GULF COAST CENTER FOR ECOTOURISM & SUSTAINABILITY

MOBILITY HUB PACKAGE

1640 ECO TRAIL, GULF SHORES, ALABAMA

DESIGN TEAM

Architect of Record	Local Architect	Civil Engineer	Structural Engineer	Mechanical Engineer	Plumbing Engineer	Electrical Engineer	Landscape Architect	Interior Designer
ArchitectureWorks	WATERSHED	Thompson Engineering	Thompson Engineering	TLC Engineering Solutions	TLC Engineering Solutions	TLC Engineering Solutions	Watermark Design Group	Hatcher Schuster Interiors
130 Nineteenth Street South Birmingham, Alabama 35233 205.320.0880	302 Magnolia Avenue Fairhope, Alabama 36532 251.929.0514	2970 Cottage Hill Road, Suite 190 Mobile, Alabama 36606 251.666.2443	2970 Cottage Hill Road, Suite 190 Mobile, Alabama 36606 251.666.2443	13099 South Cleveland Avenue, Suite 500 Fort Myers, Florida 33907 239.275.4240	13099 South Cleveland Avenue, Suite 500 Fort Myers, Florida 33907 239.275.4240	13099 South Cleveland Avenue, Suite 500 Fort Myers, Florida 33907 239.275.4240	2970 Cottage Hill Road, Suite 200 Mobile, Alabama 36606 251.344.5515	2213 Morris Avenue, Suite 300 Birmingham, Alabama 35203 205.324.3442
Jay Pigford	Rebecca Bryant	Charles Weber	Casey Brown	Matthew Wiechart	Matthew Wiechart	Mike Barrile	Christopher Grant	Ivy Schuster

ABBREVIATIONS

A

AB	ANCHOR BOLT
AD	AREA DRAIN
AC	AIR CONDITIONING
ACT	ACOUSTICAL CEILING TILE
ADD	ADDENDUM
ADDTL	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AGGR	AGGREGATE
AL/ALUM	ALUMINUM
ALT	ALTERNATE
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL

B

B.M.	BENCH MARK
BD	BOARD
BTWN	BETWEEN
BL	BUILDING LINE
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BRG	BEARING
BSMT	BASEMENT
BUR	BUILT-UP ROOF
BW	BEARING WALL

C

CEM	CEMENT
CER	CERAMIC
CG	CORNER GUARD
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMM	COMMUNICATIONS
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CORR	CORRIDOR
CR	COLD ROLLED
CSK	COUNTERSUNK
CT	CERAMIC TILE
CTR	CENTER
CW	CURTAIN WALL

D

D	DEPTH
DBA	DEFORMED BAR ANCHOR
DET	DETAIL
DIA	DIAMETER
DIAPH	DIAPHRAGM
DIM	DIMENSION
DJ	DEFLECTION JOINT
DL	DEAD LOAD
DN	DOWN
DWG	DRAWING
DS	DOWN SPOUT
DWGS	DRAWINGS
DWLS	DOWELS

E

EA	EACH
EF	EACH FACE
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC
ELEV	ELEVATOR
EOS	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
ESC	ESCALATOR
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXP BLT	EXPANSION BOLT
EXT	EXTERIOR

F

FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FHC	FIRE HOSE CABINET
FIN	FINISH
FLR	FLOOR
FS	FAR SIDE
FT	FOOT
FTG	FOOTING
FV	FIELD VERIFY
FVC	FIRE VALVE CABINET

G

GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GEN	GENERAL
GI	GALVANIZED IRON
GL	GLASS
GND	GROUND
GR	GRADE
GYP BD	GYPSUM BOARD

H

HB	HOSE BIB
HDW	HARDWARE
HDWD	HARDWOOD
HK	HOOK
HM	HOLLOW METAL
HOR	HORIZONTAL
HP	HIGH POINT
HR	HOUR
HS	HEADED STUD
HT	HEIGHT

I

IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
INSUL	INSULATION
INT	INTERIOR

L

L	ANGLE
LAV	LAVATORY
LG	LONG
LKB	LOCKABLE
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LP	LOW POINT
LT	LIGHT
LWC	LIGHTWEIGHT CONCRETE

M

MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
MPE	MECHANICAL, PLUMBING, AND ELECTRICAL
MFG	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTL	METAL

N

NA	NOT AVAILABLE
NIC	NOT IN CONTRACT
NOA	NOTICE OF ACCEPTANCE
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
NWC	NORMAL WEIGHT CONCRETE

O

OA	OVER ALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OD	OVERFLOW DRAIN
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OSF	OUTSIDE FACE

P

PLAM	PLASTIC LAMINATE
PC	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PCP	PORTLAND CEMENT PLASTER
PL	PROPERTY LINE
PLUMB	PLUMBING
PLYWD	PLYWOOD
POL	POLISHED
PORT CEM	PORTLAND CEMENT
PR	PAIR
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PT	PNEUMATIC TUBE
PTD	PAINTED

R

R	RISER
RAD	RADIUS
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REBAR	REINFORCING BAR
RECP	RECEPTACLE
REF	REFER OR REFERENCE
REINF	REINFORCING
RELOC	RELOCATE/RELOCATED
REQ'D	REQUIRED
RFVC	RECESSED FIRE VALVE CABINET
RM	ROOM
RO	ROUGH OPENING

S

SAB	SOUND ATTENUATION BLANKET
SCHED	SCHEDULE
SECT	SECTION
S/H	SINGLE HUNG
SHWR	SHOWER
SIM	SIMILAR
SO	STRUCTURAL OPENING
SOG	SLAB ON GRADE
SP	STAND PIPE
SPA	SPACE, SPACING
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
SSF	SOLID SURFACE
STA	STATION
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STIFF	STIFFENER
STIR	STIRRUP
STL	STEEL
STRUC	STRUCTURAL
SYM	SYMMETRICAL
SYS	SYSTEM

T

T	TREAD
T&B	TOP & BOTTOM
T&T	TAPE, BED, & TEXTURE
TC	TOP OF CURB
TEL	TELEPHONE
TEMP	TEMPERATURE
THK	THICK
TLT	TOILET
TO	TOP OF
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOP	TOP OF PARAPET
TOS	TOP OF SLAB
TOSTL	TOP OF STEEL
TRSH CH	TRASH CHUTE
TW	TOP OF WALL
TYP	TYPICAL

U

U/C	UNDER COUNTER
U/G	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE

V

VAR	VARIES
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VWC	VINYL WALL COVERING

W

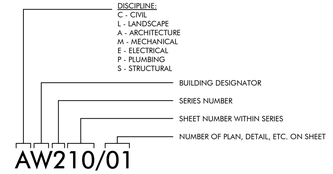
W/	WITH
W/C	WHEEL CHAIR
W/O	WITHOUT
W	WIDTH
WP	WATERPROOF(ING)
WD	WOOD
WF	WIDE FLANGE
WL	WIND LOAD
WP	WORK POINT
WPO	WORK POINT - POINT OF ORIGIN
WP1	WORK POINT - NUMBERED
WWF	6x6 W2.9/ W2.9 WELDED WIRE REINFORCEMENT

MASTER KEYNOTES

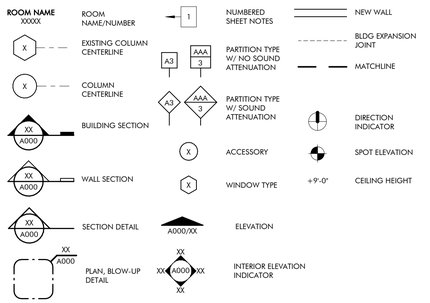
03 3000	Cast-in-Place Concrete - See Structural for reinforcement	08 3323	Overhead Coiling Doors
03 3000.BF	Board Form Cast-in-Place Concrete - See Structural for reinforcement	08 5200	Wood Windows
05 5000	Metal Fabrications	08 5400	Composite Windows
05 5000.KPB	Knife Plate Base Plate Connection - See Structural	08 6223	Tubular Skylights
05 5000.KPC	Knife Plate Column Connection - See Structural	09 2116.GYP	1/2" Gypsum Wallboard
06 1000	Rough Carpentry	09 2116.L	L Bead Accessory
06 1000.4C	4X4 Column	09 3000.CB	Cement Board
06 1000.8C	8x8 Column	09 3000.FT1	Porcelain Floor Tile
06 1000.F4	2x4 Framing	09 3000.NCT	Non-Ceramic Trim
06 1000.F6	2x6 Framing	09 3000.WT1	Porcelain Wall Tile & Grout
06 1000.F8	2x8 Framing	10 2113.17	Phenolic Toilet Compartments
06 1000.F10	2x10 Framing	10 2113.17.U	Post Supported Urinal Screen
06 1000.F12	2x12 Framing	11 3013	Residential Appliances
06 1000.PT	Pressure Treated Sill Plate	12 3600	Countertops
06 1000.ST	Framing Straps & Ties - See Structure	12 9313	Bicycle Racks
06 1300.6B	6x12 Beam	22 1400	Rain Water Harvesting
06 1300.8B	8x12 Beam	22 4216.13	Commercial Lavatories
06 1516	Wood Roof Decking	22 4713	Drinking Fountains
06 1600	Sheathing	26 5119	LED Interior Lighting
06 1753	Shop-Fabricated Wood Trusses	26 5619	LED Exterior Lighting
06 1816	Glued-Laminated Columns	31 3116	Termite Control
06 2000	Finish Carpentry	32 1216	Asphalt Paving
06 2000.2X	2x Slat	32 3116	Welded Wire Fences and Gates
06 2000.PLY	Stained 3/4" Plywood	32 3136.RG	Road Gate
06 2000.SW8	Stained Wood Boards	32 3136.SF	Site Fencing
06 2000.SWT	Stained Wood Trim	32 3300.BN	Site Bench
06 2013	Exterior Finish Carpentry	32 3300.WB	Waste & Recycling Bins
06 2013.46C	4x6 Column	32 3313.BF	Bicycle Repair Station
06 2013.F4	2x4 Wood Boards	32 3313.BR	Bicycle Racks
06 2013.F6	2x6 Wood Boards		
06 4100	Architectural Wood Casework		
07 2100.NB2	2" Nail Base Rigid Insulation Board		
07 2100.R13	R-13 Batt Insulation		
07 2100.R30	R-30 Batt Insulation		
07 2100.SB	Sound Batt		
07 2126	Blown Insulation		
07 2500.FAMF	Fluid Applied Membrane Flashing		
07 2500.SPS	Sill Plate Sealer		
07 4113	Metal Roof Panels		
07 4113.UL	Roof Underlayment		
07 4623.CB	Engineered Wood Corner Board		
07 4623.LS	Engineered Wood Lap Siding		
07 4623.TR	Engineered Wood Trim		
07 6200	Sheet Metal Flashing and Trim		
07 7123	Manufactured Gutters and Downspouts		
07 7123.D	Manufactured Downspouts		
07 7123.G	Manufactured Gutters		
07 9200	Joint Sealants		
07 9200.FBS	Full Bed of Sealant		
07 9200.LEF	Low Expansion Foam Sealant		
07 9200.S	Sealant		
07 9200.SBR	Sealant and Backer Rod		
08 1113	Hollow Metal Doors and Frames		
08 1416	Flush Wood Doors		
08 1423	Clad Wood Doors		
08 1613	Fiberglass Doors		

DRAWING SYMBOLS

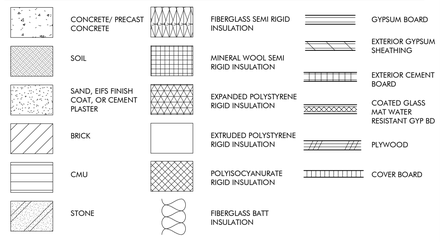
NUMBERING SYSTEM:



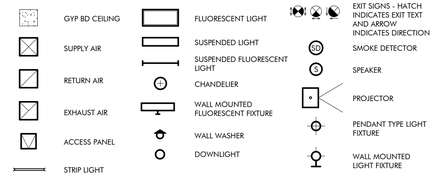
DRAWING SYMBOLS



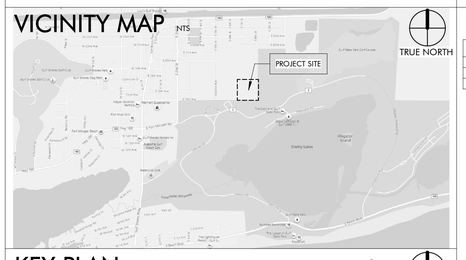
MATERIALS



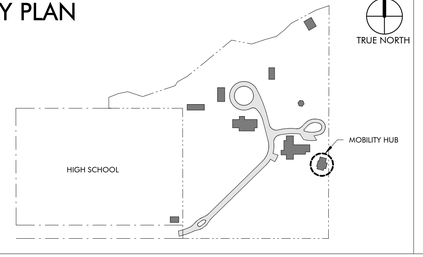
CEILING SYMBOLS



VICINITY MAP



KEY PLAN



DRAWING INDEX

REVISION #	SHEET NUMBER	SHEET NAME
GENERAL		
4	GM000	COVER SHEET
	GM010	CODE REVIEW & LIFE SAFETY
ARCHITECTURE		
2	AM120	PLANS & EXTERIOR ELEVATIONS
2	AM300	BUILDING & WALL SECTIONS
2	AM500	EXTERIOR DETAILS
4	AM600	SCHEDULES
STRUCTURAL		
1	SM001	GENERAL NOTES
2	SM002	ABBREVIATIONS SCHEDULES & TABLES
2	SM003	SCHEDULES & TABLES
	SM004	C&C WIND DIAGRAMS AND TYPICAL DETAILS
	SM005	TYPICAL DETAILS
	SM100	SLAB AND FOUNDATION PLAN
	SM110	SLAB AND FOUNDATION SECTIONS
	SM200	ROOF FRAMING PLAN
	SM201	LOW ROOF FRAMING
	SM210	ROOF FRAMING SECTIONS
	SM300	TRUSS ELEVATION
MECHANICAL		
	MM001	MECHANICAL LEGEND, FLOORPLAN, AND SCHEDULES
PLUMBING		
	PM001	PLUMBING SYMBOLS, LEGEND, NOTES AND INDEX
ELECTRICAL		
	EM000	ELECTRICAL LEGEND, ABBREVIATIONS, AND SHEET INDEX
1	EM001	ELECTRICAL GENERAL NOTES
	EM100	MOBILITY HUB POWER FLOOR PLAN
	EM200	MOBILITY HUB LIGHTING FLOOR PLAN
	EM300	ELECTRICAL RISER DIAGRAM & SCHEDULES
	EM400	FIRE ALARM RISER, DETAILS, AND NOTES
	EM401	LIGHTING CONTROLS, NOTES, AND SCHEDULES
	EM402	LIGHTING FIXTURE SCHEDULE
	EM500	ELECTRICAL DETAILS
	EM501	ELECTRICAL DETAILS
TECHNOLOGY		
	TM000	TECHNOLOGY LEGEND AND SHEET INDEX
	TM100	MOBILITY HUB TECHNOLOGY FLOOR PLAN
	TM500	TECHNOLOGY DETAILS
INTERIOR DESIGN		
	IDM100	FURNITURE PLAN

REVISION SCHEDULE

REVISION #	REVISION DATE	REVISION DESCRIPTION
1	AUGUST 31, 2022	CITY COMMENTS
2	JANUARY 8, 2023	BID SET
4	MARCH 24, 2023	CONFORMANCE SET

STATE OF ALABAMA
REGISTERED LAND PROFESSIONAL
0127
REGISTERED ARCHITECT

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GULF COAST CENTER FOR ECOTOURISM & SUSTAINABILITY

MOBILITY HUB PACKAGE

GULF SHORES, ALABAMA

No.	Date	Revision	Initials
1	AUGUST 31, 2022	CITY COMMENTS	
2	JANUARY 8, 2023	BID SET	
4	MARCH 24, 2023	CONFORMANCE SET	

JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET NAME
COVER SHEET

SHEET NO.
GM000

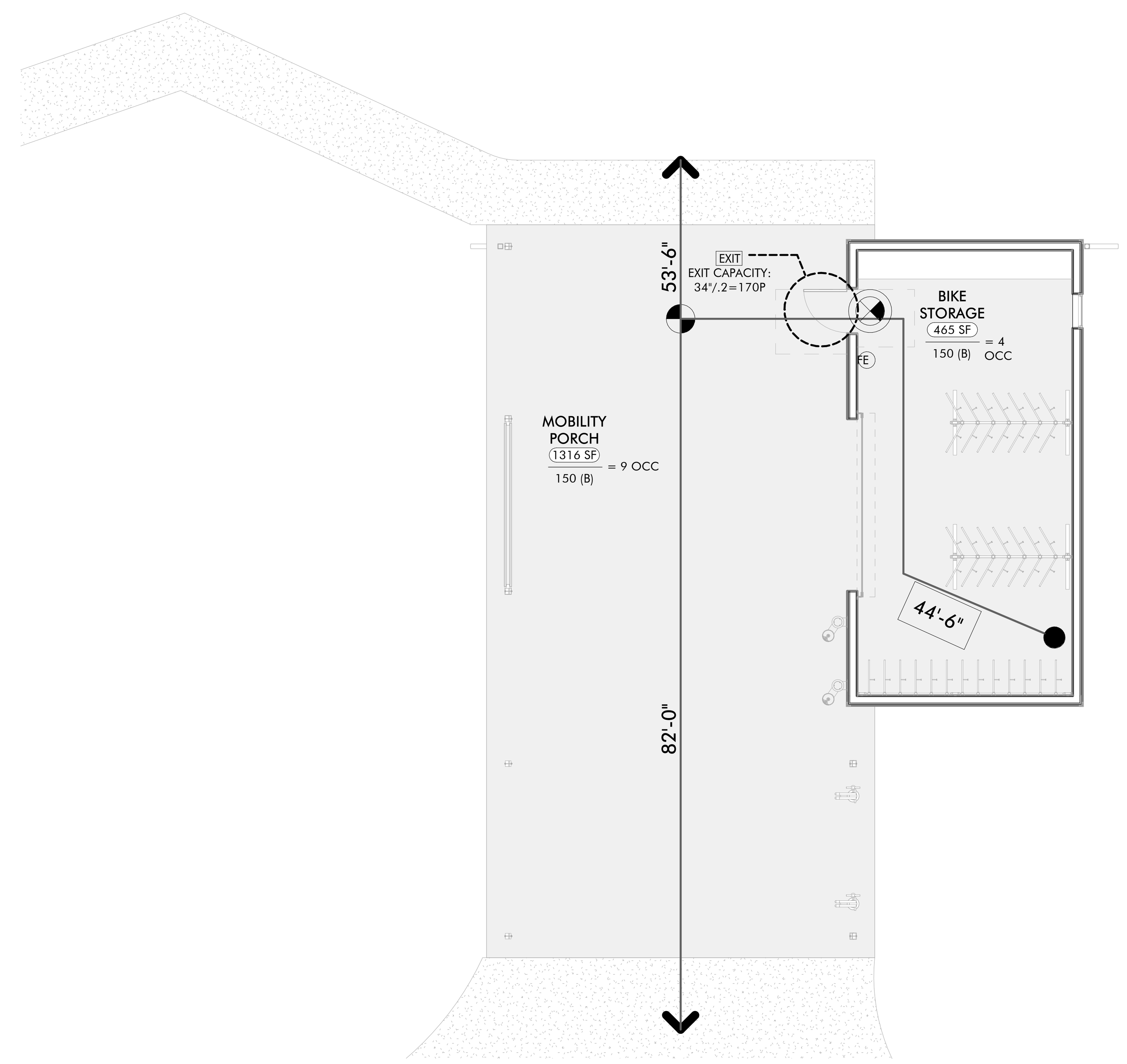
BUILDING ENVELOPE

OPAQUE THERMAL ENVELOPE INSULATION COMPONENT MINIMUM REQUIREMENTS (IECC TABLE C402.1.3)

BUILDING ELEMENT	MIN. R-VALUE**	R-VALUE PROVIDED	CODE
WALLS - WOOD FRAMED	20	20	2015 IECC - TABLE C402.1.3
ROOF	38	39	2015 IECC - TABLE C402.1.3
FLOORS - SLAB ON GRADE	NOT REQUIRED	0	2015 IECC - TABLE C402.1.3
CLIMATE ZONE	2A, BALDWIN COUNTY		2015 IECC - TABLE 301.1

PLUMBING FIXTURE SCHEDULE (IBC TABLE 2902.1)

OCCUPANCY		WATER CLOSETS		LAVATORIES	DRINKING FOUNTAIN	OTHER
OCC CLASS	OCCUPANT LOADS	MALE	FEMALE	MALE/FEMALE EACH		
B BUSINESS	13	1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR REMAINDER		1 PER 40 FOR THE FIRST 80 AND 1 PER 80 FOR THE...	1 PER 100	
		0.52	0.52	0.325 EACH	0.13	1 SERVICE SINK
TOTAL REQ'D	13	0.52	0.52	0.325 EACH	0.13	
TOTAL PROVIDED		N/A	N/A	N/A	2	1 SERVICE SINK



GRAPHIC SCALE : 1" = 8'

0' 8' 16' 32' 48'

LIFE SAFETY PLAN

MOBILITY HUB

1

1/8" = 1'-0"

CODE REVIEW

REFER SITE & CIVIL PACKAGE FOR ADDITIONAL INFORMATION SUCH AS FIRE DEPARTMENT ACCESS.

APPLICABLE CODES

2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL FIRE CODE
2021 INTERNATIONAL FUEL & GAS CODE
2021 INTERNNATIONAL MECHANICAL CODE
2018 INTERNATIONAL PLUMBING CODE
2020 NATIONAL ELECTRICAL CODE (NFPA 70)
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN
CITY OF GULF SHORES SUPPLEMENTAL REQUIREMENTS

GENERAL BUILDING HEIGHTS AND AREAS *(Chapter 5)*

OCCUPANCY CLASSIFICATION: BUSINESS *(GROUP B)*

CONSTRUCTION TYPE: TYPE VB
AUTOMATIC SPRINKLER SYSTEM: NO

ALLOWABLE AREAS: B = 9,000 SF *(NOT SPRINKLED)*
ALLOWABLE HEIGHT ABOVE GRADE (VB): B = 40 FT
ALLOWABLE NUMBER OF STORIES (VB): B = 2 STORIES
PROJECT AREAS: 1,877 SF *(UNDER ROOF)*

TYPES OF CONSTRUCTION *(Chapter 6)*

STRUCTURAL ELEMENTS CONSIST OF CONCRETE SLAB ON ON GRADE WITH WOOD FRAMED WALLS AND SHOP-FABRICATED WOOD TRUSSES.

NO FIRE-RESISTANT ASSEMBLIES REQUIRED FOR BUILDING ELEMENTS OR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE PER IBC TABLES 601 AND 705.5.

FIRE AND SMOKE PROTECTION FEATURES *(Chapters 7 & 9)*

FOR ELEVATIONS WITH FIRE SEPARATION DISTANCE OF 20'-0" TO LESS THAN 25'-0", ONLY 45% OF ELEVATION IS ALLOWED TO BE OPEN WITHOUT PROTECTION PER IBC TABLE 705.8

PER IBC 903.2.1.3, AUTOMATIC SPRINKLERS ARE NOT REQUIRED.

MEANS OF EGRESS *(Chapter 10)*

OCCUPANCY: B
GROSS FLOOR AREAS: 465 SF *(INTERIOR UNCONDITIONED)*
1,316 SF *(EXTERIOR COVERED)*
1,781 SF *TOTAL*
OCCUPANT LOAD: 13 *TOTAL*
REQ'D EXIT WIDTH: 13 x 0.2 = 2.6"
REFER PLAN
REQ'D EXIT AMT: 1
EXITS PROVIDED: REFER PLAN FOR EXITS AND EXIT ACCESS
TRAVEL DISTANCE ALLOWED: 200 FT *(NONSPRINKLED)*
MAX COMMON PATH: 100 FT *(NONSPRINKLED)*

ACCESSIBILITY (CHAPTER 11)

ACCESSIBLE ROUTES AND ENTRANCES ARE PROVIDED FOR IN THE DESIGN.

REFER SITE & CIVIL PACKAGE FOR ACCESSIBLE PARKING REQUIREMENTS AND LOCATIONS.

REFER INTERIOR ELEVATIONS FOR ACCESSIBILITY REQUIREMENTS AT OTHER FIXTURES AND EQUIPMENT.

PLUMBING FIXTURES (CHAPTER 29)

REFER PLUMBING FIXTURE SCHEDULE THIS SHEET FOR REQUIREMENTS AT THIS BUILDING. THIS BUILDING SHARES FIXTURES WITH THE MOBILITY HUB.

FAMILY-ASSISTED RESTROOM PROVIDED AT WELCOME HUB.

REFER SITE & CIVIL PACKAGE FOR PLUMBING REQUIREMENTS FOR ENTIRE CAMPUS AND LOCATIONS OF PROVIDED FACILITIES.

BUILDING ENVELOPE

REFER TO PROVIDED TABLE ON THIS SHEET.

SHEET SPECIFIC NOTES

GRAPHIC LEGEND

- ●— PATH OF TRAVEL BEGINNING
- POINT OF TRAVEL DIVERGENCE
- → PATH DISCHARGE TO PUBLIC RIGHT OF WAY
- 112'-7" TOTAL EGRESS TRAVEL DISTANCE
- 112'-7" COMMON PATH OF EGRESS TRAVEL DISTANCE
- ◯ EXIT OR EXIT ACCESS
- FE FIRE EXTINGUISHER LOCATION
- ▱ 1-HOUR FIRE BARRIER OR FIRE RESISTANT ASSEMBLY

STATE OF ALABAMA
RICHARD IRELAND PIGFORD, JR.
6127
BIRMINGHAM, ALABAMA
REGISTERED ARCHITECT

[illegible]

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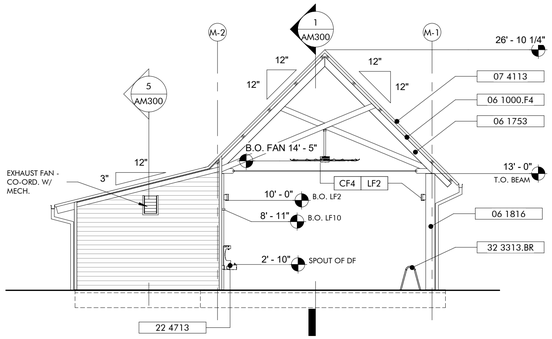
SHEET NAME
CODE REVIEW & LIFE SAFETY

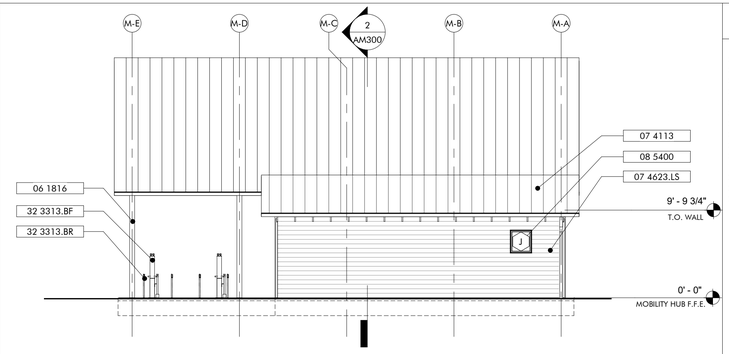
SHEET NO.
GM010



EXTERIOR ELEVATION — MOBILITY HUB - NORTH

7

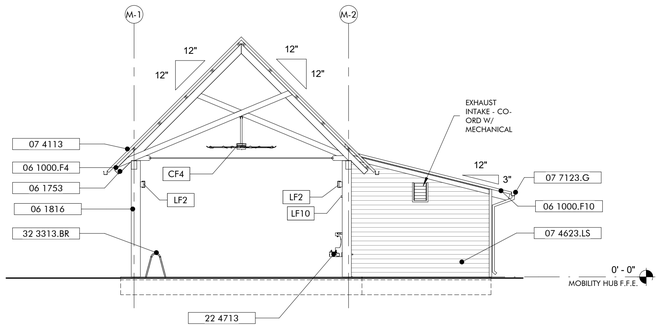
1/8" = 1'-0"



EXTERIOR ELEVATION — MOBILITY HUB - EAST

6

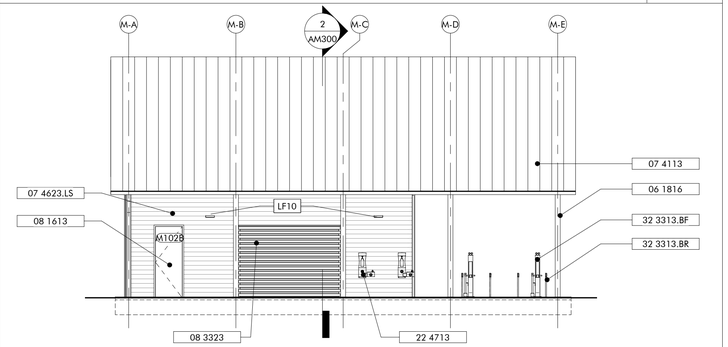
1/8" = 1'-0"



EXTERIOR ELEVATION — MOBILITY HUB - SOUTH

5

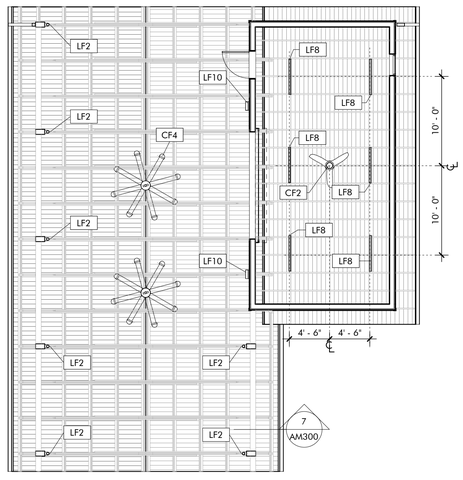
1/8" = 1'-0"



EXTERIOR ELEVATION — MOBILITY HUB - WEST

4

1/8" = 1'-0"



LIGHT FIXTURE SCHEDULE - MOBILITY HUB

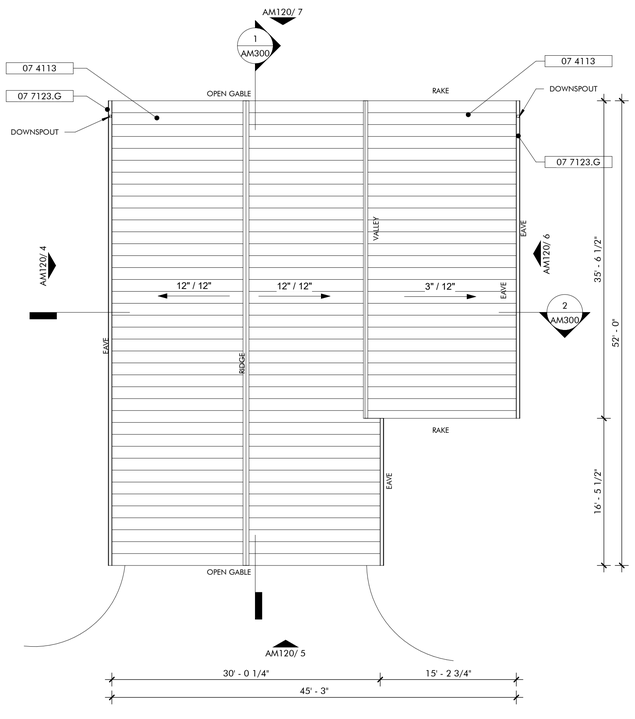
MARK	QTY	MFR	MODEL	MOUNTING	NOTES
LF2	7	BEGA-US	24034	WALL	
LF8	2	FINELITE INC.	HP2-SM	SURFACE	
LF10	2	BEGA-US	33341	WALL	

REFLECTED CEILING PLAN — MOBILITY HUB

TRUE NORTH

3

1/8" = 1'-0"

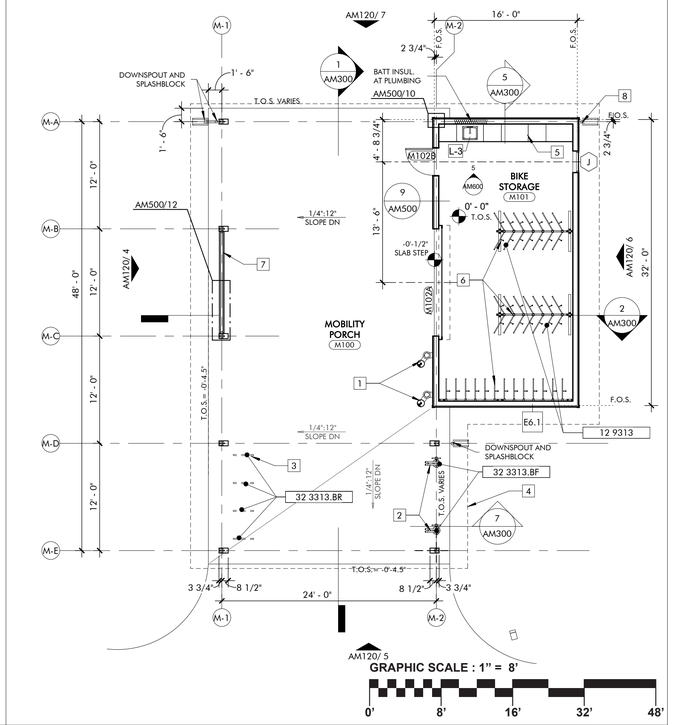


ROOF PLAN — MOBILITY HUB

TRUE NORTH

2

1/8" = 1'-0"



FLOOR PLAN — MOBILITY HUB

TRUE NORTH

1

1/8" = 1'-0"

KEYNOTES

06 1000.F4	2x4 Framing
06 1000.F10	2x10 Framing
06 1753	Shop-Fabricated Wood Trusses
06 1816	Glued-Laminated Columns
07 4112	Metal Roof Panels
07 4623.LS	Engineered Wood Lap Siding
07 7123.G	Manufactured Gutters
08 1613	Fiberglass Doors
08 3323	Overhead Coiling Doors
08 5400	Composite Windows
12 9313	Bicycle Racks
22 4713	Drinking Fountains
32 3313.BF	Bicycle Repair Station
32 3313.BR	Bicycle Racks

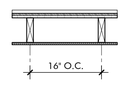
GENERAL NOTES

1. REFER SITE & CIVIL PACKAGE FOR BUILDING LOCATION ON SITE.
2. REFER AM600 SCHEDULES FOR PARTITION SCHEDULE, ROOM FINISHES SCHEDULE, AND DOOR SCHEDULE.
3. GRIDLINES - LOCATED ON CENTERLINES OF STRUCTURAL COLUMNS UNLESS OTHERWISE NOTED.
4. EXTERIOR WALLS - DIMENSIONS ARE TO FACE OF STUD UNLESS OTHER NOTED.
5. INTERIOR WALLS - DIMENSIONS ARE TO CENTERLINE OF STUD UNLESS OTHERWISE NOTED.
6. OPENINGS - DIMENSIONS ARE TO CENTERLINE OF OPENING (DOOR OR WINDOW) UNLESS OTHERWISE NOTED. REFER TO AM600 SCHEDULES FOR DOOR AND WINDOW SIZES.
7. AT EXTERIOR PORCHES PROVIDE POSITIVE SLOPE AWAY FROM BUILDING - MAX 2% CROSS SLOPE (+/- 3/16" PER FOOT) - SEE PLAN

SHEET SPECIFIC NOTES

1. (2) EXTERIOR WALL MOUNTED DRINKING FOUNTAINS WITH BOTTLE FILLERS - PROVIDE BLOCKING AS REQUIRED
2. (2) BIKE REPAIR STATIONS
3. BIKE PARKING RACKS
4. LINE OF ROOF ABOVE
5. WOOD CASEWORK WITH SOLID SURFACE COUNTER
6. BIKE STORAGE FOR (41) BIKES
7. WOOD SLAT SCREEN. REFER AM500
8. DOWNSPOUT AND SPLASH BLOCK

TYPE E6.1 LAP SIDING OVER INSULATED SHEATHING, 2x6 STUD WALL 1/2" PLYWOOD



WALL TYPE NOTES:

1. SEE PLAN FOR WALL TYPE LOACATIONS
2. SEE FINISH SCHEDULE AND INTERIOR ELEVATIONS FOR TYPE AND EXTENT OF ALL FINISHES
3. SEE PLAN AN SECTION DETAILS FOR WALL CONSTRUCTION

STATE OF ALABAMA — LICENSED LAND PLANNER, JR. — 6727 — REGISTERED ARCHITECT

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GULF COAST CENTER
FOR ECOTOURISM & SUSTAINABILITY
MOBILITY HUB PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision
1	JANUARY 6, 2023	BID SET
2		

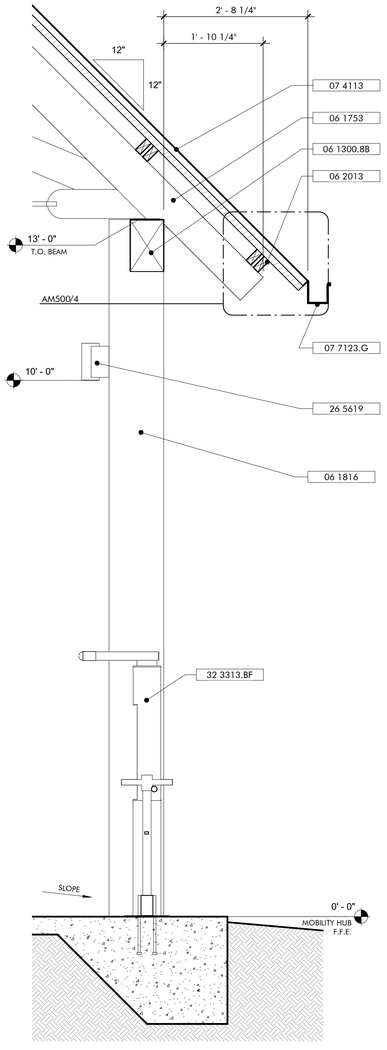
JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

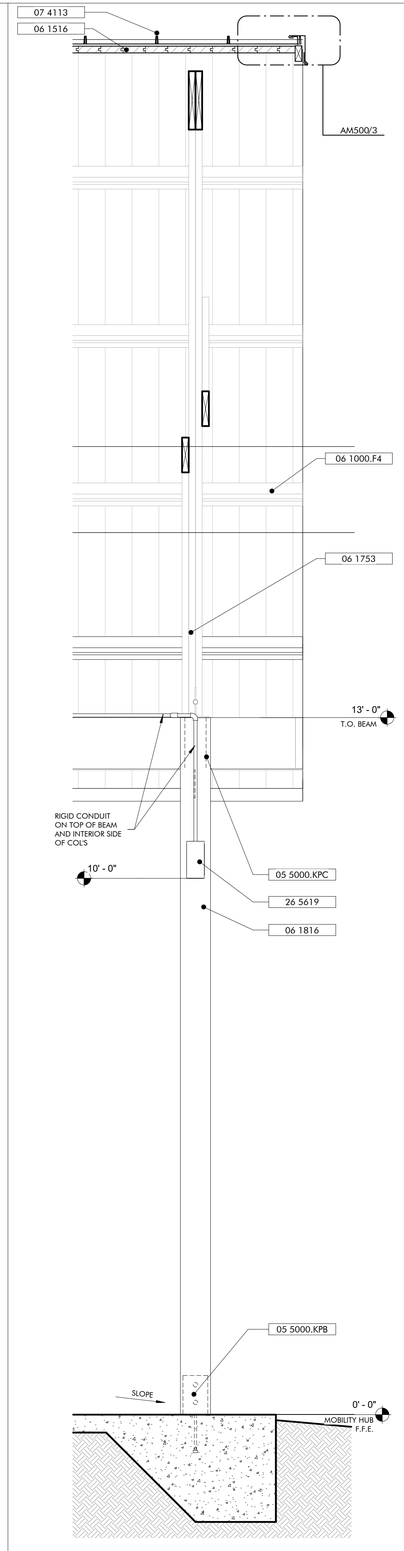
DATE
MARCH 24, 2023

SHEET NAME
PLANS & EXTERIOR ELEVATIONS

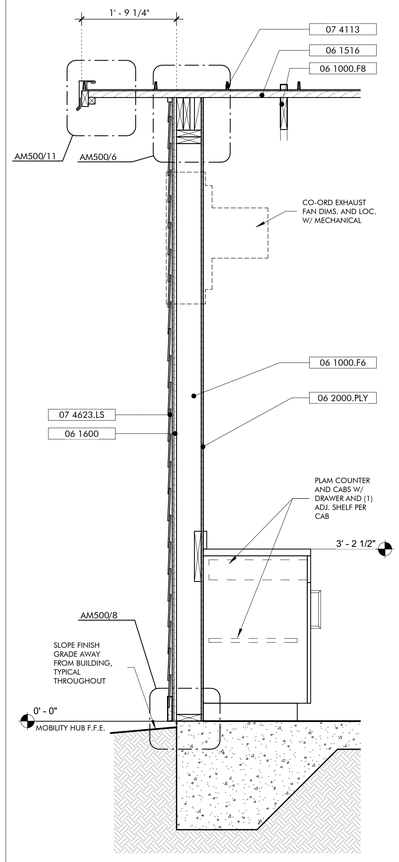
SHEET NO.
AM120



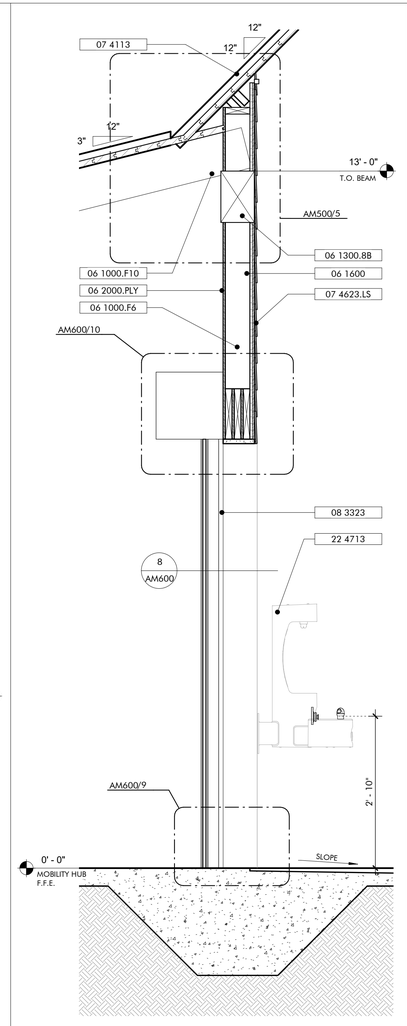
WALL SECTION 7
ROOF EAVE @ DOGTROT
3/4" = 1'-0"



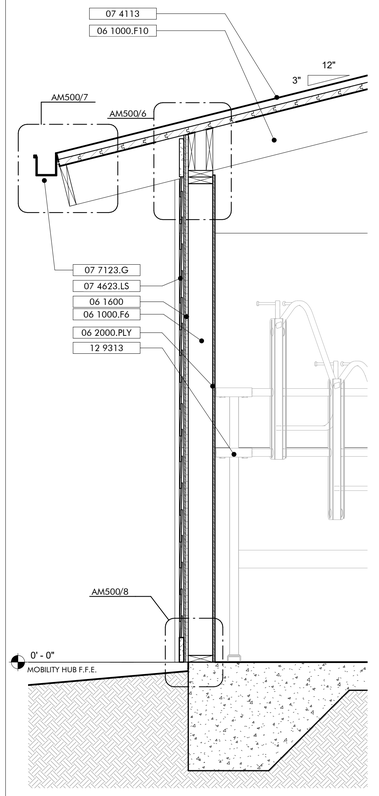
WALL SECTION 6
ROOF RAKE @ DOGTROT
3/4" = 1'-0"



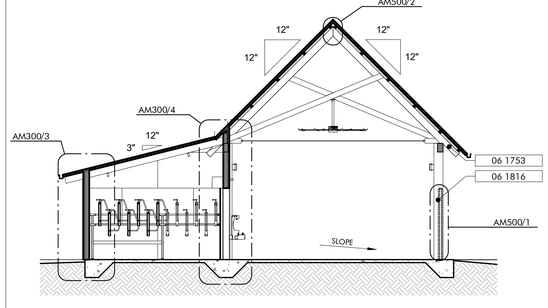
WALL SECTION 5
ROOF RAKE @ WORK AREAS
3/4" = 1'-0"



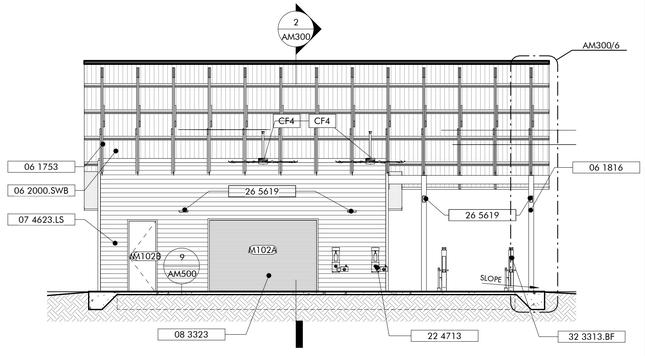
WALL SECTION 4
COILING DOOR OPENING
3/4" = 1'-0"



WALL SECTION 3
ROOF EAVE @ WORK AREAS
3/4" = 1'-0"



BUILDING SECTION 2
MOBILITY HUB - WORK AREAS
1/8" = 1'-0"



BUILDING SECTION 1
MOBILITY HUB - DOGTROT
1/8" = 1'-0"

KEYNOTES

05 5000.KPB	~~Knife Plate Base Plate Connection - See Structural~~
05 5000.KPC	Knife Plate Column Connection - See Structural
06 1000.F4	2x4 Framing
06 1000.F6	2x6 Framing
06 1000.F8	2x8 Framing
06 1000.F10	2x10 Framing
06 1300.8B	8x12 Beam
06 1516	Wood Roof Decking
06 1600	Sheathing
06 1753	Shop-Fabricated Wood Trusses
06 1816	Glued-Laminated Columns
06 2000.PLY	Stained 3/4" Plywood
06 2000.SWB	Stained Wood Boards
06 2013	Exterior Finish Carpentry
07 4113	Metal Roof Panels
07 4623.LS	Engineered Wood Lap Siding
07 7123.G	Manufactured Gutters
08 3323	Overhead Coiling Doors
12 9313	Bicycle Racks
22 4713	Drinking Fountains
26 5619	LED Exterior Lighting
32 3313.BF	Bicycle Repair Station

GENERAL NOTES

SHEET SPECIFIC NOTES

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MOBILITY HUB PACKAGE
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1	JANUARY 6, 2023	BID SET
2		

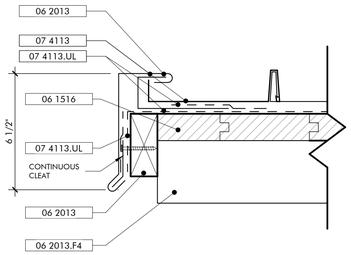
JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

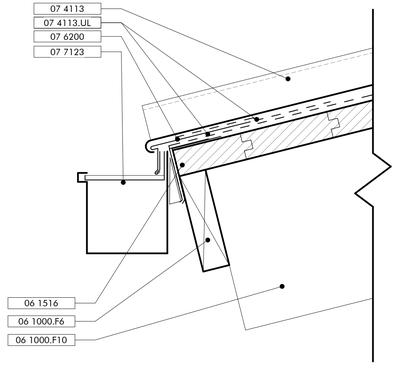
DATE
MARCH 24, 2023

SHEET NAME
BUILDING & WALL SECTIONS

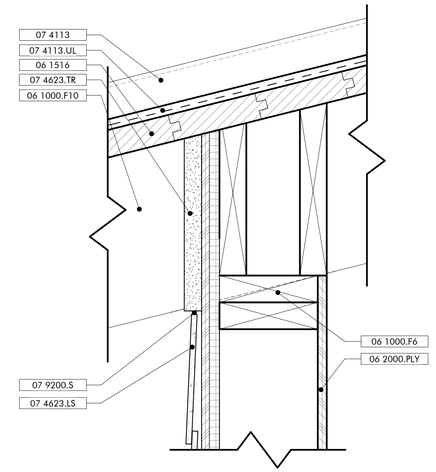
SHEET NO.
AM300



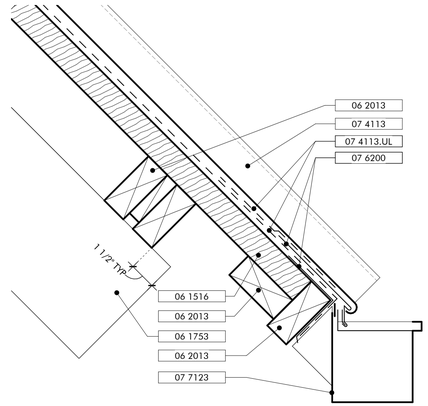
SECTION DETAIL 11
SHED ROOF RAKE — 3" = 1'-0"



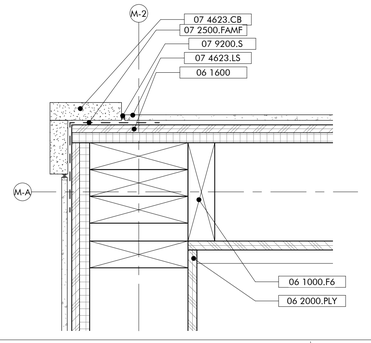
SECTION DETAIL 7
SHED ROOF EAVE — 3" = 1'-0"



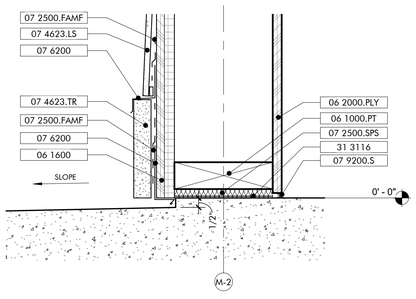
SECTION DETAIL 6
SHED WALL T.O. PLATE — 3" = 1'-0"



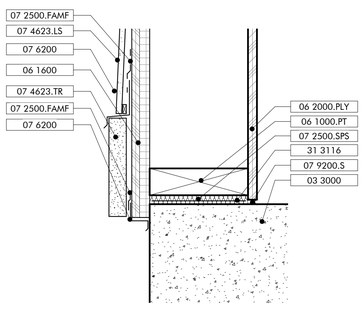
SECTION DETAIL 4
ROOF EAVE — 3" = 1'-0"



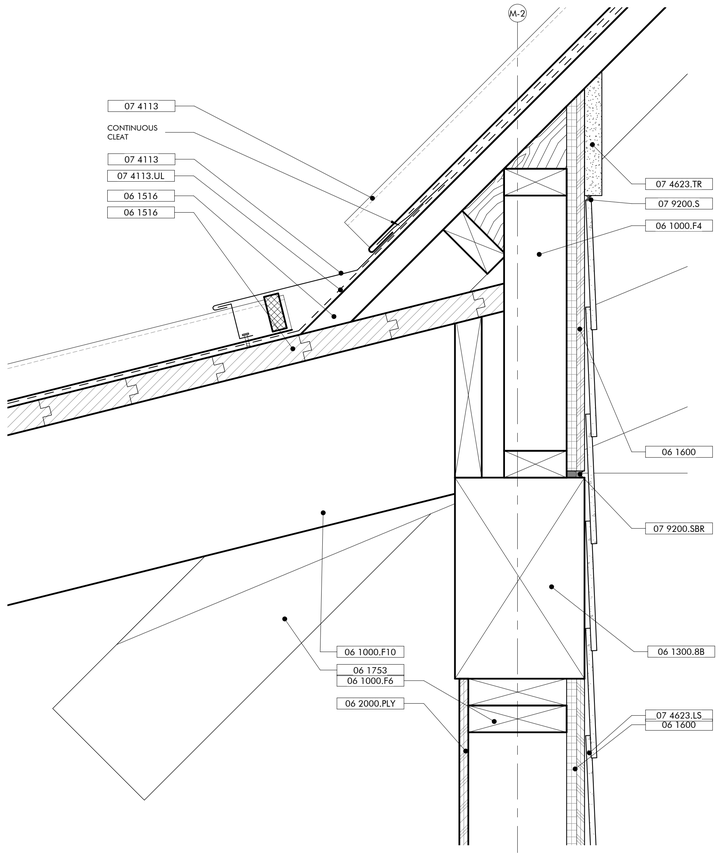
SECTION DETAIL 10
TYP OUTSIDE CORNER — 3" = 1'-0"



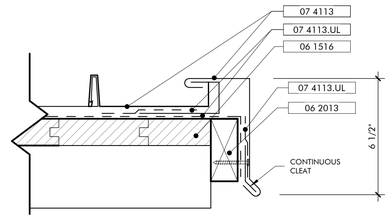
SECTION DETAIL 9
STUD WALL AT SLAB — 3" = 1'-0"



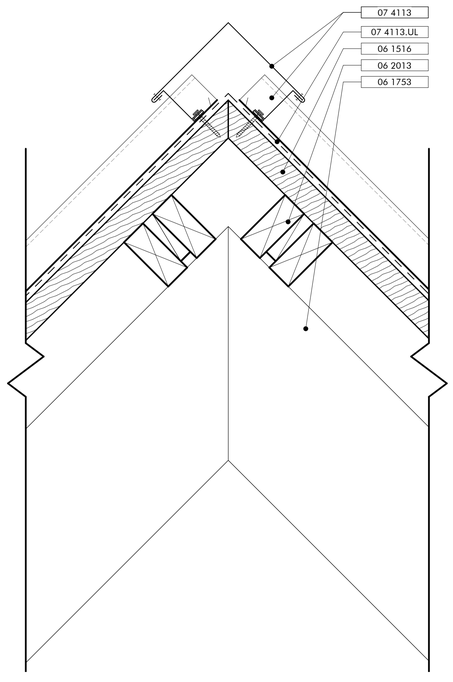
SECTION DETAIL 8
STUD WALL AT SLAB EDGE — 3" = 1'-0"



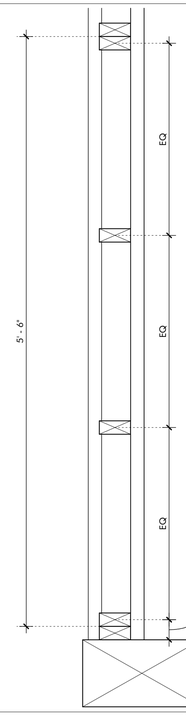
SECTION DETAIL 5
ROOF TRANSITION — 3" = 1'-0"



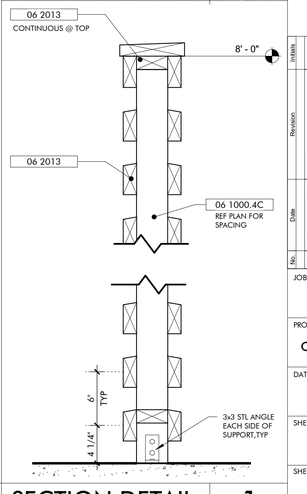
SECTION DETAIL 3
ROOF RAKE — 3" = 1'-0"



SECTION DETAIL 2
ROOF RIDGE — 3" = 1'-0"



PLAN DETAIL 12
MOBILITY HUB — 1 1/2" = 1'-0"



SECTION DETAIL 1
SCREEN — 1 1/2" = 1'-0"

KEYNOTES

03 3000	Cast-in-Place Concrete - See Structural for reinforcement
06 1000.4C	4X4 Column
06 1000.F4	2x4 Framing
06 1000.F6	2x6 Framing
06 1000.F10	2x10 Framing
06 1000.PT	Pressure Treated Sill Plate
06 1300.8B	8x12 Beam
06 1516	Wood Roof Decking
06 1600	Sheathing
06 1753	Shop-Fabricated Wood Trusses
06 2000.PLY	Stained 3/4" Plywood
06 2013	Exterior Finish Carpentry
06 2013.F4	2x4 Wood Boards
07 2500.FAMF	Fluid Applied Membrane Flashing
07 2500.SPS	Sill Plate Sealer
07 4113	Metal Roof Panels
07 4113.UL	Roof Underlayment
07 4623.CB	Engineered Wood Corner Board
07 4623.LS	Engineered Wood Lap Siding
07 4623.TR	Engineered Wood Trim
07 6200	Sheet Metal Flashing and Trim
07 7123	Manufactured Gutters and Downspouts
07 9200.S	Sealant
07 9200.SBR	Sealant and Backer Rod
31 3116	Termite Control

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GULF COAST CENTER
FOR ECOTOURISM & SUSTAINABILITY
MOBILITY HUB PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision
1.	JANUARY 6, 2023	BID SET
2.		Inhets

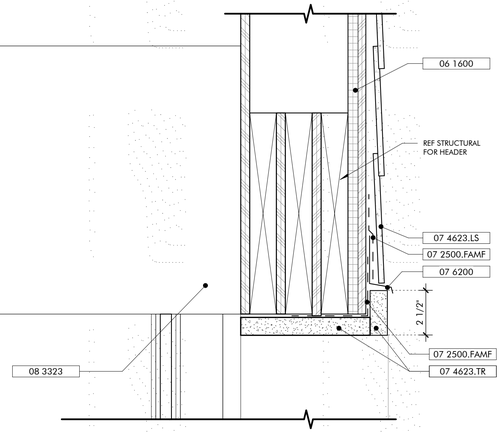
JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

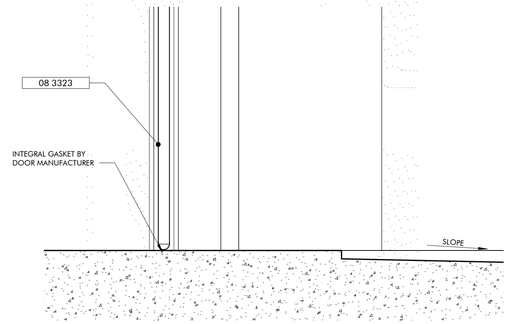
DATE
MARCH 24, 2023

SHEET NAME
EXTERIOR DETAILS

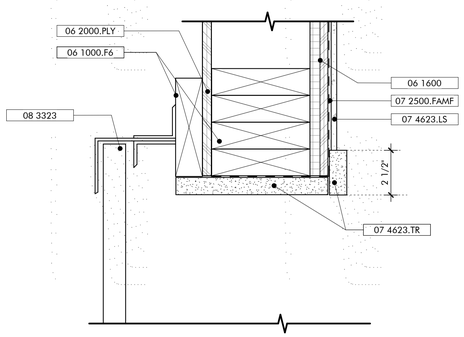
SHEET NO.
AM500



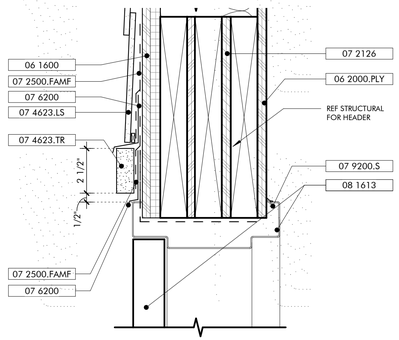
HEAD DETAIL
COILING DOOR OPENING — 10 — 3" = 1'-0"



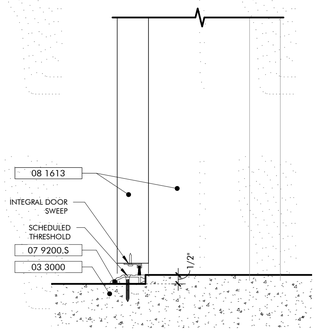
SILL DETAIL
COILING DOOR OPENING — 9 — 3" = 1'-0"



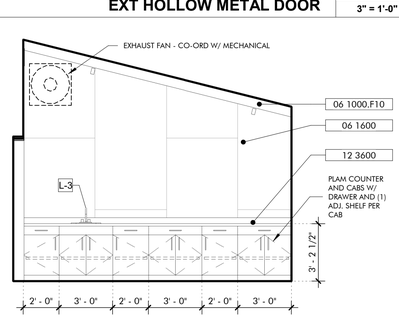
JAMB DETAIL
COILING DOOR OPENING — 8 — 3" = 1'-0"



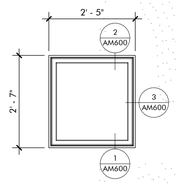
HEAD DETAIL
EXT HOLLOW METAL DOOR — 7 — 3" = 1'-0"



SILL DETAIL
EXT HOLLOW METAL DOOR — 6 — 3" = 1'-0"



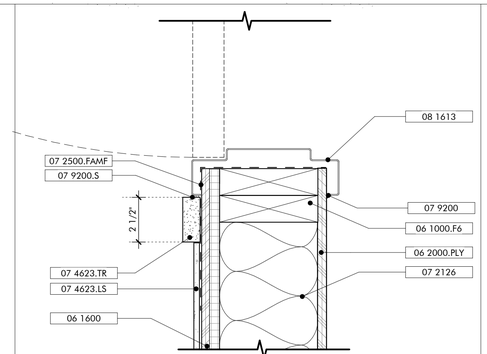
INTERIOR ELEVATION
BIKE WORKSTATION — 5 — 1/4" = 1'-0"



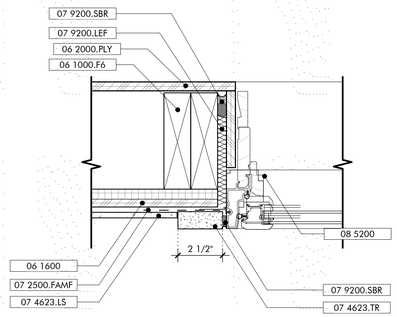
WINDOW J

FIBERGLASS CASEMENT WINDOW

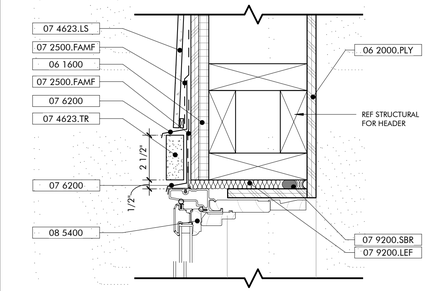
WINDOW LEGEND
MOBILITY HUB — 1/2" = 1'-0"



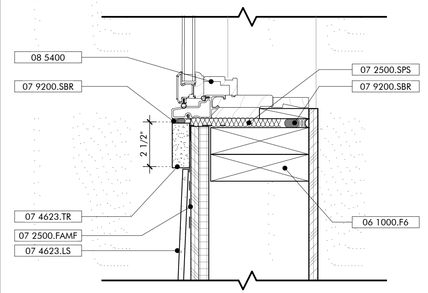
JAMB DETAIL
EXT HOLLOW METAL DOOR — 4 — 3" = 1'-0"



JAMB DETAIL
TYP WINDOW — 3 — 3" = 1'-0"



HEAD DETAIL
TYP WINDOW — 2 — 3" = 1'-0"



SILL DETAIL
TYP WINDOW — 1 — 3" = 1'-0"

KEYNOTES

03 3000	Cast-in-Place Concrete - See Structural for reinforcement
06 1000.F6	2x6 Framing
06 1000.F10	2x10 Framing
06 1600	Sheathing
06 2000.PLY	Stained 3/4" Plywood
07 2126	Blown Insulation
07 2500.FAMF	Fluid Applied Membrane Flashing
07 2500.SPS	Sill Plate Sealer
07 4623.LS	Engineered Wood Lap Siding
07 4623.TR	Engineered Wood Trim
07 6200	Sheet Metal Flashing and Trim
07 9200	Joint Sealants
07 9200.LEF	Low Expansion Foam Sealant
07 9200.S	Sealant
07 9200.SBR	Sealant and Backer Rod
08 1613	Fiberglass Doors
08 3323	Overhead Coiling Doors
08 5200	Wood Windows
08 5400	Composite Windows
12 3600	Countertops

HARDWARE SETS SCHEDULE

QTY	ITEM	REMARKS
ENTRY		
1	CLOSER+CUSH, HOLD OPEN	
4	HINGES BY DOOR MFG	BALL-BEARING
1	PULL BAR LOOP	
1	RIM EXIT DEVICE W/ LOCK CYLINDER ENTRY TRIM	HEX DOGGING, BACK OF BAR FINISHED
	THRESHOLD BY DOOR MFG	
	WEATHERSTRIPPING BY DOOR MFG	
ENTRY-2		
1	ASTRAGAL	BRUSH TYPE
2	CLOSER+CUSH, HOLD OPEN	
8	HINGES BY DOOR MFG	BALL-BEARING
2	PULL BAR LOOP	
	THRESHOLD BY DOOR MFG	ADA COMPLIANT
2	VERTICAL ROD EXIT DEVICE W/ LOCK CYLINDER ENTRY TRIM	CONCEALED VERTICAL RODS TOP & BOTTOM, HEX DOGGING, BACK OF BAR FINISHED
	WEATHERSTRIPPING BY DOOR MFG	
ENTRY-3		
1	CLOSER+CUSH, HOLD OPEN	
4	HINGES	BALL-BEARING
1	KICK PLATE	ON PUSH SIDE
1	LOCK CYLINDER, DEADBOLT	ON EXT, BLANK INT
1	PULL BAR LOOP	
1	PUSH PLATE	
	THRESHOLD	
1	WALL STOP	
	WEATHERSTRIPPING	
OFFICE		
1	CLOSER+CUSH, HOLD OPEN	
4	HINGES	BALL-BEARING
1	LEVER LOCKSET	ENTRY OR OFFICE FUNCTION
3	SILENCERS	
1	WALL STOP	
PASSAGE		
2	BAR LOOPS	BACK-TO-BACK
1	CLOSER+CUSH, HOLD OPEN	
4	HINGES	BALL-BEARING
3	SILENCERS	
1	WALL STOP	
PRIVACY		
1	CLOSER+CUSH	
4	HINGES	BALL-BEARING
1	LEVER LOCKSET	PRIVACY OR BATH FUNCTION
3	SILENCERS	
1	WALL STOP	

ROOM FINISH SCHEDULE - MOBILITY HUB

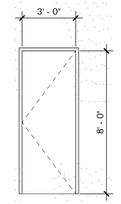
LOCATION		FLOOR FINISH	BASE	WALLS				CEILING	REMARKS
ROOM NO	ROOM NAME			WEST	NORTH	EAST	SOUTH		
M100	MOBILITY PORCH	BFC	N/A	N/A	N/A	N/A	N/A	EXP	SEE SPEC'S FOR WOOD FINISHES
M101	BIKE STORAGE	BFC	WD	PLY	PLY	PLY	PLY	EXP	SEE SPEC'S FOR WOOD FINISHES

FLOOR — BFC BROOM FINISH CONCRETE
BASE — WD WOOD
WALLS — PLY PLYWOOD
CEILINGS — EXP EXPOSED TO STRUCTURE

4 SIGN LEGEND AND SCHEDULE ARE LOCATED PROJECT MANUAL UNDER SECTION 10 1400 SIGNAGE.

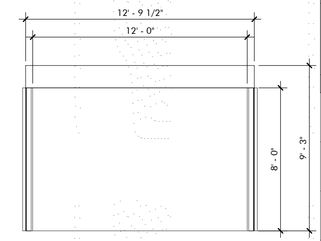
DOOR SCHEDULE - MOBILITY HUB

DOOR NO.	TYPE	HEIGHT	WIDTH	INT/EXT	FRAME	DOOR MTRL	HRDWR SET	DETAILS HEAD	DETAILS SILL	DETAILS JAMB	ADD COMMENTS
M102A	CO1	8' - 0"	12' - 0"	EXT				AM600/10	AM600/9	AM600/8	
M102B	HM1	8' - 0"	3' - 0"	EXT	HM	HM	ENTRY-3	AM600/7	AM600/6	AM600/4	



TYPE HM1

SINGLE FLUSH HOLLOW METAL DOOR IN HOLLOW METAL FRAME



TYPE C1

OHERHEAD COILING DOOR PUSH-UP OPERATION

DOOR LEGEND
MOBILITY HUB — 1/4" = 1'-0"

STATE OF ALABAMA — REGISTERED ARCHITECT — 10127 — JAMES R. ALDRIDGE
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GULF COAST CENTER
FOR ECOTOURISM & SUSTAINABILITY
MOBILITY HUB PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision
2.	JANUARY 5, 2023	ISO SET
4	MARCH 24, 2023	CONFORMANCE SET

JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET NAME
SCHEDULES

SHEET NO.
AM600

GENERAL REQUIREMENTS:

1. THESE STRUCTURAL DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. ALL CONSTRUCTION SHALL CONFORM TO THE EDITION OF THE INTERNATIONAL BUILDING CODE REFERENCED. REFERENCE TO OTHER SPECIFICATIONS OR CODES SHALL MEAN THE VERSION INDICATED IN THE INTERNATIONAL BUILDING CODE.

2. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE A PORTION OF THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH ALL OTHER DISCIPLINES DRAWINGS. ANY DISCREPANCIES OR OMISSIONS SHALL BE REPORTED TO THE ARCHITECT/ENGINEER.

3. THE CONTRACTOR SHALL VERIFY SITE CONDITIONS AND COORDINATE STRUCTURAL DIMENSIONS, ELEVATIONS AND SECTIONS WITH ARCHITECTURAL DIMENSIONS, ELEVATIONS, AND SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT/ENGINEER PRIOR TO THE FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS.

4. STRUCTURAL DRAWINGS SHOW TYPICAL AND CERTAIN SPECIFIC CONDITIONS ONLY AND SHALL APPLY FOR LIKE OR SIMILAR CONDITIONS UNLESS NOTED OTHERWISE. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS SIMILAR TO THOSE SHOWN. IF THERE IS A QUESTION REGARDING THE APPLICABILITY OF A DETAIL, CONTACT THE ARCHITECT/ENGINEER IN WRITING REQUESTING CLARIFICATION.

5. COORDINATE AND VERIFY ALL OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND/OR ELECTRICAL DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION. STRUCTURAL DRAWINGS ONLY SHOW OPENINGS RELATIVE TO THE STRUCTURE.

6. COORDINATE ALL LIMITS AND DEPTHS OF DEPRESSIONS FOR FLOOR FINISHES WITH ARCHITECTURAL DRAWINGS AND SCHEDULES. LIMITS SHOWN ON STRUCTURAL DRAWINGS ARE SCHEMATIC. COORDINATE FLOOR JOINTS WITH ARCHITECTURAL FLOOR FINISHES.

7. STRUCTURAL MEMBERS SHALL NOT BE CUT, NOTCHED, CHANGED OR MODIFIED WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.

8. DO NOT SCALE FOR DIMENSIONS NOT SHOWN ON THE DRAWINGS. SEND A WRITTEN REQUEST FOR INFORMATION TO THE ARCHITECT/ENGINEER FOR DIMENSIONS NOT PROVIDED.

9. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.

10. THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND ONLY IN ITS COMPLETED FORM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. THE ENGINEER WILL NOT ADVISE ON OR ISSUE DIRECTION RELATED TO SAFETY REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE OSHA REGULATIONS.

11. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS/ROOFS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT CONSTRUCTION LOADS DO NOT EXCEED THE DESIGN LIVE LOAD.

12. WHERE SPECIFIED, POST INSTALLED ANCHORING SYSTEMS SUCH AS MANUFACTURED BY SIMPSON OR HILTI, SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. SPECIAL ATTENTION SHALL BE GIVEN TO THE DRILLING, CLEANING, AND PREPARATION OF HOLES. WHERE ADHESIVE ANCHORS ARE SHOWN, SPECIAL ATTENTION SHALL BE GIVEN TO THE REQUIRED MIXING, APPLICATION, AND CURING TIME OF THE ADHESIVE SPECIFIED.

13. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES IN THE AREA OF CONSTRUCTION THAT MIGHT BE AFFECTED BY, OR OTHERWISE INTERFERE WITH, INSTALLATION OF NEW WORK. THIS INCLUDES THOSE THAT MIGHT BE DAMAGED BY NEW FOUNDATIONS OR OTHER WORK, AND THOSE WHOSE PRESENCE MIGHT LEAD DAMAGE TO THE NEW WORK (e.g. DIFFERENTIAL SETTLEMENT).

DESIGN CRITERIA:

1. GENERAL BUILDING CODE:
   1. INTERNATIONAL BUILDING CODE, IBC 2021 EDITION. ALL CODES BELOW ARE THE EDITION REFERENCED IN THE IBC.
2. DESIGN LOAD CRITERIA:
   1. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7.
3. CONCRETE:
   1. BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, AMERICAN CONCRETE INSTITUTE, ACI 318.
4. STRUCTURAL STEEL:
   1. SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AISC 360.
5. TIMBER:
   1. NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, AMERICAN FOREST & PAPER ASSOCIATION/AMERICAN WOOD COUNCIL, NDS.

DESIGN LOADS:

1. DESIGN DEAD LOAD IS ACTUAL WEIGHT OF THE STRUCTURE. ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.
2. LIVE LOADS (PSF):
   1. ROOF — 20
   2. STAIRS, EXIT WAYS — 100
   3. FLOOR — 100
3. LIVE LOAD REDUCTIONS HAVE BEEN APPLIED IN ACCORDANCE WITH THE BUILDING CODE WHEN PERMITTED.
4. SNOW LOADS (PSF):
   1. GROUND SNOW LOAD (Pg) — 0.0
5. WIND LOADS:
   1. DESIGN WIND SPEED (V) — 160 MPH
   2. ALLOWABLE WIND SPEED (Vasd) — 124 MPH
   3. RISK CATEGORY — II
   4. EXPOSURE CATEGORY — C
   5. PRESSURE COEFFICIENT (ENCLOSED) — +/- 0.18
   6. PRESSURE COEFFICIENT (PAR. ENCLOSED) — +/- 0.55
   7. PRESSURE COEFFICIENT (OPEN) — +/- 0.00
6. SEE DRAWINGS FOR EXTERIOR COMPONENT AND CLADDING WIND PRESSURES, EDGE STRIP WIDTH "a", AND PRESURE COEFFICIENT USED.
7. THIS STRUCTURE IS LOCATED WITHIN A WIND BORNE DEBRIS REGION AND REQUIRES IMPACT RESISTANT GLAZING.
8. SEISMIC LOADS:
   1. RISK CATEGORY — II
   2. IMPORTANCE FACTOR (Ie) — 1.0
   3. SOIL SITE CLASS — D
   4. MAPPED SPECTRAL RESPONSE ACCELERATIONS:
      1. Ss = 0.083
      2. S1 = 0.054
   5. DESIGN SPECTRAL RESPONSE ACCELERATIONS:
      1. Sds = 0.088
      2. Sd1 = 0.087
   6. SEISMIC DESIGN CATEGORY — B
   7. SEISMIC RESPONSE COEFFICIENT (Cs) — 0.059
   8. RESPONSE MODIFICATION FACTOR (R) — 1.5
   9. DESIGN BASE SHEAR — 0.059W
9. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE METHOD
10. BASIC SEISMIC-FORCE-RESISTING SYSTEM: G6 - CANTILEVERED COLUMN SYSTEMS DETAILED TO CONFORM TO THE REQUIREMENTS FOR TIMBER FRAMES.

SPECIAL INSPECTIONS:

1. SPECIAL INSPECTIONS ARE REQUIRED FOR THIS PROJECT IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE. AN APPROVED SPECIAL INSPECTOR WITH QUALIFICATIONS SATISFACTORY TO THE BUILDING OFFICIAL SHALL PERFORM THE REQUIRED SPECIAL TESTS AND INSPECTIONS.
2. OBSERVATION BY THE STRUCTURAL ENGINEER'S OFFICE DOES NOT REPLACE TESTING AND INSPECTIONS BY THE TESTING AGENCY OR THE SPECIAL INSPECTOR.
3. THE COSTS OF THE SPECIAL INSPECTOR'S SERVICES SHALL BE PAID FOR BY THE OWNER. THE COSTS OF OTHER INSPECTIONS AND TESTING SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE PAID FOR BY THE CONTRACTOR.
4. THE FOLLOWING DOCUMENTS HAVE BEEN PREPARED FOR THIS PROJECT AS A PART OF THESE CONSTRUCTION DOCUMENTS:
   1. STATEMENT OF SPECIAL INSPECTIONS
   2. SCHEDULE OF SPECIAL INSPECTIONS
5. CONTRACTOR AND SUBCONTRACTORS ENGAGED IN CONSTRUCTION OF MAIN WIND FORCE OR SEISMIC FORCE RESISTING SYSTEMS SHALL SUBMIT A STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 17 OF THE IBC.
6. THE CONTRACTOR SHALL COORDINATE THE INSPECTION SERVICES IN ACCORDANCE WITH PROGRESS OF THE WORK. THE CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE TO THE INSPECTOR TO ALLOW PROPER SCHEDULING OF PERSONNEL.
7. ALL REPORTS AND SHOP CERTIFICATIONS OF SPECIAL INSPECTIONS TO BE PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP SHALL BE SUBMITTED TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING THESE REPORTS TO THE SPECIAL INSPECTOR, THE ARCHITECT, AND THE STRUCTURAL ENGINEER IN A TIMELY MANNER.
8. THE SPECIAL INSPECTOR SHALL PREPARE THE REQUIRED QUALITY ASSURANCE PLANS AND SUBMIT THE PLAN TO THE BUILDING OFFICIAL AND TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
9. ALL SPECIAL INSPECTION REPORTS SHALL BE PREPARED BY AND BEAR THE SEAL OF THE SPECIAL INSPECTOR AND ALL REPORTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND TO THE STRUCTURAL ENGINEER. THE FREQUENCY OF REPORTS SHALL BE AS AGREED UPON BY THE BUILDING OFFICIAL.
10. REPORTS SHALL INDICATE THAT THE WORK WAS PERFORMED AND CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALL NONCONFORMING ITEMS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN IF UNCORRECTED, TO THE BUILDING OFFICIAL, ARCHITECT, AND THE STRUCTURAL ENGINEER.
11. THE SPECIAL INSPECTOR, UPON COMPLETION OF THE WORK AND PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, SHALL SUBMIT A SIGNED AND SEALED FINAL REPORT DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES IN THE PRIOR REPORTS.

SHOP DRAWINGS AND SUBMITTALS:

1. THE USE OR REPRODUCTION OF THE CONTRACT DRAWINGS BY ANY CONTRACTOR, SUBCONTRACTOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS IS NOT PERMITTED.
2. SHOP DRAWINGS SHALL DETAIL ALL CONDITIONS IN ACCORDANCE WITH SPECIFIED STANDARDS AND THE SPECIFIC REQUIREMENTS OF THIS PROJECT AS INDICATED ON THE DRAWINGS.
3. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS SPECIFIED IN THE CONTRACT DOCUMENTS. ALL SHOP DRAWINGS MUST BE REVIEWED AND "APPROVED" BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER. REVIEW OF SHOP DRAWINGS AND OTHER SUBMITTALS BY THE STRUCTURAL ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITIES.
4. SHOP DRAWINGS AND CALCULATIONS SUBMITTED AS PART OF A DELEGATED DESIGN SHALL BE SIGNED AND SEALED BY A LICENSED ENGINEER IN THE STATE OF THE PROJECT.
5. HARDCOPY SHOP DRAWING SUBMITTALS: SUBMIT ALL SHOP DRAWINGS ON THREE PRINTS ONLY. ONE PRINT WILL BE RETURNED TO THE CONTRACTOR. ALL PRINTS REQUIRED BY THE CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE AFTER APPROVED SHOP DRAWINGS ARE RETURNED. IF ADDITIONAL PRINTS ARE SUBMITTED, THEY WILL BE RETURNED UNMARKED.
6. ELECTRONIC SHOP DRAWING SUBMITTALS: SUBMIT ALL ELECTRONIC SHOP DRAWINGS IN PDF FORMAT. REVIEWED SHOP DRAWINGS WILL BE RETURNED IN PDF FORMAT. ALL PRINTS REQUIRED BY THE CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MADE AFTER APPROVED SHOP DRAWINGS ARE RETURNED.
7. RESUBMITTED SHOP DRAWINGS: RESUBMITTED SHOP DRAWINGS SHALL HAVE ALL CHANGES SINCE THE PREVIOUS SUBMISSION IDENTIFIED BY CLOUDING OR OTHER CLEAR COMMUNICATION. RE-REVIEWED SHOP DRAWINGS WILL ONLY BE REVIEWED FOR IDENTIFIED CHANGES.
8. SHOP DRAWINGS: SEE THE RELATED MATERIAL SECTION FOR THE REQUIRED SUBMITTALS AND SHOP DRAWINGS.

SOILS, SLABS, WALLS, AND SHALLOW FOUNDATIONS:

3. THE FOUNDATION AND SLAB ON GRADE DESIGN IS BASED ON CRITERIA ESTABLISHED IN THE GEOTECHNICAL REPORT BY THOMPSON ENGINEERING TITLED "GULF COAST CENTER FOR ECOTOURISM AND SUSTAINABILITY PROJECT, PROJECT NO.20-1101-0049, DATED MARCH 22, 2021". THE CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL REQUIREMENTS AND RECOMMENDATIONS.
4. MAX ALLOWABLE BEARING PER GEOTECHNICAL REPORT (PSF):
   1. UNLESS NOTED OTHERWISE — 2000
5. ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE THEIR COMPLIANCE WITH THE PRESSURES NOTED, THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS, AND THE GEOTECHNICAL REPORT.
6. ALL FOOTING ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.
7. COMPACTED FILL SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT.
8. WHEN EXCAVATIONS APPROACH THE GROUND WATER TABLE, THE WATER LEVEL SHALL BE LOWERED BY AN ACCEPTABLE DEWATERING SYSTEM SO THAT THE WATER LEVEL IS MAINTAINED CONTINUOUSLY A MINIMUM OF 2' BELOW THE EXCAVATION DURING CONSTRUCTION.
9. CONTRACTOR SHALL FOLLOW THE SITE WORK AND SUBGRADE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT.
10. EARTH SUPPORTED SLAB:
    1. SUBGRADE MODULUS (SHORT/LONG) — 100/35 PCI
11. PROVIDE 4" COMPACTED GRANULAR FILL BENEATH ALL EARTH SUPPORTED SLABS. PROVIDE A 10 MIL MINIMUM VAPOR BARRIER BETWEEN BOTTOM OF SLAB AND TOP OF GRANULAR FILL.
12. PROVIDE ½" P.E.J FILLER AROUND PERIMETER OF SLABS WHERE THEY ABUT VERTICAL SURFACES AND AT COLUMN ISOLATION JOINTS AS DETAILED.
13. SEE PROJECT SPECIFICATIONS FOR FLOOR FLATNESS AND FLOOR LEVELNESS REQUIREMENTS.
14. SIDES OF FOUNDATIONS SHALL BE FORMED UNLESS CONDITIONS PERMIT EARTH FORMING.
15. HORIZONTAL BARS IN FOOTINGS AND STEM WALLS SHALL BE CONTINUOUS. PROVIDE CORNER BARS AT ALL INTERSECTIONS UNLESS NOTED OTHERWISE.
16. SUPPORT BOTTOM REINFORCING IN FOOTINGS WITH CONCRETE BRICKS OR PLASTIC CHAIRS SPACED A MAXIMUM OF 3'-0" EACH WAY. SUPPORTS SHALL BE POSITIONED TO PROVIDE A MINIMUM OF 3" CLEAR TO BOTTOM OF LOWEST REINFORCING BAR.
17. CONSTRUCTION JOINTS IN CONTINUOUS FOOTINGS SHALL BE FORMED VERTICALLY WITH A CLASS B LAP IN HORIZONTAL REINFORCING.
18. POUR A 2" MUD MAT OF LEAN CONCRETE IN THE BOTTOM OF A FOOTING EXCAVATION THAT WILL BE EXPOSED TO RAIN.
19. ALL REINFORCING SHALL BE TIED IN PLACE PRIOR TO PLACING CONCRETE.
20. FOUNDATION PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER.
21. WHERE FOOTING STEPS ARE REQUIRED, THEY SHALL BE NO STEEPER THAN ONE VERTICAL TO TWO HORIZONTAL.
22. WHERE GRAVITY PLUMBING LINES OCCUR BELOW TOP OF WALL FOOTING, STEP FOOTING DOWN TO PROVIDE CLEARANCE. COORDINATE WITH PLUMBING DRAWINGS FOR LOCATIONS, SIZES, AND INVERTS.
23. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS AND FROM PONDING ON PREPARED SUBGRADES AND SLABS. DO NOT USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES.
24. DEWATER EXCAVATIONS AND REMOVE ANY WET MATERIAL PRIOR TO THE PLACING OF CONCRETE.
25. IMMEDIATELY NOTIFY THE OWNERS REPRESENTATIVE AND ENGINEER IF UNUSUAL SOIL CONDITIONS ARE FOUND.

CONCRETE:

1. ALL CONCRETING OPERATIONS SHALL COMPLY WITH ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
2. DETAIL CONCRETE REINFORCEMENT AND ACCESSORIES IN ACCORDANCE WITH ACI 315 "DETAILING MANUAL".
3. THE CONTRACTOR SHALL SUBMIT FOR THE STRUCTURAL ENGINEER'S REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS.
   1. CONCRETE MIX DESIGNS (40% FLY ASH)
   2. CONCRETE REINFORCING (100% RECYCLED CONTENT)
4. CONTRACTOR SHALL NOT FABRICATE OR PLACE REINFORCEMENT UNTIL REINFORCEMENT SHOP DRAWINGS, REVIEWED AND STAMPED BY THE STRUCTURAL ENGINEER, ARE RECEIVED ON THE JOB SITE. SHOP DRAWINGS SHALL CONSIST OF BOTH "CUT" AND PLACEMENT SHEETS. PLACEMENT SHEETS SHALL CONTAIN ALL INFORMATION NECESSARY TO POSITION ALL REINFORCING STEEL IN THE FIELD WITHOUT HAVING TO REFER TO THE STRUCTURAL DRAWINGS. ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL NOT BE COPIED OR REPRODUCED FOR USE AS SHOP DRAWINGS.
5. A QUALITY ASSURANCE PROGRAM CONSISTING OF SUBMITTALS, TESTING, AND INSPECTIONS SHALL BE USED TO VERIFY THAT CONSTRUCTION IS IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. MATERIAL QUALITY, HANDLING, STORAGE, PREPARATION, PLACEMENT, AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE CODE.
6. THE PROPOSED MATERIALS AND MIX DESIGN SHALL BE FULLY DOCUMENTED AND REVIEWED BY THE OWNER'S TESTING LABORATORY. RESPONSIBILITY FOR OBTAINING THE REQUIRED CONCRETE DESIGN STRENGTH IS THE CONTRACTOR'S.
7. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 AND CONTAIN 100% RECYCLED CONTENT.
8. WELDED WIRE REINFORCEMENT (WWR) SHALL CONFORM TO ASTM A1064 AND CONTAIN 100% RECYCLED CONTENT. MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2" OR 8". WWR SHALL BE SUPPLIED IN FLAT SHEETS (NOT ROLLS).
9. SEE CONCRETE MIX DESIGN SCHEDULE FOR REQUIRED CONCRETE STRENGTH AND PROPERTIES. CONCRETE DESIGN SHALL INCLUDE 40% FLY ASH.
10. USE OF CALCIUM CHLORIDE, CHLORIDE IONS, OR OTHER SALTS IN CONCRETE IS NOT PERMITTED.
11. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4 INCH CHAMFER.
12. CONSTRUCTION JOINTS IN A HORIZONTAL PLANE ARE NOT PERMITTED.
13. ANY STOP IN CONCRETE WORK MUST BE MADE WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS. MAKE ALL REINFORCING CONTINUOUS THROUGH CONSTRUCTION JOINTS. CONTROL JOINTS FOR CONCRETE SLABS ON GRADE SHALL BE AS DETAILED AND LOCATED AS SHOWN IN THE CONSTRUCTION DOCUMENTS.
14. EARTH SUPPORTED SLABS: 4" THICK, REINFORCED WITH 4X4 W2.9/W2.9 WWR AT MID-DEPTH OF SLAB, UNLESS NOTED OTHERWISE.
15. COAT ALL SLABS WITH CURING COMPOUND WITHIN 24 HOURS OF PLACING. PRODUCT USED SHALL CONFORM WITH ASTM C309, AND SHALL BE COMPATIBLE WITH ADHERED FINISHES. A DISSIPATING FORMULATION SHALL BE USED AT CEMENTITIOUS FINISHES.
16. SLAB JOINTS SHALL BE FILLED WITH AN APPROVED MATERIAL. THIS SHOULD TAKE PLACE AS LATE AS POSSIBLE, PREFERABLY 4 TO 6 WEEKS AFTER THE SLAB HAS BEEN CAST. PRIOR TO FILLING, REMOVE ALL DEBRIS FROM THE SLAB JOINTS, THEN FILL IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AS FOLLOWS: 6" SLABS FILL WITH EPOXY RESIN, OTHER SLABS FILL WITH FIELD MOLDED OR ELECTROMETRIC SEALANT.
17. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF DEPRESSED SLABS AND DRAINS. SLOPE SLAB TO DRAINS WHERE SHOWN.
18. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND VENDOR DRAWINGS FOR SLEEVES, EMBEDDED ITEMS, ACCESSORIES, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PLACING ALL SLEEVES, EMBEDDED ITEMS, ACCESSORIES, ETC.
19. SEE CONCRETE COVER SCHEDULE FOR REQUIRED STEEL COVERAGE.
20. REINFORCING BAR PLACING ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS. WHERE CONCRETE IS SAND-BLASTED OR BUSH-HAMMERED, PROVIDE ACCESSORIES OF STAINLESS STEEL.
21. ALL SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED OTHERWISE.
22. TIE ALL REINFORCING STEEL AND EMBEDMENT'S SECURELY IN PLACE PRIOR TO PLACING CONCRETE. PROVIDE SUFFICIENT SUPPORTS TO MAINTAIN POSITION OF REINFORCEMENT WITHIN SPECIFIED TOLERANCES DURING ALL CONSTRUCTION ACTIVITIES. "STICKING" DOWELS INTO WET CONCRETE IS NOT PERMITTED.
23. ADDITIONAL REINFORCING AND THE QUANTITY OF REINFORCING OCCURRING AT OPENINGS SHALL BE PLACED EQUALLY EACH SIDE OF OPENINGS AS DETAILED.
24. HOOKS IN REINFORCING ARE IN ADDITION TO LENGTH SHOWN.
25. FIELD BENDING OF BARS LARGER THAN #4 IS NOT PERMITTED. ALL BENDS FOR BARS LARGER THAN #4 SHALL BE SHOP MADE COLD BENDS.

STRUCTURAL STEEL:

1. FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
2. THE CONTRACTOR SHALL SUBMIT FOR THE STRUCTURAL ENGINEER'S REVIEW SHOP DRAWINGS WHICH INCLUDE ERECTION DRAWINGS, MATERIALS, CONNECTIONS, FABRICATION, AND ALL DETAILS FOR THE FOLLOWING ITEMS.
   1. STRUCTURAL STEEL
3. STRUCTURAL STEEL:
   1. ASTM A36 FOR ALL STEEL
4. HOLLOW STRUCTURAL SECTIONS: ASTM A500, GRADE C.
5. STEEL PIPE: ASTM A53, TYPE E OR S, GRADE B.
6. WELDED CONNECTIONS: E70XX ELECTRODES, MINIMUM SIZE FILLET WELD 3/16". ALL SHOP AND FIELD WELDING SHALL BE BY A CERTIFIED WELDER AND IN ACCORDANCE WITH AMERICAN WELDING SOCIETY D1.1 SPECIFICATION.
7. HEADED ANCHOR RODS: ASTM F1554, GRADE 55, WELDABLE ANCHOR AND HEAVY HEX NUT, UNLESS INDICATED OTHERWISE.
8. ENGINEER SHALL BE CONTACTED FOR APPROVAL OF ANY FIELD MODIFICATIONS OR REPAIRS OF ANCHOR BOLTS OR RODS, AND COLUMN BASE PLATES.
9. BOLTED CONNECTIONS: BEARING TYPE A325-N IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". USE SNUG TIGHT BEARING CONNECTIONS FOR ALL BOLTED CONNECTIONS.
10. ALL EXTERIOR ELEMENTS AND THOSE ELEMENTS NOTED TO BE GALVANIZED SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AFTER SANDBLAST CLEANING PER SSPC-SP10. USE ASTM A325 BOLTS HOT DIPPED GALVANIZED WITH GALVANIZED HARDENED WASHERS AND GALVANIZED HEAVY HEX NUTS FOR BOLTING OF GALVANIZED ITEMS.
11. ALL STEEL BELOW GRADE SHALL HAVE A MINIMUM 3" CONCRETE COVER.

MASONRY:

1. MASONRY CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE MASONRY SOCIETY AND THE AMERICAN CONCRETE INSTITUTE.
2. ALL MASONRY SHALL BE RUNNING BOND, UNLESS NOTED OTHERWISE.
3. THE CONTRACTOR SHALL SUBMIT FOR THE STRUCTURAL ENGINEER'S REVIEW THE BELOW LISTED ITEMS.
   1. MORTAR MATERIALS CERTIFICATES AND MIX DESIGN
   2. GROUT MATERIALS CERTIFICATES AND MIX DESIGN
4. THE CONTRACTOR SHALL SUBMIT FOR THE STRUCTURAL ENGINEER'S REVIEW SHOP DRAWINGS SHOWING ALL FABRICATION DIMENSIONS AND LOCATIONS FOR PLACING REINFORCING STEEL AND ACCESSORIES. PROVIDE CONCRETE MASONRY UNITS WITH A MINIMUM COMPRESSIVE STRENGTH OF f'm = 2500 PSI, AS DETERMINED IN ACCORDANCE WITH ASTM C140.
5. PROVIDE HOLLOW, LOAD BEARING CONCRETE MASONRY UNITS CONFORMING TO ASTM C90.
6. PROVIDE TYPE "S" MORTAR IN ACCORDANCE WITH ASTM C270, UNLESS NOTED OTHERWISE.
7. COURSE MASONRY GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8". MINIMUM COMPRESSIVE STRENGTH SHALL BE 2500 PSI AT 28 DAYS. STOP GROUT 2" SHORT OF TOP BED JOINT TO CREATE A SHEAR KEY WITH THE NEXT LIFT.
8. MASONRY GROUT SHALL BE MECHANICALLY CONSOLIDATED AT THE TIME OF PLACEMENT AND THEN RECONSOLIDATED WITHIN 45 MINUTES.
9. DEFORMED REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60.
10. ALL REINFORCING IN MASONRY WALLS SHALL BE FULLY ENCLOSED WITH PROPERLY CONSOLIDATED GROUT.
11. WHEN LAYING BLOCK MORE THAN FIVE FEET FOUR INCHES VERTICAL PRIOR TO GROUTING (HIGH LIFT), PROVIDE A 4"X4" CLEAN OUT OPENING AT THE BOTTOM COURSE OF EACH LIFT AT EACH REINFORCED CELL. CELLS SHALL BE THOROUGHLY CLEANED PRIOR TO GROUTING. SEAL OPENING DURING GROUTING.
12. PROVIDE 9 GA. GALVANIZED LADDER TYPE HORIZONTAL JOINT REINFORCEMENT COMPLYING WITH ASTM A82 OR ASTM A951 AT 16" OC VERTICALLY FOR FULL WALL HEIGHT. LAP 6" MINIMUM AND PROVIDE PREFAB CORNERS AND TEES. SEE ARCHITECTURAL FOR BRICK TIES FABRICATED INTEGRAL WITH JOINT REINFORCING, IF REQUIRED.
13. ADEQUATE TEMPORARY BRACING OF CMU WALLS MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE TO PROVIDE ADEQUATE LATERAL STABILITY TO THE WALL.

WOOD FRAMING:

1. WOOD CONSTRUCTION SHALL COMPLY WITH THE INTERNATIONAL BUILDING CODE AND THE AMERICAN WOOD COUNCIL REQUIREMENTS.
2. A QUALITY ASSURANCE PROGRAM CONSISTING OF SUBMITTALS AND INSPECTIONS SHALL BE USED TO VERIFY THAT THE CONSTRUCTED WOOD IS IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. MATERIAL QUALITY, HANDLING, STORAGE, PREPARATION, PLACEMENT, AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE CODE.
3. WOOD FRAMING MEMBERS: VISUALLY GRADED DIMENSIONED #2 SOUTHERN PINE.
4. TRUSSES SPANNING GREATER THAN TWENTY-FOUR FEET: VISUALLY GRADED DIMENSIONED #1 SOUTHERN PINE.
5. SILL PLATES, SOLE PLATES AND TOP PLATES SHALL BE OF THE SAME SIZE AS THE STUDS TO WHICH THEY ARE CONNECTED. GRADE SHALL BE AS SPECIFIED ABOVE.
6. ALL PRESSURE TREATED LUMBER SHALL BE PRESSURE TREATED WITH ALKALINE COPPER QUATERNARY (ACQ) OR MICRONIZED COPPER AZOLE (MCA) IN ACCORDANCE WITH AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) STANDARD.
7. PRESERVATIVE RETENTION:
   1. 0.60 LBS/FT3 PERMANENT WOOD FOUNDATIONS
   2. 0.40 LBS/FT3 GROUND CONTACT
   3. 0.25 LBS/FT3 ABOVE GROUND
8. ALL FASTENERS, NAILS AND OTHER METAL PRODUCTS USED WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIP GALVANIZED, STAINLESS STEEL, OR AS RECOMMENDED BY THE PRESERVATIVE MANUFACTURER. PRESSURE TREATED LUMBER SHALL NOT BE IN DIRECT CONTACT WITH ALUMINUM PRODUCTS.
9. DIMENSIONED LUMBER FLOOR JOISTS AND BEAMS SHALL BE LATERALLY BRACED AT ENDS, POINTS OF BEARING AND MAXIMUM INTERVALS OF 8'-0" BY SOLID BLOCKING, BRIDGING, OR TRANSVERSE BEAMS IN ORDER TO PREVENT ROTATION.
10. ALL MANUFACTURED WOOD FRAMING CONNECTORS TO BE BY SIMPSON STRONG-TIE COMPANY, INC. OR APPROVED EQUAL. ALL CONNECTORS SHALL BE FASTENED TO FRAMING MEMBERS FILLING THE REQUIRED NUMBER OF CONNECTOR HOLES WITH THE TYPE AND SIZE FASTENERS SPECIFIED BY THE MANUFACTURER.
11. FLOOR SHEATHING: 3/4" TONGUE & GROOVE PLYWOOD OR OSB, APA SINGLE FLOOR RATED SHEATHING, EXPOSURE 1. PANEL IDENTIFICATION INDEX 48/24. LONG DIMENSION OF PANEL PERPENDICULAR TO SUPPORTS WITH JOINTS STAGGERED.
12. FLOOR SHEATHING NAILING, UNLESS NOTED: 10D HOT-DIPPED GALVANIZED COMMON NAILS AT 6 INCHES AT DIAPHRAGM BOUNDARIES, 8 INCHES AT PANEL ENDS AND INTERMEDIATE SUPPORTS.
13. ROOF SHEATHING (TYPICAL): 15/32" PLYWOOD OR OSB, APA STRUCTURAL I RATED SHEATHING, EXPOSURE I. PANEL IDENTIFICATION INDEX 32/16. LONG DIMENSION OF PANEL PERPENDICULAR TO TONGUE AND GROOVE WITH JOINTS STAGGERED.
14. ROOF SHEATHING (WELCOME HUB): 23/32" PLYWOOD OR OSB, APA STRUCTURAL I RATED SHEATHING, EXPOSURE I. PANEL IDENTIFICATION INDEX 32/16. LONG DIMENSION OF PANEL PERPENDICULAR TO TONGUE AND GROOVE WITH JOINTS STAGGERED.
15. ROOF SHEATHING NAILING, UNLESS NOTED: 16D HOT-DIPPED GALVANIZED COMMON NAILS AT 6 INCHES AT DIAPHRAGM BOUNDARIES, 6 INCHES AT ALL FOUR PANEL EDGES AND 12 INCHES AT INTERMEDIATE SUPPORTS.
16. TONGUE AND GROOVE ROOF DECKING: PRESSURE TREATED 2X6 T&G SOUTHERN PINE NO. 1 GRADE SOLID TIMBER DECKING WITH TONGUE INSTALLED UP-SLOPE. TWO SPAN MINIMUM WITH END JOINT SPACING A MINIMUM OF FOUR FEET.
17. TONGUE AND GROOVE ROOF DECKING NAILING: ATTACH AT EACH SUPPORT WITH THREE 16D COMMON NAILS, ONE THROUGH THE TONGUE AND TWO FACE NAILED.
18. SHEAR WALL SHEATHING: 15/32" PLYWOOD OR OSB, APA STRUCTURAL I RATED SHEATHING, EXPOSURE 1. PANEL IDENTIFICATION INDEX 32/16. LONG DIMENSION OF PANEL PARALLEL OR PERPENDICULAR TO STUDS. ALL PLYWOOD EDGES BACKED WITH TWO-INCH NOMINAL OR WIDER FRAMING.
19. SHEAR WALL SHEATHING NAILING, UNLESS NOTED: 10D HOT-DIPPED GALVANIZED COMMON NAILS AT 4 INCHES AT SHEAR WALL BOUNDARIES, 4 INCHES AT ALL FOUR PANEL EDGES AND 12 INCHES AT INTERMEDIATE MEMBERS.
20. GLUED LAMINATED TIMBER SHALL BE SOUTHERN YELLOW PINE, UNLESS NOTED OTHERWISE.
21. GLUED LAMINATED TIMBER SHALL CONFORM TO THE REQUIREMENTS OF THE "STRUCTURAL GLUED LAMINATED TIMBER," AMERICAN INSTITUTE OF TIMBER CONSTRUCTION, AITC A190.1 AND "STANDARD APPEARANCE GRADES FOR STRUCTURAL GLUED LAMINATED TIMBER," AITC 110, ARCHITECTURAL APPEARANCE.
22. USE WET-USE (WATERPROOF) ADHESIVES FOR ALL GLUED LAMINATED TIMBER.
23. ALL PRESSURE TREATED GLUED LAMINATED TIMBER FRAMING SHALL BE PRESSURE TREATED WITH PENTACHLOROPHENOL IN MINERAL SPIRITS IN ACCORDANCE WITH AITC 109 "STANDARD FOR PRESERVATIVE TREATMENT OF STRUCTURAL GLUED-LAMINATED TIMBER." ALL TREATED GLUED LAMINATED TIMBER SHALL BE SEALED WITH 2 COATS OF URETHANE FURNISHED BY THE GLUED LAMINATED SUPPLIER AND APPLIED BY THE CONTRACTOR.
24. GLUE LAMINATED TIMBER STRESS GRADES SHALL PROVIDE THE FOLLOWING MINIMUM PROPERTIES (PSI) FOR BENDING ABOUT THE X-X AXIS:

LOAD	DRY USE	WET USE
BENDING (Fb)	2400	1900
TENSION (Ft)	1100	880
COMP PARALLEL TO GRAIN (Fc PAR)	1350	985
COMP PERPEND TO GRAIN (Fc PER)	560	295
SHEAR PARALLEL TO GRAIN (Fv)	200	175
MODULUS OF ELASTICITY (E)	1,700,000	1,400,000

SHOP FABRICATED WOOD TRUSSES:

1. DESIGN, FABRICATE, AND ERECT SHOP FABRICATED WOOD TRUSSES IN ACCORDANCE WITH THE "DESIGN SPECIFICATION FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES" OF THE TRUSS PLATE INSTITUTE.
2. THE CONTRACTOR SHALL SUBMIT FOR THE STRUCTURAL ENGINEER'S RECORD ERECTION PLANS, TRUSS CALCULATIONS, AND CONNECTION CALCULATIONS, AS DESIGNED BY THE CONTRACTOR. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
3. A QUALITY ASSURANCE PROGRAM CONSISTING OF SUBMITTALS AND INSPECTIONS SHALL BE USED TO VERIFY THAT THE CONSTRUCTED WOOD IS IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. MATERIAL QUALITY, HANDLING, STORAGE, PREPARATION, PLACEMENT, AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE CODE.
4. THE WOOD TRUSS SYSTEM ENGINEER SHALL DESIGN THE COMPLETE TRUSS SYSTEM. THE TRUSS SYSTEM IS AN ASSEMBLAGE OF TRUSSES AND TRUSS GIRDERS, TOGETHER WITH ALL BRACING, CONNECTIONS AND OTHER STRUCTURAL ELEMENTS AND ALL SPACING AND LOCATION CRITERIA, THAT, IN COMBINATION, FUNCTION TO SUPPORT THE LOADS APPLICABLE TO THE STRUCTURE.
5. TRUSS MANUFACTURER SHALL DESIGN FOR THE FOLLOWING SUPERIMPOSED LOADS (PSF):
   1. ROOF:
   2. TOP CHORD DEAD LOAD — 10
   3. BOTTOM CHORD DEAD LOAD — 10
   4. BOTTOM CHORD LIVE LOAD — 0
6. SEE "DESIGN LOADS" SECTION OF THE GENERAL NOTES FOR LIVE LOADS APPLIED TO THE TOP CHORD.
7. DESIGN ROOF TRUSSES TO RESIST THE WIND UPLIFT LOADING IN ACCORDANCE WITH THE BUILDING CODE.
8. IN ADDITION TO THE ABOVE LOADS, WOOD TRUSSES SHALL BE DESIGNED FOR CONCENTRATED LOADS HUNG FROM OR SUPPORTED ON TRUSSES. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR LOADING INFORMATION AND LOCATION. LOADING AS REQUIRED BY OTHER SUBCONTRACTORS, SUCH AS FIRE PROTECTION, SHALL BE COORDINATED BY THE CONTRACTOR.
9. ALL MANUFACTURED TRUSS HOLD-DOWNS TO BE BY SIMPSON STRONG-TIE COMPANY, INC. OR APPROVED EQUAL. ALL CONNECTORS SHALL BE FASTENED TO FRAMING MEMBERS FILLING THE REQUIRED NUMBER OF CONNECTOR HOLES WITH THE TYPE AND SIZE FASTENERS SPECIFIED BY THE MANUFACTURER.
10. ALL TEMPORARY AND PERMANENT BRACING MEMBERS AND CONNECTIONS REQUIRED FOR WOOD TRUSSES SHALL BE DETAILED ON THE WOOD TRUSS MANUFACTURER'S ERECTION PLANS.
11. TEMPORARY BRACING SHALL NOT IMPOSE ANY FORCE ON THE SUPPORTING STRUCTURE. PERMANENT BRACING FORCES SHALL BE TRANSFERRED TO THE ROOF OR FLOOR DIAPHRAGM BY THE BRACING DESIGN PROVIDED BY THE TRUSS MANUFACTURER.

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GULF SHORES, ALABAMA

No.	Date	Revision	Initials
1	08/30/2022	Rev. 1 - City Comments	

JOB
20-1101-0049

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET NAME
GENERAL NOTES

SHEET NO.
SM001

STRUCTURAL TYPICAL ABBREVIATIONS

AB	ANCHOR BOLT	VERT.	VERTICAL
AFF	ABOVE FINISH FLOOR	JST.	JOIST
BOT.	BOTTOM	JT.	JOINT
B.O. BM	BOTTOM OF BEAM	JG.	JOIST GIRDER
B.O. COL	BOTTOM OF COLUMN	K	KIPS (1000 LBS)
B.O. CONC	BOTTOM OF CONCRETE	KLF	KIPS PER LINEAR FOOT
B.O. FTG	BOTTOM OF FOOTING	KSP	KIPS PER SQUARE FOOT
B.O. FTG	BOTTOM OF FOOTING	KSP	KIPS PER SQUARE FOOT
B.O. JST	BOTTOM OF JOIST	KSI	KIPS PER SQUARE FOOT
B.O. SLAB	BOTTOM OF SLAB	LB/S	POUND/POUNDS
B.O. STL	BOTTOM OF STEEL	LLH	LONG LEG HORIZONTAL
B.O. WALL	BOTTOM OF WALL	LLV	LONG LEG VERTICAL
BFF	BELOW FINISH FLOOR	LIN.	LINEAR
BRG.	BEARING	LIN. FT.	LINEAR FOOT
BLK.	BLOCK	MISC.	MISCELLANEOUS
BM.	BEAM	NS	NEAR SIDE
BP	BASE PLATE	NTS	NOT TO SCALE
BRIDG.	BRIDGING	NOM.	NOMINAL
BRG.	BEARING	O.C.	ON CENTER
C/C	CENTER TO CENTER	O.F.	OUTSIDE FACE
CL	CENTERLINE	OPNG.	OPENING
CONN.	CONNECTION	OPP.	OPPOSITE
CMU	CONCRETE MASONRY UNIT	PL	PLATE
CONST. JT.	CONSTRUCTION JOINT	PAF	POWDER ACTUATED FASTENERS
CONT.	CONTINUOUS	PLF	POUNDS PER LINERA FOOT
CJ	CONTROL JOINT	PCF	POUNDS PER CUBIC FOOT
CONC.	CONCRETE	PCI	POUNDS PER CUBIC INCH
COL.	COLUMN	WP	WORK POINT
CTR.	CENTER	REV.	REVISION
DBL.	DOUBLE	REINF.	REINFORCING
DBA	DEFORMED ANCHOR BAR	REQ'D.	REQUIRED
DBE	DECK BEARING ELEVATIONS	SIM.	SIMILAR
EJ	EXPANSION JOINT	SCHED.	SCHEDULE
ELEV.	ELEVATION	SLH	SHORT LEG HORIZONTAL
EMBED.	EMBEDMENT	SLV.	SHORT LEG VERTICAL
EXIST. GR.	EXISTING GRADE	SJ	SAW JOINT
EXIST.	EXISTING	SPA.	SPACING
EOS	EDGE OF SLAB	SF	SQUARE FOOT
FF	FINISH FLOOR	STD.	STANDARD
F.O. BM.	FACE OF BEAM	STIFF.	STIFFENER
F.O. COL.	FACE OF COLUMN	STRUCT.	STRUCTURAL
F.O. CONC.	FACE OF CONCRETE	TBR	TO BE REMOVED
F.O. FTG.	FACE OF FOOTING	T&B	TOP AND BOTTOM
F.O. JST.	FACE OF JOIST	T.O. BM	TOP OF BEAM
F.O. SLAB	FACE OF SLAB	T.O. COL	TOP OF COLUMN
F.O. STL.	FACE OF STEEL	T.O. CONC	TOP OF CONCRETE
F.O. WALL	FACE OF WALL	T.O. FTG	TOP OF FOOTING
FLR.	FLOOR	T.O. JST	TOP OF JOIST
FDN.	FOUNDATION	T.O. SLAB	TOP OF SLAB
FTG.	FOOTING	T.O. STL	TOP OF STEEL
HS	HEADED STUD	T.O. WALL	TOP OF WALL
HK.	HOOK	THK.	THICK
HORIZ.	HORIZONTAL	THRU	THROUGH
TYP	TYPICAL	W/O	WITHOUT
UNO	UNLESS NOTED OTHERWISE	WWR	WELDED WIRE REINFORCEMENT

CAST-IN-PLACE CONCRETE MIX SCHEDULE

APPLICATION	EXPOSURE CLASS	STRENGTH (PSI)	TYPE	W/C RATIO	SLUMP	AIR CONTENT	MAX AGGREGATE	MAX CONCRETE WEIGHT (PCF)	FIBER
SLAB ON GRADE / PEDESTALS	F0, S0, P0, CO	4,000	NORMAL WT.	0.45 (40% ASH)	3" TO 5"	---	3/4"	---	NO
SHALLOW FOUNDATIONS	F0, S0, P0, CO	3,000	NORMAL WT.	0.50 (40% ASH)	4" TO 6"	---	3/4"	---	NO

1. EXPOSURE CLASS FOR FREEZE/THAW, SULFATES, PERMEABILITY, AND CORROSION ARE PER ACI 318, SECTION 4.2.
2. WHERE NO W/C RATIO, SLUMP, OR AIR CONTENT IS NOTED, VALUES SHALL BE AS RECOMMENDED BY THE READY MIX SUPPLIERS ENGINEER.
3. WHERE AIR ENTRAINMENT IS NOT REQUIRED PER THE ABOVE TABLE, THE CONTRACTOR, INSTALLER, OR SUPPLIER MAY CHOOSE TO INCLUDE AIR ENTRAINMENT TO IMPROVE PLACEMENT AND FINISHING CHARACTERISTICS. AIR ENTRAINMENT IS NOT PERMITTED IN NORMAL WEIGHT CONCRETE TO RECEIVE A HARD TROWEL FINISH, AND ENTRAPPED AIR SHALL NOT EXCEED 3%. AIR ENTRIANMENT IN LIGHT WEIGHT CONCRETE SLABS IS REQUIRED TO MEET FIRE RATING REQUIREMENTS. SLABS SHALL BE PROPERLY FINISHED TO AVOID SURFACE IMPERFECTIONS SUCH AS BLISTERING OR DELAMINATION.
4. CEMENT AND AGGREGATES SHALL BE FROM A SINGLE SOURCE.

CIP CONCRETE CLEAR COVER SCHEDULE

LOCATION	COVER mm (IN)
CONCRETE CAST AGAINST & EXPOSED TO EARTH	76 (3")
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 TO #18 BARS	51 (2")
#5, W31, AND SMALLER BARS	38 (1 1/2")
CONCRETE NOT EXPOSED TO EARTH OR WEATHER:	
SLABS, WALLS, AND JOISTS	
#14 AND #18 BARS	38 (1 1/2")
#11 AND SMALLER BARS	19 (3/4")
BEAMS AND COLUMNS	38 (1 1/2")
FOOTINGS, GRADE BEAMS, AND PILE CAPS	51 (2") TOP 76 (3") BOTT. & SIDES
DRILLED PIERS AND BELLED PIERS	76 (3") CLEAR OF TIES
PEDESTALS AND COLUMNS	38 (1 1/2") CLEAR OF TIES
BASEMENT WALLS	51 (2") EXT. & 19 (3/4") INT.
RETAINING WALLS	51 (2") BOTH FACES
SUMP AND PIT WALLS	51 (2") BOTH FACES
ELEVATED SLABS NOT EXPOSED TO WEATHER	19 (3/4") TOP & BOTT.
POST TENSIONED SLABS EXPOSED TO WEATHER	25 (1") TOP & BOTT.
ELEVATED SLABS EXPOSED TO WEATHER:	
#5 AND SMALLER BARS	38 (1 1/2") TOP & 19 (3/4") BOTT.
#6 AND GREATER BARS	51 (2") TOP & 19 (3/4") BOTT.
WELDED WIRE REINFORCEMENT:	
5" OR LESS SLAB THICKNESS	CENTER
6" OR GREATER SLAB THICKNESS	51 (2") FROM TOP
SLAB ON WELL GRADED SUBGRADE OR VAPOR BARRIERS	19 (3/4") TOP 38 (1 1/2") BOTT.
BEAMS	38 (1 1/2") CLEAR OF STIRRUPS
JOISTS	38 (1 1/2") ALL SIDES
WIDE MODULE JOISTS	19 (3/4")

CONCRETE TENSION SPLICE LAP LENGTHS

BAR SIZE	f'c = 3000 PSI				f'c = 4000 PSI				f'c = 5000 PSI			
	TOP BARS		OTHER BARS		TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
	A	B	A	B	A	B	A	B	A	B	A	B
#3	22	28	17	22	19	25	15	19	17	22	13	17
#4	29	38	22	29	25	33	19	25	23	29	17	23
#5	36	47	28	36	31	41	24	31	28	36	22	28
#6	54	56	33	43	37	49	29	37	34	44	26	34
#7	63	81	48	63	54	71	42	54	49	63	38	49
#8	72	93	55	72	62	81	48	62	56	72	43	56
#9	81	105	62	81	70	91	54	70	63	81	48	63
#10	91	118	70	91	79	102	61	79	71	92	54	71
#11	101	131	78	101	87	114	67	87	78	102	60	78

1. ALL LENGTHS ARE IN INCHES.
2. BAR COVER AND TRANSVERSE REINFORCEMENT SHALL MEET CODE MINUMUM.
3. LAP SPLICING OF #14 & #18 BARS IS NOT ALLOWED.
4. LAP LENGTHS ARE FOR NORMAL WEIGHT CONCRETE WITH UNCOATED, 60 KSI BARS.
5. WHEN LAPPING BARS OF DIFFERENT SIZES USE THE SPLICE LAP LENGTH OF THE SMALLER BAR, OR THE DEVELOPMENT LENGTH OF THE LARGER BAR, WHICHEVER IS GREATER. THE "A" VALUE FROM THE TABLE IS EQUAL TO THE BAR DEVELOPMENT LENGTH.
6. TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINFORCEMENT.

SCHEDULE OF SPECIAL INSPECTIONS

SPECIAL CASES (IBC 1705.1.1)

ITEM	FREQUENCY	INSTRUCTIONS / COMMENTS
INSPECT WORK THAT IS DEEMED "UNUSUAL" BY THE BUILDING OFFICIAL.	CONTINUOUS	AS DEFINED BY THE BUILDING OFFICIAL OR REGISTERED DESIGN PROFESSIONAL.

SOILS CONSTRUCTION (IBC 1705.6)

ITEM	FREQUENCY	EXTENT / COMMENTS
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC	AS RECOMMENDED IN APPROVED SOILS REPORT AND CONTAINED IN THE CONSTRUCTION DOCUMENTS.
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC	
VERIFY CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC	
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS	
OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY PRIOR TO PLACEMENT OF COMPACTED FILL.	PERIODIC	

CONCRETE CONSTRUCTION (IBC 1705.3)

ITEM	FREQUENCY	EXTENT / COMMENTS
SPREAD FOOTING ARE EXCEPTED FROM INSPECTIONS, BUT NOT MATERIALS TESTING.	---	
CONTINUOUS FOOTINGS ARE EXCEPTED FROM INSPECTIONS, BUT NOT MATERIALS TESTING.	---	
SLABS ON GRADE ARE EXCEPTED FROM INSPECTIONS, BUT NOT MATERIALS TESTING.	---	
CONCRETE FOUNDATION WALLS ARE EXCEPTED FROM INSPECTIONS, BUT NOT MATERIALS TESTING.	---	
INSPECT ANCHORS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.	PERIODIC	
INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE.	PERIODIC	INSPECT ACCORDING TO RESEARCH REPORT FOR THE ANCHOR ISSUED.
VERIFY THAT CORRECT CONCRETE DESIGN MIX IS BEING USED.	PERIODIC	FOR EACH POUR.
AT THE TIME CONCRETE IS SAMPLED FOR STRENGTH TESTS, TEST CONCRETE FOR SLUMP, AIR CONTENT, AND TEMPERATURE	CONTINUOUS	DURING PLACEMENT OPERATIONS. REFERENCE CONCRETE SPECIFICATIONS FOR SPECIFIC TESTS AND FREQUENCIES.
INSPECT CONCRETE/SHOTCRETE PLACEMENT AND PLACEMENT METHODS EXCEPT AS NOTED ABOVE.	CONTINUOUS	
INSPECT ALL CONCRETE CURING OPERATIONS.	PERIODIC	MONITOR DURING HOT, COLD AND WINDY CONDITIONS. REFERENCE CONCRETE SPECIFICATIONS.
MEASURE FLOOR AND SLAB FLATNESS AND LEVELNESS ACCORDING TO ASTM E 1155.	PERIODIC	FOR EACH POUR. DO NOT SUBMIT REPORTS TO BUILDING OFFICIAL.

STRUCTURAL STEEL CONSTRUCTION (IBC 1705.2.1)

ITEM	FREQUENCY	EXTENT / COMMENTS
INSPECT ANCHOR RODS AND OTHER EMBEDMENTS. VERIFY DIAMETER, GRADE, TYPE AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM AND THE EXTENT OF DEPTH OF EMBEDMENT PRIOR TO PLACEMENT OF CONCRETE.	PERIODIC	APPLIES TO EMBEDDED POST/COLUMN CONNECTIONS.

WOOD CONSTRUCTION (IBC 1705.5)

ITEM	FREQUENCY	EXTENT / COMMENTS
INSPECT SITE-BUILT ASSEMBLIES INCLUDING SITE BUILT TRUSSES. INSPECT ERECTED TRUSSES INCLUDING BRIDGING AND ATTACHMENTS.	PERIODIC	

NOTES

NOTE: THE INSPECTION AND TESTING AGENT(S) SHALL BE ENGAGED BY THE OWNER OR THE OWNER'S AGENT AND NOT BY THE CONTRACTOR OR SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL PRIOR TO COMMENCING WORK. THE QUALIFICATIONS OF THE INSPECTION AGENT(S) ARE

CONTINUOUS: THE INSPECTOR IS PRESENT WHEN AND WHERE THE WORK TO BE INSPECTED IS

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No.	Date	Revision	Initials
1	08/30/2022	Rev. 1 - City Comments	
2	03/31/23	Rev. 2 - Added Title and Details	

JOB
20-1101-0049

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET NAME
ABBREVIATIONS SCHEDULES & TABLES

SHEET NO.
SM002

NAIL FASTENING SCHEDULE

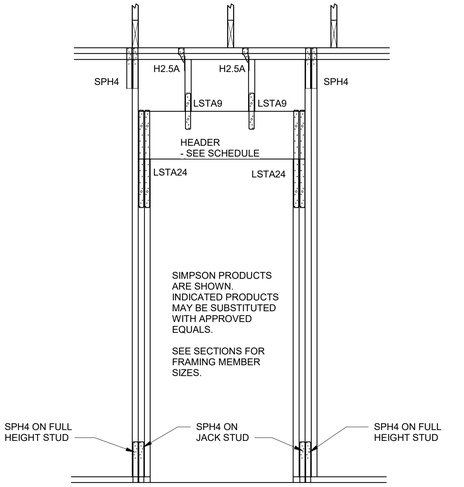
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS	SPACING AND LOCATION
ROOF		
BLOCKING BETWEEN CEILING JOISTS, RAFTERS, OR TRUSSES TO TOP PLATE OR OTHER FRAMING	3-8D COMMON (2 1/2"X0.131"); OR 3-10D BOX (3"X0.128"); OR 3-3"X0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSSES NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	2-8D COMMON (2 1/2"X0.131") 2-3"X0.131" NAILS 3-3" 14 GAGE STAPLES	EACH END, TOENAIL
	2-16D COMMON (3 1/2"X0.162") AT 6" O.C. 3-3"X0.131" NAILS 3-3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16D COMMON (2 1/2"X0.131") AT 6" O.C.	FACE NAIL
CEILING JOISTS TO TOP PLATE	3-8D COMMON (2 1/2"X0.131"); OR 3-10D BOX (3"X0.128"); OR 3-3"X0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST, TOENAIL
CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST) (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	3-16D COMMON (2 1/2"X0.131"); OR 4-10D BOX (3"X0.128"); OR 4-3"X0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	PER TABLE 2308.7.3.1	FACE NAIL
COLLAR TIE TO RAFTER	3-10D COMMON (3"X0.148"); OR 4-10D BOX (3"X0.128"); OR 4-3"X0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
RAFTER OR ROOF TRUSS TO TOP PLATE (SEE SECTION 2308.7.5, TABLE 1308.7.5)	3-10D COMMON (3"X0.148"); OR 3-16D COMMON (2 1/2"X0.131"); OR 4-10D BOX (3"X0.128"); OR 4-3"X0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	2-16D COMMON (3 1/2"X0.162"); OR 3-10D BOX (3"X0.128"); OR 3-3"X0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
	3-10D COMMON (3"X0.148"); OR 4-16D BOX (3 1/2"X0.135"); OR 4-10D BOX (3"X0.128"); OR 4-3"X0.131 NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
WALL		
STUD TO STUD (NOT AT BRACED WALL PANELS)	16D COMMON (3 1/2"X0.162")	24" O.C. FACE NAIL
	10D BOX (3"X0.128"); OR 4-3"X0.131 NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL
STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16D COMMON (3 1/2"X0.162")	16" O.C. FACE NAIL
	16D BOX (3 1/2"X0.162")	12" O.C. FACE NAIL
	3"X0.131 NAILS; OR 3" 14 GUAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
BUILT-UP HEADER (2" TO 2" HEADER)	16D COMMON (3 1/2"X0.162")	16" O.C. EACH EDGE, FACE NAIL
	10D BOX (3"X0.128")	12" O.C. EACH EDGE, FACE NAIL
CONTINUOUS HEADER TO STUD	4-8D COMMON (2 1/2"X0.131"); OR 4-10D BOX (3"X0.128")	TOENAIL
TOP PLATE TO TOP PLATE	16D COMMON (3 1/2"X0.162")	16" O.C. FACE NAIL
	10D BOX (3"X0.128"); OR 4-3"X0.131 NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
TOP PLATE TO TOP PLATE, AT END JOINTS	8-16D COMMON (3 1/2"X0.162"); OR 12-10D BOX (3"X0.128"); OR 12-3"X0.131" NAILS; OR 12-3" 14 GAGE STAPLES, 7/16" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16D COMMON (3 1/2"X0.162")	16" O.C. FACE NAIL
	16D BOX (3 1/2"X0.135"); OR 3"X0.131 NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
BOTTOM PLATE TO JOIST, RIM JIST, BAND JOIST OR BLOCKING AT BRACED WALL PANELS	2-16D COMMON (3 1/2"X0.162"); OR 3-16D BOX (3"X0.135"); OR 4-3"X0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL
STUD TO TOP OR BOTTOM PLATE	2-16D COMMON (3 1/2"X0.162"); OR 3-10D BOX (3"X0.128"); OR 3-3"X0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
TOP PLATES, LAPS AT CORNERS, AND INTERSECTIONS	2-16D COMMON (3 1/2"X0.162"); OR 3-10D BOX (3"X0.128"); OR 3-3"X0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
1" BRACE TO EACH STUD AND PLATE	2-8D COMMON (2 1/2"X0.131"); OR 2-10D BOX (3"X0.128"); OR 2-3"X0.131" NAILS; OR 2-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
1"X6" SHEATHING TO EACH BEARING	2-8D COMMON (2 1/2"X0.131"); OR 2-10D BOX (3"X0.128")	FACE NAIL
1"X8" AND WIDER SHEATHING TO EACH BEARING	3-8D COMMON (2 1/2"X0.131"); OR 3-10D BOX (3"X0.128")	FACE NAIL

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS	SPACING AND LOCATION
FLOOR		
JOIST TO SILL, TOP PLATE, OR GIRDER	3-8D COMMON (2 1/2"X0.131"); OR 3-10D BOX (3"X0.128"); OR 3-3"X0.131 NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL, OR OTHER FRAMING BELOW	8D COMMON (2 1/2"X0.131"); OR 10D BOX (3"X0.128"); OR 3"X0.131 NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	6" O.C., TOENAIL
1"X6" SUBFLOOR OR LESS TO EACH JOIST	2-8D COMMON (2 1/2"X0.131"); OR 2-10D BOX (3"X0.128")	FACE NAIL
2" SUBFLOOR TO JOIST OR GIRDER	2- 16D COMMON (3 1/2"X0.162")	FACE NAIL
2" PLANKS (PLANK AND BEAM - FLOOR AND ROOF)	2- 16D COMMON (3 1/2"X0.162")	EACH BEARING, FACE NAIL
BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20D BOX (4"X0.192")	32" O.C., FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
	10D BOX (3"X0.128"); OR 3"X0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
	AND 2-20D COMMON (4"X0.192"); OR 3-10D BOX (3"X0.128"); OR 3-3"X0.131" NAILS; OR 3-3" 14 GAUGE STAPLES, 7/16 CROWN	ENDS AND AT EACH SPLICE, FACE NAIL
LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-16D COMMON (3 1/2"X0.162"); OR 4-10D BOX (3"X0.128"); OR 4-3"X0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST OR RAFTER, FACE NAIL
JOIST TO BAND JOIST OR RIM JOIST	3-16D COMMON (3 1/2"X0.162"); OR 4-10D BOX (3"X0.128"); OR 4-3"X0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
BRIDGING OR BLOCKING TO JOIST, RAFTER, OR TRUSS	2-8D COMMON (2 1/2"X0.131"); OR 2-10D BOX (3"X0.128"); OR 2-3"X0.131 NAILS; OR 2-3" 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL

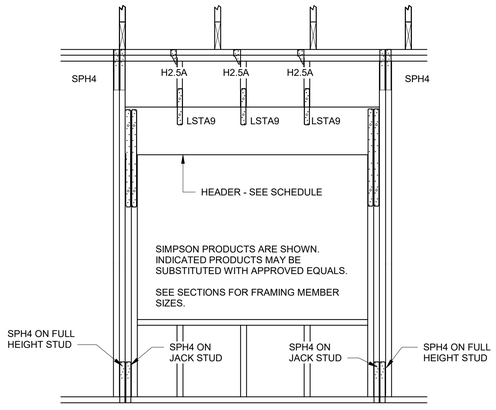
FOR USE WHEN A SPECIFIC CONNECTION IS NOT PROVIDED IN DETAILS AND SECTIONS.

WOOD HEADER TABLE

HEADER	MAX SPAN	DESCRIPTION	DETAIL
HD428	5'-0"	2X4 WALL WITH DOUBLE 2X8 BEAMS w/ 1/2" PLYWOOD SHIMS. NAIL TOGETHER w/ (2) 16D NAILS @12" OC.	
HD4212	8'-0"	2X4 WALL WITH DOUBLE 2X12 BEAMS w/ 1/2" PLYWOOD SHIMS. NAIL TOGETHER w/ (3) 16D NAILS @12" OC.	
HD628	6'-6"	2X6 WALL WITH TRIPLE 2X8 BEAMS w/ 1/2" PLYWOOD SHIMS. NAIL TOGETHER w/ (2) 16D NAILS @12" OC.	
HD6212	10'-0"	2X6 WALL WITH TRIPLE 2X12 BEAMS w/ 1/2" PLYWOOD SHIMS. NAIL TOGETHER w/ (3) 16D NAILS @12" OC.	
HD628i	5'-6"	2X6 WALL WITH DOUBLE 2X8 HEADER BEAMS w/ 2X6 T&B PLATES. NAIL TOGETHER w/ 16D NAILS @6" OC.	
HD6212i	8'-6"	2X6 WALL WITH DOUBLE 2X12 HEADER BEAMS w/ 2X6 T&B PLATES. NAIL TOGETHER w/ 16D NAILS @6" OC.	
HD6212hs	12'-0"	2X6 WALL WITH TRIPLE 2X12 HEADER BEAMS w/ 2X6 T&B PLATES. NAIL TOGETHER w/ (3) 16D NAILS @12" OC SIDES, & 16D NAILS @6" OC T&B.	



TYPICAL DOOR OPENING HOLD-DOWN



TYPICAL WINDOW OPENING HOLD-DOWN

thompson ENGINEERING
Thompson Engineering, Inc.
2970 Cottage Hill Road
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Tel: 251.666.2443

ALABAMA LICENSED No. 36802 PROFESSIONAL ENGINEER ROBERT CASEY BROWN
03/30/2023

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MOBILITY HUB PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision	Initials
1	05/30/2022	Rev. 1 - City Comments	
2	03/16/23	Rev. 2 - Added T-Bolts and Details	

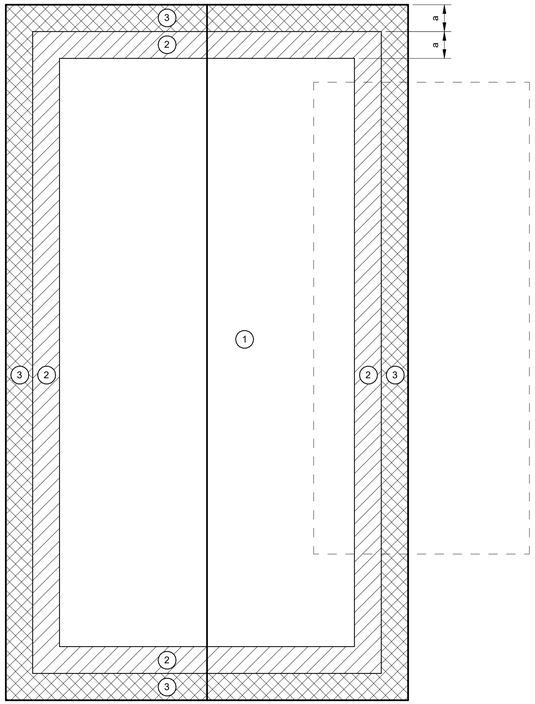
JOB
20-1101-0049

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET NAME
SCHEDULES & TABLES

SHEET NO.
SM003

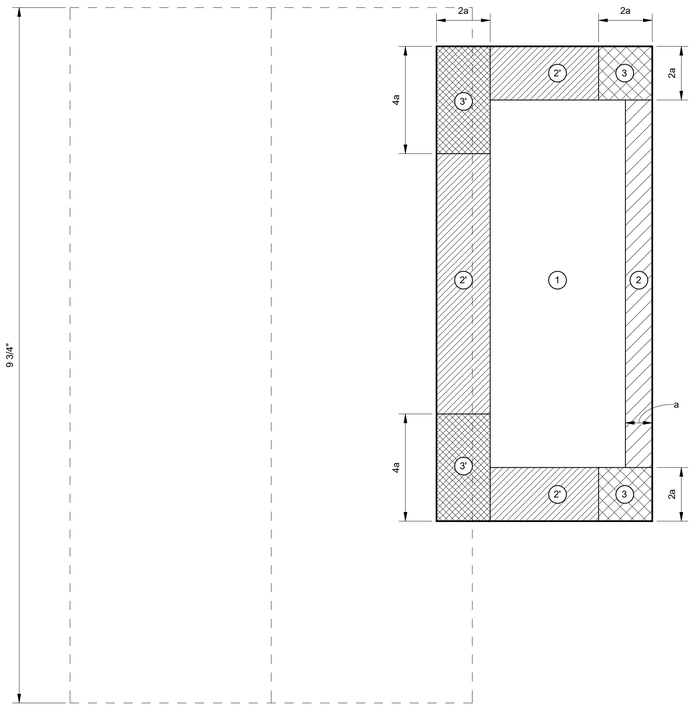


HIGH ROOF (OPEN) WIND DIAGRAM

ZONE 1
ZONE 2
ZONE 3

C&C Pressures Table Open						
OPEN LOCATION	OPEN ZONE	OPEN AREA	OPEN ULTIMATE +P	OPEN ULTIMATE -P	OPEN ALLOWABLE +P	OPEN ALLOWABLE -P
ROOF	1	≤ a2	45.4	-33.0	27.2	-19.8
ROOF	1	> a2≤ 4.0a2	45.4	-33.0	27.2	-19.8
ROOF	1	>4.0a2	45.4	-33.0	27.2	-19.8
ROOF	2	≤ a2	70.2	-49.5	42.1	-29.7
ROOF	2	> a2≤ 4.0a2	70.2	-49.5	42.1	-29.7
ROOF	2	>4.0a2	45.4	-33.0	27.2	-19.8
ROOF	3	≤ a2	90.8	-66.0	54.5	-39.6
ROOF	3	> a2≤ 4.0a2	70.2	-49.5	42.1	-29.7
ROOF	3	>4.0a2	45.4	-33.0	27.2	-19.8

NOTES:
1. DESIGN BASED ON ASCE 7-16, SECTION 30. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
2. ALLOWABLE WIND LOADS ARE 60% OF ULTIMATE WIND LOADS.
3. PRESSURE CATEGORY, OPEN.
4. WIDTH OF EDGE STRIP, "a" = 3'-2".



LOW ROOF WIND DIAGRAM

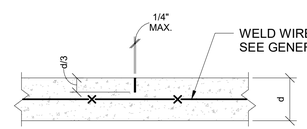
ZONE 1
ZONE 2
ZONE 2'
ZONE 3
ZONE 3'

WALL WIND DIAGRAM

ZONE 4
ZONE 5

C&C Pressures Table						
LOCATION	ZONE	AREA	ULTIMATE +P	ULTIMATE -P	ALLOWABLE +P	ALLOWABLE -P
ROOF	1	10	22.2	-59.1	13.3	-35.5
ROOF	1	20	19.9	-59.1	11.9	-35.5
ROOF	1	50	17.5	-59.1	10.5	-35.5
ROOF	1	100	17.5	-59.1	10.5	-35.5
ROOF	1	200	17.5	-59.1	10.5	-35.5
ROOF	1	500	17.5	-59.1	10.5	-35.5
ROOF	2	10	22.2	-68.3	13.3	-41.0
ROOF	2	20	19.9	-66.0	11.9	-39.6
ROOF	2	50	17.5	-63.7	10.5	-38.2
ROOF	2	100	17.5	-63.7	10.5	-38.2
ROOF	2	200	17.5	-63.7	10.5	-38.2
ROOF	2	500	17.5	-63.7	10.5	-38.2
ROOF	2'	10	22.2	-82.2	13.3	-49.3
ROOF	2'	20	19.9	-81.7	11.9	-49.0
ROOF	2'	50	17.5	-80.3	10.5	-48.2
ROOF	2'	100	17.5	-77.6	10.5	-46.6
ROOF	2'	200	17.5	-77.6	10.5	-46.6
ROOF	2'	500	17.5	-77.6	10.5	-46.6
ROOF	3	10	22.2	-91.4	13.3	-54.8
ROOF	3	20	19.9	-82.2	11.9	-49.3
ROOF	3	50	17.5	-77.6	10.5	-46.6
ROOF	3	100	17.5	-63.7	10.5	-38.2
ROOF	3	200	17.5	-63.7	10.5	-38.2
ROOF	3	500	17.5	-63.7	10.5	-38.2
ROOF	3'	10	22.2	-128.4	13.3	-77.0
ROOF	3'	20	19.9	-114.5	11.9	-68.7
ROOF	3'	50	17.5	-96.0	10.5	-57.6
ROOF	3'	100	17.5	-82.2	10.5	-49.3
ROOF	3'	200	17.5	-82.2	10.5	-49.3
ROOF	3'	500	17.5	-82.2	10.5	-49.3
WALL	4	10	54.5	-59.1	32.7	-35.5
WALL	4	20	50.8	-56.8	30.5	-34.1
WALL	4	50	47.1	-53.6	28.3	-32.2
WALL	4	100	45.7	-50.8	27.4	-30.5
WALL	4	200	44.3	-48.5	26.6	-29.1
WALL	4	500	40.6	-45.2	24.4	-27.1
WALL	5	10	54.5	-73.0	32.7	-43.8
WALL	5	20	50.8	-68.3	30.5	-41.0
WALL	5	50	47.1	-61.4	28.3	-36.8
WALL	5	100	45.7	-55.9	27.4	-33.5
WALL	5	200	44.3	-52.2	26.6	-31.3
WALL	5	500	40.6	-45.2	24.4	-27.1

NOTES:
1. DESIGN BASED ON ASCE 7-16, SECTION 30. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
2. ALLOWABLE WIND LOADS ARE 60% OF ULTIMATE WIND LOADS.
3. PRESSURE CATEGORY, ENCLOSED.
4. WIDTH OF EDGE STRIP, "a" = 3'-2".



NOTE:
SAWCUTTING SHALL BE PERFORMED 4 TO 12 HOURS AFTER PLACING CONCRETE, FILL JOINT WHEN WIDTH EXCEEDS 1/8"

SLAB ON GRADE TYPICAL CONTROL JOINT

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GULF COAST CENTER
FOR ECOTOURISM & SUSTAINABILITY
MOBILITY HUB PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision	Initials

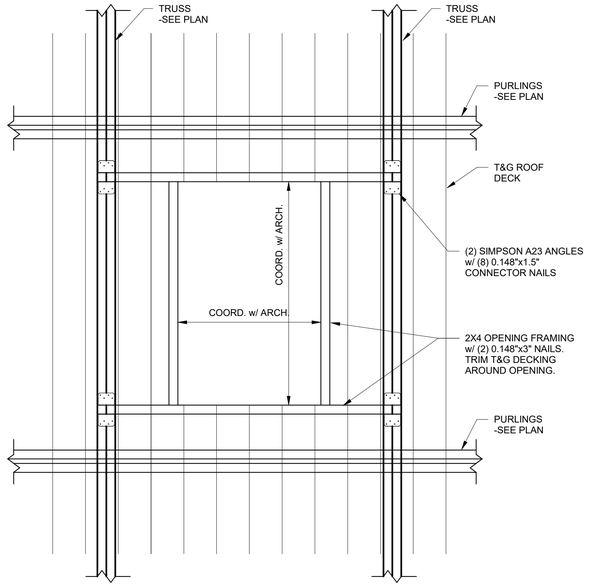
JOB
20-1101-0049

PROJECT STATUS
CONFORMANCE SET

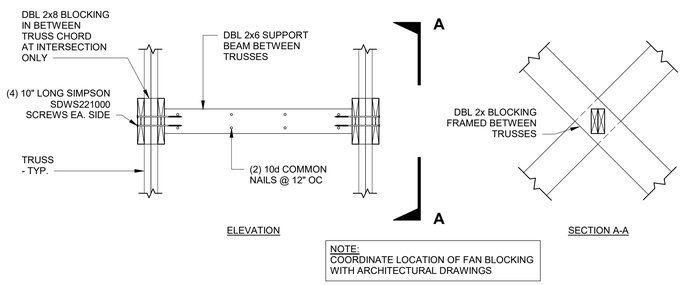
DATE
MARCH 24, 2023

SHEET NAME
C&C WIND DIAGRAMS AND TYPICAL DETAILS

SHEET NO.
SM004



ROOF PENETRATION DETAIL



FAN SUPPORT BEAM DETAIL

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GULF SHORES, ALABAMA

No.	Date	Revision	Initials

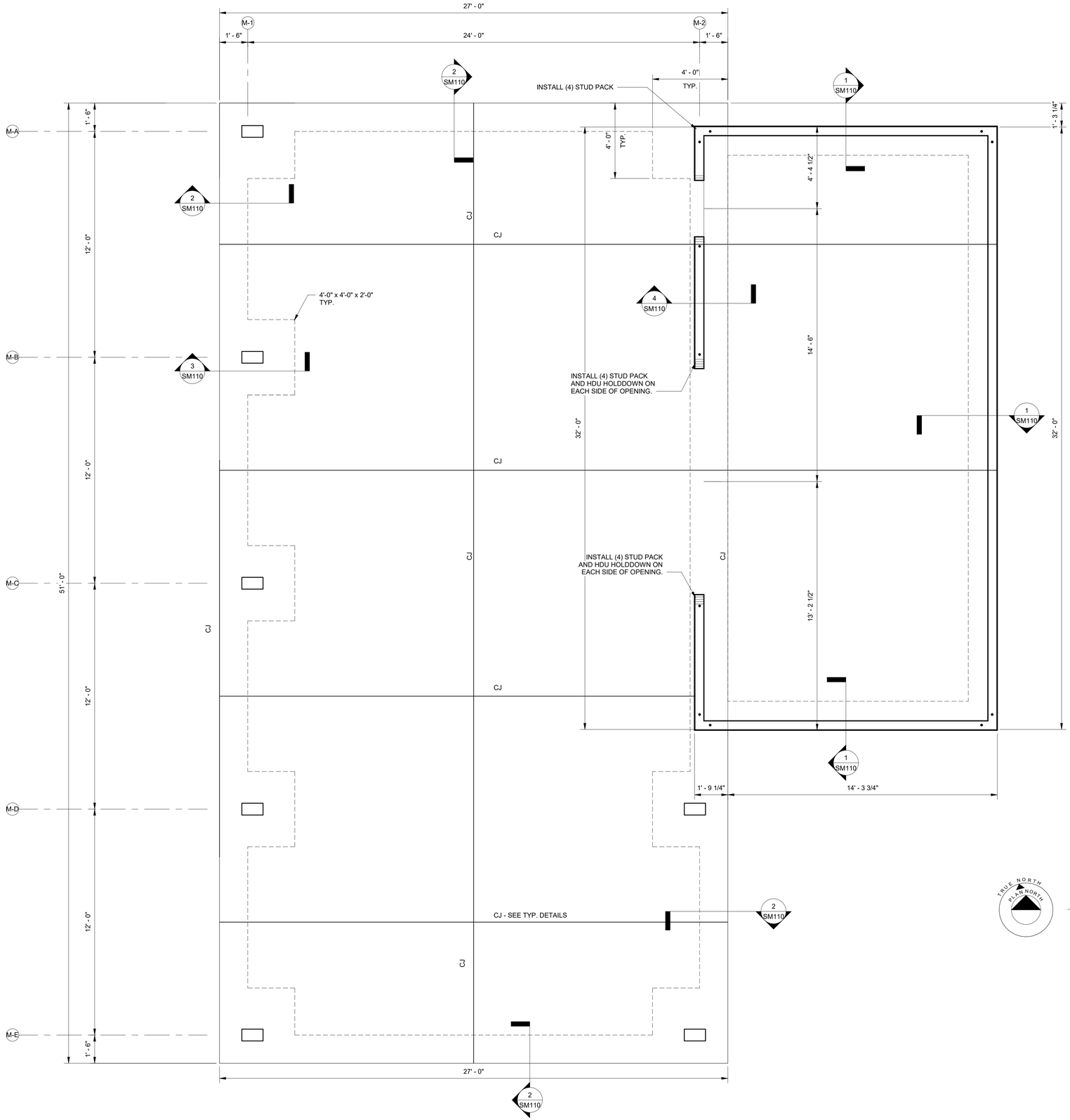
JOB
20-1101-0049

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET NAME
TYPICAL DETAILS

SHEET NO.
SM005



TRUE NORTH
PLAN NORTH

SLAB AND FOUNDATION PLAN

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

1. FINISH FLOOR (TOP OF SLAB) REFERENCE ELEVATION 0'-0", UNO.
2. FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES, TYPICAL DETAILS, AND PLAN SHEETS.
3. FOR SLAB SLOPE, RECESSES, AND PENETRATIONS, SEE ARCHITECTURAL DRAWINGS.
4. FOR OPENING LOCATION AND SIZES, SEE ARCHITECTURAL DRAWINGS.
5. ALL WOOD FRAMED WALLS ARE SHEARWALLS. SEE GENERAL NOTES FOR SHEATHING AND NAILING INFORMATION.
6. PROVIDE SIMPSON HDU4-SDS2.5 HOLDOWN WITH 5/8" DIA. x 8" TITEN HDSS TYPE 316 AT EACH END OF EACH SHEAR WALL.

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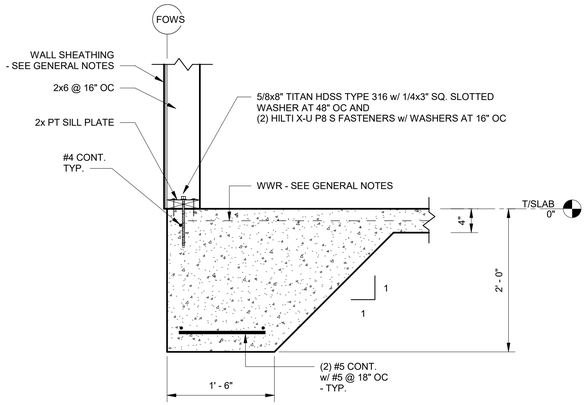
JOB
20-1101-0049

PROJECT STATUS
CONFORMANCE SET

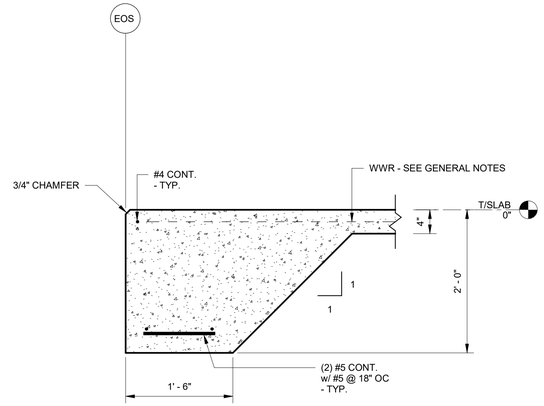
DATE
MARCH 24, 2023

SHEET NAME
SLAB AND FOUNDATION PLAN

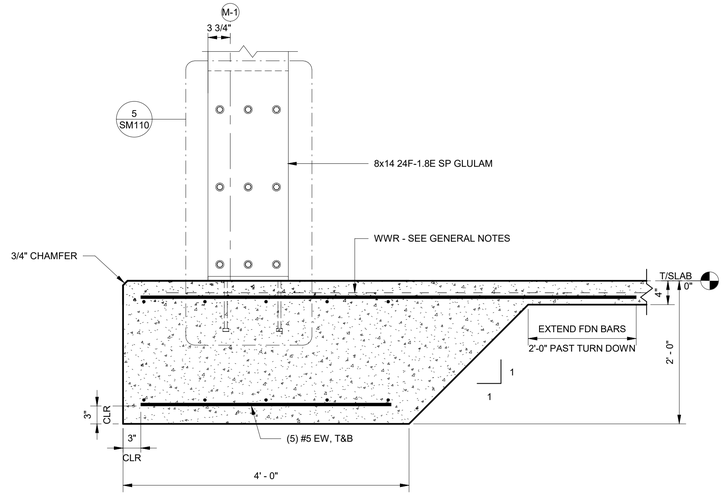
SHEET NO.
SM100



1 SM110 **SECTION**
SCALE: 1" = 1'-0"



2 SM110 **SECTION**
SCALE: 1" = 1'-0"



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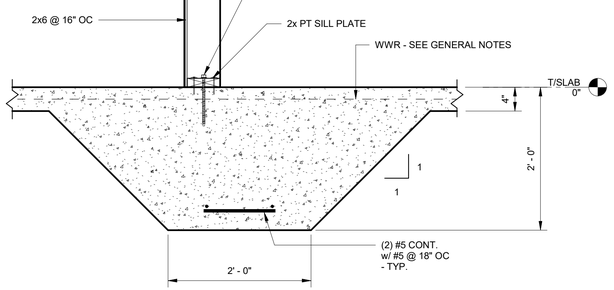

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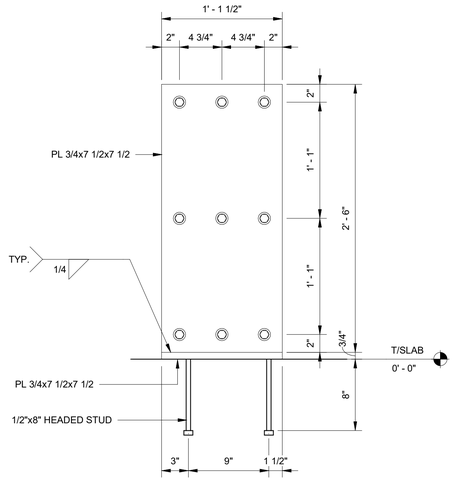

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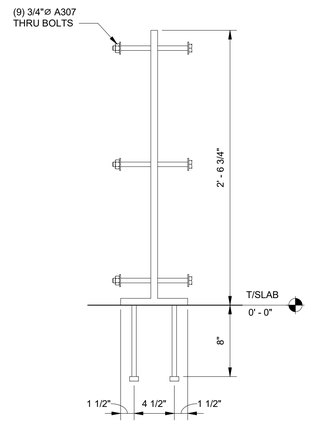

6 SM110 **DETAIL**
SCALE: 1 1/2" = 1'-0"

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GULF COAST CENTER
FOR ECOTOURISM & SUSTAINABILITY
MOBILITY HUB PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision	Initials

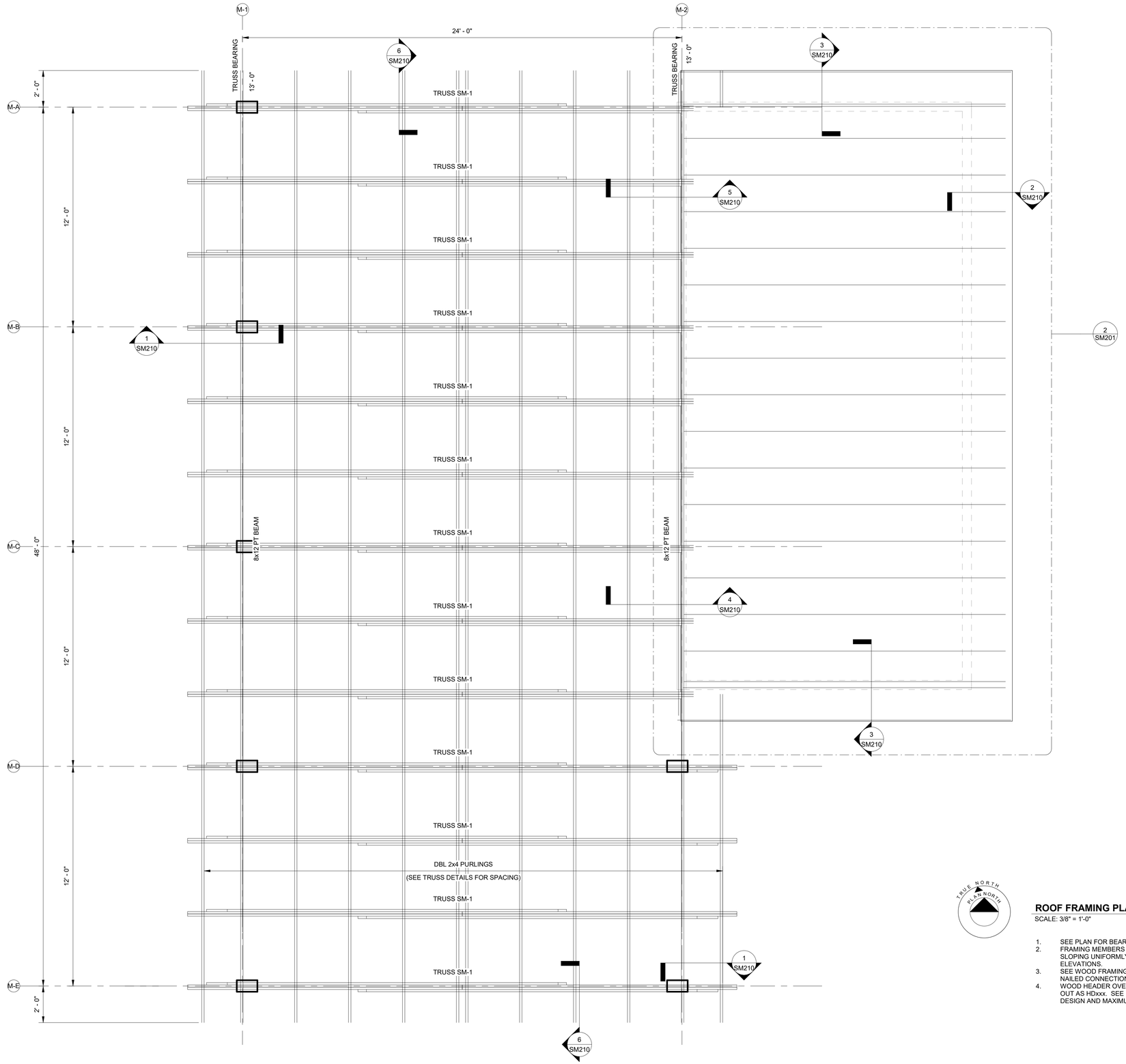
JOB
20-1101-0049

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET NAME
SLAB AND FOUNDATION SECTIONS

SHEET NO.
SM110



ROOF FRAMING PLAN

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

1. SEE PLAN FOR BEARING ELEVATIONS.
2. FRAMING MEMBERS ARE EITHER LEVEL OR SLOPING UNIFORMLY BETWEEN NOTED ELEVATIONS.
3. SEE WOOD FRAMING CONNECTION TABLE FOR NAILED CONNECTIONS.
4. WOOD HEADER OVER OPENINGS IS CALLED OUT AS HDxxx. SEE HEADER SCHEDULE FOR DESIGN AND MAXIMUM ALLOWED SPAN.

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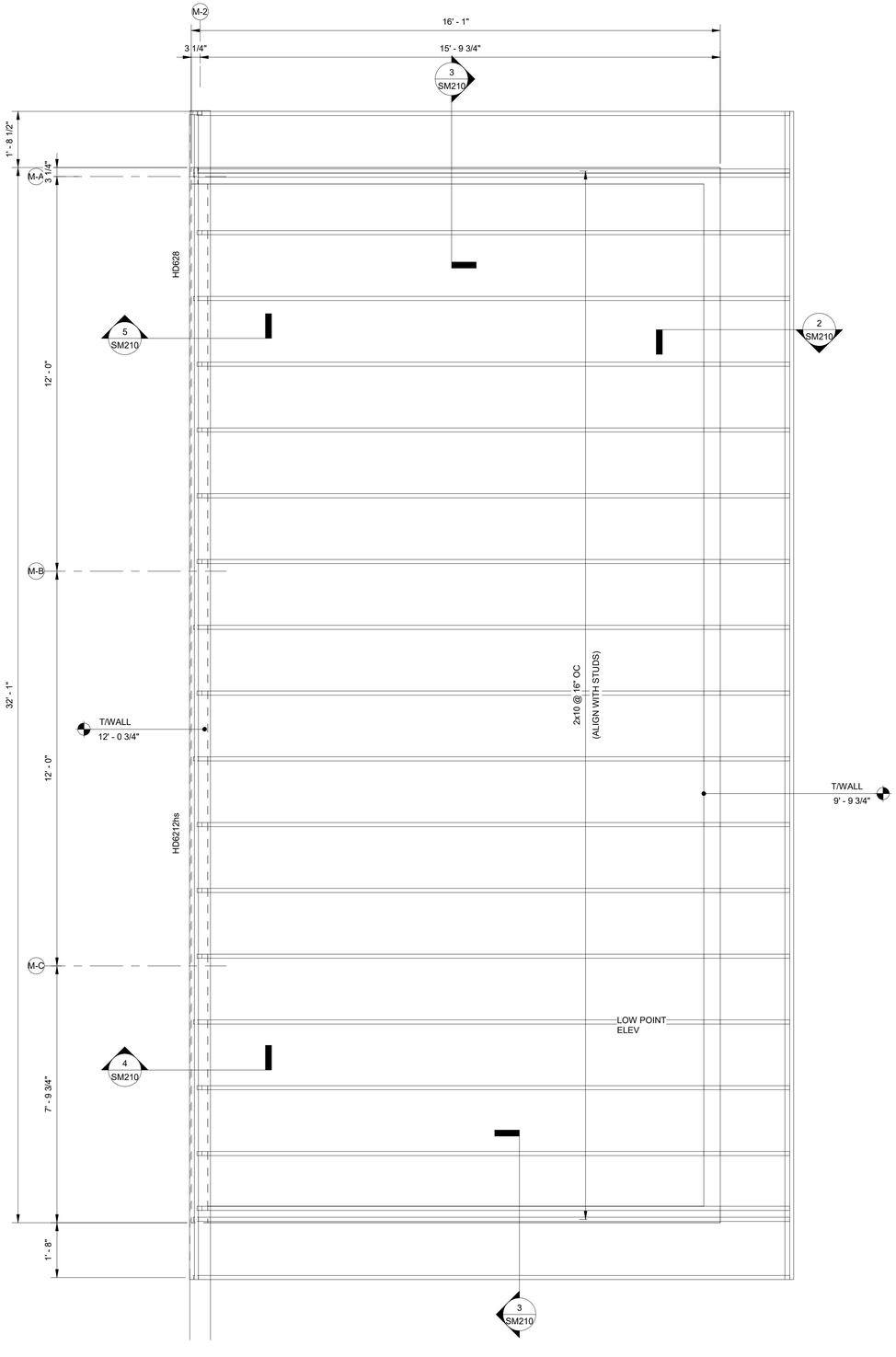
SHEET NAME
ROOF FRAMING PLAN

SHEET NO.
SM200



TRUE NORTH
PLAN NORTH

LOW ROOF FRAMING PLAN 2

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

1. WOOD HEADER OVER OPENINGS IS CALLED OUT AS HDxxx. SEE HEADER SCHEDULE FOR DESIGN AND MAXIMUM ALLOWED SPAN.

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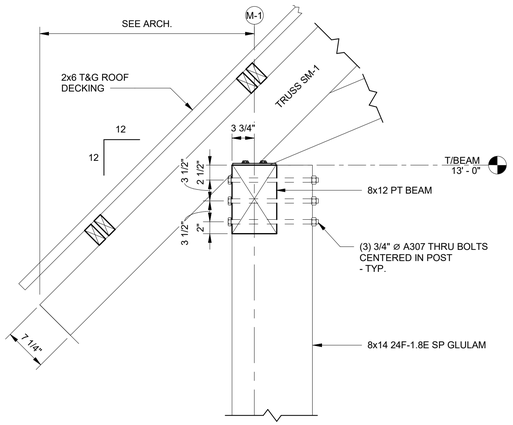
SHEET NAME
LOW ROOF FRAMING

SHEET NO.
SM201



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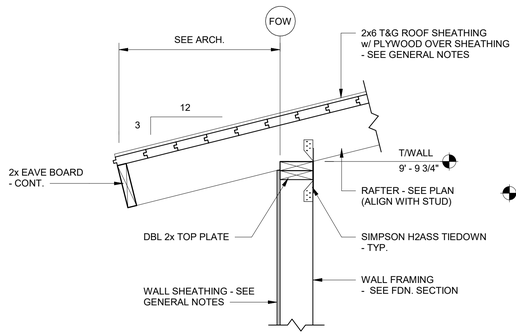

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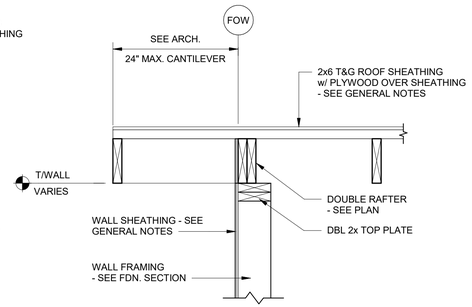

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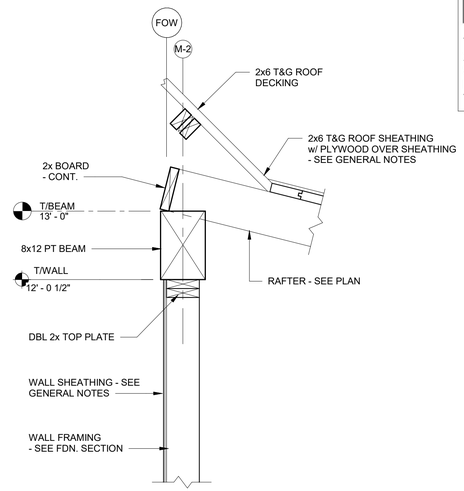

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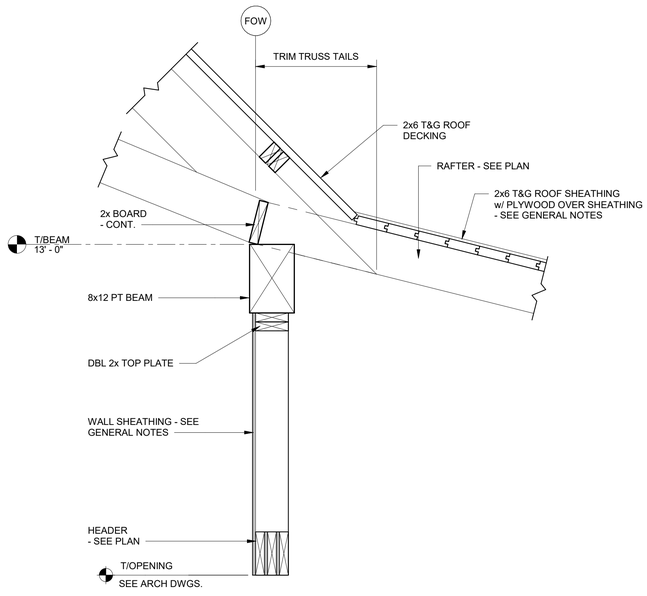

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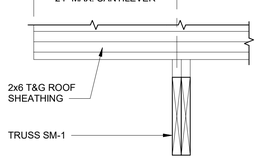

6 SM210 **SECTION**
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SHEET NAME
ROOF FRAMING SECTIONS

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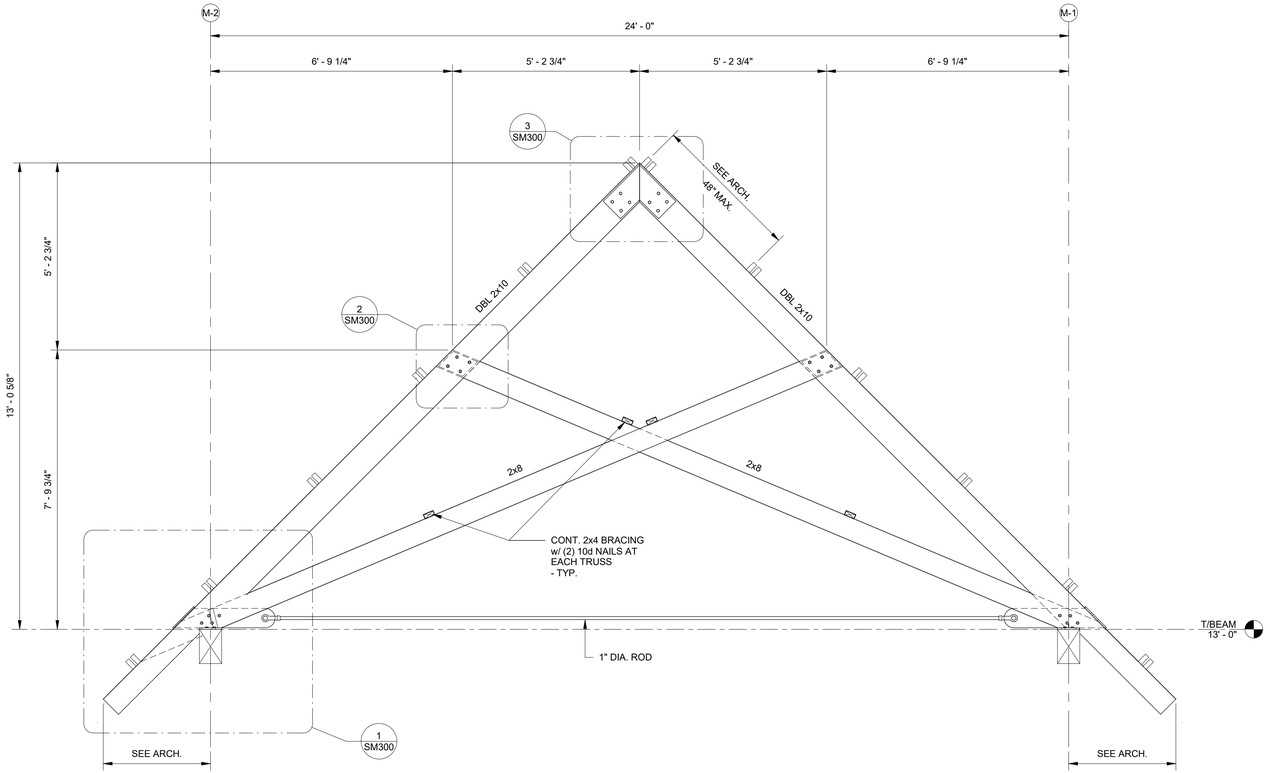
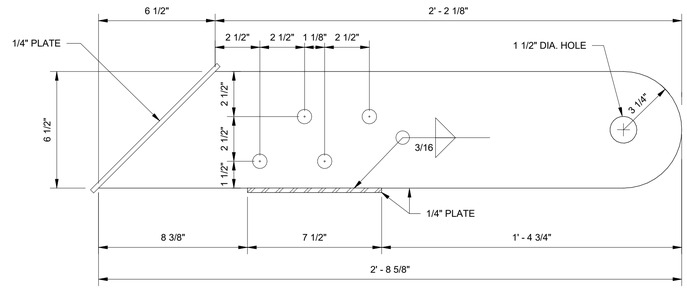
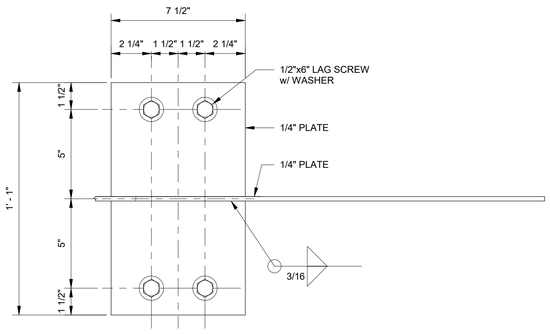


TRUSS SM-1
SCALE: 1/2" = 1'-0"



TRUSS TONGUE PLATE DETAIL - TRUSS SG-1
SCALE: 3" = 1'-0"



TRUSS SEAT PLATE DETAIL - TRUSS SG-1
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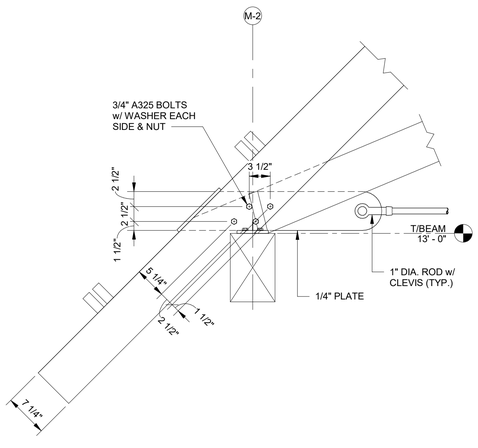

1 SM300 **DETAIL**
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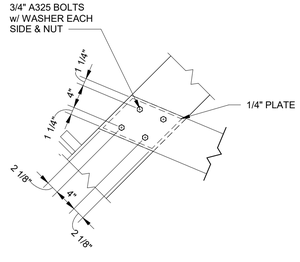

2 SM300 **DETAIL**
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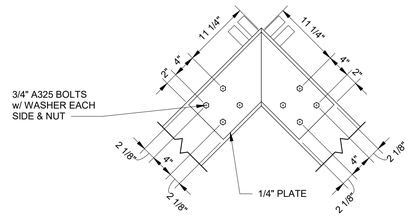

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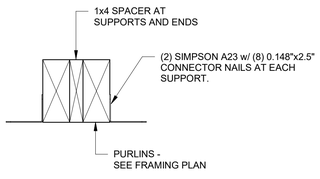

PURLIN DETAIL
SCALE: 3" = 1'-0"

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SHEET NAME
TRUSS ELEVATION

SHEET NO.
SM300

HVAC SYMBOL LEGEND

SYMBOL	DESCRIPTION
	-CEILING DIFFUSER, ROUND NECK (CEILING DIFFUSERS ARE 4-WAY THROW UNO)
	-ROUND DIFFUSER
	-CEILING RETURN
	-CEILING EXHAUST
	-CEILING DIFFUSER, RECTANGULAR OR SQUARE NECK (CEILING DIFFUSERS ARE 4-WAY THROW UNO)
	-SUPPLY REGISTER OR GRILLE (VERTICAL MOUNT, SIDEWALL)
	-RETURN/EXHAUST REGISTER OR GRILLE (VERTICAL MOUNT, SIDEWALL)
1	-REVISION REFERENCE
1 / M-1	-DETAIL REFERENCE: TOP-DETAIL#, BOTTOM-DRAWING# SHOWN ON
T	-THERMOSTAT/TEMPERATURE SENSOR
H	-HUMIDISTAT/HUMIDITY SENSOR
	-DUCT SMOKE DETECTOR
	-CONNECT TO EXISTING
	-DEMOLISH TO POINT INDICATED
M	-MOTORIZED CONTROL DAMPER
TS	-TEMPERATURE SENSOR
PS	-PRESSURE SENSOR
BD	-BACKDRAFT DAMPER
N	-NEUTRAL RELATIVE PRESSURE
+	-POSITIVE RELATIVE PRESSURE
-	-NEGATIVE RELATIVE PRESSURE
1	-SHEET NOTE CALLOUT
(1)	-SHEET NOTE CALLOUT
1	-SHEET NOTE CALLOUT
M	-CEILING MOUNTED ACCESS DOOR
	-SQUARE THROAT ELBOW W/TURNING VANES
	-RADIUS ELBOW
	-RECTANGULAR/ROUND BRANCH TAKE-OFF OR ROUND/ROUND BRANCH TAKE-OFF
	-EXHAUST DUCT UP THROUGH SLAB W/ FAN ON ROOF ABOVE
	-EXHAUST FAN ON ROOF W/ DUCT DOWN THROUGH ROOF

SYMBOL	DESCRIPTION
	-FIRE DAMPER (WITH ACCESS PANEL)
	-FIRE & SMOKE DAMPER (WITH ACCESS PANEL)
SA-1	-SOUND ATTENUATOR
M	-MOTOR OPERATED CONTROL DAMPER (MOD)
FM	-AIR FLOW MEASURING STATION
	-MANUAL BALANCING DAMPER
	-DOOR GRILLE
UC	-UNDERCUT DOOR
M	-ACCESS DOORS, VERTICAL OR HORIZONTAL
	-STAINLESS STEEL DUCTWORK
	-FLEXIBLE CONNECTION
12x8Ø	-NEW FLAT OVAL DUCT
24x12	-NEW DUCTWORK, FIRST DIMENSION IS SIDE SHOWN
24x12	-EXISTING DUCTWORK TO REMAIN
24x12	-EXISTING DUCTWORK TO BE REMOVED
24x12 DOWN UP W/IN FLOOR	-DUCT ELBOW, POSITIVE PRESSURE (SUPPLY), FIRST DIMENSION INDICATES SIDE TO WHICH ARROW IS POINTING
	-DUCT ELBOW, EXHAUST
	-DUCT ELBOW, NEGATIVE PRESSURE, RETURN
	-DUCT ELBOW UP THROUGH ROOF OR SLAB ABOVE
	-RECTANGULAR DUCT SECTION UP, POSITIVE PRESSURE, SUPPLY OR OUTSIDE AIR
	-RECTANGULAR DUCT SECTION UP, NEGATIVE PRESSURE, RETURN
	-RECTANGULAR DUCT SECTION UP, EXHAUST
	-ROUND DUCT SECTION UP
	-FLAT OVAL DUCT SECTION UP

SYMBOL	DESCRIPTION
	-TERMINAL UNIT, VARIABLE/CONSTANT AIR VOLUME WITH ELECTRIC HEAT
	-TERMINAL UNIT, VARIABLE/CONSTANT AIR VOLUME WITH ELECTRIC HEAT
	-TERMINAL UNIT, VARIABLE/CONSTANT AIR VOLUME, FAN POWERED
	-TERMINAL UNIT, VARIABLE/CONSTANT AIR VOLUME, FAN POWERED, WITH ELECTRIC HEAT
	-ELECTRIC DUCT HEATER (W/ PANEL CLEARANCE)
	-HYDRONIC REHEAT COIL
	-INLINE CENTRIFUGAL FAN
	-PACKAGED TERMINAL AIR CONDITIONER (PTAC)
UP DN	-CHANGE OF ELEVATION
	-FLEXIBLE DUCT
	-TRANSITION, CONCENTRIC
	-TRANSITION, ECCENTRIC
10x8 8"	-TRANSITION, SQUARE TO ROUND
	-SQUARE THROAT TEE
12x8	-RADIUS TEE
	-RECTANGLE-TO-ROUND TAKE-OFF
	-STANDARD BRANCH TAKE-OFF
	-SPIN-IN TAKE-OFF

HVAC ABBREVIATIONS

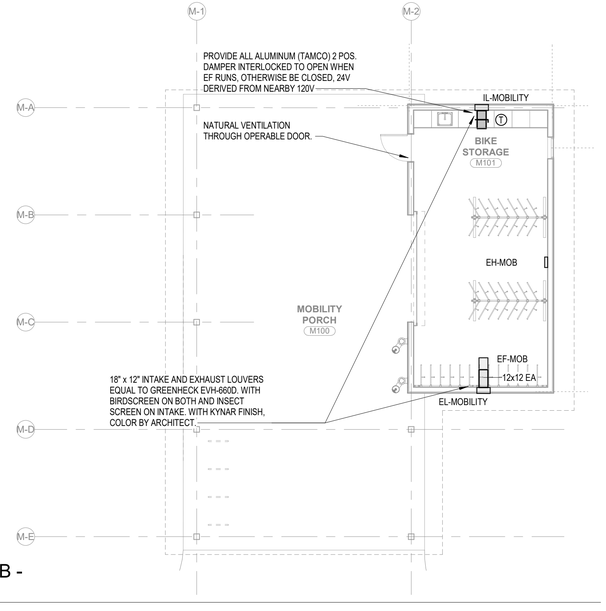
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AFD	-ADJUSTABLE FREQUENCY DRIVE	LD	-LINEAR DIFFUSER
AFF	-ABOVE FINISHED FLOOR	MBH	-THOUSAND BTUs PER HOUR
AFR	-ABOVE FINISHED ROOF	MCA	-MINIMUM CIRCUIT AMPS
AHU	-AIR HANDLING UNIT	MOCP	-MAXIMUM OVER CURRENT PROTECTION
AP	-ACCESS PANEL	MOD	-MOTOR OPERATED CONTROL DAMPER (MOD)
BOP	-BOTTOM OF PIPE	NC	-NORMALLY CLOSED
BHP	-BRAKE HORSEPOWER	NO	-NORMALLY OPEN
BTU	-BRITISH THERMAL UNIT	NTS	-NOT TO SCALE
CL	-CENTER LINE	OA	-OUTSIDE AIR
CFM	-CFM (CUBIC FEET PER MINUTE)	OAL	-OUTSIDE AIR LOUVER
CD	-CEILING DIFFUSER	PRV	-PRESSURE REDUCING VALVE
CT	-COOLING TOWER	PRS	-PRESSURE REDUCING STATION
CV	-CONSTANT AIR VOLUME	PSI	-POUNDS PER SQUARE INCH
ΔP	-CHANGE IN PRESSURE	PSIG	-PSI GAUGE
ΔT	-CHANGE IN TEMPERATURE	PTAC	-PACKAGED TERMINAL AIR CONDITIONER
CFM	-CUBIC FEET PER MINUTE	PVC	-POLYVINYL CHLORIDE PIPE
CU	-CONDENSING UNIT	RA	-RETURN AIR
DDC	-DIRECT DIGITAL CONTROLS	RHC	-REHEAT COIL
DN	-DOWN	RHP	-ROOFTOP HEAT PUMP
EAT	-ENTERING AIR TEMPERATURE	RPM	-REVOLUTIONS PER MINUTE
ESP	-EXTERNAL STATIC PRESSURE	RS/L	-REFRIGERANT SUCTION & LIQUID LINES
EWT	-ENTERING WATER TEMPERATURE	RTU	-ROOFTOP AIR HANDLING UNIT
FCU	-FAN COIL UNIT	SA	-SUPPLY AIR
FD	-FIRE DAMPER	SP	-STATIC PRESSURE
FF	-FINAL FILTERS	TSP	-TOTAL STATIC PRESSURE
FLA	-FULL LOAD AMPS	UNO	-UNLESS NOTED OTHERWISE
FPM	-FEET PER MINUTE	V/PH	-VOLTS/PHASE
GPM	-GALLONS PER MINUTE	VAV	-VARIABLE AIR VOLUME
KW	-KILOWATT	VFD	-VARIABLE FREQUENCY DRIVE
LAT	-LEAVING AIR TEMPERATURE		
LWT	-LEAVING WATER TEMPERATURE		

HVAC EQUIPMENT TAGS

TAG / A 200 / CFM	-AIR DISTRIBUTION DEVICE
AHU NUMBER / AHU-1	-AIR HANDLING UNIT

HVAC GENERAL NOTES

1. CONNECTION TO EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS. TRANSITIONS TO ALL EQUIPMENT SHALL BE VERIFIED AND PROVIDED FOR EQUIPMENT FURNISHED.
2. DIMENSIONS SHALL BE FIELD-VERIFIED AND COORDINATED PRIOR TO PROCUREMENT OR FABRICATION. COORDINATE THE WORK WITH OTHER TRADES INVOLVED. FIELD MODIFICATIONS SUCH AS OFFSETS IN PIPING OR DUCTWORK (INCLUDING DIVIDED DUCTWORK) NEEDED DUE TO OBSTRUCTIONS OR INTERFERENCES SHALL BE PROVIDED AT NO ADDITIONAL COST. FOR PROJECTS INVOLVING RENOVATION, COORDINATE NEW WORK WITH EXISTING ELEMENTS SUCH AS THE BUILDING STRUCTURE AND ARCHITECTURAL FEATURES, SPRINKLER PIPING, LIGHTS, PLUMBING, AND ELECTRICAL CONDUIT.
3. DUCT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARD.
4. SEE SPECIFICATIONS FOR GAUGES, THICKNESS, BRACING, REQUIREMENTS, ETC., OF DUCTWORK.
5. PROVIDE AIR TURNING VANES IN ALL 90 DEGREE RECTANGULAR DUCT ELBOWS.
6. DUCT SIZES AND ALL OPENINGS THROUGH BUILDING CONSTRUCTION SHALL SUIT EQUIPMENT FURNISHED.
7. COORDINATE DIFFUSER, GRILLE AND REGISTER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS AND EQUIPMENT OF ALL TRADES.
8. LOCATE THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS, AND HUMIDITY SENSORS AT 48" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. COORDINATE LOCATIONS WITH OTHER EQUIPMENT, FURNITURE, AND DOOR SWINGS.
9. ALL EQUIPMENT, DUCTWORK, ETC., SHALL BE SUPPORTED AS DETAILED AND/OR SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PROVIDE A VIBRATION-FREE, RIGID INSTALLATION.
10. ALL DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS.
11. DAMPERS AND INSIDES OF DUCTS VISIBLE THROUGH GRILLES, REGISTERS AND DIFFUSERS SHALL BE PAINTED FLAT BLACK.
12. REFER TO TYPICAL DETAILS FOR PIPING AND INSTALLATION OF EQUIPMENT.
13. TRAPPED CONDENSATE DRAINS FROM ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED FOR PROPER DRAINAGE TO SUIT EQUIPMENT FURNISHED.
14. ACCESS PANELS IN DUCTWORK AND CEILINGS SHALL BE PROVIDED WHERE REQUIRED FOR OPERATION, BALANCING OR MAINTENANCE OF ALL MECHANICAL EQUIPMENT.
15. ALL DUCTWORK AND PIPING IS SHOWN SCHEMATICALLY. PROVIDE ALL TRANSITIONS, TURNING VANES, ELBOWS, FITTINGS, ETC., TO ALLOW SMOOTH FLOWS. ALL SPLIT DUCT FITTINGS SHALL TRANSITION TO FULL SIZE OF THE SUM OF BOTH BRANCHES, UPSTREAM OF SPLIT.
16. PROVIDE CONCRETE HOUSEKEEPING PAD UNDER ALL FLOOR-MOUNTED EQUIPMENT. REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.
17. VERIFY FINISH WITH ARCHITECT PRIOR TO PURCHASING GRILLES, REGISTERS, DIFFUSERS, LOUVERS AND OTHER AIR DISTRIBUTION DEVICES.
18. PROVIDE FLEXIBLE DUCT CONNECTIONS ON ALL DUCTWORK CONNECTING TO EACH FAN, AIR HANDLING UNITS, AND FAN COIL UNITS.
19. PROVIDE TRANSITIONS AT DIFFUSER NECKS AS REQUIRED TO MATCH SIZES OF FLEX DUCTS TO BE CONNECTED.
20. INTERRUPTIONS TO EXISTING SERVICES SHALL BE SCHEDULED FOR TIMES OTHER THAN NORMAL OPERATING HOURS (SUCH AS NIGHTS AND WEEKENDS). SUCH INTERRUPTIONS TO SERVICES SHALL NOT BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE AND PROPER COORDINATION WITH OTHER TRADES. PRE-WORK SHALL BE PERFORMED TO MAKE THE SHUTDOWN PERIOD AS BRIEF AS POSSIBLE.
21. ALL EQUIPMENT, DUCTWORK, ETC., TO BE REMOVED SHALL REMAIN PROPERTY OF THE OWNER OR DISPOSED OF LEGALLY, AS DIRECTED BY OWNER.
22. MAINTAIN CLEARANCE OF A MINIMUM OF 6" BETWEEN DUCTWORK, PIPING, EQUIPMENT, ETC., AND ALL FIRE RATED AND FIRE/SMOKE RATED PARTITIONS, TO ALLOW FOR INSPECTIONS OF RATED WALLS.
23. LOCATE ALL OUTSIDE AIR INTAKES A MINIMUM OF 10' CLEAR FROM ALL PLUMBING VENTS AND EXHAUST AIR DISCHARGE LOCATIONS.
24. DUCT RUNOUTS TO DIFFUSERS SHALL MATCH THE SIZE OF THE DIFFUSER NECK.
25. WATER PRESSURE DROPS THROUGH COIL CONTROL VALVES SHALL NOT EXCEED 5 PSI.
26. UNLESS OTHERWISE NOTED, ALL EQUIPMENT AND VALVE DRAINS SHALL BE INDEPENDENTLY PIPED FULL SIZE TO THE NEAREST PLUMBING DRAIN.
27. SLEEVE AND SEAL ALL PIPING PENETRATIONS THROUGH BUILDING PARTITIONS. PROVIDE MANUAL AIR VENTS AT ALL HIGH POINTS IN CHILLED WATER AND HOT WATER PIPING.
28. PIPING, DUCTWORK, LEAK PROTECTION APPARATUS, OR OTHER EQUIPMENT FOREIGN TO ELECTRICAL SWITCHBOARDS, PANELBOARDS, DISTRIBUTION BOARDS, OR MOTOR CONTROL CENTERS SHALL NOT BE INSTALLED WITHIN THE REQUIRED SPACE FOR WORKING CLEARANCES OR DEDICATED SPACES OF THE ELECTRICAL EQUIPMENT, EXTENDING IN FRONT OF AND FROM FLOOR TO STRUCTURAL CEILING WITH A WIDTH AND DEPTH OF THE ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NEC-110.26.



1 LEVEL 1 - MOBILITY HUB - MECHANICAL
1/8" = 1'-0"

FAN SCHEDULE MOBILITY

PLAN MARK	MODEL	AREA SERVED	TYPE	TOTAL CFM	EXT. SP (IN WG.)	MAX FAN BHP	MOTOR HP	FAN RPM	VOLTS/PHASE	WEIGHT (lb)	NOTES
EF-MOB	SQ-70-VG	MOBILITY HUB	THRU WALL	200	0.35	0.03	1/15	1585	115/1	30	

1. UL 705 LISTED EC MOTOR WITH VARIABLE SPEED DIAL, OR SPEED VARIED BY POTENTIOMETER. PROVIDE ALL ALUMINUM BACKDRAFT DAMPER.
2. PROVIDE OSHA GUARD ON FAN INLET.
3. CONTROL BY 365 DAY PROGRAMMABLE THERMOSTAT ON WALL. FAN TO RUN WHENEVER INDOOR TEMPERATURE IS ABOVE 78 DEG (ADJ) INTERLOCK INTAKE DAMPER TO OPEN WHENEVER FAN IS ON, OTHERWISE REMAIN CLOSED.
4. DISCONNECT BY ELECTRICAL.

HEATER SCHEDULE MOBILITY

PLAN MARK	MODEL	AREA SERVED	TYPE	VOLTS/PHASE	WATTS	AMPS	WEIGHT (lb)	NOTES
EH-MOB	HF3326TD-RP	MOBILITY HUB	WALL MOUNTED	208/1	3000	14.4	30	1,2,3,4

1. PROVIDE WITH INTEGRAL MANUAL DISCONNECT. COORDINATE MCA AND MOCP WITH ELECTRICAL CONTRACTOR.
2. CONTROL BY ADJUSTABLE THERMOSTAT INTEGRAL TO UNIT. HEATER TO RUN WHENEVER INDOOR TEMPERATURE IS BELOW 70 DEG (ADJ)
3. BASIS OF DESIGN TPI. EQUALS BY INDEECO AND BRASCH.

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TLC Project No.: 719179

THINK. LISTEN. CREATE.

ALABAMA LICENSED No. 51929 PROFESSIONAL ENGINEER MATTHEW JOHN WIECHART 04/07/2023

This item has been electronically signed and sealed by Matthew Wiechart, PE on the date adjacent to this seal.
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FOR ECOTOURISM & SUSTAINABILITY
MOBILITY HUB PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision	Initials

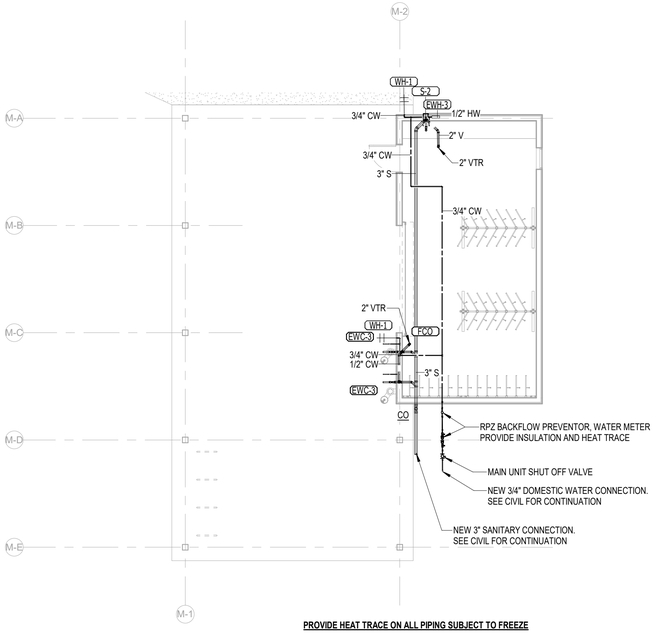
JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET **MECHANICAL LEGEND, FLOORPLAN, AND SCHEDULE**

SHEET
MM001



PROVIDE HEAT TRACE ON ALL PIPING SUBJECT TO FREEZE

1 LEVEL 1 - MOBILITY HUB - PLUMBING

1/8" = 1'-0"

PLUMBING SYMBOLS

SYMBOL	DESCRIPTION
CD	- CONDENSATE DRAIN PIPING
CW	- DOMESTIC COLD WATER PIPING
HW	- DOMESTIC HOT WATER PIPING
HWR	- DOMESTIC HOT WATER RETURN PIPING
S	- SANITARY WASTE PIPING
V	- VENT PIPING
ST	- STORM DRAIN PIPING
STO	- OVERFLOW STORM DRAIN PIPING
G	- FUEL GAS PIPING
	- HOSE BIBB OR WALL HYDRANT
CO	- CLEANOUT PLUG
CO	- WALL CLEANOUT
CO	- FLOOR CLEANOUT / EXTERIOR CLEANOUT
FD	- FLOOR DRAIN
FS	- FLOOR SINK
DD	- DECK DRAIN
	- SHUT-OFF VALVE
	- BALL VALVE
	- CALIBRATED BALANCING VALVE
	- CHECK VALVE (SWING)
	- PRESSURE REDUCING VALVE
4 / P4.101	- DETAIL REFERENCE (SHEET No. SHOWN ON)
4" S	- PIPE TAG (PIPE SIZE — PLUMBING SYSTEM)
1	- REVISION REFERENCE

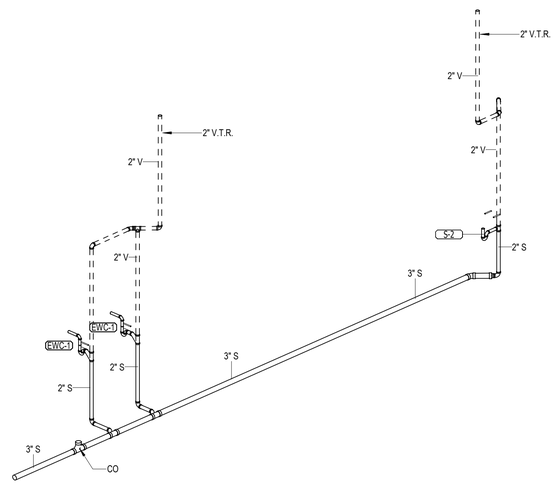
PLUMBING ABBREVIATIONS

ABBREVIATION		DESCRIPTION
CA	-	COMPRESSED AIR
AFF	-	ABOVE FINISH FLOOR
AW	-	ACID WASTE
AV	-	ACID VENT
CB	-	CATCH BASIN
CD	-	CONDENSATE DRAIN
CFH	-	CUBIC FEET PER HOUR
CO	-	CLEANOUT
CONT	-	CONTINUATION
CW	-	DOMESTIC COLD WATER
DI	-	DEIONIZED WATER
DN	-	DOWN
DS	-	DOWNSPOUT
DWG	-	DRAWING
EXIST	-	EXISTING
°F	-	DEGREE FAHRENHEIT
FCO	-	FLOOR CLEANOUT
FD	-	FLOOR DRAIN
FOF	-	FUEL OIL FILL
FOG	-	FUEL OIL GAGE
FOR	-	FUEL OIL RETURN
FOS	-	FUEL OIL SUPPLY
FOV	-	FUEL OIL VENT
FS	-	FLOOR SINK
FSE#	-	FOODSERVICE EQUIPMENT NUMBER
G	-	GAS
GPH	-	GALLONS PER HOUR
GPM	-	GALLONS PER MINUTE
GR	-	KITCHEN WASTE (GREASE)
HB	-	HOSE BIBB
HD	-	HUB DRAIN
HW	-	DOMESTIC HOT WATER
HWR	-	DOMESTIC HOT WATER RECIRCULATING
IE	-	INVERT ELEVATION
IW	-	INDIRECT WASTE
KW	-	KILOWATT
LBS	-	POUNDS
MH	-	MANHOLE
NC	-	NORMALLY CLOSED
NIC	-	NOT IN CONTRACT
NO	-	NORMALLY OPEN
NP	-	NON-POTABLE WATER
NTS	-	NOT TO SCALE
OD	-	OUTSIDE DIAMETER
PRV	-	PRESSURE REDUCING VALVE
PSI	-	POUNDS PER SQUARE INCH
PVC	-	POLYVINYL CHLORIDE PIPE
RD	-	ROOF DRAIN
RRW	-	RECYCLED RAIN WATER
RPBP	-	REDUCED PRESSURE BACKFLOW PREVENTOR
SAN	-	SANITARY
SD	-	STORM DRAIN
SF	-	SQUARE FEET
SH	-	SHEET
ST	-	STORM
STO	-	OVERFLOW STORM DRAIN
SW	-	SOFT COLD WATER
V	-	VENT
VAC	-	VACUUM
VC	-	VACUUM CLEANING
VTR	-	VENT THRU ROOF
WCO	-	WALL CLEANOUT
WTR	-	WATER

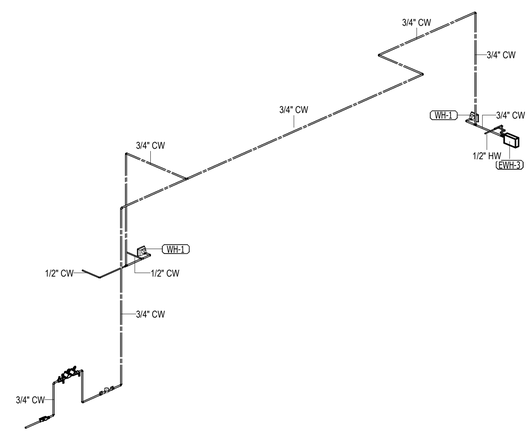
NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT

PLUMBING GENERAL NOTES

1. REFERENCE THE SPECIFICATIONS FOR MATERIAL AND EQUIPMENT INSTALLATION STANDARDS.
2. THE PLUMBING INSTALLATION SHALL COMPLY WITH ALL STATE AND LOCAL CODES.
3. UTILITIES AND SERVICES INDICATED ARE TAKEN FROM VARIOUS OLD AND NEW SURVEYS, AS-BUILT RECORDS AND FIELD INVESTIGATIONS. UNFORSEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON DRAWINGS. COOPERATION WITH OTHER TRADES IN ROUTING AND BURIAL DEPTHS, AS DETERMINED DURING CONSTRUCTION, WILL BE NECESSARY.
4. FIELD VERIFY EXISTING INSTALLATIONS. MODIFY EXISTING PLUMBING SYSTEMS, WHICH ARE TO REMAIN ACTIVE, TO FACILITATE RECONNECTION AND EXTENSION OF THE NEW WORK.
5. NOTIFY OWNER AT LEAST 24 HOURS PRIOR TO INTERRUPTING EXISTING SERVICE. SCHEDULE DISCONNECTION AND TIE-INS TO MINIMIZE DISRUPTION OF SERVICES. SERVICES ARE NOT TO BE LEFT DISRUPTED DURING NON-NORMAL CONTRACTOR WORKING HOURS.
6. PLANS ARE NOT COMPLETELY TO SCALE. PIPE ROUTING SHOWN IS SCHEMATIC AND IS NOT INTENDED TO INDICATE EXACT ROUTING. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES. VERIFY STRUCTURAL, MECHANICAL AND ELECTRICAL INSTALLATIONS AND OTHER POTENTIAL OBSTRUCTIONS AND ROUTE PIPING TO AVOID INTERFERENCES.
7. PROVIDE ALL OFFSETS AND FITTINGS AND MAKE CONNECTION TO SITE UTILITIES.
8. CONCEAL PIPING ABOVE CEILINGS, WITHIN WALLS OR CHASES EXCEPT IN MECHANICAL ROOMS OR AS SPECIFICALLY NOTED.
9. PROVIDE ACCESS PANELS FOR ALL VALVES CONCEALED IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS.
10. SLEEVE AND/OR FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS, CEILINGS, AND FLOORS WITH UL LISTED ASSEMBLIES. FIRESTOP ASSEMBLIES SHALL BE EQUAL TO OR EXCEED THE RATING OF THE WALL, CEILING OR FLOOR. SEE ARCHITECTURAL DRAWINGS FOR FINAL FINISHES.
11. FLASH AND COUNTER-FLASH ROOF PENETRATIONS.
12. WHEN BEAM SLEEVE PENETRATIONS ARE NECESSARY, COORDINATE PENETRATIONS WITH ALL TRADES, THE ARCHITECT AND THE STRUCTURAL ENGINEER.
13. PROVIDE FOUNDATION PAD PENETRATION SLEEVES. ALLOW 1" MINIMUM CLEARANCE BETWEEN SLEEVE INSIDE SURFACE AND PIPE EXTERIOR.
14. SEE ARCHITECTURAL DRAWINGS FOR FIXTURE LOCATIONS AND MOUNTING HEIGHTS.
15. PROVIDE AUTOMATIC TRAP PRIMERS FOR FLOOR DRAIN TRAP SEALS.
16. PROVIDE AN AIR GAP, WHEN REQUIRED BY CODE, SERVING INDIVIDUAL FIXTURES, DEVICES, APPLIANCES AND APPARATUS.
17. ALL EXPOSED PIPE AND FITTINGS IN FINISHED AREAS SHALL BE CHROME PLATED.
18. MOUNT HOSE BIBBS 24" ABOVE FINISHED GRADE.
19. PROVIDE CLEANOUTS IN ACCORDANCE WITH ALL STATE AND LOCAL CODES. INSTALL CLEANOUT WITH COVER FLUSH TO FINISH SURFACE.
20. COORDINATE EXACT FLOOR DRAIN LOCATIONS WITH ARCHITECTURAL DRAWINGS. SET FLOOR DRAINS BELOW FINISHED FLOOR TO ALLOW FOR FLOOR SLOPING TO THE DRAIN.
21. COORDINATE PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES. ANY PIPING RUN OVER PANELS SHALL BE RE-ROUTED AT NO ADDITIONAL COST.
22. ALL WALL MOUNTED LAVATORIES SHALL BE ATTACHED TO FLOOR MOUNTED CARRIER DESIGNED TO WITHSTAND A VERTICAL LOAD OF 250 POUNDS ON THE FRONT OF THE FIXTURE.
23. PROVIDE SANITARY WASTE, VENT, DOMESTIC WATER, ETC. ROUGH-IN AND MAKE FINAL CONNECTIONS (TO INCLUDE PROVIDING ALL NECESSARY RELATED STOPS, VALVES, TRAPS, ETC. AND MAKE READY FOR USE) TO ALL EQUIPMENT, WHETHER FURNISHED BY THIS CONTRACTOR OR FURNISHED BY OTHERS.
24. ALL MATERIALS AND EQUIPMENT INSTALLED IN RETURN AIR PLENUMS SHALL BE NON-COMBUSTIBLE AND UL APPROVED FOR USE IN A RETURN AIR PLENUM SPACE. IF MATERIALS ARE NOT NON-COMBUSTIBLE IN RETURN AIR PLENUMS, THEY SHALL BE REPLACED OR WRAPPED WITH A UL LISTED FIRE RATED FIRE WRAP (I.E. FYREWRAP 0.5 PLENUM INSULATION OR APPROVED EQUAL) AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURES UL LISTED DETAILS AND RECOMMENDATIONS AT NO ADDITIONAL COST. (NOTE: REFER TO MECHAICAL DRAWINGS FOR RETURN AIR PLENUM LOCATIONS.)
25. PIPING, INSULATION, FITTINGS, MATERIALS, COVERS AND FINISHES IN RETURN AIR PLENUM SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE DEVELOPED RATING OF 50.
26. INSTALL POINT OF USE MIXING VALVES FOR ALL HAND SINKS. BASIS OF DESIGN: ZURN AQUA GARD.
27. NSF-61-G COMPLIANCE: PRODUCTS IN CONTACT WITH DOMESTIC WATER FOR HUMAN CONSUMPTION SHALL MEET NSF-61-G AND CONTAIN LESS THAN 0.25% (WEIGHTED AVERAGE) OF LEAD. ALL PRODUCTS SHALL BE LABELED WITH THE CERTIFICATION MARK NSF-61-G2
28. CLEAN AND DISINFECT POTABLE AND NON-POTABLE DOMESTIC WATER PIPING REFER TO PLUMBING SPECIFICATION DOEMSTIC WATER PIPING FOR ADDITIONAL INFORAMTION.



2 MOBILITY HUB GRAVITY ISO



3 MOBILITY HUB PRESSURE ISO

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TLC Project No.: 719179

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ALABAMA LICENSED No. 51929 PROFESSIONAL ENGINEER MATTHEW JOHN WIECHART 04/07/2023

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MOBILITY HUB PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision	Initials

JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
PLUMBING SYMBOLS, LEGEND, NOTES AND INDEX

SHEET
PM001

ELECTRICAL SYMBOL LEGEND

BASIC MATERIALS

SYMBOL	DESCRIPTION
	DEVICE ABBREVIATION TAGS:
TR	TAMPER RESISTANT
TV	RECEPTACLE MOUNTED ADJACENT TO TV OUTLET, COORDINATE HEIGHT W/ ARCHITECT
U	DUPLEX RECEPTACLE WITH (2) USB PORTS
WP	WEATHERPROOF
S_a	SINGLE POLE SWITCH (SUBSCRIPT INDICATES ITEM CONTROLLED)
S_3	THREE-WAY SWITCH
S_4	FOUR-WAY SWITCH
S_K	SINGLE POLE KEY SWITCH
S_T	DIGITAL TIMER SWITCH W/ 5 MIN. WARNING FLASH
S_{OSab}	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH, DUAL RELAY
S_{OS}	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH
S_{VS}	WALL MOUNTED DUAL TECHNOLOGY VACANCY SENSOR SWITCH
$S_{D,OS}$	WALL MOUNTED DUAL TECHNOLOGY DIMMING/OCCUPANCY SENSOR SWITCH
S_{LV}	LOW VOLTAGE SWITCH
S_{LVO}	LOW VOLTAGE OVERRIDE SWITCH
S_{LVD}	LOW VOLTAGE OVERRIDE SWITCH WITH DIMMING
S_F	FAN SWITCH
S_M	MOTOR RATED SWITCH
S_D	DIMMER SWITCH, LINE VOLTAGE
OS	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR
OS	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR
DL	DAYLIGHT SENSOR CEILING MOUNTED
DL	DAYLIGHT SENSOR WALL MOUNTED
VS	VACANCY SENSOR CEILING MOUNTED
VS	VACANCY SENSOR WALL MOUNTED
PC	PHOTOCELL, MOUNTED ON ROOF FACING NORTH
	NOTE: DIAGONAL MARKS INDICATED ON ANY DEVICE REPRESENTS DEVICE CONNECTED TO EMERGENCY CIRCUIT (RED DEVICE FOR RECEPTACLE); TYPICAL FOR ANY DEVICE IN LEGEND
	SINGLE RECEPTACLE
	DUPLEX RECEPTACLE
	TWO DUPLEX RECEPTACLES (QUAD) WITH COMMON COVERPLATE
	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER
	TWO DUPLEX RECEPTACLES (QUAD) WITH COMMON COVER MOUNTED ABOVE COUNTER
	DUPLEX RECEPTACLE: EACH RECEPTACLE ON SEPARATE CIRCUIT (PROVIDE BREAKER WITH 2-POLE COMMON TRIP HANDLE)
	SPLIT-WIRED CONTROLLED DUPLEX RECEPTACLE
	GFCI RECEPTACLE; "WP" INDICATES CAST METAL "IN-USE" WEATHERPROOF COVER, WEATHER-RESISTANT LISTED
	TWO GFCI DUPLEX RECEPTACLES (QUAD) WITH COMMON COVERPLATE
	GFCI RECEPTACLE MOUNTED ABOVE COUNTER
	DUPLEX RECEPTACLE, CEILING MOUNTED
	TWO DUPLEX RECEPTACLES (QUAD) WITH COMMON COVERPLATE, CEILING MOUNTED
	PEDESTAL MOUNTED DUPLEX RECEPTACLE
	FLOOR BOX WITH DUPLEX RECEPTACLE WITH APPROPRIATE FLANGE
	MULTI-SERVICE FLOOR BOX WITH DUPLEX RECEPTACLE, VOICE/DATA/AV DEVICES (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS)
	MULTI-SERVICE FLOOR BOX WITH TWO DUPLEX RECEPTACLES (QUAD) , VOICE/DATA/AV DEVICES (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS)
	MULTI-SERVICE POWER & DATA FLOOR BOX WITH FURNITURE FEED CONNECTION (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS)
	SPECIAL PURPOSE RECEPTACLE, NEMA CONFIGURATION AS NOTED
J	JUNCTION BOX WALL MOUNTED
J	JUNCTION BOX MOUNTED IN OR ABOVE CEILING OR IN STRUCTURE
	WALL MOUNTED FURNITURE FEED POWER CONNECTION
PFP	POWER POLE WITH POWER & DATA FURNITURE FEED POWER CONNECTIONS
PFP	POWER POLE WITH POWER & DATA OUTLETS
P	MULTI-SERVICE POKE-THRU WITH TWO INTEGRAL DUPLEX RECEPTACLES AND VOICE/DATA/AV DEVICES (REFER TO TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS FOR LOW VOLTAGE REQUIREMENTS), OR FURNITURE FEED CONNECTION; REFER TO POKE-THRU DETAILS
	MULTI-SERVICE RACEWAY WITH 5-20R RECEPTACLES, 18" O.C. UNLESS OTHERWISE NOTED
C	CLOCK RECEPTACLE, WALL MOUNTED
GND	GROUND BUS BAR, COPPER
SPD	SURGE PROTECTIVE DEVICE
ST	SHUNT-TRIP PUSHBUTTON; SEMI-FLUSH WALL MOUNTED UNLESS OTHERWISE NOTED; NEMA 3R FOR EXTERIOR LOCATIONS
EPO	EMERGENCY POWER OFF SHUNT-TRIP PUSHBUTTON, RED MUSHROOM HEAD, CLEAR LEXAN PROTECTIVE COVER
	OVERHEAD DOOR PUSHBUTTON CONTROL STATION
	PUSHBUTTON STATION
	MOTOR CONNECTION
MD	MOTORIZED DAMPER CONNECTION
VFD	VARIABLE FREQUENCY DRIVE
DDC	DIRECT DIGITAL CONTROL PANEL
BAS	BUILDING AUTOMATION SYSTEM CONTROL PANEL
LCP	LIGHTING CONTROL PANEL

SYMBOL	DESCRIPTION
MH	MANHOLE
PB	PULLBOX
HH	HANDHOLE
T	TRANSFORMER
ATS	AUTOMATIC TRANSFER SWITCH
30AR NF 3R	NEMA RATING; NEMA 1 UNLESS OTHERWISE NOTED NON-FUSED DISCONNECT SWITCH, RATING AS NOTED NF = NON-FUSED AR = AMPERE RATING OF SWITCH 4X SS = NEMA 4X STAINLESS STEEL ENCLOSURE
30AR 20AF 3R	NEMA RATING; NEMA 1 UNLESS OTHERWISE NOTED FUSED DISCONNECT AF = AMPERE RATING OF FUSE AR = AMPERE RATING OF SWITCH 4X SS = NEMA 4X STAINLESS STEEL ENCLOSURE
MCP AMPERE RATING 30/3 3R 0	# OF POLES NEMA RATING; NEMA 1 UNLESS OTHERWISE NOTED COMBINATION MAGNETIC MOTOR STARTER, SIZE AS NOTED, 3-POLE UNLESS OTHERWISE NOTED 4X SS = NEMA 4X STAINLESS STEEL ENCLOSURE NEMA STARTER SIZE
	SWITCHBOARD/ SWITCHGEAR/ DISTRIBUTION PANEL
	BRANCH CIRCUIT PANELBOARD, OVER 240 VOLTS, SURFACE MOUNTED
	BRANCH CIRCUIT PANELBOARD, OVER 240 VOLTS, FLUSH MOUNTED
	BRANCH CIRCUIT PANELBOARD, UNDER 240 VOLTS, SURFACE MOUNTED
	BRANCH CIRCUIT PANELBOARD, UNDER 240 VOLTS, FLUSH MOUNTED
	CONDUIT CONCEALED ABOVE CEILING OR IN WAL
	CONDUIT EXPOSED
	CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDER FLOOR
	CONDUIT HOMERUN TO ELECTRICAL PANEL
UP	CONDUIT TURNING UP
DN	CONDUIT TURNING DOWN
	CONDUIT STUBBED OUT OR UP
	CONDUIT CONTINUED
	FLEXIBLE CONDUIT
	CONDUIT SEAL-OFF FITTING
	GROUND OR GROUND ROD AS NOTED
	EXISTING TO BE REMOVED (HEAVY, DASHED LINE)
	EXISTING TO REMAIN (LIGHT, SOLID LINE)
	NEW (HEAVY, SOLID LINE)

LIGHTING

	LED OR FLUORESCENT STRIP FIXTURE
A	FIXTURE TYPE
2 a ZX-X	LED OR FLUORESCENT FIXTURE, RECESSED, PENDANT OR SURFACE CEILING LOWER CASE LETTER INDICATES CONTROLLING SWITCH CIRCUIT NUMBER LIGHTING CONTROL ZONE NUMBER
	LED OR FLUORESCENT FIXTURE RECESSED, PENDANT OR SURFACE CEILING DIAGONAL HALF SHADING INDICATE FIXTURE CONNECTED TO EMERGENCY CIRCUIT OR PROVIDED WITH INTEGRAL EMERGENCY BATTERY PACK; "E" AFTER FIXTURE TYPE TAG INDICATES INTEGRAL BATTERY PACK UNLESS OTHERWISE NOTED ON LIGHT FIXTURE SCHEDULE (TYPICAL FOR ALL LIGHT FIXTURE SYMBOLS)
	LED OR FLUORESCENT FIXTURE, WALL MOUNTED
	LED, FLUORESCENT, HID, RECESSED, PENDANT OR SURFACE CEILING
	LED, FLUORESCENT, HID, WALL MOUNTED
	LED, FLUORESCENT, HID - CEILING WALLWASHER, ACCENT LIGHT, LANDSCAPING TREE ACCENT LIGHT, FACADE LIGHT
	TRACK WITH TRACK LIGHT FIXTURE (TRIANGLES INDICATE QUANTITY OF TRACK HEADS)
	EMERGENCY TWIN-HEAD LIGHT WITH INTEGRAL BATTERY PACK, WALL MOUNTED
	LINEAR FLUORESCENT, LED, RECESSED, PENDANT OR SURFACE CEILING
	EXTERIOR POLE-MOUNTED AREA LIGHT FIXTURE, ARMS AS INDICATED ON DRAWINGS
	EXTERIOR PEDESTRIAN SIDEWALK BOLLARD OR POST-TOP LIGHT FIXTURE
	EXIT LIGHT, LED, CEILING OR PENDANT MOUNTED; DIRECTIONAL ARROWS AS INDICATED; SHADED QUADRANT INDICATES FACE(S) OF FIXTURE
	EXIT LIGHT, LED, WALL MOUNTED

FIRE ALARM / DETECTION SYSTEM

SYMBOL (NFPA / LEGACY)	DESCRIPTION
F / F	MANUAL PULL STATION
S /	CEILING SMOKE DETECTOR, PHOTOELECTRIC TYPE UNLESS OTHERWISE NOTED E = ELEVATOR WITH RECALL CONTACTS I = IONIZATION
S /	DUCT SMOKE DETECTOR R = RETURN S = SUPPLY
S_{BR} / B_R	BEAM SMOKE DETECTOR BR OR R = BEAM DETECTOR RECEIVER BT OR T = BEAM DETECTOR TRANSMITTER
H / H	HEAT DETECTOR 135°F FIXED TEMPERATURE, UNLESS OTHERWISE NOTED, CEILING MOUNTED
R / R	SUPERVISED ADDRESSABLE FIRE ALARM CONTROL RELAY
/ ET	DUCT SMOKE DETECTOR REMOTE TEST SWITCH WITH INDICATING LAMP, WALL MOUNTED AT 48" AFF, UNLESS OTHERWISE NOTED
XXCD / F XXCD	**COMBINATION SPEAKER/STROBE, WALL MOUNTED, 75CD UNLESS OTHERWISE NOTED** CD = CANDELA RATING
F / H	HORN ONLY, WALL MOUNTED
XXCD / F XXCD	STROBE, CEILING MOUNTED, 75 CD UNLESS OTHERWISE NOTED CD = CANDELA RATING
C XXCD / FS	**COMBINATION SPEAKER/STROBE, CEILING MOUNTED, 75CD UNLESS OTHERWISE NOTED** CD = CANDELA RATING
S / SS	SPEAKER ONLY, CEILING MOUNTED
S / SS	SPEAKER ONLY, WALL MOUNTED
/ F	STROBE, WALL MOUNTED, 75CD UNLESS OTHERWISE NOTED
/ P	FIREMAN'S PHONE JACK
VS / TS	SPRINKLER TAMPER SWITCH CONNECTION
WS / FS	SPRINKLER WATERFLOW SWITCH CONNECTION
PS / PS	PRESSURE SWITCH CONNECTION
DH /	ELECTROMAGNETIC DOOR HOLD OPEN DEVICE
FACP / FACP	FIRE ALARM CONTROL PANEL
FATC / FATC	FIRE ALARM TERMINAL CABINET
FAA / FAA	FIRE ALARM ANNUNCIATOR PANEL - FLUSH MOUNTED
EVAC / EVAC	VOICE EVACUATION PANEL
MNS / MNS	MASS NOTIFICATION SYSTEM PANEL
DACT / DACT	MASS NOTIFICATION SYSTEM PANEL

ABBREVIATIONS

A/C	AIR CONDITIONING
AC	ALTERNATING CURRENT
ABV CLG	ABOVE CEILING
ADA	AMERICANS WITH DISABILITIES ACT
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
AMP	AMPERE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASA	AMERICAN STANDARDS ASSOCIATION
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AWG	AMERICAN WIRE GUAGE
BC	BARE COPPER
BIL	BASIC IMPULSE LEVEL
BAS	BUILDING AUTOMATION SYSTEM
BMS	BUILDING MANAGEMENT SYSTEM
BRKR OR BKR	BREAKER
C	CONDUIT OR RACEWAY
CAB	CABINET
CKT	CIRCUIT
CB	CIRCUIT BREAKER
CBM	CERTIFIED BALLAST MANUFACTURERS
CATV	CABLE TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CLEC	CLOCK EQUIPMENT CABINET
CLG	CEILING
CO	CONDUIT OR RACEWAY ONLY
COAX	COAXIAL CABLE
COND	CONDUCTOR
CONN	CONNECTION
CPU	CENTRAL PROCESSING UNIT
CRT	CATHODE RAY TERMINAL (VIDEO DISPLAY TERMINAL)
CT	CURRENT TRANSFORMER
CU	COPPER
CW	COLD WATER
DC	DIRECT CURRENT
DDC	DIRECT DIGITAL CONTROL
DEG	DEGREE
DF	DEMAND FACTOR
DISC	DISCONNECT
DISC SW	DISCONNECT SWITCH
DO	DRAW OUT
DN	DOWN
DPST	DOUBLE POLE SINGLE THROW
EDH	ELECTRIC DUCT HEATER
EMT	ELECTRIC METALLIC TUBING
EO	ELECTRICALLY OPERATED
EOL	END OF LINE
EOR	ENGINEER OF RECORD
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FATC	FIRE ALARM TERMINAL CABINET
FBC	FLORIDA BUILDING CODE
FCU	FAN COIL UNIT
FLA	FULL LOAD AMPERES
FM	FACTORY MUTUAL
FPU	FAN POWERED UNIT
FT	FEET
GF	GROUND FAULT
GFA	GROUND FAULT ALARM
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFR	GROUND FAULT RELAY
GND, G	GROUND
HP	HORSEPOWER
HOA	HAND-OFF-AUTOMATIC
HORIZ	HORIZONTAL
IBC	INTERNATIONAL BUILDING CODE
IC	INTERCOM
ICU	INTENSIVE CARE UNIT
IECC	INTERNATIONAL ENERGY CONSERVATION CODE

ABBREVIATIONS (CONT.)

IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
IES	ILLUMINATING ENGINEERING SOCIETY
IMC	INTERMEDIATE METAL CONDUIT
IN	INCHES
IPCEA	INSULATED POWER CABLE ENGINEERS ASSOCIATION
IT	INSTANTANEOUS TRIP
JB OR J-BOX	JUNCTION BOX
KCMIL	ONE THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT AMPERES
KW	KILOWATT
KWH	KILOWATT HOURS
LBS	POUNDS
LED	LIGHT EMITTING DIODE
LP	LIGHTNING PROTECTION
LT	LIGHT
LTG	LIGHTING
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND
LSIA	LONG TIME, SHORT TIME, INSTANTANEOUS, ALARM
LSI	LONG TIME, SHORT TIME, INSTANTANEOUS
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN SERVICE DISTRIBUTION PANEL
MIC	MICROPHONE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MSB	MAIN SERVICE SWITCHBOARD
MTD	MOUNTED
MTG	MOUNTING
MTR	MOTOR
MTS	MANUAL TRANSFER SWITCH
MUX	MULTIPLEX (TRANSPONDER) PANEL
MVA	MEGA VOLT AMPS
N	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NF	NON-FUSED
NL	NON-LINEAR
NO	NORMALLY OPEN OR NUMBER
OL	OVERLOAD
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
P	POLE
PB	PULLBOX
PF	POWER FACTOR
PIV	POST INDICATOR VALVE
PNL	PANEL
PR	PAIR
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYLCHLORIDE
PWR	POWER
REC, RECEPT	RECEPTACLE
REF	REFRIGERATOR
RGS, GRC	RIGID GALVANIZED STEEL CONDUIT
RLA	RUNNING LOAD AMPERES
RMS	ROOT-MEAN-SQUARE
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
SCA	SHORT CIRCUIT AMPERES
SD	SMOKE DETECTOR
SEC	SECONDARY
S/N	SOLID NEUTRAL
SPD	SURGE PROTECTIVE DEVICE
SPKR	SPEAKER
SPST	SINGLE POLE SINGLE THROW
SS	STAINLESS STEEL
SST	SOLID STATE TRIP
STD	SHORT TIME TRIP
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TEL	TELEPHONE
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
TVEC	TELEVISION EQUIPMENT CABINET
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UL	UNDERWRITERS LABORATORIES
UTIL	UTILITY
V	VOLT
VA	VOLTAMPERE
VAR	VOLT AMPERE REACTIVE
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
W	WIRE
WP	WEATHER PROOF
XFMR	TRANSFORMER
XFR	TRANSFER

ELECTRICAL DRAWING INDEX

SHEET	DESCRIPTION
EM000	ELECTRICAL LEGEND, ABBREVIATIONS, AND SHEET INDEX
EM001	ELECTRICAL GENERAL NOTES
EM100	MOBILITY HUB POWER FLOOR PLAN
EM200	MOBILITY HUB LIGHTING FLOOR PLAN
EM300	ELECTRICAL RISER DIAGRAM & SCHEDULES
EM400	FIRE ALARM RISER, DETAILS, AND NOTES
EM401	LIGHTING CONTROLS, NOTES, AND SCHEDULES
EM402	LIGHTING FIXTURE SCHEDULE
EM500	ELECTRICAL DETAILS
EM501	ELECTRICAL DETAILS

NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT.

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THINK. LISTEN. CREATE.

ALABAMA LICENSED No. 33674 PROFESSIONAL ENGINEER MICHAEL J BARRILE

04/07/2023

This item has been electronically signed and sealed by Michael Barrile, PE on the date adjacent to this seal.
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GULF SHORES, ALABAMA

No.	Date	Revision	Initials

JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
ELECTRICAL LEGEND, ABBREVIATIONS, AND SHEET INDEX

SHEET
EM000

ELECTRICAL GENERAL NOTES

GENERAL:

1. THE DRAWINGS AND APPLICABLE SPECIFICATIONS SHALL BE CONSIDERED SUPPLEMENTARY, ONE TO THE OTHER AND ARE CONSIDERED THE "CONTRACT DOCUMENTS". ALL WORKMANSHIP, METHODS AND/OR MATERIALS DESCRIBED OR IMPLIED BY ONE AND NOT DESCRIBED OR IMPLIED BY THE OTHER SHALL BE PROVIDED, FURNISHED OR PERFORMED AS IF IT HAD APPEARED IN BOTH SECTIONS. THE TERM "CONTRACT DOCUMENTS" DESCRIBED HEREIN IS NOT LIMITED SOLELY TO THE ELECTRICAL PORTION OF THE DRAWINGS AND SPECIFICATIONS, BUT ENCOMPASSES THE DRAWINGS AND SPECIFICATIONS OF ALL DIVISIONS AS A WHOLE.
2. PROVIDE AN OPERATING AND MAINTENANCE MANUAL TO OWNER PRIOR TO THE FINAL ACCEPTANCE. THE MANUAL SHALL INCLUDE, AS A MINIMUM, (1) SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. ALSO PROVIDE TWO OPERATIONS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS AND METHOD OF OPERATION FOR EQUIPMENT SHALL BE CLEARLY IDENTIFIED, AND THE NAME, PHONE NUMBER AND ADDRESS OF AT LEAST ONE QUALIFIED SERVICE AGENCY.
3. INCLUDE ALL COSTS FOR EXCAVATION, SAW CUTTING, DIRECTIONAL BORING, CORE DRILLING, BACKFILLING, SURFACE RESTORATION, REPAIR OF FINISHES, ETC. THAT IS REQUIRED IN ORDER TO MEET THE PROJECT REQUIREMENTS.
4. INCLUDE IN BID ALL COSTS ASSOCIATED WITH TEMPORARY ELECTRICAL SERVICE AS REQUIRED FOR USE BY ALL TRADES DURING CONSTRUCTION. REMOVE TEMPORARY POWER AT THE COMPLETION OF THE PROJECT. OBTAIN AND PAY FOR ALL REQUIRED PERMITS FOR TEMPORARY POWER. ENGINEER OF RECORD SHALL BE PROVIDED WITH ADDITIONAL COMPENSATION FROM THE CONTRACTOR WHERE SIGNED & SEALED DRAWINGS ARE REQUESTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD IF REQUIRED BY THE AHJ FOR THE TEMPORARY POWER.
5. PROVIDE A COMPLETE UL LISTED LIGHTNING PROTECTION SYSTEM WITH A MASTER LABEL FOR THE ENTIRE FACILITY PER THE REQUIREMENTS OF NFPA 780, AND THE DIVISION 26 SPECIFICATIONS, UNLESS NOTED OTHERWISE. LIGHTNING PROTECTION SYSTEM SHALL INCLUDE BURIED COUNTERPOISE, UNLESS NOTED OTHERWISE.
6. LOCATE, IDENTIFY, PROTECT AND DOCUMENT ALL UTILITY LINES LOCATED WITHIN THE PROJECT BOUNDARY. FOR LOCATING SITE UTILITIES, CONTACT SUNSHINE STATE ONE CALL OF FLORIDA, INC. AT LEAST 48 HOURS IN ADVANCE PRIOR TO DIGGING, AT 1-800-432-4770.
7. INCLUDE IN BID THE TRANSPORT AND DISPOSAL OR RECYLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL RULES, REGULATIONS AND GUIDELINES APPLICABLE. COMPLY FULLY WITH FLORIDA STATUTES REGARDING MERCURY-CONTAINING DEVICES, AND WITH ALL DEP AND EPA APPLICABLE GUIDELINES AT THE TIME OF DISPOSAL. PROVIDE OWNER WITH WRITTEN CERTIFICATION OF ACCEPTED DISPOSAL.

COORDINATION:

1. VERIFY AND COORDINATE LOCATIONS OF ANY MISCELLANEOUS EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (I.E., COPIERS, FAX MACHINES, PRINTERS, KITCHEN APPLIANCES, LAUNDRY APPLIANCES, PROJECTION SCREENS, SHOP TOOLS, MACHINE, ELEVATORS, ETC.) WITH APPROVED SHOP DRAWINGS, OWNER-PROVIDED CUT SHEETS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY ELECTRICAL REQUIRED.
2. VERIFY AND COORDINATE LOCATIONS AND EXACT ELECTRICAL REQUIREMENTS FOR ALL MECHANICAL, PLUMBING AND FIRE PROTECTION EQUIPMENT PRIOR TO SUBMITTAL OF SHOP DRAWINGS OF ELECTRICAL EQUIPMENT. PROVIDE ALL NECESSARY RACEWAYS, CONDUCTORS, BOXES, EQUIPMENT, ACCESSORIES, ASSOCIATED DISCONNECT SWITCHES, CIRCUIT BREAKERS, CONTROL TRANSFORMERS, FIRE ALARM SHUTDOWN, ETC. REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. COORDINATE WITH APPROPRIATE TRADE'S APPROVED SHOP DRAWINGS, MANUFACTURER'S INSTRUCTIONS, AND EQUIPMENT NAMEPLATE INFORMATION, PRIOR TO ROUGH IN, AND PROVIDE ALL NECESSARY ELECTRICAL REQUIRED, UNLESS OTHERWISE NOTED.
3. THIS PROJECT REQUIRES COORDINATION DRAWINGS BY THE CONTRACTOR. PARTICIPATE IN THE COORDINATION DRAWING PREPARATION PROCESS AND PROVIDE ALL NECESSARY INFORMATION REQUIRED TO COORDINATE ALL TRADE INFORMATION.
4. ALL WORK ON THE ELECTRICAL SYSTEM REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER DIVISIONS/TRADES PRIOR TO COMMENCEMENT OF WORK. AVOID INTERFERENCES WITH THE PROGRESS OF OTHER DIVISIONS/TRADES.
5. WHERE STRUCTURAL WALLS ARE OF TILT-UP CONSTRUCTION, PROVIDE COORDINATION FOR EXACT DIMENSIONS AND OPENINGS REQUIRED FOR ALL ELECTRICAL COMPONENTS INSTALLED WITHIN TILT-UP WALLS DURING THE SHOP DRAWING REVIEW PROCESS OF THE TILT-UP WALLS, PRIOR TO MANUFACTURE OF THE TILT-UP WALLS.
6. LOCATIONS OF VFD'S, DISCONNECTS, MOTOR STARTERS, ETC. FOR HVAC EQUIPMENT ARE DIAGRAMMATIC ON THE PLAN DRAWINGS. EXACT LOCATIONS ARE TO BE COORDINATED WITH CONTRACTOR'S COORDINATION DRAWINGS PRIOR TO ROUGHING IN TO ENSURE PROPER NEC CLEARANCES AND APPROPRIATE MOUNTING SURFACE.
7. COORDINATE RECEPTACLE LOCATIONS WITH TECHNOLOGY DRAWINGS OR OWNER'S VENDOR DRAWINGS SO THAT A 120V 20A 5-20R RECEPTACLE IS LOCATED ADJACENT TO EACH VOICE/DATA OUTLET AND TV OUTLET INDICATED ON PLANS. RECEPTACLE IS TO BE CONNECTED TO NEAREST 120V RECEPTACLE CIRCUIT, UNLESS OTHERWISE NOTED ON PLANS.
   REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, CIVIL, LANDSCAPE, INTERIOR DESIGN, TECHNOLOGY, STRUCTURAL, AND KITCHEN EQUIPMENT DRAWINGS FOR RELATED INFORMATION AND ADDITIONAL INSTALLATION REQUIREMENTS TO BE PERFORMED AS PART OF THE WORK.
8. WHERE A DISCREPANCY OR CONFLICT IS FOUND BETWEEN ONE DRAWING AND ANOTHER, OR BETWEEN A DRAWING AND APPLICABLE SPECIFICATIONS, NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY IN WRITTEN FORM. IN GENERAL, THE MOST STRINGENT REQUIREMENT SHALL GOVERN UNLESS THE DISCREPANCY CONFLICTS WITH APPLICABLE CODES OR OWNER'S DESIGN STANDARDS, WHEREIN THE CODE OR OWNER'S DESIGN STANDARDS SHALL GOVERN.
9. CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND/OR SITE AFFECTED BY THIS WORK PRIOR TO SUBMITTAL BID PRICE, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT MAY AFFECT EXECUTION OF THE WORK. SUBMISSION OF A BID PRICE SHALL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT AND/OR MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED THAT COULD HAVE BEEN REASONABLY OBSERVED WILL NOT BE RECOGNIZED.
10. COORDINATE ALL PROJECT SCHEDULING AND PHASING REQUIREMENTS WITH ARCHITECT/ENGINEER AND OWNER PRIOR TO SUBMITTING BID PRICE. THIS PROJECT MAY REQUIRE PHASING SEQUENCES AND POTENTIAL PREMIUM TIME WORK AND ALL COSTS FOR SUCH SHALL BE INCLUDED IN THE BID PRICE. PROVIDE ADEQUATE WORK FORCE AND EQUIPMENT, AND INCLUDE PREMIUM TIME AS MAY BE REQUIRED IN ORDER TO ADHERE TO THE PROJECT SCHEDULE. ADDITIONALLY, ENSURE THAT LONG LEAD ITEMS DO NOT IMPACT THE PROJECT'S SCHEDULE OR PHASING.
11. ANY TEMPORARY INTERRUPTION ON POWER REQUIRED FOR THE SYSTEM TIE-IN OR SWITCHOVER FOR ANY PORTION OF THE ELECTRICAL SYSTEM SHALL BE PRE-APPROVED IN WRITING BY THE OWNER AND SCHEDULED IN ADVANCE.
12. COORDINATE EXACT REQUIREMENTS WITH THE LOCAL UTILITY COMPANIES AND PROVIDERS (ELECTRIC, TELEPHONE, CABLE TV, ETC.) AND INCLUDE ALL COSTS FOR PROVIDING TEMPORARY AND PERMANENT SERVICES REQUIRED FOR THIS PROJECT IN THE BID PRICE. BID PRICE SHALL INCLUDE, BUT NOT BE LIMITED TO, EXCAVATION, RACEWAYS, BACKFILL, EQUIPMENT, EQUIPMENT PADS, BACKBOARDS, METERS, GROUNDING, UTILITY ENGINEERING AND IMPACT FEES.
13. CONDUCT WORK OPERATIONS AND DEBRIS REMOVAL IN A MANNER THAT ENSURES MINIMUM INTERFERENCE WITH NORMAL BUSINESS OPERATIONS, TRAFFIC, PARKING, ETC. ONGOING IN ADJACENT OCCUPIED SPACES OR FACILITIES. PROVIDE ALL THAT IS REQUIRED TO EFFECTIVELY PROTECT SURROUNDING OCCUPANTS, EQUIPMENT, FINISHES, FURNITURE, ETC. FROM DAMAGE OR EXCESSIVE NOISE THROUGHOUT THE DURATION OF THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR ANY LOSSES OR DAMAGE. ANY DAMAGE RESULTING FROM THE FAILURE TO ADHERE TO THIS REQUIREMENT. RESTORE DAMAGED ELEMENTS TO ORIGINAL CONDITION BY THE CONTRACTOR TO THE SATISFACTION OF THE ARCHITECT/ENGINEER AND OWNER, AT NO ADDITIONAL COSTS. REPORT OF ANY SUCH OCCURRENCE TO THE ARCHITECT/ENGINEER AND OWNER IMMEDIATELY AND AWAIT WRITTEN DIRECTION PRIOR TO PROCEEDING WITH REPAIRS.
14. COORDINATE THE LOCATION OF ALL LIGHT FIXTURES, DEVICES AND BOXES WITH WINDOWS, MIRRORS, MILLWORK, CABINETS, GLASS CURTAIN WALLS, AND GLASS WALLS PRIOR TO INSTALLATION OF CONDUITS OR BOXES. REVIEW ALL CONTRACT DRAWINGS TO ASCERTAIN ANY CONFLICTS PRIOR TO BIDDING. OBTAIN CLARIFICATION FROM A/E PRIOR TO BID. CONTRACTOR SHALL NOT BE ENTITLED TO ADDITIONAL COMPENSATION FOR WORK REQUIRED TO RELOCATE OUTLET BOXES OR RACEWAYS FOR COORDINATION WITH OTHER TRADE'S WORK.

ELECTRICAL EQUIPMENT:

1. EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND RATED FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED. ALL COMPONENTS OF THE ELECTRICAL SYSTEM LOCATED OUTDOORS OR INDOORS WHERE EXPOSED TO SIGNIFICANT MOISTURE SHALL BE WEATHERPROOF, NEMA 3R, AS A MINIMUM, WHETHER INDICATED ON THE CONTRACT DRAWINGS OR NOT.
2. TERMINATION PROVISIONS FOR ALL ELECTRICAL EQUIPMENT (PANELBOARDS, SWITCHBOARD, TRANSFORMERS, DISCONNECT SWITCHES, MOTOR CONTROLLERS, AUTOMATIC TRANSFER SWITCHES, ENCLOSED CIRCUIT BREAKERS, WIREWAYS, ETC.) SHALL BE LISTED AND IDENTIFIED FOR USE WITH MINIMUM 75 DEG. F CONDUCTORS IN ACCORDANCE WITH NEC.
3. WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC.
4. THE EXCLUSIVELY DEDICATED SPACE EXTENDING FROM FLOOR TO 6' ABOVE EQUIPMENT OR STRUCTURAL CEILING, WHICHEVER DISTANCE IS LOWER, WITH A WIDTH AND DEPTH OF THE PANELBOARD OR SWITCHBOARD MUST BE CLEAR OF ALL PIPING, DUCTS, EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES IN ACCORDANCE WITH NEC.
5. PROVIDE A REINFORCED CONCRETE PAD, SIZED 4" LARGER IN ALL DIRECTIONS THAN THE FOOTPRINT OF THE EQUIPMENT, AND 4" HIGH, FOR ALL FREESTANDING, FLOOR-MOUNTED ELECTRICAL EQUIPMENT. PROVIDE VIBRATION ISOLATORS AND/OR ANCHORS PER MANUFACTURER'S INSTRUCTIONS.
6. PROVIDE HACR RATED CIRCUIT BREAKER FOR ALL HVAC EQUIPMENT.
7. PROVIDE AFCI PROTECTION TO COMPLY WITH NEC IN ALL GUEST ROOMS AND GUEST SUITES WITH PROVISIONS FOR COOKING, IN ALL DWELLING UNITS, APARTMENTS AND CONDOMINIUMS.
8. ALL PANELBOARDS OR DISCONNECT SWITCHES LOCATED IN KITCHEN AREAS SHALL BE STAINLESS STEEL (COVER AND DOOR WHERE PANEL IS FLUSH MOUNTED, PANEL BOX, COVER & DOOR WHERE SURFACE MOUNTED).
9. PROVIDE SURGE PROTECTION DEVICE FOR ALL MAIN SERVICE EQUIPMENT, PANELBOARDS SERVING SENSITIVE ELECTRONIC EQUIPMENT (DATA RACKS) OR COMPUTERS, LIGHTING PANELS SERVING EXTERIOR LIGHTING, POWER CIRCUITS OR LOW VOLTAGE (FIRE ALARM, TELECOMMUNICATIONS) EXITING THE BUILDING. PROVIDE MINIMUM 30A/3P BREAKER IN PANELBOARDS AND 60A/3P DISTRIBUTION PANEL OR SWITCHBOARD, UNLESS OTHERWISE NOTED, OR PER THE SPD MANUFACTURER'S RECOMMENDATIONS FOR SURGE PROTECTION DEVICE.
10. CONTRACTOR IS TO SUBMIT FOR APPROVAL TO THE ENGINEER OF RECORD FINAL COORDINATED SETTINGS REQUIRED FOR MAIN CIRCUIT BREAKER AND ALL DOWNSTREAM ADJUSTABLE OVERCURRENT PROTECTIVE DEVICES, BASED ON SELECTED EQUIPMENT MANUFACTURER.

IDENTIFICATION:

1. PROVIDE TYPED PANEL DIRECTORIES FOR ALL NEW PANELBOARDS, AND EXISTING PANELBOARDS AFFECTED BY THIS PROJECT. DIRECTORIES SHALL REFLECT PROJECT AS- BUILT CONDITIONS FOR ALL BRANCH CIRCUITS. DIRECTORIES SHALL INCLUDE WHERE EACH PANEL IS FED FROM. ADDITIONALLY, EACH BRANCH CIRCUIT LOAD DESCRIPTION SHALL INCLUDE THE ROOM NUMBER(S) FOR EACH LOAD SERVICE (I.E., RECEPTACLES-RMS 501,503). ROOM NUMBERS SHALL BE BASED ON ACTUAL ROOM SIGNAGE INSTALLED IN FIELD. COORDINATE EXACT ROOM NUMBERS WITH A/E AND OWNER PRIOR TO COMPLETION OF PANEL DIRECTORIES.
2. PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS ON EACH SWITCHBOARD, SWITCHGEAR, DISTRIBUTION PANEL, PANELBOARD, MOTOR CONTROL CENTER, SAFETY SWITCH, ENCLOSED CIRCUIT BREAKER, CABINET, STEP-DOWN TRANSFORMER, TRANSFER SWITCH, ETC., AND ANY OTHER MAJOR COMPONENT OF THE ELECTRICAL SYSTEM.
3. PROVIDE ENGRAVED PLASTIC LAMINATE NAME TAGS FOR EACH DISTRIBUTION BREAKER OR BRANCH CIRCUIT BREAKER IN SWITCHGEAR, SWITCHBOARDS, MOTOR CONTROL CENTERS AND OTHER DISTRIBUTION EQUIPMENT. NAME TAG SHALL INCLUDE LOAD DESCRIPTION AND ROOM NUMBER FOR EACH LOAD SERVICE.
4. ARC FLASH DANGER/WARNING LABELS SHALL BE APPLIED TO SWITCHBOARD, PANELBOARDS, AND EQUIPMENT CONTROLLERS PER NEC.
5. PROVIDE LABELS ON THE INSIDE OF EACH DEVICE COVERPLATE, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) DEVICE IS CONNECTED TO.
6. PROVIDE NEATLY, HANDWRITTEN IDENTIFICATION ON THE EXTERIOR COVER OF ALL JUNCTION BOXES, PULLBOXES AND WIREWAYS, IDENTIFYING THE PANEL(S)/ CIRCUIT NUMBER(S) CONTAINED WITHIN.
7. PROVIDE A PERMANENT SIGN ON THE MAIN ELECTRICAL ROOM DOOR TO THE BUILDING STATING THAT THE MAIN SERVICE DISCONNECTING MEANS IS LOCATED INSIDE.
8. PROVIDE A PERMANENT LABEL ON ALL PANELBOARDS, SWITCHBOARDS, SWITCHGEAR, MOTOR CONTROLS CENTERS AND DISTRIBUTION PANELS STATING "DO NOT WORK ON EQUIPMENT WHILE ENERGIZED. LOCK-OUT TAG-OUT REQUIRED".
9. PROVIDE REQUIRED IDENTIFICATION PER ANSI STANDARDS, NEC REQUIREMENTS, AND OWNER'S PUBLISHED DESIGN STANDARDS WHERE APPLICABLE.

ELECTRICAL DEVICES, OUTLET BOXES, JUNCTION BOXES:

1. LIGHT SWITCHES SHALL BE MOUNTED 48 INCHES ABOVE FINISHED FLOOR TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED.
2. RECEPTACLES, VOICE/DATA OUTLETS, WALL FURNITURE FEEDS SHALL BE MOUNTED 18 INCHES ABOVE FINISHED FLOOR TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED. ABOVE COUNTER RECEPTACLES SHALL BE MOUNTED 6" ABOVE BACK SPLASH TO CENTERLINE OF DEVICE, UNLESS OTHERWISE NOTED.
3. WHEN ELECTRICAL BOXES ARE LOCATED IN VERTICAL FIRE-RESISTIVE ASSEMBLIES, (CLASSIFIED AS FIRE/SMOKE AND SMOKE PARTITIONS), THEY SHALL BE INSTALLED WITHOUT AFFECTING THE FIRE CLASSIFICATION. ALL OF THE FOLLOWING CONDITIONS SHALL BE MET:
   A. ALL ELECTRICAL BOXES SHALL BE METALLIC.
   B. BOX OPENING SHALL OCCUR ONLY ON ONE SIDE OF FRAMING SPACE.
   C. BOX OPENING SHALL NOT EXCEED 16 SQUARE INCHES.
   D. ALL CLEARANCES BETWEEN OUTLET BOX AND GYPSUM BOARD SHALL BE COMPLETELY FILLED WITH JOINT COMPOUND (OR OTHER APPROVED MATERIAL).
   E. PROVIDE A WALL AROUND OUTLETS LARGER THAN 16 SQUARE INCHES. THE INTEGRITY OF THE WALL RATING SHALL BE MAINTAINED.
   F. THE TOTAL AGGREGATE SURFACE AREA OF THE BOXES SHALL NOT EXCEED 100 SQUARE INCHES PER 100 SQUARE FEET.
   G. OUTLET BOXES LOCATED ON OPPOSITE SIDES OF FIRE RESISTIVE ASSEMBLIES SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 24 INCHES.
   H. OUTLET BOXES SHALL BE SECURELY FASTENED TO WALL FRAMING MEMBERS.
   I. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT NOT TO EXCEED 1/8 INCH BETWEEN THE EDGES OF THE OUTLET BOX AND THE EDGES OF THE OPENING.
4. IT IS THE INTENT THAT ALL DEVICE OUTLET BOXES (POWER AND SYSTEMS) BE FLUSH MOUNTED IN WALLS, CEILINGS OR FLOORS, AND JUNCTION BOXES FLUSH MOUNTED IN WALLS, CEILINGS, OR FLOORS, OR CONCEALED ABOVE ACCESSIBLE CEILINGS, AND NOT SURFACE MOUNTED, UNLESS SPECIFICALLY NOTED ON THE CONTRACT DRAWINGS, OR UNLESS A/E GRANTS WRITTEN PERMISSION.
5. ALL COMPONENTS OF THE ELECTRICAL SYSTEM (INCLUDE RACEWAYS, ELECTRICAL EQUIPMENT, OUTLET BOXES, JUNCTION BOXES, ETC.) LOCATED IN A HAZARDOUS (CLASSIFIED) LOCATION SHALL BE APPROVED FOR USE IN SAID LOCATION, AS DEFINED BY THE NEC, WHETHER INDICATED ON THE CONTRACT DOCUMENTS OR NOT.
6. ALL DEVICES SHALL BE MOUNTED VERTICALLY, UNLESS OTHERWISE NOTED.
7. ALL RECEPTACLES SHALL BE MOUNTED SUCH THAT THE GROUND PIN IS MOUNTED UP.
8. WHERE DEVICES ARE SHOWN IN WALLS BACK-TO-BACK ON OPPOSITE SIDES, INSTALL SO THAT THEY ARE SEPARATED BY AT LEAST 12".
9. RECEPTACLES OR JUNCTION BOXES FOR ELECTRIC WATER COOLERS SHALL BE LOCATED DIRECTLY BEHIND ELECTRIC WATER COOLER, CONCEALED FROM DIRECT VIEW. RECEPTACLES SHALL BE GFCI TYPE. JUNCTION BOXES FOR HARD-WIRED CONNECTION TO EWC SHALL BE CIRCUITED TO GFCI PROTECTED CIRCUIT BREAKER IN PANELBOARD.
10. ALL EXTERIOR RECEPTACLES OR RECEPTACLES LOCATED IN AREAS SUBJECT TO MOISTURE (PARKING GARAGE, WASHDOWN AREAS IN KITCHEN, ETC) SHALL BE GFCI TYPE. ALL EXTERIOR RECEPTACLES SHALL BE PROVIDED WITH CAST METAL, IN-USE COVER UNLESS NOTED OTHERWISE.
11. ALL RECEPTACLES LOCATED IN KITCHENS, BATHROOMS OR WITHIN 6' OF THE INSIDE FACE OF A SINK, IN MECHANICAL ROOMS, JANITOR CLOSETS, ELEVATOR SHAFTS, ELEVATOR SUMP PUMP, AND ELEVATOR EQUIPMENT ROOMS SHALL BE GFCI TYPE OR GFCI PROTECTED.
12. ALL RECEPTACLES LOCATED IN DAY CARES, PEDIATRIC CLINICS OR AREAS, AND OTHER AREAS AS REQUIRED BY NEC AND STATE OF FLORIDA REQUIREMENTS FOR EDUCATIONAL FACILITIES SHALL BE TAMPERPROOF.

RACEWAYS:

1. FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT METAL CONDUIT (FMC & LFMC) SHALL NOT BE USED IN LENGTHS THAT EXCEED 6'-0" UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E GRANTS WRITTEN PERMISSION.
2. ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS, INCLUDING LOW VOLTAGE SYSTEMS, SHALL BE INSTALLED IN A COMPLETE RACEWAY SYSTEM (CONDUIT) UNLESS SPECIFIED NOTED OTHERWISE.
3. THE USE OF ELECTRICAL NON-METALLIC TUBING (ENT) AND LIQUIDTIGHT FLEXIBLE NON-METALLIC CONDUIT (LFNC) ARE PROHIBITED UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E OR OWNER GRANTS WRITTEN PERMISSION.
4. CONNECTIONS TO TRANSFORMERS, AHU'S, AND PUMPS SHALL BE WITH LIGUIDTIGHT, FLEXIBLE METAL CONDUIT.
5. NO PVC CONDUIT MAY BE USED INSIDE OF BUILDING UNLESS ROUTED UNDERGROUND, AND UNLESS OTHERWISE NOTED.
6. ALL CONDUIT TERMINATIONS AT TERMINAL BOARDS ARE TO HAVE GROUNDING BUSHINGS AT CONDUIT ENDS.
7. ALL CONDUITS ARE TO BE CONCEALED UNLESS IMPOSSIBLE DUE TO EXISTING CONDITIONS (I.E., EXPOSED CEILINGS, BUILDING EXTERIOR WALL RUNS). CONCEAL ALL CONDUITS ABOVE CEILINGS OR IN WALLS AND MILLWORK. WHERE EXISTING CONDITIONS DICTATE THAT CONDUITS CANNOT BE CONCEALED, NOTIFY ARCHITECT/ENGINEER PRIOR TO INSTALLING CONDUIT FOR RESOLUTION TO ROUTING.
8. SEAL ALL PENETRATIONS AND OPENINGS MADE DURING EXECUTION OF WORK IN FIRE-RATED WALLS. WALLS SHALL BE SEALED WITH UL-APPROVED PRODUCT WITH THE SAME OR GREATER RATING OF WALL PENETRATED.
9. PROVIDE ALL PENETRATIONS THROUGH FLOORS, WALL, CEILINGS AND ROOFS WHERE REQUIRED. COORDIANTE LOCATIONS AND SIZES WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS, FIELD CONDITIONS AND WORK OF ALL OTHER DIVISIONS/TRADES. ALL OPENINGS ARE TO BE SEALED WATERTIGHT.
10. ALL RACEWAYS THAT TURN UP INTO THE SLAB OR ELECTRICAL EQUIPMENT FROM UNDERGROUND SHALL BE RIGID GALVANIZED STEEL (RGS) WITH BITUMASTIC COATING FOR AT LEAST THE FINAL 18" IN LENGTH. THE USE OF NON-METALLIC CONDUIT ABOVE GRADE IS PROHIBITED.
11. PANEL SCHEDULES AND FLOOR PLANS MAY INDICATE DEDICATED HOMERUNS FOR EACH BRANCH CIRCUIT. BRANCH CIRCUITS MAY BE GROUPED IN A COMMON HOMERUN WHERE THE HOMERUN DOES NOT EXCEED 3 PHASE CONDUCTORS, 3 NEUTRAL CONDUCTORS, AND 1 EQUIPMENT GROUND. THE HOMERUN RACEWAY SIZE AND CONDUCTOR SIZE SHALL BE INCREASED AS NECESSARY TO COMPLY WITH THE NEC FOR 40% MAXIMUM FILL AND DERATING REQUIREMENTS.
12. IT IS THE INTENT THAT ALL RACEWAYS BE CONCEALED IN WALLS, ABOVE CEILINGS, IN SLAB, OR BELOW SLAB UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E GRANTS WRITTEN PERMISSION. WHERE RACEWAYS ARE INSTALLED IN SLABS, THE MINIMUM SPACING, MAXIMUM RACEWAY SIZE, AND ANY OTHER STRUCTURAL LIMITATIONS SHALL BE COORDINATED WITH THE STRUCTURAL DRAWINGS AND THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.
13. PROVIDE SEAL OFF FITTINGS, APPROVED FOR SUCH USE, WHERE RACEWAYS PENETRATE BETWEEN A DRY, CONDITIONED ENVIRONMENT AND THE EXTERIOR OR WET ENVIRONMENTS SUCH AS WALK-IN COOLERS OR FREEZERS, KITCHEN WASH-DOWN AREAS, ETC.
14. PROVIDE POLYOLEFIN JET-LINE #232 (NYLON PULL STRING) IN EACH EMPTY CONDUIT WITH ENGRAVED METAL TAG INDICATING CONDUIT DESIGNATION.
15. MINIMUM RACEWAY SIZE SHALL BE 3/4" UNLESS NOTED OTHERWISE.
16. SET SCREW FITTINGS SHALL BE USED FOR EMT CONDUIT.

CONDUCTORS:

1. ALL WIRE SHALL BE SIZED AS SHOWN ON THE DRAWINGS. IF NO SIZE IS SHOWN, THEN WIRE SHALL BE #12 AWG, EXCEPT THAT BRANCH HOMERUNS OVER 100' IN LENGTH SHALL BE MINIMUM #10 AWG FOR 120/208 VOLT CIRCUITS, AND HOMERUNS OVER 200' IN LENGTH SHALL BE MINIMUM #10 AWG FOR 277/480 VOLT CIRCUITS. REFER TO BRANCH CIRCUIT VOLTAGE DROP TABLES BELOW. BRANCH CIRCUIT WIRING SHALL BE SIZED TO LIMIT THE VOLTAGE DROP TO 3% OF NOMINAL VOLTAGE OR LESS.
2. BRANCH CIRCUITS SHALL BE INCREASED IN SIZE AS REQUIRED TO COMPENSATE FOR VOLTAGE DROP FROM LENGTH OF CIRCUIT DUE TO FIELD ROUTING. FINAL INSTALLATION SHALL NOT EXCEED A MAXIMUM OF 3% VOLTAGE DROP FOR BRANCH CIRCUITS. REFER TO VOLTAGE DROP TABLE BELOW FOR CONDUCTOR SIZES FOR BRANCH CIRCUITS:

120V (BASED ON 1500W LOAD) CIRCUIT LENGTH	MIN. CONDUCTOR SIZE INCREASE FOR VOLTAGE DROP
0 FT - 70 FT	#12 AWG
71 FT - 115 FT	#10 AWG
116 FT - 180 FT	#8 AWG

181 FEET AND LONGER: SUBMIT WIRE SIZE TO ENGINEER OF RECORD FOR WRITTEN APPROVAL.

277V (BASED ON 4155W LOAD) CIRCUIT LENGTH	MIN. CONDUCTOR SIZE INCREASE FOR VOLTAGE DROP
0 FT - 140 FT	#12 AWG
141 FT - 220 FT	#10 AWG
221 FT - 350 FT	#8 AWG

3. ALL WIRE SIZES ARE BASED ON AMPACITIES FOR 75 DEG. F TEMPERATURE RATING LISTED IN NEC.
4. ALL CONDUCTORS IN CABINETS MUST BE CAREFULLY FORMED AND HARNESSED SO THAT EACH CONDUCTOR DROPS OFF DIRECTLY OPPOSITE TO TERMINAL.
5. ALL CONDUCTORS SHALL BE COPPER, THHN/THWN , AND SOLID FOR #10 AWG AND SMALLER, AND STRANDED FOR #8 AWG AND LARGER.
6. THE USE OF ALUMINUM CONDUCTORS, RACEWAYS, BOXES, BUSSING, WINDINGS, ETC. ARE PROHIBITED. ALL MATERIALS SHALL BE COPPER, UNLESS SPECIFICALLY NOTED OTHERWISE OR UNLESS A/E OR OWNER GRANTS WRITTEN PERMISSION.

GROUNDING:

1. FIRE PROTECTION PIPING SHALL NOT BE USED FOR GROUNDING.
2. ALL FEEDERS AND BRANCH CIRCUITS SHALL INCLUDE AN EQUIPMENT GROUND CONDUCTOR. METAL RACEWAYS SHALL NOT BE USED AS EQUIPMENT GROUND.
3. WHERE A PHASE CONDUCTOR IS INCREASED IN SIZE DUE TO VOLTAGE DROP, THE EQUIPMENT GROUND CONDUCTOR SHALL BE INCREASED IN SIZE PROPORTIONATELY.
4. PROVIDE A GROUND BUS BAR IN EACH ELECTRICAL ROOM AND TELECOMMUNICATIONS / IDF/ MDF ROOM FOR ALL NEW CONSTRUCTION AND NEW ROOMS IN EXISTING CONSTRUCTION, AND IN EXISTING CONSTRUCTION WHERE THERE IS NONE INSTALLED WITHIN AN EXISTING ROOM.

LIGHTING:

1. LIGHT FIXTURES SUPPORTED BY CEILING GRID SHALL BE SUPPORTED AS FOLLOWS: LIGHT FIXTURES WEIGHING LESS THAN 10 POUNDS SHALL HAVE 12-GAUGE HANGER WIRE CONNECTED FROM THE LIGHT FIXTURE TO THE STRUCTURE ABOVE. LIGHT FIXTURES WEIGHING 10 POUNDS OR MORE SHALL HAVE (2) 12-GAUGE HANGER WIRES ATTACHED AT OPPOSITE CORNERS OF THE LIGHT FIXTURE TO THE STRUCTURE ABOVE.
2. COORDINATE EXACT LOCATIONS OF LIGHT FIXTURES IN LAY-IN AND GYPBOARD CEILINGS WITH ARCHITECTURAL REFLECTED CEILING PLANS, AND WALL MOUNTED EXTERIOR AND INTERIOR LIGHT FIXTURES WITH ARCHITECTURAL ELEVATIONS PRIOR TO INSTALLATION. WHERE THE QUANTITY OF LIGHTS DIFFERS BETWEEN THE ARCHITECTURAL RCP AND THE ELECTRICAL LIGHTING PLANS, PROVIDE THE HIGHEST QUANTITY OF FIXTURES IN THE BID PRICE. THE DISCREPANCY IN QUANTITY SHALL BE BROUGHT TO THE ATTENTION OF THE A/E. THE HIGHEST QUANTITY SHALL BE CIRCUITED TO THE LOCAL ROOM OR AREA LIGHTING CIRCUITS AND LIGHTING CONTROL DEVICES, UNLESS OTHERWISE DIRECTED IN WRITING BY THE ARCHITECT/ENGINEER.
3. VERIFY ACTUAL CEILING CONSTRUCTION TYPE AS DEFINED ON THE ARCHITECTURAL DRAWINGS AND FURNISH ALL LIGHT FIXTURES WITH THE CORRECT MOUNTING DEVICES WHETHER OR NOT SUCH VARIATIONS ARE INDICATED BY THE LIGHT FIXTURE CATALOG NUMBER. VERIFY THE DEPTH OF ALL RECESSED LIGHT FIXTURES WITH THE ARCHITECTURAL DRAWINGS PRIOR TO ORDERING LIGHT FIXTURES. ANY DISCREPANCIES THAT WOULD CAUSE THE RECESSED LIGHT FIXTURES NOT TO FIT INTO CEILING SHALL BE REPORTED TO ARCHITECT/ENGINEER PRIOR TO ORDERING LIGHT FIXTURES.
4. LIGHT FIXTURES RECESSED IN FIRE-RATED CEILINGS SHALL BE PROVIDED WITH APPROVED FIRE-RATED ENCLOSURE WITH A FIRE RATING EQUAL TO THAT OF THE CEILING. PROVIDE A MINIMUM OF 3" CLEARANCE FROM SIDES AND TOP OF RECESSED LIGHT FIXTURES.
5. MODIFY ALL LIGHT FIXTURE CATALOG NUMBERS AS REQUIRED TO COORDINATE WITH THE LIGHTING BRANCH CIRCUIT VOLTAGES INDICATED. COORDINATE THE CATALOG NUMBERS WITH THE EXACT FIXTURE MOUNTING AND TRIM REQUIRED BY THE CEILING IN WHICH EACH FIXTURE IS BEING INSTALLED.
6. ALL LIGHT FIXTURES SHALL BE PROVIDED COMPLETE WITH LAMPS, UNLESS OTHERWISE NOTED.
7. ALL EXIT LIGHTS, LIGHT FIXTURES INDICATED WITH UNSWITCHED CIRCUIT (NIGHTLIGHT N/L), EMERGENCY TWIN-HEAD FIXTURES WITH INTEGRAL BATTERY PACKS, AND BATTERY PACKS INTEGRAL TO LIGHT FIXTURES, SHALL BE WIRED AHEAD OF ANY LOCAL SWITCHING OR LIGHTING CONTROLS.
8. PROVIDE UL WET LABEL OR IP67 RATED LIGHT FIXTURES FOR ALL FIXTURES LOCATED OUTSIDE OR IN PARKING GARAGES, IN SHOWERS, OR OPEN STRUCTURES.
9. PROVIDE 0-DEGREE BALLASTS FOR EXTERIOR FLUORESCENT OR HID LIGHT FIXTURES.
10. PROVIDE FUSING FOR ALL EXTERIOR LIGHT FIXTURES, OR FIXTURES IN PARKING GARAGES OR OPEN STRUCTURES.
11. PROVIDE ALL TEMPORARY NORMAL LIGHTING, EMERGENCY LIGHTING AND EXIT SIGNAGE REQUIRED DURING THE PROJECT CONSTRUCTION PHASE.
12. COORDINATE EXACT FOUNDATION AND/OR COMPACTING REQUIREMENTS FOR ALL POLE MOUNTED LIGHT FIXTURES WITH MANUFACTURER'S AND/OR INSTALLER'S STRUCTURAL ENGINEER. POLE BASES SHALL MEET OR EXCEED ALL WIND LOAD RATINGS, GUST FACTORS, IMPORTANCE FACTORS, ETC. REQUIRED BY NATIONAL AND/OR LOCAL CODES. SHOP DRAWINGS SHALL INCLUDES STRUCTURAL DRAWINGS FOR ALL POLE BASES, POLE, ASSEMBLY AND OVERTURN CALCULATIONS REQUIRED IN THIS PROJECT, SIGNED AND SEALED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE PROJECT STATE.
13. WHERE THERE IS NO EMERGENCY GENERATOR/ LIFE SAFETY DISTRIBUTION BRANCH AVAILABLE, PROVIDE INTEGRAL BATTERY PACKS, RATED FOR A MINIMUM OF 90 MINUTES, FOR FIXTURES SHOWN WITH SOLID SHADING AND/OR WITH "E" AFTER FIXTURE TAG, AND FOR ALL EXIT LIGHTS, OR UNLESS OTHERWISE NOTED.
14. REFER TO LIGHT FIXTURE SCHEDULE FOR LIGHT FIXTURE TYPES, DESCRIPTIONS, CATALOG NUMBERS AND ADDITIONAL INFORMATION PERTINENT TO THE LIGHT FIXTURE OR INSTALLATION THEREOF.
15. COORDINATE LIGHT FIXTURE TRIM TYPE AND FINISH COLOR WITH ARCHITECT PRIOR TO ORDERING.
16. EACH LIGHTING CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL.
17. PROVIDE AS PART OF BID PRICE, AN ADDITIVE ALTERNATE FOR THE SERVICES OF AN INDEPENDENT COMMISSIONING AGENT FOR THE LIGHTING SYSTEM FUNCTIONAL TESTING, INCLUDING ALL REQUIRED REPORTS. WHERE OCCUPANCY SENSORS, TIME SWITCHES, PROGRAMMABLE SCHEDULED LIGHTING CONTROLS, PHOTOSENSORS AND DAYLIGHTING CONTROLS ARE INSTALLED, THE FOLLOWING PROCEDURES SHALL BE PERFORMED:
   A. CONFIRM THAT THE PLACEMENT, SENSITIVITY AND TIME-OUT ADJUSTMENTS FOR OCCUPANCY SENSORS YIELD ACCEPTABLE PERFORMANCE.
   B. CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULED LIGHTING CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF.
   C. CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

MISCELLANEOUS CIRCUIT & INSTALLATION REQUIREMENTS:

1. THE INFRASTRUCTURE FOR THE ACCESS CONTROL/ CCTV OR SECURITY ELECTRONICS SYSTEM (CONDUITS, ELECTRICAL BOXES) SHALL BE INSTALLED BY DIVISION 26. THE ACCESS CONTROL/ CCTV OR SECURITY ELECTRONICS SYSTEM CONTRACTOR SHALL PROVIDE AND INSTALL THE WIRE AND CABLE FOR THE SYSTEM AND ALL REQUIRED EQUIPMENT. INSTALLATION OF THE CONDUITS AND ELECTRICAL BOXES SHALL BE UNDER THE DIRECT SUPERVISION OF THE ACCESS CONTROL/ CCTV SYSTEM CONTRACTOR. COORDINATE EXACT LOCATIONS OF DEVICES, RACEWAY LOCATIONS, SIZES AND QUANTITY, CONDUIT STUB-UPS PRIOR TO ROUGH IN.
2. THE INFRASTRUCTURE FOR THE VOICE/DATA TELECOMMUNICATIONS SYSTEM (CONDUITS, ELECTRICAL BOXES) SHALL BE INSTALLED BY DIVISION 26. THE TELECOMMUNICATIONS CONTRACTOR SHALL PROVIDE AND INSTALL THE WIRE AND CABLE FOR THE SYSTEM AND ALL REQUIRED EQUIPMENT AND COMPONENTS. INSTALLATION OF THE CONDUITS AND ELECTRICAL BOXES SHALL BE UNDER THE DIRECT SUPERVISION OF THE TELECOMMUNICATIONS CONTRACTOR. COORDINATE EXACT LOCATIONS OF DEVICES, RACEWAY LOCATIONS, SIZES AND QUANTITY, CONDUIT STUB-UPS PRIOR TO ROUGH IN.
3. PROVIDE 120V 20A 5-20R RECEPTACLE AT ALL FAN COIL UNITS FOR CONDENSATE PUMP POWER AND HOT WATER RECIRCULATING PUMPS, WHETHER SHOWN ON PLANS OR NOT. RECEPTACLE IS TO BE CONNECTED TO NEAREST 120V RECEPTACLE CIRCUIT.
4. PROVIDE 120V CONNECTION TO ALL MOTORORIZED DAMPERS INDICATED ON MECHANICAL PLANS, WHETHER SHOWN ON DIVISION 26 DRAWINGS OR NOT. FIRE/SMOKE DAMPER CIRCUITS ARE TO BE PROVIDED FROM EMERGENCY BRANCH PANEL (LEGALLY REQUIRED BRANCH IF AVAILABLE). MOTORIZED DAMPERS WITHIN THE SAME AREA CAN BE CIRCUITED TO THE SAME CIRCUIT (I.E., DEDICATED CIRCUIT IS NOT REQUIRED).
5. PROVIDE PHONE/DATA OUTLET WITH 1" RACEWAY, AND 120V RECEPTACLE ON DEDICATED CIRCUIT ADJACENT TO EACH AIR HANDLING UNIT FOR CONTROL POWER.
6. PROVIDE 120V DEDICATED CIRCUIT TO EACH AIR HANDLING UNIT WITH SEPARATE CONNECTIONS TO UNIT UV LIGHT, UNIT LIGHTS, UNIT RECEPTACLE, AND BI-POLAR IONIZATION FILTER WHERE PROVIDED. COORDINATE WITH DIVISION 23 SHOP DRAWINGS.
7. ACCESS CONTROLLED DOOR POWER NOTE: ENSURE ALL 120V CONVENIENCE RECEPTACLE CIRCUITS UTILIZED FOR ACCESS CONTROL POWER SUPPLY ARE UNDER NORMAL OPERATION ALWAYS ENERGIZED AND NOT CONTROLLED THROUGH PLUG LOAD CONTROL / LIGHTING CONTROLS / EPO STATIONS. THIS IS APPLICABLE TO ALL ACCESS CONTROL NOTES THROUGHOUT THE ELECTRICAL SET.
8. ENSURE ALL SHUNT TRIP RELAYS ARE CONTINUOUS DUTY RATED OR CONTAIN A SAFETY MECHANISM THAT ENSURES RELAYS GET DE-ENERGIZED AFTER ACTUATING TO PREVENT OVERHEATING.

FIRE ALARM SYSTEM NOTES

1. ALL FIRE ALARM EQUIPMENT IS TO BE NEW, UL LISTED FOR FIRE SERVICE, AND SHALL BE COMPATIBLE WITH THE SYSTEM BEING USED.
2. ALL WIRING AND CONDUIT IS TO CONFORM TO NEC ARTICLE 760. WIRING SHALL BE UL LISTED, MINIMUM 300V TYPE FPLP PLENUM RATED SOLID COPPER OR STANDARD COPPER WITH MAXIMUM 19 STRANDS.
3. LOW VOLTAGE CONDUCTORS: PROVIDE CONDUCTORS IN ACCORDANCE WITH NFPA 70 AND NFPA 72, AND AS RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER. CONDUCTORS SHALL BE COPPER, MINIMUM NO. 14 AWG, TWISTED SHIELDED PAIR.
4. SURVIVABILITY: A 1-HOUR RATED CABLE ASSEMBLY SHALL BE PROVIDED FOR NOTIFICATION APPLIANCE CIRCUITS AND ANY OTHER CIRCUITS NECESSARY FOR THE OPERATION OF THE NOTIFICATION APPLIANCE CIRCUITS FROM THE POINT AT WHICH THEY EXIT THE CONTROL UNIT UNTIL THE POINT THAT THEY ENTER THE NOTIFICATION ZONE THAT THEY SERVE.
5. MANUAL PULL STATIONS ARE TO BE INSTALLED AT 42" TO BOTTOM OF DEVICE AND NO HIGHER THAN 48" TO HANDLE ABOVE FINISHED FLOOR.
6. PROVIDE MINIMUM 3/4" CONDUIT AND WIRING BETWEEN EACH FIRE ALARM DEVICE AND FROM LAST DEVICE TO FACP UNLESS OTHERWISE NOTED.
7. PROVIDE FIRE ALARM RELAY AND DUCT DETECTOR CONNECTED TO FIRE ALARM SYSTEM, WITHIN 5' OF ALL DUCT PENETRATIONS THROUGH FIRE/SMOKE WALLS, WHETHER INDICATED ON ELECTRICAL OR MECHANICAL PLANS OR NOT.
8. FIRE ALARM CONTROL PANEL IS TO BE PROVIDED WITH DEDICATED 120V CIRCUIT WITH EQUIPMENT GROUND CONNECTION PER MANUFACTURER'S RECOMMENDATIONS AND ARTICLE 760 OF THE NEC. PROVIDE MINIMUM #12 AWG FOR GROUND CONNECTION. NOTE: PANEL NEUTRAL OR CONDUIT GROUND IS NOT ACCEPTABLE. 120V CIRCUIT SHALL BE FROM LIFE SAFETY BRANCH WHERE AVAILABLE.
9. SECONDARY BACK-UP POWER SHALL BE PROVIDED BY INTEGRAL BATTERIES WITHIN THE FIRE ALARM CONTROL PANEL TO SUPPLY POWER TO THE SYSTEM UNDER QUIESCENT LOAD FOR A MINIMUM OF 24 HOURS, AND THEN BE CAPABLE OF AN ADDITIONAL 15 MINUTES ALARM OPERATION AT MAXIMUM CONNECTED LOAD.
10. ALL FIRE ALARM POWER CIRCUITS SHALL HAVE A DEDICATED 120V 20A BREAKER THAT SHALL BE RED IN COLOR AND MECHANICALLY PROTECTED (LOCKABLE IN THE "ON" POSITION), MARKED AS "FIRE ALARM CIRCUIT".
11. A SUPERVISORY SIGNAL SHALL BE ANNUNCIATED UPON ANY TAMPER SWITCH ACTIVATION. FAILURE OR REMOVAL OF ANY DETECTION OR MANUAL DEVICE SHALL ACTIVATE A TROUBLE SIGNAL.
12. A CERTIFICATION OF COMPLETION AND UL LISTING SHALL BE ISSUED AND INSTALLED ON THE FIRE ALARM CONTROL PANEL.
13. MINIMUM CANDELA RATING OF STROBES IS 75; "110" ADJACENT TO DEVICE INDICATES 110 CANDELA RATING. PROVIDE SYNCHRONIZATION OF STROBES IN ALL ADJACENT AREAS WHERE STROBES ARE VISIBLE TO EACH OTHER.
14. ALL STROBES SHALL ACTIVATE UPON INITIATION OF THE GENERAL ALARM.
15. ALL STROBES SHALL BE INSTALLED PER ADA MOUNTING HEIGHT REQUIREMENTS. WALL MOUNTED STROBES SHALL BE INSTALLED SO THAT THE BOTTOM OF THE STROBE LENS IS 80" AFF.
16. STROBES SHALL BE INSTALLED WITHIN 15' OF THE ENDS OF ALL CORRIDORS.
17. SPEAKER/STROBES, HEAT DETECTORS OR MANUAL PULL STATIONS INSTALLED OUTSIDE OR IN AREAS OPEN TO THE EXTERIOR SHALL BE WEATHERPROOF DEVICES IN APPROVED BACKBOXES.
18. SMOKE DETECTORS SHALL BE PHOTO-ELECTRIC ADDRESSABLE TYPE.
19. SMOKE DETECTORS ARE TO BE INSTALLED PER NFPA 72. WALL MOUNTED SMOKE DETECTORS SHALL BE MOUNTED 4"-12" BELOW THE CEILING AND AWAY FROM CORNERS.
20. ALL SMOKE DETECTORS SHALL BE INSTALLED A MINIMUM OF 36" AWAY FROM ANY SUPPLY OR RETURN AIR VENTS OR DIFFUSERS.
21. DUCT DETECTORS SHALL BE PHOTO-ELECTRIC ADDRESSABLE TYPE, AND RATED FOR VELOCITIES UP TO 5000 FT/MIN.
22. HEAT DETECTORS SHALL BE ADDRESSABLE, FIXED TYPE @ 135 DEG F, UNLESS OTHERWISE NOTED.
23. WHERE THERE IS A GENERATOR ON THE PROJECT, CIRCUIT THE REMOTE GENERATOR ANNUNCIATOR PANEL ALARM OUTPUTS TO FIRE ALARM CONTROL PANEL PER AUTHORITY HAVING JURISDICTION REQUIREMENTS.
24. PROVIDE AN ADDRESSABLE FIRE ALARM SYSTEM PER NFPA AND ALL STATE AND LOCAL CODE REQUIREMENTS. COMPLY WITH NFPA 72 AND ADA REQUIREMENTS. STATE CERTIFIED AND LICENSED FIRE ALARM CONTRACTOR SHALL PREPARE AND SUBMIT SIGNED AND SEALED DRAWINGS FOR THE LOCAL AUTHORITY HAVING JURISDICTION/ FIRE MARSHALL.
25. FIELD VERIFY LOCATION OF AREA SMOKE DETECTORS AND HEAT DETECTORS. DO NOT LOCATE WITHIN 36" OF AN HVAC DIFFUSER (SUPPLY OR RETURN), IN DIRECT AIR FLOW PATH, OR WITHIN 36" OF A SPRINKLER HEAD UNLESS NOTED OTHERWISE. SMOKE DETECTORS FOR DOOR RELEASE SHALL BE LOCATED ON THE CENTERLINE OF THE DOOR AND A MAXIMUM OF FIVE FEET FROM THE DOOR. THE MINIMUM DISTANCE FROM THE DOOR SHALL BE THE DEPTH OF THE WALL SECTION ABOVE THE DOOR, BUT NOT LESS THAN 12".
26. PROVIDE LABELS FOR REMOTE ALARM INDICATORS FOR DUCT MOUNTED SMOKE DETECTORS (I.E., AHU-1 SUPPLY, AHU-2 RETURN, FIRE/SMOKE DAMPER, ETC.). DUCT DETECTORS SHOULD BE LOCATED WITHIN 6 TO 10 EQUIVALENT DIAMETERS OF STRAIGHT, UNINTERRUPTED DUCTWORK. DUCT DETECTORS FOR FIRE/SMOKE DAMPERS SHOULD BE LOCATED BETWEEN THE LAST INLET OR OUTLET UPSTREAM OF THE DAMPER AND THE FIRE INLET OR OUTLET DOWNSTREAM OF THE DAMPER, AND WITHIN FIVE FEET OF THE FIRE/SMOKE WALL.
27. EQUIPMENT SHUT DOWN FIRE ALARM RELAYS SHALL BE LOCATED WITHIN THREE (3) FEET OF THE EQUIPMENT CONTROLS AND THE WIRING TO THE RELAY SHALL BE MONITORED BY THE FIRE ALARM SYSTEM.
28. FOR EACH FIRE/SMOKE DAMPER, INTERLOCK WITH FIRE ALARM CONTROL PANEL TO CLOSE FIRE/SMOKE DAMPER AND TO CONTROL THE ASSOCIATED MECHANICAL UNIT PER THE MECHANICAL SEQUENCE OF OPERATIONS, UNLESS NOTED OTHERWISE.
29. ALL NOTIFICATION APPLIANCES SHALL BE WHITE IN COLOR UNLESS OTHERWISE NOTED.
30. FIRE ALARM CIRCUITS SHALL BE CLASS "B", STYLE "C" FOR INITIATION DEVICE CIRCUITS (IDC) AND CLASS "B" STYLE "Y" FOR NOTIFICATION DEVICE CIRCUITS (NAC), UNLESS OTHERWISE NOTED. CLASS "A" SHALL BE PROVIDED FOR WIRING FROM BUILNG TO BUILDING (CAMPUS).
31. SYSTEM SHALL BE AN ADDRESSABLE TYPE VOICE EVACUATION AND SHALL HAVE A SOUND PRESSURE LEVEL OF 15dB ABOVE AVERAGE AMBIENT SOUND LEVELS OR 5dB ABOVE MAXIMUM AMBIENT SOUND LEVEL, WHICHEVER IS GREATER.
32. ALL FIRE ALARM CABLE SHALL BE INSTALLED IN CONDUIT; NO FIRE ALARM CONDUIT SHALL BE INSTALLED UNDER SLAB. PROVIDE MANUFACTURED RED CONDUIT UNLESS OTHERWISE NOTED.
33. CONTRACTOR/VENDOR SHALL PREPARE FLORIDA LICENSE P.E. WORKING DRAWINGS INCORPORATING THE FIRE ALARM CRITERIA DESIGN AND CONFIRMING TO AHJ REQUIREMENTS. CONTRACTOR SHALL PROVIDE ALL MATERIAL REQUIRED PER AHJ AND DESIGN CRITERIA FOR A FULLY FUNCTIONING AND PERMITTABLE FIRE ALARM SYSTEM. SUBMIT TO DESIGN PROFESSIONAL AS A SHOP DRAWING FOR REVIEW. SUBMIT COMPLETE SIGNED & SEALED DRAWINGS TO PERMITTING AGENCY AND FOR CERTIFICATE OF OCCUPANCY. COMPLETED FIRE ALARM CERTIFICATION SHALL BE PROVIDED TO OWNER AT COMPLETION OF CONSTRUCTION.
34. WHERE A FIRE ALARM RISER IS INDICATED, IT IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO REPRESENT A COMPLETE WIRING AND DEVICE DISPLAY. ALL WIRING AND DEVICES SHALL BE IN ACCORDANCE WITH SELECTED VENDOR'S POINT-BY-POINT WIRING DIAGRAM. REFER TO FLOOR PLAN FOR DESIGN INTENT AND PROPOSED QUANTITY OF FIRE ALARM SYSTEM COMPONENTS.

WHERE THERE IS A DISCREPANCY BETWEEN ABOVE GENERAL NOTES AND SPECIFICATIONS, WHERE APPLICABLE, SPECIFICATIONS SHALL BE FOLLOWED

APPLICABLE CODES

ALL WORK AND EQUIPMENT UNDER THIS DIVISION SHALL BE IN STRICT COMPLIANCE WITH THE CODES, STANDARDS AND PRACTICES LISTED HEREIN:

A. LIFE SAFETY CODE, NFPA 101.
B. UNDERWRITERS LABORATORIES, INC. (UL) PUBLICATIONS.
C. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA).
D. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).
E. NATIONAL ELECTRICAL CODE (NEC), 2020 EDITION.
F. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE).
G. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA).
H. REQUIREMENTS OF LOCAL POWER COMPANY.
I. THE AMERICANS WITH DISABILITIES ACT (ADA).
J. OWNER'S PUBLISHED DESIGN STANDARDS.
K. INTERNATIONAL BUILDING CODE.
L. ICC 2021
M. ASHRAE 90.1 2013

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ALABAMA LICENSED No. 33674 PROFESSIONAL ENGINEER MICHAEL J BARRILE

04/07/2023

This item has been electronically signed and sealed by Michael Barrile, PE on the date adjacent to this seal.
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GULF SHORES, ALABAMA

No.	Date	Revision	Initials
1	08/30/2022	CITY COMMENTS	

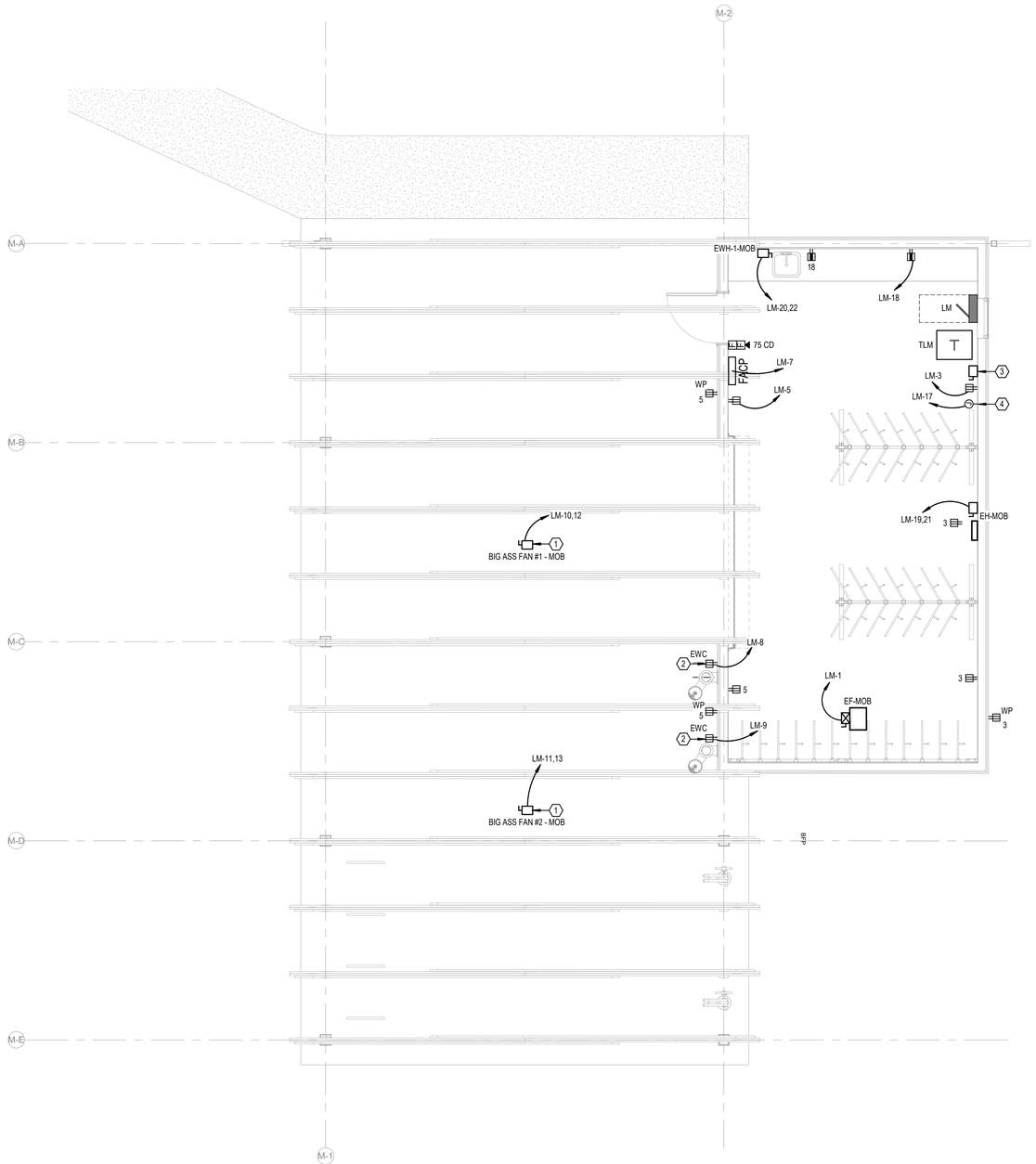
JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
ELECTRICAL GENERAL NOTES

SHEET
EM001



ELECTRICAL KEY NOTES

#	KEYNOTE TEXT
1	PROPOSED LOCATION OF A "BIG ASS" FAN. COORDINATE FINAL PLACEMENT WITH ARCHITECT AND EXACT REQUIREMENTS WITH SUBMITTED SHOP DRAWINGS PRIOR TO INSTALLATION.
2	PROVIDE A 120V, 20A DEDICATED GFCI-TYPE RECEPTACLE AT THIS LOCATION FOR AN ELECTRIC WATER COOLER. COORDINATE EXACT PLACEMENT WITH THE ARCHITECT PRIOR TO ROUGH-IN.
3	PROVIDE A 480V, 3-PHASE, 60A RATED PRIMARY SIDE LOCAL DISCONNECT SWITCH FOR THIS TRANSFORMER.
4	PROVIDE 120V, 20A POWER CONNECTION POINT AT THIS LOCATION FOR THE EMERGENCY LIGHTING INVERTER SYSTEM.

1 LEVEL 1 - MOBILITY HUB - POWER
1/4" = 1'-0"

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TLC Project No.: 719179

THINK. LISTEN. CREATE.

ALABAMA LICENSED No. 33674 PROFESSIONAL ENGINEER MICHAEL J BARRILE

04/07/2023

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FOR ECOTOURISM & SUSTAINABILITY
MAWFIELD SHED PACKAGE3E
GULF SHORES, ALABAMA

No.	Date	Revision	Initials

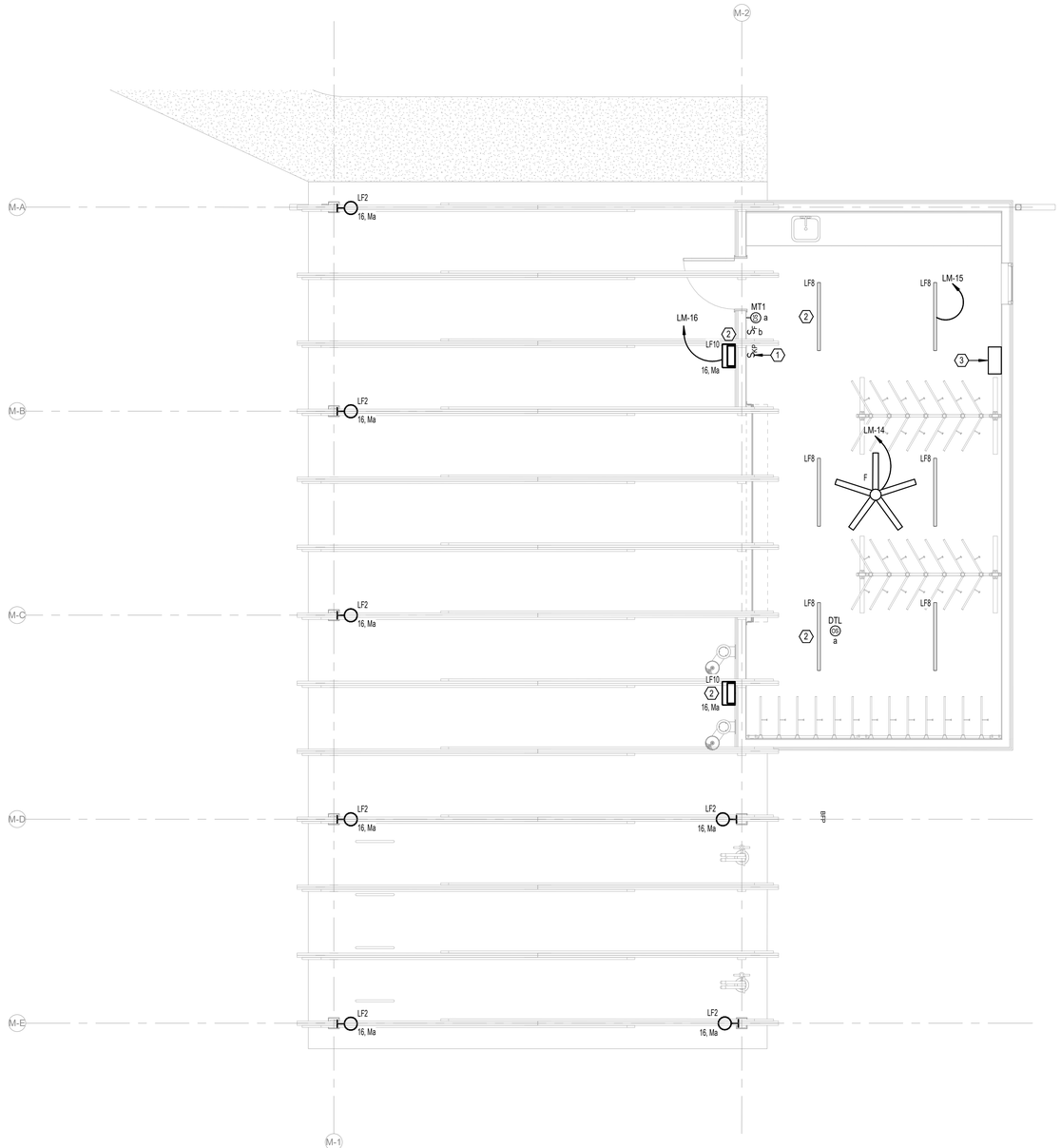
JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
MOBILITY HUB POWER FLOOR PLAN

SHEET
EM100



LEVEL 1 - MOBILITY HUB - LIGHTING

1/4" = 1'-0"

ELECTRICAL KEY NOTES

#	KEYNOTE TEXT
1	PROPOSED LOCATION OF LOCAL LIGHTING CONTROL SYSTEM KEYPAD. REFER TO THE LIGHTING CONTROL DETAILS SHEET FOR MORE INFORMATION.
2	THIS FIXTURE SHALL BE CONNECTED TO THE EMERGENCY LIGHTING INVERTER. PROVIDE MICRO-RELAY AS REQUIRED FOR TRANSFER TO EMERGENCY UPON DETECTED LOSS OF UTILITY POWER.
3	PROVIDE A 350W, 120V RATED EMERGENCY LIGHTING INVERTER WITH BATTERIES (UL 924) AT THIS LOCATION. BASIS-OF-DESIGN: MYERS EMERGENCY POWER SYSTEMS, MODEL #LV-2-R-1-B2003-B-RT.

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19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
MOBILITY HUB LIGHTING FLOOR PLAN

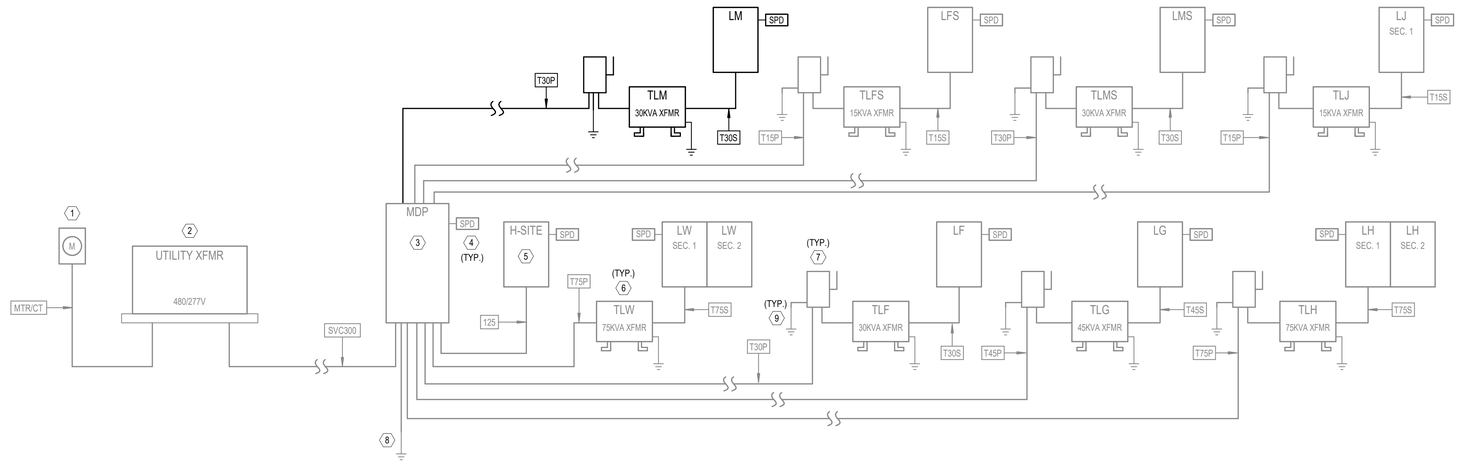
SHEET
EM200

ELECTRICAL RISER KEY NOTES

#	KEYED NOTE TEXT
1	PROVIDE ALUMINUM CT METER ENCLOSURE PER UTILITY REQUIREMENTS.
2	480/277V, 3-PHASE, PAD-MOUNTED UTILITY TRANSFORMER. REFER TO ELECTRICAL SITE PLANS FOR PLACEMENT. INSTALL PER BALDWIN EMC REQUIREMENTS.
3	480/277V, 3-PHASE, 4-WIRE MAIN DISTRIBUTION PANEL. REFER TO PANEL SCHEDULE AND SPECIFICATIONS FOR MORE INFORMATION.
4	PROVIDE A SURGE PROTECTION DEVICE (SPD) AT EVERY PANEL LOCATION PER PLANS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO THE SPECIFICATIONS FOR MORE INFORMATION.
5	480/277V, 3-PHASE, 4-WIRE BRANCH PANELBOARD. REFER TO THE PANEL SCHEDULE AND SPECIFICATIONS FOR MORE INFORMATION.
6	480/277V TO 208/120V, DRY-TYPE, STEP-DOWN TRANSFORMER. REFER TO THE TRANSFORMER SCHEDULE THIS SHEET, AND THE SPECIFCATIONS FOR MORE INFORMATION.
7	PROVIDE A PRIMARY SIDE DISCONNECTING MEANS FOR THIS TRANSFORMER PER THE PLANS AND SPECIFICATIONS.
8	PROVIDE A MAIN SYSTEM GROUND PER NEC ARTICLE 250 AND THE SPECIFICATIONS.
9	PROVIDE A GROUNDING POINT PER NEC ARTICLE 250 WHERE THE ELECTRICAL SYSTEM ENTERS THE BUILDING.

TRANSFORMER SCHEDULE (COPPER WINDINGS)

TRANSFORMER NAME	KVA RATING	PHASE	PRIMARY VOLTAGE (D=DELTA,Y=WYE)	SECONDARY VOLTAGE (D=DELTA,Y=WYE)	GROUNDING ELECTRODE CONDUCTOR
TLF	30	3	480D	120/208Y	#6
TLG	45	3	480D	120/208Y	#6
TLH	75	3	480D	120/208Y	#2
TLW	75	3	480D	120/208Y	#2
TLM	30	3	480D	120/208Y	#6
TLFS	15	3	480D	120/208Y	#8
TLMS	30	3	480D	120/208Y	#6
TLJ	15	3	480D	120/208Y	#8



RISER DIAGRAM - MOBILITY HUB

NO SCALE

NOTE: SCOPE OF WORK FOR THIS PARTICULAR BUILDING DRAWING SET ON THE RISER IS SHOWN IN BOLD. ALL OTHER PROJECT WORK NOT DIRECTLY ASSOCIATED WITH THIS BUILDING IS HALF-TONED.

Panel: LM

Location: BIKE STORAGE M101 **Mounting:** SURFACE **Dist. / Phase / Wires:** 120/208 Wye / 3 / 4 **K.A.I.C. Rating:** 10 **BUS Rating:** 225 A
Supply From: TLM **Enclosure:** TYPE 1 **Max Height Busing:** Yes **Mains Type:** MCB **MCB Rating:** 110A

KN	CKT	Circuit Description	Trip(A)	P	A (VA)		B (VA)		C (VA)		P	Trip(A)	Circuit Description	CKT	KN
2	1	EF-MOB-2	20	1	80	0								2	
1	3	GENERAL RECEPTACLES	20	1			720	0			3	30	SPD	4	
1	5	GENERAL RECEPTACLES	20	1					720	0				6	
1	7	FIRE ALARM	20	1	400	600					1	20	WATER COOLER	8	1
1	9	WATER COOLER	20	1			600	750			2	20	BIG ASS FAN #1	10	2
2	11	BIG ASS FAN #2	20	2					750	750				12	
	13				750	60					1	20	INTERIOR CEILING FAN	14	1
1	15	INTERIOR LIGHTING	20	1			216	135			1	20	EXTERIOR LIGHTING	16	1
1	17	EM LIGHTING INVERTER	20	1					500	360	1	20	COUNTERTOP RECEPTACLES	18	1
2	19	EH-MOB	20	2	1500	4160					2	50	EWH-1-MOB	20	2
	21						1500	4160						22	
	23	SPARE	20	1					0	0	1	20	SPARE	24	
	25	SPARE	20	1	0	0					1	20	SPARE	26	
	27	SPARE	20	1			0	0			1	20	SPARE	28	
	29	SPACE	--	1					--	--	1	--	SPACE	30	
	31	SPACE	--	1	--	--					1	--	SPACE	32	
	33	SPACE	--	1			--	--			1	--	SPACE	34	
	35	SPACE	--	1					--	--	1	--	SPACE	36	
	37	SPACE	--	1	--	--					1	--	SPACE	38	
	39	SPACE	--	1			--	--			1	--	SPACE	40	
	41	SPACE	--	1					--	--	1	--	SPACE	42	
		Connected Phase Load (KVA)			7.550		8.038		3.080						
		Connected Phase Amps (A)			68.647		72.711		25.667						

Load Classification	Connected Load	Demand Factor	Demand Load
Equipment	13020 VA	100.00%	13020 VA
HEATING	3000 VA	100.00%	3000 VA
Lighting	380 VA	100.00%	380 VA
Other	400 VA	100.00%	400 VA
Receptacle	1800 VA	100.00%	1800 VA
HVAC	80 VA	125.00%	100 VA

Panel Totals

Total Connected Load (KVA): 18.667
Total Demand Load (KVA): 18.687
Total Demand Current (A): 52

Panel Keynotes (KN):

1. (2)#12 AWG CU THWN & (1)#12 AWG CU (EG) IN 3/4" CONDUIT.
2. REFER TO ELECTRICAL EQUIP. COORD. SCHEDULE

COPPER CONDUCTOR/FEEDER SCHEDULE

SYMBOL	NUMBER OF SETS	PHASE CONDUCTORS (QUANTITY) SIZE - AWG	NEUTRAL CONDUCTORS (QUANTITY) SIZE - AWG	GROUNDING CONDUCTORS (QUANTITY) SIZE - AWG	CONDUIT SIZE (QUANTITY) SIZE	REMARKS
125	1	(3) #1	(1) #1	(1) #6	(1) 1 1/2"	
MTR/CT	1	----	----	----	(1) 1-1/4"	GALVANIZED RIGID CONDUIT WITH WIRING AND MOUNTING PER UTILITY COMPANY REQUIREMENTS
SVC300	1	(3) #350 KCMIL	(1) #350 KCMIL	----	(1) 3"	
T15P	1	(3) #10	----	(1) #10	(1) 3/4"	15KVA TRANSFORMER PRIMARY
T15S	1	(3) #4	(1) #4	(1) #8	(1) 1 1/4"	15KVA TRANSFORMER SECONDARY
T30P	1	(3) #6	----	(1) #10	(1) 1"	30KVA TRANSFORMER PRIMARY
T30S	1	(3) #1	(1) #1	(1) #6	(1) 1 1/2"	30KVA TRANSFORMER SECONDARY
T45P	1	(3) #4	----	(1) #8	(1) 1"	45KVA TRANSFORMER PRIMARY
T45S	1	(3) #1/0	(1) #1/0	(1) #6	(1) 2"	45KVA TRANSFORMER SECONDARY
T75P	1	(3) #2	----	(1) #6	(1) 1 1/4"	75KVA TRANSFORMER PRIMARY
T75S	1	(3) #4/0	(1) #4/0	(1) #2	(1) 2 1/2"	75KVA TRANSFORMER SECONDARY

ELECTRICAL LOAD SUMMARY

PANEL NAME	SUPPLIED FROM	AIC RATING	DEMAND (VA)	DEMAND (A)	VOLTAGE	PHASE	NO. OF SPACES/POLES	MAINS TYPE	ENCLOSURE TYPE
			0 VA	Not Computed		Not Computed			
H-SITE	MDP	42	825 VA	1 A	480/277V	3	42	MLO	TYPE 1
LF	TLF	10	11608 VA	32 A	208/120V	3	42	MCB	TYPE 1
LFS	TLFS	10	3708 VA	10 A	208/120V	3	42	MCB	TYPE 1
LG	TLG	10	24656 VA	68 A	208/120V	3	42	MCB	TYPE 1
LH	TLH	10	58979 VA	164 A	208/120V	3	84	MCB	TYPE 1
LJ	TLJ	10	2274 VA	6 A	208/120V	3	42	MCB	TYPE 1
LM	TLM	10	18687 VA	52 A	208/120V	3	42	MCB	TYPE 1
LMS	TLMS	10	32048 VA	89 A	208/120V	3	42	MCB	TYPE 1
LW	TLW	22	65891 VA	183 A	208/120V	3	84	MCB	TYPE 1
MDP		65	199467 VA	240 A	480/277V	3		MCB	TYPE 1

ELECTRICAL EQUIPMENT COORDINATION SCHEDULE - MOBILITY HUB

TAG	HP	LOAD	FLA (AMPS)	VOLTAGE	PHASE	CONDUIT/WIRE (AWG)	PANEL	CIRCUIT NUMBER	STARTER			DISCONNECT				COMMENTS
									NEMA SIZE	ENCLOS. TYPE	FURN. BY (DIV.)	SWITCH SIZE	NO. OF POLES	ENCLOS. TYPE	FURN. BY (DIV.)	
BIG ASS FAN #1 - MOB	----	1500 VA	10A	208 V	1	3/4" CONDUIT WITH 2#12 AND 1#12 GROUND	LM	10,12	---	---	---	30A	2	NEMA 3R	26	
BIG ASS FAN #2 - MOB	----	1500 VA	10A	208 V	1	3/4" CONDUIT WITH 2#12 AND 1#12 GROUND	LM	11,13	---	---	---	30A	2	NEMA 3R	26	
EF-MOB	1/10	80 VA	0.4A	120 V	1	3/4" CONDUIT WITH 2#12 AND 1#12 GROUND	LM	1	00	NEMA 3R	26	20A	2	NEMA 3R	26	
EH-MOB	----	3000 VA	14.4A	208 V	1	3/4" CONDUIT WITH 2#12 AND 1#12 GROUND	LM	19,21	---	---	---	30A	2	NEMA 1	26	
EWH-1-MOB	----	8320 VA	40A	208 V	1	1" CONDUIT WITH 3#6 AND 1#8 GROUND	LM	20,22	---	---	---	60A	2	NEMA 1	26	

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GULF SHORES, ALABAMA

No.	Date	Revision	Initials

JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
ELECTRICAL RISER DIAGRAM & SCHEDULES

SHEET
EM300

FIRE ALARM SYSTEM SEQUENCE OF OPERATION

No Scale

TYPE OF SYSTEM:

- FULLY ADDRESSABLE FIRE ALARM SYSTEM AND STANDBY BATTERY MONITORED BY CENTRAL STATION
- 24 HOURS OF STANDBY, 5 MINUTES OF ALARM USED FOR BATTERY CALCULATIONS
- VOICE EVACUATION WITH PRE-RECORDED DIGITAL MESSAGE AND MANUAL ANNOUNCEMENT VIA MICROPHONE

TYPE OF CIRCUITS:

- SIGNALING LINE CIRCUIT (SLC) = CLASS B, SURVIVABILITY LEVEL 0
- NOTIFICATION APPLIANCE CIRCUIT (NAC) = CLASS B, SURVIVABILITY LEVEL 0

WIRING METHOD:

- "FPLR" CABLE IN CONDUIT.
- WET LOCATION LISTED CABLE FOR UNDERGROUND, SLAB, AND UNCONDITIONED SPACE CONDUIT.

GENERAL ALARM SEQUENCE:

- ACTIVATION OF AN ALARM INITIATING DEVICE WILL CAUSE THE NOTIFICATION DEVICES (SPEAKERS AND STROBES) TO ACTIVATE THROUGHOUT THE BUILDINGS. ALL ALARM CONDITIONS WILL BE ANNUNCIATED AT THE FIRE ALARM CONTROL PANEL (FACP) AND REMOTE ANNUNCIATOR AND WILL BE TRANSMITTED TO THE OWNER-SELECTED OFFSITE MONITORING COMPANY.
- SUPERVISORY CONDITIONS WILL BE ANNUNCIATED AT THE FACP AND REMOTE ANNUNCIATOR. A SUPERVISORY CONDITION WILL BE TRANSMITTED BY THE FACP TO THE OWNER-SELECTED OFFSITE MONITORING COMPANY.
- TROUBLE CONDITIONS WILL BE ANNUNCIATED AT THE FACP AND REMOTE ANNUNCIATOR. A TROUBLE CONDITION WILL BE TRANSMITTED BY THE FACP TO THE OWNER-SELECTED OFFSITE MONITORING COMPANY.
- SPRINKLER FLOW SWITCH : THE FIRE PROTECTION SPRINKLER SYSTEM MAIN FLOW SWITCH SHALL BE CONNECTED AS AN ALARM INITIATING DEVICE AND SHALL BE ANNUNCIATED SEPARATELY. FIRE PROTECTION SPRINKLER SYSTEM ZONE FLOW SWITCHES SHALL BE CONNECTED AS AN AUTOMATIC INITIATING DEVICE AND EACH SWITCH SHALL BE SEPARATELY ANNUNCIATED.
- SPRINKLER FLOW SWITCH SHALL TRANSMIT A SEPARATE ALARM SIGNAL FROM OTHER ALARM CONDITIONS.
- SPRINKLER SYSTEM TAMPER SWITCH : TAMPER SWITCHES CONNECTED TO THE VALVES OF THE FIRE PROTECTION SYSTEM SHALL BE ANNUNCIATED AS SUPERVISORY CONDITION.
- ALL SIGNALS SHALL BE ANNUNCIATED AT THE

ALARM SILENCE:

- AUDIBLE NOTIFICATION DEVICES MAY BE SILENCED.
- VISUAL DEVICES WILL REMAIN ON UNTIL THE SYSTEM IS RESET.

INITIATING DEVICE OPERATIONS:

- PULL STATIONS WILL CAUSE A GENERAL ALARM.
- SPRINKLER FLOW SWITCHES WILL CAUSE A GENERAL ALARM.
- DUCT DETECTORS WILL CAUSE A SUPERVISORY CONDITION.
- ANY TAMPER SWITCH WILL CAUSE A SUPERVISORY CONDITION.
- SMOKE/HEAT DETECTORS WILL CAUSE A GENERAL ALARM AFTER AN ALARM VERIFICATION PROCESS.

AUXILIARY CONTROLS:

- AIR HANDLING UNITS CONTROLLED BY THE FIRE ALARM SYSTEM WILL SHUTDOWN THROUGHOUT THE BUILDING ON AN ALARM CONDITION. UPON SILENCING FIRE ALARM SYSTEM HVAC SYSTEM SHALL AUTOMATICALLY RETURN TO NORMAL OPERATION STATUS.

FIRE ALARM SYSTEM WIRE SCHEDULE

- (A) SIGNALLING LINE CIRCUIT: 2 CONDUCTOR #18 AWG, SOLID, SHIELDED, TWISTED PAIRS. TYPE "FPLR" CABLE. CLASS B / SURVIVABILITY LEVEL 0
- (B) NOTIFICATION APPLIANCE CIRCUIT: 2 CONDUCTOR #14 AWG, SOLID, SHIELDED CABLE. TYPE "FPLR" CABLE. CLASS B / SURVIVABILITY LEVEL 0
- (C) INITIATING DEVICE CIRCUIT (IDC): 2 CONDUCTOR #18 AWG, SOLID, SHIELDED TWISTED PAIRS. TYPE "FPLR" CABLE.
- (D) SIGNALLING LINE CIRCUIT: 2 CONDUCTOR #18 AWG, SOLID, SHIELDED, TWISTED PAIRS. TYPE "FPLR" CABLE. CLASS A / SURVIVABILITY LEVEL 3. (INTER-BUILDING)

NOTE:

- FIRE ALARM SYSTEM WIRING SHALL BE POWER LIMITED.
- ALL WIRING BELOW GRADE TO BE LISTED FOR WET LOCATIONS.
- REFER TO POWER AND SYSTEMS PLANS FOR DEVICE LOCATION AND QUANITY.
- ALL STROBES SHALL BE 75cd MINIMUM UNLESS OTHERWISE NOTED ON THE FLOOR PLANS.

FIRE ALARM NOTES :

1. ALL EQUIPMENT AND DEVICES SHALL BE U.L. LISTED.
2. ALL WIRING SHALL CONFORM TO NFPA 72 AND NEC ARTICLE 760 USING FPLR COPPER CABLING IN CONDUIT.
3. COLOR CODING AND PROPER LABELING SHALL APPLY TO ALL SYSTEMS WIRING.
4. ROUTE FIRE ALARM SYSTEM CONDUIT ACCORDING TO FIRE ALARM CONTRACTOR SHOP DRAWINGS. COORDINATE WITH THE ELECTRICAL CONTRACTOR.
5. ALL FIRE ALARM VISUAL SIGNALS IN OPEN AREA SHALL HAVE A THREE PLUS TEMPORAL PATTERN. MULTIPLE STROBES SIMULTANEOUSLY IN VIEW SHALL BE SYNCHRONIZED.
6. ALL FIRE ALARM AUDIBLE SIGNALS SHALL HAVE A SOUND LEVEL AT LEAST 15 dB ABOVE THE AVERAGE AMBIENT OR 5 dB ABOVE THE MAXIMUM SOUND LEVEL, WHICHEVER IS GREATER.
7. MOUNT FIRE ALARM SYSTEM STROBES AND HORN/STROBES AT 80" AFF OR 6" BELOW CEILING, WHICH EVER IS LOWER.
8. SMOKE DETECTOR INSTALLATIONS SHALL BE AS PER NFPA 72.
9. ADDRESSABLE MONITOR MODULES SHALL BE PROVIDED WITHIN 3' OF ANY NON-ADDRESSABLE INITIATING DEVICES.
10. FIRE ALARM CONTROL PANEL SHALL INCLUDE BATTERIES.
11. PROVIDE CERTIFICATE OF COMPLETION AT THE FINAL INSPECTION OF THE FIRE ALARM SYSTEM.
12. FIRE ALARM CONTRACTOR SHALL PROVIDE A DETAILED SET OF SHOP DRAWINGS (INCLUDING DEVICE CUT-SHEETS), A COMPLETE POINT TO POINT WIRING DIAGRAM, COMPLETE BATTERY CALCULATIONS, & VOLTAGE DROP CALCULATIONS TO THE AUTHORITY HAVING JURISDICTION AT THE TIME OF APPLICATION FOR BUILDING PERMIT.
13. PROVIDE THE OWNER WITH A COMPLETE FIRE ALARM SYSTEM OPERATING AND INSTALLATION MANUAL COVERING ALL SYSTEM EQUIPMENT INSTALLED FOR THIS PROJECT. KEEP AT THE FIRE ALARM CONTROL PANEL.
14. THE FIRE ALARM SYSTEM SHALL BE MONITORED BY AN OFFSITE CENTRAL STATION.
15. PROVIDE A SURGE PROTECTION DEVICE (SPD) AT ALL POINTS WHERE CLASS A WIRING LEAVES AND ENTERS ANY BUILDING.

FIRE ALARM RISER DIAGRAM

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19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
FIRE ALARM RISER, DETAILS, AND NOTES

SHEET
EM400

LIGHTING CONTROL SYSTEM SPECIFICATIONS

1. LIGHTING CONTROL SYSTEM SHALL BE DIGITAL AND CONSIST OF A MASTER LCP WITH UP TO 32 INDIVIDUAL RELAYS, SLAVE LCPS WITH UP TO 32 INDIVIDUAL RELAYS IN EACH PANEL, A MICRO LCP WITH UP TO 4 INDIVIDUAL RELAYS, WHICH CAN BE SWITCHABLE OR 0-10VDC DIMMABLE. DIGITAL SWITCHES AND DIGITAL INTERFACE CARDS. ALL SYSTEM COMPONENTS SHALL CONNECT IN A "DAISY CHAIN" STYLE CONFIGURATION AND BE CONTROLLED VIA CATEGORY 5 PATCH CABLE WITH RJ45 CONNECTORS, PROVIDING REAL-TIME TWO WAY COMMUNICATION WITH EACH SYSTEM COMPONENT. ANALOG SYSTEMS ARE NOT ACCEPTABLE. ALL CABLES SUPPLIED BY CONTRACTOR.

2. RELAY PANELS SHALL BE PRE-WIRED, PRE-ASSEMBLED, PROGRAMMED TO OWNER REQUIREMENTS, AND LISTED TO UL 936 (EMERGENCY LIGHTING RELAYS INTERMIXED). PANELS SHALL BE PROVIDED WITH DUAL VOLTAGE POWER SUPPLY AND 16 GAGE BARRIERS TO SEPARATE HIGH AND LOW VOLTAGE POWER.

3. STANDARD RELAYS SHALL HAVE NORMALLY CLOSED (NC) CONTACTS RATED FOR 120/277V 20A TUNGSTEN OR BALLAST. STANDARD RELAYS SHALL BE ZERO-CROSS TYPE, NO EXCEPTIONS. OPTIONAL 600V, 200 POLE RELAY, NO OR NC, AND 347 SINGLE POLE RELAY SHALL BE AVAILABLE.

4. RELAY PANEL ELECTRONICS SHALL PROVIDE CURRENT VISUAL STATUS AND CONTROL OF EACH RELAY OR ZONE. ALL SYSTEM CONTROL ELECTRONICS SHALL STORE PROGRAMMING IN A NON-VOLATILE MEMORY AND PROVIDE 10 YEAR BATTERY BACK UP FOR TIME OF DAY.

5. LIGHTING CONTROL PANEL SHALL CONSIST OF A MASTER AND SLAVE PANEL(S) CONTROLLED BY A 32-CHANNEL DIGITAL TIME CLOCK (DTC) THAT CONTROLS AND PROGRAMS THE ENTIRE LIGHTING CONTROL SYSTEM. THE DTC SHALL SUPPLY ALL TIME FUNCTIONS AND ACCEPT OTHER INPUTS. THE DTC SHALL ACCEPT CONTROL LOCALLY USING BUILT IN BUTTON PROMPTS AND USE OF AN 8 LINE 21-LETTER DISPLAY, FROM A COMPUTER, MODEM, ETHERNET OR INTERNET. ALL COMMANDS SHALL BE IN PLAIN ENGLISH. HELP PAGES SHALL DISPLAY ON THE DTC SCREEN.

6. ALL SWITCHES SHALL COMMUNICATE VIA RS485, CAT 5 PATCH CABLE WITH RJ45 CONNECTORS. CONTACT CLOSURE STYLE SWITCHES ARE NOT ACCEPTABLE. ANY SWITCH BUTTON FUNCTION SHALL BE ABLE TO BE CHANGED LOCALLY (AT THE DTC OR A PC) OR REMOTELY, VIA MODEM ETHERNET OR INTERNET. REFER TO SINGLE LINE DRAWING FOR WIRING DETAILS. SWITCHES WHICH CANNOT BE PROGRAMMED REMOTELY SHALL NOT BE ACCEPTABLE.

7. PHOTOCELL, EXTERIOR (PCO) OR INTERNET (PCI), SHALL PROVIDE READOUT ON THE DTC SCREEN IN NUMBER VALUES ANALOGOUS TO FOOT CANDLES. EACH PHOTOCELL SHALL PROVIDE A MINIMUM OF 14 TRIGGER POINTS. EACH TRIGGER CAN BE PROGRAMMED TO CONTROL ANY RELAY OR ZONE. EACH TRIGGER SHALL BE SET THROUGH DTC , LOCALLY OR REMOTELY. PHOTOCELLS THAT REQUIRE THE USE OF SET SCREWS OR MANUAL ADJUSTMENTS AT THE PHOTOCELL CONTROL CARD SHALL NOT BE ACCEPTABLE.

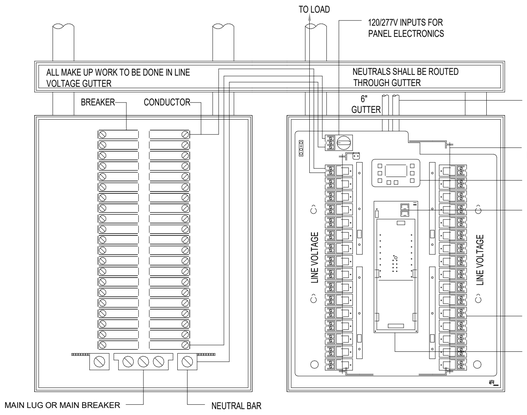
8. STANDARD LIGHTING CONTROL SYSTEM SOFTWARE, PRE-INSTALLED INTO THE DTC, SHALL CONSIST OF AND USE STANDARD GRAPHICAL MANAGEMENT SOFTWARE (GMS) PAGES. GMS SHALL PROVIDE VIA LOCAL OR REMOTE PC A VISUAL REPRESENTATION OF EACH DEVICE ON THE BUS, SHOW REAL TIME STATUS AND THE ABILITY TO CHANGE THE STATUS OF ANY INDIVIDUAL DEVICE, RELAY OR ZONE. OPTIONAL SOFTWARE THAT ACCEPTS JOB SPECIFIC GRAPHICS SHALL BE AVAILABLE. NO EXCEPTIONS.

9. TELEPHONE FACTORY DIAL-UP SUPPORT SHALL BE AVAILABLE AT NO ADDITIONAL COST TO THE EC OR OWNER BOTH DURING AND AFTER THE 3 YEAR WARRANTY PERIOD. FACTORY TO PREPROGRAM THE LIGHTING CONTROL SYSTEM PER PLANS AND APPROVED SUBMITTAL. THE LIGHTING CONTROL MANUFACTURER, AT NO ADDED COST, SHALL PROVIDE ADDITIONAL PROGRAMMING VIA MODEM AS REQUIRED BY THE EC OR OWNER FOR THE OPERATIONAL LIFE OF THE SYSTEM. MANUFACTURER WARRANTS THE DTC SOFTWARE CAN BE UPGRADED AND MONITORED REMOTELY. NO EXCEPTIONS.

10. SHOP DRAWINGS: SUBMIT DIMENSIONED DRAWINGS OF LIGHTING CONTROL SYSTEM AND ACCESSORIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, RELAY PANELS, SWITCHES, DTC, PHOTOCELLS AND OTHER INTERFACES. DRAWINGS SHALL INDICATE EXACT LOCATION AND PROGRAMMING OF EACH DEVICE. INDICATE ALL TIME SCHEDULES AND SWITCH BUTTON ENGRAVING.

11. LIGHTING CONTROL SYSTEM SHALL ACCOMMODATE DAYLIGHT HARVESTING THROUGH DAYLIGHTING SENSORS PLACED THROUGHOUT THE BUILDINGS.

TYPICAL BRANCH PANELBOARD



TYPICAL LIGHTING RELAY PANEL

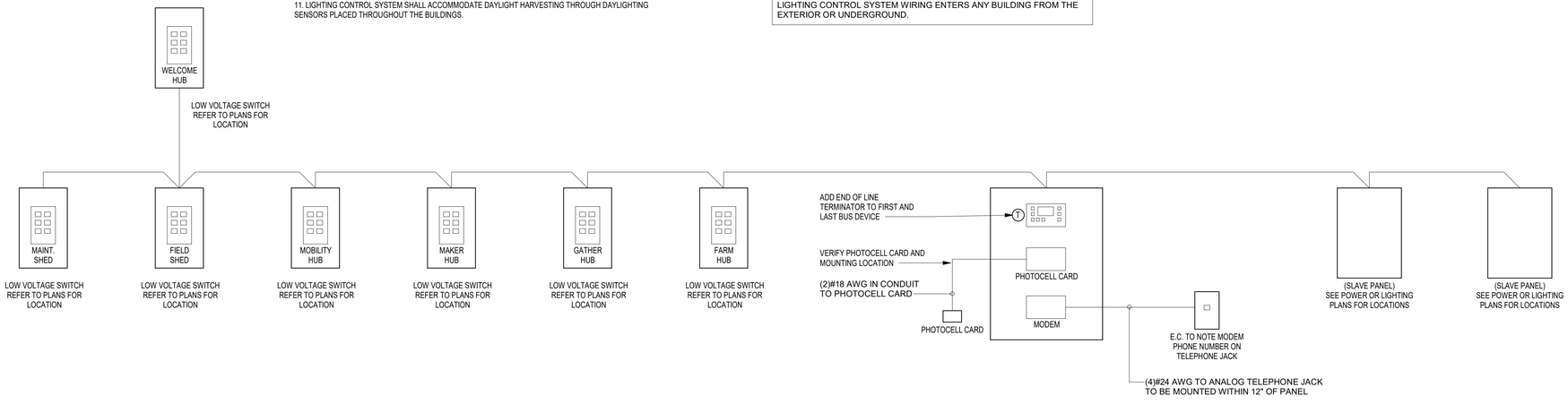
NOTE: COORDINATE CONTROL ZONE & SWITCHING LAYOUT WITH OWNER PRIOR TO PROGRAMMING & INSTALLATION.

NOTE: CONTRACTOR SHALL PROVIDE SEEMLESS CONNECTIVITY AMONG ALL THE BUILDINGS SHOWN WITH KEYPADS, LIGHTING CONTROL PANELS, AND FIXTURES DESIGNATED WITH RELAY-BASED SWITCH LEGS.

PROVIDE SURGE PROTECTION DEVICES (SPD'S) AT ALL POINTS WHERE LIGHTING CONTROL SYSTEM WIRING ENTERS ANY BUILDING FROM THE EXTERIOR OR UNDERGROUND.

NOTE:

1. ALL LIGHTING ZONES/RELAYS ARE INDIVIDUALLY PROGRAMMABLE, FOR CONTROL BY BUILDING AUTOMATION SYSTEM INTEGRAL ELECTRONIC CLOCK, PHOTOCELL OR MANUAL OVERRIDE.
2. REFER TO MANUFACTURER PROVIDED SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



OCCUPANCY / VACANCY SENSOR SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	MODEL	Type Comments
DTL	CEILING MOUNTED, DUAL TECHNOLOGY, LINE VOLTAGE OCCUPANCY SENSOR	GREENGATE WATTSTOPPER ACUITY	OAC-DT-2000-MV DT-355 CMR-PDT-9/10	AUTO ON / AUTO OFF - PROVIDE POWER PACKS AND OTHER ANCILLIARY ITEMS AS REQUIRED
MT1	WALL-MOUNTED, DUAL TECHNOLOGY, LINE VOLTAGE OCCUPANCY SENSOR WITH SINGLE LEVEL CONTROL	GREENGATE WATTSTOPPER ACUITY LEVITON	ONW-D-1001-MV DSW-100 WSX-PDT-XX OSSMT-MDW	AUTO ON / AUTO OFF WITH PUSH-BUTTON OVERRIDE
Standard 2				
VL1	WALL-MOUNTED, LINE VOLTAGE, DUAL TECHNOLOGY VACANCY SENSOR WITH SINGLE LEVEL CONTROL	GREENGATE WATTSTOPPER ACUITY LEVITON	VNW-D-1001-MV DSW-100 WSX-PDT-SA-XX OSSMD-MDW	MANUAL ON / AUTO OFF WITH PUSH-BUTTON OVERRIDE

LIGHTING CONTROL RELAY SCHEDULE - MOBILITY HUB

Relay Number	Panel	Circuit Number	Switch Type	Controlled By	Zone Designation	Note	Voltage	Area Controlled
1	LM	16	RELAY	ASTRONOMICAL TIME-CLOCK WITH KEYPAD OVERRIDE	Ma			MOBILITY HUB EXTERIOR LIGHTING

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MAWFIELD SHED PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision	Initials

JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
LIGHTING CONTROLS, NOTES, AND SCHEDULES

SHEET
EM401

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	MODEL	TYPE	COMMENTS
F	ARCHITECTURAL GRADE CEILING FAN	BY ARCHITECT	SELECTIONS BY ARCHITECT	LED	CEILING FANS TO BE SELECTED BY THE ARCHITECT. LINE-ITEM SHOWN FOR REFERENCE ONLY.
LF1	4" LED TUNABLE WHITE DOWNLIGHT	ALPHABET PORTFOLIO BOLD	NU4-RD-TW-13LM-2765-95-HE45-UNV-MOUNTING-COLOR LD4B15DE010W2N2765 EU4B1020W2N902765 4LBXXX CRF4-NIC-T-U-S-0-TW-F-FINISH-FINISH-11-D	LED	MOUNTING SELECTION TO BE DETERMINED BY CONTRACTOR. COLOR SELECTIONS & LIGHT COLOR TUNING TO BE SELECTED BY ARCHITECT.
LF2	DECORATIVE LED WALL CYLINDER FIXTURE	BEGA LIGMAN FC LIGHTING	24034 K35 UMV-30002-20W-N-W35 FCC400-11-WM-UNV-935-10L-FINISH-50-LD	LED	MOUNT FIXTURE 10'-0" ABOVE FINISHED GRADE, FINISH TO BE SELECTED BY ARCHITECT, VERIFY MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN
LF3	RECESSED "MOVE IT" DECROATIVE LED TRACK LIGHTING	XAL LITELINE	MOVE1.2-RTL-BL-48V-010V-ST-XXFT KL-I-T-XX-C-X-R-BK	LED	DECORATIVE RECESSED TRACK LIGHTING SYSTEM. COORDINATE WITH ARCHITECT ON LENGTH & SHAPE PRIOR TO ORDERING.
LF4	SURFACE-MOUNT "MOVE IT" DECORATIVE DIRECT/INDIRECT LED TRACK LIGHTING	XAL LITELINE	MOVE1.1-PDT-BL-BW-35K-C90-48V-010V-0500LF-ST-XXFT KL-I-F/S-XX-C-XX-X-BK/KL-SPOT-BK	LED	DECORATIVE SURFACE/PENDANT TRACK LIGHTING SYSTEM. COORDINATE WITH ARCHITECT ON LENGTH & SHAPE PRIOR TO ORDERING.
LF5	RECESSED 2" X 4' LED LINEAR FIXTURE	FINELITE NEORAY MARK ARCHITECTURAL	HP-2-R-D-4'-S-935-F-96LG-120-SC-MOUNTING S122DR-S350D935-XX4F0-1-UDD-F-W SL2L-LOP-4FT-FLP-FL-90CRI-35K-1000LMF-MIN1-120	LED	MOUNTING SELECTION TO BE DETERMINED BY CONTRACTOR.
LF6	5 5/8" LED RECESSED DOWNLIGHT	BEGA LIGMAN LIGHTHEADED	24817 35K UMO-80012-21W-M-W35 2-116-T-04-BRO36-35-8014-WET / D4B-FVR-R-T-3-P-VOLT	LED	COLOR SELECTION TO BE BY ARCHITECT.
LF7	DECORATIVE WALL-MOUNTED LED VANITY FIXTURE	BEGA	50144-FINISH	LED	FINAL MOUNTING HEIGHT TO BE COORDINATED WITH ARCHITECT. FINISH SELECTION TO BE BY ARCHITECT.
LF8	SURFACE/PENDANT-MOUNT 2" X 4' LED LINEAR FIXTURE	FINELITE NEORAY MARK ARCHITECTURAL	HP-2-SM-D-4'-S-935-F-96LG-120-SC-MOUNTING-FE-FINISH S122DMDP-C350D935-XX-XX4F0-1-UDD-F S2LS-LLP-4FT-90CRI-1000LMF-MIN1-120-WHT	LED	COORDINATE SURFACE OR PENDENT MOUNT WITH ARCHITECT. FINISH SELECTION TO BE BY ARCHITECT.
LF9	RECESS-MOUNT, EDGE-LIT, LED EXIT SIGN	DUAL-LITE SURE-LITES BEGHELLI	LECXRX-FINISH-E EUX7RXX OL2-SA-LR-1/2-C-CR-FINISH	LED	DIRECTIONAL CHEVRONS, WALL OR CEILING MOUNT, SINGLE OR DOUBLE FACE TO BE COORDINATED AT EACH LOCATION.
LF10	ARCHITECTURAL WALL-MOUNT LED FIXTURE	BEGA LIGMAN SISTEMALUX	33341 35K UGN-30031-2X12W-W35 S.7252W/MOD35K-DF-UNV-FINISH	LED	VERIFY FINISH AND MOUNTING HEIGHT WITH ARCHITECT.
LF11	8" DIA. LED PENDANT MOUNT CYLINDER	BEGA LIGMAN FC LIGHTING	24507 35K UJE-9511-39W-W-W35 FCC800-17-SPM/LENGTH-UNV-935-30L-FINISH-40-LD	LED	VERIFY FINISH AND MOUNTING HEIGHT WITH ARCHITECT.
LF13	DECORATIVE LED SITE BOLLARD FIXTURE	LIGMAN FC LIGHTING BEGA	ULI-10021-25W-T4-W35-FINISH-120/277V FC8T69D-UNV-42-4K-19L-FINISH 88977 K35 FINISH 79 802	LED	VERIFY FINISH WITH ARCHITECT.
LF14	SECORATIVE LED SITE COLUMN LIGHT FIXTURE	LIGMAN WE-EF LUMINIS	UBE-20011-20W-W35-FINISH-120/277V 645-3421 LQ641-L1L15-R2-LQP689-120/277-FINISH	LED	VERIFY FINISH WITH ARCHITECT.

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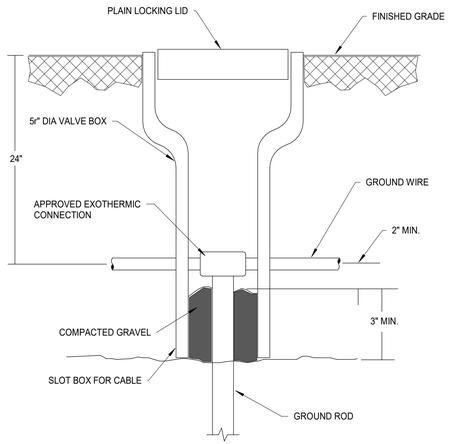
JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
LIGHTING FIXTURE SCHEDULE

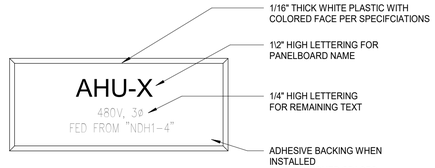
SHEET
EM402



GND. ROD INSPECTION WELL AT ALL ROD LOCATIONS

No Scale

2

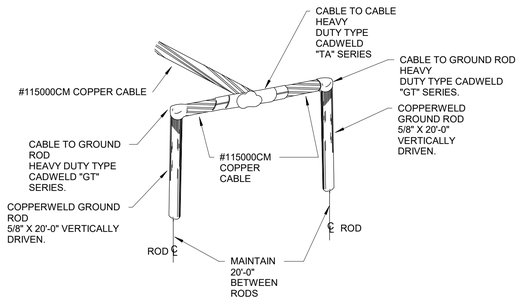


TYPICAL EQUIPMENT

EQUIPMENT NAMEPLATE DETAIL

No Scale

1

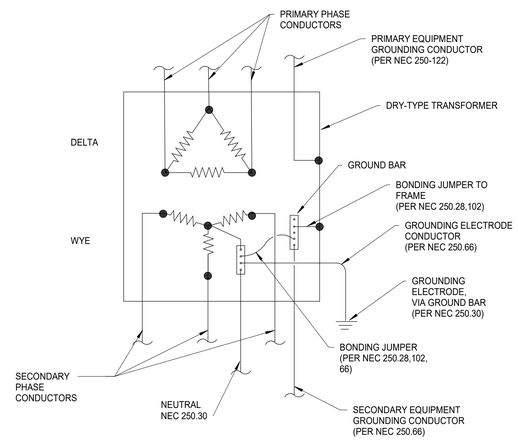


1. LOCATE GROUND RODS A MINIMUM OF 2'-0" FROM BUILDING FOUNDATION.
2. TOP OF GROUND ROD SHALL BE A MINIMUM OF 1'-0" BELOW FINISHED GRADE

TYP. GROUND ROD CONNECTION

No Scale

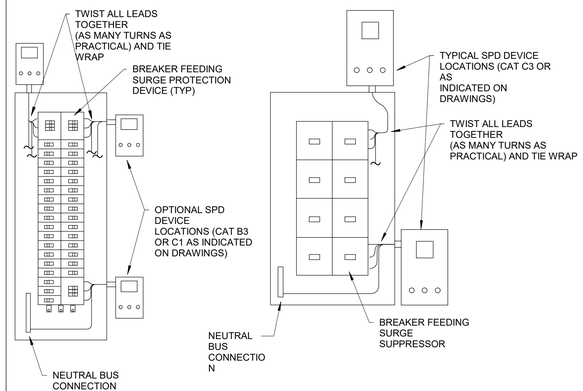
5



STEP DOWN TRANSFORMER GROUNDING

No Scale

4



PANELBOARD SERVICE ENTRANCE OR DISTRIBUTION PANEL

NOTE:MOUNT SPD DEVICE IN A LOCATION TO MAINTAIN ALL LEADS AS SHORT AS POSSIBLE. (18" MAX.)

SPD EXTERIOR MOUNT INSTALLATION

No Scale

3

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ELECTRICAL DETAILS

SHEET
EM500

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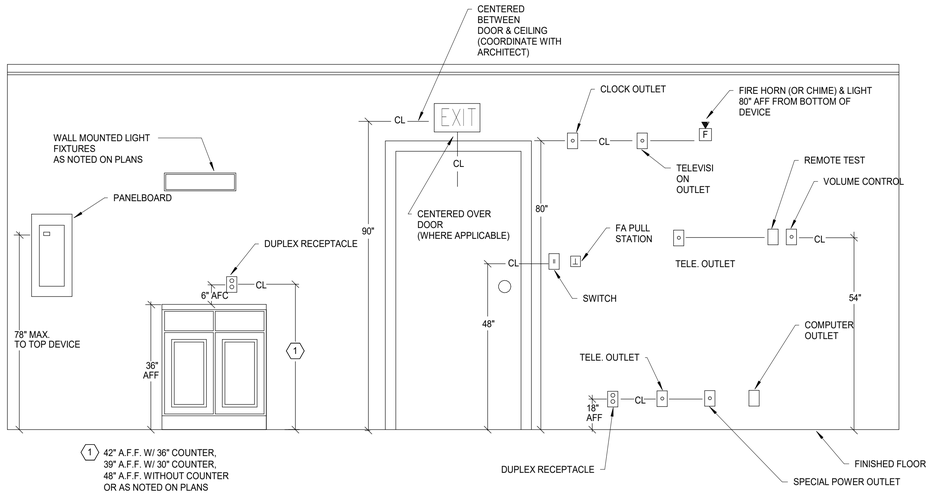

TYPICAL ELECTRICAL MOUNTING HEIGHTS

No Scale

1

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ELECTRICAL DETAILS

SHEET
EM501

TECHNOLOGY SYSTEMS GENERAL NOTES

1. REFER TO SPECIFICATION SECTION "TECHNOLOGY GENERAL PROVISIONS" FOR MORE INFORMATION ABOUT DRAWINGS AND BID DOCUMENTS.
2. MANY SYMBOLS USED IN THIS PROJECT HAVE A TYPE ASSOCIATED WITH THEM. SEE SHEETS WITH DETAILS AND PROJECT SPECIFICATIONS FOR MORE INFORMATION ON THE DESCRIPTION OF EACH TYPE.
3. ALL CONDUIT FOR TECHNOLOGY SYSTEMS INDOOR ABOVE GRADE SHALL BE EMT AND ALL CONDUIT FOR BELOW GRADE SHALL BE PVC.
4. SEE LIFE SAFETY PLANS FOR LOCATIONS OF FIRE RATED PARTITIONS IN THIS PROJECT. PROVIDE AN APPROVED FIRE STOP SYSTEMS FOR EACH RACEWAY OR CABLE GOING THROUGH A RATED WALL. SEE SPECIFICATION "RACEWAYS FOR TECHNOLOGY" FOR MORE INFORMATION.
5. WORKING CLEARANCES AROUND ELECTRICAL EQUIPMENT SHALL BE MAINTAINED IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 110. COORDINATE EQUIPMENT INSTALLATION TO MAINTAIN REQUIRED CLEARANCES.
6. SYMBOLS USED ON THE TECHNOLOGY DRAWINGS ARE NOT THE SAME SIZE AS THE ACTUAL OBJECT BEING REPRESENTED. THEREFORE LOCATIONS OF THE SYMBOLS ON THE FLOOR PLANS ARE AN APPROXIMATION TO THE ACTUAL LOCATION OF THE DEVICE AND NEED TO BE CAREFULLY COORDINATED WITH OTHER ELEMENTS IN THE VICINITY. AS A GENERAL GUIDELINE:
   A. VOICE/DATA OUTLET FOR WORK-AREAS SHALL BE INSTALLED WITHIN 6 INCHES OF A POWER OUTLET INDICATED IN ELECTRICAL DRAWINGS.
   B. TV OUTLETS SHALL BE INSTALLED WITHIN 6 INCHES OF A POWER OUTLET SHOWN ON THE ELECTRICAL DRAWINGS.
   C. WHEN MULTIPLE TECHNOLOGY SYSTEMS OUTLETS ARE INDICATED NEXT TO EACH OTHER WITH SYMBOLS, THE SPACING BETWEEN OUTLETS SHALL BE CONSISTENT IF NO ELEVATION IS SHOWN ON THE DRAWINGS.
   D. WHEN INSTALLER IS NOT CERTAIN ABOUT SPECIFIC ADJACENCIES OF A DEVICE, THE QUESTION SHALL BE ASKED TO THE ENGINEER PRIOR TO INSTALLATION.
7. FOR EXACT LOCATION OF CEILING MOUNTED EQUIPMENT REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN. LOCATIONS OF EQUIPMENT NOT INCLUDED ON THE REFLECTED CEILING PLAN SHALL BE COORDINATED WITH THOSE ITEMS SHOWN. COORDINATION OF CEILING MOUNTED EQUIPMENT SHALL BE PRIOR TO ANY ROUGH-IN. NOTIFY ENGINEER OF ANY DISCREPANCY.
8. LOCATIONS OF FLOOR BOXES AND FLOOR PENETRATIONS SHALL NOT BE MEASURED FROM THIS SET OF DRAWINGS, INSTALLER SHALL REQUEST PRECISE LOCATIONS FROM ARCHITECT.
9. EACH VOICE/DATA RJ45 JACK SHALL BE CONNECTED TO A DEDICATED 4 PR CABLE.
10. THE RESPONSIBILITY OF RACEWAY INSTALLATION SHALL BE AS DIRECTED BY THE CONSTRUCTION MANAGER OR GENERAL CONTRACTOR, BUT ALL RACEWAYS FOR TECHNOLOGY ARE TO BE INCLUDED IN THIS CONTRACT.
11. WHEN CONDUIT RUNS ARE INDICATED ABOVE GRADE OR BELOW GRADE ON THESE DRAWINGS, NOT EVERY SINGLE JUNCTION BOX (OR COMMUNICATIONS VAULT) REQUIRED IS INDICATED ON THE DRAWINGS. TYPICALLY ONLY END POINT LOCATIONS OR SPECIFIC PASS-THROUGH LOCATIONS WHERE THE ENGINEER DESIRES A BOX ARE SHOWN ON THE DRAWINGS. SEE SPECIFICATION "RACEWAYS FOR TECHNOLOGY" FOR REQUIREMENTS THAT INDICATE ADDITIONAL JUNCTION BOXES OR COMMUNICATION VAULTS THAT SHALL BE PROVIDED UNDER THIS CONTRACT. SUCH REQUIREMENTS INCLUDE ADDITIONAL BOXES REQUIRED BECAUSE OF NUMBER OF CONDUIT BENDS OR CHANGES IN ELEVATION.
12. SOME SYMBOLS INCLUDED IN THE SYMBOL LEGEND MAY NOT BE USED IN THESE PROJECT DRAWINGS.
13. UNDER NO CONDITIONS, CONDUITS FOR LOW VOLTAGE FOR FLOOR BOXES SHALL BE DAISY CHAINED TOGETHER BETWEEN ADJACENT FLOOR BOXES. ALL CONDUITS FOR FLOOR BOXES SHALL BE HOME RUNS TO NEAREST ACCESSIBLE CEILING SPACE.
14. THIS SET OF DRAWINGS DOES NOT INDICATE ALL GROUNDING AND BONDING REQUIREMENTS FOR TECHNOLOGY SYSTEMS. REFER TO SPECIFICATION SECTION "GROUNDING FOR TELECOMMUNICATION SYSTEM" FOR ADDITIONAL REQUIREMENTS.
15. ALL CABLES FOR TECHNOLOGY SYSTEMS RUN UNDER SLAB OR BELOW GRADE IN CONDUITS STUBBING UP INSIDE THE TELECOM ROOM SHALL BE INDOOR/OUTDOOR RATED. FOR CONDUITS STUBBING UP IN OTHER LOCATIONS DIFFERENT FROM TELECOM ROOMS AND FURTHER THAN 50 FT. FROM A TELECOM ROOM, DO NOT USE INDOOR/OUTDOOR RATED CABLES.
16. GRAPHICS USED FOR EQUIPMENT IN ELEVATIONS AND CHANNELS (LINE DRAWINGS) DO NOT NECESSARILY REPRESENT THE PART NUMBER OF THE EQUIPMENT SPECIFIED. THE PART NUMBERS LISTED IN THE DRAWINGS AND SPECIFICATIONS ARE TO BE FOLLOWED FOR BASIS OF DESIGN, NOT THE GRAPHICS.
17. THE TECHNOLOGY DRAWINGS DO NOT SHOW ALL REQUIRED CONDUITS/RACEWAYS TO BE PROVIDED UNDER THIS CONTRACT. TYPICALLY CONDUIT SLEEVES SMALLER THAN 2" ARE NOT SHOWN ON THE DRAWINGS. SEE SPECIFICATIONS "RACEWAYS FOR TECHNOLOGY" AND DRAWING DETAILS FOR ADDITIONAL RACEWAY REQUIREMENTS.
18. DEFINITION OF ACRONYMS USED IN THESE DRAWINGS:
   A. NIC (N.I.C.) - NOT IN CONTRACT
   B. OFE (O.F.E.) = OWNER FURNISHED EQUIPMENT. SEE RESPONSIBILITY MATRIX FOR MORE INFORMATION.
   C. DHI (D.H.I.) = DOOR HARDWARE INSTALLER
   D. USC (U.S.C.) = UNDER SEPARATE CONTRACT.
19. ALL REQUIRED WALL PENETRATIONS, EXISTING AND NEW, SHALL MAINTAIN THE NEW WALL RATING AFTER CABLING HAS BEEN INSTALLED OR REMOVED.
20. ALL SPEAKERS MOUNTED IN A CEILING TILE SHALL BE CENTERED IN THE CEILING TILE.

SECURITY SYSTEM GENERAL NOTES

1. SYMBOLS USED TO REPRESENT DEVICES SUCH AS CCTV CAMERAS, INTERCOM STATIONS, SECURITY WORKSTATIONS, CALL STATIONS, AND EMERGENCY PHONE STATIONS REQUIRE ONE (1) DATA DROP FOR SUCH DEVICE. THIS DATA DROP IS NOT SHOWN ON THE VOICE/DATA FLOOR PLANS, BUT SHALL BE PROVIDED FOLLOWING ALL REQUIREMENTS FOR VOICE/DATA DROPS INDICATED IN THE DRAWING DETAILS AND IN THE SPECIFICATION "STRUCTURED CABLING SYSTEM".
2. ANY DATA DROPS FOR SECURITY DEVICES EXCEEDING 295 FT. OF PERMANENT LINK DISTANCE TO THE TELECOM ROOM WHERE CAMERA WILL BE WIRED TO, SHALL BE WIRED WITH FIBER OPTICS FOR HORIZONTAL CABLING AND A 2 CONDUCTOR AWG-16 CL2(P) CABLE. THE FIBER CABLE SHALL BE AS DESCRIBED IN SPECIFICATION "STRUCTURED CABLING SYSTEM". IF NO INDICATION IN SUCH SPECIFICATION, FIBER OPTIC CABLE SHALL BE A 2-STRAND OM1 CABLE WITH A SUITABLE JACKET FOR THE APPLICATION.
3. ALL DOUBLE DOORS THAT ARE SHOWN WITH TWO DOOR POSITIONS SWITCHES ARE TO RECEIVE (1) DOOR POSITION SWITCH ON EACH DOOR LEAF AND SHALL REPORT AS ONE ALARM POINT.
4. ALL CAMERAS, CARD READERS AND/OR KEYPADS DEDICATED FOR ELEVATOR FLOOR SELECTION CONTROL ARE SHOWN INSIDE THE ELEVATOR CAB ON THE LOWEST LEVEL FLOOR PLAN TO HIGH THE ELEVATOR TRAVELS.
5. LOCATION OF SURVEILLANCE CAMERAS SHALL BE CLOSELY COORDINATED WITH OTHER TRADES TO AVOID OBSTRUCTIONS IN THE FIELD OF VIEW. IT IS NOT REQUIRED FOR CAMERAS TO BE MOUNTED IN CENTER OF A CEILING TILE (OR CENTER OF A HALLWAY) IF THAT LOCATION CAUSES AN OBSTRUCTION IN THE FIELD OF VIEW OF THE CAMERA. ALL CAMERAS ARE TO BE INSTALLED AS TO MINIMIZE THE OBSTRUCTIONS IN THE FIELD OF VIEW WITHIN A 4' RADIUS OF THE SPECIFIED LOCATION.
6. SURVEILLANCE CAMERAS INDICATED IN THE CORNER OF A ROOM SHALL BE INSTALLED AS CLOSE AS PHYSICALLY POSSIBLE TO THE CORNER OF THE ROOM TO GAIN THE BEST FIELD OF VIEW FOR THAT CAMERA.
7. EACH ACCESS CONTROLLED DOOR IN THE PROJECT HAS A DOOR IDENTIFIER SYMBOL THAT ASSOCIATES THE DOOR TO A CORRESPONDING ROUGH-IN DETAIL IN THE DRAWINGS AND A SPECIFIC FUNCTIONALITY OF THE DOOR IN THE SECURITY SPECIFICATIONS.

GENERAL

- NEW EQUIPMENT
- EXISTING WORK AND/OR EQUIPMENT REFERENCE, SHOWN ON MULTIPLE DRAWINGS
- DEVICE TO BE REMOVED (DEMO PLANS) UNDERFLOOR CONDUIT (NEW PLANS)
- WIRE AND/OR CONDUIT RUN CONTINUED ON REFERENCED DETAIL
- MATCH LINE REFERENCING CONTINUATION ON OTHER DRAWINGS
- DETAIL AND/OR SECTION REFERENCE
- CABLE ROUTING BOUNDARY
- FUTURE WORK

BASIC MATERIALS

- CONDUIT TURNED UP
- CONDUIT TURNED DOWN
- CAPPED CONDUIT
- CONDUIT STUBBED AND BUSHED INTO ACCESSIBLE CEILING CAVITY
- CONDUIT CONTINUED
- CONDUIT SLEEVES
  X= QTY OF SLEEVES
  Y= SIZE OF CONDUITS SLEEVES PENETRATING WALL ABOVE CEILING SPACE.
  IF NO QUANTITY INDICATED USE AS MANY SLEEVES AS REQUIRED TO MATCH CROSS SECTIONAL AREA OF CABLE TRAY NEXT TO SLEEVE.
- TUBULAR RUNWAY, HUNG ABOVE CEILING OR AS NOTED
- CABLE TRAY (TYPE), HUNG ABOVE CEILING OR AS NOTED
- SURFACE MOUNTED ENCLOSED TECHNOLOGY SYSTEMS. SEE SHEETS WITH DETAILS FOR ADDITIONAL INFORMATION
- JUNCTION BOX WALL MOUNTED. SIZE PER NEC IF NOT INDICATED ON DRAWING. NEMA 1 FOR INTERIOR, NEMA 4X FOR EXTERIOR USE WITH HINGED COVER AND LOCKING COVER
- JUNCTION BOX CEILING MOUNTED. SIZE PER NEC IF NOT INDICATED ON DRAWING. NEMA 1 FOR INTERIOR, NEMA 4X FOR EXTERIOR USE WITH HINGED COVER AND LOCKING COVER
- TELECOMMUNICATIONS GROUND VAULT. SEE DETAILS AND SPECS FOR MORE INFORMATION
  X= BOX TYPE. IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
- TELECOMMUNICATIONS PULLBOX. SEE DETAILS AND SPECS FOR MORE INFORMATION
  X= BOX TYPE. IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
- TECHNOLOGY POLE. SEE SHEETS WITH DETAILS FOR ADDITIONAL INFORMATION

DRAWING NOTES AND DESIGNATIONS

- DRAWING KEYED NOTES
- CABLE ROUTING NOTES
- DETAIL OR SECTION REFERENCE TAG

AUDIO VISUAL EQUIPMENT

- CEILING MOUNTED SPEAKER
  X= SPEAKER TYPE
  Y= SPEAKER ZONE
  Z= DENOTES SPEAKER # IN ZONE
  W= DENOTES SPEAKER WATTAGE TAP
  NO ZONE INDICATES LOCAL ZONE FOR A/V SYSTEM IN ROOM
- WALL MOUNTED SPEAKER
  X= SPEAKER TYPE
  Y= SPEAKER ZONE
  Z= DENOTES SPEAKER # IN ZONE
  W= DENOTES SPEAKER WATTAGE TAP
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF DEVICE
  NO ZONE INDICATES LOCAL ZONE FOR A/V SYSTEM IN ROOM
- VOLUME CONTROL, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF
- FLIP TOP DEVICE MOUNTED ON TABLE
- SENS MICROPHONE FOR AMBIENT NOISE, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 8'-0" AFF
- SENS MICROPHONE FOR AMBIENT NOISE, CEILING MOUNTED
- MICROPHONE, DESK MOUNTED
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
- MICROPHONE, WALL MOUNTED
  X= DENOTES TYPE OF OUTLET, IF NOT SHOWN, ONLY ONE TYPE
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET
- MICROPHONE, CEILING MOUNTED
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
- WIRELESS ANTENNA FOR WIRELESS MICRPHONE, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 8'-0" AFF
- TOUCH SCREEN FOR AUDIO/VIDEO CONTROL, DESK MOUNTED
  X= DENOTES TYPE OF OUTLET, SEE RISER FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE
- TOUCH SCREEN FOR AUDIO/VIDEO CONTROL, WALL MOUNTED, INCLUDES BACK BOX
  X= DENOTES TYPE OF OUTLET, SEE RISER FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF
- CAMERA FOR AV SYSTEM, WALL MOUNTED
  X= DENOTES TYPE OF OUTLET, SEE RISER FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET
- CAMERA FOR AV SYSTEM, CEILING MOUNTED
  X= DENOTES TYPE OF OUTLET, SEE RISER FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE
- ASSISTED LISTENING TRANSMITTER, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET
- ROOM SCHEDULING PANEL, WALL MOUNTED, INCLUDES BACK BOX
  X= DENOTES TYPE OF OUTLET, SEE RISER FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF
- AUDIO VISUAL DISPLAY
  TT= DISPLAY TYPE WITH MOUNT
  XX= SCREEN SIZE
  YY= HEIGHT TO CENTER OF SCREEN
- INTERACTIVE WHITEBOARD
  TT= DISPLAY TYPE WITH MOUNT
  XX= SCREEN SIZE
  YY= HEIGHT TO CENTER OF SCREEN
- OVERHEAD PROJECTOR WITH MOUNT
  X= TYPE
  Y= LENS THROW RATIO
- PULLDOWN PROJECTION SCREEN
  X= DIAGONAL DIMENSION IN INCHES
- MOTORIZED PROJECTION SCREEN
  X= DIAGONAL DIMENSION IN INCHES
- WALL SWITCH FOR MOTORIZED SCREEN
- PODIUM FOR AV EQUIPMENT, REFER TO DETAIL SHEETS
  X= DENOTES TYPE OF OUTLET, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
- AV PLATE OUTLET, REFER TO DETAIL SHEETS
  X= DENOTES TYPE OF OUTLET, SEE DETAIL FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 1'-6" AFF

VIDEO SURVEILLANCE SYSTEMS

- PAN/TILT/ZOOM CCTV CAMERA, WALL MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- PAN/TILT/ZOOM CCTV CAMERA, CEILING MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- FIXED CCTV CAMERA, WALL MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- FIXED CCTV CAMERA, CEILING MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- 180° CCTV CAMERA, WALL MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- 180° CCTV CAMERA, CEILING MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- 180° MULTI-IMAGER CCTV CAMERA, WALL MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- 180° MULTI-IMAGER CCTV CAMERA, CEILING MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- 360° CCTV CAMERA, WALL MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- 360° CCTV CAMERA, CEILING MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- 360° MULTI-IMAGER CCTV CAMERA, WALL MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- 360° MULTI-IMAGER CCTV CAMERA, CEILING MOUNTED
  X,C= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER
- FLAT PANEL DISPLAY WITH MOUNT
  XX= SCREEN SIZE
  YY= HEIGHT TO CENTER OF SCREEN
- SECURITY SYSTEM WORKSTATION, DESK MOUNTED
  X= TYPE

ELECTRONIC SECURITY SYSTEM

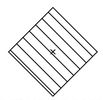
- CARD READER, WALL MOUNTED
- CARD READER WITH INTEGRATED KEYPAD, WALL MOUNTED
- BIOMETRIC ACCESS CONTROL DEVICE, WALL MOUNTED
- KEYPAD, WALL MOUNTED
- WIRED IP LOCK, DOOR MOUNTED
- WIRELESS MORTISE LOCK, DOOR MOUNTED
- WIRELESS CYLINDRICAL LOCK, DOOR MOUNTED
- INTRUSION ALARM KEYPAD
- ELECTRIC MORTISE LOCK OR ELECTRIC TRIM
- DELAYED EGRESS LATCH LOCK
- DELAYED EGRESS MAG LOCK
- ELECTRIC CYLINDRICAL LOCK
- ELECTRIC LATCH RETRACTION LOCK
- ELECTROMAGNETIC LOCK
- ELECTRONIC DETENTION LOCK
- ELECTRIC DOOR STRIKE
- ELECTRIC DOOR OPERATOR (ACTUATOR ARM)
- DOOR POSITION SWITCH
- BALANCED MAGNETIC SWITCH
- PIM MODULE FOR WIRELESS LOCKS, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF
- ALARM, BLUE LIGHT, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF
- LOCAL ALARM - HORN/STROBE, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF
- SIREN ALARM FOR INTRUSION DETECTION, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF
- ASSISTANCE STATION, WALL MOUNTED
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT, REFER TO SPECIFICATION FOR TYPE
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF
- ASSISTANCE STATION (BLUE LIGHT), TOWER STATION
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT, REFER TO SPECIFICATION FOR TYPE
- INTERCOM SUBSTATION (DOOR STATION), WALL MOUNTED
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT, REFER TO RISER FOR TYPE
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF
- INTERCOM MASTER STATION, DESK MOUNTED
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT, REFER TO RISER FOR TYPE
- INTERCOM MASTER STATION, WAll MOUNTED
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT, REFER TO RISER FOR TYPE
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF
- CALL STATION (THROUGH PHONE LINE) FOR BUILDING ENTRY, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF
- DOOR TYPE IDENTIFIER
  X= TYPE (A1,C3,B6..) REFER TO SECURITY DOOR DETAILS
- DOOR RELEASE BUTTON, WALL MOUNTED
  X= A: ADA ACCESSIBLE - (PALM ACTUATOR), W: HAND WAVE, NO TYPE: REGULAR PUSH BUTTON
- DOOR RELEASE BUTTON, DESK MOUNTED
- REQUEST TO EXIT DEVICE (IR SENSOR), MOUNT CENTERED ABOVE DOOR FRAME
- GLASS BREAK SENSOR, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF
- GLASS BREAK SENSOR, CEILING MOUNTED
- GATE PEDESTAL
- ELECTRIC GATE OPERATOR
- DURESS PANIC BUTTON, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF
- DURESS PANIC BUTTON, MOUNTED UNDER DESK
- MOTION DETECTOR, WALL MOUNTED, MOUNT 6" BELOW CEILING OR 8'-0" AFF MAX
- MOTION DETECTOR, 360 DEGREE SENSOR, CEILING MOUNTED
- DURESS PANIC BUTTON, WALL MOUNTED
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 8'-0" AFF
- INFANT ABDUCTION SYSTEM, CEILING MOUNTED ABOVE DOOR
- LINE BETWEEN SECURITY DEVICES, INDICATES ASSOCIATED EQUIPMENT
- CONTROLLED DOOR INTERLOCK GROUP. PROGRAMMED SO ONLY ONE DOOR CAN BE OPEN AT A TIME.
- ACCESS CONTROL DOOR DIRECTION, A1/A2 - REPRESENTS ACCESS CONTROL PATH
  FREE - NO ACCESS CONTROL
  CR - CARD READER
  BIOMETRIC - BIOMETRIC READER
  CR/KP - CARD READER AND KEYPAD
  MONITORED - DOOR MONITORED

VOICE AND DATA SYSTEM

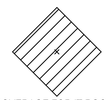
- TELECOMMUNICATION OUTLET
  X= MOUNTING: (E= EXISTING, F= FLUSH, S= SURFACE, M= MODULAR FURNITURE ADAPTER, P= POLE, L= FLOOR, R= RACEWAY)
  N= NUMBER OF DATA CABLES IN THE FACEPLATE
  Y= NOT USED
  Z= NUMBER OF FIBER OPTIC STRANDS IN THE FACEPLATE
  U= USER(IF APPLICABLE)
  +H= INSTALLATION HEIGHT IN INCHES AT CENTER OF OUTLET, COORDINATE WITH ELECTRICAL. IF NOT SHOWN INSTALL AT TYPICAL RECEPTACLE HEIGHT.
  W= WALL TELEPHONE FACEPLATE WITH SUPPORT STUDS, INSTALLED AT 48" AFF AT CENTER OF OUTLET AND 12" FROM EDGE OF WALL.
  WP=WEATHERPROOF
  EXAMPLE: F2 = TWO DATA JACKS IN A SINGLE FACEPLATE, FLUSH MOUNTED
- OUTLET FOR MECHANICAL/ ELECTRICAL/ FIRE ALARM/ ELEVATOR/ STAR CONNECTION
  Y: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  U: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  +H= IF NOT SHOWN, COORDINATE EXACT LOCATION WITH DEVICE
- CEILING MOUNTED INFORMATION OUTLET, MOUNTED ON FINISHED CEILING
  XY: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  U: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
- OUTLET FOR WIRELESS ACCESS POINT, WALL MOUNTED
  Y: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  U: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 8'-0" AFF
- OUTLET FOR WIRELESS ACCESS POINT, MOUNTED ON FINISHED CEILING
  XY: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  U: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
- FLOOR BOX FOR TECHNOLOGY SYSTEMS AND POWER OUTLETS. REFER TO POKE-THRU/ FLOORBOX SCHEDULE FOR MORE INFORMATION
  F= FLOOR CONDITION: (C= CONCRETE TYPE, G= GRADE, R= RAISED FLOOR, W= WOOD)
  Y= DENOTES # OF GANGS (1,2,3...)
  Z= DENOTES PLATE TYPE (A,B,C....), A= NO AUDIO/VISUAL
  LN= AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  U: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
- POKE-THRU FOR TECHNOLOGY SYSTEMS AND POWER OUTLETS. REFER TO POKE-THRU & FLOOR BOX SCHEDULE FOR MORE INFORMATION
  Y= DENOTES POKE-THRU SIZE (4="4", 6="6" 8="8".....)
  Z= DENOTES PLATE TYPE (A,B,C....), A= NO AUDIO/VISUAL
  LN= AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  U: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
- FLOOR BOX USED TO FEED CABLES TO MODULAR FURNITURE, REFER TO DETAIL SHEET
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
- POKE-THRU USED TO FEED CABLES TO MODULAR FURNITURE, REFER TO DETAIL SHEET
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
- AV BACKBOX, INSTALLED BEHIND DISPLAY/ CREDENZA RACK, COORDINATE BACKBOX PRIOR TO ROUGH-IN. REFER TO DETAIL & SCHEDULE FOR MORE INFORMATION
  G= DENOTES # OF GANGS
  XY= AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  U: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF DEVICE
- RECESS IN-WALL STORAGE BOX, INSTALLED BEHIND DISPLAY, COORDINATE BACKBOX PRIOR TO ROUGH-IN. REFER TO DETAIL & SCHEDULE FOR MORE INFORMATION
  G= DENOTES # OF GANGS
  XY= AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  U: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
  +H= MOUNTING HEIGHT IN INCHES AT CENTER OF DEVICE
- POWER POLE FOR COMBINED USE - TECHNOLOGY SYSTEMS AND POWER.
  X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
- FIBER OPTICS ROUTING TAG FOR BACKBONE CABLING
  N= DENOTES CONNECTION TYPE (P=PRIMARY, S=SECONDARY)
  XX= DENOTES FIBER STAND QUANTITY
  Z= DENOTES RUN NUMBER
  REFER TO FIBER OPTICS RISER FOR MORE INFORMATION.

COVERAGE FOR IDF

COVERAGE OF EACH TELECOM ROOM. THE SHADED REGIONS REPRESENT THE MAXIMUM DISTANCE LOW VOLTAGE CABLES CAN BE RUN FROM EACH IDF.



COVERAGE FOR IT ROOM 1



COVERAGE FOR IT ROOM 2

T - MOBILITY SHEET LIST

Sheet Number	Sheet Name	TLC_Sub Discipline
TM000	TECHNOLOGY LEGEND AND SHEET INDEX	MOBILITY
TM100	MOBILITY HUB TECHNOLOGY FLOOR PLAN	MOBILITY
TM500	TECHNOLOGY DETAILS	MOBILITY

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COA 15

TLC Project No.: 719179

THINK. LISTEN. CREATE.

ALABAMA LICENSED No. 33674 PROFESSIONAL ENGINEER MICHAEL J BARRILE

04/07/2023

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GULF COAST CENTER
FOR ECOTOURISM & SUSTAINABILITY
MOBILITY HUB PACKAGE
GULF SHORES, ALABAMA

No.	Date	Revision	Initials

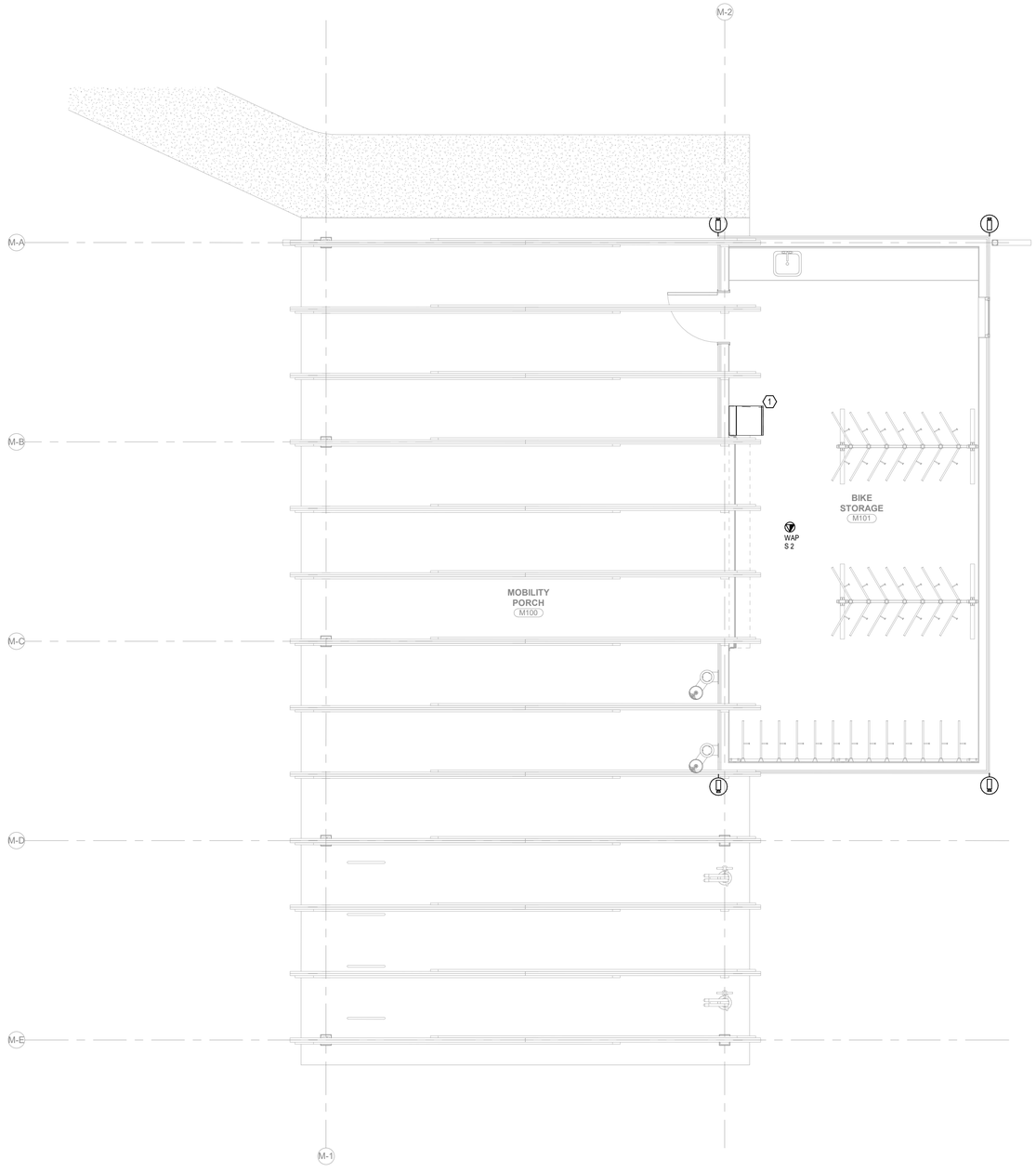
JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET
TECHNOLOGY LEGEND AND SHEET INDEX

SHEET
TM000



LEVEL 1 - MOBILITY HUB - TECHNOLOGY
1/4" = 1'-0"

TECHNOLOGY KEYED NOTES

1. PROVIDE WALL MOUNTED EQUIPMENT RACK MOUNTED TO 3/4" PLYWOOD BACKBOARD. DESIGN SELECTION: DWR-12-26PD

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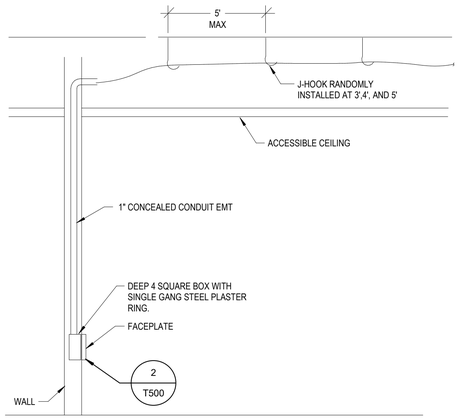
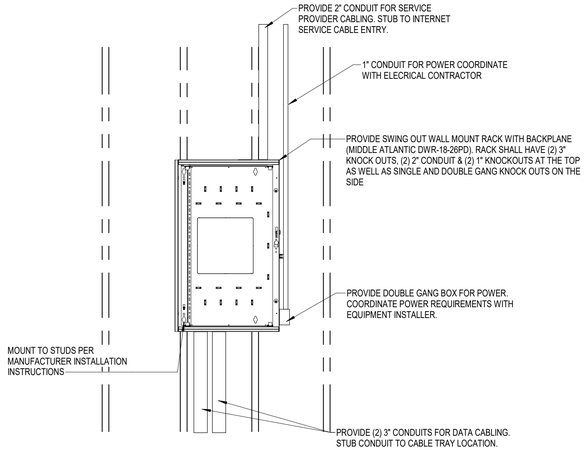
SHEET
MOBILITY HUB TECHNOLOGY FLOOR PLAN

SHEET
TM100



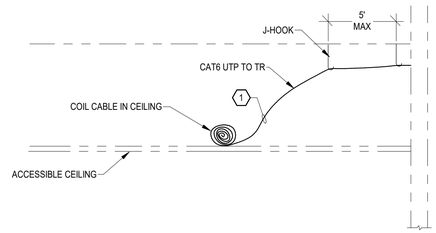
TYPICAL FLUSH MOUNT OUTLET (CONCEALED CONDUIT) - MOBILITY

1 12" = 1'-0"



WALL MOUNTED RACK DETAIL - MOBILITY

2 3/4" = 1'-0"



NOTE:
WIRELESS ACCESS POINT AND ANTENNA NOT IN CONTRACT.

DETAIL NOTE:
1 COIL 20' LOOP IN CEILING.

WAP
S02

WIRELESS ACCESS POINT (COILED IN CEILING) - MOBILITY

3 1" = 1'-0"

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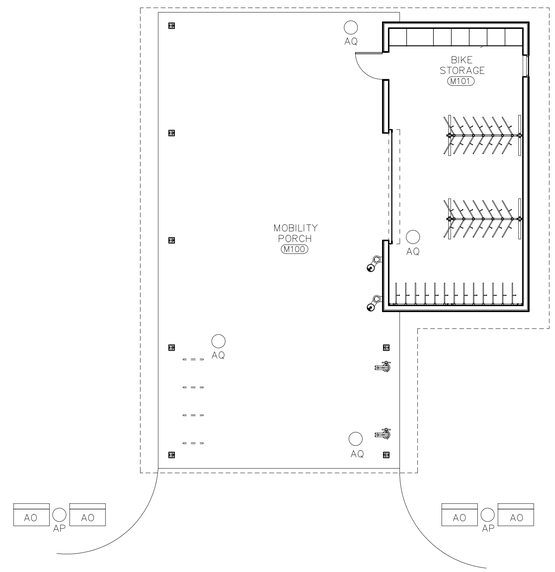
SHEET
TECHNOLOGY DETAILS

SHEET
TM500

NOTE: REFERENCE INDIVIDUAL FURNITURE SPEC'S FOR MANUFACTURERS, PRODUCT NUMBERS, QUANITIES, AND FINSHES



01/100 FURNITURE PLAN

1/8"=1'-0"

ARCHITECTURE WORKS

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No.	Date	Revision	Initials

JOB
19-028.000

PROJECT STATUS
CONFORMANCE SET

DATE
MARCH 24, 2023

SHEET NAME
FURNITURE PLAN

SHEET NO.
IDM100