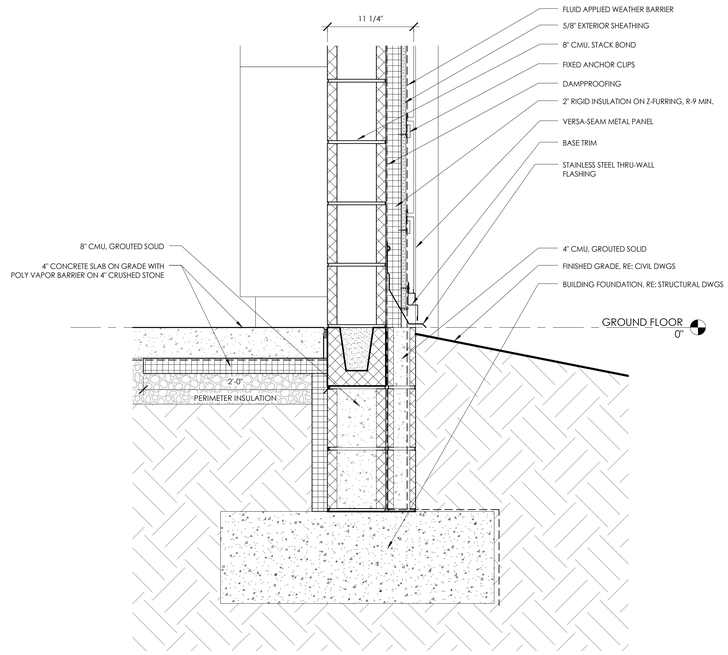
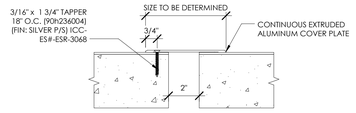
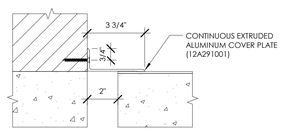


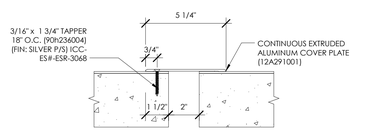
7 A800 **DETAIL @ METAL PANEL FOUNDATION**
1 1/2" = 1'-0"



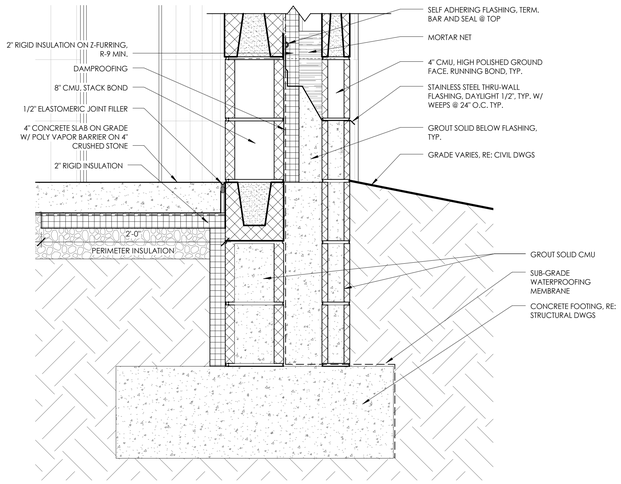
6 A800 **EXPANSION JOINT COVER**
3" = 1'-0"



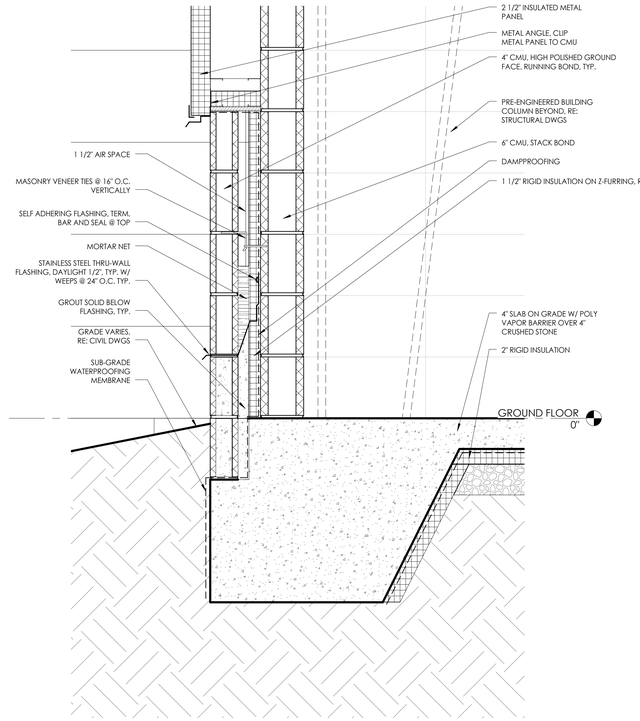
5 A800 **EXPANSION JOINT COVER - PCW-200**
3" = 1'-0"



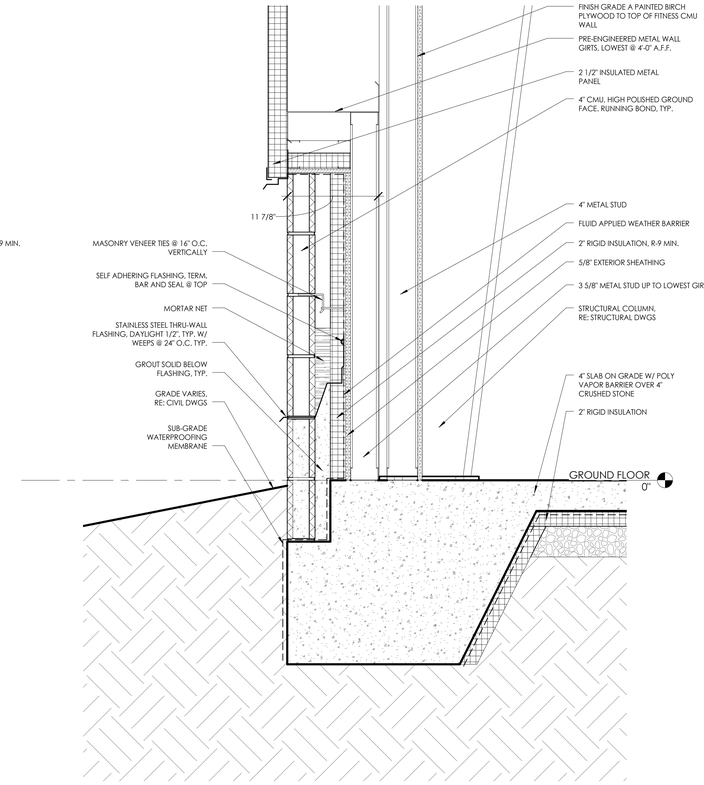
4 A800 **EXPANSION JOINT COVER - PC-200**
3" = 1'-0"



3 A800 **TYP. FOUNDATION DETAIL @ FITNESS**
1 1/2" = 1'-0"



2 A800 **DETAIL @ GYM FOUNDATION**
1 1/2" = 1'-0"



1 A800 **DETAIL @ GYM FOUNDATION, TYP.**
1 1/2" = 1'-0"

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NO.	DATE	BY	CHKD	DESCRIPTION
				Revision Schedule

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
CLARK PATTERSON LEE
No. C02227

STATE OF SOUTH CAROLINA
TIMOTHY SCOTT VAN BIBBER
Greenville, South Carolina
No. 8268
REGISTERED ARCHITECT
5-30-17

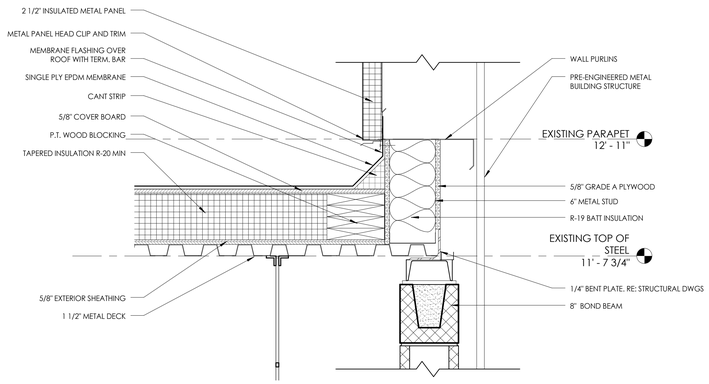
COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO SC 29488

DATE	DRAWN	CHECKED
5/30/2017	DMS	RFG
SCALE	As indicated	

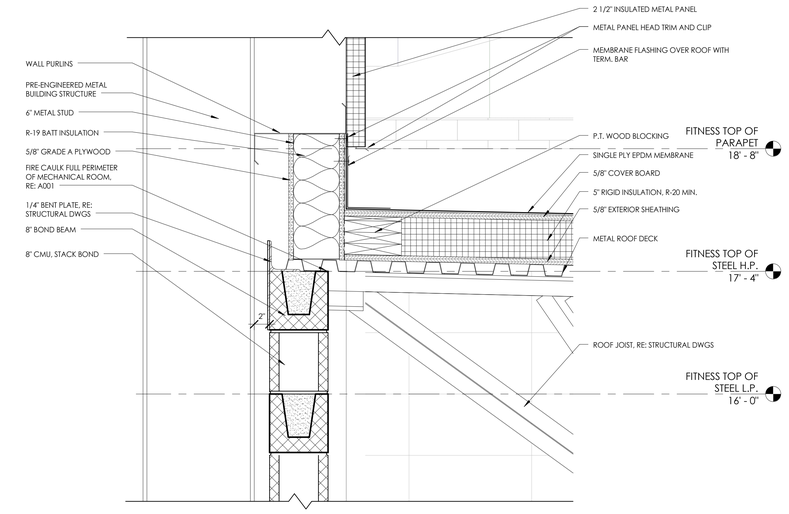
SHEET TITLE
TYPICAL DETAILS

PROJECT NUMBER
13674.00

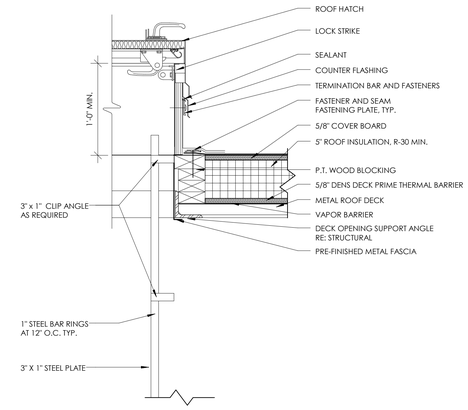
CC
A800
DRAWING NUMBER



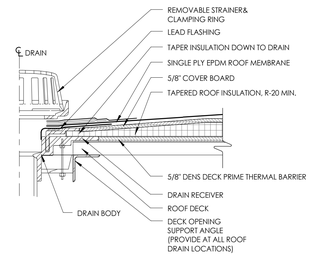
8 A801 **DETAIL @ GYM/LOBBY COMMON WALL**
1 1/2" = 1'-0"



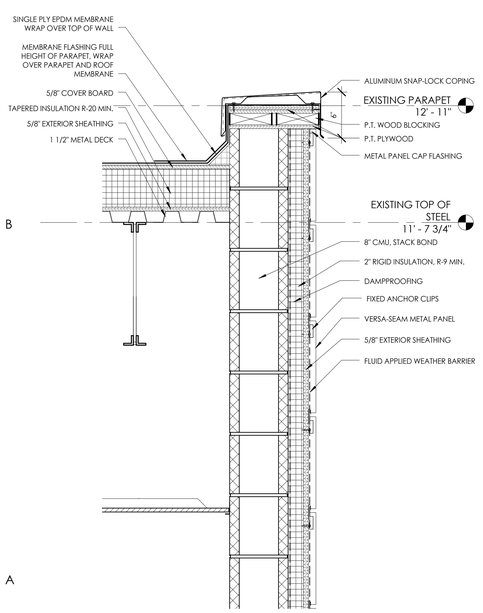
7 A801 **DETAIL @ GYM/FITNESS COMMON WALL**
1 1/2" = 1'-0"



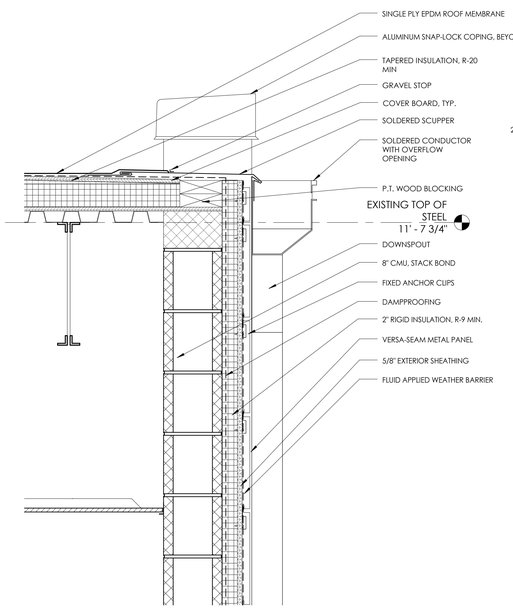
6 A801 **DETAIL @ ROOF HATCH**
1 1/2" = 1'-0"



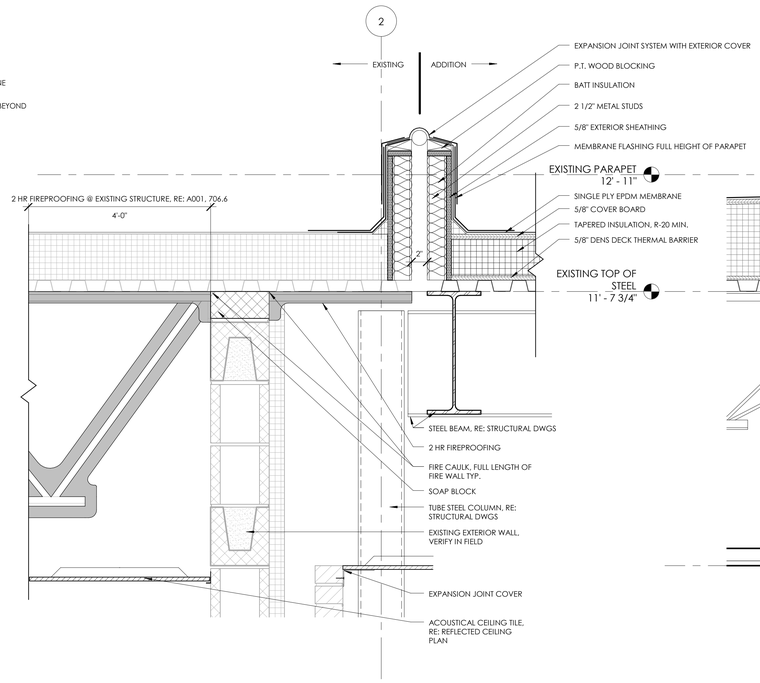
5 A801 **TYPICAL ROOF DRAIN DETAIL**
1 1/2" = 1'-0"



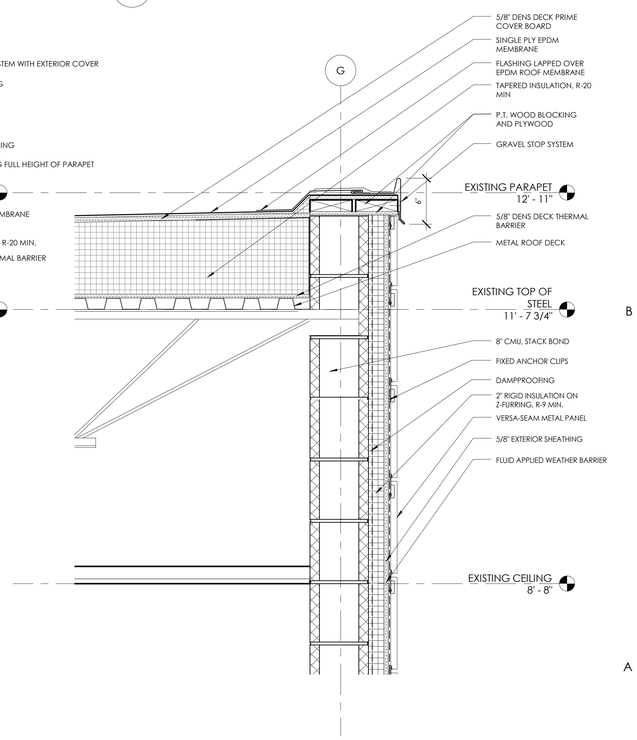
4 A801 **DETAIL @ LOCKER ROOM PARAPET**
1 1/2" = 1'-0"



3 A801 **DETAIL @ LOCKER ROOM SCUPPER**
1 1/2" = 1'-0"



2 A801 **EXPANSION JOINT @ EXISTING BUILDING**
1 1/2" = 1'-0"



1 A801 **PARAPET SECTION @ LOBBY**
1 1/2" = 1'-0"

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02222 — CERTIFICATE OF AUTHORIZATION

STATE OF SOUTH CAROLINA — TIMOTHY SCOTT VARGA — Greenville, South Carolina — No. 8268 — REGISTERED ARCHITECT — 5-30-17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO SC 29488

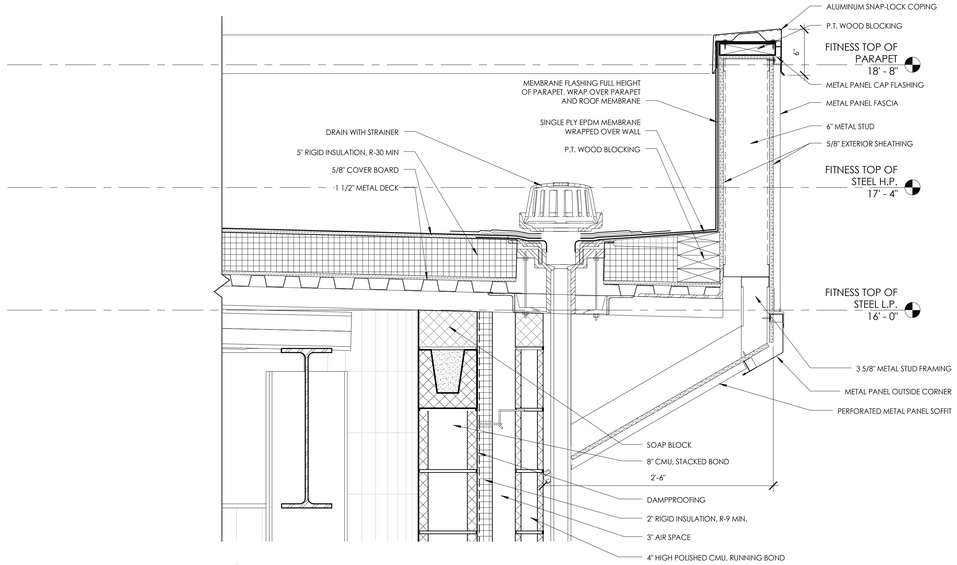
DATE	DRAWN	CHECKED
5/30/2017	DMS	RFG

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

SHEET TITLE
ROOF DETAILS

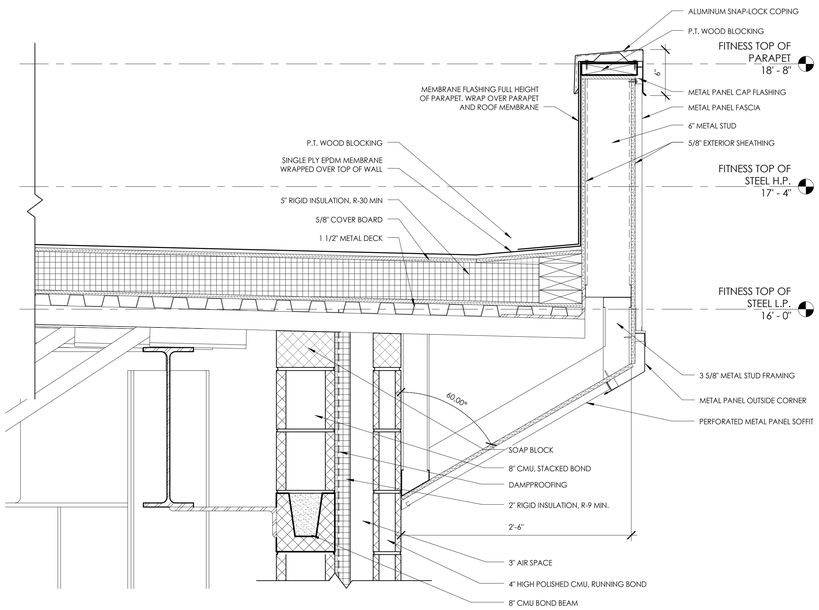
PROJECT NUMBER 13674.00

CC A801
DRAWING NUMBER



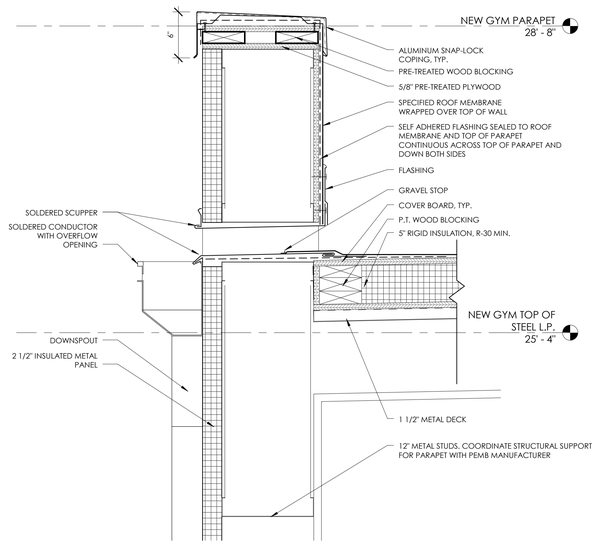
4 A802 **DETAIL @ FITNESS ROOF DRAIN**

1 1/2" = 1'-0"



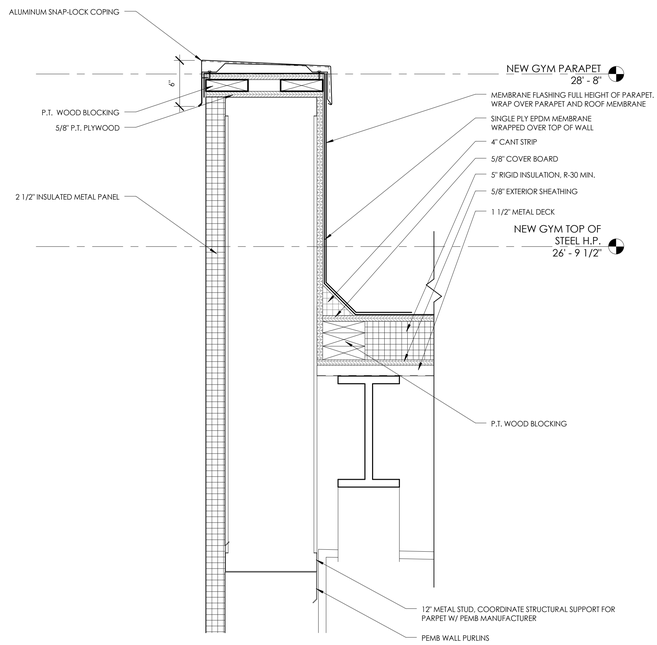
3 A802 **DETAIL @ FITNESS PARAPET**

1 1/2" = 1'-0"



2 A802 **DETAIL @ GYM SCUPPER AND DOWNSPOUT**

1 1/2" = 1'-0"



1 A802 **DETAIL @ GYM PARAPET**

1 1/2" = 1'-0"

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Revision Schedule				
NO.	DATE	BY	CHKD	DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

STATE OF SOUTH CAROLINA — TIMOTHY SCOTT VICKERS — Greenville, South Carolina — No. 8268 — REGISTERED ARCHITECT — 5.30.17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO SC 29488

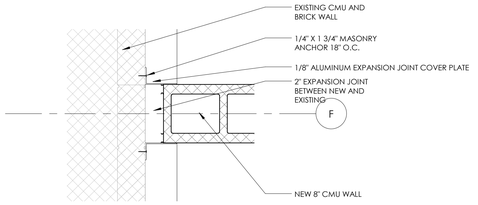
DATE	DRAWN	CHECKED
5/30/2017	DMS	RFG

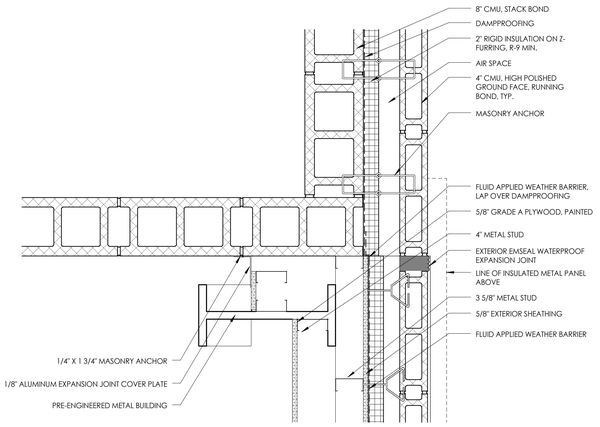
SCALE 1 1/2" = 1'-0"

SHEET TITLE
ROOF DETAILS

PROJECT NUMBER
13674.00

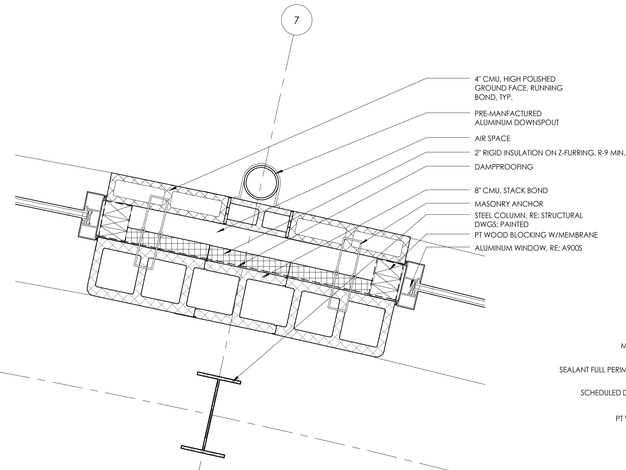
CC
A802
DRAWING NUMBER

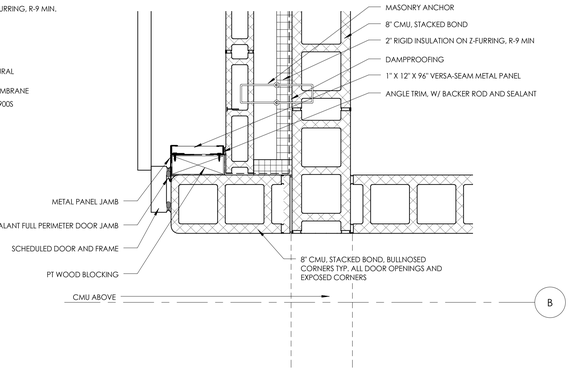


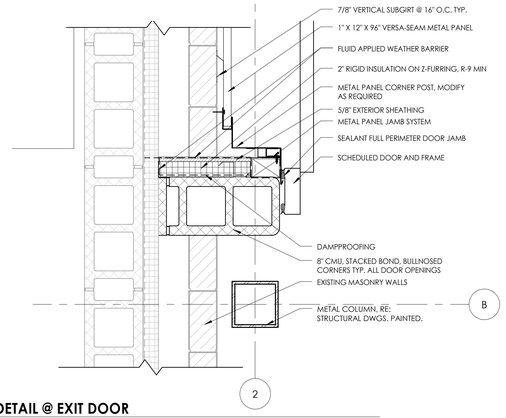


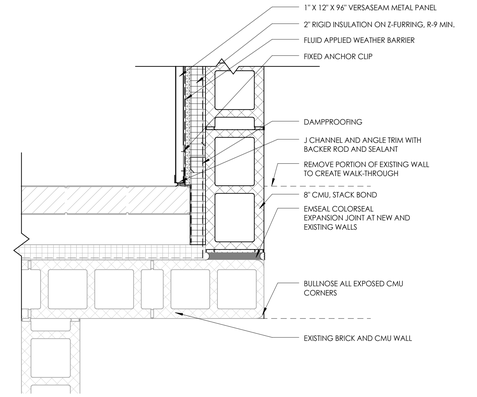
10 A810 **EXPANSION JOINT AT NEW AND EXISTING CMU**
1 1/2" = 1'-0"

9 A810 **DETAIL @ GYM & FITNESS**
1 1/2" = 1'-0"







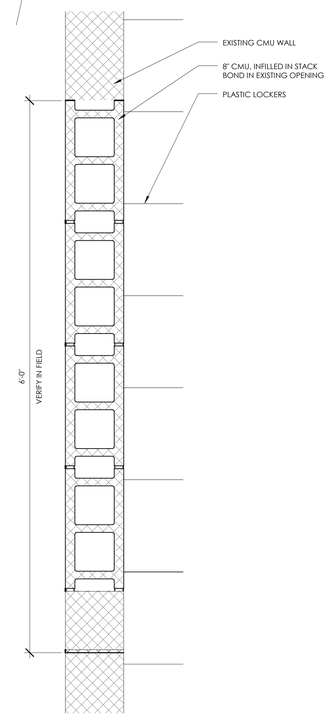


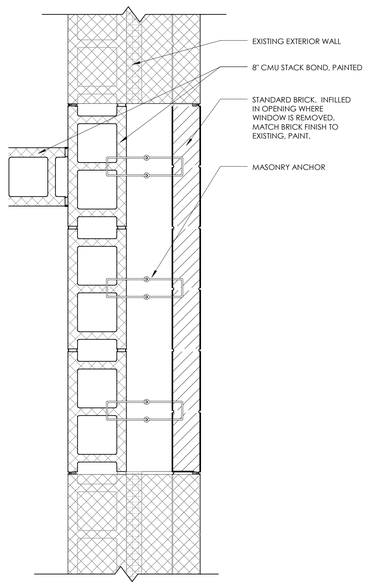
8 A810 **DETAIL @ FITNESS WALL**
1 1/2" = 1'-0"

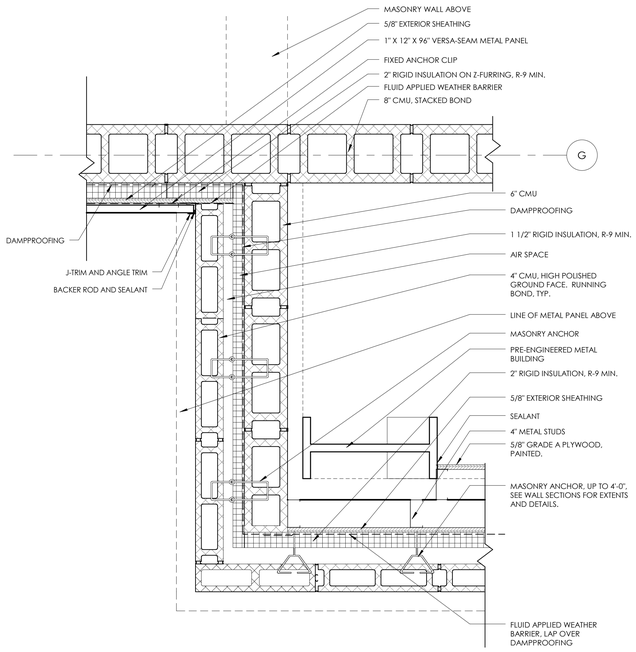
7 A810 **DETAIL @ EXIT DOOR**
1 1/2" = 1'-0"

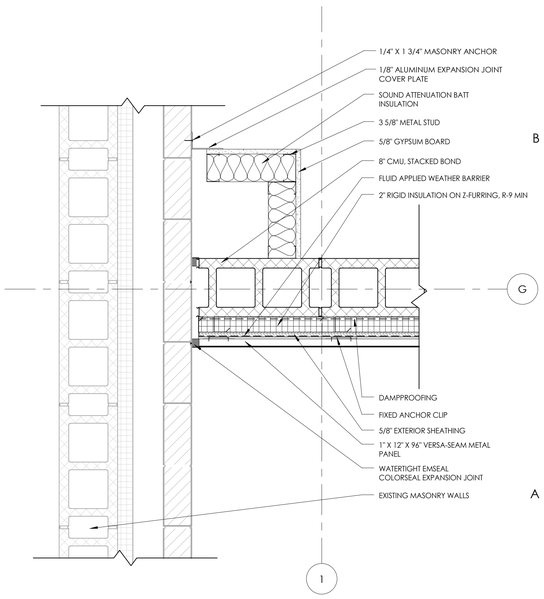
6 A810 **DETAIL @ EXIT DOOR**
1 1/2" = 1'-0"

5 A810 **DETAIL @ LOCKER ROOM ADDITION**
1 1/2" = 1'-0"









4 A810 **DETAIL @ CMU INFILL**
1 1/2" = 1'-0"

3 A810 **DETAIL @ WINDOW INFILL**
1 1/2" = 1'-0"

2 A810 **DETAIL @ GYM & LOBBY**
1 1/2" = 1'-0"

1 A810 **DETAIL @ EXISTING BUILDING & LOBBY**
1 1/2" = 1'-0"

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02221 — CERTIFICATE OF AUTHORIZATION

STATE OF SOUTH CAROLINA — TIMOTHY SCOTT VOLLMER — Greenville, South Carolina — No. 8268 — REGISTERED ARCHITECT — 5.30.17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO SC 29488

DATE	DRAWN	CHECKED
5/30/2017	DMS	RFG

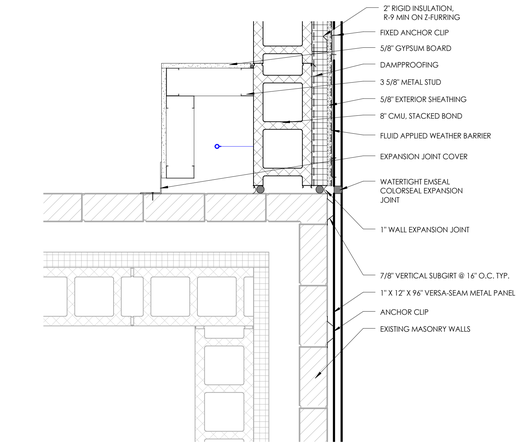
SCALE 1 1/2" = 1'-0"

SHEET TITLE
PLAN DETAILS

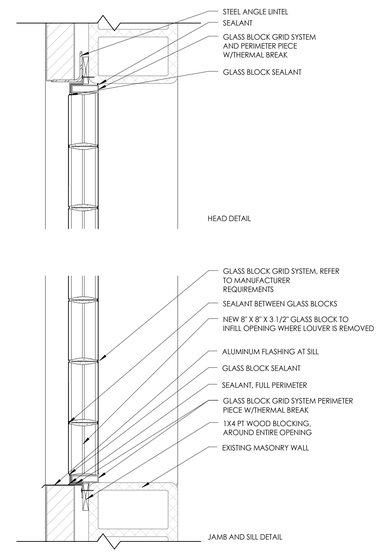
PROJECT NUMBER 13674.00

CC A810
DRAWING NUMBER

C:\Users\dscarney\Documents\Colleton Co_Existing Bldg Reno_13674_AACH_2016_dscarney@clarkpatterson.com.rvt 5/30/2017 11:37:50 AM



2 A811 **PLAN DETAIL @ LOCKER ROOM ADDITION**
1 1/2" = 1'-0"



1 A811 **PLAN AND HEAD DETAIL @ GLASS BLOCK**
1 1/2" = 1'-0"

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Revision Schedule

NO.	DATE	BY.	CHKD	DESCRIPTION

SOUTH CAROLINA CLARK PATTERSON LEE No. C02227 CERTIFICATE OF AUTHORIZATION

STATE OF SOUTH CAROLINA TIMOTHY SCOTT WHITE Greenville, South Carolina No. 8268 REGISTERED ARCHITECT 5-30-17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO SC 29488

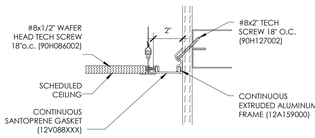
DATE	DRAWN	CHECKED
5/30/2017	DS	RFG

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

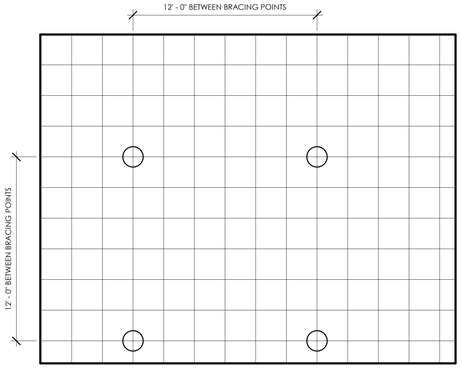
SHEET TITLE
PLAN DETAILS

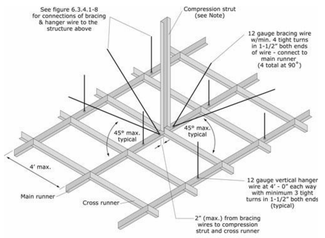
PROJECT NUMBER
13674.00

CC
A811
DRAWING NUMBER



13 A820 EXPANSION JOINT COVER @ CEILING
3" = 1'-0"





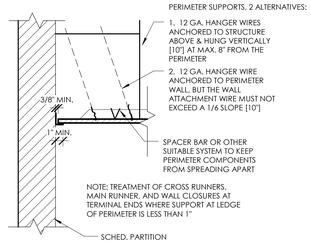
Note: Compression strut shall not replace hanger wire. Compression strut consists of a steel section attached to main runner with 2 - #12 sheet metal screws and to structure with 2 - #12 screws to wood or 1/4" min. expansion anchor to structure. Size of strut is dependent on distance between ceiling and structure (l/r ≤ 200). A 1" diameter conduit can be used for up to 6', a 1-5/8" X 1-1/4" metal stud can be used for up to 10'

12 A820 CEILING BRACING DETAIL
1/2" = 1'-0"

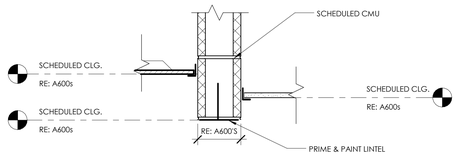
NOTE:
1. ALL MAIN RUNNERS AND CROSS RUNNERS, AND THEIR SPLICES, INTERSECTION CONNECTORS, AND EXPANSION DEVICES SHALL BE CAPABLE OF RESISTING 60 POUNDS MINIMUM IN TENSION AND CONNECTION IN ANY DIRECTION.

2. CEILING GRID MAIN AND CROSS RUNNERS SHALL NOT BE FASTENED TO THE PERIMETER CLOSURE ANGLE FOR COMPLIANCE WITH "CISCA 0-2" PER SBC SECTION 1621.2.5.

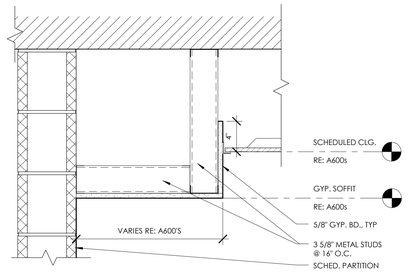
3. INSTALLATION SHALL BE IN ACCORDANCE WITH "CISCA 3-4" - SEE DETAIL.



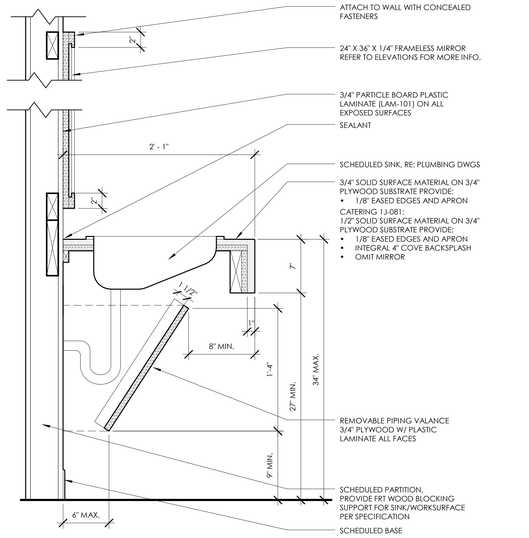
10 A820 TYPICAL SEISMIC BRACING REQUIREMENTS
1 1/2" = 1'-0"



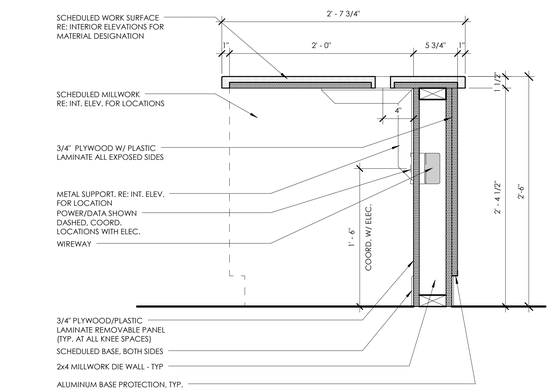
9 A820 CMU @ BULKHEAD
1 1/2" = 1'-0"



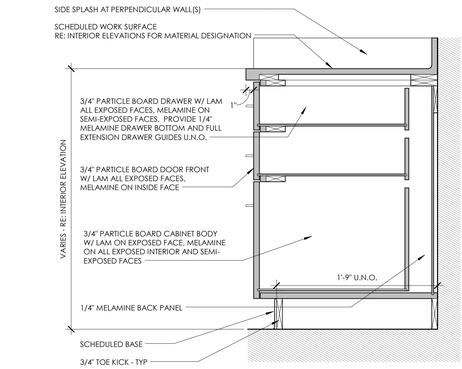
8 A820 TYP. GWB SOFFIT DETAIL @ WALL
1 1/2" = 1'-0"



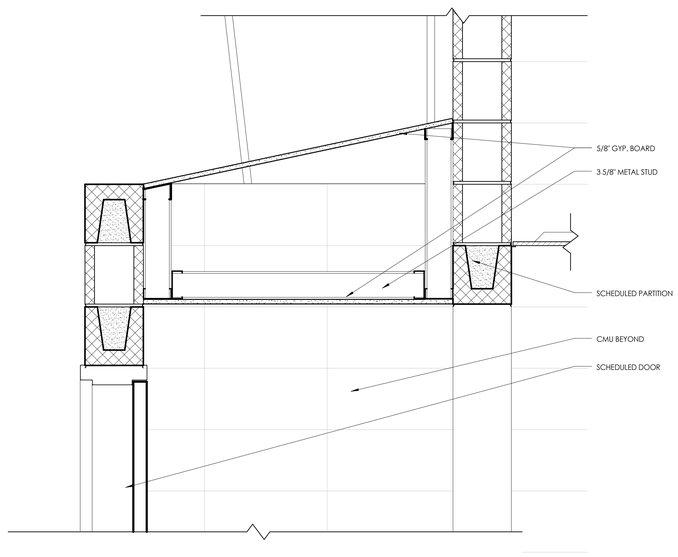
5 A820 SOLID SURFACE COUNTERTOP WITH SINK SECTION AND MIRROR
1 1/2" = 1'-0"



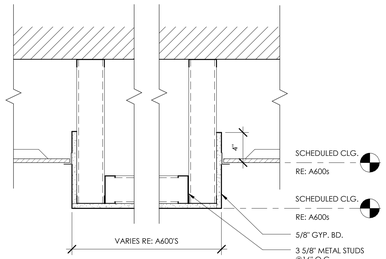
3 A820 RECEPTION DESK
1 1/2" = 1'-0"



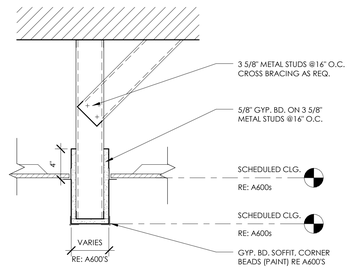
2 A820 TYPICAL BASE CABINET W/ DRAWERS
1 1/2" = 1'-0"



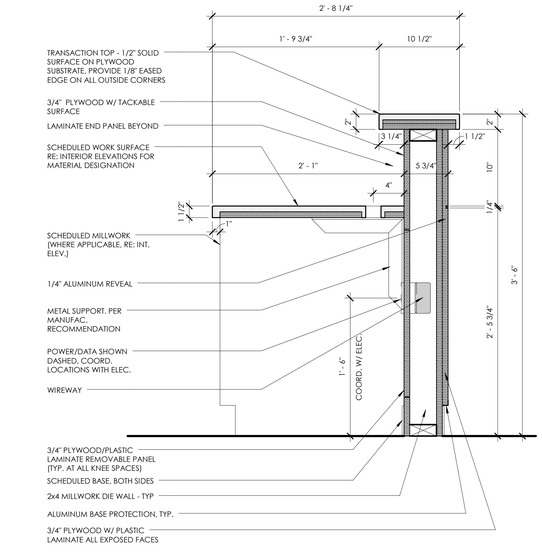
11 A820 DETAIL @ CEILING AT CMU WALL
1 1/2" = 1'-0"



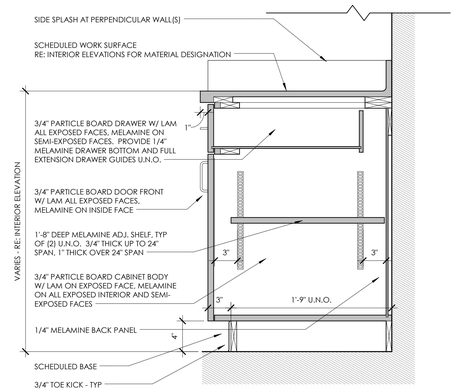
7 A820 TYP. GWB SOFFIT DETAIL
1 1/2" = 1'-0"



6 A820 BULKHEAD DETAIL
1 1/2" = 1'-0"



4 A820 RECEPTION DESK @ TRANSACTION TOP
1 1/2" = 1'-0"



1 A820 TYPICAL BASE & UPPER CABINET MILLWORK SECTION
1 1/2" = 1'-0"

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

STATE OF SOUTH CAROLINA — TIMOTHY SCOTT WOOD — Greenville, South Carolina — No. 8268 — REGISTERED ARCHITECT — 5.30.17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO SC 29488

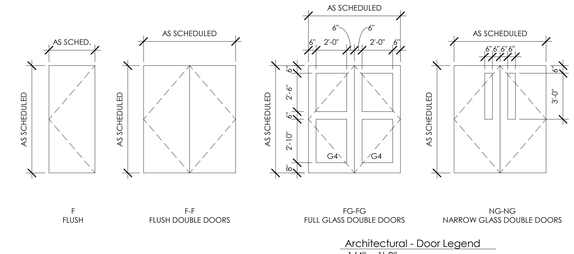
DATE	DRAWN	CHECKED
5/30/2017	DMS	RFG

SCALE: As indicated

SHEET TITLE: TYPICAL CEILING AND MILLWORK DETAILS

PROJECT NUMBER: 13674.00

CC A820
DRAWING NUMBER



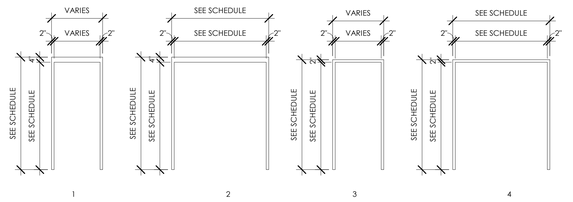
F
FLUSH

F-F
FLUSH DOUBLE DOORS

FG-FG
FULL GLASS DOUBLE DOORS

NG-NG
NARROW GLASS DOUBLE DOORS

Architectural - Door Legend
1/4" = 1'-0"



Architectural - Door Frame Legend
1/4" = 1'-0"

DOOR AND FRAME NOTES

1. ALL FRAMES ARE TO RECEIVE FULL PERIMETER SEALANT, INTERIOR AND EXTERIOR
2. ALL DOOR AND WINDOW DIMENSIONS ARE TO BE VERIFIED IN FIELD PRIOR TO FABRICATION

DOOR AND FRAME SCHEDULE LEGEND

DOOR OR FRAME MATERIAL

ACR	ACROVYN DOOR
ACR-L	ACROVYN LEAD LINED DOOR
ALUM	ALUMINUM
HM	HOLLOW METAL
HM-L	HOLLOW METAL LEAD LINED
IHM	INSULATED HOLLOW METAL
WD	WOOD
WD-L	WOOD LEAD LINED

DOOR OR FRAME FINISH

PTD	PAINT
ST	WOOD STAIN
DB	DARK BRONZE (ANODIZED)
SS	STAINLESS STEEL
BE	BAKED ENAMEL

GLASS TYPES:

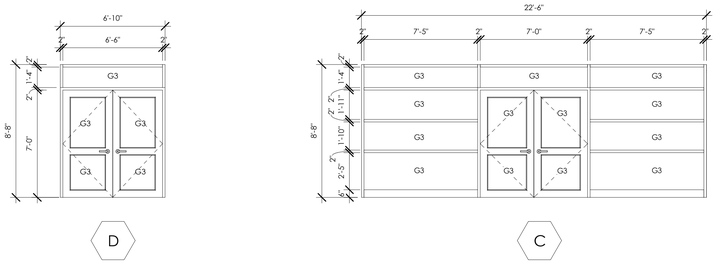
G1	1" INSULATED LOW E GLASS
G2	1/4" TEMPERED GLASS
G3	1" INSULATED TEMPERED GLASS

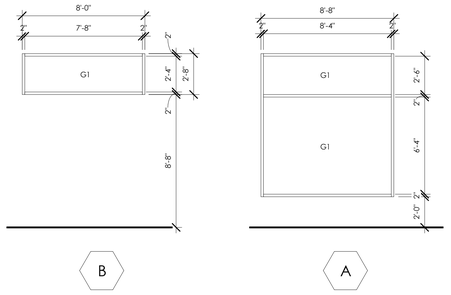
DOOR SCHEDULE - NEW DOORS

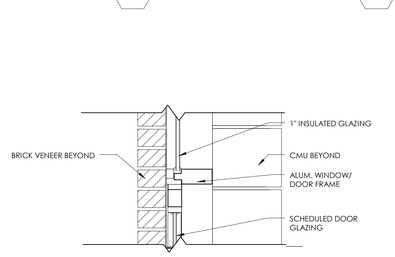
Door No.	SIZE WIDTH	SIZE HEIGHT	wt Type	wt MAT'L/ FINISH	LABEL RATING	FRAMES FRAME TYPE	FRAMES HEAD/JAMB DETAIL #'S	FRAMES MAT'L/ FINISH	GLASS TYPE	AAOS Project HW Set	REMARKS
100-1	6' - 0"	7' - 0"	FG-FG	ALUM	--	EXIST	EXIST	EXIST	G3	1.0	REPLACE DOOR WITH NEW IN EXISTING FRAME. VERIFY SIZE IN FIELD. PANIC HARDWARE.
100-2	6' - 0"	7' - 0"	FG-FG	ALUM	--	EXIST	EXIST	EXIST	G3	2.0	REPLACE DOOR WITH NEW IN EXISTING FRAME. VERIFY SIZE IN FIELD. PANIC HARDWARE.
101-3	6' - 0"	7' - 0"	F-F	HM/PT	--	EXIST	EXIST	EXIST	-	6.0	REPLACE DOOR WITH NEW IN EXISTING FRAME. VERIFY SIZE IN FIELD. PANIC HARDWARE.
101-4	3' - 0"	7' - 0"	F	HM/PT	--	EXIST	EXIST	EXIST	-	3.0	REPLACE DOOR WITH NEW IN EXISTING FRAME. VERIFY SIZE IN FIELD. ALTERNATE 01: CARD ACCESS CONTROL : HW# 3.1
102-2	3' - 0"	7' - 0"	F	WD/ST	90 MIN	1		HM/PT	-	12.0	REPLACE DOOR AND FRAME WITH NEW IN EXISTING OPENING. VERIFY SIZE IN FIELD. MAGNETIC LOCK WITH HOLD OPENS
121-1	3' - 0"	7' - 0"	F	WD/ST	--	1	1/A900, 2/A900	HM/PT	-	15.0	
123-1	6' - 0"	7' - 0"	NG-NG	WD/ST	--	2	1/A900, 2/A900	HM/PT	G2	8.0	PANIC HARDWARE
123-2	6' - 0"	7' - 0"	F-F	WD/ST	90 MIN	2	1/A900, 2/A900	HM/PT	-	9.0	MAGNETIC LOCK WITH HOLD OPENS, PANIC HARDWARE.
124-1	3' - 0"	7' - 0"	F	WD/ST	--	1	1/A900, 2/A900	HM/PT	-	13.0	
125-1	3' - 0"	7' - 0"	F	WD/ST	--	1	1/A900, 2/A900	HM/PT	-	15.0	
127-1	3' - 0"	7' - 0"	F	WD/ST	90 MIN	1		HM/PT	-	11.0	
129-1	6' - 6"	7' - 0"	FG-FG	ALUM	--	D		ALUM	G3	1.0	PANIC HARDWARE. ALTERNATE 01: CARD ACCESS CONTROL : HW# 1.1
130-1	7' - 0"	7' - 0"	FG-FG	ALUM	--	C		ALUM	G3	1.0	PANIC HARDWARE. ALTERNATE 01: CARD ACCESS CONTROL : HW# 1.1
132-1	3' - 0"	7' - 0"	F	WD/ST	--	1	1/A900, 2/A900	HM/PT	-	10.0	
133-1	6' - 0"	7' - 0"	NG-NG	WD/ST	--	2	1/A900, 2/A900	HM/PT	G2	8.0	PANIC HARDWARE
133-2	6' - 0"	7' - 0"	NG-NG	WD/ST	--	2	1/A900, 2/A900	HM/PT	G2	8.0	PANIC HARDWARE
133-3	6' - 0"	7' - 0"	F-F	HM/PT	--	4		HM/PT	-	5.0	PANIC HARDWARE. ALTERNATE 01: CARD ACCESS CONTROL : HW# 5.1
133-4	6' - 0"	7' - 0"	F-F	HM/PT	--	4		HM/PT	-	5.0	PANIC HARDWARE. ALTERNATE 01: CARD ACCESS CONTROL : HW# 5.1
134-1	6' - 0"	7' - 0"	F-F	WD/ST	--	2	1/A900, 2/A900	HM/PT	-	14.0	UNDERCUT DOORS 1"
134-2	6' - 0"	7' - 0"	F-F	WD/ST	--	2	1/A900, 2/A900	HM/PT	-	14.0	
135-1	6' - 0"	7' - 0"	F-F	WD/ST	45 MIN	2	1/A900, 2/A900	HM/PT	-	7.0	PANIC HARDWARE
136-1	6' - 0"	7' - 0"	NG-NG	WD/ST	--	2	1/A900, 2/A900	HM/PT	G2	8.0	
136-2	4' - 0"	7' - 0"	F	HM/PT	--	1		HM/PT	-	4.0	ALTERNATE 01: CARD ACCESS CONTROL : HW# 4.1

DOOR SCHEDULE - NEW DOOR HARDWARE

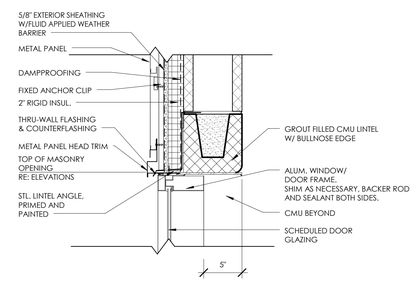
Door No.	DOORS SIZE WIDTH	DOORS SIZE HEIGHT	DOORS Type	AAOS Project HW Set	REMARKS
101-1	6' - 0"	7' - 0"	F-F	16.0	PANIC HARDWARE
101-2	6' - 0"	7' - 0"	F-F	17.0	PANIC HARDWARE
102-1	5' - 0"	7' - 0"	F-F	26.0	
103-1	3' - 0"	7' - 0"	F	22.0	
104-1	3' - 0"	7' - 0"	F	19.0	
105-1	3' - 0"	7' - 0"	F	19.0	
106-1	3' - 0"	7' - 0"	F	19.0	
107-1	3' - 0"	7' - 0"	F	18.0	
108A-1	2' - 0"	7' - 0"	F	22.0	
108B-1	2' - 0"	7' - 0"	F	22.0	
109-1	3' - 0"	7' - 0"	F	18.0	
109-2	3' - 0"	7' - 0"	F	18.0	
110-1	3' - 0"	7' - 0"	F	20.0	
111-1	3' - 0"	7' - 0"	F	18.0	
111-2	3' - 0"	7' - 0"	F	18.0	
113-1	3' - 0"	7' - 0"	F	25.0	
114-1	3' - 0"	7' - 0"	F	25.0	
116-1	3' - 0"	7' - 0"	F	22.0	
117-1	6' - 0"	7' - 0"	F-F	23.0	
118-1	3' - 0"	7' - 0"	F	20.0	
118-2	3' - 0"	7' - 0"	F	20.0	
119-1	6' - 0"	7' - 0"	F-F	23.0	
119-2	6' - 0"	7' - 0"	F-F	24.0	
120-1	3' - 0"	7' - 0"	F	19.0	
121-2	3' - 0"	7' - 0"	F	21.0	
125-2	3' - 0"	7' - 0"	F	25.0	



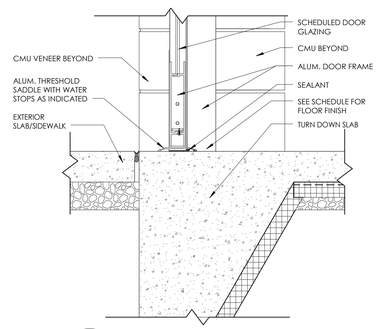




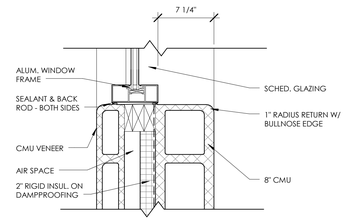
8 A900 **HEAD @ TRANSOM WINDOW AND DOOR**
1 1/2" = 1'-0"



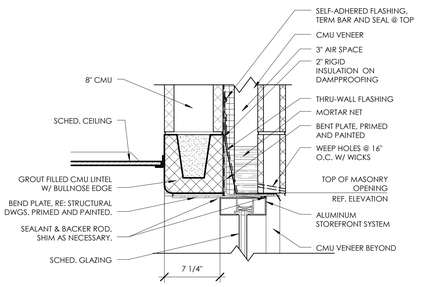
7 A900 **HEAD @ TRANSOM WINDOW**
1 1/2" = 1'-0"



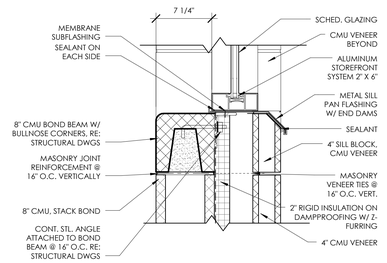
6 A900 **SILL @ DOOR**
1 1/2" = 1'-0"



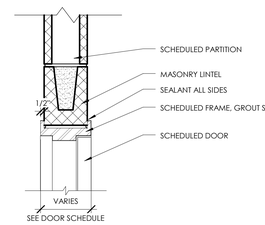
5 A900 **JAMB @ ALUMINUM WINDOW SYSTEM**
1 1/2" = 1'-0"



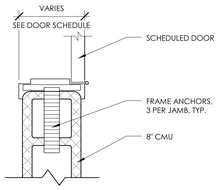
4 A900 **HEAD @ ALUMINUM WINDOW SYSTEM**
1 1/2" = 1'-0"



3 A900 **SILL @ ALUMINUM WINDOW SYSTEM**
1 1/2" = 1'-0"



2 A900 **HEAD @ MASONRY WALLS**
1 1/2" = 1'-0"



1 A900 **JAMB @ MASONRY WALLS**
1 1/2" = 1'-0"

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Revision Schedule

NO.	DATE	BY	CHKD	DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

STATE OF SOUTH CAROLINA — TIMOTHY SCOTT VOGEL — Greenville, South Carolina — No. 8268 — REGISTERED ARCHITECT — 5.30.17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO SC 29488

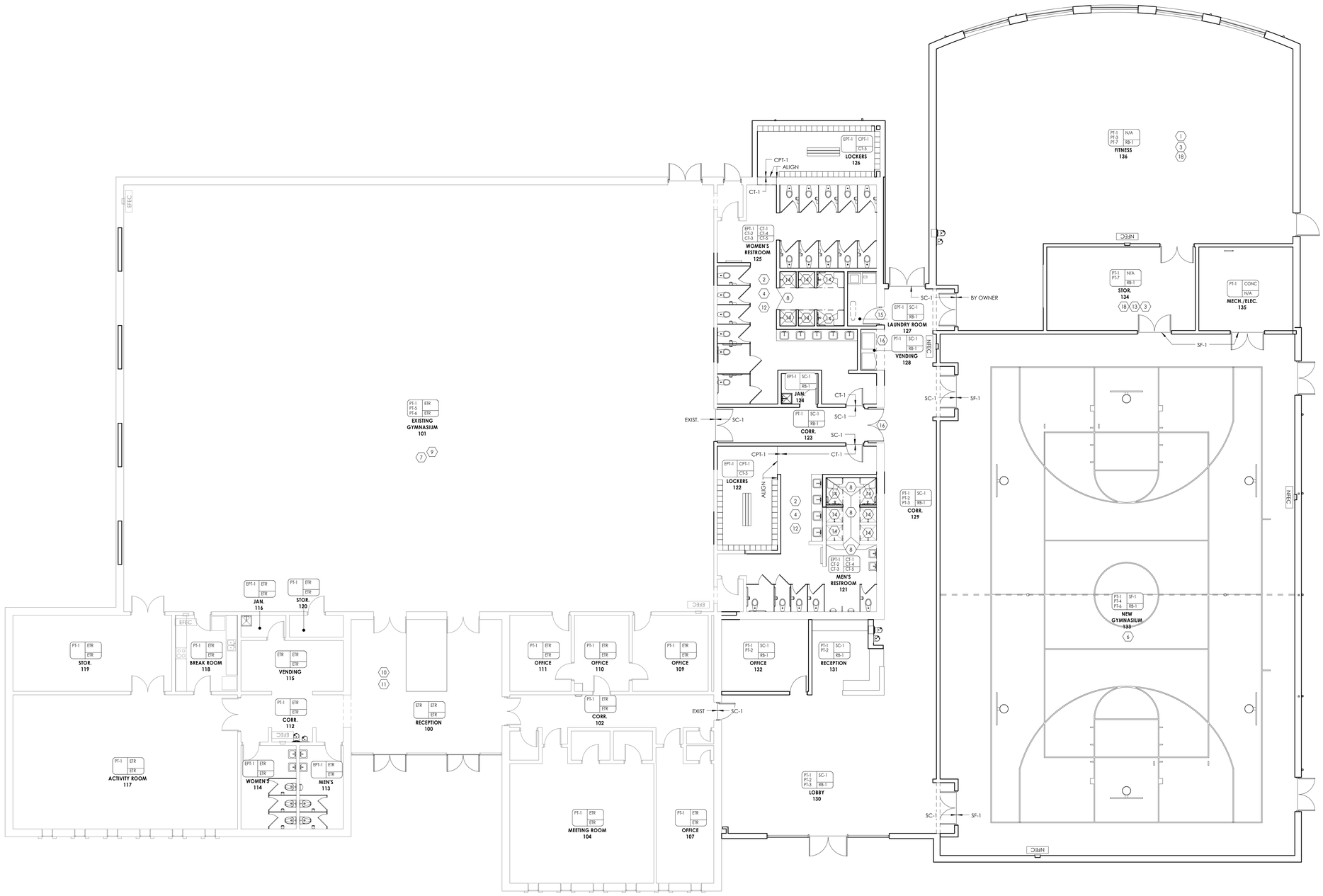
DATE	DRAWN	CHECKED
5/30/2017	DMS	RFG

SCALE: As indicated

SHEET TITLE: DOOR SCHEDULE, DOOR FRAMES, AND WINDOW TYPES

PROJECT NUMBER: 13674.00

CC A900
DRAWING NUMBER



1 / 1200 **FIRST FLOOR FINISH & FLOOR PATTERNING PLAN**
1/8" = 1'-0"

FINISH PLAN GENERAL NOTES:

1. ALL HOLLOW METAL DOORS, DOOR FRAMES AND WINDOW FRAMES SHALL BE PAINTED EPT-1.
2. ALL LOUVERS, VENTS, GRILLES AND OTHER MISCELLANEOUS MECHANICAL AND ELECTRICAL DEVICES ARE TO BE PAINTED TO MATCH THE SURFACE ON WHICH THEY APPEAR, UNLESS OTHERWISE NOTED.
3. REFER TO A600 SERIES DRAWINGS FOR CEILING TYPES AND SOFFIT FINISHES. ALL SOFFIT ACCENTS SHALL BE PAINTED ON THE FACES AND UNDERSIDES OF SOFFITS, U.N.O.
4. REFER TO A700 SERIES INTERIOR ELEVATIONS FOR MILLWORK FINISHES.
5. UNDERSIDE OF SOFFITS TO MATCH FACE OF SOFFIT. SEE A600 SERIES FOR PAINT ACCENT SPECIFICATIONS.
6. ALL MILLWORK SHALL RECEIVE LAMINATE ON FACE OF CABINETS, AND SOLID SURFACE MATERIAL ON COUNTERTOPS AND TRANSACTION TOPS, UNLESS NOTED OTHERWISE.
7. ALL LAMINATE GRAIN ON VERTICAL SURFACES SHALL RUN VERTICALLY, UNLESS NOTED OTHERWISE.
8. ALL GROUT TO BE SEALED A MINIMUM OF TWO TIMES PRIOR TO COMPLETION.
9. REFER TO 1900 FOR FINISH SPECIFICATIONS.
10. ALL EXPOSED CONCRETE FLOORS SHALL BE SEALED A MINIMUM OF TWO TIMES PRIOR TO COMPLETION.

FINISH SYMBOLS LEGEND AND ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	LAM	PLASTIC LAMINATE
ACT	ACOUSTICAL CEILING TILE	HR	HAND RAIL
CC	CUBICAL CURTAIN	PF	PANEL FABRIC
CG	CORNER GUARD	PT	PAINT
CHR	CHAIR RAIL	PTM	PAINT TO MATCH
CPT	CARPET	QT	QUARTZ
CONC	SEALED CONCRETE	RB	RESILIENT BASE
CR	CRASH RAIL	SC	STAINED CONCRETE
CS	CULTURED STONE	SSM	SOLID SURFACE MATERIAL
CT	CERAMIC TILE	STR	STONE VENEER
DS	DIVIDER STRIP	SV	SHEET VINYL
EPT	EPOXY PAINT	TS	TRANSITION STRIP
ERF	EPOXY RESIN FLOORING	TER	TERRAZZO
ETR	EXISTING TO REMAIN	VCT	VINYL COMPOSITION TILE
EXP	EXPOSED	VWC	VINYL WALL COVERING
GR	GROUT	WG	WALL GUARD
GWB	GYPSUM WALL BOARD	WOM	WALK-OFF MAT
INT	INTEGRAL	WP	WALL PROTECTION

WALL FINISH(ES) | FLOOR FINISH(ES) | BASE FINISH
ROOM NAME
101

FINISH PLAN KEY NOTES:

1. PT-1 TO BE PAINTED UP TO 8'-8", PT-3 TO BE PAINTED FROM 8'-8" UP TO 11'-4", AND PT-7 TO BE PAINTED FROM 11'-4" AND ABOVE.
2. PROVIDE CT-5 AS TILE BASE THROUGHOUT LOCKER ROOM, WITH TRM-1 AS TOP CAP AND EPOXY PAINT AS SPECIFIED ON FINISH TAG, UNLESS NOTED OTHERWISE.
3. FLOORING SHALL BE PROVIDED BY OWNER. REFER TO SPECS FOR FLOOR PREP INFORMATION.
4. TRM-1 SHALL BE USED ON ALL OUTSIDE CORNERS OF TILED SURFACES, AS WELL AS ON ALL EXPOSED EDGES OF TILE.
5. NOT USED
6. PT-1 TO BE PAINTED UP TO 13'-4", PT-4 TO BE PAINTED FROM 13'-4" UP TO 17'-4", PT-6 TO BE PAINTED FROM 17'-4" UP TO 22'-0" (BOTTOM OF JOIST), AND PT-1 TO BE PAINTED FROM 22'-0" (BOTTOM OF JOIST) AND ABOVE.
7. PT-1 TO BE PAINTED UP TO 13'-4", PT-5 TO BE PAINTED FROM 13'-4" UP TO 17'-4", PT-6 TO BE PAINTED FROM 17'-4" UP TO 22'-0" (BOTTOM OF JOIST), AND PT-1 TO BE PAINTED FROM 22'-0" (BOTTOM OF JOIST) AND ABOVE. PAINT AT STRUCTURE ABOVE TO INCLUDE ALL DUCTWORK, STRUCTURE AND CONDUIT, BOTH NEW AND EXISTING.
8. CERAMIC TILE SHALL RUN FULL HEIGHT IN BRICK STACK PATTERN ON ALL SHOWER WALLS IN MULTIPLE TILE SIZES WITHIN EXTENTS INDICATED, U.N.O. PROVIDE CT-4 ON ALL SHOWER FLOORS. REFER TO A701 FOR DETAILS.
9. CLEAN AND INSTALL RESURFACE SYSTEM ON EXISTING COMPOSITE RUBBER FLOORING. RE-STRIPE FLOORING TO MATCH EXISTING.
10. ALTERNATE 03: CLEAN & SEAL EXISTING INTERIOR BRICK.
11. ALTERNATE 04: PAINT EXISTING INTERIOR BRICK.
12. PROVIDE TRM-2 WHERE CT-5 ON WALL MEETS CT-1 ON FLOOR.
13. PT-1 TO BE PAINTED UP TO 11'-4", PT-7 TO BE PAINTED FROM 11'-4" AND ABOVE.
14. PROVIDE TRM-2 WHERE CT-2 ON WALL MEETS CT-4 ON SHOWER FLOOR.
15. PROVIDE EJC-1 @ DOORWAY WHERE INDICATED. REFER TO A800 FOR DETAILS.
16. PROVIDE EJC-3 WHERE INDICATED. REFER TO A800 FOR DETAILS.
17. PROVIDE EJC-2 ALONG LENGTH OF WALLS WHERE INDICATED. REFER TO A800 FOR DETAILS.
18. EQUIPMENT VENDOR TO BE PROVIDING FLOORING.

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Revision Schedule

NO.	DATE	BY	CHKD	DESCRIPTION

SOUTH CAROLINA CLARK PATTERSON LEE No. C02227 CERTIFICATE OF AUTHORIZATION

STATE OF SOUTH CAROLINA TIMOTHY SCOTT VANCE Greenville, South Carolina No. 8268 REGISTERED ARCHITECT 5-30-17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO SC 29488

DATE	DRAWN	CHECKED
5/30/2017	CLA	RFG

SCALE: As indicated

SHEET TITLE: FIRST FLOOR FINISH PLAN

PROJECT NUMBER: 13674.00

CC 1200
DRAWING NUMBER

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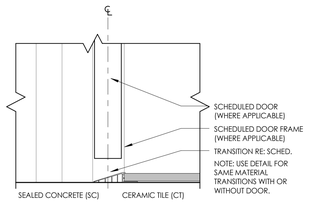
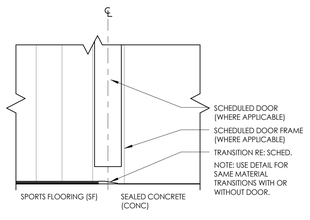
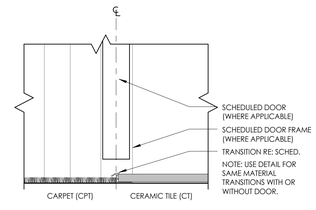
FINISHES LIST						
FINISH CODE	MANUFACTURER	STYLE/PATTERN	COLOR	DIMENSION	ADDITIONAL REQUIREMENTS	REMARKS
ACOUSTIC CEILING TILE						
ACT-1	Armstrong	Ultima Beveled Tegular 1911	White	24" x 24" x 3/4"	,70 NRC, 35 CAC, Class A Fire Rating, .90 Light Reflectance, Mold & Mildew resistant, sag resistant, washable	Prelude 15/16" suspension system (white)
ACT-2	Armstrong	Fine Fissured Tegular High NRC 1758	White	24" x 24" x 7/8"	,75 NRC, 35 CAC, 170 Articulation Class, Class A Fire Rating, .86 Light Reflectance	Prelude XL Suspension System (white)
ACT-3	Armstrong	Kitchen Zone Square Lay In 673	White	24" x 24" x 5/8"	33 CAC, Class A Fire Rating, .89 Light Reflectance, mold & mildew resistance, sag resistant, washable	15/16" Prelude suspension system
CARPET						
CPT-1	Shaw Contract Group	Reverse tile (or similar)	TBD	24" x 24"	Multi-level pattern loop, eco solution Q nylon, 100% solution dyed, Class I radiant panel testing	
CERAMIC TILE						
CT-1	American Olean	Infusion	TBD	12" x 12"	Colorway to be selected by architect during submittals	Floor Tile
CT-2	American Olean	Infusion	TBD	12" x 24"	Colorway to be selected by architect during submittals	Wall Tile
CT-3	American Olean	Infusion	TBD	2" x 24"	Colorway to be selected by architect during submittals	Accent Wall Tile
CT-4	American Olean	Infusion	TBD	1" x 2" mosaic	Colorway to be selected by architect during submittals	Floor Tile - Showers
CT-5	American Olean	Infusion	TBD	6" X 24"	Colorway to be selected by architect during submittals	Wall Tile
EPOXY PAINT						
EPT-1	Sherwin Williams	N/A	TBD	N/A	Colorway to be selected by architect during submittals	Epoxy Finish, U.N.O.
EXPANSION JOINT COVER						
EJC-1	Construction Specialties	PC-200	TBD	5 1/4" W	For 2" expansion joint, floor to floor	Refer to 1/1200 for location
EJC-2	Construction Specialties	PCW-200	TBD	5 1/4" W	For 2" expansion joint, wall to floor	Refer to 1/1200 & A200A plans for locations.
EJC-3	Construction Specialties	PC-___	TBD	TBD	For 2" expansion joint, floor to floor. Size of cover to be determined & selected during submittal/ construction process	Refer to 1/1200 & A200A plans for locations.
GROUT						
GR-1	TBD	Epoxy Grout	TBD		Colorway to be selected by architect during submittals	sanded floor grout
GR-2	TBD	Epoxy Grout	TBD		Colorway to be selected by architect during submittals	unsanded wall grout
PAINT						
PT-1	Sherwin Williams	N/A	TBD	N/A	Colorway to be selected by architect during submittals	Eggshell Finish, U.N.O.
PT-2	Sherwin Williams	N/A	TBD	N/A	Colorway to be selected by architect during submittals	Eggshell Finish, U.N.O.
PT-3	Sherwin Williams	N/A	TBD	N/A	Colorway to be selected by architect during submittals	Eggshell Finish, U.N.O.
PT-4	Sherwin Williams	N/A	TBD	N/A	Colorway to be selected by architect during submittals	Eggshell Finish, U.N.O.
PT-5	Sherwin Williams	N/A	TBD	N/A	Colorway to be selected by architect during submittals	Eggshell Finish, U.N.O.
PT-6	Sherwin Williams	N/A	TBD	N/A	Colorway to be selected by architect during submittals	Eggshell Finish, U.N.O.
PT-7	Sherwin Williams	N/A	TBD	N/A	For open structure; colorway to be selected by architect during submittals	Eggshell Finish, U.N.O.
PT-8	Sherwin Williams	N/A	SW7007 Ceiling Bright White	N/A	Colorway to be selected by architect during submittals	Eggshell Finish, U.N.O.
PLASTIC LAMINATE						
LAM-1	Wilsonart	N/A	Palisades Oak 7937-38			Toilet Rooms
LAM-2	Wilsonart	N/A	TBD		To be selected by architect during submittals	Reception Desk
RESILIENT BASE						
RB-1	Johnsonite	Traditional Cove Base	TBD	4"	Colorway to be selected by architect during submittals	Continuous Roll
SOLID SURFACE MATERIAL						
SSM-1	Corian	N/A	Cottage Lane	N/A		Toilet Rooms
SSM-2	Corian	N/A	Concrete	N/A		Reception Desk
SPORTS FLOORING						
SF-1	Gerflor	Taraflex Sport M Plus- Uni	TBD	4'-11" roll width	Colorway to be selected by architect during submittals	Double Density CXP HD Foam Backing
STAINED CONCRETE						
SC-1	Scofield	Formula One Lithium Densifier MP	Soft Gray G388	N/A	N/A	Refer to manufacturer's installation instructions
TRANSITION STRIP						
TS-1	Schluter Systems	RENO-TK	TBD			Transition from CPT to Ceramic Tile
TS-2	Schluter Systems	RENO-RAMP	TBD	2 1/2" W x 3/8"H	Centerline of transition strip shall align with centerline of door	Transition from SC to Ceramic Tile
TS-3	Johnsonite	Wheeled Traffic Transition CTA-XX-P	TBD	2 1/2" W	3/8" material to subfloor	Transition from SF to SC
TRIM PIECE						
TRM-1	Schluter Systems	Jolly	Brushed Chrome Anodized Aluminum			To be used on all outside corners of ceramic tile, as well as top cap of ceramic tile in toilet rooms where indicated, U.N.O.
TRM-2	Schluter Systems	Dilex-HKW	Classic Grey			To be installed where ceramic wall tile meets floor tile. See finish plan for specific room locations.



3 / 1900 **TS DETAIL - TILE TO CONC**
3" = 1'-0"



2 / 1900 **TS DETAIL - SHEET TO CONC**
3" = 1'-0"



1 / 1900 **TS DETAIL - CPT TO TILE**
3" = 1'-0"

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Revision Schedule

NO.	DATE	BY	CHKD	DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

STATE OF SOUTH CAROLINA — TIMOTHY SCOTT LANGLEY — Greenville, South Carolina — No. 8268 — REGISTERED ARCHITECT — 5-30-17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO SC 29488

DATE	DRAWN	CHECKED
5/30/2017	CLA	RG
SCALE	3" = 1'-0"	

SHEET TITLE
FINISH SPECIFICATIONS

PROJECT NUMBER
13674.00

CC
1900
DRAWING NUMBER

HVAC SYMBOLS LIST

		SYMBOL	DESCRIPTION
AAD	AUTOMATIC AIR DAMPER		CONNECTION - TOP
ACC	AIR-COOLED CONDENSING UNIT		CONNECTION - BOTTOM
AD	ACCESS DOOR		DIRECTION OF FLOW
AFF	ABOVE FINISHED FLOOR		REDUCER
AHU	AIR HANDLING UNIT		CAP OR PLUG
BBD	BOILER BLOW DOWN		ELBOW DOWN
BD	BACKDRAFT DAMPER		ELBOW UP
CA	COMBUSTION AIR		TEE OUTLET - UP
CD	COOLING COIL CONDENSATE DRAIN		TEE OUTLET - DOWN
CFM	CUBIC FEET PER MINUTE		UNION
CHWR	CHILLED WATER RETURN		GATE VALVE
CHWS	CHILLED WATER SUPPLY		BALL VALVE
CR	CONDENSER WATER RETURN		BALANCING VALVE
CS	CONDENSER WATER SUPPLY		STRAINER
CW	DOMESTIC COLD WATER		STRAINER WITH BLOW-DOWN
D	DRAIN		BUTTERFLY VALVE
(E)	EXISTING		BUTTERFLY CONTROL VALVE, PNEUMATIC 2-WAY
EA	EXHAUST AIR		BUTTERFLY CONTROL VALVE, ELECTRIC ACTUATOR
EC	ELECTRICAL CONTRACTOR		GLOBE VALVE
EF	EXHAUST FAN		CHECK VALVE
ERHC	ELECTRIC REHEAT COIL		TRIPLE DUTY VALVE
ETR	EXISTING TO REMAIN		GAS COCK, PLUG VALVE
EUH	ELECTRIC UNIT HEATER		UNDERCUT DOOR 1"
F&T	FLOAT AND THERMOSTATIC TRAP		LOUVERED DOOR W/ SQ. FT. OF FREE AREA
FCU	FAN-COIL UNIT		AIR VENT - MANUAL
FPM	FEET PER MINUTE		AIR VENT - AUTOMATIC
FT	FIN-TUBE		FLANGE
GC	GENERAL CONTRACTOR		CONTROL/SOLENOIND VALVE, ELECTRIC 2-WAY
GR	GLYCOL RETURN		CONTROL VALVE, ELECTRIC 3-WAY
GS	GLYCOL SUPPLY		CONTROL VALVE, PNEUMATIC 2-WAY
HC	HVAC CONTRACTOR		CONTROL VALVE, PNEUMATIC 3-WAY
HHWR	HEATING HOT WATER RETURN		RELIEF / SAFETY VALVE
HHWS	HEATING HOT WATER SUPPLY		PRESSURE REDUCING VALVE
Hp	HEAT PUMP		VACUUM BREAKER
HPC	HIGH PRESSURE CONDENSATE		FLEXIBLE PIPE CONNECTOR
HPS	HIGH PRESSURE STEAM		EXPANSION COMPENSATOR W/ GUIDES
LF	LINEAR FOOTAGE OF FIN-TUBE RADIATION		EXPANSION JOINT
LPC	LOW PRESSURE CONDENSATE		PIPE ANCHOR
LPG	LIQUEFIED PROPANE GAS		PIPE GUIDE
LPS	LOW PRESSURE STEAM		THERMOSTATIC TRAP
MBH	1,000 BTU/HR		FLOAT & THERMOSTATIC TRAP
MC	MECHANICAL CONTRACTOR		BUCKET TRAP
MPC	MEDIUM PRESSURE CONDENSATE		THERMODYNAMIC TRAP
MPS	MEDIUM PRESSURE STEAM		THERMOMETER
MRD	MONOFLO FITTING DOWN – HHWR		WELL
MSD	MONOFLO FITTING DOWN – HHWS		PRESSURE GAUGE
MUW	MAKE-UP WATER		STEAM PRESSURE GAUGE WITH 1/4" NEEDLE VALVE
NC	NORMALLY CLOSED		PRESSURE GAUGE WITH 1/4" NEEDLE VALVE
NG	NATURAL GAS		PNEUMATIC (CONTROL) TUBING
NO	NORMALLY OPEN		BUTTERFLY VALVE WITH PNEUMATIC AND MANUAL OPERATORS
NTS	NOT TO SCALE	XX	PIPING
OA	OUTSIDE AIR	XX	PIPING BELOW GRADE
PC	PLUMBING CONTRACTOR		BASE MOUNTED PUMP
PD	PUMP DISCHARGE		IN-LINE PUMP
PHWR	PRIMARY HEATING HOT WATER RETURN		AIR TERMINAL UNIT WITH REHEAT COIL AND SOUND ATTENUATOR
PHWS	PRIMARY HEATING HOT WATER SUPPLY		AIR TERMINAL UNIT WITH SOUND ATTENUATOR
RA	RETURN AIR		AIR TERMINAL UNIT WITH REHEAT COIL
RD	REFRIGERANT DISCHARGE		AIR TERMINAL UNIT
RHC	HOT WATER REHEAT COIL	W/W ENCL.	WALL TO WALL FIN TUBE ENCLOSURE
RL	REFRIGERANT LIQUID PIPE		
RS	REFRIGERANT SUCTION PIPE		
RTU	ROOFTOP UNIT		
RV	ROOF VENT		
SA	SUPPLY AIR		
SHWR	SECONDARY HEATING HOT WATER RETURN		
SHWS	SECONDARY HEATING HOT WATER SUPPLY		
SSI	SPLIT SYSTEM INDOOR SECTION (EVAPORATOR SECTION)		
SSO	SPLIT SYSTEM OUTDOOR SECTION (CONDENSING UNIT)		
TC	TEMPERATURE CONTROLS CONTRACTOR		
UH	UNIT HEATER		
UV	UNIT VENTILATOR		
V	VENT		
WAHP	WATER-TO-AIR HEAT PUMP		
WWHP	WATER-TO-WATER HEAT PUMP		

SYMBOL	DESCRIPTION
20/10	DUCT SECTION - SUPPLY
20/10	DUCT SECTION - RETURN
20/10	DUCT SECTION - EXHAUST
A"	DUCT SECTION - ROUND DUCT IN INCHES
AXB FO	DUCT SECTION - FLAT OVAL DUCT IN INCHES
	ACOUSTIC THERMAL LINING
	FLEXIBLE DUCTWORK
FC	FLEXIBLE CONNECTION
	FIRE DAMPER
	SMOKE DAMPER
	COMBINATION FIRE AND SMOKE DAMPER
VD	VOLUME DAMPER
	DAMPER CONTROL, PARALLEL BLADE
	DAMPER CONTROL, OPPOSED BLADE
AAD	AUTOMATIC AIR DAMPER
BDD	BACK DRAFT DAMPER
BG	BLAST GATE
20/10 / 12X10 / 10/20	AIR DUCT (FIRST FIGURE IS DUCT WIDTH/TOP, SECOND FIGURE IS DUCT DEPTH)
	MULTI-BLADE AIR EXTRACTOR
	TURNING VANES
	EXISTING WORK TO BE REMOVED (HATCHED)
P	POINT OF CONNECTION
R	POINT OF DISCONNECTION
	AIR FLOW SENSOR
	FILTER
	TRANSITION SQUARE TO ROUND
	HUMIDIFIER DISPERSION TUBE
RISE / R	RISE IN DUCT
DROP / D	DROP IN DUCT
	SQUARE CEILING DIFFUSER (4 WAY)
	ROUND CEILING DIFFUSER
	SQUARE OR RECTANGULAR CEILING GRILLE
	SUPPLY REGISTER, RETURN OR EXHAUST GRILLE
1-WAY 2-WAY 3-WAY	SUPPLY DIFFUSER, 1-WAY, 2-WAY, 3-WAY
8"Ø, D-3 / 300 CFM	CEILING DIFFUSER WITH NECK SIZE, TYPE, & CFM
10"x10", G-3 / 300 CFM	CEILING RETURN OR EXHAUST GRILLE WITH SIZE, TYPE, & CFM
10"x8", R-2 / 300 CFM	SUPPLY REGISTER WITH SIZE, TYPE, & CFM
10"x8", G-2 / 300 CFM	RETURN OR EXHAUST GRILLE WITH SIZE, TYPE, & CFM
	AIR FLOW
L1	ACOUSTIC/THERMAL DUCTWORK LINING - 1 INCH THICK
L2	ACOUSTIC/THERMAL DUCTWORK LINING - 2 INCH THICK
PL1	ACOUSTIC/THERMAL DUCTWORK PLENUM LINING - 1 INCH THICK
PL2	ACOUSTIC/THERMAL DUCTWORK PLENUM LINING - 2 INCH THICK

SYMBOL	DESCRIPTION
24X12 / 12X10 / VD	SUPPLY / RETURN / EXHAUST AIR TAKEOFFS
24X12 / 8"Ø / VD	SUPPLY / RETURN / EXHAUST AIR TAKEOFFS
14"Ø / 10"Ø / VD	SUPPLY AIR TAKEOFFS
14"Ø / 10"Ø / VD	SUPPLY AIR TAKEOFFS
24X12 / 6X12 / 18X12 / 20X12	SUPPLY AIR TAKEOFFS
24X12 / 12X10 / VD	SUPPLY/RETURN EXHAUST AIR TAKEOFFS W/ REGISTER/GRILLE/ DIFFUSER
VD / VD	SUPPLY/RETURN EXHAUST AIR END OF MAIN BRANCH TAKEOFFS
VD / VD	SUPPLY/RETURN EXHAUST AIR END OF MAIN BRANCH TAKEOFFS
W / R	LONG RADIUS 90° ELBOW R/W=1.5
W / R	LONG RADIUS 45° ELBOW R/W=1.5
	90° ELBOW WITH TURNING VANES
18X16 / 18X8 / 18X8	90 VERTICAL SPLIT OFF (PLAN VIEW)
20X10 / 20X10 / 20X10	DUCT TURNING UP OR DOWN
U MAX MIN	AIR TERMINAL UNIT-DUCTWORK U - UNIT TYPE MAX = MAXIMUM CFM MIN = MINIMUM CFM
U GPM MAX	AIR TERMINAL UNIT-DUCTWORK U - UNIT TYPE GPM = GALLONS PER MIN MAX = MAXIMUM GPM
U MAX MIN FAN	FAN POWERED AIR TERMINAL UNIT U - UNIT TYPE MAX = PRIMARY MAX CFM MIN = PRIMARY MIN CFM FAN = FAN CFM
TYPE / COIL SIZE / CLNG GPM / HTNG GPM	TYPE = VALANCE TYPE COIL SIZE = COIL LENGTH CLNG GPM = COOLING GPM HTNG GPM = HEATING GPM
X / XX	X = DIFFUSER OR GRILL TYPE XX = AIR FLOW VALUE (CFM)

SYMBOL	DESCRIPTION
	ELECTRIC/PNEUMATIC SWITCH OR RELAY
	PNEUMATIC/ELECTRIC SWITCH OR RELAY
CT	CURRENT TRANSDUCER
	OPEN/CLOSED
	START/STOP
	ENABLE/DISABLE
	TEMPERATURE SENSOR (DUCT OR PIPE MOUNTED)
H	HUMIDITY SENSOR (DUCT MOUNTED)
F	FLOW TRANSMITTER
P	PRESSURE TRANSMITTER
DP	DIFFERENTIAL PRESSURE TRANSMITTER
P/I	ELECTRIC/PNEUMATIC TRANSDUCER
I/P	ELECTRIC/ELECTRONIC TRANSDUCER
	DUCT SMOKE DETECTOR
T	SPACE THERMOSTAT
T	SPACE TEMPERATURE SENSOR
CO_2	SPACE CARBON DIOXIDE SENSOR
CH_4	SPACE NATURAL GAS SENSOR
CO	SPACE CARBON MONOXIDE SENSOR
G	SPACE SENSOR WITH GUARD
H	SPACE HUMIDISTAT
FS	WATER FLOW SENSOR
	PNEUMATIC ACTUATOR
	ELECTRIC ACTUATOR
VSD VFD	VARIABLE SPEED / FREQUENCY DRIVE
C	COOLING COIL
H	HEATING COIL
G	GAS FURNACE
H	HUMIDIFIER
A	ALARM
S	STATUS
FS	FLOW SWITCH
ΔP	DIFFERENTIAL STATIC PRESSURE SWITCH
R	RELAY
	PRESSURE GAUGE
FZ	FREEZE-STAT
DI	DIGITAL INPUT (TO BUILDING MANAGEMENT SYSTEM)
DO	DIGITAL OUTPUT (FROM BUILDING MANAGEMENT SYSTEM)
AO	ANALOG OUTPUT (FROM BUILDING MANAGEMENT SYSTEM)
AI	ANALOG INPUT (TO BUILDING MANAGEMENT SYSTEM)
	ELECTRICAL INTERFACE
SF	SPEED FEED BACK
	TRAVERSE AVERAGING SENSOR
	PROBE SENSOR
	FREEZE STAT SENSOR

MECHANICAL GENERAL NOTES:

1. ALL DUCTWORK, PIPING, AND CONDUIT PENETRATIONS THROUGH RATED WALLS OR FLOORS SHALL BE PROVIDED WITH FIRE/SMOKE STOPPINGS PER SPECIFICATION. REFER TO CODE ANALYSIS DRAWING FOR ALL RATED WALL LOCATIONS. ALL FLOORS SHALL BE CONSIDERED RATED.
2. ALL NEW PENETRATIONS SHALL BE PROVIDED FOR INSTALLATION OF MECHANICAL SYSTEMS INCLUDING, BUT NOT LIMITED TO, EQUIPMENT, CURBING, DUCTWORK, PIPING, CONTROLS, ETC. UNLESS SHOWN ON THE ARCHITECTURAL DRAWINGS, IT IS THE RESPONSIBILITY OF THIS CONTRACT TO PATCH AND FINISH ALL DUCTWORK OR PIPE PENETRATIONS THROUGH FLOORS, ROOFS, INTERIOR WALLS, AND EXTERIOR WALLS. PATCHING AND FINISHING SHALL MATCH CONSTRUCTION INCLUDING FIRE RATINGS. PROVIDE LINTELS PER LINTEL SCHEDULE.
3. CONNECTION TO EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS. TRANSITIONS TO ALL EQUIPMENT SHALL BE VERIFIED AND PROVIDED FOR EQUIPMENT FURNISHED.
4. DMENSIONS 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.
5. ALL MECHANICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING, MECHANICAL, PLUMBING, FUEL GAS AND FIRE PROTECTION CODES WITH SOUTH CAROLINA MODIFICATIONS AND THE 2009 INTERNATIONAL ENERGY CONSERVATION CODE.
6. DUCT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARD.
7. SEE SPECIFICATIONS FOR GAUGES, THICKNESS, BRACING, REQUIREMENTS, ETC., OF DUCTWORK.
8. PROVIDE AIR TURNING VANES IN ALL 90 DEGREE RECTANGULAR DUCT ELBOWS.
9. RADIUSED ELBOWS SHALL BE USED IN ALL RETURN AND EXHAUST DUCTWORK WHERE SPACE PERMITS. MITERED ELBOWS WITH TURNING VANES ARE PERMITTED WHERE SHOWN ON PLAN IF ACCESS DOORS FOR CLEANING ARE PROVIDED AT TURNING VANES.
10. COORDINATE DIFFUSER, GRILLE AND REGISTER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS INCLUDING LIGHT FIXTURES, SMOKE DETECTORS, SPRINKLER HEADS, ETC.
11. LOCATE THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS AND HUMIDITY SENSORS AT 48" (CENTERLINE) ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE. COORDINATE LOCATIONS WITH OTHER EQUIPMENT, FURNITURE AND DOOR SWINGS.
12. ALL EQUIPMENT, DUCTWORK, ETC., SHALL BE SUPPORTED AS DETAILED AND/OR SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PROVIDE A VIBRATION-FREE, RIGID INSTALLATION.
13. ALL DUCT SIZES SHOWN AS INSIDE CLEAR DIMENSIONS.
14. DAMPERS AND INSIDES OF DUCTS VISIBLE THROUGH GRILLES, REGISTERS AND DIFFUSERS SHALL BE PAINTED FLAT BLACK.
15. REFER TO TYPICAL DETAILS FOR PIPING AND INSTALLATION OF EQUIPMENT.
16. TRAPPED CONDENSATE DRAINS FROM ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED FOR PROPER DRAINAGE TO SUIT EQUIPMENT FURNISHED.
17. ACCESS PANELS IN DUCTWORK AND CEILINGS SHALL BE PROVIDED WHERE REQUIRED FOR OPERATION, BALANCING OR MAINTENANCE OF ALL MECHANICAL EQUIPMENT. PROVIDE DUCT ACCESS DOORS ADJACENT TO ALL SQUARE ELBOWS WITH TURNING VANES FOR CLEANING.
18. 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.
19. PROVIDE FLEXIBLE DUCT CONNECTIONS ON ALL DUCTWORK CONNECTING TO EACH PIECE OF EQUIPMENT INCLUDING FANS, AIR HANDLING UNITS, TERMINAL UNITS AND FAN COIL UNITS, ETC.
20. RUNOUT DUCTS TO DIFFUSERS & GRILLES SHALL MATCH THE SCHEDULED DEVICE NECK SIZE UNLESS NOTED OTHERWISE. PROVIDE TRANSITIONS AT DIFFUSER NECKS AS REQUIRED TO MATCH SIZES OF FLEXIBLE DUCTS TO BE CONNECTED.
21. MAINTAIN CLEARANCE OF A MINIMUM OF 4" BETWEEN DUCTWORK, PIPING, EQUIPMENT, ETC, AND ALL FIRE RATED AND FIRE/SMOKE RATED PARTITIONS, TO ALLOW FOR INSPECTIONS OF RATED WALLS.
22. UNLESS OTHERWISE NOTED, ALL DRAINS FOR EQUIPMENT AND VALVES SHALL BE INDEPENDENTLY PIPED FULL SIZE TO THE NEAREST PLUMBING DRAIN.
23. SLEEVE AND SEAL ALL PIPING PENETRATIONS THROUGH BUILDING PARTITIONS.
24. A MAXIMUM OF LENGTH 5'-0" FLEXIBLE DUCTWORK ALLOWED ON ANY RUNOUT TO ANY AIR DEVICE. FLEXIBLE DUCTWORK IS PROHIBITED FOR RETURN AND EXHAUST DUCTWORK.
25. ALL AIR TERMINAL UNIT RUNOUT SIZES SHALL BE AS INDICATED. TERMINAL UNIT OUTLET LOW PRESSURE DUCT SHALL BE TERMINAL BOX OUTLET SIZE UNLESS OTHERWISE NOTED.
26. ALL SUPPLY AND RETURN GRILLES SHALL BE A MINIMUM OF 36" AWAY FROM SMOKE DETECTOR LOCATIONS AS REQUIRED BY CODE.
27. PENETRATIONS OF RATED WALL ASSEMBLIES SHALL BE PROTECTED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. REFER TO ARCHITECTURAL SERIES DRAWINGS FOR WALL RATINGS.
28. ALL FLEXIBLE DUCT CONNECTIONS DOWNSTREAM OF VAV BOXES TO HAVE MANUFACTURED SPIN-IN FITTINGS WITH VOLUME DAMPER AND MANUAL LOCKING QUADRANT WITH INSULATION STAND-OFF BRACKET. SECURE FLEXIBLE DUCT TO FITTING WITH STAINLESS STEEL BAND AND WORM GEAR OPERATED CLAMP.
29. REFER TO ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS. DO NOT SCALE THESE DRAWINGS.
30. DUCTWORK AS SHOWN ON THE DRAWINGS IS DIAGRAMMATIC. COORDINATE EXACT LOCATION WITH THE BUILDING STRUCTURE.
31. PROVIDE ACCESS PANELS IN THE DUCTWORK FOR ALL FIRE DAMPERS OR OTHER DUCT MOUNTED EQUIPMENT.
32. CONTRACTOR SHALL FURNISH A BOUND SET OF OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL EQUIPMENT TO THE OWNER UPON COMPLETION OF THE PROJECT.
33. INSTALL ESCUTCHEONS IN ALL PLACES WHERE PIPING PENETRATES A WALL IN AN EXPOSED LOCATION.
34. REPLACE FILTERS JUST PRIOR TO ACCEPTANCE BY THE OWNER.
35. TERMINATE DUCT 18" MINIMUM BEYOND CENTERLINE OF OUTLET TO LAST DIFFUSER.
36. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE DELIVERY CLEARANCE REQUIREMENTS OF LARGE EQUIPMENT WITH THE GENERAL CONTRACTOR TO PROVIDE SUFFICIENT ACCESS FROM THE DELIVERY POINT TO THE EQUIPMENT'S FINAL LOCATION.

SYMBOLS GENERAL NOTES:

1) VALVE AND DAMPER ACTUATOR TYPES (ELECTRIC OR PNEUMATIC) WHICH ARE INDICATED IN HVAC TEMPERATURE CONTROL DRAWINGS SHALL SUPERSEDE TYPE INDICATED ON ALL OTHER HVAC DRAWINGS.

MECHANICAL DESIGN CRITERIA

CONDITION	CRITERIA	COMMENTS
SUMMER (COOLING): OUTSIDE AIR DESIGN	95 °F DB/78°F WB	DERIVED FROM ASHRAE 90.1 FOR CHARLESTON, SC
WINTER (HEATING): OUTSIDE AIR DESIGN	25 °F DB	DERIVED FROM ASHRAE 90.1 FOR CHARLESTON, SC
INDOOR DESIGN: OCCUPIED AREAS	75 °F DB	RELATIVE HUMIDITY (CONTROLLED): 50%

SEISMIC DESIGN CRITERIA FOR NON-STRUCTURAL COMPONENTS

SEISMIC DESIGN CATEGORY	D
BUILDING RISK CATEGORY	III
MECHANICAL COMPONENT IMPORTANCE FACTOR (IP)	1.0
SEISMIC DESIGN REQUIREMENTS	SEE NOTE 1

NOTES:
1. PROVIDE FLEXIBLE CONNECTIONS BETWEEN ALL HVAC COMPONENTS AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. ALL RESTRAINTS TO BE INSTALLED PER CODE REQUIREMENTS.

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER GREGORY A. KYZER No. 16220 5/10/17 CERTIFICATE OF AUTHORIZATION 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: NOT TO SCALE

SHEET TITLE: HVAC SYMBOLS LEGEND, NOTES & SYSTEM DIAGRAMS

PROJECT NUMBER: 13674.00

DRAWING NUMBER: CC H000

5/26/2017 9:46:33 AM
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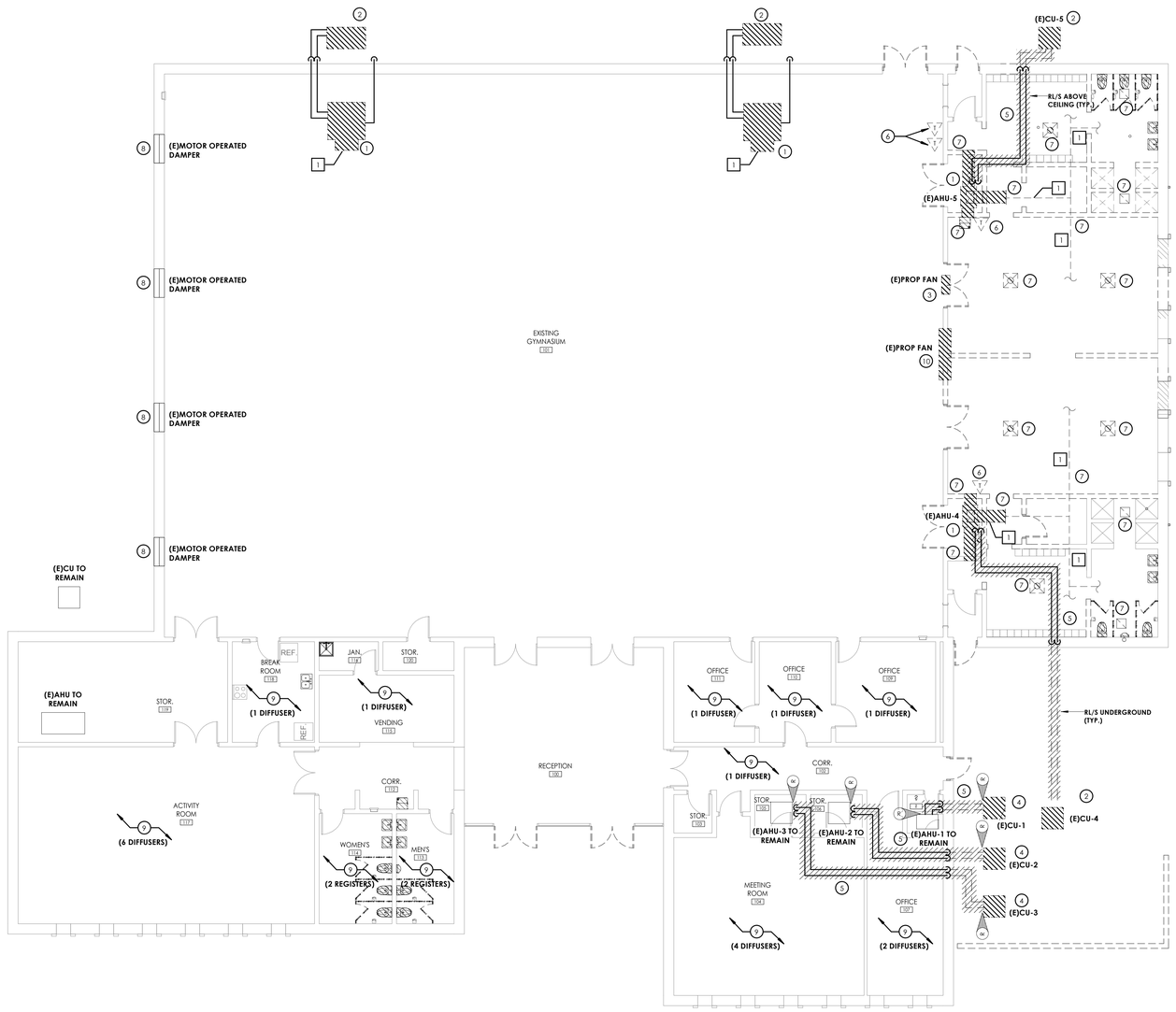

1 H100 **HVAC - GROUND FLOOR DEMOLITION PLAN**
1/8" = 1'-0"

KEY NOTES:

1. REMOVE EXISTING AIR-HANDLING UNIT IN ITS ENTIRETY INCLUDING CONTROLS, SUPPORTS, REFRIGERANT PIPING AND CONDENSATE DRAIN LINES. PATCH PIPING PENETRATIONS IN EXTERIOR WALL TO MATCH EXISTING MATERIALS AND FINISHES.
2. REMOVE EXISTING CONDENSING UNIT IN ITS ENTIRETY INCLUDING REFRIGERANT PIPING, CONTROL WIRING AND CONCRETE HOUSEKEEPING PAD.
3. REMOVE EXISTING WALL-MOUNTED PROPELLER FAN IN ITS ENTIRETY INCLUDING ALL ASSOCIATED COMPONENTS. PATCH OPENING IN WALL TO MATCH EXISTING MATERIALS AND FINISHES.
4. REMOVE AND SALVAGE EXISTING CONDENSING UNIT MOUNTED AT GRADE. REMOVE EXISTING CONCRETE HOUSEKEEPING PAD. REFER TO NEW WORK PLANS FOR RE-INSTALLATION LOCATION OF SALVAGED UNIT.
5. REMOVE EXISTING REFRIGERANT PIPING BETWEEN INDOOR AND OUTDOOR UNITS IN ITS ENTIRETY. ABANDON AND CAP ANY PIPING CONCEALED IN CHASES/WALLS SLATED TO REMAIN IN PLACE. REFER TO NEW WORK PLANS FOR NEW REFRIGERANT PIPING ROUTING WHERE OUTDOOR UNITS ARE TO BE SALVAGED.
6. REMOVE EXISTING WALL-MOUNTED THERMOSTAT AND ASSOCIATED CONTROL WIRING.
7. REMOVE ALL EXISTING DUCTWORK IN ITS ENTIRETY INCLUDING MAINS, BRANCH DUCTWORK, AND AIR DEVICES THROUGHOUT LOCKER/FITNESS ROOM AREAS. FOLLOWING DUCTWORK REMOVAL, PATCH OPENINGS IN WALLS THAT ARE REMAINING.
8. REMOVE EXISTING MOTOR OPERATED DAMPER IN ITS ENTIRETY INCLUDING ALL ASSOCIATED COMPONENTS.
9. REMOVE EXISTING GRILLES, REGISTERS AND RETURNS LOCATED IN EXISTING CEILING SYSTEM. EXISTING DUCTWORK TO REMAIN. AIR DEVICE QUANTITIES HAVE BEEN INDICATED ON PLANS FOR REFERENCE ONLY. CONTRACTOR TO VERIFY EXACT LOCATION PRIOR TO START OF WORK.
10. REMOVE EXISTING WALL-MOUNTED PROPELLER FAN IN ITS ENTIRETY INCLUDING LOUVER ALL ASSOCIATED COMPONENTS. EXISTING OPENING TO REMAIN FOR REUSE.

ASBESTOS ABATEMENT KEY NOTES:

1. REMOVE BY ABATEMENT, ASBESTOS CONTAINING INSULATION AND MASTIC ASSOCIATED WITH OVERHEAD DUCTWORK. REFER TO HAZARDOUS MATERIALS SURVEY FOR FURTHER INFORMATION.

GENERAL ASBESTOS ABATEMENT NOTES:

1. ALL DRAWINGS ARE A GRAPHIC REPRESENTATION OF APPROXIMATE LOCATIONS OF MATERIALS TO BE ABATED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXISTING CONDITIONS AND TO REVIEW THE ASBESTOS INSPECTION SURVEY INCLUDED IN THE PROJECT MANUAL PRIOR TO SUBMITTING A BID. IF THERE ARE ANY DISCREPANCIES WITH WHAT EXISTS TO WHAT IS INDICATED ON THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPORT SAID DISCREPANCIES TO THE ARCHITECT PRIOR TO SUBMITTING A BID. IT IS THE INTENT OF THIS PROJECT IS TO COMPLETELY REMOVE ASBESTOS CONTAINING MATERIALS INDICATED AND TO PROVIDE CLEAN ACM FREE WORK AREA POST ABATEMENT.
2. ALL ABATEMENT PROCEDURES TO BE IN ACCORDANCE WITH STANDARDS SET FORTH BY S.C.D.H.E.C., OSHA AND NESHAPS AND ALL APPLICABLE REGULATIONS.
3. THE CONTRACTOR IS TO EMPLOY A LICENSED ELECTRICIAN TO PERFORM ALL REQUIRED ELECTRICAL REMOVALS, POWER LOCKOUTS AND HVAC SYSTEM LOCKOUTS AND RESTORE THESE SERVICES UPON COMPLETION OF THE ABATEMENT WORK.
4. ELECTRICAL POWER LOCKOUTS SHALL NOT AFFECT PORTIONS OF THE BUILDING THAT NEED TO REMAIN IN USE. THE CONTRACTOR SHALL MAKE PROVISIONS TO REROUTE POWER OR PROVIDE TEMPORARY POWER.
5. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING FINISHES NOT SCHEDULED FOR REMOVAL UNDER THE CONTRACT, PIPING AND EQUIPMENT NOT SCHEDULED FOR REMOVED UNDER THE CONTRACT. ANY DAMAGE WILL BE REPAIRED TO THE OWNER/ARCHITECTS SATISFACTION AT NO COST TO THE OWNER.
6. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THE ASBESTOS DUMPSTER WITH THE CONSTRUCTION MANAGER.
7. THE CONTRACTOR MAY APPLY FOR PROJECT SPECIFIC VARIANCES. USE OF SUCH VARIANCES ARE SUBJECT TO APPROVAL BY THE ARCHITECT.

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA PROFESSIONAL ENGINEER GREGORY A. KYLER No. 16220 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

SHEET TITLE: HVAC - GROUND FLOOR DEMOLITION PLAN

PROJECT NUMBER: 13674.00

CC H100 DRAWING NUMBER

5/26/2017 9:46:36 AM
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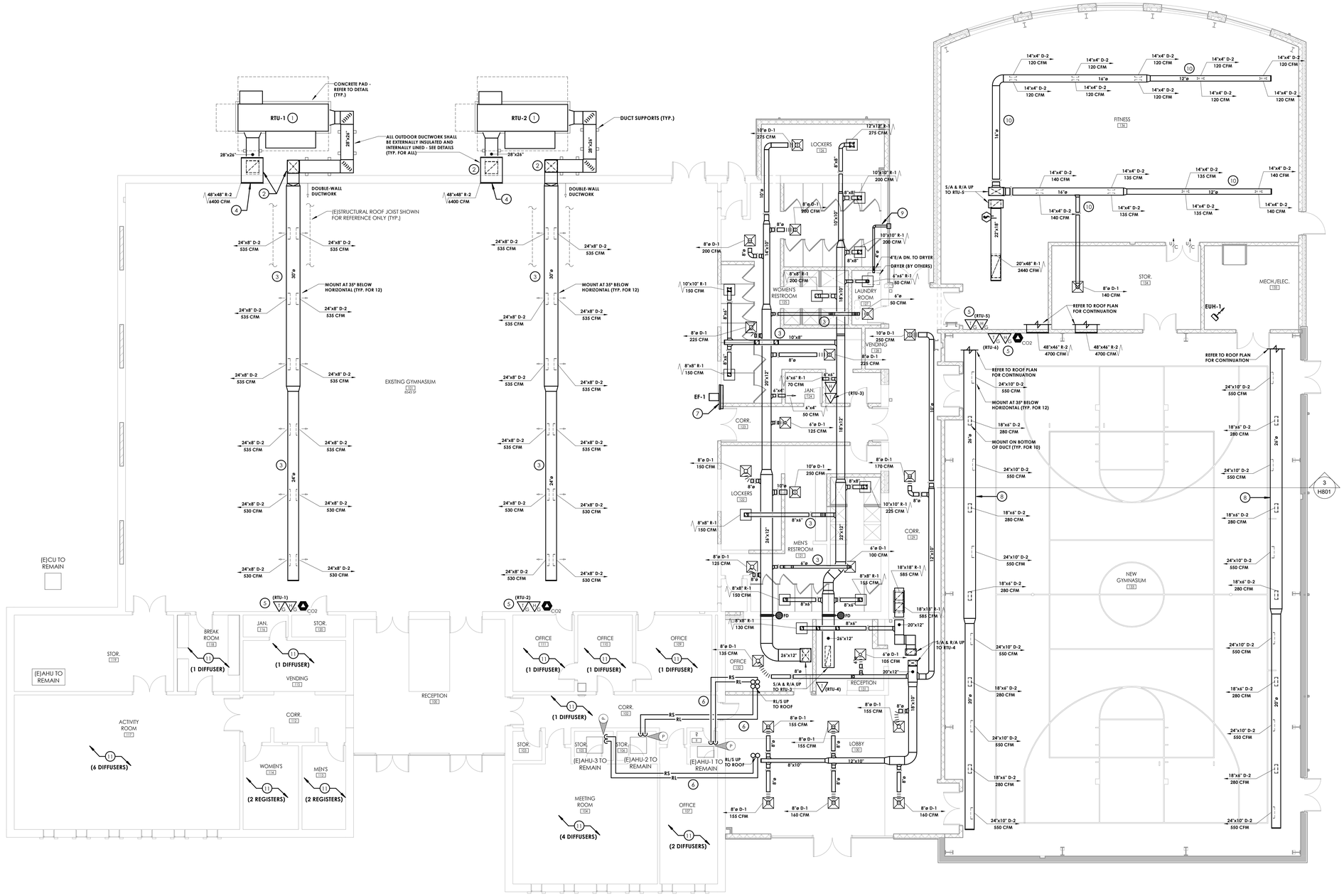
KEY NOTES:

1. NEW UNIT SHALL BE MOUNTED AT GRADE. PROVIDE CONCRETE HOUSEKEEPING PAD. REFER TO DETAIL.
2. SECURE VERTICAL DUCT RUNS TO EXTERIOR WALL. PROVIDE INTERNAL LINING AND EXTERNAL INSULATION ON ALL OUTDOOR SUPPLY AND RETURN DUCTWORK.
3. ROUTE DUCT AS HIGH AS POSSIBLE BETWEEN BAYS OF EXISTING STRUCTURAL STEEL TIGHT TO CROSSMEMBERS. COORDINATE DUCT ROUTING WITH ADJACENT SYSTEMS INCLUDING CONDUITS AND LIGHTING FIXTURES.
4. RETURN REGISTER TO BE MOUNTED ON WALL APPROXIMATELY 18' A.F.F.
5. PROVIDE LOCKABLE WIRE COVER FOR ALL SENSORS RATED FOR GYMNASIUM APPLICATIONS.
6. PROVIDE NEW INTERCONNECTING REFRIGERANT PIPING BETWEEN INDOOR AND OUTDOOR UNITS. PIPING TO BE SIZED BASED ON EXISTING EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE NEW R-22 REFRIGERANT CHARGE PER MANUFACTURER'S RECOMMENDATIONS.
7. PROVIDE NEW EXHAUST FAN AND MOTORIZED BACKDRAFT DAMPER MOUNTED IN EXISTING PENETRATION FOLLOWING EXISTING FAN REMOVAL. MODIFY/INFILL OPENING AS REQUIRED TO FACILITATE INSTALLATION OF NEW FAN HOUSING. ALL PATCH WORK SHALL MATCH EXISTING MATERIALS AND FINISHES.
8. ROUTE DUCTWORK HIGH AND TIGHT TO UNDERSIDE OF TRUSSES. COORDINATE ROUTING WITH BASKETBALL HOOPS AND LIGHTING FIXTURES.
9. INSTALL DRYER VENT DUCT IN ACCORDANCE TO DRYER MANUFACTURER'S WRITTEN INSTRUCTIONS. PROVIDE DRYER MANUFACTURER'S SIDEWALL VENT CAP.
10. ROUTE DUCTS AS HIGH AS POSSIBLE BETWEEN AND THROUGH BAYS OF STRUCTURAL STEEL TIGHT TO CROSSMEMBERS. DUCTWORK ROUTED BELOW STEEL IS NOT ACCEPTABLE. COORDINATE DUCT ROUTING WITH ADJACENT SYSTEMS INCLUDING CONDUITS AND LIGHTING FIXTURES.
11. PROVIDE NEW GRILLES, REGISTERS AND RETURNS LOCATED IN EXISTING CEILING SYSTEM. NEW AIR DEVICES TO MATCH EXISTING DEVICE OVERALL DIMENSIONS AND CONNECTION DIMENSIONS. RECONNECT EXISTING DUCTWORK TO NEW AIR DISTRIBUTION DEVICE. AIR DEVICE QUANTITIES HAVE BEEN INDICATED ON PLANS FOR REFERENCE ONLY. CONTRACTOR TO VERIFY EXACT LOCATIONS PRIOR TO START OF WORK.



1 H200 **GROUND FLOOR - HVAC DUCTWORK PLAN**
1/8" = 1'-0"

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NO.	DATE	BY	CHKD	DESCRIPTION

Revision Schedule

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 16220 — 5/30/17 — GREGORY A. KYLER — 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

SHEET TITLE: GROUND FLOOR DUCTWORK PLAN

PROJECT NUMBER: 13674.00

CC H200 — DRAWING NUMBER

5/26/2017 9:46:41 AM

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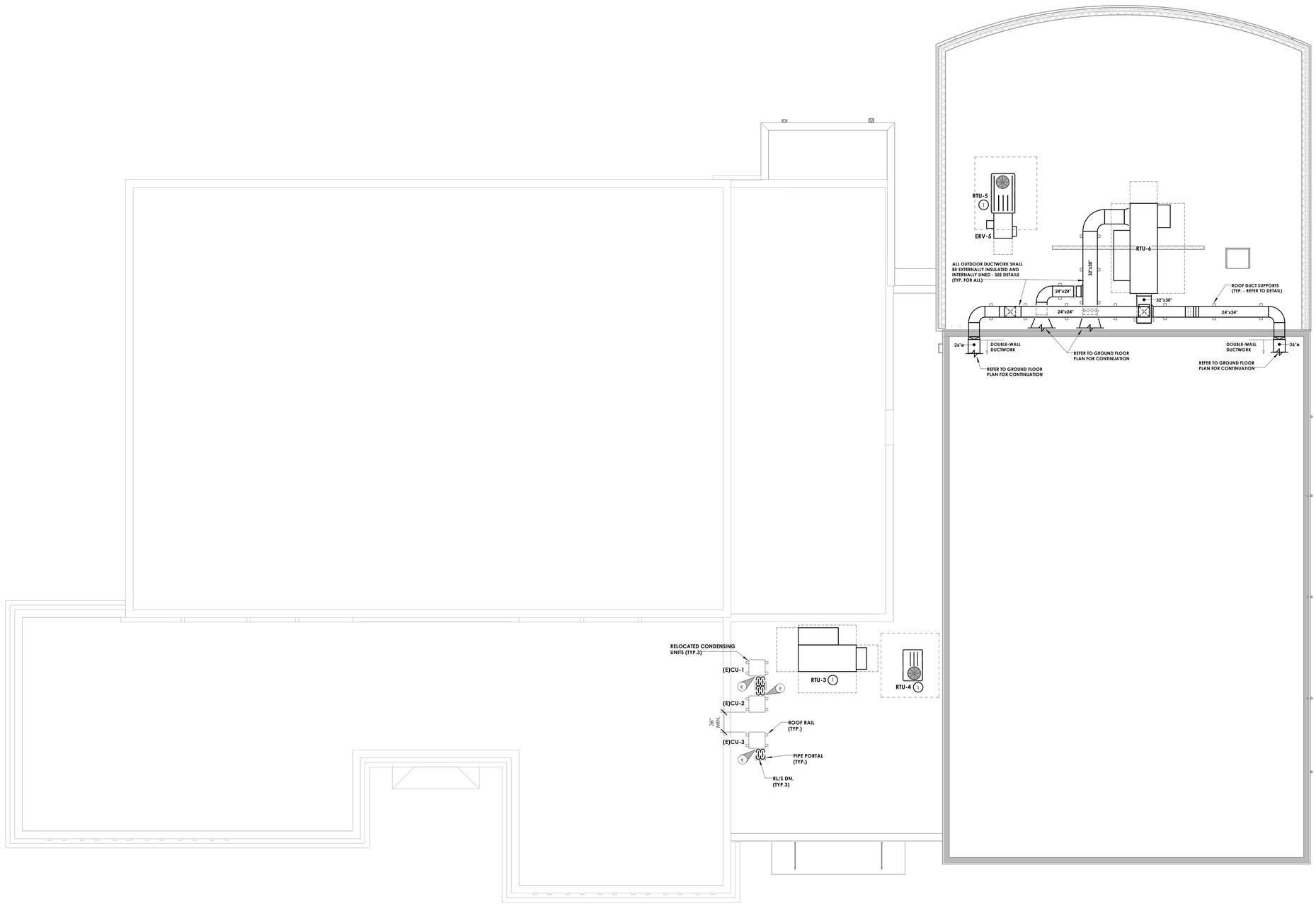
KEY NOTES:

1. COORDINATE DUCT DROPS TO BE SITUATED BETWEEN STRUCTURAL STEEL JOISTS.



1 H201 **ROOF - HVAC NEW WORK PLAN**

1/8" = 1'-0"

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CLARK PATTERSON LEE No. C02227

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 16220 5/30/17 GREGORY A. KYTER 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

SHEET TITLE: HVAC ROOF NEW WORK PLAN

PROJECT NUMBER: 13674.00

CC H201

DRAWING NUMBER

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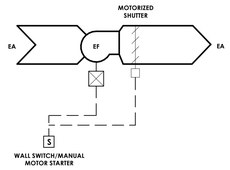


SEQUENCE OF OPERATION

WHEN THE WALL SWITCH IS PLACED IN THE "ON" POSITION, THE EXHAUST FAN MOTORIZED SHUTTER SHALL FULLY OPEN AND EXHAUST FAN SHALL BE ENERGIZED.

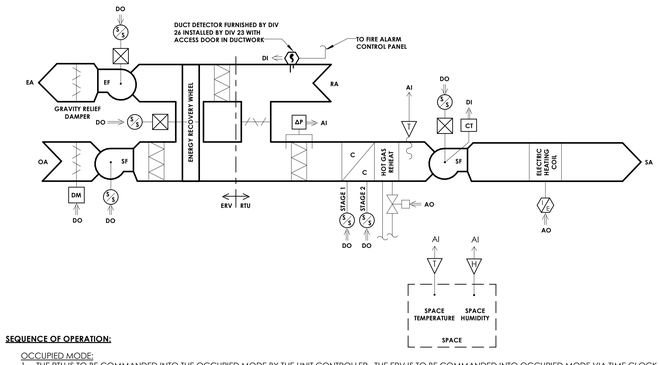
WHEN THE WALL SWITCH IS PLACED IN THE "OFF" POSITION, THE EXHAUST FAN MOTORIZED SHUTTER SHALL FULLY CLOSE AND EXHAUST FAN SHALL BE DE-ENERGIZED.

6 EXHAUST FAN CONTROL DIAGRAM
H500 N.T.S.

SEQUENCE OF OPERATION:

ELECTRIC HEATER SHALL OPERATE TO MAINTAIN SPACE HEATING TEMPERATURE SETPOINT VIA MANUFACTURER'S INTEGRAL THERMOSTAT.

3 ELECTRIC UNIT HEATER CONTROL DIAGRAM
H500 N.T.S.



SEQUENCE OF OPERATION:

OCCUPIED MODE:
1. THE RTU IS TO BE COMMANDED INTO THE OCCUPIED MODE BY THE UNIT CONTROLLER. THE ERV IS TO BE COMMANDED INTO OCCUPIED MODE VIA TIME CLOCK, TIME OF DAY SCHEDULING IS TO BE BASED UPON DIRECTION FROM THE OWNER.
2. WHEN COMMANDED INTO THE OCCUPIED MODE, THE RTU'S SUPPLY FAN IS TO BE ENERGIZED, THE ERV'S SUPPLY, EXHAUST AND ENERGY WHEEL ARE TO BE ENERGIZED.
3. ERV OUTSIDE AND EXHAUST AIR DAMPERS ARE TO FULLY OPEN.
4. IF THE SPACE TEMPERATURE IS ABOVE THE COOLING SETPOINT OF 75°F (ADJ.), THE RTU REFRIGERATION CIRCUIT IS TO BE ENERGIZED.
5. IF THE SPACE TEMPERATURE SETPOINT IS SATISFIED BUT THE SPACE RELATIVE HUMIDITY EXCEEDS THE SETPOINT OF 60% (ADJ.), THE REFRIGERATION CIRCUIT IS TO MODULATE ITS HOT GAS REHEAT TO MAINTAIN THE SPACE TEMPERATURE ABOVE THE HEATING SETPOINT OF 70°F (ADJ.)
6. IF THE SPACE TEMPERATURE AND RELATIVE HUMIDITY SETPOINTS ARE SATISFIED THE REFRIGERATION CIRCUIT CAN BE DE-ENERGIZED.
7. UPON A FURTHER DROP IN SPACE TEMPERATURE BELOW THE HEATING SETPOINT OF 70°F (ADJ.), THE ELECTRIC HEAT IS TO ACTIVATE TO MAINTAIN THE HEATING SETPOINT.
8. ONCE THE HEATING SETPOINT IS SATISFIED, THE ELECTRIC HEAT CAN BE DE-ACTIVATED.
9. WHEN IN THE OCCUPIED AND COOLING MODE THE ENERGY RECOVERY WHEEL IS TO BE ENERGIZED UNLESS THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE RETURN AIR TEMPERATURE.
10. WHEN IN THE OCCUPIED AND HEATING MODE THE ENERGY RECOVERY WHEEL IS TO BE ENERGIZED UNLESS THE RETURN AIR TEMPERATURE IS LESS THAN THE OUTSIDE AIR TEMPERATURE.
11. WHEN THE RTU IS IN THE COOLING MODE AND THE OUTSIDE AIR ENTHALPY IS LESS THAN THAT OF THE RETURN AIR, THE OUTSIDE AIR DAMPER IS TO FULLY OPEN, THE RETURN AIR DAMPER IS TO FULLY SHUT AND THE EXHAUST AIR DAMPER IS TO FULLY OPEN. THE RTU IS TO OTHERWISE OPERATE NORMALLY.

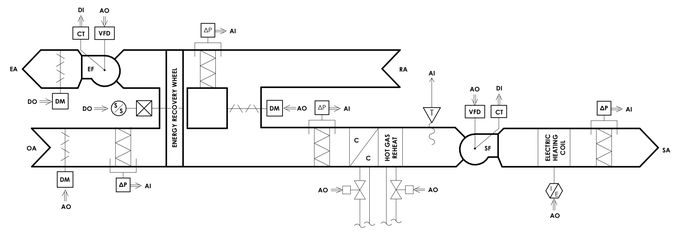
UNOCCUPIED MODE:
1. THE ERV OUTSIDE AND EXHAUST DAMPERS ARE FULLY SHUT.
2. THE RTU'S SUPPLY FAN, REFRIGERATION CIRCUIT AND THE ELECTRIC HEAT ARE TO ALL BE DE-ACTIVATED. THE ERV'S SUPPLY FAN, EXHAUST FAN AND ENERGY WHEEL ARE TO ALL BE DE-ACTIVATED.
3. IF THE SPACE TEMPERATURE EXCEEDS THE UNOCCUPIED COOLING SETPOINT OF 80°F (ADJ.), THE REFRIGERATION CIRCUIT AND THE SUPPLY FAN ARE TO BE ENERGIZED AND OPERATE UNTIL THE SETPOINT IS REACHED. ALL DAMPERS ARE TO REMAIN IN THEIR UNOCCUPIED MODE POSITIONS.
4. IF THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED HEATING SETPOINT OF 65°F (ADJ.), THE SUPPLY FAN AND ELECTRIC HEAT ARE TO BE ENERGIZED AND OPERATE UNTIL THE SETPOINT IS REACHED. ALL DAMPERS ARE TO REMAIN IN THEIR UNOCCUPIED MODE POSITIONS.
5. THE OUTSIDE AIR DAMPER IS TO REMAIN IN ITS UNOCCUPIED MODE POSITION.

RETURN DUCT MOUNTED SMOKE DETECTOR
1. UPON ACTIVATION OF THE RETURN AIR MOUNTED SMOKE DETECTOR, THE RTU SUPPLY FAN IS TO BE DE-ENERGIZED AND THE OUTSIDE AIR, RETURN AIR AND EXHAUST AIR DAMPERS ARE TO CLOSE.

FIRE ALARM SHUTDOWN
1. UPON ANY ACTIVATION OF THE FIRE ALARM SYSTEM, IN AN AREA SERVED BY THE RTU, THE RTU SUPPLY FAN IS TO BE DE-ENERGIZED AND THE ERV'S SUPPLY FAN, EXHAUST FAN, AND ENERGY WHEEL SHALL BE DE-ENERGIZED, THE ERV'S OUTSIDE AIR AND EXHAUST AIR DAMPERS ARE TO CLOSE.

AIR FILTER DIFFERENTIAL PRESSURE SENSORS
1. THE DIFFERENTIAL PRESSURE ACROSS THE FILTER BANK SHALL BE MONITORED BY THE RTU CONTROLLER. WHENEVER THE DIFFERENTIAL PRESSURE OF THE FILTER EXCEEDS THE CLEAN PRESSURE DIFFERENTIAL BY 0.5" WC (ADJ.) OR MORE AN ALARM SHALL BE SET.

5 FITNESS CENTER ROOFTOP UNIT RTU-5 AND ENERGY RECOVERY VENTILATOR ERV-5 CONTROL DIAGRAM
H500 N.T.S.



SEQUENCE OF OPERATION:

OCCUPIED MODE
1. THE RTU IS TO BE COMMANDED INTO THE OCCUPIED MODE BY THE UNIT CONTROLLER. TIME OF DAY SCHEDULING IS TO BE BASED UPON DIRECTION FROM THE OWNER.
2. WHEN COMMANDED INTO THE OCCUPIED MODE THE RTU'S SUPPLY FAN VARIABLE FREQUENCY DRIVE (VFD) IS TO BE ENERGIZED AND SHALL OPERATE AT A CONSTANT VOLUME.
3. THE OUTSIDE AIR DAMPER IS TO FULLY OPEN.
4. THE RETURN AIR DAMPER IS TO FULLY CLOSE.
5. THE EXHAUST AIR DAMPER IS TO FULLY OPEN.
6. THE EXHAUST FAN VFD IS TO BE ENERGIZED AND SHALL OPERATE AT A CONSTANT VOLUME.
7. IF THE SPACE TEMPERATURE IS ABOVE THE COOLING SETPOINT OF 75°F (ADJ.) THE RTU REFRIGERATION CIRCUIT IS TO BE ENERGIZED AND COMPRESSORS MODULATED TO MAINTAIN A SUPPLY AIR TEMPERATURE OF 55°F (ADJ.)
8. IF THE SPACE TEMPERATURE SETPOINT IS SATISFIED BUT THE SPACE RELATIVE HUMIDITY EXCEEDS THE SETPOINT OF 60% (ADJ.), THE REFRIGERATION CIRCUIT IS TO MODULATE ITS HOT GAS REHEAT TO MAINTAIN THE SPACE TEMPERATURE ABOVE THE HEATING SETPOINT OF 70°F (ADJ.).
9. IF THE SPACE TEMPERATURE AND RELATIVE HUMIDITY SETPOINTS ARE SATISFIED THE REFRIGERATION CIRCUIT SHALL BE DE-ENERGIZED.
10. UPON A FURTHER DROP IN SPACE TEMPERATURE BELOW THE HEATING SETPOINT OF 70°F (ADJ.), THE ELECTRIC HEAT IS TO MODULATE TO MAINTAIN THE HEATING SETPOINT.
11. ONCE THE HEATING SETPOINT IS SATISFIED, THE ELECTRIC HEAT SHALL BE DE-ACTIVATED.
12. WHEN IN THE OCCUPIED AND COOLING MODE THE ENERGY RECOVERY WHEEL IS TO BE ENERGIZED UNLESS THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE RETURN AIR TEMPERATURE.
13. WHEN IN THE OCCUPIED AND HEATING MODE THE ENERGY RECOVERY WHEEL IS TO BE ENERGIZED UNLESS THE RETURN AIR TEMPERATURE IS LESS THAN THE OUTSIDE AIR TEMPERATURE.

UNOCCUPIED MODE
1. THE RTU OUTSIDE DAMPER IS TO FULLY SHUT, THE EXHAUST AIR DAMPER IS TO FULLY SHUT AND THE RETURN AIR DAMPER IS TO FULLY OPEN.
2. THE SUPPLY FAN, THE EXHAUST FAN, THE REFRIGERATION CIRCUIT AND THE ELECTRIC HEAT ARE TO ALL BE DE-ACTIVATED.
3. IF THE SPACE TEMPERATURE EXCEEDS THE UNOCCUPIED COOLING SETPOINT OF 80°F (ADJ.), THE SUPPLY FAN AND REFRIGERANT CIRCUIT ARE TO BE ENERGIZED AND COMPRESSORS MODULATED UNTIL THE SETPOINT IS REACHED. ALL DAMPERS ARE TO REMAIN IN THEIR UNOCCUPIED MODE POSITIONS.
4. IF THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED HEATING SETPOINT OF 65°F (ADJ.) THE SUPPLY FAN SHALL BE ENERGIZED AND ELECTRIC HEAT SHALL MODULATE UNTIL THE SETPOINT IS REACHED. ALL DAMPERS ARE TO REMAIN IN THEIR UNOCCUPIED MODE POSITIONS.

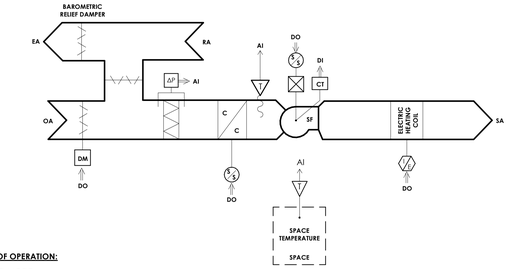
RETURN DUCT MOUNTED SMOKE DETECTOR
1. UPON ACTIVATION OF THE RETURN AIR MOUNTED SMOKE DETECTOR, THE RTU SUPPLY AND EXHAUST FANS ARE TO BE DE-ENERGIZED AND THE OUTSIDE AIR, RETURN AIR AND EXHAUST AIR DAMPERS ARE TO CLOSE.

FIRE ALARM SHUTDOWN
1. UPON ANY ACTIVATION OF THE FIRE ALARM SYSTEM, IN AN AREA SERVED BY THE RTU, THE RTU SUPPLY AND EXHAUST FANS ARE TO BE DE-ENERGIZED AND THE OUTSIDE AIR, RETURN AIR AND EXHAUST AIR DAMPERS ARE TO CLOSE.

AIR FILTER DIFFERENTIAL PRESSURE SENSORS
1. THE DIFFERENTIAL PRESSURE ACROSS THE FILTER BANK SHALL BE MONITORED BY THE RTU CONTROLLER. WHENEVER THE DIFFERENTIAL PRESSURE OF THE FILTER EXCEEDS THE CLEAN PRESSURE DIFFERENTIAL BY 0.5" WC (ADJ.) OR MORE AN ALARM SHALL BE SET.

WHEEL DEFROST CYCLE
1. WHEN COMMANDED SO BY THE RTU CONTROLLER, THE RTU IS TO OPERATE IN THE WHEEL DEFROST CYCLE. THE WHEEL DEFROST CYCLE SHALL OPERATE PER THE MANUFACTURER'S INSTRUCTIONS.

2 LOCKER ROOM ROOFTOP UNIT (RTU-3) WITH ENERGY WHEEL CONTROL SCHEMATIC
H500 N.T.S.



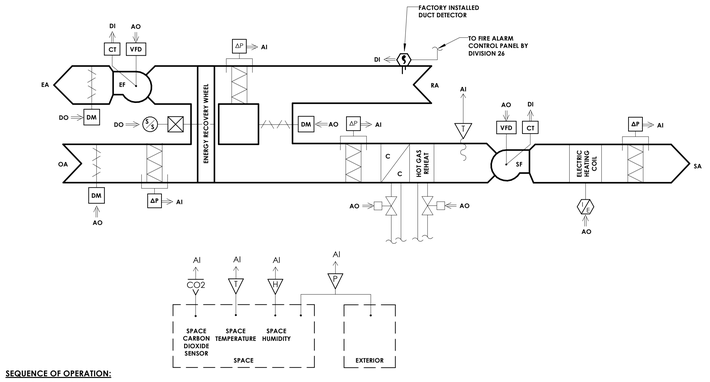
SEQUENCE OF OPERATION:

OCCUPIED MODE:
1. THE RTU IS TO BE COMMANDED INTO THE OCCUPIED MODE BY THE UNIT CONTROLLER. TIME OF DAY SCHEDULING IS TO BE BASED UPON DIRECTION FROM THE OWNER.
2. WHEN COMMANDED INTO THE OCCUPIED MODE THE RTU'S SUPPLY FAN IS TO BE ENERGIZED.
3. THE OUTSIDE AIR DAMPER IS TO OPEN TO ITS MINIMUM POSITION.
4. IF THE SPACE TEMPERATURE IS ABOVE THE COOLING SETPOINT OF 75°F (ADJ.), THE RTU REFRIGERATION CIRCUIT IS TO BE ENERGIZED.
5. WHEN THE SPACE TEMPERATURE FALLS BELOW THE COOLING SETPOINT THE REFRIGERATION CIRCUIT CAN BE DE-ENERGIZED.
6. UPON A FURTHER DROP IN SPACE TEMPERATURE BELOW THE HEATING SETPOINT OF 70°F (ADJ.), THE ELECTRIC HEAT IS TO ENERGIZE TO MAINTAIN THE HEATING SETPOINT.
7. ONCE THE HEATING SETPOINT IS SATISFIED, THE ELECTRIC HEAT CAN BE DE-ACTIVATED.

UNOCCUPIED MODE:
1. THE RTU OUTSIDE DAMPER IS TO FULLY SHUT.
2. THE SUPPLY FAN, THE REFRIGERATION CIRCUIT AND THE GAS FURNACE ARE TO ALL BE DE-ACTIVATED.
3. IF THE SPACE TEMPERATURE EXCEEDS THE UNOCCUPIED COOLING SETPOINT OF 80°F (ADJ.), THE REFRIGERATION CIRCUIT AND THE SUPPLY FAN ARE TO BE ENERGIZED AND OPERATE UNTIL THE SETPOINT IS REACHED.
4. IF THE SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED HEATING SETPOINT OF 65°F (ADJ.) THE SUPPLY FAN AND ELECTRIC HEAT ARE TO BE ENERGIZED AND OPERATE UNTIL THE SETPOINT IS REACHED.
5. THE OUTSIDE AIR DAMPER IS TO REMAIN IN ITS UNOCCUPIED MODE POSITION.

AIR FILTER DIFFERENTIAL PRESSURE SENSORS
1. THE DIFFERENTIAL PRESSURE ACROSS THE FILTER BANK SHALL BE MONITORED BY THE RTU CONTROLLER. WHENEVER THE DIFFERENTIAL PRESSURE OF THE FILTER EXCEEDS THE CLEAN PRESSURE DIFFERENTIAL BY 0.5" WC (ADJ.) OR MORE AN ALARM SHALL BE SET.

4 ROOFTOP UNIT RTU-4 CONTROL SCHEMATIC
H500 N.T.S.



SEQUENCE OF OPERATION:

OCCUPIED MODE
1. THE RTU IS TO BE COMMANDED INTO THE OCCUPIED MODE BY THE UNIT CONTROLLER. TIME OF DAY SCHEDULING IS TO BE BASED UPON DIRECTION FROM THE OWNER.
2. WHEN COMMANDED INTO THE OCCUPIED MODE THE RTU'S SUPPLY FAN IS TO BE ENERGIZED AND THE VARIABLE FREQUENCY DRIVE (VFD) IS TO BE COMMANDED TO 30% OF THE MAXIMUM SPEED.
3. THE OUTSIDE AIR DAMPER IS TO OPEN TO ITS MINIMUM POSITION.
4. THE RETURN AIR DAMPER IS TO FULLY OPEN.
5. THE EXHAUST AIR DAMPER IS TO FULLY OPEN.
6. THE EXHAUST FAN VFD IS TO MODULATE TO MAINTAIN A POSITIVE BUILDING PRESSURE OF 0.05" RELATIVE TO THE BUILDING EXTERIOR.
7. IF THE SPACE TEMPERATURE IS ABOVE THE COOLING SETPOINT OF 75°F (ADJ.) THE RTU REFRIGERATION CIRCUIT IS TO BE ENERGIZED AND COMPRESSORS MODULATED TO MAINTAIN A SUPPLY AIR TEMPERATURE OF 55°F (ADJ.)
8. THE SUPPLY FAN VFD IS TO MODULATE THE SUPPLY FAN SPEED TO MAINTAIN THE SPACE TEMPERATURE SETPOINT.
9. IF THE SPACE TEMPERATURE SETPOINT IS SATISFIED BUT THE SPACE RELATIVE HUMIDITY EXCEEDS THE SETPOINT OF 60% (ADJ.), THE SUPPLY FAN IS TO OPERATE AT ITS MINIMUM SPEED AND THE REFRIGERATION CIRCUIT IS TO MODULATE ITS HOT GAS REHEAT TO MAINTAIN THE SPACE TEMPERATURE ABOVE THE HEATING SETPOINT OF 70°F (ADJ.).
10. IF THE SPACE TEMPERATURE AND RELATIVE HUMIDITY SETPOINTS ARE SATISFIED THE REFRIGERATION CIRCUIT SHALL BE DE-ENERGIZED.
11. UPON A FURTHER DROP IN SPACE TEMPERATURE BELOW THE HEATING SETPOINT OF 70°F (ADJ.), THE SUPPLY FAN IS TO RAMP UP TO 100% SPEED AND THE ELECTRIC HEAT IS TO MODULATE TO MAINTAIN THE HEATING SETPOINT.
12. ONCE THE HEATING SETPOINT IS SATISFIED, THE ELECTRIC HEAT SHALL BE DE-ACTIVATED.
13. WHEN IN THE OCCUPIED AND COOLING MODE THE ENERGY RECOVERY WHEEL IS TO BE ENERGIZED UNLESS THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE RETURN AIR TEMPERATURE.
14. WHEN IN THE OCCUPIED AND HEATING MODE THE ENERGY RECOVERY WHEEL IS TO BE ENERGIZED UNLESS THE RETURN AIR TEMPERATURE IS LESS THAN THE OUTSIDE AIR TEMPERATURE.
15. UPON A RISE IN SPACE CARBON DIOXIDE (CO2) CONCENTRATION LEVEL ABOVE 1,000 PARTS PER MILLION (PPM, ADJ.) THE OUTSIDE AIR DAMPER IS TO MODULATE BETWEEN ITS MINIMUM AND MAXIMUM POSITIONS TO MAINTAIN THE CARBON DIOXIDE CONCENTRATION SETPOINT. IF THE OUTSIDE AIR DAMPER IS 100% OPEN AND THE CO2 CONCENTRATION LEVEL REMAINS ABOVE 1,000 PPM, THE SUPPLY FAN IS TO MODULATE ITS SPEED TO MAINTAIN THE CO2 CONCENTRATION SETPOINT. UPON A FALL IN CO2 LEVEL THE REVERSE IS TO OCCUR.
16. WHEN THE RTU IS IN THE COOLING MODE AND THE OUTSIDE AIR ENTHALPY IS LESS THAN THAT OF THE RETURN AIR, THE OUTSIDE AIR DAMPER IS TO FULLY OPEN, THE RETURN AIR DAMPER IS TO FULLY SHUT AND THE EXHAUST AIR DAMPER IS TO FULLY OPEN. THE RTU IS TO OTHERWISE OPERATE NORMALLY.

UNOCCUPIED MODE
1. THE RTU OUTSIDE DAMPER IS TO FULLY SHUT, THE EXHAUST AIR DAMPER IS TO FULLY SHUT AND THE RETURN AIR DAMPER IS TO FULLY OPEN.
2. THE SUPPLY FAN, THE EXHAUST FAN, THE REFRIGERATION CIRCUIT AND THE ELECTRIC HEAT ARE TO ALL BE DE-ACTIVATED.
3. IF THE SPACE TEMPERATURE EXCEEDS THE UNOCCUPIED COOLING SETPOINT OF 80°F (ADJ.), THE REFRIGERATION CIRCUIT AND THE SUPPLY FANS ARE TO BE ENERGIZED AND OPERATE AT 100% UNTIL THE SETPOINT IS REACHED. ALL DAMPERS ARE TO REMAIN IN THEIR UNOCCUPIED MODE POSITIONS.
4. IF THE SPACE TEMPERATURE FALL BELOW THE UNOCCUPIED HEATING SETPOINT OF 65°F (ADJ.) THE SUPPLY FAN AND ELECTRIC HEAT ARE TO BE ENERGIZED AND OPERATE AT 100% UNTIL THE SETPOINT IS REACHED. ALL DAMPERS ARE TO REMAIN IN THEIR UNOCCUPIED MODE POSITIONS.

RETURN DUCT MOUNTED SMOKE DETECTOR
1. UPON ACTIVATION OF THE RETURN AIR MOUNTED SMOKE DETECTOR, THE RTU SUPPLY FAN IS TO BE DE-ENERGIZED AND THE OUTSIDE AIR, RETURN AIR AND EXHAUST AIR DAMPERS ARE TO CLOSE.

FIRE ALARM SHUTDOWN
1. UPON ANY ACTIVATION OF THE FIRE ALARM SYSTEM, IN AN AREA SERVED BY THE RTU, THE RTU SUPPLY AND EXHAUST FANS ARE TO BE DE-ENERGIZED AND THE OUTSIDE AIR, RETURN AIR AND EXHAUST AIR DAMPERS ARE TO CLOSE.

AIR FILTER DIFFERENTIAL PRESSURE SENSORS
1. THE DIFFERENTIAL PRESSURE ACROSS THE FILTER BANK SHALL BE MONITORED BY THE RTU CONTROLLER. WHENEVER THE DIFFERENTIAL PRESSURE OF THE FILTER EXCEEDS THE CLEAN PRESSURE DIFFERENTIAL BY 0.5" WC (ADJ.) OR MORE AN ALARM SHALL BE SET.

WHEEL DEFROST CYCLE
1. WHEN COMMANDED SO BY THE RTU CONTROLLER, THE RTU IS TO OPERATE IN THE WHEEL DEFROST CYCLE. THE WHEEL DEFROST CYCLE SHALL OPERATE PER THE MANUFACTURER'S INSTRUCTIONS.

1 GYM ROOFTOP UNITS (RTU-1,2,6) WITH ENERGY WHEEL CONTROL SCHEMATIC
H500 N.T.S.

Clark Patterson Lee
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www.clarkpatterson.com

NO.	DATE	BY	CHKD	DESCRIPTION

Revision Schedule

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CLARK PATTERSON LEE No. C02227

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 16220 5/10/17 GREGORY A. KITES 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE N.T.S.

SHEET TITLE
HVAC CONTROL DIAGRAMS AND SEQUENCES OF OPERATION

PROJECT NUMBER 13674.00

CC H500
DRAWING NUMBER

5/26/2017 9:46:47 AM

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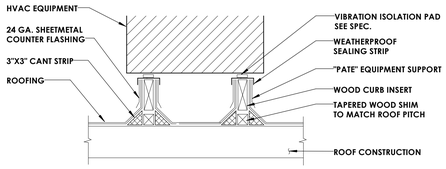
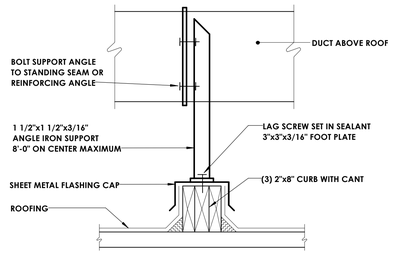
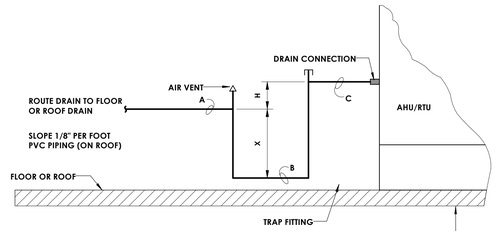


12 H800 **EQUIPMENT BASE**
NOT TO SCALE



NOTE:
ALL SUPPORTIVE STEEL TO BE COATED WITH ONE COAT OF PRIMER AND TWO COATS RUST INHIBITING PAINT.

11 H800 **DUCT SUPPORT CURB**
NOT TO SCALE



TOTAL TRAP HEIGHT = X+H+(1 1/2xPIPE DIAMETER)
= B.O.P. AT B TO T.O.P. AT C.
X = B.O.P. AT A TO T.O.P. AT B
H = B.O.P. AT A TO T.O.P. AT C
POSITIVE STATIC PRESSURES:
X = AT LEAST 1" PLUS CASING STATIC PRESSURE
H = AT LEAST 1"

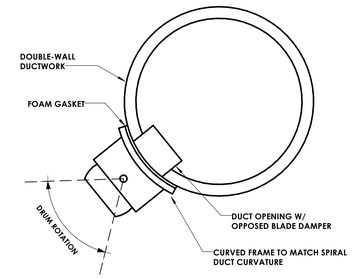
NEGATIVE STATIC PRESSURES:
X = 1/2H
H = AT LEAST 1" PLUS CASING STATIC PRESSURE

B.O.P.= BOTTOM OF PIPE
T.O.P.= TOP OF PIPE

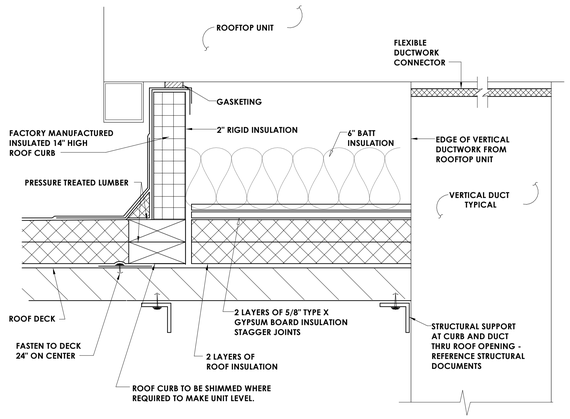
NOTE:
CONDENSATE DRAIN PIPING TO BE TYPE DWV, DRAWN TEMPER COPPER TUBING, WROUGHT-COPPER FITTINGS, AND SOLDERED JOINTS.

DRAIN PIPING SHALL BE MINIMUM UNIT CONNECTION SIZE. UNITS 25 TONS AND LARGER SHALL HAVE DRAIN SIZE ONE PIPE SIZE LARGER THAN DRAIN CONNECTION.

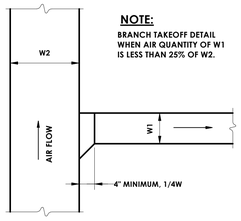
10 H800 **TYPICAL AHU/RTU CONDENSATE DRAIN DETAIL**
NOT TO SCALE



9 H800 **DRUM LOUVER INSTALLATION DETAIL**
NOT TO SCALE

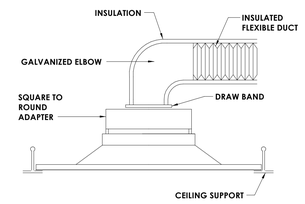


5 H800 **ROOFTOP UNIT CURB DETAIL**
NOT TO SCALE

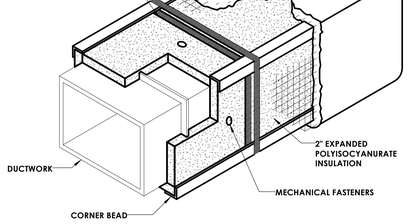


NOTE:
BRANCH TAKEOFF DETAIL WHEN AIR QUANTITY OF W1 IS LESS THAN 25% OF W2.

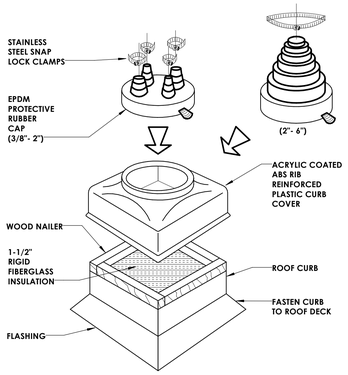
8 H800 **BRANCH TAKE-OFF DETAIL**
NOT TO SCALE



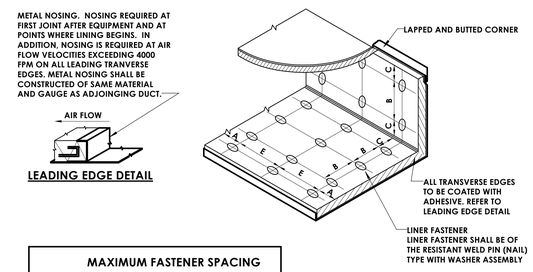
7 H800 **DIFFUSER DETAIL**
NOT TO SCALE



6 H800 **EXTERIOR DUCTWORK INSULATION DETAIL**
NOT TO SCALE



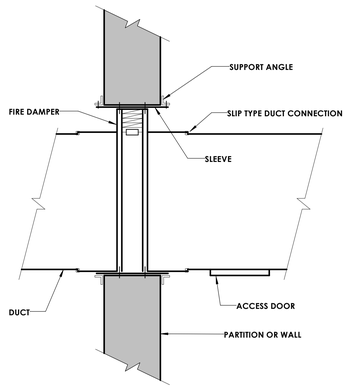
4 H800 **PIPE PORTAL**
NOT TO SCALE



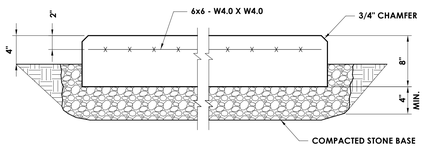
MAXIMUM FASTENER SPACING				
VELOCITY	DIMENSIONS			
	A	B	C	E
0-2500 FPM	3"	12"	4"	18"
2501-6000 FPM	3"	6"	4"	16"

NOTE:
LINER ADHERED TO THE DUCT WITH 100% AREA COVERAGE OF ADHESIVE

3 H800 **DUCT LINER INSTALLATION DETAIL**
NOT TO SCALE



2 H800 **VERTICAL FIRE DAMPER DETAIL**
NOT TO SCALE



PAD DETAIL FOR LOCATION ON GRADE
NOTE: COORDINATE UNIT SIZE WITH EQUIPMENT SELECTED.

1 H800 **EXTERIOR CONCRETE PAD DETAIL**
NOT TO SCALE

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NO.	DATE	BY	CHKD	DESCRIPTION
				Revision Schedule

SOUTH CAROLINA PROFESSIONAL ENGINEER CLARK PATTERSON LEE No. C02227 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 16220 5/30/17 GREGORY A. KYER 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

SHEET TITLE: HVAC DETAILS

PROJECT NUMBER: 13674.00

CC H800
DRAWING NUMBER

5/26/2017 9:46:51 AM
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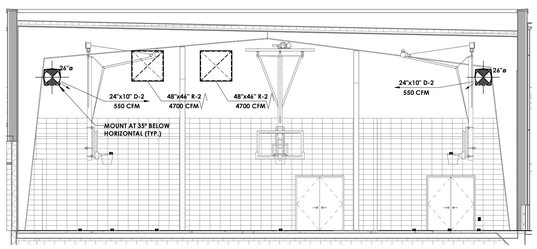
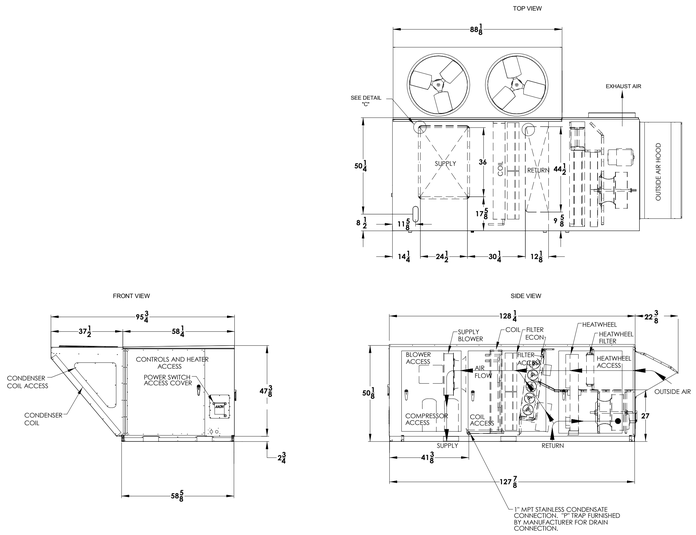
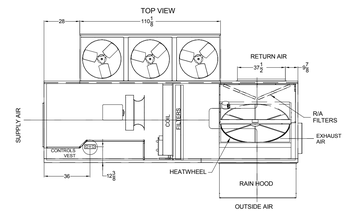
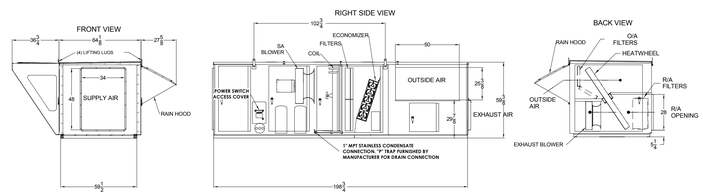


3 H801 **SECTION - NEW GYM 133**
1/8" = 1'-0"



2 H801 **DETAIL - LOCKER ROOM UNIT RTU-3**
NOT TO SCALE





1 H801 **DETAIL - GYM UNITS RTU-1,2,6**
NOT TO SCALE

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Revision Schedule

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SOUTH CAROLINA
CLARK PATTERSON LEE
No. C02227
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 16220
5/10/17
GREGORY A. KITER
13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

SHEET TITLE: HVAC DETAILS

PROJECT NUMBER: 13674.00

CC H801
DRAWING NUMBER

5/26/2017 9:46:56 AM
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ELECTRIC HEATER SCHEDULE

MARK	CONFIGURATION	MANUFACTURER	MODEL	KW	CFM	VOLT/PHASE	MCA	REMARKS
EUH-1	CEILING-SUSPENDED	QMARK	MUH03-B1	3	350	208/1	14.5	1-2

REMARKS
1. PROVIDE MANUFACTURER'S INTEGRAL DISCONNECT SWITCH.
2. PROVIDE MANUFACTURER'S INTEGRAL THERMOSTAT.

DIFFUSER/GRILLE SCHEDULE

MARK	APPLICATION	MATERIAL	FINISH	DESIGN EQUIPMENT	REMARKS
D-1	SUPPLY DIFFUSER	STEEL	WHITE	TITUS, TMS	1,4,5
D-2	DRUM SUPPLY GRILLE	ALUMINUM	(3)	TITUS, S-DL, WITH OPPOSED BLADE DAMPER	4,5
D-3	SUPPLY GRILLE	STEEL	WHITE	TITUS, 300RL	4,5
R-1	RETURN GRILLE	STEEL	WHITE	TITUS, 355RL	2,4,5
R-2	RETURN GRILLE - HEAVY DUTY	STEEL	WHITE	TITUS, 33RL	4,5

REMARKS
1. PROVIDE 24"x24" MODULE. COORDINATE WITH SPACE CEILING TYPE FOR LAY-IN OR SURFACE MOUNTING.
2. FOR GRILLES MOUNTED IN LAY-IN CEILING SYSTEM, PROVIDE MANUFACTURER'S 24"x24" STANDARD ADAPTOR MODULE TO FIT IN GRID.
3. COLOR TO BE SELECTED BY ARCHITECT.
4. SEE PLANS FOR NECK SIZE AND AIRFLOW RATE.
5. PROVIDE HANGERS AND MOUNTING ACCESSORIES SUITABLE FOR CEILING TYPE. COORDINATE DIFFUSERS/GRILLES WITH ARCHITECTURAL CEILING AND LIGHTING PLANS.

FAN SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	SPACE SERVED	CFM	EXTERNAL STATIC PRESSURE	MOTOR HP	FAN RPM	MOTOR RPM	DRIVE TYPE	CONFIGURATION	VOLTAGE/ PHASE	REMARKS
EF-1	COOK	48A10B	PROPELLER	EXISTING GYM 101	20500	0.30" W.C.	3	613	1725	BELT	SIDEWALL	208/3	1-3

REMARKS
1. PROVIDE WITH FACTORY MOUNTED AND WIRED DISCONNECT SWITCH.
2. PROVIDE WITH MANUFACTURER'S WALL COLLAR, WIREGUARD (MOTORSIDE), 120V MOTORIZED SHUTTER, AND WEATHER HOOD.
3. FAN OPERATION TO BE CONTROLLED BY WALL-MOUNTED MANUAL MOTOR STARTER.

ENERGY RECOVERY VENTILATOR UNIT SCHEDULE

MARK	MANUF.	MODEL	SUPPLY FAN				EXHAUST FAN				SUMMER WHEEL PERFORMANCE			WINTER WHEEL PERFORMANCE			ELECTRICAL				REMARKS
			EQUIPMENT DESIGN CFM	E.S.P. (IN-WG)	MOTORS BHP	MOTORS HP	EQUIPMENT DESIGN (CFM)	E.S.P. (IN-WG)	MOTORS BHP	MOTORS HP	AMBIENT DB/WB	R.A. DB/WB	WHEEL L.A.T. DB/WB	AMBIENT DB/WB	R.A. DB/WB	WHEEL L.A.T. DB/WB	VOLTAGE	PHASE	MCA (A)	MOCP (A)	
ERV-5	SEMCO	SP-2200	1215	0.30	0.65	0.75	1215	0.30	0.60	0.75	95.0/78.2	76.2/66.4	80.8/69.6	25.0/21.0	72.0/55.8	60.5/46.4	208	3	8.5	15.0	1-5

REMARKS
1. PROVIDE DISCONNECT SWITCH AND SINGLE POINT POWER CONNECTION.
2. UNIT DESIGNED TO ATTACH TO BASIS OF DESIGN ROOFTOP UNIT. PROVIDE MANUFACTURER'S ADJUSTABLE PEDESTAL SUPPORT FOR UNIT INSTALLATION AND ADAPTOR PLATE FOR ATTACHMENT TO RTU.
3. UNIT TO BE INSTALLED WITH RTU-5.
4. PROVIDE MANUFACTURER'S MOTORIZED OUTDOOR AIR DAMPER CONTROL FLOW MEASURING SYSTEM AND ROTATION DETECTOR SENSOR.
5. UNIT SHALL BE CONTROLLED BY TIMECLOCK PROVIDED BY DIVISION 26. TIMECLOCK SCHEDULING SHALL BE DETERMINED BY OWNER.

ROOF TOP UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	SUPPLY FAN				DX COOLING									ELECTRIC HEATING			ELECTRICAL			UNIT WEIGHT (LBS)	REMARKS
			SUPPLY CFM	O/A CFM	EXTERNAL S.P.	MOTOR HP	E.A.T (DB/WB)	L.A.T. (DB/WB)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	AMBIENT TEMP	REFRIGERANT	EER (SEER)	COMPRESSOR TYPE	COMPRESSOR QUANTITY	HEAT E.A.T.	HEAT L.A.T.	INPUT (KW)	UNIT MCA (AMP)	UNIT MOCP	UNIT VOLTAGE/PHASE		
RTU-4	TRANE	TSC060	1600	300	0.50	1.0	79.6/66.9	57.3/56.2	57.5	42.6	95.0	R-410A	12.0	SCROLL	1	61.6	85.2	12.0	39.9	40.0	208/3	730	1-6,8-15
RTU-5	TRANE	THC092	2440	1215	0.50	1.0	78.5/68.0	57.9/56.7	89.2	57.0	95.0	R-410A	12.6	SCROLL	2	61.5	84.7	18.0	57.5	60.0	208/3	1230	1-15

REMARKS
1. PROVIDE MANUFACTURER'S DISCONNECT SWITCH.
2. PROVIDE ROOF CURB, 14" MIN HEIGHT.
3. PROVIDE WITH COMPARATIVE ENTHALPY ECONOMIZER INCLUDING MOTORIZED DAMPERS.
4. PROVIDE WITH STAINLESS STEEL HEAT EXCHANGER.
5. PROVIDE WITH BAROMETRIC RELIEF DAMPER.
6. PROVIDE WITH MOTORIZED OUTSIDE AIR DAMPERS.
7. PROVIDE WITH DEHUMIDIFICATION CONTROL PACKAGE INCLUDING HOT GAS REHEAT.
8. PROVIDE WITH RELIATEL MICROPROCESSOR CONTROLLER OR EQUAL IF NOT UNIT THAT IS THE BASIS OF DESIGN.
9. PROVIDE WITH PHASE MONITORING PROTECTION.
10. PROVIDE WITH SINGLE POINT, THROUGH THE BASE POWER CONNECTION.
11. PROVIDE WITH CONDENSATE OVERFLOW SWITCH.
12. PROVIDE WITH HINGED ACCESS DOORS.
13. PROVIDE WITH STAINLESS STEEL DRAIN PAN.
14. PROVIDE WITH CLOGGED FILTER/FAN FAILURE SWITCH.
15. PROVIDE WITH 2" PLEATED MERV 8 FILTERS.

ROOF TOP UNIT WITH ENERGY WHEEL SCHEDULE

MARK	MANUFACTURER	MODEL	SUPPLY FAN								EXHAUST FAN						DX COOLING									ELECTRIC HEATING				ENERGY WHEEL												ELECTRICAL				
			MIN. SUPPLY CFM	MAX. SUPPLY CFM	MIN. O/A CFM	MAX. O/A CFM	E.S.P.	FAN RPM	OPERATING HP	MOTOR HP	EXHAUST CFM	ECONOMIZER EXHAUST CFM	E.S.P.	FAN RPM	OPERATING HP	MOTOR HP	E.A.T (DB/WB)	COIL L.A.T. (DB/WB)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	AMBIENT TEMP	REFRIGERANT	EER (SEER)	COMPRESSOR QUANTITY	HEAT E.A.T.	HEAT L.A.T.	INPUT (kW)	HEATER QTY.	CFM	SUMMER CONDITIONS SUPPLY EAT (DB/WB)	SUMMER CONDITIONS SUPPLY LAT (DB/WB)	SUMMER CONDITIONS E/A EAT (DB/WB)	SUMMER CONDITIONS E/A LAT (DB/WB)	SUMMER CONDITIONS TOTAL CAPACITY (MBH)	SUMMER CONDITIONS SENSIBLE CAPACITY (MBH)	WINTER CONDITIONS SUPPLY EAT (DB/WB)	WINTER CONDITIONS SUPPLY LAT (DB/WB)	WINTER CONDITIONS EXHAUST EAT (DB/WB)	WINTER CONDITIONS EXHAUST LAT (DB/WB)	WINTER CONDITIONS TOTAL CAPACITY (MBH)	WINTER CONDITIONS SENSIBLE CAPACITY (MBH)	UNIT MCA (AMP)	UNIT MOCP	UNIT VOLTAGE/ PHASE	UNIT WEIGHT (LBS)	REMARKS
RTU-1	AAON	RNA-016	3200	6400	180	1800	1.00	1368	4.5	7.5	1800	6400	0.50	1554	3.10	5.0	77.9/66.8	57.8/56.8	194.7	136.3	95.0	R-410A	11.7	2	67.5	97.2	60.1	8	1800	95.0/78.2	80.1/68.9	77.0/66.0	91.9/75.9	69.5	29.7	25.0/21.0	62.0/52.3	69.6/58.0	32.6/30.1	113.9	72.1	219	225	208/3	3930	1,3-8,10
RTU-2	AAON	RNA-016	3200	6400	180	1800	1.00	1368	4.5	7.5	1800	6400	0.50	1554	3.10	5.0	77.9/66.8	57.8/56.8	194.7	136.3	95.0	R-410A	11.7	2	67.5	97.2	60.1	8	1800	95.0/78.2	80.1/68.9	77.0/66.0	91.9/75.9	69.5	29.7	25.0/21.0	62.0/52.3	69.6/58.0	32.6/30.1	113.9	72.1	219	225	208/3	3930	1,3-8,10
RTU-3	AAON	RN-009	1975	1975	1975	1975	1.00	2050	1.3	2.0	1975	-	0.70	1327	0.93	2.0	81.6/69.9	55.0/54.2	94.5	55.3	95.0	R-410A	12.6	2	56.1	92.1	22.5	3	1975	95.0/78.2	81.6/69.9	76.0/65.0	89.4/74.1	68.3	29.3	25.0/21.0	56.1/49.0	69.0/59.0	37.9/35.9	109.6	66.5	98	100	208/3	2270	1,4,6,7,9,10
RTU-6	AAON	RNA-030	4700	9400	340	3380	1.00	1632	13.2	15.0	3380	8500	0.50	1525	3.04	10.0	78.6/67.4	55.6/55.1	346.4	229.5	95.0	R-410A	10.8	2	65.6	85.9	60.1	8	3380	95.0/78.2	81.4/69.8	77.0/66.0	90.6/75.1	119.1	50.7	25.0/21.0	58.6/50.1	69.6/58.0	36.0/33.0	195.3	123.0	265	300	208/3	4325	1-8,10

REMARKS
1. PROVIDE MANUFACTURER'S DISCONNECT SWITCH AND SINGLE POINT POWER CONNECTION.
2. PROVIDE VIBRATION ISOLATION ROOF CURB, 14" MINIMUM HEIGHT. REFER TO SPECIFICATION SECTION 23 0548 FOR ADDITIONAL REQUIREMENTS.
3. PROVIDE WITH DEMAND CONTROLLED VENTILATION CONTROL PACKAGE.
4. PROVIDE WITH DEHUMIDIFICATION CONTROL PACKAGE INCLUDING HOT GAS REHEAT.
5. PROVIDE WITH ENTHALPY ECONOMIZER.
6. PROVIDE WITH FULLY MODULATING ELECTRIC HEAT.
7. PROVIDE WITH STAINLESS STEEL HEAT EXCHANGER.
8. PROVIDE WITH MANUFACTURER'S FACTORY MOUNTED AND WIRED INTEGRAL SMOKE DETECTOR.
9. PROVIDE WITH MINIMUM 14" HIGH ROOF CURB.
10. PROVIDE WITH MANUFACTURER'S VFDS FOR SUPPLY AND EXHAUST FANS.

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Revision Schedule

NO.	DATE	BY	CHKD	DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 16220 — 5/10/17 — GREGORY A. KYZER — 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: N.T.S.

SHEET TITLE: SCHEDULES

PROJECT NUMBER: 13674.00

DRAWING NUMBER: CC H900

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GENERAL FIRE PROTECTION NOTES:

1. ALL EQUIPMENT AND MATERIAL CUT SHEETS MUST BE SUBMITTED FOR APPROVAL BY ENGINEER OF RECORD.
2. THE FIRE SPRINKLER SYSTEM AND WET STANDPIPE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ADOPTED NFPA 13, AND NFPA 14. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODES.
3. FIRE SPRINKLER CONTRACTOR SHALL SUBMIT FOR APPROVAL SHOP DRAWINGS, CALCULATION AND MANUFACTURER'S LITERATURE CUT SHEETS ON ALL MATERIALS AS REQUIRED TO THE ARCHITECT OR OWNERS REPRESENTATIVE. **DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL FIRE SPRINKLER ENGINEER OR CONTRACTOR REGISTERED IN THE STATE OF SOUTH CAROLINA.**
4. SUBMIT DRAWINGS AND CALCULATIONS TO THE DEPARTMENT OF FIRE PREVENTION OF THE STATE AND LOCAL AUTHORITIES HAVING JURISDICTION.
5. IT IS THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS OUTSIDE AND WITHIN THE BUILDING PRIOR TO COMMENCEMENT OF ALL DEMOLITION AND NEW WORK.
6. IT IS THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR TO REMOVE AND REPLACE ANY CEILINGS UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS FOR PERFORMING NEW WORK WITHIN THE BUILDING. THE CONTRACTOR SHALL RE-INSTALL THE CEILING SYSTEM TO MATCH THE ORIGINAL INSTALLATION. ANY CEILING SYSTEM COMPONENT DAMAGED DURING STORAGE, OR REINSTALLATION SHALL BE REPLACED WITH NEW AT NO EXPENSE TO THE OWNER.
7. ALL PIPING AND CONDUIT PENETRATIONS THRU FIRE RATED WALLS OR FLOORS SHALL BE PROVIDED WITH UL FIRE/SMOKE STOPPING.
8. UNLESS SHOWN ON THE ARCHITECTURAL DRAWINGS, IT IS THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR TO PATCH AND FINISH ALL EXISTING PIPE PENETRATIONS AND TRENCHING THRU FLOOR AND WALLS. IN ADDITION, ALL NEW PENETRATIONS AND TRENCHING SHALL BE PROVIDED FOR INSTALLATION OF PLUMBING SYSTEMS INCLUDING, BUT NOT LIMITED TO , EQUIPMENT, PIPING, ETC.
9. ALL SPRINKLERS HEADS IN AREAS WITH FINISHED CEILING SHALL BE CHROME-PLATED SEMI-RECESSED PENDANT TYPE WITH TEMPERATURE RATING AS CONDITIONS DICTATE. ASSOCIATED SPRINKLER PIPING SHALL BE RUN IN FURRED SPACES, CHASES, ETC., TO COMPLETELY CONCEAL ALL PIPING.
10. ALL SPRINKLERS HEADS IN AREAS WITHOUT FINISHED CEILING SHALL BE BRASS UPRIGHT HEAD TYPE WITH TEMPERATURE RATING AS CONDITIONS DICTATE. ASSOCIATED SPRINKLER PIPING SHALL BE RUN EXPOSED AND PAINTED TO MATCH ADJOINING AREAS. DO NOT PAINT HEADS.
11. THE FIRE SPRINKLER CONTRACTOR SHALL COORDINATE THE LOCATION OF PIPING AND HEADS WITH LIGHT FIXTURES, DIFFUSERS, DUCTWORK AND PLUMBING LINES. MAKE ANY MINOR ADJUSTMENTS IN THE SPRINKLER LAYOUT WHERE REQUIRED OR DEEMED NECESSARY BY THE ARCHITECT.

FIRE PROTECTION LEGEND

- XX — PIPING BELOW GRADE
- FP — FIRE PROTECTION PIPING
- NEW PENDENT SPRINKLER HEAD
- NEW UPRIGHT SPRINKLER HEAD WITH GUARD
- NEW SIDEWALL DRY SPRINKLER HEAD

SEISMIC DESIGN CRITERIA FOR NON-STRUCTURAL COMPONENTS

SEISMIC DESIGN CATEGORY	D
BUILDING RISK CATEGORY	III
COMPONENT IMPORTANCE FACTOR (IP)	1.5
SEISMIC DESIGN REQUIREMENTS	SEE NOTE 1

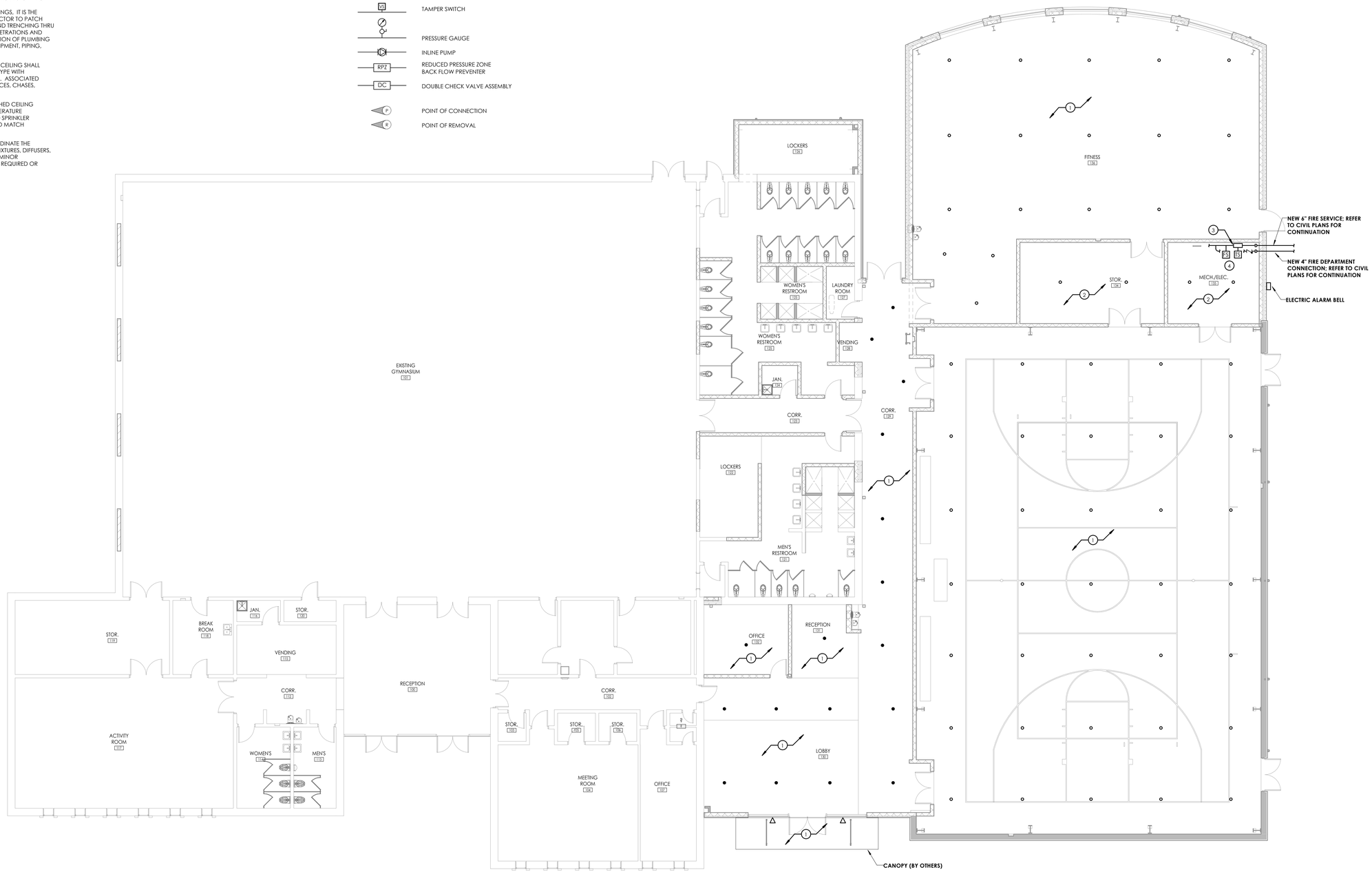
NOTES:
1. PROVIDE SEISMIC RESTRAINTS FOR FIRE PROTECTION SPRINKLER SYSTEM PER CODE REQUIREMENTS. REFER TO SPECIFICATION SECTION 210548 FOR ADDITIONAL REQUIREMENTS.

FIXTURES & FITTINGS LEGEND

- TEE OUTLET - UP
- TEE OUTLET - DOWN
- CONNECTION - BOTTOM
- CONNECTION - TOP
- ELBOW - TURNED UP
- ELBOW - TURNED DOWN
- PIPE CAP
- BALL VALVE
- CHECK VALVE
- BUTTERFLY VALVE
- CONTROL VALVE, PNEUMATIC 2-WAY
- GATE VALVE
- GLOBE VALVE
- FS — FLOW SWITCH
- TS — TAMPER SWITCH
- PRESSURE GAUGE
- INLINE PUMP
- RPZ — REDUCED PRESSURE ZONE BACK FLOW PREVENTER
- DC — DOUBLE CHECK VALVE ASSEMBLY
- P — POINT OF CONNECTION
- R — POINT OF REMOVAL

KEY NOTES:

1. PROVIDE SPRINKLER HEADS FOR ROOM / CEILING LAYOUT. SPRINKLER COVERAGE SHALL BE LIGHT HAZARD (0.10 GPM/FT2).
2. PROVIDE SPRINKLER HEADS FOR ROOM / CEILING LAYOUT. SPRINKLER COVERAGE SHALL BE ORDINARY HAZARD GROUP 1 (0.15 GPM/FT2).
3. PROVIDE FIRE SPRINKLER RISER WITH ZONE VALVE, FLOW SWITCH AND TAMPER SWITCH. DIVISION 26 SHALL PROVIDE ALL FIRE ALARM TIE-INS. REFER TO CIVIL PLANS FOR EXACT ROUTING OF FIRE SERVICE MAIN TO BUILDING.
4. COORDINATE ROUTING OF FIRE PIPING WITH ELECTRICAL PANELS TO ENSURE PIPING IS NOT ROUTED ABOVE ELECTRICAL EQUIPMENT. MAINTAIN NEC AND CODE REQUIRED CLEARANCES FOR ALL ELECTRICAL PANELS.



1 FP200 **FIRE PROTECTION - GROUND FLOOR NEW WORK PLAN**
1/8" = 1'-0"

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NO.	DATE	BY	CHKD	DESCRIPTION
				Revision Schedule

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — No. 16220 — PROFESSIONAL ENGINEER — GREGORY A. KYZER — 5/30/17 — 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

SHEET TITLE: FIRE PROTECTION - GROUND FLOOR WORK PLAN

PROJECT NUMBER: 13674.00

CC FP200
DRAWING NUMBER

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PLUMBING EQUIPMENT & FIXTURE SCHEDULE

MARK	FIXTURE	CW	HW	SAN	V	CA	DESCRIPTION	MODEL NUMBER	REMARKS
WC-1	WATER CLOSET, ACCESSIBLE	1"	-	3"	2"	-	FLOOR MOUNT WATER CLOSET, ELONGATED BOWL MANUAL FLUSH VALVE, INSTALLED AT ACCESSIBLE HEIGHT. 1.6 GPF, WITH OPEN FRONT SEAT	ZURN # Z5665-BWL1, MANUAL FLUSHOMETER (FV-1) ZURN # Z6000AV-WS1	1
WC-2	WATER CLOSET	1"	-	3"	2"	-	FLOOR MOUNT WATER CLOSET, ELONGATED BOWL MANUAL FLUSH VALVE, INSTALLED AT NON-ACCESSIBLE HEIGHT. 1.6 GPF WITH OPEN FRONT SEAT	ZURN # Z5655-BWL1, MANUAL FLUSHOMETER (FV-1) ZURN # Z6000AV-WS1	
UR-1	URINAL, ACCESSIBLE	3/4"	-	2"	2"	-	WALL MOUNT URINAL, MANUAL FLUSH VALVE, TOP SPUD, 1.0 GPF. PROVIDE WALL MOUNT CARRIER	ZURN # Z5755-U, MANUAL FLUSHOMETER (FV-2) ZURN #Z6003AV-WS1	1
UR-2	URINAL	3/4"	-	2"	2"	-	WALL MOUNT URINAL, MANUAL FLUSH VALVE, TOP SPUD, 1.0 GPF. PROVIDE WALL HUNG CARRIER	ZURN # Z5755-U, MANUAL FLUSHOMETER (FV-2) ZURN #Z6003AV-WS1	
LAV-1	LAVATORY, ACCESSIBLE	1/2"	1/2"	1 1/2"	1 1/2"	-	UNDERMOUNT LAVATORY, 19" x 16" x 5" DEPTH, WITH MANUAL FAUCET, 0.5GPM, WITH GRID STRAINER, ADA OFFSET TRAP, SUPPLIES AND STOPS TO SUIT.	ZURN # Z5220 FAUCET ZURN # 81000-XL-3M W/ THERMAL MIXING VALVE (TMV-2)	1
LAV-2	LAVATORY	1/2"	1/2"	1 1/2"	1 1/2"	-	WALL HUNG LAVATORY, CONCEALED ARM CARRIER, 20"x 18", 4" CENTERSET HOLES, WITH MANUAL FAUCET, 0.5 GPM, MOUNTED AT ACCESSIBLE HEIGHT, GRID STRAINER, STOPS, ADA OFFSET TRAP, TRAPS AND SUPPLIES INSULATED WITH TRUEBRO BRAND HANDI-LAV GUARD, PROVIDE WALL HUNG CARRIER	ZURN # Z5340 FAUCET ZURN # Z81000-XL-3M W/ THERMAL MIXING VALVE (TMV-2)	
MR-1	MOP RECEPTOR	3/4"	3/4"	3"	2"	-	24"X24"X12" FLOOR MOP SINK TERRAZZO, STAINLESS STEEL CAP, WALL GUARDS, WALL MOUNTED FAUCET AND MOP BRACKET. PROVIDE HOSE CONNECTION VACUUM BREAKER (BFP)AS PER ASSE 1011.	FIAT # TSB 3000-MSG FIAT # 830-AA FIAT # 832-AA WATTS # 8A	2
SH-1	SHOWER, ACCESSIBLE	1/2"	1/2"	-	-	-	SINGLE HANDLE BALANCING MIXING SHOWER UNIT WITH HAND/WALL SHOWER HEAD. INSTALL PER ADA REQUIREMENTS.	ZURN # Z7120-SS-LH-HW	1
SH-2	SHOWER	1/2"	1/2"	-	-	-	SINGLE HANDLE BALANCING MIXING SHOWER UNIT WITH STANDARD SHOWER HEAD.	ZURN # Z7120-SS-LH	
EWC-1	HI-LO WATER COOLER ACCESSIBLE	1/2"	-	1 1/2"	1 1/2"	-	BI-LEVEL ELECTRIC WATER COOLER, NO LEAD, 8.0 GPH, REINFORCED WALL MOUNTED, 115V, 60HZ, 4.0 FLA, 370 W	ELKAY # EZOSTL8C STAINLESS STEEL SHROUDS	1
BFS-1	BOTTLE FILLING STATION / HI-LO WATER COOLER ACCESSIBLE	1/2"	-	1 1/2"	1 1/2"	-	BOTTLE FILLING STATION AND BI-LEVEL ELECTRIC WATER COOLER, NO LEAD, 8.0 GPH, REINFORCED WALL MOUNTED, 115V, 60HZ, 4.0 FLA, 370 W	ELKAY EZH20 SYSTEM #LZSTL8WS STAINLESS STEEL SHROUDS	1
FD-1	FLOOR DRAIN	-	-	3"	2"	-	FLOOR DRAIN, 5" ROUND NICKEL BRONZE STRAINER, CAST IRON BODY, DEEP SEAL P TRAP AND TRAP PRIMER CONNECTION	ZURN # ZN-415-ZB-P (1/2")	2
TMV-1	THERMOSTATIC HIGH-LOW MIXING VALVE	3/4"	3/4"	-	-	-	THERMOSTATIC HI-LOW MASTER MIXING VALVE, LEAD FREE BRASS DESIGN, OUTLET TEMPERATURE SET POINT 120 DEGREES, 3/4" CW/HW/HWR INLETS, 1" TEMPERED WATER OUTLET, 28.5 GPM AT 20 PSI PRESSURE DROP, SURFACE MOUNTED CABINET, AND INTEGRAL INLET/OUTLET VALVES; ASSE 1017 COMPLIANT.	BRADLEY # S59-3045-B-P-SE	
TMV-2	THERMOSTATIC MIXING VALVE FOR HAND WASHING	1/2"	1/2"	-	-	-	POINT OF USE MIXING VALVE, LEAD FREE BRASS DESIGN, OUTLET TEMP, OUTLET TEMP. SET POINT 105 DEGREES. 1/2" CW/HW INLET, 1/2" TEMPERED WATER OUTLET. ASSE 1070 COMPLIANT.	WATTS #LFMMV-UT-M1	
TP-1	TRAP PRIMER VALVE	1/2"	-	-	-	-	PRESSURE DROP ACTIVATED TRAP SEAL PRIMER, 1/2" INLET/OUTLET, PRIMES UP TO 3 DRAINS. PROVIDE MI-GAP AIR GAP FITTING.	MIFAB # M2-500	
WB-1	WASHING MACHINE OUTLET BOX	1/2"	1/2"	-	-	-	WASHING MACHINE OUTLET BOX, CW/HW SUPPLY VALVES, MINI-RESTER WATER HAMMER ARRESTERS, WITH 2" DRAIN CONNECTION. INSTALL PER MANUFACTURER'S CONNECTION REQUIREMENTS.	SIOUX CHIEF WASHING MACHINE OUTLET BOX # 696 SERIES	
WHA	WATER HAMMER ARRESTOR	-	-	-	-	-	PISTON TYPE WATER HAMMER ARRESTOR, TYPE L COPPER TUBE, ANSI/ASSE 1010 CERTIFIED.	SIOUX CHIEF MODEL # 650 SERIES	
FPWH-1	FREEZE PROOF WALL HYDRANT	3/4"	-	-	-	-	KEY OPERATED, NON-FREEZE, CONCEALED OUTLET, FLUSH MOUNTED BOX WITH COVER, INTERGAL VACUUM BREAKER WITH HOSE CONNECTION AS PER ASSE 1011.	WOODFORD # B65	

REMARKS

1. ALL ACCESSIBLE EQUIPMENT/FIXTURES TO BE INSTALLED PER ADA REQUIREMENTS.
2. SIZED PER PLAN.

GENERAL PLUMBING EQUIPMENT & FIXTURE COMMENT

A. PLUMBING CONTRACTOR SHALL PROVIDE ALL RISERS, CARRIERS, P-TRAPS, STOPS, STRAINERS, TAIL PIECES, DRAINS, ETC. REQUIRED TO FACILITATE COMPLETE INSTALLATION OF ALL SCHEDULED EQUIPMENT.

ELECTRIC WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	ELECT.	INPUT (KW)	AMPS	GALS STORAGE	1ST HR. GPH	GPH @ 100° F TEMP. RISE	COLD/HOT WATER CONNECTIONS	REMARKS
EWH-1	A.O. SMITH	DVE-250-180	208V/3PH	180.0	499	250	886	686	1-1/2"	1-2

REMARKS:

1. PROVIDE 4" CONCRETE HOUSEKEEPING PAD.
2. PROVIDE WITH DISCONNECT SWITCH.

HOT WATER RECIRCULATION PUMP SCHEDULE

MARK	LOCATION	ARRANGEMENT	GPM	HEAD (TDH)	MOTOR					DESIGN EQUIPMENT	REMARKS
					FLA	RPM	HP	VOLTS	PHASE		
HWRP-1	MECH./ELEC. 135	IN-LINE PUMP	1.5	12.0	1.1	2950	125 WATTS	115	1	BELL & GOSSETT # NBF-33	1-2

REMARKS:

1. PLACE RECIRCULATOR PUMP ON HOT WATER RECIRCUALTION PIPING. REFER TO WATER HEATER DETAIL.
2. PROVIDE WITH DISCONNECT SWITCH.

SEISMIC DESIGN CRITERIA FOR NON-STRUCTURAL COMPONENTS

SEISMIC DESIGN CATEGORY	D
BUILDING RISK CATEGORY	III
COMPONENT IMPORTANCE FACTOR (IP)	1.0
SEISMIC DESIGN REQUIREMENTS	SEE NOTE 1

NOTES:
1. PROVIDE FLEXIBLE CONNECTIONS BETWEEN ALL PLUMBING COMPONENTS AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. ALL RESTRAINTS TO BE INSTALLED PER CODE REQUIREMENTS.

PIPING LEGEND

XX	PIPING
XX	PIPING BELOW GRADE
X	VENT PIPING
ACW	AUTOMATIC CLOTHES WASHER
CA	COMPRESSOR AIR
CW	COLD WATER
CW (E)	COLD WATER EXISTING
HW	HOT WATER
HW (E)	HOT WATER EXISTING
HWR	HOT WATER RECIRCULATING
HWR (E)	HOT WATER RECIRCULATING EXISTING
NG	NATURAL GAS
SPD	SUMP PUMPED DRAINAGE
SAN	SANITARY
SAN U/G	SANITARY UNDERGROUND
SAN (E)	SANITARY EXISTING
SAN U/G (E)	SANITARY UNDERGROUND EXISTING
ST	STORM
ST (E)	STORM EXISTING
ST2	STORM SECONDARY
ST2 (E)	STORM SECONDARY EXISTING
TW	TEMPERED WATER
V	VENT
V (E)	EXISTING VENT
ETR	EXISTING TO REMAIN
	EXISTING TO BE REMOVED / DEMOLISHED

FIXTURES & FITTINGS LEGEND

	TEE OUTLET - UP
	TEE OUTLET - DOWN
	CONNECTION - BOTTOM
	CONNECTION - TOP
	ELBOW - TURNED UP
	ELBOW - TURNED DOWN
	PIPE CAP
	UNION
	FLANGE
	BALL VALVE
M	BALL VALVE WITH MEMORY STOP
	BALANCING VALVE
	CHECK VALVE
	BUTTERFLY VALVE
	CONTROL VALVE, PNEUMATIC 2-WAY
	GATE VALVE
	GLOBE VALVE
	PLUG VALVE
P	PRESSURE RELIEF VALVE
TP	TEMPERATURE-PRESSURE RELIEF VALVE
	PRESSURE REDUCING VALVE
	COMBINATION VALVE (ISOLATION, CHECK, BALANCING)
M	MOTOR OPERATED VALVE
S	SOLENOID OPERATED VALVE
G	GAS PRESSURE REGULATOR
	THERMOSTATIC MIXING VALVE
	HW RECIRC VALVES
CO	CLEAN OUT
FCO / GCO	FLOOR CLEAN OUT / GRADE CLEAN OUT
WCO	WALL CLEAN OUT
HB	HOSE BIBB
NFHB	NON FREEZE HOSE BIBB
NFWH	NON FREEZE WALL HYDRANT
YH	YARD HYDRANT
HD	HUB DRAIN
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN
FS	FLOOR SINK
RD	ROOF DRAIN
DS	DOWN SPOUT
WF	FLOW SWITCH
PS	PRESSURE SWITCH
AQ	AQUASTAT
	PRESSURE GAUGE
	THERMOMETER
	STRAINER
	STRAINER WITH BLOWOFF
V	VACUUM BREAKER
	INLINE PUMP
A	WATER HAMMER ARRESTER
RPZ	REDUCED PRESSURE ZONE BACK FLOW PREVENTER
DCVA	DOUBLE CHECK VALVE ASSEMBLY
	SHOWER HEAD
P	POINT OF CONNECTION
R	POINT OF REMOVAL

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Revision Schedule

NO.	DATE	BY	CHKD	DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 16220 — 5/10/17 — GREGORY A. KYLER — 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE 12" = 1'-0"

SHEET TITLE
PLUMBING SCHEDULES, LEGEND, & GENERAL NOTES

PROJECT NUMBER 13674.00

CC P000
DRAWING NUMBER

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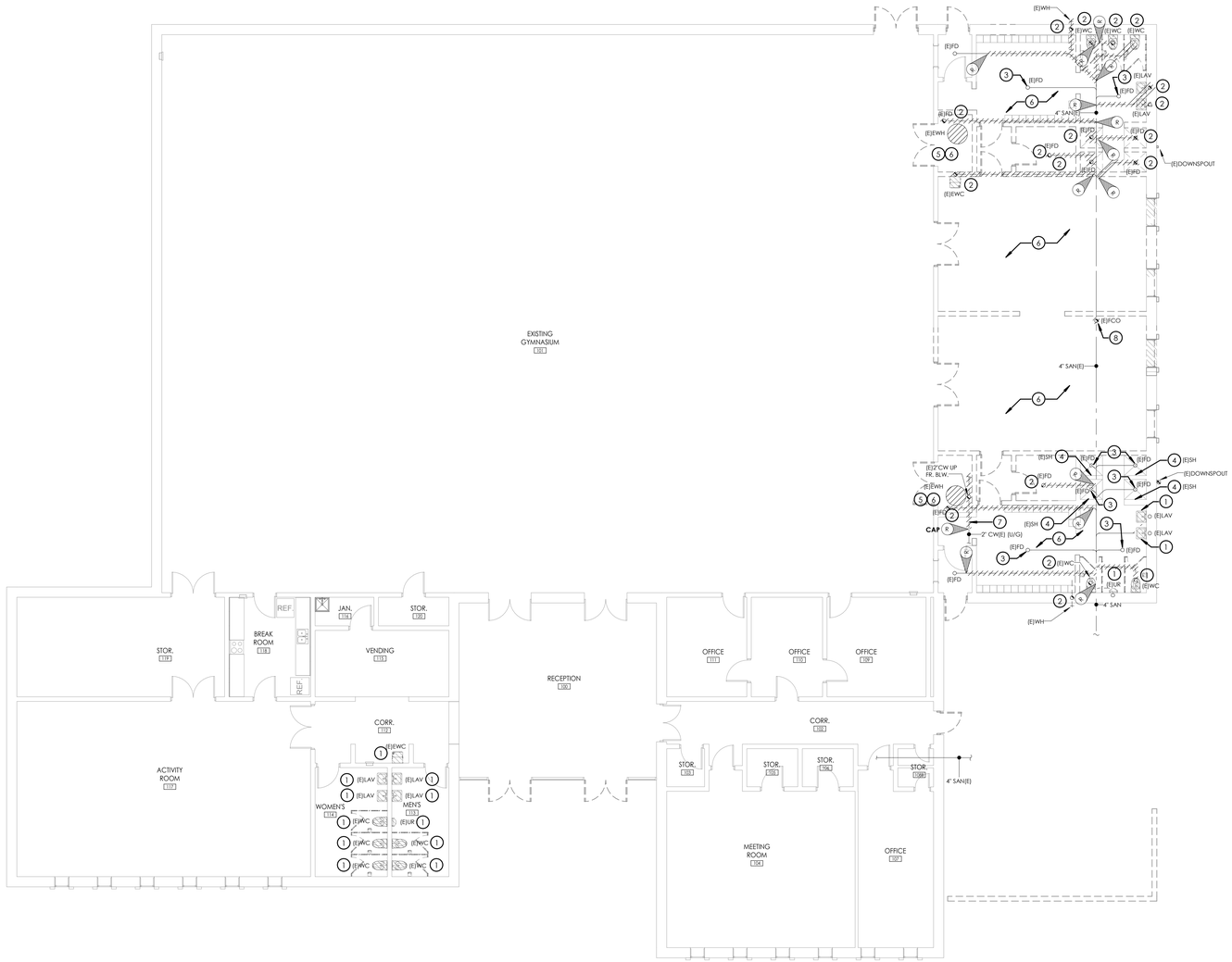
KEY NOTES:

1. REMOVE EXISTING FIXTURE IN ITS ENTIRETY INCLUDING ALL ASSOCIATED PIPING AND SUPPORTS. MAINTAIN SANITARY AND DOMESTIC WATER PIPING FOR NEW FIXTURE TO BE INSTALLED IN SIMILAR LOCATION. REFER TO NEW WORK PLANS FOR ADDITIONAL REQUIREMENTS.
2. REMOVE EXISTING FIXTURE IN ITS ENTIRETY INCLUDING ALL ASSOCIATED PIPING AND SUPPORTS. REMOVE SANITARY AND VENT PIPING BACK TO MAINS AND CAP. PROVIDE ALL NECESSARY FLOOR/WALL CUTTING AND PATCHING TO FACILITATE WORK.
3. REMOVE EXISTING FLOOR DRAIN GRID. EXISTING FLOOR DRAIN TO REMAIN FOR REUSE.
4. REMOVE EXISTING SHOWER VALVE ASSEMBLY AND ASSOCIATED SHOWER HEAD. MAINTAIN DOMESTIC WATER PIPING FOR NEW SHOWER VALVE AND HEAD TO BE INSTALLED IN SIMILAR LOCATION. REFER TO NEW WORK PLANS FOR ADDITIONAL REQUIREMENTS.
5. REMOVE EXISTING DOMESTIC WATER HEATER IN ITS ENTIRETY INCLUDING ALL PIPING AND EQUIPMENT STANDS.
6. REMOVE ALL DOMESTIC WATER DISTRIBUTION PIPING IN LOCKER ROOM AND FITNESS AREAS. MAINTAIN EXISTING DOMESTIC WATER PIPING FOR FIXTURES THAT ARE TO REMAIN. REMOVE ALL VENT PIPING ASSOCIATED WITH DEMOLISHED FIXTURES TO POINT ABOVE CEILING AND CAP.
7. CAP EXISTING DOMESTIC WATER SUPPLY PIPING BELOW FLOOR. PROVIDE ALL NECESSARY CUTTING AND PATCHING TO FACILITATE WORK.
8. REMOVE EXISTING FLOOR CLEANOUT AND PIPING BACK TO MAIN AND CAP.



1 P100 **PLUMBING - GROUND FLOOR DEMOLITION WORK PLAN**
1/8" = 1'-0"

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NO.	DATE	BY	CHKD	DESCRIPTION
				Revision Schedule

SOUTH CAROLINA CLARK PATTERSON LEE No. C02227 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 16720 5/30/17 GREGORY A. KYTE 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

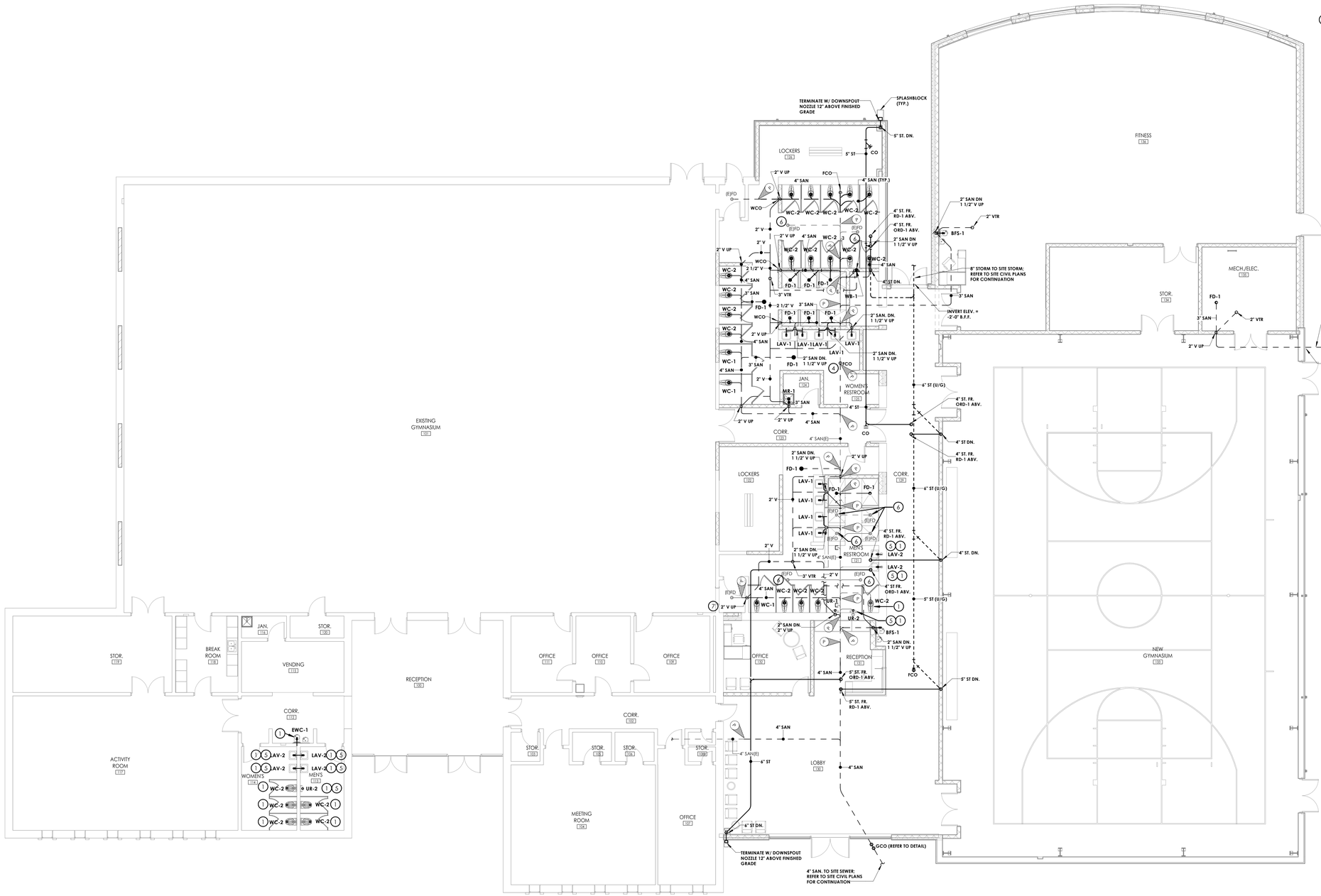
SHEET TITLE: PLUMBING - GROUND FLOOR DEMOLITION WORK PLAN

PROJECT NUMBER: 13674.00

CC P100
DRAWING NUMBER

KEY NOTES:

1. PROVIDE NEW PLUMBING FIXTURE TO REPLACE EXISTING FIXTURE. PROVIDE ALL NECESSARY PIPING MODIFICATIONS TO FACILITATE CONNECTION. PATCH WALL/FLOOR AS REQUIRED TO MATCH EXISTING MATERIALS AND FINISHES.
2. CONNECT TO EXISTING DOWNSPOUT AT POINT ABOVE NEW CEILING LEVEL. PROVIDE ALL NECESSARY FITTINGS TO FACILITATE COMPLETE CONNECTION.
3. ROUTE PIPING HIGH IN SPACE BETWEEN JOINT BAYS.
4. PROVIDE NEW FLOOR CLEAN OUT FOR EXISTING SANITARY MAIN.
5. NEW FIXTURE SHALL BE MOUNTED AT SAME HEIGHT AS THE EXISTING DEMOLISHED FIXTURE.
6. PROVIDE NEW FLOOR DRAIN GRID INSTALLED ON EXISTING FLOOR DRAIN.
7. ROUTE NEW VENT PIPING UP THROUGH EXISTING WALL.



1 P200 **PLUMBING - GROUND FLOOR NEW WORK PLAN - SANITARY**
1/8" = 1'-0"

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Charlotte, North Carolina, 28210
Tel: (800) 274-9000
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NO.	DATE	BY	CHKD	DESCRIPTION
				Revision Schedule

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER — No. 16220 — 5/10/17 — GREGORY A. KYZER — 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

SHEET TITLE: PLUMBING - GROUND FLOOR NEW WORK PLAN - SANITARY

PROJECT NUMBER: 13674.00

DRAWING NUMBER: CC P200

5/26/2017 9:47:14 AM
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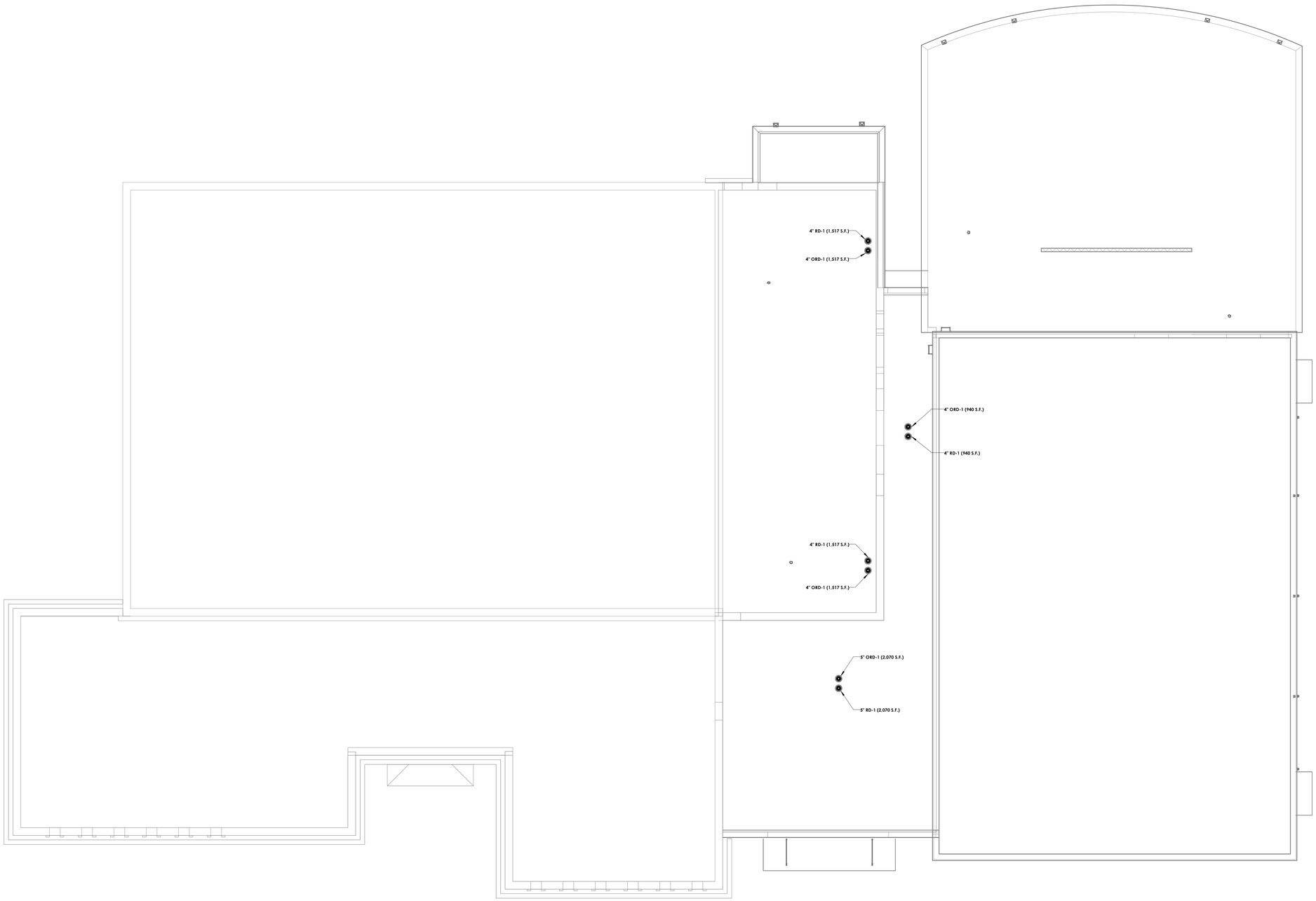

1 / P201 **PLUMBING - ROOF NEW WORK PLAN - SANITARY**
1/8" = 1'-0"

Clark Patterson Lee
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Revision Schedule				
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SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 16220 — 5/10/17 — GREGORY A. KITES — 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE 1/8" = 1'-0"

SHEET TITLE
PLUMBING - ROOF NEW WORK PLAN - SANITARY

PROJECT NUMBER 13674.00

CC P201
DRAWING NUMBER

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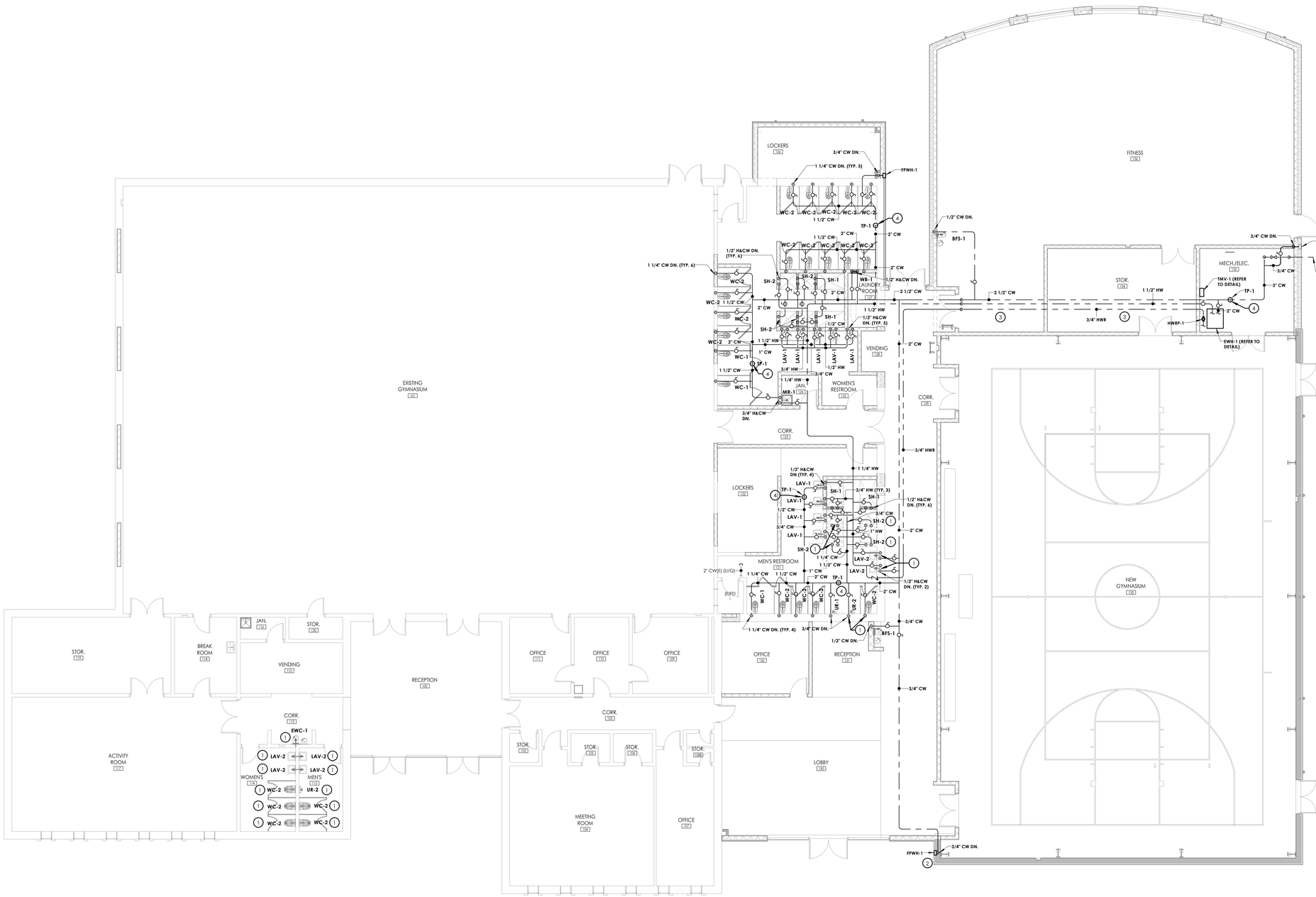
KEY NOTES:

1. PROVIDE NEW PLUMBING FIXTURE TO REPLACE EXISTING FIXTURE. PROVIDE ALL NECESSARY PIPING MODIFICATIONS TO FACILITATE CONNECTION TO EXISTING CONCEALED PIPING. PATCH WALL/FLOOR AS REQUIRED TO MATCH EXISTING MATERIALS AND FINISHES.
2. ROUTE PIPING CONCEALED WITHIN WALL. PROVIDE ALL NECESSARY BLOCKING TO FACILITATE WALL HYDRANT CLAMP INSTALLATION.
3. ROUTE PIPING HIGH AND TIGHT TO UNDERSIDE OF STRUCTURE BETWEEN JOISTS.
4. PROVIDE 1/2" CW DN. CONCEALED WITHIN WALL AND BELOW FLOOR NEAREST FLOOR DRAIN(S).



1 P300 **PLUMBING - GROUND FLOOR NEW WORK PLAN - DOMESTIC WATER**
1/8" = 1'-0"

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 16720 — 5/30/17 — GREGORY A. KYTE — 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

SHEET TITLE: PLUMBING - GROUND FLOOR NEW WORK PLAN - DOMESTIC WATER

PROJECT NUMBER: 13674.00

DRAWING NUMBER: CC P300

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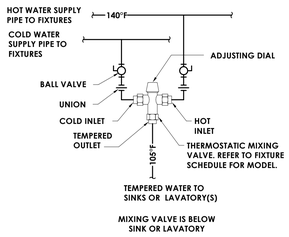
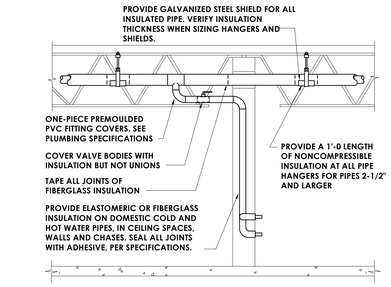
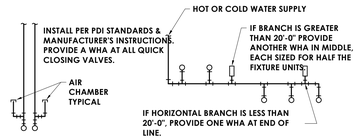


14 P800 **THERMOSTATIC MIXING VALVE (TMV-2) DETAIL**
NOT TO SCALE



13 P800 **PIPE INSULATION - BAR JOIST DETAIL**
NOT TO SCALE



SINGLE/DOUBLE FIXTURE

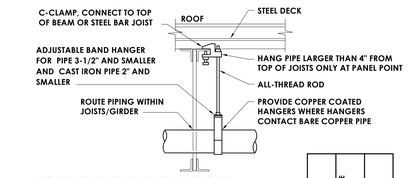
PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD
A	1/2"	1-11
B	3/4"	12-32
C	1"	33-60
D	1-1/4"	61-113
E	1-1/2"	114-154
F	2"	154-330

MULTIPLE FIXTURES

FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
WATER CLOSET (F.V.)	10	--
WATER CLOSET (TANK)	5	--
URINAL	5	--
LAVATORY/SINK	1.5	1.5
JANITOR'S SINK	3	3
SHOWER/BATHTUB	2	2

FOR BATTERIES OF FIXTURES, PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON & O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 & ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNITS AS SHOWN ON THE DRAWINGS AND/OR PER THE TABLES SHOWN ABOVE. PROVIDE ACCESSIBILITY TO "WHA" WHERE REQUIRED BY LOCAL CODE.

12 P800 **WATER HAMMER ARRESTERS DETAIL**
NOT TO SCALE

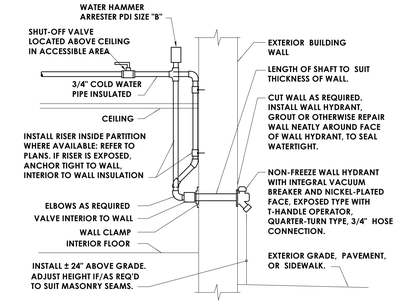


PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN HERE. DO NOT INSTALL HANGER INSIDE INSULATION OR OTHERWISE PENETRATE VAPOR BARRIER. DO NOT HANG ONE PIPE FROM ANOTHER EXCEPT IN CHASES. SLOPE ALL WATER PIPING SLIGHTLY TOWARD DRAINABLE LOCATIONS. HANGER SPACING FOR PIPE SIZE: AS INDICATED ON TABLE.

CAST IRON: 10' AND WITHIN 1'-0" OF ALL JOINTS. ROD SIZES FOR PIPE SIZE: 2" AND SMALLER =3/8", 2-1/2" TO 3" = 1/2", 4" =5/8", 6" = 3/4", 8" AND LARGER = 7/8". LOCATE HANGERS WITHIN 1'-0" OF VALVES AND FITTINGS. PROVIDE SUPPLEMENTARY STEEL STRUTS BETWEEN JOISTS IF REQUIRED. LOCATE HANGERS WITHIN 1'-0" OF EQUIPMENT CONNECTIONS. ANCHOR WATER PIPE AGAINST SWAYING DUE TO CHANGES IN WATER VELOCITY. CHAINS AND PERFORATED STRAP IRON AND STEEL ARE NOT ACCEPTABLE. DO NOT SUSPEND PIPE FROM JOIST BRACING MEMBERS. REFER TO CODE AND SPECIFICATIONS FOR FURTHER INFORMATION. PROVIDE SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES. TRAPEZE HANGERS MAY BE USED FOR MULTIPLE PARALLEL PIPES, SEE "TRAPEZE PIPE HANGER DETAIL."

PIPE SIZE	COPPER PIPE HANGER SPACING	STEEL PIPE HANGER SPACING
1/2"	5'-0"	7'-0"
3/4"	5'-0"	7'-0"
1"	6'-0"	7'-0"
1-1/4"	7'-0"	7'-0"
1-1/2"	8'-0"	9'-0"
2"	8'-0"	10'-0"
2-1/2"	9'-0"	11'-0"
3"	10'-0"	12'-0"
4"	12'-0"	14'-0"

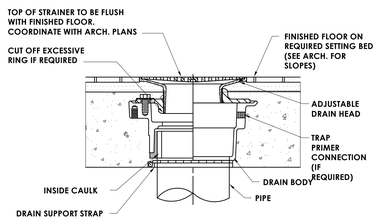
11 P800 **PIPE HANGER - BAR JOIST DETAIL**
NOT TO SCALE



10 P800 **NON-FREEZE WALL HYDRANT DETAIL**
NOT TO SCALE

LOCATE GRADE CLEANOUT 5'-0 OUTSIDE OF BUILDING.

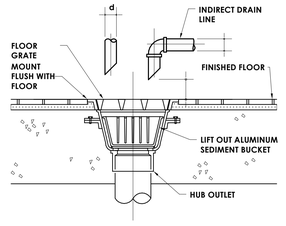
9 P800 **GRADE CLEANOUT - GCO DETAIL**
NOT TO SCALE



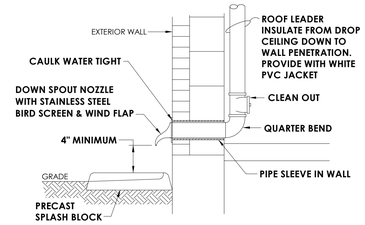
8 P800 **FLOOR DRAIN DETAIL**
NOT TO SCALE

VERIFY EXCAVATION CONDITIONS (SOIL/ROCK) WITH GEOTECHNICAL REPORT AND/OR SITE INVESTIGATION. REFER TO SPECS FOR OTHER CONDITIONS.

7 P800 **PIPE AND TRENCH LOCATION DETAIL**
NOT TO SCALE

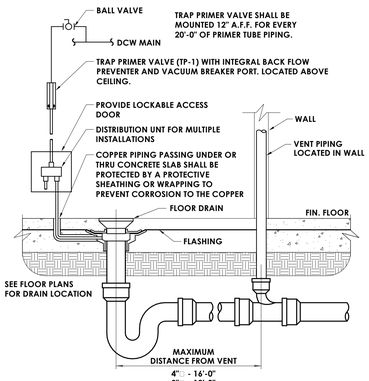


6 P800 **INDIRECT DRAIN DETAIL**
NOT TO SCALE

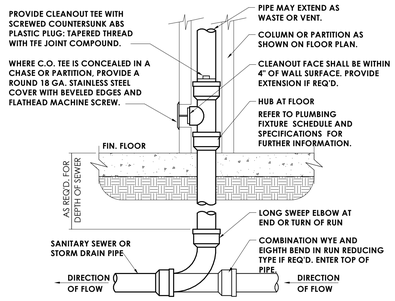


NOTE:
COORDINATE OUTLET LOCATION WITH SITE CONTRACTOR.

5 P800 **STORM PIPING OUTLET DETAIL**
1 1/2" = 1'-0"

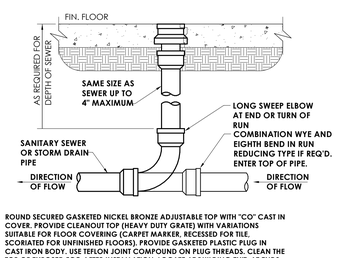


4 P800 **FLOOR DRAIN DETAIL**
NOT TO SCALE



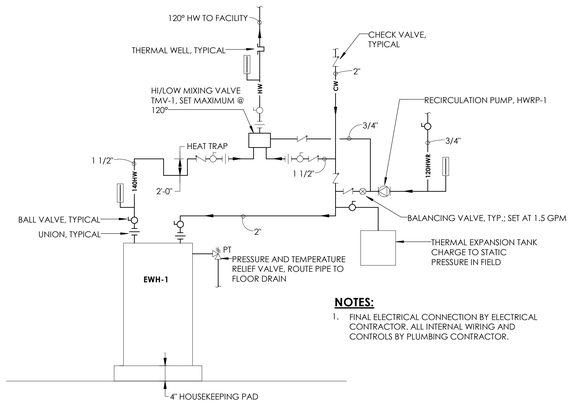
PROVIDE WCO AT BASE OF ALL RAIN-LEADER DOWNSPOUTS. PROVIDE WCO WHERE SHOWN ON PLAN, AND ON SANITARY WASTE BRANCHES NOT SERVED WITH A FLOOR CLEANOUT. LOCATE ABOVE FIXTURE FLOOD RIM WITHIN 4' OF FLOOR. CONSULT LOCAL CODES FOR OTHER WCO REQUIREMENTS.

3 P800 **WALL CLEANOUT - WCO DETAIL**
NOT TO SCALE



ROUND SECURED GASKETED NICKEL BRONZE ADJUSTABLE TOP WITH "CO" CAST IN COVER. PROVIDE CLEANOUT TOP (HEAVY DUTY GRATE) WITH VARIATIONS SUITABLE FOR FLOOR COVERING (CARPET MARKER, RECESSED FOR TILE, SCORIATED FOR UNFINISHED FLOORS). PROVIDE GASKETED PLASTIC PLUG IN CAST IRON BODY. USE TEFLON JOINT COMPOUND ON PLUG THREADS. CLEAN THE TOP OF EXPOSED FCO AFTER INSTALLATION. LOCATE AT BUILDING EXIT. AT ENDS OF RUNS. AT TURNS OF PIPE GREATER THAN 45 DEGREES. AT 50' INTERVALS ON STRAIGHT RUNS. AND/OR WHERE SHOWN ON PLANS. PROVIDE BACKFILL PER ARCH. SPECIFICATIONS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND. CONSULT LOCAL CODES FOR OTHER REQUIREMENTS.

2 P800 **FLOOR CLEANOUT - FCO DETAIL**
NOT TO SCALE



NOTES:
1. FINAL ELECTRICAL CONNECTION BY ELECTRICAL CONTRACTOR. ALL INTERNAL WIRING AND CONTROLS BY PLUMBING CONTRACTOR.

1 P800 **DOMESTIC WATER HEATER SCHEMATIC**
NOT TO SCALE

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA PROFESSIONAL ENGINEER CLARK PATTERSON LEE No. C02227 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 16220 5/10/17 GREGORY A. KYER 13674.00

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	AMT	GAK

SCALE: As indicated

SHEET TITLE: PLUMBING DETAILS

PROJECT NUMBER: 13674.00

CC P800
DRAWING NUMBER

5/26/2017 9:47:26 AM
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GENERAL NOTES:

1. VERIFY ALL PANELBOARD LOADS PRIOR TO ROUGH-IN. PROVIDE NEW PANELBOARD DIRECTORY FOR PANELBOARDS ASSOCIATED WITH THIS PROJECT. USE THE OWNERS DESIGNATIONS - DO NOT USE THE DESIGNATIONS SHOWN ON THE CONTRACT DOCUMENTS.
2. VERIFY ALL ELECTRICAL REQUIREMENTS FOR EQUIPMENT WITH MANUFACTURER AND OTHER TRADES PRIOR TO ROUGH-IN OF ELECTRICAL. REFER TO PLUMBING AND HVAC DRAWINGS FOR EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS. COORDINATE EXACT LOCATION OF DEVICE OR JUNCTION BOX ROUGH-IN WITH ARCHITECTURAL ELEVATIONS OR OTHER TRADES.
3. ALL CONDUITS FOR LOW VOLTAGE FIRE ALARM AND COMMUNICATION CABLES SHALL EXTEND FROM BACK BOX TO ABOVE ACCESSIBLE CEILING IN NEAREST CORRIDOR. PROVIDE CONDUIT SLEEVES IN EXISTING STRUCTURE FOR ACCESS BACK TO CENTRAL EQUIPMENT LOCATION. COORDINATE PATH WITH INSTALLERS PRIOR TO ROUGH-IN.
4. SYNCHRONIZE FIRE ALARM STROBES WHEN MORE THAN ONE IS VISIBLE FROM ONE LOCATION.
5. CONDUIT ROUTINGS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR SHALL VERIFY ALL ROUTES AND LOCATIONS WITH THE OWNER AND ARCHITECTS PRIOR TO ROUGH-IN.
6. THE CONTRACTOR SHALL VERIFY ALL LIGHT FIXTURE VOLTAGES AND LENGTHS WITH THE DRAWINGS AND SPECIFICATIONS.
7. CONTRACTOR SHALL PROVIDE SUITABLE TRIM AND APPURTENANCES TO MOUNT LIGHTING FIXTURES IN THE TYPE OF CEILING OR WALL AS SPECIFIED IN THE ARCHITECTURAL FINISH SCHEDULES REGARDLESS OF CATALOG NUMBER GIVEN. VERIFY BY REVIEWING ARCH. FINISH SCHEDULES PRIOR TO ORDERING FIXTURES.
8. REFER TO THE ARCHITECTURAL DRAWINGS FOR GENERAL LIMITS OF CONSTRUCTION. ELECTRICAL WORK WILL BE REQUIRED OUTSIDE THESE NOTED LIMITS FOR RUNNING OF CONDUITS AND POWER SOURCES AS WELL AS COORDINATED WORK WITH HVAC AND PLUMBING TRADES. FOR AREAS OUTSIDE THE LIMITS OF CONSTRUCTION SUPPORT OF EXISTING LIGHTING AND CONDUITS IS NOT REQUIRED TO BE BROUGHT UP TO THESE SPECIFICATIONS UNLESS THE EXISTING LIGHTING OR CONDUITS HAVE BEEN AFFECTED BY THIS WORK.
9. ELECTRICAL OPERATING AND MAINTENANCE MANUAL SHALL INCLUDE THE MANUFACTURERS STANDARD MATERIALS (MANUALS OR WRITTEN DIRECTIONS) FOR OPERATION AND MAINTENANCE OF THE ELECTRICAL EQUIPMENT ON THE PROJECT. THE O&M MANUALS SHALL ALSO INCLUDE A COPY OF THE APPROVED SHOP DRAWINGS INCLUDING WIRING DIAGRAMS SPECIFIC FOR THIS PROJECT AND COPIES OF ALL CERTIFICATIONS OF INSTALLATION SUCH AS FOR FIRE ALARM, GENERATOR SYSTEMS, ETC. METHOD OF ASSEMBLY OF THE MANUAL SHALL FOLLOW SPECIFICATIONS SECTION 'CLOSEOUT SUBMITTALS'.
10. FEEDER AND BRANCH CIRCUITS SHOWN ARE BASED ON 'EMT' CONDUIT AND THREE CURRENT CARRYING CONDUCTORS BASED ON 75 DEGREES CELSIUS INSULATION. ELECTRICAL CONTRACTOR SHALL ADJUST CONDUIT SIZE IF OTHER THAN 'EMT' CONDUIT IS USED. ELECTRICAL CONTRACTOR SHALL ADJUST WIRE SIZE FOR TERMINATIONS AND/OR EQUIPMENT THAT HAVE A LOWER TEMPERATURE RATING THAN 75 DEGREES CELSIUS. ELECTRICAL CONTRACTOR SHALL ADJUST WIRE SIZE FOR INSTALLATION IN SPACES WITH AN AMBIENT TEMPERATURE HIGHER THAN 30 DEGREES CELSIUS OR EXPOSED TO THE ELEMENTS SUCH AS ROOF TOPS. COORDINATE WITH THE EQUIPMENT INSTALLER TO DETERMINE THE TEMPERATURE RATING OF THE EQUIPMENT AND THE TERMINATION LUGS. BASE WIRE SIZE ON THE MORE STRINGENT TEMPERATURE RATING.

GENERAL ELECTRICAL NOTES:

1) ALL WORK TO BE DONE IN ACCORDANCE WITH THE 2014 EDITION OF THE NATIONAL ELECTRIC CODE (NFPA 70).
2) CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND COORDINATE WITH EXISTING EQUIPMENT PRIOR TO BIDDING.
3) ALL CONDUIT AND WIRING TO BE CONCEALED IN WALLS, FLOOR, OR ABOVE CEILINGS UNLESS OTHERWISE NOTED OR APPROVED BY THE ARCHITECT/ENGINEER. ALL DEVICE OUTLET BOXES SHALL BE RECESSED UNLESS OTHERWISE NOTED OR APPROVED BY THE ARCHITECT/ENGINEER. WHERE APPROVED OR NOTED, SURFACE METAL RACEWAY AND DEVICE BOXES SHALL BE USED IN-LIEU OF CONDUIT AND CONCEALED BOXES AT NO EXTRA COST TO THE OWNER.
4) ALL CONDUIT ROUTES SHOWN ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY FINAL ROUTE.
5) CONDUIT RUNS SHOWN ARE SCHEMATICAL AND DO NOT INDICATE THE NECESSARY FITTINGS AND JUNCTION BOXES THAT ARE INCLUDED IN THE SCOPE OF THE WORK.
6) ALL METAL RACEWAYS, INCLUDING CONDUIT, WIRE TROUGHS, WIREMOLD, ETC., SHALL BE GROUNDED. ALL CONNECTIONS IN METAL RACEWAYS SHALL BE COMPLETED IN SUCH A MANNER AS TO MAINTAIN A CONTINUOUS PATH TO GROUND THROUGHOUT THE ENTIRE LENGTH OF THE RACEWAY.
7) UNLESS NOTED OTHERWISE ON THE DRAWINGS, EACH BRANCH CIRCUIT SHALL BE 2#12, 1#12G; 1/2" CONDUIT. PROVIDE #10AWG FOR 120V BRANCH CIRCUITS LONGER THAN 75 FEET; INCREASE CONDUIT SIZE AS REQUIRED.

LIGHT FIXTURE LEGEND:

- LIGHTING FIXTURE (SEE LIGHTING FIXTURE SCHEDULE FOR LETTER DESIGNATION AND DESCRIPTION OF FIXTURES)
- EMERGENCY AND/OR NIGHT LIGHT LIGHTING FIXTURE
- EXIT LIGHTING FIXTURE UNIVERSAL MOUNT, SINGLE/DOUBLE FACE (WHERE USED, ARROW INDICATES CHEVRON DIRECTION)
- PP — POWER PACK
- SP — SLAVE PACK
- S — SWITCH, NETWORK, 2 BUTTON
- SD — SWITCH, DIMMING, NETWORK
- OS — OCCUPANCY SENSOR - CEILING MOUNTED, DUAL TECHNOLOGY WATTSTOPPER DT-300 OR EQUAL
- OSN — NETWORK LIGHTING CONTROL OCCUPANCY SENSOR, CEILING MOUNTED
- OSWN (#)WG — NETWORK LIGHTING CONTROL OCCUPANCY SENSOR WALL MOUNTED AT 8'-0", WG- INDICATES WIRE GUARD
- DSN — NETWORK DAYLIGHT HARVESTING SENSOR
- LC — LIGHTING CONTACTOR
- S_{OD} — OCCUPANCY SENSOR WALL BOX TYPE - WATT STOPPER #DW-100 OR EQUAL
- PC — PHOTOCONTROL SWITCH
- $S_{(x)}$ — SWITCH
  - (NONE) SINGLE POLE TOGGLE SWITCH
  - 2 TWO POLE TOGGLE SWITCH
  - 3 THREE WAY TOGGLE SWITCH
  - 4 FOUR WAY TOGGLE SWITCH
  - K SINGLE POLE KEYED SWITCH
  - K3 THREE WAY KEYED SWITCH
  - D D-10V DIMMING
- $S_{(x)}$ — LOWER CASE LETTER DESIGNATES SWITCH LEG

FIRE ALARM LEGEND:

- F — FIRE ALARM PULL STATION
- FSCR — FIRE ALARM SPEAKER AND STROBE COMBINATION
- FS — FIRE ALARM STROBE - WALL MOUNTED
- FS — FIRE ALARM STROBE - CEILING MOUNTED
- S — SMOKE DETECTOR
- S WG — SMOKE DETECTOR WITH GUARD
- H — HEAT DETECTOR
- D — DUCT DETECTOR
  - S - LOCATE IN SUPPLY
  - R - LOCATE IN RETURN
- RTS — REMOTE INDICATOR AND TEST STATION FOR DUCT DETECTOR
- X — FIRE ALARM SHUT DOWN RELAY
- TS — TAMPER SWITCH
- WF — FLOW SWITCH
- CM — ADDRESSABLE CONTROL MODULE
- MM — ADDRESSABLE MONITOR MODULE
- FACP — FIRE ALARM CONTROL PANEL
- FAAP — FIRE ALARM ANNUNCIATOR PANEL
- VCC — VOICE COMMAND CENTER
- FB — FIRE ALARM BELL, FURNISHED BY FIRE PROTECTION CONTRACTOR FOR INSTALLATION BY E.C.

WIRING LEGEND:

- SINGLE RECEPTACLE
- DUPLEX RECEPTACLE, 15 AMP
- DUPLEX RECEPTACLE, 20 AMP
- QUADRAPLEX RECEPTACLE
- GFCI GROUND FAULT CIRCUIT INTERRUPTER
  - WP WEATHER PROOF IN-USE COVER
  - C COUNTER HEIGHT
  - TR TAMPER RESISTANT, UL LISTED
  - P PROJECTOR OUTLET (84" AFF UNO)
  - WR WATER RESISTANT TYPE
  - USB UNIVERSAL SERIAL BUS PORT WITH DUPLEX OUTLET
- SPECIAL RECEPTACLE, NEMA NUMBER INDICATED ON PLAN
- CEILING MOUNTED DUPLEX RECEPTACLE
- FB — FLOOR SERVICE OUTLET, 6-GANG
- J — JUNCTION BOX
- DISCONNECT SWITCH
- F — FUSED DISCONNECT SWITCH
- M — MANUAL STARTER
- COMBINATION MAGNETIC STARTER, NEMA SIZE INDICATED.
- MOTOR WITH DESIGNATOR
- WH — WATER HEATER
- HVP1-6 — BRANCH CIRCUIT HOME RUN WITH PANEL NAME AND CIRCUIT NUMBER. QUANTITY OF ARROWHEADS DENOTES QUANTITY OF BRANCH CIRCUITS
- BRANCH CIRCUIT WIRING, PROVIDE QUANTITIES OF CONDUCTORS REQUIRED FOR CIRCUITING AND SWITCHING AS REQUIRED
- T — TRANSFORMER
- TVSS — TRANSFER VOLTAGE SURGE SUPPRESOR
- TS — TIME SWITCH, 7-DAY, 120A TORK #DG-100A-Y OR EQUAL
- HA J — CONNECTION TO BASKETBALL BACKBOARD HEIGHT ADJUSTOR
- BW J — CONNECTION TO BASKETBALL BACKBOARD WINCH

COMMUNICATIONS LEGEND:

UNLESS NOTED OTHERWISE ON DRAWINGS, FOR EACH COMMUNICATIONS OUTLET BELOW, PROVIDE TWO-GANG BOX WITH SINGLE-GANG MUDRING, WITH 3/4" CONDUIT WITH PULL STRING STUBBED TO 6" ABOVE NEAREST ACCESSIBLE CEILING. PROVIDE NYLON BUSHING ON CONDUIT END.

- DATA FLOOR OUTLET: (2) CAT6 CABLES IN SPECIFIED COMBINATION DATA/POWER FLOOR BOX
- TWO DATA OUTLETS IN DOUBLE GANG FLUSH MOUNTED BOX WITH FACEPLATE
  - C COUNTER HEIGHT MODULAR JACK
- SINGLE DATA OUTLET
- TELEVISION DATA PORT
- CEILING SPEAKER

PANEL LEGEND:

- ELECTRICAL PANEL
  - MSB MAIN SWITCH BOARD
- XXX — ELECTRICAL SYSTEMS PANEL
  - FACP FIRE ALARM CONTROL PANEL
  - FAAP FIRE ALARM ANNUNCIATOR PANEL
  - LCP LIGHTING CONTROL PANEL

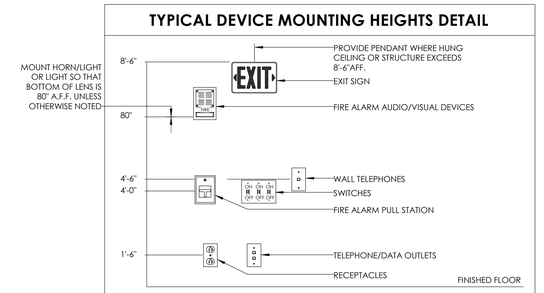
SECURITY LEGEND:

UNLESS NOTED OTHERWISE ON DRAWINGS, FOR EACH SECURITY DEVICE BELOW, PROVIDE TWO-GANG BOX WITH SINGLE-GANG MUDRING, WITH 3/4" CONDUIT WITH PULL STRING STUBBED TO 6" ABOVE NEAREST ACCESSIBLE CEILING. PROVIDE NYLON BUSHING ON CONDUIT END.

- M — MAGNETIC DOOR SWITCH
- PR — CARD READER
- CCTV CAMERA, MINIDOME
- LR — LATCH RETRACTION CONNECTION
- REX — REQUEST TO EXIT MOTION DETECTOR
- H — HANDICAP DOOR PUSHBUTTON
- DO — ELECTRIC DOOR OPERATOR FOR HANDICAP DOOR

NOTE:
SYMBOLS SHOWN ON THIS ELECTRICAL SYMBOLS LIST ARE FOR REFERENCE PURPOSES ONLY. ALL OF THESE SYMBOLS MAY NOT BE USED FOR THIS PROJECT.

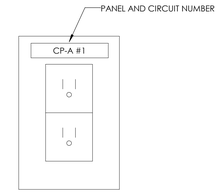
TYPICAL DEVICE MOUNTING HEIGHTS DETAIL



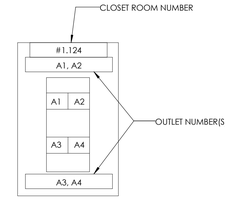
MOUNT HORN/LIGHT OR LIGHT SO THAT BOTTOM OF LENS IS 80" A.F.F. UNLESS OTHERWISE NOTED

NOTES:
1. ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM FINISHED FLOOR TO CENTERLINE OF DEVICE EXCEPT EXIT SIGNS.
2. DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.
3. ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DETAIL UNLESS OTHERWISE NOTED.

1 / E000 — **TYPICAL DEVICE MOUNTING HEIGHTS DETAIL** — NOT TO SCALE



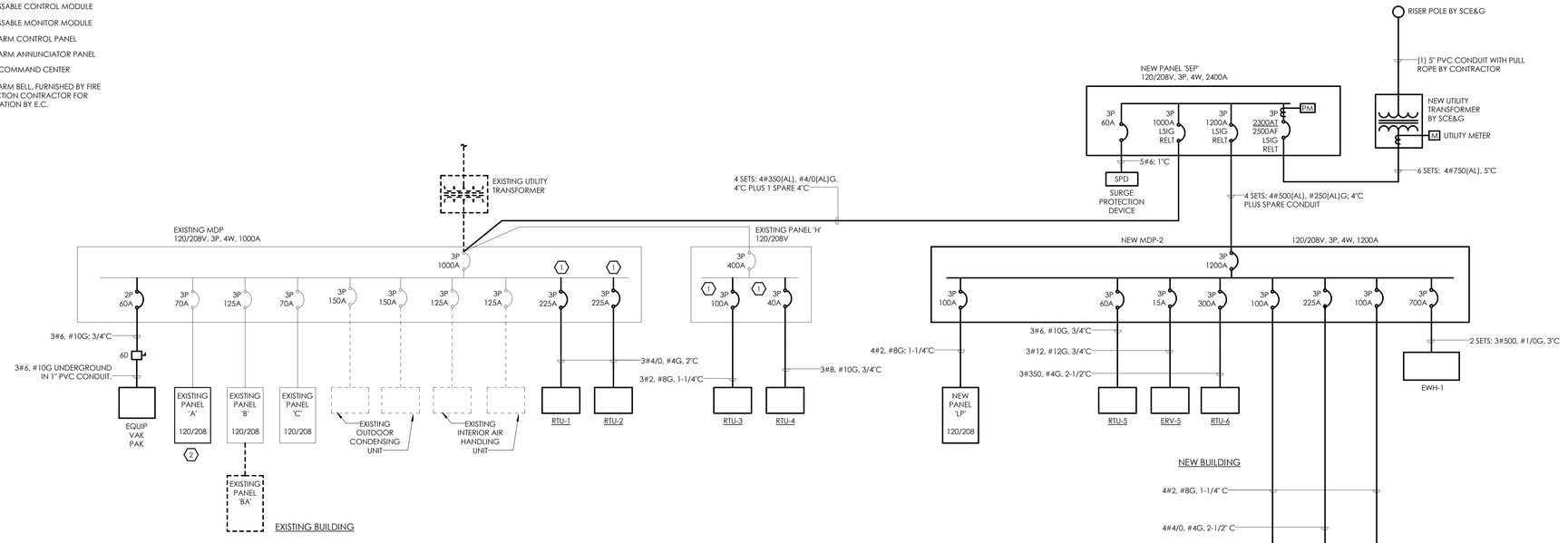
POWER OUTLET FACE PLATE



CAT 6 FACE PLATE

USE CLEAR LABELS WITH BLACK LETTERING FOR ALL FACE PLATE LABELING.

3 / E000 — **FACE PLATE LABELING DETAIL** — NOT TO SCALE



NOTES:
1. PROVIDE NEW HACR RATED CIRCUIT BREAKER IN EXISTING PANEL.
2. REPLACE EXISTING PAMEL 'A' IN EXISTING BACKBOX.

2 / E000 — **ONE-LINE DIAGRAM** — NOT TO SCALE

Electrical Sheet List

Sheet Number	Sheet Name
E000	ELECTRICAL SYMBOLS LEGEND, NOTES & ONE-LINE DIAGRAMS
E001	ELECTRICAL SITE PLAN
E100	ELECTRICAL GROUND FLOOR DEMOLITION PLAN
E200	ELECTRICAL GROUND FLOOR POWER AND SYSTEMS PLAN
E201	ELECTRICAL ROOF POWER PLAN
E300	ELECTRICAL GROUND FLOOR LIGHTING PLAN
E700	ENLARGED PLANS AND FIRE ALARM RISER DIAGRAM SECTIONS.
E800	ELECTRICAL DETAILS
E900	ELECTRICAL SCHEDULE

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 25488 — THOMAS G. BUCHER — 5 - 30 - 17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	JMM	TGB
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SHEET TITLE: ELECTRICAL SYMBOLS LEGEND, NOTES & ONE-LINE DIAGRAMS

PROJECT NUMBER: 13674.00

CC / E000 — DRAWING NUMBER

5/30/2017 7:57:48 AM

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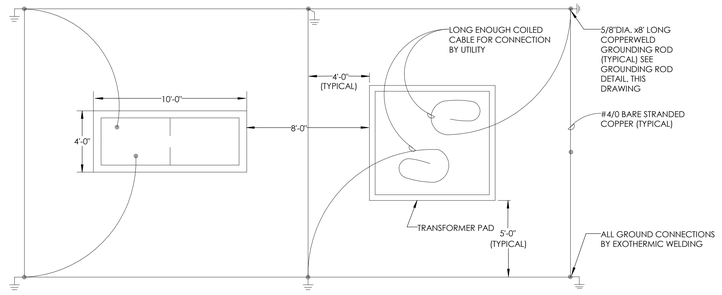
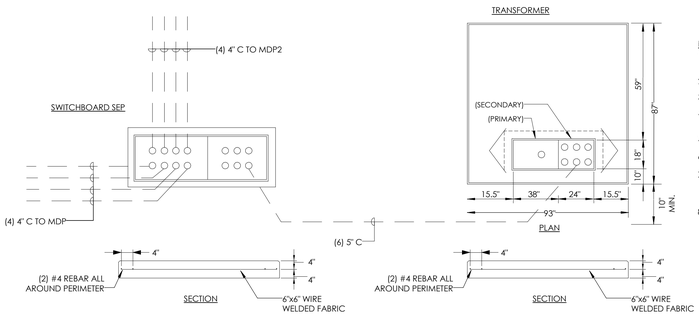
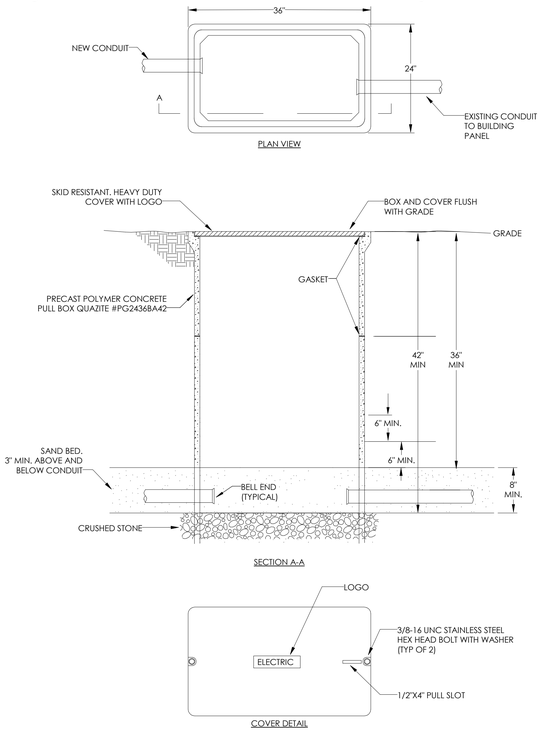


8 E001 **SERVICE GROUNDING DETAIL**
NOT TO SCALE

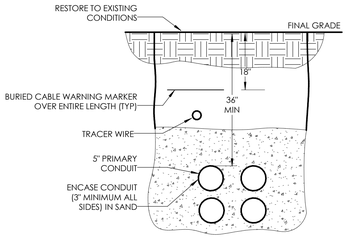


NOTES:
1) CONCRETE 3000 PSI @ 28 DAYS, CURED NOT LESS THAN 72 HOURS
2) DEFORMED BARS - ASTM A-615, GRADE 40.
3) TOP SURFACE SHALL BE TROWEL FINISHED.
4) 3/4" CHAMFER STRIP ALL EXPOSED EDGES, INCLUDING OPENING.
5) MAXIMUM WATER/CEMENT RATIO: 0.50
6) MAXIMUM SLUMP: 4"
7) COORDINATE TRANSFORMER PAD REQUIREMENTS AND LOCATION WITH SCE & G POWER COMPANY.
8) COORDINATE SWITCHBOARD PAD REQUIREMENTS WITH SWITCHBOARD SUBMITTAL.

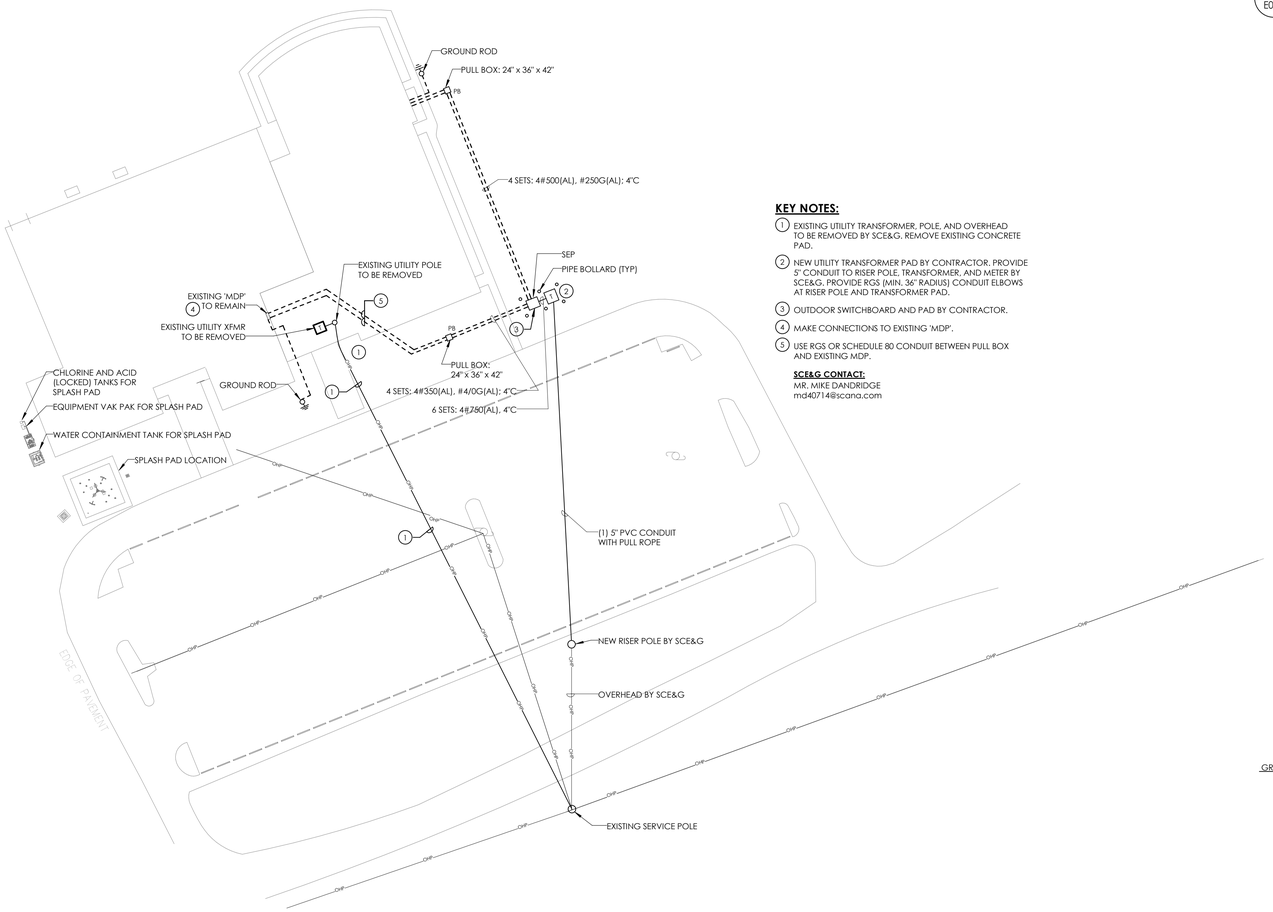
7 E001 **SEP AND TRANSFORMER PAD DETAILS**
NOT TO SCALE



6 E001 **PULL BOX DETAIL**
NOT TO SCALE



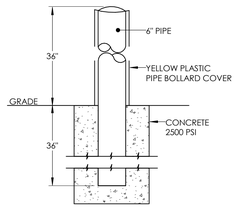
5 E001 **CONDUIT TRENCH DETAIL**
NOT TO SCALE



KEY NOTES:
1. EXISTING UTILITY TRANSFORMER, POLE, AND OVERHEAD TO BE REMOVED BY SCE&G. REMOVE EXISTING CONCRETE PAD.
2. NEW UTILITY TRANSFORMER PAD BY CONTRACTOR. PROVIDE 5" CONDUIT TO RISER POLE, TRANSFORMER, AND METER BY SCE&G. PROVIDE RGS (MIN. 36" RADIUS) CONDUIT ELBOWS AT RISER POLE AND TRANSFORMER PAD.
3. OUTDOOR SWITCHBOARD AND PAD BY CONTRACTOR.
4. MAKE CONNECTIONS TO EXISTING 'MDP'.
5. USE RGS OR SCHEDULE 80 CONDUIT BETWEEN PULL BOX AND EXISTING MDP.

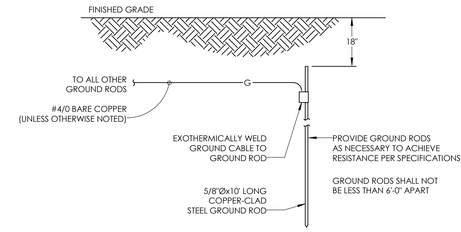
SCE&G CONTACT:
MR. MIKE DANDRIDGE
md40714@scana.com

1 E001 **ELECTRICAL SITE PLAN**
1" = 20'

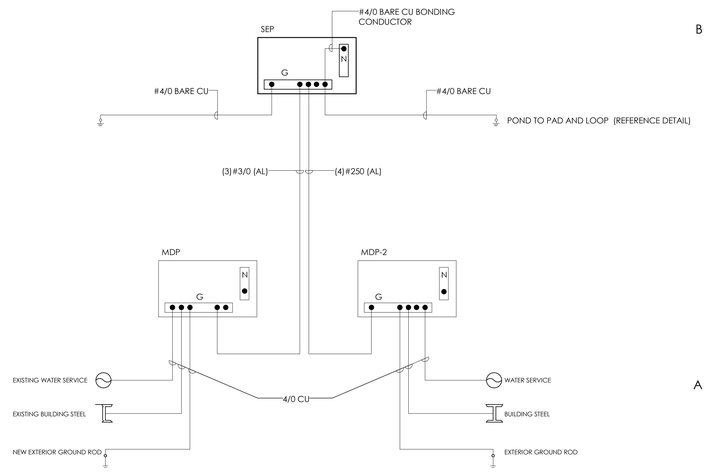


NOTE:
FILL 6" SCHEDULE STEEL PIPE WITH 2500 PSI CONCRETE, DOME TOP TO SHED WATER.

2 E001 **PIPE BOLLARD DETAIL**
NOT TO SCALE



4 E001 **GROUNDING ROD DETAIL**
NOT TO SCALE



3 E001 **GROUNDING SYSTEM RISER DIAGRAM**
NOT TO SCALE

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NO.	DATE	BY	CHKD	DESCRIPTION

Revision Schedule

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 26248 — THOMAS G. BUCHER — 5-30-17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	DCC	TGB

SCALE: As indicated

SHEET TITLE: ELECTRICAL SITE PLAN

PROJECT NUMBER: 13674.00

CC E001
DRAWING NUMBER

5/30/2017 7:57:49 AM
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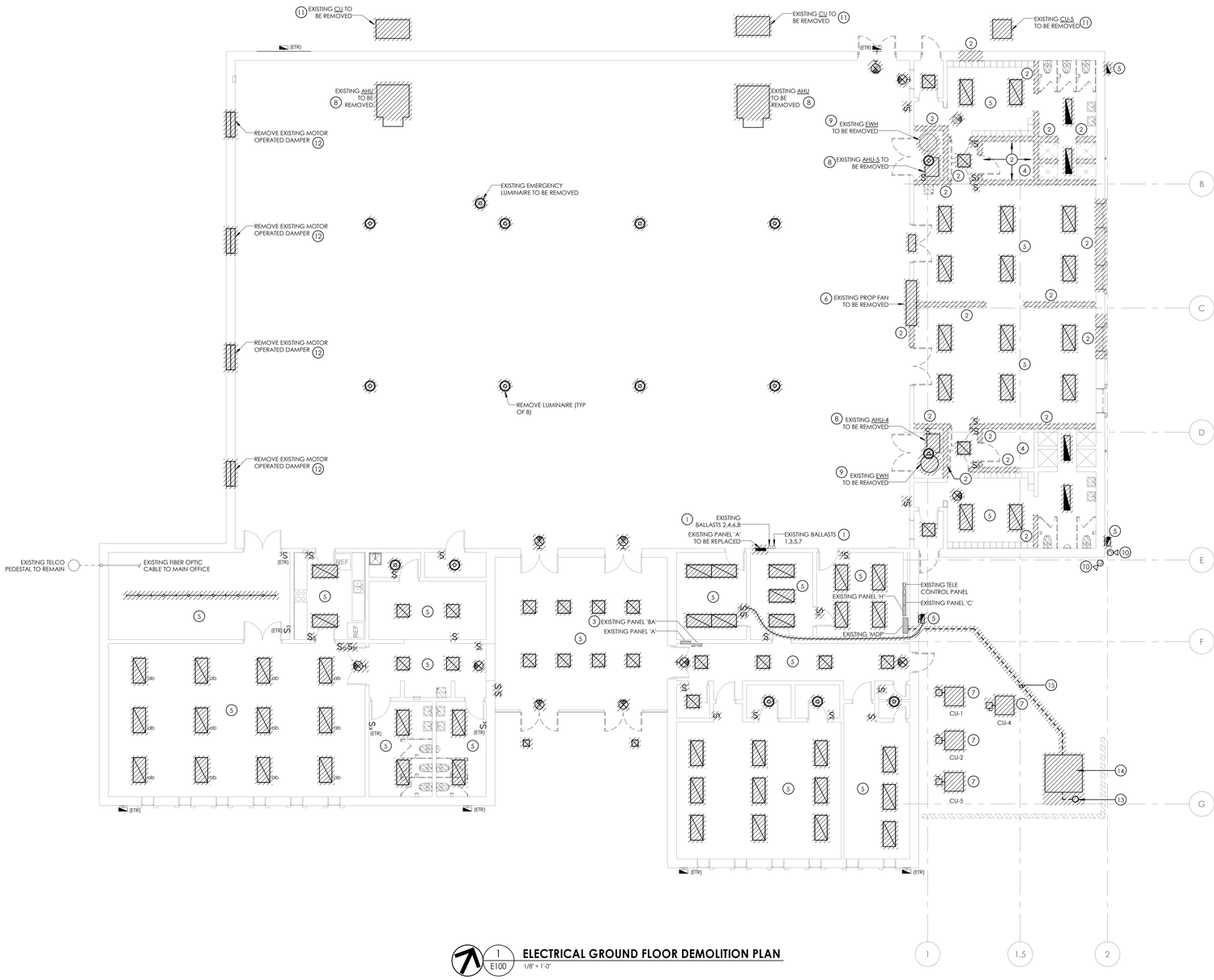

ELECTRICAL GROUND FLOOR DEMOLITION PLAN

1/8" = 1'-0"

GENERAL NOTES:

A. DRAWINGS INDICATE SPECIFIC ITEMS TO BE REMOVED AND/OR RELOCATED IN ORDER TO INDICATE GENERAL SCOPE. ADDITIONAL ITEMS NOT INDICATED, BUT NECESSARY FOR PROJECT RENOVATIONS, SHALL BE REMOVED, RELOCATED AND/OR REROUTED. THE E.C. SHALL ASSUME WITHIN THE BASE BID AN ALLOWANCE FOR ADDITIONAL BRANCH CIRCUITS, FIXTURES, DEVICES,AND SYSTEMS WIRING WITHIN WALLS OR OPENINGS BEING REMOVED OR RELOCATED THAT MAY NEED TO BE REMOVED OR RELOCATED TO ACCOMMODATE NEW CONSTRUCTION.

B. REMOVE ALL EXISTING ELECTRICAL DEVICES AND EQUIPMENT IN THE RENOVATED AREA UNLESS OTHERWISE NOTED. REROUTING OF EXISTING CONDUCTORS MAY BE REQUIRED AT NEW OPENINGS IN EXISTING CONSTRUCTION OR AROUND NEW WORK. FOR DEVICES SHOWN, PROVIDE WORK AS DENOTED BELOW:

HATCHING DENOTES ITEM TO BE REMOVED.

RS REMOVE AND SALVAGE EXISTING DEVICES, FIXTURES, EQUIPMENT, ETC., FOR REINSTALLATION IN RENOVATED AREA. ALL ASSOCIATED CIRCUITING, CABLING, AND RACEWAYS SHALL BE REMOVED BACK TO CONVENIENT LOCATION TO ACCOMMODATE DEMOLITION AND EXTENSION TO NEW LOCATIONS.

ETR EXISTING DEVICES, FIXTURES, EQUIPMENT, ETC. ARE EXISTING TO REMAIN. THEY AND THEIR ASSOCIATED CIRCUITING, CABLING, AND RACEWAYS SHALL REMAIN.

C. FOR DEVICES, FIXTURES, ETC., TO BE REMOVED, THEY AND THEIR RELATED WIRING/CONDUIT SHALL BE REMOVED BACK TO THE SOURCE PANELBOARD, UNLESS OTHERWISE NOTED. ON CIRCUITS WHERE OTHER DEVICES, FIXTURES, ETC. ARE FOUND THAT MUST REMAIN, MAINTAIN CIRCUIT CONTINUITY BY PROVIDING ADDITIONAL WIRING TO FEED THROUGH TO THESE REMAINING ITEMS. RE-CIRCUIT ANY REMAINING DEVICES AS REQUIRED TO AVAILABLE PANELBOARD SPACE. RELOCATE ANY CIRCUITS THAT REMAIN TO AVOID CONFLICT WITH NEW CONSTRUCTION AS REQUIRED. PROPERLY TERMINATE ALL WIRING.

D. COORDINATE DEMOLITION OF EQUIPMENT, DEVICES, ETC., WITH OTHER DISCIPLINES AS APPLICABLE. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS TO COORDINATE AREAS OF DEMOLITION.

E. VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF ELECTRICAL WORK REQUIRED TO COMPLETE THE PROJECT. EXISTING CONDITIONS ARE TAKEN FROM NON-INVASIVE FIELD OBSERVATION AND/OR EXISTING BUILDING DOCUMENTS. OTHER ELECTRICAL ITEMS MAY EXIST FOR WHICH THE ELECTRICAL CONTRACTOR IS RESPONSIBLE.

F. PROPERLY DISPOSE OF ALL ITEMS, DEVICES, LIGHT FIXTURES, ETC. BEING REMOVED AS PART OF THIS PROJECT. THE OWNER SHALL HAVE THE RIGHT OF RETAINING ANY ITEMS BEING REMOVED. COORDINATE ITEMS TO BE RETAINED WITH OWNER. THESE ITEMS INCLUDE PANELBOARDS AND FEEDER CONDUCTORS.

G. REMOVE AND RE-INSTALL EXISTING CEILING TILES IN ANY AREAS WHERE CEILINGS MAY REMAIN AS REQUIRED TO ACCOMMODATE SCOPE OF WORK. TILES SHALL BE VACUUMED PRIOR TO REMOVAL TO MINIMIZE DUST AND DEBRIS. REPLACE DAMAGED TILES AS REQUIRED.

H. CONTRACTOR SHALL PROVIDE NEW BLANK COVER PLATES ON ANY UNUSED FLUSH MOUNT DEVICE BOXES UPON COMPLETION OF PROJECT.

I. FIREPROOFING AND/OR FIRESTOP MATERIALS REMOVED FROM FIRE RATED WALLS AND CEILINGS AS A RESULT OF DEMOLITION SHALL BE RE-INSTALLED USING AN APPROVED UL LISTED METHOD.

J. WHERE INTERIOR WALLS WILL BE FURRED OUT AND REFINISHED, INCLUDE IN BASE BID ALL WORK AND MATERIAL REQUIRED TO SHIFT EXISTING WALL-MOUNTED DEVICES INDICATED TO REMAIN TO NEW FINISHED WALL SURFACE AT SAME LOCATION,WHERE REQUIRED.

K. EXISTING DEVICE BOXES AND CONDUIT SCHEDULED TO BE REMOVED MAY BE REUSED ONLY IF IT COMPLIES WITH ALL REQUIREMENTS OF THE NEC AND SPECIFICATIONS, IF NEW DEVICE LOCATION COINCIDES WITH EXISTING LOCATION, AND IF PRACTICAL.

L. FOR ALL EXISTING DEVICES INDICATED TO REMAIN, FIELD VERIFY THE EXISTING CIRCUIT, AND PROVIDE NEW LABEL ON DEVICE PLATE WITH CORRECT PANEL/CIRCUIT PER SPECIFICATIONS.

M. FIELD VERIFY ALL EXISTING CIRCUITS PRIOR TO SUBMITTING ON ELECTRICAL PANELBOARDS. MAKE ADJUSTMENTS TO PANELBOARD SUBMITTALS AS REQUIRED.

KEY NOTES:

1. REMOVE EXISTING BALLASTS AND ASSOCIATED LUMINAIRES.
2. REMOVE ALL ELECTRICAL DEVICES (RECEPTACLES, SWITCHES, ETC.) ON WALL BEING DEMOLISHED.
3. REMOVE EXISTING PANEL 'BA' FED FROM EXISTING ADJACENT PANEL 'B'. REMOVE WIRING/CONDUIT BACK TO SOURCE.
4. DISCONNECT EXISTING SAUNA.
5. DISCONNECT AND REMOVE EXISTING LUMINAIRES WITH SWITCHES AND BRANCH CIRCUIT WIRING BACK TO PANEL.
6. DISCONNECT EXISTING EXHAUST FAN AND STARTER WITH CONDUIT AND WIRING BACK TO PANEL.
7. DISCONNECT EXISTING CONDENSING UNIT. REMOVE DISCONNECT SWITCH AND SAVE FOR REINSTALLATION. REMOVE CONDUIT AND WIRING BACK TO SOURCE.
8. DISCONNECT EXISTING AIR HANDLER. REMOVE CONDUIT AND WIRING BACK TO SOURCE.
9. DISCONNECT EXISTING WATER HEATER. REMOVE CONDUIT AND WIRING BACK TO SOURCE.
10. DISCONNECT AND REMOVE EXISTING CCTV CAMERA AND SAVE FOR REINSTALLATION.
11. DISCONNECT EXISTING OUTDOOR CONDENSING UNIT FOR REMOVAL BY OTHERS. REMOVE DISCONNECT SWITCH AND CONDUIT AND WIRING BACK TO PANEL 'MDP'.
12. DISCONNECT EXISTING MOTORIZED DAMPERS WITH CONDUIT AND WIRING BACK TO SOURCE.
13. EXISTING OVERHEAD WIRING AND SERVICE POLE TO BE REMOVED BY UTILITY.
14. EXISTING TRANSFORMER TO BE REMOVED BY UTILITY. CONTRACTOR TO REMOVE CONCRETE PAD AND CONDUITS.
15. FIELD VARIFY ROUTING AND NUMBER OF EXISTING SECONDARY SERVICE CONDUITS TO MDP. INTERRUPT CONDUITS AND MAKE CONNECTIONS TO NEW SERVICE CONDUCTORS AND CONDUITS.

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NO.	DATE	BY	CHKD	DESCRIPTION
				Revision Schedule

SOUTH CAROLINA PROFESSIONAL ENGINEER CLARK PATTERSON LEE No. C02227 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25415 THOMAS G. BUCHER 5-30-17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	JMM	TGB

SCALE: As indicated

SHEET TITLE: ELECTRICAL GROUND FLOOR DEMOLITION PLAN

PROJECT NUMBER: 13674.00

CC E100 DRAWING NUMBER

5/30/2017 7:57:52 AM

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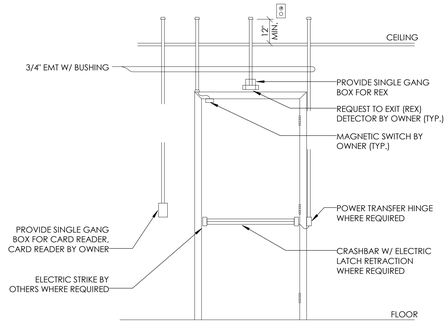
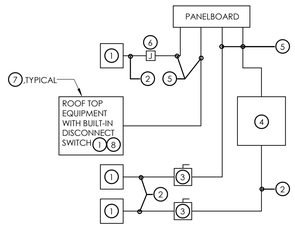


2 TYPICAL EXTERIOR DOOR PREPARATION FOR ACCESS CONTROL SYSTEM INSTALLATION

2 / E200 — NOT TO SCALE

ELECTRICAL EQUIPMENT CONNECTION DETAIL KEY NOTES:

1. EQUIPMENT OF TRADES OTHER THAN ELECTRICAL.
2. CONDUIT AND WIRING BY HVAC, PLUMBING CONTRACTOR, OR OTHER TRADES.
3. IF AN ADDITIONAL DISCONNECT IS REQUIRED BY THE NEC, IT SHALL BE PROVIDED AND INSTALLED BY THE EQUIPMENT CONTRACTOR.
4. A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATE ADJACENT TO EQUIPMENT.
5. BRANCH CIRCUIT WIRING AND CONDUIT IN ELECTRICAL WORK. SEE PANELBOARD AND MECHANICAL EQUIPMENT CONNECTION SCHEDULES FOR BREAKER AND WIRE SIZES.
6. JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. IF NO STARTER OR DISCONNECT IS SUPPLIED, A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING SHALL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER TRADES.
7. IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
8. IF THE ROOF TOP FAN IS NOT PROVIDED WITH BUILT-IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A DISCONNECT SWITCH.



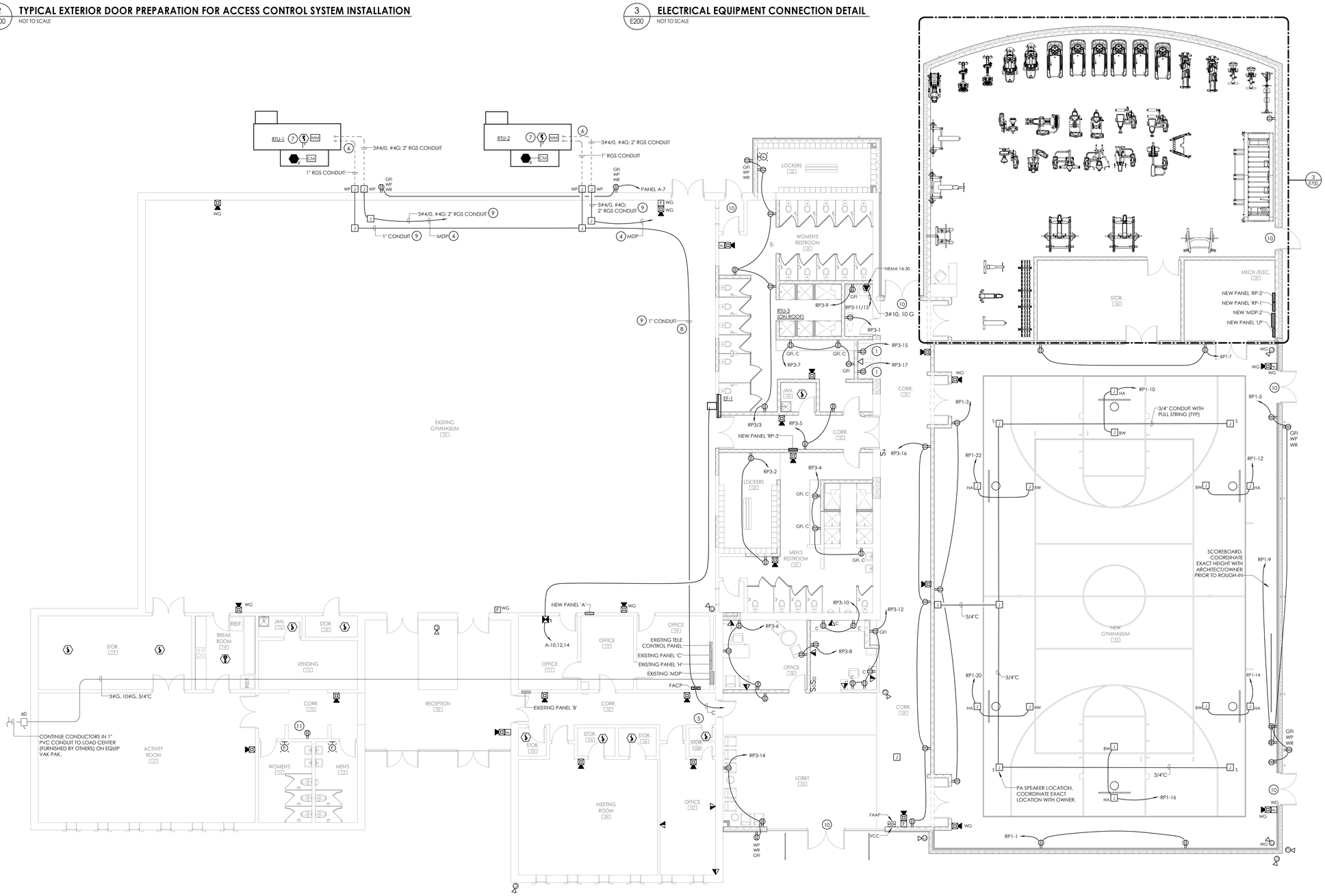
IN A SINGLE PRIME CONTRACT, IT IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR TO COORDINATE BETWEEN THE ELECTRICAL AND THE OTHER TRADES.

KEY NOTES:

1. PROVIDE GFI CIRCUIT BREAKER IN INDICATED PANEL.
2. ALL EXISTING RECEPTACLE DEVICES AND DATA/TELE COMMUNICATION DEVICES, ARE EXISTING TO REMAIN IN THE AREA/ROOM UNLESS NOTED OTHERWISE.
3. NOTE NOT USED.
4. PROVIDE (2) 3P-225A CIRCUIT BREAKERS IN EXISTING PANEL 'MDP'.
5. PROVIDE 1P-30A CIRCUIT BREAKER WITH RED HANDLE AND LOCKING DEVICE IN EXISTING PANEL.
6. COORDINATE UNDERGROUND CONDUITS WITH RTU INSTALLATION.
7. SMOKE DETECTOR IN RETURN AIR FURNISHED BY EQUIPMENT MANUFACTURER, WIRED FOR FAN SHUTDOWN UPON ACTIVATION.
8. PROVIDE CONDUIT SYSTEM FOR FIRE ALARM CONNECTIONS.
9. INSTALL CONDUIT HIGH TO AVOID CONFLICT WITH DUCT INSTALLATION.
10. PREP DOOR FOR FUTURE ACCESS CONTROL FOR PER DETAIL.
11. PROVIDE GFCI RECEPTACLE FOR NEW WATER COOLER.

3 ELECTRICAL EQUIPMENT CONNECTION DETAIL

3 / E200 — NOT TO SCALE



1 ELECTRICAL GROUND FLOOR POWER AND SYSTEMS PLAN

1 / E200 — 1/8" = 1'-0"

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SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 26618 — THOMAS G. BUCHER — 5-30-17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	JMM	TGB

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SHEET TITLE: ELECTRICAL GROUND FLOOR POWER AND SYSTEMS PLAN

PROJECT NUMBER: 13674.00

DRAWING NUMBER: CC E200

5/30/2017 7:58:22 AM

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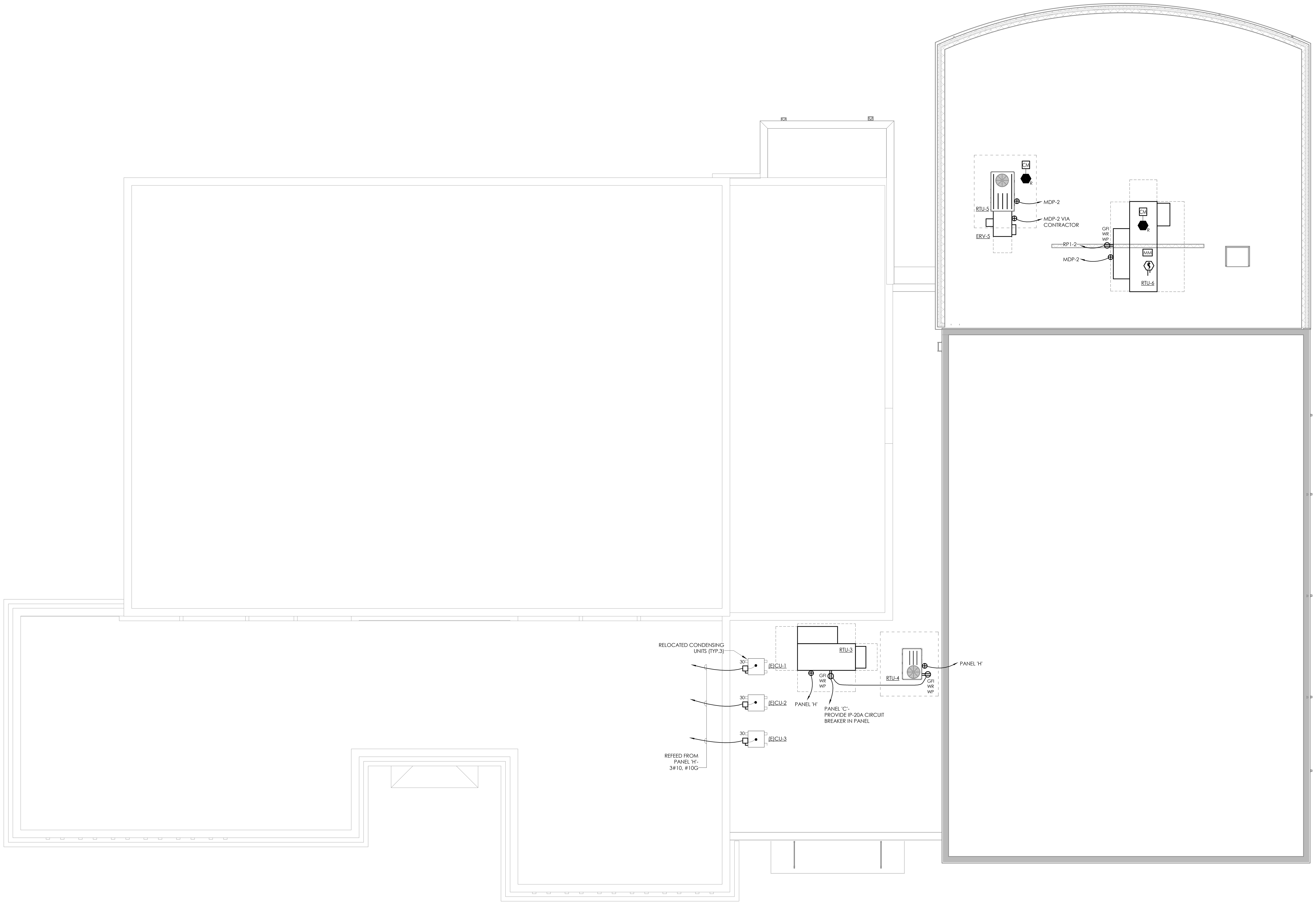

1 / E201 — ELECTRICAL ROOF POWER PLAN

1/8" = 1'-0"

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DATE	DRAWN	CHECKED
05/30/17	DCC	TGB

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SHEET TITLE: ELECTRICAL ROOF POWER PLAN

PROJECT NUMBER: 13674.00

DRAWING NUMBER: CC E201

5/30/2017 7:58:24 AM

LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	DESIGN MAKE	MODEL NUMBER	VOLTS	LUMEN SOURCE			MOUNTING	NOTES
					TYPE	WATTS	LUMENS		
A	2'X4' LED GRID TROFFER, ALUMINUM DOOR	LITHONIA	2GTL4-60L-FW-LP835	120/277	LED	54.8	6000	GRID	
A1	2'X2' LED GRID TROFFER, ALUMINUM DOOR	LITHONIA	2GTL2-20L-FW-LP835	120/277	LED	19.6	2000	GRID	
B	2'X2' LED RECESSED VOLUMETRIC TROFFER	LITHONIA	2RTL2-40L-LP-835	120/277	LED	40	3991	GRID	
B1	2'X4' LED RECESSED VOLUMETRIC TROFFER	LITHONIA	2RTL4-60L-3500K	120/277	LED	55	5418	GRID	
B2	2'X4' LED RECESSED VOLUMETRIC TROFFER	LITHONIA	2RTL4-72L-3500K	120/277	LED	71	6984	GRID	
C	1'X1' LED SURFACE MOUNT EXTERIOR HIGH ABUSE LUMINAIRE, UL LISTED FOR WET LOCATIONS	KENALL	MS11FL-PP-DB-20L35K-DV-BPC-SA	120/277	LED	41	3389	SURFACE	
C1	SURFACE WRAPAROUND	LITHONIA	CA-232-MVOLT-GEB10RS	120/277	LED	39	4542	PENDANT	
D	LED 4" DOWNLIGHT	GOTHAM	EVO-35/15-4WR-MD-LD-MVOLT	120/277	LED	17.3	1500	RECESSED	
D1	LED 6" DOWNLIGHT, 0-10V DIM TO 1%	GOTHAM	EVO-35/40-6WR-WD-LD-MVOLT-EZ1	120/277	LED	48.1	4000	RECESSED	
E	EXIT SIGN, RED LETTERS	SIGNTEX	RPR-REC-1-R-W-TW	24	LED	2	-	WALL/CEILING	
EM1	EMERGENCY LIGHT, HIGH OUTPUT, SURFACE	SIGNTEX	MHE-RE-30-S-W	24	LED	30	-	SURFACE	
EM2	EMERGENCY WALL MOUNTED FIXTURE	SIGNTEX	MAE-RE-10-A-W	24	LED	10	-	WALL	
EM3	EMERGENCY DOWNLIGHT	SIGNTEX	MLD-RE-10-W	24	LED	10	-	RECESSED	
EM4	EMERGENCY CANOPY MOUNTED FIXTURE	SIGNTEX	MAE-RE-10-A-T	24	LED	10	-	CANOPY	
EWG	EXIT SIGN, RED LETTERS, WIRE GUARD	SIGNTEX	RPR-REC-1-R-W-TW-WG	24	LED	2	-	WALL/CEILING	
HB1	PENDANT MOUNTED LED WITH ALUMINUM REFLECTOR, SAFETY CABLE, SWIVEL STEM	LITHONIA	JCBL-24000LM-DALR-MVOLT-GZ10-35K-80CRI-PM-JCBLSC120	120/277	LED	193	24,000	PENDANT	
HB2	PENDANT MOUNTED LED WITH FROSTED ACRYLIC REFLECTOR, CONICAL LENS	LITHONIA	JCBL-12000LM-ACFR-ACRCON-MVILT-GZ10-35K-80CRI-PM	120/277	LED	90	12,000	PENDANT	
T	TRACK MOUNTED LED	LITHONIA	LT1HSPLT-LED-27K	120/277	LED	9	500	TRACK	1
V8	8' LED VAPORTIGHT	LITHONIA	XWMLED	120/277	LED	48	3600	SURFACE	
WP	LED WALLPACK WITH PHOTOCONTROL SWITCH	LIGHTONIA	WST-LED-2-P2-VW-PE-COLOR TBD	120/277	LED	30	3000	WALL	
WS4	CONTINUOUS WALL SLOT, LED, HIGH OUTPUT, 3500K, 4' LENGTH, GYP CEILING	MARK	SPR LED SERIES	120/277	LED	48	3328	WALL	
WS12	CONTINUOUS WALL SLOT, LED, HIGH OUTPUT, 3500K, 12' LENGTH, GYP CEILING	MARK	SPR LED SERIES	120/277	LED	144	9984	WALL	
WS16	CONTINUOUS WALL SLOT, LED, HIGH OUTPUT, 3500K, 16' LENGTH, GYP CEILING	MARK	SPR LED SERIES	120/277	LED	192	13312	WALL	
WS24	CONTINUOUS WALL SLOT, LED, HIGH OUTPUT, 3500K, 24' LENGTH, GYP CEILING	MARK	SPR LED SERIES	120/277	LED	288	19968	SURFACE	
V8	8' LED VAPORTIGHT	LITHONIA	XWMLED	120/277	LED	48	3600	WALL	

LIGHTING FIXTURE SCHEDULE GENERAL NOTES:

A. REFER TO ARCHITECTURAL REFLECTED CEILIGN PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL LIGHTING FIXTURES.

B. SUBSTITUTIONS ARE ALLOWED WITH APPROVAL FOR ALL LIGHTING FIXTURES UNLESS NOTED OTHERWISE. SUBSTITUTE FIXTURES SHALL BE EQUAL IN TYPE, STYLE, MATERIALS, COLOR, FINISH, AND ELECTRICAL RATINGS. SUBSTITUTE LED MODULES AND DRIVERS SHALL BE EQUAL IN TYPE, STYLE, WATTAGE, AND COLOR.

C. PROVIDE WITH PROPER MOUNTING HARDWARE FOR CEILING TYPE.

LIGHTING FIXTURE REMARKS:

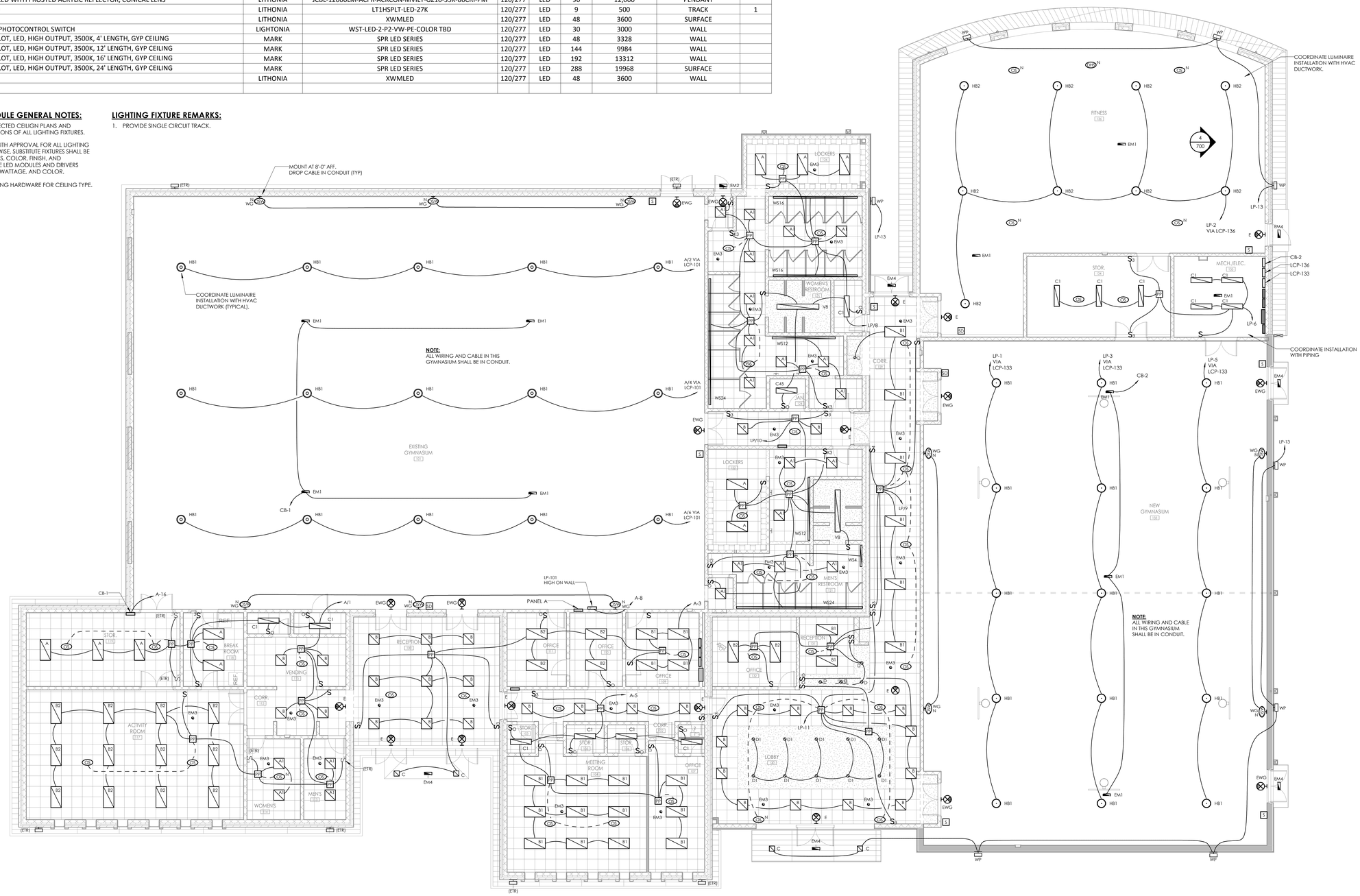
1. PROVIDE SINGLE CIRCUIT TRACK.

GENERAL NOTES:

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATIONS FOR EXACT LIGHTING FIXTURE LOCATIONS.

B. CONNECT ALL EXIT SIGNS TO CONTINUOUSLY HOT CONDUCTOR OF CIRCUIT INDICATED AHEAD OF ANY SWITCHING OR OTHER CONTROL.

C. COORDINATE ALL LIGHT SWITCH/CONTROL LOCATIONS WITH DOOR SWINGS PRIOR TO ROUGH-IN. REGARDLESS OF HOW SHOWN ON PLAN, LIGHT SWITCHES IN ROOM CONTROLLING FIXTURES ON EMERGENCY POWER SHALL BE CLOSEST TO DOOR JAMB.



1 E300 **ELECTRICAL GROUND FLOOR LIGHTING CEILING**
1/8" = 1'-0"

Clark Patterson Lee
ARCHITECTURE | ENGINEERING | PLANNING
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NO.	DATE	BY	CHKD	DESCRIPTION
				Revision Schedule

SOUTH CAROLINA PROFESSIONAL ENGINEER CLARK PATTERSON LEE No. C02227 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 26748 THOMAS G. BUCHER 5 - 30 - 17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWING	CHECKED
05/30/17	JMM	TGB
SCALE	As indicated	

SHEET TITLE
ELECTRICAL GROUND FLOOR LIGHTING PLAN

PROJECT NUMBER
13674.00

CC
E300
DRAWING NUMBER

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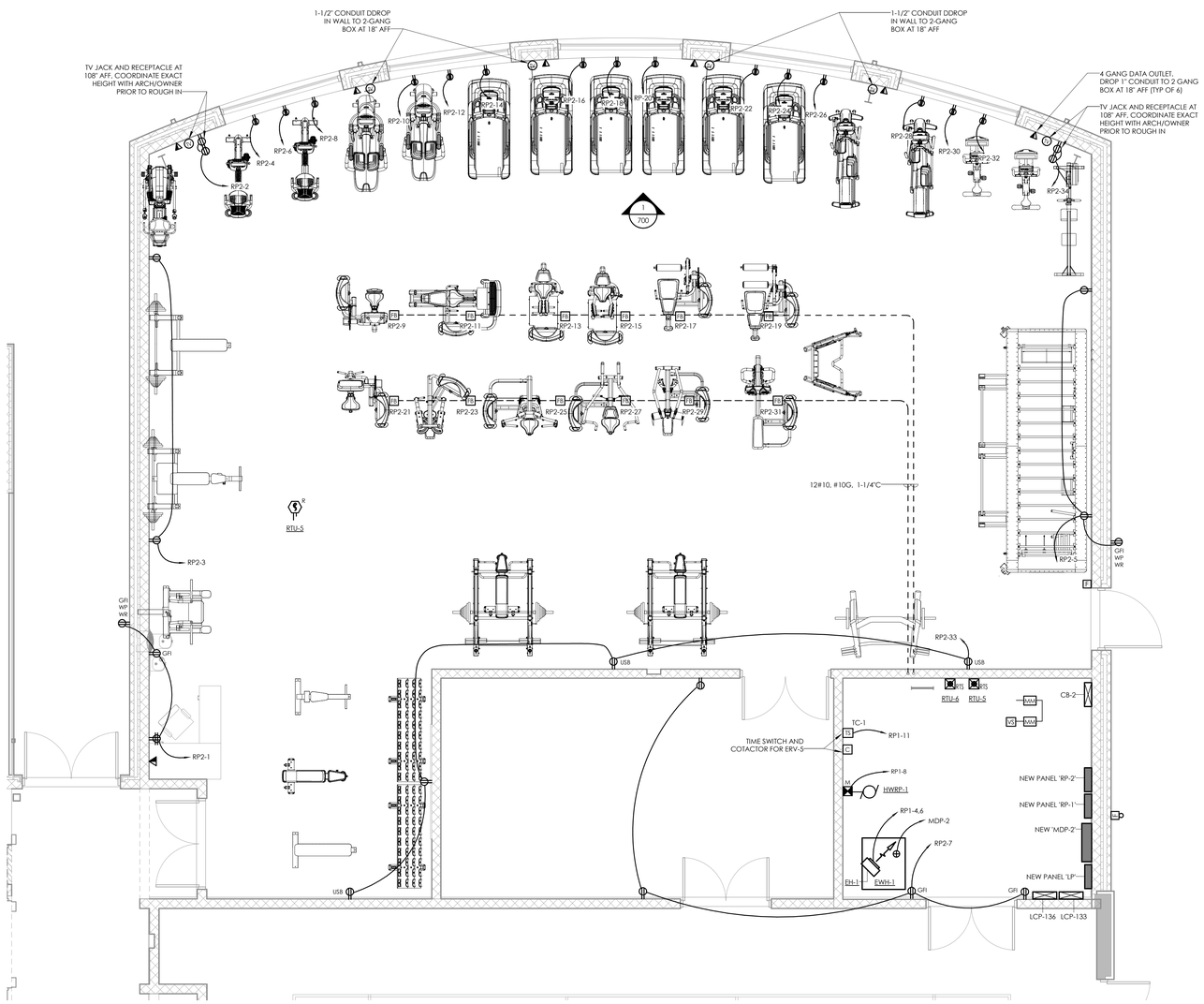
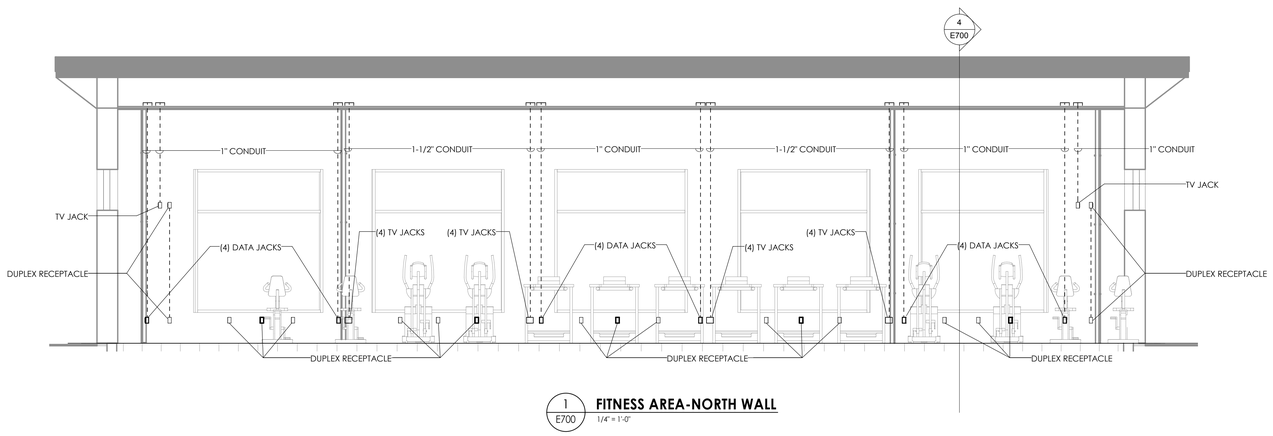
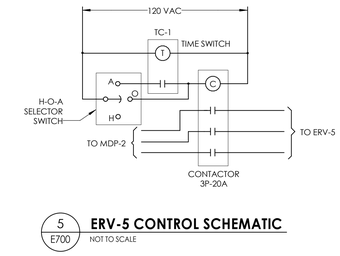


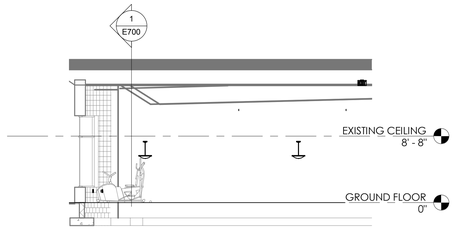
3 E700 **ENLARGED FITNESS AREA ELECTRICAL POWER AND SYSTEMS PLAN**
1/4" = 1'-0"



1 E700 **FITNESS AREA-NORTH WALL**
1/4" = 1'-0"

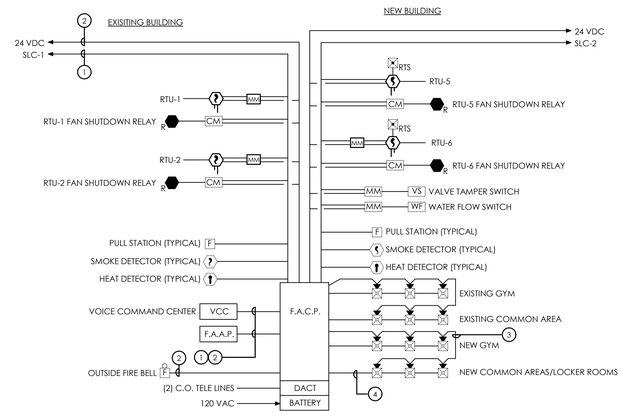


5 E700 **ERV-5 CONTROL SCHEMATIC**
NOT TO SCALE



4 E700 **Section 18**
1/8" = 1'-0"

FIRE ALARM CABLE SCHEDULE			
TYPE	SERVICE	SERVICE	DESIGN BASE
1	SIGNAL LINE CIRCUIT	#18 T.S.P.	WEST PENN #D60975
2	24VDC/CONTROL	#14 U.T.P.	WEST PENN #D60993B
3	NAC SPEAKER CIRCUIT	#18 T.S.P.	WEST PENN #D60975
4	NAC STROBE CIRCUIT	#14 U.T.P.	WEST PENN #D60993B



2 E700 **FIRE ALARM RISER**
NOT TO SCALE

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NO.	DATE	BY	CHKD	Revision Schedule DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — No. 26488 — THOMAS G. BUCHER — 5-30-17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	DCC	TGB

SCALE: As indicated

SHEET TITLE: ENLARGED PLANS AND FIRE ALARM RISER DIAGRAM SECTIONS.

PROJECT NUMBER: 13674.00

CC E700
DRAWING NUMBER

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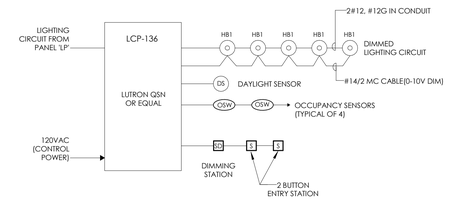
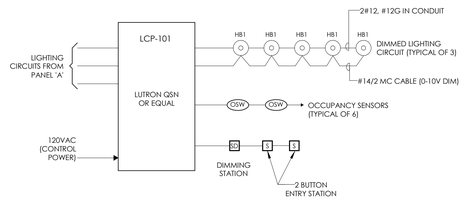
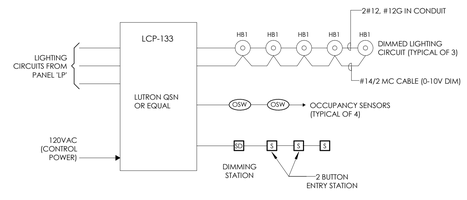


1 E800 **FITNESS 136 LIGHTING CONTROL RISER DIAGRAM**
NOT TO SCALE



2 E800 **GYMNASIUM 101 LIGHTING CONTROL RISER DIAGRAM**
NOT TO SCALE



3 E800 **GYMNASIUM 133 LIGHTING CONTROL RISER DIAGRAM**
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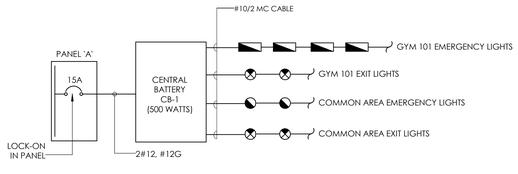
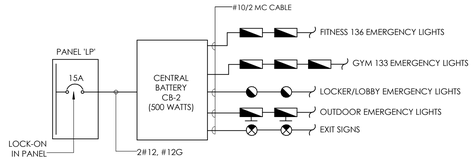
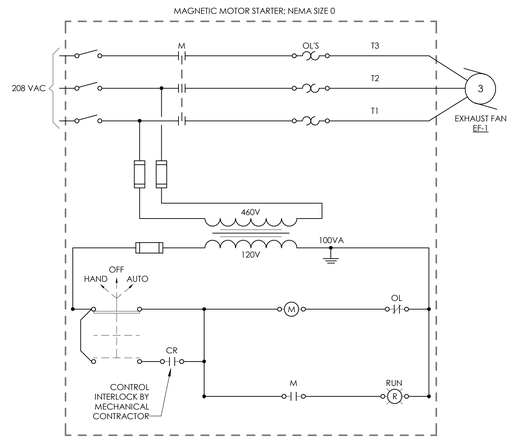


4 E800 **EXISTING BUILDING EMERGENCY LIGHTING RISER DIAGRAM**
NOT TO SCALE



5 E800 **NEW BUILDING EMERGENCY LIGHTING RISER DIAGRAM**
NOT TO SCALE



6 E800 **EXHAUST FAN EF-1 CONTROL SCHEMATIC**
NOT TO SCALE

Clark Patterson Lee
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Revision Schedule	DESCRIPTION	DATE	BY	CHKD
NO.				

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — No. 26488 — THOMAS G. BUCHER
5 - 30 - 17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	DCC	TGB

SCALE: As indicated

SHEET TITLE: ELECTRICAL DETAILS

PROJECT NUMBER: 13674.00

CC E800
DRAWING NUMBER

5/30/2017 8:02:42 AM
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PANEL PANEL A

VOLTAGE: **208/120V 3 PH 4W** | AIC RATING: **10K** | REMARKS:
FEEDER AMP: **100** | MAINS: **100A MLO** | MOUNTING: **FLUSH**
LUGS: | FEED: **TOP** | ENCLOSURE: **NEMA 1**

BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
20/1		ACTIVITY AREA LIGHTING	1500	1	A	2	1000	GYM LIGHTING CIRCUIT		20/1
20/1		OFFICE/LOBBY LIGHTING	1000	3	B	4	1000	GYM LIGHTING CIRCUIT		20/1
20/1		MEETING AREA LIGHTING	800	5	C	6	1000	GYM LIGHTING CIRCUIT		20/1
20/1		OUTDOOR REC AT RTU'S	360	7	A	8	50	LP-101 LIGHTING CONTROL PANEL		15/1
20/1		EXISTING BRANCH CIRCUIT	540	9	B	10	1134	EXHAUST FAN EF-1		20/3
20/1		EXISTING BRANCH CIRCUIT	540	11	C	12	1134	↓	↓	↓
20/1		EXISTING BRANCH CIRCUIT	540	13	A	14	1134	↓	↓	↓
20/1		EXISTING BRANCH CIRCUIT	540	15	B	16	45	CENTRAL BATTERY CB-1	LO	15/1
20/1		EXISTING BRANCH CIRCUIT	540	17	C	18	540	LCP-101 CONTROL POWER		20/1
20/1		EXISTING BRANCH CIRCUIT	540	19	A	20	540	EXISTING BRANCH CIRCUIT		20/1
20/1		EXISTING BRANCH CIRCUIT	540	21	B	22	540	EXISTING BRANCH CIRCUIT		20/1
20/1		EXISTING BRANCH CIRCUIT	540	23	C	24	540	EXISTING BRANCH CIRCUIT		20/1
20/1		EXISTING BRANCH CIRCUIT	540	25	A	26	540	EXISTING BRANCH CIRCUIT		20/1
20/1		EXISTING BRANCH CIRCUIT	540	27	B	28	540	EXISTING BRANCH CIRCUIT		20/1
20/1		EXISTING BRANCH CIRCUIT	540	29	C	30	540	EXISTING BRANCH CIRCUIT		20/1

Connected Load Per Phase — **PH A:** #REF! **PH B:** #REF! **PH C:** #REF!

	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps
Connected VA	6300	3402	0	4140	0	0	6035	19877	55.2
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	7875	3402	0	4140	0	0	6035	21452	59.5

PANEL SEP

VOLTAGE: **208/120 3 PH 4W** | AIC RATING: **35K** | REMARKS: PROVIDE WITH POWER MONITOR
FEEDER AMP: **2400** | MAINS: **2400A MCB** | MOUNTING: **PAD**
LUGS: | FEED: **BOTTOM** | ENCLOSURE: **NEMA 3R**

BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
1000/3		MDP	89500	1	A	2	105048	PANEL MDP2		1200/3
↓	↓	↓	89500	3	B	4	108138	↓	↓	↓
↓	↓	↓	89500	5	C	6	104791	↓	↓	↓
60/3		SURGE PROTECTIVE DEVICE	0	7	A	8	0	SPACE		
↓	↓	↓	0	9	B	10	0		↓	↓
↓	↓	↓	0	11	C	12	0	↓	↓	↓
		SPACE	0	13	A	14	0	SPACE		
↓	↓	↓	0	15	B	16	0	↓	↓	↓
↓	↓	↓	0	17	C	18	0	↓	↓	↓

Connected Load Per Phase — **PH A:** 194548 **PH B:** 197638 **PH C:** 194291

	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps
Connected VA	8328	85979	0	34810	0	0	457360	586477	1627.9
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	10410	85979	0	22405	0	0	457360	576154	1599.3

PANEL MPD2

VOLTAGE: **208/120 3 PH 4W** | AIC RATING: **35K** | REMARKS:
FEEDER AMP: **1200** | MAINS: **1200A MCB** | MOUNTING: **SURFACE**
LUGS: | FEED: **BOTTOM** | ENCLOSURE: **NEMA 1**

BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
100/3		PANEL LP	3665	1	A	2	9000	RTU-5		60/3
↓	↓	↓	2885	3	B	4	9000	↓	↓	↓
↓	↓	↓	1818	5	C	6	9000	↓	↓	↓
100/3		PANEL RP-1	2960	7	A	8	1000	ERV-5		15/3
↓	↓	↓	4740	9	B	10	1000	↓	↓	↓
↓	↓	↓	3900	11	C	12	1000	↓	↓	↓
225/3		PANEL RP-2	7350	13	A	14	60000	EWH-1	LO	700/3
↓	↓	↓	7520	15	B	16	60000	↓	↓	↓
↓	↓	↓	6980	17	C	18	60000	↓	↓	↓
100/3		PANEL RP-3	3480	19	A	20	0	PREPARED SPACE		
↓	↓	↓	5400	21	B	22	0	PREPARED SPACE		
↓	↓	↓	4500	23	C	24	0	PREPARED SPACE		
300/3		RTU-6	17593	25	A	26	0	PREPARED SPACE		
↓	↓	↓	17593	27	B	28	0	PREPARED SPACE		
↓	↓	↓	17593	29	C	30	0	PREPARED SPACE		
		PREPARED SPACE	0	31	A	32	0	PREPARED SPACE		
		PREPARED SPACE	0	33	B	34	0	PREPARED SPACE		
		PREPARED SPACE	0	35	C	36	0	PREPARED SPACE		
		PREPARED SPACE	0	37	A	38	0	PREPARED SPACE		
		PREPARED SPACE	0	39	B	40	0	PREPARED SPACE		
		PREPARED SPACE	0	41	C	42	0	PREPARED SPACE		

Connected Load Per Phase — **PH A:** 105048 **PH B:** 108138 **PH C:** 104791

	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps
Connected VA	8328	85979	0	34810	0	0	188860	317977	882.6
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	10410	85979	0	22405	0	0	188860	307654	854.0

PANEL LP

VOLTAGE: **208/120V 3 PH 4W** | AIC RATING: **10K** | REMARKS:
FEEDER AMP: **100** | MAINS: **100A MLO** | MOUNTING: **SURFACE**
LUGS: | FEED: **TOP** | ENCLOSURE: **NEMA 1**

BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
20/1		GYM 133 LIGHTING	965	1	A	2	810	FITNESS LIGHTING		20/1
20/1		GYM 133 LIGHTING	965	3	B	4	20	LCP-135 CONTROL POWER		20/1
20/1		GYM 133 LIGHTING	965	5	C	6	273	ELECTRICAL/STORAGE LIGHTS		20/1
20/1		LCP-133 CONTROL POWER	20	7	A	8	1320	WOMENS LOCKER AREA LIGHTS		20/1
20/1		CORRIDOR/OFFICE LIGHTS	700	9	B	10	1200	MENS LOCKER AREA LIGHTS		20/1
20/1		LOBBY LIGHTS	580	11	C	12	0	EMERGENCY BATTERY CB-2	LO	15/1
20/1		WALL PACKS	550	13	A	14	0	PREPARED SPACE		
20/1		SPARE	0	15	B	16	0	PREPARED SPACE		
20/1		SPARE	0	17	C	18	0	PREPARED SPACE		
20/1		SPARE	0	19	A	20	0	PREPARED SPACE		
20/1		SPARE	0	21	B	22	0	PREPARED SPACE		
20/1		SPARE	0	23	C	24	0	PREPARED SPACE		
20/1		SPARE	0	25	A	26	0	PREPARED SPACE		
20/1		SPARE	0	27	B	28	0	PREPARED SPACE		
20/1		SPARE	0	29	C	30	0	PREPARED SPACE		
20/1		SPARE	0	31	A	32	0	PREPARED SPACE		
20/1		SPARE	0	33	B	34	0	PREPARED SPACE		
20/1		SPARE	0	35	C	36	0	PREPARED SPACE		
20/1		SPARE	0	37	A	38	0	PREPARED SPACE		
20/1		SPARE	0	39	B	40	0	PREPARED SPACE		
20/1		SPARE	0	41	C	42	0	PREPARED SPACE		

Connected Load Per Phase — **PH A:** 3665 **PH B:** 2885 **PH C:** 1818

	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps
Connected VA	8328	0	0	0	0	0	40	8368	23.2
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	10410	0	0	0	0	0	40	10450	29.0

PANEL SCHEDULE NOTES:

LO PROVIDE PERMANENT LOCKING PROVISIONS
G PROVIDE GFCI CIRCUIT BREAKER
H PROVIDE RED HANDLE-ON CIRCUIT BREAKER

PANEL RP-1

VOLTAGE: **208/120V 3 PH 4W** | AIC RATING: **10K** | REMARKS:
FEEDER AMP: **100** | MAINS: **100A MLO** | MOUNTING: **SURFACE**
LUGS: | FEED: **TOP** | ENCLOSURE: **NEMA 1**

BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
20/1		RECEPTACLES - GYM 133	360	1	A	2	180	ROOFTOP SERVICE RECEPTACLE		20/1
20/1		RECEPTACLES - GYM 133	540	3	B	4	1500	EUH-1	↓	20/2
20/1		RECEPTACLES - GYM 133	900	5	C	6	1500	↓	↓	
20/1		RECEPTACLES - GYM 133	720	7	A	8	200	HWRP-1		15/1
20/1		SCOREBOARD RECEPTACLE	1200	9	B	10	750	BASKETBALL WINCH		20/1
20/1		ERV-5 CONTROL	100	11	C	12	750	BASKETBALL WINCH		20/1
20/1		SPARE	0	13	A	14	750	BASKETBALL WINCH		20/1
20/1		SPARE	0	15	B	16	750	BASKETBALL WINCH		20/1
20/1		SPARE	0	17	C	18	750	BASKETBALL WINCH		20/1
20/1		SPARE	0	19	A	20	750	BASKETBALL WINCH		20/1
20/1		SPARE	0	21	B	22	0	PREPARED SPACE		
20/1		SPARE	0	23	C	24	0	PREPARED SPACE		
20/1		SPARE	0	25	A	26	0	PREPARED SPACE		
20/1		SPARE	0	27	B	28	0	PREPARED SPACE		
20/1		SPARE	0	29	C	30	0	PREPARED SPACE		
20/1		SPARE	0	31	A	32	0	PREPARED SPACE		
20/1		SPARE	0	33	B	34	0	PREPARED SPACE		
20/1		SPARE	0	35	C	36	0	PREPARED SPACE		
20/1		SPARE	0	37	A	38	0	PREPARED SPACE		
20/1		SPARE	0	39	B	40	0	PREPARED SPACE		
20/1		SPARE	0	41	C	42	0	PREPARED SPACE		

Connected Load Per Phase — **PH A:** 2960 **PH B:** 4740 **PH C:** 4000

	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps
Connected VA	0	3200	0	3900	0	0	4600	11700	32.5
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	0	3200	0	3900	0	0	4600	11700	32.5

PANEL RP-2

VOLTAGE: **208/120V 3 PH 4W** | AIC RATING: **10K** | REMARKS:
FEEDER AMP: **225** | MAINS: **225 MLO** | MOUNTING: **SURFACE**
LUGS: | FEED: **TOP** | ENCLOSURE: **NEMA 1**

BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
20/1		RECEPTACLES - FITNESS 136	720	1	A	2	360	RECEPTACLE - FITNESS TELE		20/1
20/1		RECEPTACLES - FITNESS 136	360	3	B	4	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		RECEPTACLES - FITNESS 136	540	5	C	6	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		RECEPTACLES - FITNESS 136	720	7	A	8	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	9	B	10	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	11	C	12	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	13	A	14	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	15	B	16	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	17	C	18	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	19	A	20	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	21	B	22	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	23	C	24	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	25	A	26	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	27	B	28	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	29	C	30	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		FITNESS FLOOR BOX	720	31	A	32	1250	RECEPT. - FITNESS NORTH WALL		20/1
20/1		RECEPTACLES - FITNESS 136	0	33	B	34	360	RECEPTACLE - FITNESS TELE		20/1
20/1		SPARE	0	35	C	36	0	SPARE		20/1
20/1		SPARE	0	37	A	38	0	SPARE		20/1
20/1		SPARE	0	39	B	40	0	SPARE		20/1
20/1		SPARE	0	41	C	42	0	SPARE		20/1

Connected Load Per Phase — **PH A:** 10930 **PH B:** 9850 **PH C:** 9670

	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps
Connected VA	0	0	0	21810	0	0	8640	30450	84.5
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	0	0	0	15905	0	0	8640	24545	68.1

PANEL RP-3

VOLTAGE: **208/120V 3 PH 4W** | AIC RATING: **10K** | REMARKS:
FEEDER AMP: **100** | MAINS: **100A MLO** | MOUNTING: **FLUSH**
LUGS: | FEED: **TOP** | ENCLOSURE: **NEMA 1**

BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
20/1		RECEPTACLES - LAUNDRY	180	1	A	2	360	RECEPTACLE - LOCKER 122		20/1
20/1		RECEPTACLES - LOCKER 125	1080	3	B	4	540	RECEPTACLE - RESTROOM 121		20/1
20/1		RECEPTACLES - CORRIDOR 123	360	5	C	6	720	RECEPTACLE - OFFICE 132		20/1
20/1		RECEPTACLES - LOCKER 125	540	7	A	8	360	RECEPTACLE - RECEPTION		20/1
20/1		WASHER	1500	9	B	10	360	RECEPTACLE - RECEPTION		20/1
30/2		DRYER	1500	11	C	12	540	RECEPTACLE - RECEPTION		20/1
		↓	1500	13	A	14	540	RECEPTACLE - LOBBY 130		20/1
20/1	G	VENDING RECEPTACLE	1200	15	B	16	720	RECEPTACLE - CORRIDOR 129		20/1
20/1	G	VENDING RECEPTACLE	1200	17	C	18	180	ROOFTOP SERVICE RECEPTACLE		20/1
20/1		SPARE	0	19	A	20	0	PREPARED SPACE		
20/1		SPARE	0	21	B	22	0	PREPARED SPACE		
20/1		SPARE	0	23	C	24	0	PREPARED SPACE		
20/1		SPARE	0	25	A	26	0	PREPARED SPACE		
20/1		SPARE	0	27	B	28	0	PREPARED SPACE		
20/1		SPARE	0	29	C	30	0	PREPARED SPACE		
20/1		SPARE	0	31	A	32	0	PREPARED SPACE		
20/1		SPARE	0	33	B	34	0	PREPARED SPACE		
20/1		SPARE	0	35	C	36	0	PREPARED SPACE		
20/1		SPARE	0	37	A	38	0	PREPARED SPACE		
20/1		SPARE	0	39	B	40	0	PREPARED SPACE		
20/1		SPARE	0	41	C	42	0	PREPARED SPACE		

Connected Load Per Phase — **PH A:** 3480 **PH B:** 5400 **PH C:** 4500

	Lighting	HVAC	Motors	Recept.	Refrig	Kitchen	Misc	Total VA	Amps
Connected VA	0	0	0	13380	0	0	0	13380	37.1
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	0	0	0	11690	0	0	0	11690	32.4

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

UNIT			LOAD INFORMATION							SCOPE OF WORK REQUIRED
TAG	DESCRIPTION	LOCATION	POWER SOURCE	MCA	VOLTS	PHASE	WIRE	CONDUCTORS	CIRCUIT BREAKER	SCOPE OF WORK
CU-1	RELOCATED CONDENSING UNIT	ROOF	H	-	208	3	3	3#10, #10G, 1/2"C	3P-20A	1,2,3
CU-2	RELOCATED CONDENSING UNIT	ROOF	H	-	208	3	3	3#10, #10G, 1/2"C	3P-20A	1,2,3
CU-3	RELOCATED CONDENSING UNIT	ROOF	H	-	208	3	3	3#10, #10G, 1/2"C	3P-20A	1,2,3
RTU-1	ROOFTOP HVAC UNIT	GROUND	MDP	219	208	3	3	3#4/0, #4G, 2"C	3P-225A	1,7
RTU-2	ROOFTOP HVAC UNIT	GROUND	MDP	219	208	3	3	3#4/0, #4G, 2"C	3P-225A	1,7
RTU-3	ROOFTOP HVAC UNIT	ROOF	H	98	208	3	3	3#6, #10G, 1"C	3P-100A	1,7
RTU-4	ROOFTOP HVAC UNIT	ROOF	H	39.9	208	3	3	3#8, #10G, 3/4"C	3P-40A	1,7
RTU-5	ROOFTOP HVAC UNIT	ROOF	MDP-2	57.5	208	3	3	3#6, #10G, 1"C	3P-60A	7
ERV-5	ENERGY RECOVERY UNIT	ROOF	MDP-2	10	208	3	3	3#12, #12G, 1/2"C	3P-15A	7
RTU-6	ROOFTOP HVAC UNIT	ROOF	MDP-2	265	208	3	3	3#350, #4G, 2-1/2"C	3P-300A	7
EF-1	EXHAUST FAN	EXISTING GYM	A	13.30	208	3	3	3#12, #12G, 1/2"C	3P-20A	4
EWH-1	ELECTRIC WATER HEATER	NEW GYM	MDP-2	625	208	3	3	2 SETS: 3#500, #1/0 G, 3"C	3P-700A	5
EUH-1	ELECTRIC UNIT HEATER	NEW GYM	RP-1	18.0	208	1	3	2#12, #12G, 1/2"C	2P-20A	
HWRP-1	HOT WATER RETURN PUMP	NEW GYM	RP-1	FHP	120	1	3	2#12, #12G, 1/2"C	1P-20A	6

MECHANICAL SCHEDULE NOTES:

1. PROVIDE NEW HACR RATED CIRCUIT BREAKER IN EXISTING PANEL.
2. REFEED EXISTING EQUIPMENT IN NEW LOCATION.
3. PROVIDE DISCONNECT SWITCH AT UNIT.
4. PROVIDE NEMA SIZE 0 COMBINATION STARTER.
5. PROVIDE CIRCUIT BREAKER WITH PERMANENT LOCKING PROVISIONS.
6. PROVIDE MOTOR SWITCH AT UNIT.
7. DISCONNECT SWITCH AT UNIT BY MECHANICAL CONTRACTOR.

SCREW TO PANELBOARD COVER (TYP)

PANEL 'DL1'
120/208V - 3Ø, 4W
FED FROM
SWITCHBOARD 'MSB'
VIA XFMR 'T-DL'
AND PANEL 'DPP'

LAMINATED ENGRAVED NAMPELATE

SCREW TO PANELBOARD COVER (TYP)

PANEL 'DH'
277/480V - 3Ø, 4W
FED FROM
SWITCHBOARD 'MSB'
VIA PANEL 'DDP'

LAMINATED ENGRAVED NAMPELATE

NOTE: ALL PANELBOARDS, EXISTING AND NEW, SHALL HAVE A NEW NAMEPLATE. INFORMATION SHOWN IN THIS DETAIL ARE FOR REFERENCE ONLY. NAMEPLATE INFORMATION SHALL REFLECT PANELBOARD IT IS PLACED ON. FIELD VERIFY IF UNKNOWN.

1 / E900 **TYPICAL PANELBOARD NAMEPLATES DETAIL**
NOT TO SCALE

WARNING
AREA IN FRONT OF THIS ELECTRICAL PANEL MUST BE KEPT CLEAR FOR 36 INCHES OSHA-NEC REGULATIONS

NOTE: ALL EXISTING AND NEW PANELS ARE REQUIRED TO HAVE A "WARNING"/"CLEARANCE" LABEL ON THEM. IF ONE DOES NOT EXIST THEN PLACE A NEW LABEL.

2 / E900 **TYPICAL PANELBOARD WARNING LABEL**
NOT TO SCALE

DANGER
ARC FLASH & SHOCK HAZARD
APPROPRIATE PPE REQUIRED

FLASH PROTECTION
FLASH HAZARD CATEGORY: _4_
MIN. ARC RATING (cal.cm^2): _40_
FLASH PROTECTION BOUNDARY: _34_
PPE: (X) COTTON UNDERWEAR
( ) FR SHIRT AND PANTS (OR FR COVERALL)
(X) FULL FLASH SUIT AND HOOD
(X) SAFTY GLASSES OR GOGGLES
( ) HARD HAT
( ) HEARING PROTECTION
( ) LEATHER GLOVES AND SHOES

FLASH PROTECTION
208VAC SHOCK HARD WHEN: THE LOWER COVER IS OPEN
LIMITED APPROACH BOUNDARY: 48 INCHES
RESTRICTED APPROACH BOUNDARY: 20 INCHES
PROHIBITED APPROACH BOUNDARY: 10 INCHES
PPE: (X) CLASS 40
( ) V-RATING
( )

EQUIPMENT ID: 15763

3 / E900 **TYPICAL PANELBOARD HAZARD LABEL**
NOT TO SCALE

Clark Patterson Lee
ARCHITECTURE | ENGINEERING | PLANNING
6302 Fairview Rd., Suite 102
Charlotte, North Carolina, 28210
Tel: (800) 274-9000
Fax: (704) 331-0402
www.clarkpatterson.com

Revision Schedule

NO.	DATE	BY	CHKD	DESCRIPTION

SOUTH CAROLINA — CLARK PATTERSON LEE — No. C02227 — CERTIFICATE OF AUTHORIZATION

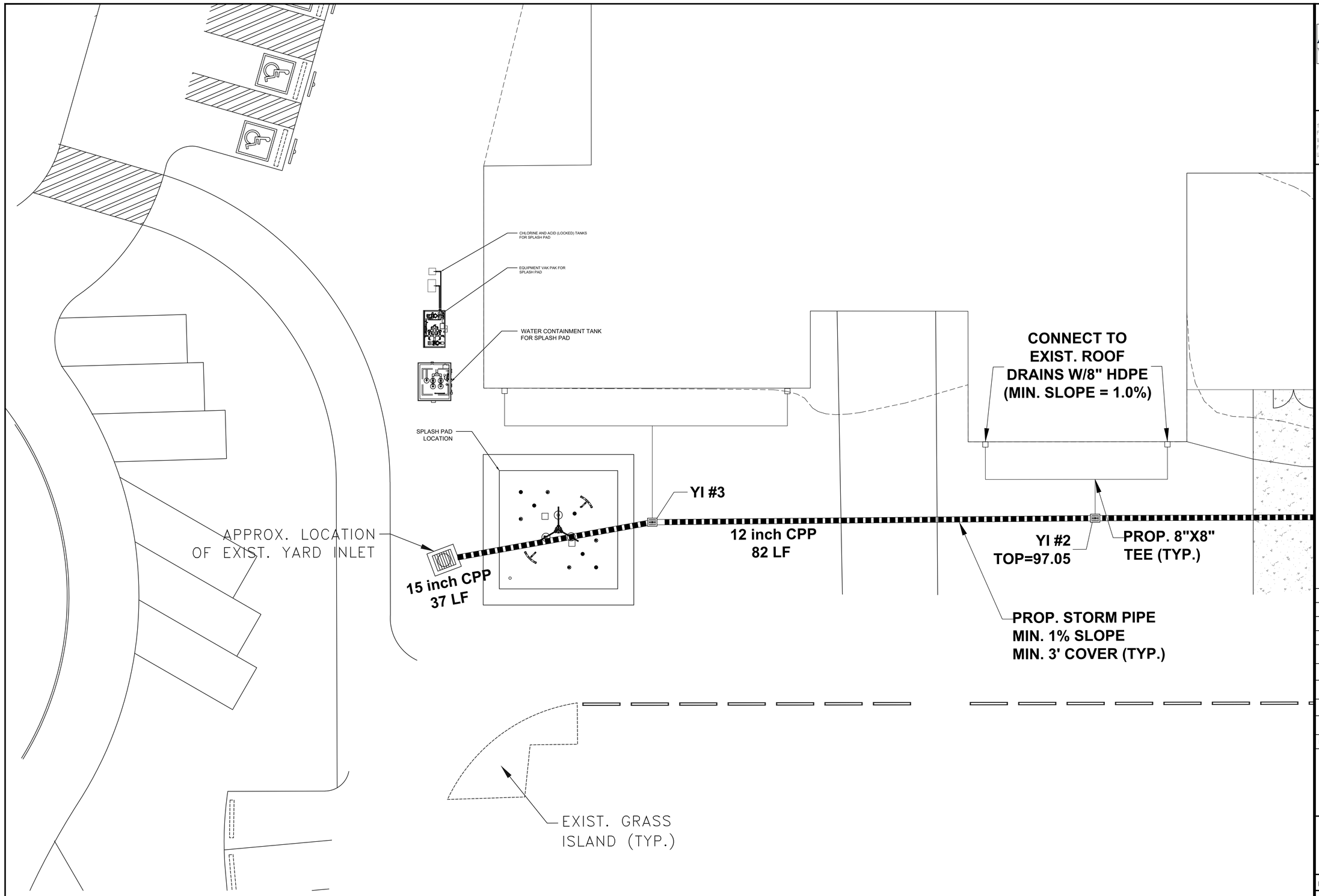
SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — No. 26[illegible] — THOMAS G. BUCHER
5 - 30 - 17

COLLETON COUNTY
RECREATION CENTER ADDITION AND RENOVATION
280 RECREATION LN, WALTERBORO, SC 29488

DATE	DRAWN	CHECKED
05/30/17	JMM	TGB

SCALE: As indicated
SHEET TITLE: ELECTRICAL SCHEDULE

PROJECT NUMBER: 13674.00
CC
E900
DRAWING NUMBER



1 SP-1 **OVERALL LAYOUT**
SCALE 1/8" = 1'-0"

0' 8' 16' 24'
1/8"=1'-0"

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AQUATIC FACILITY CONSULTING
P.O.BOX 654 DRAYTON, SC 29333
O: (864) 285-4487 C: (864) 386-1498

NO.	REVISION	DATE	BY
1	REVISED PER DHEC COMMENTS	05.30.17	TDE
0	ISSUE FOR PERMIT/CONSTRUCTION	02.16.17	TDE

COLLETON COUNTY RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

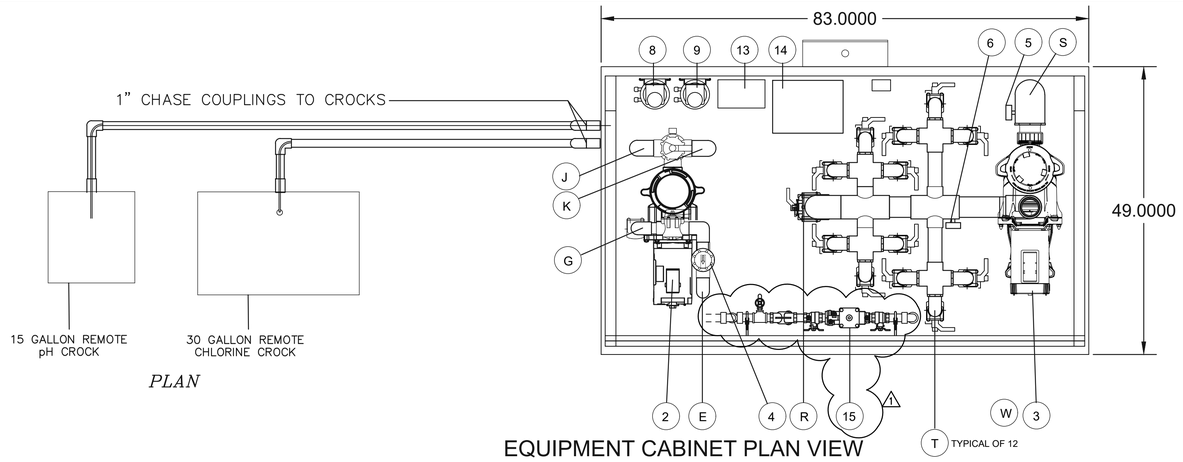
SPLASH PAD
COVER SHEET

DATE: 6.01.16

DRAWN BY: TDE CHECKED BY: TDE

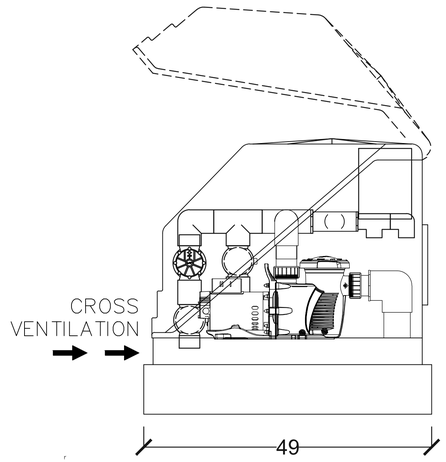
PROJECT NO: 0170

SP-1

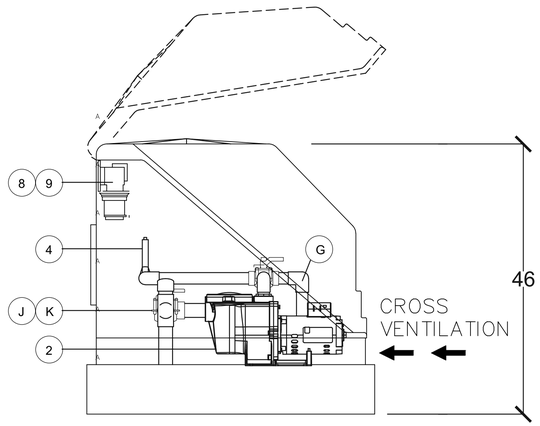


PLAN

EQUIPMENT CABINET PLAN VIEW

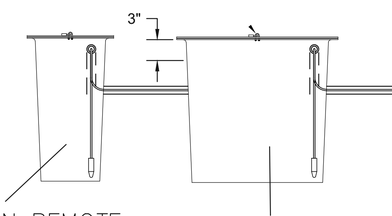


LEFT SIDE ELEVATION VIEW

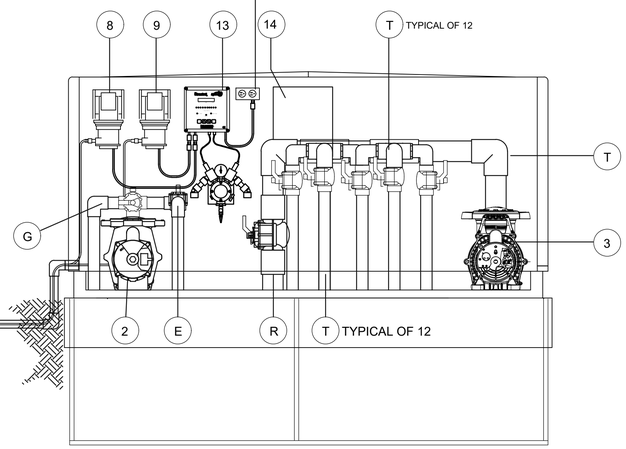


RIGHT SIDE ELEVATION VIEW

NOTE: LEAVE AT LEAST 3" OR CROCK BODY ABOVE GRADE TO PREVENT WATER SEEPAGE



INTERLOCKED CHEMICAL RECEPTACLE



FRONT ELEVATION VIEW

⚠1 COMMERCIAL VACUUM CARTRIDGE FILTER SYSTEM

CP200IWF-12CBRD 1,100 GALLONS IN 30 MINUTES

45 GPM @ .375 GPM FILTER RATE, 150 SQ. FT. TOTAL

1	1 – VAK PAK , DP150 , CARTRIDGE FILTER, 150 SQ. FT.
⚠1 2	1/2HP – PENTAIR RECIRCULATION PUMP WFE-2 1 PHASE 230 VOLTS, 45 GPM @ 55 TDH, 6" STRAINER
⚠1 3	5HP – PENTAIR FEATURE PUMP XFE-20 1 PHASE 230 VOLTS, 232 GPM @ 55 TDH, 6" STRAINER
4	1.5" FLO-VIS FLOWMETER, MODEL FV-C-15 10 TO 90 GPM
5	VAC GAUGE 0# TO -30#, 2" FACE
6	PRESSURE GAUGE, 0#-60#, 2" FACE
7	(4)150 SQ.FT. VACUUM CARTRIDGE FILTER ELEMENTS, 600 SQ.FT. TOTAL FOR 100% FEATURE PUMP FILTRATION
8	CL2 FEEDER BY STENNER , MODEL 45M5 , 50 GPD 30 GALLON REMOTE TANK, LABELED
9	PH FEEDER BY STENNER , MODEL 45M2 , 10 GPD 15 GALLON REMOTE TANK, LABELED
12	1 PHASE 12 CIRCUIT MAIN LUG BREAKER PANEL WITH VAPOR PROOF SERVICE LIGHT 125A 120/208-230V
13	PENTAIR MODEL AK110 CHEMICAL CONTROLLER
14	RAIN-DROP MODEL TMR-008 PUMP TIMER
⚠1 15	WATTS REGULATOR MODEL #009M2 RPZ BACKFLOW PREVENTER OR EQUAL

	VALVES AND PIPE SIZES	POOL
A	MAIN DRAIN (COUPLING ONLY)	6"
E	FILTER RETURN TO TANK	1.5"
G	PUMP TO WASTE	1.5"
I	FRESH WATER FILL (HOSE BIBB W/VAC BKR)	1"
J	FILTER TANK DRAIN	2"
K	RECIRCULATION SUCTION	2"
O	COLLECTOR TANK OVERFLOW	2"
R	FEATURE BYPASS TO TANK	3"
S	FEATURE SUCTION	4"
T	FEATURE RETURNS	(12)1.5"
U	___ GALLON COLLECTOR TANK	1100

NOTES:

ALL PIPING "NSF-PW" APPROVED / ALL ELECTRICAL WIRING IN COMPLIANCE WITH NEC
ELECTRICAL INTERLOCK OF ELECTRICAL FEED EQUIPMENT WITH RECIRCULATION PUMP
HYDRAULIC INTERLOCK OF EROSION FEED EQUIPMENT WITH RECIRCULATION PUMP FLOW
PROPORTIONING VALVES WHEN REQUIRED: 3" AND UNDER – JANDY DIVERTER
4" AND ABOVE – BUTTERFLY VALVE

COLLETON SPLASH PAD
WALTERBORO, SOUTH CAROLINA
REVISION 10/11/16 TK
CB502 CABINET

MODEL #CP200IWF-12CBRD
RECORD #27444
DHRS PRODUCT APPROVAL # –
DWG # CP-IWF-CBRD

COMMERCIAL FILTRATION/RECIRCULATION/DISPLAY SYSTEMS

VAK PAK inc.
P.O. Box 3264 – Jacksonville, Florida 32206 – (904) 353-4403

AQUATICS H2O
AQUATIC FACILITY CONSULTING
PO BOX 654 DRAYTON, SC 29333
O:(864) 285-4487 C:(864) 386-1498

NO.	REVISION	DATE	BY
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COLLETON COUNTY RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

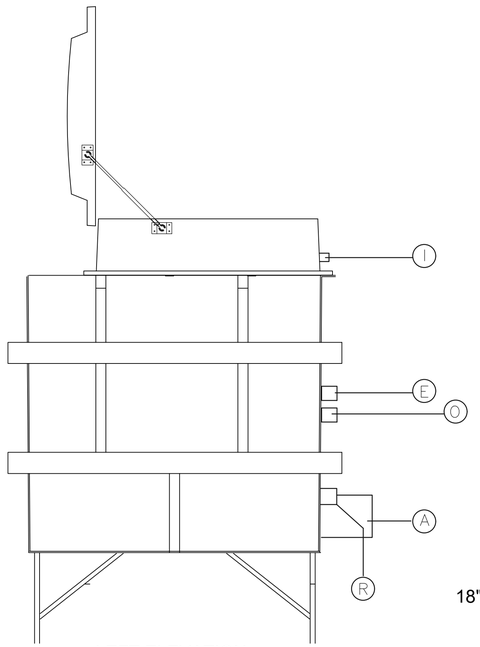
EQUIPMENT VAK PAK

DATE: 6.01.16

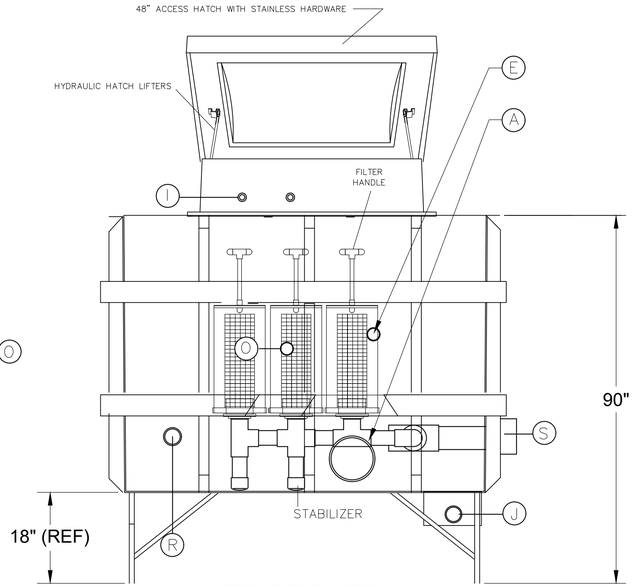
DRAWN BY: TDE CHECKED BY: TDE

PROJECT NO: 0170

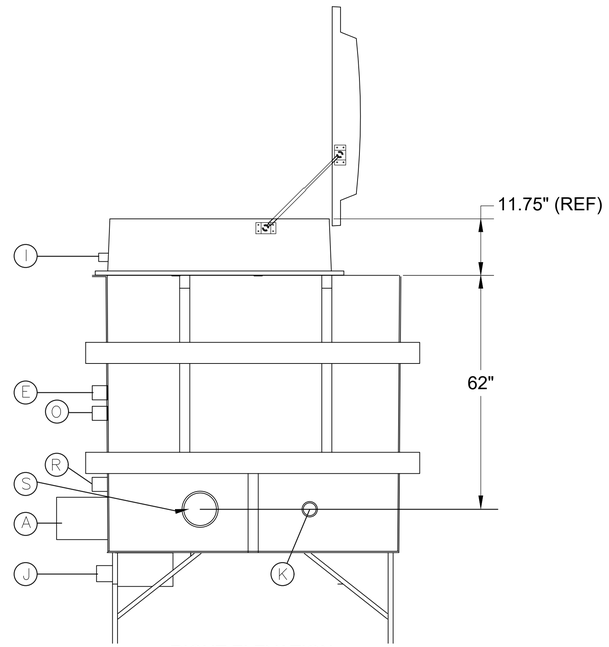
SP-2



LEFT ELEVATION

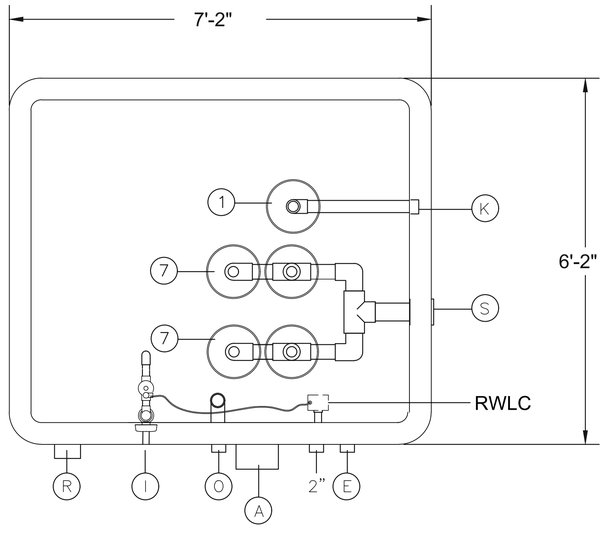


FRONT ELEVATION



RIGHT ELEVATION

	VALVES AND PIPE SIZES	POOL
A	MAIN DRAIN (COUPLING ONLY)	6"
E	FILTER RETURN TO TANK	1.5"
G	PUMP TO WASTE	1.5"
I	FRESH WATER FILL (HOSE BIBB W/VAC BKR)	1"
J	FILTER TANK DRAIN	2"
K	RECIRCULATION SUCTION	2"
O	COLLECTOR TANK OVERFLOW	2"
R	FEATURE BYPASS TO TANK	3"
S	FEATURE SUCTION	4"
T	FEATURE RETURNS	(12) 2"
U	1100 GALLON COLLECTOR TANK	1100



PLAN VIEW

NOTES:

1. ALL TANKS HAVE COVED CORNERS
2. ALL FILTER TANKS HAVE SLOPE FLOOR TO DRAIN.
3. ALL PIPING "NSF-PW" APPROVED / ALL ELECTRICAL WIRING IN COMPLIANCE WITH NEC
   ELECTRICAL INTERLOCK OF ELECTRICAL FEED EQUIPMENT WITH RECIRCULATION PUMP
   HYDRAULIC INTERLOCK OF EROSION FEED EQUIPMENT WITH RECIRCULATION PUMP FLOW
   PROPORTIONING VALVES WHEN REQUIRED: 2 1/2" AND UNDER – JANDY DIVERTER
   3" AND ABOVE – BUTTERFLY VALVE

COLLETON SPLASH PAD
1100 GAL. COLLECTOR TANK

MODEL # CT1000LP | RECORD # 27444 | DWG # CT1000LP

COMMERCIAL
FILTRATION/RECIRCULATION/DISPLAY SYSTEMS

VAK PAK inc.
P.O. Box 3264 – Jacksonville, Florida 32206 – (904) 353-4403

NO.	REVISION	DATE	BY
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0	ISSUE FOR PERMIT/CONSTRUCTION	02.16.17	TDE

AQUATICS H2O

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COLLETON COUNTY
RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

VAK PAK WATER
CONTAINMENT TANK

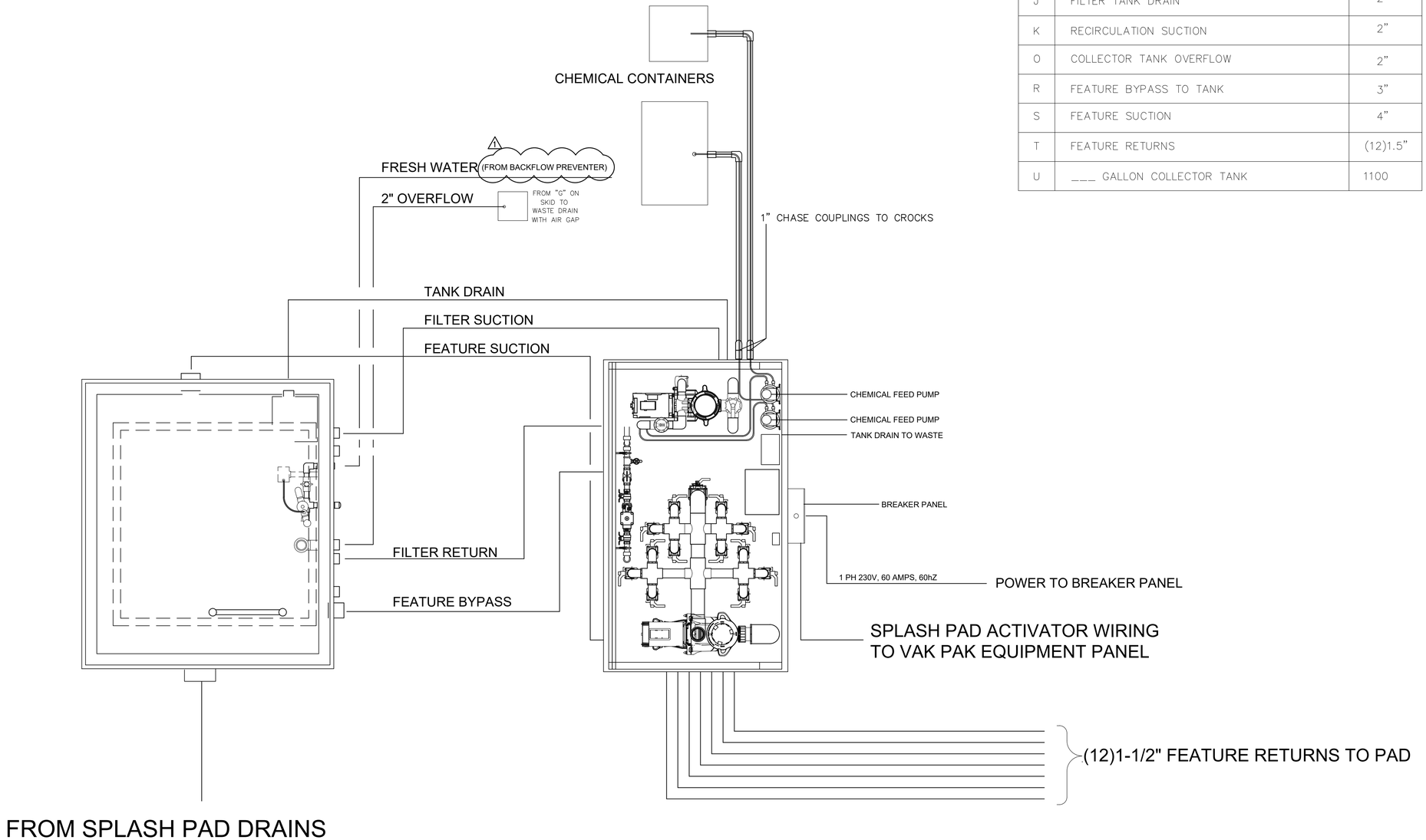
DATE: 6.01.16

DRAWN BY: TDE CHECKED BY: TDE

PROJECT NO: 0170

SP-3

	VALVES AND PIPE SIZES	POOL
A	MAIN DRAIN (COUPLING ONLY)	6"
E	FILTER RETURN TO TANK	1.5"
G	PUMP TO WASTE	1.5"
1 I	FRESH WATER FILL (RPZ BACKFLOW PREVENTER)	1"
J	FILTER TANK DRAIN	2"
K	RECIRCULATION SUCTION	2"
O	COLLECTOR TANK OVERFLOW	2"
R	FEATURE BYPASS TO TANK	3"
S	FEATURE SUCTION	4"
T	FEATURE RETURNS	(12)1.5"
U	___ GALLON COLLECTOR TANK	1100



COLLETON SPLASH PAD
WALTERBORO, SOUTH CAROLINA
REVISION 10/11/16 TK
CB502 CABINET

MODEL # CP200IWF-12CBRD
RECORD # 27444
DHRS PRODUCT APPROVAL # —
DWG # CP-IWF-CBRD

COMMERCIAL
FILTRATION/RECIRCULATION/DISPLAY
SYSTEMS

VAK PAK inc.
P.O. Box 3264 – Jacksonville, Florida 32206 – (904) 353-4403

AQUATICS H2O
AQUATIC FACILITY CONSULTING
P.O BOX 654 BRAYTON, SC 29535
O: (864) 285-4487 C: (864) 386-1498

NO.	REVISION	DATE	BY
1	REVISED PER DHEC COMMENTS	05.30.17	TDE
0	ISSUE FOR PERMIT/CONSTRUCTION	02.16.17	TDE

COLLETON COUNTY
RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

VAK PAK PLUMBING FROM EQUIPMENT TO CONTAINMENT TANK

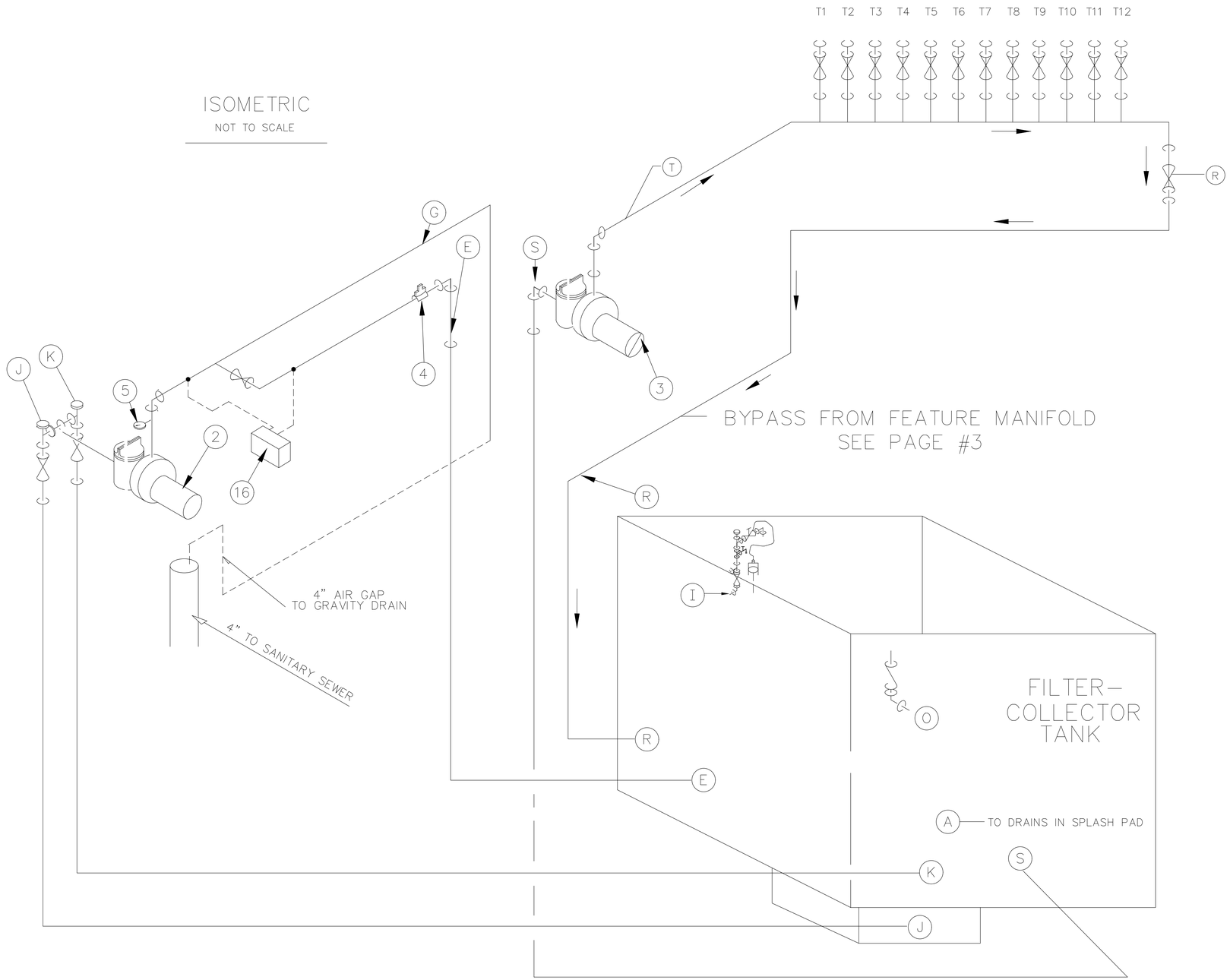
DATE: 6.01.16

DRAWN BY: TDE CHECKED BY: TDE

PROJECT NO: 0170

SP-4

ISOMETRIC
NOT TO SCALE



INTERACTIVE WATER FEATURE SYSTEM
ISOMETRIC
COLLETON SPLASH PAD
WALTERBORO, SOUTH CAROLINA

MODEL # CP200IWF-12
RECORD #27444
DHRS PRODUCT APPROVAL # —
DWG # CP-1WF-12

COMMERCIAL
FILTRATION/RECIRCULATION/DISPLAY
SYSTEMS

VAK PAK inc.
P.O. Box 3264 – Jacksonville, Florida 32206 – (904) 353-4403

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NO.	REVISION	DATE	BY
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0	ISSUE FOR PERMIT/CONSTRUCTION	02.16.17	TDE

COLLETON COUNTY
RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

VAK PAK ISOMETRIC
PLUMBING LAYOUT

DATE: 6.01.16

DRAWN BY: TDE CHECKED BY: TDE

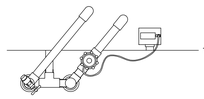
PROJECT NO: 0170

SP-5

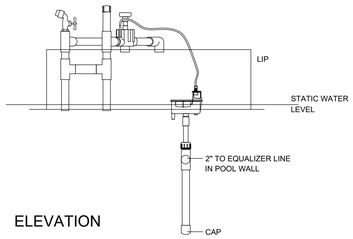
VAK PAK

RWLC

AUOTMATIC WATER FILL DEVICE



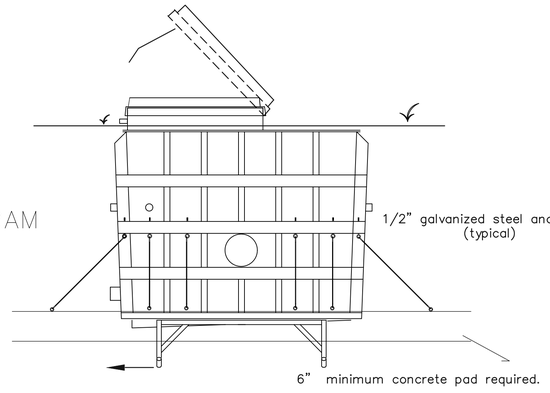
PLAN VIEW

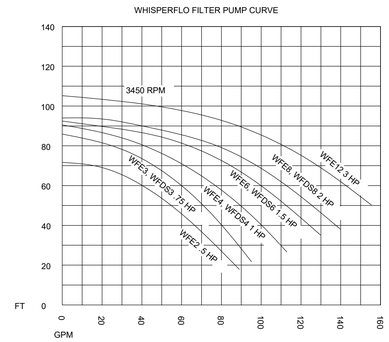


ELEVATION

LOCATED INSIDE COLLECTOR TANK

TYPICAL INSTALL DIAGRAM





PIPE CAPACITY IN GALLONS PER FOOT(U.S.)		
PIPE SIZE	GPF	TOTAL FOOTAGE
1"	.040	*
1.5"	.092	*
2"	.163	*
2.5"	.255	*
3"	.368	*
4"	.654	*
6"	1.47	*
8"	2.617	*

NOTES:

ALL EXTERNAL PLUMBING TO TANK BY OTHERS.

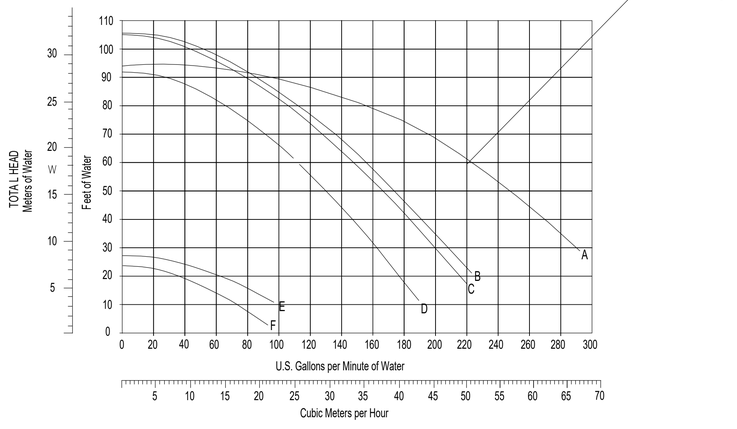
12" OF 3/8" PEA GRAVEL OR SAND REQUIRED FOR BACKFILL AROUND TANK.

GALVANIZED STEEL ANCHOR BOLTS ATTACHED TO EXTERIOR OF VAULT FOR CABLE ATTACHMENT BY OTHERS.

48" NON-CORROSIVE ACCESS HATCH WITH STAINLESS STEEL HARDWARE AND 60# HYDRAULIC PISTON TYPE LIFTERS.

TANK MEETS OR ACCEEDS FLORIDA BUILDING CODE AND FLORIDA DEPARTMENT OF HEALTH 64E-9 REQUIREMENTS FOR INTERACTIVE WATER FEATURE COLLECTOR TANKS.

PERFORMANCE CURVES WHISPERFLO XF



VAK PAK inc.

COMMERCIAL FILTRATION/RECIRCULATION/DISPLAY SYSTEMS
P.O. BOX 3264 – JACKSONVILLE, FLORIDA 32206 – (904) 353-4403

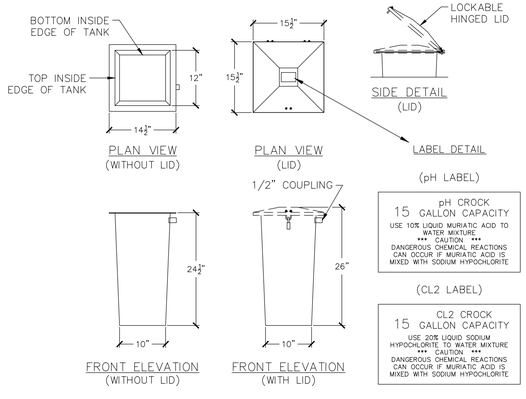
REMOTE CHEMICAL CROCK - 15 GALLON

IMPORTANT SAFETY INSTRUCTIONS

WHEN INSTALLING AND USING THIS SAFETY EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

1. READ AND FOLLOW ALL MANUFACTURERS OPERATION AND SAFETY INSTRUCTIONS.
2. WARNING-TO REDUCE THE RISK OF INJURY, DO NOT PERMIT CHILDREN TO USE THIS PRODUCT UNLESS THEY ARE CLOSELY SUPERVISED AT ALL TIMES.
3. SAVE THESE INSTRUCTIONS.

VAK PAK REMOTE CHEMICAL CROCKS ARE MADE OF REINFORCED VINYLESTER FIBERGLASS RESINAND ARE DESIGNED TO WITHSTAND HIGH EXTERNAL WATER TABLE PRESSURES WHEN BURIED AS RECOMMENDED. THE USE OF SOLID CHEMICAL SUBSTITUTES SUCH AS ISOCYANARIC STICKS OR TABLETS WHICH ARE DESIGNED TO DESOLVE IN WATER ARE NOT RECOMMENDED. THESE PRODUCTS ARE CALCIUM BASED AND TEND TO BLOCK OR GUM UP THE CHEMICAL FEED PUMP SUCTION TUBES AND STRAINERS.
VAK PAK RECOMMENDS A 1 PART LIQUID CHLORINE TO 5 PARTS WATER MIXTURE TO CROCKS INTENDED FOR USE AS ORP TYPE CHEMICAL CONTAINERS. USE ONLY SODIUM HYPOCHLORITE (LIQUID BLEACH). CONSULT WITH A CERTIFIED POOL SERVICE PROFESSIONAL OR CONTACT VAK PAK, INC. BEFORE SUBSTITUTING ANY OTHER CHEMICAL FOR THE RECOMMENDED MIXTURE OF SODIUM HYPOCHLORITE.
VAK PAK RECOMMENDS A 1 PART LIQUID MURIATIC ACID TO 10 PARTS WATER MIXTURE TO CROCKS INTENDED TO BE USED TO HOLD pH CONTROL CHEMICALS. CONSULT WITH A CERTIFIED POOL SERVICE PROFESSIONAL OR CONTACT VAK PAK, INC. BEFORE SUBSTITUTING ANY OTHER CHEMICAL FOR THE RECOMMENDED MIXTURE OF MURIATIC ACID AND WATER.



VAK PAK inc.

COMMERCIAL FILTRATION/RECIRCULATION/DISPLAY SYSTEMS
P.O. BOX 3264 – JACKSONVILLE, FLORIDA 32206 – (904) 353-4403

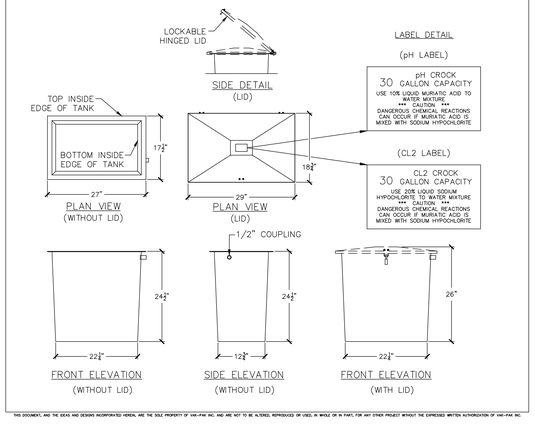
REMOTE CHEMICAL CROCK - 30 GALLON

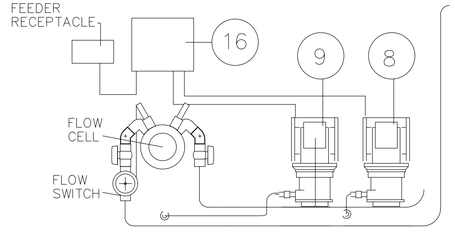
IMPORTANT SAFETY INSTRUCTIONS

WHEN INSTALLING AND USING THIS SAFETY EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

1. READ AND FOLLOW ALL MANUFACTURERS OPERATION AND SAFETY INSTRUCTIONS.
2. WARNING-TO REDUCE THE RISK OF INJURY, DO NOT PERMIT CHILDREN TO USE THIS PRODUCT UNLESS THEY ARE CLOSELY SUPERVISED AT ALL TIMES.
3. SAVE THESE INSTRUCTIONS.

VAK PAK REMOTE CHEMICAL CROCKS ARE MADE OF REINFORCED VINYLESTER FIBERGLASS RESIN AND ARE DESIGNED TO WITHSTAND HIGH EXTERNAL WATER TABLE PRESSURES WHEN BURIED AS RECOMMENDED. THE USE OF SOLID CHEMICAL SUBSTITUTES SUCH AS ISOCYANARIC STICKS OR TABLETS WHICH ARE DESIGNED TO DESOLVE IN WATER ARE NOT RECOMMENDED. THESE PRODUCTS ARE CALCIUM BASED AND TEND TO BLOCK OR GUM UP THE CHEMICAL FEED PUMP SUCTION TUBES AND STRAINERS.
VAK PAK RECOMMENDS A 1 PART LIQUID CHLORINE TO 5 PARTS WATER MIXTURE TO CROCKS INTENDED FOR USE AS ORP TYPE CHEMICAL CONTAINERS. USE ONLY SODIUM HYPOCHLORITE (LIQUID BLEACH). CONSULT WITH A CERTIFIED POOL SERVICE PROFESSIONAL OR CONTACT VAK PAK, INC. BEFORE SUBSTITUTING ANY OTHER CHEMICAL FOR THE RECOMMENDED MIXTURE OF SODIUM HYPOCHLORITE.
VAK PAK RECOMMENDS A 1 PART LIQUID MURIATIC ACID TO 10 PARTS WATER MIXTURE TO CROCKS INTENDED TO BE USED TO HOLD pH CONTROL CHEMICALS. CONSULT WITH A CERTIFIED POOL SERVICE PROFESSIONAL OR CONTACT VAK PAK, INC. BEFORE SUBSTITUTING ANY OTHER CHEMICAL FOR THE RECOMMENDED MIXTURE OF MURIATIC ACID AND WATER.





CHEMICAL EQUIPMENT
(SHOWN REMOTE FOR CLARITY)

INTERACTIVE WATER FEATURE SYSTEM
COMPONENT DETAILS
COLLETON PARK SPLASH PAD
WALTERBORO, SOUTH CAROLINA

MODEL # CP200IWF-12
RECORD # 27444
DHRS PRODUCT APPROVAL # _
DWG # CP-IWF-12

COMMERCIAL FILTRATION/RECIRCULATION/DISPLAY SYSTEMS

VAK PAK inc.
P.O. Box 3264 – Jacksonville, Florida 32206 – (904) 353-4403

AQUATICS H2O
AQUATIC FACILITY CONSULTING
P.O.BOX 654 DRAYTON, SC 29333
O: (864) 285-4487 C: (864) 386-1498

NO.	REVISION	DATE	BY
1	REVISED PER DHEC COMMENTS	05.30.17	TDE
0	ISSUE FOR PERMIT/CONSTRUCTION	02.16.17	TDE

COLLETON COUNTY RECREATION CENTER

280 Recreation Lane.
Walterboro, SC 29488

VAK PAK WATER LEVEL CONTROL AND CHEMICAL CROCKS

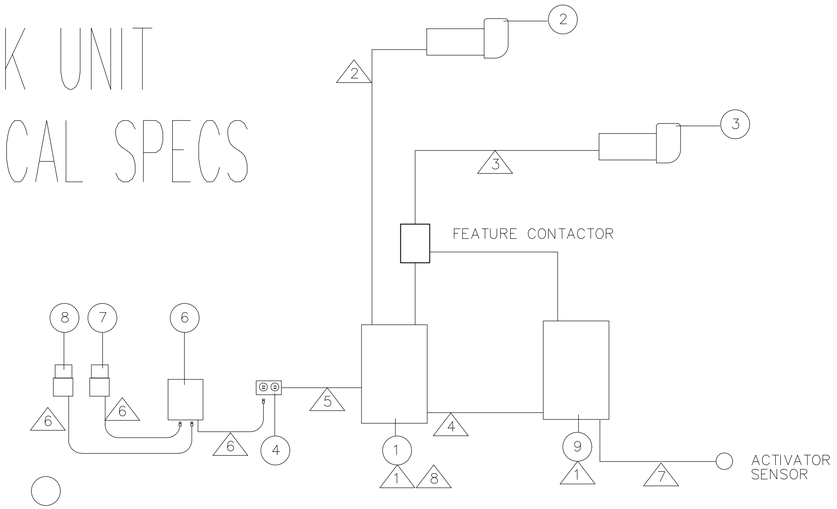
DATE: 6.01.16

DRAWN BY: TDE CHECKED BY: TDE

PROJECT NO: 0170

SP-6

VAK PAK UNIT ELECTRICAL SPECS



#	manufacture	part#	description
1	SIEMENS	WO1224ML1125CU	Main lug breaker panel, 12 circuit,
			125A capacity, 1 phase 120,208-230v
2	PENTAIR	WFE-2	1/2Hp Recirculation pump, 1 ph 230v
3	PENTAIR	XFE-20	5hp Feature pump, 1ph 208-230v
4	LEVITON	5320	chemical feeder receptacle, 115v
6	PENTAIR	AK110	Chemical controller, 115v
7	STENNER	45M5	Liquid Chlorine feeder, 115v
8	STENNER	45M2	Liquid pH feeder, 115v

FEEDER AND CIRCUIT SCHEDULE

#	CONDUCTORS PHASE	NEUTRAL	GROUND	CONDUIT	REMARKS
1					PANEL FEED
2	2-#12		1-#12	1/2"	UL SEALTITE
3	2-#10		1-#10	3/4"	UL SEALTITE
4	1-#12	1-#12		1/2"	SEALTITE TO LIGHT
5	1-#14	1-#14	1-#14	1/2"	SEALTITE TO RECEPT.
6	1-#12	1-#12	1-#12		CORD AND PLUG
7	2-#16	1-#16			3 CONDUCTOR CORD
8	INDICATES WIRE AND CONDUIT INSTALLED BY OTHERS				

ALL 1 PHASE BREAKERS ARE GFCI RATED

PANEL SCHEDULE

115/208-230V, 1 PHASE, 3 WIRE, 60Hz TYPE Q SURFACE MOUNT, 125A MLU

CIRCUIT	POLES	TRIP	LOAD	AMPS
1	2	15A	RECIRC. PUMP W/INTERLOCKED REC.	8.8
2	2	30A	FEATURE PUMP	19.9
6	1	15A	SERVICE LIGHT	1.5
7	1	15A	TIME CONTROLLER	10.5
			TOTAL LOAD	40.7

VAK PAK inc.
P.O. Box 3264 - Jacksonville, Florida 32206 - (904) 353-4403

COMMERCIAL - RESIDENTIAL
FILTRATION / IRRIGATION / FOUNTAIN
PUMP STATIONS - COMPONENTS

DRAWN/DATE	01/17
RECORD #	27444
SCALE	not to scale
SHEET	1 of 1
REVISIONS	

COLLETON PARK SPLASH PAD
MODEL# CP2001WF-12
1 PHASE 230 VOLTS

AQUATICS H2O

AQUATIC FACILITY CONSULTING
P.O.BOX 654 DRAYTON, SC 29333
O: (864) 285-4487 C: (864) 386-1498

NO.	REVISION	DATE	BY
1	REVISED PER DHEC COMMENTS	05.30.17	TDE
0	ISSUE FOR PERMIT/CONSTRUCTION	02.16.17	TDE

COLLETON COUNTY RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

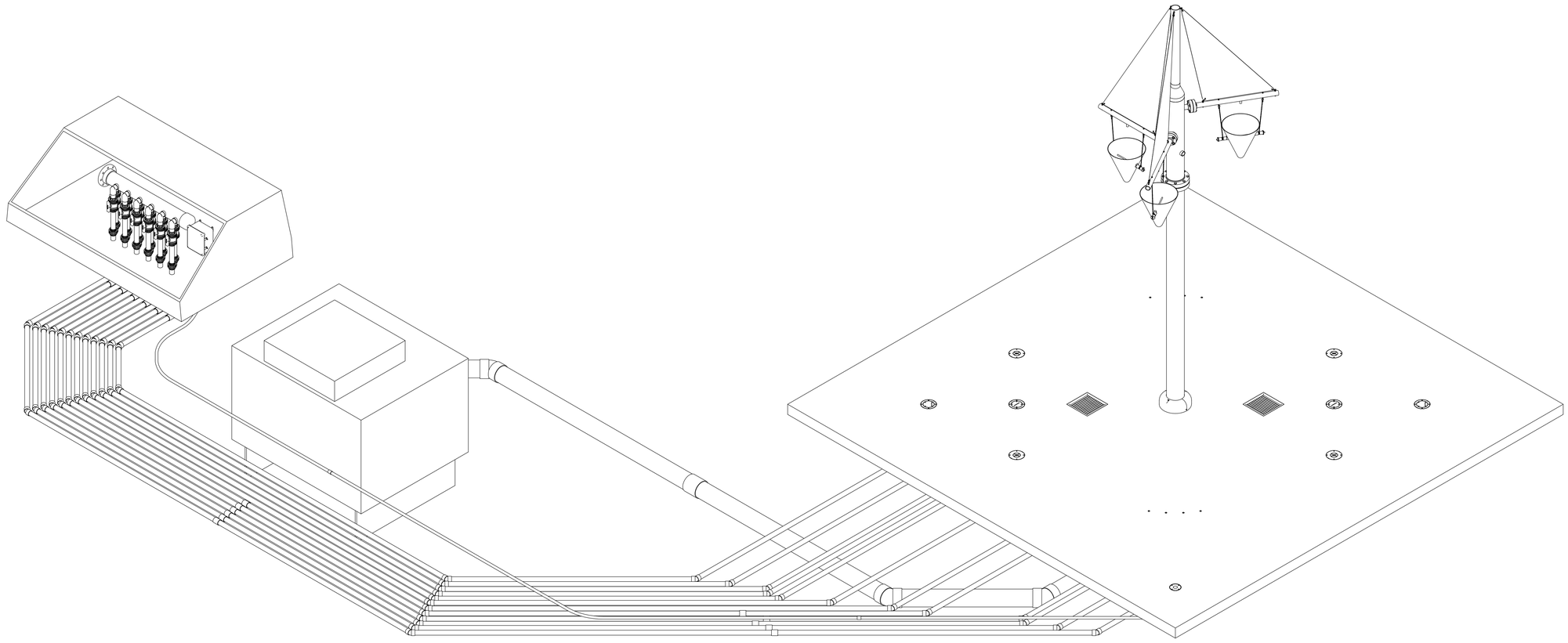
VAK PAK ELECTRICAL

DATE: 6.01.16

DRAWN BY: TDE CHECKED BY: TDE

PROJECT NO: 0170

SP-7



IMPORTANT NOTICE:
THIS LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. FINAL LAYOUT PLAN MUST BE STAMPED BY CERTIFIED ENGINEER IN ACCORDANCE WITH ALL APPLICABLE LAWS.

Rain Drop® Products, LLC
2121 COTTAGE ST. ASHLAND, OHIO 44805
419.207.1229 WWW.RAIN-DROP.COM

PROJECT

COLLETON COUNTY RECREATIONAL CENTER
WALTERBORO, SC 29488

SIZE	PROJECT #	DWG NO	REV
B	13619	13619-2016-1SC-WALTERBORO-COLLETON CO REC CTR-11	1

DRAWN gwills 9/8/2016 SHEET OF 7

C:\Vault workspace\Designs\2016\13619-2016-1SC-WALTERBORO-COLLETON CO REC CTR\13619-2016-1SC-WALTERBORO-COLLETON CO REC CTR-11.idw

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NO.	REVISION	DATE	BY
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COLLETON COUNTY RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

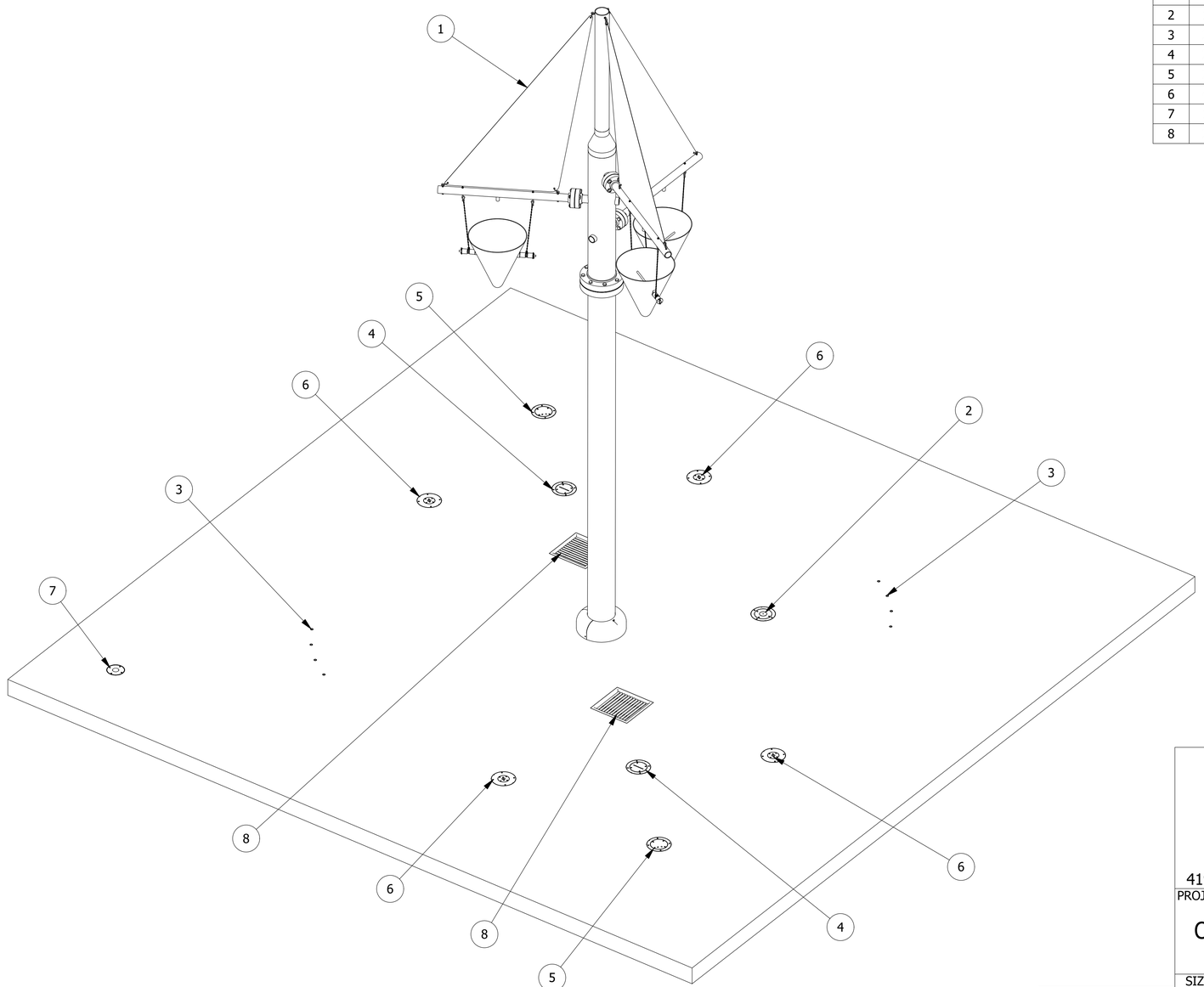
SPLASHPAD ISOMETRIC LAYOUT

DATE: 6.01.16

DRAWN BY: TDE CHECKED BY: TDE

PROJECT NO: 0170

SP-8



PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	GPM
1	1	TBKT-004-OM	TUMBLE BUCKET X3 W/ SAIL, OMNI	46.7
2	1	TIER-002-OM	TWO TIER TOOLIP JET, OMNI	12.3
3	2	PPJT-004	POP JET, CURVED, 4 OUTLET	27
4	2	PCJT-001-OM	PEACOCK JET, OMNI	18.5
5	2	FNJT-003-OM	FAN JET, OMNI	7.6
6	4	SLJT-003-OM	SLANT JET, OMNI	3.8
7	1	ACT-A001	ACTIVATOR, STEP	N/A
8	2	DRN12-002	DRAIN-12X12X12 FIBERGLASS-6"	135

NOTES -
1 - DESIGNS ARE PREPARED FOR REVIEW ONLY AND NOT INTENDED AS A CONSTRUCTION DOCUMENT.
2 - CONCRETE PAD LAYOUT AND SIZE ARE FOR REFERENCE ONLY AND MAY BE ALTERED TO BEST ACCOMODATE EXISTING FIELD CONDITIONS.
3 - CONSTRUCTION SHALL CONFORM TO THE LATEST STATE DEPARTMENT OF HEALTH STANDARDS AND SPECIFICATIONS, AND LOCAL SUPPLIMENTAL CODES AND SPECIFICATIONS.
4 - CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL CONSTRUCTION MATERIAL AND LABOR TO PROPERLY CONNECT AND INSTALL EQUIPMENT AND WATER FEATURES.
5 - AN APPROVED SET OF PLANS SHALL BE AVAILABLE ON THE JOBSITE AT ALL TIMES.

IMPORTANT NOTICE:
THIS LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. FINAL LAYOUT PLAN MUST BE STAMPED BY CERTIFIED ENGINEER IN ACCORDANCE WITH ALL APPLICABLE LAWS.

Rain Drop® Products, LLC
2121 COTTAGE ST. ASHLAND, OHIO 44805
419.207.1229 WWW.RAIN-DROP.COM

PROJECT
COLLETON COUNTY RECREATIONAL CENTER
WALTERBORO, SC 29488

SIZE	PROJECT #	DWG NO	REV
B	13619	13619-2016-1SC-WALTERBORO-COLLETON CO REC CTR-11	1

DRAWN gwills 9/8/2016 SHEET OF 7

C:\Vault workspace\Designs\2016\13619-2016-1SC-WALTERBORO-COLLETON CO REC CTR\13619-2016-1SC-WALTERBORO-COLLETON CO REC CTR-11.idw

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AQUATIC FACILITY CONSULTING
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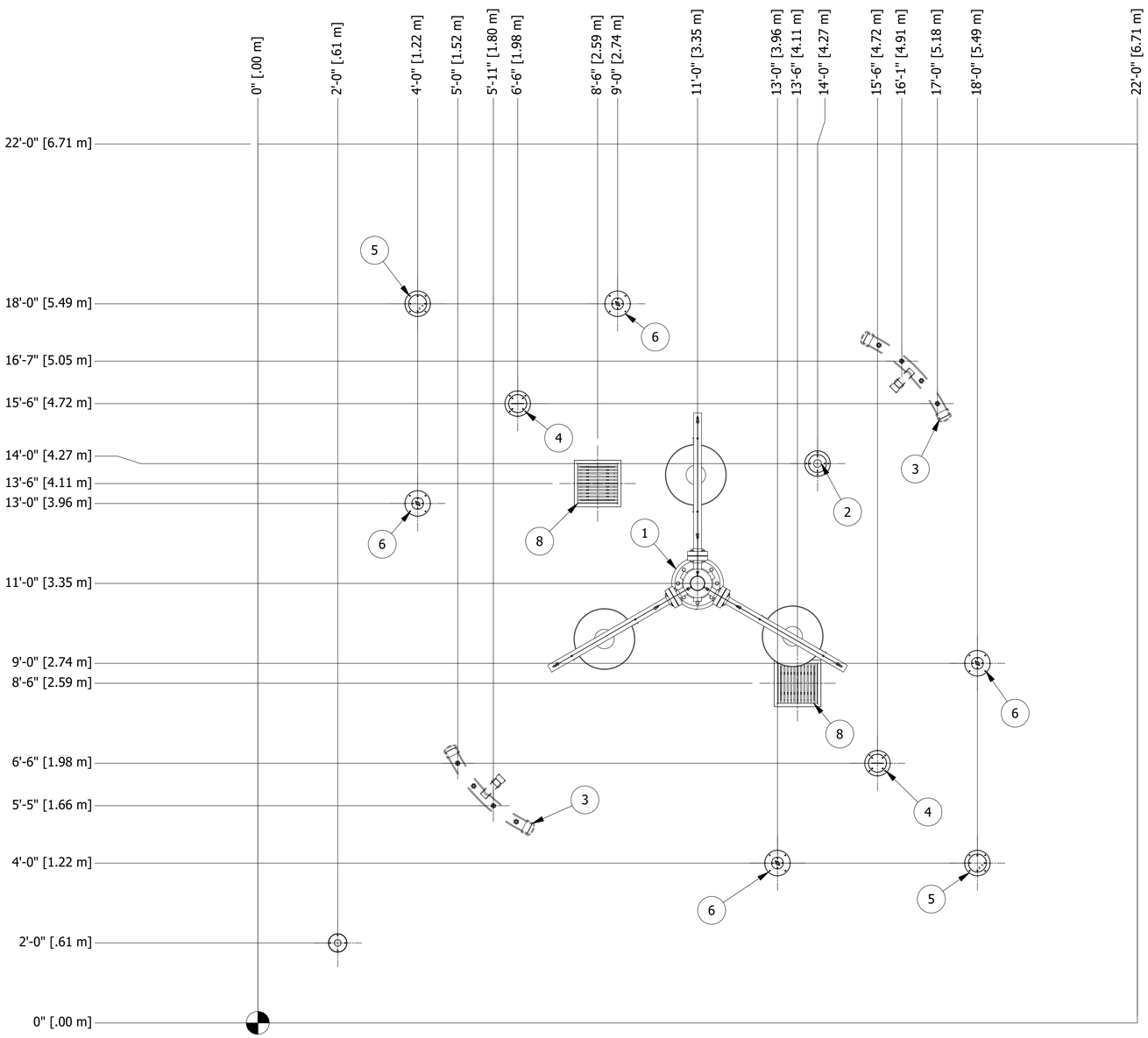
COLLETON COUNTY RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

SPLASHPAD FEATURE LAYOUT

DATE: 6.01.16
DRAWN BY: TDE CHECKED BY: TDE
PROJECT NO: 0170

SP-9



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TBKT-004-OM	TUMBLE BUCKET X3 W/ SAIL, OMNI
2	1	TIER-002-OM	TWO TIER TOOLIP JET, OMNI
3	2	PPJT-004	POP JET, CURVED, 4 OUTLET
4	2	PCJT-001-OM	PEACOCK JET, OMNI
5	2	FNJT-003-OM	FAN JET, OMNI
6	4	SLJT-003-OM	SLANT JET, OMNI
7	1	ACT-A001	ACTIVATOR, STEP
8	2	DRN12-002	DRAIN-12X12X12 FIBERGLASS-6"

CONCRETE -
1 - CONCRETE PAD LAYOUT AND SIZE ARE FOR REFERENCE ONLY AND MAY BE ALTERED TO BEST ACCOMODATE EXISTING FIELD CONDITIONS.
2 - ALL CONCRETE SHALL BE 3000 PSI MINIMUM 28 DAY COMPRESSIVE STRENGTH WITH 6% AIR ENTRAPMENT.
3 - GRADE SHALL BE SLOPED 2% FROM THE PERIMETER TO THE MAIN DRAINS.
4 - A 5 FOOT OVERSPRAY BUFFER ZONE IS INCORPORATED BETWEEN THE PERIMETER AND THE INTENDED AREA OF INFLUENCE, AND IS CALCULATED INTO THE OVERALL DIMENSIONS OF THE CONCRETE PAD.
5 - ALL REINFORCEMENT STEEL SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH ACI 318-99, AND CRSI MSP-1-01.
6 - ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
7 - EACH WATER FEATURE SHALL BE LOCATED WITHIN A SINGLE CONCRETE PANEL UNLESS OTHERWISE NOTED.
8 - OMNIPOD COVER MUST BE CAST FLUSH AND LEVEL WITH THE FINISHED CONCRETE SURFACE.
9 - SURFACE SPRAY NOZZLES SHALL BE CAST FLUSH AND LEVEL WITH THE FINISHED CONCRETE.
10 - EARTHFORMS MAY BE USED UNDER SLAB.
11 - SPRAYGROUND AREA IS 484 SQUARE FEET [45 SQUARE METERS]

IMPORTANT NOTICE:
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PROJECT
COLLETON COUNTY RECREATIONAL CENTER
WALTERBORO, SC 29488

COLLETON COUNTY RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

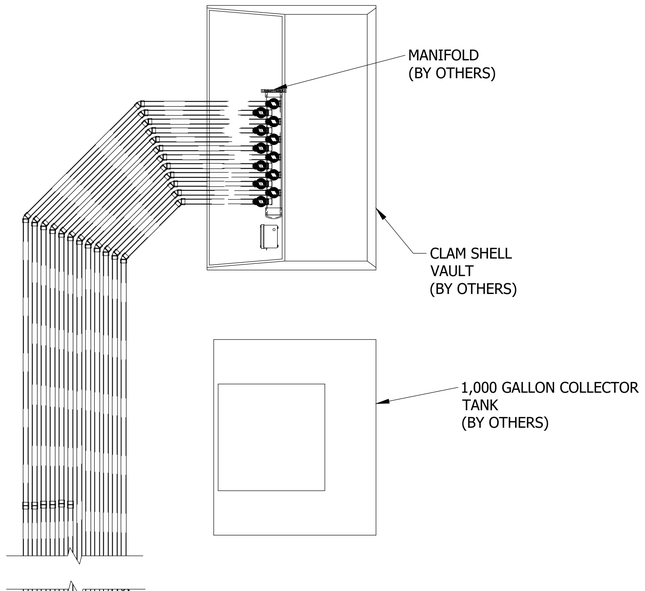
SPLASHPAD DIMENSION LAYOUT

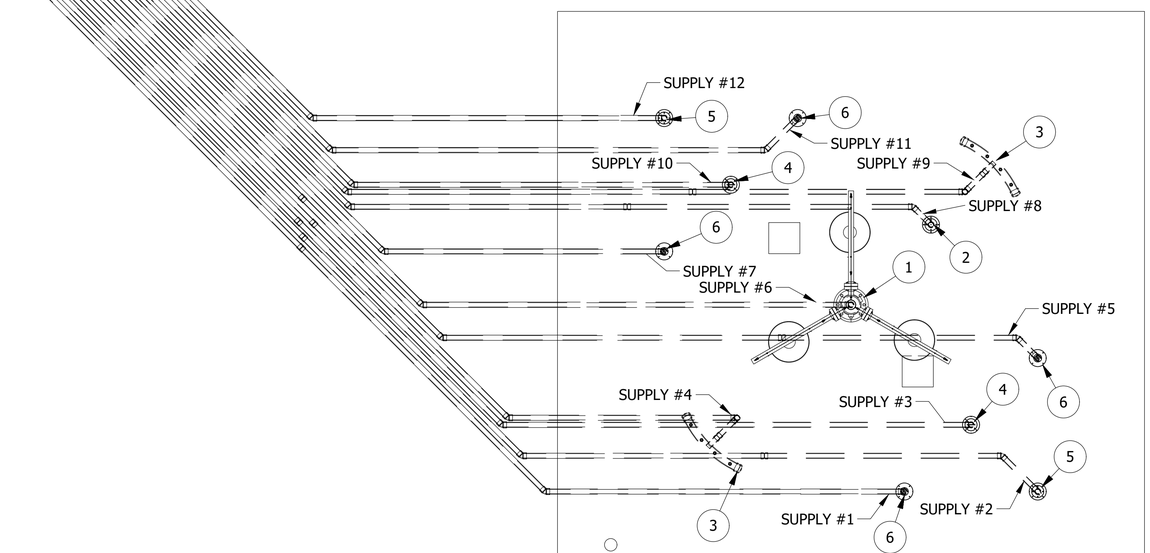
SIZE	PROJECT #	DWG NO	REV
B	13619	13619-2016-1SC-WALTERBORO-COLLETON CO REC CTR-11	1

DRAWN gwills 9/8/2016 SHEET OF 7

DATE: 6.01.16
DRAWN BY: TDE CHECKED BY: TDE
PROJECT NO: 0170

SP-10





PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TBKT-004-OM	TUMBLE BUCKET X3 W/ SAIL, OMNI
2	1	TIER-002-OM	TWO TIER TOOLIP JET, OMNI
3	2	PPJT-004	POP JET, CURVED, 4 OUTLET
4	2	PCJT-001-OM	PEACOCK JET, OMNI
5	2	FNJT-003-OM	FAN JET, OMNI
6	4	SLJT-003-OM	SLANT JET, OMNI

PVC PIPING -
1 - SCHEDULE 80 PVC PIPE AND SOCKET TYPE FITTINGS SHALL CONFORM TO ASTM D2467, ASTM D1785-12, AND ALL APPLICABLE LOCAL CODES.
2 - ALL PVC PIPING SHALL BE STAMPED WITH N.S.F. SEAL OF APPROVAL FOR POTABLE WATER.
3 - ALL PIPING SHALL BE LABELED WITH DIRECTIONAL FLOW ARROWS.
4 - ALL PIPING TO BE PRESSURE TESTED BEFORE POURING CONCRETE.
5 - PIPING DESIGNED TO CARRY THE REQUIRED QUANTITIES OF WATER AT VELOCITIES NOT TO EXCEED 10 FPS OR PER LOCAL CODES AND REGULATIONS.
6 - SUPPLY LINES TO BE CHEMICALLY WELDED TO OMNIPOD FEATURE RECIEVER.
7 - ALL PIPING TO BE 2" SCHEDULE 80 PVC UNLESS OTHERWISE SPECIFIED.
8 - DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL PIPE LOCATIONS SHALL BE FIELD VERIFIED AND COORDINATED WITH CONTRACTOR.

IMPORTANT NOTICE:
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Rain Drop® Products, LLC
2121 COTTAGE ST. ASHLAND, OHIO 44805
419.207.1229 WWW.RAIN-DROP.COM

PROJECT

COLLETON COUNTY RECREATIONAL CENTER
WALTERBORO, SC 29488

SIZE	PROJECT #	DWG NO	REV
B	13619	13619-2016-1SC-WALTERBORO-COLLETON CO REC CTR-11	1

DRAWN gwills 9/8/2016 SHEET OF 7

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AQUATIC FACILITY CONSULTING
P.O.BOX 654 DRAYTON, SC 29333
O: (864) 285-4487 C: (864) 386-1498

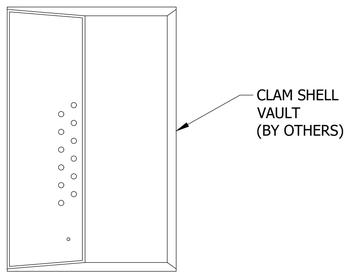
NO.	REVISION	DATE	BY
1	REVISED PER DHEC COMMENTS	05.30.17	TDE
0	ISSUE FOR PERMIT/CONSTRUCTION	02.16.17	TDE

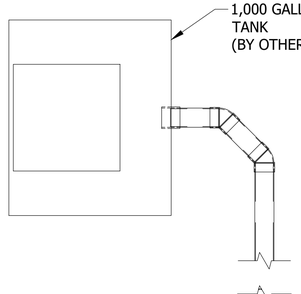
COLLETON COUNTY RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

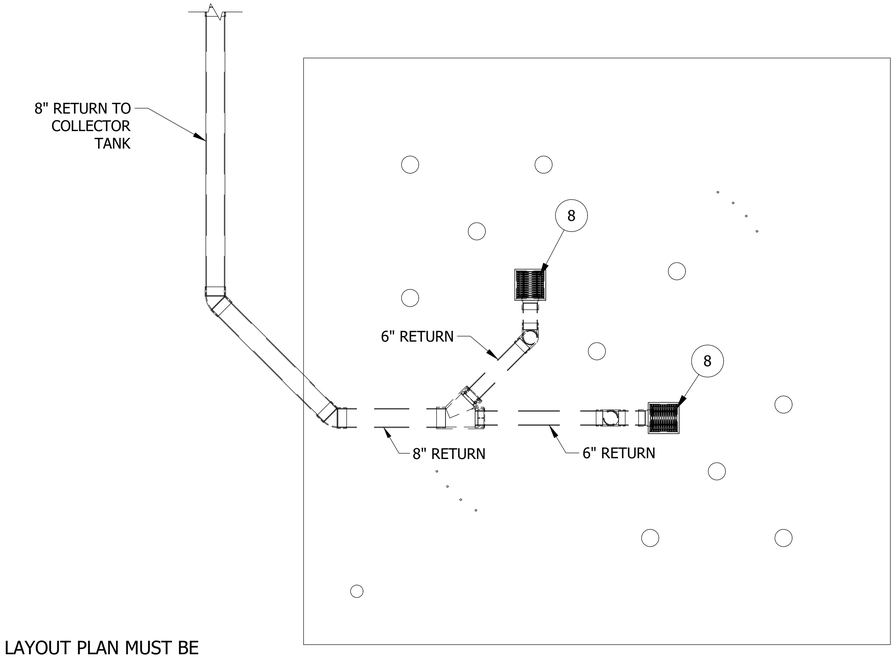
SPLASHPAD PLUMBING LAYOUT

DATE: 6.01.16
DRAWN BY: TDE CHECKED BY: TDE
PROJECT NO: 0170

SP-11







PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
8	2	DRN12-002	DRAIN-12X12X12 FIBERGLASS-6"

DRAINS -
1 - DRAIN PIPE AND FITTINGS SHALL CONFORM TO ASTM D2665. CONNECTIONS SHALL BE A SOLVENT WELD, UNLESS OTHERWISE SPECIFIED.
2 - ALL PVC PIPING SHALL BE STAMPED WITH N.S.F. SEAL OF APPROVAL FOR POTABLE WATER.
3 - ALL PIPING SHALL BE LABELED WITH DIRECTIONAL FLOW ARROWS.
4 - SOLVENT WELD CEMENT FOR THE SOCKET CONNECTIONS SHALL MEET THE REQUIREMENTS OF ASTM D2564.
5 - PIPING SHALL BE DESIGNED TO CARRY THE REQUIRED QUANTITIES OF WATER AT VELOCITIES NOT EXCEEDING 1.5 FEET PER SECOND IN GRAVITY PIPING.
6 - ALL PIPING TO BE SLOPED 2% TO RESERVOIR.
7 - DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL PIPE, RESERVOIR, AND SEDIMENT TRAP LOCATIONS SHALL BE FIELD VERIFIED AND COORDINATED WITH CONTRACTOR.

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DRAWN gwills | 9/8/2016 | SHEET OF 7

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COLLETON COUNTY RECREATION CENTER
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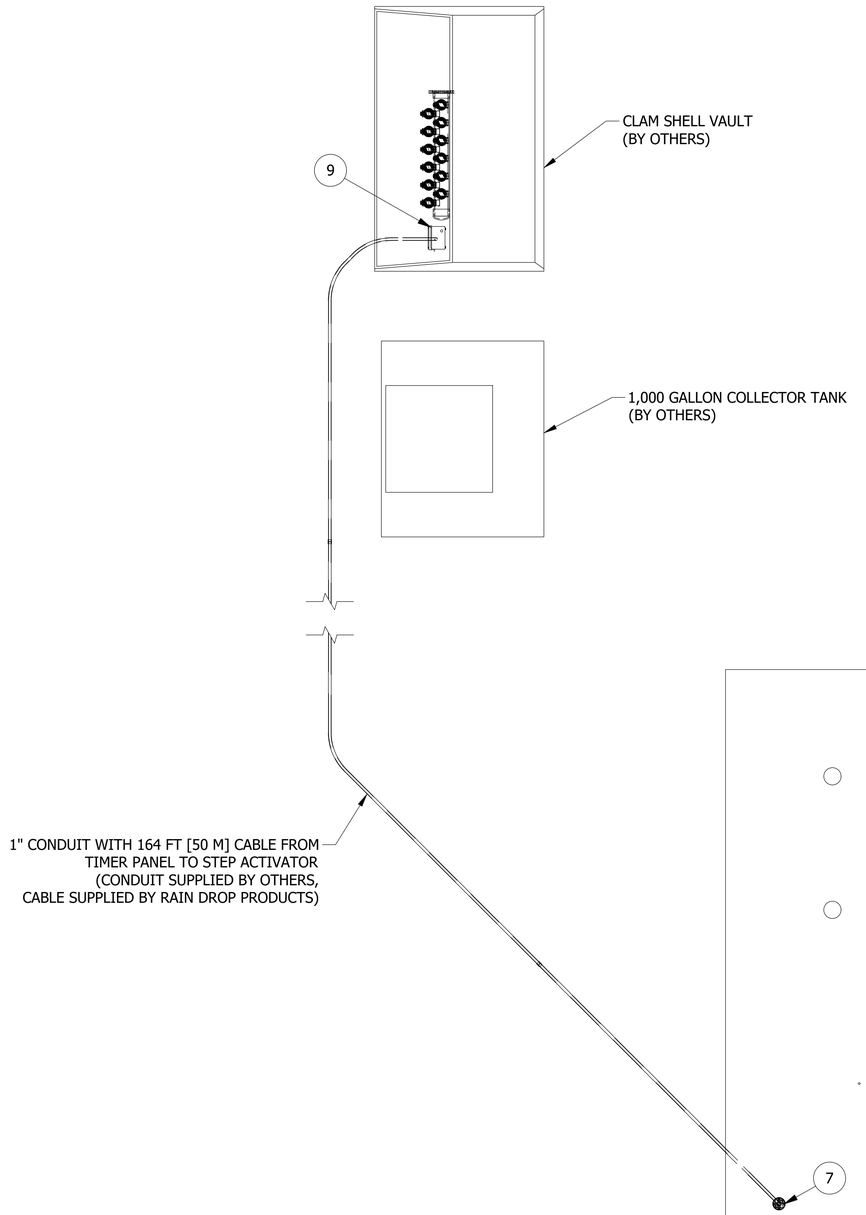
Walterboro, SC 29488

SPLASHPAD MAIN DRAIN PLUMBING LAYOUT

DATE: 6.01.16
DRAWN BY: TDE CHECKED BY: TDE
PROJECT NO: 0170

SP-12



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
7	1	ACT-A001	ACTIVATOR, STEP
9	1	TMR-008	TIMER PANEL

ELECTRICAL -
1 - ALL ELECTRICAL SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL APPLICABLE LOCAL CODES. IN ADDITION, ALL WORK SHALL BE IN ACCORDANCE WITH THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).
2 - THE CONTRACTOR SHALL VERIFY THE SERVICE REQUIREMENTS FOR ALL PIECES OF EQUIPMENT.
3 - DRAWINGS ARE INTENDED FOR SCHEMATIC USE ONLY. FINAL CONDUIT AND CONTROLLER LOCATIONS SHALL BE FIELD VERIFIED AND COORDINATED WITH CONTRACTOR.

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COLLETON COUNTY RECREATION CENTER
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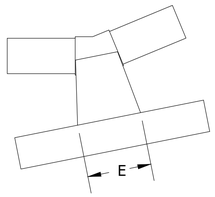
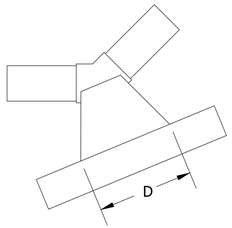
SPLASHPAD ACTIVATOR LAYOUT

DATE: 6.01.16
DRAWN BY: TDE CHECKED BY: TDE
PROJECT NO: 0170

SP-13



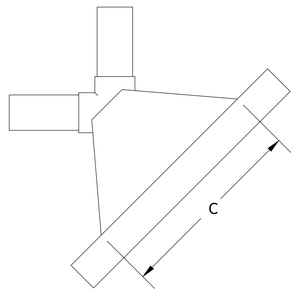
11 1/4° & 22 1/2° BEND



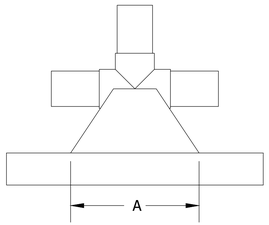
45° BEND

PIPE SIZE	A	B	C	D	E
4"	1'-6"	1'-0"	2'-6"	1'-0"	1'-0"
6"	2'-0"	1'-6"	3'-0"	1'-6"	1'-0"
8"	2'-6"	2'-0"	3'-6"	2'-0"	1'-0"
10"	3'-6"	2'-6"	4'-6"	2'-6"	1'-6"
12"	4'-0"	3'-0"	5'-6"	3'-0"	1'-6"

NOTES:
1 - CONCRETE TO BE 4000 PSI.
2 - ALL FITTINGS TO BE GLUE JOINTS.
3 - THRUST BLOCK TO BE PLACED AGAINST UNDISTURBED EARTH. USE ADDITIONAL CONCRETE OF OVER-EXCAVATION.
4 - NO CONCRETE SHALL BE POURED ON ANY PART OF THE JOINT.
5 - THE CONSULTING ENGINEER SHALL BE RESPONSIBLE TO VERIFY THE TYPE AND SIZE OF ALL THRUST BLOCKS.



90° BEND



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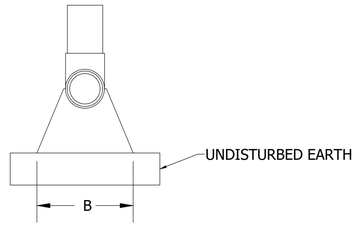
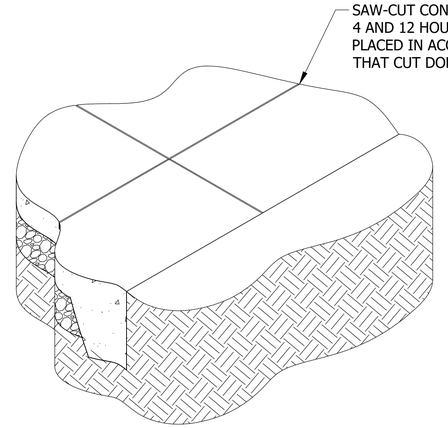
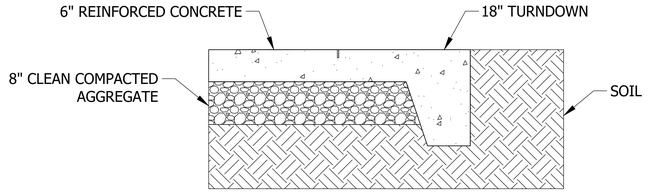


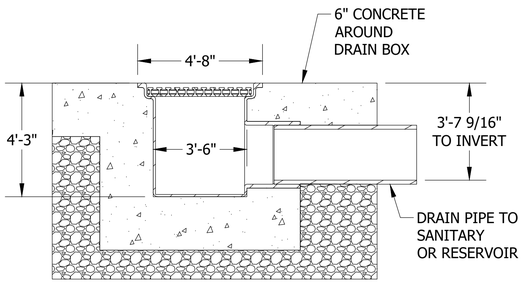
TYPICAL SIDE ELEVATION

THRUST BLOCK DETAILS
NOT TO SCALE

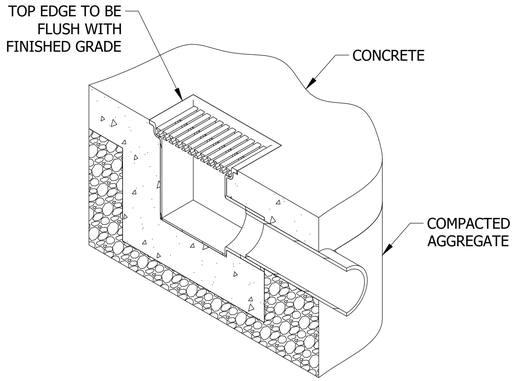




CONCRETE DETAIL
NOT TO SCALE



12" DRAIN DETAIL
NOT TO SCALE



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DRAWN gwills 9/8/2016 SHEET OF 7

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COLLETON COUNTY RECREATION CENTER
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Walterboro, SC 29488

SPLASHPAD DETAILS

DATE: 6.01.16
DRAWN BY: TDE CHECKED BY: TDE
PROJECT NO: 0170

SP-14

680.26 Equipotential Bonding

680.26 (A) Performance. The equipotential bonding required by this section shall be installed to reduce voltage gradients in the pool area.

680.26 (B) Bonded Parts. The parts specified in 680.26(B)(1) through (B)(7) shall be bonded together using solid copper conductors, insulated covered, or bare, not smaller than 8 AWG or with rigid metal conduit of brass or other identified corrosion-resistant metal. Connections to bonded parts shall be made in accordance with 250.8 (see note following). An 8 AWG or larger solid copper bonding conductor provided to reduce voltage gradients in the pool area shall not be required to be extended or attached to remote panel boards, service equipment, or electrodes.

NOTE: Article 250.8 specifies equipment grounding conductors, grounding electrode conductors, and bonding jumpers shall be connected by pressure connectors listed as grounding and bonding equipment.

680.26(B)(1) Conductive Pool Shells. Bonding to conductive pool shells shall be provided as specified in 680.26(B)(1)(a) or (B)(1)(b). Poured concrete, pneumatically applied or sprayed concrete and concrete block with painted or plastered coatings shall all be considered conductive materials due to water permeability and porosity. Vinyl liners and fiberglass composite shells shall be considered to be non-conductive materials.
(a) Structural Reinforcing Steel. Un-encapsulated structural reinforcing steel shall be bonded together by steel tie wires or the equivalent. Where structural reinforcing steel is encapsulated in a nonconductive compound, a copper conductor grid shall be installed in accordance with 680.26(B)(1)(b).
(b) Copper Conductor Grid. A copper conductor grid shall be provided and shall comply with (b)(1) through (b)(4).
(1) Be constructed of minimum 8 AWG bare solid copper conductors bonded to each other at all points of crossing. The bonding shall be in accordance with 250.8 or other approved means.
(2) Conform to the contour of the pool.
(3) Be arranged in a 300-mm (12-in.) by 300-mm (12-in.) network of conductors in a uniformly spaced perpendicular grid pattern with a tolerance of 100-mm (4 in.).
(4) Be secured within or under the pool no more than 150-mm (6 in.) from the outer contour of the pool shell.

680.26(B)(2) Perimeter Surfaces. The perimeter surface shall extend for 1 m (3 ft) horizontally beyond the inside walls of the pool and shall include unpaved surfaces, as well as poured concrete surfaces and other types of paving. Perimeter surfaces less than 1 m (3 ft) separated by a permanent wall or building 1.5 m (5 ft) in height or more shall require equipotential bonding on the pool side of the permanent wall or building. Bonding to perimeter surfaces shall be provided as specified in 680.26(B)(2)(a) or (2)(b) and shall be attached to the pool reinforcing steel or copper conductor grid at a minimum of four (4) points uniformly spaced around the perimeter of the pool. For nonconductive pool shells, bonding at four points shall not be required.
(a) Structural Reinforcing Steel. Structural reinforcing steel shall be bonded in accordance with 680.26(B)(1)(a).
(b) Alternate Means. Where structural reinforcing steel is not available or is encapsulated in a non-conductive compound, a copper conductor(s) shall (1) At least one minimum 8 AWG bare solid copper conductor shall be provided.
(2) The conductors shall follow the contour of the perimeter surface.
(3) Only listed splices shall be permitted.
(4) The required conductor shall be 450 mm to 600 mm (18 in. to 24 in.) from the inside walls of the pool.
(5) The required conductor shall be secured within or under the perimeter surface 100 mm to 150 mm (4 in. to 6 in.) below the subgrade.
680.26(B)(3) Metallic Components. All metallic parts of the pool structure., including reinforcing metal not addressed in 680.26(B)(1)(a), shall be bonded. Where reinforcing steel is encapsulated with a nonconductive compound, the reinforcing steel shall not be required to be bonded.

680.26(B)(4) Underwater Lighting. All metal forming shells and mounting brackets of no-niche luminaries shall be bonded.
Exception: Listed low-voltage lighting systems with non-metalic forming shells shall not require bonding.

680.26(B)(5) Metal Fittings. All metal fittings within or attached to the pool structure shall be bonded, isolated parts that are not over 100 mm (4 in.) in any dimension and do not penetrate into the pool structure more than 25 mm (1 in.) shall not require bonding.

680.26(B)(6) Electrical Equipment. Metal parts of electrical equipment associated with the pool water circulating system, including pump motors and metal parts of equipment associated with pool covers, including electric motors, shall be bonded.

Exception: Metal parts of listed equipment incorporating an approved system of double insulation shall not be bonded.

(a) Double-insulated Water Pump Motors. Where a double-insulated water pump motor is installed under the provisions of this rule, a solid 8 AWG copper conductor of sufficient length to make a bonding connection to a replacement motor shall be extended from the bonding grid to an accessible point in the vicinity of the pool pump motor. Where there is no connection for the premises, this bonding conductor shall be connected to the equipment grounding conductor of the motor circuit.
(b) Pool Water Heaters. For pool water heaters rated at more than 50 amperes and having specific instructions regarding bonding and grounding, only those parts designated to be bonded shall be bonded and only those parts designated to be grounded shall be grounded.

680.26(B)(7) Fixed Metal Parts. All fixed metal parts shall be bonded including, but not limited to, metal-sheathed cables and raceways, metal piping, metal awnings, metal fences, and metal door and window frames.

Exception No. 1: Those separated from the pool by a permanent barrier that prevents contact by a person shall not be required to be bonded.

Exception No. 2: Those greater than 1.5m (5 ft) horizontally of the inside walls of the pool shall not be required to be bonded.

Exception No. 3: Those greater than 3.7m (12 ft) measured vertically above the maximum water level of the pool, or as measured vertically above any observation stands, towers, or platforms, or any diving structures, shall not be required to be bonded.

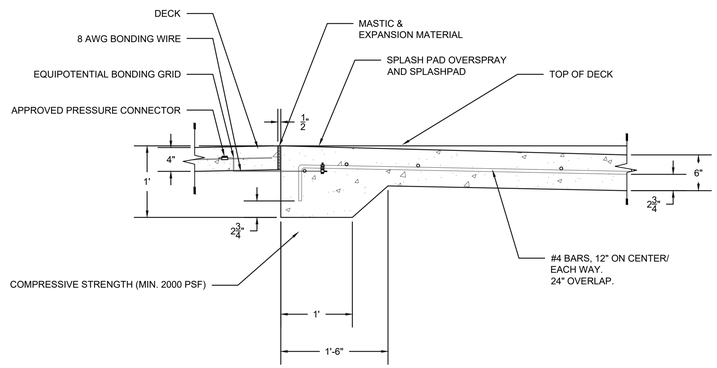
680.26(C) Pool Water. An intentional bond of a minimum conductive surface area of 5800 mm2 (9 in.2) shall be installed in contact with the pool water. This bond shall be permitted to consist of parts that are required to be bonded in 680.26(B).

POOL SHELL CONCRETE AND REINFORCEMENT REQUIREMENTS:

STRUCTURAL CONCRETE REINFORCEMENT NOTES
- ALL REINFORCEMENT BENDS TO BE IN ACCORDANCE WITH ACI 318, SECTION 7.2
- ALL REINFORCEMENT TO BE COLD BENT, UNLESS AUTHORIZED BY THE ENGINEER OF RECORD.
- ALL REINFORCEMENT SHALL BE FREE FROM MUD, OIL, OR OTHER NONMETALLIC COATINGS THAT DECREASE BOND, WITH THE EXCEPTION OF EPOXY COATED REINFORCEMENT OR CONSTRUCTION DOWELS AS INDICATED ON STRUCTURAL DRAWINGS.
- EXCEPT FOR PRESTRESSING TENDONS, STEEL REINFORCEMENT WITH RUST, MILL SCALE, OR A COMBINATION OF BOTH SHALL BE CONSIDERED SATISFACTORY, PROVIDED THE MINIMUM DIMENSIONS (INCLUDING HEIGHT OF DEFORMATIONS) AND WEIGHT OF A HAND-WIRE-BRUSHED TEST SPECIMEN COMPLY WITH APPLICABLE ASTM SPECIFICATIONS AS REFERENCED BY ACI 318, SECTION 3.5
- ALL REINFORCEMENT AND DUCTS SHALL BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED BEFORE CONCRETE IS PLACED, AND SHALL BE SECURED AGAINST DISPLACEMENT WITHIN TOLERANCES PERMITTED IN ACI 318, SECTION 7.5.2
- WELDING OF CROSSING BARS SHALL NOT BE PERMITTED FOR ASSEMBLY UNLESS AUTHORIZED BY THE ENGINEER OF RECORD.
- ALL REINFORCEMENT COVER TO BE IN ACCORDANCE WITH ACI 318, SECTION 7.7, TO INCLUDE REINFORCEMENT NOT INDICATED IN STRUCTURAL DRAWINGS.
- ALL DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING STEEL SHALL COMPLY WITH THE REQUIREMENTS OF ACI-SP-66
- IF NO SPLICE LENGTH DIMENSION IS PROVIDED, THE SPLICE LENGTH SHALL BE CLASS "B" LENGTH AS PER ACI 318, SECTION 12.15
- DEVELOPMENT LENGTHS SHALL BE IN ACCORDANCE WITH ACI 318, SECTION 12.3 FOR COMPRESSION STEEL AND SECTION 12.5 FOR STANDARD HOOKS IN TENSION.
- PROVIDE (2) #5 BARS , EACH WAY AT RE-ENTRANT CORNERS.
- ALL REINFORCING BARS TO BE GRADE 60 DEFORMED BARS COMPLYING WITH ASTM A615
- ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185

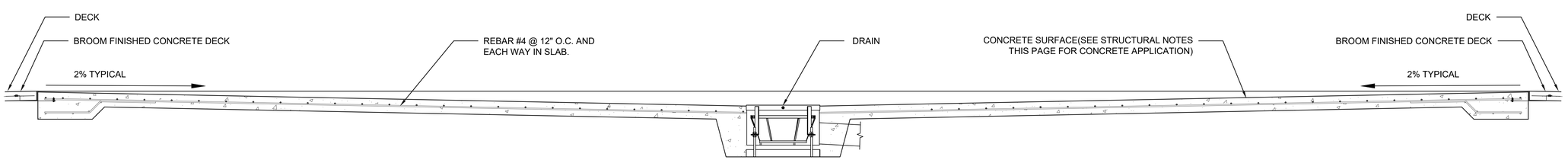
STRUCTURAL CONCRETE
- ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.
- AIR ENTRAINMENT SHALL BE 2% BY VOLUME.
- ALL EXTERNALLY EXPOSED CORNERS OF CONCRETE SHALL BE BEVELED WITH A 3/4" X 45 DEGREE SURFACE, UNLESS INDICATED DIFFERENTLY ON DRAWINGS
- ALL CONCRETE FLATWORK SHALL CONFORM TO THE FOLLOWING TOLERANCES AS INDICATED BY ASTM E1155:
  ---> OVERALL FLATNESS: Ff>20
  ---> MINIMUM LOCAL FLATNESS: Ff>15
  ---> OVERALL LEVELNESS: Fl>15
  ---> MINIMUM LOCAL LEVELNESS: Fl>10
- WIRE BRUSH AND LIGHTLY OIL ANCHOR BOLTS AFTER CONCRETE PLACEMENT
- CONSTRUCTION JOINTS WHEN REQUIRED SHALL BE LOCATED AT MIDSPANS OF SLABS OR BEAM.
- WET (NOT FLOOD) FORMS, REINFORCEMENT, AND FOOTING AND GRADE BEAM EXCAVATIONS IMMEDIATELY BEFORE PLACING CONCRETE. REMOVE ALL DELETERIOUS MATERIAL (SAWDUST, WOOD CHIPS, BOTTLES, ETC.) FROM EXCAVATION PRIOR TO CONCRETE PLACEMENT.
- CONCRETE SLABS SHALL BE MACHINE TROWELED FINISHED AND RECEIVE A COAT OF SEALER/HARDENER LIQUID MEMBRANE CURING COMPOUND TO BE APPLIED IMMEDIATELY AFTER SLAB IS FINISHED. APPLY PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- PROTECT FRESHLY PLACED CONCRETE IN ACCORDANCE WITH ACI 318, SECTIONS 5.11, 5.12, & 5.13, "CURING, COLD WEATHER REQUIREMENTS, AND HOT WEATHER REQUIREMENTS". CONCRETE SHALL BE MAINTAINED ABOVE 50° FAHRENHEIT FOR AT LEAST THE FIRST 7 DAYS AFTER PLACEMENT.
- ALL CONCRETE SHALL BE PLACED IN STRICT ACCORDANCE WITH ACI 318, SECTION 5.10

FILL & EXCAVATION
- ALL FILL MATERIAL SHALL BE SELECT MATERIAL CAPABLE OF ATTAINING 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST.
- BACKFILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, CONSTRUCTION MATERIAL, COBBLE, BOULDERS, BOTTLES, CANS, OR OTHER DELETERIOUS MATERIAL THAT AFFECTS THE COMPATIBILITY OF THE MATERIAL. BACKFILL SHALL BE PLACED IN LIFTS AND COMPACTED IN A MANNER THAT DOES NOT DAMAGE THE FOUNDATION, WATERPROOFING, OR DAMPPROOFING MATERIAL.
- THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING TO PROVIDE FOR POSITIVE DRAINAGE.
- FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 6" AND SHALL BE COMPACTED TO AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY.
- CONTRACTOR SHALL TAKE MEASURES AS TO PREVENT CAVE-IN OF FOOTING EXCAVATIONS AS MAY BE REQUIRED.
- PRIOR TO PLACEMENT OF ANY CONCRETE, THE THIN LAYER OF DISTURBED SOIL IN THE FOOTING SUBGRADE SHALL BE COMPACTED WITH HAND-OPERATED, GAS-POWERED TAMPERS.



2 SP-15 SPLASH PAD STRUCTURAL SECTION
SCALE: 1"=1'

0' 1' 2' 3'
1" = 1'-0"



1 SP-15 SPLASH PAD STRUCTURAL DESIGN
NTS

AQUATICS H2O
AQUATIC FACILITY CONSULTING
PO BOX 694 BRAYTON, SC 29535
O: (864) 285-4487 C: (864) 386-1498

NO.	REVISION	DATE	BY
1	REVISED PER DHEC COMMENTS	05.30.17	TDE
0	ISSUE FOR PERMIT/CONSTRUCTION	02.16.17	TDE

COLLETON COUNTY RECREATION CENTER
280 Recreation Lane.
Walterboro, SC 29488

SPLASHPAD ELECTRICAL & STRUCTURAL NOTES

DATE: 6.01.16
DRAWN BY: TDE CHECKED BY: TDE
PROJECT NO: 0170

SP-15