OMISSIONS IN SHOP DRAWINGS.

3. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION REGARDING ALL STRUCTURAL ITEMS, INCLUDING THE FOLLOWING:
A. CONCRETE MIX DESIGNS (5 DAYS BEFORE POUR, MIN.)
B. CONCRETE REINFORCEMENT
C. PRE-ENGINEERED ROOF TRUSSES

4. SHOP DRAWINGS SHALL INCLUDE CONNECTIONS AS WELL AS SIZE, SPACING, AND GRADE OF ALL MEMBERS. PLANS AND ANY DETAILING NECESSARY FOR DETERMINING FIT AND PLACEMENT SHALL ALSO BE INCLUDED.

5. IF THE SHOP DRAWINGS DIFFER FROM OR ADD TO THE DESIGN OF THE STRUCTURAL DRAWINGS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ARE SUBJECT TO REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.

6. ITEMS THAT ARE DESIGNED BY THE CONTRACTOR SHALL BE DESIGNED TO RESIST THE LIVE LOADS INDICATED IN STRUCTURAL NOTES, DEAD LOAD, SELF WEIGHT, ANY ADDITIONAL LOADING INDICATED ON PLANS AND DETAILS, SNOW DRIFT, AND A NET WIND UPLIFT.

7. ITEMS THAT ARE DESIGNED BY THE CONTRACTOR SHALL INCLUDE ANY RELEVANT TECHNICAL LITERATURE FROM THE MANUFACTURER. ALSO PROVIDE A CERTIFICATION FROM THE MANUFACTURER SHOWING THE PRODUCT IS IN COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.

8. THE CONTRACTOR SHALL COORDINATE SEISMIC RESTRAINTS OF MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT, MACHINERY, AND ASSOCIATED PIPING WITH THE STRUCTURE. ANY CONNECTIONS TO STRUCTURE SHALL CONFORM TO ASCE 7, CHAPTER 13 AND SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE APPROPRIATE STATE AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION.

10. FIELD ENGINEERED DETAILS DEVELOPED BY THE CONTRACTOR THAT DIFFER FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN THE APPROPRIATE STATE AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.

SPECIAL INSPECTIONS:

1. PROVIDE SPECIAL STRUCTURAL INSPECTIONS AND VERIFICATIONS BY A THIRD PARTY MEETING THE REQUIREMENTS OF CHAPTER 17 OF THE BUILDING CODE AND THE BUILDING OFFICIAL.

2. SPECIAL INSPECTORS SHALL BE QUALIFIED AND FURNISH THEIR REPORTS IN A TIMELY MANNER TO THE CONTRACTOR, BUILDING OFFICIALS, ARCHITECT, AND/OR ENGINEER

3. SHOULD INSPECTOR IDENTIFY ANY DISCREPANCY, THEY SHALL NOTIFY CONTRACTOR FIRST, AND THEN ARCHT/ ENGINEER IMMEDIATELY THEREAFTER IF CORRECTIVE ACTION IS NEEDED.

4. SPECIAL INSPECTIONS AS REQUIRED BY CODE:
A. CONCRETE: SECTION 1705.3 AND TABLE 1705.3 CONCRETE MATERIAL SAMPLING AND TESTING, REBAR OBSERVATIONS. TAKE SET OF (3) CYLINDERS FOR EVERY 50 C.Y., BUT NOT LESS THAN ONE SET OF SAMPLES PER DAY'S WORK AND PER MIX.
B. SOILS: SECTION 1705.6. FOUNDATION BEARING, EXCAVATION, FILL PLACEMENT.
C. WOOD CONSTRUCTION: SECTION 1705.5.

EARTHWORK AND FOUNDATIONS:

1. PERIMETER AND EXTERIOR FOOTINGS SHALL BEAR AT A MINIMUM OF 3'-0" BELOW ADJACENT GRADE.

2. ALL FOOTINGS SHALL BEAR ON FIRM NATIVE MATERIALS, COMPACTED OR ENGINEERED FILL CAPABLE OF SUPPORTING AN ALLOWABLE BEARING PRESSURE OF 1,500 PSF PER THE IBC. DEEPEN FOOTINGS, AND REMOVE AND REPLACE UNACCEPTABLE SOILS WITH ENGINEERED FILL AS REQUIRED TO PROVIDE THIS MINIMUM DEPTH AND SUITABLE BEARING.

3. UNDERCUT THE PAD TO A DEPTH OF 24-INCHES BELOW BOTTOM OF FLOOR SLAB ELEVATION AND REPLACE WITH LOW-VOLUME-CHANGE MATERIALS PER THE GEOTECHNICAL REPORT.

4. FILL PLACEMENT, COMPACTION, AND SOIL BEARING TESTS SHALL BE PERFORMED BY A GEOTECHNICAL ENGINEER PRIOR TO INSTALLING FOOTINGS TO ENSURE DESIGN ALLOWABLE BEARING VALUES AND SLAB SUBGRADE REQUIREMENTS ARE SATISFIED. IF ACTUAL SITE CONDITIONS DO NOT SATISFY THESE REQUIREMENTS, COORDINATE ADJUSTMENTS WITH ARCHITECT/ENGINEER/ GEOTECHNICAL ENGINEER

6. SURFACE WATER SHALL NOT BE ALLOWED TO STAND ADJACENT TO OR DRAIN TOWARDS THE FOUNDATION AND SLAB SUBGRADES UNDER ANY CIRCUMSTANCES. PAVEMENTS OR GRADED SOILS AT THE PERIMETER OF THE BUILDING, EXCEPT AS REQUIRED AT EXITS OR AS NOTED, SHALL BE SLOPED AWAY AT 5% OR 6" MIN FOR THE FIRST TEN FEET AND AS REQUIRED TO PROVIDE POSITIVE DRAINAGE.

7. FOOTINGS MAY BE POURED TO NEAT LINES OF EXCAVATIONS PROVIDING VERTICAL LINES OF EXCAVATIONS CAN BE MAINTAINED DURING CONCRETE PLACEMENT.

8. FOUNDATION WALL BACKFILL SHALL NOT BE UNBALANCED BY MORE THAN TWO FEET ON EITHER SIDE AT ANY TIME. BASEMENT WALL AND RESTRAINED RETAINING WALL BACKFILL SHALL NOT BE PLACED, UNLESS THE WALL IS ADEQUATELY BRACED. RETAINING WALL AND BASEMENT WALL BACKFILL SHALL BE FREE DRAINING GRANULAR BACKFILL ACCEPTABLE TO THE GEOTECHNICAL ENGINEER.

CONCRETE AND MASONRY REINFORCING STEEL:

1. SUBMIT SHOP DRAWINGS FOR REBAR. ALL REINFORCING BARS SHALL MEET ASTM A615 GRADE 60.

2. ALL MESH SHALL MEET ASTM A-185: LAP A MINIMUM OF 8" OR ONE FULL MESH, WHICHEVER IS GREATER.

3. REINFORCING BAR QUANTITIES SHOWN ARE FOR ESTIMATING PURPOSES ONLY.

4. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE ¾" CLEAR FOR SLABS, 2" CLEAR FOR FORMED SURFACES AND 3" CLEAR FOR FOOTINGS (TYPICAL UNLESS NOTED).

5. CONTRACTOR SHALL VERIFY THAT ALL REINFORCEMENT, SLAB DOWELS, INSERTS, SLEEVES AND EMBEDDED ITEMS ARE PROPERLY LOCATED AND RIGIDLY SECURED PRIOR TO CONCRETE PLACEMENT. "WET STICKING" DOWELS WILL NOT BE ALLOWED.

6. REINFORCEMENT SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST A.C.I. DETAILING MANUAL BY A QUALIFIED AND EXPERIENCED FIRM AND PERSON. PLACE AND SUPPORT REINFORCEMENT WITH ACCESSORIES: MAXIMUM SPACING - 48" CENTERS (PLASTIC-TIPPED LEGS FOR EXPOSED SURFACES). USE 3" SBP SUPPORTS AT ALL FOOTINGS.

7. ALL STRUCTURAL ADHESIVE SHALL BE SIMPSON SET 3G OR HILTI HY-200 R OR EQUIVALENT. ALL STRUCTURAL ADHESIVE SHALL BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS. SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL WITH APPROPRIATE ICBO EVALUATION REPORTS.

CAST IN PLACE CONCRETE:

1. SUBMIT PROPOSED MIXED DESIGNS OF EACH TYPE FOR REVIEW. REQUIRED MINIMUM CONCRETE COMPRESSIVE STRENGTHS AT 28 DAYS:

a. FOOTING AND GRADE BEAM CONCRETE: ..... 4000 PSI
b. FOUNDATION WALL CONCRETE: ..... 4000 PSI
c. SLAB ON GRADE ..... 4000 PSI

2. ALL CONCRETE MIX DESIGNS SHALL HAVE WATER TO CEMENT RATIOS LESS THAN 0.52 (0.45 FOR MOISTURE SENSITIVE FLOORING), WITH A MAXIMUM 60/40 FINE TO COARSE AGGREGATE RATIO. CONCRETE MIX DESIGNS THAT DO NOT CONFORM TO THE ABOVE STANDARD AND/OR CONTAIN WATER REDUCING ADMIXTURES SHALL BE SUBMITTED WITH APPROPRIATE TEST DATA PER A.C.I.. ALL CONCRETE SHALL BE IN CONFORMANCE WITH THE A.C.I. 301 STANDARD THAT IS REFERENCED IN THE BUILDING CODE AT THE TIME OF PERMITTING THE PROJECT.

3. EXTERIOR CONCRETE (FLOOR SLABS, WALLS, ETC) SHALL HAVE 6.5% (PLUS/MINUS 1.5%) ENTRAINED AIR.

4. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" (VERIFY WITH ARCHITECT).

5. NO ALUMINUM SHALL BE EMBEDDED IN ANY CONCRETE.

6. NO CALCIUM CHLORIDE SHALL BE USED IN CONCRETE

7. THE DESIGN, CONSTRUCTION, AND SAFETY OF ALL FORMWORK IS THE RESPONSIBILITY OF THE CONTRACTOR

8. ALL CONCRETE IS REINFORCED UNLESS SPECIFICALLY NOTED AS UNREINFORCED. REINFORCE ALL CONCRETE NOT OTHERWISE SHOWN WITH THE SAME REINFORCING AS SIMILAR SECTIONS OR AREAS.

9. CONSTRUCTION JOINTS IN GRADE BEAMS, CONTINUOUS FOOTINGS, AND WALLS THAT DO NOT CHANGE DIRECTION SHALL BE SPACED NO GREATER THAN 60'-0". INTERMEDIATE CONTROL JOINTS SHALL BE SPACED AT 25'-0" MAX FOR WALLS. CONTROL JOINTS IN WALLS SHALL ALSO BE LOCATED 15'-0" FROM CORNERS AND AT CHANGES IN WALL THICKNESS

10. WHERE FRESH CONCRETE IS DEPOSITED AGAINST HARDENED CONCRETE (GREATER THAN 8 HRS OLD), CLEAN EXISTING SURFACE OF LAITANCE AND FOREIGN MATERIAL AND DAMPEN THE EXISTING SURFACE. IF REQUIRED, ROUGHEN EXISTING CONCRETE TO ¼" AMPLITUDE.

11. SLABS ON GRADE SHALL BE 4" THICK MINIMUM ON 4" OF GRANULAR FILL. REINF SLAB WITH 6 X 6-W2.1xW2.1 WWR OR #3 BARS @ 18" OC EA WAY. PLACE REINF IN UPPER 1/3 OF SLAB THICKNESS. AT INTERIOR SLABS, A 10 MIL VAPOR BARRIER SHALL BE PLACED BETWEEN THE CONCRETE AND GRANULAR BASE AND CARE SHOULD BE TAKEN DURING CURING TO PREVENT SLAB CURLING. THIS NOTE SHALL BE TYPICAL UNLESS NOTED OTHERWISE

12. SAW CUT JOINTS OR KEYED CONSTRUCTION JOINTS IN SLABS ON GRADE SHALL BE SPACED TO DIVIDE THE SLAB INTO PANELS NOT TO EXCEED 225 SQUARE FEET. THE LONGER DIMENSION OF EACH PANEL SHALL NOT EXCEED THE SHORTER DIMENSIONS BY MORE THAN 40%. JOINTS SHALL BE LOCATED AT COLUMN CENTERLINES WHERE POSSIBLE. SPACING BETWEEN JOINTS SHALL NOT EXCEED 15 FEET. CONTRACTOR SHALL SUBMIT JOINT LAYOUT TO ARCHITECT FOR APPROVAL. REFER TO TYPICAL DETAILS.

13. REINFORCEMENT SHALL BE CONTINUOUS AND LAPPED 53 BAR DIAMETERS (2'-6" MIN.) EXCEPT AS NOTED AND PROVIDE CORNER BARS OF SAME SIZE AND SPACING.

14. MINIMUM CONCRETE WALL REINFORCING (WALL 10" OR GREATER) SHALL BE #5 AT 10" CENTERS EACH WAY, EACH FACE

15. MINIMUM REINFORCING AROUND CONCRETE WALL OPENINGS 2'-0" OR GREATER (TYPICAL UNLESS NOTED): 2 - #5, EXTEND REINF 2'-0" PAST OPENINGS. PROVIDE 2-#5 x 4'-0" DIAGONAL BARS AT CORNERS

16. CONTRACTOR SHALL COORDINATE ALL CURING COMPOUNDS WITH FLOOR FINISH REQUIREMENTS TO ENSURE COMPATIBILITY.

17. FOUNDATION CONTRACTOR TO ENSURE PROPER ANCHOR ROD PROJECTION AND THAT ANCHOR RODS ARE HELD SECURELY IN POSITION PRIOR TO CONCRETE PLACEMENT. INSTALL ANCHOR RODS TO THE STRICT DIMENSIONAL TOLERANCES PER AISC REQUIREMENTS. STRUCTURAL STEEL COLUMN ANCHOR RODS SHALL BE SET WITH A RIGID TEMPLATE.

18. AGGREGATES AND/OR CONCRETE MIXES SHALL BE CERTIFIED TO BE FREE OF AND ELIMINATE DAMAGE OF CONCRETE DUE TO ALKALI-SILICA REACTION OR ALKALI-AGGREGATE REACTIONS WHEN EXPOSED TO SOILS AND/OR AN EXTERIOR ENVIRONMENT.

WOOD:

1. FRAMING MATERIAL: ALL WOOD FRAMING SHALL MEET OR EXCEED THE FOLLOWING:
A. NOMINAL STRUCTURAL LUMBER: DOUG. FIR – NO.2 OR BETTER, KILN-DRIED, MIN Fb = 900 PSI, MIN E = 1400 KSI.
B. EXPOSED TO WEATHER: NOMINAL STRUCT LUMBER – PRESS TREATED NO.2 OR BETTER, MIN Fb = 1000 PSI, MIN E = 1300 KSI
C. MICROLLAM LVL (LAMINATED VENEER LUMBER) BEAMS SHALL MEET TRUS JOIST SPECIFICATIONS: MINIMUM Fb = 2600 PSI AND MINIMUM E = 1900 KSI.
D. TIMBERSTRAND LSL (LAMINATED STRAND LUMBER) BEAMS SHALL MEET TRUS JOIST SPECIFICATIONS: MINIMUM Fb = 2600 PSI AND MINIMUM E = 1550 KSI.
E. GLULAM FRAMING: 24F-V4 DOUGLAS FIR, ARCHITECTURAL FINISH (COORDINATE WITH ARCH).

2. ALL LUMBER IN DIRECT CONTACT WITH CONCRETE OR MASONRY, SUCH AS SILL PLATES AND BEARING PLATES BELOW BEAMS POCKETED IN CMU, SHALL BE TREATED LUMBER.

3. WOOD SHEATHING:
A. ROOF SHEATHING SHALL BE 15/32" OR 1/2" WITH AN APA SPAN RATING OF 32/16, EXPOSURE 1, MINIMUM 2 SPAN, FASTEN WITH 10d COMMON NAILS AT 6" CENTERS AT ALL PANEL EDGES AND 12" CENTERS MAXIMUM AT INTERMEDIATE FRAMING MEMBERS (IN THE FIELD). USE PLYCLIPS AT MIDSPAN.
B. FLOOR SHEATHING SHALL BE TONGUE AND GROOVE SHEATHING, EXPOSURE 1, MINIMUM 2 SPAN, FASTEN WITH APA APPROVED ADHESIVE AND 10d RING SHANKED NAILS AT 6" ON CENTERS AT ALL PANEL EDGES AND AT 10" ON CENTERS MAXIMUM AT INTERMEDIATE FRAMING MEMBERS (IN THE FIELD).
--WHEN CLEAR DISTANCE BETWEEN FLOOR JOISTS OR FLOOR TRUSSES IS 16" OR LESS USE 3/4" SHEATHING WITH AN APA SPAN RATING OF 48/24.
--WHEN CLEAR DISTANCE BETWEEN FLOOR JOISTS OR FLOOR TRUSSES IS GREATER THAN 16" USE 7/8" SHEATHING WITH AN APA SPAN RATING OF 60/32.
C. WALL SHEATHING FOR EXTERIOR WALLS SHALL BE 7/16" WITH AN APA SPAN RATING OF 24/16, UNLESS NOTED OTHERWISE. ALL PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING. FASTEN WITH 8d COMMON NAILS AT 6" OC MAXIMUM AT ALL TOP PLATES, BLOCKING, BOUNDARIES AND 10" OC MAXIMUM IN THE FIELD.

4. ALL WOOD SHEATHING TO BE STAGGERED 4'X8' SHEETS. ORIENTED PERPENDICULAR TO SUPPORTING MEMBERS.

5. PROVIDE 1/8" GAP AT ALL SHEATHING PANEL EDGES AND END JOINTS UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. DUE TO CONSTRUCTION CONDITIONS, TEMPORARY EXPANSION JOINTS MAY BE REQUIRED IN FLOOR/ROOF SHEATHING.

6. ALL HEADERS IN EXTERIOR OR INTERIOR BEARING WALLS SPANNING MORE THAN 3'-8" SHALL BE SUPPORTED ON DOUBLE STUDS UNLESS NOTED.

7. MINIMUM NAILING SHALL CONFORM TO IBC TABLE 2304.10.1. USE COMMON NAILS EXCEPT WHERE NOTED. ALL FASTENERS (BOLTS, SCREWS, NAILS, ETC) IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT DIP GALVANIZED.

8. LIGHT GAUGE WOOD FRAMING CONNECTORS AS NOTED ON THE PLANS FOR WOOD JOISTS, COLUMNS, BEAMS AND TRUSSES SHALL BE "STRONG – TIE" CONNECTORS BY THE SIMPSON CO. OR REVIEWED EQUIVALENT. CONNECTORS IN DIRECT CONTACT WITH PRESSURE TREATED LUMBER SHALL HAVE "ZMAX" G185 HOT DIP GALVANIZED COATING OR REVIEWED EQUIVALENT.

9. CONNECTORS IN DIRECT CONTACT WITH PRESSURE TREATED LUMBER SHALL HAVE "ZMAX" G185 HOT DIP GALVANIZED COATING OR REVIEWED EQUIVALENT.

10. STAINLESS STEEL FASTENERS, ANCHOR BOLTS, LIGHT GAUGE CONNECTORS, ETC. MAY BE SUBSTITUTED FOR HOT DIP GALVANIZED MATERIALS AT THE CONTRACTORS OPTION.

11. PROVIDE UPLIFT CONNECTORS AT EACH ROOF TRUSS TO WALL CONNECTIONS PER IBC.

12. STUDS SHALL BE CONTINUOUS BETWEEN EACH DIAPHRAGM LEVEL. EXTERIOR WALL STUDS AT GROUND FLOOR SHALL BE BRACED BY KICKERS AND/OR STRUCTURAL CEILING FRAMING.

13. TYPICAL SILL ANCHOR RODS SHALL BE GALVANIZED 5/8" DIAMETER EMBEDDED 6" MIN INTO CONCRETE, SPACED NO FURTHER THAN 3'-0" OC, AND SHALL OCCUR WITHIN 12" OF THE ENDS OF A SILL PLATE. SPACE ANCHOR RODS MORE CLOSELY TOGETHER AT SHEAR WALLS AS SHOWN ON THE DRAWINGS. EACH SILL PLATE SHALL HAVE A MINIMUM OF 2 ANCHOR RODS. PROVIDE 2" SQUARE PLATE WASHERS AND NUTS.

14. SUBSTITUTIONS OF SPECIFIED WOOD MEMBERS SHALL NOT BE MADE WITHOUT REVIEW OF THE ARCHITECT/ENGINEER.

15. CUT ENDS OF EXTERIOR WOOD POSTS SHALL BE FIELD TREATED WITH AN APPROVED PRESERVATIVE (SUCH AS COPPER NAPHTHENATE). ATTACHMENT OF THE BEAM TO THE SIDE OF THE POST WITHOUT NOTCHING IS PROHIBITED. ALL 3-PLY BEAMS SHALL BE CONNECTED TO THE POST BY A POST CAP PLATE.

PRE-FABRICATED WOOD TRUSS NOTES:

1. THE WOOD TRUSS MANUFACTURER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR ENGINEER'S REVIEW. THE SHOP DRAWINGS SHALL INCLUDE PLACING PLANS OF ALL TRUSSES CLEARLY LABELED, DETAILS OF TRUSS CONNECTIONS AND ANCHORAGES, DETAILS OF METAL CONNECTORS USED AT JOINTS, AND ENGINEERING DESIGN DATA. THE ENGINEERING DESIGN FOR EACH TYPE OF TRUSS SHALL INCLUDE: TRUSS LOCATION IDENTIFICATION, ALL LOADINGS AND REACTIONS, WOOD SPECIES AND STRESS GRADES, MEMBER STRESSES, JOINT CONNECTIONS, CONFIGURATION, TRUSS HANGERS, TRUSS TO TRUSS CONNECTIONS, BRACING FOR LATERAL STABILITY OF THE COMPLETED FRAMING SYSTEM AND OF THE TEMPORARY CONSTRUCTION CONDITION IN ACCORDANCE WITH THE TPI RECOMMENDATIONS, AND THE PROFESSIONAL ENGINEERS SEAL OF THE PERSON RESPONSIBLE FOR THE DESIGN OF THE TRUSSES/TRUSS SYSTEM.

2. PREFABRICATED WOOD TRUSS DESIGN SHALL CONFORM TO THE FOLLOWING REQUIREMENTS. ANSI/TPI "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION" TPI HIP " COMMENTARY AND RECOMMENDATIONS FOR HANDLING INSTALLING AND BRACING OF METAL PLATE CONNECTED TRUSSES" TPI SDB " RECOMMENDED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES". SHOP DRAWINGS SHALL INDICATE VERIFICATION OF PARTICIPATION IN THE TPI INSPECTION PROGRAM.

3. THE CONTRACTOR SHALL FURNISH A COPY OF THE APPROVED PRE-FABRICATED TRUSS SHOP DRAWINGS TO BUILDING OFFICIAL FOR THEIR RECORDS.

4. TRUSS MEMBERS AND COMPONENTS SHALL NOT BE FIELD CUT, NOTCHED, DRILLED,

03_Abbreviation Schedule	
Abbreviation	Abbreviation Name
+/-	PLUS OR MINUS
ADDNL	ADDITIONAL
ADJ	ADJACENT
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
AR	ANCHOR ROD
ARCH	ARCHITECT OR ARCHITECTURAL
B/	BOTTOM OF
B/W	BETWEEN
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BRG	BEARING
BWP	BRACED WALL PANEL
CFS	COLD FORMED STEEL
CHKD	CHECKED
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CTR	CENTER
db	DIA OF REINF BAR, DIA OF BOLT
DBA	DEFORMED BAR ANCHOR
DIA or Ø	DIAMETER
DIAG	DIAGONAL
DIR	DIRECTION
DWL	DOWEL
EA	EACH
EE	EXTENDED END
EJ	EXPANSION JOINT
ELEV	ELEVATION
EN	EDGE NAILING
ENGR	ENGINEER
EOD	EDGE OF DECK
EOS	EDGE OF SLAB
EQ	EQUAL
EW	EACH WAY
EXIST	EXISTING
EXT	EXTERIOR
FDN	FOUNDATION
FLG	FLANGE
FLR	FLOOR
FS	FAR SIDE
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
HORIZ	HORIZONTAL
HSA	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL SECTION
IF	INSIDE FACE
INT	INTERIOR
JST	JOIST
K	KIPS (1000 LBS)
LCE	COMPRESSION EMBEDMENT LENGTH
LCS	COMPRESSION LAP SPLICE LENGTH
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSH	LONG SLOTTED HOLE
LTE	TENSION EMBEDMENT LENGTH
LTS	TENSION LAP SLICE LENGTH
LW	LIGHTWEIGHT
MFCR	MANUFACTURER
MTL	METAL
NIC	NOT IN CONTRACT
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OF	OUTSIDE FACE
OPP	OPPOSITE
OVS	OVERSIZED
P/C	PRECAST
PAF	POWDER ACTUATED FASTENER
PAR	PARALLEL
PEMB	PRE-ENGINEERED METAL BUILDING
PEN	PENETRATION
PERP	PERPENDICULAR
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PREFAB	PREFABRICATED
PRELIM	PRELIMINARY
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
RC	REINFORCED CONCRETE
RE:	REFER TO
REINF	REINFORCING
REQD	REQUIRED
RF	RIGID FRAME
SC	SLIP CRITICAL
SDS	SELF DRILLING SCREW
SIM	SIMILAR
SLV	SHORT LEG VERTICAL
SOG	SLAB ON GRADE
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STIR	STIRRUPS
STL	STEEL
SW	SHEAR WALL
SYM	SYMMETRIC
T&B	TOP AND BOTTOM
T/	TOP OF
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W/	WITH
W/O	WITHOUT
WF	WIDE FLANGE
WP	WORK POINT
WWR	WELDED WIRE REINFORCEMENT

STRUCTURAL GENERAL NOTES

DESIGN CRITERIA:

1. LIVE LOADS (UNIFORM (PSF) / POINT LOADS (KIPS)):
   -- ROOF..... 20 PSF / 1.0 K
   -- ELEVATED FLOORS..... 40 PSF / 1.0 K
2. GROUND SNOW LOAD (Pg):..... 20 PSF
3. BASIC WIND SPEED (3 SEC GUST):..... 115 MPH (ULT) 90 MPH (ASD)
4. DECK GUARD RAIL LOAD:..... 200# CONCENTRATED LOAD APPLIED IN ANY DIRECTION

AREA	MIN DEAD LOAD	MIN LIVE LOAD
BALCONIES (EXTERIOR) AND DECKS	10	40
CEILING JOISTS W/O STORAGE (SCUTTLE ACCESS ONLY)	10	10
CEILING JOISTS - ATTICS W/ STORAGE (DOOR OR PULL DOWN LADDER ACCESS)	10	20
ROOMS - NON SLEEPING	15	40
SLEEPING ROOMS	15	30
ROOF - LIGHT ROOF COVERING	15	20
ROOF - HEAVY ROOF COVERING (CONCRETE/TILE/SLATE)	20	20

STRUCTURAL GENERAL NOTES:

1. DESIGN AND CONSTRUCTION SHALL CONFORM TO THE "INTERNATIONAL RESIDENTIAL CODE, 2018 EDITION". CONSULT WITH THE LOCAL JURISDICTION FOR INSPECTION REQUIREMENTS

2. CONTRACTOR TO VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY.

3. IF DISCREPANCIES EXIST BETWEEN STRUCTURAL PLANS, ARCHITECTURAL PLANS, OTHER PLANS, OR SPECIFICATIONS, THE CONTRACTOR OR SUBCONTRACTOR SHALL PROVIDE A WRITTEN REQUEST FOR CLARIFICATION FROM THE ARCHITECT AND/OR ENGINEER PRIOR TO PROCEEDING WITH THE WORK

4. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTORS RESPONSIBILITY TO EXECUTE AND DETERMINE FINAL ERECTION PROCEDURES, SEQUENCING AND TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION.

5. FABRICATORS AND SUPPLIERS SHALL CLEARLY NOTE AND HIGHLIGHT CHANGES MADE IN SHOP DRAWINGS, WHICH DO NOT COMPLY WITH THE CONTRACT DOCUMENTS.

6. BEAMS, COLUMNS, WALLS, AND FOOTING CENTERS SHALL BE CENTERED UNDER SUPPORTING MEMBERS (TYPICAL UNLESS NOTED OTHERWISE).

EARTHWORK AND FOUNDATIONS:

1. PRESUMPTIVE ALLOWABLE BEARING PRESSURE = 1,500 PSF (PER THE IRC). ALL FOOTINGS AND FOUNDATIONS SHALL BEAR ON NATIVE UNDISTURBED SOIL. NOTIFY ENGINEER IF FILL IS ENCOUNTERED BELOW FOOTING BEARING LOCATIONS.

2. ALL PERIMETER AND EXTERIOR FOOTINGS SHALL EXTEND AT LEAST 3'-0" BELOW FINAL ADJACENT GRADE. DEEPEN FOOTINGS AS REQUIRED TO PROVIDE THIS MINIMUM BOTTOM OF FOOTING.

3. SURFACE WATER SHALL NOT BE ALLOWED TO STAND ADJACENT TO OR DRAIN TOWARDS THE FOUNDATION UNDER ANY CIRCUMSTANCES. PAVEMENTS OR GRADED SOILS AT THE PERIMETER OF THE BUILDING, EXCEPT AS REQUIRED AT EXITS OR AS NOTED, SHALL BE SLOPED AWAY AT 5% OR 6" MIN FOR THE FIRST TEN FEET.

4. FOOTINGS MAY BE POURED TO NEAT LINES OF EXCAVATIONS PROVIDING VERTICAL LINES OF EXCAVATIONS CAN BE MAINTAINED DURING CONCRETE PLACEMENT.

5. FOUNDATION CONTRACTOR TO ENSURE PROPER ANCHOR ROD PROJECTION AND THAT ANCHOR RODS ARE HELD SECURELY IN POSITION PRIOR TO CONCRETE PLACEMENT. STRUCTURAL STEEL COLUMN ANCHOR RODS SHALL BE SET WITH A TEMPLATE.

6. FOUNDATION WALL BACKFILL SHALL NOT BE UNBALANCED BY MORE THAN TWO FEET ON EITHER SIDE AT ANY TIME. BASEMENT WALL AND RESTRAINED RETAINING WALL BACKFILL SHALL NOT BE PLACED, UNLESS THE WALL IS ADEQUATELY BRACED. RETAINING WALL AND BASEMENT WALL BACKFILL SHALL BE FREE DRAINING GRANULAR BACKFILL.

7. SOIL CONDITIONS AT THE TIME OF CONSTRUCTION SHOULD BE EVALUATED BY THE CONTRACTOR. SOIL THAT IS TOO DRY OR TOO WET MAY BE SUBJECT TO EXCESSIVE SHRINKING OR SWELLING. IN ADDITION, SOME ON-SITE SOILS MAY BE UNSUITABLE FOR BACK FILL. CONSULT WITH A GEOTECHNICAL ENGINEER AS NEEDED FOR SITE PREP REQUIREMENTS.

PRE-FABRICATED WOOD FLOOR TRUSS NOTES:

1. THE WOOD FLOOR TRUSS MANUFACTURER SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER'S REVIEW. THE SHOP DRAWINGS SHALL INCLUDE PLACING PLANS OF ALL TRUSSES CLEARLY LABELED, DETAILS OF TRUSS CONNECTIONS AND ANCHORAGES, DETAILS OF METAL CONNECTORS USED AT JOINTS, AND ENGINEERING DESIGN DATA. THE ENGINEERING DESIGN FOR EACH TYPE OF TRUSS SHALL INCLUDE: TRUSS LOCATION IDENTIFICATION, ALL LOADINGS AND REACTIONS, WOOD SPECIES AND STRESS GRADES, MEMBER STRESSES, JOINT CONNECTIONS, CONFIGURATION, TRUSS TO TRUSS CONNECTIONS, BRACING FOR LATERAL STABILITY OF THE COMPLETED FRAMING SYSTEM, AND THE PROFESSIONAL ENGINEERS SEAL OF THE PERSON RESPONSIBLE FOR THE DESIGN OF THE TRUSSES/TRUSS SYSTEM.

2. THE CONTRACTOR SHALL FURNISH A COPY OF THE PREFAB TRUSS SHOP DRAWINGS TO BUILDING OFFICIAL FOR THEIR RECORDS.

3. TRUSS MEMBERS AND COMPONENTS SHALL NOT BE FIELD CUT, NOTCHED, DRILLED, OR ALTERED IN ANY WAY WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER RESPONSIBLE FOR THE TRUSS DESIGN.

4. ALL SCISSOR AND/OR VAULTED TRUSSES ARE NOT RESTRAINED AT WALLS CONSIDER HORIZONTAL DEFLECTION IN TRUSS DESIGN. LIMIT HORIZONTAL DEFLECTION TO 0.5" TOTAL OR 0.25" EA SIDE.

5. PREFABRICATED WOOD ROOF TRUSS DESIGN CRITERIA:
   -- TOP CHORD DEAD LOAD.....10 PSF
   -- TOP CHORD FLOOR LIVE LOAD.....20 PSF
   -- BOT CHORD DEAD LOAD.....10 PSF
   -- BOT CHORD LIVE LOAD.....10 PSF
   -- LIVE LOAD DEFLECTION CRITERIA.....L/360
   -- TOTAL LOAD DEFLECTION CRITERIA.....L/240

6. TRUSS SUPPLIER SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO TRUSS FABRICATION.

CONCRETE AND MASONRY REINFORCING STEEL:

1. ALL REINFORCING BARS SHALL MEET ASTM A615 GRADE 40.

2. ALL MESH SHALL MEET ASTM A-185: LAP A MINIMUM OF 8" OR ONE FULL MESH, WHICHEVER IS GREATER.

3. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE ¾" CLEAR FOR SLABS, 2" CLEAR FOR FORMED SURFACES AND 3" CLEAR FOR FOOTINGS (TYPICAL UNLESS NOTED OTHERWISE).

4. CONTRACTOR SHALL VERIFY THAT ALL REINFORCEMENT, SLAB DOWELS, INSERTS, SLEEVES AND EMBEDDED ITEMS ARE PROPERLY LOCATED AND RIGIDLY SECURED PRIOR TO CONCRETE PLACEMENT, "WET STICKING" DOWELS WILL NOT BE ALLOWED.

CAST IN PLACE CONCRETE:

1. CONCRETE CONSTRUCTION SHALL ADHERE TO THE RECOMMENDATIONS AND REQUIREMENTS OF ACI 332 - "REQUIREMENTS FOR RESIDENTIAL CONCRETE CONSTRUCTION" (UNLESS NOTED OTHERWISE)

2. REQUIRED MINIMUM CONCRETE COMPRESSIVE STRENGTHS AT 28 DAYS:
   a. FOOTING CONCRETE.....4,000 PSI
   b. FOUNDATION WALL CONCRETE.....4,000 PSI
   c. INTERIOR SOG .....4,000 PSI
   d. EXTERIOR SLAB ON GRADE AND GARAGE FLOOR SLABS....4,000 PSI

3. EXTERIOR CONCRETE (FLOOR SLABS, WALLS, ETC) INCLUDING GARAGE FLOORS SHALL HAVE 6% (PLUS/MINUS 1%) ENTRAINED AIR.

4. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" (VERIFY WITH ARCHITECT).

5. NO ALUMINUM SHALL BE EMBEDDED IN ANY CONCRETE.

6. NO CALCIUM CHLORIDE SHALL BE USED IN CONCRETE.

7. THE DESIGN, CONSTRUCTION, AND SAFETY OF ALL FORMWORK IS THE RESPONSIBILITY OF THE CONTRACTOR.

8. ALL CONCRETE IS REINFORCED UNLESS SPECIFICALLY NOTED AS UNREINFORCED. REINFORCE ALL CONCRETE NOT OTHERWISE SHOWN WITH THE SAME REINFORCING AS SIMILAR SECTIONS OR AREAS.

9. CONSTRUCTION JOINTS IN GRADE BEAMS, CONTINUOUS FOOTINGS, AND WALLS THAT DO NOT CHANGE DIRECTION SHALL BE SPACED NO GREATER THAN 60'-0". INTERMEDIATE CONTROL JOINTS SHALL BE SPACED AT 25'-0" MAX FOR WALLS. CONTROL JOINTS IN WALLS SHALL ALSO BE LOCATED 15'-0" FROM CORNERS AND AT CHANGES IN WALL THICKNESS.

10. WHERE FRESH CONCRETE IS DEPOSITED AGAINST HARDENED CONCRETE (GREATER THAN 6 HRS OLD), CLEAN EXISTING SURFACE OF LAITANCE AND FOREIGN MATERIAL AND DAMPEN THE EXISTING SURFACE. IF REQUIRED, ROUGHEN EXISTING CONCRETE TO ¼" AMPLITUDE.

11. SLABS ON GRADE SHALL BE 4" THICK MIN ON 6" OF GRANULAR FILL. REINF SLAB WITH 6 x 6 - W2.1 x W2.1 WWR, #3 BARS AT 18" OC, OR #4 BARS AT 24" OC (UNLESS NOTED OTHERWISE). ALL REINF SHALL BE PLACED IN UPPER 1/3 OF SLAB THICKNESS. AT INTERIOR SLABS, AN 8 MIL VAPOR BARRIER SHALL BE PLACED BETWEEN THE CONCRETE AND GRANULAR BASE AND CARE SHOULD BE TAKEN DURING CURING TO PREVENT SLAB CURLING. THIS NOTE SHALL BE TYPICAL UNLESS NOTED OTHERWISE.

12. SAW CUT JOINTS OR KEYED CONSTRUCTION JOINTS IN SLABS ON GRADE SHALL BE SPACED TO DIVIDE THE SLAB INTO PANELS NOT TO EXCEED 225 SQUARE FEET. THE LONGER DIMENSION OF EACH PANEL SHALL NOT EXCEED THE SHORTER DIMENSION BY MORE THAN 40%. JOINTS SHALL BE LOCATED AT COLUMN CENTERLINES WHERE POSSIBLE. SPACING BETWEEN JOINTS SHALL NOT EXCEED 15 FEET. CONTRACTOR SHALL SUBMIT JOINT LAYOUT TO ARCHITECT FOR APPROVAL.

13. REINFORCEMENT SHALL BE CONTINUOUS AND LAPPED 53 BAR DIAMETERS (2' -6" MIN) EXCEPT AS NOTED AND PROVIDE CORNER BARS OF SAME SIZE AND SPACING.

14. MINIMUM REINFORCING AROUND CONCRETE WALL OPENINGS 2'-0" OR GREATER (TYPICAL UNLESS NOTED OTHERWISE): (2) #5, EXTEND REINF 2'-0" PAST OPENINGS. PROVIDE (2) #5 x 4'-0" DIAGONAL BARS AT CORNERS.

15. MINIMUM REINFORCING IN PERIMETER STEM WALL SHALL BE #4 VERTS @ 16" OC WITH STD HOOKS INTO FOOTING AND #4 HORIZ @ 16" OC MAX. IN FOOTING PROVIDE (2) #4 CONTINUOUS W/ #4 TRANSVERSE @ 16" OC MAX.

STRUCTURAL STEEL:

1. STRUCTURAL STEEL SHAPES AND PLATE MATERIAL REQUIREMENTS (TYPICAL UNLESS NOTED OTHERWISE):
   a. WIDE FLANGE SHAPES – ASTM A992 (FY = 50 KSI MIN.)
   b. CHANNELS, ANGLES, AND PLATES: - ASTM A36 (FY = 36 KSI MIN)
   c. RECTANGULAR HSS – ASTM A500, GR.B (FY = 46 KSI)
   d. ANCHOR RODS – ASTM F1554 (FY = 36 KSI MIN)
   e. ROUND PIPE - ASTM A53, GRB (FY=35 KSI MIN)

2. STRUCTURAL STEEL SHALL BE NEW AND MEET THE 15TH EDITION AISC "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS AND BRIDGES", AND THE "CODE OF STANDARD PRACTICES FOR STEEL BUILDINGS AND BRIDGES", EXCLUDING SECTION 4.4.1.B.

3. WELDING SHALL CONFORM TO THE CURRENT AND APPLICABLE AWS STANDARDS AND BE COMPLETED BY AN AWS CERTIFIED WELDER.
   a. AWS D1.1 – STRUCTURAL WELDING CODE – STEEL
   b. AWS D1.3 – STRUCTURAL WELDING CODE – SHEET STEEL
   c. AWS D1.6 – STRUCTURAL WELDING CODE – STAINLESS STEEL

4. WELD SIZES SHALL BE INCREASED TO MEET THE REQUIRED EFFECTIVE THROAT WIDTH IF GAPS EXIST AT THE FAYING SURFACE.

5. NO COLUMN OR BEAM SPLICES, UNLESS CLEARLY INDICATED ON THE STRUCTURAL DRAWINGS, WILL BE ALLOWED WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

6. GROUT WHERE INDICATED ON PLANS AT BASE PLATES SHALL BE NON-METALLIC NON-SHRINK WITH A MINIMUM COMPRESSIVE STRENGTH OF 6,000 PSI AT 28 DAYS CONFORMING TO ASTM C1107.

7. ALL POST INSTALLED ANCHORS WHERE NOTED SHALL BE MANUFACTURED BY HILTI, INC. OR SIMPSON STRONG TIE AND BE INSTALLED PER THE MANUFACTURERS SPECIFICATIONS. SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL WITH APPROPRIATE ICBO EVALUATION REPORTS.

GARAGE

1. THE GARAGE FLOOR SHALL SLOPE TOWARD THE GARAGE DOOR.

2. NEW GARAGE DOOR SHALL BE A 20 MINUTE OR 1-3/8" SOLID WOOD DOOR BETWEEN THE HOUSE AND GARAGE.

3. 1/2" GYP BOARD SHALL BE USED ON WALLS BETWEEN GARAGE AND HOUSE. 5/8" TYPE-X GYP BOARD SHALL BE USED ON THE GARAGE CEILING.

WOOD:

1. FRAMING MATERIAL:
A. NOMINAL STRUCTURAL LUMBER -- NO.2 OR BETTER, KD D. FIR, MIN Fb = 900 PSI, MIN E = 1,400 KSI.
B. EXPOSED NOMINAL STRUCT LUMBER -- PRESS TREATED NO.2 OR BETTER, MIN Fb = 1,000 PSI, MIN E = 1,300 KSI
C. MICROLLAM LVL (LAMINATED VENEER LUMBER) BEAMS SHALL MEET TRUS JOIST SPECIFICATIONS: MINIMUM Fb = 2,600 PSI AND MINIMUM E = 1,900 KSI.
D. TIMBERSTRAND LSL (LAMINATED STRAND LUMBER) BEAMS SHALL MEET TRUS JOIST SPECIFICATIONS: MINIMUM Fb = 2,600 PSI AND MINIMUM E = 1,700 KSI.
E. GLULAM FRAMING: 24F-V4 DOUGLAS FIR, ARCHITECTURAL FINISH (COORD W/ ARCH).

2. SUBSTITUTIONS OF SPECIFIED WOOD MEMBERS SHALL NOT BE MADE WITHOUT REVIEW OF THE ARCHITECT/ENGINEER.

3. WOOD SHEATHING:
A. ROOF SHEATHING SHALL BE 5/8" WITH AN APA SPAN RATING OF 40/20, EXPOSURE 1, MINIMUM 2 SPAN, FASTEN WITH 8d COMMON (2.5" x 0.131") NAILS AT 6" OC MAXIMUM AT ALL EDGE CONDITIONS AND 12" OC AT INTERMEDIATE SUPPORTS. AT ALL LOCATIONS WITHIN 48" FROM GABLE END WALLS AND RIDGES (BOTH SIDES) ALL FASTENING SHALL BE AT 6" OC BOTH EDGES AND INTERMEDIATE SUPPORTS. IF ROOF RAFTER SPACING IS 24" OR GREATER THEN USE PLYCLIPS AT MIDSPAN.
B. FLOOR SHEATHING SHALL BE TONGUE AND GROOVE, EXPOSURE 1, MINIMUM 2 SPAN. FASTENED WITH APA APPROVED ADHESIVE AND PER THE CHART ON THIS PAGE.
   --WHEN CLEAR DISTANCE BETWEEN FLOOR JOISTS OR FLOOR TRUSSES IS 16" OR LESS USE 3/4" SHEATHING WITH AN APA SPAN RATING OF 48/24.
   --WHEN CLEAR DISTANCE BETWEEN FLOOR JOISTS OR FLOOR TRUSSES IS GREATER THAN 16" USE 7/8" SHEATHING WITH AN APA SPAN RATING OF 60/32.
C. WALL SHEATHING FOR EXTERIOR WALLS SHALL BE 7/16" WITH AN APA SPAN RATING OF 24/16, UNLESS NOTED OTHERWISE. ALL PANEL EDGES SHALL BE BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING. FASTEN WITH 8d COMMON (2.5" x 0.131") NAILS AT 6" OC MAXIMUM AT ALL TOP PLATES, BLOCKING, BOUNDARIES AND 10" OC MAXIMUM IN THE FIELD. AT BRACED WALL LOCATIONS NOTED ON WALL FRAMING PLAN REFERENCE S062 FOR ADDTIONAL FASTENING REQUIREMENTS.

4. ALL WOOD SHEATHING TO BE STAGGERED 4'x8' SHEETS ORIENTED PERPENDICULAR TO SUPPORTING MEMBERS.

5. PROVIDE 1/8" GAP AT ALL SHEATHING PANEL EDGES AND END JOINTS UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. DUE TO CONSTRUCTION CONDITIONS, TEMPORARY EXPANSION JOINTS MAY BE REQUIRED IN FLOOR/ROOF SHEATHING.

6. ALL HEADERS IN EXTERIOR OR INTERIOR BEARING WALLS SPANNING MORE THAN 3'-8" SHALL BE SUPPORTED ON DOUBLE STUDS UNLESS NOTED OTHERWISE.

7. LIGHT GAUGE WOOD FRAMING CONNECTORS AS NOTED ON THE PLANS FOR WOOD JOISTS, COLUMNS, BEAMS AND TRUSSES SHALL BE "STRONG – TIE" CONNECTORS BY THE SIMPSON CO. OR REVIEWED EQUIVALENT. CONNECTORS IN DIRECT CONTACT WITH PRESSURE TREATED LUMBER SHALL HAVE "ZMAX" G185 HOT DIP GALVANIZED COATING OR REVIEWED EQUIVALENT.

8. STAINLESS STEEL FASTENERS, ANCHOR BOLTS, LIGHT GAUGE CONNECTORS, ETC. MAY BE SUBSTITUTED FOR HOT DIP GALVANIZED MATERIALS AT THE CONTRACTORS OPTION.

9. ALL RAFTER AND CEILING JOIST CONNECTIONS SHALL COMPLY WITH IRC SECTION 802.3. PROVIDE UPLIFT CONNECTORS AT ROOF TO WALL CONNECTIONS PER IRC SECTION 802.11.

10. STUDS SHALL BE CONTINUOUS FROM FLOOR TO ROOF DIAPHRAGM PER IRC SECTION 602.3. WALL STUDS SHOULD NOT BE INTERRUPTED AT GABLE WALLS UNLESS BRACED BY A CEILING. WALLS EXTENDING HIGHER THAN TYPICAL SINGLE FLOOR PLATFORM FRAMING, SHALL BE CONTINUOUS (NOT INTERRUPTED) TO NEXT FLOOR ELEVATION OR ROOF.

11. SILL ANCHOR RODS SHALL BE 1/2" DIAMETER EMBEDDED 7" MIN INTO CONCRETE, SPACED NO FURTHER THAN 3'-0" OC, AND SHALL OCCUR WITHIN 12" OF THE ENDS OF A SILL PLATE. EACH SILL PLATE SHALL HAVE A MINIMUM OF 2 ANCHOR RODS. PROVIDE 2" SQ PLATE WASHERS AND NUTS.

12. PROVIDE FULL DEPTH 2x BLOCKING BETWEEN JOISTS OVER ALL INTERIOR LOAD BEARING WALLS AND AT DOWNSET GIRDERS

13. PROVIDE SOLID BLOCKING IN FLOOR FRAMING BELOW LOAD BEARING WALLS AND POINT LOADS ABOVE. BELOW POINT LOADS BLOCKING AREA SHOULD MATCH SIZE OF POST ABOVE.

GENERAL NOTES:

1. THE DRAWING SET IS CONSIDERED TO BE "BUILDERS PLANS" WHEREBY SOME ASPECTS OF THE PROJECT'S REQUIREMENTS ARE LEFT TO THE CONTRACTOR TO UNDERSTAND AND IMPLEMENT. AS SUCH, IT IS A REQUIREMENT THAT THE CONTRACTOR (BUILDER) BE COMPETENT IN RESIDENTIAL CONSTRUCTION AND HAVE A THOROUGH UNDERSTANDING OF THE APPLICABLE INTERNATIONAL RESIDENTIAL CODES (IRC). THE CONTRACTOR IS RESPONSIBLE FOR MEETING THE REQUIREMENTS OF THE BUILDING CODE WHETHER EXPLICITLY STATED OR NOT. IF ADDITIONAL DETAIL OR GUIDANCE IS NEEDED BY THE CONTRACTOR OR HOMEOWNER, A WRITTEN REQUEST FOR SUCH GUIDANCE MAY BE SUBMITTED TO THE ENGINEER.

2. REFER TO THE IRC FOR ALL REQUIREMENTS NOT SPECIFICALLY STATED IN THE PLANS. THIS INCLUDES FIRE RATINGS, LIGHTING AND VENTILATION, SANITATION, GLAZING, GARAGES, SMOKE ALARMS AND CARBON MONOXIDE ALARMS, MEANS OF EGRESS, AND PROTECTION AGAINST DECAY AND TERMITES.

3. CONTRACTOR SHALL ENSURE THAT ALL MECHANICAL, ELECTRICAL, AND PLUMBING IS DESIGNED AND INSTALLED TO MEET THE REQUIREMENTS OF THE APPLICABLE IRC.

4. EGRESS WINDOWS SHALL COMPLY WITH SECTION 310 OF THE IRC.

5. WALL COVERINGS SHALL BE WATER-RESISTANT AND COMPLY WITH SECTION 703.2 OF THE IRC.

6. WINDOWS SHALL HAVE FALL PROTECTION PER IRC 312.2.

7. PROVIDE CARBON MONOXIDE DETECTORS PER IRC SECTION R315.

8. ALL NEW CONSTRUCTION SHALL COMPLY WITH THE ENERGY CONSERVATION CODE AS LISTED IN CHAPTER 11 OF THE IRC. THIS INCLUDES:
-- WALLS - INSULATE WITH R-13 MIN
-- ATTICS - INSULATE WITH R-49 MIN (EXCEPTION: R-38 FOR VAULTED CEILINGS); USE 8" OF RIGID INSULATION (R40) IN VAULTED CEILINGS
-- FLOORS OVER UNCONDITIONED SPACE - INSULATE WITH R-19 MIN
-- CRAWL SPACE WALLS - INSULATE WITH R-10 MIN
-- BASEMENT WALLS - R-13 CAVITY OR R-10 CONTINUOUS
-- SLABS SHALL BE R-10 FOR A DEPTH OF 2'-0"
-- DUCTWORK OUTSIDE OF CONDITIONED SPACES - R-8 MIN
-- WINDOWS SHALL HAVE A "U" VALUE OF 0.35 OR BETTER

9. ALL EXTERIOR DOORS INCLUDING THE DOOR LEADING FROM THE GARAGE TO THE DWELLING UNIT SHALL INCORPORATE THE PHYSICAL SECURITY REQUIREMENTS OF THE LOCAL JURISDICTION AS REQUIRED.

10. THE THERMAL ENVELOPE OF THE BUILDING IS REQUIRED TO BE SEALED PER IRC SECTION N1102.4.1 AND TABLE N1102.4.1.1.

11. ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES USED AS DUCTS SHALL BE SEALED PER IRC SECTION N1103.2.2

GLAZING

1. GLAZING IN HAZARDOUS LOCATIONS SHALL BE APPROVED SAFETY GLAZING MATERIALS PER IRC SECTION R308.

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

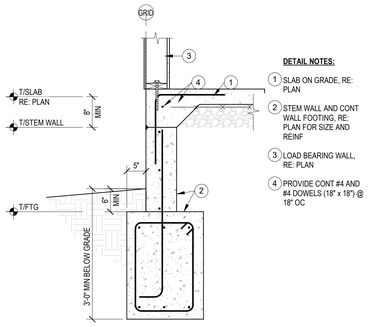
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S002

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

STRUCTURAL GENERAL NOTES IRC

8/24/2023 12:02:33 PM

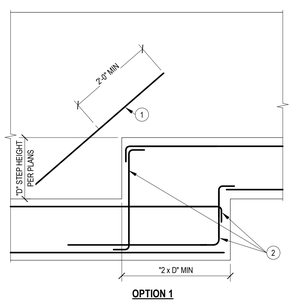


DETAIL NOTES:

1. SLAB ON GRADE, RE: PLAN
2. STEM WALL AND CONT WALL FOOTING, RE: PLAN FOR SIZE AND REINF
3. LOAD BEARING WALL, RE: PLAN
4. PROVIDE CONT #4 AND #4 DOWELS (18" x 18") @ 18" OC

9 FDN SECTION @ STEM WALL

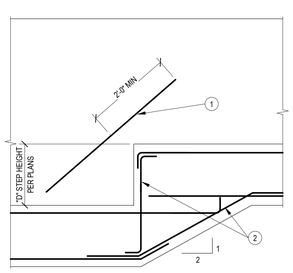
3/4" = 1'-0"



OPTION 1

DETAIL NOTES:

1. #4 EACH FACE DIAG IN CONCRETE WALL
2. STEP FTG BARS (MATCH Ø & LAP W/ FTG BARS)



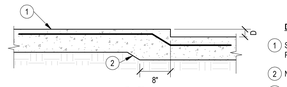
OPTION 2

DETAIL NOTES:

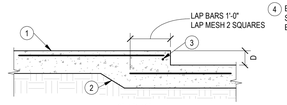
1. #4 EACH FACE DIAG IN CONCRETE WALL
2. STEP FTG BARS (MATCH DIAMETER & LAP W/ FTG BARS)

8 FOOTING STEP

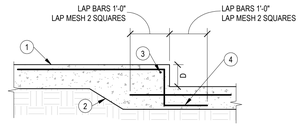
1/2" = 1'-0"



D < 3"



3" < D < 6"



6" ≤ D < 10"

DETAIL NOTES:

1. SLAB ON GRADE, RE: PLAN
2. NATURAL SLOPE
3. (1) #3 CONT @ EDGE
4. BEND SLAB REINF AS SHOWN. HOOK 12" @ BOTTOM OF SLAB

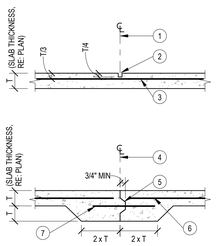
NOTES:

A. COORDINATE DEPTH AND LOCATION OF ALL FLOOR DEPRESSIONS WITH ARCHITECTURAL DRAWINGS

B. PROVIDE (1) #4 x 4'-0" TOP AT INTERIOR CORNERS OF ALL DEPRESSIONS

7 SLAB ON GRADE FLOOR DEPRESSION

3/4" = 1'-0"



DETAIL NOTES:

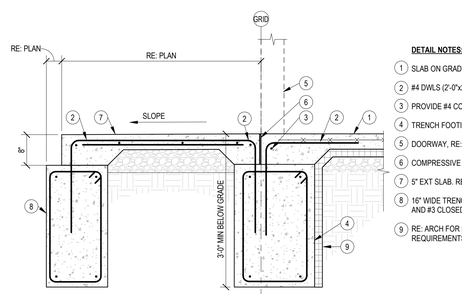
1. SAW CUT JOINT
2. SAW CUT JOINT AS SOON AS EQUIPMENT CAN BE PLACED ON SLAB WITHOUT DAMAGE
3. MESH OR REBAR CONT
4. KEYED CONSTRUCTION JOINT USE BOND BREAKER
5. FORMED KEY (NO METAL KEY)
6. CUT MESH OR REBAR AT JOINT
7. 3/4" x 16" SMOOTH DWLS @ 12" OC

NOTES:

A. THIS DETAIL MAY BE USED IN LIEU OF SAW CUT JOINT

6 SLAB ON GRADE CONTROL JOINTS

3/4" = 1'-0"

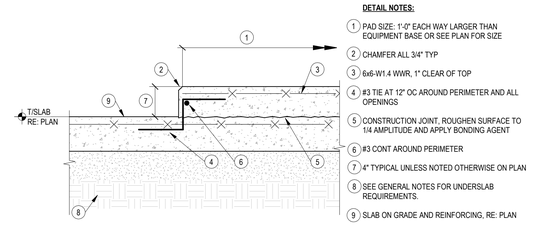


DETAIL NOTES:

1. SLAB ON GRADE, RE: PLAN FOR SIZE & REINF
2. #4 DWLS (2'-0"x2'-0") @ 18" OC ALONG PERIMETER
3. PROVIDE #4 CONT @ PERIMETER
4. TRENCH FOOTING, RE: PLAN
5. DOORWAY, RE: ARCH
6. COMPRESSIVE FILLER & SEALANT, RE: ARCH
7. 5" EXT SLAB. REINF W/ #4 @ 9" OC EA WAY
8. 16" WIDE TRENCH FOOTING. REINF W/ (2) #4 T&B AND #3 CLOSED TIES @ 24" OC
9. RE: ARCH FOR FOUNDATION INSULATION REQUIREMENTS

5 STOOP DETAIL

3/4" = 1'-0"



DETAIL NOTES:

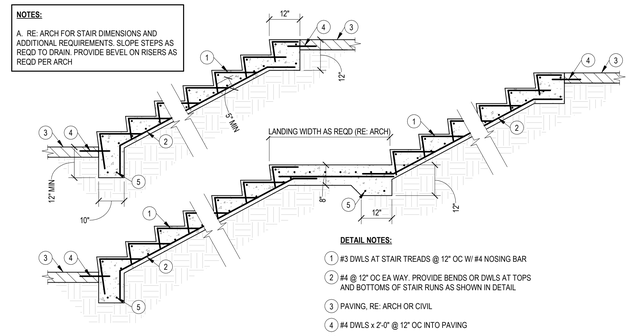
1. PAD SIZE: 1'-0" EACH WAY LARGER THAN EQUIPMENT BASE OR SEE PLAN FOR SIZE
2. CHAMFER ALL 3/4" TYP
3. 6x6-W1.4 WWR, 1" CLEAR OF TOP
4. #3 TIE AT 12" OC AROUND PERIMETER AND ALL OPENINGS
5. CONSTRUCTION JOINT, ROUGHEN SURFACE TO 1/4 AMPLITUDE AND APPLY BONDING AGENT
6. #3 CONT AROUND PERIMETER
7. 4" TYPICAL UNLESS NOTED OTHERWISE ON PLAN
8. SEE GENERAL NOTES FOR UNDERSLAB REQUIREMENTS.
9. SLAB ON GRADE AND REINFORCING, RE: PLAN

4 EQUIP PAD @ NEW SLAB ON GRADE

1 1/2" = 1'-0"

NOTES:

A. RE: ARCH FOR STAIR DIMENSIONS AND ADDITIONAL REQUIREMENTS. SLOPE STEPS AS REQD TO DRAIN. PROVIDE BEVEL ON RISERS AS REQD PER ARCH



DETAIL NOTES:

1. #3 DWLS AT STAIR TREADS @ 12" OC W/ #4 NOSING BAR
2. #4 @ 12" OC EA WAY. PROVIDE BENDS OR DWLS AT TOPS AND BOTTOMS OF STAIR RUNS AS SHOWN IN DETAIL
3. PAVING, RE: ARCH OR CIVIL
4. #4 DWLS x 2'-0" @ 12" OC INTO PAVING
5. (2) #4 CONT

3 CONCRETE STAIRS ON GRADE

1/2" = 1'-0"

DEVELOPMENT AND LAP SPLICE SCHEDULE

	F'c=3000 psi							F'c=4000 psi						
	EMBEDMENT			LAP SPLICE				EMBEDMENT			LAP SPLICE			
	COMPRESSION	TENSION (LTE)		COMPRESSION	TENSION (LTS)		HOOK	COMPRESSION	TENSION (LTE)		COMPRESSION	TENSION (LTS)		HOOK
BAR	(LCE)	TOP	OTHER	(LCS)	TOP	OTHER	(LDH)	(LCE)	TOP	OTHER	(LCS)	TOP	OTHER	(LDH)
#3	8	13	12	12	28	21	6	8	12	12	12	16	16	7
#4	11	21	16	15	37	28	8	9	18	14	15	24	18	9
#5	14	31	24	19	46	36	10	12	27	21	19	35	27	12
#6	16	43	33	23	56	43	12	14	37	28	23	48	37	14
#7	19	69	53	26	81	62	13	17	60	46	26	78	60	17
#8	22	85	66	30	93	71	15	19	74	57	30	96	74	19
#9	25	103	80	34	105	80	17	21	90	69	34	116	90	21
#10	28	124	96	38	118	90	19	24	108	83	38	140	108	24
#11	31	146	112	42	131	100	22	27	126	97	42	164	126	27

NOTES (PERTAINING TO TABLE):

A. TOP BARS ARE HORIZONTAL BARS THAT HAVE MORE THAN 12" OF FRESH CONCRETE CAST BELOW THEM.
B. ALL BARS THAT ARE NOT "TOP BARS" ARE "OTHER" BARS
C. ABBREVIATIONS:
- LCE - COMPRESSION EMBEDMENT LENGTH
- LTE - TENSION EMBEDMENT LENGTH
- LCS - COMPRESSION LAP SPLICE LENGTH
- LTS - TENSION LAP SPLICE LENGTH
- LDH - HOOKED BAR TENSION EMBEDMENT LENGTH

NOTES (GENERAL):

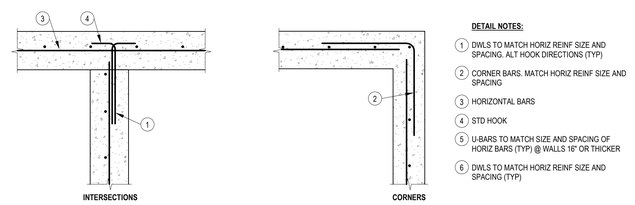
A. STAGGER ALL SPLICES 12 db MIN, BUT NOT LESS THAN 12"
B. ALL DIMENSIONS INDICATED IN TABLE ARE IN INCHES
C. BARS GREATER THAN #11 SHALL BE MECHANICALLY SPLICED
D. ALL SPLICES SHALL BE WIRED IN CONTACT STACKED VERTICAL

MULTIPLIERS:

ALL EMBEDMENT AND LAP SPLICE LENGTHS SHALL BE INCREASED AS REQ'D BY THE MULIPLIERS BELOW. APPLY MULTIPLE MULTIPLIERS IF APPLICABLE
1.3 – IF CONC CONTAINS LIGHT WEIGHT AGGREGATES
1.3 – IF EPOXY COATED REBAR USED

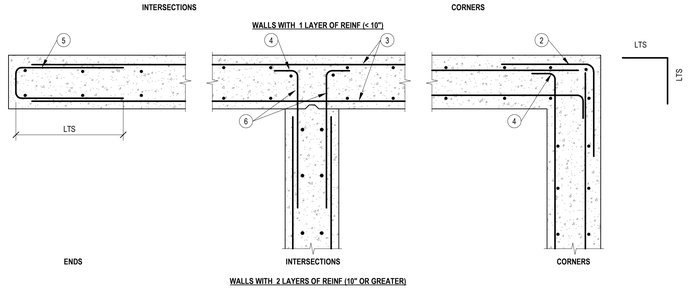
2 SPLICE & DEVELOPMENT SCHEDULE

3/4" = 1'-0"



DETAIL NOTES:

1. DWLS TO MATCH HORIZ REINF SIZE AND SPACING. ALT HOOK DIRECTIONS (TYP)
2. CORNER BARS. MATCH HORIZ REINF SIZE AND SPACING
3. HORIZONTAL BARS
4. STD HOOK
5. U-BARS TO MATCH SIZE AND SPACING OF HORIZ BARS (TYP) @ WALLS 16" OR THICKER
6. DWLS TO MATCH HORIZ REINF SIZE AND SPACING (TYP)



1 CONC WALL CORNERS

3/4" = 1'-0"

collins|webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

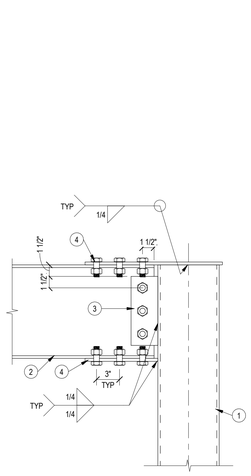
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S030

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

TYPICAL DETAILS - CONCRETE

8/24/2023 12:02:35 PM

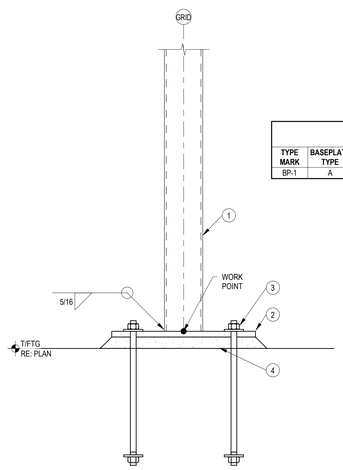


DETAIL NOTES:

1. COLUMN, RE: PLAN OR SCHEDULE
2. STEEL BEAM, RE: PLAN
3. 3/8" THICK SHEAR TAB W/ (3) 3/4" Ø A325 BOLTS
4. 3/8" THICK TOP AND BOTTOM PLATES W/ (6) 3/4" Ø A325 BOLTS ON EA PLATE (2" GAGE)

3 BEAM TO COLUMN MOMENT CONN

1 1/2" = 1'-0"

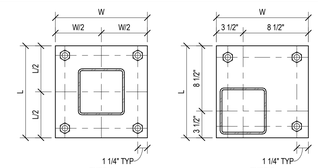


DETAIL NOTES

1. HSS COLUMN, RE: PLAN FOR SIZE
2. BASE PLATE, RE: SCHEDULE
3. ANCHOR RODS, RE: SCHEDULE
4. 1 1/2" OF NON - SHRINK GROUT

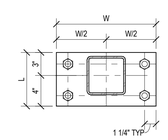
SCHEDULE - BASEPLATE

TYPE MARK	BASEPLATE TYPE	BASEPLATE DIMENSIONS [TxWxL]	ANCHOR ROD DIA.	ANCHOR ROD EMBEDMENT	GROUT THICKNESS
BP-1	A	1"x8"x1'-4"	1"	12"	1 1/2"



TYPE A

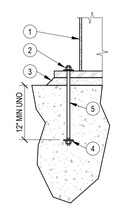
TYPE B



TYPE C

1 COLUMN - BASE PLATE

1 1/2" = 1'-0"



DETAIL NOTES:

1. COL AND BASE PLATE, RE: PLAN & SCHEDULE
2. PROVIDE OVERSIZED HOLES IN BASE PLATE AND 1/4" PL WASHER WITH HEAVY HEX NUTS ON ANCHOR RODS. WELD WASHERS TO BASE PLATE 1" MIN ALL 4 SIDES
3. 1 1/2" MIN NON-SHRINK NON-METALLIC GROUT
4. PROVIDE EITHER HEADED ANCHOR RODS, OR ALTERNATIVELY PROVIDE 3" SQ x 1/4" PL WASHER WITH HEAVY HEX NUT. TACK WELD WASHER AND NUT TO ANCHOR ROD
5. ANCHOR ROD. RODS TO EXTEND 1/2" MIN THRU NUTS TOP AND BOT, RE: BASE PLATE SCHEDULE

NOTES:

A. ACCOUNT FOR GROUT THICKNESS WHEN DETERMINING BOTTOM OF BASE PLATE ELEVATION

B. ANCHOR RODS SHALL BE F1554 GR. 36 UNO

2 ANCHOR ROD

3/4" = 1'-0"

collins|webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000172099
REGISTERED PROFESSIONAL ENGINEER

08/24/2023

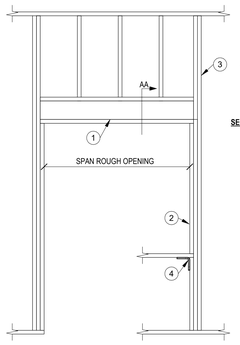
PROFESSIONAL SEAL

S050

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

TYPICAL DETAILS - STEEL

8/24/2023 12:02:36 PM



WOOD HEADER SCHEDULE				
MARK	MEMBERS	MAX SPAN	JAMB MEMBERS	NOTES
HD206	(2) 2x6	6'-0"	1 KING, 1 TRIMMER*	NON-STRUCT HDR
HDN08	(N) 2x8	SEE PLAN	1 KING, 2 TRIMMER*	
HDN10	(N) 2x10	SEE PLAN	2 KING, 2 TRIMMER	
HDN12	(N) 2x12	SEE PLAN	2 KING, 2 TRIMMER	
HDNLVL	(N) 1 3/4"x11 7/8" LVL	SEE PLAN	3 KING, 2 TRIMMER	

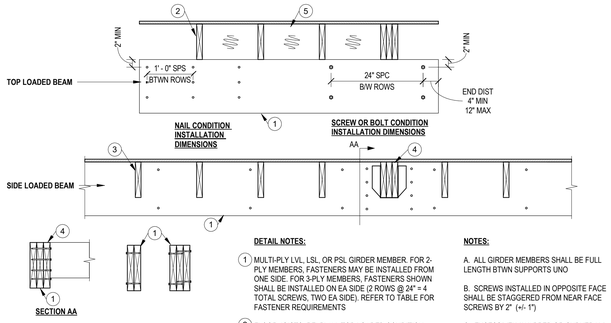
*PROVIDE MIN (2) KING STUDS FOR ALL EXTERIOR WALL OPENINGS

LEGEND
HD 2 08
HEADER — "N" PLIES — DEPTH / DESIGNATION

DETAIL NOTES:

1. WOOD HEADER, RE: SCHEDULE. ALL HEADERS SHALL BE NAILED TOGETHER AT 16" OC MAX. PROVIDE PLYWOOD FILLER AS REQD TO MATCH STUD THICKNESS
2. TRIMMER STUDS, RE: SCHEDULE
3. KING STUDS, RE: SCHEDULE
4. PROVIDE STUD UNDER SILL END OR SIMPSON A35 CLIP ANGLE

3 HEADER SCHEDULE
1/2" = 1'-0"



DETAIL NOTES:

1. MULTI-PLY LVL, LSL, OR PSL GIRDER MEMBER. FOR 2-PLY MEMBERS, FASTENERS MAY BE INSTALLED FROM ONE SIDE. FOR 3-PLY MEMBERS, FASTENERS SHOWN SHALL BE INSTALLED ON EA SIDE (2 ROWS @ 24" = 4 TOTAL SCREWS, TWO EA SIDE). REFER TO TABLE FOR FASTENER REQUIREMENTS
2. FLOOR JOISTS, RE: PLAN. TOP LOADED CONDITION
3. FLOOR JOISTS, RE: PLAN. SIDE LOADED CONDITION. PROVIDE FACE MOUNTED OR TOP FLANGE MOUNTED HANGERS ATTACHED TO GIRDER PER MFCR REQUIREMENTS
4. AT HEAVY LOADED BEAM HANGER LOCATIONS, PROVIDE (4) STRUCTURAL SCREWS EA SIDE OF HANGER. SCREWS SHALL PENETRATE ALL PLYS (3.25" MIN FOR 2 PLY, 5" MIN FOR 3 PLY). THIS SHALL BE TYP UNO
5. WHEN BEAM IS DOWNSET PROVIDE 2x FULL HEIGHT BLOCKING BTWN FLOOR JOISTS

NOTES:

A. ALL GIRDER MEMBERS SHALL BE FULL LENGTH BTWN SUPPORTS UNO

B. SCREWS INSTALLED IN OPPOSITE FACE SHALL BE STAGGERED FROM NEAR FACE SCREWS BY 2" (+/- 1")

C. EXCESSIVELY WARPED OR CURVED LVL SHOULD NEVER BE FORCED INTO ALIGNMENT BY USE OF CLAMPS, SCREWS OR BOLTS AS SPLITTING MAY OCCUR

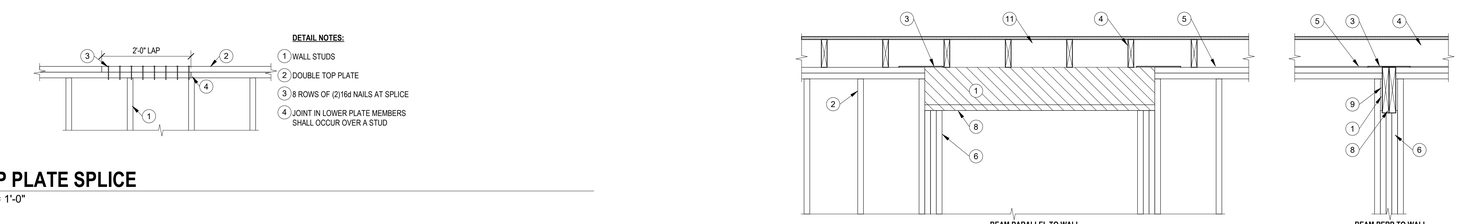
D. IF COUNTERSINKING SCREWS OR BOLTS IS REQUIRED, USE A SPADE BIT TO CREATE THE COUNTERSINK PRIOR TO INSTALLING THE FASTENER

E. BOLTS SHALL MEET OR EXCEED ASTM A307

F. STRUCTURAL SCREWS MAY BE ONE OF THE FOLLOWING PRODUCTS: 1/4"ø SIMPSON STRONG TIE SDS, WS SCREWS BY USP, OR TRUSSLOK SCREWS BY FASTENMASTER

FASTENER OPTIONS				
FASTENER	BM DEPTH	2-PLY	3-PLY	4-PLY
10d (0.128"x3") NAILS	7.25" TO 14"	3 @ 12" OC	3 @ 12" OC EA SIDE	NOT ALLOWED
10d (0.128"x3") NAILS	14" OR GREATER	4 @ 12" OC	4 @ 12" OC EA SIDE	NOT ALLOWED
1/2" DIA THRU BOLTS	7.25" OR GREATER	2 @ 24" OC	2 @ 24" OC	2 @ 16" OC
STRUCTURAL SCREW	7.25" OR GREATER	2 @ 24" OC	2 @ 24" OC EA SIDE	2 @ 16" OC EA SIDE

2 BUILT-UP ENGR LUMBER BEAM
3/4" = 1'-0"



DETAIL NOTES:

1. WOOD BEAM, PER PLAN
2. WALL STUDS
3. IF TOP PLATE IS INTERRUPTED USE SIMPSON LSTA9 STRAP OR EQUIVALENT
4. WOOD JOISTS, RE: PLAN
5. DOUBLE 2x TOP PLATE
6. MIN 3 STUDS TO SUPPORT BEAM UNO ON PLAN
7. FACE MOUNT JOIST HANGER
8. COORD BOT OF BEAM ELEV W/ ARCH REQUIREMENTS
9. 1/2" OSB SPACERS AS REQD
10. SIMPSON LSTA9 STRAP EA SIDE
11. WHEN BEAM IS DOWNSET PROVIDE 2x FULL HT BLOCKING BTWN FLOOR JOISTS

1 BEAM BEARING CONDITIONS
3/4" = 1'-0"



DETAIL NOTES:

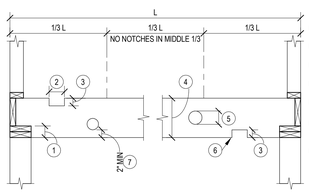
1. STUD DEPTH
2. MAX DIAMETER OF BORED HOLE = STUD DEPTH / 2 1/2
3. IF BORED HOLE IS GREATER THAN STUD DEPTH / 2 1/2 & LESS THAN 3 " STUD DEPTH / 5, THEN STUD MUST BE DOUBLED & NO MORE THAN TWO SUCCESSIVE STUDS ARE DOUBLED & BORED
4. 5/8" MIN TO EDGE
5. BORED HOLES SHALL NOT BE LOCATED IN THE SAME CROSS SECTION OF CUT OR NOTCH IN STUD
6. MAX NOTCH = STUD DEPTH / 4

6 BORED HOLE & NOTCHES - VERT FRAMING
3/4" = 1'-0"

DETAIL NOTES:

1. WALL STUDS
2. DOUBLE TOP PLATE
3. 8 ROWS OF (2)16d NAILS AT SPLICE
4. JOINT IN LOWER PLATE MEMBERS SHALL OCCUR OVER A STUD

5 TOP PLATE SPLICE
3/4" = 1'-0"



DETAIL NOTES:

1. MAX DIMENSION = JOIST DEPTH / 4
2. MAX DIMENSION = JOIST DEPTH / 3
3. MAX DIMENSION = JOIST DEPTH / 6
4. JOIST DEPTH
5. MAX DIMENSION = JOIST DEPTH / 3
6. SQUARE HOLES AND NOTCHES NOT RECOMMENDED
7. HOLES MAY BE ANYWHERE ALONG THE LENGTH OF THE SPAN MINUS 1'-0" ON EA END. HOLE EDGES SHALL BE 2" FROM TOP OF JOIST OR BOTTOM OF JOIST. THEY SHALL ALSO BE 2" FROM ANY OTHER HOLE OR NOTCH

NOTE: DETAIL IS FOR DIMENSIONAL LUMBER ONLY. FOR I-JOISTS AND LVL FOLLOW MANUFACTURERS REQUIREMENTS

4 BORED HOLE & NOTCHES - HORIZ FRAMING
3/4" = 1'-0"

CWA collins|webb ARCHITECTURE
807 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

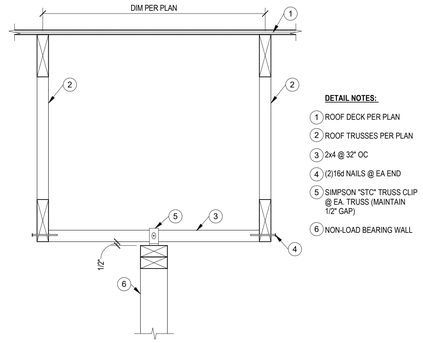
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000172099
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S060

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

TYPICAL DETAILS - WOOD FRAMING

8/24/2023 12:02:37 PM

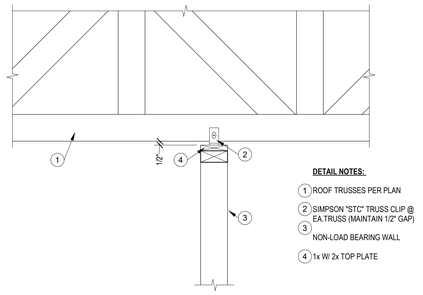


DETAIL NOTES:

1. ROOF DECK PER PLAN
2. ROOF TRUSSES PER PLAN
3. 2x4 @ 32" OC
4. (2)16d NAILS @ EA END
5. SIMPSON "STC" TRUSS CLIP @ EA. TRUSS (MAINTAIN 1/2" GAP)
6. NON-LOAD BEARING WALL

7 TYP - NON-LOAD BRG WALL - TRUSS

1 1/2" = 1'-0"

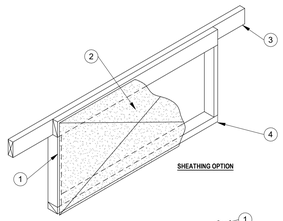


DETAIL NOTES:

1. ROOF TRUSSES PER PLAN
2. SIMPSON "STC" TRUSS CLIP @ EA.TRUSS (MAINTAIN 1/2" GAP)
3. NON-LOAD BEARING WALL
4. 1x W/ 2x TOP PLATE

5 TYP - NON-LOAD BRG WALL - ROOF TRUSS

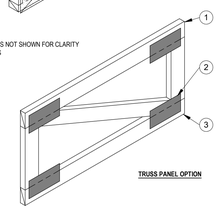
1 1/2" = 1'-0"



DETAIL NOTES:

1. SOLID 2x BLOCKING AT EACH EDGE OF WOOD STRUCTURAL PANEL - VERTICAL BLOCKING MAY BE OMITTED WHERE WALLS ABOVE BLOCK ARE NOT BEARING
2. SOLID WOOD STRUCTURAL PANEL SHEATHING WITH 10d NAILS AT 3" O.C. AT ALL EDGES
3. FASTEN TOP CHORD OF PANEL IN ACCORDANCE WITH BOTTOM PLATE NAILING OF SHEARWALL ABOVE
4. FASTEN BOTTOM CHORD OF PANEL IN ACCORDANCE WITH BOTTOM PLATE NAILING OF SHEARWALL BELOW

NOTE:
PREFAB. TRUSS NOT SHOWN FOR CLARITY BOTH OPTIONS

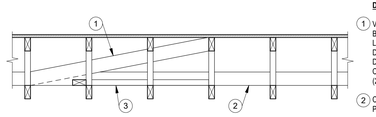


DETAIL NOTES:

1. FASTEN TOP CHORD OF PANEL IN ACCORDANCE WITH BOTTOM PLATE NAILING OF SHEARWALL ABOVE
2. TRUSS MANUFACTURER TO DESIGN PREFAB TRUSS PANEL FOR LATERAL LOAD SHOWN IN SHEARWALL SCHEDULE
3. FASTEN BOTTOM CHORD OF PREFAB TRUSS PANEL WITH CLIPS AT SPACING PER SHEARWALL SCHEDULE

6 TYPICAL FLOOR/ROOF TRUSS BLOCKING

3/4" = 1'-0"



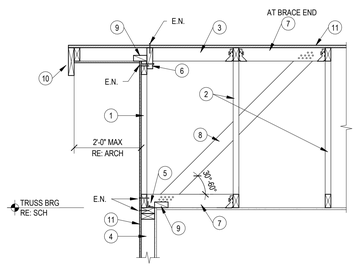
DETAIL NOTES:

1. VERTICAL SWAY BRACING AT EACH BOTTOM CHORD STRUT LINE IN SAME LOCATION AS BOTTOM CHORD DIAGONAL BRACING (ALTERNATE DIRECTION). NAIL TO TRUSS TOP CHORD AND BOTTOM CHORD STRUT W/ (2) 16d NAILS
2. CONTINUOUS BOTTOM CHORD STRUTS. PROVIDE (4) 16d NAILS AT LAPS
3. BOTTOM CHORD DIAGONAL BRACING. NAIL TO EACH TRUSS W/ (2) 16d NAILS

NOTES:
A. ALL BRACING TO BE MINIMUM 2x4 AND NAILED TO EACH TRUSS.
B. DIAGONAL AND SWAY BRACING TO BE PLACED AT APPROXIMATELY 45° ANGLES.
C. WHERE TRUSS FRAMING CHANGES DIRECTION, EXTEND STRUTS TO BOTTOM CHORD OF PERPENDICULAR TRUSSES. THESE TRUSSES ARE CONSIDERED A BRACING LOCATION.

8 TYPICAL TRUSS BRACING DETAIL

3/4" = 1'-0"



DETAIL NOTES:

1. HOLD DOWN PRE-ENGINEERED GABLE END TRUSS, RE: PLAN
2. PRE-ENGINEERED ROOF TRUSS, RE: PLAN
3. 2x OUTRIGGER, RE: PLAN
4. 2x STUD FRAMED WALL, RE: PLAN
5. SIMPSON A34 FRAMING ANGLE @ 24" OC INSTALLED W/ #9 SD SCREWS, UNO, RE: SHEAR WALL SCHEDULE FOR SHEAR WALL LOCATIONS
6. 2x6 BLOCKING BETWEEN EA OUTRIGGER ATTACH TO GABLE END TRUSS TOP CHORD W/ (6) 0.148" x 3" NAILS (10d COMMON)
7. 2x4 TOP & BOTTOM CHORD BLOCKING W/ SIMPSON LUS24 HANGER @ EA NON-BEARING END
8. (2) 2x4 BRACE (MAX. 12'-0" LONG) @ EA BLOCKING ATTACH W/ (10) 0.148" x 3" LONG (10d COMMON NAIL) @ EA END
9. 2x BLOCKING FOR NAILING, RE: ARCH
10. FASCIA BOARD, RE: ARCH
11. WALL/ROOF SHEATHING, RE: PLAN & SHEAR WALL SCHEDULE

1 GABLE END TRUSS PARALLEL

3/4" = 1'-0"

collins|webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

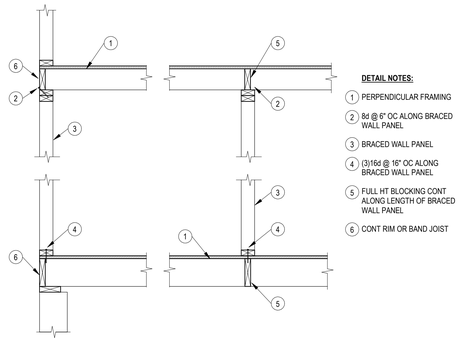
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S061

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

TYPICAL DETAILS - WOOD ROOF TRUSS

8/24/2023 12:02:38 PM



DETAIL NOTES:

1. PERPENDICULAR FRAMING
2. 8d @ 6" OC ALONG BRACED WALL PANEL
3. BRACED WALL PANEL
4. (3)16d @ 16" OC ALONG BRACED WALL PANEL
5. FULL HT BLOCKING CONT ALONG LENGTH OF BRACED WALL PANEL
6. CONT RIM OR BAND JOIST

3 BWP CONN PERP TO FRAMING

3/4" = 1'-0"

BRACED WALL PANEL LEGEND:

WSP: WOOD STRUCTURAL PANEL. PANEL THICKNESS AND NAILING REQUIREMENTS IN GENERAL NOTES MEET BRACED WALL REQUIREMENTS.

GB: GYP BOARD. 1/2" GYP BOARD EA SIDE OF WALL. NAILS OR SCREWS PER GENERAL NOTES MAY BE USED. MAX FASTENER SPACING = 7" FOR BOTH EDGE AND FIELD FASTENERS.

PFG: PORTAL FRAME GARAGE, RE: TYP DETAIL RZ-206A FOR REQUIREMENTS.

CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME. CONSTRUCT SIMILAR TO TYP DETAIL RZ-206A EXCEPT THAT ALL SURFACES SHALL BE CONTINUOUSLY SHEATHED.

CS-WSP: CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL.

EC-#: END CONDITION FOR CONTINUOUSLY SHEATH WALL PANEL.

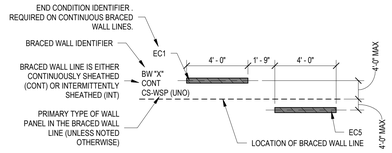
END CONDITIONS (CONTINUOUSLY SHEATHED)

EC1: PROVIDE RETURN PANEL AT THE END OF THE WALL. MIN RETURN PANEL LENGTH = 24".

EC2: PROVIDE SIMPSON DTT2Z HOLDDOWN AT CORNER. FASTEN TO STUDS W/ (6) SIMPSON SDS SCREWS AND ANCHOR TO CONCRETE W/ 1/2" DIA SIMPSON TITEN HD SCREW ANCHOR x 4" MIN EMBED (6" OVERALL LENGTH). WHERE HOLDDOWN IS REQUIRED BETWEEN FLOORS, PROVIDE DTT2Z ABOVE AND BELOW FLOOR AND FASTEN TO WALL STUDS. CONNECT TOGETHER WITH 1/2" DIAMETER THREADED ROD.

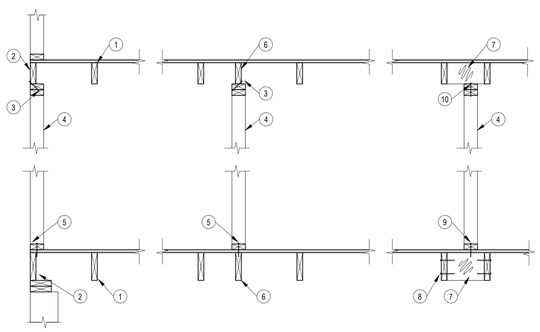
EC3: 48" WIDE BRACED WALL PANEL AT THE END OF THE WALL. NO RETURN PANEL IS REQUIRED.

EC5: SIMILAR TO EC2, EXCEPT HOLDDOWN DOES NOT OCCUR AT CORNER, BUT MAY BE UPTO 10'-0" AWAY FROM A CORNER.



2 BRACED WALL PANEL LEGEND

1/4" = 1'-0"

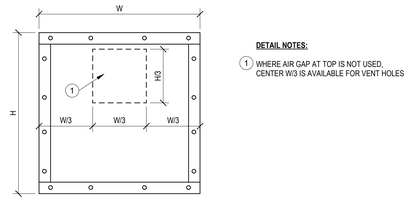


DETAIL NOTES:

1. FRAMING ORIENTED PARALLEL TO BRACED WALL PANEL
2. CONT RIM OR END JOIST
3. 8d @ 6" OC ALONG BRACED WALL PANEL
4. BRACED WALL PANEL
5. (3)16d @ 16" OC ALONG BRACED WALL PANEL
6. ADDITIONAL FRAMING MEMBER DIRECTLY BELOW BRACED WALL PANEL
7. FULL HEIGHT BLOCKING @ 16" OC ALONG BRACED WALL
8. (2) 16d NAILS @ EA BLOCKING MEMBER
9. (3)16d NAILS @ EA BLOCKING MEMBER
10. TOE NAIL (3) 8d NAILS @ EA BLOCKING MEMBER

1 BWP CONN PAR TO FRAMING

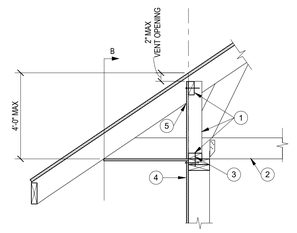
3/4" = 1'-0"



DETAIL NOTES:

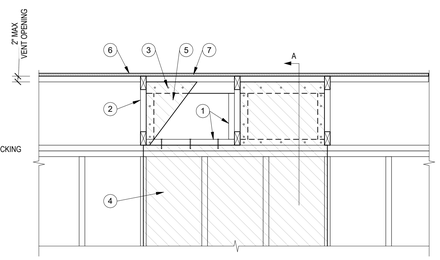
1. WHERE AIR GAP AT TOP IS NOT USED, CENTER W/3 IS AVAILABLE FOR VENT HOLES

ELEVATION B



DETAIL NOTES:

1. 2x BLOCKING
2. PRE-ENGINEERED ROOF TRUSSES
3. (4) 8d NAILS (2 1/2" x 0.131) @ EA BLOCKING
4. BRACED WALL PANEL
5. BLOCK BRACING



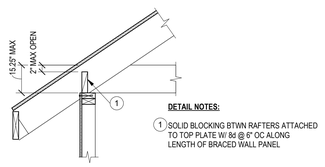
DETAIL NOTES:

1. 2x BLOCKING
2. PRE-ENGINEERED ROOF TRUSSES
3. EDGE NAILING RE: GENERAL NOTES
4. BRACED WALL PANEL
5. BRACING
6. ROOF SHEATHING
7. VENTING

FIGURE R602.10.8.2(3)
BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES

5 BRACED WALL CONN

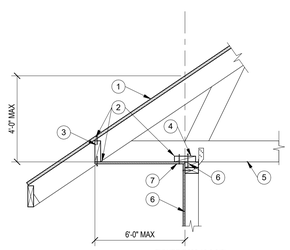
3/4" = 1'-0"



DETAIL NOTES:

1. SOLID BLOCKING BTWN RAFTERS ATTACHED TO TOP PLATE W/ 8d @ 6" OC ALONG LENGTH OF BRACED WALL PANEL

FIGURE R602.10.8.2(1)
BRACED WALL PANEL CONNECTION TO PERPENDICULAR RAFTERS



DETAIL NOTES:

1. ROOF SHEATHING
2. EDGE NAILING PER TABLE R602.3(1) TYP
3. BLOCKING
4. 2x BLOCKING
5. PRE-ENGINEERED ROOF TRUSSES
6. (4) 8d NAILS (2 1/2" x 0.131 @ EA BLOCKING
7. BRACED WALL PANEL
8. BRACING. METHODS OF BRACING SHALL BE AS DESCRIBED IN SECTION R602.10.4

NOTE: PROVIDE VENTING PER SECTION R806 (NOT SHOWN)

FIGURE R602.10.8.2(2)
BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES

4 BRACED WALL CONN

3/4" = 1'-0"

CWA collins|webb ARCHITECTURE
507 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000172099
REGISTERED PROFESSIONAL ENGINEER
08/24/2023

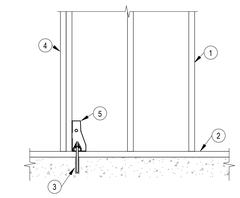
PROFESSIONAL SEAL

S062

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

TYPICAL DETAILS - WOOD BRACED WALLS

8/24/2023 12:02:39 PM



DETAIL NOTES

1. 2x STUD FRAMING, RE: SHEAR WALL SCHEDULE
2. TREATED 2x SILL PLATE TO MATCH SIZE OF WALL. RE: SHEAR WALL SCHEDULE
3. HILTI THREADED HAS ROD W/ HILTI HY-200 ADHESIVE, RE: SCHEDULE FOR SIZE & EMBEDMENT
4. BOUNDRY CONDITION STUDS @ SHEAR WALL ENDS. RE: SHEAR WALL SCHEDULE FOR NUMBER OF PLYS. RE: GENERAL NOTES FOR BUILT UP 2x FRAMING FASTENER SCHEDULE
5. SIMPSON HOLDOWN ATTACH TO BOUNDARY CONDITION STUDS PER SIMPSONS SPECS. RE: SHEARWALL SCHEDULE FOR SIZE. RE: PLAN FOR LOCATION

3 SHEAR WALL - BASE HOLDOWN

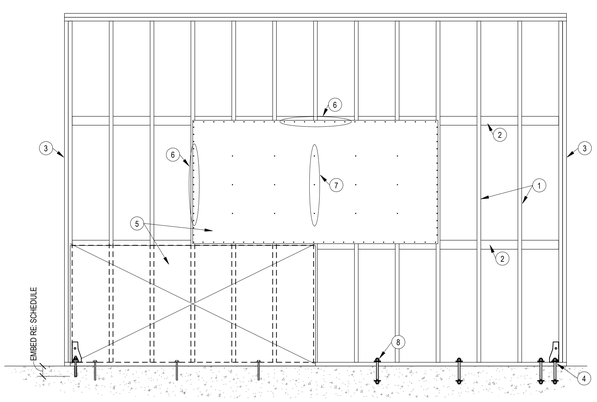
3/4" = 1'-0"

DETAIL NOTES:

1. 2x STUD FRAMING, RE: SHEAR WALL SCHEDULE
2. PANEL BLOCKING AS REQD, RE: SHEAR WALL SCHEDULE
3. BOUDARY CONDITION @ SHEAR WALL ENDS, RE: SHEAR WALL SCHEDULE FOR NUMBER OF PLYS
4. HOLDOWN, RE: SHEAR WALL SCHEDULE AND HOLDOWN DETAIL
5. WOOD STRUCTURAL PANEL SHEATHING, RE: SHEAR WALL SCHEDULE
6. PANEL EDGE NAILING NO LESS THAN 3/8" FROM PANEL EDGES, RE: SHEAR WALL SCHEDULE FOR PATTERN
7. INTERMEDIATE FIELD NAILS @ 12" OC, TYP UNO
8. TREATED 2x SILL PLATE W/ SILL ANCHORS RE: GENERAL NOTES AND DETAILS FOR TYPE AND SPACING

2 PERFORATED SHEAR WALL - ELEVATION

1/2" = 1'-0"

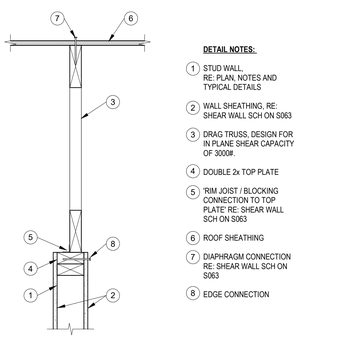


DETAIL NOTES:

1. 2x STUD FRAMING, RE: SHEAR WALL SCHEDULE
2. PANEL BLOCKING AS REQD, RE: SHEAR WALL SCHEDULE
3. BOUDARY CONDITION @ SHEAR WALL ENDS, RE: SHEAR WALL SCHEDULE FOR NUMBER OF PLYS
4. HOLDOWNS, RE: SHEAR WALL SCHEDULE AND HOLDOWN TYP DETAIL
5. WOOD STRUCTURAL PANEL SHEATHING, RE: SHEAR WALL SCHEDULE
6. PANEL EDGE NAILING NO LESS THAN 3/8" FROM PANEL EDGES, RE: SHEAR WALL SCHEDULE FOR PATTERN
7. INTERMEDIATE FIELD NAILS @ 12" OC, TYP UNO
8. TREATED 2x SILL PLATE W/ SILL ANCHORS RE: GENERAL NOTES AND DETAILS FOR TYPE AND SPACING

1 SEGMENTED SHEAR WALL - ELEVATION

1/2" = 1'-0"



DETAIL NOTES:

1. STUD WALL, RE: PLAN, NOTES AND TYPICAL DETAILS
2. WALL SHEATHING, RE: SHEAR WALL SCH ON S063
3. DRAG TRUSS, DESIGN FOR IN PLANE SHEAR CAPACITY OF 3000#.
4. DOUBLE 2x TOP PLATE
5. 'RIM JOIST / BLOCKING CONNECTION TO TOP PLATE' RE: SHEAR WALL SCH ON S063
6. ROOF SHEATHING
7. DIAPHRAGM CONNECTION RE: SHEAR WALL SCH ON S063
8. EDGE CONNECTION

4 ROOF DRAG TRUSS @ SHEAR WALL

1 1/2" = 1'-0"

SCHEDULE - SHEAR WALL

SW MARK	SW TYPE	SHEATHING	FASTENERS (EDGE / FIELD)	BOUNDARY MEMBERS	CONNECTION TO TOP PLATE	SILL ANCHORS	'SIMPSON' HOLDOWN	HOLDOWN ANCHOR ROD, EMBEDMENT
SW-A	SEGMENTED	7/16" OSB	8d @ 4"/12" (BLOCKED)	3 PLY	A34 FRAMING ANGLE @ 12" OC W/ (8) #9 x 1 1/2" SD SCREW	1/2" Ø SCREW ANCHOR @ 32" OC	HDU5-SDS2.5 W/ (14) 1/4 x 2 1/2 SDS	PAB5-36, 12" MIN
SW-B	SEGMENTED	7/16" OSB	8d @ 3"/12" (BLOCKED)	3 PLY	A34 FRAMING ANGLE @ 12" OC W/ (8) #9 x 1 1/2" SD SCREW	1/2" Ø SCREW ANCHOR @ 32" OC	HDU5-SDS2.5 W/ (14) 1/4 x 2 1/2 SDS	PAB5-36, 12" MIN

CW/ collins|webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000172099
REGISTERED PROFESSIONAL ENGINEER

08/24/2023

PROFESSIONAL SEAL

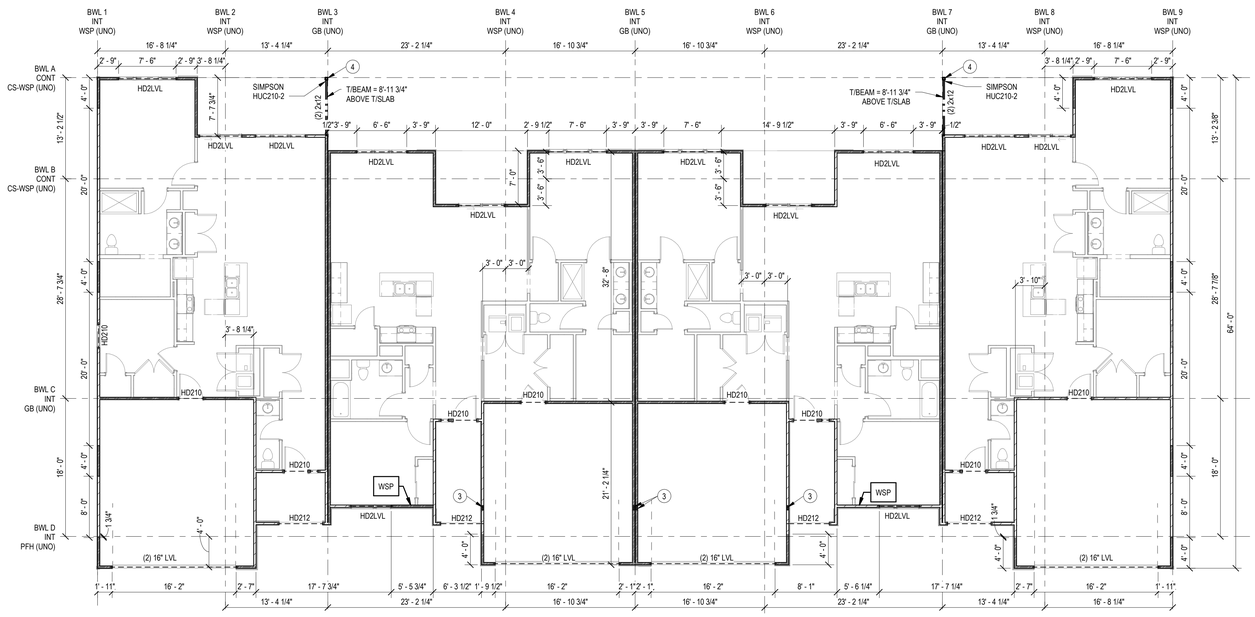
S063

ISSUE DATE: 24 AUGUST 2023

STAND SEI #: 23090

TYPICAL DETAILS - WOOD SHEAR WALLS

8/24/2023 12:02:39 PM

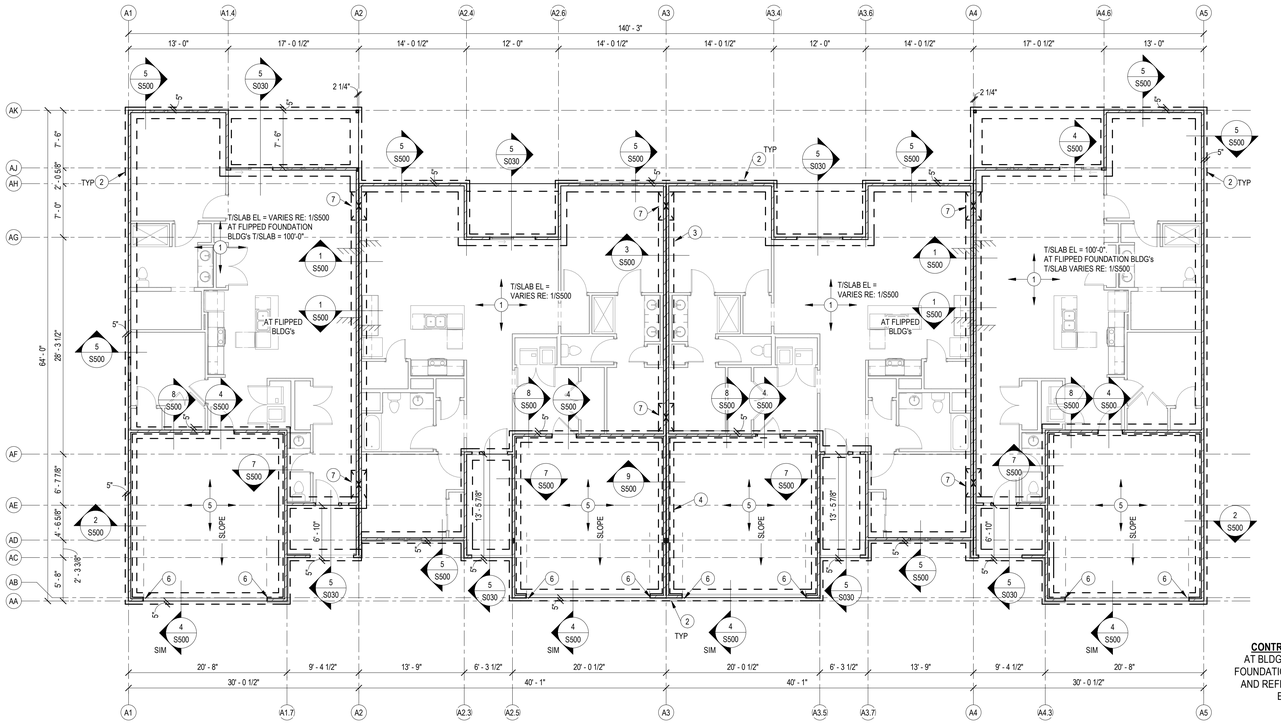


2 FIRST FLOOR WALL PLAN - BUILDING A

1/8" = 1'-0"

WALL FRAMING PLAN NOTES:

1. 2x6 LOAD BEARING STUD FRAMED WALL @ 16" OC
2. EXTEND HDR CONTINUOUS TO THE CORNER FOR BRACED WALL CONNECTION
3. (6) 2x4 STUD PACK BELOW LOAD BEARING ELEMENT ABOVE
4. 4x4 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU44Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
5. 6x6 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU66Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
6. SIMPSON ECCL POST CAP
7. SIMPSON ECCQ POST CAP



1 FOUNDATION PLAN - BUILDING A

1/8" = 1'-0"

FOUNDATION PLAN NOTES:

1. 4" CONCRETE SLAB ON GRADE. RE:GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
2. 18" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (2) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
3. 24" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (3) #4 CONT AND #3 TRANS @ 24" OC
4. 24" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (3) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
5. 5" CONCRETE GARAGE SLAB ON GRADE. RE: GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
6. RECESS/STOP CONC CURB @ DOOR OPENINGS
7. STEP FOOTING, RE: TYPICAL DETAILS
8. 36" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (4) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
9. 16" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (2) #4 CONT AND #3 TRANS @ 24" OC
10. 3'-0" x 3'-0" x 1'-2" THICK SPREAD FTG REINF. W/ (6) #4 OC EA WAY. LOCATE BELOW STUD PACK
11. POUR TRENCH FOOTING OVER TOP OF FOOTING TO FULLY ENCAPSULATE COLUMN BASEPLATE BEND REINF. AROUND COLUMN AS REQ.

CONTRACTOR NOTE FOR FLIPPED FOUNDATION BLDG's:
AT BLDG's **1, 5, 6, 8, 9, 11, 14, 16, 17, 18, 26, 27, 28,** AND **29** THE FOUNDATION STEPS IN THE OPPOSITE DIRECTION. COORDINATE AND REFERENCE CIVIL DRAWINGS FOR BUILDING AND T/SLAB ELEVATIONS PRIOR TO WORK COMMENCING.

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTRURAL GENERAL NOTES AND S0xx FOR TYPICAL STRUCTURAL DETAILS. REVIEW NOTES & DETAILS OR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x4 @ 16" OC, UNO. AT LOCATIONS WHERE STONE/MASONRY IS TO BE INSTALLED ON EXTERIOR WALLS STUD FRAMING SHALL BE (2) 2x4 @ 16" OC, UNO.

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD / EDGE OF SLAB. DIMENSIONS TO INTERIOR WALLS ARE TO CENTERLINE OF INTERIOR WALL.

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING. INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQ'D. TRUSSES SHALL BEAR WITHIN 5"

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX". RE: TYP DTL. ALL HEADERS IN STRUCTURAL WALLS WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6 (MAXIMUM 10FT OPENING).

G. REFER TO SHEET S062 FOR BRACED WALL REQUIREMENTS.

H. TOP OF SLAB ELEVATION = 100'-0", UNO.
BOTTOM OF SOFFIT ELEVATION = 109'-1 1/8"
RE: ARCH AND CIVIL FOR DATUM ELEVATION.

J. PROVIDE 2x BLOCKING @ MIDHEIGHT (4'-0" MAX) AT ALL STUD WALLS NOT SHEATHED ON BOTH SIDES WITH EITHER GYP OR OSB.

K. ROOF TRUSS BEARING ELEVATION = 9'-1 1/8" ABOVE TOP OF SLAB, UNO. RE: ARCH ELEVATIONS

L. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

M. PLANS SHOWN ARE FOR PROTOTYPE BUILDING. RE: ARCH AND SITE PLAN FOR LOCATIONS, VARIATIONS, GRADING CONDITIONS, ETC.

N. PROVIDE (6) STUDS MIN BELOW ALL BEAMS AND GIRDER TRUSSES, UNO.

O. ALL HORIZONTAL REINF. SHALL BE CONTINUOUS THROUGH FOUNDATION STEPS.

P. ALL MULTI-PLY ENGINEERING LUMBER BEAMS ARE DESIGNATED BY NUMBER PLYS AND DEPTH (EX. (3) 14" LVL). THE PLYS SHALL BE 1.75" WIDTH UNO AND STRENGTH SHALL BE PER THE GENERAL NOTES. BEAMS SHALL BE FASTENED TOGETHER PER THE TYPICAL DETAILS.

Q. HANGERS ARE DENOTED ON PLAN AS "Hxx" REFER TO SCHEDULE ON S060 FOR REQS. WHERE NOT CALLED OUT, CONTACT ENGINEER OR USE HEAVIEST HANGER FOR NUMBER OF PLYS IN BEAM BEING SUPPORTED. WHERE BEAMS ARE BEING SUPPORTED BY TRUSSES, TRUSS MFCR TO PROVIDE BLOCKING AS REQ'D FOR CONNECTION. TRUSS TO TRUSS HANGERS ARE BY TRUSS MFCR.

FRAMING LEGEND

- FOUNDATION / LOAD BEARING WALL BELOW
- LOAD BEARING WALL
- BRACED WALL
- HEADER
- BEAM (STEEL)
- WOOD BEAM/ GIRDER TRUSS
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- OVERBUILD

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

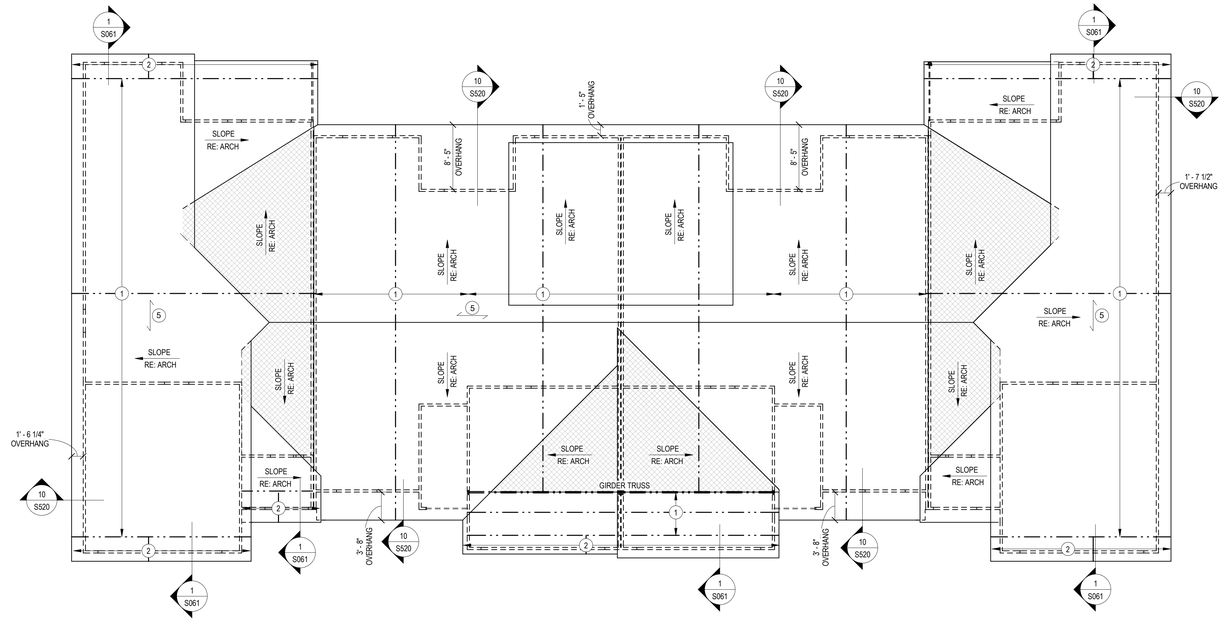
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 A

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

FOUNDATION & WALL PLANS - BUILDING A

8/24/2023 12:02:45 PM



SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTRURAL GENERAL NOTES AND S0xx FOR TYPICAL STRUCTURAL DETAILS. REVIEW NOTES & DETAILS OR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x4 @ 16" OC, UNO. AT LOCATIONS WHERE STONE/MASONRY IS TO BE INSTALLED ON EXTERIOR WALLS STUD FRAMING SHALL BE (2) 2x4 @ 16" OC, UNO.

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD / EDGE OF SLAB. DIMENSIONS TO INTERIOR WALLS ARE TO CENTERLINE OF INTERIOR WALL.

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING. INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQ'D. TRUSSES SHALL BEAR WITHIN 5"

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX". RE: TYP DTL. ALL HEADERS IN STRUCTURAL WALLS WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6 (MAXIMUM 10FT OPENING).

G. REFER TO SHEET S062 FOR BRACED WALL REQUIREMENTS.

H. TOP OF SLAB ELEVATION = 100'-0", UNO.
BOTTOM OF SOFFIT ELEVATION = 109'-1 1/8"
RE: ARCH AND CIVIL FOR DATUM ELEVATION.

J. PROVIDE 2x BLOCKING @ MIDHEIGHT (4'-0" MAX) AT ALL STUD WALLS NOT SHEATHED ON BOTH SIDES WITH EITHER GYP OR OSB.

K. ROOF TRUSS BEARING ELEVATION = 9'-1 1/8" ABOVE TOP OF SLAB, UNO. RE: ARCH ELEVATIONS

L. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

M. PLANS SHOWN ARE FOR PROTOTYPE BUILDING. RE: ARCH AND SITE PLAN FOR LOCATIONS, VARIATIONS, GRADING CONDITIONS, ETC.

N. PROVIDE (6) STUDS MIN BELOW ALL BEAMS AND GIRDER TRUSSES, UNO.

O. ALL HORIZONTAL REINF. SHALL BE CONTINUOUS THROUGH FOUNDATION STEPS.

P. ALL MULTI-PLY ENGINEERING LUMBER BEAMS ARE DESIGNATED BY NUMBER PLYS AND DEPTH (EX. (3) 14" LVL). THE PLYS SHALL BE 1.75" WIDTH UNO AND STRENGTH SHALL BE PER THE GENERAL NOTES. BEAMS SHALL BE FASTENED TOGETHER PER THE TYPICAL DETAILS.

Q. HANGERS ARE DENOTED ON PLAN AS "Hxx" REFER TO SCHEDULE ON S060 FOR REQ'S. WHERE NOT CALLED OUT, CONTACT ENGINEER OR USE HEAVIEST HANGER FOR NUMBER OF PLYS IN BEAM BEING SUPPORTED. WHERE BEAMS ARE BEING SUPPORTED BY TRUSSES, TRUSS MFCR TO PROVIDE BLOCKING AS REQ'D FOR CONNECTION. TRUSS TO TRUSS HANGERS ARE BY TRUSS MFCR.

FRAMING LEGEND

- FOUNDATION / LOAD BEARING WALL BELOW
- LOAD BEARING WALL
- BRACED WALL
- HEADER
- BEAM (STEEL)
- WOOD BEAM/ GIRDER TRUSS
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- OVERBUILD

ROOF FRAMING PLAN NOTES:

1. PRE-ENGINEERED ROOF TRUSSES @ 24" OC, TOP CHORD TO MATCH ROOF PROFILE, RE: ARCH
2. 2x4 OUTRIGGERS @ 24" OC, HOLD GABLE END TRUSS DOWN & PROVIDE FULL DEPTH BLOCKING BTWN OUTRIGGERS
3. 2x10 ROOF RAFTERS @ 16" OC ATTACH TO LEDGER W/ SIMPSON LUS210 SLOPED HANGER
4. 2x10 LEDGER ATTACHED W/ (2) 1/4"x SIMPSON SDS WOOD SCREW @ 16" OC (2" MIN EDGE DISTANCE)
5. 5/8" THICK ROOF SHEATHING RE: GENERAL NOTES ADDITIONAL FASTENING REQD
6. 2x8 ROOF RAFTERS @ 16" OC
7. STEP IN TOP PLATE OF WALL, RE: TYPICAL DETAILS
8. TOP PLATE INTERRUPTED BY HEADER, RE: TYPICAL DETAIL 1/S060 FOR STRAP INFO & REQ.
9. PRE-ENGINEERED MONO SLOPED ROOF TRUSS @ 24" OC. CEILING VAULTED BELOW. RE: PLAN FOR TRUSS BEARING ELEVATION

1 ROOF FRAMING PLAN - BUILDING A

1/8" = 1'-0"

CWA collins|webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

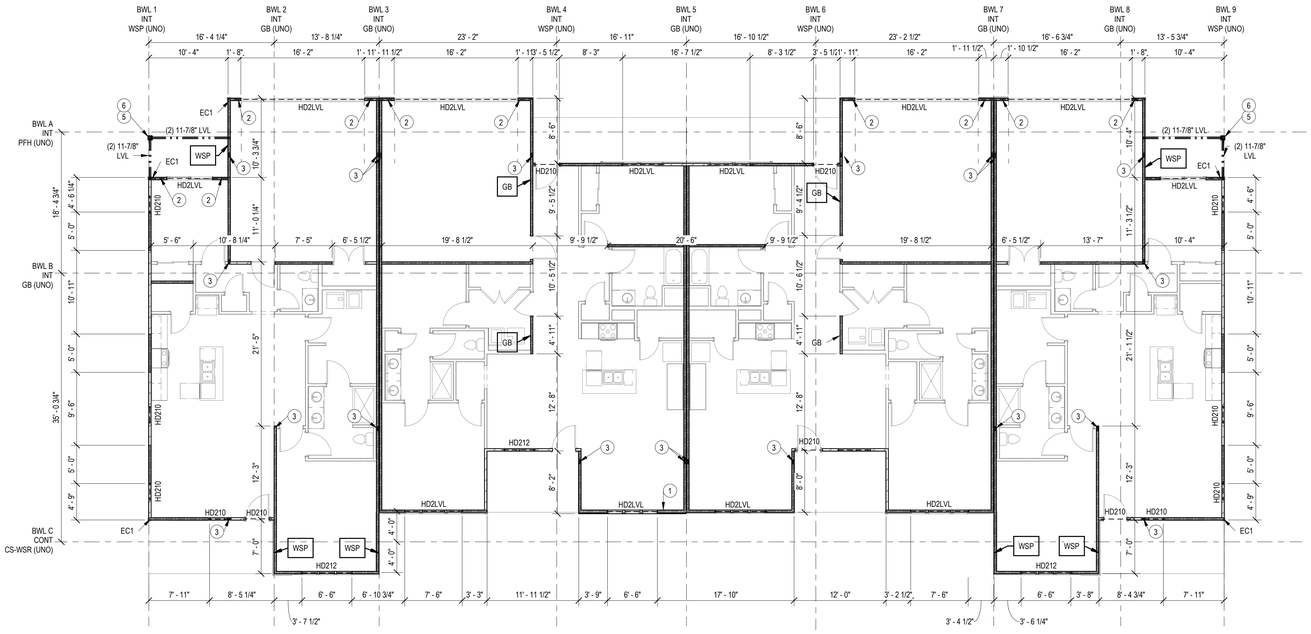
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 A-1

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

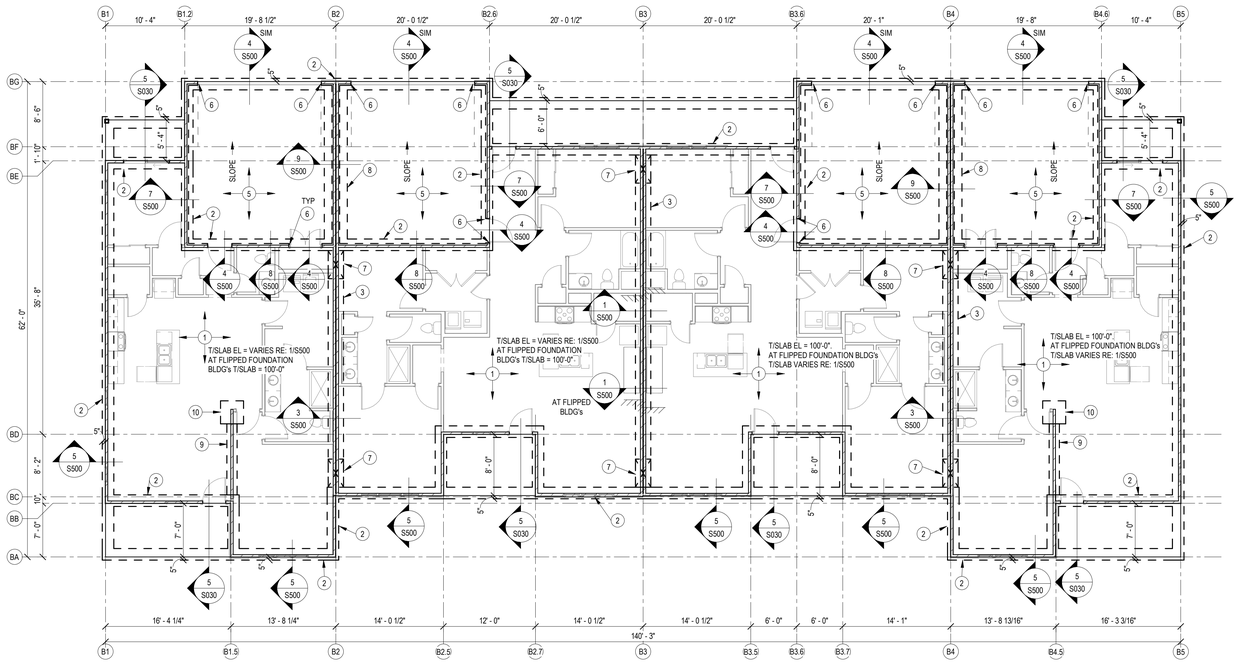
ROOF FRAMING PLAN - BUILDING A

8/24/2023 12:02:48 PM



2 FIRST FLOOR WALL PLAN - BUILDING B1

1/8" = 1'-0"



1 FOUNDATION PLAN - BUILDING B1

1/8" = 1'-0"

WALL FRAMING PLAN NOTES:

1. 2x6 LOAD BEARING STUD FRAMED WALL @ 16" OC
2. EXTEND HDR CONTINUOUS TO THE CORNER FOR BRACED WALL CONNECTION
3. (6) 2x4 STUD PACK BELOW LOAD BEARING ELEMENT ABOVE
4. 4x4 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU44Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
5. 6x6 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU66Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
6. SIMPSON ECCL POST CAP
7. SIMPSON ECCQ POST CAP

FOUNDATION PLAN NOTES:

1. 4" CONCRETE SLAB ON GRADE. RE:GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
2. 18" WIDE x 2'-10" DEEP TRENCH FOOTING. REINF W/ (2) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
3. 24" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (3) #4 CONT AND #3 TRANS @ 24" OC
4. 24" WIDE x 2'-10" DEEP TRENCH FOOTING. REINF W/ (3) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
5. 5" CONCRETE GARAGE SLAB ON GRADE. RE: GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
6. RECESS/STOP CONC CURB @ DOOR OPENINGS
7. STEP FOOTING, RE: TYPICAL DETAILS
8. 36" WIDE x 2'-10" DEEP TRENCH FOOTING. REINF W/ (4) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
9. 16" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (2) #4 CONT AND #3 TRANS @ 24" OC
10. 3'-0" x 3'-0" x 1'-2" THICK SPREAD FTG REINF. W/ (6) #4 OC EA WAY. LOCATE BELOW STUD PACK
11. POUR TRENCH FOOTING OVER TOP OF FOOTING TO FULLY ENCAPSULATE COLUMN BASEPLATE BEND REINF. AROUND COLUMN AS REQ.

CONTRACTOR NOTE FOR FLIPPED FOUNDATION BLDG's:

AT BLDG's **1, 5, 6, 8, 9, 11, 14, 16, 17, 18, 26, 27, 28,** AND **29** THE FOUNDATION STEPS IN THE OPPOSITE DIRECTION. COORDINATE AND REFERENCE CIVIL DRAWINGS FOR BUILDING AND T/SLAB ELEVATIONS PRIOR TO WORK COMMENCING.

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTRURAL GENERAL NOTES AND S0xx FOR TYPICAL STRUCTURAL DETAILS. REVIEW NOTES & DETAILS OR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x4 @ 16" OC, UNO. AT LOCATIONS WHERE STONE/MASONRY IS TO BE INSTALLED ON EXTERIOR WALLS STUD FRAMING SHALL BE (2) 2x4 @ 16" OC, UNO.

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD / EDGE OF SLAB. DIMENSIONS TO INTERIOR WALLS ARE TO CENTERLINE OF INTERIOR WALL.

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING. INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQ'D. TRUSSES SHALL BEAR WITHIN 5"

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX". RE: TYP DTL. ALL HEADERS IN STRUCTURAL WALLS WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6 (MAXIMUM 10FT OPENING).

G. REFER TO SHEET S062 FOR BRACED WALL REQUIREMENTS.

H. TOP OF SLAB ELEVATION = 100'-0", UNO.
BOTTOM OF SOFFIT ELEVATION = 109'-1 1/8"
RE: ARCH AND CIVIL FOR DATUM ELEVATION.

J. PROVIDE 2x BLOCKING @ MIDHEIGHT (4'-0" MAX) AT ALL STUD WALLS NOT SHEATHED ON BOTH SIDES WITH EITHER GYP OR OSB.

K. ROOF TRUSS BEARING ELEVATION = 9'-1 1/8" ABOVE TOP OF SLAB, UNO. RE: ARCH ELEVATIONS

L. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

M. PLANS SHOWN ARE FOR PROTOTYPE BUILDING. RE: ARCH AND SITE PLAN FOR LOCATIONS, VARIATIONS, GRADING CONDITIONS, ETC.

N. PROVIDE (6) STUDS MIN BELOW ALL BEAMS AND GIRDER TRUSSES, UNO.

O. ALL HORIZONTAL REINF. SHALL BE CONTINUOUS THROUGH FOUNDATION STEPS.

P. ALL MULTI-PLY ENGINEERING LUMBER BEAMS ARE DESIGNATED BY NUMBER PLYS AND DEPTH (EX. (3) 14" LVL). THE PLYS SHALL BE 1.75" WIDTH UNO AND STRENGTH SHALL BE PER THE GENERAL NOTES. BEAMS SHALL BE FASTENED TOGETHER PER THE TYPICAL DETAILS.

Q. HANGERS ARE DENOTED ON PLAN AS "Hxx" REFER TO SCHEDULE ON S060 FOR REQS. WHERE NOT CALLED OUT, CONTACT ENGINEER OR USE HEAVIEST HANGER FOR NUMBER OF PLYS IN BEAM BEING SUPPORTED. WHERE BEAMS ARE BEING SUPPORTED BY TRUSSES, TRUSS MFCR TO PROVIDE BLOCKING AS REQ'D FOR CONNECTION. TRUSS TO TRUSS HANGERS ARE BY TRUSS MFCR.

FRAMING LEGEND

- FOUNDATION / LOAD BEARING WALL BELOW
- LOAD BEARING WALL
- BRACED WALL
- HEADER
- BEAM (STEEL)
- WOOD BEAM/ GIRDER TRUSS
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- OVERBUILD

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

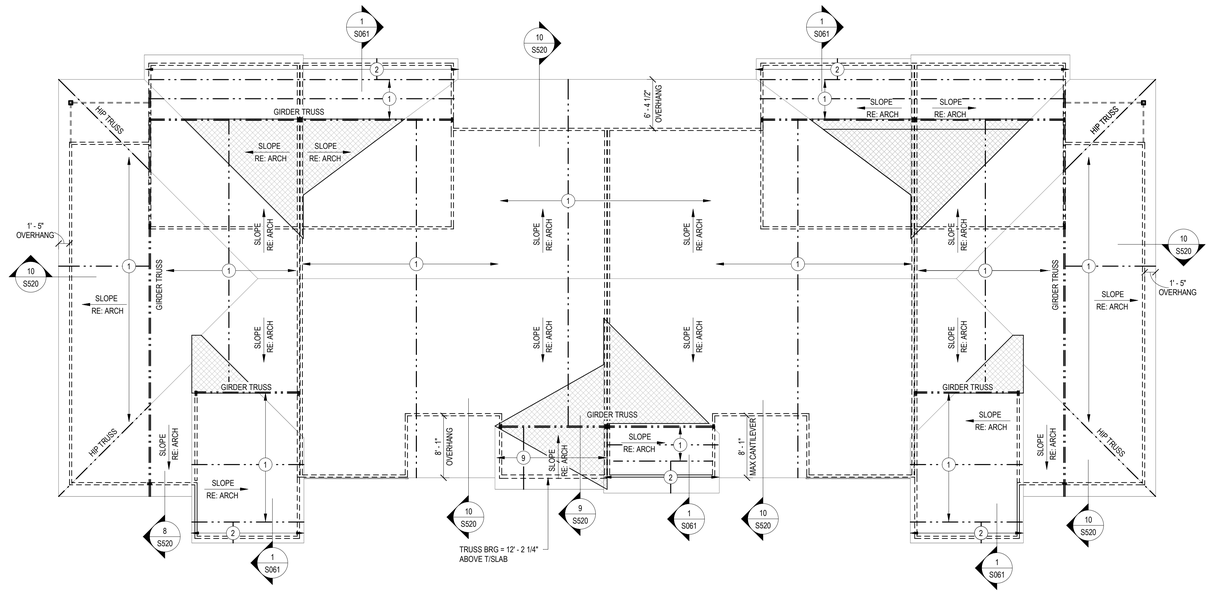
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000172099
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 B1

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

FOUNDATION & WALL PLANS - BUILDING B1

8/24/2023 12:02:53 PM



1 ROOF FRAMING PLAN - BUILDING B1

1/8" = 1'-0"

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTRURAL GENERAL NOTES AND S0xx FOR TYPICAL STRUCTURAL DETAILS. REVIEW NOTES & DETAILS OR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x4 @ 16" OC, UNO. AT LOCATIONS WHERE STONE/MASONRY IS TO BE INSTALLED ON EXTERIOR WALLS STUD FRAMING SHALL BE (2) 2x4 @ 16" OC, UNO.

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD / EDGE OF SLAB. DIMENSIONS TO INTERIOR WALLS ARE TO CENTERLINE OF INTERIOR WALL.

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING. INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQ'D. TRUSSES SHALL BEAR WITHIN 5"

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX". RE: TYP DTL. ALL HEADERS IN STRUCTURAL WALLS WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6 (MAXIMUM 10FT OPENING).

G. REFER TO SHEET S062 FOR BRACED WALL REQUIREMENTS.

H. TOP OF SLAB ELEVATION = 100'-0", UNO.
BOTTOM OF SOFFIT ELEVATION = 109'-1 1/8"
RE: ARCH AND CIVIL FOR DATUM ELEVATION.

J. PROVIDE 2x BLOCKING @ MIDHEIGHT (4'-0" MAX) AT ALL STUD WALLS NOT SHEATHED ON BOTH SIDES WITH EITHER GYP OR OSB.

K. ROOF TRUSS BEARING ELEVATION = 9'-1 1/8" ABOVE TOP OF SLAB, UNO. RE: ARCH ELEVATIONS

L. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

M. PLANS SHOWN ARE FOR PROTOTYPE BUILDING. RE: ARCH AND SITE PLAN FOR LOCATIONS, VARIATIONS, GRADING CONDITIONS, ETC.

N. PROVIDE (6) STUDS MIN BELOW ALL BEAMS AND GIRDER TRUSSES, UNO.

O. ALL HORIZONTAL REINF. SHALL BE CONTINUOUS THROUGH FOUNDATION STEPS.

P. ALL MULTI-PLY ENGINEERING LUMBER BEAMS ARE DESIGNATED BY NUMBER PLYS AND DEPTH (EX. (3) 14" LVL). THE PLYS SHALL BE 1.75" WIDTH UNO AND STRENGTH SHALL BE PER THE GENERAL NOTES. BEAMS SHALL BE FASTENED TOGETHER PER THE TYPICAL DETAILS.

Q. HANGERS ARE DENOTED ON PLAN AS "Hxx" REFER TO SCHEDULE ON S060 FOR REQ'S. WHERE NOT CALLED OUT, CONTACT ENGINEER OR USE HEAVIEST HANGER FOR NUMBER OF PLYS IN BEAM BEING SUPPORTED. WHERE BEAMS ARE BEING SUPPORTED BY TRUSSES, TRUSS MFCR TO PROVIDE BLOCKING AS REQ'D FOR CONNECTION. TRUSS TO TRUSS HANGERS ARE BY TRUSS MFCR.

FRAMING LEGEND

- FOUNDATION / LOAD BEARING WALL BELOW
- LOAD BEARING WALL
- BRACED WALL
- HEADER
- BEAM (STEEL)
- WOOD BEAM/ GIRDER TRUSS
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- OVERBUILD

ROOF FRAMING PLAN NOTES:

1. PRE-ENGINEERED ROOF TRUSSES @ 24" OC, TOP CHORD TO MATCH ROOF PROFILE, RE: ARCH
2. 2x4 OUTRIGGERS @ 24" OC, HOLD GABLE END TRUSS DOWN & PROVIDE FULL DEPTH BLOCKING BTWN OUTRIGGERS
3. 2x10 ROOF RAFTERS @ 16" OC ATTACH TO LEDGER W/ SIMPSON LUS210 SLOPED HANGER
4. 2x10 LEDGER ATTACHED W/ (2) 1/4"x SIMPSON SDS WOOD SCREW @ 16" OC (2" MIN EDGE DISTANCE)
5. 5/8" THICK ROOF SHEATHING RE: GENERAL NOTES ADDITIONAL FASTENING REQD
6. 2x8 ROOF RAFTERS @ 16" OC
7. STEP IN TOP PLATE OF WALL, RE: TYPICAL DETAILS
8. TOP PLATE INTERRUPTED BY HEADER, RE: TYPICAL DETAIL 1/S060 FOR STRAP INFO & REQ.
9. PRE-ENGINEERED MONO SLOPED ROOF TRUSS @ 24" OC. CEILING VAULTED BELOW. RE: PLAN FOR TRUSS BEARING ELEVATION

CWA collins|webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

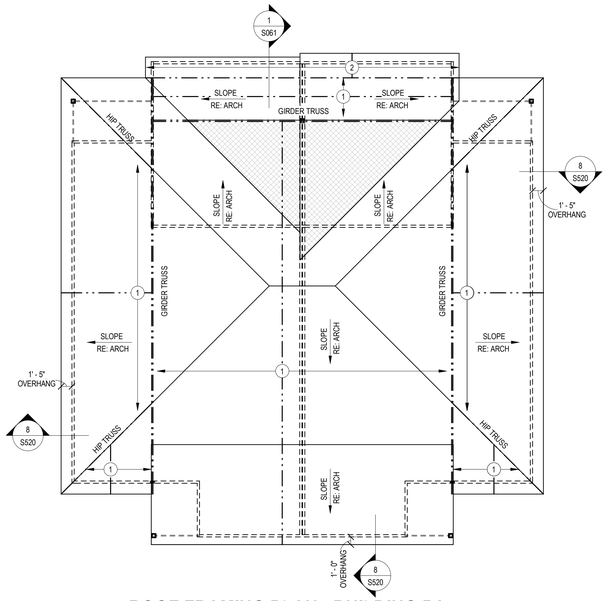
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 B1-1

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

ROOF FRAMING PLAN - BUILDING B1

8/24/2023 12:02:56 PM

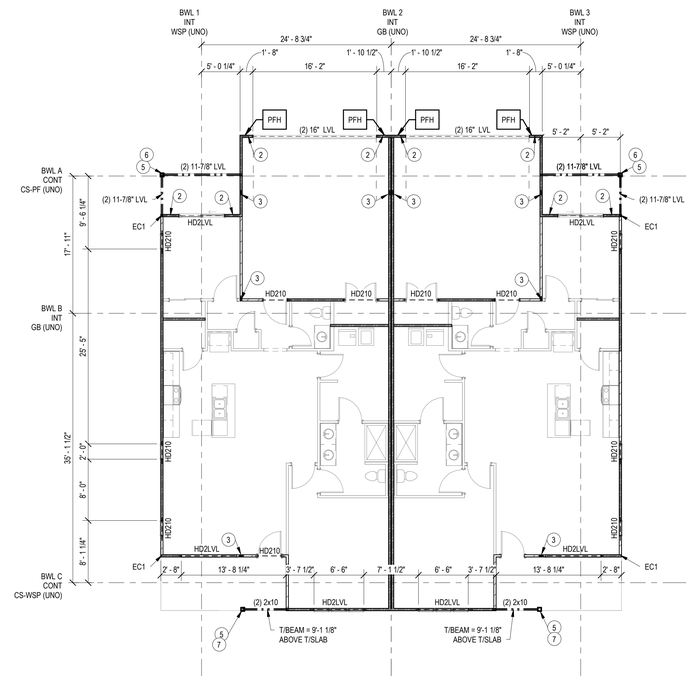


3 ROOF FRAMING PLAN - BUILDING B2

1/8" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. PRE-ENGINEERED ROOF TRUSSES @ 24" OC, TOP CHORD TO MATCH ROOF PROFILE, RE: ARCH
2. 2x4 OUTRIGGERS @ 24" OC, HOLD GABLE END TRUSS DOWN & PROVIDE FULL DEPTH BLOCKING BTWN OUTRIGGERS
3. 2x10 ROOF RAFTERS @ 16" OC ATTACH TO LEDGER W/ SIMPSON LUS210 SLOPED HANGER
4. 2x10 LEDGER ATTACHED W/ (2) 1/4"x SIMPSON SDS WOOD SCREW @ 16" OC (2" MIN EDGE DISTANCE)
5. 5/8" THICK ROOF SHEATHING RE: GENERAL NOTES ADDITIONAL FASTENING REQ'D
6. 2x8 ROOF RAFTERS @ 16" OC
7. STEP IN TOP PLATE OF WALL, RE: TYPICAL DETAILS
8. TOP PLATE INTERRUPTED BY HEADER, RE: TYPICAL DETAIL 1/S060 FOR STRAP INFO & REQ.
9. PRE-ENGINEERED MONO SLOPED ROOF TRUSS @ 24" OC. CEILING VAULTED BELOW. RE: PLAN FOR TRUSS BEARING ELEVATION

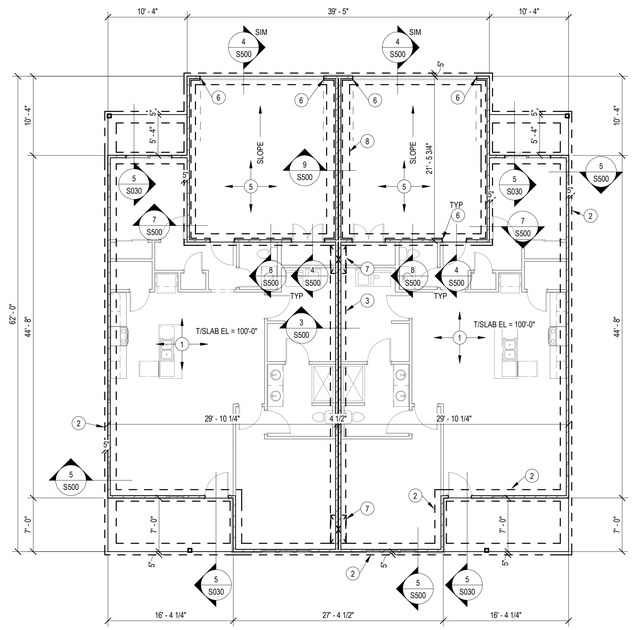


WALL FRAMING PLAN NOTES:

1. 2x6 LOAD BEARING STUD FRAMED WALL @ 16" OC
2. EXTEND HDR CONTINUOUS TO THE CORNER FOR BRACED WALL CONNECTION
3. (6) 2x4 STUD PACK BELOW LOAD BEARING ELEMENT ABOVE
4. 4x4 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU44Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
5. 6x6 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU66Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
6. SIMPSON ECCL POST CAP
7. SIMPSON ECCQ POST CAP

2 FIRST FLOOR WALL PLAN - BUILDING B2

1/8" = 1'-0"



FOUNDATION PLAN NOTES:

1. 4" CONCRETE SLAB ON GRADE. RE:GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
2. 18" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (2) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
3. 24" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (3) #4 CONT AND #3 TRANS @ 24" OC
4. 24" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (3) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
5. 5" CONCRETE GARAGE SLAB ON GRADE. RE: GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
6. RECESS/STOP CONC CURB @ DOOR OPENINGS
7. STEP FOOTING, RE: TYPICAL DETAILS
8. 36" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (4) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
9. 16" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (2) #4 CONT AND #3 TRANS @ 24" OC
10. 3'-0" x 3'-0" x 1'-2" THICK SPREAD FTG REINF. W/ (6) #4 OC EA WAY. LOCATE BELOW STUD PACK
11. POUR TRENCH FOOTING OVER TOP OF FOOTING TO FULLY ENCAPSULATE COLUMN BASEPLATE BEND REINF. AROUND COLUMN AS REQ.

1 FOUNDATION PLAN - BUILDING B2

1/8" = 1'-0"

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTRURAL GENERAL NOTES AND S0xx FOR TYPICAL STRUCTURAL DETAILS. REVIEW NOTES & DETAILS OR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x4 @ 16" OC, UNO. AT LOCATIONS WHERE STONE/MASONRY IS TO BE INSTALLED ON EXTERIOR WALLS STUD FRAMING SHALL BE (2) 2x4 @ 16" OC, UNO.

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD / EDGE OF SLAB. DIMENSIONS TO INTERIOR WALLS ARE TO CENTERLINE OF INTERIOR WALL.

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING. INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQ'D. TRUSSES SHALL BEAR WITHIN 5"

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX". RE: TYP DTL. ALL HEADERS IN STRUCTURAL WALLS WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6 (MAXIMUM 10FT OPENING).

G. REFER TO SHEET S062 FOR BRACED WALL REQUIREMENTS.

H. TOP OF SLAB ELEVATION = 100'-0", UNO.
BOTTOM OF SOFFIT ELEVATION = 109'-1 1/8"
RE: ARCH AND CIVIL FOR DATUM ELEVATION.

J. PROVIDE 2x BLOCKING @ MIDHEIGHT (4'-0" MAX) AT ALL STUD WALLS NOT SHEATHED ON BOTH SIDES WITH EITHER GYP OR OSB.

K. ROOF TRUSS BEARING ELEVATION = 9'-1 1/8" ABOVE TOP OF SLAB, UNO. RE: ARCH ELEVATIONS

L. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

M. PLANS SHOWN ARE FOR PROTOTYPE BUILDING. RE: ARCH AND SITE PLAN FOR LOCATIONS, VARIATIONS, GRADING CONDITIONS, ETC.

N. PROVIDE (6) STUDS MIN BELOW ALL BEAMS AND GIRDER TRUSSES, UNO.

O. ALL HORIZONTAL REINF. SHALL BE CONTINUOUS THROUGH FOUNDATION STEPS.

P. ALL MULTI-PLY ENGINEERING LUMBER BEAMS ARE DESIGNATED BY NUMBER PLYS AND DEPTH (EX. (3) 14" LVL). THE PLYS SHALL BE 1.75" WIDTH UNO AND STRENGTH SHALL BE PER THE GENERAL NOTES. BEAMS SHALL BE FASTENED TOGETHER PER THE TYPICAL DETAILS.

Q. HANGERS ARE DENOTED ON PLAN AS "Hxx" REFER TO SCHEDULE ON S060 FOR REQ'S. WHERE NOT CALLED OUT, CONTACT ENGINEER OR USE HEAVIEST HANGER FOR NUMBER OF PLYS IN BEAM BEING SUPPORTED. WHERE BEAMS ARE BEING SUPPORTED BY TRUSSES, TRUSS MFCR TO PROVIDE BLOCKING AS REQ'D FOR CONNECTION. TRUSS TO TRUSS HANGERS ARE BY TRUSS MFCR.

FRAMING LEGEND

- FOUNDATION / LOAD BEARING WALL BELOW
- LOAD BEARING WALL
- BRACED WALL
- HEADER
- BEAM (STEEL)
- WOOD BEAM/ GIRDER TRUSS
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- OVERBUILD

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

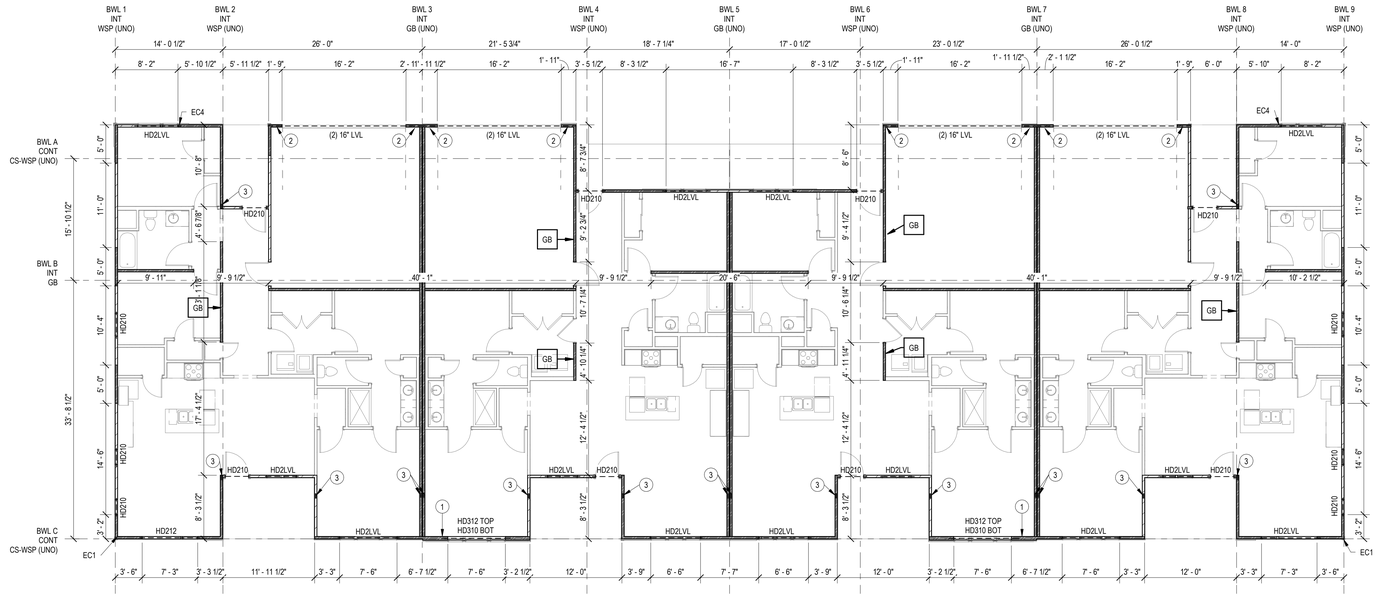
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 B2

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

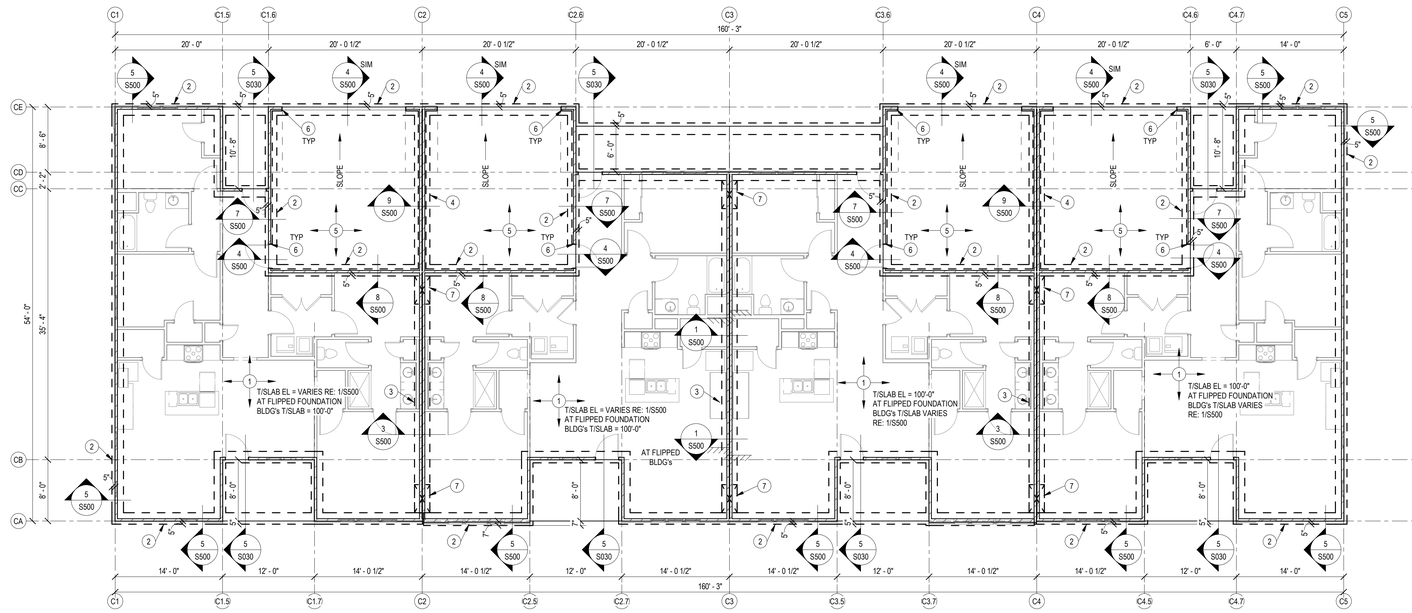
FOUNDATION & ROOF FRAMING PLANS - BUILDING B2

8/24/2023 12:03:03 PM



2 FIRST FLOOR WALL PLAN - BUILDING C

1/8" = 1'-0"



1 FOUNDATION PLAN - BUILDING C

1/8" = 1'-0"

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTRURAL GENERAL NOTES AND S0xx FOR TYPICAL STRUCTURAL DETAILS. REVIEW NOTES & DETAILS OR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x4 @ 16" OC, UNO. AT LOCATIONS WHERE STONE/MASONRY IS TO BE INSTALLED ON EXTERIOR WALLS STUD FRAMING SHALL BE (2) 2x4 @ 16" OC, UNO.

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD / EDGE OF SLAB. DIMENSIONS TO INTERIOR WALLS ARE TO CENTERLINE OF INTERIOR WALL.

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING. INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQ'D. TRUSSES SHALL BEAR WITHIN 5"

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX". RE: TYP DTL. ALL HEADERS IN STRUCTURAL WALLS WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6 (MAXIMUM 10FT OPENING).

G. REFER TO SHEET S062 FOR BRACED WALL REQUIREMENTS.

H. TOP OF SLAB ELEVATION = 100'-0", UNO.
BOTTOM OF SOFFIT ELEVATION = 109'-1 1/8"
RE: ARCH AND CIVIL FOR DATUM ELEVATION.

J. PROVIDE 2x BLOCKING @ MIDHEIGHT (4'-0" MAX) AT ALL STUD WALLS NOT SHEATHED ON BOTH SIDES WITH EITHER GYP OR OSB.

K. ROOF TRUSS BEARING ELEVATION = 9'-1 1/8" ABOVE TOP OF SLAB, UNO. RE: ARCH ELEVATIONS

L. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

M. PLANS SHOWN ARE FOR PROTOTYPE BUILDING. RE: ARCH AND SITE PLAN FOR LOCATIONS, VARIATIONS, GRADING CONDITIONS, ETC.

N. PROVIDE (6) STUDS MIN BELOW ALL BEAMS AND GIRDER TRUSSES, UNO.

O. ALL HORIZONTAL REINF. SHALL BE CONTINUOUS THROUGH FOUNDATION STEPS.

P. ALL MULTI-PLY ENGINEERING LUMBER BEAMS ARE DESIGNATED BY NUMBER PLYS AND DEPTH (EX. (3) 14" LVL). THE PLYS SHALL BE 1.75" WIDTH UNO AND STRENGTH SHALL BE PER THE GENERAL NOTES. BEAMS SHALL BE FASTENED TOGETHER PER THE TYPICAL DETAILS.

Q. HANGERS ARE DENOTED ON PLAN AS "Hxx" REFER TO SCHEDULE ON S060 FOR REQ'S. WHERE NOT CALLED OUT, CONTACT ENGINEER OR USE HEAVIEST HANGER FOR NUMBER OF PLYS IN BEAM BEING SUPPORTED. WHERE BEAMS ARE BEING SUPPORTED BY TRUSSES, TRUSS MFCR TO PROVIDE BLOCKING AS REQ'D FOR CONNECTION. TRUSS TO TRUSS HANGERS ARE BY TRUSS MFCR.

WALL FRAMING PLAN NOTES:

1. 2x6 LOAD BEARING STUD FRAMED WALL @ 16" OC
2. EXTEND HDR CONTINUOUS TO THE CORNER FOR BRACED WALL CONNECTION
3. (6) 2x4 STUD PACK BELOW LOAD BEARING ELEMENT ABOVE
4. 4x4 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU44Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
5. 6x6 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU66Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
6. SIMPSON ECCL POST CAP
7. SIMPSON ECCQ POST CAP

FRAMING LEGEND

- FOUNDATION / LOAD BEARING WALL BELOW
- LOAD BEARING WALL
- BRACED WALL
- HEADER
- BEAM (STEEL)
- WOOD BEAM/ GIRDER TRUSS
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- OVERBUILD

FOUNDATION PLAN NOTES:

1. 4" CONCRETE SLAB ON GRADE. RE:GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
2. 18" WIDE x 2'-10" DEEP TRENCH FOOTING. REINF W/ (2) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
3. 24" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (3) #4 CONT AND #3 TRANS @ 24" OC
4. 24" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (3) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
5. 5" CONCRETE GARAGE SLAB ON GRADE. RE: GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
6. RECESS/STOP CONC CURB @ DOOR OPENINGS
7. STEP FOOTING, RE: TYPICAL DETAILS
8. 36" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (4) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
9. 16" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (2) #4 CONT AND #3 TRANS @ 24" OC
10. 3'-0" x 3'-0" x 1'-2" THICK SPREAD FTG REINF. W/ (6) #4 OC EA WAY. LOCATE BELOW STUD PACK
11. POUR TRENCH FOOTING OVER TOP OF FOOTING TO FULLY ENCAPSULATE COLUMN BASEPLATE BEND REINF. AROUND COLUMN AS REQ.

CONTRACTOR NOTE FOR FLIPPED FOUNDATION BLDG's:
AT BLDG's **1, 5, 6, 8, 9, 11, 14, 16, 17, 18, 26, 27, 28,** AND **29** THE FOUNDATION STEPS IN THE OPPOSITE DIRECTION. COORDINATE AND REFERENCE CIVIL DRAWINGS FOR BUILDING AND T/SLAB ELEVATIONS PRIOR TO WORK COMMENCING.

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

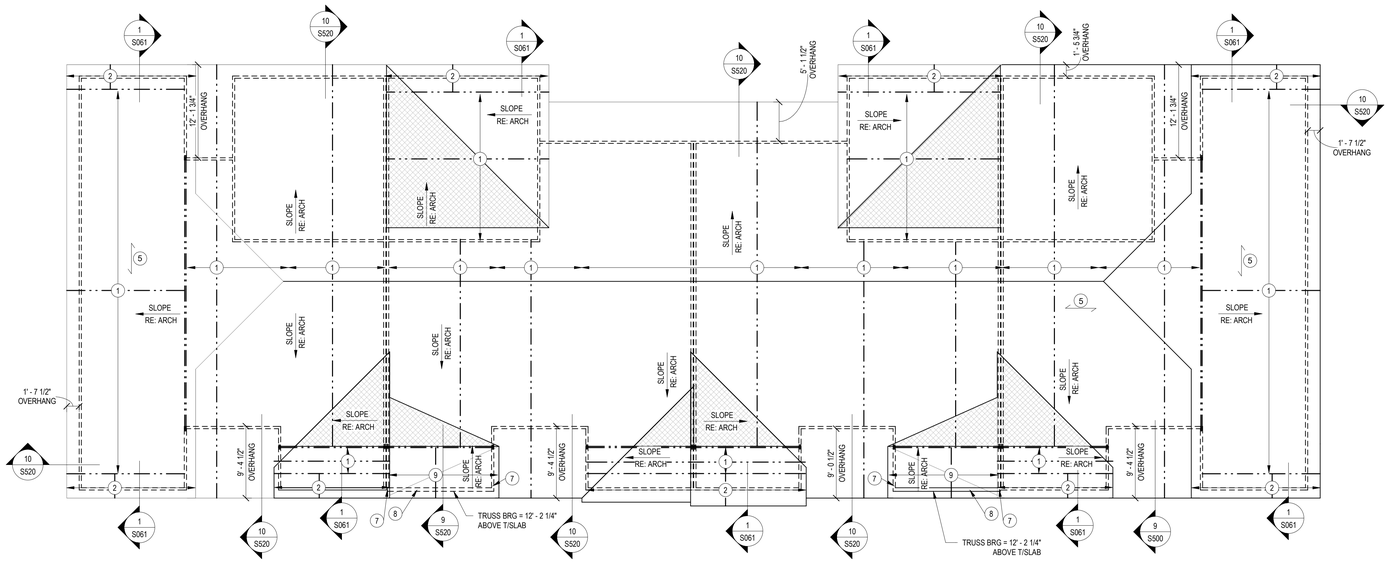
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 C

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

FOUNDATION & WALL PLANS - BUILDING C

8/24/2023 12:03:08 PM



1 ROOF FRAMING PLAN - BUILDING C

1/8" = 1'-0"

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTRURAL GENERAL NOTES AND S0xx FOR TYPICAL STRUCTURAL DETAILS. REVIEW NOTES & DETAILS OR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x4 @ 16" OC, UNO. AT LOCATIONS WHERE STONE/MASONRY IS TO BE INSTALLED ON EXTERIOR WALLS STUD FRAMING SHALL BE (2) 2x4 @ 16" OC, UNO.

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD / EDGE OF SLAB. DIMENSIONS TO INTERIOR WALLS ARE TO CENTERLINE OF INTERIOR WALL.

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING. INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQ'D. TRUSSES SHALL BEAR WITHIN 5"

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX". RE: TYP DTL. ALL HEADERS IN STRUCTURAL WALLS WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6 (MAXIMUM 10FT OPENING).

G. REFER TO SHEET S062 FOR BRACED WALL REQUIREMENTS.

H. TOP OF SLAB ELEVATION = 100'-0", UNO.
BOTTOM OF SOFFIT ELEVATION = 109'-1 1/8"
RE: ARCH AND CIVIL FOR DATUM ELEVATION.

J. PROVIDE 2x BLOCKING @ MIDHEIGHT (4'-0" MAX) AT ALL STUD WALLS NOT SHEATHED ON BOTH SIDES WITH EITHER GYP OR OSB.

K. ROOF TRUSS BEARING ELEVATION = 9'-1 1/8" ABOVE TOP OF SLAB, UNO. RE: ARCH ELEVATIONS

L. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

M. PLANS SHOWN ARE FOR PROTOTYPE BUILDING. RE: ARCH AND SITE PLAN FOR LOCATIONS, VARIATIONS, GRADING CONDITIONS, ETC.

N. PROVIDE (6) STUDS MIN BELOW ALL BEAMS AND GIRDER TRUSSES, UNO.

O. ALL HORIZONTAL REINF. SHALL BE CONTINUOUS THROUGH FOUNDATION STEPS.

P. ALL MULTI-PLY ENGINEERING LUMBER BEAMS ARE DESIGNATED BY NUMBER PLYS AND DEPTH (EX. (3) 14" LVL). THE PLYS SHALL BE 1.75" WIDTH UNO AND STRENGTH SHALL BE PER THE GENERAL NOTES. BEAMS SHALL BE FASTENED TOGETHER PER THE TYPICAL DETAILS.

Q. HANGERS ARE DENOTED ON PLAN AS "Hxx" REFER TO SCHEDULE ON S060 FOR REQ'S. WHERE NOT CALLED OUT, CONTACT ENGINEER OR USE HEAVIEST HANGER FOR NUMBER OF PLYS IN BEAM BEING SUPPORTED. WHERE BEAMS ARE BEING SUPPORTED BY TRUSSES, TRUSS MFCR TO PROVIDE BLOCKING AS REQ'D FOR CONNECTION. TRUSS TO TRUSS HANGERS ARE BY TRUSS MFCR.

FRAMING LEGEND

- FOUNDATION / LOAD BEARING WALL BELOW
- LOAD BEARING WALL
- BRACED WALL
- HEADER
- BEAM (STEEL)
- WOOD BEAM/ GIRDER TRUSS
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- OVERBUILD

ROOF FRAMING PLAN NOTES:

1. PRE-ENGINEERED ROOF TRUSSES @ 24" OC, TOP CHORD TO MATCH ROOF PROFILE, RE: ARCH
2. 2x4 OUTRIGGERS @ 24" OC, HOLD GABLE END TRUSS DOWN & PROVIDE FULL DEPTH BLOCKING BTWN OUTRIGGERS
3. 2x10 ROOF RAFTERS @ 16" OC ATTACH TO LEDGER W/ SIMPSON LUS210 SLOPED HANGER
4. 2x10 LEDGER ATTACHED W/ (2) 1/4"ø SIMPSON SDS WOOD SCREW @ 16" OC (2" MIN EDGE DISTANCE)
5. 5/8" THICK ROOF SHEATHING RE: GENERAL NOTES ADDITIONAL FASTENING REQD
6. 2x8 ROOF RAFTERS @ 16" OC
7. STEP IN TOP PLATE OF WALL, RE: TYPICAL DETAILS
8. TOP PLATE INTERRUPTED BY HEADER, RE: TYPICAL DETAIL 1/S060 FOR STRAP INFO & REQ.
9. PRE-ENGINEERED MONO SLOPED ROOF TRUSS @ 24" OC. CEILING VAULTED BELOW. RE: PLAN FOR TRUSS BEARING ELEVATION

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

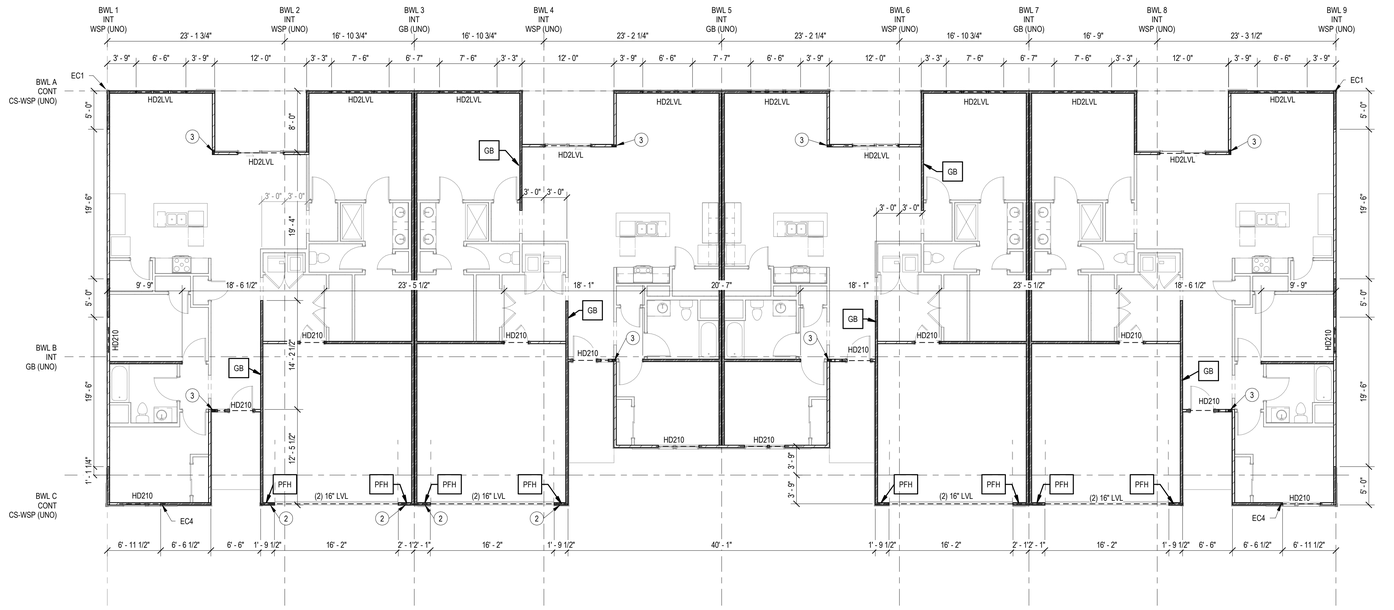
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 C-1

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

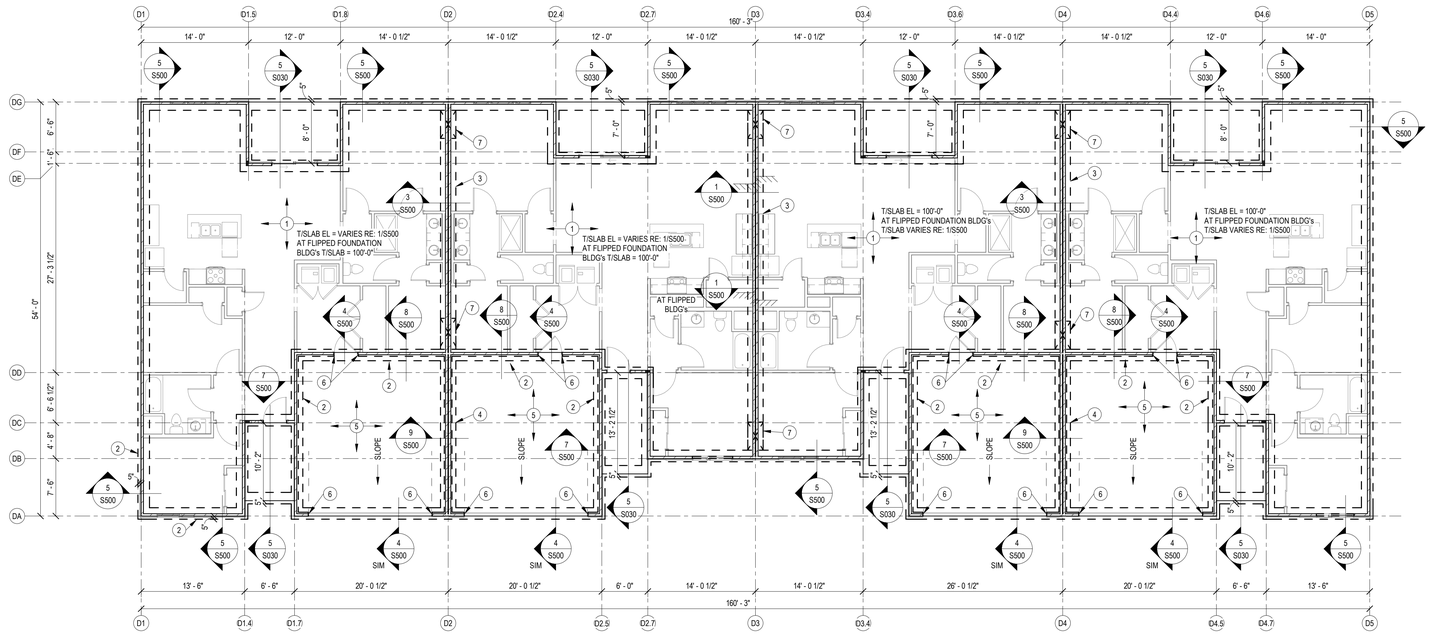
ROOF FRAMING PLAN - BUILDING C

8/24/2023 12:03:12 PM



2 FIRST FLOOR WALL PLAN - BUILDING D

1/8" = 1'-0"



1 FOUNDATION PLAN - BUILDING D

1/8" = 1'-0"

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTRURAL GENERAL NOTES AND S0xx FOR TYPICAL STRUCTURAL DETAILS. REVIEW NOTES & DETAILS OR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x4 @ 16" OC, UNO. AT LOCATIONS WHERE STONE/MASONRY IS TO BE INSTALLED ON EXTERIOR WALLS STUD FRAMING SHALL BE (2) 2x4 @ 16" OC, UNO.

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD / EDGE OF SLAB. DIMENSIONS TO INTERIOR WALLS ARE TO CENTERLINE OF INTERIOR WALL.

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING. INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQ'D. TRUSSES SHALL BEAR WITHIN 5"

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX". RE: TYP DTL. ALL HEADERS IN STRUCTURAL WALLS WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6 (MAXIMUM 10FT OPENING).

G. REFER TO SHEET S062 FOR BRACED WALL REQUIREMENTS.

H. TOP OF SLAB ELEVATION = 100'-0", UNO.
BOTTOM OF SOFFIT ELEVATION = 109'-1 1/8"
RE: ARCH AND CIVIL FOR DATUM ELEVATION.

J. PROVIDE 2x BLOCKING @ MIDHEIGHT (4'-0" MAX) AT ALL STUD WALLS NOT SHEATHED ON BOTH SIDES WITH EITHER GYP OR OSB.

K. ROOF TRUSS BEARING ELEVATION = 9'-1 1/8" ABOVE TOP OF SLAB, UNO. RE: ARCH ELEVATIONS

L. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

M. PLANS SHOWN ARE FOR PROTOTYPE BUILDING. RE: ARCH AND SITE PLAN FOR LOCATIONS, VARIATIONS, GRADING CONDITIONS, ETC.

N. PROVIDE (6) STUDS MIN BELOW ALL BEAMS AND GIRDER TRUSSES, UNO.

O. ALL HORIZONTAL REINF. SHALL BE CONTINUOUS THROUGH FOUNDATION STEPS.

P. ALL MULTI-PLY ENGINEERING LUMBER BEAMS ARE DESIGNATED BY NUMBER PLYS AND DEPTH (EX. (3) 14" LVL). THE PLYS SHALL BE 1.75" WIDTH UNO AND STRENGTH SHALL BE PER THE GENERAL NOTES. BEAMS SHALL BE FASTENED TOGETHER PER THE TYPICAL DETAILS.

Q. HANGERS ARE DENOTED ON PLAN AS "Hxx" REFER TO SCHEDULE ON S060 FOR REQS. WHERE NOT CALLED OUT, CONTACT ENGINEER OR USE HEAVIEST HANGER FOR NUMBER OF PLYS IN BEAM BEING SUPPORTED. WHERE BEAMS ARE BEING SUPPORTED BY TRUSSES, TRUSS MFCR TO PROVIDE BLOCKING AS REQ'D FOR CONNECTION. TRUSS TO TRUSS HANGERS ARE BY TRUSS MFCR.

WALL FRAMING PLAN NOTES:

1. 2x6 LOAD BEARING STUD FRAMED WALL @ 16" OC
2. EXTEND HDR CONTINUOUS TO THE CORNER FOR BRACED WALL CONNECTION
3. (6) 2x4 STUD PACK BELOW LOAD BEARING ELEMENT ABOVE
4. 4x4 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU44Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
5. 6x6 TREATED WOOD POST CONNECT TO FOUNDATION W/ SIMPSON ABU66Z POST BASE INSTALLED W/ 5/8 Ø SIMPSON TITEN HD
6. SIMPSON ECCL POST CAP
7. SIMPSON ECCQ POST CAP

FRAMING LEGEND

- FOUNDATION / LOAD BEARING WALL BELOW
- LOAD BEARING WALL
- BRACED WALL
- HEADER
- BEAM (STEEL)
- WOOD BEAM/ GIRDER TRUSS
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- OVERBUILD

FOUNDATION PLAN NOTES:

1. 4" CONCRETE SLAB ON GRADE. RE:GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
2. 18" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (2) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
3. 24" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (3) #4 CONT AND #3 TRANS @ 24" OC
4. 24" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (3) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
5. 5" CONCRETE GARAGE SLAB ON GRADE. RE: GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
6. RECESS/STOP CONC CURB @ DOOR OPENINGS
7. STEP FOOTING, RE: TYPICAL DETAILS
8. 36" WIDE x 2'-10" DEEP TRENCH FOOTING, REINF W/ (4) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
9. 16" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (2) #4 CONT AND #3 TRANS @ 24" OC
10. 3'-0" x 3'-0" x 1'-2" THICK SPREAD FTG REINF. W/ (6) #4 OC EA WAY. LOCATE BELOW STUD PACK
11. POUR TRENCH FOOTING OVER TOP OF FOOTING TO FULLY ENCAPSULATE COLUMN BASEPLATE BEND REINF. AROUND COLUMN AS REQ.

CONTRACTOR NOTE FOR FLIPPED FOUNDATION BLDG's:
AT BLDG's **1, 5, 6, 8, 9, 11, 14, 16, 17, 18, 26, 27, 28,** AND **29** THE FOUNDATION STEPS IN THE OPPOSITE DIRECTION. COORDINATE AND REFERENCE CIVIL DRAWINGS FOR BUILDING AND T/SLAB ELEVATIONS PRIOR TO WORK COMMENCING.

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

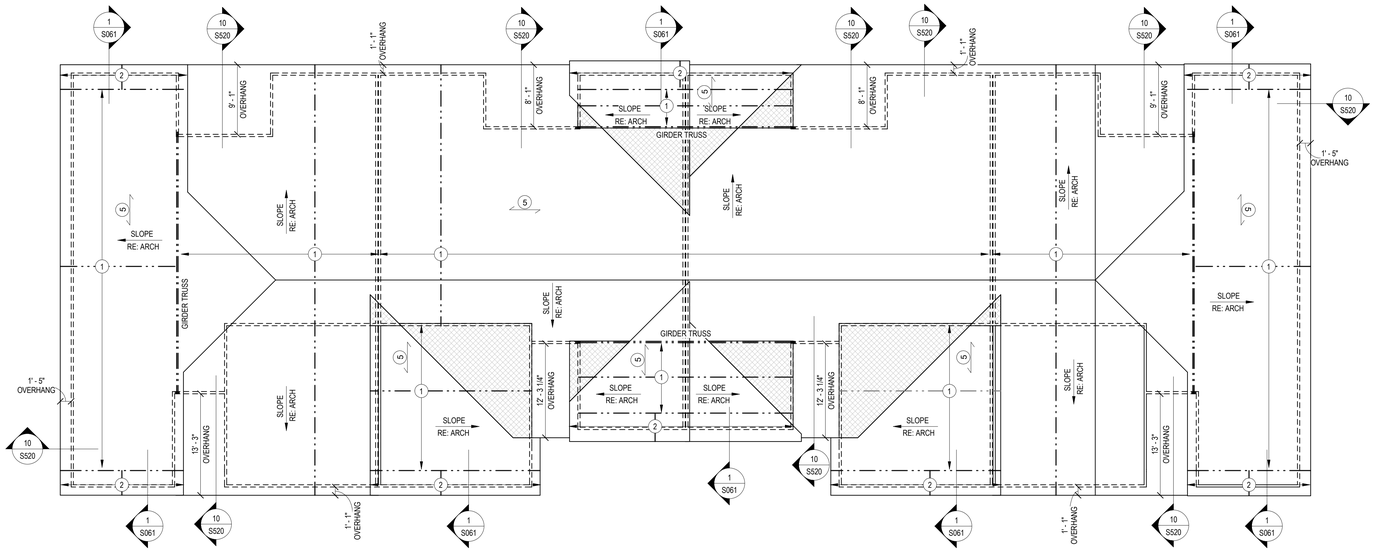
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 D

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

FOUNDATION & WALL PLAN - BUILDING D

8/24/2023 12:03:17 PM



1 ROOF FRAMING PLAN - BUILDING D

1/8" = 1'-0"

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTRURAL GENERAL NOTES AND S0xx FOR TYPICAL STRUCTURAL DETAILS. REVIEW NOTES & DETAILS OR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x4 @ 16" OC, UNO. AT LOCATIONS WHERE STONE/MASONRY IS TO BE INSTALLED ON EXTERIOR WALLS STUD FRAMING SHALL BE (2) 2x4 @ 16" OC, UNO.

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD / EDGE OF SLAB. DIMENSIONS TO INTERIOR WALLS ARE TO CENTERLINE OF INTERIOR WALL.

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING. INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQ'D. TRUSSES SHALL BEAR WITHIN 5"

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX". RE: TYP DTL. ALL HEADERS IN STRUCTURAL WALLS WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6 (MAXIMUM 10FT OPENING).

G. REFER TO SHEET S062 FOR BRACED WALL REQUIREMENTS.

H. TOP OF SLAB ELEVATION = 100'-0", UNO.
BOTTOM OF SOFFIT ELEVATION = 109'-1 1/8"
RE: ARCH AND CIVIL FOR DATUM ELEVATION.

J. PROVIDE 2x BLOCKING @ MIDHEIGHT (4'-0" MAX) AT ALL STUD WALLS NOT SHEATHED ON BOTH SIDES WITH EITHER GYP OR OSB.

K. ROOF TRUSS BEARING ELEVATION = 9'-1 1/8" ABOVE TOP OF SLAB, UNO. RE: ARCH ELEVATIONS

L. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

M. PLANS SHOWN ARE FOR PROTOTYPE BUILDING. RE: ARCH AND SITE PLAN FOR LOCATIONS, VARIATIONS, GRADING CONDITIONS, ETC.

N. PROVIDE (6) STUDS MIN BELOW ALL BEAMS AND GIRDER TRUSSES, UNO.

O. ALL HORIZONTAL REINF. SHALL BE CONTINUOUS THROUGH FOUNDATION STEPS.

P. ALL MULTI-PLY ENGINEERING LUMBER BEAMS ARE DESIGNATED BY NUMBER PLYS AND DEPTH (EX. (3) 14" LVL). THE PLYS SHALL BE 1.75" WIDTH UNO AND STRENGTH SHALL BE PER THE GENERAL NOTES. BEAMS SHALL BE FASTENED TOGETHER PER THE TYPICAL DETAILS.

Q. HANGERS ARE DENOTED ON PLAN AS "Hxx" REFER TO SCHEDULE ON S060 FOR REQ'S. WHERE NOT CALLED OUT, CONTACT ENGINEER OR USE HEAVIEST HANGER FOR NUMBER OF PLYS IN BEAM BEING SUPPORTED. WHERE BEAMS ARE BEING SUPPORTED BY TRUSSES, TRUSS MFCR TO PROVIDE BLOCKING AS REQ'D FOR CONNECTION. TRUSS TO TRUSS HANGERS ARE BY TRUSS MFCR.

FRAMING LEGEND

- FOUNDATION / LOAD BEARING WALL BELOW
- LOAD BEARING WALL
- BRACED WALL
- HEADER
- BEAM (STEEL)
- WOOD BEAM/ GIRDER TRUSS
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- OVERBUILD

ROOF FRAMING PLAN NOTES:

1. PRE-ENGINEERED ROOF TRUSSES @ 24" OC, TOP CHORD TO MATCH ROOF PROFILE, RE: ARCH
2. 2x4 OUTRIGGERS @ 24" OC, HOLD GABLE END TRUSS DOWN & PROVIDE FULL DEPTH BLOCKING BTWN OUTRIGGERS
3. 2x10 ROOF RAFTERS @ 16" OC ATTACH TO LEDGER W/ SIMPSON LUS210 SLOPED HANGER
4. 2x10 LEDGER ATTACHED W/ (2) 1/4"x SIMPSON SDS WOOD SCREW @ 16" OC (2" MIN EDGE DISTANCE)
5. 5/8" THICK ROOF SHEATHING RE: GENERAL NOTES ADDITIONAL FASTENING REQD
6. 2x8 ROOF RAFTERS @ 16" OC
7. STEP IN TOP PLATE OF WALL, RE: TYPICAL DETAILS
8. TOP PLATE INTERRUPTED BY HEADER, RE: TYPICAL DETAIL 1/S060 FOR STRAP INFO & REQ.
9. PRE-ENGINEERED MONO SLOPED ROOF TRUSS @ 24" OC. CEILING VAULTED BELOW. RE: PLAN FOR TRUSS BEARING ELEVATION

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 D-1

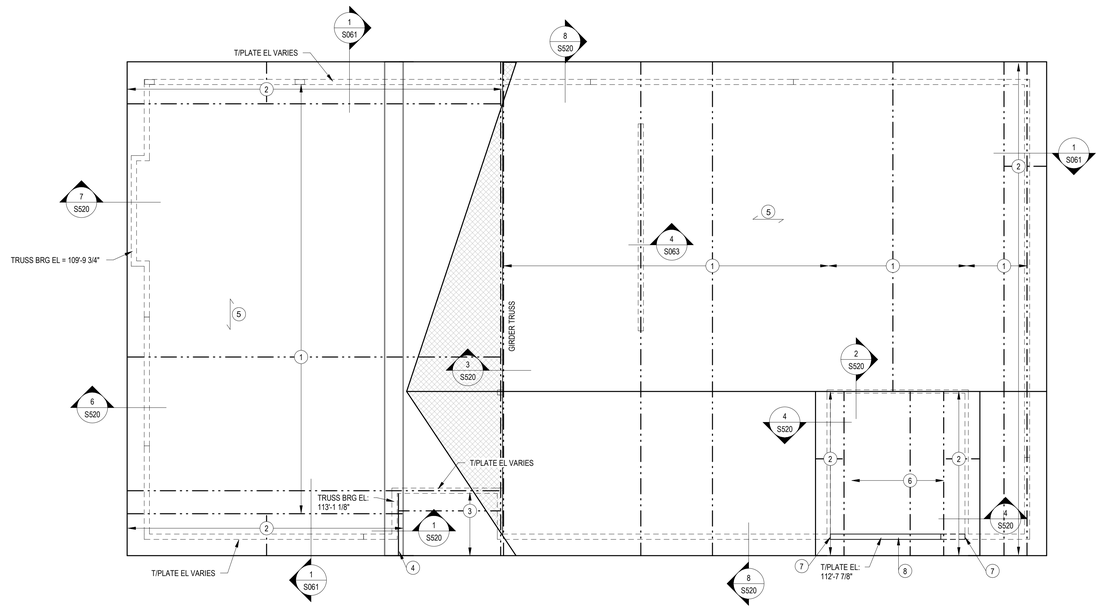
ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

ROOF FRAMING PLAN - BUILDING D

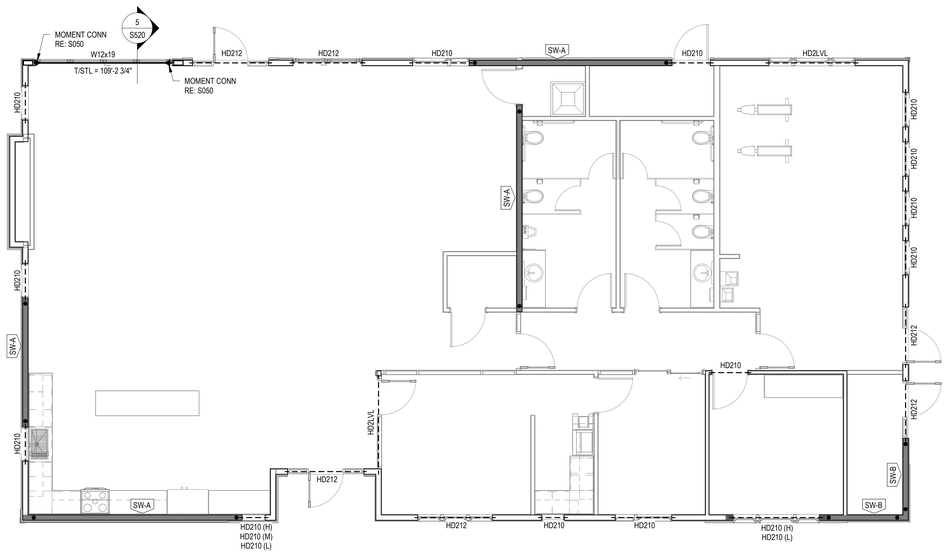
8/24/2023 12:03:20 PM

SCHEDULE - COLUMN	
TYPE MARK	TYPE
C10.5.6	HSS10x5x3/8
PSL 5.25	PSL 5-1/4" x 5-1/4"

SCHEDULE - SPREAD FOOTING				
TYPE MARK	LENGTH	WIDTH	THICKNESS	REINF
F4.0	4' - 0"	4' - 0"	1' - 2"	(5) #5 EA WAY TOP & BOT
F3.0-E	3' - 0"	3' - 0"	1' - 10"	(4) #5 EA WAY TOP & BOT

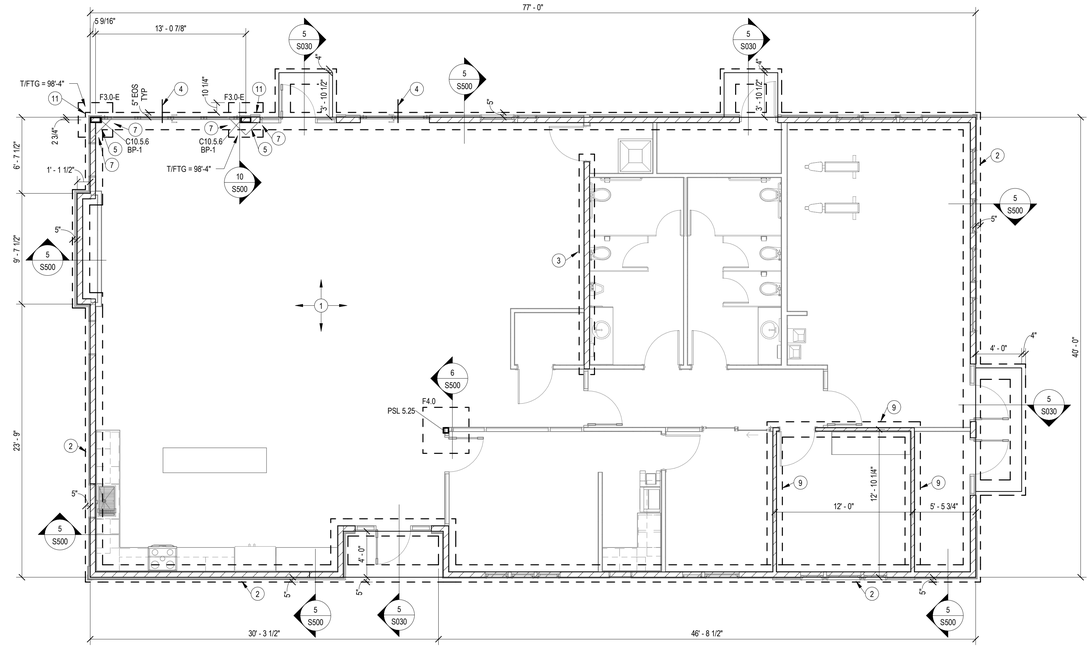


3 ROOF FRAMING PLAN - CLUBHOUSE
3/16" = 1'-0"



CONTRACTOR NOTE: AT EXTERIOR WALLS THAT HAVE STONE/MASONRY FACADE AND ARE TALLER THAN 10'-0" PROVIDE (2) 2x6 @ 16" OC.

2 FIRST FLOOR WALL FRAMING PLAN - CLUBHOUSE
3/16" = 1'-0"



1 FOUNDATION PLAN - CLUBHOUSE
3/16" = 1'-0"

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTURAL GENERAL NOTES. REVIEW NOTES & DETAILS FOR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTURAL WALLS ARE 2x6 @ 16" OC UNO. BUILDING CORNER ZONES (4'-6" FROM EDGE OF BUILDING) SHALL BE 2x6 @ 12" OC

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD/ EDGE OF SLAB

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILING, INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQD

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX" RE: TYP DETAIL. ALL HEADERS IN STRUCTURAL WALL WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6

G. "SW-X" DENOTES WOOD SHEAR WALLS, RE: S060 FOR SHEAR WALL SCHEDULE

H. TOP OF SLAB ELEVATION = 100'-0" UNO RE: ARCH & CIVIL FOR DATUM ELEVATION

J. ROOF TRUSS BRG = 10'-1 1/8" ABOVE TOP OF SLAB, UNO RE: ARCH

K. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE. DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

L. ALL HORIZONTAL REINF SHALL BE CONT THROUGH FOUNDATION STEPS

M. SPREAD FOOTINGS DENOTED ON PLAN BY "Fx.x". REFER TO SCHEDULE ON THIS SHEET FOR SIZE AND REINFORCING.

N. PROVIDE BLOCKOUTS IN SLAB FOR COLUMNS PER TYPICAL DETAIL

O. STEEL COLUMNS ARE DENOTED ON PLAN AS "Cx x". REFER TO SCHEDULE ON THIS SHEET FOR COLUMN SIZE, BASEPLATE TYPE, AND BASEPLATE DIMENSIONS.

P. BASEPLATES ARE DENOTED ON PLAN AS "BP-x". REFER TO SCHEDULE ON S050 FOR BASEPLATE TYPE AND BASEPLATE DIMENSIONS.

Q. ALL GIRDER TRUSSES SHALL BEAR ON A MIN OF (3) 2x6 STUD PACK, UNO

FRAMING LEGEND

- FOUNDATION / WALL BELOW
- LOAD BEARING WALL
- SHEAR WALL
- HEADER
- BEAM (STEEL)
- BUILT UP WOOD BEAM
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST
- TYPE
- HOLDOWN
- OVERBUILD

ROOF FRAMING PLAN NOTES:

1. PRE-ENGINEERED ROOF TRUSSES @ 24" OC, TOP CHORD TO MATCH ROOF PROFILE, RE: ARCH
2. 2x4 OUTRIGGERS @ 24" OC, HOLD GABLE END TRUSS DOWN & PROVIDE FULL DEPTH BLOCKING BTWN OUTRIGGERS
3. 2x10 ROOF RAFTERS @ 16" OC ATTACH TO LEDGER W/ SIMPSON LUS210 SLOPED HANGER
4. 2x10 LEDGER ATTACHED W/ (2) 1/4"x SIMPSON SDS WOOD SCREW @ 16" OC (2" MIN EDGE DISTANCE)
5. 5/8" THICK ROOF SHEATHING RE: GENERAL NOTES ADDITIONAL FASTENING REQD
6. 2x8 ROOF RAFTERS @ 16" OC
7. STEP IN TOP PLATE OF WALL, RE: TYPICAL DETAILS
8. TOP PLATE INTERRUPTED BY HEADER, RE: TYPICAL DETAIL 1\S060 FOR STRAP INFO & REQ.
9. PRE-ENGINEERED MONO SLOPED ROOF TRUSS @ 24" OC. CEILING VAULTED BELOW. RE: PLAN FOR TRUSS BEARING ELEVATION

FOUNDATION PLAN NOTES:

1. 4" CONCRETE SLAB ON GRADE. RE:GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
2. 18" WIDE x 2'-10" DEEP TRENCH FOOTING. REINF W/ (2) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
3. 24" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (3) #4 CONT AND #3 TRANS @ 24" OC
4. 24" WIDE x 2'-10" DEEP TRENCH FOOTING. REINF W/ (3) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
5. 5" CONCRETE GARAGE SLAB ON GRADE. RE: GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
6. RECESS/STOP CONC CURB @ DOOR OPENINGS
7. STEP FOOTING, RE: TYPICAL DETAILS
8. 36" WIDE x 2'-10" DEEP TRENCH FOOTING. REINF W/ (4) #5 CONT TOP AND BOT BARS AND #3 CLOSED TIES @ 24" OC
9. 16" WIDE x 12" DEEP THICKEND SLAB. REINF W/ (2) #4 CONT AND #3 TRANS @ 24" OC
10. 3'-0" x 3'-0" x 1'-2" THICK SPREAD FTG REINF. W/ (6) #4 OC EA WAY. LOCATE BELOW STUD PACK
11. POUR TRENCH FOOTING OVER TOP OF FOOTING TO FULLY ENCAPSULATE COLUMN BASEPLATE BEND REINF. AROUND COLUMN AS REQ.

CWA collins|webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

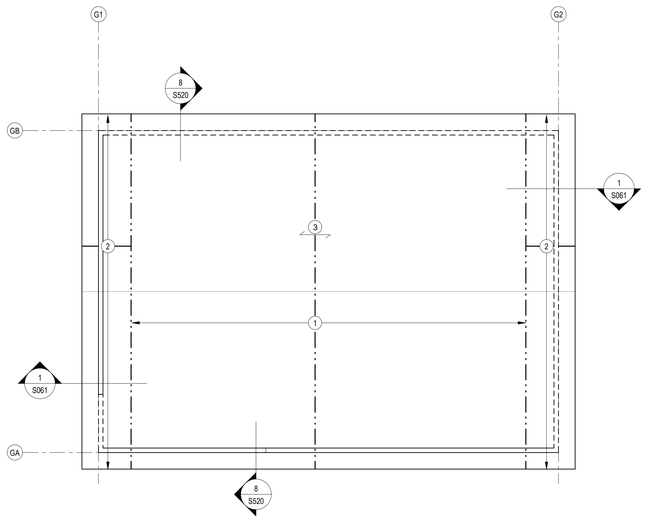
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S101 K

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

FOUNDATION, WALL, AND ROOF FRAMING PLAN - CLUBHOUSE

8/24/2023 12:03:22 PM

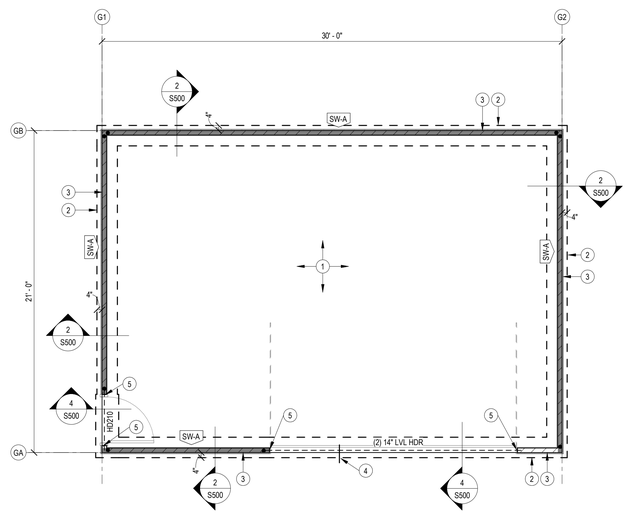


2 ROOF FRAMING PLAN - MAINTENANCE GARAGE

1/4" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. PRE-ENGINEERED ROOF TRUSSES @ 24" OC, TOP CHORD TO MATCH ROOF PROFILE, RE: ARCH
2. 2x4 OUTRIGGERS @ 24" OC, HOLD GABLE END TRUSS DOWN & PROVIDE FULL DEPTH BLOCKING BTWN OUTRIGGERS
3. 5/8" THICK ROOF SHEATHING RE: GENERAL NOTES ADDITIONAL FASTENING REQD



1 FOUNDATION PLAN - MAINTENANCE GARAGE

1/4" = 1'-0"

FOUNDATION PLAN NOTES:

1. 5" MIN CONCRETE SLAB ON GRADE. RE:GENERAL NOTES FOR REINFORCING, GRANULAR FILL, VAPOR BARRIER AND JOINTING REQUIREMENTS
2. 16" WIDE x 2'-6" DEEP TRENCH FOOTING. REINF W/ (2) #5 CONT TOP AND BOT BARS AND #4 CLOSED TIES @ 24" OC
3. 6" WIDE CONT CONC CURB. REINF. W/ #4 CONT @ TOP AND #4 DOWELS (14" LONG) @ 24" OC
4. #3 DWLS (18" LONG) @ 24" OC @ DOOR OPENING
5. TERMINATE CONC CURB @ DOOR OPENINGS

SHEET NOTES:

A. REFERENCE SHEET S001 FOR STRUCTURAL GENERAL NOTES. REVIEW NOTES & DETAILS FOR APPLICABILITY.

B. SEE ARCHITECTURAL DRAWING FOR DETAILS & DIMENSIONS NOT SHOWN.

C. ALL STRUCTUREAL WALLS ARE 2x4 @ 16" OC UNO. BUILDING CORNER ZONES (4'-0" FROM EDGE OF BUILDING) SHALL BE 2x4 @ 12" OC

D. DIMENSIONS TO EXTERIOR WALLS ARE TO EXTERIOR FACE OF STUD/ EDGE OF SLAB

E. FOLLOW TRUSS MFCR RECOMMENDED DETAILIN, INSTALL BACKING, BLOCKING, BRIDGING, ETC AS REQD

F. HEADERS IN STRUCTURAL WALLS ARE CALLED OUT ON PLANS AS "HDXXX" RE: TYP DETAIL. ALL HEADERS IN STRUCTURAL WALL WHERE OPENING IS LESS THAN 4'-0" ARE (2) 2x10. HEADERS IN NON-STRUCTURAL WALLS ARE (2) 2x6

G. SHEAR WALLS ARE CALLED OUT ON PLAN AS "SW-X" RE: TYP DETAILS

H. TOP OF SLAB ELEVATION = 100'-0" UNO RE: ARCH & CIVIL FOR DATUM ELEVATION

J. ROOF TRUSS BRG = 9'-1 1/8" ABOVE TOP OF SLAB, UNO RE: ARCH

K. TOP OF TRENCH FOOTING ELEVATION = 99'-4" UNO. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MIN BELOW GRADE, DEEPEN FOOTINGS AS REQUIRED. GRADE IS GENERALLY 6" BELOW FINISH FLOOR ELEVATION (COORDINATE WITH CIVIL). IF GRADE IS MORE THAN 6" BELOW TOP OF SLAB ELEVATION PROVIDE STEM WALL AS REQUIRED PER TYPICAL DETAIL SHEET.

L. ALL HORIZONTAL REINF SHALL BE CONT THROUGH FOUNDATION STEPS

FRAMING LEGEND

- FOUNDATION / WALL BELOW
- LOAD BEARING WALL
- SHEAR WALL
- HEADER
- BEAM (STEEL)
- BUILT UP WOOD BEAM
- SPAN DIRECTION
- JOIST / TRUSS
- EXTENTS OF JOIST TYPE
- HOLDOWN
- OVERBUILD

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023

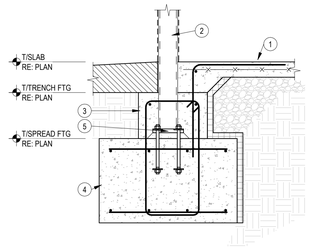
PROFESSIONAL SEAL

S102 K

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

FOUNDATION & ROOF FRAMING PLAN - MAINTENANCE GARAGE

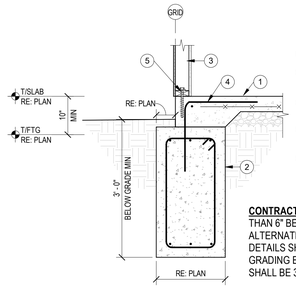
8/24/2023 12:03:24 PM



DETAIL NOTES:

1. CONCRETE SLAB ON GRADE, RE: PLAN
2. HSS COL, RE: PLAN
3. CONC TRENCH FTG, RE: PLAN - REBAR TO BE CONT THROUGH SPREAD FTG
4. CONC SPREAD FTG, RE: PLAN
5. COL BASE PLATE, RE: PLAN AND S050

10 FOOTING @ COLUMN
3/4" = 1'-0"

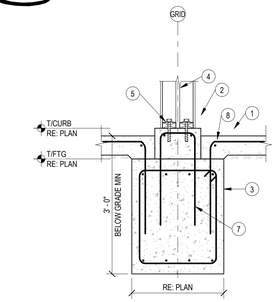


DETAIL NOTES:

1. SLAB ON GRADE, RE: PLAN
2. TRENCH FOOTING, RE: PLAN FOR SIZE AND REINF
3. LOAD BEARING WALL, RE: PLAN
4. PROVIDE CONT #4 AND #4 DOWELS (18" x 18") @ 18" OC
5. 1/2" Ø SILL ANCHOR @ 3'-0" OC. RE: GENERAL NOTES FOR ADDITONAL REQ.

CONTRACTOR NOTE: WHERE GRADE IS MORE THAN 6" BELOW TOP OF SLAB PROVIDE ALTERNATE FOUNDATION DETAIL ON TYPICAL DETAILS SHEET (9/S030). REFERENCE CIVIL FOR GRADING ELEVATIONS. BOTTOM OF FOOTINGS SHALL BE 3'-0" BELOW GRADE.

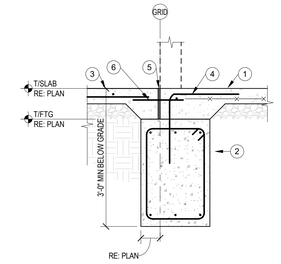
5 FDN SECTION @ WALL FTG
3/4" = 1'-0"



DETAIL NOTES:

1. SLAB ON GRADE, RE: PLAN
2. CURB WALL, RE: PLAN FOR SIZE, REINF, AND T/CURB ELEVATION, RE: PLAN
3. CONT TRENCH FOOTING, RE: PLAN
4. LOAD BEARING STUD WALL, RE: PLAN
5. PRESSURE TREATED 2x SILL PLATE TO MATCH STUD SIZE AND SILL ANCHOR, RE: SHEAR WALL SCHEDULE AND STRUCTURAL GENERAL NOTES FOR SILL ANCHOR INFO
6. RIGID INSULATION, RE: ARCH
7. PROVIDE (2) #5 HOOKED DOWELS @ SHEAR WALL HOLDOWNS RE: PLAN CENTER IN STEMWALL EA SIDE OF HOLDOWN.
8. PROVIDE #4 (2'-0"x2'-0") DWL'S @ 24" OC AND #4 CONT @ PERIMETER

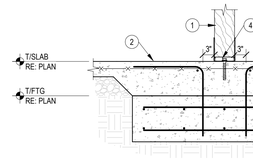
9 FOUNDATION SECTION
3/4" = 1'-0"



DETAIL NOTES:

1. SLAB ON GRADE, RE: PLAN
2. TRENCH FOOTING, RE: PLAN FOR SIZE AND REINF
3. EXTERIOR PAVING, RE: CIVIL
4. PROVIDE CONT #4 AND #4 DOWELS (18" x 18") @ 18" OC
5. BOND BREAK AND SEALANT, RE: ARCH
6. (3) #3 DOWELS (18" LG) EQ SPACED @ DOORWAYS, 6" MIN EMBEDMENT. AT SIM PROVIDE #3 DOWELS @ 24" OC

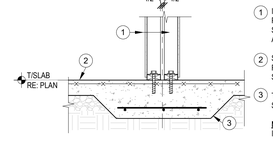
4 FDN SECTION @ WALL OPENING
3/4" = 1'-0"



DETAIL NOTES:

1. PSL COL, RE: PLAN
2. SOG, RE: PLAN
3. CONC FTG, RE: PLAN
4. SIMPSON ABU5-5Z COLUMN BASE W/ 5/8" Ø x 5" LONG TITEN HD SCREW ANCHOR
5. (8) 1'-6" x 1'-6" DOWELS (2) EA FACE OF COLUMN WITH #4 CONT CLOSED TIE

6 PSL COLUMN FOOTING
3/4" = 1'-0"

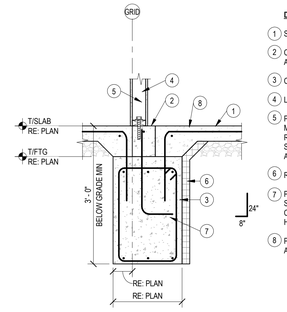


DETAIL NOTES:

1. INTERIOR LOAD BEARING WALL, RE: PLAN AND GENERAL NOTES FOR STUD SIZE, SPACING AND SILL ANCHORS
2. SLAB ON GRADE, RE: PLAN. RUN SLAB REINF CONT THROUGH THICKENED SLAB
3. THICKENED SLAB, RE: PLANS FOR SIZE AND REINF.

NOTE BLOCK WALLS AT MID HEIGHT IF ONE SIDE IS UNSHEATHED

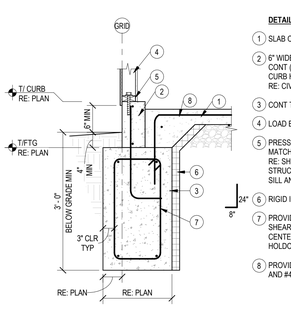
3 FDN SECTION @ COMMON WALL
3/4" = 1'-0"



DETAIL NOTES:

1. SLAB ON GRADE, RE: PLAN
2. CURB WALL, RE: PLAN FOR SIZE, REINF, AND T/CURB ELEVATION, RE: PLAN
3. CONT TRENCH FOOTING, RE: PLAN
4. LOAD BEARING STUD WALL, RE: PLAN
5. PRESSURE TREATED 2x SILL PLATE TO MATCH STUD SIZE AND SILL ANCHOR, RE: SHEAR WALL SCHEDULE AND STRUCTURAL GENERAL NOTES FOR SILL ANCHOR INFO
6. RIGID INSULATION, RE: ARCH
7. PROVIDE (2) #5 HOOKED DOWELS @ SHEAR WALL HOLDOWNS RE: PLAN CENTER IN STEMWALL EA SIDE OF HOLDOWN.
8. PROVIDE #4 (2'-0"x2'-0") DWL'S @ 24" OC AND #4 CONT @ PERIMETER

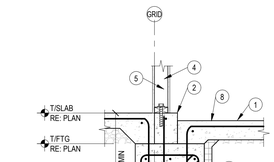
8 FOUNDATION SECTION
3/4" = 1'-0"



DETAIL NOTES:

1. SLAB ON GRADE, RE: PLAN
2. 6" WIDE CURB WALL, REINF. W/ (2) #4 CONT (1) TOP AND (1) BOT. ADJUST CURB HEIGHT AS NEEDED PER GRADE, RE: CIVIL.
3. CONT TRENCH FOOTING, RE: PLAN
4. LOAD BEARING STUD WALL, RE: PLAN
5. PRESSURE TREATED 2x SILL PLATE TO MATCH STUD SIZE AND SILL ANCHOR, RE: SHEAR WALL SCHEDULE AND STRUCTURAL GENERAL NOTES FOR SILL ANCHOR INFO
6. RIGID INSULATION, RE: ARCH
7. PROVIDE (2) #5 HOOKED DOWELS @ SHEAR WALL HOLDOWNS RE: PLAN CENTER IN STEMWALL EA SIDE OF HOLDOWN.
8. PROVIDE #4 (2'-0"x2'-0") DWL'S @ 24" OC AND #4 CONT @ PERIMETER

2 FOUNDATION SECTION
3/4" = 1'-0"

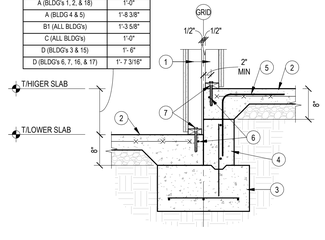


DETAIL NOTES:

1. SLAB ON GRADE, RE: PLAN
2. CURB WALL, RE: PLAN FOR SIZE, REINF, AND T/CURB ELEVATION, RE: PLAN
3. CONT TRENCH FOOTING, RE: PLAN
4. LOAD BEARING STUD WALL, RE: PLAN
5. PRESSURE TREATED 2x SILL PLATE TO MATCH STUD SIZE AND SILL ANCHOR, RE: SHEAR WALL SCHEDULE AND STRUCTURAL GENERAL NOTES FOR SILL ANCHOR INFO
6. RIGID INSULATION, RE: ARCH
7. PROVIDE (2) #5 HOOKED DOWELS @ SHEAR WALL HOLDOWNS RE: PLAN CENTER IN STEMWALL EA SIDE OF HOLDOWN.
8. PROVIDE #4 (2'-0"x2'-0") DWL'S @ 24" OC AND #4 CONT @ PERIMETER

7 FOUNDATION SECTION
3/4" = 1'-0"

BUILDING TYPE	STEP HT
A (BLDG's 1, 2, & 18)	1'-0"
A (BLDG 4 & 5)	1'-8 3/8"
B1 (ALL BLDG's)	1'-3 5/8"
C (ALL BLDG's)	1'-0"
D (BLDG's 3 & 15)	1'- 6"
D (BLDG's 6, 7, 16, & 17)	1'- 7 3/16"



DETAIL NOTES:

1. DEMISING WALL, RE: PLAN
2. SLAB ON GRADE, RE: PLAN
3. CONC FTG, RE: PLAN
4. 8" WIDE CONC STEM WALL, REINF. W/ (2) #4 CONT HORIZ BARS AND #4 VERTS @ 12" OC, EMBED INTO FTG 6" MIN. PROVIDE KEYWAY AT FTG
5. (1'-4" x 1'-4") BENT DWLS @ 24" OC
6. #4 CONT PERIMETER BAR
7. 1/2" DIA GALVANIZED SIMPSON TITEN HD SCREW ANCHOR @ 3'-0" OC, (1) ANCHOR SHALL BE LOCATED WITHIN 12" FROM END OF WALL OR OPENING

1 FOUNDATION STEP @ DEMISING WALL
3/4" = 1'-0"

collins|webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

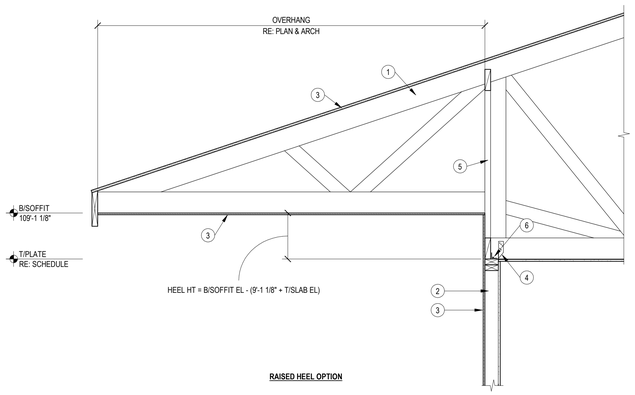
STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000173299
PROFESSIONAL ENGINEER
08/24/2023
PROFESSIONAL SEAL

S500

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

FOUNDATION SECTIONS

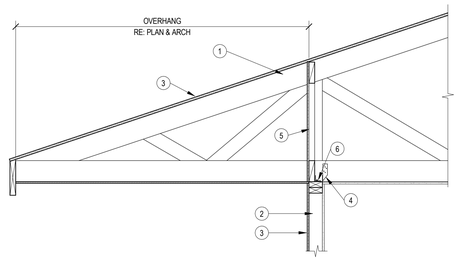
8/24/2023 12:03:26 PM



DETAIL NOTES:

1. PRE-ENGINEERED ROOF TRUSSES, RE: PLAN
2. LOAD BEARING STUD WALL, RE: PLAN
3. ROOF/WALL SHEATHING, RE: PLAN AND GENERAL NOTES
4. SIMPSON H2.5T HANGER @ EA TRUSS
5. CONT BLOCKING BETWEEN EA TRUSS BAY, RE: DETAILS 4 & 5 ON S062 FOR ALTERNATE BLOCKING OPTIONS
6. CONNECTION TO TOP PLATE USE SIMPSON A34 CLIP @ 12" OC

RAISED HEEL OPTION

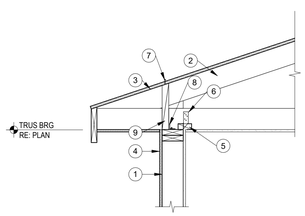


DETAIL NOTES:

1. PRE-ENGINEERED ROOF TRUSSES, RE: PLAN
2. LOAD BEARING STUD WALL, RE: PLAN
3. ROOF/WALL SHEATHING, RE: PLAN AND GENERAL NOTES
4. SIMPSON H2.5T HANGER @ EA TRUSS
5. CONT BLOCKING BETWEEN EA TRUSS BAY, RE: DETAILS 4 & 5 ON S062 FOR ALTERNATE BLOCKING OPTIONS
6. CONNECTION TO TOP PLATE RE: S062

FLAT BOTTOM CHORD OPTION

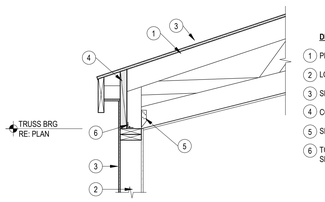
10 TRUSS OVERHANG
3/4" = 1'-0"



DETAIL NOTES:

1. LOAD BEARING STUD WALL, RE: PLAN
2. PRE-ENGINEERED ROOF TRUSS, RE: PLAN
3. ROOF SHEATHING, RE: PLAN
4. WALL SHEATHING, RE: SHEAR WALL SCHEDULE
5. 2x DRYWALL BLOCKING BEYOND, RE: ARCH
6. SIMPSON H2.5T @ EA TRUSS, TYP
7. DIAPHRAGM NAILING, RE: GENERAL NOTES AND AT SHEAR WALLS REF SCH.
8. CONNECTION TO TOP PLATE RE: S063 SHEAR WALL SCH
9. FULL DEPTH LVL BLOCKING BETWEEN TRUSSES @ SHEAR WALL LOCATIONS.

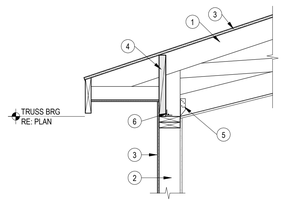
8 SECTION @ RAISED HEEL TRUSS
3/4" = 1'-0"



DETAIL NOTES:

1. PRE-ENGINEERED ROOF TRUSS, RE: PLAN
2. LOAD BEARING STUD WALL, RE: PLAN
3. SHEATHING, RE: PLAN & GENERAL NOTES
4. CONT BLOCKING BETWEEN TRUSSES
5. SIMPSON H2.5T TIE @ EA TRUSS BEARING
6. TOP PLATE CONNECTION TO WALL, RE: SHEAR WALL SCH ON S063

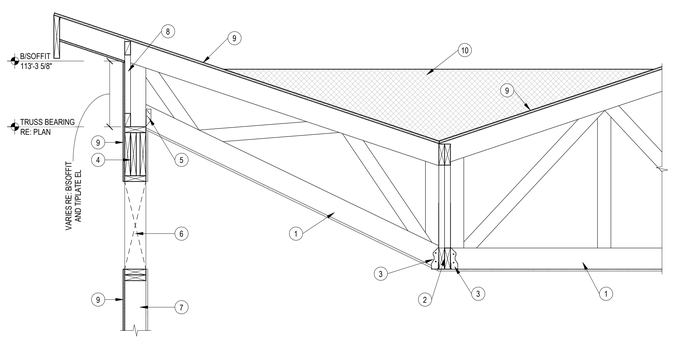
7 SECTION @ FIREPLACE BUMP OUT
3/4" = 1'-0"



DETAIL NOTES:

1. PRE-ENGINEERED ROOF TRUSS, RE: PLAN
2. LOAD BEARING STUD WALL, RE: PLAN
3. SHEATHING, RE: PLAN & GENERAL NOTES
4. CONT BLOCKING BETWEEN TRUSSES
5. SIMPSON H2.5T TIE @ EA TRUSS BEARING
6. TOP PLATE CONNECTION TO WALL, RE: SHEAR WALL SCH ON S063

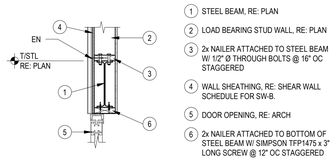
6 SECTION @ CLUBHOUSE
3/4" = 1'-0"



DETAIL NOTES:

1. PRE-ENGINEERED ROOF TRUSS, RE: PLAN
2. PRE-ENGINEERED GIRDER TRUSS, RE: PLAN
3. TRUSS HANGER BY TRUSS SUPPLIER
4. WOOD HEADER, RE: PLAN AND TYPICAL DETAILS
5. SIMPSON H2.5T TIE @ EA TRUSS
6. WINDOW OPENING, RE: ARCH
7. LOAD BEARING STUD WALL, RE: PLAN
8. TRUSS BLOCKING BETWEEN EA TRUSS BAY RE: S062 FOR BLOCKING OPTIONS.
9. ROOF/WALL SHEATHING, RE: PLAN AND GENERAL NOTES
10. BUILT UP CRICKET FOR PROPER DRAINAGE RE: ARCH

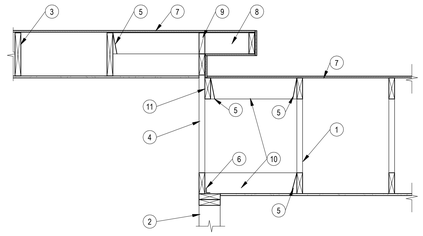
9 VAULTED CEILING TRUSS
3/4" = 1'-0"



DETAIL NOTES:

1. STEEL BEAM, RE: PLAN
2. LOAD BEARING STUD WALL, RE: PLAN
3. 2x NAILER ATTACHED TO STEEL BEAM W/ 1/2" Ø THROUGH BOLTS @ 16" OC STAGGERED
4. WALL SHEATHING, RE: SHEAR WALL SCHEDULE FOR SW-B.
5. DOOR OPENING, RE: ARCH
6. 2x NAILER ATTACHED TO BOTTOM OF STEEL BEAM W/ SIMPSON TFP1475 x 3" LONG SCREW @ 12" OC STAGGERED

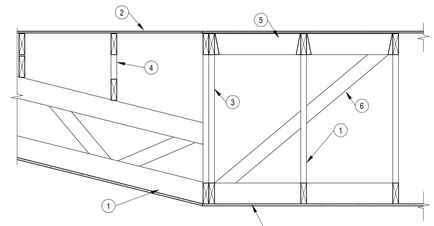
5 STEEL BEAM @ CLUBHOUSE DOOR
3/4" = 1'-0"



DETAIL NOTES:

1. PRE-ENGINEERED ROOF TRUSS, RE: PLAN
2. LOAD BEARING STUD WALL, RE: PLAN
3. 2x ROOF RAFTERS, RE: PLAN
4. PRE-ENGINEERED GABLE END TRUSS RE: PLAN
5. SIMPSON LUS 24 HANGER
6. SIMPSON A35 CLIP @ 24" OC
7. ROOF SHEATHING, RE: PLAN
8. 2x OUTRIGGER RE: PLAN
9. 2x BLOCKING BTWN EA OUTRIGGER
10. 2x TRUSS BLOCKING @ 24" OC
11. 2x LEDGER ATTACHED TO GABLE TRUSS W/ (2) 1/4"Ø x 2 1/2" LONG SDS WOOD SCREWS @ EA VERT (24" OC MAX)

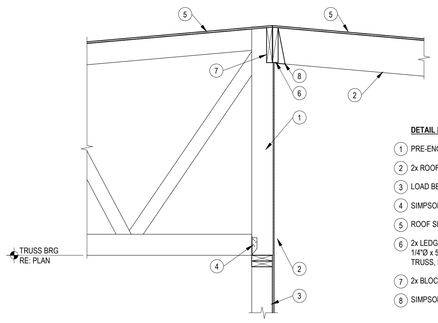
4 SECTION
3/4" = 1'-0"



DETAIL NOTES:

1. PRE-ENGINEERED ROOF TRUSS, RE: PLAN
2. ROOF SHEATHING, RE: PLAN
3. GIRDER TRUSS RE: PLAN
4. OVERBUILD TRUSSES RE: PLAN
5. 2x BLOCKING @ 4'-0" OC ATTACH TO TRUSSES W/ LUS26 HANGERS
6. 2x6 KICKER @ 4'-0" OC ATTACH TO TRUSS CHORD W/ SIMPSON A35 @ EA END & (5) 10d NAILS @ EA END

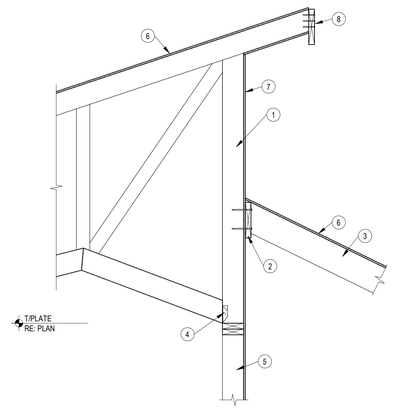
3 SECTION
3/4" = 1'-0"



DETAIL NOTES:

1. PRE-ENGINEERED ROOF TRUSS, RE: PLAN
2. 2x ROOF RAFTERS, RE: PLAN
3. LOAD BEARING STUD WALL, RE: PLAN
4. SIMPSON H2.5T TIE @ EA TRUSS
5. ROOF SHEATHING, RE: PLAN
6. 2x LEDGER ATTACHED TO ROOF TRUSS W/ (2) 1/4"Ø x 5" LONG SDS WOOD SCREWS @ EA TRUSS, RE: PLAN
7. 2x BLOCKING BTWN EA TRUSS
8. SIMPSON LRU262 HANGER

2 SECTION
3/4" = 1'-0"



DETAIL NOTES:

1. PRE-ENGINEERED ROOF TRUSS, RE: PLAN
2. 2x LEDGER ATTACHED TO ROOF TRUSS W/ (2) 1/4"Ø x 5" LONG SDS WOOD SCREWS @ EA TRUSS, RE: PLAN
3. 2x ROOF RAFTERS, RE: PLAN
4. SIMPSON H2.5T TIE @ EA TRUSS
5. LOAD BEARING STUD WALL, RE: PLAN
6. ROOF SHEATHING, RE: PLAN
7. WALL SHEATHING, RE: GENERAL NOTES
8. 2x CONT FASCIA ATTACH TO ROOF TRUSS W/ (3) 10d NAILS @ EA TRUSS.

1 TRUSS BEARING @ CLUBHOUSE ENTRY
3/4" = 1'-0"

collins | webb ARCHITECTURE
307 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
JOHN E. FUNK
NUMBER E-2000172299
REGISTERED PROFESSIONAL ENGINEER
08/24/2023

PROFESSIONAL SEAL

S520

ISSUE DATE: 24 AUGUST 2023
STAND SEI #: 23090

FRAMING SECTIONS

8/24/2023 12:03:29 PM



1 ARCHITECTURAL SITE PLAN
1/4" = 1'-0"

SITE PLAN KEY

- Building Type A
- Building Type B
- Building Type B2
- Building Type C
- Building Type D
- Clubhouse
- A-type Unit

NORTH

GENERAL NOTES – FURNITURE & EQUIPMENT PLANS:

1. RE: CIVIL DRAWINGS - FOR ADDITIONAL SITE INFORMATION AND DETAILS.
2. RE: SHEET G002 - FOR TYPICAL MOUNTING HEIGHTS.
3. RE: SHEET AG003 - FOR DETAILED PLANS OF EACH SPECIFIED A-TYPE UNIT.

collins|webb ARCHITECTURE
6078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
ROGER L. WEBB II
NUMBER A-2016004008
ARCHITECT
8/24/23

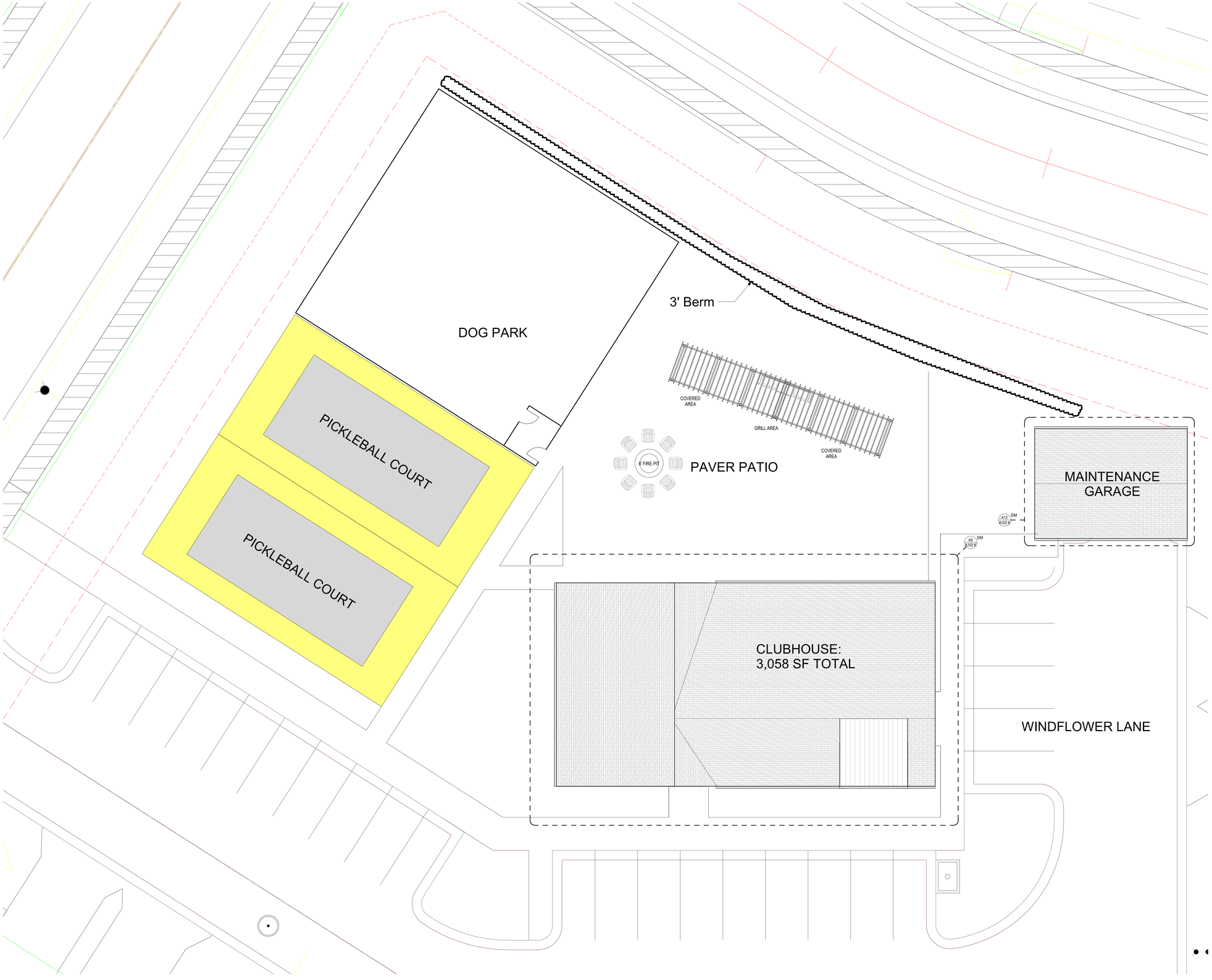
PROFESSIONAL SEAL

A100

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

ARCHITECTURAL SITE PLAN

8/23/2023 2:30:50 PM



A12 SITE PLAN - CLUBHOUSE AREA
1/8" = 1'-0"

GENERAL NOTES: FLOOR PLANS

1. SEE GENERAL ARCHITECTURAL SHEETS FOR ADDITIONAL NOTES AND DETAILS THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0"
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OFSTUD (FOS), FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS AND PER WALL TYPES. SEE GENERAL SHEETS.
5. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO HINGE SIDE OF THE DOOR, ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL, OR OTHER PROTRUDING OBJECTS.
6. ALL ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FINISHES AS THE ADJOINING SPACES.
7. RE: FINISH LEGEND, FINISH SCHEDULE AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
8. STAIR ENCLOSURES, SHAFT WALLS, EXIT PASSAGE WAYS AND EXTERIOR WALLS TO BE COORDINATED FOR PHASE OF WORK PER MATRIX AND PROJECT SCOPING.

GENERAL NOTES: ROOF PLANS

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE ROOF PLAN ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
3. PROVIDE 1/2" / FT. TAPERED INSULATION AT ALL ROOF CURBS AND AT EQUIPMENT WHICH EXCEEDS 18 INCHES IN WIDTH.

collins | webb ARCHITECTURE
6078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

1	City Comments	01/23/2025

STATE OF MISSOURI
ROGER L. WEBB II
NUMBER A-2016034008
01/29/2025
REGISTERED ARCHITECT

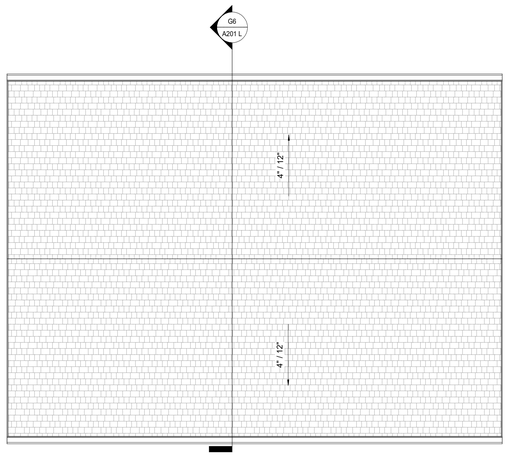
PROFESSIONAL SEAL

A101 K

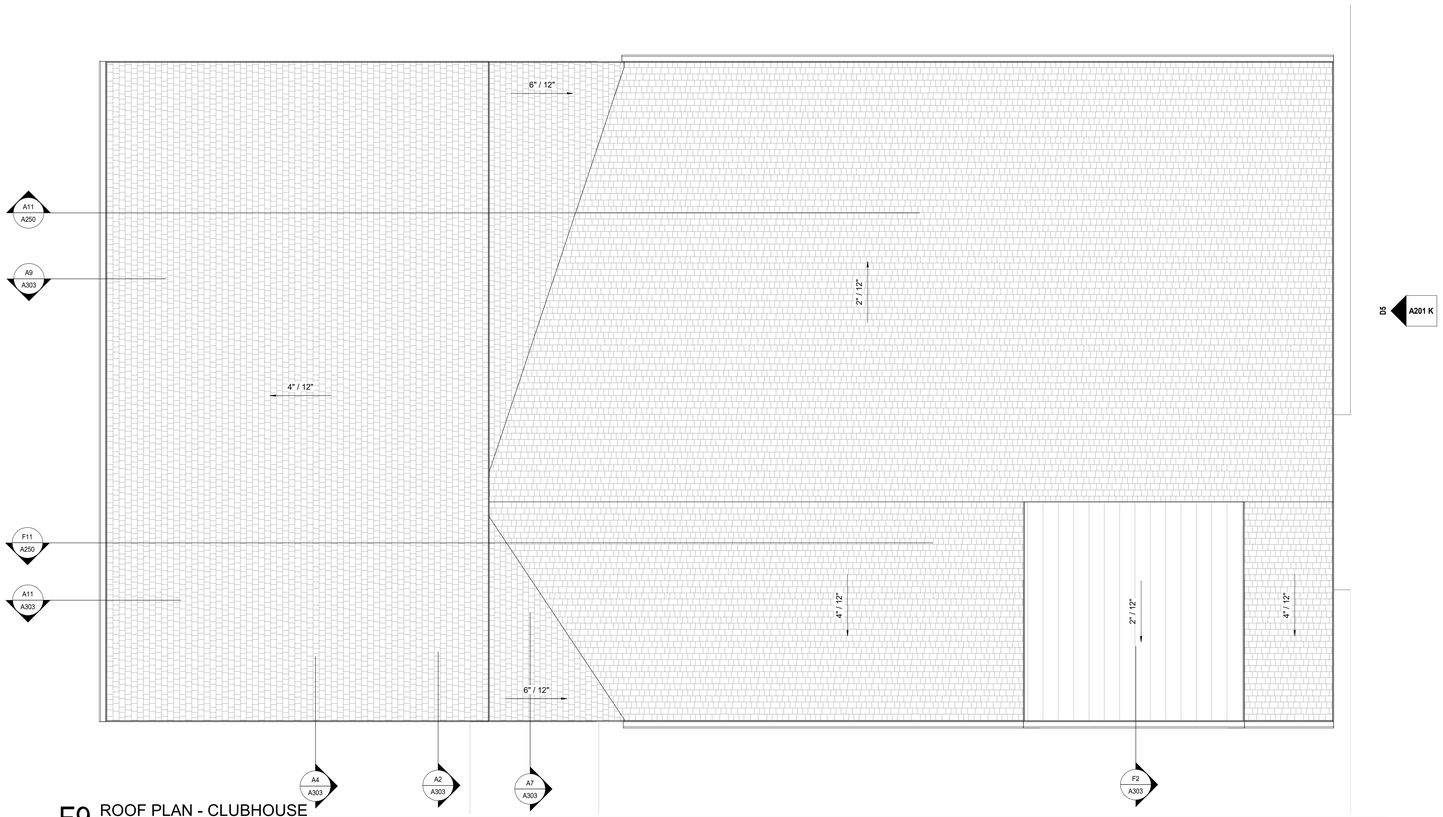
ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

SITE PLAN - CLUBHOUSE AREA

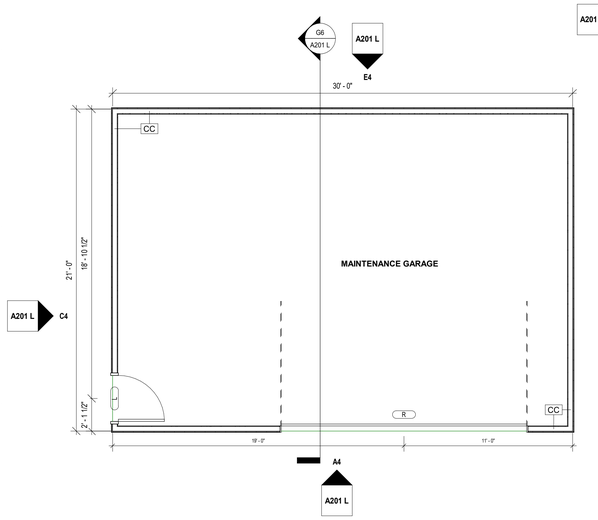
1/29/2025 8:41:35 AM



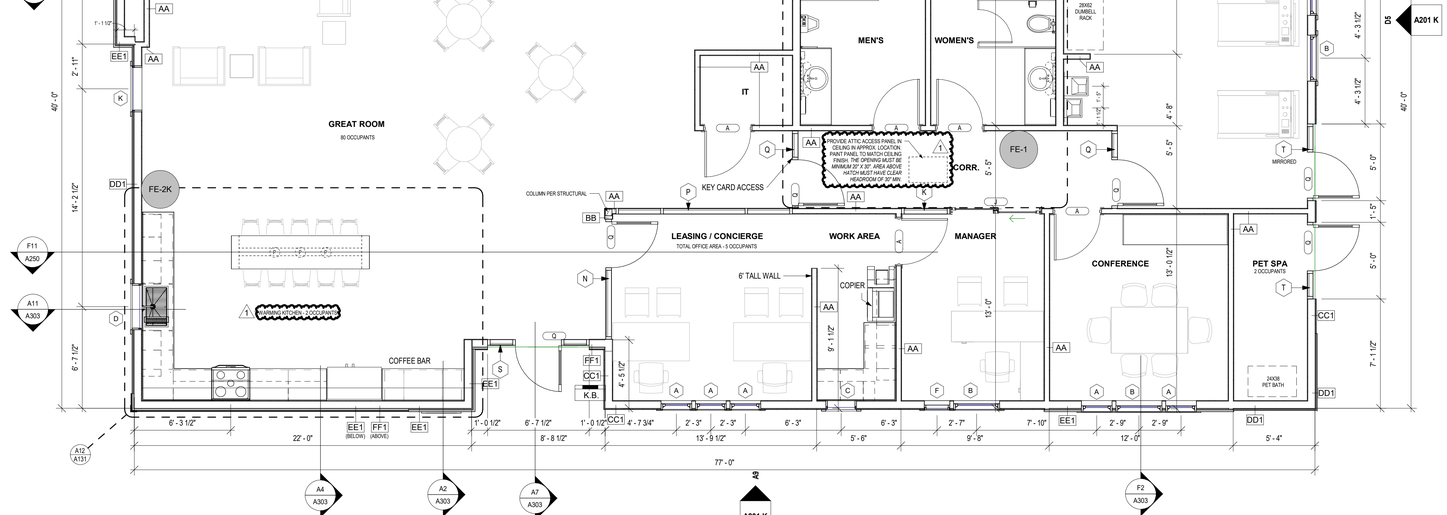
F12 ROOF PLAN -MAINTENANCE GARAGE
1/4" = 1'-0"



F9 ROOF PLAN - CLUBHOUSE
1/4" = 1'-0"



A12 MAINTENANCE GARAGE
1/4" = 1'-0"



A9 CLUBHOUSE
1/4" = 1'-0"

GENERAL NOTES: FLOOR PLANS

1. SEE GENERAL ARCHITECTURAL SHEETS FOR ADDITIONAL NOTES AND DETAILS THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0"
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OFSTUD (FOS), FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS AND PER WALL TYPES. SEE GENERAL SHEETS.
5. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO HINGE SIDE OF THE DOOR, ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL, OR OTHER PROTRUDING OBJECTS.
6. ALL ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FINISHES AS THE ADJOINING SPACES.
7. RE: FINISH LEGEND, FINISH SCHEDULE AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
8. STAIR ENCLOSURES, SHAFT WALLS, EXIT PASSAGE WAYS AND EXTERIOR WALLS TO BE COORDINATED FOR PHASE OF WORK PER MATRIX AND PROJECT SCOPING.

GENERAL NOTES: ROOF PLANS

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE
2. DIMENSIONS SHOWN ON THE ROOF PLAN ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
3. PROVIDE 1/2" / FT. TAPERED INSULATION AT ALL ROOF CURBS AND AT EQUIPMENT WHICH EXCEEDS 18 INCHES IN WIDTH.

ROOF PLAN LEGEND

- SLOPE DIRECTION
- AREA WHERE ROOF PENETRATIONS ARE NOT ALLOWED PER IRC 2018, R302.2.4 EXCEPTION
- LEVEL 01 COMMON WALLS TO UNDERSIDE OF SHEATHING PER DETAIL A11/G003
- EXTENTS OF RIDGE VENTS ALLOWED BETWEEN COMMON WALLS
- EXTENTS OF CONTINUOUS SOFFIT VENTS ALLOWED BETWEEN COMMON WALLS =
- SHINGLE ROOF
- STANDING SEAM METAL ROOF

FIRE RESISTIVE LEGEND

- X" FROM ROOM OR LEVEL X = CLEAR WIDTH OF OPENING IN INCHES
- F.E.C. FIRE RISER CABINET
- F.A.C.P. FIRE ALARM CONTROL PANEL
- FDC FIRE DEPARTMENT CONNECTION
- K.B. KNOX BOX
- AR AREA OF RESCUE ASSISTANCE
- ACCESSIBLE EGRESS COMPONENT
- EGRESS PATH
- FE-1 INDICATES FIRE EXTINGUISHER CABINET(FE) LOCATION WITH 75'-0" RADIUS COVERAGE AREA. SEE SPECIFICATIONS FOR FE TYPE.
- FE-2K INDICATES KITCHEN/ BAR FIRE EXTINGUISHER (FE) LOCATION WITH 75'-0" RADIUS COVERAGE AREA. SEE SPECIFICATIONS FOR FE TYPE.

collins | webb ARCHITECTURE
13A SW 3rd Street, Lee's Summit, Missouri, 64063 P: 816.249.2270 www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

1	City Comments	01/23/2025

STATE OF MISSOURI ROGER T. WEBB II NUMBER A-2016041008 01/29/2025 ARCHITECT

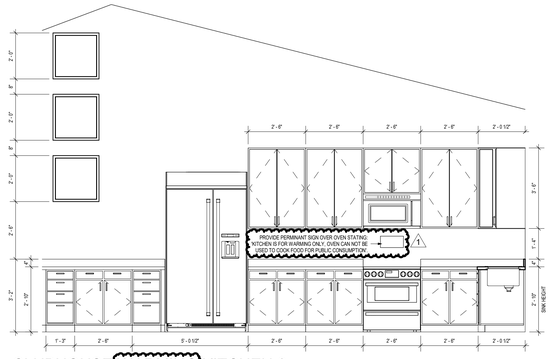
PROFESSIONAL SEAL

A102 K

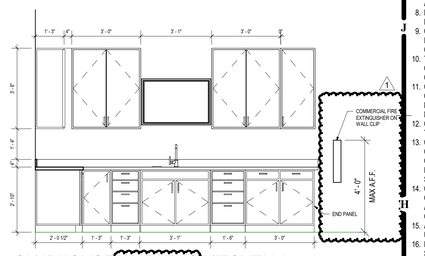
ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

FLOOR PLANS - CLUBHOUSE & MAINTENANCE BUILDING

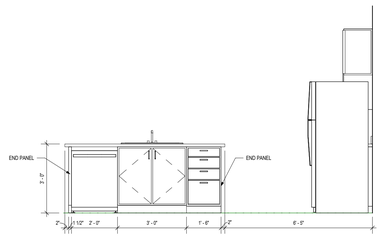
1/29/2025 8:41:36 AM



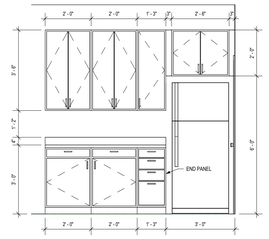
H6 CLUBHOUSE WARMING KITCHEN 2
3/8" = 1'-0"



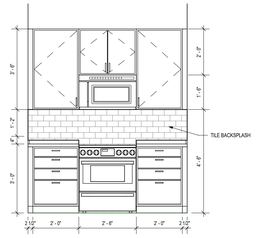
H3 CLUBHOUSE WARMING KITCHEN 1
3/8" = 1'-0"



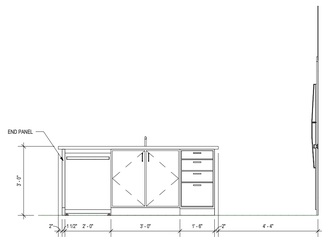
F7 UNIT B / C - KITCHEN - 3
3/8" = 1'-0"



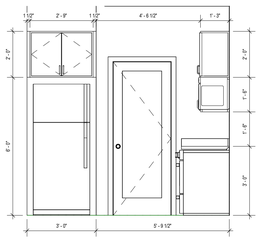
F5 UNIT B / C - KITCHEN - 2
3/8" = 1'-0"



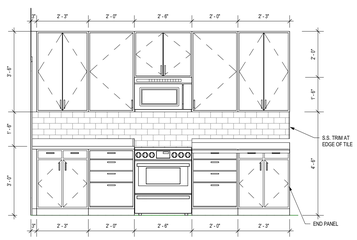
F3 UNIT B / C - KITCHEN 1
3/8" = 1'-0"



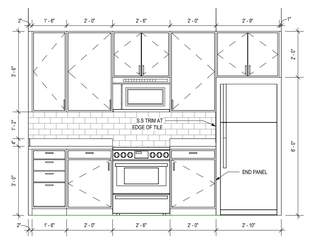
D11 UNIT A REV - KITCHEN 3
3/8" = 1'-0"



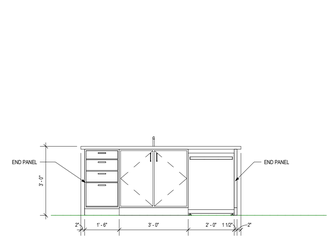
D9 UNIT A REV - KITCHEN 2
3/8" = 1'-0"



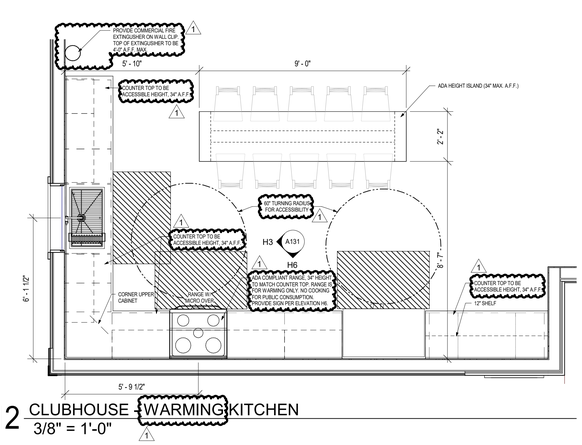
D7 UNIT A REV - KITCHEN 1
3/8" = 1'-0"



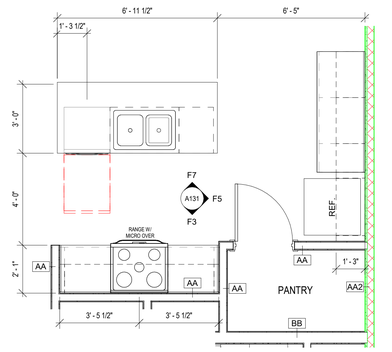
D5 UNIT A - KITCHEN - 2
3/8" = 1'-0"



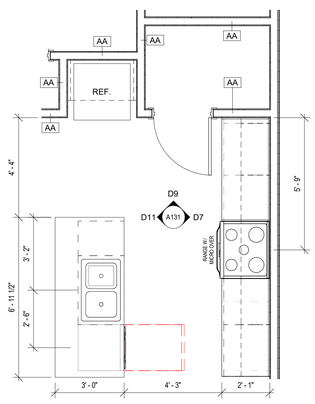
D3 UNIT A - KITCHEN - 1
3/8" = 1'-0"



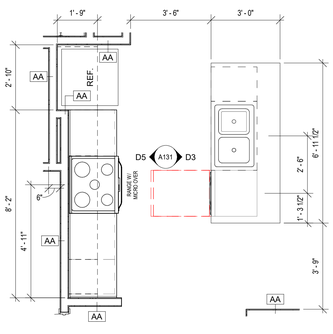
A12 CLUBHOUSE WARMING KITCHEN
3/8" = 1'-0"



A8 UNIT B / B REV / C / C REV - KITCHEN
3/8" = 1'-0"



A5 UNIT A REV - KITCHEN
3/8" = 1'-0"



A3 UNIT A - KITCHEN
3/8" = 1'-0"

GENERAL NOTES: INTERIOR DETAILS

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: SHEET G002 ACCESSIBILITY GUIDELINES FOR MOUNTING HEIGHTS OF FIXTURES AND ACCESSORIES.
3. RE: A901 FOR FINISH LEGEND AND FINISH SCHEDULE FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
4. RE: A902 FINISH FLOOR PLANS FOR ADDITIONAL WALL FINISH CLARIFICATIONS.
5. RE: SHEET A903 FOR REVEAL AND CONTROL JOINT DETAILS, WALL PROTECTION DETAILS, AND FLOOR TRANSITION / WALL BASE DETAILS.
6. RE: ENLARGED FLOOR PLAN SHEETS FOR TOILET ACCESSORY SCHEDULE.
7. PROVIDE GYPSUM BOARD CONTROL JOINTS AT DOOR HEADERS WHERE EXPOSED/FINISHED GYPSUM BOARD EXCEEDS 30 FEET (TYP.), UNLESS SHOWN OTHERWISE. JOINTS TO BE LINED UP WITH BOTH SIDES OF DOOR FRAMES FOR DOORS 4'-0" AND OVER AND ALL DOORS THAT ARE LEAD LINED. CONTROL JOINTS NOT NECESSARY AT WALLS WHERE ACOUSTICAL WALLCOVERING IS SPECIFIED.
8. PROVIDE PRIMER ON ALL WALL SURFACES THAT ARE TO RECEIVE WALLCOVERING (WC1, WC2, WC3, WC4).
9. CONTINUE WALL FINISH AS SCHEDULED BEHIND ALL FURNITURE AND EQUIPMENT, INCLUDING UNDER OPEN COUNTERS.
10. TRANSITION ALL WALL AND BASE FINISHES, AND/ OR COLOR CHANGES AT INSIDE CORNERS, UNLESS NOTED OTHERWISE. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
11. CONTINUE WALL BASE AT ALL WALLS, FURRED OUT COLUMNS & COLUMN COVERS, AND AT ALL CASEWORK TOE KICKS, SIDE PANELS, AND UNDER OPEN COUNTERS, UNLESS NOTED OTHERWISE.
12. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO MILLWORK/ CASEWORK FABRICATION & INSTALLATION.
13. CONTRACTOR SHALL PROVIDE & INSTALL GROMMETS AT 48" O.C. MAX, AT ALL WORK STATIONS WITH OPEN KNEE SPACE. COORDINATE LOCATIONS DIRECTLY WITH ELECTRICAL/DATA DRAWINGS FOR OUTLET LOCATIONS. COLOR TO BE SELECTED BY ARCHITECT.
14. CONTRACTOR SHALL PROVIDE COUNTERTOP BRACKETS AT OPEN KNEE SPACES WIDER THAN 42" (TYP.), CENTER IN OPEN AREA AND PAINT TO MATCH WALL COLOR, UNLESS NOTED OR SHOWN OTHERWISE.
15. ALIGN ALL WALL TILE JOINTS WITH FLOOR TILE JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
16. RE: EQUIPMENT DRAWINGS & SPECS. FOR EQUIPMENT ITEMS SHOWN DASHED, PROVIDED BY EQUIP. CONSULTANT AND/ OR SUPPLIED BY OWNER. COORDINATE WITH OTHER TRADES AS NECESSARY.
17. MECH. & ELEC. SYMBOLS AND OUTLETS ARE SHOWN FOR REFERENCE ONLY. COORDINATE LOCATIONS WITH MEP DRAWINGS. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.

CWA collins|webb ARCHITECTURE
3078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

1	City Comments	01/23/2025

STATE OF MISSOURI
ROGER L. WEBB II
NUMBER A-2016034008
01/29/2025
ARCHITECT

PROFESSIONAL SEAL

A131

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

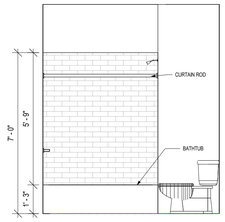
KITCHEN ENLARGED PLANS AND ELEVATIONS

1/29/2025 8:41:40 AM

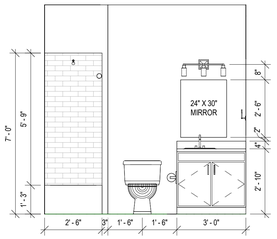
ACCESSORY SCHEDULE						
TYPE MARK	MANUFACTURER	DESCRIPTION	MODEL	WxDxH	FINISH	REMARKS
	Kenmore	Kenmore 14573 24" Built-In Dishwasher w/ Removable Third Rack - Stainless Steel	Model # 14573			
1	BOBRICK WASHROOM EQUIPMENT, INC.	Toilet Tissue Dispenser, Recessed Extra Roll	B-663	6.25x6.25x7		
2	BOBRICK WASHROOM EQUIPMENT, INC.	GRAB BAR, 1-1/2" DIA., SS, 36"	B-5806-36	1-1/2" DIA x 36"		3
3	BOBRICK WASHROOM EQUIPMENT, INC.	GRAB BAR, 1-1/2" DIA., SS, 42"	B-6806-42	1-1/2" DIA x 42"		3
4	Bradley Corporation	Chrome Plated Towel Ring	9185			
5	BOBRICK WASHROOM EQUIPMENT, INC.	24" x 30" mirror	B-165 2430			
6	BOBRICK WASHROOM EQUIPMENT, INC.	5'6" x 30" mirror	B-165 2460			
7	BOBRICK WASHROOM EQUIPMENT, INC.	Towel Bar, Surface Mount Classic x24	B7674	25.625x3.25x2		
8	BOBRICK WASHROOM EQUIPMENT, INC.	SHOWER CURTAIN ROD	B-207x60		SATIN SS	
9	Bradley Corporation	Towel Dispenser	244-110000			
10	Bradley Corporation	ADA Restroom Partition				
11	Bradley Corporation	Restroom Partition	Baked Enamel - Toilet Partition			
12	Bradley Corporation	Restroom Partitions, Urinal Screen	Baked Enamel - Urinal Screen			

GENERAL NOTES:
A. ALL TOILET ACCESSORY LOCATIONS BASED ON FLOOR PLAN LAYOUT.
B. REFER TO INTERIOR ELEVATIONS FOR ANY ACCESSORIES THAT MAY NOT SHOW UP ON THE PLANS.
C. REFER TO G002 AND MANUFACTURER'S SPECIFICATIONS FOR MOUNTING HEIGHTS.
D. COORDINATE ALL MOUNTING HEIGHTS W/ PLUMBING FIXTURES TO ALLOW PROPER OPERATION & INFORM ARCHITECT IN WRITING OF ANY CONFLICTS.
E. G.C. TO VERIFY DIRECTLY W/ OWNER TO DETERMINE MOUNTING HEIGHTS, U.N.O.
F. REFER TO PLANS AND ELEVATIONS FOR ITEMS NOTED AS FF&E.
G. PROVIDE ALLOWANCE FOR ALL ROUNDED VANITY MIRRORS.

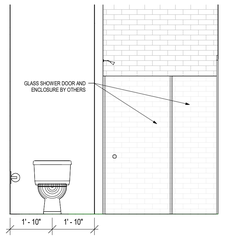
REMARKS:
1. OWNER FURNISHED, OWNER INSTALLED.
2. FF&E ITEM - OWNER FURNISHED, CONTRACTOR INSTALLED. REFER TO PLANS AND ELEVATIONS FOR FURTHER CLARIFICATION.
3. SURFACE MOUNTED.
4. RECESSED.
5. MIRRORS TO BE CENTERED AT SINKS, TYP.



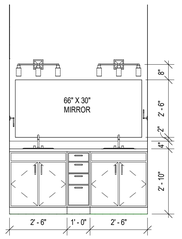
G12 UNIT C - BATH 1 - 2
3/8" = 1'-0"



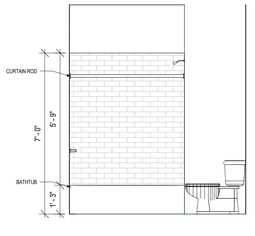
G10 UNIT C - BATH 1 - 1
3/8" = 1'-0"



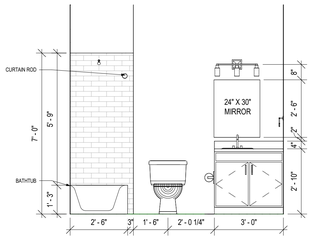
G8 UNIT B / B REV / C / C REV - P.BATH - 2
3/8" = 1'-0"



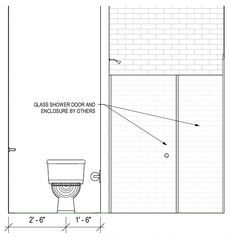
G6 UNIT B / B REV / C / C REV - P.BATH - 1
3/8" = 1'-0"



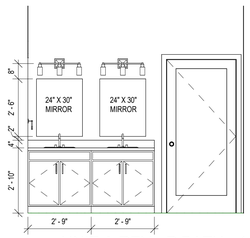
G4 UNIT B / B REV - BATH 1 - 2
3/8" = 1'-0"



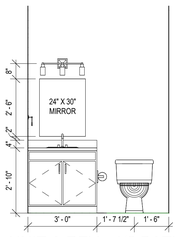
G3 UNIT B / B REV - BATH 1 - 1
3/8" = 1'-0"



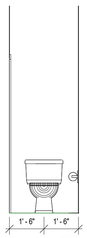
E12 UNIT A REV - P.BATH - 2
3/8" = 1'-0"



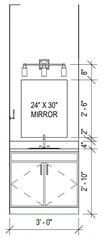
E11 UNIT A REV - P.BATH - 1
3/8" = 1'-0"



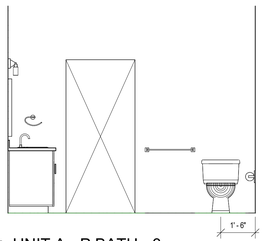
E9 UNIT A REV - 1/2 BATH
3/8" = 1'-0"



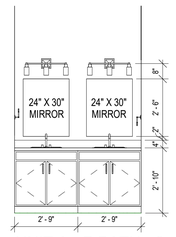
E8 UNIT A - 1/2 BATH - 2
3/8" = 1'-0"



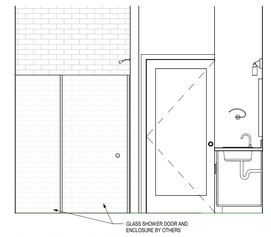
E7 UNIT A - 1/2 BATH - 1
3/8" = 1'-0"



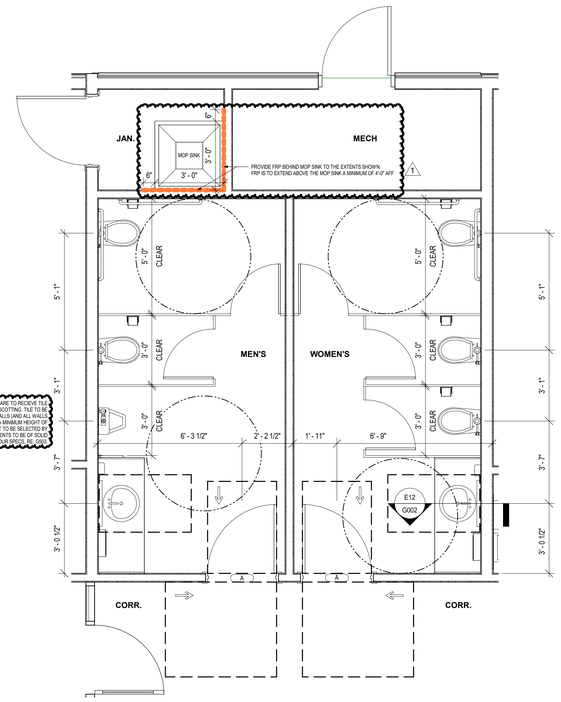
E5 UNIT A - P.BATH - 3
3/8" = 1'-0"



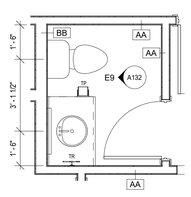
E4 UNIT A - P.BATH - 2
3/8" = 1'-0"



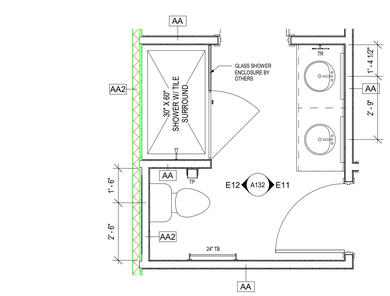
E2 UNIT A - P.BATH - 1
3/8" = 1'-0"



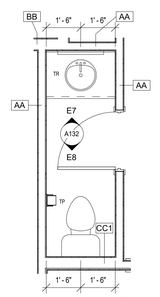
A11 CLUBHOUSE - RESTROOMS
3/8" = 1'-0"



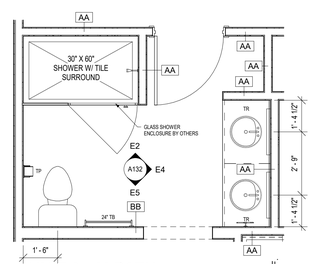
A8 UNIT A REV - 1/2 BATH
3/8" = 1'-0"



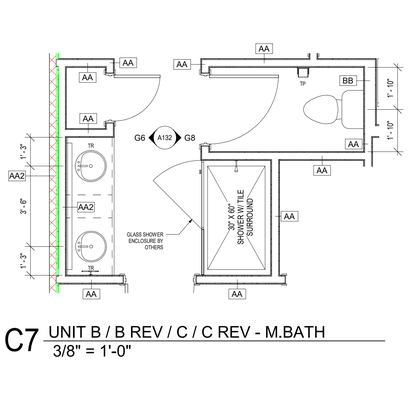
A6 UNIT A REV - M.BATH
3/8" = 1'-0"



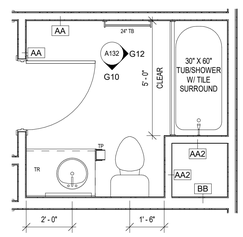
A4 UNIT A - 1/2 BATH
3/8" = 1'-0"



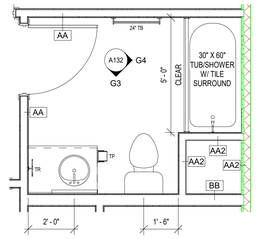
A2 UNIT A - M.BATH
3/8" = 1'-0"



C7 UNIT B / B REV / C / C REV - M.BATH
3/8" = 1'-0"



C4 UNIT C - BATH 1
3/8" = 1'-0"



C2 UNIT B / B REV - BATH 1
3/8" = 1'-0"

1/29/2025 8:41:45 AM

GENERAL NOTES: INTERIOR DETAILS

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: SHEET G002 ACCESSIBILITY GUIDELINES FOR MOUNTING HEIGHTS OF FIXTURES AND ACCESSORIES.
3. RE: A901 FOR FINISH LEGEND AND FINISH SCHEDULE FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
4. RE: A902 FINISH FLOOR PLANS FOR ADDITIONAL WALL FINISH CLARIFICATIONS.
5. RE: SHEET A903 FOR REVEAL AND CONTROL JOINT DETAILS, WALL PROTECTION DETAILS, AND FLOOR TRANSITION / WALL BASE DETAILS.
6. RE: ENLARGED FLOOR PLAN SHEETS FOR TOILET ACCESSORY SCHEDULE.
7. PROVIDE GYPSUM BOARD CONTROL JOINTS AT DOOR HEADERS WHERE EXPOSED/FINISHED GYPSUM BOARD EXCEEDS 30 FEET (TYP.), UNLESS SHOWN OTHERWISE. JOINTS TO BE LINED UP WITH BOTH SIDES OF DOOR FRAMES FOR DOORS 4'-0" AND OVER AND ALL DOORS THAT ARE LEAD LINED. CONTROL JOINTS NOT NECESSARY AT WALLS WHERE ACOUSTICAL WALLCOVERING IS SPECIFIED.
8. PROVIDE PRIMER ON ALL WALL SURFACES THAT ARE TO RECEIVE WALLCOVERING (WC1, WC2, WC3, WC4).
9. CONTINUE WALL FINISH AS SCHEDULED BEHIND ALL FURNITURE AND EQUIPMENT, INCLUDING UNDER OPEN COUNTERS.
10. TRANSITION ALL WALL AND BASE FINISHES, AND/ OR COLOR CHANGES AT INSIDE CORNERS, UNLESS NOTED OTHERWISE. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
11. CONTINUE WALL BASE AT ALL WALLS, FURRED OUT COLUMNS & COLUMN COVERS, AND AT ALL CASEWORK TOE KICKS, SIDE PANELS, AND UNDER OPEN COUNTERS, UNLESS NOTED OTHERWISE.
12. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO MILLWORK/ CASEWORK FABRICATION & INSTALLATION.
13. CONTRACTOR SHALL PROVIDE & INSTALL GROMMETS AT 48" O.C. MAX, AT ALL WORK STATIONS WITH OPEN KNEE SPACE. COORDINATE LOCATIONS DIRECTLY WITH ELECTRICAL/DATA DRAWINGS FOR OUTLET LOCATIONS. COLOR TO BE SELECTED BY ARCHITECT.
14. CONTRACTOR SHALL PROVIDE COUNTERTOP BRACKETS AT OPEN KNEE SPACES WIDER THAN 42" (TYP.). CENTER IN OPEN AREA AND PAINT TO MATCH WALL COLOR, UNLESS NOTED OR SHOWN OTHERWISE.
15. ALIGN ALL WALL TILE JOINTS WITH FLOOR TILE JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
16. RE: EQUIPMENT DRAWINGS & SPECS. FOR EQUIPMENT ITEMS SHOWN DASHED, PROVIDED BY EQUIP. CONSULTANT AND/ OR SUPPLIED BY OWNER. COORDINATE WITH OTHER TRADES AS NECESSARY.
17. MECH. & ELEC. SYMBOLS AND OUTLETS ARE SHOWN FOR REFERENCE ONLY. COORDINATE LOCATIONS WITH MEP DRAWINGS. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.

collins | webb ARCHITECTURE
3078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

1	City Comments	01/23/2025

STATE OF MISSOURI
ROGER L. WEBB II
NUMBER A-2016002008
01/29/2025
ARCHITECT
PROFESSIONAL SEAL

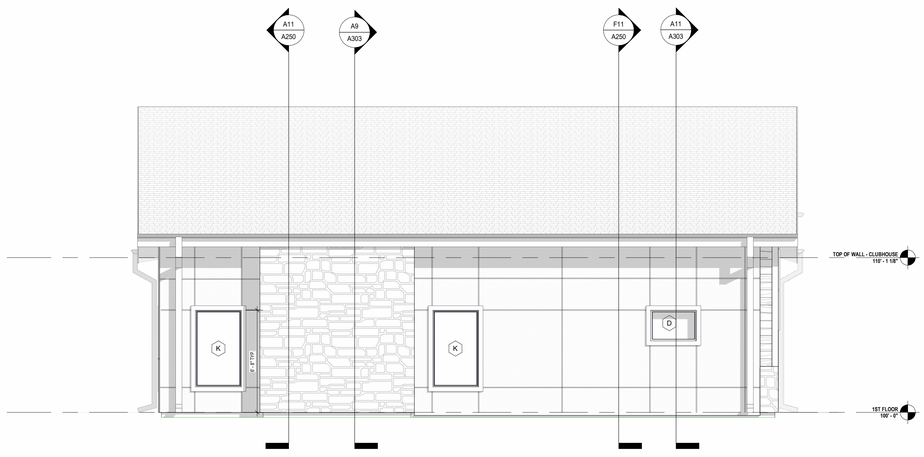
A132

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

BATHROOM ENLARGED PLANS AND ELEVATIONS



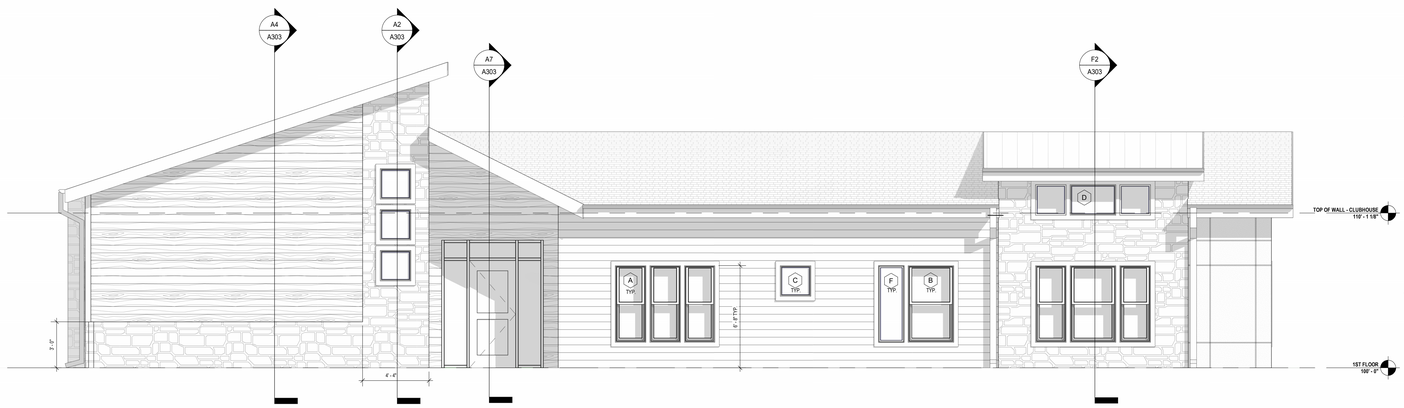
G10 CLUBHOUSE - REAR
1/4" = 1'-0"



D10 CLUBHOUSE - LEFT
1/4" = 1'-0"



D5 CLUBHOUSE - RIGHT
1/4" = 1'-0"



A9 CLUBHOUSE - FRONT
1/4" = 1'-0"

GENERAL NOTES EXTERIOR ELEVATIONS:

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE EXTERIOR ELEVATIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), FACE OF STUD, AND COLUMN GRID LINES, UNLESS OTHERWISE NOTED OR INDICATED.
3. RE: THE WINDOW TYPES SHEET FOR ALL EXTERIOR WINDOW TYPES AND GLASS TYPES.
4. PROVIDE ALL BLOCKING AND POWER AS REQUIRED FOR EXTERIOR SIGNAGE.

KEY NOTES EXTERIOR ELEVATIONS:

MARK	DESCRIPTION
1A	6" LAP SIDING - WHITE - SEE EXTERIOR MATERIAL LEGEND BELOW.
1B	6" LAP SIDING - BROWN - SEE EXTERIOR MATERIAL LEGEND BELOW.
1C	CULTURED STONE VENEER - SEE EXTERIOR MATERIAL LEGEND BELOW.
1D	EXTERIOR STUCCO SYSTEM. SEE EXTERIOR MATERIAL LEGEND BELOW.
1E	6" BATT SIDING - WHITE - SEE EXTERIOR MATERIAL LEGEND BELOW.
2A	ARCHITECTURAL ASPHALT SHINGLES.
2B	ARCHITECTURAL STANDING SEAM METAL ROOF.
3A	PREFINISHED ALUMINUM GUTTER. RE: EXT. FINISH LEGEND.
3B	PREFINISHED ALUMINUM DOWNSPUT WITH SPASH BLOCKS. RE: EXT. FINISH LEGEND.
4A	1X4 TRIM BOARD.
4B	1X6 TRIM BOARD.
5A	LIGHT FIXTURE. RE: ELECTRICAL
6A	CONCRETE FOUNDATION. PAINT WITH EXTERIOR CONCRETE PAINT. RE: EXT. FINISH LEGEND
7A	ROOF VENT.
7B	POST FOR ROOF STRUCTURE. RE: STRUCT.
8A	ALUMINUM DOOR. RE: DOOR SCHEDULE
8B	VINYL WINDOW SYSTEM. BASIS OF DESIGN: MI 3500 SERIES
8C	VINYL DOOR. RE: DOOR SCHEDULE
8D	GARAGE OVERHEAD DOOR. RE: DOOR SCHEDULE

EXTERIOR ELEVATION MATERIALS

- STO CRACK DEFENSE STUCCO SYSTEM - TEXTURE: FINE - GRAY DAWN
- NEW TECH WOOD - ALL WEATHER SIDING - BRAZILIAN IPE (IP)
- LP SMARTSIDE LAP SIDING - SMOOTH FINISH - SNOWSCAPE WHITE
- EL DORADO STONE (SIMULATED)- CUT COARSE STONE VENEER - SEASHELL
- LP SMARTSIDE VERTICAL SIDING- CEDAR TEXTURE PANEL SNOWSCAPE WHITE

collins | webb ARCHITECTURE
3078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

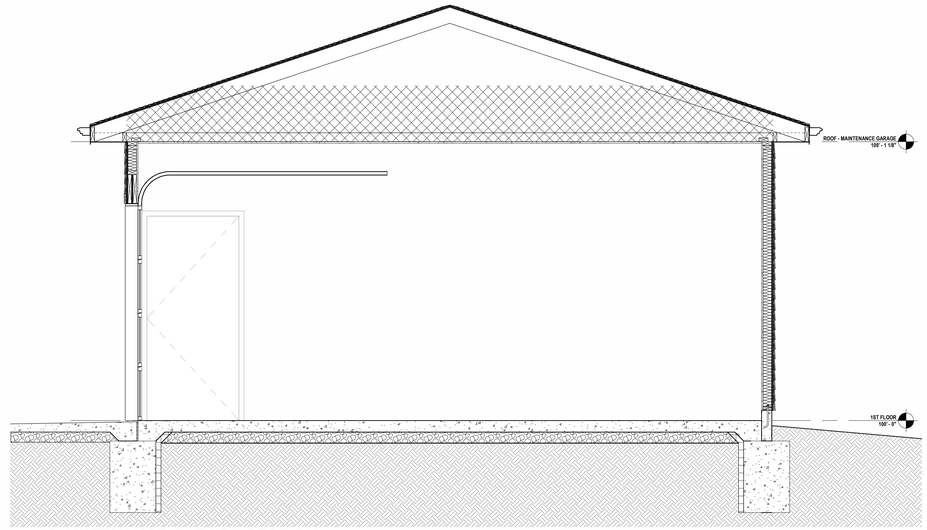
STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016004008
ARCHITECT
PROFESSIONAL SEAL

A201 K

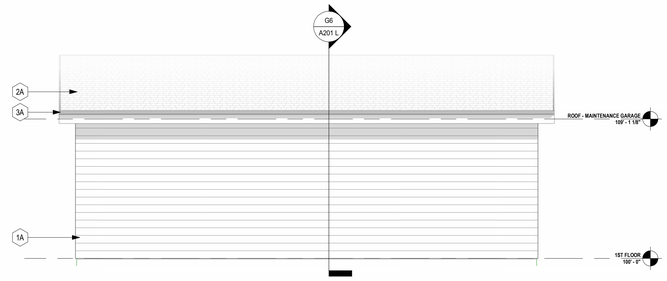
ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

EXTERIOR ELEVATIONS - CLUBHOUSE

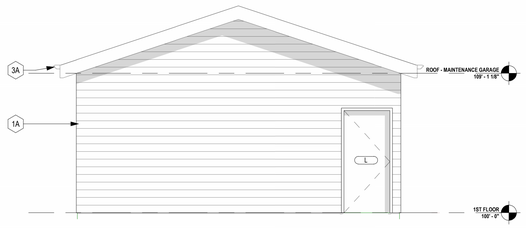
1/29/2025 8:42:15 AM



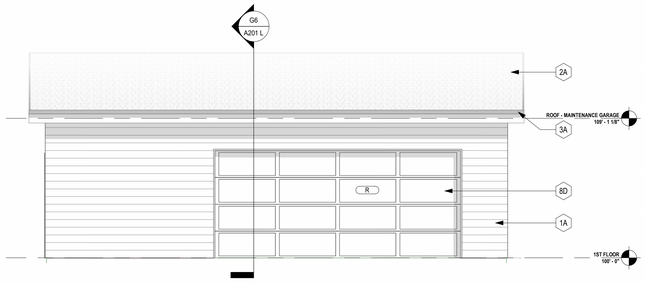
G6 MAINTENANCE GARAGE SECTION
1/2" = 1'-0"



E4 MAINTENANCE GARAGE - REAR
1/4" = 1'-0"



C4 MAINTENANCE GARAGE - LEFT
1/4" = 1'-0"



A4 MAINTENANCE GARAGE - FRONT
1/4" = 1'-0"

GENERAL NOTES EXTERIOR ELEVATIONS:

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE EXTERIOR ELEVATIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), FACE OF STUD, AND COLUMN GRID LINES, UNLESS OTHERWISE NOTED OR INDICATED.
3. RE: THE WINDOW TYPES SHEET FOR ALL EXTERIOR WINDOW TYPES AND GLASS TYPES.
4. PROVIDE ALL BLOCKING AND POWER AS REQUIRED FOR EXTERIOR SIGNAGE.

KEY NOTES EXTERIOR ELEVATIONS:

MARK	DESCRIPTION
1A	6" LAP SIDING - WHITE - SEE EXTERIOR MATERIAL LEGEND BELOW.
1B	6" LAP SIDING - BROWN - SEE EXTERIOR MATERIAL LEGEND BELOW.
1C	CULTURED STONE VENEER - SEE EXTERIOR MATERIAL LEGEND BELOW.
1D	EXTERIOR STUCCO SYSTEM. SEE EXTERIOR MATERIAL LEGEND BELOW.
1E	6" BATT SIDING - WHITE - SEE EXTERIOR MATERIAL LEGEND BELOW.
2A	ARCHITECTURAL ASPHALT SHINGLES.
2B	ARCHITECTURAL STANDING SEAM METAL ROOF.
3A	PREFINISHED ALUMINUM GUTTER. RE: EXT. FINISH LEGEND.
3B	PREFINISHED ALUMINUM DOWNSPUT WITH SPASH BLOCKS. RE: EXT. FINISH LEGEND.
4A	1X4 TRIM BOARD.
4B	1X6 TRIM BOARD.
5A	LIGHT FIXTURE. RE: ELECTRICAL
6A	CONCRETE FOUNDATION. PAINT WITH EXTERIOR CONCRETE PAINT. RE: EXT. FINISH LEGEND
7A	ROOF VENT.
7B	POST FOR ROOF STRUCTURE. RE: STRUCT.
8A	ALUMINUM DOOR. RE: DOOR SCHEDULE
8B	VINYL WINDOW SYSTEM. BASIS OF DESIGN: MI 3500 SERIES
8C	VINYL DOOR. RE: DOOR SCHEDULE
8D	GARAGE OVERHEAD DOOR. RE: DOOR SCHEDULE

EXTERIOR ELEVATION MATERIALS

- STO CRACK DEFENSE STUCCO SYSTEM - TEXTURE: FINE - GRAY DAWN
- NEW TECH WOOD - ALL WEATHER SIDING - BRAZILIAN IPE (IP)
- LP SMARTSIDE LAP SIDING - SMOOTH FINISH - SNOWSCAPE WHITE
- EL DORADO STONE (SIMULATED)- CUT COARSE STONE VENEER - SEASHELL
- LP SMARTSIDE VERTICAL SIDING- CEDAR TEXTURE PANEL SNOWSCAPE WHITE

collins | webb ARCHITECTURE
13A SW 3rd Street, Lee's Summit, Missouri, 64063 P: 816.249.2270 www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

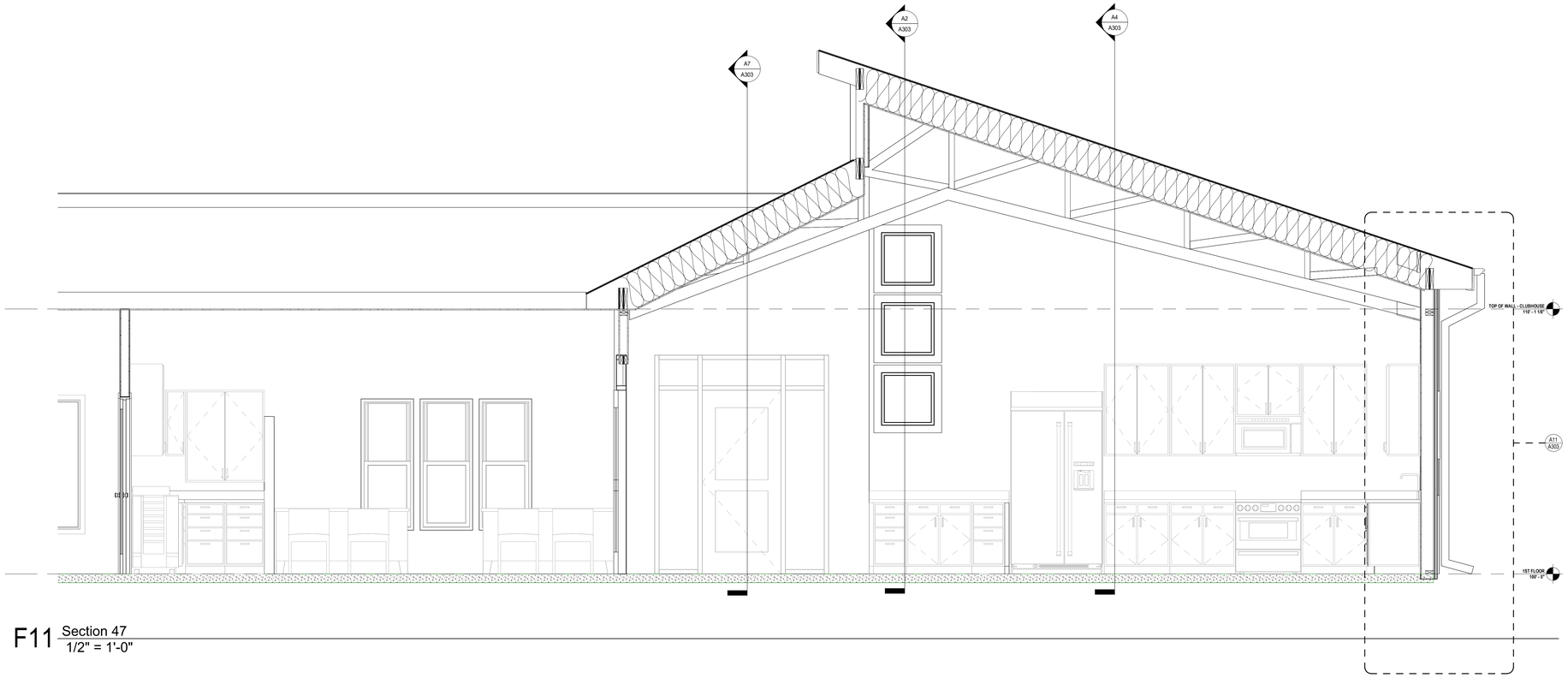
STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016014088
ARCHITECT
PROFESSIONAL SEAL

A201 L

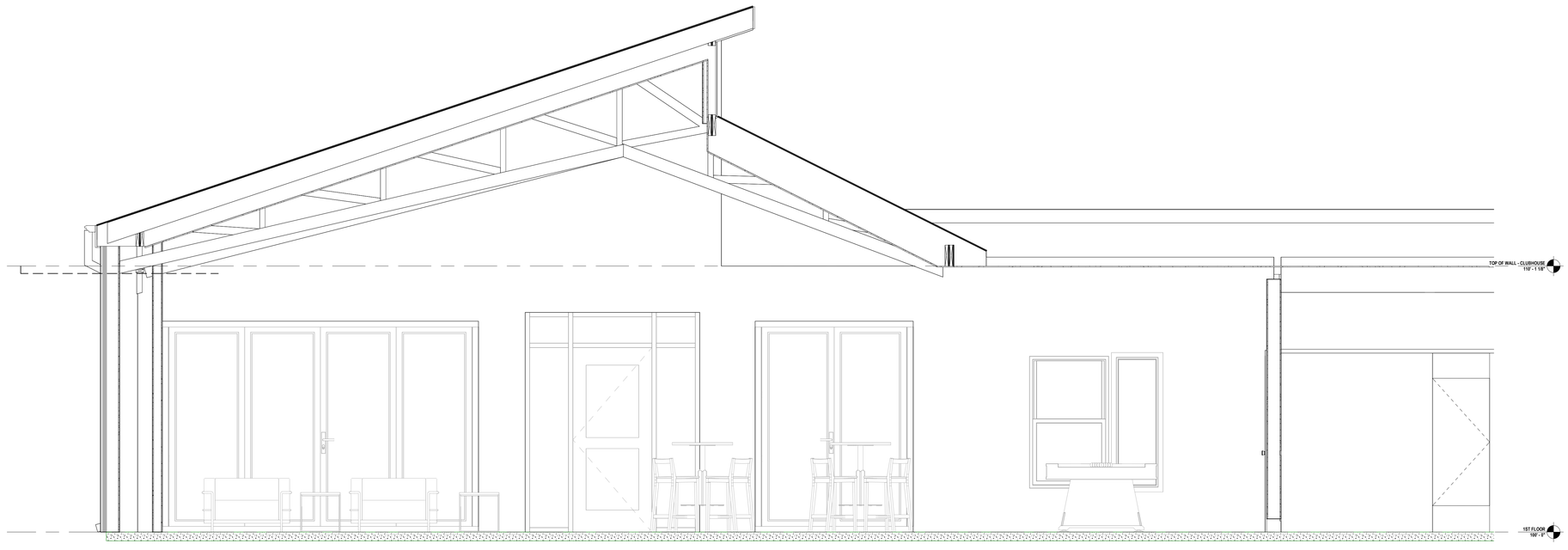
ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

EXTERIOR ELEVATIONS - MAINTENANCE GARAGE

1/29/2025 8:42:21 AM



F11 Section 47
1/2" = 1'-0"



A11 Section 48
1/2" = 1'-0"

GENERAL NOTES: EXTERIOR WALL SECTIONS/ DETAILS

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)
6. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS, INCLUDING LOCATIONS OF SHEAR WALLS.

KEY NOTES WALL SECTIONS:

MARK	DESCRIPTION
1A	6" LP SMARTSIDE LAP SIDING OVER HOUSE WRAP - WHITE - RE: MFR. FOR INSTALLATION DETAILS
1B	NEW TECH WOOD - ALL WEATHER SIDING - BROWN - RE: MFR. FOR INSTALLATION DETAILS
1C	CULTURED STONE VENEER - RE: MFR. FOR INSTALLATION DETAILS
1D	STUCCO FINISH SYSTEM - RE: MFR. FOR INSTALLATION DETAILS
1E	SMARTSIDE VERTICAL SIDING OVER HOUSE WRAP - WHITE - RE: MFR. FOR INSTALLATION DETAILS
2A	ARCHITECTURAL ASPHALT SHINGLES OVER FELT PAPER AND ICE DAM (AT FASCHIA EDGES)
2B	ARCHITECTURAL STANDING SEAM METAL ROOF
3A	PREFINISHED ALUMINUM GUTTER RE: EXT. FINISH LEGEND
3B	PREFINISHED ALUMINUM DOWNSPUT WITH SPASH BLOCKS. RE: EXT. FINISH LEGEND
4A	FASCIA BOARD
4B	1X4 TRIM BOARD
4C	1X6 TRIM BOARD
5A	ROOF VENT.
6A	LIGHT FIXTURE. RE: ELECTRICAL
7A	CONCRETE FOUNDATION. RE: STRUCTURAL
7B	CONCRETE FOUNDATION. PAINT EXPOSED AREAS WITH EXTERIOR CONC. PAINT, RE: FINISH LEGEND
8A	POST FOR ROOF STRUCTURE. RE: STRUCT.
8B	TREATED WOOD JOIST SYSTEM. RE: STRUCT.
8C	TREATED WOOD BEAM SYSTEM. RE: STRUCT.
9A	DECORATIVE INSULATED METAL PANEL OVERHEAD DOOR. RE: DOOR SCHEDULE
9B	FIBERGLASS DOOR. RE: DOOR SCHEDULE
9C	DECORATIVE WOOD ENTRY DOOR. RE: DOOR SCHEDULE
9D	WHITE VINYL WINDOW SYSTEM. BASIS OF DESIGN: MI 3500 SERIES
9E	PROVIDE BLACK FABRIC BACKING OR FILM ON WINDOW. OPENING IS FOR AESTHETICS ONLY
10A	ROOF SHEATHING. RE: STRUCT.
10B	ROOF STRUCTURE. RE: STRUCT.
11A	MIN. R-38 BLOWN INSULATION
11B	R-15 BATT INSULATION
11C	WEATHER RESISTANT PVC SOFFIT VENT. COLOR: WHITE
11D	2" RIGID INSULATION
12A	2X WOOD HEADER. RE: STRUCT.
12B	RIM BOARD. RE: STRUCT.
12C	ENGINEERED JOIST SYSTEM. RE: STRUCT.
12D	2X TRUSS LEDGER
13A	1/2" GYPSUM BOARD
13B	5/8" TYPE 'X' GYPSUM BOARD
14A	PREFINISHED ALUMINUM FLASHING
14B	FLANGED WINDOW HEAD DETAIL PER MFR'S SPECS
14C	FLANGED WINDOW-SILL DETAIL PER MFR'S SPECS
15A	SOFFIT PANEL TO MATCH SIDING MATERIAL. RE: ROOF PLANS FOR CONDITIONS WHERE RATED PLYWOOD OCCURS
16A	1/2" FIRE RATED PLYWOOD SHEATHING. RE: PLAN FOR CONDITIONS WHERE RATED PLYWOOD OCCURS
16B	3/4" SUBFLOOR SHEATHING
17A	CONCRETE PAD. RE: STRUCTURAL DWGS
17B	4" CONCRETE SIDEWALK. RE: STRUCUTRAL DWGS
17C	1/2" EXPANSION JOINT
17D	BACKER ROD AND SEALANT
18A	GRAVEL BASE
18B	EARTH FILL
19A	SILL PLATE ANCHOR. RE: STRUCTURAL DWGS
19B	2X TREATED SILL PLATE

collins|webb ARCHITECTURE
3078 SW Market St. | Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

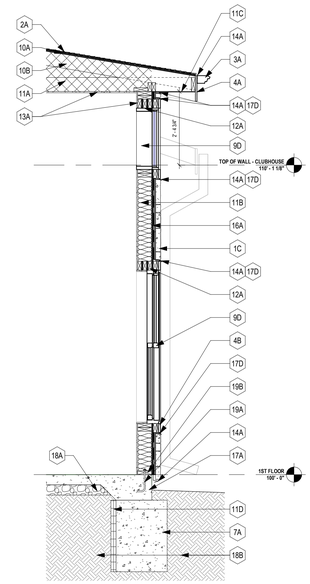
STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016004008
ARCHITECT
9/24/23
PROFESSIONAL SEAL

A250

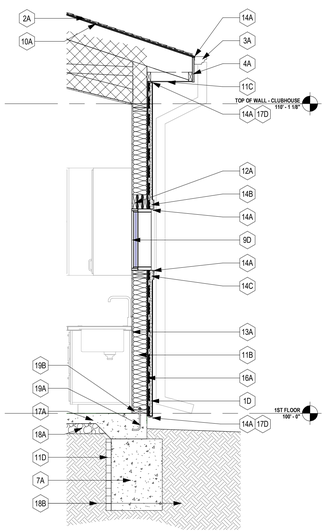
ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

BUILDING SECTIONS - CLUBHOUSE

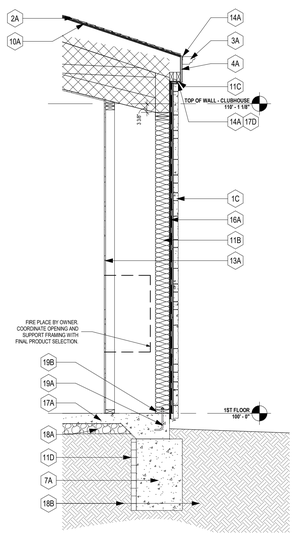
1/29/2025 8:42:22 AM



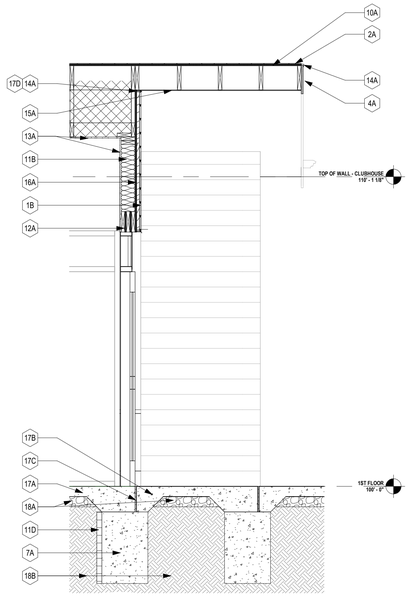
F2 WALL SECTION - CLUBHOUSE
1/2" = 1'-0"



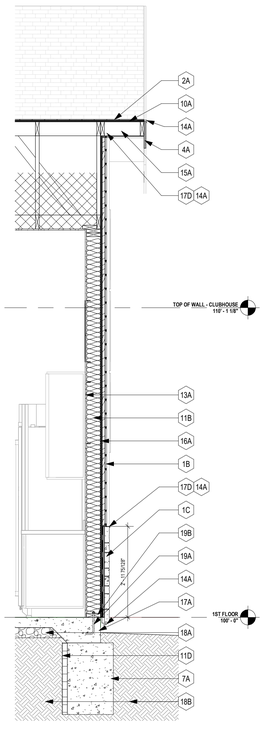
A11 WALL SECTION - CLUBHOUSE
1/2" = 1'-0"



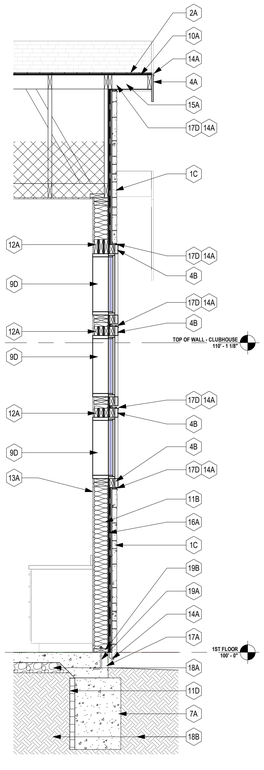
A9 WALL SECTION - CLUBHOUSE
1/2" = 1'-0"



A7 WALL SECTION - CLUBHOUSE
1/2" = 1'-0"



A4 WALL SECTION - CLUBHOUSE
1/2" = 1'-0"



A2 WALL SECTION - CLUBHOUSE
1/2" = 1'-0"

GENERAL NOTES: EXTERIOR WALL SECTIONS/ DETAILS

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)
6. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS, INCLUDING LOCATIONS OF SHEAR WALLS.

KEY NOTES WALL SECTIONS:

MARK	DESCRIPTION
1A	6" LP SMARTSIDE LAP SIDING OVER HOUSE WRAP - WHITE - RE: MFR. FOR INSTALLATION DETAILS
1B	NEW TECH WOOD - ALL WEATHER SIDING - BROWN - RE: MFR. FOR INSTALLATION DETAILS
1C	CULTURED STONE VENEER - RE: MFR. FOR INSTALLATION DETAILS
1D	STUCCO FINISH SYSTEM - RE: MFR. FOR INSTALLATION DETAILS
1E	SMARTSIDE VERTICAL SIDING OVER HOUSE WRAP - WHITE - RE: MFR. FOR INSTALLATION DETAILS
2A	ARCHITECTURAL ASPHALT SHINGLES OVER FELT PAPER AND ICE DAM (AT FASCHIA EDGES)
2B	ARCHITECTURAL STANDING SEAM METAL ROOF
3A	PREFINISHED ALUMINUM GUTTER RE: EXT. FINISH LEGEND
3B	PREFINISHED ALUMINUM DOWNSPUT WITH SPASH BLOCKS. RE: EXT. FINISH LEGEND
4A	FASCIA BOARD
4B	1X4 TRIM BOARD
4C	1X6 TRIM BOARD
5A	ROOF VENT.
6A	LIGHT FIXTURE. RE: ELECTRICAL
7A	CONCRETE FOUNDATION. RE: STRUCTURAL
7B	CONCRETE FOUNDATION. PAINT EXPOSED AREAS WITH EXTERIOR CONC. PAINT, RE: FINISH LEGEND
8A	POST FOR ROOF STRUCTURE. RE: STRUCT.
8B	TREATED WOOD JOIST SYSTEM. RE: STRUCT.
8C	TREATED WOOD BEAM SYSTEM. RE: STRUCT.
9A	DECORATIVE INSULATED METAL PANEL OVERHEAD DOOR. RE: DOOR SCHEDULE
9B	FIBERGLASS DOOR. RE: DOOR SCHEDULE
9C	DECORATIVE WOOD ENTRY DOOR. RE: DOOR SCHEDULE
9D	WHITE VINYL WINDOW SYSTEM. BASIS OF DESIGN: MI 3500 SERIES
9E	PROVIDE BLACK FABRIC BACKING OR FILM ON WINDOW. OPENING IS FOR AESTHETICS ONLY
10A	ROOF SHEATHING. RE: STRUCT.
10B	ROOF STRUCTURE. RE: STRUCT.
11A	MIN. R-38 BLOWN INSULATION
11B	R-15 BATT INSULATION
11C	WEATHER RESISTANT PVC SOFFIT VENT. COLOR: WHITE
11D	2" RIGID INSULATION
12A	2X WOOD HEADER. RE: STRUCT.
12B	RIM BOARD. RE: STRUCT.
12C	ENGINEERED JOIST SYSTEM. RE: STRUCT.
12D	2X TRUSS LEDGER
13A	1/2" GYPSUM BOARD
13B	5/8" TYPE 'X' GYPSUM BOARD
14A	PREFINISHED ALUMINUM FLASHING
14B	FLANGED WINDOW HEAD DETAIL PER MFR'S SPECS
14C	FLANGED WINDOW-SILL DETAIL PER MFR'S SPECS
15A	SOFFIT PANEL TO MATCH SIDING MATERIAL. RE: ROOF PLANS FOR CONDITIONS WHERE RATED PLYWOOD OCCURS
16A	1/2" FIRE RATED PLYWOOD SHEATHING. RE: PLAN FOR CONDITIONS WHERE RATED PLYWOOD OCCURS
16B	3/4" SUBFLOOR SHEATHING
17A	CONCRETE PAD. RE: STRUCTURAL DWGS
17B	4" CONCRETE SIDEWALK. RE: STRUCUTRAL DWGS
17C	1/2" EXPANSION JOINT
17D	BACKER ROD AND SEALANT
18A	GRAVEL BASE
18B	EARTH FILL
19A	SILL PLATE ANCHOR. RE: STRUCTURAL DWGS
19B	2X TREATED SILL PLATE

collins | webb ARCHITECTURE
3078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016014008
ARCHITECT
09/04/25

PROFESSIONAL SEAL

A303

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

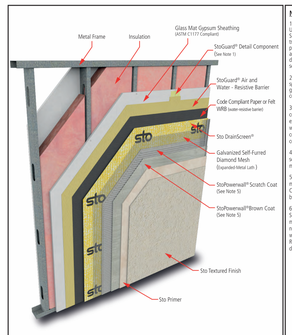
EXTERIOR WALL SECTIONS + DETAILS

1/29/2025 8:42:24 AM

↑ Back to Top

StoPowerwall® DrainScreen®
System Components

Detail No.: 64s.00
Date: March 2022



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

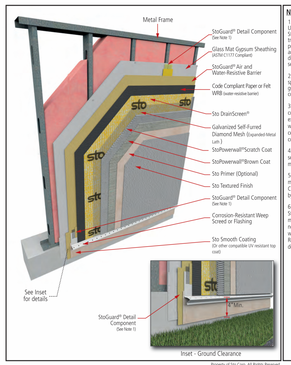
ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Termination at Grade: Sheathing Flush with Foundation

Detail No.: 64s.02
Date: March 2022



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

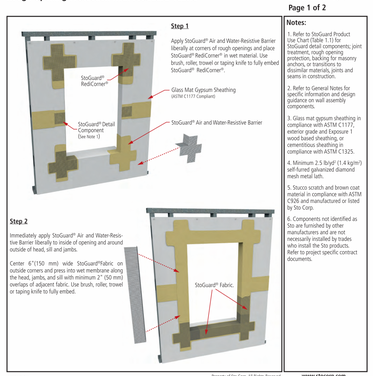
ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Rough Opening Protection with StoGuard®Fabric

Detail No.: 64s.04F
Date: March 2022
Page 1 of 2



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

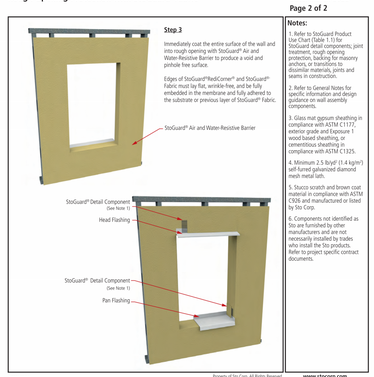
ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Rough Opening Protection with StoGuard®Fabric

Detail No.: 64s.04F
Date: March 2022
Page 2 of 2



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

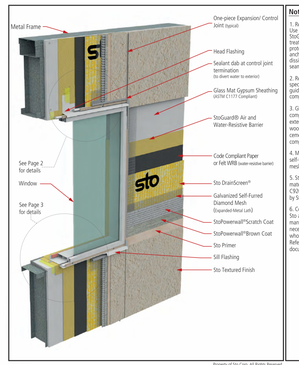
ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Box Window at Sill, Jamb, and Head

Detail No.: 64s.05
Date: March 2022
Page 1 of 3



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Box Window at Head/Jamb

Detail No.: 64s.05
Date: March 2022
Page 2 of 3

Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Box Window at Sill/Jamb

Detail No.: 64s.05
Date: March 2022
Page 3 of 3

Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

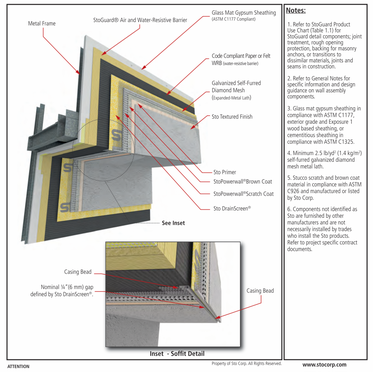
ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Soffit Return

Detail No.: 64s.07
Date: March 2022



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

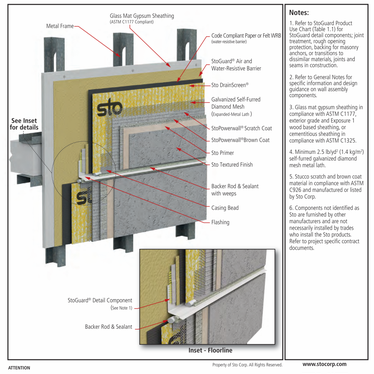
ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Floorline without Deflection Track

Detail No.: 64s.08
Date: March 2022



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Inside Corner: Common Substrate

Detail No.: 64s.12
Date: March 2022



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

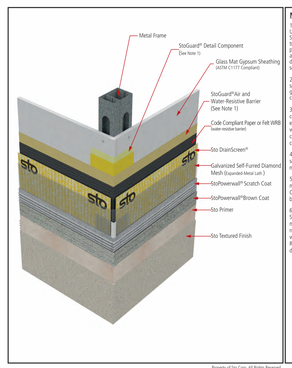
ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Outside Corner: Common Substrate

Detail No.: 64s.14
Date: March 2022



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

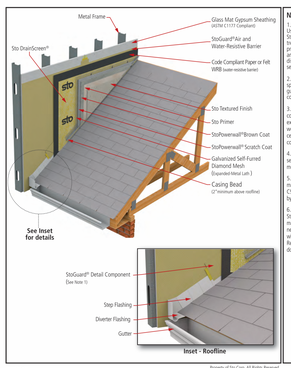
ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Roof / Wall Abutment

Detail No.: 64s.16
Date: March 2022



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

www.stocorp.com

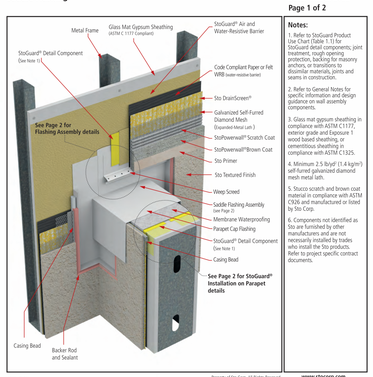
ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclosures, please refer to the Sto Corp. website, www.stocorp.com.

StoPowerwall® DrainScreen®
Saddle Flashing

Detail No.: 64s.17
Date: March 2022
Page 1 of 2



Notes:

1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.

2. Refer to General Notes for specific information and design guidance on wall assembly components.

3. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.

4. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.

5. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.

6. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

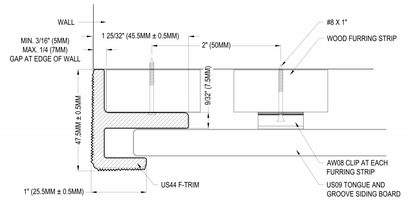
www.stocorp.com

ATTENTION
Property of Sto Corp. All Rights Reserved.

Sto products are intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. They should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, of for other construction activities beyond Sto's control. Improper use of Sto products or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to Sto products, and to the structure of the building or its components.

STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME. For the fullest, most current information on pro

NEWTECHWOOD® AMERICA INC.
15912 INTERNATIONAL PLAZA DR.
HOUSTON, TX 77032
TOLL FREE: 1-866-728-5273
PHONE: (281) 570-6450
www.newtechwood.com



VERTICAL INSTALLATION PLAN

SPECIFICATIONS:
PROFILE: F-TRIM USED AT THE OUTERMOST EDGE OF THE WALL
WEIGHT: 0.53LB/FT

MANUFACTURERS' NOTES:
1. REFER TO MANUFACTURER'S WEBSITE FOR ALL COLOR OPTIONS

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 5467-015.

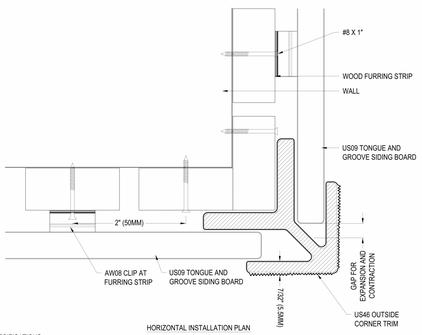
ULTRASHIELD® WALL CLADDING

US44: F-TRIM

5467-015 REVISION DATE 03/01/2022

PROTECTED BY COPYRIGHT ©2021 CADDETAILS.COM LTD. CADdetails.com

NEWTECHWOOD® AMERICA INC.
15912 INTERNATIONAL PLAZA DR.
HOUSTON, TX 77032
TOLL FREE: 1-866-728-5273
PHONE: (281) 570-6450
www.newtechwood.com



HORIZONTAL INSTALLATION PLAN

SPECIFICATIONS:
PROFILE: OUTSIDE CORNER TRIM
WEIGHT: 0.85LB/FT

MANUFACTURERS' NOTES:
1. REFER TO MANUFACTURER'S WEBSITE FOR ALL COLOR OPTIONS

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 5467-017.

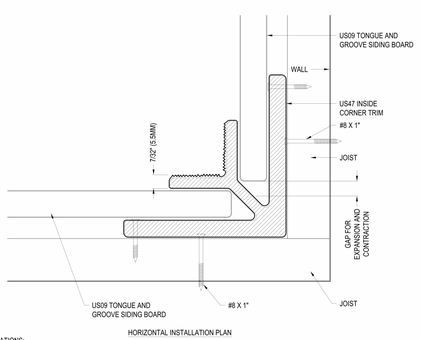
ULTRASHIELD® WALL CLADDING

US46: OUTSIDE CORNER TRIM

5467-017 REVISION DATE 03/01/2022

PROTECTED BY COPYRIGHT ©2021 CADDETAILS.COM LTD. CADdetails.com

NEWTECHWOOD® AMERICA INC.
15912 INTERNATIONAL PLAZA DR.
HOUSTON, TX 77032
TOLL FREE: 1-866-728-5273
PHONE: (281) 570-6450
www.newtechwood.com



HORIZONTAL INSTALLATION PLAN

SPECIFICATIONS:
PROFILE: INSIDE CORNER TRIM
WEIGHT: 1.13LB/FT

MANUFACTURERS' NOTES:
1. REFER TO MANUFACTURER'S WEBSITE FOR ALL COLOR OPTIONS

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 5467-018.

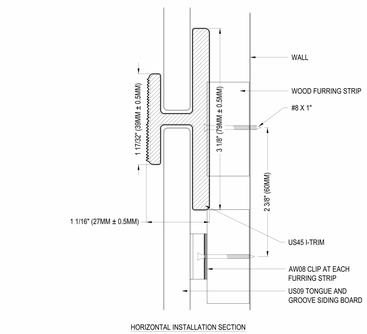
ULTRASHIELD® WALL CLADDING

US47: INSIDE CORNER TRIM

5467-018 REVISION DATE 03/01/2022

PROTECTED BY COPYRIGHT ©2021 CADDETAILS.COM LTD. CADdetails.com

NEWTECHWOOD® AMERICA INC.
15912 INTERNATIONAL PLAZA DR.
HOUSTON, TX 77032
TOLL FREE: 1-866-728-5273
PHONE: (281) 570-6450
www.newtechwood.com



HORIZONTAL INSTALLATION SECTION

SPECIFICATIONS:
PROFILE: I TRIM USED AT THE BUTT JOINT OF TWO-COLUMN BOARDS
WEIGHT: 0.71LB/FT

MANUFACTURERS' NOTES:
1. REFER TO MANUFACTURER'S WEBSITE FOR ALL COLOR OPTIONS

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 5467-016.

ULTRASHIELD® WALL CLADDING

US45: I-TRIM

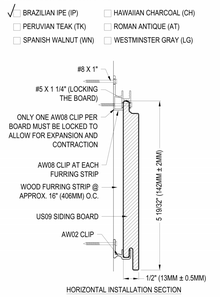
5467-016 REVISION DATE 03/01/2022

PROTECTED BY COPYRIGHT ©2021 CADDETAILS.COM LTD. CADdetails.com

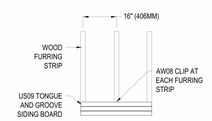
NEWTECHWOOD® AMERICA INC.
15912 INTERNATIONAL PLAZA DR.
HOUSTON, TX 77032
TOLL FREE: 1-866-728-5273
PHONE: (281) 570-6450
www.newtechwood.com

☑ SELECT DESIRED COLOR OPTION:

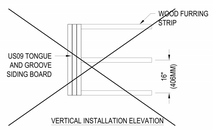
- √ ☐ BRAZILIAN IPE (IP)
- ☐ PERUVIAN TEAK (TK)
- ☐ SPANISH WALNUT (WN)
- ☐ HAWAIIAN CHARCOAL (CH)
- ☐ ROMAN ANTIQUE (AT)
- ☐ WESTMINSTER GRAY (LG)



HORIZONTAL INSTALLATION SECTION



HORIZONTAL INSTALLATION ELEVATION



VERTICAL INSTALLATION ELEVATION

SPECIFICATIONS:
PROFILE: TONGUE AND GROOVE SIDING
WEIGHT: 1.32LB/FT
LENGTH: 16'

MANUFACTURERS' NOTES:
1. REFER TO MANUFACTURERS' WEBSITE FOR ALL CUSTOM COLOR OPTIONS

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 5467-014.

ULTRASHIELD® WALL CLADDING

US09: TONGUE AND GROOVE SIDING BOARD

5467-014 REVISION DATE 11/08/2022

PROTECTED BY COPYRIGHT ©2022 CADDETAILS.COM LTD. CADdetails.com

collins | webb ARCHITECTURE
3078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016042008
ARCHITECT
26/08/23

PROFESSIONAL SEAL

A352

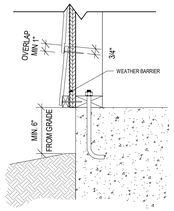
ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

WALL CLADDING DETAILS - NEWTECHWOOD

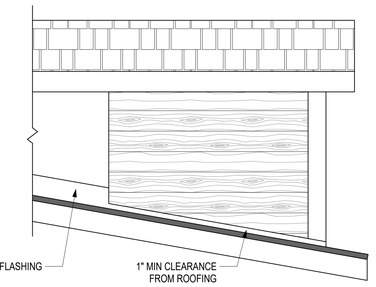
1/29/2025 8:42:48 AM

LAP

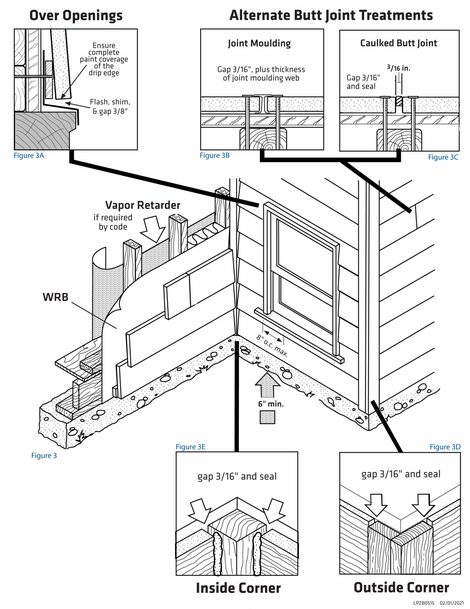
Application instructions (cont.)



H6 LAP OVERLAP, CLEARANCE & NAILING
1 1/2" = 1'-0"



F6 LAP ROOF CLEARANCE
1" = 1'-0"



LP28515 02/01/2021

BATT

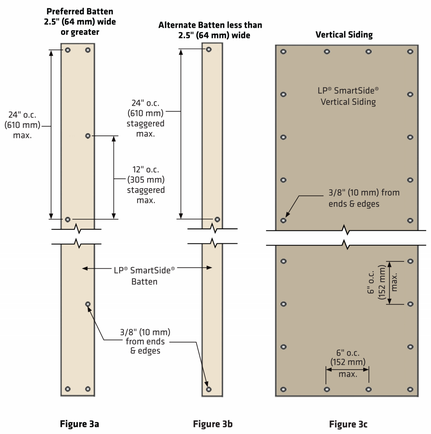


Figure 3a **Figure 3b** **Figure 3c**

ADDRESS 414 Union Street
Suite 2000 Nashville, TN
TEL (615) 986-5600
FAX (615) 986-5666
WEB www.lpcorp.com
BUILD WITH US®

Date Created: 03/15/2017
Last Revision: 05/13/2022

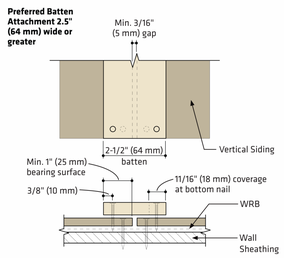


Figure 4a

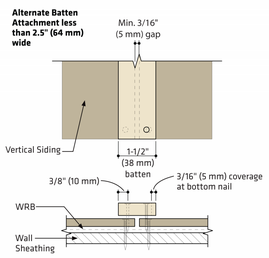


Figure 4b

ADDRESS 414 Union Street
Suite 2000 Nashville, TN
TEL (615) 986-5600
FAX (615) 986-5666
WEB www.lpcorp.com
BUILD WITH US®

Date Created: 03/15/2017
Last Revision: 05/13/2022

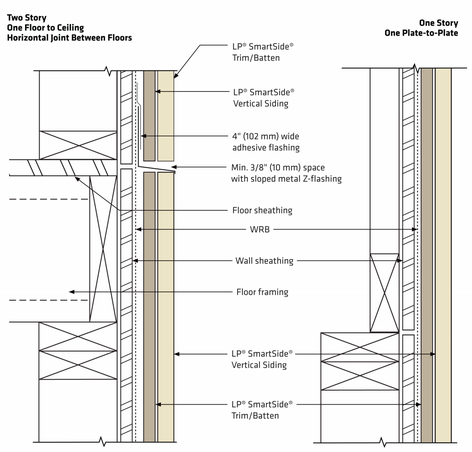


Figure 5a **Figure 5b**

ADDRESS 414 Union Street
Suite 2000 Nashville, TN
TEL (615) 986-5600
FAX (615) 986-5666
WEB www.lpcorp.com
BUILD WITH US®

Date Created: 03/15/2017
Last Revision: 05/13/2022

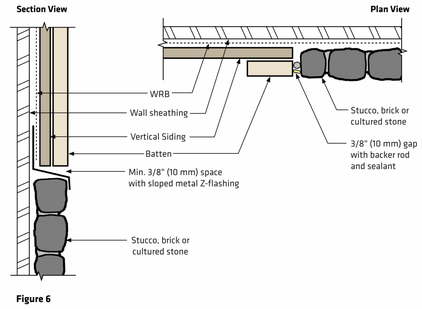


Figure 6

ADDRESS 414 Union Street
Suite 2000 Nashville, TN
TEL (615) 986-5600
FAX (615) 986-5666
WEB www.lpcorp.com
BUILD WITH US®

Date Created: 03/15/2017
Last Revision: 05/13/2022

collins|webb ARCHITECTURE
6078 SW Market St. | Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL
SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016042008
ARCHITECT
26 AUG 23

PROFESSIONAL SEAL

A353

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

WALL CLADDING DETAILS - LP SMARTLAP & BATT

1/29/2025 8:42:55 AM

Figure 3. Wall Assembly Transition

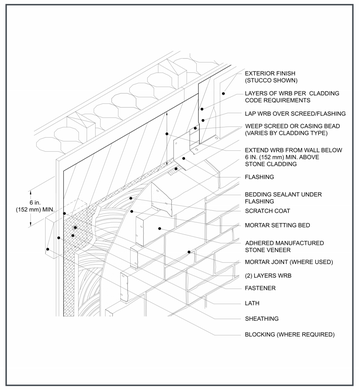


Figure 5a. Foundation Wall Base

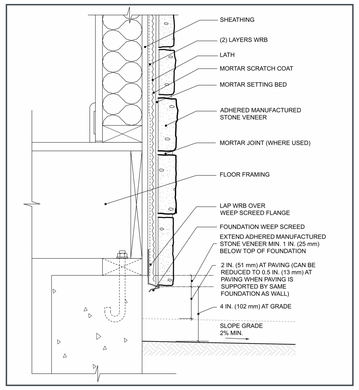
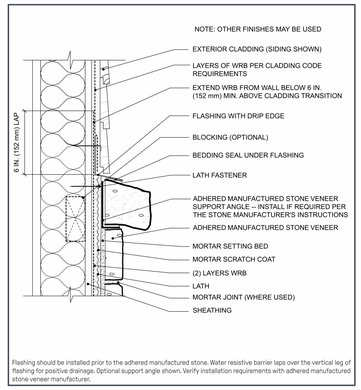


Figure 8a. Cladding Transition



Flashing should be installed prior to the adhered manufactured stone. Water resistive barrier laps over the vertical leg of flashing for positive drainage. Optional support angle shown. Verify installation requirements with adhered manufactured stone veneer manufacturer.

Figure 9a. Outside Corner

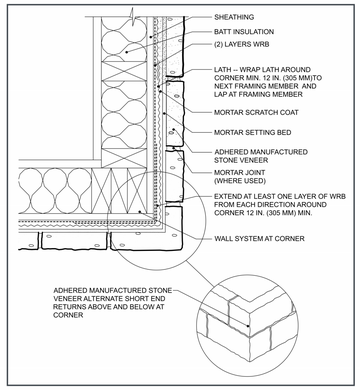


Figure 10a. Inside Corner

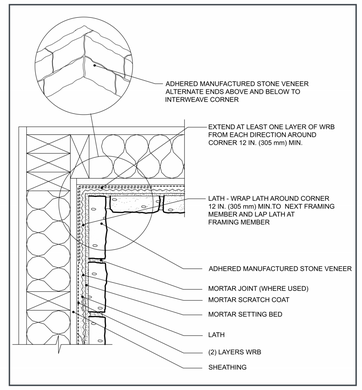


Figure 11a. Horizontal Transition

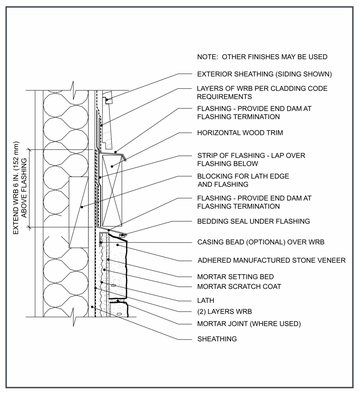


Figure 12a. Vertical Transition

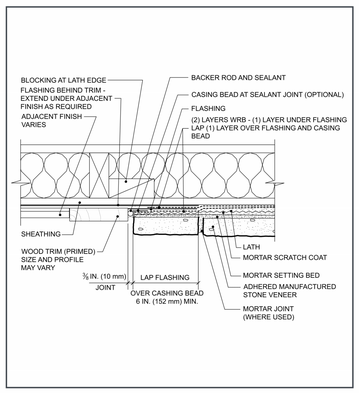
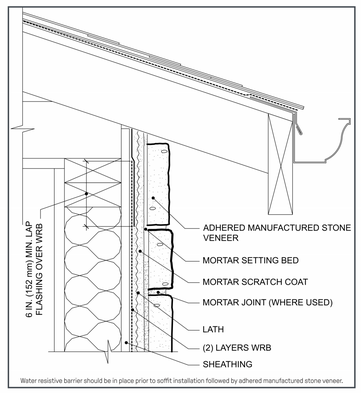


Figure 13a. Open Eave - Overhang



Water resistive barrier should be in place prior to soffit installation followed by adhered manufactured stone veneer.

Figure 15. Rake - Overhang

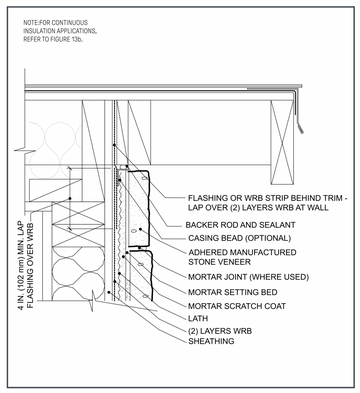


Figure 17a. Side Wall – Composition Shingles

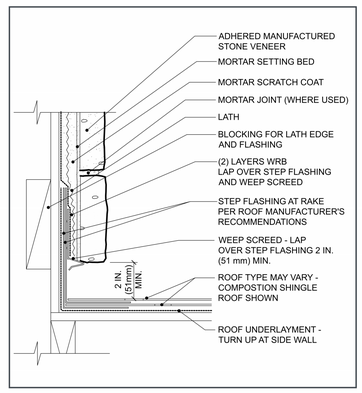
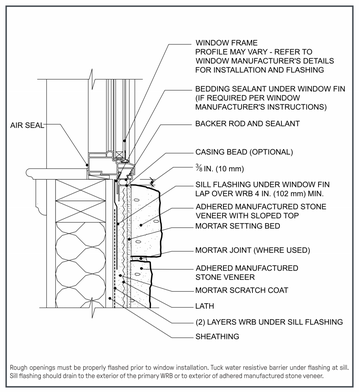
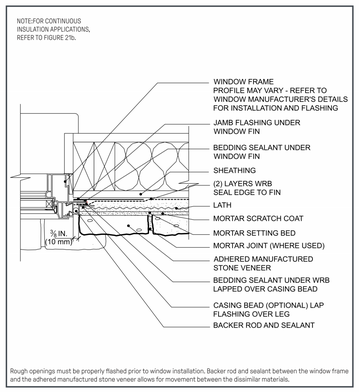


Figure 21a. Window Sill



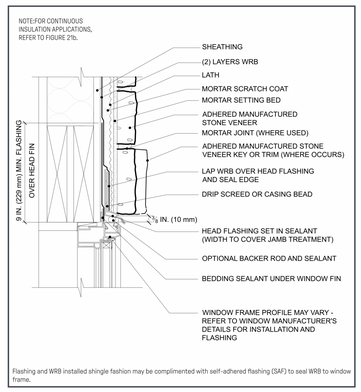
Rough openings must be properly flashed prior to window installation. Tuck water resistive barrier under flashing at sill. Sill flashing should drain to the exterior of the primary WRB or to exterior of adhered manufactured stone veneer.

Figure 22. Window Jamb



Rough openings must be properly flashed prior to window installation. Backer rod and sealant between the window frame and the adhered manufactured stone veneer allows for movement between the dissimilar materials.

Figure 23. Window Head



Flashing and WRB installed shingle fashion may be complimented with self-adhered flashing (SAF) to seal WRB to window frame.

Figure 24. Kick-Out Flashing

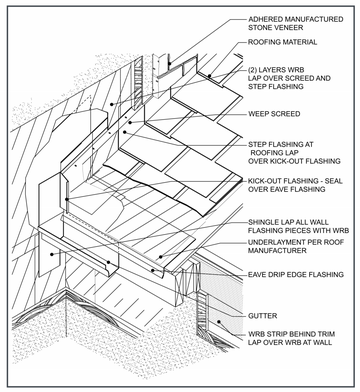
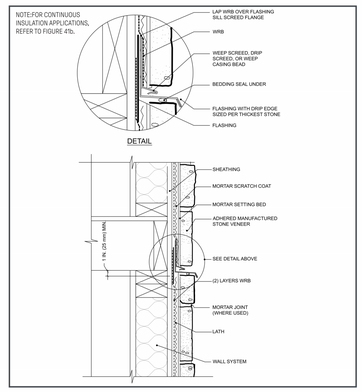


Figure 45. Wall–Section Multi-Floor Joint Detail



CWA collins|webb ARCHITECTURE
13A SW 3rd Street, Lee's Summit, Missouri, 64063 P: 816.249.2270 www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI ROGER L. WEBB NUMBER A-2016004008 ARCHITECT 08/24/23

PROFESSIONAL SEAL

A354

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

WALL CLADDING DETAILS - ELDORADO STONE

1/29/2025 8:43:12 AM

Figure 30. Penetration Non-Flanged, with Housewrap WRB

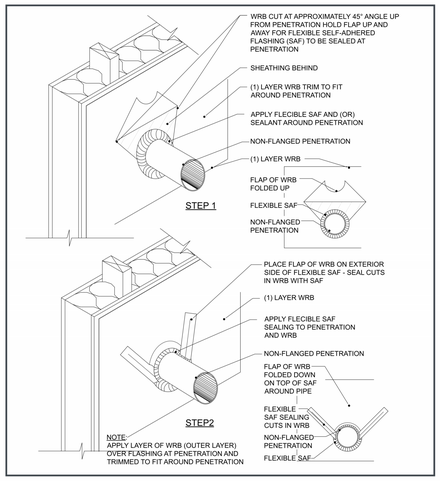
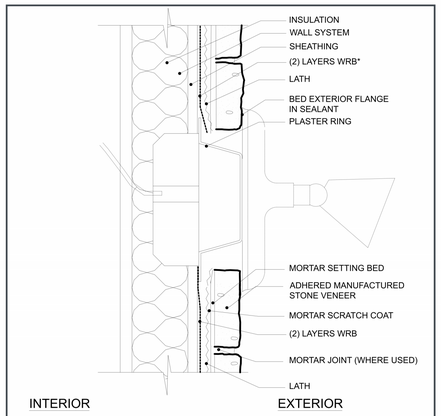


Figure 31. Penetration, Fixture



*SEE FIGURES 29, 30, AND 31 FOR FLASHING OPTIONS.

Plaster rings should be affixed over the service box to bring the face of the box flush with the adhered manufactured stone veneer. Bed the exterior flange in sealant. Water resistive barrier should be installed snugly around the plaster ring flange.

Figure 32. Penetration, Dryer Vent

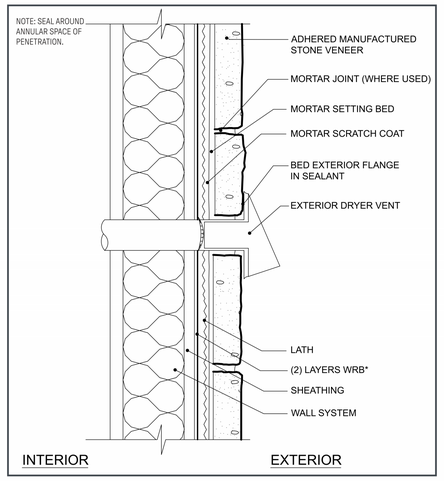


Figure 41a. Forward Mounted Commercial Window

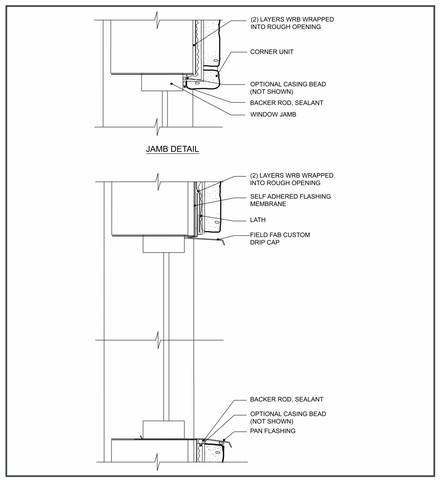


Figure 43. Commercial Storefront Window – Top View

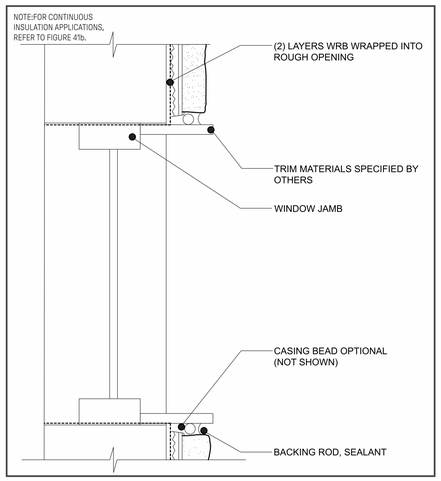
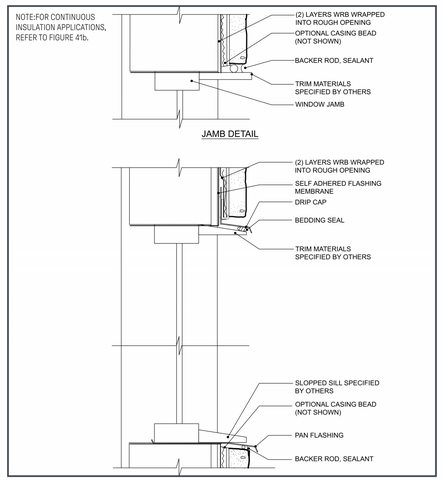


Figure 44. Commercial Storefront Window



CWA collins|webb ARCHITECTURE
13A SW 3rd Street, Lee's Summit, Missouri, 64063 P: 816.249.2270 www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016004008
ARCHITECT
1/29/25

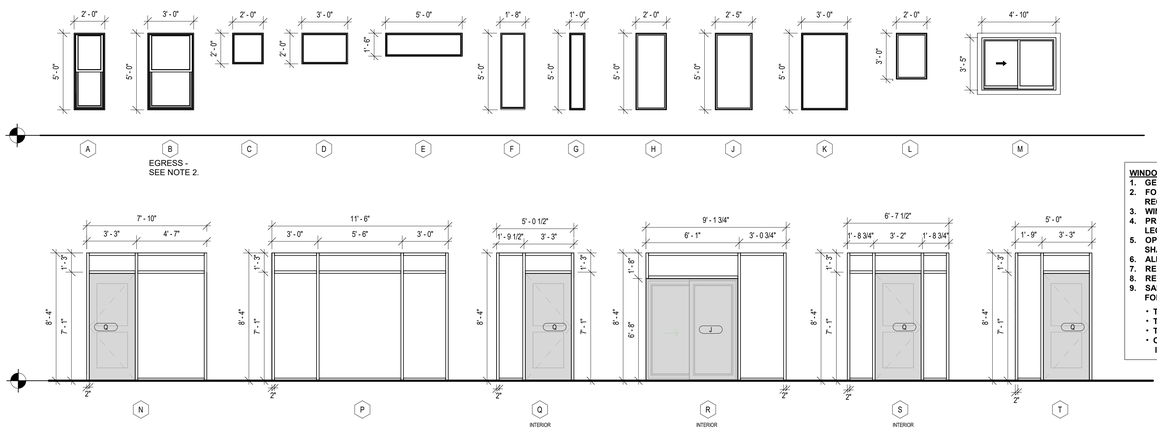
PROFESSIONAL SEAL

A355

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

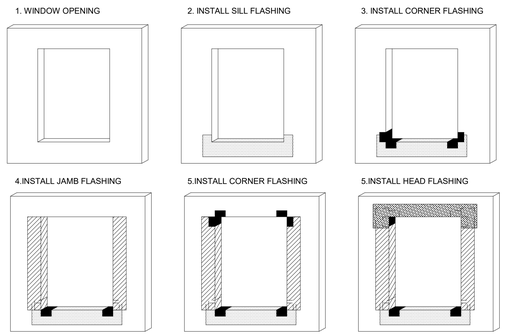
WALL CLADDING DETAILS - ELDORADO STONE 2

1/29/2025 8:43:19 AM



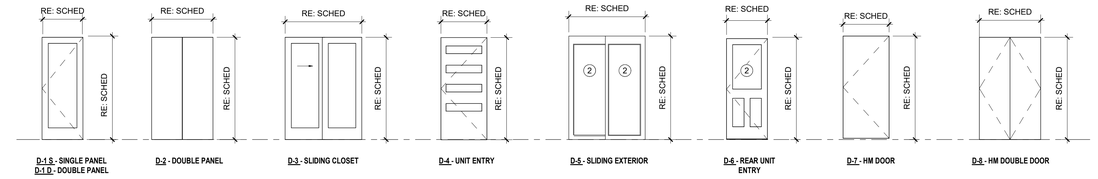
WINDOW SCHEDULE GENERAL NOTES:

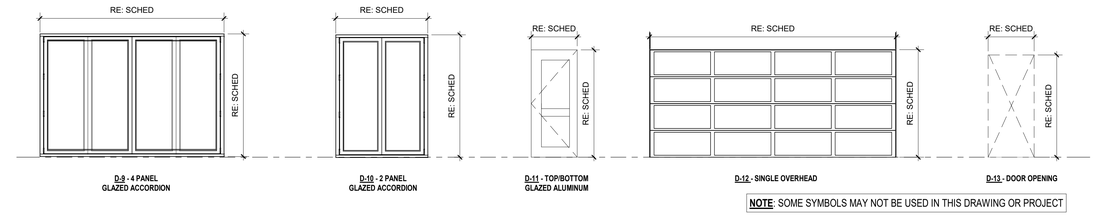
1. GENERAL CONTRACTOR TO VERIFY ALL WINDOW & DOOR SIZES PRIOR TO ORDERING.
2. FOR MODEL NO. 3050, INCORPORATE A SINGLE BALANCE IN TOP HOLE TO MEET EGRESS REQUIREMENTS OF 5.7 SQUARE FEET.
3. WINDOWS BASIS OF DESIGN MI 3500 SINGLE HUNG WINDOW.
4. PROVIDE SAFETY GLAZING AT HAZARDOUS LOCATIONS PER IRC SECTION R308. RE: GLASS TYPE LEGEND AND WINDOW ELEVATIONS.
5. OPERABLE WINDOWS WITH SILL MORE THAN 72" ABOVE FINISH GRADE & LESS THAN 36" A.F.F. SHALL BE EQUIPPED WITH WINDOW OPENING CONTROL DEVICE AS PER IRC SECTION R312.2.1.
6. ALL WINDOW HEAD HEIGHTS ARE 6'-8" A.F.F. UNLESS NOTED OTHERWISE.
7. REFER TO DETAILS A3, A8, AND A11 ON SHEET A501 FOR TYPICAL HEAD, JAMB, AND SILL DETAILS.
8. REFER TO ELEVATIONS FOR WINDOW GRID LOCATIONS.
9. SAFETY GLAZING REQ'D IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL THE FOLLOW CONDITIONS:
   - THE EXPOSED AREA OF AN INDIVIDUAL PANEL IS LARGER THAN 9 SQFT
   - THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES ABOVE THE FLOOR.
   - THE TOP EDGE OF THE GLAZING IS MORE THAN 36 INCHES ABOVE THE FLOOR
   - ONE OR MORE WALKING SURFACES ARE WITHIN 36 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.



NOTES:
1. SURFACES SHALL BE CLEAN AND DRY AND PRIMED WITH CONTACT ADHESIVE.
2. FLASHING SHALL BE A MIN. OF 9" WIDE. THE FLASHING SHALL WRAP INTO WINDOW OPENING GREATER THAN THE DEPTH OF THE WINDOW AND OUT ONTO THE WALL A MIN. OF 3".
3. THE SEQUENCE FLASHING INSTALLATION TO PROVIDE SHINGLED OVERLAPS. OVERLAPS SHALL BE A MIN. OF 2".
4. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
5. DO NOT SCALE DRAWINGS.

H3 WINDOW FLASHING SEQUENCE
1/2" = 1'-0"



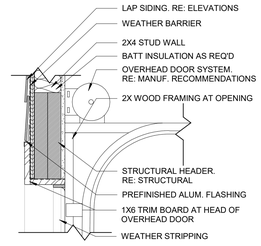


NOTE: SOME SYMBOLS MAY NOT BE USED IN THIS DRAWING OR PROJECT

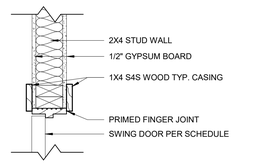
DOOR SCHEDULE										
DOOR NO.	LOCATION	WIDTH	HEIGHT	DOOR TYPE	DOOR MAT.	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	REMARKS
A	Interior	3' - 0"	6' - 8"	D-1	SCWD	PAINT	C2//A501	WD	PAINT	
B	Interior	2' - 6"	6' - 8"	D-1	SCWD	PAINT	C2//A501	WD	<varies>	
C	Interior	2' - 4"	6' - 8"	D-1	SCWD	PAINT	C2//A501	WD	<varies>	
D	Interior	2' - 0"	6' - 8"	D-1	SCWD	PAINT	C2//A501	WD	PAINT	
E	Interior	5' - 0"	6' - 8"	D-2	SCWD	PAINT	C2//A501	WD	PAINT	
F	Interior	4' - 0"	6' - 8"	D-3	SCWD	PAINT	SIM. C2//A501	WD	PAINT	
G	Interior	5' - 0"	6' - 8"	D-3	SCWD	PAINT	SIM. C2//A501	WD	PAINT	
H	Exterior	3' - 0"	6' - 8"	D-4	FIBERGLASS	PAINT	A2//A501	WD	PAINT	
J	Exterior	6' - 0"	6' - 8"	D-5	METAL / GLASS	MANUF.	C2//A501	WD	PAINT	
K	Exterior	3' - 0"	6' - 8"	D-6	FIBERGLASS / GLASS	PAINT	A2//A501	WD	PAINT	
L	Exterior	3' - 0"	6' - 8"	D-7	HM	PAINT	C2//A501	WD	PAINT	
M	Exterior	2' - 0"	6' - 8"	D-8	HM	PAINT	C2//A501	WD	PAINT	
N	Exterior	12' - 0"	8' - 0"	D-9	ALUM/GL	MANUF.	SIM. A2//A501	ALUM	MANUF.	
P	Exterior	6' - 0"	8' - 0"	D-10	ALUM/GL	MANUF.	SIM. A2//A501	ALUM	MANUF.	
Q	Interior	3' - 0"	7' - 0"	D-11	ALUM/GL	MANUF.	-	ALUM	MANUF.	
R	Exterior	16' - 0"	7' - 0"	D-12	INSUL. METAL	PAINT	D2//A501	WD	PAINT	
S	Interior	3' - 0"	6' - 8"	D-13	N/A	N/A	C2//A501	WD	PAINT	
T	Interior	2' - 8"	6' - 8"	D-13	N/A	N/A	C2//A501	WD	PAINT	

DOOR SCHEDULE REMARKS:

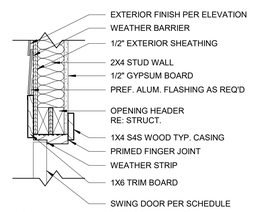
1. PROVIDE EACH ENTRY DOOR WITH PEEPHOLE WITH A 180 DEGREE VIEWER AND A DEADBOLT LOCK
2. WEATHERSTRIP ALL EXTERIOR DOORS
3. PROVIDE SAFETY GLAZING AT HAZARDOUS LOCATIONS PER IRC SECTION R308. SEE PLAN FOR LOCATIONS.
4. SAFETY GLAZING REQUIRED AT DOORS WHEN:
   - GLAZING IS WITHIN 24" OF EITHER SIDE OF THE DOOR IN A CLOSED POSITION.
   - GLAZING IS ON A WALL LESS THAN 180 DEGREES FROM THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24" OF THE HINGE SIDE OF AN IN-SWING DOOR.
5. CONTRACTOR TO CONFIRM PROPER SWING WITH UNIT AND BUILDING LAYOUT PLANS.
6. REFERENCE SPEC ON G SERIES SHEETS FOR HARDWARE TYPES.



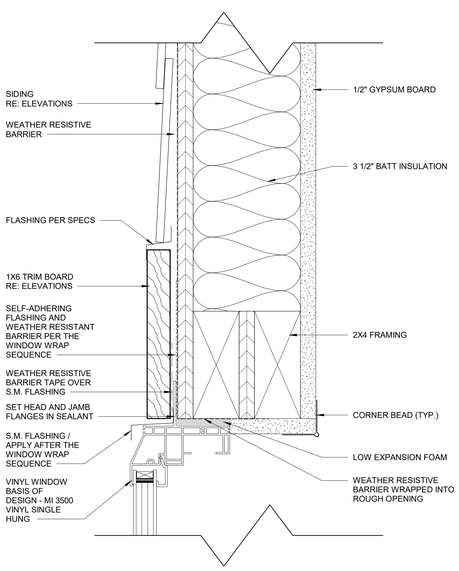
D2 DETAIL - WOOD HEAD_GARAGE
1 1/2" = 1'-0"



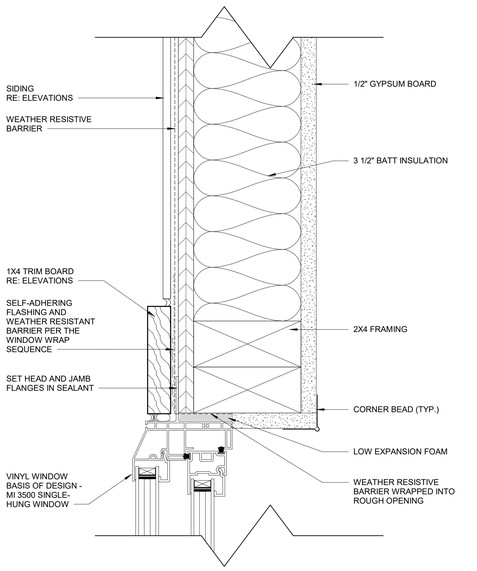
C2 DETAIL - WOOD HEAD
1 1/2" = 1'-0"



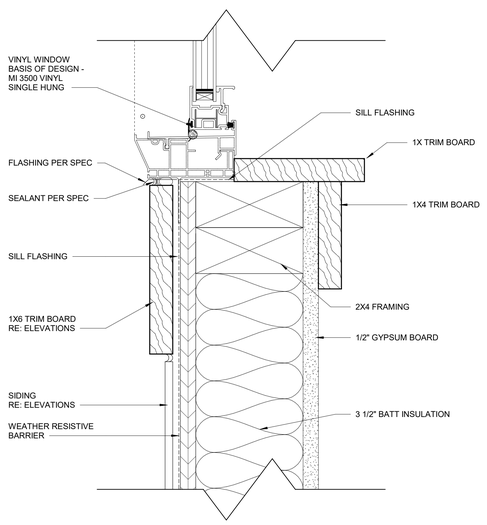
A2 DETAIL - WOOD HEAD
1 1/2" = 1'-0"



A12 DETAIL - WINDOW HEAD
6" = 1'-0"



A9 DETAIL - WINDOW JAMB
6" = 1'-0"



A6 DETAIL - WINDOW SILL
6" = 1'-0"

GENERAL NOTES: DOOR SCHEDULE

1. HM REFERS TO HOLLOW METAL
2. AL REFERS TO ALUMINUM
3. WD REFERS TO WOOD
4. SCWD REFERS TO SOLID CORE WOOD
5. ALL EXTERIOR ALUMINUM DOORS & FRAMES ARE TO BE FINISHED TO MATCH ADJACENT ALUMINUM WINDOW FRAME, U.N.O.
6. FOR FINISH COLOR DESIGNATION FOR INTERIOR DOOR AND FRAMES, REFER TO FINISH LEGEND.
7. REFER TO SPECIFICATION FOR DOOR HARDWARE SET DESIGNATIONS.
8. 2 HOUR FIRE BARRIED DOORS = 90 MINUTE RATING
   1 HOUR FIRE BARRIED DOORS = 45 MINUTE RATING
   1 HOUR SMOKE BARRIER = 20 MINUTE RATING
9. PROTECT ALL DOORS & FRAMES FROM DAMAGE THROUGHOUT CONSTRUCTION PHASES.
10. ALL EGRESS DOORS TO BE PROVIDED WITH PANIC HARDWARE.

GENERAL NOTES: WINDOW TYPES / GLASS TYPES

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. ALL WINDOW TYPES ARE ALUMINUM STOREFRONT, UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE TO ROUGH OPENING AND TO TOP OR BOTTOM OF MULLION, UNLESS NOTED OR SHOWN OTHERWISE.
4. ALL OPENINGS ARE TO BE FIELD VERIFIED, AND NOTED AS SUCH ON SHOP DRAWINGS, PRIOR TO ARCHITECT'S REVIEW.
5. GLASS DOORS, ADJACENT PANELS AND ALL GLAZED OPENINGS WITHIN 1'-6" OF THE FLOOR, AND WITHIN A 24-INCH ARC OF EITHER VERTICAL EDGE OF A DOOR, ETC., SHALL BE SAFETY GLAZING AS APPROVED FOR IMPACT BY APPLICABLE BUILDING CODES, AND SHALL BE LABELED AS SUCH.
6. REFER TO SPECIFICATIONS FOR GLAZING & FRAME PRODUCT INFORMATION.

CWA
collins|webb ARCHITECTURE
2078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
ROGER T. WEBB
NUMBER A-2010038008
ARCHITECT
09/24/25

PROFESSIONAL SEAL

A501

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

DOOR / WINDOW SCHEDULE + DETAILS

1/29/2025 8:43:22 AM

ROOM FINISH SCHEDULE

ROOM NAME	FLOORS		CEILING FINISH	Wall Finish	CASEWORK	
	FLOOR	WALL BASE			COUNTERTOP	REMARKS
CLUBHOUSE						
BILLIARDS	CPT	WB	P2	P1		
CONFERENCE	CPT	WB	P2	P1		
CORR.	CPT	WB	P2	P1		
GREAT ROOM	CPT	WB	P2	P1		
GYM	LVT	WB	P2	P1		
IT	SMOOTH CONC	NONE	TAPE + MUD	TAPE + MUD		
JAN.	SMOOTH CONC	NONE	TAPE + MUD	TAPE + MUD		
LEASING / CONCIERGE	CPT	WB	P2	P1		
MAINTENANCE GARAGE	SMOOTH CONC	NONE	TAPE + MUD	TAPE + MUD		
MANAGER	CPT	WB	P2	P1		
MECH	SMOOTH CONC	NONE	TAPE + MUD	TAPE + MUD		
MEN'S	TILE	TB1	P2	P1	QUARTZ	
PET SPA	SMOOTH CONC	NONE	TAPE + MUD	TAPE + MUD		
WOMEN'S	TILE	TB1	P2	P1	QUARTZ	
WORK AREA	CPT	WB	P2	P1	QUARTZ	
REUNION						
1/2 BATH	TILE	TB1	P2	P1	QUARTZ	
BATH	TILE	TB1	P2	P1	QUARTZ	
BEDROOM #2	CPT	WB	P2	P1		
CLO.	MATCH ADJACENT FLOORING	WB	P2	P1		
CORR.	LVT	WB	P2	P1		
DINING	LVT	WB	P2	P1		
ENTRY	LVT	WB	P2	P1		
FLEX	CPT	WB	P2	P1		
GARAGE	SMOOTH CONC	NONE	TAPE + MUD	TAPE + MUD		
KITCHEN	LVT	WB	P2	P1	QUARTZ	
LAUNDRY	LVT	WB	P2	P1		
LIVING	LVT	WB	P2	P1		
MECH	SMOOTH CONC	NONE	TAPE + MUD	TAPE + MUD		
MUD RM	LVT	WB	P2	P1		
P. BATH	TILE	TB1	P2	P1	QUARTZ	
PANTRY	LVT	WB	P2	P1		
PRIMARY BEDROOM	CPT	WB	P2	P1		
WALK-IN	CPT	WB	P2	P1		

GENERAL NOTES: INTERIOR FINISHES

1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: G002 FOR ACCESSIBILITY GUIDELINES.
3. CONTINUE WALL FINISH AS SCHEDULED BEHIND EQUIPMENT.
4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CASEWORK FABRICATION AND INSTALLATION.
5. ALL BACKSPLASH MATERIAL SHALL MATCH COUNTERTOP MATERIAL.
6. TRANSITION ALL WALL FINISHES/COLOR CHANGES AT INSIDE CORNERS, UNLESS NOTED OTHERWISE (U.N.O.)
7. TRANSITION WALL BASE AT INSIDE CORNERS, U.N.O.
8. INSTALL METAL TRANSITION STRIP WHERE WALL TILE MEETS PAINTED GYP. BD. WALL IN ALL VERTICAL AND/ OR HORIZONTAL CONDITIONS, U.N.O.

ROOM FINISH SCHEDULE REMARKS:

AREAS WITH MULTIPLE DESIGNATED FINISHES, RE: FINISH FLOOR PLANS & INTERIOR ELEVATIONS FOR ADDITIONAL CLARIFICATION.

1. PROVIDE FULL HEIGHT WALL TILE AT WET WALL, RE: INTERIOR ELEVATIONS.
2. PROVIDE WALL TILE TO 6'-0" AFF ON ALL WALLS IN ROOM/SPACE. RE: INTERIOR ELEVATIONS.
3. PROVIDE FRP FULL HEIGHT.
4. PROVIDE FRP TO 3'-0" AFF.
5. PROVIDE FRP AT INSIDE OF BAR DIE WALL.
6. PROVIDE PLYWOOD PANELS FULL HEIGHT (ABOVE WALL BASE) AT WALLS DESIGNATED PER FINISH FLOOR PLANS.
7. PROVIDE CAULK JOINT BETWEEN EDGE OF STAIR AND/OR AUDITORIUM RISER AND HORIZONTAL FINISH. CAULK JOINT COLOR TO MATCH LVT AND SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS. JOINT SHOULD BE 1/8" OR LESS AND BE FINISHED PER SPECIFICATIONS.
8. PROVIDE WALL TILE TO 5'-0" AFF AT WET WALL. RE: INTERIOR ELEVATIONS.
9. PROVIDE FULL HEIGHT WALL TILE ON ALL WALLS IN ROOM/SPACE. RE: INTERIOR ELEVATIONS.
10. PROVIDE LEVEL 4 FINISH FOR ALL WALLS TO RECEIVE WC2, WC3, AND WC4.
11. PROVIDE LEVEL 5 FINISH FOR ALL WALLS TO RECEIVE WG1 AND WG2.
12. PROVIDE LEVEL 3 FINISH FOR ALL WALLS TO RECEIVE WALL CARPET, WC1. PROVIDE WC1, ALONG PERIMETER OF ALL AUDITORIUM WALLS & KNEE WALLS, WITH THE EXCEPTION OF THE SCREEN WALL. RE: INTERIOR ELEVATIONS FOR SPECIFIC HEIGHTS.
13. PROVIDE FULL HEIGHT WALL CARPET, WC1/WC2 AS SPECIFIED, ALONG PERIMETER OF ALL WALLS. RE: FINISH FLOOR PLANS FOR SPECIFIC LOCATIONS.

collins|webb ARCHITECTURE
3078 SW Market St., Lee's Summit, Missouri 64063 | 816.249.2270 | www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
ROGER L. WEBB
NUMBER A-2016004008
ARCHITECT
1/29/25

PROFESSIONAL SEAL

A901

ISSUE DATE: 24 AUGUST 2023
COLLINS WEBB #: 21075

FINISH SCHEDULE

1/29/2025 8:43:24 AM

ELECTRICAL SPECIFICATIONS

PART I – GENERAL

A. GENERAL
1. FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATIONAL ELECTRICAL SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO, THESE MAJOR ITEMS.
   A. LIGHTING FIXTURES AS INDICATED AND SPECIFIED ON THE PLANS.
   B. ELECTRICAL PANELS, SERVICE, CONDUIT, WIRING, ETC., FOR ALL OUTLETS AND EQUIPMENT.
   C. TELEPHONE, TELEVISION, AND FIRE ALARM. OUTLETS AND CONDUIT AS INDICATED.
2. OBTAIN AND REVIEW ALL OTHER DRAWINGS INCLUDING REFLECTED CEILING PLAN, INTERIOR AND EXTERIOR ELEVATIONS, FURNITURE PLANS AND ALL MILL WORK DRAWINGS. COORDINATE INSTALLATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT PRIOR TO ROUGH-IN.
3. OBTAIN SUBMITTAL AND SHOP DRAWINGS FROM OTHER TRADES AND EQUIPMENT TO COORDINATE INSTALLATION ACCORDINGLY.
4. INSTALLATION SHALL COMPLY WITH ALL CURRENT APPLICABLE CODES AND GOVERNING AGENCIES HAVING JURISDICTION.
5. FIRE ALARM SYSTEM, IF REQUIRED PER IBC, SHALL BE DESIGN-BUILD BY OWNER'S/GC'S FIRE ALARM CONTRACTOR. DESIGN SHALL BE IN ACCORDANCE WITH NFPA 72. FIRE ALARM CONTRACTOR SHALL SUBMIT STAMPED DRAWINGS TO AHJ FOR REVIEW AND APPROVAL. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR TESTING AND VERIFYING THAT THE AUDIBILITY OF THE FIRE ALARM SYSTEM MEETS A MINIMUM OF 15 DBA ABOVE AMBIENT NOISE LEVELS. ADD HORNS WHERE REQUIRED TO MAINTAIN MINIMUM LEVELS.
6. PROVIDE FIRE STOP ON ALL PIPING THAT PENETRATES RATED WALLS. METHOD OF FIRE STOP SHALL MEET WALL RATING. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED WALLS. THIS CONTRACTOR SHALL PROVIDE FIRE RATED ENCLOSURES AROUND ALL ROUGH-IN BOXES, PANELS, ETC. THAT ARE LOCATED IN FIRE RATED WALLS AND SHALL FIRE CAULK ALL OPENINGS IN RATED ASSEMBLIES.

B. RELATED WORK BY OTHERS
1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR ELECTRICAL SERVICE ENTRANCE FROM THE MAIN SERVICE TO UTILITY POINT OF ELECTRICAL SERVICE. ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE WITH SERVING UTILITY COMPANY.
2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT, TRENCH, AND BACKFILL FOR PRIMARY PHONE AND CATV SERVICE FROM THE TELEPHONE TERMINAL BOARD OR CABINET TO THE PHONE COMPANY AND CATV COMPANY POINT OF SERVICE. COORDINATE WITH LOCAL UTILITY COMPANIES.

C. CODES, REGULATIONS, AND STANDARDS
1. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, WITH THE REGULATIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND WITH THE REQUIREMENTS OF THE POWER, TELEPHONE, AND CATV COMPANIES FURNISHING SERVICES TO THIS INSTALLATION.
2. THE LATEST EDITIONS OF THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS, AND CODES ARE MINIMUM REQUIREMENTS:
   A. THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS.
   B. THE NATIONAL ELECTRICAL CODE, INCLUDING LOCAL AMENDMENTS.
   C. UNDERWRITER LABORATORIES INCORPORATED STANDARDS.
   D. AMERICAN NATIONAL STANDARDS INSTITUTE,
   E. INTERNATIONAL BUILDING CODE.

D. INSPECTION OF SITE
1. PRIOR TO SUBMITTING A BID FOR ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND SHALL THOROUGHLY ACQUAINT HIMSELF WITH EXISTING UTILITIES, AND WORKING CONDITIONS TO BE ENCOUNTERED, ETC. ALLOWANCE WILL NOT BE MADE FOR NONCOMPLIANCE WITH THIS CONDITION AFTER BIDDING.
2. ELECTRICAL INSTALLATION SHALL MEET THE EXISTING CONDITIONS.

E. STORAGE AND HANDLING OF MATERIAL
1. DELIVER MATERIALS AND EQUIPMENT TO THE PROJECT IN THE MANUFACTURER'S ORIGINAL, UNOPENED, LABELED CONTAINERS. PROTECT AGAINST MOISTURE, TAMPERING, OR DAMAGE FROM IMPROPER HANDLING OR STORAGE. CONTRACTOR SHALL PROTECT AND BE RESPONSIBLE FOR ANY DAMAGE TO WORK OR MATERIALS UNTIL FINAL ACCEPTANCE BY THE OWNER, AND SHALL MAKE GOOD WITHOUT COST TO THE OWNER, ANY DAMAGE OR LOSS THAT MAY OCCUR DURING THIS PERIOD.
2. ARRANGE FOR TIMELY DELIVERY OF MATERIALS AND EQUIPMENT TO THE JOB SITE IN ORDER TO MINIMIZE THE LENGTH OF TIME BETWEEN DELIVERY AND INSTALLATION.
3. COVER AND PROTECT ANY MATERIAL WHICH MAY BE AFFECTED BY THE WEATHER WHILE IN TRANSIT OR STORED AT THE PROJECT SITE. ANY MATERIAL FOUND DEFECTIVE OR NOT INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS MAY BE REJECTED BY THE ENGINEER.

F. CLEANUP
1. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS, OR RUBBISH CAUSED BY EMPLOYEES OR WORK UNDER THIS DIVISION OF THE SPECIFICATIONS. AT THE COMPLETION OF THE WORK REMOVE ALL SURPLUS MATERIALS, TOOLS, ETC., AND LEAVE THE PREMISES BROOM-CLEAN.

G. EXCAVATION, CUTTING, AND FITTING
1. PERFORM ALL EXCAVATION AND BACK FILLING REQUIRED FOR WORK PERFORMED UNDER THIS DIVISION OF THE SPECIFICATIONS. USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OFF SITE MATERIALS ARE DEEMED NECESSARY.
2. PERFORM THE EXCAVATION, CUTTING, FITTING, REPAIRING, AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF THE EQUIPMENT OF THIS SECTION. HOWEVER, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE CONSENT OF THE ARCHITECT.

H. DRAWINGS
1. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK. DATA PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE, BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SUIT FIELD CONDITIONS IS REQUIRED. REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS, OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATE OF BID OPENING. IF DISCREPANCIES ARE NOT REPORTED, THE CONTRACTOR SHALL BID THE GREATER QUANTITY OR BETTER QUALITY, AND APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRACT AWARD. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD MEASURE AND CONFIRM MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, RADIATION, ETC. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS, USE ACTUAL BUILDING DIMENSIONS.

I. COOPERATION WITH OTHER CONTRACTORS
1. COOPERATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF THE ELECTRICAL OUTLETS AND EQUIPMENT WILL BE PROPERLY COORDINATED. CONDUIT, LIGHTING FIXTURES, AND OTHER EQUIPMENT LOCATIONS SHALL BE VERIFIED WITH OTHER TRADES TO AVOID CONFLICT WITH THE PIPING, DUCTWORK, STEEL BEAMS, OR OTHER OBSTRUCTIONS.
2. CAREFULLY VERIFY THE LOCATIONS OF THE OUTLET BOXES AND DETERMINE THAT THEY HAVE NOT BEEN DISTURBED DURING THE INSTALLATION OF MATERIALS OF OTHER TRADES.
3. COORDINATE THE LOCATION OF THE TRENCHES AND CONDUITS FOR ELECTRICAL AND TELEPHONE UTILITY SERVICES WITH THE GENERAL CONTRACTOR.
4. COORDINATE HVAC AND PLUMBING EQUIPMENT CONNECTION REQUIREMENTS WITH HVAC AND PLUMBING CONTRACTORS.

J. RECORD DRAWINGS
1. THE ELECTRICAL CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE JOB SITE FOR THE EXCLUSIVE PURPOSE OF MAINTAINING A RECORD OF ALL WORK INSTALLED AND TO SHOW ANY DEVIATIONS FROM THE WORK INDICATED ON THE DRAWINGS.
2. AT THE COMPLETION OF THE PROJECT, ONE SET OF REPRODUCIBLE DRAWINGS, SHOWING ALL RECORD CONDITIONS, SHALL BE DELIVERED TO THE OWNER FOR ACCEPTANCE PRIOR TO FINAL PAYMENT.

PART II – PRODUCTS AND EXECUTION

A. MATERIALS
1. ALL MATERIALS SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY ARE USED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND REGULATIONS.

B. SHOP DRAWINGS AND APPROVALS
1. THE ITEMS SPECIFIED HEREIN AND ON DRAWINGS ARE USED AS A STANDARD OF QUALITY. ANY MATERIALS OF EQUAL QUALITY AND AESTHETIC VALUE WILL BE GIVEN CONSIDERATION AS A SUBSTITUTE FOR THE MATERIALS SPECIFIED. NO APPROVAL WILL BE GIVEN TO A SPECIFIC CATALOG NUMBER, MODEL, OR TYPE OF EQUIPMENT, PRIOR TO BIDDING. AFTER BIDDING, THE DECISION OF THE ARCHITECT AND/OR ENGINEER DETERMINING EQUAL MATERIALS WILL BE FINAL.
2. THE CONTRACTOR SHALL SUBMIT (3) IDENTICAL BOUND SETS OF SHOP DRAWINGS ON THE FOLLOWING ITEMS TO THE C.C.:
   A. LIGHTING FIXTURE CUTS AND PERFORMANCE DATA.
   B. OUTLINE DRAWINGS AND DATA SHEETS OF EACH PANELBOARD, LOAD CENTERS, AND DISTRIBUTION PANELS.
   C. OUTLINE DRAWINGS OF ALL SWITCH GEAR COMPONENTS.
   D. WIRING DEVICES AND COVERPLATES.
   E. ALL CIRCUIT BREAKERS INSTALLED IN PANELBOARDS, LOAD CENTERS, AND DISTRIBUTION PANELS.

C. SYSTEM GROUNDING
1. GROUNDING SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 250. ALL EXPOSED NONCURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, METALLIC CABLE ARMOR, GROUNDING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, GROUNDING CONDUCTOR IN NONMETALLIC RACEWAYS, AND GROUNDED CONDUCTORS OF THE WIRING SYSTEM SHALL BE GROUNDED.
2. GROUNDED CONDUCTOR (NEUTRAL) OF THE WIRING SYSTEM SHALL BE CONNECTED TO THE SYSTEM GROUNDING CONDUCTOR AT A SINGLE PLACE IN EACH SYSTEM BY REMOVABLE BONDING JUMPERS, SIZED ACCORDING TO THE APPLICABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE. THE GROUNDED CONDUCTOR (NEUTRAL) TO THE GROUNDING CONDUCTOR CONNECTION SHALL BE LOCATED IN THE ENCLOSURE FOR THE SYSTEM'S OVERCURRENT PROTECTION OR WHERE OTHERWISE INDICATED ON THE PLANS OR SPECIFICATIONS.
3. A GROUND BUS SEPARATE FROM THE NEUTRAL BUS SHALL BE PROVIDED IN ALL DISTRIBUTION PANELS AND PANELBOARDS. PROPER TORQUE ON GROUND BUS SHALL BE VERIFIED, PER MANUFACTURER'S RECOMMENDATIONS, PRIOR TO ENERGIZING EQUIPMENT.
4. GROUND BUSES AND NEUTRAL BUSES IN ALL DISTRIBUTION PANELS, LOAD CENTERS, PANELBOARDS, AND THOSE PROVIDED IN ANY EQUIPMENT SHALL BE ISOLATED EXCEPT WHERE REQUIRED TO BE CONNECTED AS SPECIFIED ABOVE FOR THE SERVICE ENTRANCE
5. WHEN INDICATED ON THE DRAWINGS, EQUIPMENT GROUNDING CONDUCTORS SHALL BE EXTENDED FROM THE GROUND BUS IN THE DISTRIBUTION EQUIPMENT TO THE RECEPTACLE, FIXTURE OR DEVICE LUGS WHERE THEY ARE PROVIDED. WHERE LUGS ARE NOT PROVIDED, EQUIPMENT GROUNDING CONDUCTORS SHALL BE CONNECTED TO EQUIPMENT ENCLOSURES. THE CONNECTIONS SHALL BE ARRANGED SUCH THAT REMOVAL OF THE RECEPTACLE, EQUIPMENT GROUND CONDUCTORS, OR GROUND JUMPERS FROM GROUND BUSING SHALL NOT AFFECT THE GROUND SYSTEM.
6. RACEWAYS MAY NOT BE USED AS A GROUNDING CONDUCTOR FOR POWER AND LIGHTING CIRCUITS. ALL CONDUIT SHALL HAVE SEPARATE CODE SIZED GREEN GROUND WIRE INSTALLED IN THE CONDUIT TO INSURE A CONTINUOUS GROUNDING PATH.
7. IN INACCESSIBLE LOCATIONS, MAKE CONNECTIONS BY EXOTHERMIC WELD PROCESS.
8. IN ACCESSIBLE LOCATIONS, CONNECTIONS SHALL BE MADE WITH BOLTED THROUGH, APPROVED SOLDERLESS BRONZE GROUNDING DEVICES.

D. WIRE
1. CONDUCTOR SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE SPECIFIED, ALL WIRE SHALL BE TYPE XHHW OR SE FOR FEEDERS OR BRANCH CIRCUITS LARGER THAN 4 AWG, TYPE THHN/THWN INSULATION FOR FEEDERS AND BRANCH CIRCUITS 4 AWG AND SMALLER. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER.
   1.A. ALUMINUM CONDUCTORS MAY BE UTILIZED FOR SERVICE ENTRANCE AND PANEL FEEDERS. CONDUCTORS SHALL BE ALUMINUM ALLOY AA-8000 SERIES.
2. THE WIRES SHALL BE MARKED WITH COLOR TO SIMPLIFY CIRCUIT IDENTIFICATION. UNLESS OTHERWISE REQUIRED BY LOCAL ORDINANCES GROUND WIRES SHALL BE GREEN, NEUTRAL WIRES SHALL BE 120V-WHITE [277V-GREY]; LIVE WIRES 480Y/277V SHALL BE BROWN (PHASE A), ORANGE (PHASE B), AND YELLOW (PHASE C); AND LIVE WIRES 208Y/120V AND 120/240V SHALL BE BLACK (PHASE A), RED (PHASE B), AND BLUE (PHASE C). WHERE BOTH 208Y/120V AND 120/240V EXIST IN THE SAME BUILDING, THE CONDUCTORS FOR EACH CONFIGURATION SHALL BE SEPARATELY IDENTIFIED (NOT THE SAME COLORS). "HIGH-LEG" PHASE OF DELTA SYSTEM SHALL ALWAYS BE MARKED ORANGE. CIRCUIT SHALL BE LABELED IN EACH J-BOX.
3. ALL CONDUCTORS SHALL BE RATED 600 VOLT.
4. SPLICES IN EXTERIOR PULL BOXES AND MANHOLES SHALL BE WEATHERPROOF USING "SCOTCHCAST" SPLICE KIT OR APPROVED EQUAL. SEAL ENDS OF CONDUITS AND DUCTS WITH "DUCTSEAL" OR APPROVED EQUAL.
5. PROVIDE SOLID CONDUCTOR FOR 10 AWG AND SMALLER.
6. NO WIRE SHALL BE INSTALLED IN THE CONDUIT SYSTEM UNTIL THE CONDUIT SYSTEM IS COMPLETE. USE MINERALAC NO. 100 OR EQUIVALENT AS A LUBRICANT TO FACILITATE THE INSTALLATION OF THE CONDUCTORS IN THE CONDUIT SYSTEM.
7. MC CABLE WITH COPPER CONDUCTORS AND GROUND WIRE MAY BE USED WHERE PERMITTED.

E. CONDUIT
1. ALL WIRING SHALL BE INSTALLED IN LISTED METALLIC CONDUIT EXCEPT AS PERMITTED IN OTHER SECTIONS. RGS, WITH A 20 MIL PVC COATING WILL BE USED WHEN IN CONTACT WITH EARTH. IMC MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH THE EARTH. EMT MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH EARTH, NOT IN CONCRETE SLABS OR WALLS AND NOT SUBJECT TO DAMAGE. PVC MAY BE USED IN OR BELOW CONCRETE AND DIRECT BURIED IN EARTH. FLEXIBLE STEEL CONDUIT SHALL BE USED FOR INDOOR FINAL CONNECTIONS TO EQUIPMENT IN LENGTHS NOT TO EXCEED 72". LIQUID-TIGHT FLEXIBLE STEEL CONDUIT SHALL BE FOR OUTDOOR FINAL CONNECTIONS TO EQUIPMENT NOT TO EXCEED 48".
2. WHERE CONDUIT ENTERS OUTLET BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN WITH STEEL SET SCREW, COMPRESSION CONNECTORS, OR DOUBLE LOCKNUTS FOR GRC. ALL CONNECTIONS SHALL HAVE BUSHINGS OR INSULATED THROAT CONNECTORS. FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN EXPOSED CONDUIT PARALLEL TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS (UNISTRUT, T & B OR APPLETON, OR EQUAL).
3. COVER METALLIC CONDUIT IN CONTACT WITH EARTH WITH POLYETHYLENE TAPED SPIRAL WRAPPED, 1/2 LAPPED TO PROVIDE 20 MIL THICKNESS. TAPE SHALL BE SCOTCH NO. 50 TAPE. CONDUIT AND DUCTS NOT UNDER BUILDINGS AND FEEDER DUCTS SHALL BE INSTALLED PER N.E.C. 300-5. MAKE JOINTS WITH COMPOUND TO BE WATERTIGHT.
4. SCHEDULE 40 PVC CONDUIT SHALL BE PERMITTED UNDERGROUND WITH PROPER FITTINGS, ALL UL APPROVED AND CEMENTED JOINTS. PENETRATIONS THROUGH FLOOR SLABS AND BENDS GREATER THAN 22° SHALL BE WRAPPED RIGID GALVANIZED STEEL ELBOWS.
5. FITTINGS AND CONDUIT BODIES SHALL BE STEEL. DIECAST FITTINGS ARE NOT ACCEPTABLE.
6. CONDUIT SIZES SHALL BE AS REQUIRED BY CODE AND AS INDICATED OR SPECIFIED.
7. ALL EMPTY CONDUIT SYSTEMS SHALL HAVE A 200 LB. TEST NYLON PULL STRING TO FACILITATE INSTALLATION OF FUTURE WIRE.
8. WIRING, CONDUITS, AND OUTLETS SHALL BE CONCEALED WITH THE BUILDING STRUCTURE, EXCEPT THAT CERTAIN MOTOR AND LIGHTING FEEDER CONDUITS MAY BE RUN EXPOSED IN CERTAIN AREAS AS INDICATED ON THE DRAWINGS.
9. CONDUIT PENETRATION THROUGH ROOF SHALL HAVE ROOF FLASHING WITH CAULK TYPE COUNTER FLASHING SLEEVE. INSTALLATION SHALL BE WATERTIGHT.
10. CONDUITS SHALL BE ROUTED PARALLEL AND PERPENDICULAR TO THE STRUCTURE.

F. OUTLET, PULL, AND JUNCTION BOXES
1. EACH SWITCH, LIGHT, RECEPTACLE OR OTHER OUTLET, SHALL BE PROVIDED WITH A CODE SIZED, STEEL OUTLET BOX. JUNCTION AND PULL BOXES SHALL BE METAL AND CODE SIZED.
2. BOXES INSTALLED IN POURED CEMENT FLOORS SHALL BE FLUSH TYPE CAST IRON OR STEEL WITH WATERTIGHT GASKETED COVERS. WHERE BOXES ARE INSTALLED IN FLOORS WITH TILE OR CARPET FLOOR COVERING, COVERS SHALL BE OF THE RECESSED TYPE TO ACCOMMODATE THE FLOOR COVERING.
3. BOXES INSTALLED FOR THE ALARM, COMPUTER, AND SECURITY SYSTEM SHALL BE PROVIDED WITH APPROPRIATE COVER PLATES.
4. BOXES FOR TELEPHONE, COMPUTER, T.V., FIRE ALARM, SECURITY, AND SIMILAR SYSTEMS SHALL BE MINIMUM 2-1/8" DEEP.

G. WIRING DEVICES (COMMERCIAL)
1. WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES, 20A 120/277 VOLT.
2. RECEPTACLES SHALL BE SPECIFICATION GRADE, DUPLEX TYPE. NEMA5-20R, 20 AMPERE, 120VOLT GROUNDED TYPE. SPECIAL APPLICATION RECEPTACLES SHALL BE INDICATED ON PLANS. MOUNT WITH THE GROUND DOWN.
3. DEVICE PLATES SHALL BE EQUAL TO SIERRA SMOOTH-LINE PLASTIC WALL PLATES. COLOR SHALL BE WHITE, UNLESS OTHERWISE NOTED.
4. RECEPTACLES IN OUTDOOR AND WET LOCATIONS SHALL BE INSTALLED WITH A HINGED OUTLET COVER/ENCLOSURE CLEARLY MARKED AND U.L. LISTED SUITABLE FOR WET LOCATIONS WHILE IN USE, EQUAL TO TAYMAC SPECIFICATION GRADE.

H. SERVICE ENTRANCE SECTION
1. THE SERVICE ENTRANCE EQUIPMENT SHALL BE AS INDICATED ON THE DRAWINGS. EQUIPMENT SHALL CARRY THE U.L. LABEL AND SHALL CONFORM TO THE POWER COMPANY REGULATIONS.
2. SERVICE ENTRANCE EQUIPMENT SHALL BE PROVIDED WITH A FULLY RATED COPPER OR ALUMINUM BUS. HORIZONTALLY TAPERED BUSSING SHALL NOT BE ALLOWED.

J. PANEL BOARDS
1. CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. UNLESS INDICATED OTHERWISE, ALL PANELS SHALL HAVE PANEL BOARD TYPE CONSTRUCTION WITH BOLT-ON CIRCUIT BREAKERS FOR 3ø PANELS
2. MANUFACTURERS SHALL BE GENERAL ELECTRIC, SQUARE D, SIEMENS, CUTLER-HAMMER WITH VOLTAGE, SIZES, AND RATINGS AS INDICATED ON DRAWINGS.
3. THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT OF THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH DESIGN THAT COMBINATION OF SINGLE-POLE, DOUBLE-POLE, AND THREE-POLE BREAKERS CAN BE ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAIN TERMINALS SHALL BE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE.

K. LOAD CENTER
1. CIRCUIT BREAKER TYPE AS INDICATED ON DRAWINGS. MANUFACTURERS SHALL BE GENERAL ELECTRIC, SQUARE D, SIEMENS, CUTLER-HAMMER/EATON WITH VOLTAGE, SIZES, AND RATINGS AS INDICATED ON DRAWINGS.
2. THE CIRCUIT BREAKERS SHALL BE OPERABLE IN ANY POSITION AND BE REMOVABLE FROM THE FRONT OF THE PANEL BOARD WITHOUT DISTURBING THE ADJACENT UNITS. BRANCH BREAKERS SHALL BE OF SUCH DESIGN THAT COMBINATION OF SINGLE-POLE AND DOUBLE-POLE BREAKERS CAN BE ASSEMBLED ON THE SAME PANEL. EACH BRANCH CIRCUIT SHALL BE CLEARLY NUMBERED. BRANCH AND MAIN TERMINALS SHALL BE OF THE SOLDERLESS TYPE. HANDLE TIES TO FORM MULTI-POLE BREAKERS NOT ACCEPTABLE.
   A. CIRCUIT BREAKERS SHALL BE PLUG-IN TYPE.
3. WIRE TERMINATION FOR PANEL BOARDS AND CIRCUIT BREAKERS SHALL BE LISTED AS SUITABLE FOR 75 DEGREES C.
4. PROVIDE A TYPEWRITTEN CIRCUIT INDEX BEHIND CLEAR PLASTIC COVER ON INSIDE OF DOOR. INFORMATION SHALL INCLUDE ROOM AND TYPE LOAD SERVED. ALL CIRCUIT BREAKERS SHALL BE IDENTIFIED, INCLUDING SPARES. INDEX CARD FRAME SHALL BE METAL, SECURED TO DOOR.
5. PANEL BOARDS/LOAD CENTERS TO BE PROVIDED WITH COPPER BUSSING ONLY.

L. LIGHTING FIXTURES
1. PROVIDE ALL LIGHTING FIXTURES, WIRED AND CONNECTED. THE DRAWINGS INDICATE THE FIXTURES FOR EACH LOCATION. PROVIDE LAMPS FOR ALL FIXTURES. THE LAMPS SHALL BE BY THE SAME MANUFACTURER. VERIFY CEILING CONSTRUCTION BEFORE ORDERING RECESSED UNITS. PROVIDE PLASTER FRAMES AND HANGERS AS REQUIRED. CEILING CONSTRUCTION, ARCHITECTURAL ACCESSORIES, VOLTAGE, AND DRIVERS TO MEET THE EXISTING CEILING CONDITION.
2. ALL FIXTURES SHALL BE FED FROM JUNCTION BOXES WITH LIGHT FIXTURE WHIPS (<6'). DAISY-CHAINING OF FIXTURES IS NOT ALLOWED.

M. LIGHTING CONTROL
1. FURNISH AND INSTALL TIME SWITCHES, PHOTOCELLS, CONTRACTORS AND FULL LIGHTING CONTROL SYSTEMS AS REQUIRED FOR LIGHTING CONTROLS INDICATED ON THE DRAWINGS.
2. TIME SWITCHES SHALL BE EQUAL TO PARAGON, GENERAL ELECTRIC, TORK, OR INTERMATIC AND SHALL HAVE SIZE AND NUMBER OF POLES AS REQUIRED.
3. PHOTOCELLS SHALL BE EQUAL TO TORK OR INTERMATIC WITH VOLTAGE AS INDICATED.

N. TELEPHONE AND CABLE TELEVISION SYSTEMS
1. TELEPHONE WALL OUTLETS SHALL CONSIST OF NO LESS THAN 2-1/8" DEEP BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.
2. CABLE TELEVISION OUTLETS SHALL CONSIST OF NO LESS THAN 2-1/8" DEEP BOXES MOUNTED 18" ABOVE THE FLOOR UNLESS OTHERWISE INDICATED. PROVIDE A TERMINAL MOUNTING BOARD FOR THE INCOMING SERVICE CABLE.

O. GUARANTEE
1. GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD, TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED HEREUNDER, SHALL BE MADE GOOD AT NO EXPENSE TO THE OWNER.

Q. FIRE SEALING NOTES
1. COORDINATE CONSTRUCTION OF OPENINGS AND PENETRATING ITEMS TO ENSURE THAT THROUGH-PENETRATION FIRESTOP SYSTEMS ARE INSTALLED ACCORDING TO SPECIFIED AND APPLICABLE UL REQUIREMENTS.
2. COORDINATE SIZING OF SLEEVES, OPENINGS, CORE-DRILLED HOLES, OR CUT OPENINGS TO ACCOMMODATE THROUGH-PENETRATION FIRESTOP SYSTEMS.
3. DO NOT COVER UP THROUGH-PENETRATION FIRESTOP SYSTEM INSTALLATIONS UNTIL EXAMINED BY INSPECTOR, IF REQUIRED BY AUTHORITIES HAVING JURISDICTION.
4. COMPATIBILITY: PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS THAT ARE COMPATIBLE WITH ONE ANOTHER, WITH THE SUBSTRATES FORMING OPENINGS, AND WITH THE ITEMS, IF ANY, PENETRATING THROUGH-PENETRATION FIRESTOP SYSTEMS, UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.
5. PROVIDE COMPONENTS FOR EACH THROUGH-PENETRATION FIRESTOP SYSTEM THAT ARE NEEDED TO INSTALL FILL MATERIALS. USE ONLY COMPONENTS SPECIFIED BY THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER AND APPROVED BY QUALIFIED TESTING AND INSPECTING AGENCY FOR FIRESTOP SYSTEMS INDICATED.
6. PROVIDE SLEEVES THROUGH ALL FIRE-RATED WALLS AND FILL VOIDS SURROUNDING SLEEVES AND INTERIOR TO SLEEVES AROUND PIPING WITH FIRE STOP PUTTY WITH U.L. LISTED 3 HOUR RATING INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
7. FIRE SEAL ALL PIPING, CONDUIT, CABLE, ETC PENETRATIONS ROUTED THROUGH FIRE RATED WALLS.
8. PROVIDE FIRE RATED ENCLOSURES OR WRAPS ON LIGHT FIXTURES AND OTHER ITEMS PENETRATING FIRE RATED CEILINGS, FLOOR/CEILING/ CEILING/ROOF ASSEMBLIES TO MAINTAIN UL LISTING FOR CONSTRUCTION.

SYMBOLS LEGEND

NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC, ARE NECESSARILY USED ON THE DRAWINGS.

LIGHTING FIXTURES – SYMBOL/LETTER INDICATES LIGHT FIXTURE AS INDICATED ON FIXTURE SCHEDULE

- LED FIXTURE (SEE LIGHTING FIXTURE SCHEDULE)
- FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- TRACK LIGHT
- DOWNLIGHT FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- WALL MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- PENDANT MOUNTED FIXTURE WITH EMERGENCY BATTERY DRIVER UNIT
- DOWNLIGHT FIXTURE
- WALL MOUNTED FIXTURE
- PENDANT MOUNTED FIXTURE
- WALL WASHER
- SINGLE FACE EXIT SIGN – UNIVERSAL MOUNTED
- SINGLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD
- DOUBLE FACE EXIT SIGN W/ DIRECTIONAL ARROWS – UNIVERSAL MTD
- DUAL HEADED EMERGENCY UNIT
- COMBO DUAL HEADED EMERGENCY AND EXIT SIGN UNIT
- POLE MOUNTED SITE LIGHT

LIGHTING CONTROLS

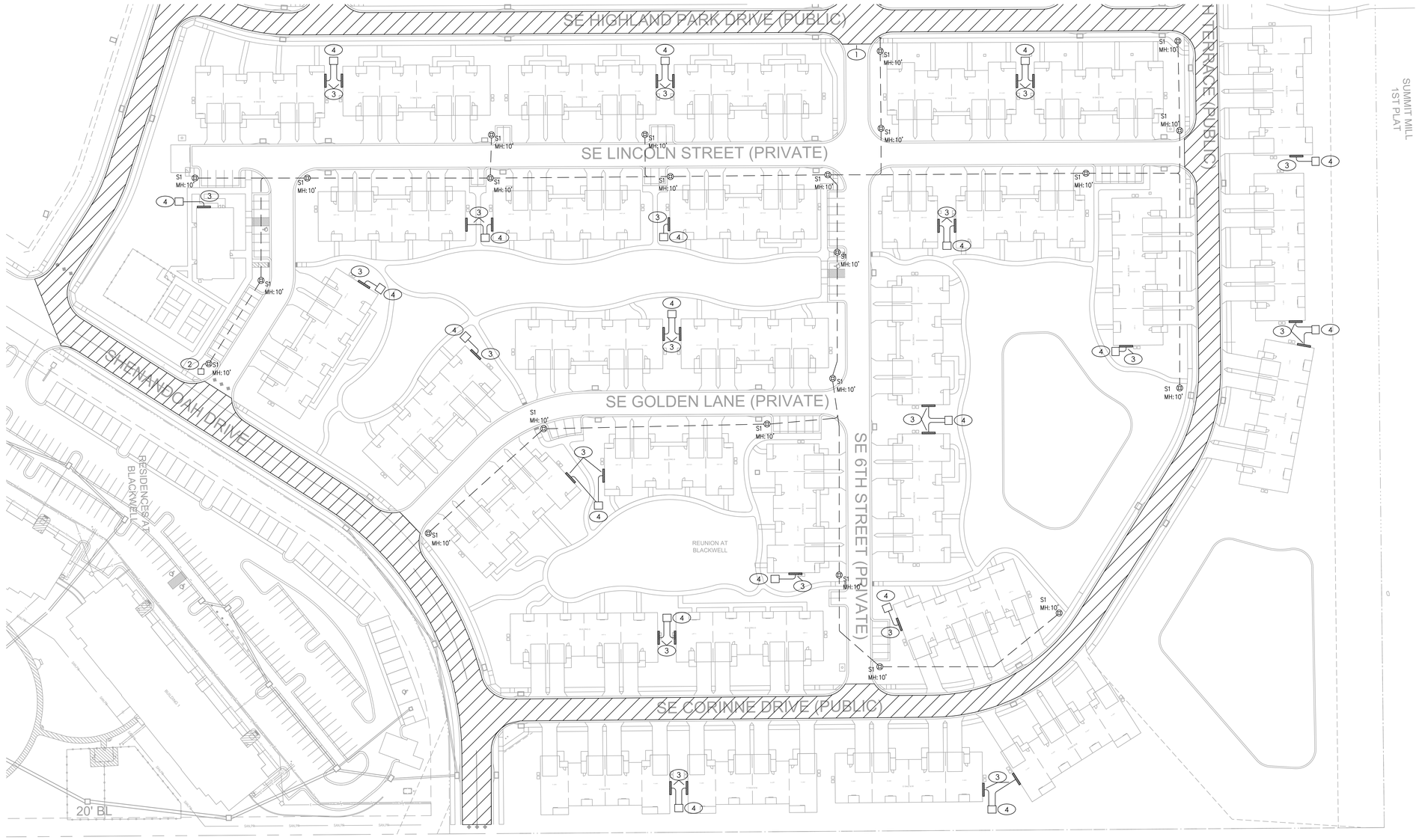
- S – SINGLE POLE SWITCH @ +48" UNLESS NOTED
- Sabc – SWITCH BANK @ +48" UNLESS NOTED. LOWER CASE LETTER INDICATES FIXTURE CONTROLLED.
- S3 – 3-WAY SWITCH @ +48" UNLESS NOTED
- S4 – 4-WAY SWITCH @ +48" UNLESS NOTED
- SD – DIMMER SWITCH – SIZE AS REQUIRED @ +48" UNLESS NOTED
- SM – MANUAL MOTOR STARTER
- SOS – WALL SWITCH WITH OCCUPANCY SENSOR. DIGITAL LOW VOLTAGE WALL SWITCH. SWITCH @ +48" UNLESS NOTED.
- SLV – TWO BUTTON DIGITAL LOW VOLTAGE WALL SWITCH. PROVIDES ON/OFF/0-10V DIMMING. SWITCH @ +48" UNLESS NOTED. PROVIDE EXTRA CONTROL CABLES NEEDED TO FIXTURE CONTROLLED.
- (OS) – LIGHTING CONTROLS CEILING MOUNT OCCUPANCY SENSOR
- (PP) – LIGHTING CONTROLS POWER PACK
- PC – PHOTOCELL
- TC – TIMECLOCK

POWER DISTRIBUTION

- SWITCHBOARD, MOTOR CONTROL CENTER OR DISTRIBUTION BOARD
- 277/480V, 3 PHASE, 4 WIRE PANELBOARD, UNO
- 120/208V, 3 PHASE, 4 WIRE PANELBOARD, UNO
- 120/240V, 1 PHASE, 3 WIRE PANELBOARD, UNO
- T – TRANSFORMER

POWER DEVICES

- SPECIAL HEAVY DUTY RECEPTACLE @ +18" UNLESS NOTED – SIZE AS NOTED
- 1/2 SWITCHED RECEPTACLE @ +18" UNLESS NOTED
- FIRE RATED POKE THRU WITH TYPE INDICATED
- FLUSH FLOOR BOX WITH TYPE INDICATED
- SINGLE RECEPTACLE @ +18" UNLESS NOTED
- DUPLEX RECEPTACLE @ +18" UNLESS NOTED
- DOUBLE DUPLEX RECEPTACLE @ +18" U



SITE ELECTRICAL PLAN - REUNION

SCALE : 1" = 50'-0"

1

NORTH

KEYED PLAN NOTES

1. PUBLIC ROADWAY LIGHTING DESIGN BY OTHERS.
2. PROVIDE ROADWAY LIGHTING METER AND CONTROLLER PER MUNICIPAL STANDARDS. REFER TO STANDARD DETAILS ON SHEETS E100C–G FOR MORE INFORMATION.
3. PROPOSED LOCATION OF ELECTRIC SERVICE ENTRANCE EQUIPMENT. COORDINATE EXACT LOCATION AND SECONDARY ROUTING FROM UTILITY TRANSFORMER WITH UTILITY PRIOR TO CONSTRUCTION.
4. PROPOSED UTILITY TRANSFORMER LOCATION. COORDINATE EXACT LOCATION OF TRANSFORMER WITH UTILITY PRIOR TO CONSTRUCTION.

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER
JSC ENGINEERS
MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

JUSTIN R. SMOTHERS
NUMBER PE-2012003958
STATE OF MISSOURI
PROFESSIONAL ENGINEER
08-24-23
PROFESSIONAL SEAL

E100A

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

ELECTRICAL SITE PLAN

STREET LIGHT POLE, BRACKET ARM, AND BREAK–AWAY BASE

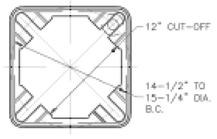
POLE TYPE	MOUNTING HEIGHT (A)	BRACKET ARMS		POLE SHAFT				SHOE BASE	ANCHOR BOLTS		
		LENGTH (B)		BASE O.D.	TOP O.D.	MIN. WALL THICKNESS	SHAFT LENGTH (C)	BOLT CIRCLE (BC)	DIAMETER	LENGTH	HOOK
		ARM 1	ARM 2								
P12	12'	–	–	6"	3"	0.156"	12'–0"	9.5"	0.75" 10NC	25"	3"
P14	14'	–	–	6"	3"	0.156"	14'–0"	9.5"	0.75" 10NC	25"	3"
P305	30'	6' or 10'	–	8"	6"	0.188"	26'–6" ±2"	11.0"	1.00" 8NC	36"	4"
P300	30'	6' or 10'	6' or 10'	8"	6"	0.219"	26'–6" ±2"	11.0"	1.00" 8NC	36"	4"
P405	40'	6', 10' or 15'	–	8"	6"	0.219"	36'–6" ±2"	11.5"	1.00" 8NC	36"	4"
P400	40'	6', 10' or 15'	6', 10' or 15'	10"	6"	0.219"	36'–6" ±2"	14.5"	1.00" 8NC	48"	4"

NOTES:

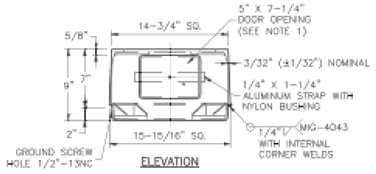
1. ALL POLES, ARMS, AND MISCELLANEOUS EQUIPMENT SHALL CONFORM TO THESE DETAILS AND AS SPECIFIED BY THE LATEST CITY STANDARD SPECIFICATIONS.
2. POLE SHAFT SHALL HAVE A SATIN GROUND FINISH.
3. ALL HARDWARE (BOLTS, NUTS, WASHERS BUT NOT INCLUDING ANCHOR BOLTS) NOT OTHERWISE SPECIFICALLY DESIGNATED IN THE SPECIFICATIONS OR DETAILS SHALL BE 300–SERIES STAINLESS STEEL CONFORMING TO ASTM A193 OR A194.
4. ANCHOR BOLTS SHALL BE USED WITH CONCRETE BASES. ANCHOR BOLTS SHALL BE STEEL WITH 50,000 PSI MINIMUM YIELD; TOP 10" MIN. GALVANIZED; INCLUDING 8 NUTS AND 8 FLAT WASHERS GALVANIZED TO ASTM A153 STANDARDS. GALVANIZED HEX HEAD BOLTS (SEE POLE FOUNDATION SHEET) SHALL BE USED WITH SCREW–IN ANCHOR BASES. 4 BOLTS, 4 NUTS AND 8 FLAT WASHERS TO PROVIDED WITH EACH ANCHOR.
5. ALL WELDING IS TO BE DONE WITH 4043 WELD WIRE. ALL ARMS AND SHAFTS ARE TO BE HEAT–TREATED TO T6 TEMPER AFTER WELDING.
6. ANCHOR BOLTS SHALL PROJECT ABOVE THE CONCRETE BASE AS PER MANUFACTURER'S RECOMMENDED PRACTICES, 2½" TO 3".
7. THE ALUMINUM STREET LIGHT POLE ASSEMBLY, INCLUDING ANCHORAGE AND LUMINAIRE, SHALL COMPLY WITH THE LATEST CITY STANDARD SPECIFICATIONS AND THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LOAD WIND LOADING.
8. ALL POLES AND ARMS SHALL BE CLEARLY IDENTIFIED BY THE MANUFACTURER'S NAME, ABBREVIATION, OR SYMBOL ENGRAVED ON THE SHAFT, SHOE BASE, HAND HOLE, OR OTHER MEANS SUCH AS TO BE READILY VISIBLE AFTER INSTALLATION.

MATERIAL DATA

COMPONENT	ALUMINUM ALLOY DESIGNATION	SPECIFICATION
SHOE BASE	356–T6, CAST	ASTM B26 OR B108
BREAKAWAY BASE	356–T6, CAST	ASTM B108
BOLT COVERS	356 OR 360, CAST	ASTM B26 OR B108
POLE SHAFT	6063–T6, EXTRUDED	ASTM B221 OR B241
GROUND LUG	6061–T5 OR 6063–T6, PLATE	ASTM B221
REINFORCED HANDHOLE FRAME	356–T6 OR 6061–T6	ASTM B26, B108 OR B221
HANDHOLE COVER	6063–T6	ASTM B209, B221 OR B241
BRACKET ARM & TUBING PIPES	6063–T6	ASTM B221, B241 OR B249
BRACKET ARM MOUNTING PLATES	6061–T6 OR 6063–T6 EXTRUDED	ASTM B221
BRACKET ARM STRUT & ARM CONNECTOR	AU5061–T6 OR 6063–T6 EXTRUDED	ASTM B221, B241 OR B249
POLE CAP	356, CAST	ASTM B26 OR B108
ANCHOR BOLTS	N/A	GALVANIZED PER ASTM A153



BOTTOM

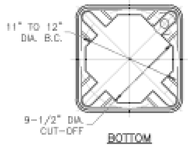


ELEVATION

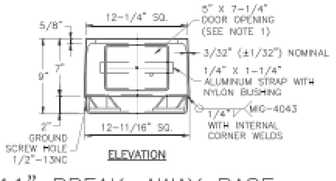
15" BREAK–AWAY BASE

NOTES:

1. DOOR SHALL BE ON THE SAME SIDE OF THE POLE AS THE HAND HOLE.
2. BASE CONFORMS TO BREAKAWAY CRITERIA OF AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (1994).

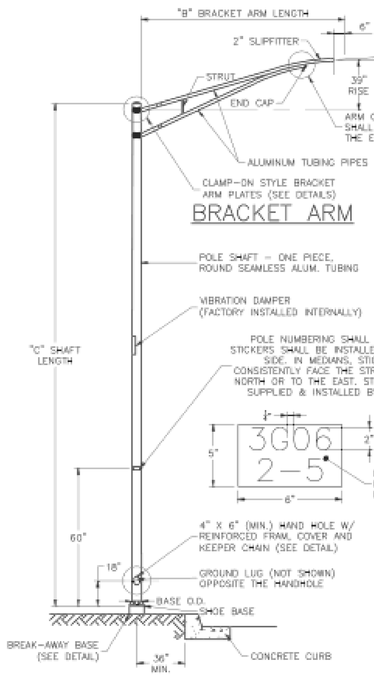


BOTTOM



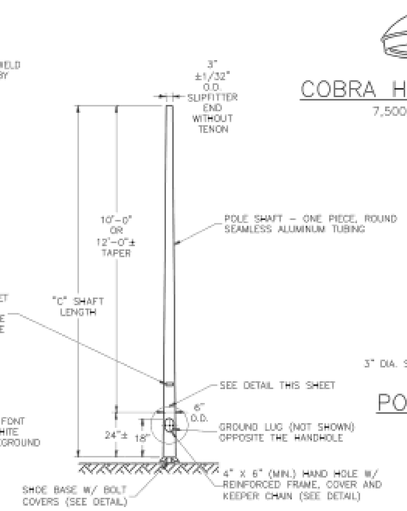
ELEVATION

11" BREAK–AWAY BASE



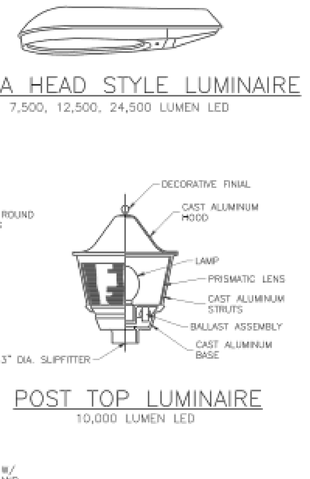
POLE ELEVATION

(SEE TABLES FOR DIMENSIONS AND MATERIALS)



PEDESTAL POLE ELEVATION

(SEE TABLES FOR DIMENSIONS AND MATERIALS)

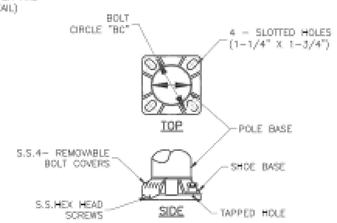


COBRA HEAD STYLE LUMINAIRE

7,500, 12,500, 24,500 LUMEN LED

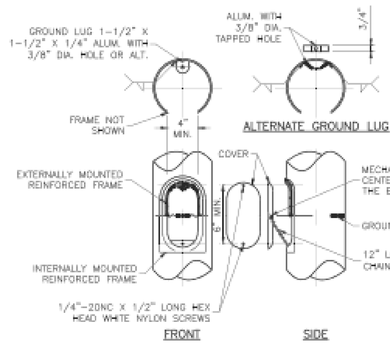
POST TOP LUMINAIRE

10,000 LUMEN LED



SHOE BASE

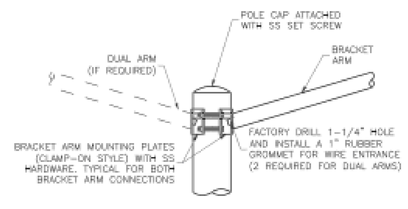
TOP



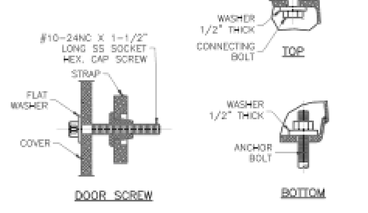
FRONT SIDE

HAND HOLE

TOP



BRACKET ARM MOUNTING



BREAK–AWAY BASE ANCHORAGE

MUNICIPAL SITE LIGHTING DETAILS

1

SCALE : N/A

LS LEE'S SUMMIT MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: POLE AND LUMINAIRE DETAILS

Drawn By: BWC
Checked By: MR
Date: 08/23/2023
Proj. #:

SL-1

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006766 | KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012020664
PROFESSIONAL ENGINEER

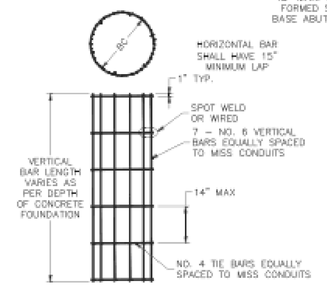
08-24-23
PROFESSIONAL SEAL

E100C

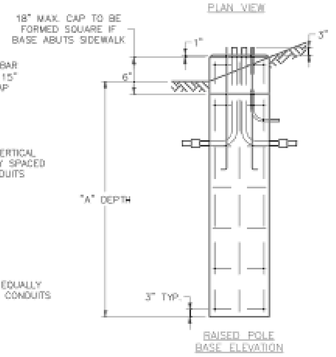
ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

ELECTRICAL SITE LIGHTING DETAILS

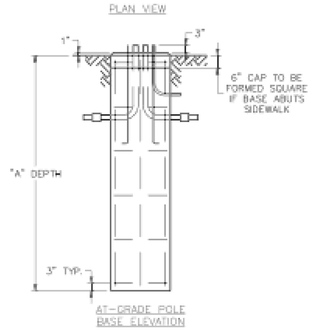
POLE TYPE	BRACKET ARM	DEPTH (A)	BOLT CIRCLE (BC)
P12	---	48"	9.5"
P14	---	48"	9.5"
P30S OR P30D	SINGLE OR DUAL	72"	11.0"
P40S	SINGLE	94"	11.5"
P40D	DUAL	94"	14.5"



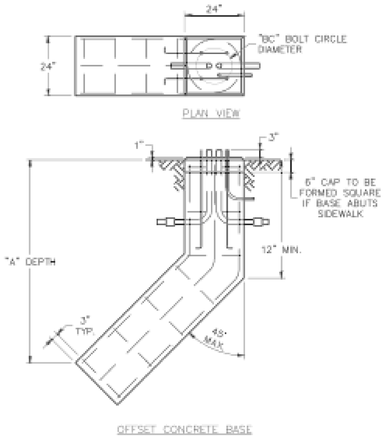
REBAR CAGE DETAIL



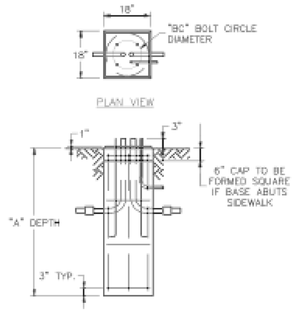
RAISED POLE BASE ELEVATION



AT-GRADE POLE BASE ELEVATION



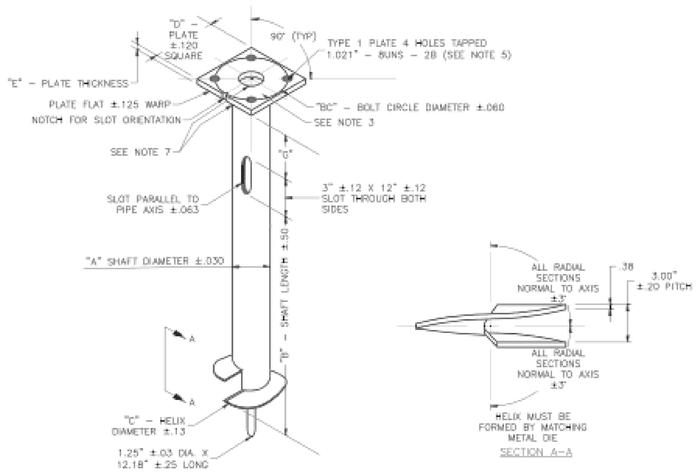
OFFSET CONCRETE BASE



PEDESTAL POLE BASE

CONCRETE BASE DETAILS

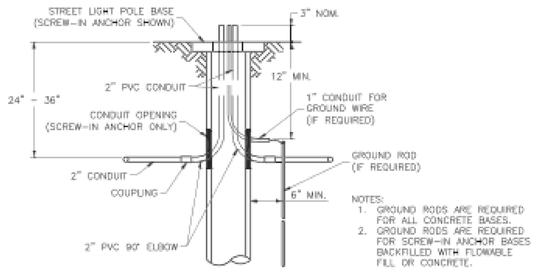
BASE TYPE	POLE TYPE	MINIMUM TORQUE RATING (LBS. FT.)	MAXIMUM TORQUE RATING (LBS. FT.)	SHAFT DIA. (A)	SHAFT LENGTH (B)	HELIX DIA. (C)	PLATE SIZE (D)	PLATE THICKNESS (E)	BOLT CIRCLE (BC)	SLOT LOCATION (G)
B12	P12	2,000	15,000	6"	48"	12"	10"	0.75"	9.5"	12"
B14	P14	2,000	15,000	6"	48"	12"	10"	0.75"	9.5"	12"
B30	P30S & P30D	2,000	15,000	6"	60"	12"	12"	1.0"	11.0"	18"
B40S	P40S	2,000	20,000	8"	60"	14"	12"	1.0"	11.5"	18"
B40D	P40D	2,000	20,000	8"	60"	14"	15"	1.25"	14.5"	18"



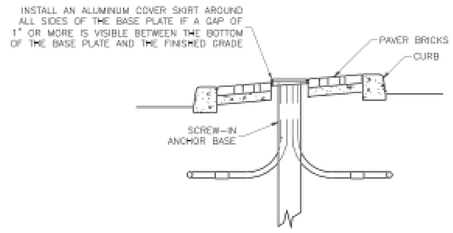
SCREW–IN ANCHOR BASE DETAILS

NOTES:

1. FINISH: HOT DIP GALVANIZE PER ASTM–A153 (LATEST REVISION).
2. BASEPLATE TO BE PERPENDICULAR TO SHAFT AXIS (±1°) AND HOLE AND CONCENTRIC (±.188 I.D. FIM) TO SHAFT AXIS.
3. ALL BASES SHALL BE IDENTIFIED BY THE MANUFACTURER'S INITIALS AND THE ANCHOR TYPE (1 OR 2) PERMANENTLY STAMPED INTO THE TOP PLATE WITH 1/2" LETTERS., THE JULIAN DATE OF MANUFACTURE SHALL BE PERMANENTLY STAMPED IN 1/4" NUMERALS.
4. PILOT POINT AND SHAFT AXES TO BE CONCENTRIC (±.125 FIM) AND IN LINE (±2°).
5. TAP 1" HOLES ON THE SPECIFIED BOLT CIRCLE PERPENDICULAR TO THE BASEPLATE. CLEAN AND CHASE THE THREADS AFTER HOT–DIP GALVANIZING SO THAT A BOLT MAY BE INSTALLED.
6. PREHEAT (ROOM TEMPERATURE 70°F), TUMBLEBLAST, HANDGRIND, AND CLEAN BASEPLATE, HELIX, AND CORE ON ALL WELD AREAS.
7. FLAME CUT IRREGULARITIES PERMISSIBLE:
   (1) VALLEYS NOT TO EXCEED 3/32 IN. BELOW NOMINAL SURFACE LEVEL.
   (2) PEAKS OR POSITIVE IRREGULARITIES NOT TO EXCEED 1/32 IN. ABOVE NOMINAL SURFACE LEVEL OR INTERSECTIONS OF NOMINAL SURFACES.
8. MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.
9. ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:
   BASEPLATE: ASTM A36–(LATEST REVISION) HOT ROLLED STEEL PLATE (CONFORM TO AASHTO TECHNICAL BUL. #270).
   SHAFT: STEEL PIPE PILES, SEEMLESS OR STRAIGHT WELDED, GRADE 2 PER ASTM A252. ALTERNATE MATERIAL: PIPE TYPE E OR S, GRADE B PER ASTM A53.
   HELIX: ASTM A635–(LATEST REVISION) HOT ROLLED STEEL PLATE
   PILOT POINT: ASTM A575–(LATEST REVISION) HOT ROLLED STEEL
   BOLT: ASTM A325 OR GRADE 5 SAE J429 – 1" DIAMETER HOT DIP GALVANIZED HEX HEAD BOLT. BOLT SHALL INCLUDE ONE EACH LOCK AND FLAT WASHER.
10. THE DESIGN AND PERFORMANCE INTEGRITY OF THE FOUNDATION SHALL BE VERIFIED BY FULL–SCALE TESTS BY QUALIFIED ENGINEERS INDEPENDENT OF THE MANUFACTURER. CERTIFIED TEST REPORTS SHALL BE PROVIDED UPON REQUEST.
11. FLAME CUT NOTCH OR PROJECTION WILL BE ON THE BASE PLATE TO INDICATE SLOT ORIENTATION.



CONDUIT ENTRANCE AND GROUNDING



COVERSKIRT REQUIREMENTS

Project:
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
POLE BASE DETAILS
Drawing Name:

Drawn By: BMC
Checked By: MP
Date: 08.24.2023
Proj. #:

SL-2

MUNICIPAL SITE LIGHTING DETAILS

SCALE : N/A

1

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

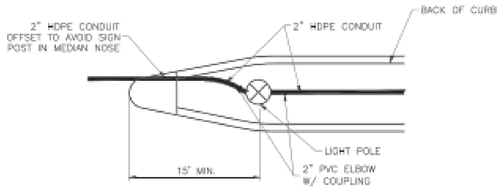
MEP ENGINEER
JSC ENGINEERS
MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

JUSTIN R. SMOTHERS
STATE OF MISSOURI
NUMBER PE-2012003566
PROFESSIONAL ENGINEER
08-24-23
PROFESSIONAL SEAL

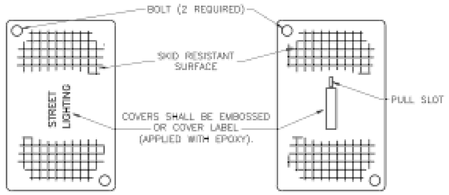
E100D

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

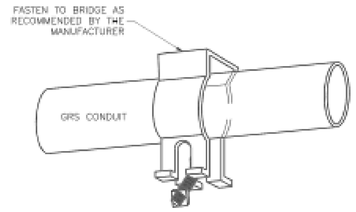
ELECTRICAL SITE LIGHTING DETAILS



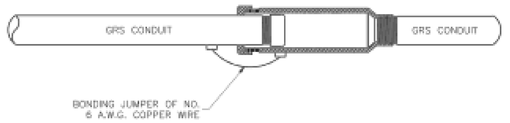
STREET LIGHT POLE IN MEDIAN



BOX COVER

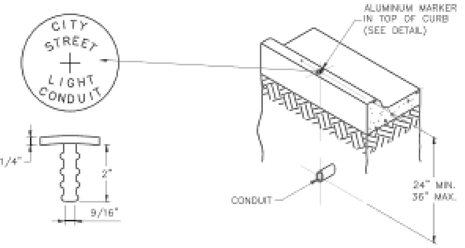


CONDUIT HANGER



EXPANSION FITTING

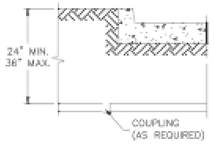
GRS CONDUIT DETAILS



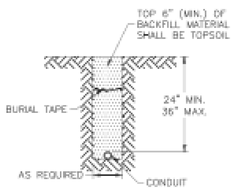
CONDUIT MARKING DETAIL

NOTES:

1. AN ALUMINUM MARKER SHALL BE PLACED IN THE TOP OF THE CURB DIRECTLY OVER THE CONDUIT.
2. MARKERS SHALL BE INSTALLED BY DRILLING THE CURB AND EXPOXYING THE MARKER IN PLACE. IF INSTALLED IN A SIDEWALK OR CURB RAMP, THE TOP OF THE MARKER SHALL BE FLUSH WITH THE CONCRETE SURFACE.
3. NO DIRECT PAYMENT SHALL BE MADE FOR CONDUIT MARKERS; THEY ARE SUBSIDIARY TO THE INSTALLATION OF CONDUIT.



BORED CONDUIT

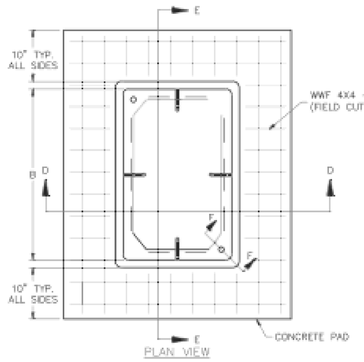


TRENCHED OR PLOWED CONDUIT

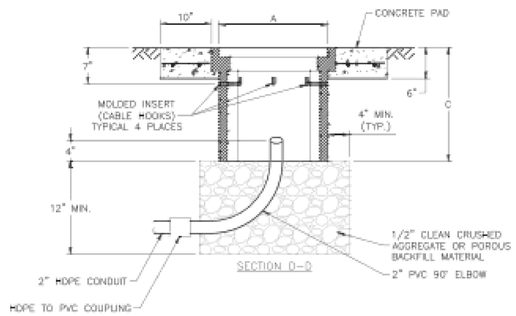
CONDUIT LOCATIONS

NOTES:

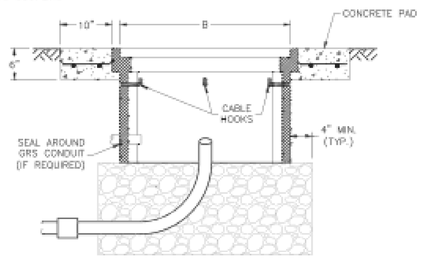
1. BACKFILL UNDER PAVED SURFACES SHALL BE FLOWABLE FILL.
2. THE CONDUIT SHALL NOT BE COVERED UNLESS INSPECTED AND APPROVED BY THE CITY ENGINEER, SO AS TO ENSURE PROPER DEPTH, CORRECT CONDUIT MATERIAL, AND PROPER CONDUIT END TREATMENT.



PLAN VIEW



SECTION D–D



SECTION E–E

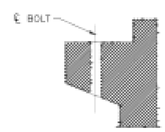
PULL OR JUNCTION BOX DETAILS

NOTES:

1. ALL CONDUITS INSTALLED ABOVE GROUND SHALL BE GRS.
2. CONDUIT ATTACHED TO BRIDGES SHALL HAVE EXPANSION FITTINGS INSTALLED AT EACH END OF THE BRIDGE AND AT EACH EXPANSION JOINT ON THE BRIDGE.
3. ALL GRS CONDUITS SHALL BE ELECTRICALLY BONDED BY A GROUNDING BUSHING AND GROUND WIRE AS DETAILED.
4. INSTALL THE CONDUIT AND CONNECTOR ASSEMBLY TO PERMIT A 1/2" MINIMUM LONGITUDINAL TRAVEL IN EITHER DIRECTION.

NUMBER OF ENTERING/EXITING CONDUITS	BOX TYPE	MINIMUM BOX DIMENSIONS		
		A	B	C
1 – 2	TYPE 1 JUNCTION BOX	12"	12"	12"
3 – 4	TYPE 2 JUNCTION BOX	12"	18"	12"
> 4	CLASS 1 PULL BOX	17"	30"	22"

ALL DIMENSIONS SHOWN ARE NOMINAL



SECTION F–F

NOTES:

1. LIFT OPENING REQUIRED ON ALL COVERS.
2. PREFORMED BOX WALLS MAY BE EITHER FLARED OR VERTICAL. THE BOTTOM OF BOXES SHALL BE OPEN TO BELOW.
3. IF AN EXTENSION IS USED WITH A PREFORMED BOX, THE LIP OF THE EXTENSION MAY BE INTERIOR OR EXTERIOR. THE EXTENSION SHALL BE COMPATIBLE AND FROM THE SAME MANUFACTURER.
4. CABLE HOOKS ARE TO BE INCLUDED WITH CLASS 1 PULL BOXES ONLY.
5. A CLASS 1 PULL BOX SHALL BE INSTALLED ADJACENT TO EACH 4–CIRCUIT POWER SUPPLY.

MUNICIPAL SITE LIGHTING DETAILS 1

SCALE : N/A

LEE'S SUMMIT MISSOURI

PUBLIC WORKS ENGINEERING DEPARTMENT

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Project

Sheet Name: BOX AND CONDUIT DETAILS

Drawn By: BMC
Checked By: MH
Date: 08.24.2023
Proj. #:

SL-3

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinswebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

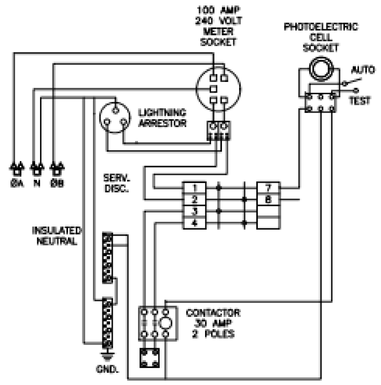
STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003566
PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

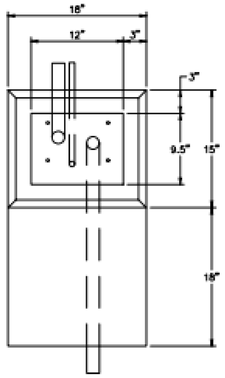
E100E

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

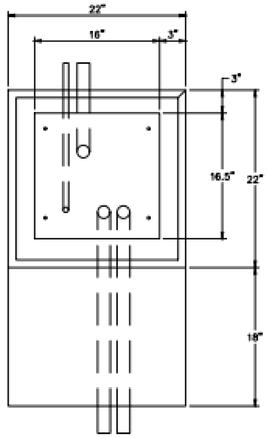
ELECTRICAL SITE LIGHTING DETAILS



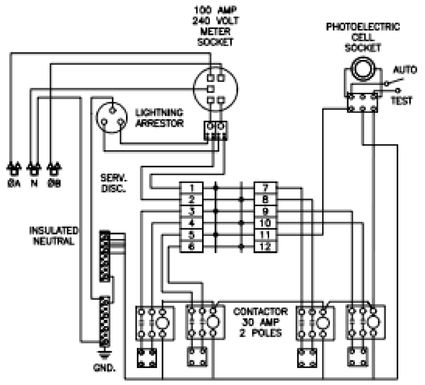
WIRING SCHEMATIC



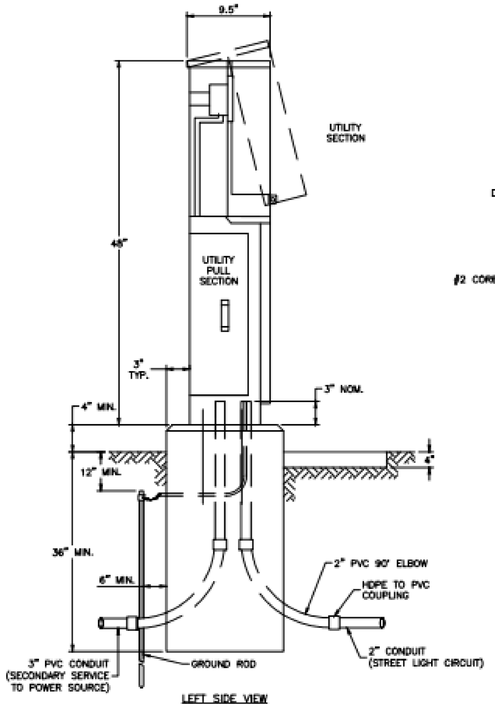
PLAN VIEW



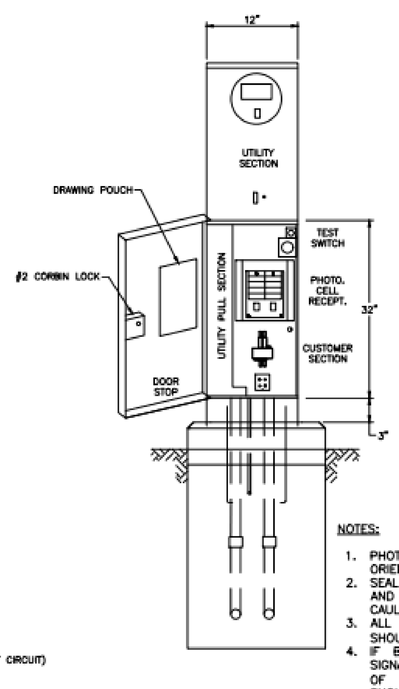
PLAN VIEW



WIRING SCHEMATIC

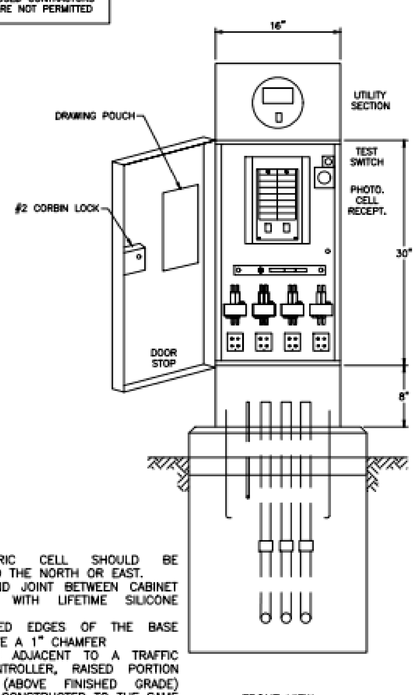


LEFT SIDE VIEW



FRONT VIEW

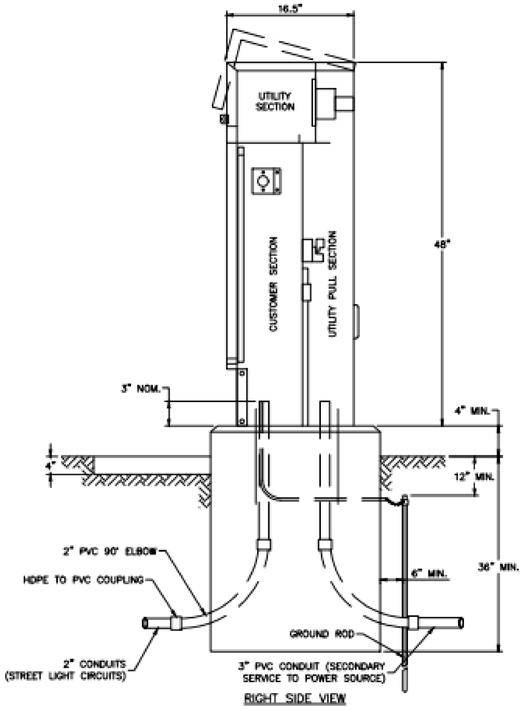
FUSED CONTRACTORS ARE NOT PERMITTED



FRONT VIEW

NOTES:

1. PHOTOELECTRIC CELL SHOULD BE ORIENTED TO THE NORTH OR EAST.
2. SEAL AROUND JOINT BETWEEN CABINET AND BASE WITH LIFETIME SILICONE CAULK.
3. ALL EXPOSED EDGES OF THE BASE SHOULD HAVE A 1" CHAMFER
4. IF BASE IS ADJACENT TO A TRAFFIC SIGNAL CONTROLLER, RAISED PORTION OF BASE (ABOVE FINISHED GRADE) SHOULD BE CONSTRUCTED TO THE SAME HEIGHT AS THE SIGNAL CONTROLLER BASE.
5. THE STREET ADDRESS WITH THE POWER SUPPLY NUMBER BELOW IT SHOULD BE LABELED ON THE UPPER PORTION OF THE CABINET FACING THE STREET. THE CONTRACTOR WILL SUPPLY AND INSTALL STICKERS.



RIGHT SIDE VIEW

1 – CIRCUIT
POWER SUPPLY

4 – CIRCUIT
POWER SUPPLY

LEE'S SUMMIT
MISSOURI

POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Project:

Sheet Name: POWER SUPPLY DETAILS

Drawn By: BWC
Checked By: MP
Date: 11/2020
Proj. #:

SL-4

MUNICIPAL SITE LIGHTING DETAILS

SCALE : N/A

1

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

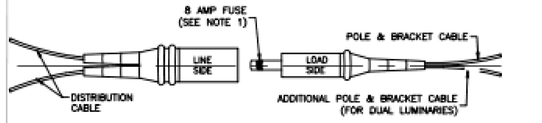
MEP ENGINEER
JSC ENGINEERS
MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003560
PROFESSIONAL ENGINEER
08-24-23
PROFESSIONAL SEAL

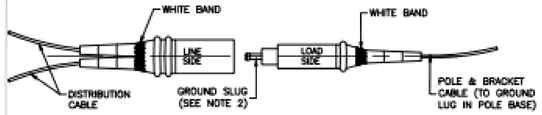
E100F

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

ELECTRICAL SITE LIGHTING DETAILS



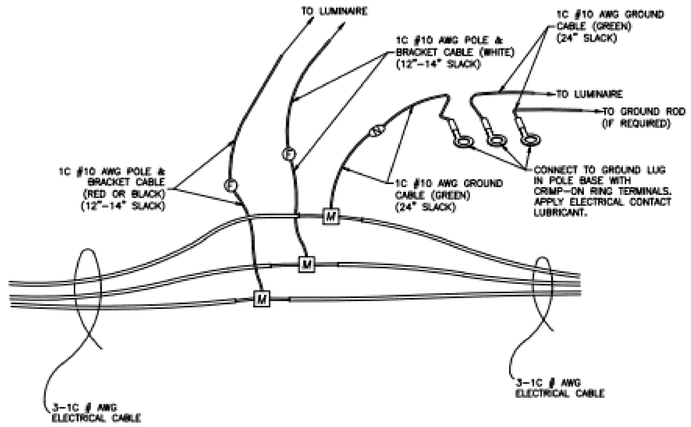
BREAK–AWAY FUSED ELECTRICAL CONNECTORS



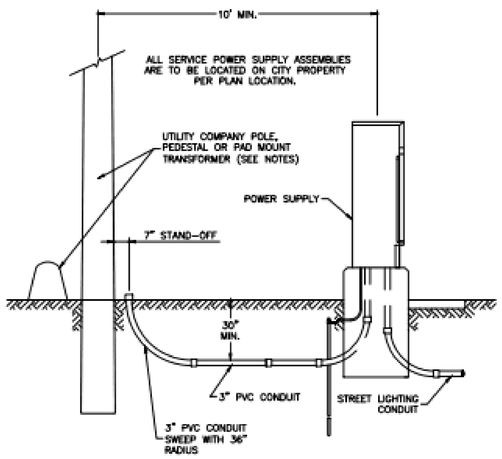
BREAK–AWAY NON FUSED ELECTRICAL CONNECTOR

NOTES:

1. FUSE REMAINS IN "LOAD SIDE" AFTER BREAK–AWAY.
2. GROUND "SLUG" REMAINS IN "LOAD SIDE" AFTER BREAK–AWAY.
3. CONNECTORS SHALL HAVE SET SCREW TYPE TERMINALS TO ATTACH CABLES.



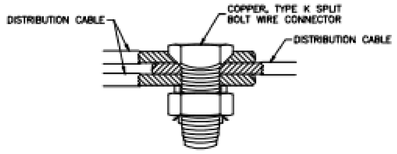
ELECTRICAL CONNECTOR KIT SCHEMATIC
(SINGLE LUMINAIRE)



SECONDARY SERVICE CONNECTION DETAILS

NOTES:

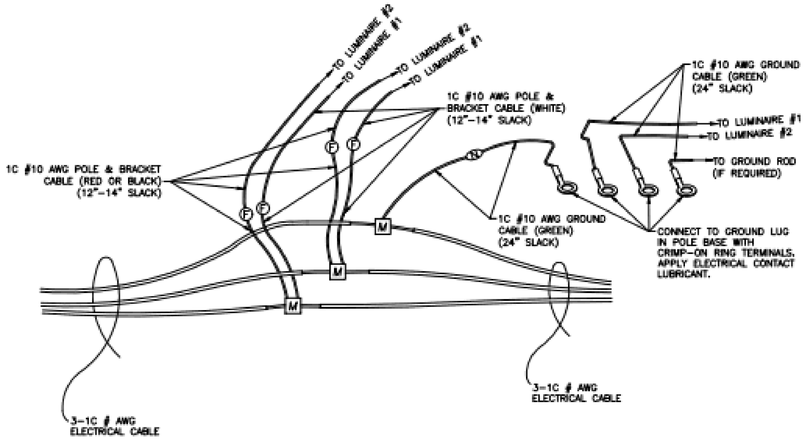
1. CONTRACTOR SHALL INSTALL A CONDUIT STUB 24" TO 6" ABOVE GROUND AT UTILITY POLES. CONDUIT SHALL BE STUBBED TO THE SIDE OF THE POLE THAT WILL ALLOW A DIRECT RUN UP THE POLE TO THE TRANSFORMER WITHOUT CROSSING OTHER UTILITY LINES OR CABLES. THE END OF THE CONDUIT SHALL BE CAPPED.
2. CONTRACTOR SHALL INSTALL CONDUIT IN A TRENCH TO WITHIN 24" OF PEDESTALS OR PAD MOUNT TRANSFORMERS AND LEAVE A 36" X 36" X 36" ACCESS HOLE IN THE GROUND. CONTRACTOR SHALL KEEP OPEN TRENCH COVERED AND PROMPTLY BACKFILL ACCESS HOLE WHEN SERVICE IS COMPLETED.



SPLICE KIT DETAILS

NOTES:

1. TO BE USED ONLY IN JUNCTION OR PULL BOXES WHERE CIRCUITS BRANCH OR "TEE".
2. ALL SPLICES SHALL BE PROTECTED WITH A RESIN SPLICE KIT (NOT SHOWN) INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.



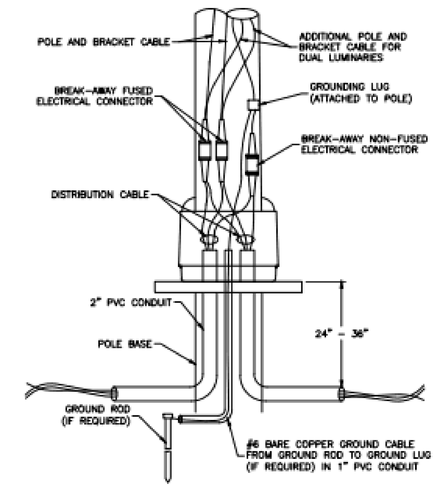
ELECTRICAL CONNECTOR KIT SCHEMATIC
(TWIN LUMINAIRES)

LEGEND

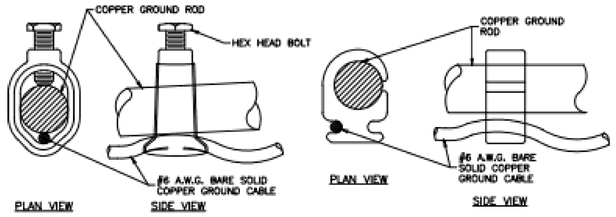
- M — MULTI–TAP ELECTRICAL CONNECTOR
- F — BREAK–AWAY FUSED ELECTRICAL CONNECTOR WITH 8 AMP FUSE
- N — BREAK–AWAY NON–FUSED ELECTRICAL CONNECTOR WITH GROUND "SLUG"
- S — SPLICE KIT

NOTES:

1. RED CABLES SHALL BE CONNECTED TO WEST OR NORTH ORIENTED LUMINAIRE. BLACK CABLES SHALL BE CONNECTED TO EAST OR SOUTH ORIENTED LUMINAIRE.
2. THE SPECIFIED CABLE SLACK SHALL BE PROVIDED ON EACH SIDE OF THE FUSED AND UN–FUSED CONNECTORS.
3. ADDITIONAL SLACK SHALL BE PROVIDED FOR THE #4 AWG CABLE SUCH THAT WHEN EXTENDED UPWARD, THE TOP OF THE MULTI–TAP CONNECTORS ARE NO LESS THAN 1" AND NO MORE THAN 3" ABOVE THE TOP OF THE HAND HOLE OPENING.



POLE WIRING DETAILS



GROUND ROD CONNECTION DETAILS

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: ELECTRICAL DETAILS

Drawn By: BWC
Checked By: MP
Date: 11/2020
Proj. #:

SL-5

MUNICIPAL SITE LIGHTING DETAILS 1
SCALE : N/A

LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

REUNION AT BLACKWELL
SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

PERMIT DOCUMENTS

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinswebb.com

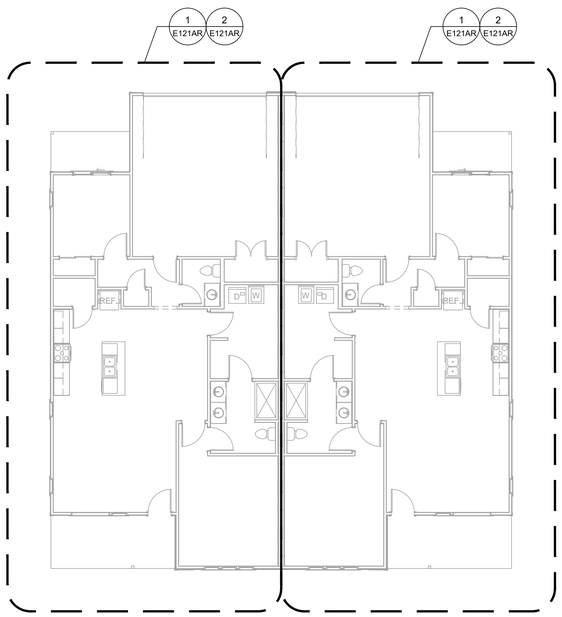
MEP ENGINEER
JSC ENGINEERS
MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

JUSTIN R. SMOTHERS
NUMBER PE-2012003568
PROFESSIONAL ENGINEER
STATE OF MISSOURI
08-24-23
PROFESSIONAL SEAL

E100G

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

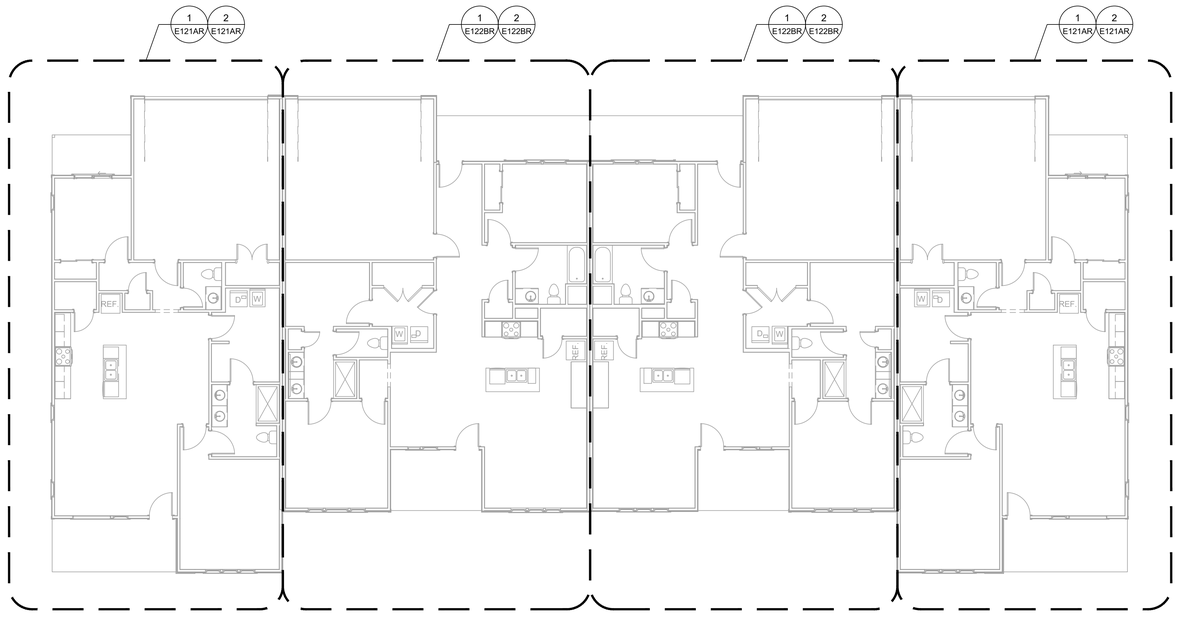
ELECTRICAL SITE LIGHTING DETAILS



1ST FLOOR - BUILDING B2 OVERALL

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

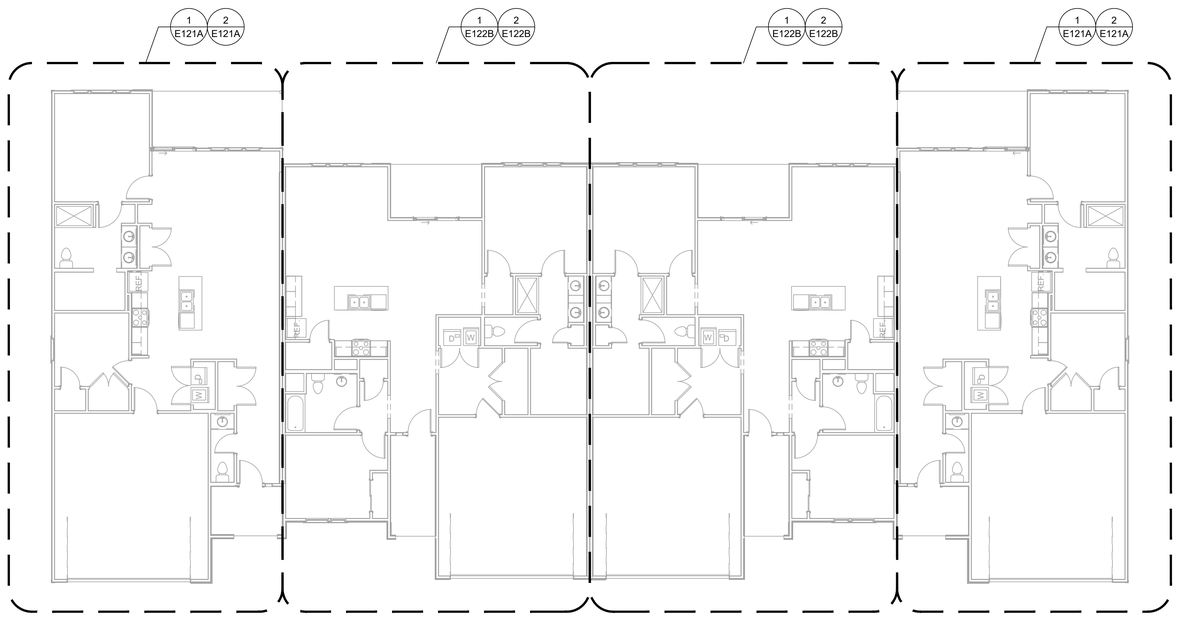
3



1ST FLOOR - BUILDING B OVERALL

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

2



1ST FLOOR - BUILDING A OVERALL

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

1

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003868
PROFESSIONAL ENGINEER

08-24-23

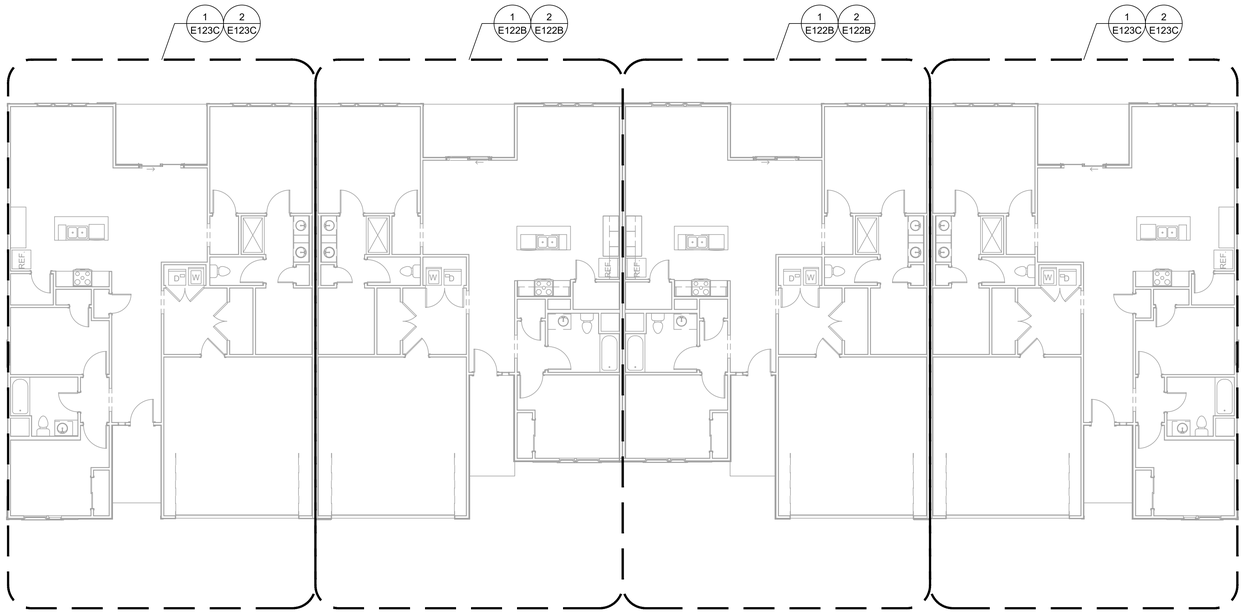
PROFESSIONAL SEAL

E101AB

ISSUE DATE: 08.24.23

JSC PROJECT #: 23-046

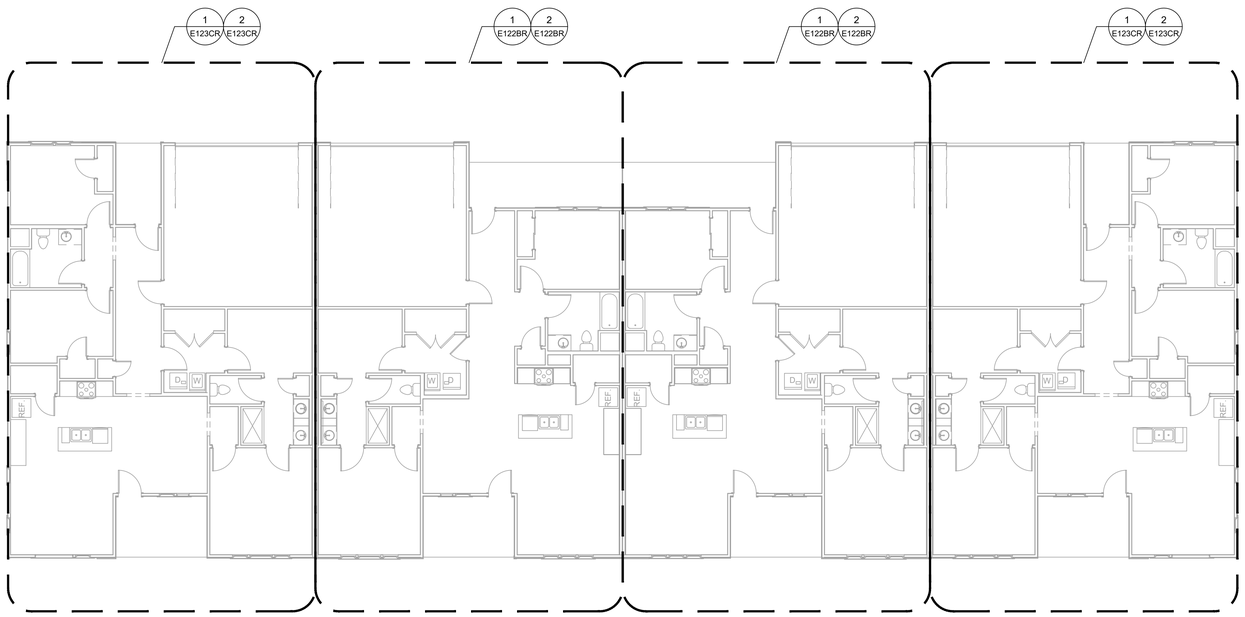
1ST FLOOR OVERALL PLANS
BUILDINGS A & B, B2



1ST FLOOR - BUILDING D OVERALL

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

2



1ST FLOOR - BUILDING C OVERALL

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

1

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

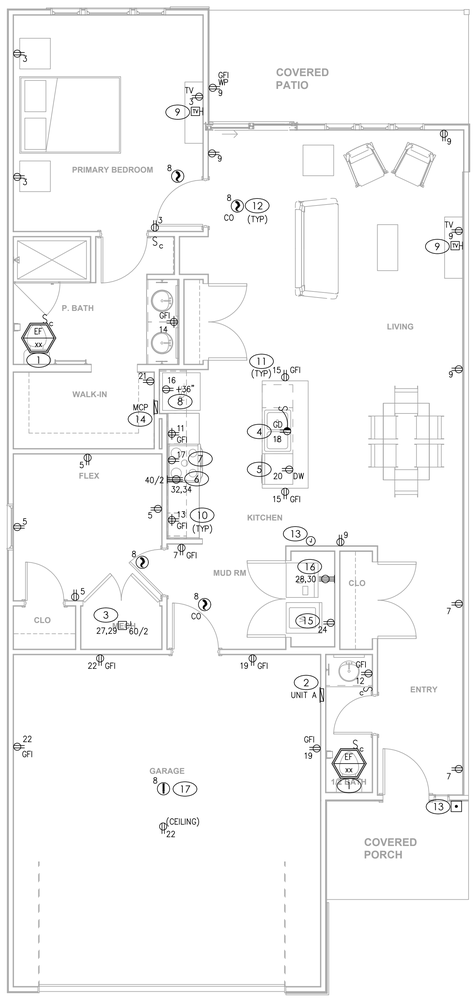
STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003566
PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

E101CD

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

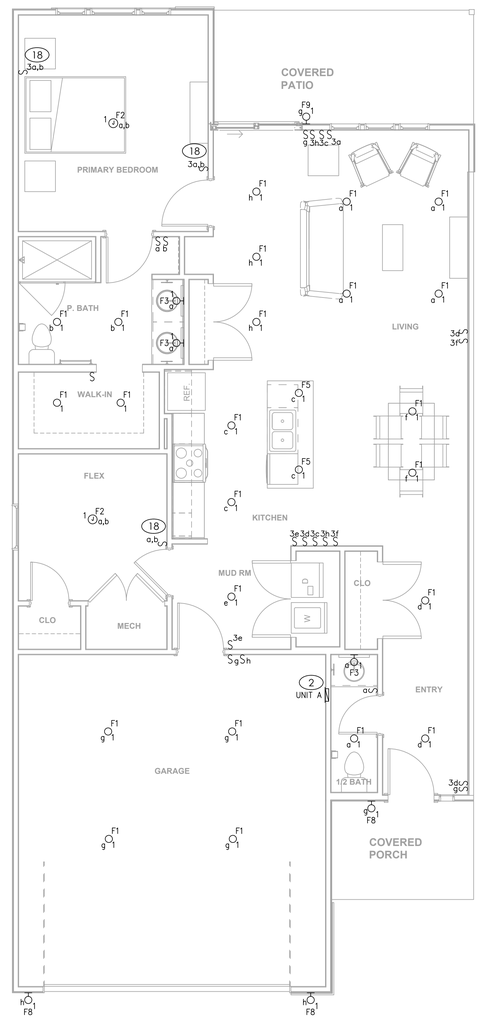
1ST FLOOR OVERALL PLANS
BUILDINGS C & D



POWER - UNIT PLAN A

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

2



LIGHTING - UNIT PLAN A

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

1

KEYED PLAN NOTES

1. EXHAUST FAN DERIVES POWER FROM CIRCUIT SERVING LIGHTING FIXTURES IN ROOM.
2. NEW PANELBOARD. REFER TO SINGLE LINE DIAGRAM AND PANELBOARD SCHEDULE.
3. MAKE CONNECTION TO DIVISION 22/23 EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS. COORDINATE WORK WITH DIVISION 22/23 CONTRACTOR PRIOR TO CONSTRUCTION. DISCONNECT SWITCH SIZE AND CONNECTION STYLE ARE ASSUMED IN THIS DRAWING. REFER TO MECHANICAL & PLUMBING ENGINEERED DRAWINGS FOR EXACT EQUIPMENT SPECIFICATIONS & ELECTRICAL CONNECTION REQUIREMENTS.
4. GARBAGE DISPOSAL. 120V, ½ HP. CORD & PLUG CONNECTON TO HALF-SWITCHED AFCI RECEPTACLE MOUNTED BELOW SINK. PROVIDE 2 #12 CU, 1 #12CU EGC AT HANDICAP UNITS. MOUNT SWITCH WITHIN LOWER CABINETS PER ADA GUIDELINES.
5. DISHWASHER RECEPTACLE. 120V, 6.2A. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION TO RECEPTACLE.
6. ELECTRIC COOKTOP, 208V, 1P, 8KW. PROVIDE HARD WIRED CONNECTION TO J-BOX IN CABINET. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE LOCKABLE CIRCUIT BREAKER IN PANEL AS DISCONNECTING MEANS TO COMPLY WITH NEC 422.31(B). PROVIDE 3 #8 CU, 1 #10 CU EGC. PROVIDE RECEPTACLE TO MATCH PLUG ON UNIT IF UNIT INSTALLED IS CORD AND PLUG CONNECTED.
7. COMBINATION MICROWAVE AND EXHAUST HOOD. 120V, 15A MAX. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
8. REFRIGERATOR 120V, 12A MAX. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
9. TELEVISION. PROVIDE 120V DUPLEX RECEPTACLE, DATA OUTLET AND COAX CABLE (BOTH WIRED BACK TO LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE). MOUNT BETWEEN 18" AND 66" AFF. VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN.
10. FOR KITCHEN AND BATHROOM RECEPTACLES ABOVE COUNTER, COORDINATE LOCATION AND PLACEMENT PRIOR TO ROUGH-IN. IF FULL BACKSPLASH IS USED MOUNT RECEPTACLES VERTICALLY. IFF FULL BACKSPLALSH IS NOT USED MOUNT RECEPTACLES HORIZONTALLY ABOVE BACKSPLASH.
11. MOUNT ISLAND/PENSULA RECEPTACLES 12" MAX BELOW TOP OF COUNTER.
12. COMBINATION SMOKE DETECTOR AND CARBON MONOXIDE SENSOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74 WITH SPECIAL ATTENTION GIVEN TO THE LOCATION OF THE DETECTOR IN THE VICINITY OF RETURN AIR GRILLES. (PROVIDE SMOKE DETECTOR ONLY WHERE ALLOWED BY CODE).
13. PROVIDE LOW-VOLTAGE DOOR BELL SYSTEM WITH TRANSFORMER. PROVIDE LOW-VOLTAGE WIRING FROM TRANSFORMER TO PUSHBUTTTON AND FROM PUSHBUTTON TO CHIME.
14. LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE. COORDINATE REQUIREMENTS. PROVIDE 120V DUPLEX RECEPTACLE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. ROUTE 1 2"C TO LOCATION OF INCOMING COMMUNICATION FOR BUILDING.
15. CLOTHES WASHER, 120V, 12.0A. PROVIDE 2 #12 CU, 1 #12 CU EGC, CORD AND PLUG CONNECTION. PROVIDE NEMA 5-20R RECEPTACLE.
16. ELECTRIC CLOTHES DRYER, 208V, 1 PH, 5000W, 24A. PROVIDE 14-30R RECEPTACLE. PROVIDE 2 #10 C, 1 #10 CU EGC.
17. RATE OF RISE HEAT DETECTOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74. (PROVIDE HEAT DETECTOR ONLY WHERE ALLOWED BY CODE).
18. DUAL SWITCH FOR SEPARATE CONTROL OF FIXTURE FAN AND LIGHT.

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

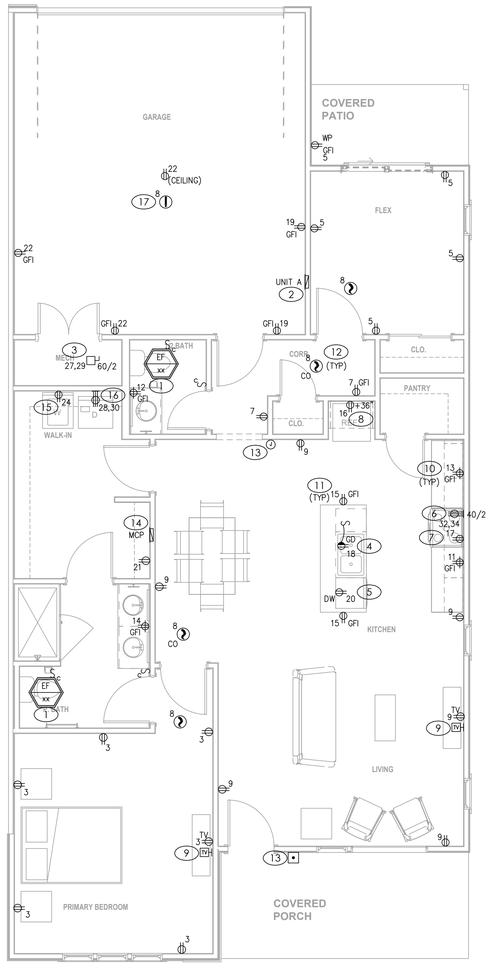
JUSTIN R. SMOTHERS
STATE OF MISSOURI
NUMBER PE-2012003568
PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

E121A

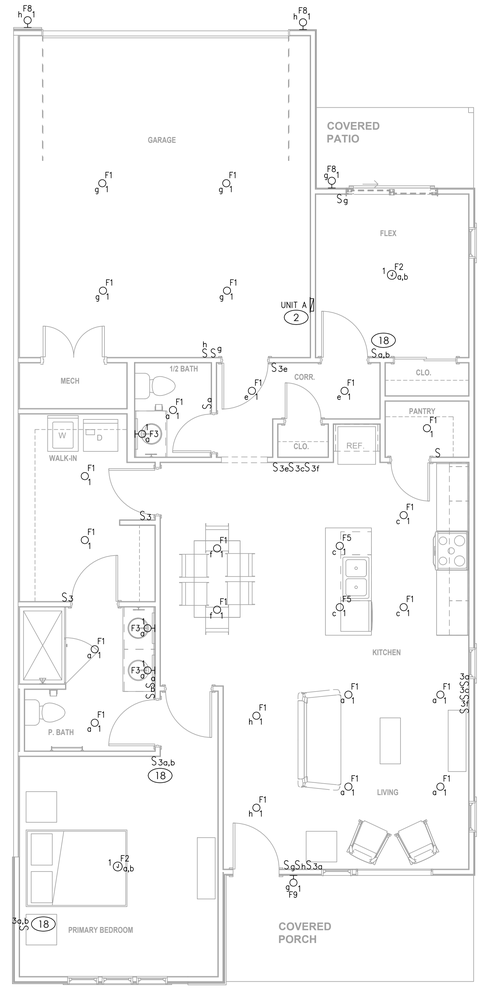
ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

UNIT PLAN A
LIGHTING & POWER PLANS



POWER - UNIT PLAN A REVERSED 2

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



LIGHTING - UNIT PLAN A REVERSED 1

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

KEYED PLAN NOTES

1. EXHAUST FAN DERIVES POWER FROM CIRCUIT SERVING LIGHTING FIXTURES IN ROOM.
2. NEW PANELBOARD. REFER TO SINGLE LINE DIAGRAM AND PANELBOARD SCHEDULE.
3. MAKE CONNECTION TO DIVISION 22/23 EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS. COORDINATE WORK WITH DIVISION 22/23 CONTRACTOR PRIOR TO CONSTRUCTION. DISCONNECT SWITCH SIZE AND CONNECTION STYLE ARE ASSUMED IN THIS DRAWING. REFER TO MECHANICAL & PLUMBING ENGINEERED DRAWINGS FOR EXACT EQUIPMENT SPECIFICATIONS & ELECTRICAL CONNECTION REQUIREMENTS.
4. GARBAGE DISPOSAL. 120V, ½ HP. CORD & PLUG CONNECTON TO HALF-SWITCHED AFCI RECEPTACLE MOUNTED BELOW SINK. PROVIDE 2 #12 CU, 1 #12CU EGC AT HANDICAP UNITS. MOUNT SWITCH WITHIN LOWER CABINETS PER ADA GUIDELINES.
5. DISHWASHER RECEPTACLE. 120V, 6.2A. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION TO RECEPTACLE.
6. ELECTRIC COOKTOP, 208V, 1P, 8KW. PROVIDE HARD WIRED CONNECTION TO J-BOX IN CABINET. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE LOCKABLE CIRCUIT BREAKER IN PANEL AS DISCONNECTING MEANS TO COMPLY WITH NEC 422.31(B). PROVIDE 3 #8 CU, 1 #10 CU EGC. PROVIDE RECEPTACLE TO MATCH PLUG ON UNIT IF UNIT INSTALLED IS CORD AND PLUG CONNECTED.
7. COMBINATION MICROWAVE AND EXHAUST HOOD. 120V, 15A MAX. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
8. REFRIGERATOR 120V, 12A MAX. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
9. TELEVISION. PROVIDE 120V DUPLEX RECEPTACLE, DATA OUTLET AND COAX CABLE (BOTH WIRED BACK TO LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE). MOUNT BETWEEN 18" AND 66" AFF. VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN.
10. FOR KITCHEN AND BATHROOM RECEPTACLES ABOVE COUNTER, COORDINATE LOCATION AND PLACEMENT PRIOR TO ROUGH-IN. IF FULL BACKSPLASH IS USED MOUNT RECEPTACLES VERTICALLY. IFF FULL BACKSPLALSH IS NOT USED MOUNT RECEPTACLES HORIZONTALLY ABOVE BACKSPLASH.
11. MOUNT ISLAND/PENSULA RECEPTACLES 12" MAX BELOW TOP OF COUNTER.
12. COMBINATION SMOKE DETECTOR AND CARBON MONOXIDE SENSOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74 WITH SPECIAL ATTENTION GIVEN TO THE LOCATION OF THE DETECTOR IN THE VICINITY OF RETURN AIR GRILLES. (PROVIDE SMOKE DETECTOR ONLY WHERE ALLOWED BY CODE).
13. PROVIDE LOW-VOLTAGE DOOR BELL SYSTEM WITH TRANSFORMER. PROVIDE LOW-VOLTAGE WIRING FROM TRANSFORMER TO PUSHBUTTTON AND FROM PUSHBUTTON TO CHIME.
14. LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE. COORDINATE REQUIREMENTS. PROVIDE 120V DUPLEX RECEPTACLE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. ROUTE 1 ¼"C TO LOCATION OF INCOMING COMMUNICATION FOR BUILDING.
15. CLOTHES WASHER, 120V, 12.0A. PROVIDE 2 #12 CU, 1 #12 CU EGC, CORD AND PLUG CONNECTION. PROVIDE NEMA 5-20R RECEPTACLE.
16. ELECTRIC CLOTHES DRYER, 208V, 1 PH, 5000W, 24A. PROVIDE 14-30R RECEPTACLE. PROVIDE 2 #10 C, 1 #10 CU EGC.
17. RATE OF RISE HEAT DETECTOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74. (PROVIDE HEAT DETECTOR ONLY WHERE ALLOWED BY CODE).
18. DUAL SWITCH FOR SEPARATE CONTROL OF FIXTURE FAN AND LIGHT.

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

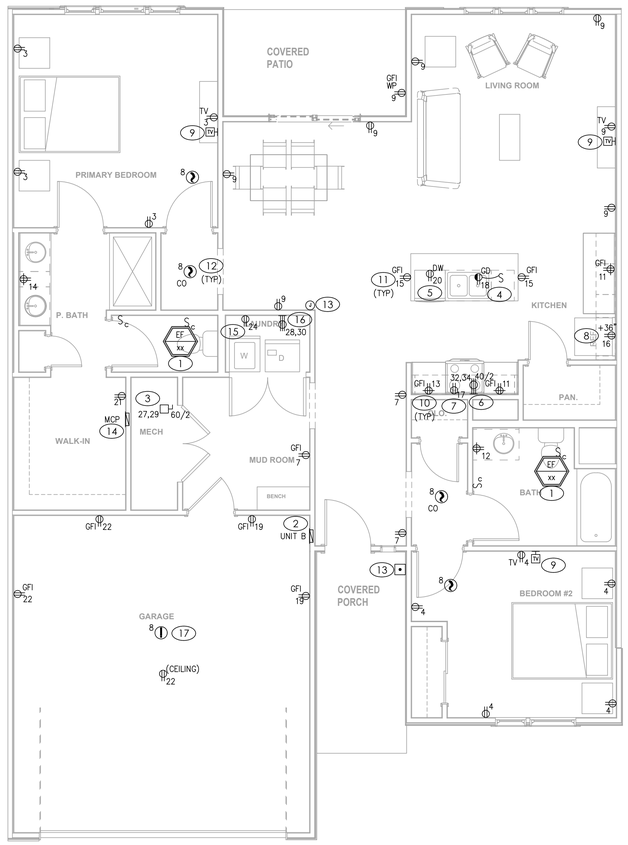
STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003668
PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

E121AR

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

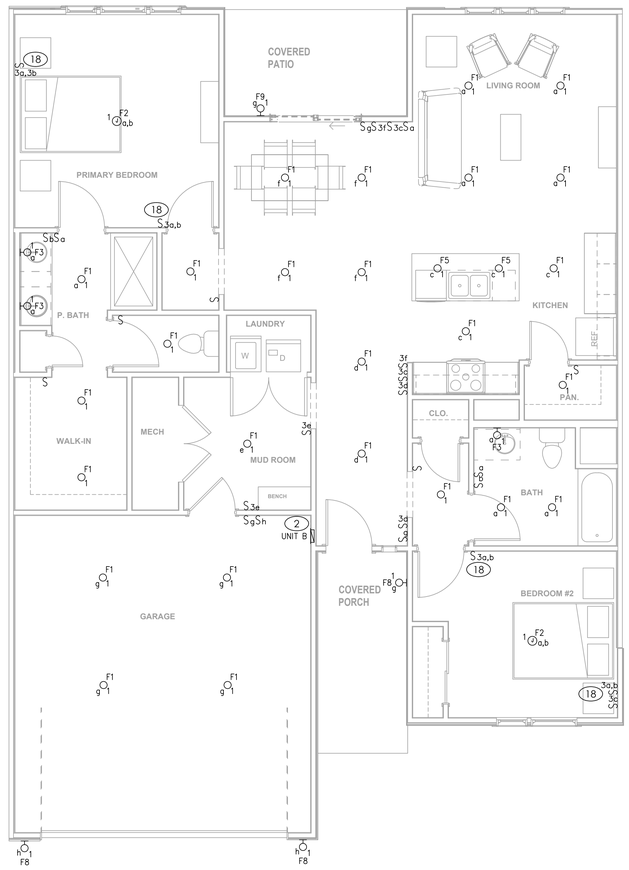
UNIT PLAN A REVERSED
LIGHTING & POWER PLANS



POWER - UNIT PLAN B

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

2



LIGHTING - UNIT PLAN B

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

1

KEYED PLAN NOTES

1. EXHAUST FAN DERIVES POWER FROM CIRCUIT SERVING LIGHTING FIXTURES IN ROOM.
2. NEW PANELBOARD. REFER TO SINGLE LINE DIAGRAM AND PANELBOARD SCHEDULE.
3. MAKE CONNECTION TO DIVISION 22/23 EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS. COORDINATE WORK WITH DIVISION 22/23 CONTRACTOR PRIOR TO CONSTRUCTION. DISCONNECT SWITCH SIZE AND CONNECTION STYLE ARE ASSUMED IN THIS DRAWING. REFER TO MECHANICAL & PLUMBING ENGINEERED DRAWINGS FOR EXACT EQUIPMENT SPECIFICATIONS & ELECTRICAL CONNECTION REQUIREMENTS.
4. GARBAGE DISPOSAL. 120V, ½ HP. CORD & PLUG CONNECTON TO HALF-SWITCHED AFCI RECEPTACLE MOUNTED BELOW SINK. PROVIDE 2 #12 CU, 1 #12CU EGC AT HANDICAP UNITS. MOUNT SWITCH WITHIN LOWER CABINETS PER ADA GUIDELINES.
5. DISHWASHER RECEPTACLE. 120V, 6.2A. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION TO RECEPTACLE.
6. ELECTRIC COOKTOP, 208V, 1P, 8KW. PROVIDE HARD WIRED CONNECTION TO J-BOX IN CABINET. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE LOCKABLE CIRCUIT BREAKER IN PANEL AS DISCONNECTING MEANS TO COMPLY WITH NEC 422.31(B). PROVIDE 3 #8 CU, 1 #10 CU EGC. PROVIDE RECEPTACLE TO MATCH PLUG ON UNIT IF UNIT INSTALLED IS CORD AND PLUG CONNECTED.
7. COMBINATION MICROWAVE AND EXHAUST HOOD. 120V, 15A MAX. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
8. REFRIGERATOR 120V, 12A MAX. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
9. TELEVISION. PROVIDE 120V DUPLEX RECEPTACLE, DATA OUTLET AND COAX CABLE (BOTH WIRED BACK TO LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE). MOUNT BETWEEN 18" AND 66" AFF. VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN.
10. FOR KITCHEN AND BATHROOM RECEPTACLES ABOVE COUNTER, COORDINATE LOCATION AND PLACEMENT PRIOR TO ROUGH-IN. IF FULL BACKSPLASH IS USED MOUNT RECEPTACLES VERTICALLY. IFF FULL BACKSPLALSH IS NOT USED MOUNT RECEPTACLES HORIZONTALLY ABOVE BACKSPLASH.
11. MOUNT ISLAND/PENSULA RECEPTACLES 12" MAX BELOW TOP OF COUNTER.
12. COMBINATION SMOKE DETECTOR AND CARBON MONOXIDE SENSOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74 WITH SPECIAL ATTENTION GIVEN TO THE LOCATION OF THE DETECTOR IN THE VICINITY OF RETURN AIR GRILLES. (PROVIDE SMOKE DETECTOR ONLY WHERE ALLOWED BY CODE).
13. PROVIDE LOW-VOLTAGE DOOR BELL SYSTEM WITH TRANSFORMER. PROVIDE LOW-VOLTAGE WIRING FROM TRANSFORMER TO PUSHBUTTTON AND FROM PUSHBUTTON TO CHIME.
14. LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE. COORDINATE REQUIREMENTS. PROVIDE 120V DUPLEX RECEPTACLE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. ROUTE 1 ¼"C TO LOCATION OF INCOMING COMMUNICATION FOR BUILDING.
15. CLOTHES WASHER, 120V, 12.0A. PROVIDE 2 #12 CU, 1 #12 CU EGC, CORD AND PLUG CONNECTION. PROVIDE NEMA 5-20R RECEPTACLE.
16. ELECTRIC CLOTHES DRYER, 208V, 1 PH, 5000W, 24A. PROVIDE 14-30R RECEPTACLE. PROVIDE 2 #10 C, 1 #10 CU EGC.
17. RATE OF RISE HEAT DETECTOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74. (PROVIDE HEAT DETECTOR ONLY WHERE ALLOWED BY CODE).
18. DUAL SWITCH FOR SEPARATE CONTROL OF FIXTURE FAN AND LIGHT.

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003556
PROFESSIONAL ENGINEERS

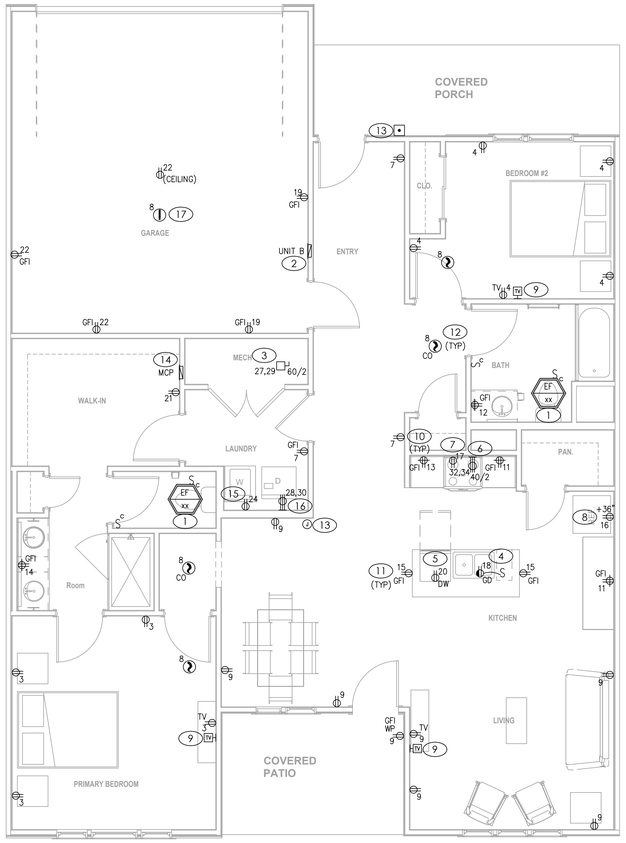
08-24-23

PROFESSIONAL SEAL

E122B

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

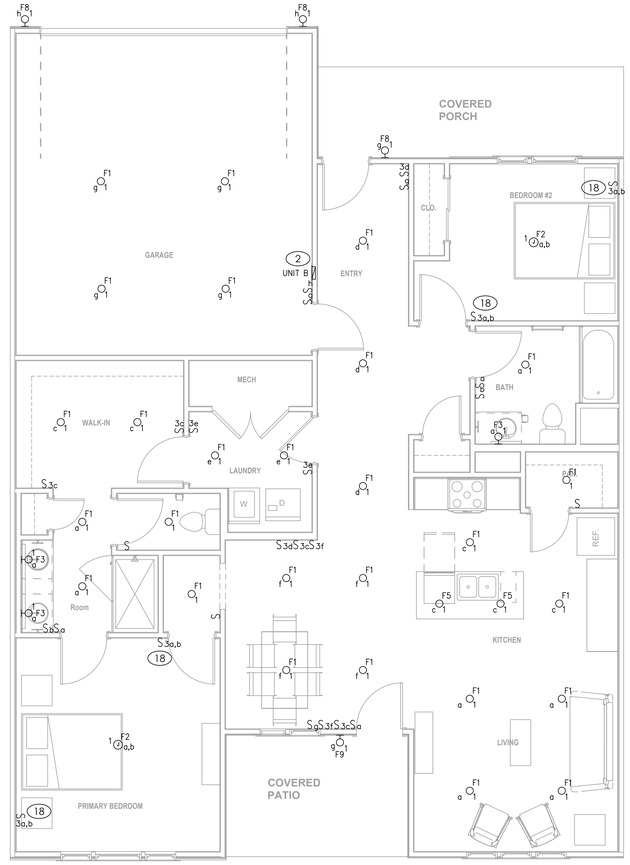
UNIT PLAN B
LIGHTING & POWER PLANS



POWER - UNIT PLAN B REVERSED

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

2



LIGHTING - UNIT PLAN B REVERSED

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

1

KEYED PLAN NOTES

1. EXHAUST FAN DERIVES POWER FROM CIRCUIT SERVING LIGHTING FIXTURES IN ROOM.
2. NEW PANELBOARD. REFER TO SINGLE LINE DIAGRAM AND PANELBOARD SCHEDULE.
3. MAKE CONNECTION TO DIVISION 22/23 EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS. COORDINATE WORK WITH DIVISION 22/23 CONTRACTOR PRIOR TO CONSTRUCTION. DISCONNECT SWITCH SIZE AND CONNECTION STYLE ARE ASSUMED IN THIS DRAWING. REFER TO MECHANICAL & PLUMBING ENGINEERED DRAWINGS FOR EXACT EQUIPMENT SPECIFICATIONS & ELECTRICAL CONNECTION REQUIREMENTS.
4. GARBAGE DISPOSAL. 120V, ½ HP. CORD & PLUG CONNECTON TO HALF-SWITCHED AFCI RECEPTACLE MOUNTED BELOW SINK. PROVIDE 2 #12 CU, 1 #12CU EGC AT HANDICAP UNITS. MOUNT SWITCH WITHIN LOWER CABINETS PER ADA GUIDELINES.
5. DISHWASHER RECEPTACLE. 120V, 6.2A. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION TO RECEPTACLE.
6. ELECTRIC COOKTOP, 208V, 1P, 8KW. PROVIDE HARD WIRED CONNECTION TO J-BOX IN CABINET. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE LOCKABLE CIRCUIT BREAKER IN PANEL AS DISCONNECTING MEANS TO COMPLY WITH NEC 422.31(B). PROVIDE 3 #8 CU, 1 #10 CU EGC. PROVIDE RECEPTACLE TO MATCH PLUG ON UNIT IF UNIT INSTALLED IS CORD AND PLUG CONNECTED.
7. COMBINATION MICROWAVE AND EXHAUST HOOD. 120V, 15A MAX. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
8. REFRIGERATOR 120V, 12A MAX. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
9. TELEVISION. PROVIDE 120V DUPLEX RECEPTACLE, DATA OUTLET AND COAX CABLE (BOTH WIRED BACK TO LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE). MOUNT BETWEEN 18" AND 66" AFF. VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN.
10. FOR KITCHEN AND BATHROOM RECEPTACLES ABOVE COUNTER, COORDINATE LOCATION AND PLACEMENT PRIOR TO ROUGH-IN. IF FULL BACKSPLASH IS USED MOUNT RECEPTACLES VERTICALLY. IFF FULL BACKSPLALSH IS NOT USED MOUNT RECEPTACLES HORIZONTALLY ABOVE BACKSPLASH.
11. MOUNT ISLAND/PENSULA RECEPTACLES 12" MAX BELOW TOP OF COUNTER.
12. COMBINATION SMOKE DETECTOR AND CARBON MONOXIDE SENSOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74 WITH SPECIAL ATTENTION GIVEN TO THE LOCATION OF THE DETECTOR IN THE VICINITY OF RETURN AIR GRILLES. (PROVIDE SMOKE DETECTOR ONLY WHERE ALLOWED BY CODE).
13. PROVIDE LOW-VOLTAGE DOOR BELL SYSTEM WITH TRANSFORMER. PROVIDE LOW-VOLTAGE WIRING FROM TRANSFORMER TO PUSHBUTTTON AND FROM PUSHBUTTON TO CHIME.
14. LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE. COORDINATE REQUIREMENTS. PROVIDE 120V DUPLEX RECEPTACLE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. ROUTE 1 1"c TO LOCATION OF INCOMING COMMUNICATION FOR BUILDING.
15. CLOTHES WASHER, 120V, 12.0A. PROVIDE 2 #12 CU, 1 #12 CU EGC, CORD AND PLUG CONNECTION. PROVIDE NEMA 5-20R RECEPTACLE.
16. ELECTRIC CLOTHES DRYER, 208V, 1 PH, 5000W, 24A. PROVIDE 14-30R RECEPTACLE. PROVIDE 2 #10 C, 1 #10 CU EGC.
17. RATE OF RISE HEAT DETECTOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74. (PROVIDE HEAT DETECTOR ONLY WHERE ALLOWED BY CODE).
18. DUAL SWITCH FOR SEPARATE CONTROL OF FIXTURE FAN AND LIGHT.

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003568
PROFESSIONAL ENGINEER

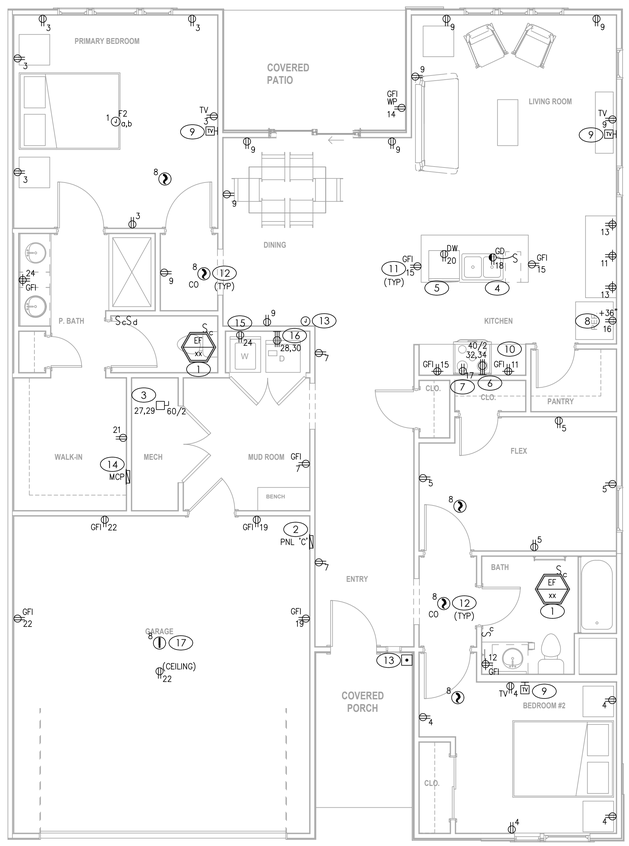
08-24-23

PROFESSIONAL SEAL

E122BR

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

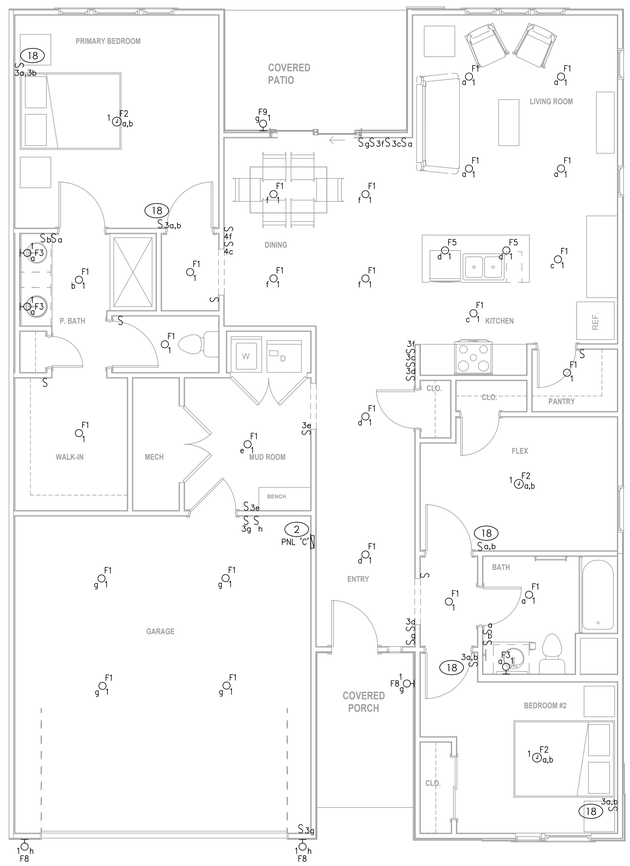
UNIT PLAN B REVERSED
LIGHTING & POWER PLANS



POWER - UNIT PLAN C

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

2



LIGHTING - UNIT PLAN C

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

1

KEYED PLAN NOTES

1. EXHAUST FAN DERIVES POWER FROM CIRCUIT SERVING LIGHTING FIXTURES IN ROOM.
2. NEW PANELBOARD. REFER TO SINGLE LINE DIAGRAM AND PANELBOARD SCHEDULE.
3. MAKE CONNECTION TO DIVISION 22/23 EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS. COORDINATE WORK WITH DIVISION 22/23 CONTRACTOR PRIOR TO CONSTRUCTION. DISCONNECT SWITCH SIZE AND CONNECTION STYLE ARE ASSUMED IN THIS DRAWING. REFER TO MECHANICAL & PLUMBING ENGINEERED DRAWINGS FOR EXACT EQUIPMENT SPECIFICATIONS & ELECTRICAL CONNECTION REQUIREMENTS.
4. GARBAGE DISPOSAL. 120V, ½ HP. CORD & PLUG CONNECTON TO HALF-SWITCHED AFCI RECEPTACLE MOUNTED BELOW SINK. PROVIDE 2 #12 CU, 1 #12CU EGC AT HANDICAP UNITS. MOUNT SWITCH WITHIN LOWER CABINETS PER ADA GUIDELINES.
5. DISHWASHER RECEPTACLE. 120V, 6.2A. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION TO RECEPTACLE.
6. ELECTRIC COOKTOP, 208V, 1P, 8KW. PROVIDE HARD WIRED CONNECTION TO J-BOX IN CABINET. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE LOCKABLE CIRCUIT BREAKER IN PANEL AS DISCONNECTING MEANS TO COMPLY WITH NEC 422.31(B). PROVIDE 3 #8 CU, 1 #10 CU EGC. PROVIDE RECEPTACLE TO MATCH PLUG ON UNIT IF UNIT INSTALLED IS CORD AND PLUG CONNECTED.
7. COMBINATION MICROWAVE AND EXHAUST HOOD. 120V, 15A MAX. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
8. REFRIGERATOR 120V, 12A MAX. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
9. TELEVISION. PROVIDE 120V DUPLEX RECEPTACLE, DATA OUTLET AND COAX CABLE (BOTH WIRED BACK TO LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE). MOUNT BETWEEN 18" AND 66" AFF. VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN.
10. FOR KITCHEN AND BATHROOM RECEPTACLES ABOVE COUNTER, COORDINATE LOCATION AND PLACEMENT PRIOR TO ROUGH-IN. IF FULL BACKSPLASH IS USED MOUNT RECEPTACLES VERTICALLY. IFF FULL BACKSPLASHLSH IS NOT USED MOUNT RECEPTACLES HORIZONTALLY ABOVE BACKSPLASH.
11. MOUNT ISLAND/PENSULA RECEPTACLES 12" MAX BELOW TOP OF COUNTER.
12. COMBINATION SMOKE DETECTOR AND CARBON MONOXIDE SENSOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74 WITH SPECIAL ATTENTION GIVEN TO THE LOCATION OF THE DETECTOR IN THE VICINITY OF RETURN AIR GRILLES. (PROVIDE SMOKE DETECTOR ONLY WHERE ALLOWED BY CODE).
13. PROVIDE LOW-VOLTAGE DOOR BELL SYSTEM WITH TRANSFORMER. PROVIDE LOW-VOLTAGE WIRING FROM TRANSFORMER TO PUSHBUTTTON AND FROM PUSHBUTTON TO CHIME.
14. LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE. COORDINATE REQUIREMENTS. PROVIDE 120V DUPLEX RECEPTACLE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. ROUTE 1 ¼"C TO LOCATION OF INCOMING COMMUNICATION FOR BUILDING.
15. CLOTHES WASHER, 120V, 12.0A. PROVIDE 2 #12 CU, 1 #12 CU EGC, CORD AND PLUG CONNECTION. PROVIDE NEMA 5-20R RECEPTACLE.
16. ELECTRIC CLOTHES DRYER, 208V, 1 PH, 5000W, 24A. PROVIDE 14-30R RECEPTACLE. PROVIDE 2 #10 C, 1 #10 CU EGC.
17. RATE OF RISE HEAT DETECTOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74. (PROVIDE HEAT DETECTOR ONLY WHERE ALLOWED BY CODE).
18. DUAL SWITCH FOR SEPARATE CONTROL OF FIXTURE FAN AND LIGHT.

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

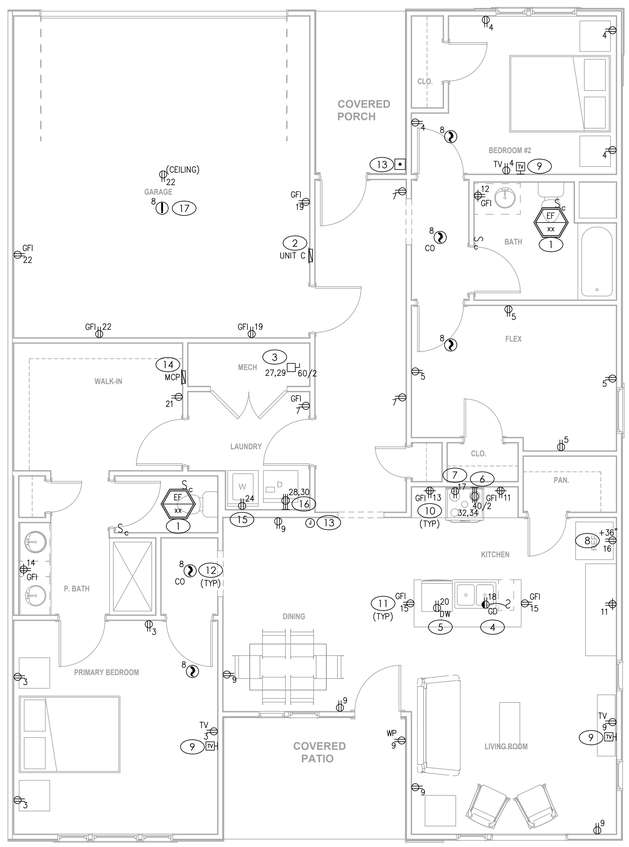
JUSTIN R. SMOTHERS
NUMBER PE-2012003568
STATE OF MISSOURI
PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

E123C

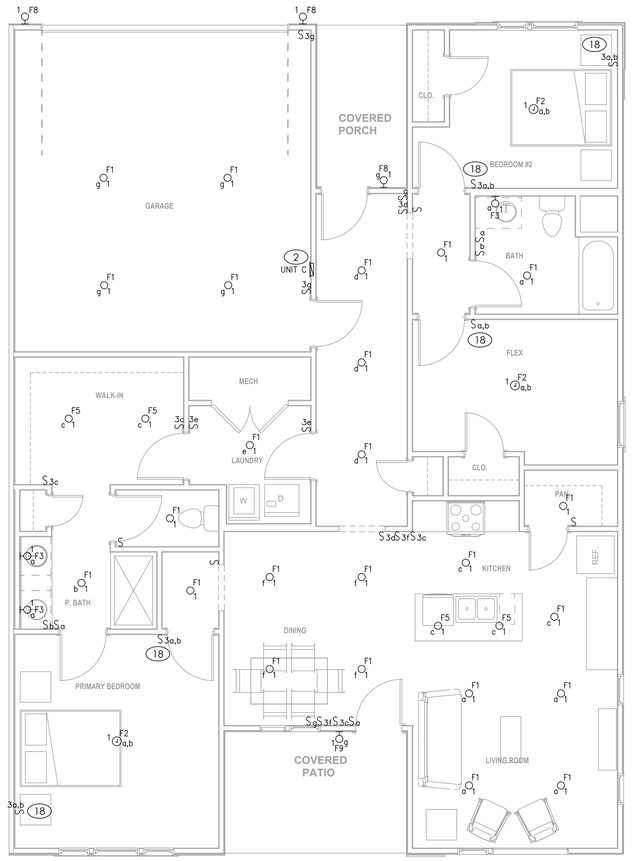
ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

UNIT PLAN C
LIGHTING & POWER PLANS



POWER - UNIT PLAN C REVERSED 2

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



LIGHTING - UNIT PLAN C REVERSED 1

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

KEYED PLAN NOTES

1. EXHAUST FAN DERIVES POWER FROM CIRCUIT SERVING LIGHTING FIXTURES IN ROOM.
2. NEW PANELBOARD. REFER TO SINGLE LINE DIAGRAM AND PANELBOARD SCHEDULE.
3. MAKE CONNECTION TO DIVISION 22/23 EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS. COORDINATE WORK WITH DIVISION 22/23 CONTRACTOR PRIOR TO CONSTRUCTION. DISCONNECT SWITCH SIZE AND CONNECTION STYLE ARE ASSUMED IN THIS DRAWING. REFER TO MECHANICAL & PLUMBING ENGINEERED DRAWINGS FOR EXACT EQUIPMENT SPECIFICATIONS & ELECTRICAL CONNECTION REQUIREMENTS.
4. GARBAGE DISPOSAL. 120V, ½ HP. CORD & PLUG CONNECTON TO HALF-SWITCHED AFCI RECEPTACLE MOUNTED BELOW SINK. PROVIDE 2 #12 CU, 1 #12CU EGC AT HANDICAP UNITS. MOUNT SWITCH WITHIN LOWER CABINETS PER ADA GUIDELINES.
5. DISHWASHER RECEPTACLE. 120V, 6.2A. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION TO RECEPTACLE.
6. ELECTRIC COOKTOP, 208V, 1P, 8KW. PROVIDE HARD WIRED CONNECTION TO J-BOX IN CABINET. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE LOCKABLE CIRCUIT BREAKER IN PANEL AS DISCONNECTING MEANS TO COMPLY WITH NEC 422.31(B). PROVIDE 3 #8 CU, 1 #10 CU EGC. PROVIDE RECEPTACLE TO MATCH PLUG ON UNIT IF UNIT INSTALLED IS CORD AND PLUG CONNECTED.
7. COMBINATION MICROWAVE AND EXHAUST HOOD. 120V, 15A MAX. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
8. REFRIGERATOR 120V, 12A MAX. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
9. TELEVISION. PROVIDE 120V DUPLEX RECEPTACLE, DATA OUTLET AND COAX CABLE (BOTH WIRED BACK TO LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE). MOUNT BETWEEN 18" AND 66" AFF. VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN.
10. FOR KITCHEN AND BATHROOM RECEPTACLES ABOVE COUNTER, COORDINATE LOCATION AND PLACEMENT PRIOR TO ROUGH-IN. IF FULL BACKSPLASH IS USED MOUNT RECEPTACLES VERTICALLY. IFF FULL BACKSPLASLH IS NOT USED MOUNT RECEPTACLES HORIZONTALLY ABOVE BACKSPLASH.
11. MOUNT ISLAND/PENSULA RECEPTACLES 12" MAX BELOW TOP OF COUNTER.
12. COMBINATION SMOKE DETECTOR AND CARBON MONOXIDE SENSOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74 WITH SPECIAL ATTENTION GIVEN TO THE LOCATION OF THE DETECTOR IN THE VICINITY OF RETURN AIR GRILLES. (PROVIDE SMOKE DETECTOR ONLY WHERE ALLOWED BY CODE).
13. PROVIDE LOW-VOLTAGE DOOR BELL SYSTEM WITH TRANSFORMER. PROVIDE LOW-VOLTAGE WIRING FROM TRANSFORMER TO PUSHBUTTTON AND FROM PUSHBUTTON TO CHIME.
14. LOW VOLTAGE STRUCTURED MEDIA ENCLOSURE. COORDINATE REQUIREMENTS. PROVIDE 120V DUPLEX RECEPTACLE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. ROUTE 1 ¼"C TO LOCATION OF INCOMING COMMUNICATION FOR BUILDING.
15. CLOTHES WASHER, 120V, 12.0A. PROVIDE 2 #12 CU, 1 #12 CU EGC, CORD AND PLUG CONNECTION. PROVIDE NEMA 5-20R RECEPTACLE.
16. ELECTRIC CLOTHES DRYER, 208V, 1 PH, 5000W, 24A. PROVIDE 14-30R RECEPTACLE. PROVIDE 2 #10 C, 1 #10 CU EGC.
17. RATE OF RISE HEAT DETECTOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74. (PROVIDE HEAT DETECTOR ONLY WHERE ALLOWED BY CODE).
18. DUAL SWITCH FOR SEPARATE CONTROL OF FIXTURE FAN AND LIGHT.

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003556
PROFESSIONAL ENGINEERS

08-24-23

PROFESSIONAL SEAL

E123CR

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

UNIT PLAN C REVERSED
LIGHTING & POWER PLANS

ELECTRIC UNIT HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	WEIGHT	CFM	KW	VOLTAGE/PH	NOTES
EH-1	REZNOR	EGHB-7	45	700	7.5	240/1	A,B

REMARKS:
- A. PROVIDE CEILING MOUNT BRACKET.
- B. PROVIDE WITH DISCONNECT SWITCH AND WALL MOUNTED THERMOSTAT.

DIFFUSER, REGISTER AND GRILLE SCHEDULE

MARK	MANUFACTURER	MODEL	FACE TYPE	MOUNTING TYPE	FACE SIZE (IN.)	MAX NC	NOTES
SUPPLY							
CSD-1	TITUS	OMNI	PLAQUE FACE	SURFACE	24 x 24	25	A,B,C,E
DSD-1	TITUS	300RL	DOUBLE DEFLECTION	DUCT MOUNT	DUCT + 1.75	25	A,B,C,E
RETURN							
CRG-1	TITUS	50F	EGGCRATE	SURFACE	12 x 24	25	A-D
CRG-2	TITUS	50F	EGGCRATE	SURFACE	24 x 24	25	A-D
WRG-1	TITUS	350RL	LOUVERED	SURFACE	DUCT + 1.75	25	A-C

NOTES:
- A. NECK SIZE SHOWN ON DRAWINGS.
- B. BAKED ENAMEL FINISH, WHITE
- C. FRAME TYPE TO MATCH CEILING CONSTRUCTION, COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLAN.
- D. PAINT THE INSIDE OF CANS FLAT BLACK.
- E. PROVIDE OPPOSED BLADE DAMPER ADJUSTABLE FROM FACE.

EXHAUST FAN SCHEDULE

MARK	AREA SERVED	MANUFACTURER	MODEL	MOUNTING LOCATION	CFM	ESP (IN)	DRIVE	WATTS	ELECTRICAL VOLTS	ELECTRICAL PHASE	WEIGHT	NOTES
EF-1	MEN'S RESTROOM - 109	PANASONIC	FV-1115VKL2	CEILING	150	0.1	DIRECT	14.9	120	1	13	A,B,D,F
EF-2	WOMEN'S RESTROOM - 112	PANASONIC	FV-1115VKL2	CEILING	150	0.1	DIRECT	14.9	120	1	13	A,B,D,F
EF-3	PET SPA - 108	PANASONIC	FV-0511VQ1	CEILING	110	0.1	DIRECT	10.6	120	1	11	A-D
EF-4	IT - 107	PANASONIC	FV-0511VQ1	CEILING	110	0.1	DIRECT	10.6	120	1	11	A,B,D,E

NOTES:
- A. INSTALL EXHAUST FAN PER MANUFACTUER'S WRITTEN INSTRUCTIONS.
- B. PROVIDE FAN SPEED CONTROLLER.
- C. INTERLOCK WITH LIGHT SWITCH.
- D. PROVIDE GRAVITY BACKDRAFT DAMPER AND INTERGRAL DISCONNECT.
- E. INTERLOCK WITH LINE VOLTAGE COOLING-ONLY THERMOSTAT.
- F. CONTINUOUS OPERATION.

OUTDOOR AIR CALCULATIONS

UNIT	ROOM	ROOM NUMBER	AREA (SQ-FT)	OCCUPANCY CLASSIFICATION	OCCUPANT DENSITY, PEOPLE/1000 SQ-FT	SPECIFIED OCCUPANCY	OUTDOOR AIRFLOW RATE PER PERSON (Rp), CFM/PERSON	AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE (Ra), CFM/SQ-FT	ZONE DISTRIBUTION EFFECTIVENESS (Ez)	REQUIRED AIR FLOW, CFM
F-1	GREAT ROOM	100	1450	RECEPTION	25	--	5	0.06	0.8	419.1
									TOTAL	419.1
F-2	LEASING/CONCIERGE	102	162	OFFICE	5	--	5	0.06	0.8	21.5
	WORK AREA	308	65	OFFICE	5	--	5	0.06	0.8	8.6
	MANAGER	104	115	OFFICE	5	--	5	0.06	0.8	15.3
	CONFERENCE	106	144	CONFERENCE ROOM	45	--	5	0.06	0.8	64.1
	PET SPA	108	62	STORAGE	--	--	--	0.12	0.8	9.3
	GYM	113	410	WEIGHT ROOM	10	--	20	0.06	0.8	166.6
	CORRIDOR	110	105	COORIDOR	--	--	--	0.06	0.8	7.9
	MEN'S RESTROOM	109	132	RESTROOM	--	--	--	0.06	0.8	9.9
	WOMEN'S RESTROOM	112	132	RESTROOM	--	--	--	0.06	0.8	9.9
									TOTAL	313.1

CONDENSING UNIT SCHEDULE

TAG	MFR/MODEL	LOCATION	DIMENSIONS (IN.)	WEIGHT (LBS)	NOMINAL CAPACITY (BTUH)	ELECTRICAL VOLTAGE (V)	PHASE	HZ	MOCP	MCA	COOLING COIL COIL MODEL	REFRIG.	UNIT	NOTES
CU-1	LENNOX / ML18XC2-048-230A	GRADE	32.25x32.25x35.75	231	48,000	230	1	60	45.0	26.2	C35-48C-2F	R-410A	F-1	A-C
CU-2	LENNOX / ML18XC2-048-230A	GRADE	32.25x32.25x35.75	231	48,000	230	1	60	45.0	26.2	C35-48C-2F	R-410A	F-2	A-C

NOTES:
- A. PROVIDE TIME DELAY ON COMPRESSOR RE-START KIT, CRANKCASE HEATER, AND COMPRESSOR LOCK-OUT WITH AMBIENT BELOW 35°F.
- B. MECHANICAL CONTRACTOR SHALL COORDINATE ALL UNIT MOCPs OF ACTUAL INSTALLED EQUIPMENT WITH ELECTRICAL CONTRACTOR.
- C. INSTALL ON MINIMUM 12" TALL EQUIPMENT PAD.

GAS FURNACE SCHEDULE

TAG	BASIS OF DESIGN MFR/MODEL	FLOW DIRECTION	WEIGHT (LBS)	OUTSIDE AIR (CFM)	HEATING INPUT (BTUH)	OUTPUT (BTUH)	AFUE	VENT	FAN DATA TYPE	HP	CFM	ESP (IN WG)	ELECTRICAL VOLT	PHASE	HZ	MOCP	MCA	NOTES
F-1	LENNOX / ML296UH090XV48C	UPFLOW	223	425	88,000	85,000	96%	CONCENTRIC	VARIABLE	3/4	1600	0.5	120	1	60	15	10.1	A-D
F-2	LENNOX / ML296UH090XV48C	UPFLOW	223	350	88,000	85,000	96%	CONCENTRIC	VARIABLE	3/4	1600	0.5	120	1	60	15	10.1	A-D

NOTES:
- A. 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 FILTER AND COIL.
- B. PROVIDE UNIT WITH 7-DAY PROGRAMMABLE HEAT/COOL/AUTO THERMOSTAT.
- C. PROVIDE MANUFACTURER'S CONCENTRIC VENT KIT. SIZE AND INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS WHILE ADHERING TO LENGTH AND FITTING LIMITATIONS.
- D. PROVIDE SIDE RETURN FILTER KIT.

MECHANICAL SPECIFICATIONS

1. GENERAL PROVISIONS:
   - A. PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE MECHANICAL SYSTEMS OUTLINED.
   - B. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATIONS OF COMPLIANCE OR APPROVAL AS REQUIRED BY 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 DEFECT FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.
   - H. INSPECTION OF THE SITE: THIS CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MEP DRAWINGS, SPECIFICATIONS, DETAIL, AND THE SITE. THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY SPECIAL OR UNUSUAL PROBLEMS, CONFLICTS, OR OBSTRUCTIONS THAT AFFECT HIS BID.
   - I. FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE MECHANICAL AND PLUMBING DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS AND FITTINGS REQUIRED FOR INSTALLATION. DO NOT SCALE DRAWINGS. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DATA AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION SECTIONS WHERE MECHANICAL WORK INTERFACES WITH OTHER TRADES.
   - J. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON THE PLANS OR WITH CODE REQUIREMENTS, THE NOTE OR CODE WHICH PRESCRIBES AND ESTABLISHES THE MORE COMPLETE JOB OR HIGHER STANDARD SHALL PREVAIL.
   - K. INSTALL MATERIALS AND SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SUBMITTALS. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH UNIFORM APPEARANCE FOR EXPOSED WORK. COORDINATE WITH WORK OF OTHER SECTIONS. COMPLY WITH APPLICABLE REGULATIONS AND CODE REQUIREMENTS. PROVIDE PROPER CLEARANCES FOR SERVICING.
   - L. INCLUDE ALL BASIC MATERIALS AND CONSTRUCTION METHODS INCLUDING PIPES, PIPE FITTINGS, AND SPECIALTIES AND SUPPORTING DEVICES, VALVES, PIPE AND VALVE IDENTIFICATION, PUMPS, VIBRATION ISOLATION, ETC.
   - M. FURNISH ADEQUATE ACCESS PANELS AND DOORS TO ALLOW FOR FUTURE PIPING ALTERATIONS, REPLACEMENT, AND MAINTENANCE OF PIPING. PROPERLY IDENTIFY ALL ACCESS PANELS AND DOORS.

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 OPERATING 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 AND CONTRACTORS.

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.
   - B. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

4. MOTORS:
   - A. PROVIDE THERMAL OVERLOAD PROTECTION FOR EACH MOTOR PROVIDED BY THIS WORK.

5. PIPING
   - A. CONDENSATE DRAIN AND INDIRECT WASTE (ABOVEGROUND)
     1. PVC DWV PIPE, SCHEDULE 40, SOLVENT JOINT.
     2. INSTALL AT 1/8" PER FOOT SLOPE.
   - B. REFRIGERANT
     1. ASTM B 280, TYPE ACR, HARD DRAWN STRAIGHT LENGTHS, AND SOFT-ANNEALED COILS, SEAMLESS COPPER TUBING.
     2. WROUGHT COPPER, ANSI B16.22, STREAMLINED PATTERN, FITTINGS. BRAZED JOINTS, AWS A 5.8 CLASSIFICATION BAG-1 (SILVER).
     3. TUBING TO BE FACTORY CLEANED, READY FOR INSTALLATION, AND HAVE ENDS CAPPED TO PROTECT CLEANLINESS OF PIPE INTERIORS PRIOR TO SHIPPING.
     4. SIZE AND INSTALLATION OF PIPING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6. 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 DEVELOPMENT RATING OF NOT OVER 50, IN ACCORDANCE WITH NFPA.
   - B. PIPE INSULATION (ABOVE GRADE):
     1. THE PIPE INSULATION USED SHALL HAVE A THERMAL CONDUCTIVITY OF 0.27 BTU PER IN/HR•SQ-FT•°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. INSULATION SCHEDULE:
        - a. REFRIGERANT SUCTION: 1-1/2" FOR PIPING UP TO 1-1/2"ø, 2" FOR PIPING 1-1/2"ø AND LARGER.
   - C. DUCTWORK INSULATION:
     1. DUCT LINING: 2 LB/CF, THICKNESS AS SCHEDULED, AIR STREAM SIDE COATED, INSTALL PER SMACNA STANDARDS.
     2. DUCT LINING SCHEDULE:
        - a. SUPPLY DUCT: 1/2" THROUGH THE FIRST 10 FEET OF DUCT
        - b. RETURN AIR DUCT: 1/2" THROUGH THE FIRST 10 FEET OF DUCT
     3. DUCT COVERING: 3/4 LB/CF, FIBERGLASS BLANKET WITH FACTORY APPLIED VAPOR BARRIER AND FACING. THICKNESS AS SCHEDULED, INSTALLATION IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. DUCT COVERING SHALL BE MINIMUM R-6.
        - a. SUPPLY AIR DUCT: 2"
        - b. RETURN AIR DUCT: 2"
        - c. OUTDOOR AIR / MAKEUP AIR DUCT: 2"

7. TESTING, BALANCING AND CLEANING:
   - A. ALL PIPING SHALL BE TESTED FOR LEAKS BEFORE BEING CONCEALED IN WALL CONSTRUCTION OR COVERED WITH INSULATION.
   - B. 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 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 LABELLED OR MAY BE AN ELECTRONIC PDF SUBMITTAL.

8. DUCTWORK:
   - A. ALL DUCTWORK UNLESS OTHERWISE INDICATED SHALL BE FABRICATED FROM GALVANIZED SHEET STEEL COMPLYING WITH ASTM A 527, LOCKFORMING QUALITY, WITH G60 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" WATER GAUGE STATIC PRESSURE.
   - C. ALL FITTINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION.
   - D. RECTANGULAR DUCT:
     1. ELBOWS, UNLESS INDICATED OTHERWISE, SHALL BE CONSTRUCTED WITH CENTERLINE RADIUS OF NOT LESS THAN 1.5 DUCT WIDTH OR SQUARE ELBOWS WITH DOUBLE WALL STREAMLINE ELBOWS.
     2. TAKE-OFF FITTINGS: BRANCH DUCT TAKE-OFF FITTINGS FOR SUPPLY AND EXHAUST DIFFUSER/REGISTERS SHALL INCLUDE AN INTEGRAL MANUAL VOLUME DAMPER WITH LOCKING QUADRANT, DAMPER NOT REQUIRED ON RETURN AIR. FOR RECTANGULAR TO ROUND TAKE-OFFS, UTILIZE A "BUCKLEY" MODEL 3300 & 3300D OR EQUAL.
     3. RETURN AIR ACOUSTIC ELBOWS AND SOUND BOOTS SHALL BE A SQUARE ELBOW WITH NO TURNING VANES.
     4. SLOPES FOR TRANSITIONS OR OTHER CHANGES IN DIMENSIONS SHALL BE A MINIMUM 1 TO 3.
   - E. ROUND DUCT (SEE INSULATION SECTION FOR SPIRAL DUCT):
     1. PROVIDE RADIUS TYPE FITTINGS FABRICATED OF MULTIPLE SECTIONS WITH MAXIMUM 15 DEGREE CHANGE OF DIRECTION PER SECTION. UNLESS SPECIFICALLY DETAILED OTHERWISE, USE 45 DEGREE LATERALS FOR BRANCH TAKEOFF CONNECTIONS. WHERE 90 DEGREE BRANCHES ARE INDICATED PROVIDE CONICAL TYPE TEES.
     2. SLOPES FOR TRANSITIONS OR OTHER CHANGES IN DIMENSIONS SHALL BE MINIMUM 1 TO 3.
     3. ROUND LONGITUDINAL SEAM DUCT: USE FOR RIGID METAL DUCT ON LEAVING SIDE OF DUCT IN CONCEALED LOCATIONS FOR EXTENSION TO FLEX FOR DIFFUSERS.
   - F. SEAL ALL CONCEALED DUCTWORK JOINTS WITH NON-HARDENING, NON-MIGRATING MASTIC SEALANT, AS RECOMMENDED FOR SEALING SEAMS AND JOINTS IN DUCTWORK. OIL BASED CAULKING AND GLAZING COMPOUNDS SHALL NOT BE ACCEPTABLE. DUCTS SHALL BE SEALED TO THE CLASS LEVEL LISTED BELOW:

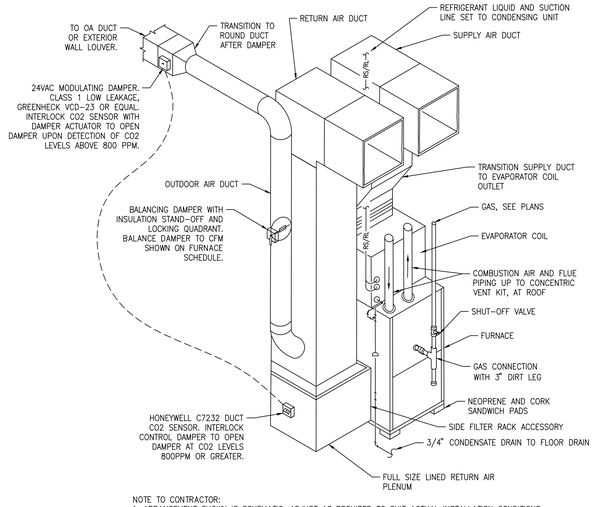
(1) UNCONDITIONED SPACES:	CLASS B	CLASS C	CLASS B	
(2) CONDITIONED SPACES (PLENUM):	CLASS C	CLASS B	CLASS C	
	SUPPLY 2"WC OR LESS	EXHAUST	RETURN	

   - G. DUCT SIZES SHOWN ON THE DRAWINGS ARE SHEET METAL SIZES. INCREASE SHEET METAL SIZES ACCORDINGLY TO ACCOUNT FOR THICKNESS OF DUCT LINER.
   - H. WHETHER SHOWN ON PLANS OR NOT, PROVIDE MANUAL VOLUME DAMPERS IN EACH RUNOUT TO EACH SUPPLY DIFFUSER OR REGISTER. PROVIDE ACCESS PANELS TO DAMPERS LOCATED ABOVE HARD CEILINGS.
   - I. PROVIDE AUXILIARY STEEL AS REQUIRED TO ADEQUATELY SUPPORT DUCTWORK.
   - J. WHERE DUCTS PASS THROUGH FIRE-RATED FLOORS, WALLS, OR PARTITIONS, PROVIDE FIRESTOPPING BETWEEN DUCT AND WALL.
   - K. WHERE DUCTS PASS THROUGH INTERIOR PARTITIONS OR EXTERIOR WALLS, AND ARE EXPOSED TO VIEW, CONCEAL SPACE BETWEEN OPENING AND DUCT OR DUCT INSULATION WITH SHEET METAL FLANGES OF SAME GAUGE AS DUCT. OVERLAP OPENING ON 4 SIDES BY AT LEAST 1-1/2". FASTEN TO DUCT AND WALL.

9. 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".

10. FLUES AND ACCESSORIES:
    - A. FLUE FOR GAS FIRED CONDENSING WATER HEATER OR FURNACE SHALL BE AS RECOMMENDED BY THE GAS APPLIANCE MANUFACTURER. FLUES SHALL BE SCHEDULE 40 PVC OR CPVC PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
    - B. PROVIDE MANUFACTURER'S STANDARD ACCESSORY ITEMS INCLUDING BIRD PROOF TOP, STORM COLLAR, ROOF THIMBLE, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION. ROOF THIMBLES THROUGH THE BUILDING ROOF SHALL BE SUITABLE FOR USE WITH THE ROOF PROVIDED.
    - C. FLUES FOR HEATERS SHALL BE DOUBLE WALL TYPE B EQUAL TO METALBESTOS. PROVIDE MANUFACTURER'S STANDARD FITTING AND ACCESSORIES (ROOF THIMBLE, STORM COLLAR, COUNTER FLASHING, ETC.) AS REQUIRED FOR A COMPLETE INSTALLATION.

11. SMOKE DETECTORS:
    - A. UNITS MOUNTED IN THE DUCTWORK SHALL BE A DUCT MOUNTED UL LISTED PHOTO-ELECTRIC SELF-CONTAINED SMOKE DETECTOR WITH HOUSING. UNITS SHALL BE EQUAL TO SIMPLEX #4098-4687. THE SAMPLING TUBE SHALL BE #2098-9804. LENGTH AS REQUIRED FOR DUCT.
    - B. DUCT DETECTOR REMOTE TEST STATION SHALL BE SIMPLEX #4098-9842 WITH REMOTE ALARM INDICATOR. POWER-ON INDICATOR, TONE-ALERT, TONE-ALERT SILENCE SWITCH, AND TEST/RESET SWITCH. DEVICES SHALL BE MOUNTED IN APPROVED LOCATION BY LOCAL AHJ. WHERE DUCT SMOKE DETECTORS ARE NOT RESETTABLE FROM THE PROTECTED PREMISES FIRE ALARM SYSTEM, A LISTED ALARM/SUPERVISORY INDICATOR WITH AN INTEGRAL RESET SWITCH SHALL BE PROVIDED.
    - C. PROVIDE AND INSTALL A PHOTO-ELECTRIC SMOKE DETECTOR IN THE RETURN AIR DUCT FOR EACH HVAC UNIT AS INDICATED ON THE FLOOR PLANS. DETECTORS ARE TO BE PROVIDED WITH A SUB-BASE CONTAINING AUXILIARY RELAY CONTACTS. RELAY CONTACTS SHALL BE WIRED INTO UNIT CONTROL WIRING SO AS TO SHUT DOWN UNIT IN THE CASE OF SMOKE DETECTION. PROVIDE ALL CONTROL WIRING. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V POWER TO EACH DETECTOR.
    - D. SMOKE DETECTORS SHALL BE INTERLOCKED. IN ALARM CONDITION OF A SINGLE DETECTOR ALL UNITS SHALL SHUT DOWN.



NOTE TO CONTRACTOR:
1. ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED TO SUIT ACTUAL INSTALLATION CONDITIONS.

FURNACE DETAIL

SCALE : NO SCALE

1

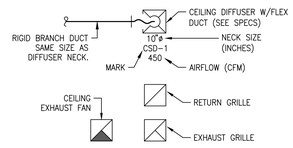
MECHANICAL SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ETC, ARE NECESSARILY USED ON THE DRAWINGS.

HVAC EQUIPMENT & DUCTWORK

- SPIN-IN FITTING WITH MANUAL VOLUME DAMPER
- BRANCH DUCT WITH 45° RECTANGLE-ROUND BRANCH FITTING AND MANUAL VOLUME DAMPER
- ELBOW WITH TURNING VANES
- RETURN, EXHAUST, OR OUTSIDE AIR DUCT UP
- RETURN, EXHAUST, OR OUTSIDE AIR DUCT DOWN
- SUPPLY AIR DUCT UP
- SUPPLY AIR DUCT DOWN
- EQUIPMENT WITH FLEXIBLE DUCT CONNECTION
- MANUAL VOLUME DAMPER
- SQUARE TO ROUND TRANSITION
- DUCT TRANSITION
- BRANCH DUCT
- DUCT MOUNTED SMOKE DETECTOR

FD	FIRE DAMPER	CO2	CARBON DIOXIDE SENSOR
FSD	FIRE SMOKE DAMPER	HS	HUMIDITY SENSOR
SD	SMOKE DAMPER	SP	STATIC PRESSURE SENSOR
MD	MOTORIZED DAMPER	TS	TEMPERATURE SENSOR
BD	BACKDRAFT DAMPER	H	HUMIDISTAT
VD	VOLUME DAMPER	T	THERMOSTAT



ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	MC	MECHANICAL CONTRACTOR
BAS	BUILDING AUTOMATION SYSTEM	MIN	MINIMUM
BD	BACKDRAFT	NC	NOISE CRITERIA
CFM	CUBIC FEET PER MINUTE	OA	OUTSIDE AIR
DDC	DIRECT DIGITAL CONTROL	RA	RETURN AIR
DX	DIRECT EXPANSION	SA	SUPPLY AIR
EA	EXHAUST AIR	SD	SMOKE DUCT DETECTOR
FFA	FROM FLOOR ABOVE	TFA	TO FLOOR ABOVE
FFB	FROM FLOOR BELOW	TFB	TO FLOOR BELOW
GPM	GALLONS PER MINUTE	TYP	TYPICAL
IN WC	INCHES OF WATER COLUMN	UNO	UNLESS NOTED OTHERWISE
MAX	MAXIMUM	W/	WITH
MBH	1000 BTU PER HOUR	W/O	WITHOUT

STANDARD MOUNTING HEIGHTS

(AFF, UNLESS NOTES OTHERWISE)

THERMOSTATS (USER ADJUSTABLE) (TOP OF DEVICE)	48"
CONTROLS (TOP OF DEVICE)	48"

ANNOTATION

- (#) PLAN WORK NOTE
- RTU 1 — MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
- CONNECTION POINT OF NEW WORK TO EXISTING
- A / M1 — DETAIL REFERENCE UPPER NUMBER INDICATED DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
- 1 / M1 — SECTION CUT DESIGNATION

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003956
PROFESSIONAL ENGINEER

08-24-23

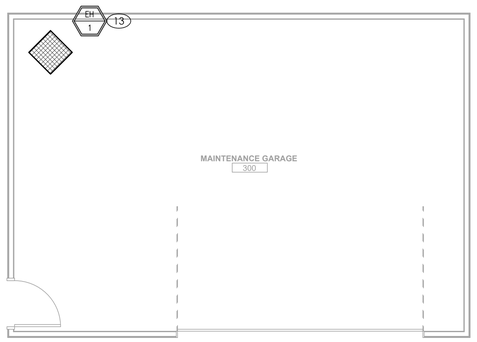
PROFESSIONAL SEAL

M001

ISSUE DATE: 08.24.23

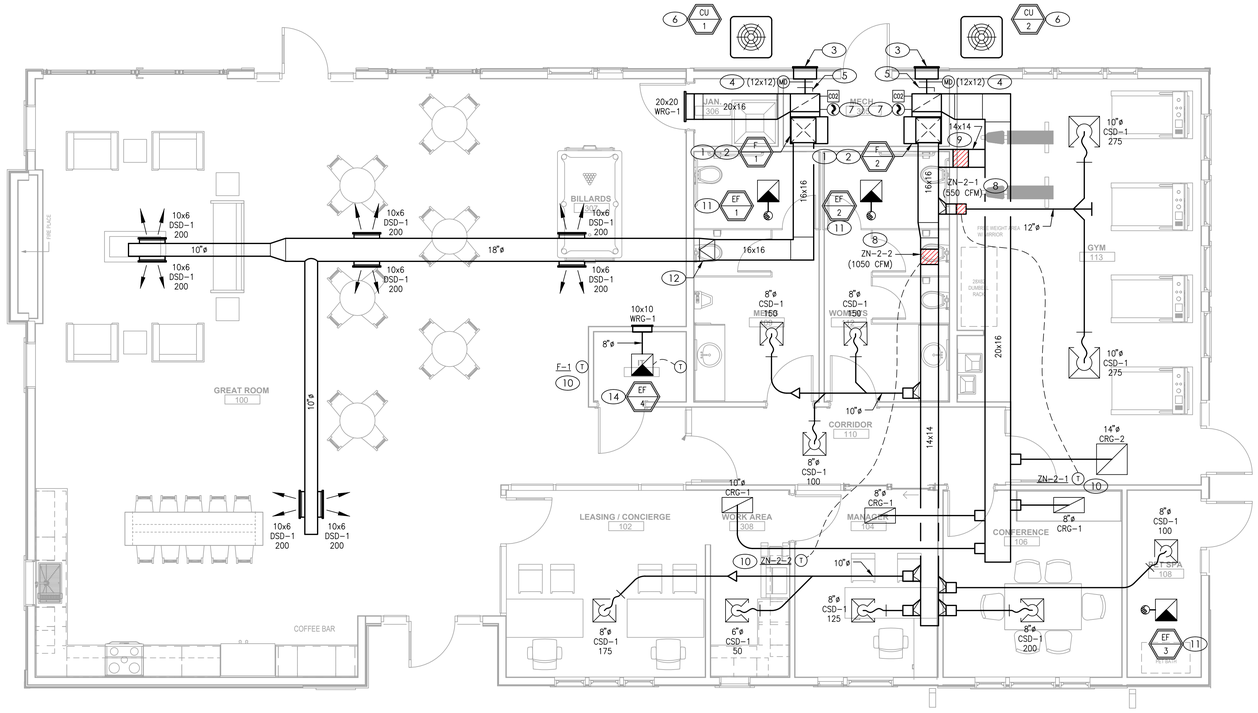
JSC PROJECT #: 23-086

MECHANICAL SPECIFICATIONS, SCHEDULES, AND SYMBOLS



MECHANICAL PLAN - MAINTENANCE GARAGE 2

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



MECHANICAL PLAN - CLUBHOUSE 1

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

GENERAL NOTES

A. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISION OF BID.

B. COORDINATE INSTALLATION OF MECHANICAL AND PLUMBING SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION AND AVOID CONFLICTS. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC. VERIFY DUCT SPACE AVAILABLE ABOVE ALL CEILINGS PRIOR TO ANY FABRICATION OF INSTALLATION.

C. OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF.

D. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.

E. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

(#) KEYED PLAN NOTES

1. FULL SIZE DUCT FROM COIL UP TO CEILING SPACE. CONTINUE DISTRIBUTION AS SHOWN.
2. PROVIDE CONCENTRIC VENT FOR FURNACE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS. ADHERE TO SIZE AND LENGTH LIMITATIONS. LOCATE VENT A MINIMUM OF 10'-0" FROM OUTSIDE AIR INTAKE. ROUTE TO NEAREST WALL OR ROOF. COORDINATE LOCATION WITH GC PRIOR TO INSTALLATION.
3. 18"x12"(WxH) LOUVER EQUAL TO RUSKIN MODEL ELF6375DX WITH INSECT SCREEN. PAINT LOUVER COLOR AS DIRECTED BY ARCHITECT OR OWNER. TRANSITION TO DUCT AS REQUIRED. LOCATE LOUVER A MINIMUM OF 10'-0" FROM ANY EXHAUST DISCHARGE.
4. PROVIDE GREENHECK VCD-23 CLASS 1A LOW LEAKAGE CONTROL DAMPER WITH 24V ACTUATOR AND LOW VOLTAGE TRANSFORMER. SIZE AS SHOWN. TRANSITION AS REQUIRED TO 12"ø OUTDOOR AIR DUCT AND CONTINUE TO RETURN AIR DUCT AT UNIT. PROVIDE RETURN AIR DUCT CO2 SENSOR, INTERLOCK CONTROL DAMPER WITH CO2 SENSOR TO OPEN DAMPER UPON DETECTION OF CO2 LEVELS ABOVE 800PPM. SEE DETAIL ON M001 FOR ADDITIONAL INFORMATION.
5. PROVIDE MANUAL BALANCING DAMPER. BALANCE TO OUTSIDE AIR CFM SHOWN ON FURNACE SCHEDULE.
6. CONDENSING UNIT LEVEL AT GRADE ON PRE-MANUFACTURED PAD. INSTALL PER MANUFACTURER'S INSTRUCTIONS MAINTAINING RECOMMENDED SERVICE CLEARANCES. ROUTE REFRIGERANT LINES THOUGH WALL. WEATHER SEAL REFRIGERANT LINE PENETRATIONS OF BUILDING. PROVIDE ALL RECOMMENDED VALVES, FILTERS, FITTINGS, ETC. AND MAKE ALL NECESSARY CONNECTIONS TO AIR HANDLING UNIT. COORDINATE EXACT LOCATION WITH BUILDING OWNER PRIOR TO INSTALLATION.
7. PROVIDE SMOKE DETECTOR IN RETURN AIR DUCT IN COMPLIANCE WITH NFPA 72. DUCT SMOKE DETECTORS SHALL BE INTERLOCKED TO SHUT DOWN ALL UNITS UPON DETECTION OF SMOKE.
8. PROVIDE ZONE DAMPER WITH TEMPERATURE SENSOR. SIZE DAMPER AS SHOWN AND VERIFY "(XXXX)" CFM CAPACITY WITH MANUFACTURER. DAMPER SHALL BE EQUAL TO ZONEX MODEL STMPD, STRD, OR STCD, WITH 24V ACTUATOR.
9. PROVIDE BYPASS DAMPER SIZED AS SHOWN. DAMPER SHALL BE EQUAL TO ZONEX MODEL STDBP, WITH 24V ACTUATOR. INTERLOCK WITH STATIC PRESSURE SENSOR PER MANUFACTURE'S INSTALLATION INSTRUCTIONS. INSTALL STATIC PRESSURE SENSOR AT LOCATION RECOMMENDED BY ZONE DAMPER SYSTEM.
10. LOCATE THERMOSTAT ON WALL AT 54"AFF. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
11. ROUTE 8"ø DUCT UP FROM EXHAUST FAN TO ROOF WEATHER CAP. LOCATE DISCHARGE A MINIMUM OF 10'-0" FROM ANY OUTSIDE AIR INTAKE.
12. TRANSITION TO SPIRAL DUCT PRIOR TO ENTERING OPEN CEILING AREA.
13. SUSPEND UNIT HEATER FROM OVERHEAD STRUCTURE AS REQUIRED. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
14. PROVIDE LINE VOLTAGE COOLING ONLY THERMOSTAT FOR EXHAUST FAN. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR. DISCHARGE EXHAUST DUCT TO WALL GRILLE.

collins|webb ARCHITECTURE
3078 SW MARKET St. Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003568
PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

M101K

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-086

MECHANICAL PLANS - CLUBHOUSE AND MAINTENANCE GARAGE

PLUMBING FIXTURE SCHEDULE

DF	DRINKING FOUNTAIN: ELKAY MODEL EzH2O LZSTL8WSLK, BI-LEVEL ELECTRIC FILTERED WATER COOLER WITH BOTTLE FILLING STATION. ADA COMPLIANT. LIGHT GRAY. MOUNT AT HEIGHT DETERMIND BY ARCHITECT. 115V/1PH, 6.0 FLA, 370 WATTS, 104 LBS.
FD	FLOOR DRAIN: SIOUX CHIEF 833-23DIR, CAST IRON BODY AND CLAMPING COLLAR, ADJUSTABLE 6-1/2" ROUND NICKEL BRONZE STRAINER. PROVIDE TRAP GUARD COMPATIABLE WITH FIXTURE.
FS	FLOOR SINK: ZURN FD2376-NH3-H FLOOR SINK, 8" DEEP BODY, CLAMP COLLAR, ALUMINUM DOME STRAINER AND SQUARE GRATE.
IMB	ICE MAKER BOX: OATEY 39152, QUARTER TURN BRASS BALL VALVES, COPPER SWEAT CONNECTIONS, WATER HAMMER ARRESTORS.
LAV	HANDICAP ACCESSIBLE DROP IN LAVATORY, PROFLO MODEL PF20174WH, VITREOUS CHINA, WHITE, SELF-RIMMING COUNTER TOP, PROFLOW PFWS3006 ADA COMPLIANT FAUCET, 55 FLEX SUPPLY RISERS WITH CHROME PLATED STOP VALVES, P-TRAP WITH CLEANOUT AND ESCUTCHEONS. INSULATE WITH "HANDI-LAV-GUARD" MODEL 102, OR EQUAL.
MS	MOP SINK: FIAT SB2424 OR EQUAL. 24"x24"x6" MOP BASIN WITH DRAIN. WALL MOUNT FAUCET, T&S B-0655-BSTR, WITH TWO HANDLES, VACUUM BREAKER AND 1/2" NPT THREAD. INSTALLATION BY PLUMBING CONTRACTOR.
RCP	HOT WATER RECIRCULATION PUMP: GRUNDFOS UP 15-10 SU7P/TLC. 6 GPM MAX, 5.25 FT HEAD, 120V/1 PH, 25W, STAINLESS STEEL HEAD, INTEGRAL TIMER.
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER: WATTS LF009, 1-1/2", MEETING ASSE 1013, LEAD FREE CAST BRONZE BODY. QUARTER TURN TESTING COCKS, QUARTER TURN BALL VALVES, AND AIR GAP FITTING.
SINK	DROP-IN SINK: AMERICAN STANDARD 18DB6332211.075, SINGLE FAUCET HOLE, 33"X22", DOUBLE BOWL, SELF RIMMING, STAINLESS STEEL, WITH PULL-DOWN FAUCET (MOEN 87233). PROVIDE GARBAGE DISPOSAL (INSINKERATOR BADGER 5, 120V, 1/2 HP), FLEXIBLE SS RISERS WITH CHROME PLATED STOP VALVES, P-TRAP WITH CLEANOUT AND ESCUTCHEONS.
UR	URINAL: KOHLER S-4991-ET, VITREOUS CHINA, WASHOUT WALL URINAL, 0.5 GALLONS PER FLUSH, 27"H X 18"W. FURNISH WITH SENSOR ACTIVATED FLUSHOMETER (SLOAN G2 8186-1 FLUSH VALVE), VANDAL RESISTANT CHROME PLATED HOUSING, ADJUSTABLE TAILPIECE AND VANDAL RESISTANT OUTLET STRAINER. MOUNT ADA URINAL 17" FROM FINISHED FLOOR. TRIM: SUITABLE CARRIER WITH STANCHIONS TO FLOOR. PLUMBING CONTRACTOR TO INSTALL.
WC1	FLOOR MOUNTED WATER CLOSET: AMERICAN STANDERD MODEL 3043.001, 15" RIM HEIGHT WATER CLOSET, VITREOUS CHINA, 1.1GPF, ELONGATED BOWL, FURNISHED WITH ELECTRONIC FLUSH VALVE. PROVIDE WITH OPEN-FRONT SEAT, CHROME STOPS, C.P. FLEXIBLE RISER TUBE, BOLT CAPS AND ESCUTCHEON.
WC2	FLOOR MOUNTED WATER CLOSET: AMERICAN STANDERD MODEL 3043.001, 17" RIM HEIGHT, ADA COMPLIANT WATER CLOSET, VITREOUS CHINA, 1.1GPF, ELONGATED BOWL, FURNISHED WITH ELECTRONIC FLUSH VALVE. PROVIDE WITH OPEN-FRONT SEAT, CHROME STOPS, C.P. FLEXIBLE RISER TUBE, BOLT CAPS AND ESCUTCHEON.
WH	ELECTRIC WATER HEATER: A.O.SMITH E6-30L45DVB, 28 GALLON CAPACITY, 3/4" CONNECTIONS, 20.7 GPH @ 90°F RISE, 240V/1PH, DUAL 4500W ELEMENTS, NON-SIMULTANEOUS OPERATION.

FIXTURE BRANCH CONNECTION SCHEDULE

FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
DRINKING FOUNTAIN	1/2"	-	1-1/2"	1-1/2"
FLOOR DRAIN	-	-	3"	1-1/2"
FLOOR SINK	-	-	3"	2"
LAVATORY/SINK	1/2"	1/2"	1-1/2"	1-1/2"
MOP SINK	1/2"	1/2"	3"	2"
URINAL	3/4"	-	2"	2"
WATER CLOSET	1"	-	4"	2"
WATER HEATER	3/4"	3/4"	-	-
NOTE:	PIPE SIZES SHOWN ARE MINIMUM. MINIMUM SANITARY SIZE UNDERGROUND IS 2".			

PLUMBING SPECIFICATIONS

1. GENERAL PROVISIONS:
   A. PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF THE PLUMBING SYSTEMS OUTLINED.
   B. OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATIONS OF COMPLIANCE OR APPROVAL AS REQUIRED BY 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 DEFECT FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.
   H. INSPECTION OF THE SITE: THIS CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE MEP DRAWINGS, SPECIFICATIONS, DETAIL, AND THE SITE. THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY SPECIAL OR UNUSUAL PROBLEMS, CONFLICTS, OR OBSTRUCTIONS THAT AFFECT HIS BID.
   I. FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE MECHANICAL AND PLUMBING DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS AND FITTINGS REQUIRED FOR INSTALLATION. DO NOT SCALE DRAWINGS. THE SIZE AND LOCATION OF EQUIPMENT IS SHOWN TO SCALE WHEREVER POSSIBLE. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DATA AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATION SECTIONS WHERE MECHANICAL WORK INTERFACES WITH OTHER TRADES.
   J. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON THE PLANS OR WITH CODE REQUIREMENTS, THE NOTE OR CODE WHICH PRESCRIBES AND ESTABLISHES THE MORE COMPLETE JOB OR HIGHER STANDARD SHALL PREVAIL.
   K. INSTALL MATERIALS AND SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND APPROVED SUBMITTALS. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH UNIFORM APPEARANCE FOR EXPOSED WORK. COORDINATE WITH WORK OF OTHER SECTIONS. COMPLY WITH APPLICABLE REGULATIONS AND CODE REQUIREMENTS. PROVIDE PROPER CLEARANCES FOR SERVICING.
   L. INCLUDE ALL BASIC MATERIALS AND CONSTRUCTION METHODS INCLUDING PIPES, PIPE FITTINGS, AND SPECIALTIES AND SUPPORTING DEVICES, VALVES, PIPE AND VALVE IDENTIFICATION, PUMPS, VIBRATION ISOLATION, ETC.
   M. FURNISH ADEQUATE ACCESS PANELS AND DOORS TO ALLOW FOR FUTURE PIPING ALTERATIONS, REPLACEMENT, AND MAINTENANCE OF PIPING. PROPERLY IDENTIFY ALL ACCESS PANELS AND DOORS.

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 OPERATING 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 AND CONTRACTORS.

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.
   B. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

4. PLUMBING:
   A. PROVIDE AN APPROVED WATER HAMMER ARRESTOR FOR EACH PLUMBING FIXTURE SUPPLY AS REQUIRED BY FIXTURE MANUFACTURER.
   B. ALL EXPOSED PIPE IN FINISHED AREAS SHALL BE CHROME PLATED BRASS PIPE, NO FERROUS PIPE.
   C. PROVIDE CLEANOUTS AT EACH CHANGE IN 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 (FCO):JR SMITH #4140, OR EQUAL.
      2. QUARRY TILE FLOOR (FCO):JR SMITH #4200, OR EQUAL.
      3. CARPETED FLOOR (FCO):JR SMITH #4020-Y, OR EQUAL.
      4. UNFINISHED FLOOR (FCO):JR SMITH #4020, OR EQUAL.
      5. WALL (WCO):JR SMITH #4472, OR EQUAL, 24" ABOVE THE FLOOR.
      6. GRADE (GCO):JR SMITH #4256, OR EQUAL, WITH HEAVY DUTY CAST IRON BODY AND COVER.
   F. ALL SEWER 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.
      3. CONDENSATE DRAIN SHALL BE INSTALLED AT 1/8" PER FOOT FALL.
   G. PROVIDE DIELECTRIC UNIONS WITH APPROPRIATE END CONNECTION 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 JOINTS.
   H. ALL SEWER PIPING LOCATED EXTERIOR TO THE BUILDING SHALL BE INSTALLED WITH THE FOLLOWING SLOPES.
      1. INSTALL 4" AND SMALLER PIPE AT A MINIMUM OF 2% SLOPE.
      2. INSTALL 6" AND LARGER PIPE AT A MINIMUM OF 1% SLOPE.

5. PIPING
   A. DOMESTIC COLD, HOT, AND HOT WATER RECIRCULATING (ABOVEGROUND).
      1. TYPE L HARD DRAWN COPPER TUBING, ASTM B-88 WITH WROUGHT BRONZE SOLDERED FITTINGS.
      2. GATE VALVE: CRANE #428 OR EQUAL.
      3. GLOBE VALVE: CRANE #7 OR EQUAL.
      4. BALL VALVE: CRANE #932 OR EQUAL.
   B. DOMESTIC COLD, HOT, AND HOT WATER RECIRCULATING, 1"-3" (UNDERGROUND).
      1. TYPE K HARD OR SOFT DRAWN COPPER TUBING, ASTM B-88 WITH WROUGHT BRONZE SOLDERING FITTINGS.
   C. SANITARY SEWER AND VENTS (UNDERGROUND, INTERIOR TO BUILDING).
      1. WASTE, DRAIN AND VENT PIPE AND FITTINGS, THROUGHOUT THE BUILDING BELOW THE BASE SLAB TO THE LOCATIONS NOTED OUTSIDE OF THE BUILDING SHALL BE ASTM D2665 POLYVINYL CHLORIDE (PVC) DWV PIPE, SCHEDULE 40, SOLVENT JOINT.
      2. SEWER LINES SHALL BE LOCATED IN GENERAL AS SHOWN ON THE DRAWINGS. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN SUCH A MANNER AS TO MAINTAIN PROPER CLEARANCES AND SUFFICIENT SLOPE TO ENSURE DRAINAGE.
      3. VENT STACKS SHALL BE EXTENDED FULL SIZE THROUGH THE ROOF AND FLASHED WITH 4 POUND LEAD SHEETS TURNED DOWN INTO THE STACK AT LEAST 2" AND EXTENDED 12" IN ALL DIRECTIONS FROM THE PIPE AT THE ROOF LINE. VENTS THROUGH ROOF SHALL NOT BE LESS THAN 3". PVC PIPING SHALL NOT BE USED FOR VENT PIPING THROUGH THE ROOF. WHERE APPLICABLE FOR ROOFING SYSTEM USED, PROVIDE FLASHING VIA PLEATED EPDM CONE IN LIEU OF LEAD. ALL VENT STACKS IN OR AT OUTSIDE WALLS SHALL BE OFFSET 1'-6" MINIMUM FROM OUTSIDE WALLS BEFORE GOING THROUGH THE ROOF, TO FACILITATE FLASHING.
   D. CONDENSATE DRAIN AND INDIRECT WASTE (ABOVEGROUND)
      1. DWV, WROUGHT COPPER, ANSI B-16.29.
   E. NATURAL GAS PIPING:
      1. SCHEDULE 40 BLACK STEEL PIPING: 2" AND SMALLER WITH SCREWED JOINTS AND 150 LB. MALLEABLE IRON SCREWED FITTINGS. PIPE 2-1/2" AND LARGER SHALL USE STANDARD WEIGHT BLACK STEEL WELDING FITTINGS WITH WELDED JOINTS.
      2. GAS VALVES SHALL BE ROCKWELL 142/143, PLUG VALVE.
      3. SUPPORT PIPING AT INTERVALS NOT TO EXCEED THOSE LISTED IN TABLE 415.1 OF THE I.F.G.C.
      4. PROVIDE A.G.A. APPROVED SHUT OFF VALVES AND DIRT LEGS AT CONNECTIONS TO ALL EQUIPMENT.
      5. ALL ELEVATED PRESSURE GAS PIPING (GREATER THAN 14" W.C.) SHALL BE LABELED EVERY 40' WITH SIGNS INDICATING "ELEVATED PRESSURE."
      6. EPOXY PAINT ALL EXTERIOR GAS PIPING TO PREVENT CORROSION.
   F. ALL PIPE HANGERS AND SUPPORTS SHALL BE STANDARD PRODUCTS OF GRINNELL, FEE AND MASON, OR ANVIL. HANGER SPACING SHALL BE IN ACCORDANCE WITH MSS-SP-69.
   G. SLEEVES
      1. 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 GAUGE 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 THE EXISTING ROOF WARRANTY. ALL PLUMBING VENT TERMINALS SHALL TERMINATE A MINIMUM OF 12" ABOVE ROOF OR EQUAL TO HEIGHT OF PARAPET, WHICHEVER IS GREATER.
   H. PROVIDE CHROME PLATED ESCUTCHEONS ON ALL PIPE ENTERING FINISHED AREAS.

6. INSULATION:
   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 DEVELOPMENT RATING OF NOT OVER 50, IN ACCORDANCE WITH NFPA.
   B. PIPE INSULATION (ABOVE GRADE):
      1. THE PIPE INSULATION USED SHALL HAVE A THERMAL CONDUCTIVITY OF 0.27 BTU PER IN/HR•SQ-FT•°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 HEAT TRAP (INCLUDING THE HEAT TRAP) MUST BE INSULATED.
      5. INSULATION SCHEDULE:
         a. DOMESTIC COLD WATER: 1/2"
         b. DOMESTIC HOT WATER: 1"
         c. HOT WATER RECIRCULATING: 1"

7. TESTING, BALANCING AND CLEANING:
   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 HOURS, WITH NO LEAKS.
   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 THE 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 FROM THE SYSTEM SHALL BE APPROVED BY THE BOARD OF HEALTH.
   E. NATURAL GAS SYSTEMS SHALL BE TESTED WITH COMPRESSED AIR AT A PRESSURE OF NOT LESS THAN 1-1/2 TIMES THE OPERATING PRESSURE , BUT NOT LESS THAN 50 PSIG FOR A PERIOD OF 2 HOURS WITH NO LEAKS.

PLUMBING SYMBOLS

SYMBOL	DESCRIPTION
SS	SANITARY SEWER (ABOVE GRADE)
SS	SANITARY SEWER (BELOW GRADE)
GW	GREASE WASTE (BELOW GRADE)
CD	CONDENSATE DRAIN
V	VENT PIPING
G	G = GAS PIPING LESS THAN 2 PSI
MPG	MPG = GAS PIPING 2 PSI
	GAS PIPE ON ROOF, G OR MPG
CW	COLD WATER PIPING
HW	HOT WATER PIPING
HWR	RECIRCULATING HOT WATER
CA	COMPRESSED AIR
	PIPE ELBOW DOWN
	PIPE ELBOW UP
	GATE VALVE
	BACKFLOW PREVENTER
	CHECK VALVE
	BALL VALVE
	STRAINER
	PRESSURE REDUCING VALVE
	PLUG VALVE
	CONTROL VALVE
	FLOOR CLEANOUT (FCO)
	CLEANOUT AT GRADE (GCO)
	WALL CLEANOUT (WCO)
	FLOOR DRAIN
	FLOOR SINK
	CAPPED PIPE

STANDARD MOUNTING HEIGHTS

PLUMBING (AFF, AFG, UNLESS NOTED OTHERWISE)

REFER TO ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE MOUNTING HEIGHTS. UNO, INSTALL PLUMBING FIXTURES WITH THE MOUNTING HEIGHTS AS LISTED BELOW WITH FINAL APPROVAL BY THE ARCHITECT.

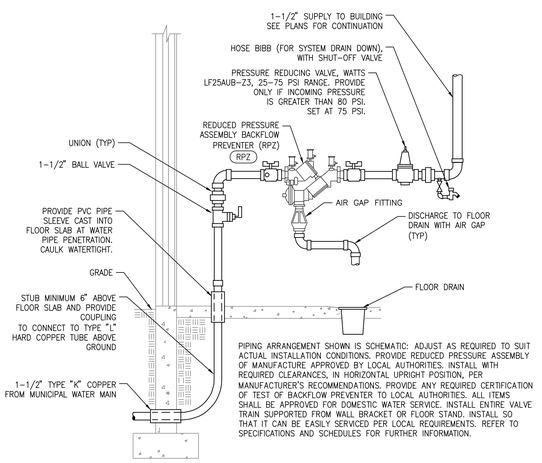
ADA ACCESSIBLE LAVATORIES	34" FLOOR TO RIM
ADA ACCESSIBLE WATER CLOSET	17" TO 19" FLOOR TO TOP OF SEAT
JANITOR'S SINK FAUCET FITTINGS	42" FLOOR TO CENTERLINE

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
AFG	ABOVE FINISHED GRADE	N/C	NORMALLY CLOSED
AHU	ABOVE HANDLING UNIT	N/O	NORMALLY OPEN
BFF	BELOW FINISHED FLOOR	ORD	OVERFLOW ROOF DRAIN
BFG	BELOW FINISHED GRADE	PDI	PLUMBING DRAINAGE INSTITUTE
BOP	BOTTOM OF PIPE	PVC	POLYVINYL CHLORIDE
BOS	BOTTOM OF STRUCTURE	PRV	PRESSURE REDUCING VALVE
BTU	BRITISH THERMAL UNIT	RPM	REVOLUTIONS PER MINUTE
CPVC	CHLORINATED POLYVINYL CHLORIDE	SF	SQUARE FEET, SUPPLY FAN
		TDH	TOTAL DYNAMIC HEAD
DN	DOWN	TFA	TO FLOOR ABOVE
DFU	DRAINAGE FIXTURE UNIT	TFB	TO FLOOR BELOW
ETR	EXISTING TO REMAIN	UL	UNDERWATER LABORATORIES, INC.
FD	FLOOR DRAIN		
FFA	FROM FLOOR ABOVE	UNO	UNLESS NOTED OTHERWISE
FFB	FROM FLOOR BELOW	V	VOLT(S)
FF	FINISHED FLOOR	VCP	VITRIFIED CLAY PIPE
FLA	FULL LOADS AMPS	VS	VENT STACK
FLR	FLOOR	VTR	VENT THROUGH ROOF
GPM	GALLON PER MINUTE	W/	WITH
IE	INVERTED ELEVATION	W/O	WITHOUT
IN WC	INCHES OF WATER COLUMN	WC	WATER COLUMN
kW	KILOWATT	WS	WATER STACK
MAX	MAXIMUM	WSFU	WATER SUPPLY FIXTURE UNIT
MBH	1000 BTU PER HOUR		

ANNOTATION

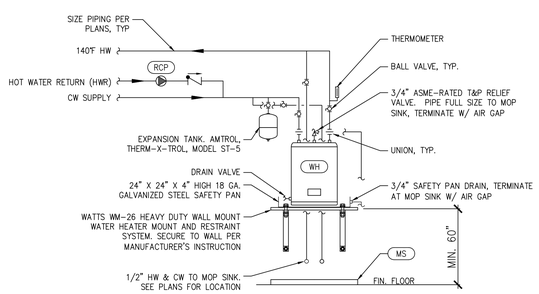
- (#) PLAN WORK NOTE
- (RTU 1) MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
- (—) PLUMBING FIXTURE DESIGNATION
- CONNECTION POINT OF NEW WORK TO EXISTING
- (A / M1) DETAIL REFERENCE UPPER NUMBER INDICATED DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
- (1 / M1) SECTION CUT DESIGNATION



PIPING ARRANGEMENT SHOWN IS SCHEMATIC: ADJUST AS REQUIRED TO SUIT ACTUAL INSTALLATION CONDITIONS. PROVIDE REDUCED PRESSURE ASSEMBLY OF MANUFACTURE APPROVED BY LOCAL AUTHORITIES. INSTALL WITH REQUIRED CLEARANCES, IN HORIZONTAL UPRIGHT POSITION, PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ANY REQUIRED CERTIFICATION OF TEST OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES. ALL ITEMS SHALL BE APPROVED FOR DOMESTIC WATER SERVICE. INSTALL ENTIRE VALVE TRAIN SUPPORTED FROM WALL BRACKET OR FLOOR STAND. INSTALL SO THAT IT CAN BE EASILY SERVICED PER LOCAL REQUIREMENTS. REFER TO SPECIFICATIONS AND SCHEDULES FOR FURTHER INFORMATION.

DOMESTIC WATER SERVICE ENTRY 2

SCALE : NO SCALE



ELECTRIC WATER HEATER DETAIL 1

SCALE : NO SCALE

CAW collins|webb ARCHITECTURE
3078 SW MARKET St. | Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER
JSC ENGINEERS
MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

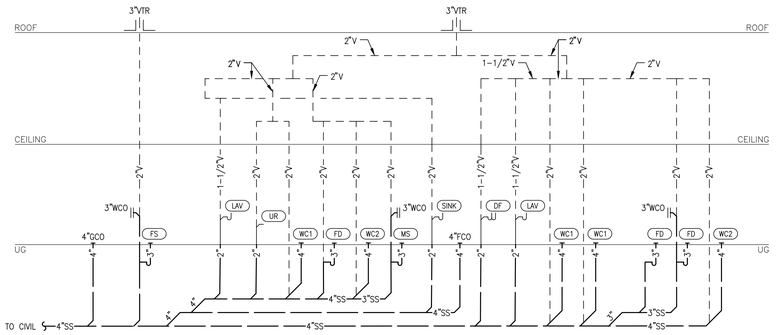
STATE OF MISSOURI JUSTIN R. SMOTHERS NUMBER PE-2012003668 PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

P001

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-086

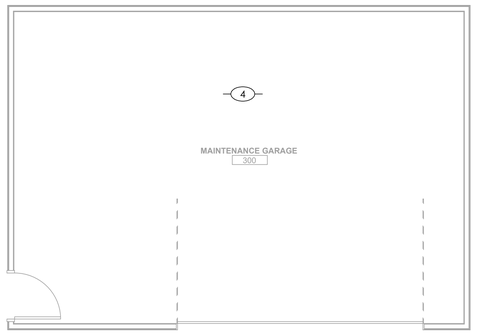
PLUMBING SPECIFICATIONS AND SYMBOLS



WASTE & VENT RISER DIAGRAM

SCALE : NO SCALE

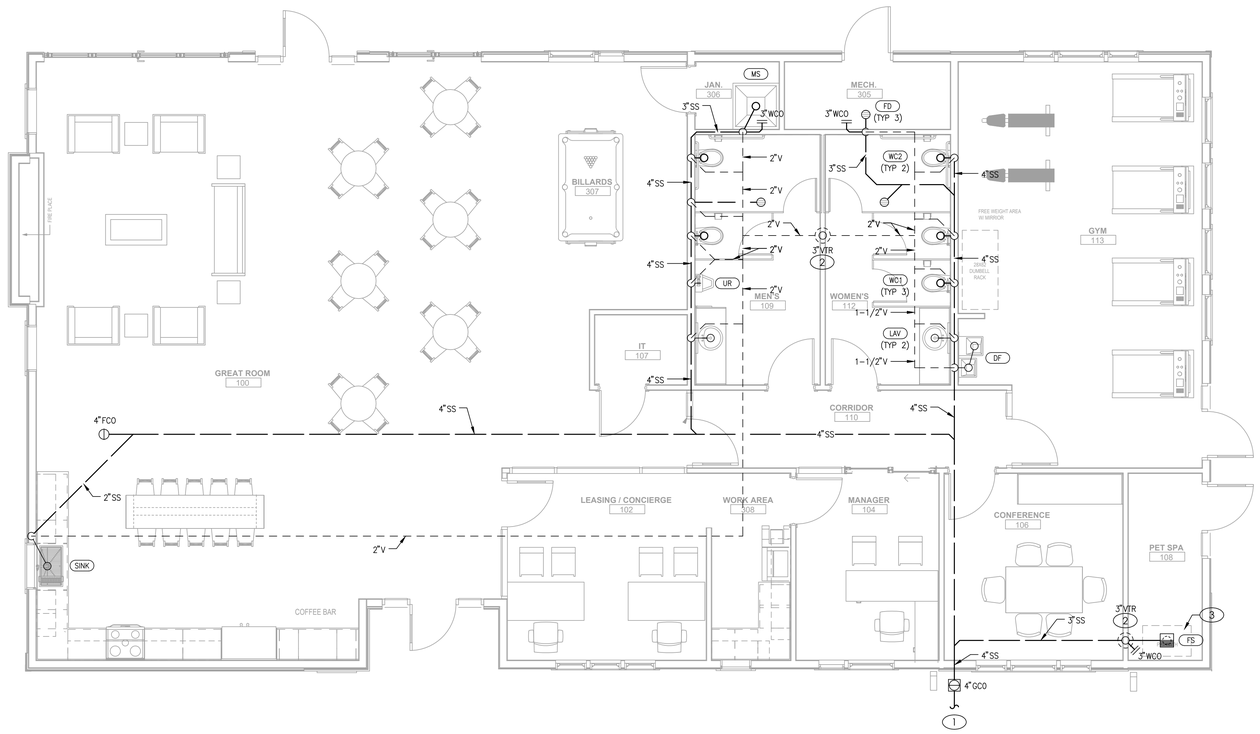
3



WASTE AND VENT PLAN - MAINTENANCE GARAGE

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

2



WASTE AND VENT PLAN - CLUBHOUSE

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

1

GENERAL NOTES

A. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.

B. COORDINATE INSTALLATION OF PLUMBING SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION AND AVOID CONFLICTS. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE INSTALLATION PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC.

C. OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF.

D. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.

(#) KEYED PLAN NOTES

1. 4" SANITARY TO UTILITY SERVICE. CONTRACTOR SHALL WORK WITH LOCAL WASTE WATER AUTHORITY AND BEAR ALL COST FOR INSTALLATION OF A NEW SEWER LINE CONNECTING INTO THE SEWER MAIN FOR A COMPLETE INSTALLATION. REFER TO CIVIL PLANS FOR CONTINUATION.
2. 3" VENT UP WALL TO 3" VTR. LOCATE VENT MIN. 10'-0" FROM ALL BUILDING OPENINGS AND MIN. 3'-0" FROM EDGE OF ROOF. SEAL PENETRATION WEATHER TIGHT. COORDINATE WITH MECHANICAL CONTRACTOR.
3. OWNER PROVIDED FIXTURE. ROUTE DISCHARGE TO FLOOR SINK WITH ADEQUATE AIR GAP. PROVIDE HAIR STRAINER PRIOR TO DISCHARGE TO FLOOR SINK. INSTALL IN ACCESSIBLE LOCATION.
4. NO WORK IN MAINTENANCE GARAGE.

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

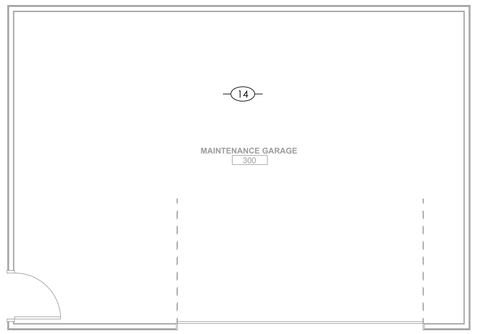
MEP ENGINEER
JSC ENGINEERS
MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003668
PROFESSIONAL ENGINEER
08-24-23
PROFESSIONAL SEAL

P101K

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-086

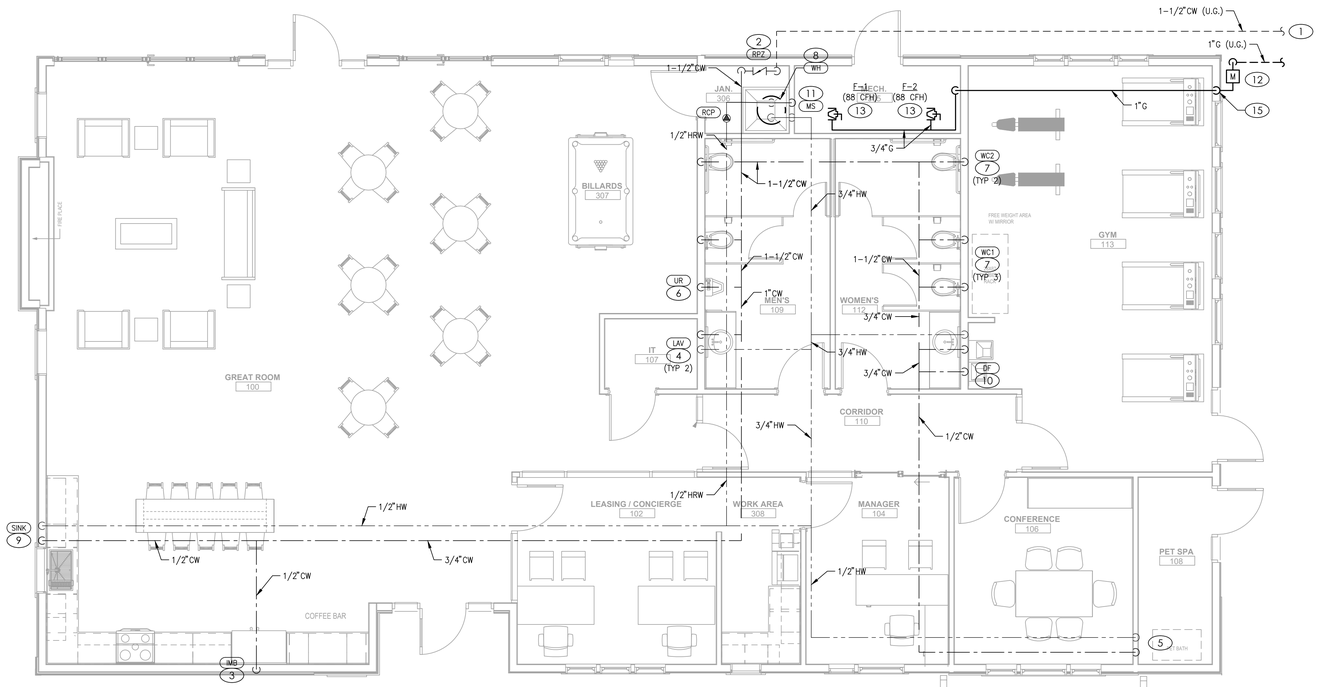
WASTE AND VENT PLAN
CLUBHOUSE



WATER AND GAS PLAN - MAINTENANCE GARAGE

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

2



WATER AND GAS PLAN - CLUBHOUSE

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

1

GENERAL NOTES

A. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.

B. COORDINATE INSTALLATION OF PLUMBING SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION AND AVOID CONFLICTS. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE INSTALLATION PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC.

C. OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF.

D. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.

(#) KEYED PLAN NOTES

1. 1-1/2" DOMESTIC WATER SERVICE ENTRANCE. CONTRACTOR SHALL WORK WITH THE WATER COMPANY FOR THE INSTALLATION OF A NEW WATER MAIN ENTRANCE, INCLUDING TAP, METER, METER PIT, PIPING, ETC. FOR A COMPLETE INSTALLATION. SEE CIVIL PLANS FOR CONTINUATION AND LOCATION OF WATER METER.
2. PROVIDE 1-1/2" RPZ BACKFLOW PREVENTER. INSTALL 24" A.F.F. AND 6" FROM WALL. ROUTE DRAIN FROM RPZ TO FLOOR DRAIN. TERMINATE DRAIN WITH AIR GAP. SEE DOMESTIC WATER SERVICE ENTRY DETAIL.
3. 1/2"CW TO ICE MAKER OUTLET BOX. INSULATE ALL PIPING IN EXTERIOR WALL.
4. 1/2"CW AND 1/2"HW TO LAVATORY. PROVIDE THERMOSTATIC MIXING VALVE FOR FIXTURE EQUAL TO LEONARD MODEL 170. SET HOT WATER SUPPLY TEMPERATURE TO 110°F.
5. 1/2"CW AND 1/2"HW DOWN IN WALL TO OWNER PROVIDED FIXTURE. MAKE CONNECTION PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6. 3/4"CW DOWN IN WALL TO URINAL.
7. 1"CW DOWN IN WALL TO WATER CLOSET.
8. MOUNT WATER HEATER ABOVE MOP SINK. CONNECT 3/4"CW AND 3/4"HW TO WATER HEATER. ROUTE 3/4" T&P RELIEF FROM WATER HEATER TO MOP SINK. DISCHARGE WITH ADEQUATE AIR GAP.
9. 1/2"HW AND 1/2"CW DOWN IN WALL AT LOCATION SHOWN. ROUTE PIPING UNDER COUNTER TO SINK. INSULATE ALL PIPING IN EXTERIOR WALL.
10. 1/2"CW DOWN IN WALL TO DRINKING FOUNTAIN.
11. 1/2"CW AND 1/2"HW DOWN IN WALL TO MOP SINK.
12. COORDINATE WITH GAS COMPANY FOR INSTALLATION OF TENANT METER WITH CAPACITY FOR 176 MBH @ 11" W.C. PLUMBING CONTRACTOR TO VERIFY ALL EQUIPMENT GAS CAPACITIES AND OPERATING PRESSURES PRIOR TO INSTALLATION OF ANY PIPING.
13. PROVIDE DIRT LEG AND SHUT-OFF VALVE PRIOR TO FINAL CONNECTION.
14. NO WORK IN MAINTENANCE GARAGE.
15. ROUTE 1" GAS PIPING UP INSIDE EXTERIOR WALL. ALL CONCEALED JOINTS ARE TO BE WELDED OR USE FITTINGS APPROVED FOR CONCEALED USE.

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

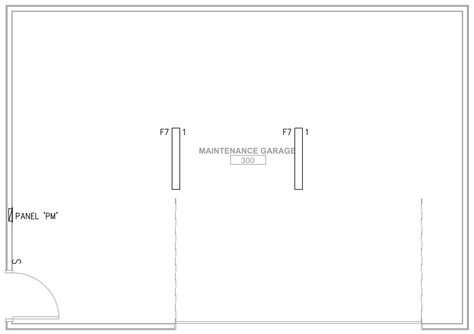
STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003568
PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

P102K

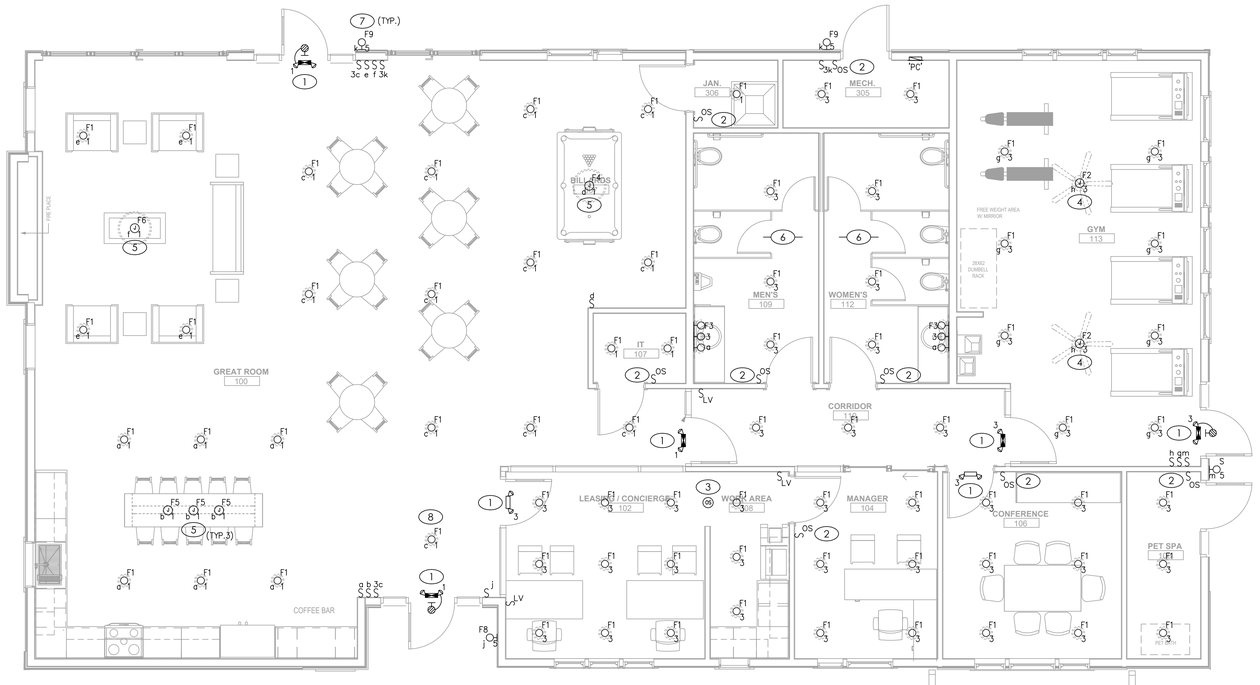
ISSUE DATE: 08.24.23
JSC PROJECT #: 23-086

WATER AND GAS PLAN
CLUBHOUSE



LIGHTING PLAN - MAINTENANCE GARAGE 2

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



LIGHTING PLAN - CLUBHOUSE 1

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

KEYED PLAN NOTES

1. CONNECT EXIT/EMERGENCY LIGHT TO INDICATED CIRCUIT WITH A SEPARATE AND UN-SWITCHED HOT CONDUCTOR BYPASSING ALL CONTROLS AND CONTACTORS.
2. WALL SWITCH OCCUPANCY SENSOR. SENSORWORX SWX-100 SERIES OR PRE-BID APPROVED EQUAL. PROVIDE AND MAKE ALL CONNECTIONS PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS.
3. CEILING MOUNTED OCCUPANCY SENSOR. SENSORWORX SWX-200 SERIES OR PRE-BID APPROVED EQUAL. PROVIDE AND MAKE ALL CONNECTIONS PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS.
4. PROVIDE AND SECURE STEEL JUNCTION BOX TO STRUCTURE FOR CEILING FAN PER NEC 422.18(A).
5. PROVIDE AND SECURE JUNCTION BOX IN CEILING FOR PENDANT MOUNTED LIGHT FIXTURE.
6. EXHAUST FAN DERIVES POWER FROM CIRCUIT SERVING LIGHTING FIXTURES IN ROOM.
7. ROUTE EXTERIOR LIGHTING THROUGH PHOTOCELL. MOUNT PHOTOCELL ON ROOF AND POINT NORTH.
8. WIRE NIGHTLIGHT FOR CONTINUOUS-ON OPERATION.

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

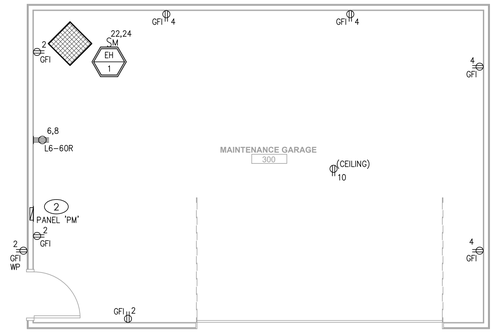
STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003668
PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

E101K

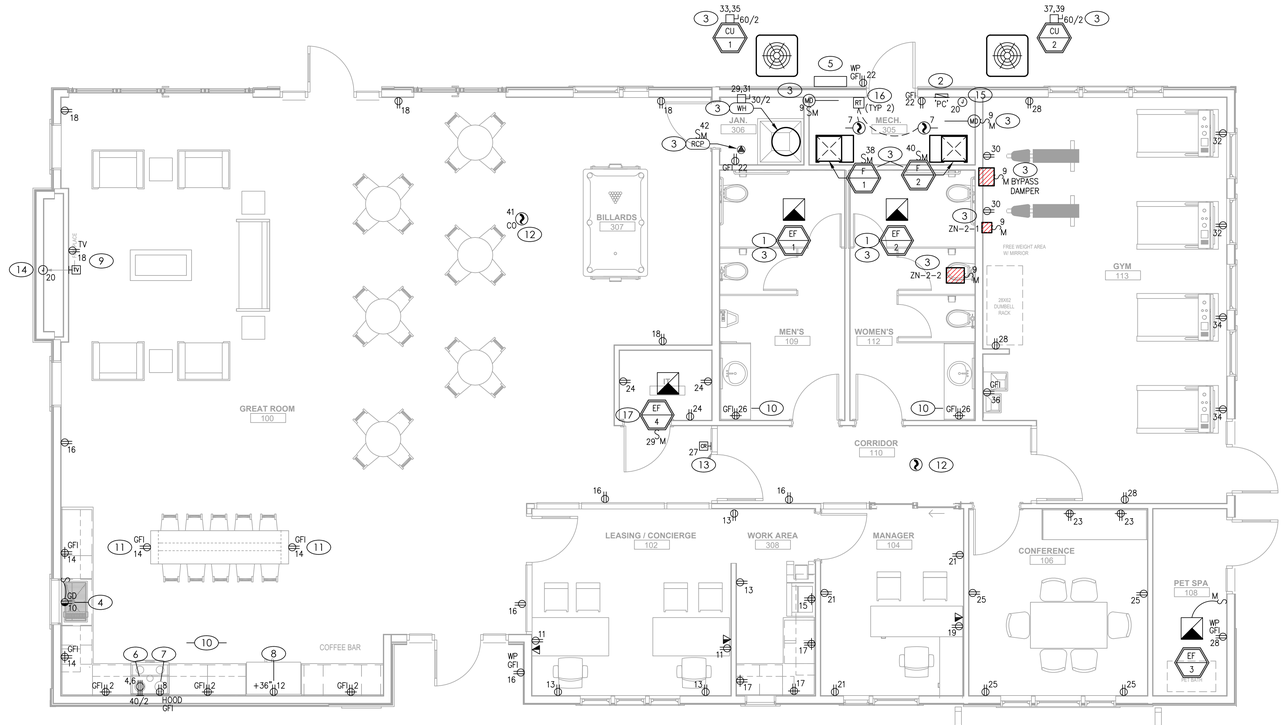
ISSUE DATE: 08.24.23
JSC PROJECT #: 23-086

LIGHTING PLAN - CLUBHOUSE & MAINTENANCE GARAGE



POWER PLAN - MAINTENANCE GARAGE 2

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



POWER PLAN - CLUBHOUSE 1

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

KEYED PLAN NOTES

1. EXHAUST FAN DERIVES POWER FROM CIRCUIT SERVING LIGHTING FIXTURES IN ROOM.
2. NEW PANELBOARD. REFER TO SINGLE LINE DIAGRAM AND PANELBOARD SCHEDULE. HOMERUN DESIGNATIONS FOR DEVICES AND FIXTURES IN THIS BUILDING ARE TO THIS PANEL.
3. MAKE CONNECTION TO DIVISION 22/23 EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND NEC REQUIREMENTS. COORDINATE WORK WITH DIVISION 22/23 CONTRACTOR PRIOR TO CONSTRUCTION.
4. GARBAGE DISPOSAL. 120V, ½ HP, CORD & PLUG CONNECTON TO HALF-SWITCHED AFCI RECEPTACLE MOUNTED BELOW SINK. PROVIDE 2 #12 CU, 1 #12CU EGC AT HANDICAP UNITS. MOUNT SWITCH WITHIN LOWER CABINETS PER ADA GUIDELINES.
5. ELECTRICAL SERVICE ENTRANCE EQUIPMENT. COORDINATE UTILITY TRANSFORMER LOCATION AND SECONDARY ROUTING TO BUILDING WITH UTILITY SERVICE PROVIDER PRIOR TO CONSTRUCTION. REFER TO SINGLE LINE DIAGRAM ON SHEET E200 FOR MORE INFORMATION.
6. ELECTRIC COOKTOP, 208V, 1P, 8KW. PROVIDE HARD WIRED CONNECTION TO J-BOX IN CABINET. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE LOCKABLE CIRCUIT BREAKER IN PANEL AS DISCONNECTING MEANS TO COMPLY WITH NEC 422.31(B). PROVIDE 3 #8 CU, 1 #10 CU EGC. PROVIDE RECEPTACLE TO MATCH PLUG ON UNIT IF UNIT INSTALLED IS CORD AND PLUG CONNECTED.
7. COMBINATION MICROWAVE AND EXHAUST HOOD. 120V, 15A MAX. COORDINATE EXACT LOCATION WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
8. REFRIGERATOR 120V, 12A MAX. PROVIDE 2 #12 CU, 1 #12 CU EGC. CORD AND PLUG CONNECTION.
9. TELEVISION. PROVIDE 120V DUPLEX RECEPTACLE, DATA OUTLET AND COAX CABLE (BOTH WIRED BACK TO IT ROOM). MOUNT BETWEEN 18" AND 66" AFF. VERIFY MOUNTING HEIGHT PRIOR TO ROUGH-IN.
10. FOR KITCHEN AND BATHROOM RECEPTACLES ABOVE COUNTER, COORDINATE LOCATION AND PLACEMENT PRIOR TO ROUGH-IN. IF FULL BACKSPLASH IS USED MOUNT RECEPTACLES VERTICALLY. IFF FULL BACKSPLALSH IS NOT USED MOUNT RECEPTACLES HORIZONTALLY ABOVE BACKSPLASH.
11. MOUNT ISLAND/PENSULA RECEPTACLES 12" MAX BELOW TOP OF COUNTER.
12. COMBINATION SMOKE DETECTOR AND CARBON MONOXIDE SENSOR. 120V WITH BATTERY BACK-UP. DETECTORS SHALL BE INTERCONNECTED AND INSTALLED IN ACCORDANCE WITH IRC 314 AND 315,M IF 908.7, NFPA 72 & 74 WITH SPECIAL ATTENTION GIVEN TO THE LOCATION OF THE DETECTOR IN THE VICINITY OF RETURN AIR GRILLES. (PROVIDE SMOKE DETECTOR ONLY WHERE ALLOWED BY CODE).
13. PROVIDE BACKBOX AND CONDUIT FOR CARD READER; COORDINATE EXACT REQUIREMENTS WITH ACCESS CONTROL CONSULTANT PRIOR TO CONSTRUCTION.
14. PROVIDE JUNCTION BOX AND HOMERUN CIRCUIT FOR GAS FIREPLACE CONTROLS. COORDINATE LOCATION OF JUNCTION BOX WITH FIREPLACE SUPPLIER.
15. JUNCTION BOX FOR CONNECTION TO BUILDING FIRE ALARM CONTROL PANEL BY OTHERS IF APPLICABLE. CONFIRM EXACT LOCATION WITH OWNER/FIRE ALARM CONTRACTOR ON SITE. MAKE CONNECTION ACCORDING TO MANUFACTURER'S LITERATURE AND NFPA REQUIREMENTS.
16. MAKE CONNECTION TO DUCT SMOKE DETECTOR BY OTHERS ACCORDING TO MANUFACTURER'S LITERATURE AND NFPA REQUIREMENTS. PROVIDE REMOTE TEST STATION WITH INDICATING LIGHT AT 48"AFF FOR CONNECTION TO DETECTOR.
17. WIRE EXHAUST FAN FOR CONTINUOUS-ON OPERATION. PROVIDE OVERRIDE-OFF MOTOR RATED DISCONNECT ABOVE CEILING AT DEVICE FOR MAINTENANCE.

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

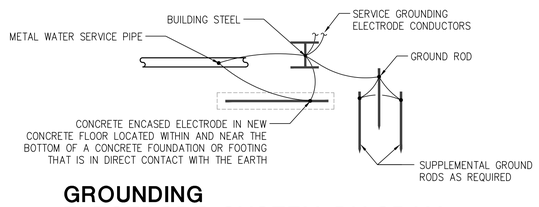
STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003568
PROFESSIONAL ENGINEER

08-24-23
PROFESSIONAL SEAL

E102K

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-086

POWER PLAN - CLUBHOUSE & MAINTENANCE GARAGE

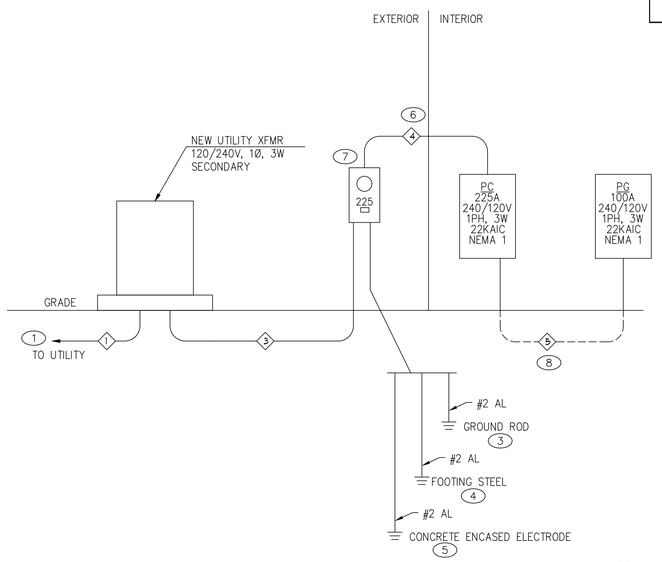


GROUNDING ELECTRODE SYSTEM DIAGRAM 4

SCALE : NO SCALE

ELECTRICAL LIGHTING SCHEDULE (OR EQUAL. VERIFY ALL SELECTIONS AND FINISHES WITH OWNER OR ARCHITECT PRIOR TO ORDERING).

FIXTURE TYPE	MANUFACTURER NAME	MANUFACTURER CATALOG NUMBER	VOLT AMPS	MOUNTING	LAMP TYPE	REMARKS	VOLT
F1	HALO	SLD612/8030/WH	15	SURFACE	INCLUDED LED	SURFACE MOUNTED LED DOWNLIGHT, 1200 LUMEN, 3000K, WHITE FINISH	120
F2	ROYAL PACIFIC	1057-L	15	SURFACE	INCLUDED LED	52" 5-BLADE FAN, 3 SPEED, REVERSIBLE, WITH GLOBE LIGHT KIT, BRUSHED NICKEL FINISH	120
F3	MINKA	6542-77	20	WALL	INCLUDED LED	DUAL VANITY WALL SCONCE, CHROME FINISH	120
F4	OWNER SELECTED	BILLIARDS TABLE PENDANT	100	PENDANT	INCLUDED LED	BILLIARDS TABLE PENDANT LIGHT - OWNER SELECTED - $300/FIXTURE ALLOWANCE	120
F5	HOME DECORATION	7434P-15	10	PENDANT	INCLUDED LED	COUNTERTOP PENDANT LIGHT, CHROME FINISH	120
F6	OWNER SELECTED	GREAT ROOM PENDANT	100	PENDANT	INCLUDED LED	GREAT ROOM PENDANT LIGHT - OWNER SELECTED - $300/FIXTURE ALLOWANCE	120
F7	COOPER	ST SERIES	20	SURFACE	INCLUDED LED	4FT LED STRIP - MAINTENANCE GARAGE	120
F8	TERON	GRDW24-CNL-L18-120-12CV-WAL	36	WALL	INCLUDED LED	ENTRY LIGHT, FINISH BY ARCHITECT	120
F9	NUVO	60-531	10	WALL	INCLUDED LED	PATIO LIGHT, BRONZE FINISH	120
S1	COOPER LIGHTING SOLUTIONS (CLS)	150 WATT POST-TOP LUMINAIRE	150	POST-TOP	INCLUDED LED	LED POST-TOP FIXTURE - SPECIFICATION PER LEE'S SUMMIT STANDARDS - PROVIDE WITH 150 WATT LAMP PER LSMO STANDARDS.	120
	EMERGI-LITE	12MPR12M-2-LG	4	WALL	INCLUDED LED	EMERGENCY LIGHTING UNIT WITH 2 LED LAMPS AND 90 MIN. BATTERY PACK	120
	EMERGI-LITE	W-PR-612M-1-R-2-LA	4	SURFACE	INCLUDED LED	EMERGENCY EXIT EGRESS COMBO LIGHTING UNIT WITH RED FACE EXIT SIGN AND 90 MIN. BATTERY PACK	120
H	EMERGI-LITE	EF12-D-LED	3	SURFACE	INCLUDED LED	OUTDOOR EMERGENCY REMOTE EGRESS LIGHTING UNIT	120
	EMERGI-LITE	W-PREM-SNX-R	3	SURFACE	INCLUDED LED	EMERGENCY EGRESS SIGN WITH RED LETTERS AND 90 MINUTE BATTERY PACK	120



SINGLE LINE DIAGRAM - CLUBHOUSE 3

SCALE : N/A

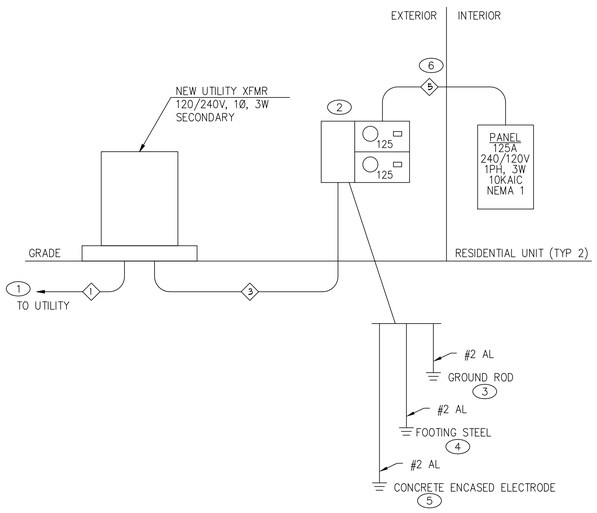
KEYED SLD NOTES

1. PROVIDE NEW CONDUIT TO UTILITY SOURCE. VERIFY EXACT LOCATION AND REQUIREMENTS WITH UTILITY PRIOR TO CONSTRUCTION.
2. NEW UTILITY METER STACK. COORDINATE EXACT REQUIREMENTS WITH UTILITY PRIOR TO CONSTRUCTION.
3. PROVIDE NEW GROUND PER NEC 250.52(A)(5).
4. BOND PER NEC 250.52(A)(2).
5. PROVIDE NEW GROUND PER NEC 250.52(A)(3).
6. COORDINATE EXACT LOCATION OF EXTERIOR PENETRATION INTO THE BUILDING WITH ARCHITECT AND OWNER PRIOR TO CONSTRUCTION.
7. NEW SINGLE METER, 225A, 120/240V WITH SERVICE DISCONNECTING MEANS. COORDINATE EXACT REQUIREMENTS WITH UTILITY PRIOR TO CONSTRUCTION.
8. DERIVE SERVICE FEEDER FOR GARAGE PANEL FROM SERVICE ENTRANCE EQUIPMENT SERVING BUILDING B. 4 INSTANCES IN PROJECT. REFER TO ELECTRICAL SITE PLAN ON SHEET E101 FOR INSTANCES AND LOCATIONS.

NOTE: ALL 120-VOLT, SINGLE-PHASE, 15- AND 20- AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT-INTERRUPTER ACCORDING TO NEC 210.12(A)(1) THROUGH (6).

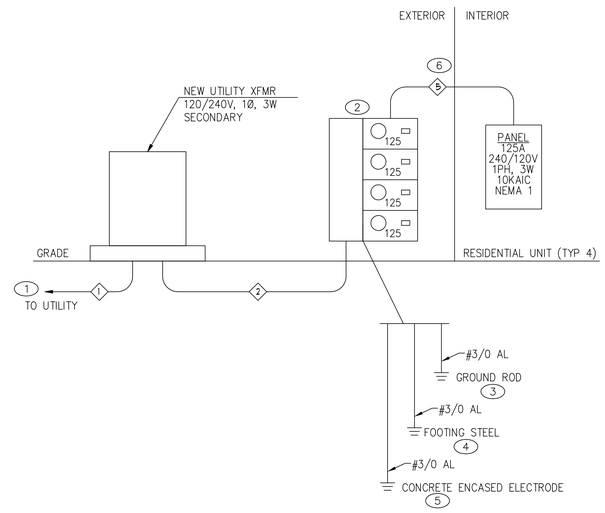
FEEDER SCHEDULE (CONDUCTORS TO BE COPPER UNLESS NOTED OTHERWISE)

FEEDER NUMBER	CONDUIT AND CONDUCTOR SIZES
1	(1) 4" CONDUIT FOR UTILITY USE
2	(2) 3" CONDUIT EACH W/ (3) #350KCMIL AL
3	(1) 3" CONDUIT W/ (3) #350KCMIL AL
4	(1) 2-1/2" CONDUIT W/ (3) #300KCMIL AL & 1 #2 AL GND
5	(1) 1-1/2" CONDUIT W/ (3) #2/0 AL & 1 #4 AL GND



SINGLE LINE DIAGRAM - BUILDING B2 (TYP.) 2

SCALE : N/A



SINGLE LINE DIAGRAM - BUILDINGS A,B,C,D (TYP.) 1

SCALE : N/A

VOLTAGE DROP CRITERIA

PROVIDE WIRING PER THE TABLE BELOW, UNLESS NOTED OTHERWISE. (NOTE: DISTANCE IS ORTHOGONAL DISTANCE TO CENTER OF LOAD).

120 VOLT - 20 AMP CIRCUITS
0-100 FEET: #12
101-150 FEET: #10
151-200 FEET: #8
201-300 FEET: #6
301-450 FEET: #4
451-750 FEET: #2

277 VOLT - 20 AMP CIRCUITS
0-150 FEET: #12
151-250 FEET: #10
251-400 FEET: #8
401-600 FEET: #6
601-1000 FEET: #4

collins|webb ARCHITECTURE
3078 SW MARKET St., Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY COLLINS WEBB ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER
JSC ENGINEERS
MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

JUSTIN R. SMOTHERS
STATE OF MISSOURI
NUMBER PE-2012003556
PROFESSIONAL ENGINEER
08-24-23
PROFESSIONAL SEAL

E200

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

ELECTRICAL SCHEDULES AND DIAGRAMS

RESIDENTIAL UNIT ELECTRICAL LOAD CALCULATION

UNIT FLOOR AREA		NEC 220.80 "PART IV. OPTIONAL FEEER AND SERVICE LOAD CALCUALTIONS"						
UNIT	SF	(B)(1)	(B)(2)	(B)(3)	(B)(4)	*** (C)(1–6)	TOTAL VA	TOTAL AMPERES (240V/1PH)
A/A REV	1230	3690VA	4500VA	6000VA	0VA	9000VA	23190VA	97A
B/B REV	1450	4350VA	4500VA	6000VA	0VA	12500VA	27350VA	114A
C/C REV	1584	4752VA	4500VA	6000VA	0VA	12500VA	27752VA	116A

***HVAC DESIGN IS BY OTHERS – ELECTRICAL LOADING IS ASSUMED
– CONFIRM WITH MECHANICAL ENGINEERED DRAWINGS PRIOR TO CONSTRUCTION.

PANELBOARD: PM (NEW)

BUS AMPS: 125A
MAIN SIZE/TYPE: 100A MCB
VOLTS/PHASE: 120/240V, 1PH, 3W
SECTION: 1

FED FROM: PC
A/C RATING: PCA +10% MINIMUM FULLY RATED
SERVES: MAINTENANCE GARAGE
MOUNTING: SURFACE
LOCATION: GARAGE

LINE-SIDE LUGS: MECHANICAL
EQUIPMENT GROUND BUS

CKT NO.	DESCRIPTION	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	WIRE NO.	BKR AMP	P	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	DESCRIPTION	CKT NO.
1	LTG - MAINTENANCE GARAGE	500		12	20	1	1	20	12	900		RCPT - MAINTENANCE GARAGE	2
3	SPARE				20	1	1	20	12		720	RCPT - GARAGE 2	4
5	SPARE				20	1	2	60	4	5,000		RCPT - L6-60R	6
7	SPARE				20	1					5,000		8
9	SPARE				20	1	1	20	12	500		RCPT - GARAGE DOOR	10
11	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	12
13	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	14
15	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	16
17	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	18
19	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	20
21	PROVISIONAL SPACE					1	2	40	8	3,750		PWR - EH-1	22
23	PROVISIONAL SPACE					1					3,750		24
	SUBTOTAL		500							10,150	9,470	SUBTOTAL	

		LOAD	CONN. VA	DF	LOAD	CONN. VA	DF
TOTAL PHASE A - VA	10,650	COOLING		0	REFRIG		1.00
AMPS	89	HEATING	7,500	1.00	SIGN/DISP		1.25
TOTAL PHASE B - VA	9,470	LIGHTING	500	1.25	KITCHEN		1.00
AMPS	79	RECEPTACLES	12,120	1.0/.5	EXISTING		1.00
TOTAL PNLBD - VA	20,120	MOTORS		1.00	LRG MOTOR		1.25
AMPS	84	SUPP HEAT		1.00	SHOW WNDW		1.25
		MISC EQUIP		1.00	LTG TRACK		1.00

TOTAL DEMAND
19,185 VA
80 A

PANELBOARD NOTES

PANELBOARD: PC (NEW)

BUS AMPS: 225A
MAIN SIZE/TYPE: MLO
VOLTS/PHASE: 120/240V, 1PH, 3W
SECTION: 1

FED FROM: UTILITY
A/C RATING: 22000 FULLY RATED
SERVES: CLUBHOUSE
MOUNTING: SURFACE
LOCATION: MECH 305

LINE-SIDE LUGS: MECHANICAL
EQUIPMENT GROUND BUS

CKT NO.	DESCRIPTION	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	WIRE NO.	BKR AMP	P	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	DESCRIPTION	CKT NO.
1	LTG - CLUBHOUSE INT MAIN 1	1,140		12	20	1	1	20	12	540		RCPT - KITCHEN COUNTER 1	2
3	LTG - CLUBHOUSE INT GYM/OFFICES 1		950	12	20	1	2	40	8		3,500	RCPT - OVEN	4
5	LTG - CLUBHOUSE EXTERIOR	450		12	20	1				3,500			6
7	PWR - DUCT SMOKE DETECTORS		400	12	20	1	1	20	12		800	RCPT - RANGE HOOD	8
9	PWR - ZONE DAMPER/MOTOR DAMPERS	500		12	20	1	1	20	12	500		RCPT - GARBAGE DISPOSAL	10
11	RCPT - LEASING DESKS		1,000	12	20	1	1	20	12		1,200	(GFI)RCPT - REFRIGERATOR	12
13	RCPT - LEASING/WORK CONVENIENCE	720		12	20	1	1	20	12	720		RCPT - KITCHEN COUNTER 2	14
15	RCPT - COPIER		1,350	12	20	1	1	20	12		900	RCPT - FOH CONVENIENCE	16
17	RCPT - WORK AREA ABOVE COUNTER	540		12	20	1	1	20	12	900		RCPT - GREAT ROOM CONVENIENCE	18
19	RCPT - MANAGER DESK		500	12	20	1	1	20	12		800	PWR - FIRE PLACE	20
21	RCPT - MANAGER CONVENIENCE	540		12	20	1	1	20	12	540		RCPT - JANI/MECH/EXTERIOR	22
23	RCPT - CONFERENCE COUNTER		360	12	20	1	1	20	12		540	RCPT - IT ROOM	24
25	RCPT - CONFERENCE GENERAL	720		12	20	1	1	20	12	360		RCPT - RESTROOMS	26
27	PWR - ACCESS CONTROL		800	12	20	1	1	20	12		720	RCPT - GYM/PET SPA CONVENIENCE	28
29	PWR - EF-4	75		12	20	1	1	20	12	1,000		RCPT - GYM WEST EQUIP	30
SECTION: 2													
31	PWR - EF-3		75	12	20	1	1	20	12		1,000	RCPT - GYM EAST EQUIP 1	32
33	PWR - CU-1 (HACR)	3,500		8	40	2	1	20	12	1,000		RCPT - GYM EAST EQUIP 2	34
35			3,500				1	20	12		500	RCPT - GYM DRINKING FOUNTAIN	36
37	PWR - CU-2 (HACR)	3,500		8	40	2	1	20	12	900		PWR - F-1 (HACR)	38
39			3,500				1	20	12		900	PWR - F-2 (HACR)	40
41	PWR - SMOKE DETECTOR / FACP	600		12	20	1	1	20	12	400		PWR - RCP	42
43	PWR - WATER HEATER	2,250		10	30	2	1	20				SPARE	44
45			2,250				1	20				SPARE	46
47	SPARE				20	1	1	20				SPARE	48
49	SPARE				20	1	1	20				SPARE	50
51	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	52
53	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	54
55	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	56
57	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	58
59	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	60
	SUBTOTAL	24,005	25,335							10,360	10,860	SUBTOTAL	

		LOAD	CONN. VA	DF	LOAD	CONN. VA	DF
TOTAL PHASE A - VA	34,365	COOLING	15,800	1.00	REFRIG		1.00
AMPS	286	HEATING	7,500	0	SIGN/DISP		1.25
TOTAL PHASE B - VA	36,195	LIGHTING	3,040	1.25	KITCHEN		1.00
AMPS	302	RECEPTACLES	38,870	1.0/.5	EXISTING		1.00
TOTAL PNLBD - VA	70,560	MOTORS	1,050	1.00	LRG MOTOR		1.25
AMPS	294	SUPP HEAT	4,500	1.00	SHOW WNDW		1.25
		MISC EQUIP	1,800	1.00	LTG TRACK		1.00

TOTAL DEMAND
50,385 VA
210 A

PANELBOARD NOTES

GFI = GROUND-FAULT INTERRUPTER CIRCUIT BREAKER

FEED THRU CONNECTION: #4/0

SUB-FEED THRU TO MAINTENANCE GARAGE PANEL "PM"

PANELBOARD: C (NEW)

BUS AMPS: 150A
MAIN SIZE/TYPE: MLO
VOLTS/PHASE: 120/240V, 1PH, 3W
SECTION: 1

FED FROM: UTILITY
AIC RATING: 10000 FULLY RATED
SERVES: BUILDING C
MOUNTING: RECESSED
LOCATION: GARAGE

LINE-SIDE LUGS: MECHANICAL
EQUIPMENT GROUND BUS

CKT NO.	DESCRIPTION	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	WIRE NO.	BKR AMP	P	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	DESCRIPTION	CKT NO.
1	*LTG - FIRST FLOOR	550		12	20	1	1	20	12	900		*LTG - SECOND FLOOR	2
3	*RCPT - PRIMARY BEDROOM		900	12	20	1	1	20	12		720	*RCPT - BEDROOM 1	4
5	*RCPT - BEDROOM 3	900		12	20	1	1	20	12	720		*RCPT - BEDROOM 2	6
7	*RCPT - CORR. / LAUNDRY / CORR. 1ST FL		900	12	20	1	1	20	12		600	*PWR - SMOKE / HEAT DETECTORS	8
9	*RCPT - DINING / LIVING ROOM	1,440		12	20	1	1	20	12	180		*RCPT - HALF-BATH GFI	10
11	*RCPT - KITCHEN COUNTER		1,200	12	20	1	1	20	12		1,800	*RCPT - BATH GFI	12
13	*RCPT - KITCHEN COUNTER	1,200		12	20	1	1	20	12	1,800		*RCPT - P. BATH GFI	14
15	*RCPT - KITCHEN ISLAND / COUNTER		1,800	12	20	1	1	20	12		800	#RCPT - REFRIGERATOR	16
17	*RCPT - MICROWAVE / HOOD	1,500		12	20	1	1	20	12	1,200		#RCPT - GARBAGE DISPOSAL	18
19	*RCPT - GARAGE GFI'S		360	12	20	1	1	20	12		600	#RCPT - DISHWASHER	20
21	*RCPT - COMMUNICATIONS CABINET	200		12	20	1	1	20	12	360		*RCPT - GARAGE GFI'S	22
23	*SPARE				20	1	1	20	12		1,800	*RCPT - WASHER	24
25	*SPARE				20	1	1	20				*SPARE	26
27	^PWR - AHU		4,500	8	40	2	2	30	10		2,500	PWR - DRYER	28
29		4,500								2,500			30
31	^PWR - CU		4,500	8	40	2	2	40	8		3,000	PWR - RANGE	32
33		4,500								3,000			34
35	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	36
37	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	38
39	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	40
41	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	42
	SUBTOTAL	14,790	14,160							10,660	11,820	SUBTOTAL	

		LOAD	CONN. VA	DF	LOAD	CONN. VA	DF
TOTAL PHASE A - VA	25,450	COOLING	9,000	1.00	REFRIG		1.00
AMPS	212	HEATING	9,000	0	SIGN/DISP		1.25
TOTAL PHASE B - VA	25,980	LIGHTING	1,450	1.25	KITCHEN		1.00
AMPS	217	RECEPTACLES	31,380	1.0/.5	EXISTING		1.00
TOTAL PNLBD - VA	51,430	MOTORS		1.00	LRG MOTOR		1.25
AMPS	214	SUPP HEAT		1.00	SHOW WNDW		1.25
		MISC EQUIP	600	1.00	LTG TRACK		1.00

TOTAL DEMAND
32,103 VA
134 A

PANELBOARD NOTES

* = AFI-TYPE BREAKER
^ = HACR-TYPE BREAKER
# = AFI/GFI-TYPE COMBO BREAKER

PANELBOARD: B (NEW)

BUS AMPS: 150A
MAIN SIZE/TYPE: MLO
VOLTS/PHASE: 120/240V, 1PH, 3W
SECTION: 1

FED FROM: UTILITY
A/C RATING: 10000 FULLY RATED
SERVES: BUILDING B
MOUNTING: RECESSED
LOCATION: GARAGE

LINE-SIDE LUGS: MECHANICAL
EQUIPMENT GROUND BUS

CKT NO.	DESCRIPTION	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	WIRE NO.	BKR AMP	P	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	DESCRIPTION	CKT NO.
1	*LTG - FIRST FLOOR	550		12	20	1	1	20	12	900		*LTG - SECOND FLOOR	2
3	*RCPT - PRIMARY BEDROOM		900	12	20	1	1	20	12		720	*RCPT - BEDROOM 1	4
5	*RCPT - BEDROOM 3	900		12	20	1	1	20	12	720		*RCPT - BEDROOM 2	6
7	*RCPT - CORR. / LAUNDRY / CORR. 1ST FL		900	12	20	1	1	20	12		600	*PWR - SMOKE / HEAT DETECTORS	8
9	*RCPT - DINING / LIVING ROOM	1,440		12	20	1	1	20	12	180		*RCPT - HALF-BATH GFI	10
11	*RCPT - KITCHEN COUNTER		1,200	12	20	1	1	20	12		1,800	*RCPT - BATH GFI	12
13	*RCPT - KITCHEN COUNTER	1,200		12	20	1	1	20	12	1,800		*RCPT - P. BATH GFI	14
15	*RCPT - KITCHEN ISLAND / COUNTER		1,800	12	20	1	1	20	12		800	#RCPT - REFRIGERATOR	16
17	*RCPT - MICROWAVE / HOOD	1,500		12	20	1	1	20	12	1,200		#RCPT - GARBAGE DISPOSAL	18
19	*RCPT - GARAGE GFI'S		360	12	20	1	1	20	12		600	#RCPT - DISHWASHER	20
21	*RCPT - COMMUNICATIONS CABINET	200		12	20	1	1	20	12	360		*RCPT - GARAGE GFI'S	22
23	*SPARE				20	1	1	20	12		1,800	*RCPT - WASHER	24
25	*SPARE				20	1	1	20				*SPARE	26
27	^PWR - AHU		4,500	8	40	2	2	30	10		2,500	PWR - DRYER	28
29		4,500								2,500			30
31	^PWR - CU		4,500	8	40	2	2	40	8		3,000	PWR - RANGE	32
33		4,500								3,000			34
35	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	36
37	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	38
39	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	40
41	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	42
	SUBTOTAL	14,790	14,160							10,660	11,820	SUBTOTAL	

		LOAD	CONN. VA	DF	LOAD	CONN. VA	DF
TOTAL PHASE A - VA	25,450	COOLING	9,000	1.00	REFRIG		1.00
AMPS	212	HEATING	9,000	0	SIGN/DISP		1.25
TOTAL PHASE B - VA	25,980	LIGHTING	1,450	1.25	KITCHEN		1.00
AMPS	217	RECEPTACLES	31,380	1.0/.5	EXISTING		1.00
TOTAL PNLBD - VA	51,430	MOTORS		1.00	LRG MOTOR		1.25
AMPS	214	SUPP HEAT		1.00	SHOW WNDW		1.25
		MISC EQUIP	600	1.00	LTG TRACK		1.00

TOTAL DEMAND
32,103 VA
134 A

PANELBOARD NOTES

* = AFI-TYPE BREAKER
^ = HACR-TYPE BREAKER
# = AFI/GFI-TYPE COMBO BREAKER

PANELBOARD: A (NEW)

BUS AMPS: 150A
MAIN SIZE/TYPE: MLO
VOLTS/PHASE: 120/240V, 1PH, 3W
SECTION: 1

FED FROM: UTILITY
A/C RATING: 10000 FULLY RATED
SERVES: BUILDING A
MOUNTING: RECESSED
LOCATION: GARAGE

LINE-SIDE LUGS: MECHANICAL
EQUIPMENT GROUND BUS

CKT NO.	DESCRIPTION	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	WIRE NO.	BKR AMP	P	P	BKR AMP	WIRE NO.	VOLTAMPS/PHASE A	VOLTAMPS/PHASE B	DESCRIPTION	CKT NO.
1	*LTG - FIRST FLOOR	550		12	20	1	1	20	12	900		*LTG - SECOND FLOOR	2
3	*RCPT - PRIMARY BEDROOM		900	12	20	1	1	20	12		720	*RCPT - BEDROOM 1	4
5	*RCPT - BEDROOM 3	900		12	20	1	1	20	12	720		*RCPT - BEDROOM 2	6
7	*RCPT - CORR. / LAUNDRY / CORR. 1ST FL		900	12	20	1	1	20	12		600	*PWR - SMOKE / HEAT DETECTORS	8
9	*RCPT - DINING / LIVING ROOM	1,440		12	20	1	1	20	12	180		*RCPT - HALF-BATH GFI	10
11	*RCPT - KITCHEN COUNTER		1,200	12	20	1	1	20	12		1,800	*RCPT - BATH GFI	12
13	*RCPT - KITCHEN COUNTER	1,200		12	20	1	1	20	12	1,800		*RCPT - P. BATH GFI	14
15	*RCPT - KITCHEN ISLAND / COUNTER		1,800	12	20	1	1	20	12		800	#RCPT - REFRIGERATOR	16
17	*RCPT - MICROWAVE / HOOD	1,500		12	20	1	1	20	12	1,200		#RCPT - GARBAGE DISPOSAL	18
19	*RCPT - GARAGE GFI'S		360	12	20	1	1	20	12		600	#RCPT - DISHWASHER	20
21	*RCPT - COMMUNICATIONS CABINET	200		12	20	1	1	20	12	360		*RCPT - GARAGE GFI'S	22
23	*SPARE				20	1	1	20	12		1,800	*RCPT - WASHER	24
25	*SPARE				20	1	1	20				*SPARE	26
27	^PWR - AHU		4,500	8	40	2	2	30	10		1,500	PWR - DRYER	28
29		4,500								1,500			30
31	^PWR - CU		4,500	8	40	2	2	40	8		3,000	PWR - RANGE	32
33		4,500								3,000			34
35	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	36
37	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	38
39	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	40
41	PROVISIONAL SPACE					1	1					PROVISIONAL SPACE	42
	SUBTOTAL	14,790	14,160							9,660	10,820	SUBTOTAL	

		LOAD	CONN. VA	DF	LOAD	CONN. VA	DF
TOTAL PHASE A - VA	24,450	COOLING	9,000	1.00	REFRIG		1.00
AMPS	204	HEATING	9,000	0	SIGN/DISP		1.25
TOTAL PHASE B - VA	24,980	LIGHTING	1,450	1.25	KITCHEN		1.00
AMPS	208	RECEPTACLES	29,380	1.0/.5	EXISTING		1.00
TOTAL PNLBD - VA	49,430	MOTORS		1.00	LRG MOTOR		1.25
AMPS	206	SUPP HEAT		1.00	SHOW WNDW		1.25
		MISC EQUIP	600	1.00	LTG TRACK		1.00

TOTAL DEMAND
31,103 VA
130 A

PANELBOARD NOTES

* = AFI-TYPE BREAKER
^ = HACR-TYPE BREAKER
# = AFI/GFI-TYPE COMBO BREAKER

PANELBOARD SCHEDULES

SCALE : N/A

1

CWA collins | webb ARCHITECTURE
3078 SW MARKET St. Lee's Summit, Missouri 64063 | 816.249.2270
www.collinsandwebb.com

PERMIT DOCUMENTS

REUNION AT BLACKWELL

SE SHENANDOAH DRIVE
LEE'S SUMMIT, MO 64063

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

MEP ENGINEER

JSC ENGINEERS

MO COA NO. 2012006786 / KS COA NO. E-2818
1925 CENTRAL STREET, SUITE 201
KANSAS CITY, MO 64108
phone: (816) 272-5289
email: jsmothers@jscengineers.com

STATE OF MISSOURI
JUSTIN R. SMOTHERS
NUMBER PE-2012003856
PROFESSIONAL ENGINEER
08-24-23
PROFESSIONAL SEAL

E201

ISSUE DATE: 08.24.23
JSC PROJECT #: 23-046

PANELBOARD SCHEDULES