DOOR AND FRAME SCHEDULE - FIELDHOUSE LOCKER ROOMS (BASE BID)

DOOR NUMBER	DOOR FIRE RATING MINUTES	DOOR PANELS: PANEL TYPE PANEL 1	PANEL TYPE PANEL 2	PANEL DIMENSIONS WIDTH PANEL 1	PANEL DIMENSIONS WIDTH PANEL 2	PANEL DIMENSIONS HEIGHT	DOOR PANELS FINISH 1	DOOR FRAME TYPE	DOOR FRAME FINISH 1	FRAME HEAD HEIGHT	HW SET	COMMENTS
GROUND FLOOR LEVEL												
100		PNL-N-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	14.0	
101		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	12.0	
102		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	13.0	
103		PNL-N-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	14.0	
104		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	8.0	
105		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	13.0	
106		PNL-L-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	2.0	
106B	60 MIN	PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	11.0	
107		PNL-N-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	14.0	
108		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	
109		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	
110		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	18.0	
111		PNL-NP		3'-6"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM2	Metal - Painted Door Panel - EXT	4"	-	
111A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	1.0	
111B		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	21.0	
112		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	13.0	
113		PNL-NP		3'-6"		7'-0"	<By Category>	FRM-00HM2	Metal - Painted Door Panel - EXT	4"	-	
114		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	17.0	
115		PNL-N-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	19.0	
116A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	1.0	
116B		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	21.0	
116C		PNL-NP		3'-6"		7'-0"	<By Category>	FRM-00HM2	Metal - Painted Door Panel - EXT	4"	-	
117		PNL-NP		3'-6"		7'-0"	<By Category>	FRM-00HM2	Metal - Painted Door Panel - EXT	4"	-	
118		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	20.0	
119		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	21.0	
120		PNL-FG-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	6.0	
121		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	4.0	
122		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	20.0	
123		PNL-NP		3'-6"		7'-0"	<By Category>	FRM-00HM2	Metal - Painted Door Panel - EXT	4"	-	
124A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	1.0	
124B		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	21.0	
124C		PNL-NP		3'-6"		7'-0"	<By Category>	FRM-00HM2	Metal - Painted Door Panel - EXT	4"	-	
125A		PNL-N-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	1.0	
125B		PNL-N-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	1.0	
125C		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	1.0	
126		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	6.0	
126B		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	17.0	
126C		PNL-F1-STL		8'-0"		4'-8"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	4"	23.0	

DOOR AND FRAME SCHEDULE - FIELDHOUSE WEIGHT ROOM (ADD ALT #1)

DOOR NUMBER	DOOR FIRE RATING MINUTES	DOOR PANELS: PANEL TYPE PANEL 1	PANEL TYPE PANEL 2	PANEL DIMENSIONS WIDTH PANEL 1	PANEL DIMENSIONS WIDTH PANEL 2	PANEL DIMENSIONS HEIGHT	DOOR PANELS FINISH 1	DOOR FRAME TYPE	DOOR FRAME FINISH 1	FRAME HEAD HEIGHT	HW SET	COMMENTS
GROUND FLOOR LEVEL												
125C.2		PNL-FG-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	16.0	DOOR 125C.2 TO REPLACE DOOR 125C FOR ADD-ALT #1
130A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	1.0	
130B		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	1.0	
130C		PNL-F1-STL		8'-0"		8'-0"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	4"	23.0	
130D		PNL-F1-STL		8'-0"		8'-0"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	4"	23.0	INSULATED COILING DOOR

DOOR AND FRAME SCHEDULE - CONCESSIONS & RESTROOMS (ADD ALT #6)

DOOR NUMBER	DOOR FIRE RATING MINUTES	DOOR PANELS: PANEL TYPE PANEL 1	PANEL TYPE PANEL 2	PANEL DIMENSIONS WIDTH PANEL 1	PANEL DIMENSIONS WIDTH PANEL 2	PANEL DIMENSIONS HEIGHT	DOOR PANELS FINISH 1	DOOR FRAME TYPE	DOOR FRAME FINISH 1	FRAME HEAD HEIGHT	HW SET	COMMENTS
GROUND FLOOR LEVEL												
200		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	6.0	
200A		PNL-F1-STL		8'-0"		4'-8"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	0"	23.0	COILING COUNTER DOOR
200B		PNL-F1-STL		8'-0"		4'-8"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	0"	23.0	COILING COUNTER DOOR
201		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	3.0	
202		PNL-L-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	3.0	
203		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	17.0	
204		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	17.0	
205		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	9.0	
206A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	
206B		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	
207A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	
207B		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	

DOOR AND FRAME SCHEDULE - GREENHOUSE (ADD ALT #5)

DOOR NUMBER	DOOR FIRE RATING MINUTES	DOOR PANELS: PANEL TYPE PANEL 1	PANEL TYPE PANEL 2	PANEL DIMENSIONS WIDTH PANEL 1	PANEL DIMENSIONS WIDTH PANEL 2	PANEL DIMENSIONS HEIGHT	DOOR PANELS FINISH 1	DOOR FRAME TYPE	DOOR FRAME FINISH 1	FRAME HEAD HEIGHT	HW SET	COMMENTS
GROUND FLOOR LEVEL												
301		PNL-O-AL1 : PNL-O-AL		3'-0"		7'-0"	AL	FRM-00HM5 : FRM-00HM1	AL	2"		HW SET TO BE PROVIDED BY MANUFACTURER
302		PNL-O-AL1 : PNL-O-AL		3'-0"		7'-0"	AL	FRM-00HM5 : FRM-00HM1	AL	2"		HW SET TO BE PROVIDED BY MANUFACTURER

DOOR AND FRAME SCHEDULE - RESTROOM & STORAGE BUILDING (BASE BID)

DOOR NUMBER	DOOR FIRE RATING MINUTES	DOOR PANELS: PANEL TYPE PANEL 1	PANEL TYPE PANEL 2	PANEL DIMENSIONS WIDTH PANEL 1	PANEL DIMENSIONS WIDTH PANEL 2	PANEL DIMENSIONS HEIGHT	DOOR PANELS FINISH 1	DOOR FRAME TYPE	DOOR FRAME FINISH 1	FRAME HEAD HEIGHT	HW SET	COMMENTS
GROUND FLOOR LEVEL												
401A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	4.0	
401B		PNL-F1-STL		8'-0"		8'-0"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	4"	23.0	COILING SERVICE DOOR
402A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	4.0	
402B		PNL-F1-STL		8'-0"		8'-0"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	4"	23.0	COILING SERVICE DOOR
403A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	4.0	
403B		PNL-F1-STL		8'-0"		8'-0"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	4"	23.0	COILING SERVICE DOOR
404A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	
404B		PNL-L-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	
405A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	
405B		PNL-L-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	10.0	

DOOR AND FRAME SCHEDULE - DUGOUTS (BASE BID)

DOOR NUMBER	DOOR FIRE RATING MINUTES	DOOR PANELS: PANEL TYPE PANEL 1	PANEL TYPE PANEL 2	PANEL DIMENSIONS WIDTH PANEL 1	PANEL DIMENSIONS WIDTH PANEL 2	PANEL DIMENSIONS HEIGHT	DOOR PANELS FINISH 1	DOOR FRAME TYPE	DOOR FRAME FINISH 1	FRAME HEAD HEIGHT	HW SET	COMMENTS
GROUND FLOOR LEVEL												
501A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	3.0	
501B		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	4.0	
511A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	6.0	
511B		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	7.0	

DOOR AND FRAME SCHEDULE - PRESSBOXES (ADD ALT #2)

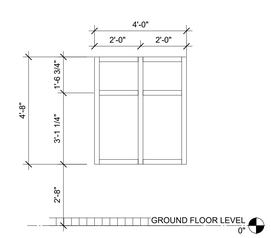
DOOR NUMBER	DOOR FIRE RATING MINUTES	DOOR PANELS: PANEL TYPE PANEL 1	PANEL TYPE PANEL 2	PANEL DIMENSIONS WIDTH PANEL 1	PANEL DIMENSIONS WIDTH PANEL 2	PANEL DIMENSIONS HEIGHT	DOOR PANELS FINISH 1	DOOR FRAME TYPE	DOOR FRAME FINISH 1	FRAME HEAD HEIGHT	HW SET	COMMENTS
GROUND FLOOR LEVEL												
502		PNL-F-HM		4'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	2"	5.0	PRESSBOX
503		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	2"	7.0	PRESSBOX
510		PNL-F-HM		4'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	2"	5.0	PRESSBOX
511		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	2"	7.0	PRESSBOX

DOOR AND FRAME SCHEDULE - STORAGE BUILDING (ADD ALT #2)

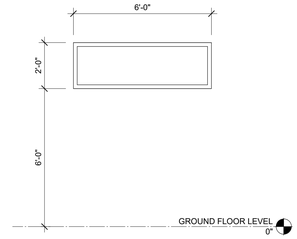
DOOR NUMBER	DOOR FIRE RATING MINUTES	DOOR PANELS: PANEL TYPE PANEL 1	PANEL TYPE PANEL 2	PANEL DIMENSIONS WIDTH PANEL 1	PANEL DIMENSIONS WIDTH PANEL 2	PANEL DIMENSIONS HEIGHT	DOOR PANELS FINISH 1	DOOR FRAME TYPE	DOOR FRAME FINISH 1	FRAME HEAD HEIGHT	HW SET	COMMENTS
GROUND FLOOR LEVEL												
601A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	4.0	
601B		PNL-F1-STL		8'-0"		8'-0"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	4"	23.0	
602A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	4.0	
602B		PNL-F1-STL		8'-0"		8'-0"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	4"	23.0	
603A		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	4"	4.0	
603B		PNL-F1-STL		8'-0"		8'-0"	08-OPENINGS-ROLLING DOOR 3" PANELS	FRM-60STL	Metal - Painted Door Panel - EXT	4"	23.0	

DOOR AND FRAME SCHEDULE - PRESSBOX (ADD ALT #6)

DOOR NUMBER	DOOR FIRE RATING MINUTES	DOOR PANELS: PANEL TYPE PANEL 1	PANEL TYPE PANEL 2	PANEL DIMENSIONS WIDTH PANEL 1	PANEL DIMENSIONS WIDTH PANEL 2	PANEL DIMENSIONS HEIGHT	DOOR PANELS FINISH 1	DOOR FRAME TYPE	DOOR FRAME FINISH 1	FRAME HEAD HEIGHT	HW SET	COMMENTS
PB FLOOR LEVEL												
700		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	2"	7.0	
701		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	2"	15.0	
702		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	2"	15.0	
703		PNL-F-HM		3'-0"		7'-0"	Metal - Painted Door Panel - EXT	FRM-00HM1	Metal - Painted Door Panel - EXT	2"	7.0	



TYPE A
3/8" = 1'-0"



TYPE B
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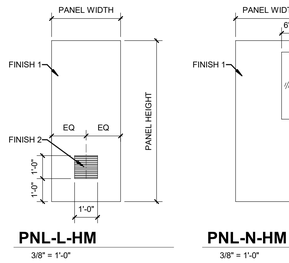
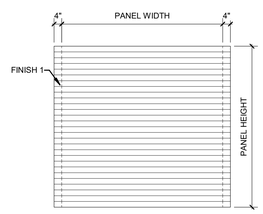
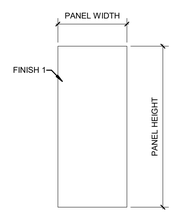


PNL-L-HM
3/8" = 1'-0"

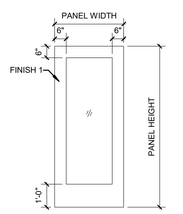
PNL-N-HM
3/8" = 1'-0"



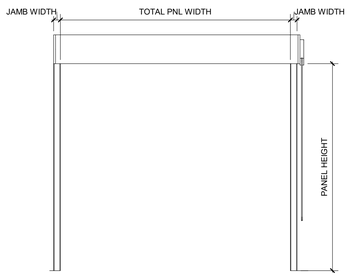
PNL-F1-STL
3/8" = 1'-0"



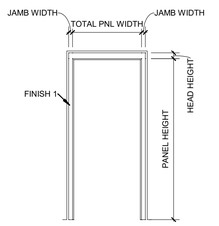
PNL-F-HM
3/8" = 1'-0"



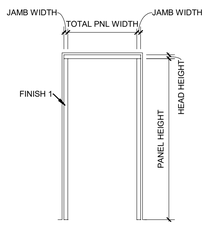
PNL-FG-HM
3/8" = 1'-0"



FRM-60STL
3/8" = 1'-0"



FRM-00HM1
3/8" = 1'-0"



FRM-00HM2
3/8" = 1'-0"

GENERAL NOTES

A. WHEN LOCATING DOOR FRAMES WITHIN A WALL, THE FRAME SHALL BE LOCATED SO THAT THERE IS 18" MIN. CLEAR SPACE LOCATED ON THE LATCH SIDE ON A FRONT APPROACH PULL SIDE. THERE SHALL BE 12" MIN. ON THE LATCH SIDE FOR A FRONT APPROACH PUSH SIDE WHEN BOTH A CLOSER AND LATCH ARE PROVIDED.
B. MATERIALS, FINISHES, AND INSTALLATION OF PRODUCTS REFERENCED IN THE SCHEDULE SHALL BE IN ACCORDANCE WITH REQUIREMENTS SPECIFIED IN THE RESPECTIVE PRODUCT SECTIONS.
C. REFER TO PARTITION TYPES AS INDICATED ON SHEET A-001 TO DETERMINE FRAME DEPTH.
D. GLAZING TYPE AT DOORS TO BE AS INDICATED ON SHEET A-610.
E. ALL GLAZING IN AND ADJACENT TO DOORS SHALL COMPLY WITH SAFETY GLASS REQUIREMENTS PER 2021 SC BUILDING CODE, CHAPTER 24, SECTION 2406.
F. ELECTRIFIED HARDWARE: COORDINATE ELECTRICAL REQUIREMENTS WITH DIVISION 26.
G. ALARMS AND DOOR MONITORING: COORDINATE WITH DIVISION 28.
H. OPENING SIZES INDICATED REFER TO DOOR OPENING DIMENSIONS INSIDE OF FRAME.
I. ALL SMOKE CONTROL DOORS SHALL MEET THE REQUIREMENTS OF 2021 SC BUILDING CODE, CHAPTER 7, SECTION 715 AND BE 'S' LABELED PER SECTION 715.4.5.3. DOOR INSTALLATION TO BE IN ACCORDANCE WITH NFPA 105.
J. CONTRACTOR SHALL LEAVE ALL LABELS ON GLASS UNTIL COMPLETION OF OSF INSPECTIONS.
K. FOR TYPICAL INTERNAL DOOR SILL DETAILS, REFER TO FLOOR TRANSITION DETAILS.

DOOR/FRAME MATERIAL LEGEND

AL	ALUMINUM
HM	HOLLOW METAL
SS	STAINLESS STEEL

DOOR/FRAME FINISH LEGEND

AA	ANODIZED ALUMINUM (FACTORY FINISHED)
PT	PAINTED
SS	STAINLESS STEEL

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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LS3P PROJECT: 1201-217190
DATE: 10/31/2025

DOOR & WINDOW SCHEDULES

A-601

CONSTRUCTION DOCUMENTS

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ROOM FINISH LEGEND

MATERIAL CODE	DESCRIPTION	MANUFACTURER	STYLE / PATTERN	COLOR/ FINISH	SIZE	INSTALLATION FORMAT / COMMENTS
DIVISION 3 CONCRETE						
CS-1	CONCRETE SEALER	SEE SPECIFICATIONS		CLEAR FINISH		REFER TO SPECS.
DIVISION 6 WOOD AND PLASTICS						
PLM-1	PLASTIC LAMINATE, COUNTER TOP	FORMICA		6314-AN NEO CLOUD INFINITY FINISH		REFER TO SPECS.
PLM-2	PLASTIC LAMINATE, VERTICAL SURFACES (UPPER & LOWER CABINETS)	EGGER		HONEY CARINI WALNUT H3790 ST12		REFER TO SPECS.
SS-3	SOLID SURFACE; COUNTERTOPS	CORIAN		CARRARA LINO		
DIVISION 9 FINISHES - CEILINGS						
ACT-1	ACOUSTICAL CEILING TILE	ARMSTRONG	SCHOOL ZONE	WHITE	2'x2'	REFER TO SPECS.
ACT-2	ACOUSTICAL CEILING TILE	ARMSTRONG	GEORGIAN WITH HUMIGUARD PLUS	WHITE	2'X2'	REFER TO SPECS.
ACT-3	ACOUSTICAL CEILING TILE	PROVIDED BY PREENGINEERED BUILDING SUPPLIERS FOR PRESSBOXES			2'X4'	
AXT-1	ACOUSTICAL CEILING TRIM	ARMSTRONG	AXIOM CLASSIC	TRIM COLOR: WHITE	6"	LOCATED AT ACT-1 CLOUDS IN WEIGHT ROOM; ADD ALT #1
GYP-1	GYPSUM CEILING	SHERWIN WILLIAMS		SW-7757 HIGH REFLECTIVE WHITE		
GYP-2	GYPSUM CEILING	SHERWIN WILLIAMS		SW-7757 HIGH REFLECTIVE WHITE		MOLD RESISTANT
DIVISION 9 FINISHES - FLOORS						
GTF-1	GROUT PORCELAIN TILE FLOORING (RESTROOM & SHOWER/LOCKER ROOM)	LATICRETE		TBD	1/4"	
PTF-2	PORCELAIN TILE FLOORING (LOCKER ROOMS)	DALTILE	KEYSTONES	DESERT GRAY SPECKLE D200	2"x2"	STACKED BOND PATTERN
PTF-3	PORCELAIN TILE FLOORING (LOCKER ROOMS)	DALTILE	KEYSTONES	WATRERFALL D169	2"x2"	STACKED BOND PATTERN
QTF-1	QUARRY TILE	DALTILE	SURETREAD AND PAVERS WITH QUARRY GUARD	STORM GRAY WITH TEXTURED TREAD SURFACE	6"x6"x3/8"	STACKED BOND PATTERN
RAF-1	RESILIENT ATHLETIC FLOORING	ECORE ATHLETIC	PERFORMANCE MOTIVATE RUBBERX RESILIENT ATHLETIC FLOOR	BUFF BLUE 20 ES45	48" WIDE ROLL	
RAF-2	RESILIENT ATHLETIC FLOORING	ECORE ATHLETIC	PERFORMANCE MOTIVATE RUBBERX RESILIENT ATHLETIC FLOOR	BLUE ES500	48" WIDE ROLL	
VCT-1	VINYL FLOORING	ARMSTRONG	STANDARD	52513 CIRQUE WHITE	12"X12"	
VCT-2	VINYL FLOORING	ARMSTRONG	STANDARD	51903 BLUE GRAY	12"X12"	
VCT-3	VINYL FLOORING	ARMSTRONG	STANDARD	51820 MARINA BLUE	12"X12"	
VCT-4	VINYL FLOORING	ARMSTRONG	STANDARD	57508 BLUE DREAMS	12"X12"	
DIVISION 9 FINISHES - WALL BASE						
PTB-2	PORCELAIN TILE "BUILD-UP BASE"	DALTILE	DALTILE "BUILD-UP BASE" MB-5B (1) ROW S-886 (1) ROW 2x2 (1) ROW C-833 KEYSTONES	DESERT GRAY SPECKLE D200	2"x2"	PROVIDE PTB-2 AT PTF-2 LOCATIONS
PTB-3	PORCELAIN TILE "BUILD-UP BASE"	DALTILE	DALTILE "BUILD-UP BASE" MB-5B (1) ROW S-886 (1) ROW 2x2 (1) ROW C-833 KEYSTONES	WATRERFALL D169	2"x2"	PROVIDE PTB-3 AT PTF-3 LOCATIONS
QTB-1	QUARRY TILE COVE BASE	DALTILE	SURETREAD AND PAVERS WITH QUARRY GUARD	STORM GRAY	6"x6"	
RBS-1	RUBBER BASE COVE	JOHNSONITE		20 CHARCOAL	4" COVE	
DIVISION 9 FINISHES - WALLS						
CTW-1	CERAMIC WALL TILE (RESTROOMS)	DALTILE	COLOR WHEEL LINEAR	DESERT GRAY X114	4"x12"	VERTICAL STACK
CTW-3	CERAMIC WALL TILE (RESTROOMS)	DALITLE	COLOR WHEEL LINEAR	SEA BREEZE 1174	4"x12"	VERTICAL STACK
FRP-1	FIBERGLASS REINFORCED PLASTIC WALL PANEL	CRANE COMPOSITES	VARIETEX	SHELTER COVE 1281/SATIN LINEN TEXTURE	4' WIDE x 8' HIGH	
FRP-2	FIBERGLASS REINFORCED PLASTIC WALL PANEL	CRANE COMPOSITES	VARIETEX	SHELTER COVE 1281/SATIN LINEN TEXTURE	4' WIDE x 10' HIGH	
PNT-1	PAINT; OVERALL	SHERWIN WILLIAMS		SW-7004 SNOWBOUND		EGGSHELL FINISH AT WALLS, FLAT FINISH AT CEILINGS. REFER TO SPECIFICATIONS; EPOXY FINISH IN ALL WET ROOMS
PNT-4	PAINT	SHERWIN WILLIAMS		SW-6967 REGALE BLUE (TO MATCH SCHOOL COLOR)		SCHOOL COLOR PROVIDED BY OWNER; EGGSHELL FINISH. REFER TO SPECIFICATIONS; EPOXY FINISH IN ALL WET ROOMS
PNT-11	PAINT	SHERWIN WILLIAMS		SW-6959 BLUE CHIP (TO MATCH SCHOOL COLOR)		SCHOOL COLOR PROVIDED BY OWNER; EGGSHELL FINISH. REFER TO SPECIFICATIONS; EPOXY FINISH IN ALL WET ROOMS
PNT-13	PAINT	SHERWIN WILLIAMS		SW-6528 TRICORN BLACK		EGGSHELL FINISH. REFER TO SPECIFICATIONS; EPOXY FINISH IN ALL WET ROOMS
PTW-1	PORCELAIN WALL TILE (SHOWERS)	DALTILE	KEYSTONES	WATRERFALL D169	2"x2"	STACKED BOND PATTERN
TRIM-1	CERAMIC WALL TRIM	DALTILE	COLOR WHEEL LINEAR, BULLNOSE	DESERT GRAY X114	4 1/4"X 12 7/8"	PROVIDE AT EXPOSED EDGES OF CTW-1
TRIM-2	CERAMIC WALL TRIM	DALITLE	COLOR WHEEL LINEAR, BULLNOSE	SUEDE GRAY 0182	4 1/4"X 12 7/8"	PROVIDE AT EXPOSED EDGES OF CTW-2
TRIM-3	CERAMIC WALL TRIM	DALITLE	COLOR WHEEL LINEAR, BULLNOSE	SEA BREEZE 1174	4 1/4"X 12 7/8"	PROVIDE AT EXPOSED EDGES OF CTW-3
DIVISION 10 SPECIALTIES						
LKM-1	METAL LOCKERS	PENCO		TBD		REFER TO SPECS.
MR-2	MIRROR				4'X5'	WEIGHT ROOM
TPT-1	TOILET PARTITION	ASI GLOBAL	HDPE	9200 GRAY		REFER TO SPECS.
WP44	WALL PANEL, ACOUSTICS	ARMSTRONG	TECTUM DIRECT-ATTACH WALL PANELS/C-20 MOUNT	CUSTOM COLOR	4'X4'	REFER TO DRAWINGS FOR LOCATION & INTENT; REFER TO SPECIFICATIONS
MARKERBOARDS AND TACK BOARDS						
MB-6	MARKERBOARDS	CLARIDGE	SERIES 3 BOARDS	WHITE	4'X6'	REFER TO DRAWINGS FOR LOCATION & INTENT; REFER TO SPECIFICATIONS

ARCH- ROOM FINISHES - BASE BID

NUMBER	NAME	FINISH				NOTES
		FLOOR	BASE	WALL	CEILING	
GROUND FLOOR LEVEL						
100	OFFICE	VCT-1	RBS-1	PNT-1, PNT-4	ACT-1	
101	LAUNDRY	VCT-1	RBS-1	PNT-1	ACT-1	
102	TLT	PTF-2	PTB-2	PNT-1, CTW-3, CTW-1	GYP-1	
103	OFFICE	VCT-1	RBS-1	PNT-1,PNT-4	ACT-1	
104	FAMILY TOILET	PTF-2		PNT-1, CTW-3	GYP-2	
105	HC TOILET	PTF-2	PTB-2	PNT-1, CTW-3	GYP-1	
106	ELEC	CS-1	RBS-1	PNT-1	GYP-1	
106B	ELEC - LS	CS-1	RBS-1	PNT-1	GYP-1	
107	TRAINING OFFICE	VCT-1, VCT-3, VCT-4	RBS-1	PNT-1, PNT-4	ACT-1	
108	MEN'S	PTF-2	PTB-2	PNT-1, CTW-3	GYP-2	
109	WOMEN'S	PTF-2	PTB-2	PNT-1, CTW-3	GYP-2	
110	EQUIPMENT ROOM	VCT-1	RBS-1	PNT-1	GYP-1	
111	FEMALE LOCKER ROOM	PTF-2	PTB-2	PNT-1, PNT-4	GYP-2	
112	FEMALE SHOWER	PTF-2	PTB-2	PNT-1, CTW-1	GYP-2	
113	FEMALE TOILET	PTF-2, PTF-3	PTB-2, PTB-3	PNT-1, CTW-1	GYP-2	
114	JANITOR	CS-1	RBS-1	PNT-1	GYP-2	
115	CLASSROOM / FILM ROOM	VCT-1, VCT-3, VCT-4	RBS-1	PNT-1, PNT-4	ACT-1	
116	JUNIOR VARSITY MALE LOCKER ROOM	PTF-2, PTF-3	PTB-2, PTB-3	PNT-1, PNT-4	GYP-2	
117	MALE TOILET	PTF-2, PTF-3	PTB-2, PTB-3	PNT-1, CTW-1	GYP-2	
118	MALE SHOWER	PTF-2	PTB-2	PNT-1, CTW-1	GYP-2	
119	COACHES CHANGING	VCT-1	RBS-1	PNT-1	ACT-1	
120	REFEREE ROOM	VCT-1	RBS-1	PNT-1, PNT-4	ACT-1	
121	SERVICE	CS-1	RBS-1	PNT-1	GYP-2	
122	MALE SHOWER	PTF-2	PTB-2	PNT-1, CTW-1	GYP-2	
123	MALE TOILET	PTF-2, PTF-3	PTB-2, PTB-3	PNT-1, CTW-1	GYP-2	
124	VARSITY MALE LOCKER ROOM	PTF-2, PTF-3	PTB-2, PTB-3	PNT-1	GYP-2	
125	CORRIDOR	VCT-1, VCT-3	RBS-1	PNT-1	ACT-1	
126	CONCESSIONS	QTF-1	QTB-1	FRP-2	ACT-2	FRP-2 TO BE FLOOR TO CEIING
126B	STORAGE	VCT-1	RBS-1	PNT-1	ACT-2	
401	STORAGE	CS-1	-	METAL LINER PANEL FROM MANUF.	-	
402	STORAGE	CS-1	-	METAL LINER PANEL FROM MANUF.	-	
403	TRACK STORAGE	CS-1	-	PNT-1, FRP-1, METAL LINER PANEL FROM MANUF.	-	
404	W TLT	CS-1	RBS-1	PNT-1, FRP-1		FRP-1 TO BE 8'-0" HIGH
405	M TLT	CS-1	RBS-1	PNT-1, FRP-1		FRP-1 TO BE 8'-0" HIGH
500	HOME DUGOUT (BASEBALL)	-	-	PNT-1	-	
501	STORAGE	-	-	PNT-1	-	
504	VISITOR (BASEBALL)	-	-	PNT-1	-	
510	HOME (SOFTBALL)	-	-	PNT-1	-	
511	SOFTBALL STORAGE	-	-	PNT-1	-	
514	VISITOR (SOFTBALL)	-	-	PNT-1	-	

ARCH- ROOM FINISHES - ADD ALT. 1 WEIGHT ROOM

NUMBER	NAME	FINISH				NOTES
		FLOOR	BASE	WALL	CEILING	
GROUND FLOOR LEVEL						
130	WEIGHT ROOM	RAF-1, RAF-2	RBS-1	PNT-1, PNT-4	ACT-1	
131	RADIO					

ARCH- ROOM FINISHES - ADD ALT. 2 B & S ACCESSORY STRUCT.

NUMBER	NAME	FINISH				NOTES
		FLOOR	BASE	WALL	CEILING	
GROUND FLOOR LEVEL						
601	STORAGE	CS-1		METAL LINER PANEL FROM MANUF.		
602	STORAGE	CS-1		METAL LINER PANEL FROM MANUF.		
603	STORAGE	CS-1		METAL LINER PANEL FROM MANUF.		
PRESSBOX 2ND FLOOR LEVEL						
503	BASEBALL PRESSBOX	VCT-1	RBS-1	PNT-1	ACT-3	
511	SOFTBALL PRESSBOX	VCT-1	RBS-1	PNT-1	ACT-3	

ARCH- ROOM FINISHES - ADD ALT. 6 STADIUM & CONCESSIONS

NUMBER	NAME	FINISH				NOTES
		FLOOR	BASE	WALL	CEILING	
GROUND FLOOR LEVEL						
200	CONCESSIONS	QTF-1	QTB-1	FRP-2	ACT-2	FRP-2 TO BE FLOOR TO CEILING
201	ELEC - LS	CS-1	RBS-1	PNT-1	GYP-1	
202	ELECTRICAL	CS-1	RBS-1	PNT-1	GYP-1	
203	JANITOR	VCT-1	RBS-1	PNT-1	ACT-2	
204	STORAGE	VCT-1	RBS-1	PNT-1	ACT-2	
205	FAMILY TLT	PTF-2	PTB-2	PNT-1, CTW-3	GYP-1	
206	MEN'S	PTF-2, PTF-3	PTB-2, PTB-3	PNT-1, CTW-3	GYP-1	
207	WOMEN'S	PTF-2, PTF-3	PTB-2, PTB-3	PNT-1, CTW-3	GYP-1	
PB FLOOR LEVEL						
700	HOME COACHES / FILM	VCT-1	RBS-1	PNT-1	ACT-3	
701	ANNOUNCERS	VCT-1	RBS-1	PNT-1	ACT-3	
702	AWAY COACHES / FILM	VCT-1	RBS-1	PNT-1	ACT-3	

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LS3P PROJECT: 1201-217190

DATE: 10/31/2025

FINISH LEGEND AND SCHEDULE

A-700

CONSTRUCTION DOCUMENTS

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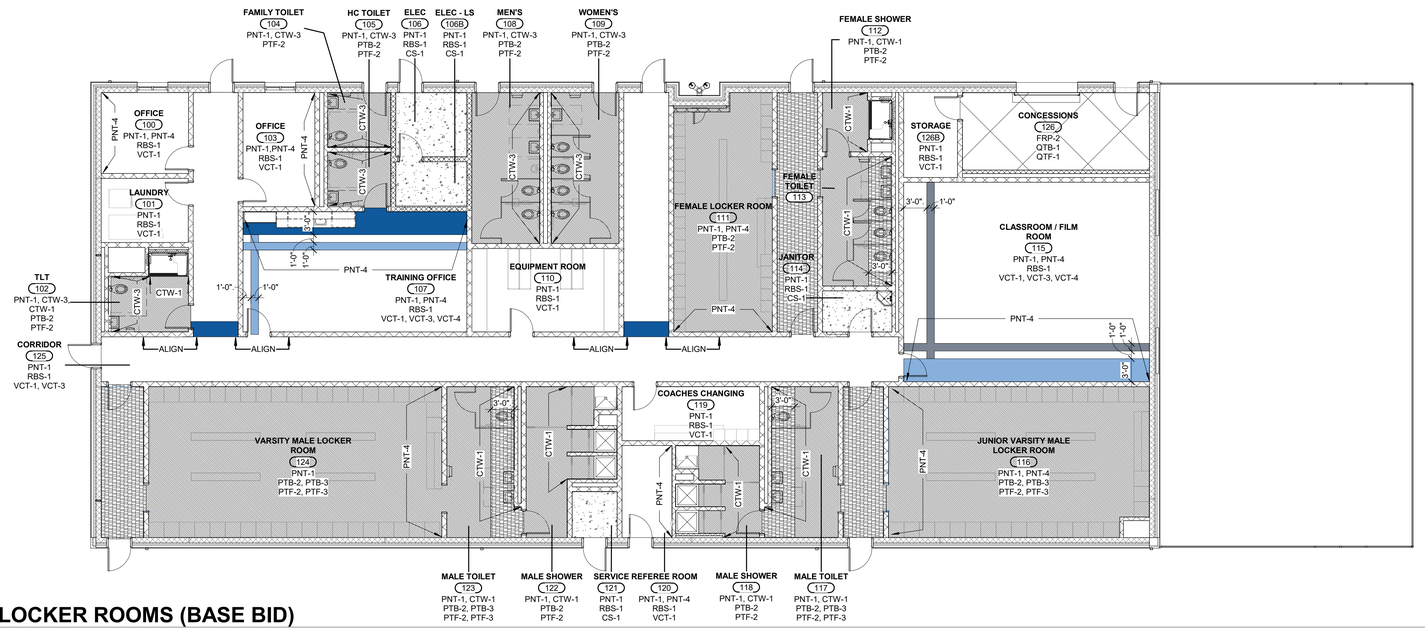
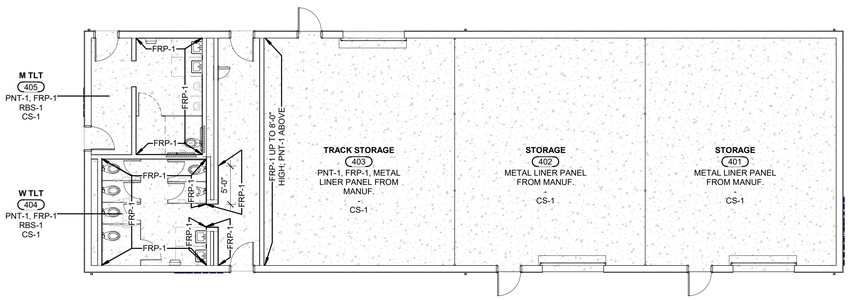
D1 FINISH PLAN - FIELDHOUSE WEIGHT ROOM (ADD ALTERNATE 1)

1/8" = 1'-0"



B1 FINISH PLAN - FIELDHOUSE LOCKER ROOMS (BASE BID)

1/8" = 1'-0"



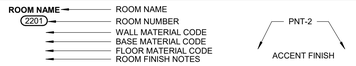
A1 FLOOR PLAN - RESTROOM & STORAGE BUILDING

1/8" = 1'-0"

FINISH FLOOR PLAN SHEET NOTES

1. REFER TO A-700 FINISH LEGEND AND SPECIFICATIONS
2. REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL FINISH INFORMATION.

ROOM FINISH TAG LEGEND



MATERIAL CODE LEGEND

ACC	ACOUSTICAL CEILING CANOPIES	QTF	QUARRY TILE FLOORING
ACT	ACOUSTICAL CEILING TILE	RAF	RESILIENT ATHLETIC FLOORING
AWP	SOUND ABSORBING WALL PANEL	RBC	RUBBER BASE COVE
AXT	ACOUSTICAL CEILING TRIM	RBS	RUBBER BASE STRAIGHT
CCS	COLORED CONCRETE STAIN	RBT	RUBBER TILE
CON	CONCRETE	RSA	RESILIENT STAIR ACCESSORY
CPT	CARPET	RTF	RESILIENT TILE FLOORING
CS	CONCRETE SEALER	SCN	SEALED CONCRETE
EPX	EPOXY PAINT	SDT	STATIC DISSIPATIVE TILE
ERC	EPOXY RESIN COUNTERTOPS	SHV	SHEET VINYL
FWP	FABRIC WRAPPED PANEL	SS	SOLID SURFACE
GRB	GROUT RESILIENT TILE BASE	SPF	SPORTS FLOORING
GRF	GROUT RESILIENT TILE FLOORING	STC	STAMPED CONCRETE
GTB	GROUT PORCELAIN TILE BASE	STF	PERFORMANCE STAGE FLOORING
GTF	GROUT PORCELAIN TILE FLOOR	STN	STONE COUNTER
LVT	LUXURY VINYL TILE	TBD	TO BE DETERMINED
PLM	PLASTIC LAMINATE	TZB	TERRAZZO BASE
PNT	PAINT	TZZ	TERRAZZO FLOORING
PTB	PORCELAIN TILE BASE	VCT	VINYL COMPOSITION TILE
PTC	HIGH PERFORMANCE COATINGS	VPF	VINYL PLANK FLOORING
PTF	PORCELAIN TILE FLOORING	VWC	VINYL WALLCOVERING
PTW	PORCELAIN TILE WALL	WDB	WOOD BASE
PWB	PAINTED WALL BASE	WDF	WOOD FLOORING

ROOM FINISH PLAN GENERAL NOTES

A. PRIOR TO INSTALLATION AND FABRICATION, CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND INTERIOR DESIGNER TO REVIEW ALL FLOOR PATTERNS, FINISHES AND DOCUMENTATION INFORMATION

B. PRIOR TO PAINTING, PAINTING CONTRACTOR SHALL SUBMIT TO ARCHITECT/INTERIOR DESIGNER EACH PAINT COLOR FINISH ON A 8 1/2" X 11" SHEET OF CHIPBOARD FOR PRELIMINARY APPROVAL. FOR FINAL APPROVAL BY OWNER AND ARCHITECT PRIOR TO PAINTING, THE PAINTING CONTRACTOR SHALL PAINT EACH PAINT COLOR WITH THE DESIGNATED FINISH ON A 4' X 4' PIECE OF GYPSUM BOARD. SAMPLE BOARDS SHALL BE REVIEWED AND APPROVED AT THE JOB SITE WITH THE APPROPRIATE LIGHTING.

C. INSTALLERS OF EACH FINISH MATERIAL SHALL INSPECT BOTH THE SUBSTRATE AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. INSTALLER SHALL NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN AN ACCEPTABLE MANNER TO ALL PARTIES AND MEET ALL MANUFACTURER'S REQUIREMENTS

D. ALL INTERIOR FINISHES SHALL COMPLY WITH SECTION 803 OF RESTRICTIONS OF COMBUSTIBLE MATERIALS OF THE INTERNATIONAL BUILDING CODE. ALL INTERIOR FINISHES SHALL BE CLASS B OR BETTER

E. THE INTENT IS TO PROVIDE A COMPLETE FINISHED INTERIOR WHETHER OR NOT SPECIFICALLY INDICATED. ITEMS SHALL BE FINISHED AND/OR PAINTED AS DIRECTED BY DESIGNER, WHETHER OR NOT SPECIFICALLY SCHEDULED OR INDICATED ON DRAWINGS

F. TILE SUBCONTRACTOR SHALL USE LATEX ADDITIVE IN SETTING BED PER MANUFACTURER'S RECOMMENDATIONS UNLESS OTHERWISE NOTED

G. INSTALL ALL VINYL COMPOSITION TILE IN THE SAME DIRECTION UNLESS OTHERWISE NOTED

H. CARPET INSTALLER SHALL SUBMIT SEAMING SHOP DRAWING FOR ALL AREAS SPECIFIED TO RECEIVE CARPET FLOORING PRIOR TO COMMENCEMENT OF WORK

I. PAINT ALL EXPOSED AND SEMI-EXPOSED WOOD BLOCKING AND METAL SUPPORTS TO MATCH ADJACENT SURFACES. COORDINATE WITH INTERIOR DESIGNER

J. PAINTED FINISH ON METAL SURFACES SHALL BE SMOOTH, CLEAR AND FREE OF ALL BRUSH MARKS

K. ADHESIVE FOR WALL COVERING SHALL BE STRIPPABLE, MILDEW RESISTANT AND NON-STAINING PER MANUFACTURER'S REQUIREMENTS

L. ALL WALL COVERING SHALL BE WRAPPED AT LEAST 2" AROUND OUTSIDE CORNERS. MATCH ALL PATTERN AT SEAMS

M. WHERE WOOD BASE IS SPECIFIED, CAULK AT TOP OF BASE AND WALL WITH COLORED CAULK TO MATCH WOOD STAIN

N. INSTALL TRANSITION STRIP AT THRESHOLD WHERE DIFFERING FLOORING MATERIALS ABUTT, UNLESS OTHERWISE NOTED. COORDINATE COLOR/FINISH WITH DESIGNER

O. PAINT METAL WALL-MOUNTED ACCESS DOORS, GRILLES, RETURN AIR GRILLES, COVER PLATES, FAN COIL UNITS, FIRE EQUIPMENT CABINETS, AND ELECTRICAL CABINETS TO MATCH ADJACENT SURFACE UNLESS OTHERWISE NOTED.

P. ALL FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTER LINE OF CLOSED DOORS.

Q. FLOOR PATTERN TO CONTINUE UNDER ALL OPEN WOODWORK/ WORKSURFACES.

R. FLOORING CONTRACTOR SHALL MAKE ADJUSTMENTS TO ACCOMMODATE FOR ANY DIFFERENCES IN THE PILE HEIGHT OF THE CARPET.

S. PRIOR TO ORDERING, SUB-CONTRACTORS FOR FLOORING, PAINTING, AND MILLWORK SHALL SUBMIT TO ARCHITECT / INTERIOR DESIGNER AN 8" X 8" SAMPLE OF EACH MATERIAL SPECIFIED FOR FINAL APPROVAL.

T. IF ANY DISCREPANCIES OR OMISSIONS ARE NOTED IN THESE DRAWINGS, CONTACT INTERIOR DESIGNER OR ARCHITECT PRIOR TO ORDERING OR COMMENCING WORK.

U. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK LEAD TIMES ON FINISHES IN ORDER TO AVOID DELAYING WORK.

V. ALIGN GROUT JOINTS AT FLOOR, BASE, AND WALL TILE.

FLOORING MATERIAL LEGEND

FLOORING TYPE

- VCT-1
- VCT-2
- VCT-3
- VCT-4
- CS-1
- RAF-1
- RAF-2
- PTF-2
- PTF-3
- QTF-1

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LS3P PROJECT: 1201-217190
DATE: 10/31/2025

FINISH PLAN BASE BID & ADD ALT 1

A-701

CONSTRUCTION DOCUMENTS

Autodesk Docs://1201-217190 Hampton County HS/Athletic Fieldhouse_Hampton County HS_v2022.rvt
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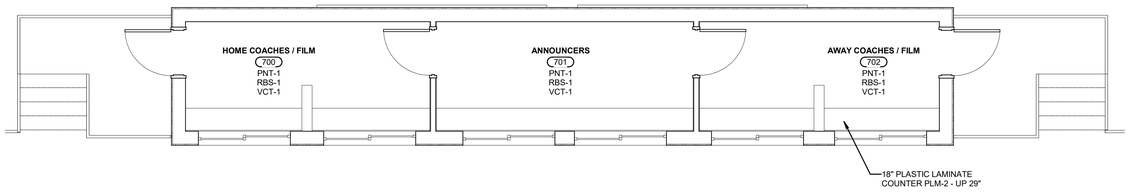
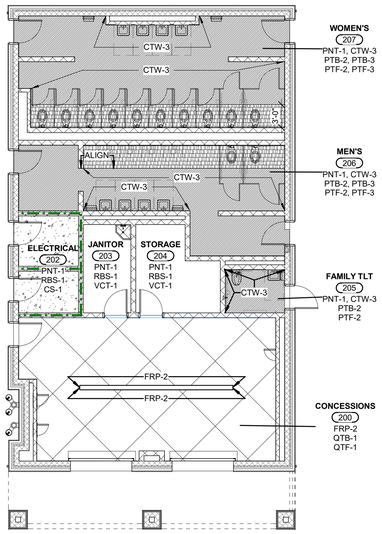


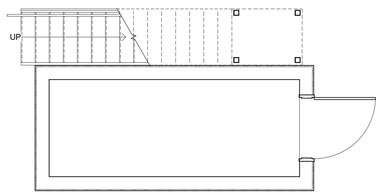
E1 FINISH PLAN - PRESSBOX (ADD ALT #6)

1/4" = 1'-0"



C1 FINISH PLAN - CONCESSIONS & RESTROOMS (ADD ALT #6)

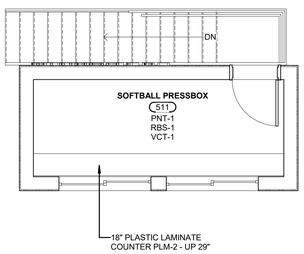
1/8" = 1'-0"



*THERE ARE TWO INSTANCES OF THIS BUILDING;
THIS FINISH PLAN APPLIES TO BOTH BUILDINGS.

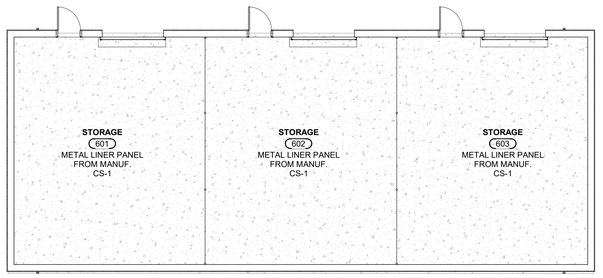
A1 FINISH PLAN - BASEBALL AND SOFTBALL PB FIRST FLOOR LEVEL (ADD ALT #2)

1/4" = 1'-0"



A2 FINISH PLAN - BASEBALL AND SOFTBALL PB SECOND FLOOR LEVEL (ADD ALT #2)

1/4" = 1'-0"



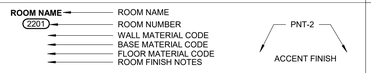
A4 FINISH PLAN - STORAGE BUILDING (ADD ALT #2)

1/8" = 1'-0"

FINISH FLOOR PLAN SHEET NOTES

1. REFER TO A-700 FINISH LEGEND AND SPECIFICATIONS
2. REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL FINISH INFORMATION.

ROOM FINISH TAG LEGEND



MATERIAL CODE LEGEND

ACC	ACOUSTICAL CEILING CANOPIES	QTF	QUARRY TILE FLOORING
ACT	ACOUSTICAL CEILING TILE	RAF	RESILIENT ATHLETIC FLOORING
AWP	SOUND ABSORBING WALL PANEL	RBC	RUBBER BASE COVE
AXT	ACOUSTICAL CEILING TRIM	RBS	RUBBER BASE STRAIGHT
CCS	COLORED CONCRETE STAIN	RBT	RUBBER TILE
CON	CONCRETE	RSA	RESILIENT STAIR ACCESSORY
CPT	CARPET	RTF	RESILIENT TILE FLOORING
CS	CONCRETE SEALER	SCN	SEALED CONCRETE
EPX	EPOXY PAINT	SDT	STATIC DISSIPATIVE TILE
ERC	EPOXY RESIN COUNTERTOPS	SHV	SHEET VINYL
FWP	FABRIC WRAPPED PANEL	SS	SOLID SURFACE
GRB	GROUT RESILIENT TILE BASE	SPF	SPORTS FLOORING
GRF	GROUT RESILIENT TILE FLOORING	STC	STAMPED CONCRETE
GTB	GROUT PORCELAIN TILE BASE	STF	PERFORMANCE STAGE FLOORING
GTF	GROUT PORCELAIN TILE FLOOR	STN	STONE COUNTER
LVT	LUXURY VINYL TILE	TBD	TO BE DETERMINED
PLM	PLASTIC LAMINATE	TZB	TERRAZZO BASE
PNT	PAINT	TZZ	TERRAZZO FLOORING
PTB	PORCELAIN TILE BASE	VCT	VINYL COMPOSITION TILE
PTC	HIGH PERFORMANCE COATINGS	VPF	VINYL PLANK FLOORING
PTF	PORCELAIN TILE FLOORING	VWC	VINYL WALLCOVERING
PTW	PORCELAIN TILE WALL	WDB	WOOD BASE
PWB	PAINTED WALL BASE	WDF	WOOD FLOORING

ROOM FINISH PLAN GENERAL NOTES

A. PRIOR TO INSTALLATION AND FABRICATION, CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND INTERIOR DESIGNER TO REVIEW ALL FLOOR PATTERNS, FINISHES AND DOCUMENTATION INFORMATION

B. PRIOR TO PAINTING, PAINTING CONTRACTOR SHALL SUBMIT TO ARCHITECT/INTERIOR DESIGNER EACH PAINT COLOR FINISH ON A 8 1/2" X 11" SHEET OF CHIPBOARD FOR PRELIMINARY APPROVAL. FOR FINAL APPROVAL BY OWNER AND ARCHITECT PRIOR TO PAINTING, THE PAINTING CONTRACTOR SHALL PAINT EACH PAINT COLOR WITH THE DESIGNATED FINISH ON A 4' X 4' PIECE OF GYPSUM BOARD. SAMPLE BOARDS SHALL BE REVIEWED AND APPROVED AT THE JOB SITE WITH THE APPROPRIATE LIGHTING.

C. INSTALLERS OF EACH FINISH MATERIAL SHALL INSPECT BOTH THE SUBSTRATE AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. INSTALLER SHALL NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN AN ACCEPTABLE MANNER TO ALL PARTIES AND MEET ALL MANUFACTURER'S REQUIREMENTS

D. ALL INTERIOR FINISHES SHALL COMPLY WITH SECTION 803 OF RESTRICTIONS OF COMBUSTIBLE MATERIALS OF THE INTERNATIONAL BUILDING CODE. ALL INTERIOR FINISHES SHALL BE CLASS B OR BETTER

E. THE INTENT IS TO PROVIDE A COMPLETE FINISHED INTERIOR WHETHER OR NOT SPECIFICALLY INDICATED. ITEMS SHALL BE FINISHED AND/OR PAINTED AS DIRECTED BY DESIGNER, WHETHER OR NOT SPECIFICALLY SCHEDULED OR INDICATED ON DRAWINGS

F. TILE SUBCONTRACTOR SHALL USE LATEX ADDITIVE IN SETTING BED PER MANUFACTURER'S RECOMMENDATIONS UNLESS OTHERWISE NOTED

G. INSTALL ALL VINYL COMPOSITION TILE IN THE SAME DIRECTION UNLESS OTHERWISE NOTED

H. CARPET INSTALLER SHALL SUBMIT SEAMING SHOP DRAWING FOR ALL AREAS SPECIFIED TO RECEIVE CARPET FLOORING PRIOR TO COMMENCEMENT OF WORK

I. PAINT ALL EXPOSED AND SEMI-EXPOSED WOOD BLOCKING AND METAL SUPPORTS TO MATCH ADJACENT SURFACES. COORDINATE WITH INTERIOR DESIGNER

J. PAINTED FINISH ON METAL SURFACES SHALL BE SMOOTH, CLEAR AND FREE OF ALL BRUSH MARKS

K. ADHESIVE FOR WALL COVERING SHALL BE STRIPPABLE, MILDEW RESISTANT AND NON-STAINING PER MANUFACTURER'S REQUIREMENTS

L. ALL WALL COVERING SHALL BE WRAPPED AT LEAST 2" AROUND OUTSIDE CORNERS. MATCH ALL PATTERN AT SEAMS

M. WHERE WOOD BASE IS SPECIFIED, CAULK AT TOP OF BASE AND WALL WITH COLORED CAULK TO MATCH WOOD STAIN

N. INSTALL TRANSITION STRIP AT THRESHOLD WHERE DIFFERING FLOORING MATERIALS ABUTT, UNLESS OTHERWISE NOTED. COORDINATE COLOR/FINISH WITH DESIGNER

O. PAINT METAL WALL-MOUNTED ACCESS DOORS, GRILLES, RETURN AIR GRILLES, COVER PLATES, FAN COIL UNITS, FIRE EQUIPMENT CABINETS, AND ELECTRICAL CABINETS TO MATCH ADJACENT SURFACE UNLESS OTHERWISE NOTED.

P. ALL FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTER LINE OF CLOSED DOORS.

Q. FLOOR PATTERN TO CONTINUE UNDER ALL OPEN WOODWORK/ WORKSURFACES.

R. FLOORING CONTRACTOR SHALL MAKE ADJUSTMENTS TO ACCOMMODATE FOR ANY DIFFERENCES IN THE PILE HEIGHT OF THE CARPET.

S. PRIOR TO ORDERING, SUB-CONTRACTORS FOR FLOORING, PAINTING, AND MILLWORK SHALL SUBMIT TO ARCHITECT / INTERIOR DESIGNER AN 8" X 8" SAMPLE OF EACH MATERIAL SPECIFIED FOR FINAL APPROVAL.

T. IF ANY DISCREPANCIES OR OMISSIONS ARE NOTED IN THESE DRAWINGS, CONTACT INTERIOR DESIGNER OR ARCHITECT PRIOR TO ORDERING OR COMMENCING WORK.

U. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK LEAD TIMES ON FINISHES IN ORDER TO AVOID DELAYING WORK.

V. ALIGN GROUT JOINTS AT FLOOR, BASE, AND WALL TILE.

FLOORING MATERIAL LEGEND

FLOORING TYPE

- VCT-1
- VCT-2
- VCT-3
- VCT-4
- CS-1
- RAF-1
- RAF-2
- PTF-2
- PTF-3
- QTF-1

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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REVISIONS:

No.	Description	Date

LS3P PROJECT: 1201-217190
DATE: 10/31/2025

FINISH PLANS ADD ALT #2 & ADD ALT #6

A-721

CONSTRUCTION DOCUMENTS

Autodesk Docs://1201-217190 Hampton County HS/Athletic Fieldhouse_Hampton County HS_v2022.rvt
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ARCH- MILLWORK- BASE AND FULL HEIGHT

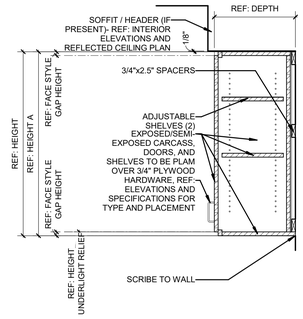
TAG	TYPE	DESCRIPTION	CABINET CARCASS			NOMINAL FEATURE HEIGHT						FACE STYLE GAP DIMS		TOE KICK		COMMENTS
			WIDTH	HEIGHT	DEPTH	A	B	C	D	E	F	G	HEIGHT	WIDTH	HEIGHT	DEPTH	
B22	33X32X24A	CABINET- BASE- 1 DRAWER, 2 DOOR	33"	32"	24"	6"	22"						0"	0"	4"	3"	
B22	36X32X24A	CABINET- BASE- 1 DRAWER, 2 DOOR	36"	32"	24"	6"	22"						0"	0"	4"	3"	
B24H	36X32X24HC	CABINET- BASE- FIXED PANEL, 2 DOOR (HC)	36"	32"	24"	4 1/2"	23 1/2"						0"	0"	4"	3"	
B44	18X32X24HC	CABINET- BASE- 4 DRAWER	18"	32"	24"	6"	5"	5"	12"				0"	0"	4"	3"	
F12	51X90X18A	CABINET- FULL HEIGHT- 2 DOOR (2X)	51"	90"	18"	86"							0"	0"	4"	3"	

ARCH- MILLWORK- UPPER CABINETS

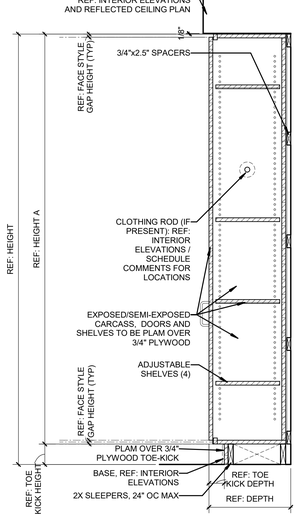
TAG	TYPE	DESCRIPTION	CABINET CARCASS			NOMINAL FEATURE HEIGHT			FACE STYLE GAP DIMS		UNDERLIGHT	COMMENTS
			WIDTH	HEIGHT	DEPTH	A	B	C	HEIGHT	WIDTH		
U11	18X30x12A	CABINET- UPPER- 1 DOOR	18"	30"	12"	30"			0"	0"		
U12B	33X30x12B	CABINET- UPPER- 2 DOOR	33"	30"	12"	30"			0"	0"		
U12B	36X30x12B	CABINET- UPPER- 2 DOOR	36"	30"	12"	30"			0"	0"		

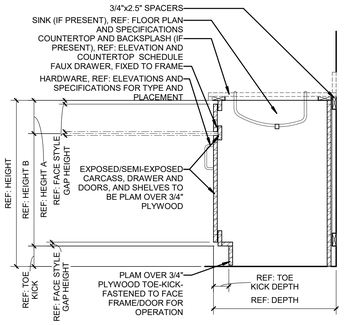
ARCH- MILLWORK- COUNTERTOPS

TAG	COUNTERTOP DEPTH			COUNTERTOP LENGTH			WORKSURFACE			ANGLED ENDS		BACK AND SIDE SPLASHES											
													BACKSPLASH 1		BACKSPLASH 2		BACKSPLASH 3		SIDE SPLASH 1		SIDE SPLASH 2		SIDESPLASH LEG 3	
	LEG 1	LEG 2	LEG 3	LEG 1	LEG 2	LEG 3	HEIGHT	MATERIAL	THICKNESS	END ANGLE 1	END ANGLE 2	SPLASH MATERIAL	PRESENT	HEIGHT IF PRESENT	PRESENT	HEIGHT IF PRESENT	PRESENT	HEIGHT IF PRESENT	PRESENT	HEIGHT IF PRESENT	PRESENT	HEIGHT IF PRESENT	PRESENT	HEIGHT IF PRESENT
	2'-1"			10'-4"			2'-6"	12-MILLWORK-PLAM-IVORY	1 1/2"	0.000°	0.000°	12-MILLWORK-PLAM-IVORY	Yes	4"					No	4"	No	4"		

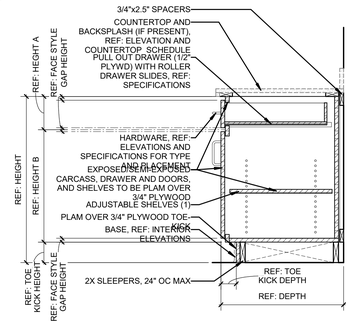


6 U11, U12
1" = 1'-0"





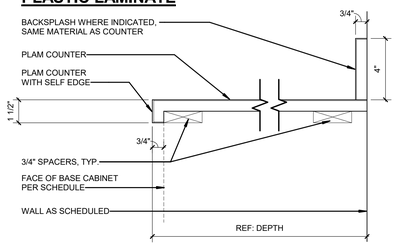
5 B24HC
1" = 1'-0"



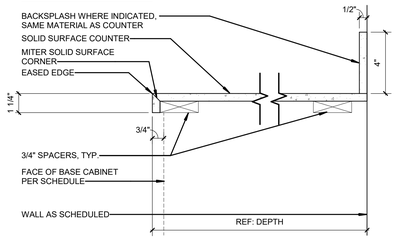
4 B21, B22, B23
1" = 1'-0"

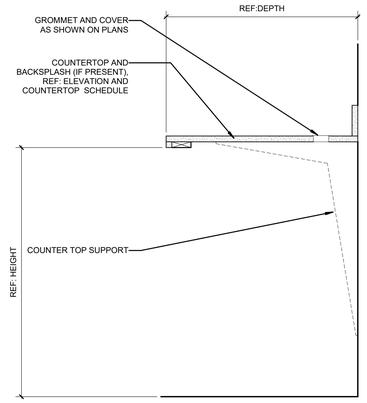
3 F11, 12
1" = 1'-0"

PLASTIC LAMINATE



SOLID SURFACE



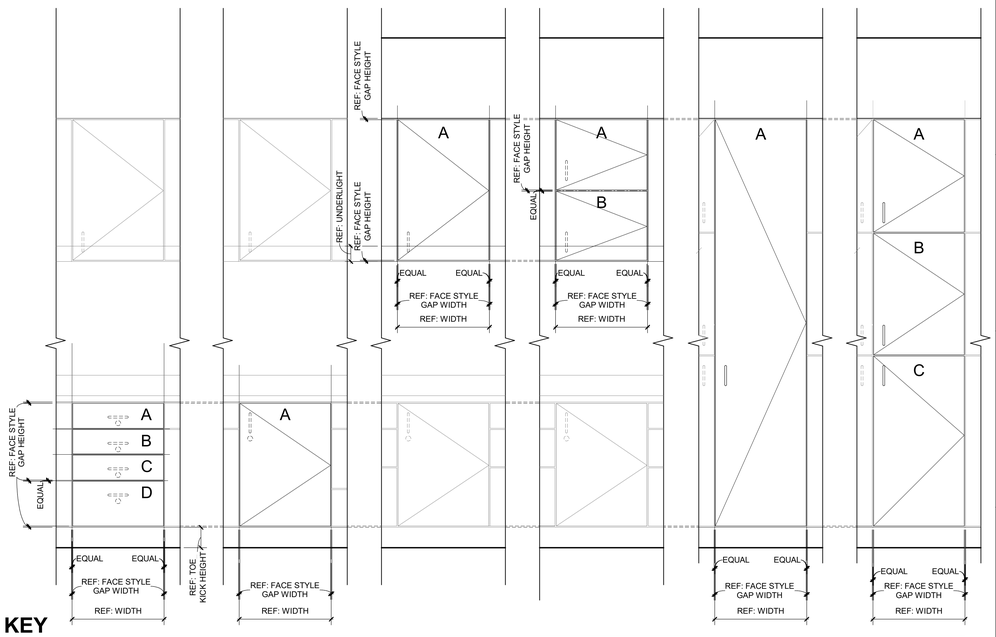


1. WHEN MULTIPLE FEATURES (LETTERS) ARE PRESENT, "A" IS TOP MOST FEATURE. FEATURES ARE LETTERED ALPHANUMERICALLY TOP TO BOTTOM, PER CABINET.

2. FACE STYLE GAP AND WIDTH DIMENSIONS SHOWN IN SCHEDULE AND ELEVATIONS ARE NOMINAL. GAP WIDTHS OF 0" DENOTE FLUSH OVERLAY INTERFACE STYLE (WITH AN ACTUAL APPROXIMATE 1/8" GAP). REFER TO SPECIFICATIONS REGARDING TYPE A/TYPE B CONSTRUCTION, AND/OR FLUSH INSET STYLE.

3. MODELED CABINETS AND MILLWORK DETAILS ARE PRESENTED TO CONVEY FEATURE TYPE, SIZE AND SPACING, CABINET SIZE AND SPACING, HARDWARE TYPES, SIZES, AND SPACING. TYPE B CONSTRUCTION WITH FLUSH/REVEAL OVERLAY INTERFACE IS SHOWN FOR REPRESENTATION OF SCHEDULED DIMENSIONS ONLY. REFER TO SPECIFICATIONS FOR MILLWORK CONSTUCTION TYPES.

4. REFER TO INTERIOR ELEVATIONS FOR MATERIAL TAGS INDICATING EXTERIOR FINISHES. REFER TO SPECIFICATIONS FOR INTERIOR FINISHES.



1 MILLWORK- COUNTERTOP KEY
3" = 1'-0"

2 MILLWORK- COUNTER TOP - DESK
1 1/2" = 1'-0"

A3 MILLWORK- CABINET FEATURE KEY
1" = 1'-0"

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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REVISIONS:

No.	Description	Date

LS3P PROJECT: 1201-217190
DATE: 10/31/2025

MILLWORK TYPE SCHEDULE AND NOTES

A-781

CONSTRUCTION DOCUMENTS

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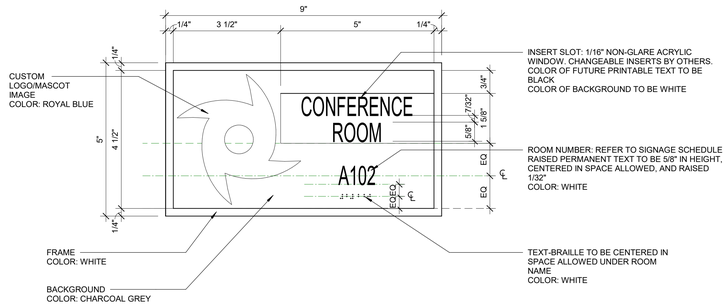
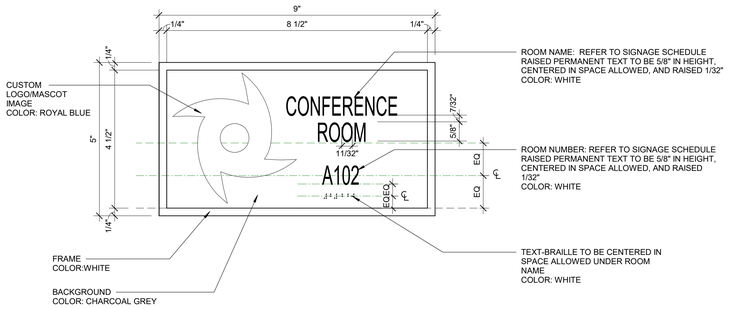
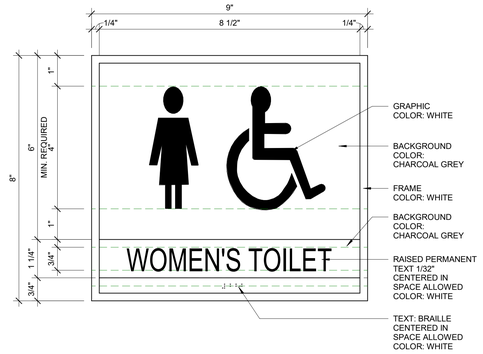


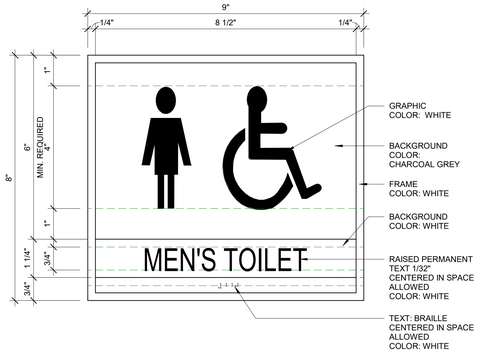
E1 SG-01 SIGNAGE - TYPE 1A
6" = 1'-0"



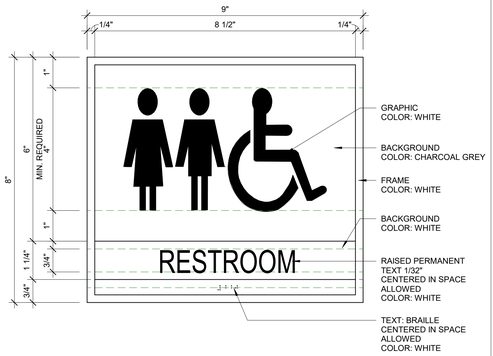
E3 SIGNAGE - TYPE 1B
6" = 1'-0"



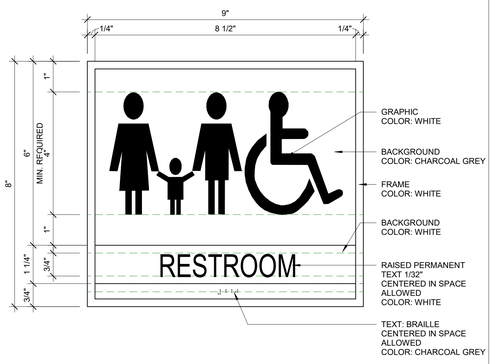
C1 SIGNAGE - TYPE 2A
6" = 1'-0"



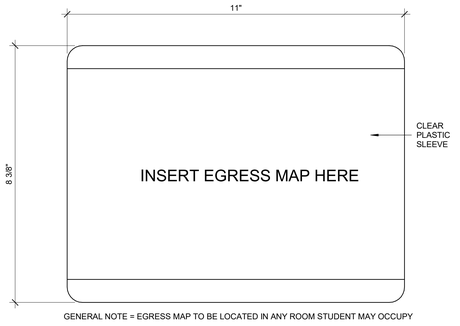
C2 SIGNAGE - TYPE 2B
6" = 1'-0"



B1 SIGNAGE - TYPE 2C
6" = 1'-0"

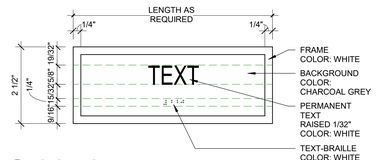


B2 SIGNAGE - TYPE 2D
6" = 1'-0"

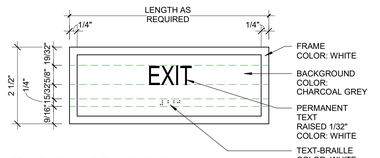


GENERAL NOTE = EGRESS MAP TO BE LOCATED IN ANY ROOM STUDENT MAY OCCUPY

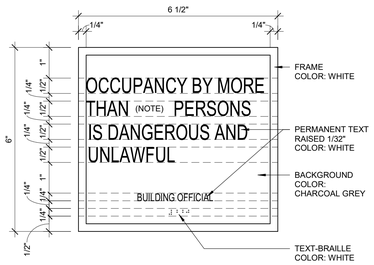
B3 SIGNAGE - TYPE 4
6" = 1'-0"



B4 SIGNAGE - TYPE 3A
6" = 1'-0"

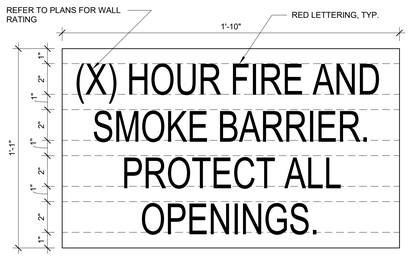


B5 SIGNAGE - TYPE 3B
6" = 1'-0"



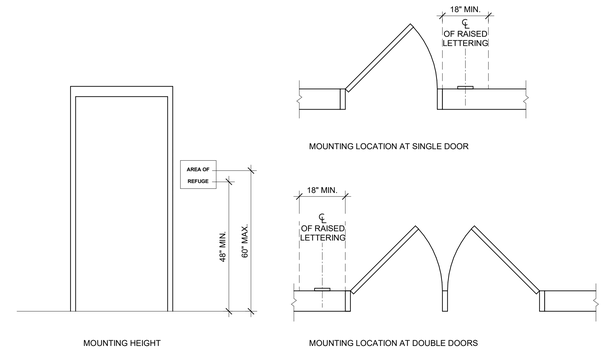
NOTE:
SEE LIFE SAFETY SHEETS G-004 AND G-005 FOR OCCUPANCY COUNT TO BE LISTED ON EACH SIGN.

A1 SIGNAGE - TYPE 3C
6" = 1'-0"



NOTE: SIGN TYPICAL AT ALL FIRE-RATED PARTITIONS WHERE WALL IS EXPOSED TO DECK. PROVIDE STENCILING PER OSF REQUIREMENTS AT ALL OTHER RATED WALLS.

A3 OSF FIRE PARTITION SIGNAGE
3" = 1'-0"



A4 TYPICAL SIGN MOUNTING LOCATIONS
1/2" = 1'-0"

GENERAL NOTES

A. PROVIDE CONCEALED STUD MOUNTING WITH THREADED BOLT THROUGH TRUSS.
B. SEE A-902 FOR SIGNAGE SCHEDULES.
C. OWNER TO APPROVE FINAL SIGNAGE SCHEDULE COPY, COLOR SELECTIONS AND FINAL LOCATIONS. ALL DESIGN, COLOR, AND COPY ELEMENTS TO BE APPROVED BY OWNER PRIOR TO ORDER ENTRY. ROOM NAMES AND NUMBERS LISTED IN THESE DOCUMENTS MAY DIFFER FROM FINAL NAMES AND NUMBERS.
D. ALL TEXT TO USE FONT STYLE AS CHOSEN BY THE OWNER, WITH ALL LETTERS CAPITALIZED. ALL SIGNAGE REQUIRED BY CODE MUST MEET REQUIREMENTS OF ANSI A117.1-2009.
E. INSTALL ALL INTERIOR SIGN TYPES NOT AT GLASS WITH 1/32" THICK FOAM TAPE. AT ALL GLASS LOCATIONS, PROVIDE A MATHCING BACK COVERPLATE FOR OPPOSING SIDE OF GLASS.
F. ALL SIGNS IDENTIFYING SAFETY DEVICES SUCH AS FIRE ALARM PULL STATIONS, FIRE EXTINGUISHERS, ETC., TO BE LOCATED AT A HEIGHT HORIZONTALLY ALONG THE SAME CENTERLINE OF THE DEVICE IT IS IDENTIFYING. LOCATE SAFTEY DEVICE SIGNS FOR ITEMS WITHIN A CABINET ON THE SIGN ADJACENT TO THE PULL/HANDLE, 2" FROM THE DEVICE'S EDGE. FOR SAFETY DEVICES NOT WITHIN A CABINET, LOCATE SIGNS 2" TO THE RIGHT OF DEVICES, AS SPACE ALLOWS, TO THE LEFT IN SPACE TO THE RIGHT AS OBSTRUCTED.
G. ALL SIGNS TO BE MOUNTED FOLLOWING ANSI A117.1-2009 GUIDELINES, PLACING EDGE OF SIGN 2" FROM FRAME AT DOOR/FRAMED OPENINGS, LATCH SIDE OF DOOR, OR 2" FROM EDGE OF OPENING IF NO FRAME IS USED, UNLESS NOTED OTHERWISE. LOCATE SIGN ON FACE OF WALL LEADING INTO SPACE WITH SIGN NAME, U.N.O.
H. PROVIDE A QUANTITY OF ONE PANEL SIGN AT EACH DOOR TO BE PROVIDED, LEADING INTO A SPACE (AS DIRECTED BY VARIOUS SIGN TYPES SHOWN). FINAL SIGNAGE TYPES AND LOCATIONS TO BE APPROVED BY OWNER.
I. PROVIDE SIGN TYPE 3A WITH APPROPRIATE COPY AT EACH SAFETY DEVICE INTENDED FOR PUBLIC USE INCLUDING, BUT NOT LIMITED TO, FIRE EXTINGUISHERS, FIRE ALARM PULL STATIONS AND EMERGENCY HVAC FAN STOPS.
J. EVACUATION SIGNAGE TO BE LOCATED AS STIPULATED BY LOCAL CODES AND AS STIPULATED BY BUILDING'S DESIGN, WITH FINAL COPY AND GRAPHICS, AS GENERATED BY SIGNAGE COPY, PROVIDED TO OWNER FOR FINAL APPROVAL DURING SUBMITTAL PROCESS.
K. A SIGN STATING "EXIT" IN RAISED CHARACTERS AND BRAILLE AND COMPLYING WITH ICC ANSI A 117.1 SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AN AREA OF REFUGE, AN EXTERIOR AREA FOR ASSISTED RESCUE, AN EXIT STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE.

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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REVISIONS:

No.	Description	Date

LS3P PROJECT: 1201-217190
DATE: 10/31/2025

SIGNAGE ELEVATIONS

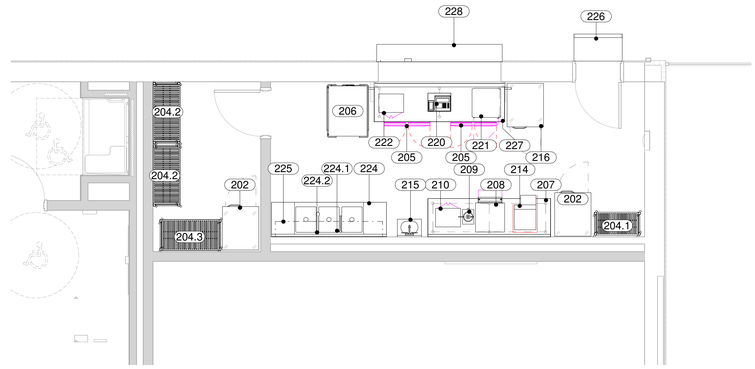
A-901

CONSTRUCTION DOCUMENTS

Autodesk Docs://1201-217190 Hampton County HS/Athletic Fieldhouse_Hampton County HS_v2022.rvt
10/31/2025 1:22:40 PM



1 QF105 FOODSERVICE EQUIPMENT PLAN - CONCESSIONS
1/4" = 1'-0"



2 QF105 FOODSERVICE EQUIPMENT PLAN - CONCESSIONS SMALL
1/4" = 1'-0"

FOODSERVICE EQUIPMENT SCHEDULE - CONCESSIONS

ITEM NO.	QTY.	DESCRIPTION	MANUFACTURER	MODEL	EQUIPMENT REMARKS	AMPS	HP	KW	VOLTS	PHASE	CONN. TYPE	NEMA	ELEC. CONN. HEIGHT	ELECTRICAL REMARKS	CW SIZE	CW CONN. HEIGHT	HW SIZE	HW CONN. HEIGHT	HW TEMP.	HW GPH	DW SIZE	DW CONN. HEIGHT	IW SIZE	PLUMBING REMARKS	ITEM NO.
202	4	REFRIGERATOR	CONTINENTAL REFRIGERATOR	D1RENHD	CASTERS	5.8			120	1	CORD & PLUG	5-15P	50"												202
204	2	MOBILE SHELVING UNIT	CAMBRO	EXMU243670V4480	4-TIER, 70" POSTS, CASTERS																				204
204.1	3	MOBILE SHELVING UNIT	CAMBRO	EXMU183670V4480	4-TIER, 70" POSTS, CASTERS																				204.1
204.2	2	MOBILE SHELVING UNIT	CAMBRO	EXMU214870V4480	4-TIER, 70" POSTS, CASTERS																				204.2
204.3	1	MOBILE SHELVING UNIT	CAMBRO	EXMU244870V4480	4-TIER, 70" POSTS, CASTERS																				204.3
205	6	UNDERCOUNTER REFRIGERATOR	CONTINENTAL REFRIGERATOR	SW36N-U		6.3	1/5		120	1	CORD & PLUG	5-15P	24"												205
206	2	MOBILE HOT CABINET	METRO	C5T9D-DSB	CASTERS, ENERGY STAR	12			120	1	CORD & PLUG	5-15P	66"												206
207	2	WORKTABLE	TO BE FABRICATED	CUSTOM																					207
208	2	NACHO CHIP WARMER	HATCO	FST-1-MN		10.2			120	1	CORD & PLUG	5-15P	50"												208
209	2	NACHO CHEESE WARMER	STAR	HPDE1HP		7			120	1	CORD & PLUG	5-15P	50"												209
210	2	POPCORN MACHINE	GOLD MEDAL	2001		15.9			120	1	CORD & PLUG	5-20P	50"												210
211	1	WORKTABLE	TO BE FABRICATED	CUSTOM																					211
212	1	WORKTABLE	TO BE FABRICATED	CUSTOM																					212
213	1	GRIDDLE, DOWNDRAFT VENTED TABLE	EVO	10-0148-EVT		40		8.32	208	1	CORD & PLUG	6-50P	24"												213
214	3	COUNTER TOP DEEP FRYER	PERFECT FRY COMPANY	PFA730		35		7.6	208	1	CORD & PLUG	6-50P	50"												214
215	3	HAND SINK	EAGLE GROUP	HSA-10-FAW	WRIST HANDLES, SIDE PANELS										1/2"	14"	1/2"	14"	110 °F	5	1 1/2"	12"		WRIST HANDLES	215
216	5	FREEZER	CONTINENTAL REFRIGERATOR	DL1FENHD	CASTERS	6.3			120	1	CORD & PLUG	5-15P	50"												216
217	1	PREP TABLE W/ SINK	TO BE FABRICATED	CUSTOM																			1 1/2"	LEVER WASTE	217
217.1	1	FAUCET	T&S BRASS	B-0231-CR-KIT											1/2"	14"	1/2"	14"	140 °F	10					217.1
218	1	TEA BREWER	BY PRODUCT SUPPLIER			14			120	1	CORD & PLUG	5-15P	50"		1/4"	14"									218
218.1	4	TEA URN	BY PRODUCT SUPPLIER																						218.1
219	1	COFFEE BREWER	BY PRODUCT SUPPLIER			25.8			120/208	1	DIRECT		50"		3/8"	14"									219
219.1	2	AIRPOT	BY PRODUCT SUPPLIER																						219.1
220	3	P.O.S.	BY OWNER			10			120	1	CORD & PLUG	5-15P	24"												220
221	3	PIZZA DISPLAY CABINET	HATCO	FSD-1		12			120	1	CORD & PLUG	5-15P	50"												221
222	3	POPCORN MACHINE	GOLD MEDAL	2001		15.9			120	1	CORD & PLUG	5-20P	50"												222
223	1	CUBE ICE MACHINE	HOSHIZAKI	KM-660MAJ	WATER FILTER	15.2			120	1	DIRECT		72"		1/2"	66"							3/4"	WATER FILTER	223
223.1	1	ICE BIN	HOSHIZAKI	B-500SF																			3/4"		223.1
224	2	3-COMPARTMENT SINK	EAGLE GROUP	FN2048-3-18-14/3																			1 1/2"		224
224.1	2	FAUCET	T&S BRASS	B-0231-CR-KIT											1/2"	14"	1/2"	14"	140 °F	22					224.1
224.2	2	PRE-RINSE FAUCET	T&S BRASS	B-0133-B											1/2"	14"	1/2"	14"	140 °F	22					224.2
225	2	WALL SHELF W/ UTENSIL RAIL	EAGLE GROUP	WSP1284																					225
226	2	AIR CURTAIN	BERNER INTERNATIONAL CORP.	AHC10-1036A		7.2			120	1	DIRECT		108"												226
227	3	WORKTABLE	TO BE FABRICATED	CUSTOM																					227
228	3	AIR CURTAIN	BERNER INTERNATIONAL CORP.	AHC10-2096A		14.4			120	1	DIRECT		108"												228

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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No.	Description	Date
	CONSTRUCTION DOCUMENTS	10.31.2025

PROJECT: 1201-217190
DATE: 10/31/2025
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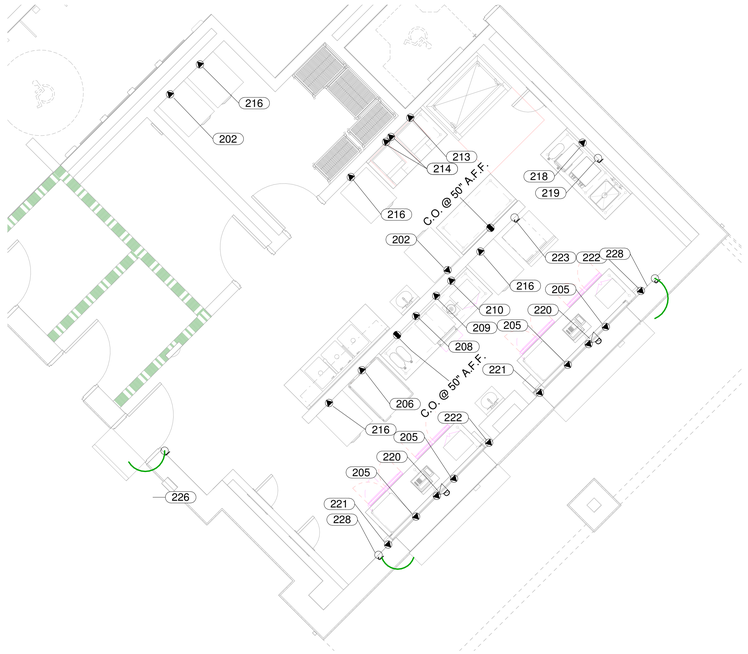
CHECKED BY: HS

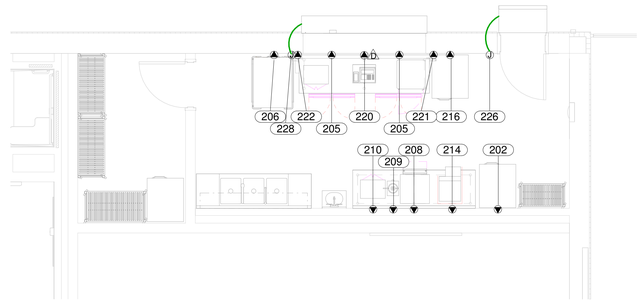
FOODSERVICE EQUIPMENT PLAN - PHASE 2

QF105

CONSTRUCTION DOCUMENTS



1 QF303 FOODSERVICE ELECTRICAL ROUGH-IN PLAN - CONCESSIONS
1/4" = 1'-0"



2 QF303 FOODSERVICE ELECTRICAL ROUGH-IN PLAN - CONCESSIONS SMALL
1/4" = 1'-0"

ELECTRICAL LEGEND

	DUPLEX RECEPTACLE
	SPECIAL PURPOSE RECEPTACLE
	JUNCTION BOX
	CONVENIENCE RECEPTACLE (15A/120V/1)
	DROP RECEPTACLE (DOWN FROM ABOVE)
	STUB RECEPTACLE (UP FROM FLOOR)
	DATA CONNECTION
$	SWITCH

FOODSERVICE ELECTRICAL NOTES

- THIS ELECTRICAL PLAN AND COORDINATING SCHEDULE IS INTENDED TO SHOW ROUGH-IN LOCATIONS AND HEIGHTS, CONNECTION TYPES, POSITIONS, FIXTURE TYPES, AND LOAD REQUIREMENTS FOR FOODSERVICE EQUIPMENT SPECIFIED AND SCHEDULED FOR REUSE. THIS ELECTRICAL PLAN IS INTENDED TO SHOW ELECTRICAL REQUIREMENTS AND APPROXIMATE ROUGH-IN LOCATIONS ONLY. DO NOT USE FOR ACTUAL ROUGHING-IN. FOR FINAL ROUGH-IN LOCATIONS, SEE DIMENSIONED PLANS PROVIDED BY FOODSERVICE EQUIPMENT CONTRACTOR.
- UTILITY REQUIREMENTS INDICATED ARE TO SERVE AS A REFERENCE TO THE LICENSED PROFESSIONAL ARCHITECT AND/OR ENGIENEERS IN THE PREPARATION OF THEIR RESPECTIVE BID AND CONSTRUCTION DOCUMENTS. NO ARCHITECTRUAL OR ENGINEERING DESIGN SERVICES ARE INTENDED OR ASSUMED. SEE ELECTRICAL ENGINEER/ARCHITECT'S DRAWINGS FOR ADDITIONAL INFORMATION.
- PRIOR TO EQUIPMENT INSTALLATION, THE FOODSERVICE EQUIPMENT CONTRACTOR SHALL CHECK UTILITY ROUGH-IN LOCATIONS, COORDINATE FIELD CONDITIONS, AND CALL TO THE ATTENTION OF THE GENERAL CONTRACTOR ANY DISCREPANCIES BETWEEN THE FOODSERVICE UTILITY PLANS, THE EQUIPMENT SPECIFIED, AND THE ROUGH-INS AS THEY OCCUR IN THE FIELD.
- SHOULD DISCREPANCIES OCCUR, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT AND/OR PROJECT ARCHITECT/ENGINEER FOR THE CONFLICT TO BE CLARIFIED IN AN OFFICIAL REQUEST FOR INFORMATION.
- ELECTRICAL LOADS ARE BASED ON MANUFACTURER'S INFORMATION. MINIMUM CIRCUIT AMPACITY AND OVERCURRENT PROTECTION TO BE DETERMINED BY CODE REQUIRMENTS AND/OR MANUFACTURER'S DIRECTIONS.
- EXPOSED UTILITY LINES AND PIPES SHALL BE INSTALLED IN A WAY THAT DOES NOT OBSTRUCT OR PREVENT THE CLEANING OF FLOORS, WALLS, AND CEILING AREAS (2 INCHES OFF WALLS AND 6 INCHES MINIMUM OFF FLOORS).
- ELECTRICAL ENGINEER TO BE RESPONSIBLE FOR ALL CONCERNS AND ARRANGEMENTS REGARDING PENETRATIONS INTO THE FLOOR AND WALL. BUILDING OWNER TO APPROVE PRIOR TO CONSTRUCTION.
- ELECTRICAL ENGINEER TO LOCATE RECEPTACLES IN STORAGE AREA AS REQUIRED BY LOCAL BUILDING CODE.
- ELECTRICAL COMPONENTS MUST NOT INTERFERE WITH THE OPERATION OF FOODSERVICE EQUIPMENT

ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:

- ELECTRICAL ROUGH-IN
- ALL ELECTRICAL WORK, LABOR, AND MATERIAL REQUIRED TO CONNECT THIS EQUIPMENT IS TO BE FURNISHED BY ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY CALLED FOR IN FOODSERVICE DOCUMENTS. ELECTRICAL CONTRACTOR SHALL INCLUDE ROUGHING-IN TO POINTS INDICATED ON ROUGHING-IN PLANS, FINAL CONNECTIONS FROM ROUGH-IN POINTS TO EQUIPMENT REQUIRING THOSE CONNECTIONS, AND THE SUPPLYING OF ALL NECESSARY MATERIALS AND LABOR FOR THIS WORK EXCEPT AS HEREINAFTER NOTED.
- ELECTRICAL BUILDING SERVICES INCLUDING BUT NOT LIMITED TO CONDUIT, WIRING, LINE AND DISCONNECT SWITCHES, SAFETY CUTOFFS AND FITTINGS, CONTROL PANELS, FUSES. BOXES AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION (EXCEPT INTERNAL WIRING AS SPECIFIED OR INDICATED OTHERWISE ON DRAWINGS).
- FINAL ELECTRICAL CONNECTIONS TO EQUIPMENT SHALL BE BY THE ELECTRICAL CONTRACTOR, INCLUDING ALL REQUIRED MATERIALS (SUCH AS LINE AND DISCONNECT SWITCHES, SAFETY CUTOUTS, CONTROL PANELS, FUSE BOXES OR OTHER ELECTRICAL CONTROLS, FITTINGS, CONDUITS AND CONNECTIONS). ITEMS NOT FURNISHES AS A STANDARD PART OF THE EQUIPMENT BY THE MANUFACTURER ARE TO BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. STARTING SWITCHES PROVIDED BY FOODSERVICE EQUIPMENT CONTRACTOR AND FURNISHED LOOSE AS A STANDARD BY THE EQUIPMENT MANUFACTURER ARE TO BE MOUNTED AND WIRED COMPLETE UNDER THE ELECTRICAL CONTRACT.
- FINAL CONNECTIONS, INCLUDING MOUNTING AND WIRING OF STARTERS AND SWITCHES FURNISHED AS PART OF THE FOODSERVICE EQUIPMENT (UNLESS OTHERWISE INDICATED ON DRAWINGS).
- JUNCTION BOXES, ELECTRICAL OUTLETS, COVER PLATES, SWITCHES, ETC. NOT BUILT INTO FIXTURES OR EQUIPMENT. ALL RECEPTACLES, COVER PLATES, ETC. IN FOODSERVICE AREAS SHALL BE MOISTURE PROOF.
- PLUGS AND CORDS THAT ARE NEMA RATED AND UL APPROVED FOR MANUFACTURER AND FABRICATED EQUIPMENT.
- SHUNT-TRIP CIRCUIT BREAKERS OR DISCONNECTS FOR FIRE SUPPRESSION SYSTEM SHUT-OFF FOR EQUIPMENT BENEATH VENTILATORS AS REQUIRED BY NFPA-96 AND LOCAL, STATE, AND NATIONAL CODES.
- GFI RECEPTACLES AS REQUIRED BY LOCAL, STATE, AND NATIONAL CODES.
- DISCONNECTS OR OTHER DEVICES AS MAY BE REQUIRED BY LOCAL, STATE, AND NATIONAL CODES.

WHEN APPLICABLE, THE ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT AND WIRING, INSTALL ELECTRICAL COMPONENTS (PROVIDED BY THE FOODSERVICE EQUIPMENT CONTRACTOR), AND INTERWIRE BETWEEN THE FOLLOWING:

- EXHAUST HOODS FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR WITH LIGHT FIXTURES, EMPTY CONDUIT TO JUNCTION BOX, AND PRE-WIRE PACKAGE. ELECTRICAL CONTRACTOR TO INTERCONNECT TO SWITCHES AND MAKE ALL FINAL CONNECTIONS.
- STAINLESS STEEL UTILITY CHASE SHALL BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR WITH HOLES CUT FOR RECEPTACLES AND CORD AND PLUG SETS LOOSE. ELECTRICAL CONTRACTOR TO INSTALL AND WIRE EACH RECEPTACLE ON UTILITY CHASE AND MAKE FINAL CONNECTIONS. ELECTRICAL CONTRACTOR TO CONNECT ALL CORD AND PLUG SETS TO EQUIPMENT.
- FIRE SUPPRESSION SYSTEM FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR WITH APPLIANCE SHUT-OFF FEATURE. ELECTRICAL CONTRACTOR TO INTERCONNECT TO SHUNT TRIPS PER MANUFACTURER'S DIAGRAM SO AS TO SHUT OFF ALL EQUIPMENT UNDER HOODS WITH ACTIVATED.
- POWER TO ALL ELECTRICALLY OPERATED COOKING EQUIPMENT UNDER HOODS TO BE FROM PANEL WHERE MAIN BREAKER IS INTERWIRED WITH THE FIRE SUPPRESSION SYSTEM AND/OR FIRE TERMINAL BLOCK IN THE UTILITY DISTRIBUTION SYSTEM SO THAT THE POWER SHUT-OFF IS ACHEIVED UPON EITHER MANUAL OR AUTOMATIC OPERATION OF THE FIRE SUPPRESSION SYSTEM. ALL INTERWIRING BY ELECTRICAL CONTRACTOR.
- HOOD CONTROLS AND FIRE SUPPRESSION SYSTEMS EACH REQUIRE 24-HOUR EMERGENCY ELECTRICAL SERVICE.
- ELECTRICAL CONTRACTOR TO PROVIDE CIRCUITS ON ROOF FOR EXHAUST/SUPPLY FANS. VERIFY UTILITIES REQUIRED WITH MECHANICAL CONTRACTOR AND LOCATION OF UNITS WITH GENERAL CONTRACTOR. FINAL CONNECTIONS BY ELECTRICAL CONTRACTOR.
- DISHMACHINE SHALL BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR PRE-WIRED TO INTEGRAL CONTROL PANEL AND READY FOR FINAL CONNECTION BY ELECTRICAL CONTRACTOR.
- DISHMACHINE SHALL BE FURNISHED WITH EXHAUST FAN CONTROL SWITCH BY FOODSERVICE EQUPMENT CONTRACTOR. ELECTRICAL CONTRACTOR TO INTERCONNECT TO EXHAUST FAN SO THAT FAN OPERATES WHEN DISHMACHINE IS TURNED ON.
- DISHMACHINE SHALL BE FURNISHED WITH LIMIT SWITCH BY FOODSERVICE EQUIPMENT CONTRACTOR. ELECTRICAL CONTRACTOR TO INTERCONNECT AND MAKE FINAL CONNECTIONS.
- COLD STORAGE ROOMS SHALL BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR WITH PRE-WIRED LIGHT AND SWITCH AT DOOR PANEL. ELECTRICAL CONTRACTOR TO PROVIDE INTERCONNECTING WIRING TO EXTRA LIGHT FIXTURES AND MAKE FINAL CONNECTIONS.
- REFRIGERATION SYSTEMS SHALL BE FURNISHED AND INSTALLED BY FOODSERVICE EQUIPMENT CONTRACTOR. DEFROST CONTROL WIRING BETWEEN FREEZER CONDENSING UNIT AND EVAPORATOR COIL SHALL BE BY ELECTRICAL CONTRACTOR. FINAL ELECTRICAL DROPS AND DISCONNECTS FOR CONDENSING UNTIS AND EVAPORATOR COILS SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR.
- DISPOSERS SHALL BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR WITH SOLENOID VALVE AND AUTO-REVERSING CONTROL CENTER WITH MAGNETIC STARTER AND START/STOP BUTTONS. INTERWIRING AND FINAL CONNECTION BY ELECTRICAL CONTRACTOR.
- UTILITY DISTRIBUTION SYSTEM SHALL BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR PRE-WIRED AND READY FOR FINAL CONNECTION BY ELECTRICAL CONTRACTOR. FOODSERVICE EQUIPMENT CONTRACTOR TO FURNISH CORD AND PLUG SETS FOR INSTALLATION TO EQUIPMENT BY ELECTRICAL CONTRACTOR. ANY NECESSARY INTERWIRING AND FINAL CONNECTIONS TO THE EQUIPMENT SHALL BE BY THE ELECTRICAL CONTRACTOR.
- AIR CURTAIN FAN TO BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR WITH DOOR SWITCH. ELECTRICAL CONTRACTOR TO PROVIDE MASTER SWITCH, INTERWIRE DOOR SWITCH, AND MAKE FINAL CONNECTIONS.

IT IS THE INTENT OF THIS DRAWING TO SHOW ELECTRICAL CONNECTION POINTS. FOR FINAL ROUGH-IN DRAWINGS, SEE CONTRACTOR'S DETAIL SHOP DRAWINGS. ALLOWANCES SHALL BE MADE FOR TRIM, FITTINGS AND ACCESSORIES.

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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No.	Description	Date
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CHECKED BY: HS

FOODSERVICE ELECTRICAL ROUGH-IN PLAN - PHASE 2

QF303

CONSTRUCTION DOCUMENTS



1 QF403 FOODSERVICE PLUMBING ROUGH-IN PLAN - CONCESSIONS
1/4" = 1'-0"



2 QF403 FOODSERVICE PLUMBING ROUGH-IN PLAN - CONCESSIONS SMALL
1/4" = 1'-0"

PLUMBING LEGEND

	HW-HOT WATER, OR CW-COLD WATER
	DW-DIRECT WASTE
	IW-INDIRECT WASTE
	GAS
	FD-FLOOR DRAIN
	FS-FLOOR SINK
	COMPRESSED AIR
	STEAM SUPPLY
	CONDENSATE RETURN

FOODSERVICE PLUMBING NOTES

- THIS PLUMBING PLAN AND COORDINATING SCHEDULE IS INTENDED TO SHOW ROUGH-IN LOCATIONS AND HEIGHTS, CONNECTION TYPES, POSITIONS, FIXTURE TYPES, AND LOAD REQUIREMENTS FOR FOODSERVICE EQUIPMENT SPECIFIED AND SCHEDULED FOR REUSE. THIS PLUMBING PLAN IS INTENDED TO SHOW PLUMBING REQUIREMENTS AND APPROXIMATE ROUGH-IN LOCATIONS ONLY. DO NOT USE FOR ACTUAL ROUGHING-IN. FOR FINAL ROUGH-IN LOCATIONS, SEE DIMENSIONED PLANS PROVIDED BY FOODSERVICE EQUIPMENT CONTRACTOR.
- UTILITY REQUIREMENTS INDICATED ARE TO SERVE AS A REFERENCE TO THE LICENSED PROFESSIONAL ARCHITECT AND/OR ENGIENEERS IN THE PREPARATION OF THEIR RESPECTIVE BID AND CONSTRUCTION DOCUMENTS. NO ARCHITECTRUAL OR ENGINEERING DESIGN SERVICES ARE INTENDED OR ASSUMED. SEE PLUMBING ENGINEER/ARCHITECT'S DRAWINGS FOR ADDITIONAL INFORMATION.
- PRIOR TO EQUIPMENT INSTALLATION, THE FOODSERVICE EQUIPMENT CONTRACTOR SHALL CHECK UTILITY ROUGH-IN LOCATIONS, COORDINATE FIELD CONDITIONS, AND CALL TO THE ATTENTION OF THE GENERAL CONTRACTOR ANY DISCREPANCIES BETWEEN THE FOODSERVICE UTILITY PLANS, THE EQUIPMENT SPECIFIED, AND THE ROUGH-INS AS THEY OCCUR IN THE FIELD.
- SHOULD DISCREPANCIES OCCUR, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT AND/OR PROJECT ARCHITECT/ENGINEER FOR THE CONFLICT TO BE CLARIFIED IN AN OFFICIAL REQUEST FOR INFORMATION.
- UTILITIES ARE BASED ON MANUFACTURER'S INFORMATION. ACTUAL ROUGHING-IN TO BE DETERMINED BY CODE REQUIRMENTS AND/OR MANUFACTURER'S DIRECTIONS.
- EXPOSED UTILITY LINES AND PIPES SHALL BE INSTALLED IN A WAY THAT DOES NOT OBSTRUCT OR PREVENT THE CLEANING OF FLOORS, WALLS, AND CEILING AREAS (2 INCHES OFF WALLS AND 6 INCHES MINIMUM OFF FLOORS).
- GAS COOKING EQUIPMENT SHALL BE AGA APPROVED AND FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR WITH GAS PRESSURE REGULATORS DESIGNED TO OPERATE WITH 14" W.C. INCOMING GAS PRESSURE OR LESS.
- FOODSERVICE EQUIPMENT CONTRACTOR TO FURNISH MECHANICAL GAS SOLENOID VALVE LOOSE FOR PLUMBING CONTRACTOR TO INSTALL IN GAS SUPPLY LINE, LOCATED SO AS TO SHUT OFF GAS TO COOKING EQUIPMENT WHEN ACTIVATED.
- PLUMBING ENGINEER TO BE RESPONSIBLE FOR ALL CONCERNS AND ARRANGEMENTS REGARDING PENETRATIONS INTO THE FLOOR AND WALL. BUILDING OWNER TO APPROVE PRIOR TO CONSTRUCTION.
- PLUMBING ENGINEER TO LOCATE AREA DRAINS AS REQUIRED FOR GENERAL CLEANING OF THE FACILITY.
- PLUMBING COMPONENTS MUST NOT INTERFERE WITH THE OPERATION OF FOODSERVICE EQUIPMENT.
- WHEN APPLICABLE, PLUMBING CONTRACTOR TO INTERCONNECT DISHMACHINE WITH BOOSTER HEATER/HEAT RECLAIMER AS PER MANUFACTURER'S INSTRUCTIONS.
- WHEN APPLICABLE, PLUMBING CONTRACTOR TO INTERCONNECT WATER-WASH VENTILATORS WITH CONTROL PANELS AS PER MANUFACTURER'S INSTRUCTIONS.
- WHERE POSSIBLE, UTILITIES SHALL BE CONCEALED WITHIN BUILDING WALLS OR COLUMN CHASES, NOT RUN ALONG WALL FACE. DO NOT STUB OUT OF FLOOR AND RUN ON THE FACE OF THE WALL.
- ANY AND ALL EXPOSED PIPING OR FITTINGS TO BE STAINLESS STEEL, CHROME PLATED, OR ENCLOSED IN A CONCEALED, MOUNTED STAINLESS STEEL CHASE.
- ALL HORIZONTAL PIPING RUNS EXTENDED TO AND CONNECTED TO EQUIPMENT ITEMS SHALL BE AT THE HIGHEST PRACTICAL ELEVATION AND NOT LESS THAN 6" ABOVE THE FINISHED FLOOR (TO PROVIDE CLEARANCE FOR CLEANING).
- VENT PIPES TO BE CONCEALED IN WALLS OR COLUMN CHASES. USE LOOP VENTS FOR ISLAND FIXTURES, AS ALLOWED BY LOCAL CODES.
- LINES ROUTED THROUGH EQUIPMENT SHALL NOT INTERFERE WITH THE INTENDED USE OF OR SERVICING OF EQUIPMENT.
- DRINKING FOUNTAINS ARE BY PLUMBING TRADES. VERIFY UTILITY REQUIREMENTS WITH PLUMBING ENGINEER.
- FLOOR DRAINS, FUNNEL FLOOR DRAINS, FLOOR SINKS, ETC. LOCATED AT FOOD PREP SINKS, POT WASHING SINKS, AND DISHMACHINES MUST HAVE REMOVABLE BASKETS TO CATCH FOOD PARTICLES. FLOOR TROUGH DRAINS MUST ALSO BE PROVIDED WITH REMOVABLE BASKETS AND TO BE INSTALLED FLUSH WITH THE FINISHED FLOOR. NO RAISED FLOOR SINKS SHALL BE INSTALLED. ALL DRAINS IN FOODSERVICE AREAS TO BE RUN THROUGH GREASE TRAP UNLESS OTHERWISE ALLOWED BY LOCAL CODE.

PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:

- ALL PLUMBING WORK, LABOR, AND MATERIAL REQUIRED TO CONNECT THIS EQUIPMENT IS TO BE FURNISHED BY ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY CALLED FOR IN FOODSERVICE DOCUMENTS. PLUMBING CONTRACTOR SHALL INCLUDE ROUGHING-IN TO POINTS INDICATED ON ROUGHING-IN PLANS, FINAL CONNECTIONS FROM ROUGH-IN POINTS TO EQUIPMENT REQUIRING THOSE CONNECTIONS, AND THE SUPPLYING OF ALL NECESSARY MATERIALS AND LABOR FOR THIS WORK EXCEPT AS HEREINAFTER NOTED.
- ALL WATER, WASTE, GAS, AND STEAM SERVICE TO POINT OF ROUGH-IN AS SHOWN ON PLAN. ROUGH-IN OUTLETS TO STUB 4" OUT OF WALLS AT HEIGHT INDICATED FROM FINISHED FLOOR TO CENTERLINE OF SERVICE LINE. FLOOR ROUGH-INS TO STUB UP 3" ABOVE FINISHED FLOOR OR CURB. ALL FLOOR OPENINGS OR PENETRATIONS TO BE SEALED WATERTIGHT.
- FINAL CONNECTIONS TO EQUIPMENT, INCLUDING ALL MATERIALS (STOPS, LINE STRAINERS, TAILPIECES, VALVES, FILTERS, TRAPS, CHECK VALVES, PIPING OF SUPPLY AND WASTE LINES FROM BUILDING SERVICE TO ROUGH-IN, TUBING, ETC.) REQUIRED FOR A COMPLETE INSTALLATION.
- PRESSURE REDUCING AND/OR REGULATING VALVES FOR DISHWASHERS, BOOSTER HEATERS, OR AS OTHERWISE NOTED IN ALL FOODSERVICE AREAS.
- GAS PIPING WITH INDIVIDUAL SHUT-OFF VALVES AND INTERMEDIATE REGULATORS AS REQUIRED TO REDUCE INCOMING BUILDING PRESSURE TO LEVEL SUITABLE FOR EQUIPMENT.
- FLOOR SINKS, COMPLETE WITH TOP GRATES AND REMOVABLE SEDIMENT BUCKETS. FIXTURES TO BE SET FLUSH WITH FINISHED FLOOR, EXCEPT AS OTHERWISE NOTED.
- WASTE LINES, DIRECT OR INDIRECT, EXCEPT AS OTHERWISE NOTED. MINIMUM DIAMETER OF LINE SHALL BE AS INDICATED ON PLAN REGARDLESS OF CONNECTION, AND SHALL BE PITCHED DOWNWARD. MAINTAIN DRAIN LINES AS HIGH AS POSSIBLE (MINIMUM 6" CLEAR ABOVE FINISHED FLOOR) FOR SANITATION AND CLEANING. WASTE LINES SHALL HAVE ADEQUATE CLEAN-OUT PROVISIONS PER LOCAL CODES.
- INDIRECT CONDENSATE DRAINLINES FOR WALK-IN COOLER/FREEZER, PITCHED 4" PER 12" OF HORIZONTAL RUN AND TERMINATING IN A P-TRAP OVER A FLOOR SINK.
- HEATER TAPE FOR WALK-IN FREEZER, WITH AN EFFECTIVE RATING OF 35 WATTS PER LINEAR FOOT, AND INSULATION OF ALL DRAINLINES WITHIN FREEZER COMPARTMENTS.
- REQUIRED GREASE INTERCEPTORS, OUTSIDE THE BUILDING WHERE POSSIBLE. INDOOR GREASE INTERCEPTORS ARE TO BE RECESSED, FLUSH WITH THE TOP OF THE FINISHED FLOOR (UNLESS SPECIFIED OTHERWISE) AND REMOVAL OF COVER SHALL NOT INTERFERE WITH THE OPERATION OF FOODSERVICE EQUIPMENT. STRICT COORDINATION WITH EQUIPMENT AND LOCAL CODES REQUIRED IF GREASE INTERCEPTOR IS TO BE SET ABOVE THE FLOOR OR UNDER EQUIPMENT.
- FIRE SUPPRESSION GAS SHUT-OFF VALVE (SOLENOID, EITHER MANUAL OR ELECTRIC) AS SUPPLIED BY FIRE SUPPRESSION SYSTEM CONTRACTOR (IF GAS COOKING EQUIPMENT IS USED).
- VACUUM BREAKERS AS REQUIRED BY LOCAL, STATE, AND NATIONAL CODES.
- INSULATION ON HOT WATER LINES WITHIN THE FOODSERVICE AREAS. SUCH LINES ARE TO BE COLOR-CODED ACCORDING TO LOCAL CODES.
- ITEMS NOT FURNISHED AS A STANDARD PART OF THE EQUIPMENT BY THE MANUFACTURER. FAUCETS PROVIDED BY FOODSERVICE EQUIPMENT CONTRACTOR AND FURNISHED LOOSE AS STANDARD BY EQUIPMENT MANFACTURERS ARE TO BE MOUNTED AND PLUMBED COMPLETE UNDER THE PLUMBING CONTRACT.

IT IS THE INTENT OF THIS DRAWING TO SHOW PLUMBING CONNECTION POINTS. FOR FINAL ROUGH-IN DRAWINGS, SEE CONTRACTOR'S DETAIL SHOP DRAWINGS. ALLOWANCES SHALL BE MADE FOR TRIM, FITTINGS AND ACCESSORIES.

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

LS3P

701-A LADY STREET
COLUMBIA, SOUTH CAROLINA 29201
TEL. 803.765.2418 FAX 803.765.2419
WWW.LS3P.COM

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REVISIONS:

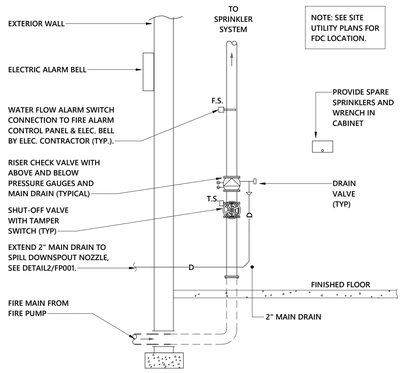
No.	Description	Date
	CONSTRUCTION DOCUMENTS	10.31.2025

PROJECT: 1201-217190
DATE: 10/31/2025
DRAWN BY: BD
CHECKED BY: HS

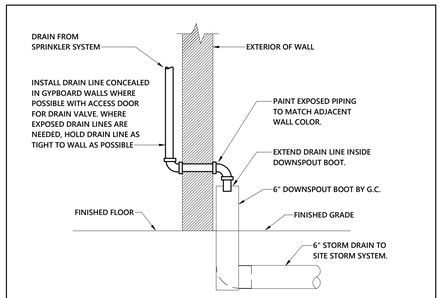
FOODSERVICE PLUMBING ROUGH-IN PLAN - PHASE 2

QF403

CONSTRUCTION DOCUMENTS

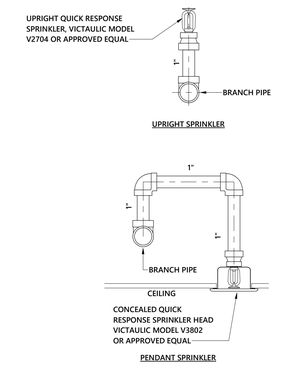


1 FIRE SERVICE ENTRANCE SCHEMATIC
NOT TO SCALE

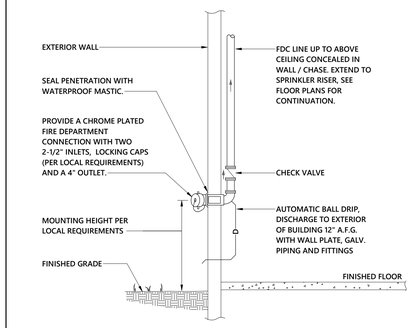


NOTE: DO NOT SPILL SPRINKLER DRAIN ONTO PAVING OR LANDSCAPING OF ANY TYPE. DISCHARGE SPRINKLER DRAINS INTO DOWNSPOUT BOOTS AT THE LOCATIONS DESIGNATED ON THE PLANS. IF ADDITIONAL AUXILIARY DRAINS ARE NEEDED, THE SPRINKLER CONTRACTOR SHALL PROVIDE A DOWNSPOUT BOOT AND EXTEND A 6" STORM DRAIN LINE UNDERGROUND TO THE NEAREST SITE STORM DRAIN INLET FOR EACH AUXILIARY DRAIN. OBTAIN DESIGN TEAM APPROVAL FOR ANY ADDITIONAL AUXILIARY DRAIN LOCATIONS PRIOR TO INSTALLATION. DOWNSPOUT BOOTS SHALL MATCH THE OTHER DOWNSPOUT BOOTS UTILIZED ON THE BUILDING. COORDINATE SPRINKLER DRAIN LOCATIONS WITH G.C. AND SITE GRADING PLANS.

2 TYPICAL DRAIN TO DOWNSPOUT BOOT
NOT TO SCALE



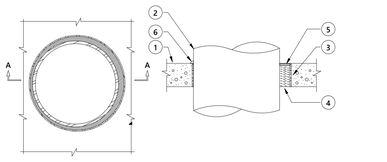
3 TYPICAL RETURN BEND SCHEMATIC
NOT TO SCALE



4 FIRE DEPARTMENT CONNECTION DETAIL - WALL MOUNTED
NOT TO SCALE

U.L. SYSTEM NO. CAJ1155
METAL PIPE THROUGH A SLEEVE IN CONCRETE WALL OR FLOOR

F RATING = 3-HR.
T RATING = 0-HR.
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = 4 CFM/SQ. FT.



1. FLOOR OR WALL ASSEMBLY: B. U.L. CLASSIFIED CONCRETE BLOCK WALL (MINIMUM 8" BLOCK). A. MINIMUM 4-1/2" THICK LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 20" DIAMETER STEEL PIPE.
   B. MAXIMUM 6" DIAMETER COPPER PIPE.
   C. MAXIMUM 6" DIAMETER STEEL CONDUIT.
   D. MAXIMUM 4" DIAMETER EMT.
3. OPTIONAL: MAXIMUM 22" DIAMETER STEEL PIPE SLEEVE (SCHEDULE 10 OR HEAVIER).
4. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) RECESSED 1/2" FROM TOP OF SLEEVE.
5. MINIMUM 1/2" DEPTH HILTI FS-ONE FIRESTOP SEALANT.
6. A GENEROUS BEAD OF HILTI FS-ONE FIRESTOP SEALANT AROUND OUTER PERIMETER OF STEEL SLEEVE.

NOTES:
1. MAXIMUM DIAMETER OF OPENING = 22".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-1/2".

INSTALLATION INSTRUCTIONS FOR UL NO.CAJ1155

STEP 1 - PREPARATION: to application of firestopping materials. All surfaces must be clean, sound, dry and frost free prior

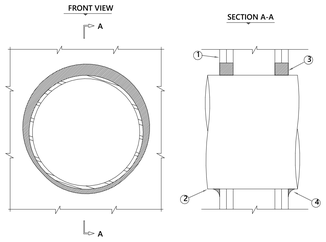
STEP 2 - BACKING MATERIAL: Firmly pack mineral wool around the penetrating item recessing it 1/2" below surface of the sleeve (or both ends of sleeve in wall)

STEP 3 - FIRESTOP SEALANT: Apply the Firestop Sealant over the backing material to a min. depth of 1/2" flush with the end(s) of the sleeve. Wall penetrations require Firestop Sealant installed on both sides. Leave completed seal undisturbed for 48 hours.

5 U.L. SYSTEM NO CAJ-1155 DETAIL
NOT TO SCALE

U.L. SYSTEM NO. WL1054
METAL PIPE THROUGH GYPSUM WALL ASSEMBLY

F RATING = 1-HR OR 2-HR
T RATING = 0-HR
L RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L RATING AT 400°F = 4 CFM/SQ. FT.



1. GYPSUM-WALL ASSEMBLY (1-HR. AND 2-HR. FIRE RATING)(2-HR. SHOWN).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 20" DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
   B. MAXIMUM 6" DIAMETER COPPER PIPE.
   C. MAXIMUM 6" DIAMETER STEEL CONDUIT.
   D. MAXIMUM 4" DIAMETER STEEL EMT.
1. MINIMUM DEPTH
   A. MINIMUM 5/8" DEPTH HILTI FS-ONE FIRESTOP SEALANT = 1-HR. FIRE-RATING. B. MINIMUM 1-1/4" DEPTH HILTI FS-ONE FIRESTOP SEALANT = 2-HR. FIRE-RATING.
2. MINIMUM 1/2" BEAD HILTI FS-ONE FIRESTOP SEALANT FOR POINT OF CONTACT.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 22-1/4".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 2-1/4".

INSTALLATION INSTRUCTIONS FOR UL NO.WL1054

STEP 1 - PREPARATION: All surfaces must be clean, sound, dry and frost free prior to application of firestopping materials.

STEP 2 - FIRESTOP SEALANT: Apply a minimum 5/8" or 1-1/4" depth of FS-ONE in the annular space around the penetrating item. Tool excess sealant beyond perimeter of the opening 1/2" onto wall surface. Leave completed seal undisturbed for for 48 hours.

6 U.L. SYSTEM NO WL1054 DETAIL
NOT TO SCALE

SPRINKLER SCHEDULE

1. PROVIDE ADJUSTABLE CONCEALED PENDENT SPRINKLERS ALL LAY-IN ACOUSTICAL TILE AND GYPBOARD CEILINGS. COORDINATE COLOR OF CONCEALED SPRINKLER HEAD COVER-PLATE WITH ARCHITECT.
2. LOCATE SPRINKLERS SO NOT OBSTRUCTED BY CEILING MOUNTED DEVICES. WHERE CEILING DEVICES OBSTRUCT SPRINKLER DISCHARGE, ADD ADDITIONAL SPRINKLERS SPACED AROUND THE OBSTRUCTION.
3. PROVIDE BRASS UPRIGHT SPRINKLERS IN EXPOSED AREAS WITH NO FINISH CEILING.
4. PROVIDE BRASS PENDENT SPRINKLERS WITH SHIELDS IN MECHANICAL ROOMS, ELECTRIC ROOMS, GYMNASIUMS, STORAGE ROOMS AND OTHER AREAS WHERE EXPOSED SPRINKLERS ARE SUBJECT TO DAMAGE.
5. PROVIDE RECESSED DRY STEM PENDENT SPRINKLER WITH WHITE PLATE IN AREAS SUBJECT TO FREEZING.
6. PROVIDE RECESSED SIDEWALL SPRINKLERS AS REQUIRED OR INDICATED.
7. PROVIDE INTERMEDIATE TEMPERATURE SPRINKLERS (175° F - 225°F ACTIVATION TEMPERATURE) IN ELEC. ROOMS, BOILER ROOMS, DATA CLOSETS AND WHEN SPRINKLER IS LOCATED WITHIN 18" OF HVAC DIFFUSER.
8. PROVIDE HIGH TEMPERATURE SPRINKLERS (250° F - 300°F ACTIVATION TEMPERATURE) IN KILN ROOMS OR OTHER AREAS SUBJECT TO HIGH TEMPERATURES.

* INSTALL SPRINKLERS IN ACCORDANCE WITH NFPA 13 AND THE MANUFACTURERS APPROVAL LISTING.
* PROVIDE QUICK RESPONSE SPRINKLERS.

FIRE PROTECTION MATERIALS

1. ALL PIPING SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA.
2. ABOVE GRADE PIPING: BLACK STEEL PIPING (ASTM A53, ASTM A135, OR ASTM A795) SHALL BE LISTED FOR FIRE SPRINKLER PIPING USE AND INCLUDE FM APPROVED MIC INHIBITING COATING. PIPING 1-1/4" AND SMALLER SHALL BE SCHEDULE 40 BLACK STEEL PIPE THREADED, WELDED OR ROLL GROOVED FOR MECHANICAL FITTINGS. PIPING 1-1/2" AND LARGER SHALL BE SCHEDULE 10 BLACK STEEL PIPE WELDED, OR ROLL GROOVED FOR MECHANICAL FITTINGS.
3. THREADED FITTINGS: UL-LISTED, STANDARD WEIGHT SUITABLE FOR PRESSURE UP TO 175 PSIG, CAST IRON MEETING ASTM A126 OR MALLEABLE IRON MEETING ASTM A197. THREADED CAST IRON FITTINGS SHALL MEET ANSI B16.4; FLANGED CAST IRON FITTINGS SHALL MEET ANSI B16.1. THREADED MALLEABLE IRON FITTINGS SHALL MEET ANSI B16.3.
4. GROOVED FITTINGS AND COUPLINGS: UL-LISTED, DUCTILE IRON MEETING ASTM A536, UTILIZING AN EDPM GASKET. PLAIN-END FITTINGS AND COUPLINGS, OR WELDED-SEGMENTED FITTINGS SHALL NOT BE USED. CHANGES IN PIPE DIAMETER SHALL BE MADE USING TAPERED REDUCING FITTINGS. BUSHINGS OR GROOVED-END REDUCING COUPLINGS SHALL NOT BE USED UNLESS STANDARD REDUCING FITTINGS ARE NOT REGULARLY AVAILABLE.
5. USE HOT-DIPPED GALVANIZED PIPING AND FITTINGS FOR COMPRESSED AIR PIPING, WATER MOTOR ALARM PIPING, BALL DRIP DISCHARGES AND TEST / DRAIN PIPING SUBJECT TO ALTERNATE WETTING AND DRYING.
6. PIPE HANGERS: UL-LISTED SWIVEL LOOP TYPE WITH PRE-GALVANIZED CARBON STEEL BAND, HANGER RODS SIZED PER NFPA 13, UL-LISTED STEEL OR MALLEABLE IRON BEAM CLAMPS, UL-LISTED ANCHORS. POWER DRIVEN ANCHORS SHALL NOT BE USED. REFER TO THE STRUCTURAL PLANS AND DETAILS FOR ACCEPTABLE LOCATIONS TO ATTACH HANGERS AND SUPPORTS TO THE BUILDING STRUCTURE. HANGERS SHALL NOT ATTACH TO THE ROOF DECK.
7. VALVES: OS&Y TYPE, IRON BODY BRONZE MOUNTED, DOUBLE DISC WITH PARALLEL SEATS, OR; BUTTERFLY, LUG TYPE, DUCTILE IRON BODY, STAINLESS STEEL STEM, ALUMINUM BRONZE DISC, PHENOLIC RING AND BUNA N SEAT. VALVES SHALL BE FM/UL LISTED AND APPROVED FOR FIRE PROTECTION SERVICE.
8. ESCUTCHEON PLATES: PROVIDE CHROME PLATED ESCUTCHEON PLATES WHERE PIPES PASS THROUGH FINISHED WALLS, FLOORS, OR CEILING. PROVIDE PRIME COAT PAINTED ESCUTCHEON PLATES WHERE PIPES PASS THROUGH WALLS, CEILINGS, ETC. IN UNFINISHED EXPOSED AREAS.
9. SPRINKLERS: LISTED IN U.L.'S FIRE PROTECTION EQUIPMENT DIRECTORY OR FM GLOBAL'S APPROVAL GUIDE. 175-PSI MINIMUM, AUTOMATIC SPRINKLERS WITH HEAT RESPONSIVE ELEMENT. SEE SPRINKLER SCHEDULE FOR ADDITIONAL INFORMATION.

Fire Sprinkler System Specification Sheet
(Per §40-10-250)

Project Data

Project name: HAMPTON COUNTY HIGH SCHOOL - PHASE 2			
Location in South Carolina:	Address (street # & name): 1682 SAVANNAH HIGHWAY, HAMPTON, SC 29924		State Project: ☐ Yes ■ No
	City: Hampton	County: Hampton	State Project #: n/a

Water Supply Information
(Flow test data must be less than 1 year old per §40-10-250(A)(1))

Date test conducted: 08 / 19 / 2025	Static pressure (psi): 68	Residual pressure (psi): 33	Flow (gpm): 787
Distances of test gauges relative to the base of the riser:	Horizontal (ft): 1,865	Vertical (elevation difference in ft): 2	
Source of water supply:	☐ Municipal dead-end ■ Municipal circulation ☐ existing fire pump ☐ Other:		Pipe Size (in.): 12"
Test data by/from:	Name: Kari Foy	Title: Staff Engineer	
	Organization: Lowcountry Regional Water System	Phone: 803-943-1006	
Fire pump: ☐ New ☐ Existing ■ No Pump	Rated Pressure (psi):	Churn Pressure (psi):	
	Rated Capacity (gpm): 5	Pressure @ 150% flow (psi):	
On-site water storage:	☐ Yes ■ No	☐ New ☐ Existing ☐ Tank ☐ Other:	Capacity (gal):

NFPA Hazard Classification
(Attach continuation page when necessary)

Area #	Hazard Class or Code Reference	Description of Hazard Protected (including occupancy use group, and details of storage arrangement as applicable (including commodity class, rack arrangement/type, ceiling and storage height.))
1	Light Hazard	Office Spaces, Restrooms, Classrooms, Corridors, Locker Rooms
2	Ordinary Hazard Group 1	Storage Rooms, Mechanical Rooms, Concessions

Design Parameters
(Attach continuation page when necessary)

Area #	System Type	Density(gpm/ft²)/Area(ft²), or Other (Reference code sections)	Inside Hose (gpm)	Outside Hose (gpm)
1	Wet	0.10 / 1500	100	100
2	Wet	0.15 / 1500	100	250

Seismic Design Data:	S_{DS}=0.416	**Site Classification**=D	**Seismic Design Category**=D

Codes and Standards
(Attach continuation page when necessary)

Applicable Codes, Standards, & Editions (i.e. 2018 IBC, 2016 NFPA 13, etc.) **for the Scope of Work on the Fire Sprinkler System**

2021 South Carolina Building Code, 2021 South Carolina Fire Code, 2019 NFPA 13

Scope of work (i.e. sprinkler system A.G. from 1'-0" A.F.F., U.G. from tap to 5'-0" outside, etc.) and **notes** (attach continuation page when necessary):
Sprinkler system above ground from 1'-0" above finished floor. Entire building will be sprinklered per NFPA 13.

Specifier's Information

Name: George C. Fowler III	
Engineering services provided through a firm: ■ Yes ☐ No	
Firm name: Optima Engineering	
Address: 1927 South Tryon Street	
City: Charlotte	
State: North Carolina	Zip: 28203
Phone: 704-927-1796	Fax: n/a
E-mail: gfowler@optimaengineering.com	

SOUTH CAROLINA OPTIMA ENGINEERING PA No. C00710 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA George C. Fowler III No. 27021 REGISTERED PROFESSIONAL ENGINEER

Revision No.: _____ Page 1 of 1 Signature: _____

Form Version: July 1, 2021 Date: 10-28-2025

FIRE PROTECTION SHEET INDEX

SHEET NUMBER	SHEET NAME
FP-001	FIRE PROTECTION INDEX, LEGEND, NOTES AND MATERIALS
FP-101	FIELD HOUSE FIRE PROTECTION PLAN (BASE BID)
FP-111	FIELD HOUSE + WEIGHT ROOM FIRE PROTECTION PLAN (BASEBID+ ALT1)

FIRE PROTECTION LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
F	F	FIRE MAIN PIPING
WP	WP	WET PIPE SPRINKLER
D	D	DRAIN PIPING
	-	PIPING ELBOW DOWN
	-	PIPING ELBOW UP
	-	PIPING CONTINUES
	-	SHUT-OFF VALVE
	CV	CHECK VALVE
	FDC	FIRE DEPARTMENT CONNECTION

ADDITIONAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AFG	ABOVE FINISHED GRADE	MFG	MANUFACTURER
BFF	BELOW FINISHED FLOOR	PSI	POUNDS PER SQUARE INCH
CLG	CEILING	TS	TAMPER SWITCH
CONT	CONTINUATION	TYP	TYPICAL
DN	DOWN		
FHV	FIRE HOSE VALVE	EC	ELECTRICAL CONTRACTOR
FS	FLOW SWITCH	GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE	MC	MECHANICAL CONTRACTOR
HP	HORSE POWER	PC	PLUMBING CONTRACTOR

FIRE PROTECTION DESIGN CRITERIA

OCCUPANCY	TYPE	DESIGN DENSITY GPM/S.F.	HYDRAULIC REMOTE AREA S.F.	AREAS OF COVERAGE
LIGHT HAZARD	WET	0.10	1500	ENTIRE FIELD HOUSE (BASE BID)
ORDINARY HAZARD GROUP I	WET	0.15	1500	MECH. ROOMS, STORAGE ROOMS, ELEC. ROOMS, JANITORS ROOMS, ETC.

APPLICABLE PUBLICATIONS: THE FOLLOWING PUBLICATIONS SHALL BE USED AS A REFERENCE FOR THE DESIGN OF THE FIRE PROTECTION SYSTEM ON THIS PROJECT:

1. NORTH CAROLINA STATE BUILDING CODE: FIRE PREVENTION CODE - 2018 EDITION
2. NFPA 13 - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS - 2013 EDITION

NOTES:
1. DURING DESIGN CALCULATIONS, AN ALLOWANCE SHALL BE MADE FOR A 250 GPM HOSE STREAM.

FIRE PROTECTION GENERAL NOTES

1. THE INTENT OF THESE PLANS IS TO PROVIDE INFORMATION TO THE REVIEWING AUTHORITIES THAT THE BUILDING WILL BE PROTECTED BY A SPRINKLER SYSTEM.
2. GENERAL AND SPECIAL CONDITIONS OF THE CONTRACT APPLY TO THE FIRE PROTECTION SCOPE OF WORK. THE FIRE PROTECTION DRAWINGS AND SPECIFICATIONS SHALL NOT BE INTERPRETED AS WAIVING OR OVERRULING ANY REQUIREMENTS EXPRESSED IN GENERAL CONDITIONS.
3. SCOPE: PROVIDE DESIGN, FABRICATION AND INSTALLATION OF A HYDRAULICALLY CALCULATED AUTOMATIC SPRINKLER SYSTEM INCLUDING ALL SERVICES, MATERIALS, LABOR AND EQUIPMENT REQUIRED FOR A COMPLETE WORKING SPRINKLER SYSTEM IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE 2013 EDITION OF NFPA 13, THE OWNER'S INSURANCE UNDERWRITER, THE 2021 SOUTH CAROLINA STATE FIRE CODE AND THE LOCAL AUTHORITY HAVING JURISDICTION.
4. PERMITS: APPLY AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION. ACREAGE CHARGES, FACILITIES CHARGES AND BOND PROPERTY ASSESSMENTS ARE NOT TO BE CONSTRUED TO BE A PART OF THIS CONTRACT.
5. WARRANTY: PROVIDE A ONE YEAR WARRANTY, FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER, FOR ALL SPRINKLER SYSTEM MATERIALS AND EQUIPMENT.
6. COORDINATE ALL SPRINKLER PIPING LOCATIONS, SPRINKLER LOCATIONS AND EQUIPMENT LOCATIONS WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES. FINAL PIPING AND EQUIPMENT LOCATIONS SHALL BE A CODE COMPLIANT INSTALLATION FOR ALL TRADES.
7. WHERE DISCREPANCIES ARE FOUND IN THE DRAWINGS AND SPECIFICATIONS THE MORE STRINGENT SHALL APPLY. CONTACT ENGINEER FOR CLARIFICATION.
8. OBTAIN A NEW FLOW TEST, LESS THAN 1 YEAR OLD, PRIOR TO STARTING THE DESIGN OF THE SPRINKLER SYSTEM. THE FLOW TEST CRITERIA SHALL INCLUDE THE STATIC PRESSURE, RESIDUAL PRESSURE, FLOW IN GPM, HORIZONTAL AND VERTICAL DISTANCE OF TEST FROM BASE OF FIRE RISER, THE NAME OF THE PERSON AND COMPANY WHOM PERFORMED THE FLOW TEST, THE TESTING COMPANY'S PHONE NUMBER, AND THE DATE AND TIME THE TEST WAS PERFORMED.
9. DESIGN AND HYDRAULICALLY CALCULATE THE SPRINKLER SYSTEM UTILIZING THE CURRENT FLOW TEST DATA, BASED ON THE 48-HOUR LOW PRESSURE. MEET ALL NFPA 13 REQUIREMENTS WHETHER OR NOT SPECIFICALLY INDICATED WITHIN THESE DOCUMENTS. TERMINATE THE HYDRAULIC CALCULATIONS AT THE CITY CONNECTION MINIMUM. INDICATE ON DRAWINGS ALL UNDERGROUND PIPE AND FITTINGS BOTH NEW AND EXISTING. THE CONTRACTOR SHALL INCLUDE THE MINIMUM SAFETY FACTOR LISTED ABOVE IN THEIR CALCULATIONS ON THE STATIC & RESIDUAL WATER PRESSURE AS WELL AS THE WATER FLOW. IN NO CASE SHALL THE SAFETY FACTOR BE LESS THAN 10% OF THE STATIC PRESSURE.
10. THE CONTRACTOR SHALL HAVE A DESIGNER ON STAFF WITH A CURRENT NICET LEVEL III CERTIFICATION OR HIGHER TO PREPARE THE WORKING PLANS AND HYDRAULIC CALCULATIONS IN ACCORDANCE WITH NFPA 13 CHAPTER 23 "PLANS AND CALCULATIONS". THE NICET DESIGNERS NAME, SIGNATURE AND CERTIFICATE NUMBER SHALL APPEAR ON THE WORKING DRAWINGS AND HYDRAULIC CALCULATIONS.
11. PROVIDE DESIGN AND INSTALLATION OF SEISMIC RESTRAINT ELEMENTS FOR THE FIRE PROTECTION SYSTEM(S) IN COMPLIANCE WITH THE 2013 EDITION OF NFPA 13. REFER TO THE APPENDIX B ON THE ARCHITECTURAL DRAWINGS FOR THE SITE'S SEISMIC DESIGN CATEGORY.
12. SUBMIT WORKING PLANS, HYDRAULIC CALCULATIONS AND MATERIALS DATA AND ACCESSORIES IN ELECTRONIC FORMAT (PDF) TO THE ARCHITECT / ENGINEER FOR REVIEW AND OBTAIN APPROVAL BEFORE STARTING THE INSTALLATION OF THE SPRINKLER SYSTEM.
13. THE CONTRACTOR SHALL SUBMIT WORKING PLANS AND HYDRAULIC CALCULATIONS EXPEDIENTLY TO THE AUTHORITIES HAVING JURISDICTION. APPROVAL FROM ALL AUTHORITIES HAVING JURISDICTION SHALL BE OBTAINED BEFORE STARTING THE INSTALLATION OF THE SPRINKLER SYSTEM.
14. AT THE COMPLETION OF THE PROJECT, PROVIDE TWO SETS OF RECORD DRAWINGS TO THE OWNER, CLEARLY SHOWING ANY CHANGES AND/OR MODIFICATIONS, ADDITIONS OR DELETIONS TO AND FROM THE CONSTRUCTION DOCUMENTS. THESE SETS SHALL BE REVIEWED BY THE ARCHITECT / ENGINEER BEFORE BEING TURNING OVER TO THE OWNER.

INSTALLATION REQUIREMENTS:

1. PROVIDE ALL NECESSARY OFFSETS, RISES OR DROPS IN THE PIPING AND AUXILIARY DRAINS AS REQUIRED BY ALL APPLICABLE CODES WHETHER OR NOT SHOWN ON THE PLANS.
2. CONNECT ALL SPRINKLER ALARM, TAMPER AND DETECTION SYSTEMS TO THE BUILDINGS CENTRAL FIRE ALARM SYSTEM, COORDINATE LOCATIONS AND REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.
3. PIPE PENETRATIONS THRU WALLS, PARTITIONS AND FLOORS SHALL BE SLEEVED. CORE DRILLING THRU WALLS AND PARTITIONS IS PERMITTED IF PERFORMED IN A NEAT CRAFTSMAN LIKE MANNER. PIPES PENETRATING THRU EXTERIOR WALLS SHALL BE SEALED WATER TIGHT. INSTALL ESCUTCHEONS IN ALL EXPOSED AREAS.
4. CONCEAL PIPING ABOVE CEILINGS OR TIGHT TO UNDERSIDE OF STRUCTURE IN EXPOSED AREAS.
5. PAINT ALL EXPOSED FIRE PROTECTION SYSTEM PIPING (IN CLOSETS, STAIRWELLS, MECHANICAL ROOMS, ETC.). COLOR TO BE SELECTED BY THE ARCHITECT.
6. SPRINKLER LOCATIONS ARE TO BE IN THE CENTER OF THE CEILING TILE USING THE REFLECTED CEILING PLANS AND AS COORDINATED WITH THE CEILING CONTRACTOR.
7. WARRANT THE SYSTEM LABOR, MATERIALS AND EQUIPMENT FOR THE AMOUNT OF TIME SPECIFIED IN THE PROJECT MANUAL. IF NO WARRANTY SECTION IS PROVIDED, THEN WARRANT THE SYSTEM LABOR, MATERIAL AND EQUIPMENT FOR A MINIMUM OF ONE YEAR AFTER COMPLETION AND ACCEPTANCE. PRIOR TO TURNING THE COMPLETED SYSTEM OVER TO THE OWNER, REVIEW THE INSTALLATION WITH THE ARCHITECT / ENGINEER AND REPLACE OR REPAIR ANY DEFECTIVE WORKMANSHIP, EQUIPMENT AND MATERIALS AT NO ADDITIONAL COST TO THE OWNER.

TESTING AND FLUSHING:

1. OVERHEAD SPRINKLER PIPING: TESTED FOR A PERIOD OF TWO HOURS AT A HYDROSTATIC PRESSURE OF 200 LBS. AND ALL PIPING, VALVES, HEADS,ETC. SHALL BE WATERTIGHT.

HAMPTON COUNTY HIGH SCHOOL PHASE 2

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SOUTH CAROLINA OPTIMA ENGINEERING PA No. C00710 CERTIFICATE OF AUTHORIZATION

George C. Fowler III No. 27021 REGISTERED PROFESSIONAL ENGINEER

State Board of Registration for Professional Engineers and Surveyors.

10/31/25

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

FIRE PROTECTION INDEX, LEGEND, NOTES AND MATERIALS

FP-001

CONSTRUCTION DOCUMENTS

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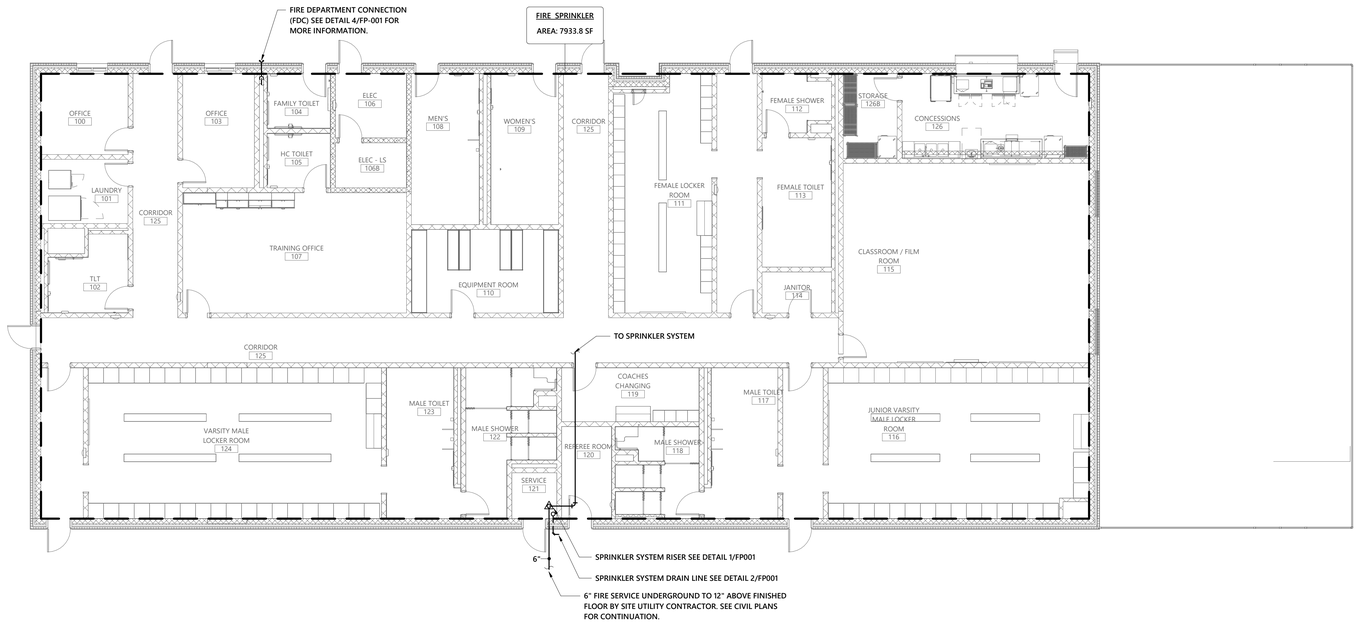

1 **1ST FLOOR - FIELD HOUSE - FIRE PROTECTION**
1/8" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

PROJECT NORTH N

TRUE NORTH

HAMPTON COUNTY HIGH SCHOOL PHASE 2

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OPT PROJECT: 23-0084
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FIELD HOUSE FIRE PROTECTION PLAN (BASE BID)

FP-101

CONSTRUCTION DOCUMENTS

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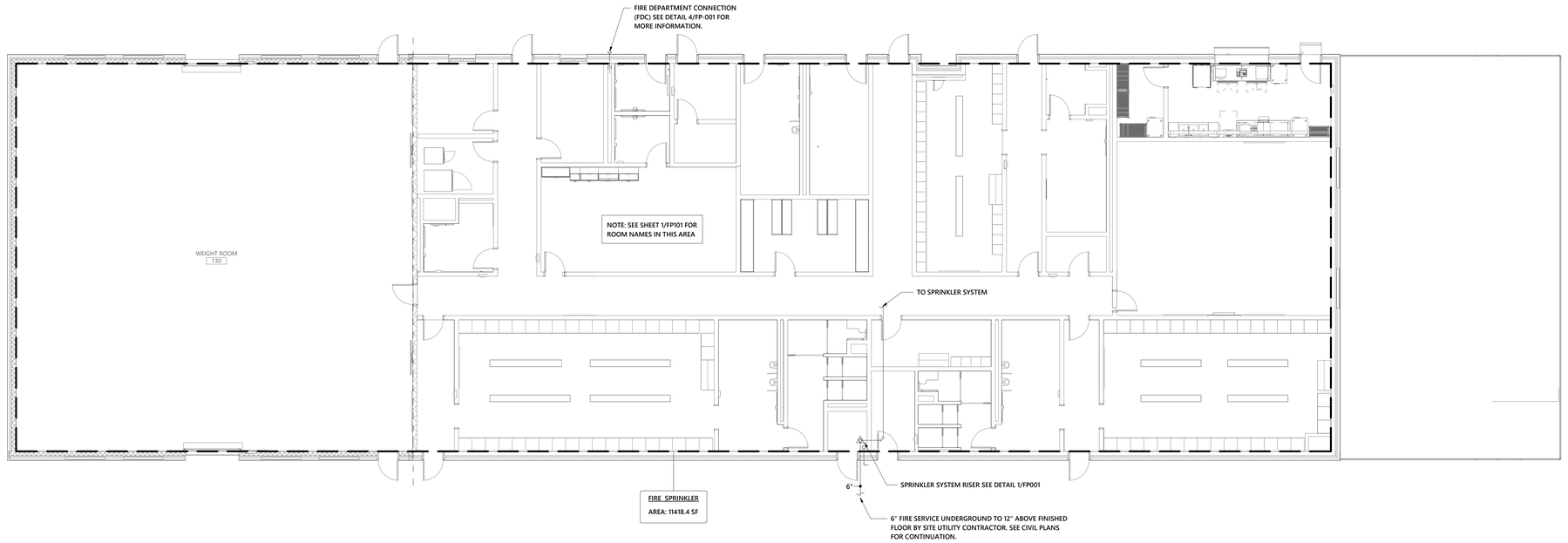

1 1ST FLOOR - FIELD HOUSE & WEIGHT ROOM - FIRE PROTECTION
1/8" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

PROJECT NORTH N

TRUE NORTH

HAMPTON COUNTY HIGH SCHOOL PHASE 2

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No.	Description	Date

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DATE: 10.31.2025

FIELD HOUSE + WEIGHT ROOM FIRE PROTECTION PLAN (BASEBID+ ALT1)

FP-111

CONSTRUCTION DOCUMENTS

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PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	CONNECTION SIZE				SPECIFICATION	REMARKS
		W	V	CW	HW		
P1	TOILET ELONGATED, WHITE VITREOUS CHINA, FLOOR MOUNTED (1.28 GPF) HARD WIRED SENSOR OPERATED FLUSH VALVE	4"	2"	1-1/4"	-	FIXTURE: AMERICAN STANDARD 2234.001 "MADERA" FLUSH VALVE: SLOAN 111-1.28 ESS TMO "OPTIMA" HARD WIRED SENSOR, WITH TRUE MECHANICAL OVERRIDE AND CHLORAMINE RESISTANT DIAPHRAGM SEAT: BEMIS 1955CT ANTI-MICROBIAL (WHITE)	15" RIM HEIGHT. COORDINATE SENSOR JUNCTION BOX LOCATIONS WITH E.C. SEE NOTE 5 & 6 BELOW
P1A	TOILET, A.D.A. COMPLIANT ELONGATED, WHITE VITREOUS CHINA, FLOOR MOUNTED (1.28 GPF) HARD WIRED SENSOR OPERATED FLUSH VALVE	4"	2"	1-1/4"	-	FIXTURE: AMERICAN STANDARD 3043.001 "MADERA 16.5 HIGH" FLUSH VALVE: SLOAN 111-1.28 ESS TMO "OPTIMA" HARD WIRED SENSOR, WITH TRUE MECHANICAL OVERRIDE AND CHLORAMINE RESISTANT DIAPHRAGM SEAT: BEMIS 1955CT ANTI-MICROBIAL (WHITE)	16.5" RIM HEIGHT. COORDINATE SENSOR JUNCTION BOX LOCATIONS WITH E.C. SEE NOTE 5 & 6 BELOW
P2	URINAL WHITE VITREOUS CHINA, CARRIER MOUNTED, (0.125 GPF) HARD WIRED SENSOR OPERATED FLUSH VALVE	2"	2"	3/4"	-	FIXTURE: AMERICAN STANDARD 6590.001 "WASHBROOK" FLUSH VALVE: SLOAN 186-0.128 ESS TMO "OPTIMA" HARD WIRED SENSOR, WITH TRUE MECHANICAL OVERRIDE AND CHLORAMINE RESISTANT DIAPHRAGM	COORDINATE SENSOR JUNCTION BOX LOCATIONS WITH E.C. SEE NOTE 1 & 6 BELOW
P2A	URINAL, A.D.A. COMPLIANT WHITE VITREOUS CHINA, CARRIER MOUNTED, (0.125 GPF) HARD WIRED SENSOR OPERATED FLUSH VALVE	2"	2"	3/4"	-	FIXTURE: AMERICAN STANDARD 6590.001 "WASHBROOK" FLUSH VALVE: SLOAN 186-0.128 ESS TMO "OPTIMA" HARD WIRED SENSOR, WITH TRUE MECHANICAL OVERRIDE AND CHLORAMINE RESISTANT DIAPHRAGM	COORDINATE SENSOR JUNCTION BOX LOCATIONS WITH E.C. SEE NOTE 1 & 6 BELOW
P3	LAVATORY, A.D.A. COMPLIANT, 20"x18" RECTANGULAR BOWL, WHITE ENAMELED CAST IRON, CARRIER MOUNTED, 4" CENTER FAUCET HOLES, METERING FAUCET WITH PUSH TOP HANDLES (0.5 GPM) VANDAL RESISTANT AERATOR	2"	1-1/2"	1/2"	1/2"	FIXTURE: AMERICAN STANDARD 4867.004 FAUCET: ZURN Z86500-XL GRID DRAIN: ZURN 8743; P-TRAP: ZURN Z-8701 (1-1/4"x1-1/2", 17 GA.) SUPPLIES/STOPS: ZURN 8806-XL-LR-LK	SEE NOTES 2 & 4 BELOW
P3S	LAVATORY, A.D.A. COMPLIANT, 20"x18" RECTANGULAR BOWL, WHITE ENAMELED CAST IRON, CARRIER MOUNTED, 4" CENTER FAUCET HOLES, SINGLE METERING FAUCET WITH PUSH TOP HANDLE (0.5 GPM) VANDAL RESISTANT AERATOR	2"	1-1/2"	1/2"	1/2"	FIXTURE: AMERICAN STANDARD 4867.004 FAUCET: ZURN Z86100-XL GRID DRAIN: ZURN 8743; P-TRAP: ZURN Z-8701 (1-1/4"x1-1/2", 17 GA.) SUPPLIES/STOPS: ZURN 8806-XL-LR-LK	SEE NOTES 2 & 4 BELOW
P4	WATER COOLER, A.D.A. COMPLIANT, STAINLESS STEEL FINISH, BI-LEVEL, DOUBLE BOWL, VANDAL RESISTANT, WALL MOUNTED, SENSOR OPERATED BOTTLE FILLER, FREEZE, INTEGRAL WATER FILTER	2"	1-1/2"	1/2"	-	FIXTURE: ELKAY LVRCGRNTLBWSK ELEC: 260 WATT, 120 VOLT, SINGLE PHASE P-TRAP: ZURN Z-870 (1-1/4"x1-1/2", 17 GA.) SUPPLY/STOP: ZURN 8806-XL-LR-LK	PROVIDE CANE APRON WHEN WATER COOLER IS LOCATED ON AN EXPOSED WALL. SEE NOTE 3 BELOW
P4E	OUTDOOR DRINKING FOUNTAIN & BOTTLE FILLER, A.D.A. COMPLIANT, STAINLESS STEEL FINISH, BI-LEVEL, DOUBLE BOWL, WALL MOUNTED, SENSOR OPERATED BOTTLE FILLER, FREEZE RESISTANT VALVE SYSTEM WITH INTERIOR ACCESS VALVE BOXES.	2"	1-1/2"	1/2"	-	FIXTURE: MURDOCK GYE27-FRA3 ELEC: 335 WATT, 120 VOLT, SINGLE PHASE P-TRAP: McGUIRE 8902C (1-1/4"x1-1/2", 17 GA.) SUPPLY/STOP: McGUIRE LF175LK	PROVIDE CANE APRON WHEN WATER COOLER IS LOCATED ON AN EXPOSED WALL. PROVIDE BLUE POWDER COATED FINISH.
P4S	OUTDOOR DRINKING FOUNTAIN & BOTTLE FILLER, A.D.A. COMPLIANT, STAINLESS STEEL FINISH, SINGLE BOWL, WALL MOUNTED, SENSOR OPERATED BOTTLE FILLER, FREEZE RESISTANT VALVE SYSTEM WITH INTERIOR ACCESS VALVE BOXES.	2"	1-1/2"	1/2"	-	FIXTURE: MURDOCK GYE17-FRA2 ELEC: 335 WATT, 120 VOLT, SINGLE PHASE P-TRAP: McGUIRE 8902C (1-1/4"x1-1/2", 17 GA.) SUPPLY/STOP: McGUIRE LF175LK	PROVIDE CANE APRON WHEN WATER COOLER IS LOCATED ON AN EXPOSED WALL. PROVIDE BLUE POWDER COATED FINISH.
P4FS	OUTDOOR DRINKING FOUNTAIN & BOTTLE FILLER, A.D.A. COMPLIANT, STAINLESS STEEL FINISH, TWO-LEVEL, DOUBLE BOWL, FREE STANDING, SENSOR OPERATED BOTTLE FILLER, UNDERGROUND FREEZE RESISTANT VALVE SYSTEM	2"	1-1/2"	1/2"	-	FIXTURE: ELKAY LK4430BFIUFRK WITH FREEZE RESISTANT VALVE SYSTEM AND DIRECT BURY KIT 97890C SUPPLY: 3/8" RIGID COPPER. STOP: 1/2" BALL VALVE. P-TRAP: 2" UNDERGROUND	INSTALL CW AND DRAIN PIPING UNDERGROUND PER MFG. INSTRUCTIONS. PROVIDE BLUE POWDER COATED FINISH.
P5A	SINK, A.D.A. COMPLIANT, 19"x19"x6" RECTANGULAR SINGLE BOWL, 18 GAUGE STAINLESS STEEL, COUNTER MOUNTED, SELF RIMMING, 8" GOOSENECK FAUCET WITH WRIST BLADE HANDLES (1.5 GPM) VANDAL RESISTANT AERATOR	2"	1-1/2"	1/2"	1/2"	FIXTURE: ELKAY LRAD1919 FAUCET: AMERICAN STANDARD 6530.170 BASKET STRAINER: ZURN Z-8740 P-TRAP: ZURN 8703 (1-1/2"x2", 17 GA.) SUPPLY/STOP: ZURN 8806-XL-LR-LK	PROVIDE SOLIDS TRAP FOR ALL ART ROOM SINKS EQUAL TO ZURN Z-1180 IN LIEU OF A P-TRAP SEE NOTE 4 BELOW
P6	MOP SINK, 24"x 24"x 12" TERRAZZO BASIN, 6" DROP FRONT WITH STAINLESS STEEL THRESHOLD CAP, 36" HIGH STAINLESS STEEL WALL GUARDS, SERVICE FAUCET, HOSE, MOP HANGER BRACKET.	3"	2"	1/2"	1/2"	FIXTURE: FIAT TSB100, 830AA, 832AA, (2) MSG3624 FAUCET: AMERICAN STANDARD 8344.012 WITH INTEGRAL VACUUM BREAKER, DRAIN: 3" STAINLESS STEEL SLOTTED P-TRAP: 3" DEEP SEAL, CAST IRON	PROVIDE CHECK VALVES ON HW AND CW SUPPLIES. PROVIDE P6EW EYEWASH ADJACENT TO MOP SINK.
P7	SHOWER, PRESSURE BALANCED SHOWER VALVE WITH 1.5 GPM WALL MOUNTED SHOWER HEAD	2"	2"	1/2"	1/2"	FIXTURE: TILED WALLS AND FLOOR BY G.C. SHOWER VALVE & HEAD : AMERICAN STANDARD 1662SG.211 PROVIDE FLOOR DRAIN 2" FD1 IN TILED FLOOR BASE	COORDINATE RIGHT OR LEFT HAND CONTROLS WITH ARCHITECTURAL PLANS AND ELEVATIONS
P7A	SHOWER, ADA COMPLIANT, PRESSURE BALANCED SHOWER VALVE WITH 1.5 GPM WALL MOUNTED SHOWER HEAD WITH HAND HELD SHOWER AND SLIDE BAR.	2"	2"	1/2"	1/2"	FIXTURE: TILED WALLS AND FLOOR BY G.C. SHOWER VALVE & HEAD : AMERICAN STANDARD 1662SG.211 PROVIDE FLOOR DRAIN 2" FD1 IN TILED FLOOR BASE	COORDINATE RIGHT OR LEFT HAND CONTROLS WITH ARCHITECTURAL PLANS AND ELEVATIONS
P7B	ROLL IN SHWR, ADA COMPLIANT, PRESSURE BALANCED SHOWER VALVE WITH 1.5 GPM WALL MOUNTED SHOWER HEAD WITH HAND HELD SHOWER AND SLIDE BAR.	2"	2"	1/2"	1/2"	FIXTURE: TILED WALLS AND FLOOR BY G.C. SHOWER VALVE: BRADLEY S59-1005, SHOWER HEAD: BRADELY S24-210 DIVERTER VALVE: BRADLEY DV, HAND HELD SHOWER / SLIDEBAR: BRADLEY B24 PROVIDE FLOOR DRAIN 2" FD1 IN TILED FLOOR BASE	COORDINATE RIGHT OR LEFT HAND CONTROLS WITH ARCHITECTURAL PLANS AND ELEVATIONS

NOTES:
1. SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT. PROVIDE A FLOOR MOUNTED PLATE STYLE CARRIER EQUAL TO ZURN Z1222-EZ (-SL) SERIES. WHEN CARRIER IS LOCATED BEHIND A BLOCK WALL, PROVIDE EXTENDED STUD LENGTHS TO COMPENSATE FOR THE BLOCK WALL THICKNESS.
2. SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT. PROVIDE A FLOOR MOUNTED, ADJUSTABLE CONCEALED ARM CARRIER EQUAL TO ZURN Z1231-EZ (-SL) SERIES. WHEN CARRIER IS LOCATED BEHIND BLOCK WALL, PROVIDE EXTENDED CONCEALED ARM SLEEVES TO COMPENSATE FOR THE BLOCK WALL THICKNESS.
3. SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT. PROVIDE A FLOOR MOUNTED PLATE STYLE CARRIER EQUAL TO ZURN Z1225-EZ (-SL) SERIES. WHEN CARRIER IS LOCATED BEHIND A BLOCK WALL, PROVIDE EXTENDED STUD LENGTHS TO COMPENSATE FOR THE BLOCK WALL THICKNESS.
4. PROVIDE PRE-MANUFACTURED A.D.A. COMPLIANT INSULATION KIT FOR EXPOSED P'TRAP AND SUPPLY TRIM UNDER SINK.
5. PROVIDE HEAVY DUTY CAST IRON CLOSET FLANGE WITH COMPRESSION SEAL AND TEST CAP EQUAL TO ZURN CF2980-CI4. OFFSET FLANGES ARE NOT ACCEPTABLE.
6. PROVIDE SLOAN EL-154 TRANSFORMER (120V TO 24V) AND FINAL LOW VOLTAGE CONNECTIONS FROM TRANSFORMER TO FLUSHVALVE(S). WHERE GROUP RESTROOMS OCCUR PROVIDE A MINIMUM OF TWO TRANSFORMERS PER RESTROOM TO SERVE MULTIPLE FLUSHVALVES.

** MATCH PIPE SIZE SHOWN ON PLANS, SEE PLANS.

APPROVED EQUALS:	PRODUCT TYPE:	ACCEPTED MANUFACTURERS:
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE MODEL WHICH MOST CLOSELY MATCHES THE SPECIFIED PRODUCT. PROVIDE PRODUCTS MADE BY THE MANUFACTURER'S LISTED.	VITREOUS CHINA FLUSH VALVES ENAMELED CAST IRON CARRIERS STAINLESS STEEL SINKS FAUCETS WATER COOLERS SUPPLIES, STOPS HOSE BIBBS UTILITY SINKS SHOWER VALVES	KOHLER, AMERICAN STANDARD, SLOAN SLOAN, ZURN, DELANEY KOHLER, AMERICAN STANDARD, ZURN ZURN, J.R. SMITH, WADE ELKAY, JUST, ADVANCE TABCO AMERICAN STANDARD, ZURN, CHICAGO ELKAY, HALSEY TAYLOR, HAWS ZURN, MCGUIRE, BRASSCRAFT ZURN, J.R. SMITH, WOODFORD FIAT, FLORESTONE, STERN WILLIAMS AMERICAN STANDARD, CHICAGO, SYMMONS

PLUMBING SPECIALTIES SCHEDULE

SYMBOL	DESCRIPTION	CONNECTION SIZE				SPECIFICATION	REMARKS
		W	V	CW	HW		
WB1	WASHING MACHINE CONNECTION BOX; 14"x 9"x 3.5", 20 GAUGE STEEL WITH WHITE POWDER COATING, RECESSED IN WALL	3"	2"	1/2"	1/2"	FIXTURE: GUY GRAY T200TPPVCHA WITH WATER HAMMER ARRESTOR STOPS: INTEGRAL 1/4 TURN SUPPLIES: (2) 5/8" BRAIDED S.S. FLEXIBLE HOSES	2" DRAIN OUTLET, 2" STANDPIPE WITH 2" P-TRAP. SEE 8/P501
IDB1	INDIRECT DRAIN CONNECTION BOX; 14"x 9"x 3.5", 20 GAUGE STEEL WITH WHITE POWDER COATING, RECESSED IN WALL	2"	1-1/2"	-	-	FIXTURE: GUY GRAY T200LV WITH KNOCK-OUTS IN TOP OF BOX 2" DRAIN OUTLET WITH 2" DEEP SEAL P-TRAP	PROVIDE 2" TRAP GUARD EQUAL TO RECTORSEAL "SURE-SEAL". SEE 9/P501
IMB1	WATER CONNECTION BOX; 7"X 7"X 3.5", 20 GAUGE STEEL WITH WHITE POWDER COATING, RECESSED IN WALL	-	-	1/2"	-	FIXTURE: GUY GRAY MIB1ABB STOP: QUARTER TURN WITH SHOCK ARRESTOR SUPPLY: 1/4" FLEXIBLE HOSE	PROVIDE INLINE DOUBLE CHECK VALVE WILKINS SERIES 700
CS-x	BALANCING VALVE, THERMOSTATIC, AUTOMATIC, SUFFIX INDICATES PIPE SIZE, SEE FLOOR PLANS	-	-	-	**	EQUIPMENT: CIRCUIT SOLVER CS SERIES, SIZES 1/2" THRU 2", NSF 61 CERTIFIED.	PROVIDE 105°F MODEL
SA-x	SHOCK ARRESTOR, SUFFIX INDICATES PDI SIZE	-	-	x	-	EQUIPMENT: SIOUX CHIEF 650 SERIES, SIZES 1/2" THRU 2", NSF 61 CERTIFIED.	SEE SHOCK ARRESTOR TABLE THIS SHEET
HB1	HOSE BIBB, INTERIOR, EXPOSED, STAINLESS STEEL FACE PLATE, ANTI-SIPHON	-	-	1/2"	-	EQUIPMENT: ZURN Z1333-C-34EL, PROVIDE VACUUM BREAKER AND METAL LOOSE KEY FOR EACH HOSE BIBB	MOUNT 18" AFF
HB2	HOSE BIBB, EXTERIOR, EXPOSED, STAINLESS STEEL FACE PLATE, FREEZELESS, ANTI-SIPHON	-	-	3/4"	-	EQUIPMENT: ZURN Z1310-34EL, PROVIDE VACUUM BREAKER AND METAL LOOSE KEY FOR EACH HOSE BIBB	MOUNT 18" AFF
HB3	HOSE BIBB, EXTERIOR, EXPOSED, STAINLESS STEEL FACE PLATE, FREEZELESS, ANTI-SIPHON, DUAL TEMPERATURE, RECESSED	-	-	3/4"	-	EQUIPMENT: WOODFORD HCB67 WITH TEMPERATURE CONTROL MIXING VALVE PROVIDE VACUUM BREAKER AND METAL LOOSE KEY	MOUNT 42" AFF
CO	PLUG CLEANOUT, CAST IRON BODY	**	-	-	-	CLEANOUT: ZURN Z-1440-BP, BRONZE PLUG, CLEANOUT SIZE SHALL MATCH PIPE SIZE	GAS / WATER TIGHT
WCO	WALL CLEANOUT, CAST IRON BODY, STAINLESS STEEL WALL PLATE	**	-	-	-	CLEANOUT: ZURN Z-1446-BP, BRONZE PLUG, CLEANOUT SIZE SHALL MATCH PIPE SIZE	GAS / WATER TIGHT
FCO	FLOOR CLEANOUT, CAST IRON BODY, NICKEL BRONZE TOP, ADJUSTABLE	**	-	-	-	CLEANOUT: ZURN ZN-1400-BP, BRONZE PLUG CLEANOUT SIZE SHALL MATCH PIPE SIZE	GAS / WATER TIGHT, INSTALL TOP FLUSH WITH FINISHED FLOOR
YCO	YARD CLEANOUT, CAST IRON BODY, NICKEL BRONZE TOP, ADJUSTABLE, INSTALLED IN 18"x18"x6" CONCRETE PAD	**	-	-	-	CLEANOUT: ZURN ZN-1400-BP, BRONZE PLUG INSTALL IN 18"x 18"x 6" DEEP CONCRETE PAD	GAS / WATER TIGHT, INSTALL TOP FLUSH WITH FINISHED GRADE
FD1	FLOOR DRAIN, CAST IRON BODY, ROUND NICKEL BRONZE GRATE, ADJUSTABLE	3"	2"	-	-	DRAIN: ZURN ZN-415-B, 5" DIAMETER GRATE P-TRAP: 3" DEEP SEAL.	INSTALL TOP FLUSH WITH FINISHED FLOOR. SEE NOTE 1 BELOW.
FD2	FLOOR DRAIN, CAST IRON BODY, ROUND NICKEL BRONZE GRATE, ADJUSTABLE	4"	2"	-	-	DRAIN: ZURN ZN-415-I, 9" DIAMETER RECESSED GRATE PROVIDE DEEP SEAL P-TRAP, MATCH PIPE SIZE ON PLANS	INSTALL TOP OF DRAIN LIP FLUSH WITH FINISHED FLOOR. SEE NOTE 1 BELOW.
FS1	FLOOR SINK, 12"x 12"x 6" DEEP, STAINLESS STEEL BODY AND GRATE	3"	2"	-	-	DRAIN: ZURN Z1750 P-TRAP: 3" CAST IRON, DEEP SEAL	SEE KITCHEN EQUIP. PLANS FOR GRATE (FULL / QUARTER / HALF)

NOTES:
1. PROVIDE WATERLESS INLINE TRAP GUARD FOR EACH FLOOR DRAIN CONFORMING TO ASSE 1072 AND EQUAL TO RECOTORSEAL"SURE-SEAL" MODEL SS3009V. INSTALL TRAP GUARDS IN THE OUTLET OF THE FLOOR DRAIN BODY (NOT IN THE STRAINER).

** MATCH PIPE SIZE SHOWN ON PLANS, SEE PLANS.

APPROVED EQUALS:	PRODUCT TYPE:	ACCEPTED MANUFACTURERS:
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE MODEL WHICH MOST CLOSELY MATCHES THE SPECIFIED PRODUCT. PROVIDE PRODUCTS MADE BY THE MANUFACTURER'S LISTED.	SHOCK ARRESTOR HOSE BIBBS DRAINS BACKFLOW PREVENTER	SIOUX CHIEF, PPP INC., ZURN, WATTS ZURN, WOODFORD, ZURN, J.R. SMITH ZURN, J.R. SMITH, WADE WILKINS, WATTS, APOLLO

DOMESTIC WATER PIPING

1. BELOW GRADE PIPING AND JOINTS: PROVIDE TYPE 'K' SOFT ANNEALED SEAMLESS COPPER TUBING (ASTM B 88) WITH NO JOINTS FOR PIPING 2-1/2" AND SMALLER. PROVIDE DUCTILE IRON PIPE AND FITTINGS (AWWA C151, AWWA C110) WITH RUBBER GASKET JOINTS AND RODS (AWWA C111) FOR PIPING 3" AND LARGER.
2. ABOVE GRADE PIPING AND JOINTS: PROVIDE TYPE 'L' HARD DRAWN SEAMLESS COPPER TUBING (ASTM B 88) AND CAST COPPER ALLOY FITTINGS (ASME B16.18). JOINTS 2" AND SMALLER SHALL BE LEAD FREE 95-5 TIN/SILVER SOLDER JOINTS (ASTM B 32). JOINTS 2-1/2" AND LARGER SHALL BE BCUP SILVER / PHOSPHORUS / COPPER BRAZED JOINTS (AWS A5.8). ALTERNATELY PROVIDE COPPER PIPE AND FITTINGS AS SPECIFIED ABOVE EXCEPT WITH GROOVED ENDS (ASTM B 88, ASME B16.18) AND JOINTS UTILIZING GROOVED MECHANICAL COUPLINGS MEETING (ASTM F1476).
3. INSULATE PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH GLASS FIBER INSULATION HAVING A VAPOR BARRIER AND JACKET. PIPE INSULATION SHALL HAVE A CONDUCTIVITY NOT EXCEEDING 0.27 BTUH x SQ. FT., SEE LIST BELOW FOR INSULATION THICKNESS:
   - PROVIDE 1" THICK INSULATION FOR HW & HWR PIPING SIZES 1/2" THRU 3/4", R-VALUE R7.
   - PROVIDE 1-1/2" THICK INSULATION FOR HW & HWR PIPING SIZES 1" THRU 1 1/4", R-VALUE R12.5.
   - PROVIDE 1 1/2" THICK INSULATION FOR HW & HWR PIPING SIZES 1 1/2" THRU 4", R-VALUE R11.
   - PROVIDE 1" THICK INSULATION FOR CW PIPING SIZES 1/2" THRU 1 1/4", R-VALUE R6.5.
   - PROVIDE 1" THICK INSULATION FOR CW PIPING SIZES 1 1/2" THRU 4", R-VALUE R6.5.
4. PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES SHALL MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS AS TESTED BY ASTM E84 (NFPA 255) METHOD AND SHALL BE PLENUM RATED. PROVIDE PVC INSULATION JACKET FOR EXPOSED PIPING IN MECHANICAL ROOMS. INSTALL INSULATION CONTINUOUSLY THRU FIRE RATED WALLS AND PIPE HANGERS. PROVIDE GALVANIZED STEEL SHIELD BETWEEN PIPE HANGER AND INSULATION.
5. PROVIDE A CHROME FINISH ON EXPOSED PIPING IN REST ROOMS AND OTHER FINISHED AREAS.
6. PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON TRAPEZE HANGERS WITH OTHER PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH DISSIMILAR OTHER METALS.
7. PROTECT COPPER PIPING AGAINST CONTACT WITH MASONRY. WHERE COPPER IS SLEEVED THROUGH MASONRY, PROVIDE COPPER OR RED BRASS SLEEVES. WHERE COPPER MUST BE CONCEALED IN OR AGAINST MASONRY PARTITIONS, PROVIDE A HEAVY COATING OF ASPHALTIC ENAMEL ON THE COPPER PIPING AND 15# ASPHALT SATURATED FELT BETWEEN THE PIPING AND THE MASONRY PARTITION.
8. PERFORM A PRESSURE TEST ON ALL WATER PIPING. FILL PIPING WITH POTABLE WATER, CAP AND SUBJECT PIPING TO A STATIC WATER PRESSURE OF 50 PSIG ABOVE OPERATING PRESSURE, WITHOUT EXCEEDING PRESSURE RATING OF PIPING SYSTEM MATERIALS OR PRESSURIZE PIPING WITH AIR TO AT LEAST ONE-HUNDRED (100) PSI. ISOLATE TEST SOURCE AND ALLOW TO STAND FOR FOUR HOURS. LEAKS AND LOSS IN TEST PRESSURE CONSTITUTE DEFECTS THAT MUST BE REPAIRED. REPAIR LEAKS AND DEFECTS WITH NEW MATERIALS AND RETEST PIPING OR PORTION THEREOF UNTIL SATISFACTORY RESULTS ARE OBTAINED
9. STERILIZE THE DOMESTIC WATER SYSTEM IN PER THE AMERICAN WATER WORKS ASSOCIATION'S INSTRUCTIONSSPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
10. SLOPE WATER PIPING FOR DRAINAGE WITH DRAIN VALVES INSTALLED AT LOW POINTS.
11. BALANCE THE DOMESTIC HOT WATER CIRCULATION SYSTEM TO THE PERFORMANCE SPECIFICATIONS INDICATED ON THE PLANS AND PROVIDE THE ENGINEER WITH THREE COPIES OF A COMPLETE TEST AND BALANCE REPORT. THE REPORT IS TO BE ISSUED A MINIMUM OF TWO WEEKS PRIOR TO PROJECT COMPLETION. THE TEST AND BALANCE REPORT WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER. ANY ADDITIONAL TESTING, ADJUSTING AND BALANCING REQUIRED (AT ENGINEER'S REQUEST) AFTER REVIEW OF THE INITIAL REPORT SHALL BE PROVIDED AT NO ADDITIONAL COST. TEST AND BALANCE REPORT TO BE COMPLETED BY AN INDEPENDENT, CERTIFIED TEST AND BALANCE CONTRACTOR.

PLUMBING EQUIPMENT SCHEDULE

SYM.	DESCRIPTION	CONN. SIZE		SPECIFICATION	REMARKS
		INLET	OUT		
WH1 (TYP. OF 1)	WATER HEATER, COMMERCIAL TANK TYPE, GAS FIRED, 100 GALLON CAPACITY, 27 3/4" DIAMETER	1 1/2"	1 1/2"	EQUIPMENT: AO SMITH, BTH-199 GAS INPUT: 199,900 BTUH ELEC (ALT.): 58 KW RECOVERY: 294 GPH AT 80° RISE.	SET OUTLET TEMPERATURE TO 120°F SEE NOTE 1
WH2 (TYP. OF 1)	WATER HEATER, COMMERCIAL TANK TYPE, ELECTRIC, 120 GALLON CAPACITY, 29 1/2" DIAMETER (ADD ALT. 6, ONLY)	1 1/4"	1 1/4"	EQUIPMENT: AO SMITH DRE 120-12 ELEC: 12 KW, 230 V RECOVERY: 62 GPH AT 80° RISE.	SET OUTLET TEMPERATURE TO 120°F SEE NOTE 3
ET1	THERMAL EXPANSION TANK 5.1 GALLON CAPACITY	3/4"	-	EQUIPMENT: AMTROL ST-12-C	-
RCP1	CIRCULATION PUMP ALL BRONZE CONSTRUCTION	3/4"	3/4"	PUMP: B&G ECOCIRC 18-20 SS, ELEC: 10-70 WATT, 120V RATED FOR 9 GPM AT 10' HEAD	SEE NOTE 2

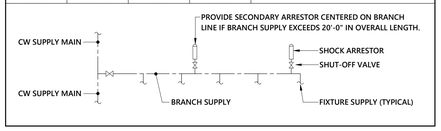
NOTES:
1. COMMERCIAL GAS FIRED WATER HEATER SHALL HAVE AT LEAST A 96% THERMAL EFFICIENCY RATING, A 5 YEAR WARRANTY, STAINLESS STEEL BURNERS, REDUNDANT GAS VALVES, SEALED COMBUSTION CHAMBER, FAN ASSISTED COMBUSTION, ASME 150 PSI WORKING PRESSURE, INLET AND OUTLET TEMPERATURE GAUGE, TEMP GAUGE, 150 PSI T&P RELIEF VALVE, OPERATING LIMIT AND HIGH LIMIT CONTROLS, U.L. AND FM APPROVED GAS TRAIN, FLOW SWITCH, 100% SAFETY SHUTDOWN AND LOW NOX EMISSIONS. PROVIDE WITH FACTORY CONDENSATE NEUTRALIZATION KIT. PROVIDE WATER HEATER WITH INTERNAL CIRCULATION PUMP, INTERNAL BUFFER TANK AND CIRCULATION INLET. SET WATER HEATER CIRCULATION PUMP CONTROL SETTING AND VALVE TO "EXTERNAL CIRCULATION MODE". WATER HEATER SHALL EXCEED ASHRAE 90.1 REQUIREMENTS.
2. INTERLOCK WITH FULLY ADJUSTABLE AQUASTAT AND 7-DAY, 24 HOUR TIMER.
3. WH2 TO BE PROVIDED IN THE ADD ALTERNATE 6 PACKAGE ONLY.

** MATCH PIPE SIZE SHOWN ON PLANS, SEE PLANS.

APPROVED EQUALS:	PRODUCT TYPE:	ACCEPTED MANUFACTURERS:
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE MODEL WHICH MOST CLOSELY MATCHES THE SPECIFIED PRODUCT. PROVIDE PRODUCTS MADE BY THE MANUFACTURER'S LISTED.	WATER HEATERS EXPANSION TANKS PUMPS	NAVIEN, RINNAI, NORITZ AMTROL, LOCHINVAR, WATTS, WESSLES B&G, TACO, ARMSTRONG

SHOCK ARRESTOR TABLE

DRAWING SYMBOL	FIXTURE UNITS	P.D.I. WH201 DESIGNATION	ARRESTOR SIZE	REMARKS
SA-A	1 - 11	A	1/2"	INSTALL SHOCK ARRESTORS PER THE PLUMBING DRAINAGE INSTITUTE (P.D.I.) GUIDELINES. ACCEPTED MANUFACTURERS: SIOUX CHIEF, WATTS, PPP INC., ZURN
SA-B	12 - 32	B	3/4"	
SA-C	33 - 60	C	1"	
SA-D	61 - 113	D	1-1/4"	
SA-E	114 - 154	E	1-1/2"	



GREASE INTERCEPTOR - GRS1/GRS2

ZURN PROCEPTOR GMC-1000 OR APPROVED EQUAL BY XERXES, FLOWTITE, OR TOWN AND COUNTRY PLASITICS. 1,000 GALLON WATER CAPACITY, FIBERGLASS CONSTRUCTION, 6" INLETS AND OUTLETS AND 3" VENTS. PROVIDE MANWAYS TO MEET INVERT DEPTH AND H-20 TRAFFIC RATED MANHOLE COVERS AND FRAMES INSTALLED FLUSH WITH FINISHED GRADE. PROVIDE REINFORCED CONCRETE RELIEVING SLAB WHEN EASE INTERCEPTOR IS LOCATED IN AREAS WITH VEHICLE ACCESS. INSTALL PER THE MANUFACTURERS INSTRUCTIONS. COORDINATE EXACT LOCATION WITH SITE UTILITY CONTRACTOR. SEE SCHEMATIC 11/P400.

LINT INTERCEPTOR - LI-1

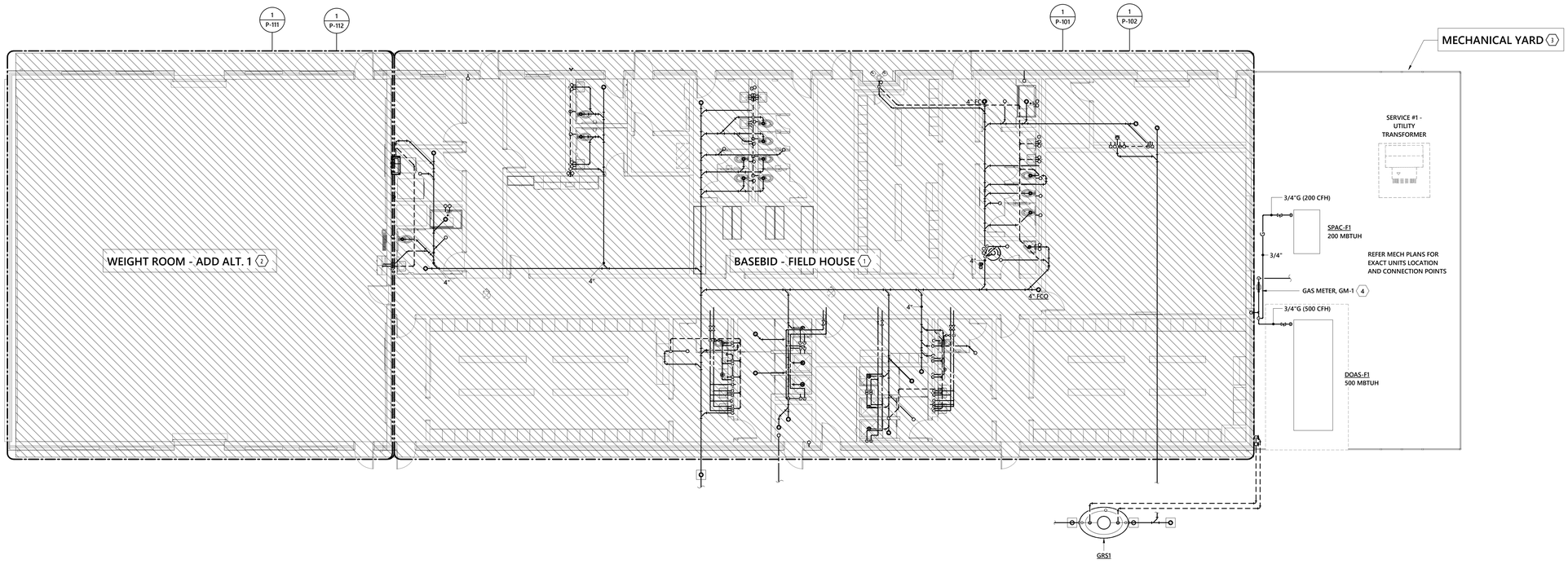
H-M COMPANY DRAIN TROUGH 4'-0"x1'-0"x1'-0" OR APPROVED EQUAL, 1/4" THICK PREFABRICATED POLYPROPYLENE LAUNDRY TRENCH RECESSED IN FLOOR WITH 3/8" THICK POLYPROPYLENE REMOVABLE LID. PROVIDE LINT SCREEN AND OPTIONAL SECOND LINT SCREEN. PROVIDE WITH 4" BOTTOM OUTLET AND 4" P'TRAP. SEE SCHEMATIC 2/P400

PLUMBING GENERAL NOTES

1. GENERAL AND SPECIAL CONDITIONS OF THE CONTRACT APPLY TO THE PLUMBING SCOPE OF WORK. THE PLUMBING DRAWINGS AND SPECIFICATIONS SHALL NOT BE INTERPRETED AS WAIVING OR OVERRULING ANY REQUIREMENTS EXPRESSED IN GENERAL CONDITIONS.
2. PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2018 INTERNATIONAL PLUMBING CODE AND WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
3. SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
4. PERMITS: APPLY AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION. ACREAGE CHARGES, FACILITIES CHARGES AND BOND PROPERTY ASSESSMENTS ARE NOT TO BE CONSTRUED TO BE A PART OF THIS CONTRACT.
5. WARRANT THE SYSTEM LABOR, MATERIALS AND EQUIPMENT FOR THE TIME PERIOD SPECIFIED IN THE PROJECT MANUAL. IF NO WARRANTY SECTION IS PROVIDED, THEN WARRANT THE SYSTEM LABOR, MATERIAL AND EQUIPMENT FOR A MINIMUM OF ONE YEAR AFTER COMPLETION AND ACCEPTANCE. PRIOR

CONSTRUCTION NOTES

1. FIELDHOUSE IS INCLUDED IN HAMPTON ATHLETICS 'BASE BID' PACKAGE. PLEASE REFER TO SHEETS 1/P101 & 1/P102 FOR ENLARGED PLUMBING DRAINAGE & SUPPLY PIPING INFORMATION.
2. WEIGHTROOM AREA IS ADD ALTERNATE 1 FOR HAMPTON ATHLETICS PACKAGE. PROVIDE ALTERNATE PRICING IN ADDITION TO BASEBID (FIELDHOUSE) PACKAGE. PLEASE REFER TO SHEETS 1/P111 & 1/P112 FOR ENLARGED PLUMBING DRAINAGE & SUPPLY PIPING INFORMATION.
3. MECHANICAL YARD, INCLUDED AS PART OF THE 'BASE BID' PACKAGE.
4. GAS SERVICE AND METER TO BE PROVIDED BY LOCAL GAS CO. (1050 CFH AT 2 PSIG). NOTE, THE PLUMBING CONTRACTORS WORK BEGINS AT THE OUTLET OF THE GAS METER ASSEMBLY



1 OVERALL FIELDHOUSE BUILDING PLAN
1/8" = 1'-0"

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George C. Fowler III No. 21021 — SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER

State Board of Registration for Professional Engineers and Surveyors.

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OVERALL FIELDHOUSE BUILDING PLAN

P-100

PROJECT NORTH N
TRUE NORTH

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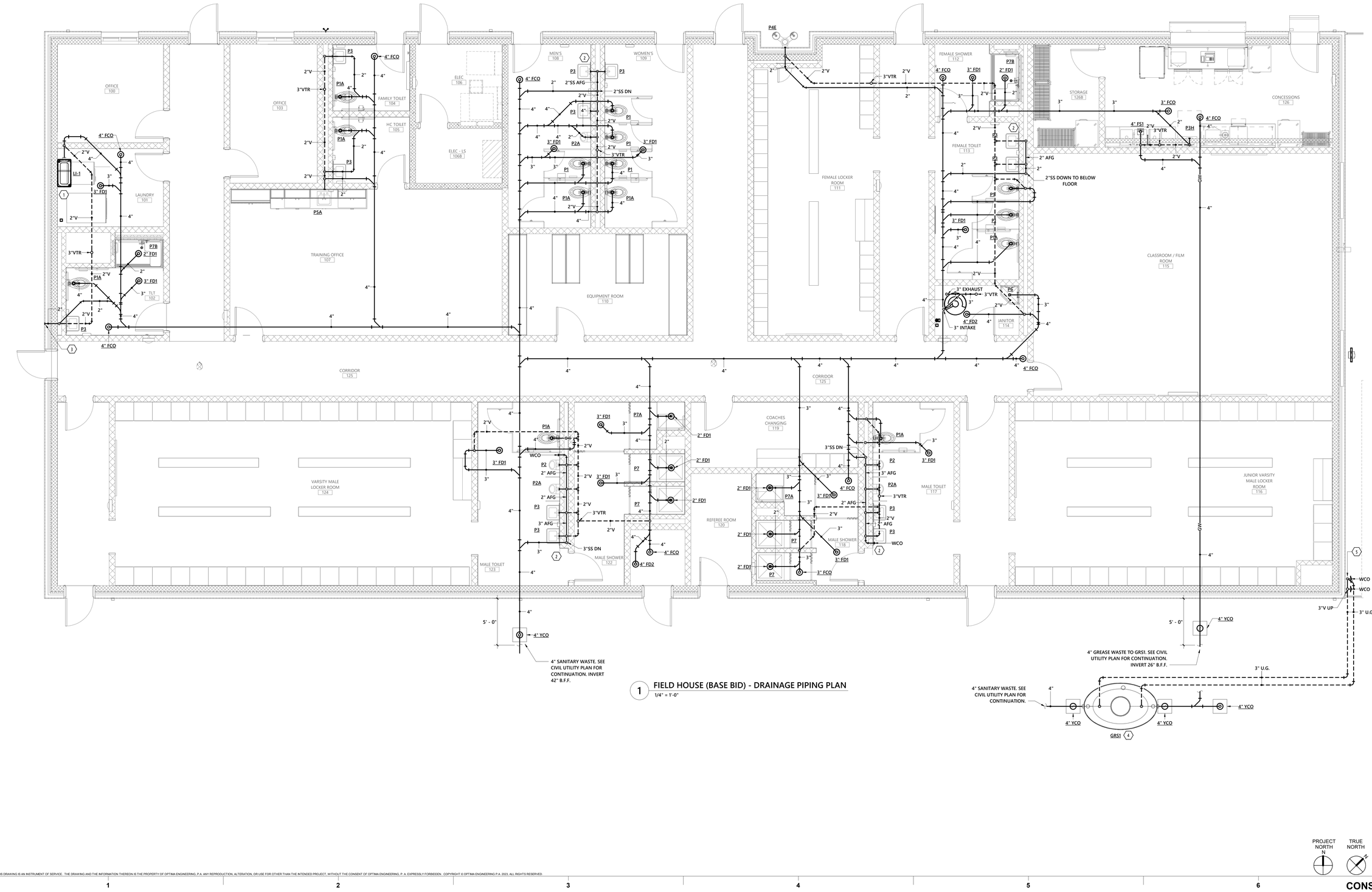
CONSTRUCTION NOTES

1. PROVIDE INDIRECT DRAIN PIPING FROM WASHING MACHINE TO LAUNDRY TRENCH. PROVIDE DRAIN TROUGH WITH LINT FILTER FOR COMMERCIAL WASHER. SEE DETAIL 2/P400 FOR MORE INFORMATION.
2. SANITARY WASTE PIPING FROM LAVATORIES TO RUN CONCEALED IN CHASE PROVIDED & COMBINED INTO (1) WASTE PIPE BEFORE DROPPING BELOW FINISHED FLOOR TO RUN UNDERGROUND.
3. PROVIDE 2" SANITARY WASTE LINE AND 2" VENT AND CAP FOR FUTURE USE TO SERVE P4 FIXTURE IN WEIGHT ROOM, INCLUDED IN ADD. ALT 1. SEE SHEET P111 FOR CONTINUATION.
4. GREASE INTERCEPTOR (GRS1). PLEASE REFER TO CIVIL SITE PLANS FOR EXACT LOCATION. SEE DETAIL 11/P400 FOR MORE INFORMATION.
5. 3" UNDERGROUND VENT PIPING TO RISE AT EXTERIOR WALL. PROVIDE WCO FOR EACH VENT AT 1' AFF. AFTER WCO, TIE VENT PIPING TOGETHER INTO (1) 3" V, RISE AND TERMINATE PIPING ABOVE ROOF LEVEL. PROVIDE CAST IRON VENT PIPING WHERE PIPING IS EXPOSED ABOVE GRADE AT EXTERIOR.



1 FIELD HOUSE (BASE BID) - DRAINAGE PIPING PLAN
1/4" = 1'-0"

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FIELD HOUSE DRAINAGE PLAN (BASE BID)

P-101

PROJECT NORTH N
TRUE NORTH

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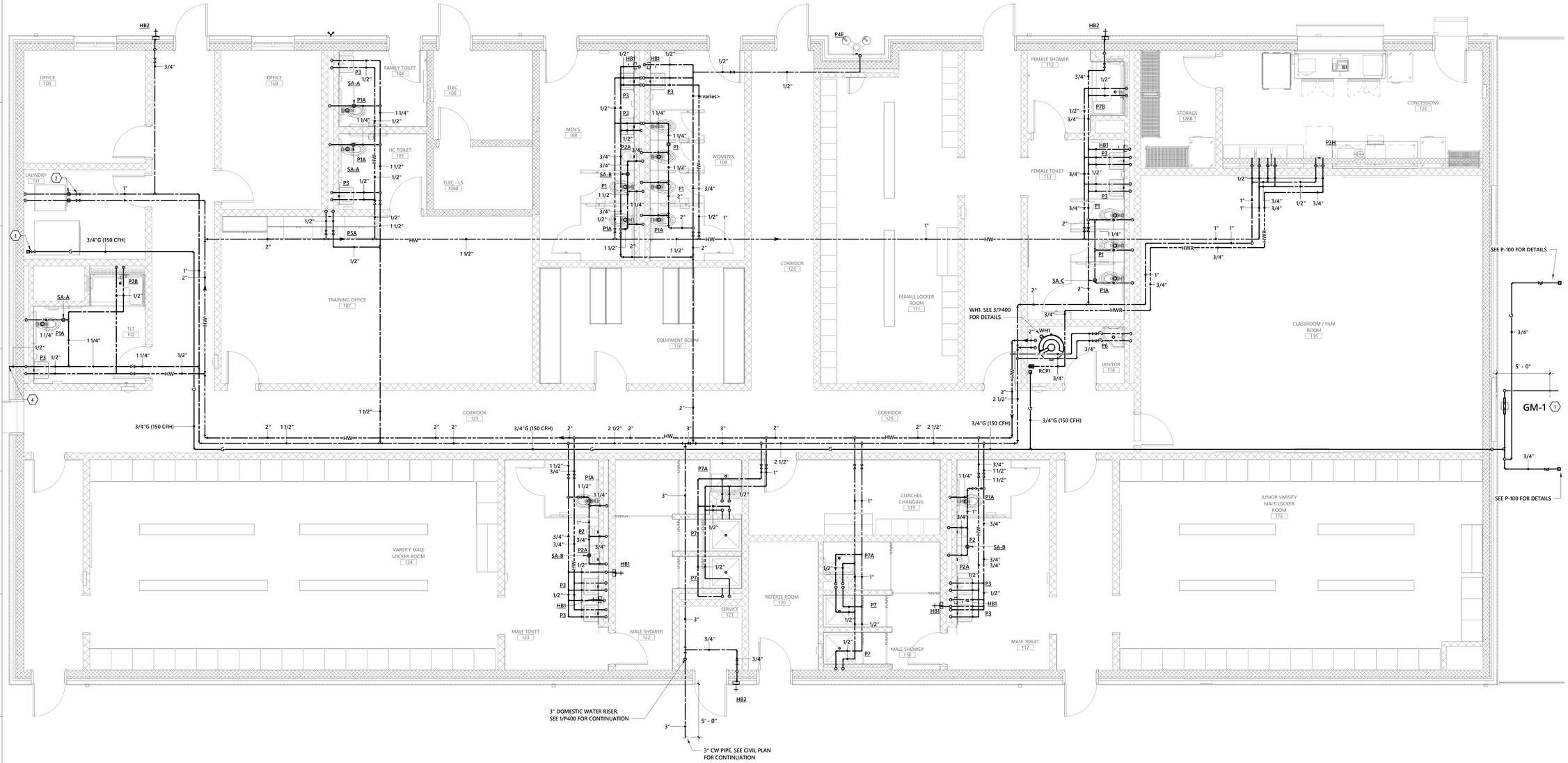
CONSTRUCTION NOTES

1. GAS SERVICE AND METER TO BE PROVIDED BY LOCAL GAS CO. (1050 CFH AT 2 PSIG). NOTE, THE PLUMBING CONTRACTORS WORK BEGINS AT THE OUTLET OF THE GAS METER ASSEMBLY. SEE P-100 FOR OVERALL PLAN WITH ENTIRE MECHANICAL YARD AND CONTINUATION OF GAS PIPING..
2. PROVIDE 1" CW & 1" HW FOR COMMERCIAL WASHER. PROVIDE SHOCK ARRESTORS AND SHUT OFF VALVES FOR WATER LINES IN AN ACCESSIBLE LOCATION.
3. PROVIDE 3/4" GAS LINE FOR COMMERCIAL DRYER. PC TO CONFIRM EXACT GAS LOAD NEEDED FOR COMMERCIAL DRYER PRIOR TO PERFORMING ANY WORK. PROVIDE SHUT OFF VALVE IN AN ACCESSIBLE LOCATION.
4. PROVIDE 1/2" CW LINE AND CAP FOR FUTURE USE TO SERVE FIXTURE P4 IN WEIGHT ROOM, INCLUDED IN ADD. ALT 1. SEE SHEET P112 FOR CONTINUATION.



1 FIELD HOUSE (BASE BID) - SUPPLY PLAN
1/4" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

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FIELD HOUSE SUPPLY PLAN (BASE BID)

P-102

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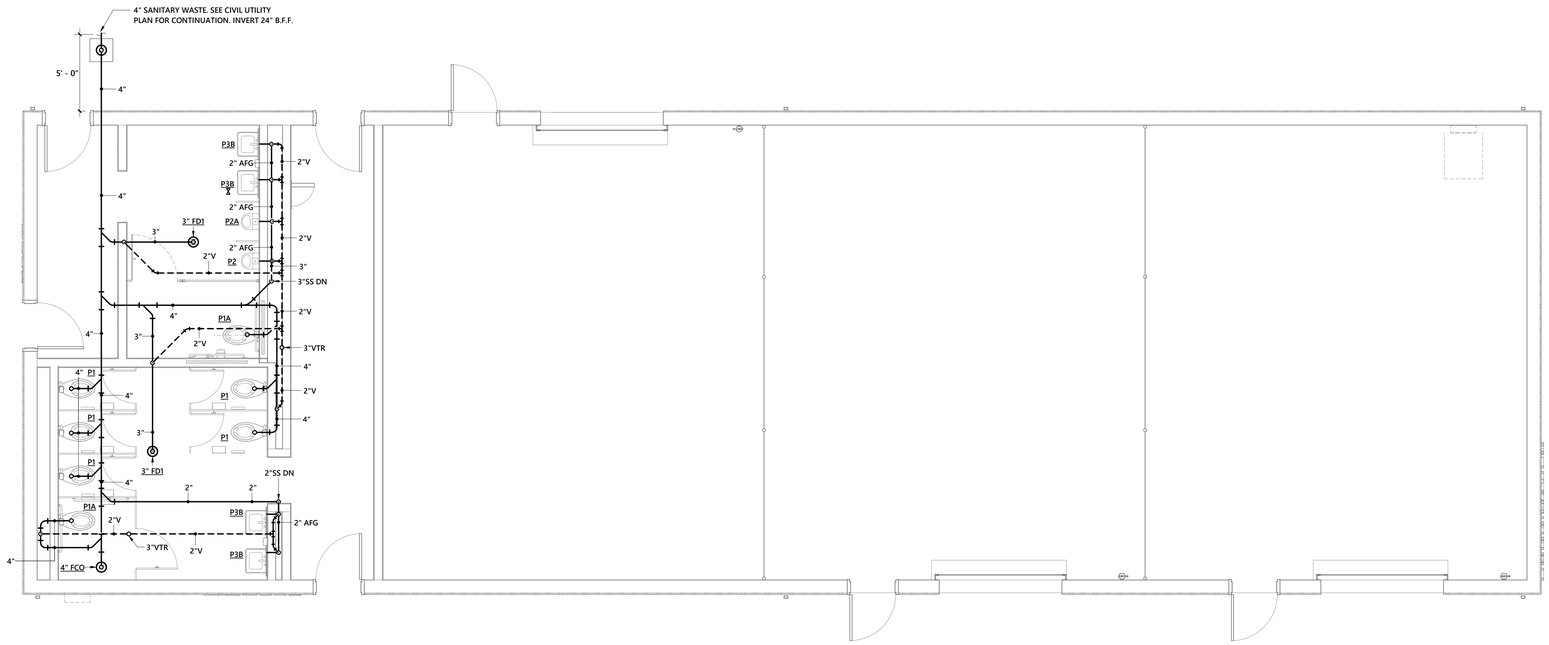

1 RESTROOM & STORAGE BUILDING DRAINAGE PLANS (BASE BID)
1/4" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

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RESTROOM & STORAGE BUILDING DRAINAGE PLAN (BASE BID)

P-103

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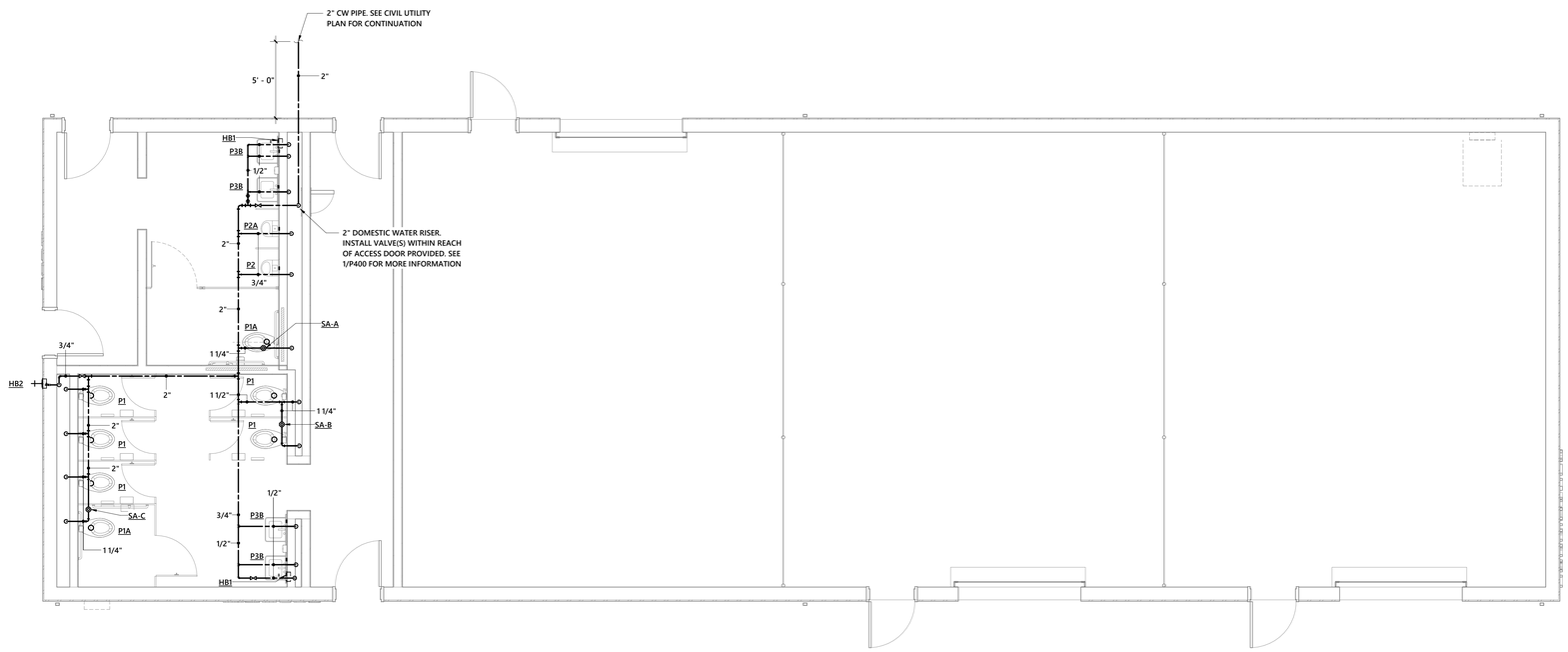

1 RESTROOM & STORAGE BUILDING SUPPLY PLAN (BASE BID)
1/4" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

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RESTROOM & STORAGE BUILDING SUPPLY PLAN (BASE BID)

P-104

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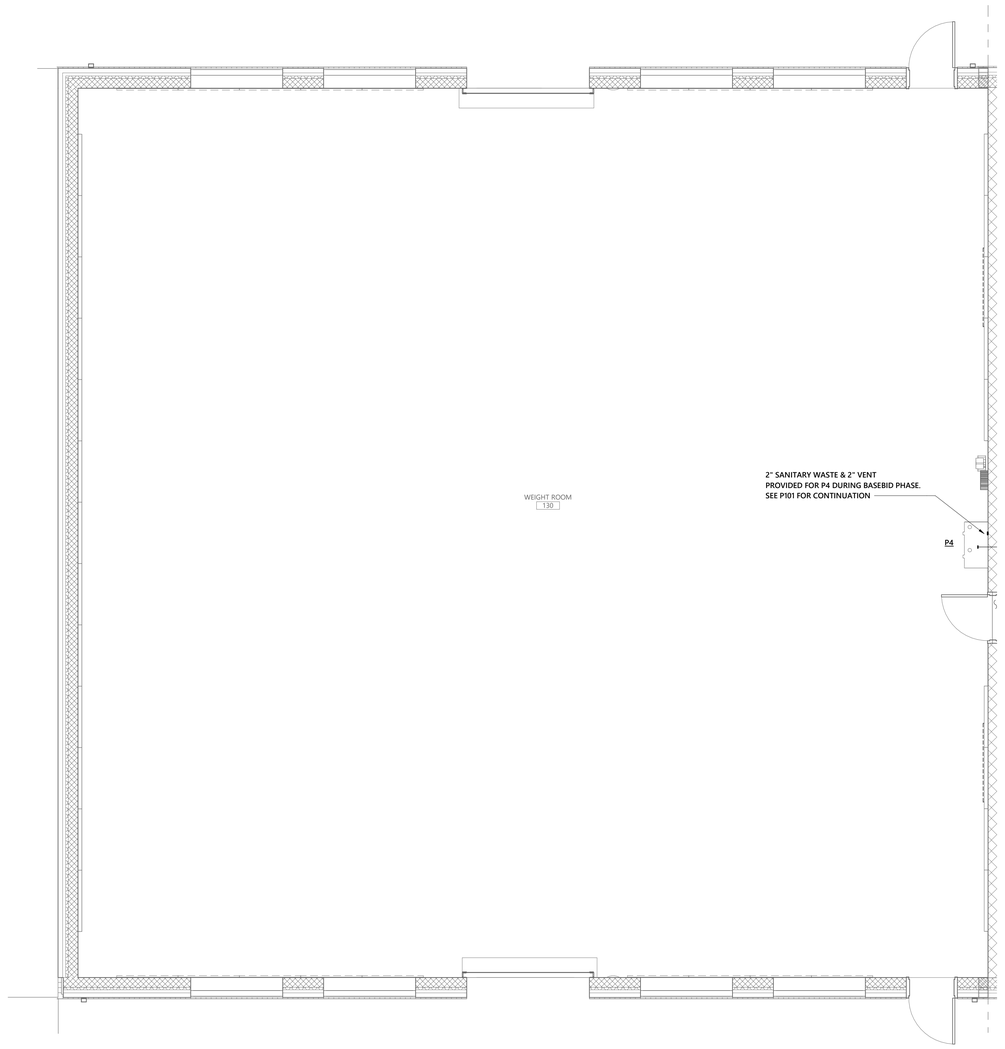

1 WEIGHT ROOM - DRAINAGE PIPING PLAN
1/4" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

PROJECT NORTH
TRUE NORTH

HAMPTON COUNTY HIGH SCHOOL PHASE 2

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1927 South Tryon St, Suite 300, Charlotte NC 28203
Phone 704.338.1292 · www.optimaengineering.com
South Carolina License Number C-00710

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SOUTH CAROLINA
OPTIMA ENGINEERING PA
No. C00710
CERTIFICATE OF AUTHORIZATION

George C. Fowler III
SOUTH CAROLINA
No. 21021
PROFESSIONAL ENGINEER
State Board of Registration for Professional Engineers and Surveyors.

10/31/25

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

WEIGHT ROOM DRAINAGE PLAN (ADD ALT #1)

P-111

CONSTRUCTION DOCUMENTS

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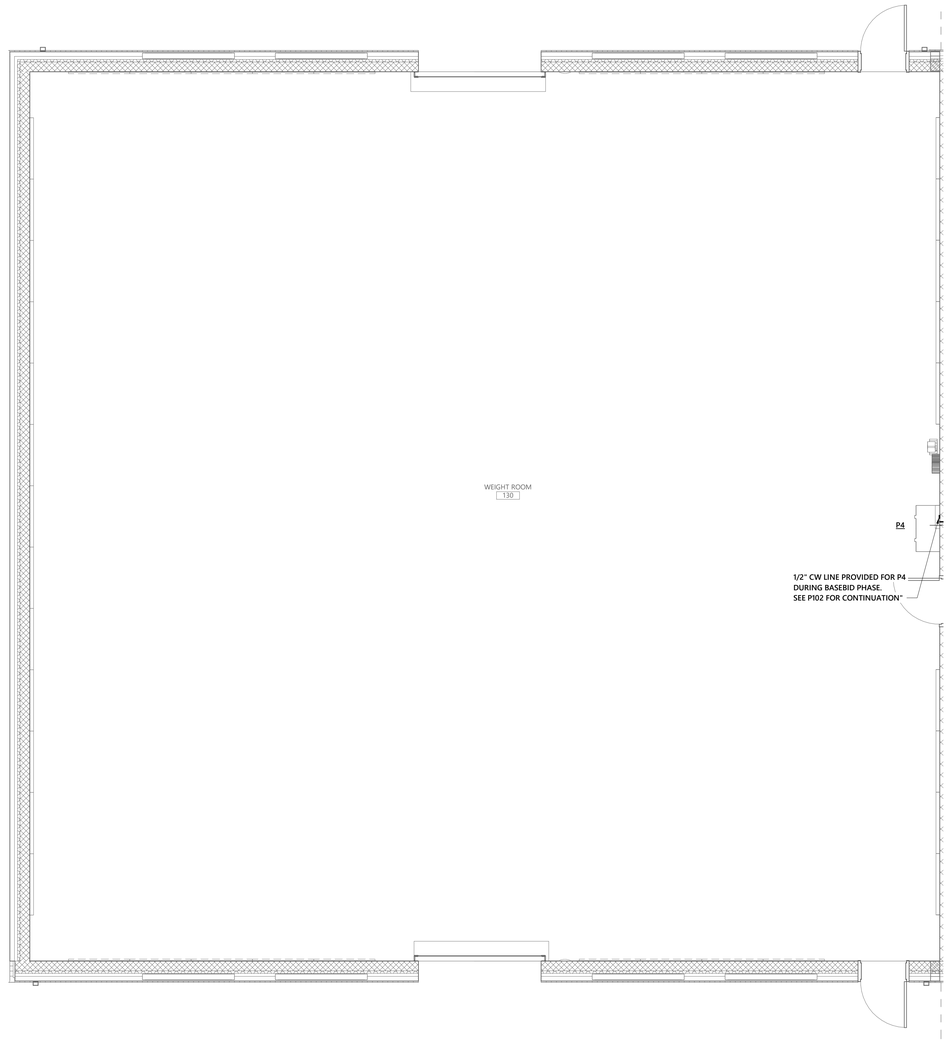

1 WEIGHT ROOM - SUPPLY PLAN
1/4" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

PROJECT NORTH
TRUE NORTH

HAMPTON COUNTY HIGH SCHOOL PHASE 2

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WEIGHT ROOM SUPPLY PLAN (ADD ALT #1)

P-112

CONSTRUCTION DOCUMENTS

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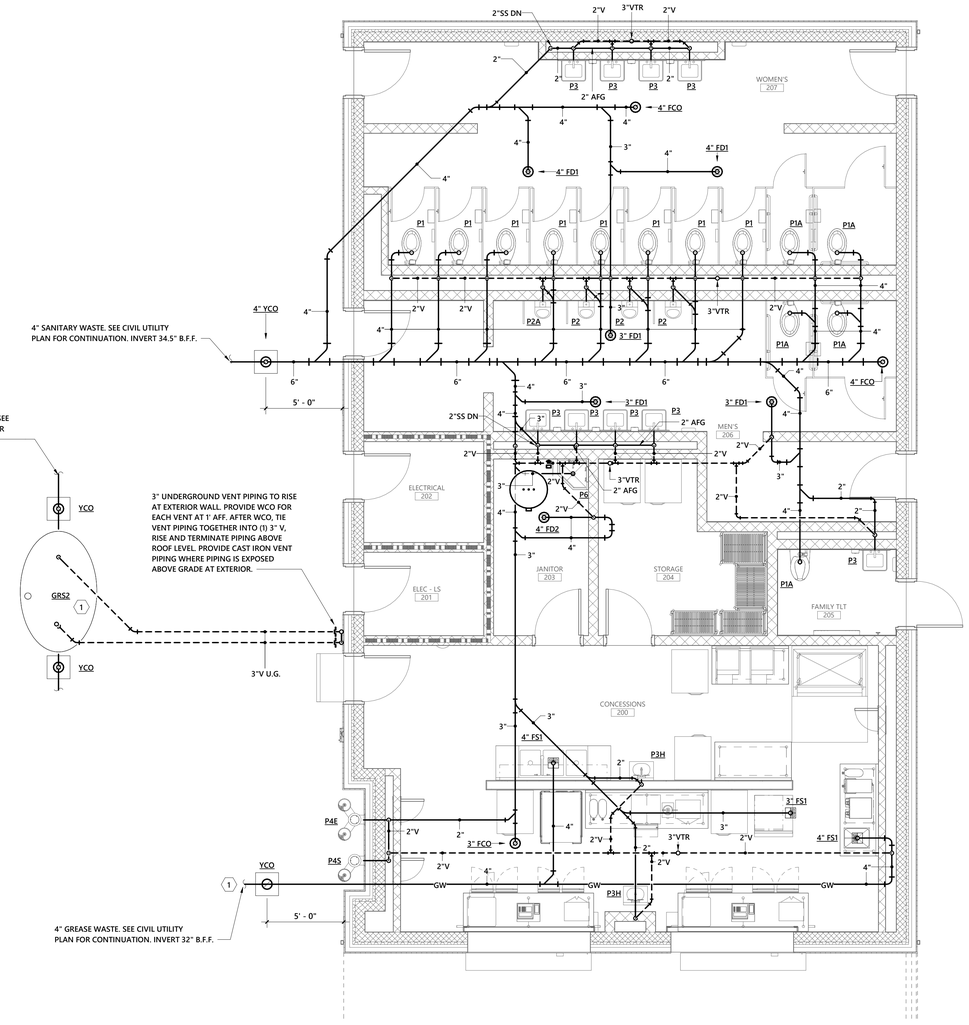
CONSTRUCTION NOTES

1. GREASE INTERCEPTOR (GRS2). PLEASE REFER TO CIVIL SITE PLANS FOR EXACT LOCATION. SEE DETAIL 11/P400 FOR MORE INFORMATION.



1 CONCESSIONS - DRAINAGE PIPING PLAN
1/4" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

PROJECT NORTH N

TRUE NORTH

HAMPTON COUNTY HIGH SCHOOL PHASE 2

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OPT PROJECT: 23-0084
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CONCESSIONS DRAINAGE PLAN (ADD ALT #6)

P-161

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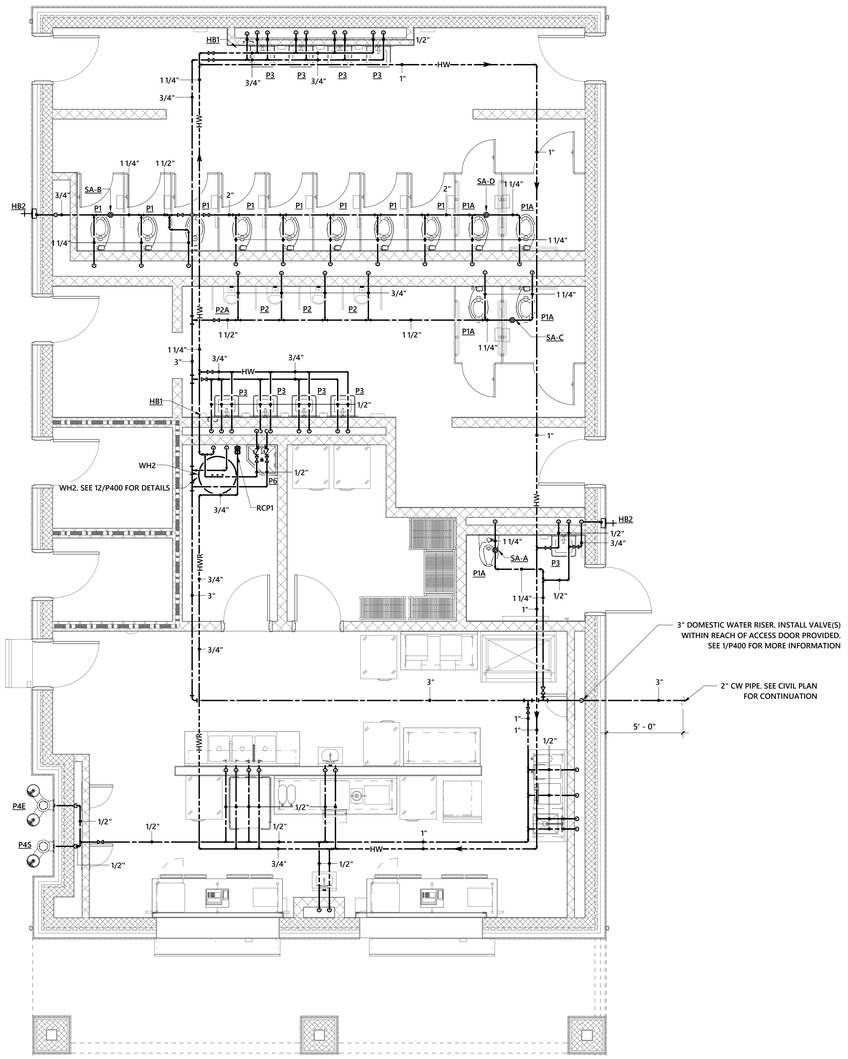

1 CONCESSIONS - SUPPLY PLAN
1/4" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

PROJECT NORTH
TRUE NORTH

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CONCESSIONS SUPPLY PLAN (ADD ALT #6)

P-162

CONSTRUCTION DOCUMENTS

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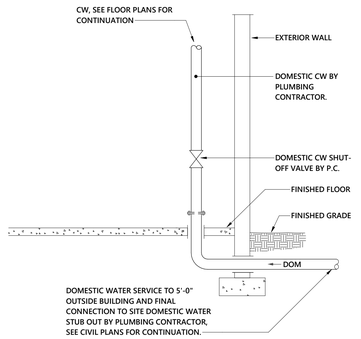
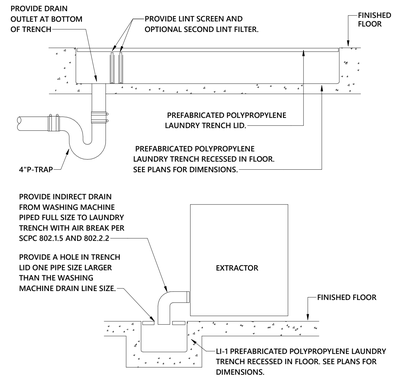
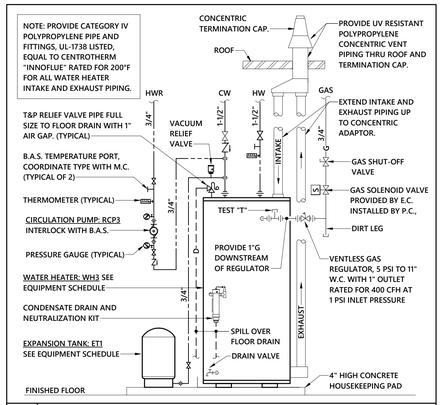


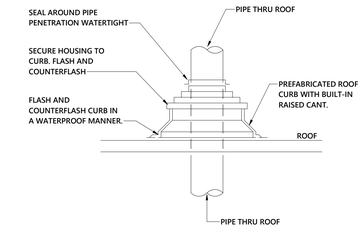
1 WATER SERVICE ENTRANCE SCHEMATIC
NOT TO SCALE



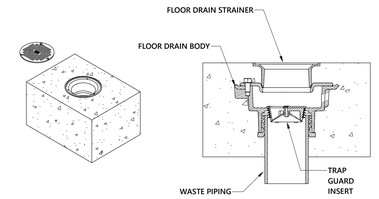
2 WASHER DRAIN WITH LINT TRAP DETAIL
NOT TO SCALE



3 GAS FIRED WATER HEATER SCHEMATIC - (WH1)
NOT TO SCALE



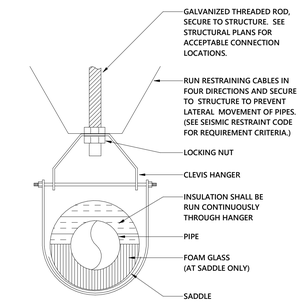
4 PIPE PORTAL DETAIL
NOT TO SCALE



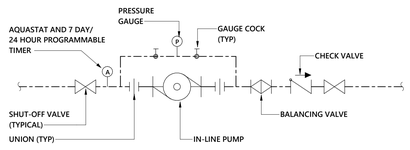
NOTES:

1. REMOVE SCREWS AND STRAINER FROM INSTALLED DRAIN. MAKE SURE DRAIN OUTLET IS CLEAR OF ANY DEBRIS OR OBSTRUCTIONS PRIOR TO INSTALLING THE TRAP GUARD.
2. ALIGN TRAP GUARD WITH THE CENTER OF THE DRAIN ASSEMBLY.
3. PUSH TRAP GUARD INTO BOTTOM OF DRAIN BODY OR OUTLET PIPE UNTIL THE UNDERSIDE OF THE BARRIER TRAP IS FLUSH WITH BOTTOM OF DRAIN OR TOP OF THE PIPE.

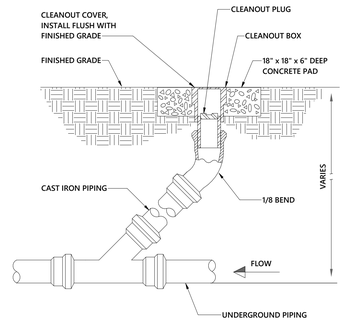
5 FLOOR DRAIN TRAP GUARD DETAIL
NO SCALE



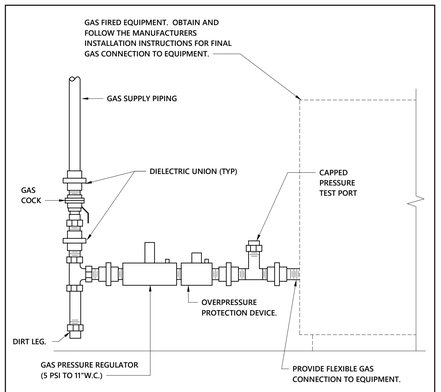
6 PIPE HANGER SCHEMATIC
NOT TO SCALE



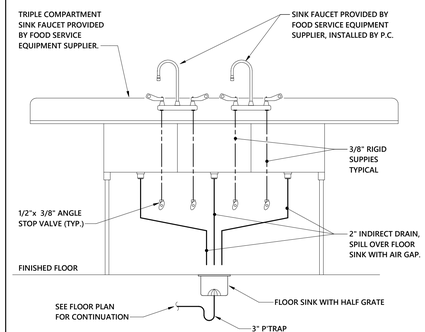
7 HOTWATER RECIRC PUMP DETAIL
NOT TO SCALE



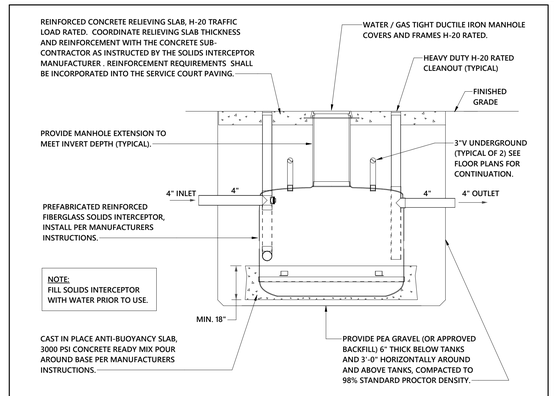
8 YARD CLEANOUT DETAIL
NOT TO SCALE



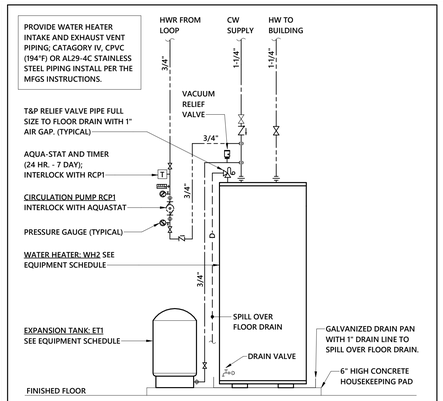
9 TYPICAL GAS PIPING CONNECTION TO EQUIPMENT DETAIL
NOT TO SCALE



10 TRIPLE COMPARTMENT SINK PIPING DETAIL
NOT TO SCALE



11 GREASE INTERCEPTOR - GRS1/GRS2
NOT TO SCALE



12 ELECTRIC WATER HEATER SCHEMATIC (WH2)
NOT TO SCALE

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OPT PROJECT: 23-0084
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PLUMBING DETAILS

P-400

CONSTRUCTION DOCUMENTS

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EQUIVALENT MANUFACTURERS LISTING

LISTING OF MANUFACTURER'S NAME DOES NOT GUARANTEE APPROVAL. ALL EQUIPMENT MUST MEET OR EXCEED QUALITY AND CAPACITIES OF SPECIFIED EQUIPMENT. FINAL APPROVAL WILL BE BASED ON EQUIPMENT SUBMITTALS. ANY MANUFACTURER NOT LISTED BUT WISHING TO BID THIS PROJECT SHALL SUBMIT A WRITTEN REQUEST A MINIMUM OF 7 DAYS PRIOR TO BID DATE OR AS INDICATED IN THE SPECIFICATIONS, ALL EQUIPMENT LISTED IN THE PROJECT SCHEDULE IS TO BE CONSIDERED DESIGN BASIS EQUIPMENT. PRIOR APPROVAL IS REQUIRED FOR ALL MANUFACTURERS NOT LISTED.

(ALPHABETICAL ORDER)
AIR DISTRIBUTION: CARNES, KRUEGER, METAL*AIRE, NAILOR, PRICE, TITUS, TUTTLE & BAILEY
DDC CONTROLS: ALERTON, HONEYWELL, SEIMENS, TRANE, AUTOMATED LOGIC
ELECTRIC WALL/UNIT HEATERS: BERKO, MARKEL, MODINE, QMARK, RAYWALL
FANS: COOK, GREENHECK, PENN, TWIN CITY
FIRE DAMPERS: GREENHECK, NAILOR, NCA, POTTORFF, RUSKIN, SAFE-AIRE
PACKAGED DX COOLING UNITS: CARRIER, DAIKIN, TRANE, YORK/JOHNSON

NOTE:
ALL COST ASSOCIATED WITH SUBSTITUTED/NON-DESIGN BASIS EQUIPMENT TO COMPLY WITH BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, PIPING, SHEET METAL, ELECTRICAL, REPLACEMENT OF SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED/NON-DESIGN BASIS EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.

MECHANICAL GENERAL NOTES

SEE SPECIFICATIONS FOR ADDITIONAL PROJECT REQUIREMENTS. THESE GENERAL NOTES ARE INTENDED TO SUPPLEMENT THE SPECIFICATIONS. IN THE EVENT THAT THE VERBIAGE IS IN CONFLICT OR CONTRADICTS THE REQUIREMENTS LISTED HERE, THE QUESTION SHALL BE ASKED PRIOR TO BIDDING OR THE MORE STRINGENT SHALL APPLY AT THE ENGINEER'S DISCRETION.

1. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING DIFFUSERS, ETC.
2. ALL EQUIPMENT LISTED IN PROJECT SCHEDULES IS TO BE CONSIDERED DESIGN BASIS EQUIPMENT. ALL COST ASSOCIATED WITH SUBSTITUTED/NON-DESIGN BASIS EQUIPMENT TO COMPLY WITH BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, PIPING, SHEET METAL, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED/NON-DESIGN BASIS EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. THIS INCLUDES ANY MODIFICATIONS TO ANY ASSOCIATED MECHANICAL, PLUMBING, OR ELECTRICAL SYSTEMS REQUIRED BY THIS SPECIFIC MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 2" THICK DUCT WRAP WITH VAPOR BARRIER. INSULATION (INCLUDING FLEXIBLE DUCT INSULATION) SHALL HAVE A MINIMUM INSTALLED R-VALUE OF 6.0. UNIT RETURN DUCTWORK AND TRANSFER DUCTS SHALL BE LINED WITH 1" THICK FIBERGLASS DUCT LINER FOR ACOUSTICAL PURPOSES. DUCT DIMENSIONS ON PLANS ARE FREE AREA SIZE.
4. SUPPLY AND RETURN DUCTWORK LOCATED OUTSIDE THE BUILDING SHALL BE WRAPPED WITH 3" THICK DUCT WRAP WITH VAPOR BARRIER HAVING A MINIMUM INSTALLED R VALUE OF 8.0. COVER EXTERNAL INSULATION WITH AN ALUMINUM OUTER ENCLOSURE AND SEAL WATER TIGHT.
5. ALL DUCTWORK SHALL BE SEALED PER THE REQUIREMENTS OF THE SOUTH CAROLINA MECHANICAL CODE. SEAL MEDIUM PRESSURE SUPPLY DUCTWORK FOR POSITIVE 3" PRESSURE CLASS, SMACNA SEAL CLASS A, SMACNA LEAKAGE CLASS 4. SEAL LOW PRESSURE SUPPLY, RETURN, OUTSIDE AIR, AND EXHAUST DUCTWORK FOR POSITIVE/NEGATIVE 2" PRESSURE CLASS, SMACNA SEAL CLASS A, SMACNA LEAKAGE CLASS 4.
6. ALL PIPING, DUCTS, VENTS, ETC., EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND COUNTERFLASHED IN A WATERPROOF MANNER.
7. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS, TO AVOID INTERFERENCE.
8. THE MECHANICAL CONTRACTOR SHALL BALANCE ALL MECHANICAL SYSTEMS TO THE PERFORMANCE SPECIFICATIONS INDICATED ON PLANS AND PROVIDE THE ENGINEER WITH THREE COPIES OF A COMPLETE TEST AND BALANCE REPORT. THE REPORT IS TO BE ISSUED A MINIMUM OF TWO WEEKS PRIOR TO PROJECT COMPLETION. THE TEST AND BALANCE REPORT WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER. ANY ADDITIONAL TESTING, ADJUSTING AND BALANCING REQUIRED (AT ENGINEER'S REQUEST) AFTER REVIEW OF THE INITIAL REPORT SHALL BE PROVIDED AT NO ADDITIONAL COST. TESTING AND BALANCING CONTRACTOR TO CONFIRM FILTERS ARE CLEAN, AND FREE OF DEBRIS PRIOR TO BEGINNING WORK. THE MECHANICAL CONTRACTOR SHALL REPLACE ANY DIRTY FILTERS, AS NEEDED. TEST AND BALANCE REPORT TO BE COMPLETED BY AN INDEPENDENT, CERTIFIED TEST AND BALANCE CONTRACTOR.
9. UPON PROJECT COMPLETION, THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER INSTALLATION INFORMATION INCLUDING RECORD SUBMITTALS (WITH ANY SUBMITTAL REVIEW COMMENTS ADDRESSED) AND O&M MANUALS FOR EACH PIECE OF EQUIPMENT INCLUDING ALL SELECTED OPTIONS, THE NAME AND ADDRESS OF AT LEAST ONE SERVICE AGENCY, FULL CONTROL SYSTEM O&M AND CALIBRATION INFORMATION INCLUDING WIRING DIAGRAMS, SCHEMATICS, FULL SEQUENCE OF OPERATION, AND PROGRAMMED SETPOINTS.
10. PROVIDE A ONE YEAR WARRANTY FOR ALL WORK PERFORMED BEGINNING ON THE DAY THE SYSTEM IS COMPLETELY OPERATIONAL AND ACCEPTABLE BY THE OWNER.
11. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND ALL EQUIPMENT FOR MAINTENANCE AND FILTER REMOVAL.
12. ALL CONDENSATE DRAIN PIPING SHALL BE TYPE "L" OR TYPE "K" COPPER PIPE AND FITTINGS. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED. INTERIOR CONDENSATE DRAINS SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX INSULATION. MINIMUM DRAIN SIZE SHALL BE 3/4". TERMINATE ROOFTOP UNIT DRAINS ON A CONCRETE SPLASHBLOCK.
13. ALL REFRIGERANT PIPE SHALL BE NITROGENIZED ACR COPPER TUBE. SIZE, INSULATE, AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. REFRIGERANT PIPING INSULATION EXPOSED OUTDOORS SHALL BE COVERED WITH AN OUTER ALUMINUM JACKET.
14. ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER INDICATED ON THE DRAWINGS OR NOT.
15. INSTALL THE TOP OF ALL THERMOSTATS, SENSORS, AND SWITCHES AT 4'-0" (MAXIMUM) ABOVE FINISH FLOOR. COORDINATE EXACT THERMOSTAT LOCATION WITH OWNER PRIOR TO INSTALLATION. ANY DEVICE ON A PERIMETER WALL SHALL BE MOUNTED ON A FOAM-FILLED ELECTRICAL BOX, WITH ALL GAPS BETWEEN BOX AND WALL SEALED TO PREVENT INFILTRATION.
16. CONTRACTOR SHALL VERIFY LOCATION OF ALL ROOF PENETRATIONS WITH ARCHITECT & OWNER PRIOR TO INSTALLATION. NEW ROOF PENETRATIONS MADE THROUGH EXISTING ROOF SYSTEMS SHALL BE VERIFIED WITH THE OWNER'S EXISTING ROOF WARRANTY PRIOR TO INSTALLATION.
17. ROOF CURBS SHALL ALLOW A MINIMUM OF 8" ABOVE ROOF INSULATION FOR FLASHING, OR AS INDICATED ON THE DRAWINGS, WHICHEVER IS GREATER. IN ADDITION, ALL ROOF CURBS OR EQUIPMENT SUPPORT RAILS THAT SUPPORT EQUIPMENT, PIPING, CONDUIT, ETC. EXPOSED ON THE ROOF SHALL HAVE SUFFICIENT HEIGHT TO MAINTAIN A MINIMUM OF 18" CLEARANCE BELOW SUPPORTED EQUIPMENT FOR ROOF MAINTENANCE.
18. CONTRACTOR SHALL LOCATE EXHAUST FANS, OUTLETS, AND GAS FLUES A MINIMUM OF 10'-0" FROM ANY OUTSIDE AIR INTAKE.
19. DRYER VENT WALL CAPS SHALL BE PROVIDED WITH A BACKDRAFT DAMPER. DRYER VENT SHALL NOT EXCEED A TOTAL EQUIVALENT LENGTH OF 35'-0" WITH A 2.5' DEDUCTION FOR EACH 45° BEND AND A 5' DEDUCTION FOR EACH 90° BEND.
20. MINIMUM GAS PIPING SIZE SHALL BE 3/4".
21. GAS PIPING AND FITTINGS SHALL BE BLACK STEEL, SCHEDULE 40, IN ACCORDANCE WITH ASTM SPECIFICATION A 106, WITH 150 PSI BLACK MALLEABLE IRON FITTINGS IN ACCORDANCE WITH ASTM SPECIFICATION A 47, GRADE 32510, AND ASA SPECIFICATION B16.3, 125 LB.
22. GAS PIPING SHALL BE INSTALLED TO THE REQUIREMENTS OF THE STATE BUILDING CODE AND NFPA STANDARD NO. 54. ALL PIPING TO BE SUPPORTED BY CLEVIS HANGERS WITH GALVANIZED ROD A MAXIMUM OF 8' ON CENTER. PIPING SHALL BE SUPPORTED BY ROD HANGERS IN THE PIPE RUN 12" OR LESS IN LENGTH FROM THE TOP OF THE PIPE TO THE SUPPORTING STRUCTURE PER THE STATE BUILDING CODE AND ASCE 7.
23. GAS PIPING SHALL BE TESTED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN NFPA NO 54. ANY OTHER TEST AS REQUIRED BY THE LOCAL GAS INSPECTION DEPARTMENT OR GAS COMPANY SHALL ALSO BE PERFORMED.
24. NATURAL GAS PIPING AND FITTINGS ABOVE GRADE: SCHEDULE 40 BLACK STEEL PIPING, TYPE S, SEAMLESS, GRADE B (ASTM A 53) AND 150 PSI MALLEABLE BLACK IRON FITTINGS, GRADE 32510, (ASTM B 16.3) OR FORGED STEEL WELDING TYPE FITTINGS (ASTM A234). PROVIDE THREADED JOINTS FOR PIPE 2" AND SMALLER. PROVIDE WELDED JOINTS (ASME B31.9) FOR PIPE 2 1/2" AND LARGER.
25. NATURAL GAS PIPING AND FITTINGS OUTSIDE BELOW GRADE: SCHEDULE 40 BLACK STEEL, TYPE S, SEAMLESS, GRADE B (ASTM A 53) AND FORGED STEEL WELDING TYPE FITTINGS (ASTM A234) WITH (AWWA C105) POLYETHYLENE JACKET OR DOUBLE LAYER, HALF LAPPED 10 MIL POLYETHYLENE TAPE. PROVIDE WELDED JOINTS (ASME B31.9) FOR ALL UNDERGROUND PIPE.
26. SPACE GAS PIPING HANGER RODS 8'-0" ON CENTER MAXIMUM AND SPACE TRANSVERSE BRACING 20'-0" ON CENTER MAXIMUM. TRANSVERSE BRACING FOR ONE SECTION MAY ACT AS LONGITUDINAL BRACING FOR THE PIPE SECTION CONNECTED TO IT IF THE BRACING IS INSTALLED WITHIN 24" OF THE ELBOW OR TEE. COORDINATE HANGER LOCATIONS WITH STRUCTURAL DRAWING DETAILS.
27. PROVIDE A.G.A. CERTIFIED SHUT-OFF VALVES MINIMUM, 125 PSI RATED, NON- LUBRICATED PLUG TYPE WITH BRONZE BODY AND BRONZE PLUG, STRAINERS AND REGULATORS (AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER) FOR ALL EQUIPMENT CONNECTED TO THE NATURAL GAS SYSTEM.
28. PAINT ALL GAS PIPING WITH 2 COATS OF YELLOW ENAMEL PAINT APPLIED WITH A BRUSH (2 MIL THICKNESS MINIMUM). PROVIDE PRE-PRINTED LABELS WITH BLACK LETTERING INDICATING THE GAS PRESSURE AND THE WORD "GAS" ON THE PIPE AT 5'-0" CENTERS FOR ALL GAS PIPING.
29. ALL TERMINAL UNITS, CONTROLS, ETC. REQUIRING ACCESS AND SERVICE SHALL BE INSTALLED WITHIN 18" OF THE CEILING FOR SERVICE ACCESSIBILITY. LOCATIONS SHALL BE INDICATED ON THE CEILING GRID PER THE SPECIFICATIONS.
30. ALL EQUIPMENT CONCRETE PAD SIZES FOR MECHANICAL EQUIPMENT SHALL BE CONFIRMED WITH APPROVED SHOP DRAWING SUBMITTALS AND ASSOCIATED UNIT MANUFACTURER ANCHOR LOCATIONS PRIOR TO FABRICATION/INSTALLATION. THE MECHANICAL AND PLUMBING CONTRACTORS SHALL COORDINATE THE EXACT LOCATION OF MECHANICAL EQUIPMENT HOUSEKEEPING PADS WITH THE FLOOR DRAIN LOCATIONS PRIOR TO INSTALLATION OF DRAINS AT EQUIPMENT/PAD LOCATIONS.
31. DUCTWORK AND PIPING PASSING THROUGH/ABOVE ELECTRICAL ROOMS SHALL BE CLOSELY COORDINATED WITH THE ELECTRICAL CONTRACTOR. DUCTWORK OR PIPING SHALL NOT BE LOCATED ABOVE ELECTRICAL PANELS.
32. EQUIPMENT OPERATED DURING CONSTRUCTION SHALL USE FILTERED MEDIA TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING COILS, DUCTWORK SYSTEMS, AIR TERMINALS ETC. AT COMPLETION OF CONSTRUCTION, MECHANICAL CONTRACTOR SHALL CLEAN ALL SYSTEMS WITH ALL CONTROL DEVICES WIDE OPEN AND REMOVE ANY REMAINING DEBRIS PRIOR TO TEST AND BALANCING. MECHANICAL CONTRACTOR SHALL REPLACE ALL FILTRATION WITH NEW FILTERS AT COMPLETION OF CONSTRUCTION. ANY DUCTWORK, AIR TERMINALS, AND/OR OTHER EQUIPMENT UPSTREAM OF FILTRATION SHALL BE CLEANED THOROUGHLY OF CONSTRUCTION DEBRIS BEFORE HANDING OVER TO OWNER.
33. COMMERCIAL DRYER EXHAUST DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL NOT LESS THAN 0.0195 INCHES THICK. EXHAUST DUCT SHALL BE ASSEMBLED WITH SMOOTH INTERIOR SURFACE SO THAT THE JOINTS DO NOT PERMIT THE ACCUMULATION OF LINT, DO NOT USE SHEET METAL SCREWS AT JOINTS. ALL 90° TURN SHALL HAVE LONG RADIUS ELBOWS. ALL DUCTWORK SHALL BE INSTALLED PER THE DRYER MANUFACTURER'S RECOMMENDATIONS. COMMERCIAL DRYER EXHAUST DUCTWORK SHALL BE WRAPPED WITH TWO LAYERS OF 1 1/2" THICK THERMAL INSULATION BLANKET AS MANUFACTURED BY FIREMASTER (OR EQUAL). INSULATION SHALL BE INSTALLED PER NFPA-96 AND IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS TO OBTAIN A 2-HOUR RATED ASSEMBLY. ASSEMBLY SHALL BE U.L. APPROVED.
34. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING RESTRAINTS TO RESIST THE EARTHQUAKE EFFECTS ON THE MECHANICAL SYSTEMS. THE REQUIREMENTS FOR THOSE RESTRAINTS ARE FOUND IN THE LOCAL BUILDING CODE AND ASCE 7. THE ANCHORAGE OF THE MECHANICAL SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF THE LOCAL BUILDING CODE AND ASCE 7.
35. ALL MECHANICAL EQUIPMENT SHALL BE U.L. LISTED AND LABELED AS A COMPLETE PACKAGE, NOT THROUGH INDIVIDUAL COMPONENTS OR PARTS. PROVIDE REQUIRED 3RD PARTY FIELD UL LISTING SERVICES AS REQUIRED TO COMPLY.

MECHANICAL DUCT SYMBOLS

SYMBOL	DESCRIPTION
16x8	SQUARE DUCT SIZE TAG (WIDTH x HEIGHT)
16/8	OVAL DUCT SIZE TAG (WIDTH / HEIGHT)
16"Ø	ROUND DUCT SIZE TAG (DIAMETER)
S/A	SUPPLY AIR
O/A	OUTDOOR AIR
R/A	RETURN AIR
E/A	EXHAUST AIR
L/A	RELIEF AIR
	SUPPLY AIR DIFFUSER (4-WAY)
	RETURN AIR GRILLE
	RETURN AIR GRILLE WITH SOUND BOOT
	EXHAUST AIR GRILLE
M.C.	MECHANICAL CONTRACTOR
G.C.	GENERAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
N.I.C.	NOT IN CONTRACT
AFF	ABOVE FINISHED FLOOR
DN	DOWN
UP	UP
X / X	SECTION CUT — REFERRING DETAIL NUMBER — REFERRING SHEET NUMBER

MECHANICAL ACCESSORIES SYMBOL LEGEND

SYMBOL	DESCRIPTION
T	THERMOSTAT / TEMP SENSOR (4'-0" AFF TO TOP)
H	HUMIDISTAT (4'-0" AFF TO TOP)
C	CARBON DIOXIDE SENSOR
B	BUILDING PRESSURE SENSOR (4'-0" AFF TO TOP)
FD	RECTANGULAR DUCT FIRE DAMPER W/ ACCESS DOOR (SEE DETAIL)
DD	RECTANGULAR DUCT MOUNTED DUCT DETECTOR. FURNISHED AND CONNECTED BY ELECTRICAL CONTRACTOR, INSTALLED BY MECHANICAL CONTRACTOR. CUTTING OF DUCT, INSTALLATION OF DETECTOR, AND DETERMINATION OF SAMPLING TUBE LENGTH SHALL BE THE MECHANICAL CONTRACTOR. PROVIDE REMOTE INDICATING LIGHT WITH EACH DETECTOR.

ABBREVIATIONS

Ø	ROUND	LVR	LOUVER
ABV	ABOVE	M/A	MIXED AIR
AC	AIR CONDITIONING	MAX	MAXIMUM
ADD	ADDENDUM	MBH	ONE THOUSAND BTU PER HOUR
AFF	ABOVE FINISHED FLOOR	MD	MOTORIZED DAMPER
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MECH	MECHANICAL
ALT	ALTERNATE	MFR	MANUFACTURER
AP	ACCESS PANEL	MIN	MINIMUM
ARCH	ARCHITECT/ARCHITECTURAL	MISC	MISCELANEOUS
BFF	BELOW FINISHED FLOOR	MTR	MOTOR
BLW	BELOW	MU/A	MAKE-UP/AIR
BTU	BRITISH THERMAL UNITS	NC	NOISE CRITERIA
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NORMALLY CLOSED
CAP	CAPACITY	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NO	NORMALLY OPEN
CLG	CEILING	NTS	NOT TO SCALE
D	DEGREE	O/A	OUTSIDE AIR
DB	DRY BULB	PD	PRESSURE DROP
DIA	DIAMETER	PLBG	PLUMBING
DN	DOWN	PRESS	PRESSURE
EA	EACH	PSI	POUNDS PER SQUARE INCH
EAT	ENTERING AIR TEMPERATURE	PSIG	POUNDS PER SQUARE INCH GAUGE
ELEC	ELECTRICAL	PWR	POWER
EQUIP	EQUIPMENT	R/A	RETURN AIR
E/A	EXHAUST AIR	RH	RELATIVE HUMIDITY
F	DEGREES FAHRENHEIT	RL/A	RELIEF AIR
FD	FIRE DAMPER	RM	REMAIN
FL	FLOOR	RPM	REVOLUTIONS PER MINUTE
FPM	FEET PER MINUTE	SF	SQUARE FOOT
FT	FOOT/FEET	S/A	SUPPLY AIR
GC	GENERAL CONTRACTOR	SF	SQUARE FOOT
HP	HORSE POWER	SP	STATIC PRESSURE
HTG	HEATING	T	THERMOSTAT
HTR	HEATER	TD	TEMPERATURE DROP
IN	INCH	TEMP	TEMPERATURE
LB	POUND	TYP	TYPICAL
LAT	LEAVING AIR TEMPERATURE	VAV	VARIABLE AIR VOLUME
LP	LOW PRESSURE	VENT	VENTILATION
		WB	WET BULB

EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	GRV	GRAVITY ROOF VENTILATOR
ACC	AIR COOLED CONDENSER	PRV	POWER ROOF VENTILATOR
ACCU	AIR COOLING CONDENSING UNIT	RE	RETURN/EXHAUST FAN
AHU	AIR HANDLING UNIT	RTU	ROOFTOP UNIT
AS	AIR SEPARATOR	SF	SUPPLY FAN
CUH	CEILING UNIT HEATER	UH	UNIT HEATER
DC	DUCT MOUNTED COIL		
EF	EXHAUST FAN		
EDC	ELECTRIC DUCT COIL		

TESTING, ADJUSTING, AND BALANCING

THE TEST & BALANCE REPORT SHALL BE REVIEWED AND APPROVED PRIOR TO FINAL OSF APPROVAL. PROJECT SCHEDULE SHALL INCLUDE ALLOWANCE FOR THIS REQUIREMENT.

1. THE MECHANICAL CONTRACTOR SHALL BALANCE ALL MECHANICAL SYSTEMS TO THE PERFORMANCE SPECIFICATIONS INDICATED ON PLANS AND PROVIDE THE ENGINEER WITH THREE COPIES OF A COMPLETE TEST AND BALANCE REPORT. THE TEST AND BALANCE REPORT WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER. ANY ADDITIONAL TESTING, ADJUSTING AND BALANCING REQUIRED (AT ENGINEER'S REQUEST) AFTER REVIEW OF THE INITIAL REPORT SHALL BE PROVIDED AT NO ADDITIONAL COST. TEST AND BALANCE REPORT TO BE COMPLETED BY AN INDEPENDENT, CERTIFIED TEST AND BALANCE CONTRACTOR.
2. CONDUCT TESTING AND BALANCING IN ACCORDANCE WITH TECHNICAL PORTIONS OF THE AABC "NATIONAL STANDARDS FOR TESTING AND BALANCING HVAC SYSTEMS", LATEST EDITION.
3. INSTRUMENTS USED FOR BALANCING MUST HAVE BEEN CALIBRATED WITHIN A PERIOD OF SIX (6) MONTHS PRIOR TO BALANCING. SUBMIT SERIAL NUMBERS, AND DATES OF CALIBRATION OF ALL INSTRUMENTS TO BE USED PRIOR TO THE START OF WORK.
4. SET HVAC SYSTEM AIRFLOW RATES WITHIN THE FOLLOWING TOLERANCES:
   A. SUPPLY, RETURN, AND EXHAUST FANS AND EQUIPMENT WITH FANS: MINUS 5 TO PLUS 10 PERCENT.
   B. AIR OUTLETS AND INLETS: 0 TO MINUS 10 PERCENT.
5. REFER TO SPECIFICATION SECTION 230593 AND CONTRACT DRAWINGS IN THEIR ENTIRETY FOR ADDITIONAL REQUIREMENTS.

COORDINATION DRAWINGS

THE CONSTRUCTION DRAWINGS HEREIN ARE DIAGRAMATIC IN NATURE. THE MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION AND GENERAL CONTRACTORS ARE RESPONSIBLE FOR CREATING A COORDINATED SET OF CONSTRUCTION SHOP DRAWINGS.

THE CONTRACTORS ARE RESPONSIBLE FOR HOSTING MEETINGS, AND IDENTIFYING CONFLICTS BETWEEN MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SYSTEMS AND OTHER SYSTEMS INCLUDING BUT NOT LIMITED TO STRUCTURAL FOUNDATIONS, STRUCTURAL STEEL, EQUIPMENT, CLEARANCECS, DUCTWORK, PIPING, CONDUITS, CABLE TRAYS, SPACE REQUIREMENTS FOR SUPPORTS, LIGHTING, AND ACCESS DOORS.

ONCE THE COORDINATION DRAWINGS HAVE BEEN FULLY COORDINATED AND SIGNED OFF BY THE CONTRACTOR OF EACH TRADE. THE CONTRACTORS SHALL CREATE A SET OF 1/4 SCALE 2D COORDINATION DRAWINGS (WITH HORIZONTAL / ELEVATION DIMENSIONS) AND FORWARD TO THE DESIGN TEAM FOR REVIEW. THE COORDINATION DRAWINGS SHALL BE COMPLETED PRIOR TO THE PURCHASE OF ANY EQUIPMENT OR FABRICATION AND INSTALLATION OF ANY DUCTWORK, PIPING SYSTEMS, CABLE TRAY, ETC.

MECHANICAL SHEET INDEX

SHEET NUMBER	SHEET NAME
M-001	MECHANICAL LEGEND AND NOTES
M-002	MECHANICAL SCHEDULES
M-003	MECHANICAL VENTILATION SCHEDULES
M-010	MECHANICAL SEQUENCE OF OPERATION
M-100	MECHANICAL SITE PLAN
M-101	MECHANICAL FLOOR PLAN - FIELD HOUSE (BASE BID)
M-103	MECHANICAL FLOOR PLAN - RESTROOM & STORAGE BUILDING (BASE BID)
M-111	MECHANICAL FLOOR PLAN - WEIGHT ROOM (ADD ALT #1)
M-161	MECHANICAL FLOOR PLANS - CONCESSIONS (ADD ALT #6)
M-500	MECHANICAL DETAILS

MECHANICAL PIPING SYSTEMS LEGEND

SYMBOL	DESCRIPTION
D	CONDENSATE DRAINAGE

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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ALEX R. DIX No. 22161 — REGISTERED PROFESSIONAL ENGINEER — SOUTH CAROLINA

State Board of Registration for Professional Engineers and Surveyors.

10/31/25

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

MECHANICAL LEGEND AND NOTES

M-001

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CONSTRUCTION DOCUMENTS

GRADE MOUNTED UNIT SCHEDULE (DX COOLING, GAS HEAT w/ERV) BASE BID

SYMBOL	NOMINAL TONS	SUPPLY FAN CFM	SUPPLY FAN E.S.P. (IN. H2O)	EXHAUST FAN CFM	EXHAUST FAN E.S.P. (IN. H2O)	O.A. (CFM)	SUMMER POST WHEEL AIR CONDITIONS DRY BULB (F°)	SUMMER POST WHEEL AIR CONDITIONS WET BULB (F°)	SUMMER POST WHEEL AIR CONDITIONS HUMIDITY RATIO (gr/lb)	WINTER POST WHEEL AIR CONDITIONS DRY BULB (F°)	WINTER POST WHEEL AIR CONDITIONS WET BULB (F°)	WINTER POST WHEEL AIR CONDITIONS HUMIDITY RATIO (gr/lb)	COOLING CAPACITY (NET) T.C. (BTUH)	COOLING CAPACITY (NET) S.C. (BTUH)	COOLING COIL LAT DRY BULB (F°)	COOLING COIL LAT WET BULB (F°)	EFFICIENCY SEER	EFFICIENCY EER	EFFICIENCY IEER	EFFICIENCY IPLV	HEATING CAPACITY INPUT (BTUH)	HEATING CAPACITY OUTPUT (BTUH)	EFFICIENCY AFUE	COMPRESSOR (EA) QTY	COMPRESSOR (EA) RLA	COMPRESSOR (EA) LRA	OFM QTY	OFM FLA	SUPPLY FAN QTY	SUPPLY FAN HP	SUPPLY FAN FLA	COMB. FAN FLA	EXHAUST FAN QTY	EXHAUST FAN FLA	POWER SUPPLY MCA	POWER SUPPLY MOCP	POWER SUPPLY VOTAGE	POWER SUPPLY PH	OPERATING WEIGHT	TRANE	ACCESSORIES
DOAS-F1	30	7,500	1.00	7,500	1.00	7,500	83.2	71.2	95.6	47.0	42.0	31.5	371,200	206,300	55.1	54.7	0	14.8	0	0	500,000	405,000	81	2	51.3	340.0	3	4.2	1	10.0	26.4	1.0	1	20.6	176.6	225.0	208	3	4700 lb	OADG030F1	

GRADE MOUNTED UNIT SCHEDULE (DX COOLING, HEAT PUMP, ELECTRIC HEAT w/ERV) ALT 6

SYMBOL	NOMINAL TONS	SUPPLY FAN CFM	SUPPLY FAN E.S.P. (IN. H2O)	EXHAUST FAN CFM	EXHAUST FAN E.S.P. (IN. H2O)	O.A. (CFM)	SUMMER POST WHEEL AIR CONDITIONS DRY BULB (F°)	SUMMER POST WHEEL AIR CONDITIONS WET BULB (F°)	SUMMER POST WHEEL AIR CONDITIONS HUMIDITY RATIO (gr/lb)	WINTER POST WHEEL AIR CONDITIONS DRY BULB (F°)	WINTER POST WHEEL AIR CONDITIONS WET BULB (F°)	WINTER POST WHEEL AIR CONDITIONS HUMIDITY RATIO (gr/lb)	COOLING CAPACITY T.C. (BTUH)	COOLING CAPACITY S.C. (BTUH)	COOLING COIL LAT DRY BULB (F°)	COOLING COIL LAT WET BULB (F°)	EFFICIENCY EER	EFFICIENCY IEER	HEAT PUMP CAPACITY @ 34F	HEAT PUMP CAPACITY HEATER KW	COMPRESSOR (EA) QTY	COMPRESSOR (EA) RLA	COMPRESSOR (EA) LRA	OFM QTY	OFM FLA	SUPPLY FAN QTY	SUPPLY FAN HP	EXHAUST FAN QTY	EXHAUST FAN FLA	POWER SUPPLY MCA	POWER SUPPLY MOCP	POWER SUPPLY VOTAGE	POWER SUPPLY PH	OPERATING WEIGHT	TRANE	ACCESSORIES
DOAS-C1	8.5	2,100	1.00	2,100	1.00	2,100	80.0	68.3	85	55.0	47.9	38	102,100	63,300	52.0	52.0	17.7	0	96,600	24	1	29.8	240.0	1	4.2	1	3.0	1	8.0	140.3	150.0	208	3	2200 lb	OABE108D3	

NOTES:
1. COOLING CAPACITIES BASED ON 95° AMBIENT
2. ENERGY RECOVERY WHEEL ENTERING CONDITIONS: SUMMER O/A 95°F db, 80°F wb & E/A 75°F db, 63°F wb; WINTER O/A 20°F db, 18°F wb & E/A 68°F db, 56.8°F wb;
3. PROVIDE UNITS WITH: BASE CURB (14" HIGH MINIMUM), TOTAL ENERGY RECOVERY WHEEL, VARIABLE FREQUENCY DRIVE ON SUPPLY AND EXHAUST FANS, PREMIUM EFFICIENCY BLOWER MOTORS, MOTORIZED ECONOMIZER DAMPERS WITH ENTHALPY CONTROL, DDC CONTROLS, E/A BACKDRAFT DAMPER, MODULATING GAS HEATING CONTROL WITH INTERMITTENT PILOT IGNITION, MODULATING HOT GAS REHEAT (MAINTAIN 70°F), VFD CONDENSOR FANS (VARIABLE SPEED), MERV 8 FILTRATION UPSTREAM OF ENERGY RECOVERY WHEEL ON BOTH AIRSTREAMS, O/A AIRFLOW MEASURING STATION, DOUBLE WALL CONSTRUCTION, CONDENSER COIL HAIL GUARDS AND HINGED ACCESS DOORS WITH "TOOL-LESS" ENTRY.
4. ALL UNITS SHALL BE AGA CERTIFIED, U.L. LABELED, AND ASHRAE 90.1 COMPLIANT.
5. PROVIDE UNIT WITH A PHOTOELECTRIC TYPE SMOKE DETECTOR, INSTALLED IN THE EXHAUST DUCTWORK (SEE PLANS FOR LOCATIONS) WIRED TO SHUT DOWN THE UNIT UPON ACTIVATION. SMOKE DETECTOR SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR, INSTALLED IN THE DUCTWORK BY THE MECHANICAL CONTRACTOR AND WIRED TO SHUT DOWN THE UNIT AND FOR FIRE ALARM INTERFACE BY THE ELECTRICAL CONTRACTOR.
6. PRIMARY COOLING COIL PITCHED DRAIN PAN SHALL BE PROVIDED WITH A FLOAT SWITCH BY UNIT MFR; ACTIVATION OF THE FLOAT SWITCH SHALL SHUT DOWN UNIT AND SEND AN ALARM TO THE CENTRAL BAS.
7. SEE SPECIFICATION FOR WARRANTY REQUIREMENTS.
8. ALL ELECTRICAL COMPONENTS SERVING AND WITHIN UNIT MUST HAVE A MINIMUM SCCR RATING OF 35 KAIC.
9. PROVIDE FAN MOTORS WITH GROUNDING RING.
10. ALL TEMPERATURES ARE MEASURED IN DEGREES FAHRENHEIT, AND HUMIDITY RATIO IS MEASURED IN GRAINS PER POUND DRY AIR.
11. PROVIDE FLEX CONNECTION AT UNIT INLET AND DISCHARGE DUCT CONNECTIONS.
12. SEE SHEETS M-010 FOR CONTROLS SEQUENCES AND MINIMUM CONTROLS POINTS

GRADE MOUNTED UNIT SCHEDULE (DX COOLING, GAS HEAT) ALT 1

SYMBOL	NOMINAL TONS	CFM	O.A. MIN (CFM)	O.A. (CFM)	SUPPLY FAN E.S.P. (IN. H2O)	COOLING CAPACITY (NET) T.C. (BTUH)	COOLING CAPACITY (NET) S.C. (BTUH)	EFFICIENCY SEER	EFFICIENCY EER	EFFICIENCY IEER	EFFICIENCY IPLV	HEATING CAPACITY INPUT (BTUH)	HEATING CAPACITY OUTPUT (BTUH)	EFFICIENCY AFUE	COMPRESSOR (EA) QTY	COMPRESSOR (EA) RLA	COMPRESSOR (EA) LRA	OFM QTY	OFM FLA	SUPPLY FAN QTY	SUPPLY FAN HP	SUPPLY FAN FLA	COMB. FAN FLA	RETURN FAN QTY	RETURN FAN FLA	POWER SUPPLY MCA	POWER SUPPLY MOCP	POWER SUPPLY VOTAGE	POWER SUPPLY PH	OPERATING WEIGHT	MANUFACTURER	MODEL	ACCESSORIES
SPAC-F1	8.5	2800	450	900	1.00	107820	76620	0	12.1	0	0	200,000	162,000	81	2	21.8	156.5	1	2.8	3.0	8.8	1.0	0	0	53.0	70.0	208	3	1250 lb	TRANE	YHK102A	

NOTES:
1. COOLING CAPACITIES BASED ON 95° AMBIENT, 82/68 ENTERING AIR.
2. PROVIDE WITH: HORIZONTAL DUCT CONNECTIONS, BASE CURB, MODULATING HOT GAS REHEAT (70° F LAT) DDC CONTROLS, MERV 8 FILTERS, ECONOMIZER, BAROMETRIC RELIEF DAMPER, RETURN AIR BACKDRAFT DAMPER, INTERMITTENT PILOT IGNITION, CONDENSER COIL HAIL GUARDS AND HINGED ACCESS DOORS WITH "TOOL-LESS" ENTRY.
3. ALL UNITS SHALL BE AGA CERTIFIED, U.L. LABELED, AND ASHRAE 90.1 COMPLIANT.
4. PROVIDE EACH UNIT WITH A PHOTOELECTRIC TYPE SMOKE DETECTOR, INSTALLED IN THE RETURN DUCT WIRED TO SHUT DOWN THE UNIT UPON ACTIVATION. SMOKE DETECTOR SHALL BE SUPPLIED, WIRED FOR INTERFACE WITH FIRE ALARM SYSTEM AND UNIT SHUTDOWN BY THE ELECTRICAL CONTRACTOR. SMOKE DETECTOR SHALL BE INSTALLED IN THE RETURN DUCT BY THE MECHANICAL CONTRACTOR.
5. PRIMARY COOLING COIL PITCHED DRAIN PAN SHALL BE STAINLESS STEEL AND PROVIDED WITH A FLOAT SWITCH BY UNIT MFR; ACTIVATION OF THE FLOAT SWITCH SHALL SHUT DOWN UNIT AND SEND AN ALARM TO THE CENTRAL BAS.
6. SEE SPECIFICATION FOR WARRANTY REQUIREMENTS.
7. ALL ELECTRICAL COMPONENTS SERVING AND WITHIN UNIT MUST HAVE A MINIMUM SCCR RATING OF 35 KAIC.
8. PROVIDE FAN MOTORS WITH GROUNDING RING.
9. PROVIDE FLEX CONNECTION AT UNIT INLET AND DISCHARGE DUCT CONNECTIONS.
10. SEE SHEETS M-010 FOR CONTROLS SEQUENCES AND MINIMUM CONTROLS POINTS

ELECTRIC HEATER SCHEDULE

SYMBOL	LOCATION	CFM	BTUH	KW	MOTOR RPM	MOTOR H.P.	MOTOR VOLT	MOTOR PH	MANUFACTURER (MARKEL)	ACCESSORIES
CUH-F1	FIELD HOUSE	600	6800	2.0	750	0.00	208 V	1	F3482A1	3
CUH-F2	RESTROOM	600	17000	5.0	750	0.00	208 V	1	F3485A1	3
CUH-F3	RESTROOM	600	10200	3.0	750	0.00	208 V	1	F3483A1	3

NOTES:
1. HEATING CAPACITY BASED ON 65° F. E.A.T.,
2. PROVIDE EACH UNIT HEATER WITH: DISCONNECT SWITCH, REMOTE THERMOSTAT, ROOF MOUNTED BRACKETS, AND ADJUSTABLE DISCHARGE LOUVERS..
3. PROVIDE EACH CEILING HEATER WITH BUILT-IN DISCONNECT SWITCH AND THERMOSTAT, RECESSED MOUNTING, PLASTER FRAME, AND THERMAL OVERLOAD PROTECTION.
4. PROVIDE EACH WALL HEATER WITH BUILT-IN DISCONNECT SWITCH AND THERMOSTAT, PENCIL-PROOF LOUVERS, AND CABINET FOR SURFACE MOUNTING.
5. THERMOSTATS SHALL BE LOW VOLTAGE, LINE VOLTAGE THERMOSTATS ARE NOT ACCEPTABLE.
6. FOR MAIN BUILDING HEATERS, PROVIDE ADDITIONAL DDC TEMPERATURE SENSOR.

ROOF MOUNTED GRAVITY VENTILATOR SCHEDULE

SYMBOL	LOCATION	SERVICE	CFM	MAX. THROAT VELOCITY (FPM)	MAX. SP DROP (IN.)	MANUFACTURER	MODEL	ACCESSORIES
RIV-F1	FIELD HOUSE	COMBUSTION AIR		0	0.00	Greenheck	FGI-12X12	1,2,3,4
REV-F1	FIELD HOUSE	EXHAUST	120	800	0.10	Greenheck	FGR-12X12	1,2
REV-F2	RR & STORAGE BLDG	EXHAUST	600	800	0.10	Greenheck	FGR-18X18	1,2
REV-C1	CONCESSIONS	EXHAUST	120	800	0.00	Greenheck	FGR-12X12	1,2

ROOF VENT NOTES:
1. COORDINATE SLOPED ROOF CURBS WITH ROOFING CONTRACTOR. CURBS AND VENTILATORS SHALL BE INSTALLED LEVEL.

ACCESSORIES:
1. ROOF CURB (12" HIGH MINIMUM AT HIGH POINT)
2. BIRD SCREEN
3. 1.0 SF FREE AREA
4. MOTORIZED DAMPER, INTERLOCK WITH DRYER OPERATION.

FAN SCHEDULE

SYMBOL	LOCATION	TYPE	CFM	APPROX. ESP	DRIVE TYPE	FAN RPM	ELECTRICAL DATA WATTS	ELECTRICAL DATA H.P.	ELECTRICAL DATA VOLTAGE-PHASED	MANUFACTURER	MODEL NO.	ACCESSORIES	CONTROL TYPE
FAN EF-F1	FILEDHOUSE	CEILING EXH	120	0.250	DIRECT	950	18		115 V-1Ø	Greenheck	SP-A110	A,B,F,G,O	1
FAN EF-F2	RR & STORAGE BLDG	CEILING EXH	450	0.500	DIRECT	905	180		115 V-1Ø	Greenheck	SP-A1050	A,B,F,G,O,W	2
FAN EF-F3	RR & STORAGE BLDG	CEILING EXH	225	0.500	DIRECT	1096	140		115 V-1Ø	Greenheck	SP-A390	A,B,F,G,O,W	2
FAN EF-C1	CONCESSIONS	CEILING EXH	120	0.250	DIRECT	950	18		115 V-1Ø	Greenheck	SP-A110	A,B,F,G,O	1

EXHAUST FAN SCHEDULE ACCESSORIES:
- A. DISCONNECT SWITCH
- B. GRAVITY BACKDRAFT DAMPER
- C. MOTORIZED BACKDRAFT DAMPER
- D. PREFAB, ROOF CURB (18" HIGH MINIMUM)
- E. BIRDSCREEN
- F. ACOUSTICAL LINING
- G. HANGING BRACKETS WITH VIBRATION ISOLATION
- H. WL, WALL LOUVER DISCHARGE
- I. FCC OR GRS ROOF CAP (FLAT ROOF) OR RJ ROOF CAP (PITCHED ROOF)
- J. WALL MOUNTING COLLAR
- K. INLET GUARD
- L. EC MOTOR
- M. 2" WASHABLE ALUMINUM FILTERS
- N. MOTORSIDE FAN GUARD
- O. ALUMINUM EXHAUST GRILLE
- P. U.L. 762
- Q. VENTED ROOF CURB EXTENSION
- R. COMBINATION KITCHEN HOOD FAN CURB
- S. INTERLOCK WITH FUME HOOD
- T. PROVIDE DRAIN PLUG ACCESSORY
- U. ROOF SUPPORT RAILS
- V. VFD
- W. ALUMINUM OR GALV STEEL FAN WHEEL

EXHAUST FAN SCHEDULE CONTROLS:
1. WALL MOUNTED THERMOSTAT (REVERSE ACTING, SET FOR 80°)
2. INTERLOCK WITH ROOM LIGHT SWITCH (FAN SHALL OPERATE WHEN LIGHT IS ON IF ANY ROOM IS SERVED BY FAN)
3. WALL MOUNTED ON/OFF SWITCH WITH IDENTIFICATION LABEL
4. WALL MOUNTED MUSHROOM PUSH BUTTON SWITCH/STARTER WITH IDENTIFICATION LABEL
5. CONTROLLED BY BUILDING AUTOMATION SYSTEM
6. CONTINUOUS OPERATION
7. INTERLOCK WITH KITCHEN HOOD CONTROLS
8. INTERLOCK WITH DISHWASHER
9. INTERLOCK WITH RANGE HOOD
10. INTERLOCK WITH FUME HOOD
11. INTERLOCK WITH CO MONITOR ALARM CONDITION. VERIFY QUANTITY OF OXYGEN DEPLETION SENSORS SHOWN ON FLOOR PLAN.
12. WALL MOUNTED TWIST TIMER WITH 0-30 MINUTE RANGE WITH IDENTIFICATION LABEL.
13. INTERLOCK WITH ROOM OXYGEN DEPLETION (REFRIGERANT) SENSOR.

EXHAUST FAN SCHEDULE NOTES:
1. ALL FANS SHALL BE U.L. LISTED AND LABELED AND SHALL BE AMCA CERTIFIED FOR SOUND AND AIR FLOW. ALL FANS INSTALLED INSIDE, ABOVE, OR ADJACENT TO OCCUPIED SPACES SHALL HAVE A MAXIMUM 9.0 INLET SONE LEVEL.
2. ALL FANS SHALL BE SUPPLIED BY ONE MANUFACTURER UNLESS NOTED OTHERWISE.
3. MECHANICAL CONTRACTOR SHALL PROVIDE MAGNETIC STARTER WITH AUXILIARY CONTACTS AS REQUIRED. SEE DETAIL 10/M502 FOR ADDITIONAL INFORMATION.
4. PROVIDE ALL DIRECT DRIVE FANS WITH SPEED CONTROLLERS.
5. BACKDRAFT DAMPER ON ROOF SUPPLY FANS SHALL BE MOTORIZED.
6. ALL GRAVITY BACKDRAFT DAMPERS SHALL BE TESTED IN ACCORDANCE WITH AMCA 500D AND LABELED BY AN APPROVED AGENCY.
7. ALL EXHAUST FANS SHALL BE PROVIDED WITH A CT FOR MONITORING STATUS BY THE BAS

GRILLE AND DIFFUSER SCHEDULE

SYMBOL	SERVICE	CFM RANGE	FACE SIZE (*)	NECK SIZE	TYPE	OBD	LINDAB
A	SUPPLY	(SEE PLANS FOR SIZE AND CFM)			DBL. DEFL.	NO	RGS-3
							PRICE
B	SUPPLY	(SEE PLANS FOR SIZE AND CFM)			DBL. DEFL.	YES	520
C	SUPPLY	0-125	12x12	6x6	LOUVERED	NO	SMD
D	SUPPLY	0-125	24x24	6x6	LOUVERED	NO	SMD
E	SUPPLY	130-280	24x24	9x9	LOUVERED	NO	SMD
F	SUPPLY	285-500	24x24	12x12	LOUVERED	NO	SMD
G	SUPPLY	505-780	24x24	15x15	LOUVERED	NO	SMD
H	RET/EXH	(SEE PLANS FOR SIZE AND CFM)			FIXED BLADE	YES	530
J	RET/EXH	0-195	12x12	8x8	CUBE CORE	NO	80
K	RET/EXH	0-195	24x24	8x8	CUBE CORE	NO	80
L	RET/EXH	200-300	24x24	10x10	CUBE CORE	NO	80
M	RET/EXH	305-450	24x24	12x12	CUBE CORE	NO	80
N	RET/EXH	455-800	24x24	16x16	CUBE CORE	NO	80
P	S/R/E	805-1500	24x24	22x20	CUBE CORE	NO	80
R	RETURN	0-1800	24x24	NON-DUCTED	CUBE CORE	NO	80
S	RETURN	(SEE PLANS FOR SIZE AND CFM)			HEAVY DUTY	NO	96
U	SUPPLY	0-200	3x48 (1) SLOT	8"Ø	1" SLOT DIFFUSER	NO	SDS
V	RET/EXH	0-200	3x48 (1) SLOT	8"Ø	1" SLOT RETURN	NO	SDR
TF	THERMAFUSER	NOTE 6					

(*) - FOR DEVICES INSTALLED IN GYP CEILINGS, PROVIDE MINIMUM FACE SIZE FOR SPECIFIED NECK SIZE.

NOTES:
1. ALL CEILING AND WALL MOUNTED DEVICES SHALL BE FURNISHED WITH AN ENAMEL OFF-WHITE FINISH.
2. ALL DEVICES SHALL BE FURNISHED WITH FRAMES SUITABLE FOR TYPE OF INSTALLATION REQUIRED.
3. ALL AIR DISTRIBUTION DEVICES LOCATED IN KITCHEN, LOCKER ROOMS, AND TOILETS SHALL BE ALL ALUMINUM CONSTRUCTION.
4. ALL DOUBLE DEFLECTION SUPPLY GRILLES SHALL HAVE DAMPER BLADES ADJUSTED TO PROVIDE AIRFLOW PATTERN INDICATED BY FLOW ARROWS ON PLANS. DAMPERS SHALL BE ADJUSTED TO A 30 DEGREE POSITION UNLESS NOTED OTHERWISE ON PLANS.
5. PROVIDE INSULATED PLENUM WITH ROUND NECK CONNECTION ON SLOT TYPE AIR DISTRIBUTION.
6. GRILLES MARKED "TF" SHALL BE SQUARE THERMA-FUSERS (ACUTHERM MODEL TF-HC THERMALLY POWERED VARIABLE AIR VOLUME DIFFUSERS). BALANCE AIR QUANTITY TO DELIVER LISTED CFM AS A MAXIMUM WHEN GRILLE BLADES ARE WIDE OPEN IN EITHER HEATING OR COOLING MODE. PROVIDE WITH FACTORY RELIEF RING TO DIVERT UNUSED SUPPLY AIR INTO THE CEILING PLENUM. SEE PLANS FOR NECK SIZES.

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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South Carolina License Number C-00710

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OPTIMA ENGINEERING PA No. C00710 STATE OF AUTHORIZATION SOUTH CAROLINA

H. R. D. No. 22161 REGISTERED PROFESSIONAL ENGINEER SOUTH CAROLINA

State Board of Registration for Professional Engineers and Surveyors.

10/31/25

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

MECHANICAL SCHEDULES

M-002

CONSTRUCTION DOCUMENTS

Autodesk Docs://1201-217190 Hampton County HS\22-0084_Athletic Fieldhouse Hampton County HS_MECH_v2022.rvt
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VENTILATION CALCULATIONS (SCMC 2021, SECT 403):

ROOM NUMBER	ROOM NAME	OCCUPANCY CLASSIFICATION	Rp (CFM/PERSON)	Ra (CFM/SQ.FT.)	OCCUPANT DENSITY PEOPLE/1000 SQ.FT.	EXHAUST AIRFLOW (CFM/SQ.FT.)	Az AREA (SQ. FT.)	Pz CALCULATED OCCUPANCY (PEOPLE)	RpPz CALCULATED PEOPLE O/A (CFM)	RaAz CALCUATED AREA O/A (CFM)	Vbz PEOPLE + AREA O/A (CFM)	CALCULATED AREA E/A (CFM)
	DOAS-F1											
100	OFFICE	Office space	5	0.06	5	0	122	1	3	7	10	0
101	LAUNDRY	Storage rooms	0	0.12	0	0	95	0	0	11	11	0
102	TLT	Toilet Room - Public	0	0	0	70	2	0	0	0	0	140
103	OFFICE	Office space	5	0.06	5	0	141	1	4	8	12	0
104	FAMILY TOILET	Toilet Room - Public	0	0	0	70	1	0	0	0	0	70
105	HC TOILET	Toilet Room - Public	0	0	0	70	1	0	0	0	0	70
106B	ELEC - LS	Storage rooms	0	0.12	0	0	54	0	0	7	7	0
107	TRAINING OFFICE	Office space	5	0.06	5	0	458	2	11	27	39	0
108	MEN'S	Toilet Room - Public	0	0	0	70	3	0	0	0	0	210
109	WOMEN'S	Toilet Room - Public	0	0	0	70	4	0	0	0	0	280
110	EQUIPMENT ROOM	Storage rooms	0	0.12	0	0	209	0	0	25	25	0
111	FEMALE LOCKER ROOM	Locker/Dressing Rooms	0	0	0	0.25	388	0	0	0	0	97
112	FEMALE SHOWER	Shower Room (per shower head)	0	0	0	50	1	0	0	0	0	50
113	FEMALE TOILET	Toilet Room - Public	0	0	0	70	3	0	0	0	0	210
126	CONCESSIONS	Office space	5	0.06	5	0	246	1	6	15	21	0
114	JANITOR	Storage rooms	0	0.12	0	0	48	0	0	6	6	0
126B	STOIRAGE	Storage rooms	0	0.12	0	0	78	0	0	9	9	0
115	CLASSROOM / FILM ROOM	Classrooms (age 9 plus)	10	0.12	35	0	833	29	292	100	392	0
116	JUNIOR VARSITY MALE LOCKER ROOM	Locker/Dressing Rooms	0	0	0	0.25	660	0	0	0	0	165
117	MALE TOILET	Toilet Room - Public	0	0	0	70	3	0	0	0	0	210
118	MALE SHOWER	Shower Room (per shower head)	0	0	0	50	3	0	0	0	0	150
120	REFEREE ROOM	Office space	5	0.06	5	0	79	0	2	5	7	0
122	MALE SHOWER	Shower Room (per shower head)	0	0	0	50	3	0	0	0	0	150
125	CORRIDOR	Corridors	0	0.06	0	0	984	0	0	59	59	0
123	MALE TOILET	Toilet Room - Public	0	0	0	70	3	0	0	0	0	210
122A	CORRIDOR	Corridors	0	0.06	0	0	104	0	0	6	6	0
122B	CORRIDOR	Corridors	0	0.06	0	0	165	0	0	10	10	0
122C	CORRIDOR	Corridors	0	0.06	0	0	109	0	0	7	7	0
124	VARSITY MALE LOCKER ROOM	Locker/Dressing Rooms	0	0	0	0.25	753	0	0	0	0	188
			0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0
						TOTALS	5553	34	318	303	620	2200
										PROVIDED	**7500**	**7500**

VENTILATION CALCULATIONS (SCMC 2021, SECT 403):

ROOM NUMBER	ROOM NAME	OCCUPANCY CLASSIFICATION	Rp (CFM/PERSON)	Ra (CFM/SQ.FT.)	OCCUPANT DENSITY PEOPLE/1000 SQ.FT.	EXHAUST AIRFLOW (CFM/SQ.FT.)	Az AREA (SQ. FT.)	Pz CALCULATED OCCUPANCY (PEOPLE)	RpPz CALCULATED PEOPLE O/A (CFM)	RaAz CALCUATED AREA O/A (CFM)	Vbz PEOPLE + AREA O/A (CFM)	CALCULATED AREA E/A (CFM)
	SPAC-F1											
130	WEIGHT ROOM	Health club/weight rooms	20	0.06	10	0	3445	34	689	207	896	0
			0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0
						TOTALS	3445	34	689	207	896	0
										PROVIDED	**900**	**0**

VENTILATION CALCULATIONS (SCMC 2021, SECT 403):

ROOM NUMBER	ROOM NAME	OCCUPANCY CLASSIFICATION	Rp (CFM/PERSON)	Ra (CFM/SQ.FT.)	OCCUPANT DENSITY PEOPLE/1000 SQ.FT.	EXHAUST AIRFLOW (CFM/SQ.FT.)	Az AREA (SQ. FT.)	Pz CALCULATED OCCUPANCY (PEOPLE)	RpPz CALCULATED PEOPLE O/A (CFM)	RaAz CALCUATED AREA O/A (CFM)	Vbz PEOPLE + AREA O/A (CFM)	CALCULATED AREA E/A (CFM)
	DOAS-C1											
201	ELEC - LS	Storage rooms	0	0.12	0	0	42	0	0	5	5	0
203	JANITOR	Storage rooms	0	0.12	0	0	71	0	0	9	9	0
204	STOIRAGE	Storage rooms	0	0.12	0	0	105	0	0	13	13	0
205	FAMILY TLT	Toilet Room - Public	0	0	0	70	1	0	0	0	0	70
206	MEN'S	Toilet Room - Public	0	0	0	70	6	0	0	0	0	420
207	WOMEN'S	Toilet Room - Public	0	0	0	70	10	0	0	0	0	700
G191	CONCESSIONS	Office space	5	0.06	5	0	582	3	15	35	49	0
			0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0
						TOTALS	818	3	15	61	76	1190
										PROVIDED	**2100**	**2100**

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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JEREMY R. DIXON No. 22161 REGISTERED PROFESSIONAL ENGINEER SOUTH CAROLINA

State Board of Registration for Professional Engineers and Surveyors.

10/31/25

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

MECHANICAL VENTILATION SCHEDULES

M-003

CONSTRUCTION DOCUMENTS

Autodesk Docs://1201-217190 Hampton County HS/22-0084_Athletic Fieldhouse Hampton County HS_MECH_v2022.rvt
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INPUT/OUTPUT SUMMARY

DOAS-F1	INPUTS: ANALOG: MEASURED: TEMPERATURE	PRESSURE	RH	KW	AIR FLOW	WATER FLOW	CO2	AMPS	RPM	VOLTS	SETPOINT ADJ	INPUTS: ANALOG: CALC.: KWH	ENTHALPY	RUN TIME	EFFICIENCY	INPUTS: BINARY: STATUS	FILTER	SMOKE	FREEZE	AIRFLOW	METER	OVER RIDE	OUTPUTS: DIGITAL: OFF-ON	OFF-AUTO-ON	OFF-HI-LO	OPEN-CLOSE	OUTPUTS: ANALOG: DMPR POS.	VALVE POS.	STEP CONTROL	SYSTEM FEATURES: ALARMS: HI ANALOG	LO ANALOG	HI BINARY	LO BINARY	PROOF	SYSTEM FEATURES: PROGRAMS: TIME SCHEDULING	DEMAND LIMITING	DUTY CYCLE	STAT/STOP OPT.	ENTHALPY OPT.	SMOKE CNT.	TRENDING	ALARM INSTRUCT.	MAIN. WK. ORD.	GENERAL: COLOR GRAPHIC	SUPPLEMENT NOTES
SINGLE ZONE PACKAGE UNIT																																												
SUPPLY FAN											X					X								X																			
VFD ON/OFF																							X																			WHERE INDICATED
VFD SPEED											X																															WHERE INDICATED
VFD STATUS																X																									WHERE INDICATED
EXHAUST FAN																X							X																			WHERE INDICATED
VFD ON/OFF																							X																			WHERE INDICATED
VFD SPEED											X																															WHERE INDICATED
VFD STATUS																X																									WHERE INDICATED
COMPRESSOR #1																X							X												X							WHERE INDICATED
COMPRESSOR #2																X							X												X							WHERE INDICATED
GAS HEAT																X														X													
SUPPLY TEMP	X																																										
EXHAUST TEMP	X																																										
EXHAUST RH			X																																								
OA DAMPER					X																									X													
SMOKE DETECTOR																	X																										
FILTER STATUS																X																										
OVER-RIDE																						X																				
SETPOINT ADJ.											X																																
SPACE RH			X																																								WHERE INDICATED
ENERGY RECOVERY WHEEL																X								X												X							WHERE INDICATED
ERV - EAT (°F db)	X												X	X																													
ERV - EAT (°F wb)	X												X	X																													
ERV - LAT (°F db)	X												X	X																													
ERV - LAT (°F wb)	X												X	X																													

GENERAL NOTE:
THE POINTS LIST PROVIDED IS INTENDED TO COMMUNICATE THE GENERAL DESIGN INTENT TO THE CONTROLS SUBCONTRACTOR AND IS NOT INTENDED TO BE COMPLETE. IN THE CONTROLS SUBMITTAL, THE SUBCONTRACTOR SHALL FULLY DEVELOP THE POINTS LIST FOR ALL SYSTEMS IDENTIFIED AND SHALL PRESENT ALL SETPOINTS, CONTROL PARAMETERS, AND ALARM POINTS. THE CONTROLS SUBCONTRACTOR SHALL INCORPORATE STANDARD FEATURES SUCH AS MINIMUM RUN TIME DELAYS AND DEAD BANDS FROM SETPOINTS TO PREVENT EQUIPMENT FROM SHORT CYCLING WHEN NEAR SETPOINTS. ALL MONITORED POINTS SHALL INCLUDE EARLY HIGH/LOW ALARM NOTIFICATIONS PRIOR TO HAVING TO TAKE CORRECTIVE ACTIONS OR EQUIPMENT SHUTDOWNS. TRANSMITTERS SHALL INCLUDE OUT-OF-RANGE, FAIL-SAFE POSITIONING FOR OPEN CIRCUITS OR LOSS OF COMMUNICATION. CONTROL CONTRACTOR SHALL SPECIFY TO FAIL DE-ENERGIZER, HOLD LAST STATE, OR DEFAULT TO A PREDETERMINED SETPOINT. THESE BASIC FEATURES THAT ARE NECESSARY AND ARE PART OF A COMPLETE CONTROLS INSTALLATION SHALL BE INCLUDED IN THE SCOPE OF SERVICES FOR DELIVERABLES AT NO ADDITIONAL COSTS TO THE OWNER.

INPUT/OUTPUT SUMMARY

SPAC-F1	INPUTS: ANALOG: MEASURED: TEMPERATURE	PRESSURE	RH	KW	AIR FLOW	WATER FLOW	CO2	AMPS	RPM	VOLTS	SETPOINT ADJ	INPUTS: ANALOG: CALC.: KWH	ENTHALPY	RUN TIME	EFFICIENCY	INPUTS: BINARY: STATUS	FILTER	SMOKE	FREEZE	AIRFLOW	METER	OVER RIDE	OUTPUTS: DIGITAL: OFF-ON	OFF-AUTO-ON	OFF-HI-LO	OPEN-CLOSE	OUTPUTS: ANALOG: DMPR POS.	VALVE POS.	STEP CONTROL	SYSTEM FEATURES: ALARMS: HI ANALOG	LO ANALOG	HI BINARY	LO BINARY	PROOF	SYSTEM FEATURES: PROGRAMS: TIME SCHEDULING	DEMAND LIMITING	DUTY CYCLE	STAT/STOP OPT.	ENTHALPY OPT.	SMOKE CNT.	TRENDING	ALARM INSTRUCT.	MAIN. WK. ORD.	GENERAL: COLOR GRAPHIC	SUPPLEMENT NOTES
SINGLE ZONE ROOFTOP UNIT																																											
SUPPLY FAN											X					X								X																			
VFD ON/OFF																							X																			WHERE INDICATED
VFD SPEED											X																															WHERE INDICATED
VFD STATUS																X																									WHERE INDICATED
COMPRESSOR #1																X							X												X							WHERE INDICATED
COMPRESSOR #2																X							X												X							WHERE INDICATED
GAS HEAT																X														X												
SUPPLY TEMP	X																																									
RETURN RH			X																																							
OA DAMPER					X																									X												
SMOKE DETECTOR																	X																										
FILTER STATUS																X																										
OVER-RIDE																						X																				
SETPOINT ADJ.											X																																
SPACE CO2						X																								X													WHERE INDICATED
SPACE RH			X																																								WHERE INDICATED

GENERAL NOTE:
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INPUT/OUTPUT SUMMARY

DOAS-C1	INPUTS: ANALOG: MEASURED: TEMPERATURE	PRESSURE	RH	KW	AIR FLOW	WATER FLOW	CO2	AMPS	RPM	VOLTS	SETPOINT ADJ	INPUTS: ANALOG: CALC.: KWH	ENTHALPY	RUN TIME	EFFICIENCY	INPUTS: BINARY: STATUS	FILTER	SMOKE	FREEZE	AIRFLOW	METER	OVER RIDE	OUTPUTS: DIGITAL: OFF-ON	OFF-AUTO-ON	OFF-HI-LO	OPEN-CLOSE	OUTPUTS: ANALOG: DMPR POS.	VALVE POS.	STEP CONTROL	SYSTEM FEATURES: ALARMS: HI ANALOG	LO ANALOG	HI BINARY	LO BINARY	PROOF	SYSTEM FEATURES: PROGRAMS: TIME SCHEDULING	DEMAND LIMITING	DUTY CYCLE	STAT/STOP OPT.	ENTHALPY OPT.	SMOKE CNT.	TRENDING	ALARM INSTRUCT.	MAIN. WK. ORD.	GENERAL: COLOR GRAPHIC	SUPPLEMENT NOTES
SINGLE ZONE PACKAGE UNIT																																											
SUPPLY FAN											X					X								X																			
VFD ON/OFF																							X																			WHERE INDICATED
VFD SPEED											X																															WHERE INDICATED
VFD STATUS																X																									WHERE INDICATED
EXHAUST FAN																X							X																			WHERE INDICATED
VFD ON/OFF																							X																			WHERE INDICATED
VFD SPEED											X																															WHERE INDICATED
VFD STATUS																X																									WHERE INDICATED
COMPRESSOR #1																X							X												X							WHERE INDICATED
COMPRESSOR #2																X							X												X							WHERE INDICATED
ELECT HEAT																X														X													
SUPPLY TEMP	X																																										
EXHAUST TEMP	X																																										
EXHAUST RH			X																																								
OA DAMPER					X																									X												
SMOKE DETECTOR																	X																										
FILTER STATUS																X																										
OVER-RIDE																						X																				
SETPOINT ADJ.											X																																
SPACE RH			X																																								WHERE INDICATED
ENERGY RECOVERY WHEEL																X								X												X							WHERE INDICATED
ERV - EAT (°F db)	X												X	X																													
ERV - EAT (°F wb)	X												X	X																													
ERV - LAT (°F db)	X												X	X																													
ERV - LAT (°F wb)	X												X	X																													

GENERAL NOTE:
THE POINTS LIST PROVIDED IS INTENDED TO COMMUNICATE THE GENERAL DESIGN INTENT TO THE CONTROLS SUBCONTRACTOR AND IS NOT INTENDED TO BE COMPLETE. IN THE CONTROLS SUBMITTAL, THE SUBCONTRACTOR SHALL FULLY DEVELOP THE POINTS LIST FOR ALL SYSTEMS IDENTIFIED AND SHALL PRESENT ALL SETPOINTS, CONTROL PARAMETERS, AND ALARM POINTS. THE CONTROLS SUBCONTRACTOR SHALL INCORPORATE STANDARD FEATURES SUCH AS MINIMUM RUN TIME DELAYS AND DEAD BANDS FROM SETPOINTS TO PREVENT EQUIPMENT FROM SHORT CYCLING WHEN NEAR SETPOINTS. ALL MONITORED POINTS SHALL INCLUDE EARLY HIGH/LOW ALARM NOTIFICATIONS PRIOR TO HAVING TO TAKE CORRECTIVE ACTIONS OR EQUIPMENT SHUTDOWNS. TRANSMITTERS SHALL INCLUDE OUT-OF-RANGE, FAIL-SAFE POSITIONING FOR OPEN CIRCUITS OR LOSS OF COMMUNICATION. CONTROL CONTRACTOR SHALL SPECIFY TO FAIL DE-ENERGIZER, HOLD LAST STATE, OR DEFAULT TO A PREDETERMINED SETPOINT. THESE BASIC FEATURES THAT ARE NECESSARY AND ARE PART OF A COMPLETE CONTROLS INSTALLATION SHALL BE INCLUDED IN THE SCOPE OF SERVICES FOR DELIVERABLES AT NO ADDITIONAL COSTS TO THE OWNER.

SEQUENCE OF OPERATION

SZ UNIT WITH ERV (DOAS-F1) BASE BID
UNIT SHALL BE STARTED AND STOPPED ON A PROGRAMMED BASIS BY THE DDC CONTROL SYSTEM. FACTORY UNIT MOUNTED CONTROLS SHALL OPERATE UNIT AS OUTLINED BELOW.
SINGLE ZONE UNITS SHALL BE PROVIDED WITH A WALL MOUNTED DDC SENSOR FOR SPACE TEMPERATURE CONTROL AND SPACE HUMIDITY MEASUREMENT.
WHILE IN THE OCCUPIED MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY TO PROVIDE VENTILATION AIR TO THE SPACE. UPON A RISE IN SPACE TEMPERATURE, UNIT COMPRESSORS AND CONDENSER FANS SHALL ACTIVATE IN STAGES TO SATISFY SPACE. UPON A DROP IN SPACE TEMPERATURE, GAS HEAT SHALL BE ACTIVATED IN STAGES TO SATISFY SPACE TEMPERATURE.
WHILE IN THE UNOCCUPIED MODE, THE UNIT SUPPLY FAN, DX COOLING, AND GAS HEATING SHALL CYCLE AS INDICATED TO MAINTAIN SETBACK TEMPERATURES. IF ACTIVATED DURING THE UNOCCUPIED MODE, THE UNIT SHALL OPERATE FOR A MINIMUM OF 20 MINUTES OR UNTIL SPACE SETPOINT IS SATISFIED AND SHALL NOT BE ALLOWED TO RESTART FOR A MINIMUM OF 30 MINUTES FOLLOWING SHUT-DOWN.
UNIT FACTORY MOUNTED CONTROLS SHALL PROVIDE ECONOMIZER OPERATION TO PROVIDE "FREE COOLING" WHEN OUTDOOR AIR CONDITIONS ALLOW. UPON DETERMINATION THAT OUTSIDE AIR ENTHALPY IS BELOW RETURN AIR ENTHALPY WHILE IN THE COOLING MODE, THE OUTSIDE AIR DAMPER SHALL OPEN, ENERGY RECOVERY WHEEL SHALL BE CYCLED OFF AND THE EXHAUST FAN SHALL BE ON. IF "ECONOMIZER" CONTROL IS INSUFFICIENT TO MAINTAIN DISCHARGE AIR TEMPERATURE, THE UNIT COOLING CYCLE SHALL FUNCTION AS OUTLINED ABOVE.
PROVIDE HUMIDISTAT AS INDICATED ON THE PLANS, IF SPACE HUMIDITY REACHES 65% R.H. (ADJ)., ALARM SHALL BE SENT TO THE CENTRAL BAS AND HUMIDITY CONTROL SEQUENCE SHALL BE ACTIVATED. UNIT COMPRESSORS SHALL ACTIVATE TO PROVIDE COOLING WITH A COOLING COIL LEAVING AIR TEMPERATURE SETPOINT OF 55°. MODULATING HOT GAS REHEAT IN THE UNIT SHALL BE UTILIZED TO MAINTAIN SPACE TEMPERATURE. WHEN SPACE RELATIVE HUMIDITY DROPS BELOW 55% R.H. (ADJ), BAS SHALL DEACTIVATE HUMIDITY CONTROL SEQUENCE. CONTROL OF UNIT SHALL REVERT BACK AS INDICATED ABOVE.
ENERGY RECOVERY VENTILATOR/EXHAUST FAN (ERV); THE ERV SHALL RUN ANY TIME THE SUPPLY FAN IS ENERGIZED EXCEPT DURING ECONOMIZER MODE. DURING ERV OPERATION, THE EXHAUST FAN SHALL ALSO BE ENERGIZED.
ALARMS SHALL BE PROVIDED AS FOLLOWS: EXHAUST FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF; EXHAUST FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON; EXHAUST FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.
DUCT MOUNTED SMOKE DETECTOR SHALL BE PROVIDED IN THE RETURN DUCT. DETECTOR SHALL SHUT DOWN UNIT AND ACTIVATE THE FIRE ALARM SYSTEM UPON ACTIVATION. FIRE ALARM INTERFACE WITH THE SMOKE DETECTOR IS PROVIDED BY THE ELECTRICAL CONTRACTOR.

SZ VAV UNIT (SPAC-F1) ALTERNATE 1
UNIT SHALL BE STOPPED/STARTED ON A PROGRAMMED BASIS THROUGH THE BAS. FACTORY UNIT MOUNTED CONTROLS SHALL OPERATE UNIT AS OUTLINED BELOW.
SUPPLY FAN SHALL OPERATE CONTINUOUSLY WHEN THE UNIT IS IN THE OCCUPIED MODE. SUPPLY FAN SPEED SHALL BE CONTROLLED BY A VARIABLE FREQUENCY DRIVE. SINGLE ZONE UNITS SHALL BE PROVIDED WITH A WALL MOUNTED DDC SENSOR FOR SPACE TEMPERATURE CONTROL AND SPACE HUMIDITY SENSOR FOR HUMIDITY CONTROL. WHILE IN THE OCCUPIED MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY TO PROVIDE VENTILATION AIR TO THE SPACE. UPON A RISE IN SPACE TEMPERATURE, SUPPLY FAN SPEED SHALL BE RAMPED UP UNTIL IT REACHES MAXIMUM SPEED. UNIT COMPRESSORS AND CONDENSER FANS SHALL ACTIVATE IN STAGES TO MAINTAIN DISCHARGE AIR TEMPERATURE. UPON A DROP IN SPACE TEMPERATURE, SUPPLY FAN SPEED SHALL BE RAMPED DOWN UNTIL IT REACHES MINIMUM SPEED (TO MAINTAIN OUTSIDE AIR VOLUME), ON A CONTINUED DROP IS SPACE TEMPERATURE, GAS HEAT SHALL BE ACTIVATED IN STAGES TO SATISFY DISCHARGE AIR TEMPERATURE. A DISCHARGE AIR TEMPERATURE SENSOR SHALL CONTROL UNIT COOLING AND HEATING SYSTEMS TO MAINTAIN THE PACKAGE UNIT SUPPLY AIR TEMPERATURE. WHILE IN THE UNOCCUPIED MODE, THE UNIT SUPPLY FAN (MINIMUM SPEED), DX COOLING, AND GAS HEATING SHALL CYCLE AS INDICATED TO MAINTAIN SETBACK TEMPERATURES. IF ACTIVATED DURING THE UNOCCUPIED MODE, THE UNIT SHALL OPERATE FOR A MINIMUM OF 20 MINUTES OR UNTIL SPACE SETPOINT IS SATISFIED AND SHALL NOT BE ALLOWED TO RESTART FOR A MINIMUM OF 30 MINUTES FOLLOWING SHUT-DOWN.
OUTSIDE AIR INTAKES SHALL BE PROVIDED WITH A MOTORIZED DAMPER. OA DAMPER SHALL REMAIN CLOSED WHEN IN THE UNOCCUPIED MODE. UPON UNIT START UP, THE OUTSIDE AIR INTAKE DAMPER SHALL REMAIN CLOSED UNTIL THE RETURN AIR TEMPERATURE RISES ABOVE 65° F (ADJ). ONCE RETURN AIR TEMPERATURE IS SATISFIED, THE OUTSIDE AIR DAMPER SHALL OPEN TO THE OCCUPIED MINIMUM SETPOINT OR AS REQUIRED FOR ECONOMIZER OPERATION.
DEMAND CONTROL VENTILATION: OUTSIDE AIR DAMPERS SHALL MODULATE AS REQUIRED TO MAINTAIN MINIMUM AND MAXIMUM OUTSIDE AIR FLOW RATE BASED ON SPACE CO2 LEVELS. CO2 SENSOR MOUNTED IN THE SPACE SHALL MODULATE THE OUTSIDE AIR DAMPER BASED ON CO2 LEVELS, DAMPER SHALL MODULATE OPEN FROM THE OCCUPIED MINIMUM SETPOINT TO THE DESIGN MAXIMUM SETPOINT AS REQUIRED TO MAINTAIN A SPACE CO2 LEVEL OF 600 PPM ABOVE THE OUTSIDE AIR CO2 LEVEL. AN ALARM SHALL BE ACTIVATED IF THE SPACE CO2 LEVEL RISES ABOVE 1000 PPM ABOVE OUTSIDE AIR C02 LEVELS. SEE UNIT SCHEDULE FOR MINIMUM AND DESIGN OUTSIDE AIR SETPOINTS. BAS SHALL BE CAPABLE OF OPENING AND CLOSING OUTSIDE AIR DAMPER REMOTELY.
PACKAGE UNIT FACTORY MOUNTED CONTROLS SHALL PROVIDE ECONOMIZER OPERATION TO PROVIDE "FREE COOLING" WHEN OUTDOOR AIR CONDITIONS ALLOW. UPON DETERMINATION THAT OUTSIDE AIR ENTHALPY IS BELOW RETURN AIR ENTHALPY WHILE IN THE COOLING MODE, THE OUTSIDE AIR DAMPER SHALL MODULATE TO MAINTAIN UNIT DISCHARGE AIR TEMPERATURE. IF "ECONOMIZER" CONTROL IS INSUFFICIENT TO MAINTAIN DISCHARGE AIR TEMPERATURE, THE UNIT COOLING CYCLE SHALL FUNCTION AS OUTLINED ABOVE. WITH SYSTEM IN OCCUPIED OR UNOCCUPIED MODE, HUMIDITY CONTROL SYSTEM SHALL BE CAPABLE OF BEING ACTIVATED. UNDER NORMAL OPERATION, UNIT SHALL BE CONTROLLED AS OUTLINED ABOVE.
PROVIDE HUMIDISTAT AS INDICATED ON THE PLANS, IF SPACE HUMIDITY REACHES 65% R.H. (ADJ), ALARM SHALL BE SENT TO THE CENTRAL BAS AND HUMIDITY CONTROL SEQUENCE SHALL BE ACTIVATED. OUTSIDE AIR INTAKE SHALL CLOSE TO MINIMUM POSITION. UNIT COMPRESSORS SHALL ACTIVATE TO PROVIDE COOLING WITH A COOLING COIL LEAVING AIR TEMPERATURE SETPOINT OF 55°. MODULATING HOT GAS REHEAT IN THE UNIT SHALL BE UTILIZED TO MAINTAIN SPACE TEMPERATURE. WHEN SPACE RELATIVE HUMIDITY DROPS BELOW 55% R.H. (ADJ), BAS SHALL DEACTIVATE HUMIDITY CONTROL SEQUENCE. CONTROL OF UNIT SHALL REVERT BACK AS INDICATED ABOVE.
DUCT MOUNTED SMOKE DETECTOR SHALL BE PROVIDED IN THE RETURN DUCT. DETECTOR SHALL SHUT DOWN PACKAGE UNIT AND ACTIVATE THE FIRE ALARM SYSTEM UPON ACTIVATION. FIRE ALARM INTERFACE WITH THE SMOKE DETECTOR IS PROVIDED BY THE ELECTRICAL CONTRACTOR.

SZ UNIT WITH ERV (DOAS-C1) ALTERNATE 6
UNIT SHALL BE STARTED AND STOPPED ON A PROGRAMMED BASIS BY THE DDC CONTROL SYSTEM. FACTORY UNIT MOUNTED CONTROLS SHALL OPERATE UNIT AS OUTLINED BELOW.
SINGLE ZONE UNITS SHALL BE PROVIDED WITH A WALL MOUNTED DDC SENSOR FOR SPACE TEMPERATURE CONTROL AND SPACE HUMIDITY MEASUREMENT.
WHILE IN THE OCCUPIED MODE, THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY TO PROVIDE VENTILATION AIR TO THE SPACE. UPON A RISE IN SPACE TEMPERATURE, UNIT COMPRESSORS AND CONDENSER FANS SHALL ACTIVATE IN STAGES TO SATISFY SPACE. UPON A DROP IN SPACE TEMPERATURE, DX HEAT PUMP REVERSE CYCLE SHALL BE ACTIVATED TO SATISFY SPACE TEMPERATURE. IF DX HEATING CYCLE DOES NOT MAINTAIN SPACE OR DISCHARGE AIR TEMPERATURES, ELECTRIC HEAT SHALL STAGE ON TO MAINTAIN SPACE TEMPERATURE.
WHILE IN THE UNOCCUPIED MODE, THE UNIT SUPPLY FAN, DX COOLING, AND DX HEAT PUMP CYCLE AND ELECTRIC HEAT SHALL CYCLE AS INDICATED TO MAINTAIN SETBACK TEMPERATURES. IF ACTIVATED DURING THE UNOCCUPIED MODE, THE UNIT SHALL OPERATE FOR A MINIMUM OF 20 MINUTES OR UNTIL SPACE SETPOINT IS SATISFIED AND SHALL NOT BE ALLOWED TO RESTART FOR A MINIMUM OF 30 MINUTES FOLLOWING SHUT-DOWN.
UNIT FACTORY MOUNTED CONTROLS SHALL PROVIDE ECONOMIZER OPERATION TO PROVIDE "FREE COOLING" WHEN OUTDOOR AIR CONDITIONS ALLOW. UPON DETERMINATION THAT OUTSIDE AIR ENTHALPY IS BELOW RETURN AIR ENTHALPY WHILE IN THE COOLING MODE, THE OUTSIDE AIR DAMPER SHALL OPEN, ENERGY RECOVERY WHEEL SHALL BE CYCLED OFF AND THE EXHAUST FAN SHALL BE ON. IF "ECONOMIZER" CONTROL IS INSUFFICIENT TO MAINTAIN DISCHARGE AIR TEMPERATURE, THE UNIT COOLING CYCLE SHALL FUNCTION AS OUTLINED ABOVE.
PROVIDE HUMIDISTAT AS INDICATED ON THE PLANS, IF SPACE HUMIDITY REACHES 65% R.H. (ADJ)., ALARM SHALL BE SENT TO THE CENTRAL BAS AND HUMIDITY CONTROL SEQUENCE SHALL BE ACTIVATED. UNIT COMPRESSORS SHALL ACTIVATE TO PROVIDE COOLING WITH A COOLING COIL LEAVING AIR TEMPERATURE SETPOINT OF 55°. MODULATING HOT GAS REHEAT IN THE UNIT SHALL BE UTILIZED TO MAINTAIN SPACE TEMPERATURE. WHEN SPACE RELATIVE HUMIDITY DROPS BELOW 55% R.H. (ADJ), BAS SHALL DEACTIVATE HUMIDITY CONTROL SEQUENCE. CONTROL OF UNIT SHALL REVERT BACK AS INDICATED ABOVE.
ENERGY RECOVERY VENTILATOR/EXHAUST FAN (ERV); THE ERV SHALL RUN ANY TIME THE SUPPLY FAN IS ENERGIZED EXCEPT DURING ECONOMIZER MODE. DURING ERV OPERATION, THE EXHAUST FAN SHALL ALSO BE ENERGIZED.
ALARMS SHALL BE PROVIDED AS FOLLOWS: EXHAUST FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF; EXHAUST FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON; EXHAUST FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.
DUCT MOUNTED SMOKE DETECTOR SHALL BE PROVIDED IN THE RETURN DUCT. DETECTOR SHALL SHUT DOWN UNIT AND ACTIVATE THE FIRE ALARM SYSTEM UPON ACTIVATION. FIRE ALARM INTERFACE WITH THE SMOKE DETECTOR IS PROVIDED BY THE ELECTRICAL CONTRACTOR.

WALL/CEILING HEATERS
A BUILT-IN THERMOSTAT SHALL OPERATE WALL/UNIT HEATER AND FAN TO MAINTAIN A SETPOINT OF 49° (ADJ). ONCE THE UNIT HEATER IS ENERGIZED, IT WILL RUN FOR AT LEAST FIVE MINUTES TO AVOID SHORT CYCLING. BAS DOES NOT INTERFACE WITH UNIT HEATERS.

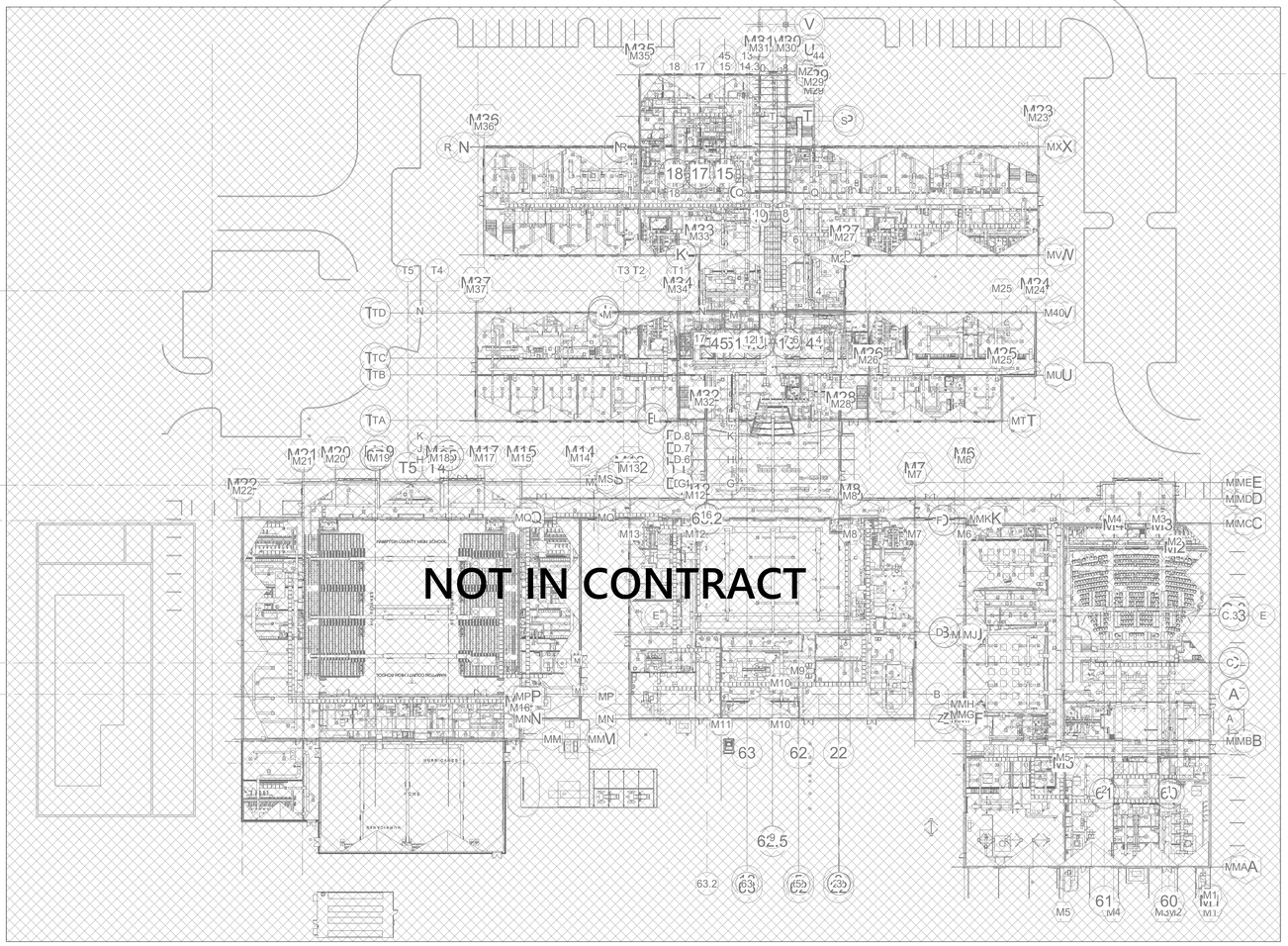
MISC. EXHAUST FANS
PROVIDE WALL SWITCHES, WALL THERMOSTATS, INTERLOCKS, ETC. AS INDICATED ON THE FAN SCHEDULE TO CONTROL FANS AS INDICATED ON PLANS. BOILER ROOM AND ELECTRICAL ROOM THERMOSTATS SHALL BE SET AT 80° F. (USER ADJUSTABLE, BAS REMOTE).

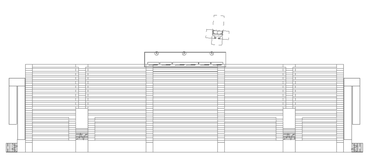
HVAC SCHEDULING
INITIAL SCHEDULES OF OPERATION SHALL BE COORDINATED AND CONFIRMED BY THE OWNER, AND PROGRAMMED BY THE CONTROLS CONTRACTOR. MODIFICATION OF SCHEDULES SHALL BE A PART OF REQUIRED OWNER TRAINING. DISCREET SCHEDULES SHALL BE PROVIDED FOR EACH AIR HANDLING UNIT.

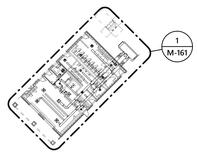
SCHOOL CALENDAR SHALL BE PROGRAMMED INTO THE BAS SUCH THAT THE SYSTEMS REMAIN UNOCCPUIED ON DAYS THE SCHOOL IS CLOSED AND ON TEACHER WORKDAYS.

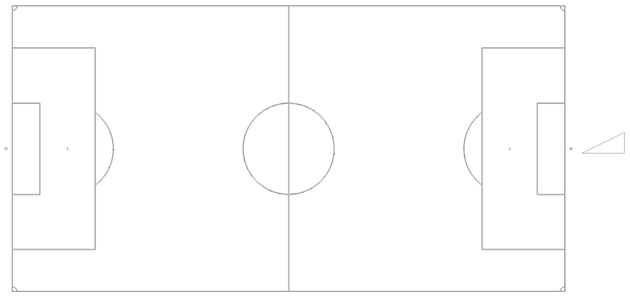
REMAINING AIR HANDLING UNITS SHALL BE INITIALLY SET TO BE IN THE OCCUPIED MODE FROM 30 MINUTES BEFORE THE OPENING BELL TO 30 MINUTES PRIOR TO THE CLOSING BELL, UNTIL MODIFIED BY START/STOP OPTIMIZATION. AFTER HOURS OPERATION FOR ALL ZONES SHALL BE COORDINATED WITH THE OWNER WITH INPUT FROM THE KITCHEN, ATHLETIC, LIBRARY, AND FINE ARTS STAFF.

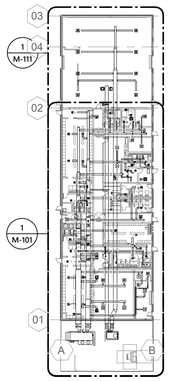
START/STOP OPTIMIZATION
BAS SHALL PROVIDE START/STOP OPTIM



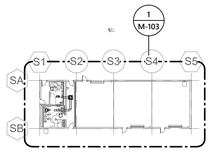


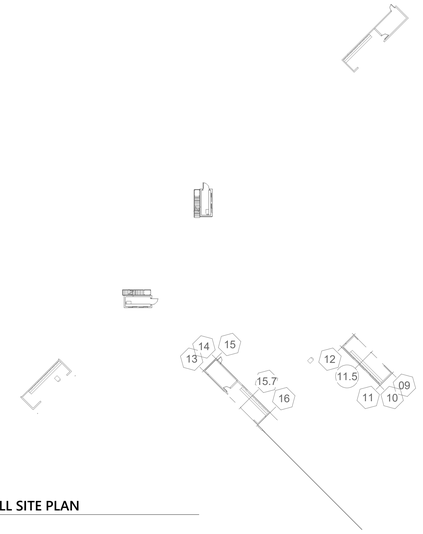












1 OVERALL SITE PLAN
1" = 40'-0"

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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STEVEN B. DAVIS No. 22161 REGISTERED PROFESSIONAL ENGINEER SOUTH CAROLINA

State Board of Registration for Professional Engineers and Surveyors.
10/31/25
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No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

MECHANICAL SITE PLAN

M-100

PROJECT NORTH
TRUE NORTH

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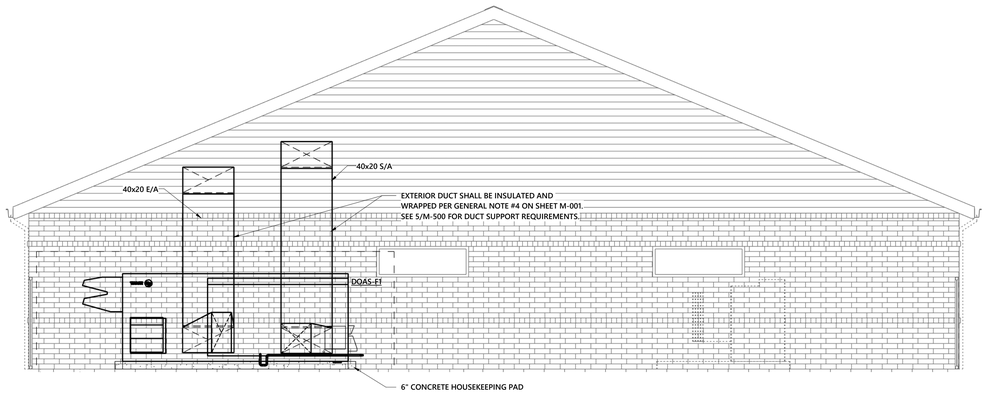
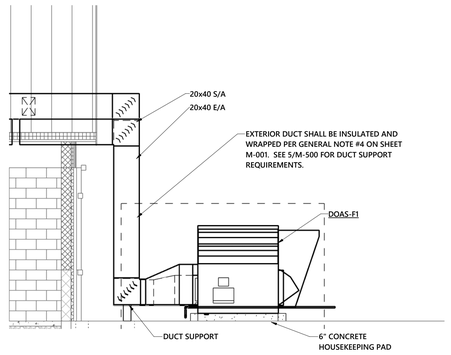
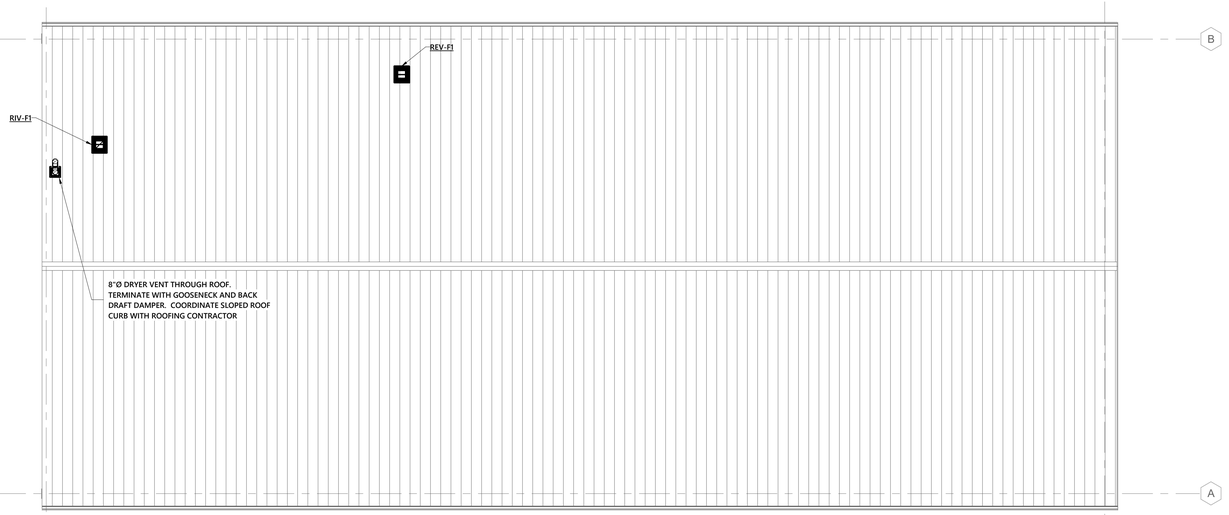


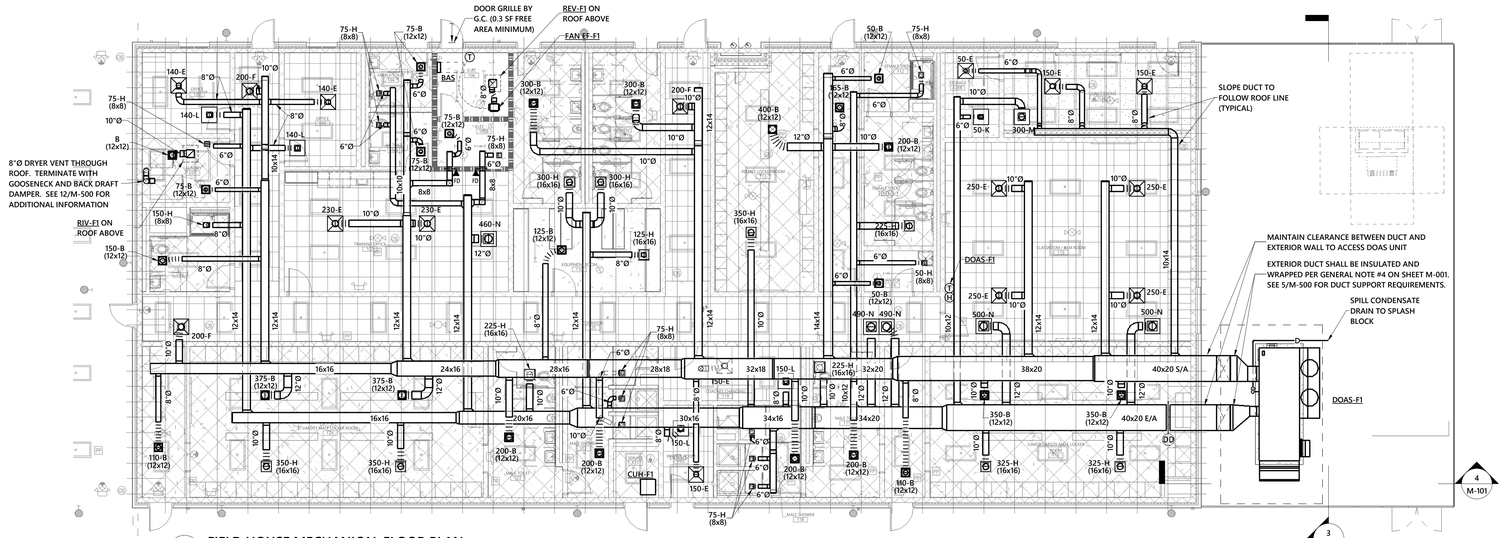
3 MECHANICAL SECTION 1 THROUGH FIELD HOUSE
1/4" = 1'-0"



4 MECHANICAL SECTION 2 THROUGH FIELD HOUSE
1/4" = 1'-0"



2 FIELD HOUSE MECHANICAL ROOF PLAN
1/8" = 1'-0"



1 FIELD HOUSE MECHANICAL FLOOR PLAN
1/8" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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MECHANICAL FLOOR PLAN - FIELD HOUSE (BASE BID)

M-101

TRUE NORTH

CONSTRUCTION DOCUMENTS

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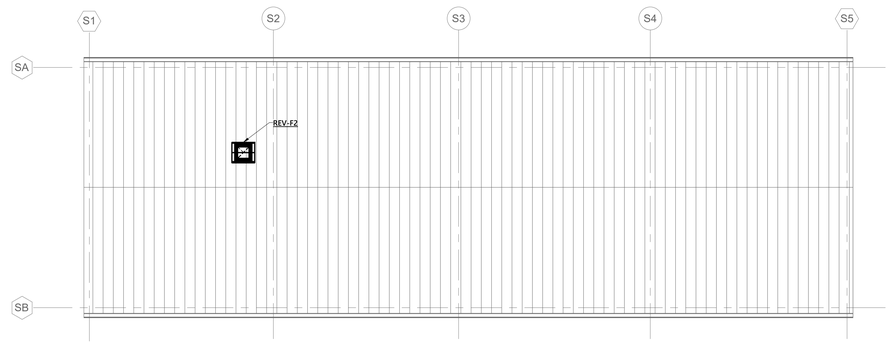
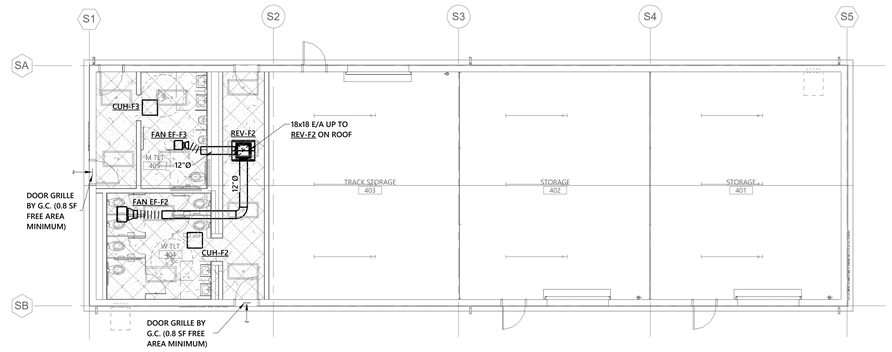


2 RESTROOM & STORAGE BUILDING MECHANICAL ROOF PLAN

1/8" = 1'-0"



1 RESTROOM & STORAGE BUILDING MECHANICAL FLOOR PLAN

1/8" = 1'-0"

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LS3P PROJECT: 1201-217190
DATE: 10.31.2025

MECHANICAL FLOOR PLAN - RESTROOM & STORAGE BUILDING (BASE BID)

M-103

PROJECT NORTH
TRUE NORTH

CONSTRUCTION DOCUMENTS

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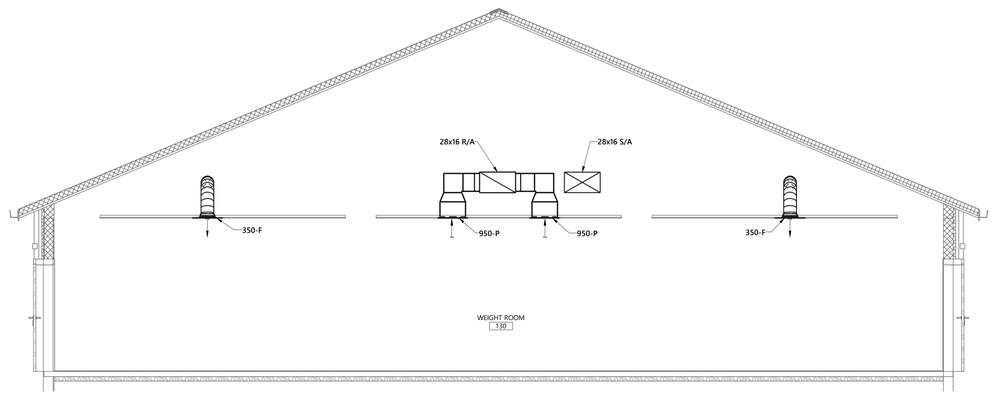
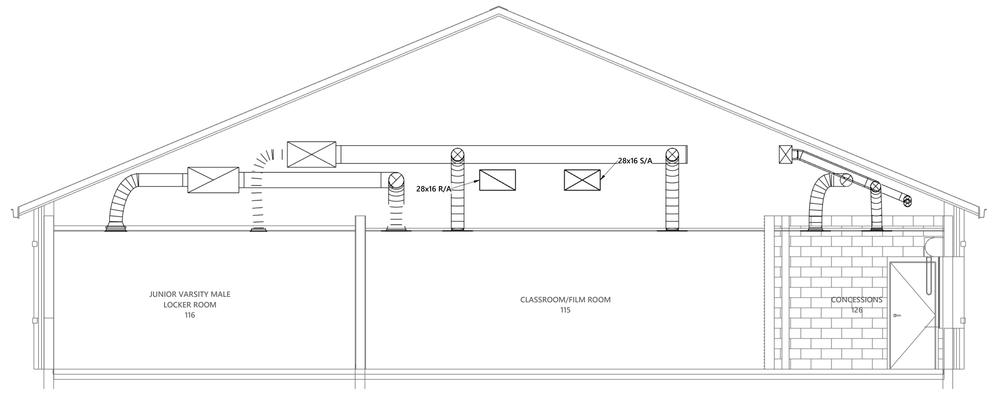
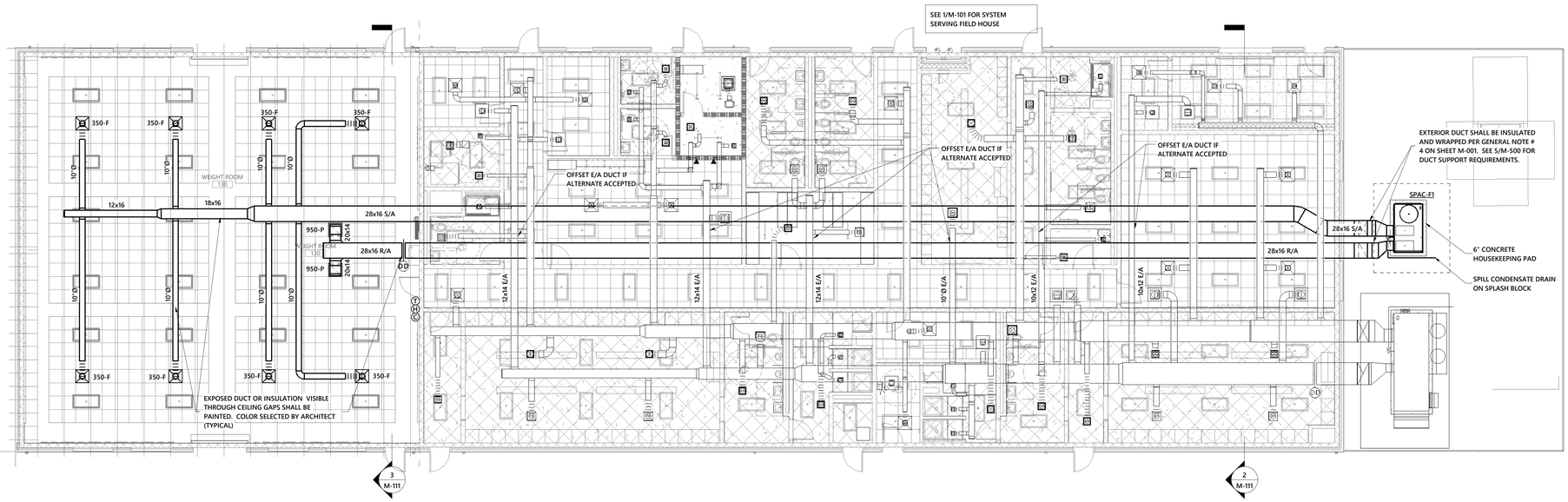


3 MECHANICAL SECTION 2 THROUGH WEIGHT ROOM (ADD ALT #1)
1/4" = 1'-0"



2 MECHANICAL SECTION 1 THROUGH FIELD HOUSE (ADD ALT #1)
1/4" = 1'-0"



1 WEIGHT ROOM MECHANICAL FLOOR PLAN (ADD ALT #1)
1/8" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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South Carolina License Number C-00710

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SOUTH CAROLINA — OPTIMA ENGINEERING PA — No. C00710 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — REGISTERED — No. 22161 — STEVEN R. DAVIS — PROFESSIONAL ENGINEER

State Board of Registration for Professional Engineers and Surveyors.

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

MECHANICAL FLOOR PLAN - WEIGHT ROOM (ADD ALT #1)

M-111

TRUE NORTH

CONSTRUCTION DOCUMENTS

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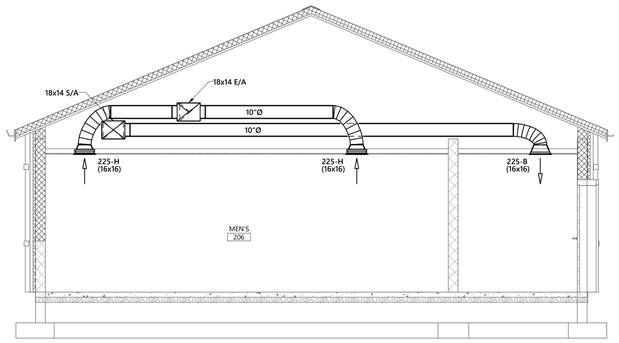
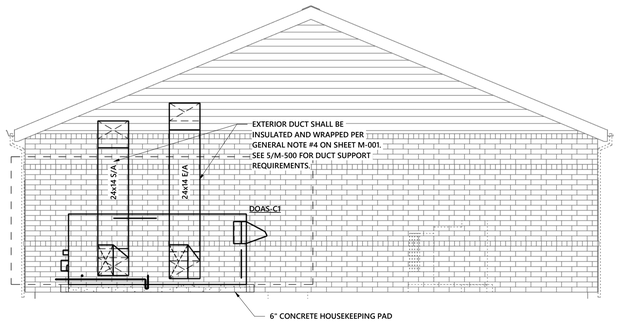
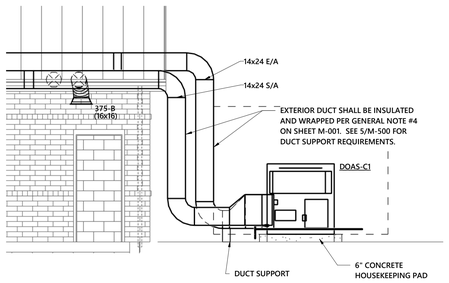


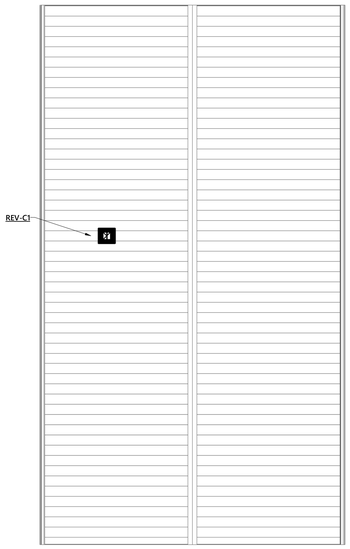
4 MECHANICAL SECTION 2 THROUGH CONCESSIONS (ADD ALT #6)
1/4" = 1'-0"



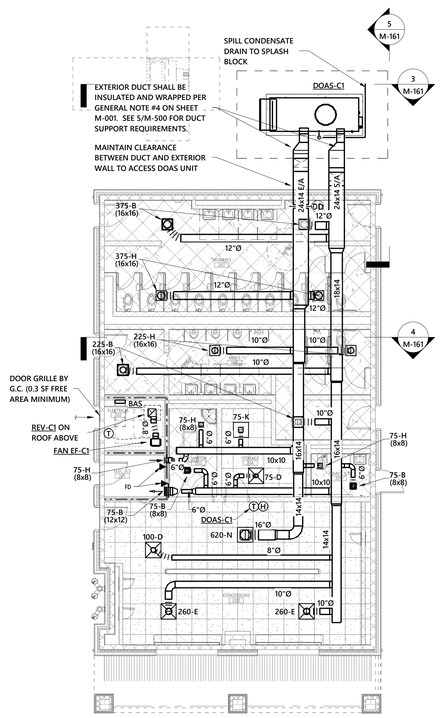
3 MECHANICAL SECTION 1 THROUGH CONCESSIONS (ADD ALT #6)
1/4" = 1'-0"



5 MECHANICAL SECTION 3 THROUGH CONCESSIONS (ADD ALT #6)
1/4" = 1'-0"



2 CONCESSIONS MECHANICAL ROOF PLAN (ADD ALT #6)
1/8" = 1'-0"



1 CONCESSIONS MECHANICAL FLOOR PLAN (ADD ALT #6)
1/8" = 1'-0"

PARTITION LEGEND

- SMOKE PARTITION TO DECK
- 1 HR. RATED PARTITION TO DECK
- 2 HR. RATED PARTITION TO DECK

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OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

MECHANICAL FLOOR PLANS - CONCESSIONS (ADD ALT #6)

M-161

TRUE NORTH

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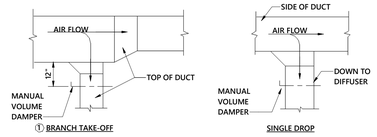
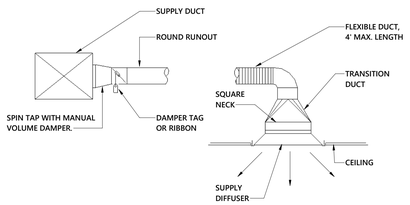


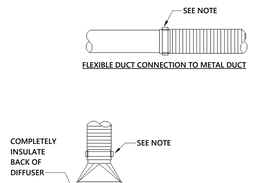
NOTE:
1. USE BRANCH TAKE-OFF ① WHEN MAIN AND BRANCH DUCTS ARE DIFFERENT DEPTHS
2. USE BRANCH TAKE-OFF ② WHEN MAIN AND BRANCH DUCTS ARE SAME DEPTHS
3. MANUAL VOLUME DAMPERS SHALL BE PROVIDED FOR ALL SUPPLY, RETURN AND GENERAL EXHAUST SINGLE DROP DUCT RUNS.

1 DUCTWORK DETAILS
NOT TO SCALE



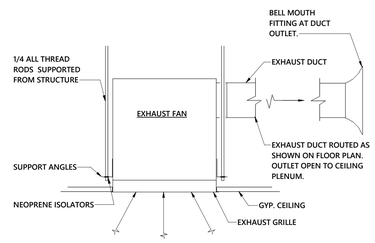
NOTE:
1. ALL MANUAL VOLUME DAMPERS (FOR INSULATED DUCTWORK) SHALL BE PROVIDED WITH AN ELEVATED REGULATOR (STAND-OFF) EQUAL TO DURO DYNE SRST SERIES. STAND SHALL EXTEND A MINIMUM OF 2" BEYOND DUCTWORK WITH EXTENDED TAB/SHAFT.
2. MANUAL VOLUME DAMPERS SHALL BE PROVIDED FOR ALL SUPPLY, RETURN, AND GENERAL EXHAUST RUNOUTS

2 SPIN TAP TO SQUARE NECK DIFFUSER
NOT TO SCALE

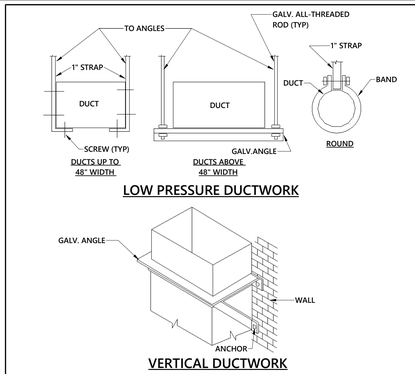


NOTE:
ALL FLEXIBLE DUCT CONNECTIONS TO SHEET METAL SHALL BE SECURED WITH APPROVED STRAP AND SEALANT.

3 FLEX CONNECTION DETAIL
NOT TO SCALE

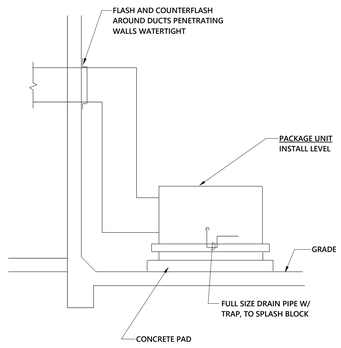


4 EXHAUST FAN DETAIL
NOT TO SCALE

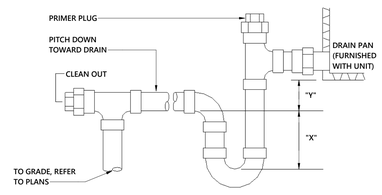


NOTE:
ALL DUCTWORK SHALL BE SUPPORTED PER SCMC 603.10 AND LATEST SMACNA STANDARDS

5 DUCTWORK HANGER DETAILS - VERTICAL
NO SCALE



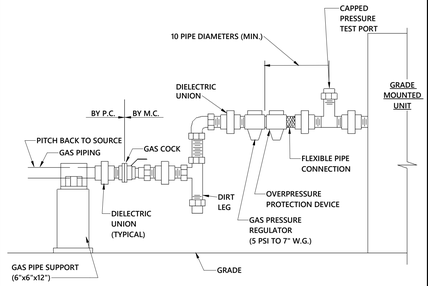
6 PACKAGE UNIT - HORIZONTAL DISCHARGE
NOT TO SCALE



DIMENSIONS
P = PRESSURE INSIDE AHU CASING (INCHES W.G.)
Y = P + 2"
X = Y

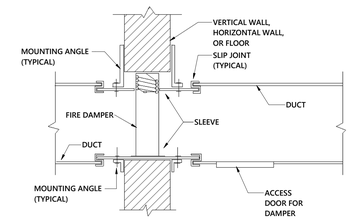
MINIMUM PIPE SIZE	MAXIMUM COIL LOAD (TONS)
3/4"	2
1"	5
1 1/4"	30
1 1/2"	50
2"	75

7 P-TRAP PIPING DETAIL
NO SCALE



NOTE:
1. GAS PIPING AND SHUT-OFF VALVE SHALL BE BY PLBG. CONTR., DIRT LEG, REGULATOR, AND FINAL CONNECTION TO UNIT SHALL BE BY MECH. CONTR.
2. PROVIDE DIELECTRIC UNIONS WHERE DISSIMILAR MATERIALS ARE JOINED.
3. VERIFY INLET GAS PRESSURE WITH PLUMBING CONTRACTOR.

8 GAS CONNECTION TO UNIT (WITH REGULATOR)
NOT TO SCALE



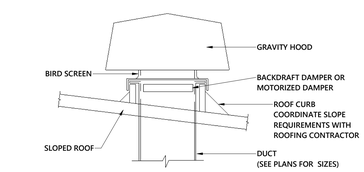
NOTE: DAMPERS SHALL BE INSTALLED AS PER MFG. INSTRUCTIONS.

FIRE DAMPER SHALL BE RUSKIN TYPE DIBD2 STYLE B 1 1/2 HOUR UL, INSTALLED IN ACCORDANCE WITH NFPA. ACCESS DOOR SHALL BE RUSKIN MODEL ADC2 LOCATED ON ACCESSIBLE CEILING SIDE OF WALL. IF ACCESSIBLE CEILING NOT AVAILABLE, MECHANICAL CONTRACTOR SHALL PROVIDE ACCESS DOOR IN CEILING (OR WALL) TO MATCH FINISH COLOR. DAMPER SHALL BE EQUIPPED FOR HORIZONTAL OR VERTICAL MOUNTING AS REQUIRED. WHERE ROUND DUCTS REQUIRE A DAMPER, AN ENCLOSURE WITH ROUND DUCT CONNECTION WILL BE REQUIRED WITH TYPE B DAMPER INSIDE. ALL MODELS ARE RUSKIN (APPROVED EQUAL ACCEPTABLE).

9 DAMPER - LOW PRESSURE FIRE
NOT TO SCALE

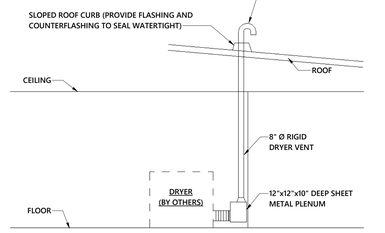
1. ALL INSULATED METAL PIPING PENETRATING A ONE HOUR OR MORE RATED ASSEMBLY SHALL BE SEALED AROUND INSULATION ON BOTH SIDES OF WALL WITH AN APPROVED FIRE STOP WRAP/STRIP MATERIAL. NUMBER OF WRAPS AROUND INSULATION WITHIN WALL OPENING SHALL BE AS REQUIRED FOR THICKNESS OF INSULATION AND MFG. RECOMMENDATIONS. COVER EXPOSED SURFACE AND SEAMS WITH AN APPROVED FIRE STOP CAULK ON BOTH SIDES OF WALL.
2. ALL NON-INSULATED METAL PIPING PENETRATING A ONE HOUR WALL OR MORE RATED WALL OR FLOOR SHALL BE SEALED AROUND PIPE ON BOTH SIDES OF WALL WITH AN APPROVED FIRE STOP CAULK. THICKNESS SHALL BE AS RECOMMENDED BY MANUFACTURER FOR WALL RATING REQUIRED TO MAINTAIN U.L. CLASSIFICATION.
3. ALL METAL DUCTWORK (LESS THAN 100 SQUARE INCHES) PENETRATING A ONE HOUR WALL OR SMOKE SHALL BE SEALED AROUND DUCT ON BOTH SIDES OF WALL WITH A SHEET METAL COLLAR (SAME GAUGE AS DUCT) SECURED TO WALL AND DUCT IN A SMOKE-TIGHT MANNER. DUCT PENETRATIONS EXCEEDING 100 SQUARE INCHES SHALL HAVE A FIRE DAMPER INSTALLED IN THE WALL AS DETAILED.
4. ALL DUCTWORK PENETRATING A TWO HOUR OR MORE RATED WALL OR FLOOR SHALL BE PROVIDED WITH A FIRE DAMPER INSTALLED AS DETAILED.
5. NO FLEXIBLE DUCTWORK WILL BE ALLOWED TO PENETRATE ONE HOUR WALLS, TWO HOUR WALLS, SMOKE WALLS, CORRIDOR WALLS OR WALLS CLOSED-OFF TO STRUCTURE. METAL RIGID DUCTWORK SHALL EXTEND A MINIMUM OF 5'-0" FROM WALL BEFORE THE FIRST AIR DISTRIBUTION DEVICE IS INSTALLED OR BEFORE FLEXIBLE DUCT IS STARTED. FLEXIBLE DUCTWORK IN A SINGLE DUCT RUN IS ALLOWED ON ONE SIDE OF A RATED WALL BUT NOT BOTH SIDES.
6. ACCEPTABLE MANUFACTURERS OF FIRE STOP MATERIALS ARE AS FOLLOWS: NELSON FLAMESEAL PUTTY CROUSE-HINDS CABLE BARRIER SYSTEM DOW CORNING FIRE STOP SEALANT/FOAM 3M FIRE BARRIER 7AB FLAMESAFE THERMAFIBER BRAND SAFING ALL MATERIALS AND METHODS OF INSTALLATION SHALL BE U.L. APPROVED FOR THAT INSTALLATION. SHOP DRAWING SUBMITTALS OF MATERIALS AND METHOD OF INSTALLATION, INCLUDING DRAWINGS, SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW.
7. WHEN A PIPE, WIRE, OR DUCT PENETRATES A NON-RATED SMOKETIGHT PARTITION, THE MECHANICAL CONTRACTOR SHALL SEAL AROUND ALL PIPES WIRES AND DUCTS WITH SEALANT MATERIAL TO MAKE IT SMOKETIGHT. SEE ARCHITECTURAL PLANS FOR LOCATION OF THESE PARTITIONS.
8. SEE ARCHITECTURAL PLANS FOR WALL TYPES.
9. ALL RATED WALL PENETRATIONS SHALL BE IN ACCORDANCE WITH UNDERWRTIERS LABORATORIES PENETRATION FIRESTOP SYSTEM REQUIREMENTS. ALL MATERIALS USED IN PENETRATION FIRESTOP SYSTEMS SHALL BE APPROVED BY UNDERWRITERS LABORATORIES AND SHALL BE U.L. LABELED.
10. PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOORS OF NON-COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH NONCOMBUSTIBLE MATERIALS. PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOOR OF COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH MATERIALS EQUIVALENT TO TWO INCHES OF WOOD. FIRESTOPPING SHALL COMPLY WITH ASTM E-814.

10 PIPE AND DUCTWORK WALL PENETRATION NOTES (MECHANICAL)
NO SCALE



NOTE:
SECURE VENTILATOR TO CURB WITH NON-FERROUS SCREWS. MIN. 2 PER SIDE, 4-INCHES FROM CORNERS AND MAX. 12-INCHES ON CENTER. PROVIDE EDPM WASHERS FOR BOTH SIDES OF ROOF CURB.

11 GRAVITY HOOD DETAIL
NO SCALE



NOTES:
1. DRYER VENT PIPING SHALL BE GALVANIZED SHEET METAL AND SHALL HAVE A SMOOTH INTERIOR FINISH WITH JOINTS RUNNING IN THE DIRECTION OF THE AIR FLOW.
2. MAXIMUM LENGTH OF DRYER VENT SHALL NOT EXCEED 45' IN TOTAL LENGTH (DEDUCT 10' FOR EACH 90° ELBOW AND 5' FOR EACH 45° ELBOW).
3. DRYER VENT SHALL BE NONSCREENED WITH A BACKDRAFT DAMPER AND MINIMUM SIZE OF 8".

12 DRYER VENT THRU ROOF
NOT TO SCALE

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

MECHANICAL DETAILS

M-500

CONSTRUCTION DOCUMENTS

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SCHEDULE NOTES:

SCHEDULE NOTES:

1. SEE DETAIL FOR STANDARD MOUNTING HEIGHTS OF ALL DEVICES, UNLESS OTHERWISE NOTED.
2. ALL DEVICES (SWITCHES AND RECEPTACLES) SHALL BE GRAY. DEDICATED CIRCUITS SHALL BE RED, AND EMERGENCY SHALL BE ORANGE. COVER PLATE SHALL BE 302 STAINLESS STEEL UNLESS OTHERWISE NOTED. ALL COVER PLATES IN MASONRY WALLS SHALL BE JUMBO PLATES.
3. ALL RECEPTACLES & SWITCHES SHALL HAVE TAMPER PROOF SCREWS WHERE ACCESSIBLE TO STUDENTS. ALL KINDERGARTEN AND 1ST GRADE ROOMS SHALL BE PROVIDED WITH PROTECTIVE INSERTS IN ALL RECEPTACLES.
4. ALL FIRE ALARM SHALL BE IN CONDUIT UNLESS OTHERWISE NOTED.
5. ALL SPECIAL SYSTEMS DEVICES LOCATED IN THE GYM/MULTI-PURPOSE ROOM SHALL HAVE PROTECTIVE GUARDS. THIS INCLUDES BUT NOT LIMITED TO EXIT SIGNS, EMERGENCY LIGHTING, AND FIRE ALARM DEVICES.
6. PANEL DIRECTORIES SHALL REFLECT ACTUAL ROOM NUMBER ASSIGNED BY SCHOOL SYSTEM AND NOT ARCHITECTURAL PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UPDATE ALL SCHEDULES BASED ON FINAL ROOM DESIGNATION. ALL PANEL DIRECTORIES SHALL BE NEATLY TYPED.
7. ALL LOW VOLTAGE CABLING SHALL BE PLENUM RATED.
8. MC CABLE SHALL NOT BE PERMITTED.
9. ALL PLAN DRAWINGS SHALL SUPERCEDE SPECIFICATIONS WHEN PLANS AND SPECIFICATIONS ARE IN CONFLICT.
10. ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT TO COMPLY WITH BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, CONDUIT, WIRE, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
11. SHARED NEUTRAL OR "SUPER NEUTRAL" CONDUCTORS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS.
12. E.C. SHALL BID CONTRACT AS A MULTI-PRIME CONTRACT. ALL REFERENCES TO GENERAL CONTRACTOR OR G.C. SHALL BE CONSIDERED THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY FOR CONSTRUCTION AND PRICING.
13. ALL PANELS SHALL HAVE A MINIMUM OF (9) 3/4" CONDUIT TO ABOVE LOCAL CORRIDOR CEILING (CONCEALED) WITH PULL STRING FOR FUTURE USE.
14. SERIES RATED PANELS ARE NOT ACCEPTABLE.
15. STACKED TRANSFORMERS SHALL BE COORDINATED AND INSTALLED PRIOR TO DOOR OPENING OF ELECTRICAL ROOMS.

COORDINATION SET

THE CONSTRUCTION DRAWINGS HEREIN ARE DIAGRAMATIC IN NATURE. THE MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION AND GENERAL CONTRACTORS ARE RESPONSIBLE FOR CREATING A COORDINATED SET OF CONSTRUCTION SHOP DRAWINGS.

THE CONTRACTORS ARE RESPONSIBLE FOR HOSTING MEETINGS, AND IDENTIFYING CONFLICTS BETWEEN MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SYSTEMS AND OTHER SYSTEMS INCLUDING BUT NOT LIMITED TO STRUCTURAL FOUNDATIONS, STRUCTURAL STEEL, EQUIPMENT, CLEARANCECS, DUCTWORK, PIPING, CONDUITS, CABLE TRAYS, SPACE REQUIREMENTS FOR SUPPORTS, LIGHTING, AND ACCESS DOORS.

ONCE THE COORDINATION DRAWINGS HAVE BEEN FULLY COORDINATED AND SIGNED OFF BY THE CONTRACTOR OF EACH TRADE. THE CONTRACTORS SHALL CREATE A SET OF 1/4 SCALE 2D COORDINATION DRAWINGS (WITH HORIZONTAL / ELEVATION DIMENSIONS) AND FORWARD TO THE DESIGN TEAM FOR REVIEW. THE COORDINATION DRAWINGS SHALL BE COMPLETED PRIOR TO THE PURCHASE OF ANY EQUIPMENT OR FABRICATION AND INSTALLATION OF ANY DUCTWORK, PIPING SYSTEMS, CABLE TRAY, ETC.

GENERAL NOTES

NOTES:

1. CURRENT ADOPTED ELECTRICAL CODE IS NEC 2020. MINIMUM STANDARDS AND ADOPTED CODES IN STATE OF SOUTH CAROLINA ADHERE TO THIS ADOPTED CODE.
2. ALL REQUIRED DOCUMENTATION REGARDING THE DESIGN OF FIRE DETECTION, ALARM, AND COMMUNICATIONS SYSTEM AND THE PROCEDURES FOR MAINTENANCE, INSPECTION, AND TESTING OF FIRE DETECTION, ALARM AND COMMUNICATIONS SYSTEMS SHALL BE MAINTAINED AT AN APPROVED, SECURED LOCATION FOR THE LIFE OF THE SYSTEM

GENERAL TELECOMM NOTES

Notes:

1. ALL CONDUIT RACEWAYS AND CABLE TRAY SHALL BE PROVIDED BY EC. FOR ALL SYSTEMS.
2. LOW VOLTAGE CABLING AND EQUIPMENT FOR DATA, PHONE, CABLE TV, INTERCOM, CARD ACCESS, INTRUSION DETECTION, AND SECURITY CAMERAS ARE NOT IN THIS CONTRACT. CABLING AND EQUIPMENT WILL BE BY OTHERS.
3. TURN KEY FIRE ALARM, AND BOOSTING RADIO SYSTEM AND INDEPENDENT SOUND SYSTEMS ARE BY THE EC. (INCLUDING ALL CABLING, COMPONENTS AND PATHWAYS.)
4. ALL CONDUIT RACEWAYS SHALL BE INSTALLED CONCEALED ABOVE CEILINGS OR IN WALLS. NO LOW VOLTAGE CABLING PATHWAYS SHALL BE UNDERGROUND/BELOW SLAD BOTHER THAN THE SERVICE ENTRANCE CONDUITS AND PATHWAYS FEEDING FLOORBOXES.
5. J-HOOKS SHALL NOT SUPPORT ELECTRICAL CONDUITS OR CABLES. ELECTRICAL CONDUITS SHALL BE A MINIMUM OF 12" AWAY FROM DATA RUNS TO MINIMIZE ELECTRICAL MAGNETIC INTERFERENCE.

SEISMIC CATEGORY NOTES:

1. PROVIDE DESIGN AND INSTALLATION OF SEISMIC RESTRAINT ELEMENTS FOR THE ELECTRICAL SYSTEM(S) IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF THE 2021 SOUTH CAROLINA BUILDING CODE AND ASCE 7-10, CHAPTER 13 FOR A SEISMIC DESIGN CATEGORY D.

2. PROVIDE CALCULATIONS AND PREPARE SHOP DRAWINGS FOR THE SPECIFIC METHODS OF SEISMIC RESTRAINT TO BE USED IN ACCORDANCE WITH ASCE 7-10. REQUIRED RESTRAINT DEVICES, MATERIALS, AND SUPPLEMENTARY FRAMING SHALL BE AN INTEGRAL PART OF THE DESIGN AND SHALL BE INCLUDED IN THE SHOP DRAWINGS. PROVIDE ISOLATORS, SEISMIC MOUNTS, RESTRAINTS, ETC. AS NECESSARY TO COMPLY WITH ALL APPLICABLE REQUIREMENTS.

3. CALCULATIONS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF SOUTH CAROLINA WITH A MINIMUM 5 YEARS OF EXPERIENCE IN THE DESIGN AND SPECIFICATION OF SEISMIC RESTRAINT SYSTEMS.

4. SUBMIT CALCULATIONS AND SHOP DRAWINGS TO THE ARCHITECT, ENGINEER, AND LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL.

5. COPIES OF THE APPROVED RESTRAINT SYSTEM(S) INSTALLATION MANUAL SHALL BE ON THE JOBSITE PRIOR TO INSTALLATION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REQUIRED SPECIAL INSPECTIONS AND ASSOCIATED DOCUMENTATION. THE CONTRACTOR SHALL PROVIDE VERIFICATION IN WRITING OF COMPLIANCE WITH THE APPROVED SHOP DRAWINGS.

7. REVIEW AND APPROVAL OF THE SHOP DRAWINGS AND CALCULATIONS BY THE ARCHITECT/ENGINEER/ SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY WITH SEISMIC OR OTHER REQUIREMENTS OF THE 2021 SOUTH CAROLINA BUILDING CODE AND ASCE 7-10.

ELECTRICAL FIXTURES LEGEND - COMMERCIAL

SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE, 20 AMP, 120 VOLT. TAMPER RESISTANT.
GFCI	GROUND FAULT RECEPTACLE. NEMA 5-20R DUPLEX. ALL RECEPTACLES INSTALLED OUTSIDE, WITHIN 6' OF A SINK OR IN A KITCHEN SHALL BE GFCI. TAMPER RESISTANT.
	DUPLEX RECEPTACLE NEMA, 5-20R, MOUNTED ABOVE COUNTER, OR AT HEIGHT NOTED.
GFCI	GROUND FAULT RECEPTACLE - BREAKER AT PANEL. NEMA 5-20R DUPLEX. ALL RECEPTACLES INSTALLED OUTSIDE, WITHIN 6' OF A SINK OR IN A KITCHEN SHALL BE GFCI PROTECTED.
	DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTER BACKSPLASH OR AT HEIGHT NOTED. TAMPER RESISTANT.
GFCI	GROUND FAULT DUPLEX RECEPTACLE, NEMA 5-20R MOUNTED 6" ABOVE COUNTER OR AT HEIGHT NOTED. TAMPER RESISTANT.
WP GFCI	WEATHERPROOF GROUND FAULT RECEPTACLE. NEMA 5-20R DUPLEX, CORROSION RESISTANT, WITH IN-USE COVER.
	QUAD RECEPTACLE. TWO NEMA 5-20R DUPLEX RECEPTACLES, OTHERWISE SAME AS DUPLEX RECETACLE ABOVE. TAMPER RESISTANT.
GFCI	QUAD RECEPTACLE, TWO NEMA 5-20R FOR ELECTRIC WATER COOLER TO BE SUPPLIED BY GROUND FAULT BREAKER. COORDINATE LOCATION WITH PLUMBING CONTRACTOR.
	QUAD RECEPTACLE. TWO NEMA 5-20R DUPLEX RECEPTACLES 6" ABOVE COUNTER OR AT HEIGHT NOTED. TAMPER RESISTANT.

ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)
A	AMPERE
AC	ABOVE COUNTER OR AIR CONDITIONER
ACLG	ABOVE CEILING
ADO	AUTOMATIC DOOR OPENER
AF	AMP FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFI	ARC FAULT CIRCUIT INTERRUPTER
AHU	AIR HANDLING UNIT
AL	ALUMINUM
ALT	ALTERNATE
AMP	AMPERE
AMPL	AMPLIFIER
ANNUN	ANNUNCIATOR
APPROX	APPROXIMATELY
AQ-STAT	AQUASTAT
ARCH	ARCHITECT, ARCHITECTURAL
AS	AMP SWITCH
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BATT	BATTERY
BD	BOARD
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
C	CONDUIT
CAB	CABINET
CAT	CATALOG
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
COMB	COMBINATION
CMPR	COMPRESSOR
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUATION OR CONTINUOUS
CONTR	CONTRACTOR
CONV	CONVECTOR
CP	CIRCULATING PUMP
CRT	CATHODE-RAY TUBE
CT	CURRENT TRANSFORMER
CTR	CENTER
CU	COPPER
DCP	DOMESTIC WATER CIRCULATING PUMP
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DISC	DISCONNECT
DIST	DISTRIBUTION
DN	DOWN
DPR	DAMPER
DS	SAFETY DISCONNECT SWITCH
DT	DOUBLE THROW
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
EP	ELECTRIC PNEUMATIC
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXH	EXHAUST
EXP	EXPLOSION PROOF
FA	FIRE ALARM
FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLUORESCENT
FU	FUSE
FUDS	FUSED SAFETY DISCONNECT SWITCH
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTOR
GND	GROUND
GRS	GALVANIZED RIGID STEEL (CONDUIT)
GYP BD	GYPSUM BOARD
HOA	HANDS-OFF-AUTOMATIC SWITCH
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPF	HIGH POWER FACTOR
HT	HEIGHT
HTG	HEATING
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HWP	HYDRONIC WATER PUMP
IC	INTERRUPTING CAPACITY
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
INCAND	INCANDESCENT
IR	INFRARED
I/W	INTERLOCK WITH
J-BOX	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KVAR	KILOVOLT-AMPERE REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR
LOC	LOCATE OR LOCATION
LT	LIGHT
LTG	LIGHTING
LTNG	LIGHTNING
LV	LOW VOLTAGE
MAX	MAXIMUM
MAG.S	MAGNETIC STARTER
M/C	MOMENTARY CONTACT
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDC	MAIN DISTRIBUTION CENTER
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MFS	MAIN FUSED DISCONNECT SWITCH
MH	MANHOLE
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MMS	MANUAL MOTOR STARTER
MOA	MULTIOUTLET ASSEMBLY
MSP	MOTOR STARTER PANELBOARD
MSBD	MAIN SWITCHBOARD
MT	MOUNT
MT.C	EMPTY CONDUIT
MTS	MANUAL TRANSFER SWITCH
MTR	MOTOR, MOTORIZED
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFDS	NON-FUSED SAFETY DISCONNECT SWITCH
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
N.O.	NORMALLY OPEN
NPF	NORMAL POWER FACTOR
NTS	NOT TO SCALE
OH	OVERHEAD
OL	OVERLOADS
PA	PUBLIC ADDRESS
PB	PULL BOX OR PUSHBUTTON
PE	PNEUMATIC ELECTRIC
PED	PEDESTAL
PF	POWER FACTOR
PH	PHASE
PIV	POST INDICATING VALVE
PNL	PANEL
PP	POWER POLE
PR	PAIR
PRI	PRIMARY
PROJ	PROJECTION
PRV	POWER ROOF VENTILATOR
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE (CONDUIT)
PWR	POWER
QUAN	QUANTITY
RCPT	RECEPTACLE
REQD	REQUIRED
RM	ROOM
RSC	RIGID STEEL CONDUIT
RTU	ROOF TOP UNIT
SC	SURFACE CONDUIT
SEC	SECONDARY
SHT	SHEET
SIM	SIMILAR
S/N	SOLID NEUTRAL
SPEC	SPECIFICATION
SPKR	SPEAKER
SP	SPARE
SR	SEE RISER
SS	STAINLESS STEEL
SSW	SELECTOR SWITCH
S/S	STOP/START PUSHBUTTONS
STA	STATION
STD	STANDARD
SURF	SURFACE MOUNTED
SW	SWITCH
SWBD	SWITCHBOARD
SYM	SYMMETRICAL
SYS	SYSTEM
TEL	TELEPHONE
TEL/DATA	TELEPHONE/DATA
TERM	TERMINAL
TL	TWIST LOCK
TR	TAMPER RESISTANT
T-STAT	THERMOSTAT
TTC	TELEPHONE TERMINAL CABINET
TV	TELEVISION
TVTC	TELEVISION TERMINAL CABINET
TYP	TYPICAL
UC	UNDER COUNTER
UE	UNDERGROUND ELECTRICAL
UG	UNDERGROUND
UH	UNIT HEATER
UT	UNDERGROUND TELEPHONE
UTIL	UTILITY
UV	UNIT VENTILATOR OR ULTRAVIOLET
V	VOLT
VA	VOLT-AMPERES
VDT	VIDEO DISPLAY TERMINAL
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
W	WATT
W/	WITH
WG	WIRE GUARD
WH	WATER HEATER
W/O	WITHOUT
WP	WEATHERPROOF
XFMR	TRANSFORMER
XFR	TRANSFER

∠	ANGLE
@	AT
△	DELTA
'	FEET
"	INCHES
#	NUMBER
Ø	PHASE
C	CENTER LINE
P	PLATE

SYMBOL SCHEDULE POWER

SYMBOL	DESCRIPTION
	WIRING SYSTEM CONCEALED IN WALL OR CEILING. WHEN SHOWN, CROSS LINES INDICATE NUMBER OF WIRES. (GROUND WIRES ARE NOT SHOWN)
	WIRING SYSTEM CONCEALED IN OR UNDER SLAB OR UNDERGROUND.
	WIRING SYSTEM EXPOSED.
	CONDUIT TURNED DOWN TO FLOOR BELOW.
	CONDUIT TURNED UP TO FLOOR ABOVE.
	BRANCH CIRCUIT HOMERUN TO PANEL.

SYMBOL SCHEDULE POWER LEGEND

SYMBOL	DESCRIPTION
	JUNCTION BOX WITH CONNECTION TO EQUIPMENT SERVED. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
	208/120V SINGLE PHASE PANELBOARD. SEE SCHEDULE FOR MOUNTING. TOP OF PANEL AT 6'-6" AFF.
	208Y/120V THREE PHASE PANELBOARD. SEE SCHEDULE FOR MOUNTING. TOP OF PANEL AT 6'-6" AFF.
CLNG	DUPLEX RECEPTCLE CEILNG MOUNT
	SPECIAL OUTLET. SEE PLANS.
	FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED. UNSHADED INDICATES NON-FUSED.
XX-1 0.3 hp	COIL GARAGE DOOR WALL MOUNT CONNECTION TO MOTOR. STARTER PROVIDED BY OTHERS UNLESS OTHERWISE NOTED. NUMBER INDICATES HORSEPOWER.

NFPA FIRE ALARM LEGEND

SYMBOL	DESCRIPTION
FACP	VOICE EVACUATION FIRE ALARM CONTROL PANEL
FAC	FIRE ALARM COMMUNICATOR
FATC	FIRE ALARM TERMINAL CABINET
WF	SPRINKLER FLOW SWITCH
VS	VALVE SUPERVISORY SWITCH
M	ADDRESSABLE INPUT MONITOR
X	GAS DETECTOR 'CO' CARBON MONOXIDE DETECTOR
	HEAT DETECTOR/SENSOR. X=TYPE
F	PULLSTATION/FIRE ALARM
	SMOKE DETECTOR/SENSOR (DEFAULT PHOTOELECTRIC TYPE)
15cd	ADA COMPLIANT WALL MOUNTED FIRE ALARM SPEAKER WITH STROBE LIGHT, 15CD UNLESS OTHERWISE NOTED. WHITE FINISH.
15cd	FIRE ALARM STROBE (CANDELAS), WHITE FINISH
	FIRE ALARM SPEAKER ONLY, WHITE FINISH
15cd	FIRE ALARM SPEAKER W/STROBE (CANDELAS), WHITE FINISH

SPECIAL SYSTEMS LEGEND

SYMBOL	DESCRIPTION
TV	DISPLAY. PROVIDE QUANTITY OF CATEGORY 6A CABLES AS INDICATED BY SUBSCRIPT. REFER TO ELECTRICAL DRAWINGS FOR RECESSED WALL BOX AND CONDUIT REQUIREMENTS.
S	FLUSH-MOUNTED CEILING SPEAKER.
S	INTERCOM SPEAKER, WALL MOUNT
S	WALL-MOUNTED SPEAKER,3/4" CONDUIT TO LOCAL CABLE TRAY
S WP	EXTERIOR WEATHERPROOF SPEAKER;3/4" CONDUIT TO LOCAL CABLE TRAY PROVIDE WEATHERPROOF J-BOX

EM./LS LIGHTING FIXTURE SYMBOLS AND DEVICES

SYMBOL	DESCRIPTION
	LED FIXTURE WITH EMERGENCY BATTERY. PROVIDE 1100 LUMEN INVERTER RATED FOR 90 MINUTE OPERATION. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE, EMERGENCY DEVICE SHALL SUPPLEMENT FIXTURE.

LIGHTING FIXTURES SYMBOLS AND DEVICES...

SYMBOL	DESCRIPTION
S	SINGLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER AH 1221, OR EQUAL BY HUBBELL, LEVITON AND PASS & SEYMOUR.
^{3}	THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, OR EQUAL BY HUBBELL, LEVITON AND PASS & SEYMOUR.
^{4}	FOUR WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1224 OR EQUAL.
^{K}	KEY OPERATED SWITCH
^{T}	2-HR TIMER SWITCH, 20 AMP, 120/277 VOLT, EQUAL TO INTERMATIC FF SERIES
OCC	CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY. SENSOR SWITCH CM PDT 10, WATT STOPPER #DT-300, COOPER OAC-DT OR EQUAL.
OTC	WALL MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY. SENSOR SWITCH WV- PDT, WATT STOPPER #DT-200, LEVITON, GREENGATE OR EQUAL. CONICAL PATTERN, MOUNT AS CLOSE TO CORNER OF ROOM AS POSSIBLE. MOUNT 10' AFF OR 6" BELOW CEILING (IF LOWER THAN 10':)
^{OC}	WALL MOUNTED OCCUPANCY SENSOR AND SWITCH. INFRARED TECHNOLOGY WITH NEUTRAL, 120/277V RATED. WATT STOPPER #WS-250, OR EQUAL BY SENSOR SWITCH, AND LEVITON.
PC	PHOTO CONTROL, EXTERIOR, MOUNT FACING NORTH.
^{LV}	LOW VOLTAGE MOMENTARY SWITCH. REFERENCE DETAIL.
P	CEILING MOUNTED OCCUPANCY SENSOR POWER PACK. SENSOR SWITCH PP-20, WATT STOPPER #BZ-100, COOPER SP-20, OR EQUAL.

FLR. BOX OUTLETS-FLUSH MOUNT SINGLE DUPLE...

SYMBOL	DESCRIPTION

FLR. BOX OUTLETS-REC. FLUSH MOUNT SYMBOL...

SYMBOL	DESCRIPTION

SECURITY DEVICES SYMBOL LEGEND - ELECTRICAL

SYMBOL	DESCRIPTION
	CEILING MOUNTED CAMERA. CAMERA PROVIDED AND INSTALLED BY OTHERS. PROVIDE 4" SQUARE JUNCTION BOX, AND 1" CONDUIT TO CABLE TRAY.
	WALL MOUNTED CAMERA. CAMERA PROVIDED AND INSTALLED BY OTHERS. PROVIDE 4" SQUARE JUNCTION BOX, AND 1" CONDUIT TO CABLE TRAY.
CR	CARD READER, MINIMUM 1/2" CONDUIT. PROVIDE SINGLE GANG JUNCTION BOX AND PULL STRING. SEE CARD READER DETAIL FOR ADDITIONAL REQUIREMENTS OF PATHWAYS AND CABLING.

TELECOM LEGEND - ELECTRICAL

SYMBOL	DESCRIPTION
#	DATA OUTLET ABOVE COUNTER OR HEIGHT SPECIFIED. MINIMUM 1 1/4" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. SUBSCRIPT NEXT TO OUTLET INDICATES HEIGHT OR DATA DROPS. WHERE NO HEIGHT SHOWN, MOUNT 6" ABOVE COUNTER TOP. IF CABLE QUANTITY AND SERVICE ARE NOT IDENTIFIED, THEN PATHWAY ONLY OR REFER TO TO TECHNOLOGY DRAWINGS FOR CABLE AND ACTIVATION TYPE.
#	DATA OUTLET ABOVE COUNTER OR HEIGHT SPECIFIED. MINIMUM 1 1/4" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. SUBSCRIPT NEXT TO OUTLET INDICATES HEIGHT OR DATA DROPS. WHERE NO HEIGHT SHOWN, MOUNT 6" ABOVE COUNTER TOP. IF CABLE QUANTITY AND SERVICE ARE NOT IDENTIFIED, THEN PATHWAY ONLY OR REFER TO TO TECHNOLOGY DRAWINGS FOR CABLE AND ACTIVATION TYPE.
#	DATA OUTLET. MINIMUM 1 1/4" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. SUBSCRIPT NEXT TO OUTLET INDICATES DATA DROPS. IF CABLE QUANTITY AND SERVICE ARE NOT IDENTIFIED, THEN PATHWAY ONLY OR REFER TO TO TECHNOLOGY DRAWINGS FOR CABLE AND ACTIVATION TYPE.
P #	TELEPHONE OUTLET ABOVE COUNTER OR HEIGHT SPECIFIED. MINIMUM 1 1/4" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. SUBSCRIPT NEXT TO OUTLET INDICATES HEIGHT OR DATA DROPS. WHERE NO HEIGHT SHOWN, MOUNT 6" ABOVE COUNTER TOP. IF CABLE QUANTITY AND SERVICE ARE NOT IDENTIFIED, THEN PATHWAY ONLY OR REFER TO TO TECHNOLOGY DRAWINGS FOR CABLE AND ACTIVATION TYPE.
P #	TELEHONE AND DATA OUTLET ABOVE COUNTER OR HEIGHT SPECIFIED. MINIMUM 1 1/4" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. SUBSCRIPT NEXT TO OUTLET INDICATES HEIGHT OR DATA DROPS. WHERE NO HEIGHT SHOWN, MOUNT 6" ABOVE COUNTER TOP. IF CABLE QUANTITY AND SERVICE ARE NOT IDENTIFIED, THEN PATHWAY ONLY OR REFER TO TO TECHNOLOGY DRAWINGS FOR CABLE AND ACTIVATION TYPE.
#	TELEPHONE AND DATA OUTLET. MINIMUM 1 1/4" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. SUBSCRIPT NEXT TO OUTLET INDICATES DATA DROPS. IF CABLE QUANTITY AND SERVICE ARE NOT IDENTIFIED, THEN PATHWAY ONLY OR REFER TO TO TECHNOLOGY DRAWINGS FOR CABLE AND ACTIVATION TYPE.
WAP	STRUCTURE MOUNTED JUNCTION BOX FOR WIRELESS ACCESS POINT IN OPEN CEILING APPLICATIONS. 4" SQUARE BOX WITH A TWO-GANG OPENING. STUB 1" EC FROM BOX TO J-HOOKS OR CABLE TRAY ABOVE ACCESSIBLE CEILING. PROVIDE CABLING, TERMINATIONS AND FACEPLATE PER SPECIFICATIONS.
TV	SEE TV DETAIL FOR TYPE AND REQUIREMENTS. MINIMUM 1 1/4" CONDUIT FOR CABLING AND 3/4" CONDUIT FOR POWER. PROVIDE PULL STRING FOR LOW VOLTAGE CABLING TO ACCESSIBLE CEILING.

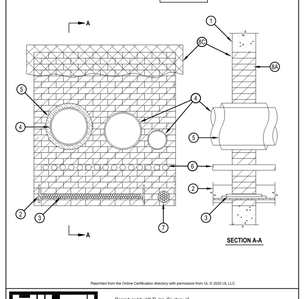
ELECTRICAL SHEET INDEX

SHEET NUMBER	SHEET NAME
E832	ELECTRICAL DETAILS - LIGHTING
E-001	ELECTRICAL LEGEND AND NOTES
E-002	PENTRATION DETAILS
E-003	ELECTRICAL DETAILS
E-004	LIGHTING DETAILS
E-005	ELECTRICAL DETAILS
E-006	ELECTRICAL DETAILS
E-007	LIFE SAFETY DETAILS
E-050	ELECTRICAL SITE PLAN (BASE BID)
E-101	ELECTRICAL PRACTICE FIELDS (BASE BID)
E-120	ELECTRICAL SITE PLAN (ADD ALT #2)
E-130	ELECTRICAL SITE PLAN - TENNIS COURTS (ADD ALT #3)
E-201	POWER PLAN - FIELD HOUSE (BASE BID)
E-202	POWER PLAN - BASEBALL FIELD (BASE BID)
E-203	POWER PLAN - SOFTBALL FIELD (BASE BID)
E-204	POWER PLAN - RESTROOM & STORAGE MAINTENANCE (BASE BID)
E-211	POWER PLAN - WEIGHT ROOM (ADD ALT 1)
E-220	POWER PLAN - BASEBALL AND SOFTBALL FIELD ACCESSORY BUILDINGS (ADD ALT #2)
E-251	POWER PLAN - GREENHOUSE (ADD ALT #5)
E-260	POWER PLAN - FOOTBALL FIELD (ADD ALT #6)
E-263	POWER PLAN - CONCESSION (ADD ALT #6)
E-264	POWER PLAN - FOOTBALL PRESS BOX (ADD ALT #6)
E-701	POWER RISER DIAGRAM AND SCHEDULES
E-702	PANEL SCHEDULES
E-703	PANEL SCHEDULES
E-704	PANEL SCHEDULES
E-705	MECHANICAL EQUIPMENT CONNECTION SCHEDULE
E-800	LIGHTING FIXTURE SCHEDULE
E-801	SPORTS FIELD PHOTOMETRIC 1
E-802	SPORTS FIELD PHOTOMETRIC 2
E-803	SPORTS FIELD PHOTOMETRIC 3
E-804	SPORTS FIELD PHOTOMETRIC 4
E-805	SPORTS FIELD PHOTOMETRIC 5
E-806	SPORTS FIELD PHOTOMETRIC 6
E-807	SPORTS FIELD PHOTOMETRIC 7
E-808	SPORTS FIELD PHOTOMETRIC 8
E-809	BASEBALL ACCESSORY BUILDING PHOTOMETRIC 9
E-810	FIELD HOUSE PHOTOMETRIC 10
E-811	CONCESSIONS RESTROOM PHOTOMETRIC 11

**HAMPTON COUNTY HI

System No. WJ-8007

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 4 Hr	F Rating — 4 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Rating — 4 Hr
	FTH Rating — 0 Hr



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January 04, 2012

Hilti Firestop Systems

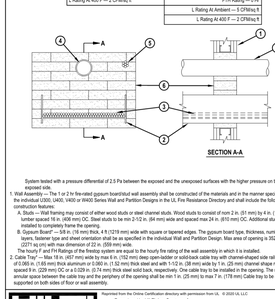
1. Wall Assembly — Min 7-5/8 in. (194 mm) thick wall assembly constructed of any UL Classified Concrete Blocks*. Max area of opening is 2496 in. sq. (161 m2) with max dimension of 52 in. (1321 mm).
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Cable Tray* — Max 36 in. (914 mm) wide by 6 in. (152 mm) deep open-ladder cable tray with channel-shaped side rails formed of 0.067 in. (1.7 mm) thick aluminum and with 1-1/2 in. (38 mm) wide by 3/4 in. (19 mm) deep channel shape rungs spaced 9 in. (229 mm) OC. One cable tray to be installed in the opening. The max annular space between the cable tray and the periphery of the opening shall be min 1 in. (25 mm) to max 4-1/2 in. (114 mm). The cable tray to be rigidly supported on both sides of wall assembly.
3. Cables — Aggregate cross-sectional area of cables in cable tray to be max 40 percent of the cross-sectional area of the cable tray based on a max 6 in. (152 mm) cable loading depth within the cable tray. Any combination of the following types and sizes of cables may be used:
   A. 300 pair — No. 24 AWG telephone cable with polyvinyl chloride (PVC) insulation and PVC jacket.
   B. 1C - 500 kcmil with thermoplastic insulation and nylon jacket.
   C. 24 fiber optic cable with polyvinyl chloride (PVC) outer and subunit jacket.
   D. 7C No. 12 AWG cable with polyvinyl chloride (PVC) insulation and PVC jacket.
4. Through Penetrants — One or more pipes or tubes to be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and types and sizes of the penetrants. Any combination of the penetrants listed below may be used provided that the following parameters relative to the annular spaces and the spacings between the pipes are maintained. The space between pipes, conduits or tubing and the periphery of the opening and the pipes or conduits shall be min 0 in. (0 mm) to max 4-1/2 in. (114 mm). Pipe, conduit or tubing to be rigidly supported on both sides of the wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. Steel Pipe — Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe.
   C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or steel conduit.
   D. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.
5. Pipe Covering* — Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (3.5 pcf or 56 kg/m3) glass fiber units jacketed of the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
   See Pipe and Equipment Covering and Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
   3A. Metal Jacket — (Not Shown) — Required when pipe covering (Item 5) is used. Min 6 in. (152 mm) long jacket formed of min 0.010 in. (0.25 mm) thick steel sheet cut to wrap tightly around the pipe insulation with a min 2 in. (51 mm) lap. Jacket secured with min 1/2 in. (13 mm) wide stainless steel hose clamp located at the center of the jacket. Jacket to be installed on both surfaces of wall and recessed into the opening 1 in. (25 mm).
6. Conduit — Nom 2 in. (51 mm) diam steel electrical metallic tubing or steel conduit. A max of thirteen conduit or tubing to be installed within the opening. The space between adjacent conduits or tubing shall be 1-1/8 in. (28 mm). The space between conduits or tubing and the periphery of the opening shall be min 1-1/8 in.(28 mm) to max 2-1/2 in. (64 mm). The space between conduits or tubing and other types of penetrating items shall be min 4-1/2 in.(114 mm) to max 4-3/4 in. (121 mm). Conduit or tubing to be rigidly supported on both sides of the wall assembly.

7. Cables — Max 4 in. (102 mm) diam tight bundle. The space between the bundle and adjacent penetrating items shall be min 2 in. (51 mm) to 6 in. (152 mm) max and between the periphery of the opening and the bundle shall be min 1-1/2 in. (38 mm) and 2-1/4 in. (57 mm) max. Cable bundle to be rigidly supported on both sides of the wall assembly. Any combination of the following types and sizes of cables may be used.
   A. 300 pair — No. 24 AWG telephone cable with polyvinyl chloride (PVC) insulation and PVC jacket.
   B. 24 fiber optic cable with polyvinyl chloride (PVC) outer and subunit jacket.
   C. 7C No. 12 AWG cable with polyvinyl chloride (PVC) insulation and PVC jacket.
   D. RG/U59 coaxial cable with polyvinyl chloride (PVC) insulation and PVC jacket.
   E. 2C No. 10 AWG cable with ground with polyvinyl chloride (PVC) insulation and PVC jacket.
   F. Three 1/C No. 18 AWG wire with polyvinyl chloride (PVC) insulation in a nom 3/4 in. flexible metal conduit.
8. Firestop System — The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material* — Fill opening with sufficient thickness of mineral wool batt insulation firmly packed into opening and completely fill the entire opening. Either one or a combination of the block types specified below may be used.
      HILTI CONSTRUCTION CHEMICALS, DIV OF
      HILTI INC — FS 657 Fire Block or CFS-BL Firestop Block
   B. Fill, Void or Cavity Material* — Fill material to be forced into interstices of cables, between cables and cable tray, between the penetrants and the Fire Blocks and in obvious openings between blocks, and between blocks and the periphery of the opening to the max extent possible on both surfaces of wall.
      HILTI CONSTRUCTION CHEMICALS, DIV OF
      HILTI INC — FS-ONE Sealant or CP 618 Putty Stick
   C. Wire Mesh — When the annular space exceeds 4 in. (102 mm) to the periphery, a nom 2 sq. in. (12.9 cm2) wire fencing shall be used to keep the blocks in place. The wire fencing is fabricated from min No. 16 BWG (0.060 in.) galv steel wire. The wire is cut to fit the contour of the penetrating item with a min 3 in. (76 mm) lap beyond the periphery of the opening. Wire fencing secured to both surfaces of the wall assembly by means of 1/4 in. (6 mm) diam by 4-3/16 in. (106 mm) long hollow wall anchors and 1/4 in. (6 mm) by 1-1/2 in. (38 mm) diam fender washers spaced max 8 in. (203 mm) OC.

*Bearing the UL Classification Mark

System No. W-L-8013

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient — 5 CFM/sq ft	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating At 400 F — 2 CFM/sq ft	FTH Rating — 0 Hr
	L Rating At Ambient — 5 CFM/sq ft
	L Rating At 400 F — 2 CFM/sq ft



System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

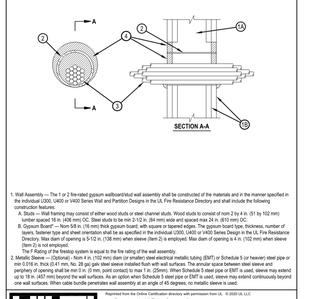
1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, W400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. Additional studs required at openings per UL design.
   B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (1219 mm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max area of opening is 352 sq in. (2271 sq cm) with max dimension of 22 in. (559 mm) wide.
   The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.
2. Cable Tray* — Max 18 in. (457 mm) wide by 4 in. (102 mm) deep open-ladder or solid-back cable tray with channel-shaped side rails formed of 0.060 in. (1.65 mm) thick aluminum or 0.060 in. (1.52 mm) thick steel and with 1-1/2 in. (38 mm) wide by 1 in. (25 mm) channel shape rungs spaced 9 in. (229 mm) OC or a 0.029 in. (0.74 mm) thick steel solid back, respectively. One cable tray to be installed in the opening. The max annular space between the cable tray and the periphery of the opening shall be min 1 in. (25 mm) to max 7 in. (178 mm) Cable tray to be rigidly supported on both sides of floor or wall assembly.

3. Cables — Aggregate cross-sectional area of cables in cable tray to be max 30 percent of the cross-sectional area of the cable tray. Any combination of the following types and sizes of cables and copper conductor cables may be used:
   A. 7C No. 12 AWG with polyvinyl chloride (PVC) insulation and PVC jacket.
   B. 100 pair — No. 24 AWG cable with PVC insulation and jacket.
   C. 1C, 750 kcmil (or smaller) with PVC insulation and jacket.
4. Through-Penetrants — One or more pipes or tube to be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and types and sizes of the penetrants. Any combination of the following penetrants may be used provided that the following parameters relative to the annular spaces and the spacings between the pipes are maintained. The space between the pipe or tube and the periphery of the opening shall be min 1-1/2 in. (38 mm) to max 6-1/4 in. (205 mm). Pipe or tube to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of non-metallic or metallic pipes, or tubes may be used:
   A. Polyvinyl Chloride (PVC) Pipe — Max 3 in. (76 mm) diam Schedule 40 solid core PVC pipe (or smaller) for use in closed (process or supply) or vented (drain, waste or vent) piping system.
   B. Steel Pipe — Max 6 in. (152 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
   C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or 6 in. (152 mm) diam steel conduit.
   D. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper tube.
   E. Copper Tube — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tube.
5. Pipe Covering* — Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (3.5 pcf or 56 kg/m3) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
   See Pipe and Equipment Covering and Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
6. Cables — Max 1-1/2 in. (38 mm) diam tight bundle of cables installed within the opening and rigidly supported on both surfaces of wall. The space between the cables and periphery of the opening shall range from 1-3/16 in. (30.2 mm) min to a max of 1-1/2 in. (38 mm). Any combination of the following types and sizes of cables may be used:
   A. 7C No. 12 AWG with polyvinyl chloride (PVC) insulation and jacket.
   B. 25 pair — No. 24 AWG cable with PVC insulation and jacket.
   C. 1C, 500 kcmil with thermoplastic insulation and nylon jacket.
   D. 24 fiber optic cable with PVC sub unit and outer jacket.
7. Firestop System — The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material* — Fire Blocks For walls Incorporating max 5-5/8 in. (92 mm) steel studs or max 2.(51 mm) by 4 in. (102 mm) wood studs, fire block installed with 5 in. (127 mm) dimension projecting through and centered in opening. For walls constructed of larger steel or wood studs, fire block installed with long dimension passing through and centered in opening. Blocks may or may not be cut flush with both surfaces of wall. When multiple layers of gypsum board are used, blocks may be recessed 1/2 in. (13 mm) from surface of wall. Blocks to be firmly packed in opening. Either one or a combination of the block types specified below may be used.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS 657 Fire Block or CFS-BL Firestop Block
   B. Fill, Void or Cavity Material* — Sealant or Putty - Fill material to be forced into interstices of cables, between cables and cable trays, around sleeves and where obvious voids are observed to max extent possible on both surfaces of the penetration.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant, CP 618 Putty Stick or CP620 Fire Foam

*Bearing the UL Classification Mark

System No. W-L-3065

F Ratings — 1 and 2 Hr (See Item 1)
T Rating — 0 and ¼ Hr (See Item 3)



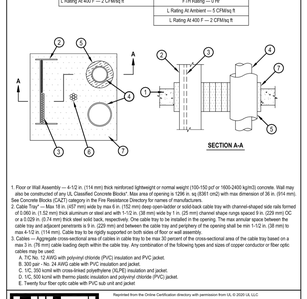
1. Wall Assembly — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
   B. Gypsum Board* — Two layers of nom 5/8 in. (16 mm) thick gypsum board, with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 5-1/2 in. (138 mm) when sleeve (Item 2) is employed. Max diam of opening is 4 in. (102 mm) when sleeve (Item 2) is not employed.
   The F Rating of the firestop system is equal to the fire rating of the wall assembly.
2. Metallic Sleeve — (Optional) - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or Schedule 5 (or heavier) steel pipe or min 0.016 in. thick (0.41 mm), No. 28 galv galv steel sleeve installed flush with wall surfaces. The annular space between steel sleeve and periphery of opening shall be min 0 in. (0 mm) point contact to max 1 in. (25mm). When Schedule 5 steel pipe or EMT is used, sleeve may extend up to 18 in. (457 mm) beyond the wall surfaces. As an option when Schedule 5 steel pipe or EMT is used, sleeve may extend continuously beyond one wall surface. Metallic cable bundle penetrates wall assembly at an angle of 45 degrees, no metallic sleeve is used.

3. Cables — Aggregate cross-sectional area of cable in opening to be max 45 percent of the cross-sectional area of the opening. The annular space between the cable bundle and the periphery of the opening to be min 0 in. (0 mm, point contact) to max 1 in. (25 mm) Cables to be rigidly supported on both sides of the wall assembly. Cable bundle, using cables described below, may penetrate the wall at an angle not greater than 45 degrees. Any combination of the following types and sizes of copper conductor cables may be used:
   A. Max TC No. 12 AWG with polyvinyl chloride (PVC) insulation and jacket.
   B. Max 25 pair — No. 24 AWG cable with PVC insulation and jacket.
   B1. Max 4 pr No. 22 AWG Cat 5 or 6 computer cables.
   C. Type RG/U coaxial cable with polyethylene (PE) insulation and PVC jacket having a max outside diameter of ¼ in. (13 mm).
   C1. Max RG 6/U coaxial cable with fluorinated ethylene propylene insulation and jacketing.
   D. Multiple fiber optical communication cable jacketed with PVC and having a max OD of 5/8 in. (16 mm).
   E. Through Penetrating Products* — Max three copper conductor No. 8 AWG. Metal-Clad Cable*.
   AFC CABLE SYSTEMS INC
   F. Max 3C AWG with ground (or smaller) No. 8 AWG copper conductor cable with PVC insulation and jacketing.
   G. Max 3/4 in. (19 mm) diam copper ground cable with or without a PVC jacket.
   H. Fire Resistive Cables* - Max 1-1/4 in. (32 mm) diam single conductor or multi-conductor Type MI cable. A min 1/8 in. (3 mm) separation shall be maintained between MI cables and any other types of cable.
   I. Max 2C AWG with ground 300 kcmil (or smaller) aluminum SER cable with PVC insulation and jacket.
   J. Through Penetrating Product* - Any cables, Metal-Clad Cable* or Armored Cable* currently Classified under the Through Penetrating Product (XHJI) category.
   K. Maximum 3C No. 8 AWG metal-clad cables.
   L. Maximum 5/8 diam fiber-optic cable with PVC jacket.
   For cable bundle penetrating the wall assembly at an angle of 45 degrees, the T rating is ¼ hr for a 2 hr wall assembly.
   See Through Penetrating Product (XHJI) category in the Fire Resistance Directory for names of manufacturers.
4. Fill, Void or Cavity Material* — Sealant or Putty — Fill material applied within the annulus, flush with each end of the steel sleeve or wall surface. Fill material installed symmetrically on both sides of the wall. A min 5/8 in. (16 mm) thickness of sealant is required for the 1 or 2 hr F Rating . An additional 1/2 in. (13 mm) diam bead of fill material shall be applied around the perimeter of sleeve on both sides of the wall when sleeve extends beyond surface of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP601S, CP606, FS-One Sealants or CP618 Putty

*Bearing the UL Classification Mark
*Bearing the UL Listing Mark

System No. C-AJ-8056

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 3 Hr	F Rating — 3 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At 400 F — 2 CFM/sq ft	FH Rating — 3 Hr
	FTH Rating — 0 Hr
	L Rating At Ambient — 5 CFM/sq ft
	L Rating At 400 F — 2 CFM/sq ft

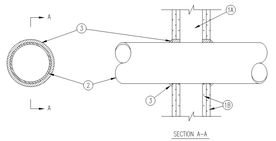


1. Floor or Wall Assembly — 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max area of opening is 1296 in. sq (8361 cm2) with max dimension of 36 in. (914 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Cable Tray* — Max 18 in. (457 mm) wide by max 6 in. (152 mm) deep open-ladder or solid-back cable tray with channel-shaped side rails formed of 0.060 in. (1.52 mm) thick aluminum or steel and with 1-1/2 in. (38 mm) wide by 1 in. (25 mm) channel shape rungs spaced 9 in. (229 mm) OC, or a 0.029 in. (0.74 mm) thick steel solid back, respectively. One cable tray to be installed in the opening. The max annular space between the cable tray and the periphery of the opening shall be min 1 in. (25 mm) to max 4-1/2 in. (114 mm). The cable tray to be rigidly supported on both sides of floor or wall assembly.
3. Cables — Aggregate cross-sectional area of cables in cable tray to be max 30 percent of the cross-sectional area of the cable tray based on a max 3 in. (76 mm) cable loading depth within the cable tray. Any combination of the following types and sizes of copper conductor or fiber optic cables may be used:
   A. 7C No. 12 AWG with polyvinyl chloride (PVC) insulation and PVC jacket.
   B. 300 pair - No. 24 AWG cable with PVC insulation and jacket.
   C. 1C, 350 kcmil with cross-linked polyethylene (XLPE) insulation and jacket.
   D. 1C, 500 kcmil with thermo plastic insulation and polyvinyl chloride (PVC) jacket.
   E. Twenty four fiber optic cable with PVC sub unit and jacket

4. Through-Penetrants — One or more pipe, conduit or tube to be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and types and sizes of the penetrants. Any combination of the penetrants described below may be used provided that the following parameters relative to the annular spaces and the spacings between the pipes are maintained. The space between pipes, conduits or tubing and between the periphery of the opening and the pipes or conduits shall be min 1 in. (25 mm) to max 4-1/2 in. (114 mm). Pipe, conduit or tube to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. Nom 6 in. (152 mm) diam (or smaller) rigid galv steel conduit.
   B. Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
   C. Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
   D. Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tube.
   E. Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   F. Nom 6 in. (152 mm) diam (or smaller) cast or ductile iron pipe.
5. Pipe Covering* — Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
   See Pipe and Equipment Covering and Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
6. Cables — Max 2 in. (51 mm) diam tight bundle of cables centered in opening and rigidly supported on both surfaces of floor and wall. Any combination of the following types and sizes of cables may be used:
   A. 7C No. 12 AWG with polyvinyl chloride (PVC) insulation and PVC jacket.
   B. 25 pair - No. 24 AWG cable with PVC insulation and jacket.
   C. 2C No. 10 AWG with PVC insulation and jacket.
   D. 3C No. 8 AWG aluminum clad cable with cross-linked polyethylene (XLPE) insulation and PVC jacket.
   E. Type RC - 62 A/U coaxial cable with air core and PVC jacket.
   F. 1C, 500 kcmil with PVC jacket and nylon jacket.
7. Firestop System — The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material* — Fire blocks installed with long dimension passed through the opening and centered within the thickness of the floor or wall. Blocks to be firmly packed and completely fill the entire area and thickness of opening. Either one or a combination of the block types specified below may be used.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS 657 -Fire Block or CFS-BL Firestop Block
   B. Fill, Void or Cavity Material* — (Not Shown) Fill material to be forced into interstices of cables and between cables and cable trays to max extent possible on both surfaces of the penetration.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant, FS-ONE MAX Intumescent Sealant, or CP618 Firestop Putty Stick (L Rating applies only when FS-One Sealant is used.)
   C. Wire Mesh (Not Shown) — When the annular space exceeds 4-1/2 in. (114 mm) to the periphery, a nom 2 in. sq (51 mm sq.) wire fencing shall be used to keep the blocks in place. The wire fencing is fabricated from min No. 16 BWG (0.060 in.) (1.52 mm) galv steel wire. The wire is cut to fit the contour of the penetrating item with a min 3 in. (76 mm) lap beyond the periphery of the opening. Wire fencing secured to top surface of floor and both surfaces of wall assembly by means of 1/4 in. (6 mm) diam by 3 in. (76 mm) long concrete anchors and 1/4 in. (6 mm) by 1-1/2 in. (38 mm) diam fender washers spaced max 8 in. (203 mm) OC.

System No. W-L-1085

F Rating — 1 and 2 Hr (See Item 1B)
T Rating — 0 Hr
L Rating At Ambient — Less Than 1 CFM/Sq Ft
L Rating At 400 F — 4 CFM/Sq Ft



1. Wall Assembly The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC.
   B. Gypsum Board* 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max diam of circular opening cut through gypsum wallboard on each side of wall assembly to be min 1/4 in. to max 1/2 in. larger than max diam of through penetrant (Item 2). The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

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FIRESTOP SYSTEMS

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November 24, 1999

2. Through Penetrants One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The annular space between the through-penetrant and the periphery of the opening shall be min 0 in. to max 1/4 in. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. Steel Pipe Nom 12 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe Nom 12 in. diam (or smaller) cast or ductile iron pipe.
   C. Conduit Nom 6 in. diam (or smaller) steel electrical metallic tubing or steel conduit.
   D. Copper Tubing Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.
   E. Copper Pipe Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.
3. Fill, Void or Cavity Material* — Sealant Fill material to be forced into the annulus to maximum extent possible. Additional fill material to be installed such that a min 1/2 in. crown is formed around the penetrating item and lapping 1/4 in. beyond the periphery of the opening.
   HILTI CONSTRUCTION CHEMICALS, DIV OF
   HILTI INC — FS-One Sealant
*Bearing the UL Classification Marking

FIRESTOP SYSTEMS

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November 24, 1999

System No. W-L-8004

F Rating — 2 Hr
T Rating — 1/4 Hr

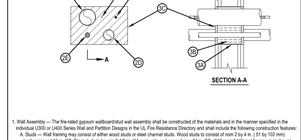
1. Wall Assembly — The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. Additional framing (not shown) may be installed around the perimeter of the opening in lieu of the steel wire mesh (Item No. 3A).
   B. Gypsum Board* — Two layers of nom 5/8 in. (16 mm) thick gypsum wallboard, as specified in the individual Wall and Partition Design. Max area of opening is 96 sq in. (992 cm2) with max dimension of 12 in. (305 mm) Max width of opening in wood stud walls is limited to 12 in. (305 mm).
2. Through Penetrants — The following types and sizes of pipes, conduits, tubing or cables may be used:
   A. Nom 3 in. (76 mm) diam (or smaller) electrical metallic tubing (EMT)
   B. Max 25 pair — No. 24 AWG (or smaller) telephone cable with polyvinyl chloride (PVC) insulation and jacket.
   C. Max 3C with ground — No. 10 AWG (or smaller) Type NM cable with PVC insulation and jacket.
   D. Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC pipe for use in closed (process or supply) piping systems only.
   E. Max 300 kcmil (or smaller) power cable with PVC insulation and nylon jacket.
   The through penetrating items to be rigidly supported on both sides of wall assembly and located as shown in the table below:

Item No.	Max Distance Between Adjacent Pen. Item In. (mm)	Min Distance Between Adjacent Pen. Item In. (mm)	Max Distance From Through Opening In. (mm)	Min Distance From Through Opening In. (mm)
2A	7-7/16 (189)	1-1/16 (43)	14-1/2(370)	½ (13 mm)
2B	7-7/16 (189)	1-1/16 (43)&	14-1/2(370)	1/2 (13 mm)
2C	7-7/16 (189)	1-1/16 (43)	14-1/2(370)	1/2 (13 mm)
2D	7-7/16 (189)	1-1/16 (43)	14-1/2(370)	1/2 (13 mm)
2E	7-7/16 (189)	1-1/16 (43)	14-1/2(370)	1-1/2 (32 mm)

3. Firestop System — The firestop system shall consist of the following:
   A. Steel Wire Mesh — No. 8 steel wire mesh having a min 1 in. (25 mm) lap along the longitudinal seam. Length of steel wire mesh to be 4-3/4 in., (120 mm) centered and formed to fit periphery of through opening. Steel wire mesh is not required when additional framing members (Item No. 1A) are used.
   B. Packing Material — Min 4.0 in. (102 mm) thickness of min 3.5 pcf (56 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.
   C. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant
*Bearing the UL Classification Mark

System No. W-L-8004

F Rating — 2 Hr
T Rating — 1/4 Hr



1. Wall Assembly — The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. For W Rating, steel studs to be min 3-5/8 in. (92 mm) wide. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 to 8 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. (51 to 76 mm) clearance is present between the penetrating item and the framing on all four sides.
   B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 20-1/4 in. (819 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls. The F and FH Ratings of the firestop system are equal to the fire rating of the wall assembly. The W Rating is applicable only to 1 hr rated walls.

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January 21, 2020

2. Through-Penetrants — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. to max 2-1/4 in. (57 mm). Pipe may be installed with continuous point contact. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. Steel Pipe — Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
   C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or 6 in. (152 mm) . diam steel conduit.
   D. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
   E. Copper Tube — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.
3. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point or continuous annular space between pipe and wall, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the pipe wall interface on both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

Movement Direction	Penetrant Item	Nominal Penetrant Diameter	Annular Space	Movement	Sealant Depth	F-Rating	L Rating with Movement
Y	2A, 2C*	2 in.	Max 2-1/4 in.	5%	5/8 in.	1 hr	N/A
Z	2A, 2C*	2 in.	2-1/4 in.	0.25 in.	5/8 in.	1 hr	N/A

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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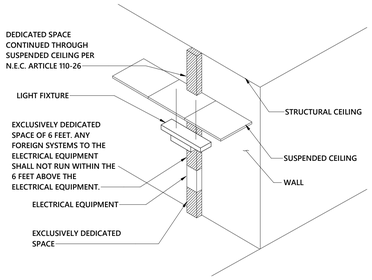
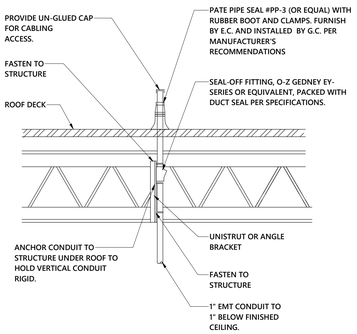


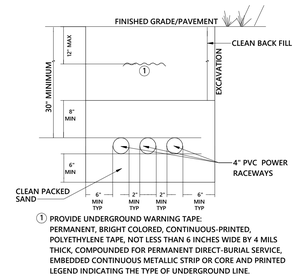
NOTES:

THIS FIGURE ILLUSTRATES THE ADDITIONAL EXCLUSIVELY DEDICATED SPACE REQUIRED OVER AND UNDER THE ELECTRICAL EQUIPMENT FOR THE CABLES, RACEWAYS, ETC., TO AND FROM THE ELECTRICAL EQUIPMENT REQUIRED BY SECTION 11-26 OF THE NATIONAL ELECTRICAL CODE.

5 DEDICATED SPACE FOR ELECTRICAL EQUIPMENT
NO SCALE

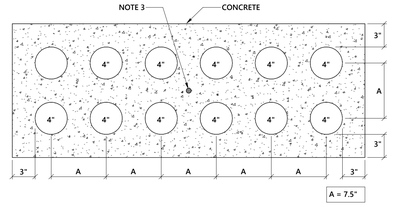


4 ROOF PENETRATION DIAGRAM
NOT TO SCALE



① PROVIDE UNDERGROUND WARNING TAPE: PERMANENT, BRIGHT COLORED, CONTINUOUS-PRINTED, POLYETHYLENE TAPE, NOT LESS THAN 6 INCHES WIDE BY 4 MILS THICK, COMPOUNDED FOR PERMANENT DIRECT-BURIAL SERVICE, EMBEDDED CONTINUOUS METALLIC STRIP OR CORE AND PRINTED LEGEND INDICATING THE TYPE OF UNDERGROUND LINE.

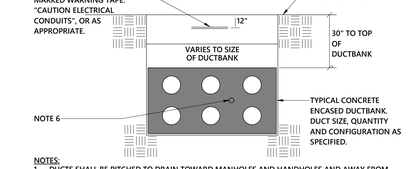
3 DIRECT BURIED RACEWAYS SECTION DETAIL
NO SCALE



DESIGNER NOTE FOR DUCTS LARGER THAN 4":
FOR 5" DUCTS, INCREASE DUCT-TO-DUCT SPACING TO 8".
FOR 6" DUCTS, INCREASE DUCT-TO-DUCT SPACING TO 9".

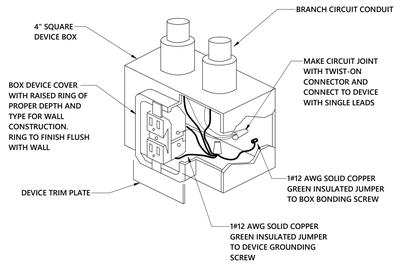
NOTES:
1. SEE "TYPICAL DUCTBANK TRENCH DETAIL" FOR ADDITIONAL REQUIREMENTS.
2. CONDUITS NOT DRAWN TO SCALE.
3. INSTALL 1#2 BARE COPPER GROUND WIRE WITHIN CONCRETE ALONG ENTIRE DUCTBANK LENGTH. EXOTHERMICALLY CONNECT TO GROUND TRIAD RING. THIS GROUND WIRE IS IN ADDITION TO ANY GROUNDED (NEUTRAL) AND GROUNDING CONDUCTORS INDICATED TO BE INSTALLED WITHIN THE CONDUITS. ALTERNATE THE POSITION OF THE GROUND WIRE THROUGH THE DUCT SPACERS TO PREVENT SAG. ELECTRICAL POWER DUCTBANKS ONLY.

2 12-WAY (6Hx2V) DUCTBANK SECTION
NOT TO SCALE

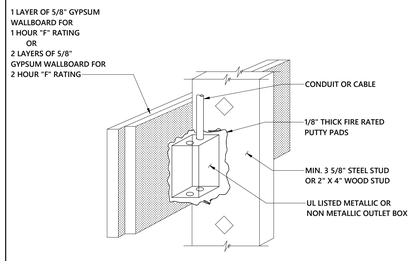


NOTES:
1. DUCTS SHALL BE PITCHED TO DRAIN TOWARD MANHOLES AND HANDHOLES AND AWAY FROM BUILDINGS AND EQUIPMENT AS APPROPRIATE.
2. DUCT SPACERS SHALL BE INSTALLED AND COORDINATED WITH THE DUCT SIZE. SPACING SHALL BE AS REQUIRED BY THE MANUFACTURER AND TO PREVENT SAGGING/DEFORMING OF DUCTS. SPACERS SHALL BE SECURED BY NON-FERROUS MEANS TO PREVENT FLOATING DURING CONCRETE POUR.
3. ALL DUCTS SHALL BE SEALED AT TERMINATIONS WITH APPROVED SEALING COMPOUND AND PLUGS, RATED TO WITHSTAND MINIMUM 15 PSI HYDROSTATIC PRESSURE.
4. ALL DUCTS SHALL BE RODDED, CLEARED AND SWABBED TO REMOVE ALL OBSTRUCTIONS AFTER INSTALLATION AND HAVE A WATERPROOF PULL CORD INSTALLED (130 LB MINIMUM TENSILE TEST). CORD SHALL BE FACTORY MARKED AT MINIMUM ONE FOOT INTERVALS.
5. VIBRATE CONCRETE TO FILL VOIDS.
6. INSTALL 1#2 BARE COPPER GROUND WIRE WITHIN CONCRETE ALONG ENTIRE DUCTBANK LENGTH. EXOTHERMICALLY CONNECT TO GROUND TRIAD RING. THIS GROUND WIRE IS IN ADDITION TO ANY GROUNDED (NEUTRAL) AND GROUNDING CONDUCTORS INDICATED TO BE INSTALLED WITHIN THE CONDUITS. ALTERNATE THE POSITION OF THE GROUND WIRE THROUGH THE DUCT SPACERS TO PREVENT SAG. ELECTRICAL POWER DUCTBANKS ONLY.
7. CONCRETE STRENGTH SHALL BE 3000 PSI @ 28 DAYS MINIMUM.
8. CONCRETE THERMAL RESISTIVITY (RHO) SHALL BE 0.55 m-C/W OR LESS.

1 TYPICAL DUCTWORK TRENCH DETAIL
NOT TO SCALE

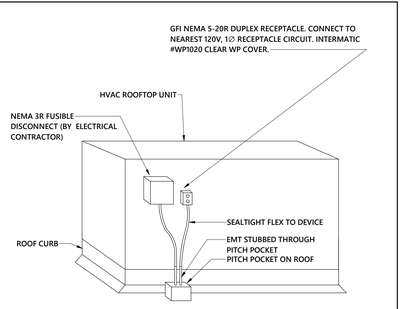


9 RECEPTACLE GROUNDING DETAIL
NO SCALE



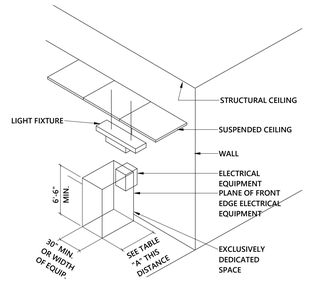
NOTES:
1. REQUIRED FOR METALLIC AND NON-METALLIC ELECTRICAL BOXES EXCEEDING 16 SQ. INCHES IN AREA OR MULTIPLE BOXES SERVING SAME SPACE.
2. REQUIRED FOR BACK TO BACK BOXES IN THE SAME STUD CAVITY.
3. REQUIRED FOR BOXES EXCEEDING 100 SQ INCHES TOTAL IN 100 SQ FEET OF WALL AREA.
4. THE USE OF PUTTY PADS ADHERENCE IS AT THE DISCRETION OF THE LOCAL AUTHORITY HAVING JURISDICTION.
5. REFER TO UL LISTING OF WALL FOR ADDITIONAL RESTRICTIONS OR INFORMATION.

8 WALL OUTLET DETAIL
NOT TO SCALE



NOTE: TYPICAL FOR ROOF MOUNTED HVAC EQUIPMENT.

7 ROOFTOP RECEPTACLE DETAIL
NOT TO SCALE



NOTES:

THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF THE ELECTRICAL EQUIPMENT REQUIRED BY SECTION 110-26 OF THE NATIONAL ELECTRICAL CODE.

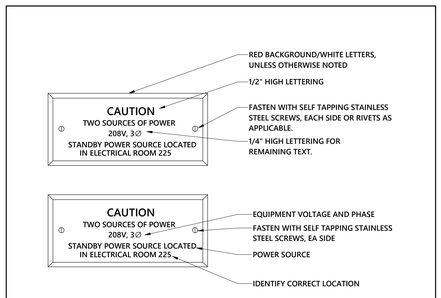
TABLE A - WORKING CLEARANCES

VOLTAGE TO GROUND NOMINAL	MINIMUM CLEAR DISTANCE (FEET) CONDITION:	1	2	3
0 - 150		3	3	3
151 - 600		3	3 1/2	4

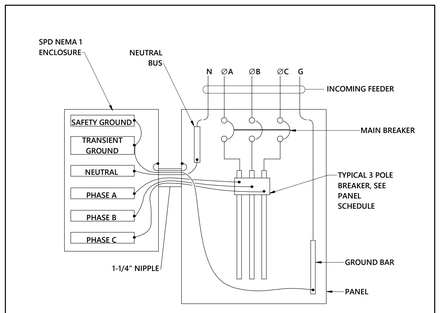
WHERE THE "CONDITIONS" ARE AS FOLLOWS:

1. EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR OTHER INSULATING MATERIALS. INSULATED WIRE OR INSULATED BUSBARS OPERATING AT NOT OVER 300V SHALL NOT BE CONSIDERED LIVE PARTS.
2. EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.
3. EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

6 WORKING CLEARANCE FOR ELECTRICAL EQUIPMENT
NO SCALE

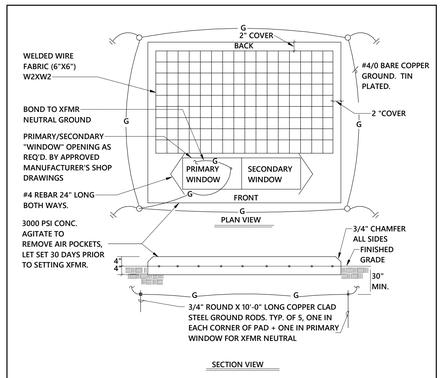


14 EMERGENCY POWER NAMEPLATE
NOT TO SCALE

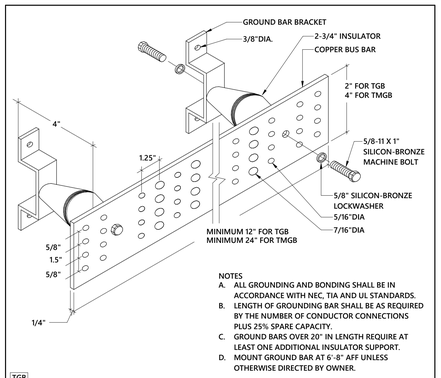


NOTES:
1. ALL WIRING SHALL BE #6 AWG.
2. AVOID SHARP BENDS IN WIRES. ALL WIRE LENGTHS SHALL NOT EXCEED 18" (WHERE POSSIBLE).
3. SEE SPD SPECIFICATION FOR EXACT TYPE FOR LOCATION AS INDICATED ON THE POWER RISER DIAGRAM.

13 SPD CONNECTION DETAIL
NOT TO SCALE



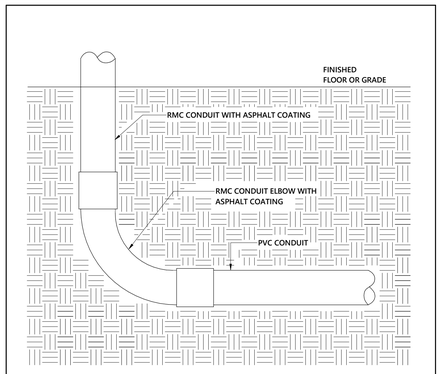
12 TRANSFORMER PAD DETAIL
NOT TO SCALE



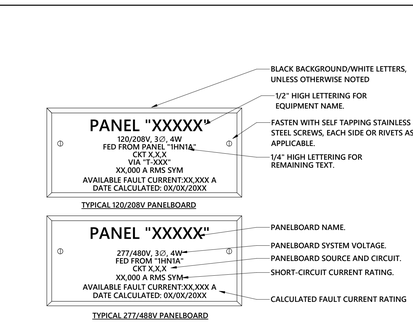
TGB
TMGB

NOTES
A. ALL GROUNDING AND BONDING SHALL BE IN ACCORDANCE WITH NEC, TIA AND UL STANDARDS.
B. LENGTH OF GROUNDING BAR SHALL BE AS REQUIRED BY THE NUMBER OF CONDUCTOR CONNECTIONS PLUS 25% SPARE CAPACITY.
C. GROUND BARS OVER 20" IN LENGTH REQUIRE AT LEAST ONE ADDITIONAL INSULATOR SUPPORT.
D. MOUNT GROUND BAR AT 6'-8" AFF UNLESS OTHERWISE DIRECTED BY OWNER.

11 TELECOMMUNICATIONS GROUNDING BAR DETAIL
NO SCALE



10 CONDUIT TRANSITION DETAIL
NO SCALE

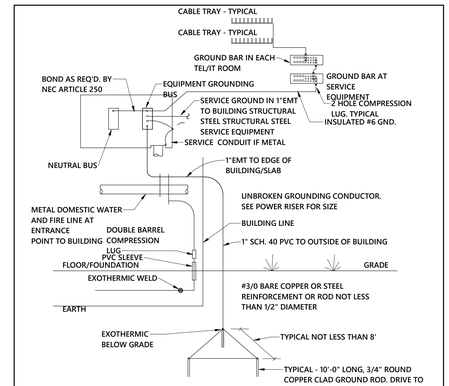


PANELBOARD NAMEPLATES

EQUIPMENT NAMEPLATES

NOTES:
1. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, COLORS, ETC.
2. PROVIDE SHORT-CIRCUIT CURRENT RATING AND AVAILABLE FAULT CURRENT ON EACH NON-DWELLING SERVICE EQUIPMENT NAMEPLATE.

16 TYPICAL NAMEPLATE DIAGRAM
NOT TO SCALE



15 SERVICE GROUND DIAGRAM
NOT TO SCALE

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REVISIONS:

No.	Description	Date

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

ELECTRICAL DETAILS

E-003

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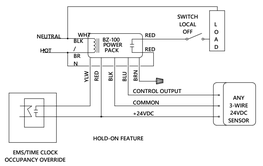
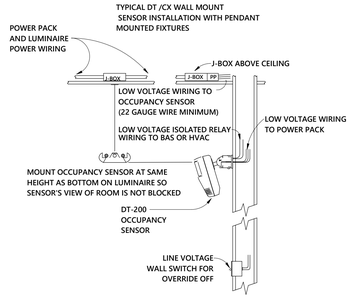


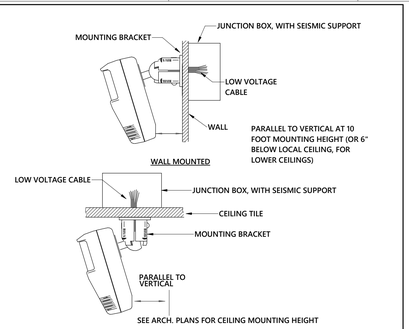
NOTE: CONNECT ONLY THE SUPPLY FOR THE VOLTAGE BEING USED.
CAP UNUSED POWER SUPPLY WIRE.

5 POWER PACK WIRING DIAGRAM
NOT TO SCALE



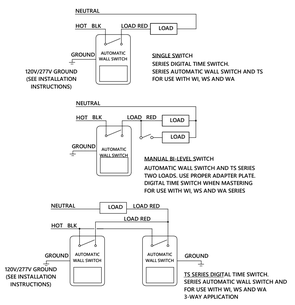
DT-200/CX SERIES MOUNTING DETAIL
WITH PENDANT MOUNTED FIXTURES

4 DT-200 PENDENT FIXTURE
NOT TO SCALE



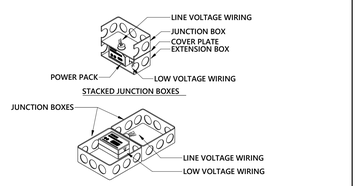
NOTES:
1. TILT SENSOR TOWARD CENTER OF ROOM FOR MAXIMUM EFFECTIVENESS.
2. CALIBRATE SENSITIVITY AND DIRECTION AFTER INSTALLATION.
3. PROVIDE WALL MOUNT BRACKET AND INSTALL AT CORNER MOST SECTION OF ROOM. PATTERN IS BASED ON CONICAL SHAPE.

3 CORNER MOUNT SENSOR
NOT TO SCALE



*WHEN THESE SWITCHES ARE WIRED IN A THREE-WAY WIRING CONFIGURATION THEY WILL ONLY OPERATE AS THREE-WAY SWITCHES IF THEY ARE LEFT IN AUTOMATIC MODE. IF ONE SWITCH IS TURNED OFF, THE LIGHTS WILL NOT COME AUTOMATICALLY ON UNTIL THAT SWITCH IS TURN BACK TO THE AUTOMATIC POSITION.

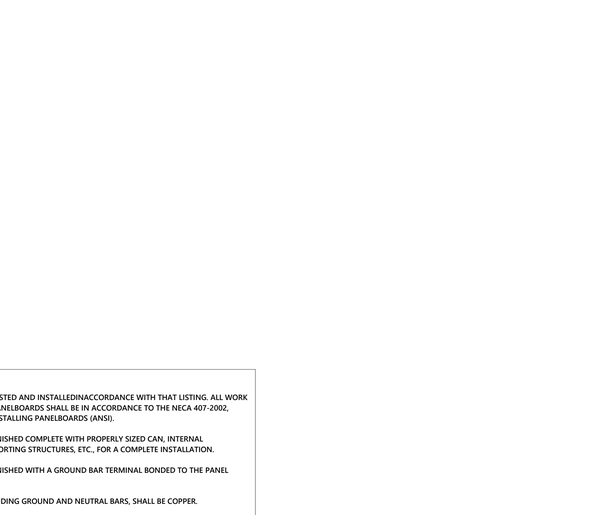
2 SINGLE POLE OCC. SENSOR SWITCH
NOT TO SCALE



NOTE:
DO NOT MOUNT POWER PACKS CLOSER THAN 6-12 INCHES FROM SENSOR. PROVIDE DOUBLE STACKED JUNCTION BOX FOR MAXIMUM VENTILATION OF POWER PACK. PROVIDE BLANK COVER. WHERE PERMITTED BY CODE AND AHJ, LEAVE (2) OPENINGS IN CONDUIT KNOCKOUT FOR VENTING OF POWER PACK. VERIFY WITH AHJ PRIOR TO KNOCKOUT REMOVAL.

POWER PACK INSTALLED IN J-BOX

1 POWER PACK INSTALLATION
NOT TO SCALE

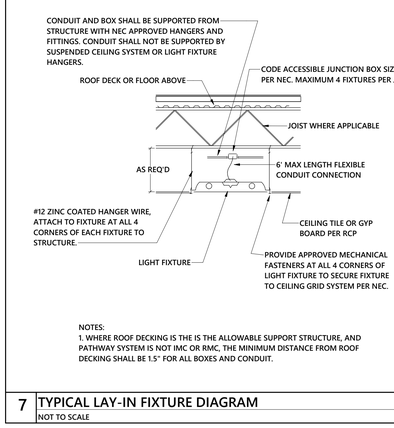


NOTE:
1. PROVIDE POWER PACK WITH SWITCH

9 DIMMING CONTROL AND ON/OFF WIRING DIAGRAM
NOT TO SCALE

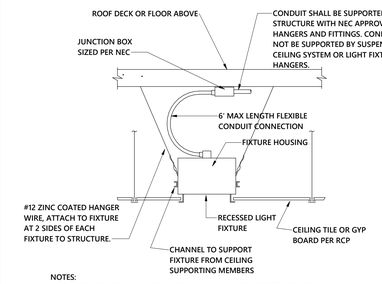
NOTES:
1. RELAY SHALL BE BODINE #BLCD-20B OR HUBBEL, LEGRAND, OR EQUAL DEVICE LISTED FOR UL 924.
2. PROVIDE ONE RELAY PER LIFE SAFETY SWITCH LEG / CIRCUIT SHOWN ON PLANS.
3. LOCAL LIGHTING CONTROL (WALL SWITCH, OCCUPANCY SENSOR, RELAY, CONTACT, ETC.).
4. SWITCHED EMERGENCY FIXTURE SHALL BE POWERED VIA THE EMERGENCY PANEL. SWITCHED EMERGENCY FIXTURE SHALL BE CONTROLLED WITH NORMAL LOCAL LIGHTING FIXTURES ONLY WHEN NORMAL POWER IS AVAILABLE. UPON LOSS OF NORMAL POWER, SWITCHED EMERGENCY LIGHTING FIXTURE CONTROL SHALL BE BYPASSED AND THE FIXTURE SHALL BE FULLY ENERGIZED. RELAY SHALL NOT BE UTILIZED AS A POWER TRANSFER DEVICE (UL1008).

8 EMERGENCY LIGHTING RELAY CONTROL CIRCUIT
NOT TO SCALE



NOTES:
1. WHERE ROOF DECKING IS THE IS THE ALLOWABLE SUPPORT STRUCTURE, AND PATHWAY SYSTEM IS NOT IMC OR RMC, THE MINIMUM DISTANCE FROM ROOF DECKING SHALL BE 1.5" FOR ALL BOXES AND CONDUIT.

7 TYPICAL LAY-IN FIXTURE DIAGRAM
NOT TO SCALE



NOTES:
1. WHERE ROOF DECKING IS THE IS THE ALLOWABLE SUPPORT STRUCTURE, AND PATHWAY SYSTEM IS NOT IMC OR RMC, THE MINIMUM DISTANCE FROM ROOF DECKING SHALL BE 1.5" FOR ALL BOXES AND CONDUIT.

6 TYPICAL RECESSED DOWN LIGHT FIXTURE INSTALLATION DIAGRAM
NOT TO SCALE

PANELBOARD NOTES:

1. ALL PANELBOARDS SHALL BE UL LISTED AND INSTALLEDINACCORDANCE WITH THAT LISTING. ALL WORK FOR THE INSTALLATION OF THE PANELBOARDS SHALL BE IN ACCORDANCE TO THE NECA 407-2002, RECOMMENDED PRACTICE FOR INSTALLING PANELBOARDS (ANSI).
2. ALL PANELBOARDS SHALL BE FURNISHED COMPLETE WITH PROPERLY SIZED CAN, INTERNAL HARDWARE, COMPONENTS, SUPPORTING STRUCTURES, ETC., FOR A COMPLETE INSTALLATION.
3. ALL PANELBOARDS SHALL BE FURNISHED WITH A GROUND BAR TERMINAL BONDED TO THE PANEL ENCLOSURE.
4. ALL PANELBOARD BUSSING, INCLUDING GROUND AND NEUTRAL BARS, SHALL BE COPPER.
5. THE TERMINATION POINT OF THE FEEDER SERVING EACH ASSEMBLY SHALL BE AT THE NEAREST POINT OF FEEDER ENTRY TO MINIMIZE CONDUCTOR FILL IN THE CAN. COORDINATE TOP/BOTTOM FEED PANELBOARD PROVISIONS WITH EACH FEEDER INSTALLATION.
6. PROVIDE THE MATCHING TERMINAL AND/OR BREAKER LUGS FOR INCOMING AND OUTGOING FEEDERS (MULTIPLE LUGS WHEN PARALLEL FEEDERS ARE USED) FOR THE NUMBER AND SIZE CIRCUITS INDICATED.
7. ALL PANELBOARDS SHALL BE FULLY RATED. SERIES RATED PANELBOARDS WILL NOT BE ALLOWED.
8. ALL PANELBOARDS SHALL HAVE HINGED DOOR-IN-DOOR CONSTRUCTION WITH LOCK.
9. ALL PANELBOARDS SHALL BE CLEARLY MARKED TO COMPLY WITH NEC 110.16 REGARDING POTENTIAL HAZARDS OF ARC FLASH.
10. ALL SERVICE EQUIPMENT SHALL BE FIELD MARKED WITH THE AVAILABLE FAULT CURRENT IN COMPLIANCE TO NEC 110.24.
11. ALL PANELBOARDS SHALL HAVE METAL DIRECTORY FRAME. FOR EACH PANELBOARD, PROVIDE TYPED CIRCUIT DIRECTORY PER NEC 408.4. SPARE CIRCUIT BREAKERS SHALL BE NEATLY WRITTEN IN PENCIL.
12. ALL FLUSH MOUNTED PANELBOARDS SHALL BE PROVIDED WITH AT LEAST SIX 3/4" EMPTY CONDUITS TO ABOVE ACCESSIBLE SPACE ABOVE CEILING.
13. PROVIDE A NAMEPLATE AS SHOWN IN DETAIL 1 THIS SHEET FOR EACH PANELBOARD.

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No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

LIGHTING DETAILS

E-004

CONSTRUCTION DOCUMENTS

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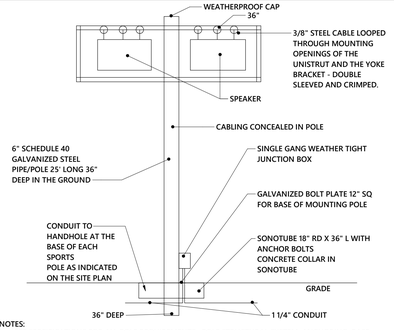
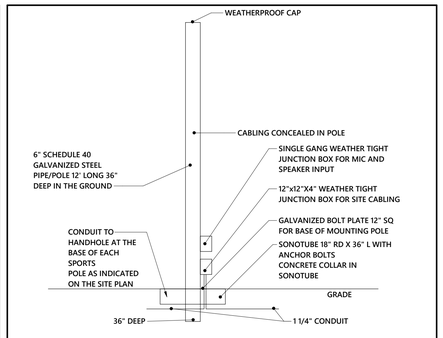


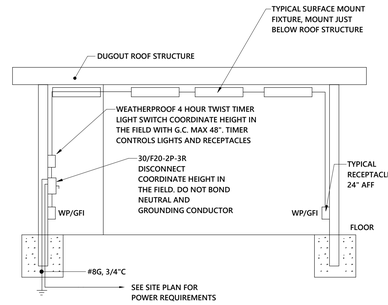
NOTES:
1. SEE SPECIFICATIONS FOR ALL POLE REQUIREMENTS. POLE STRUCTURAL SYSTEM, ANCHORING, BASE, STRUCTURAL ARMS, MOUNTING, AND INSTALLATION ARE PART OF THE EQUIPMENT.
2. UNISTRUT - 1 5/8" ALL JOINTS WELDED AND GALVANIZED. P-SERIES 12 GAUGE STEEL. BRACKET FOR SPEAKER SHALL HAVE A VERTICAL SUPPORT WELDED FROM TOP OF THE BRACKET TO THE BOTTOM OF THE BRACKET ON THE BOTTOM SIDE OF THE POLE.

4 STADIUM POLE SPEAKER - SOUND - DUAL
NO SCALE



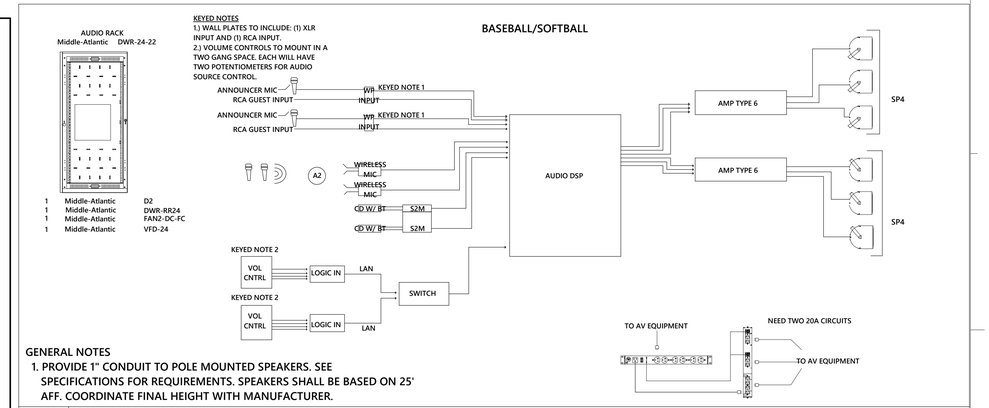
NOTES:
1. SEE SPECIFICATIONS FOR ALL POLE REQUIREMENTS. POLE STRUCTURAL SYSTEM, ANCHORING, BASE, STRUCTURAL ARMS, MOUNTING, AND INSTALLATION ARE PART OF THE EQUIPMENT.

3 STADIUM POLE - CENTER
NO SCALE



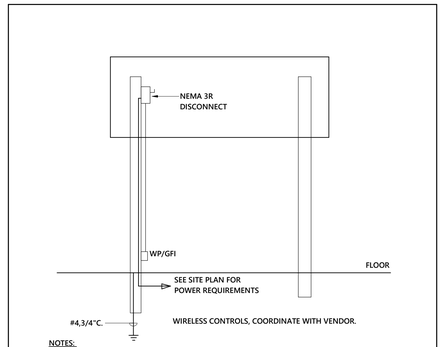
NOTES:
1. PROVIDE (1) GFCI/WP RECEPTACLE AT EACH END OF THE DUGOUT.
2. PROVIDE (4) SURFACE MOUNTED LED VANDAL PROOF TYPE STL2, WEATHERPROOF FIXTURES.
3. SURFACE MOUNT CONDUIT, PAINT TO MATCH LOCAL AREA.

2 DUGOUT CONNECTIONS - EACH OCCURENCE
NO SCALE



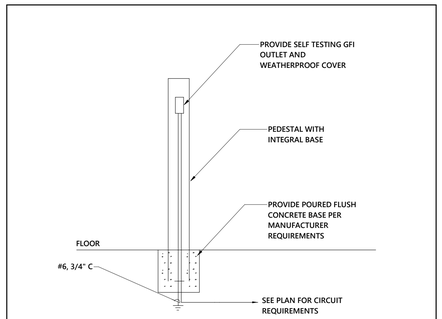
GENERAL NOTES
1. PROVIDE 1" CONDUIT TO POLE MOUNTED SPEAKERS. SEE SPECIFICATIONS FOR REQUIREMENTS. SPEAKERS SHALL BE BASED ON 25' AFF. COORDINATE FINAL HEIGHT WITH MANUFACTURER.

1 BASEBALL/SOFTBALL SOUND SYSTEMS
NO SCALE



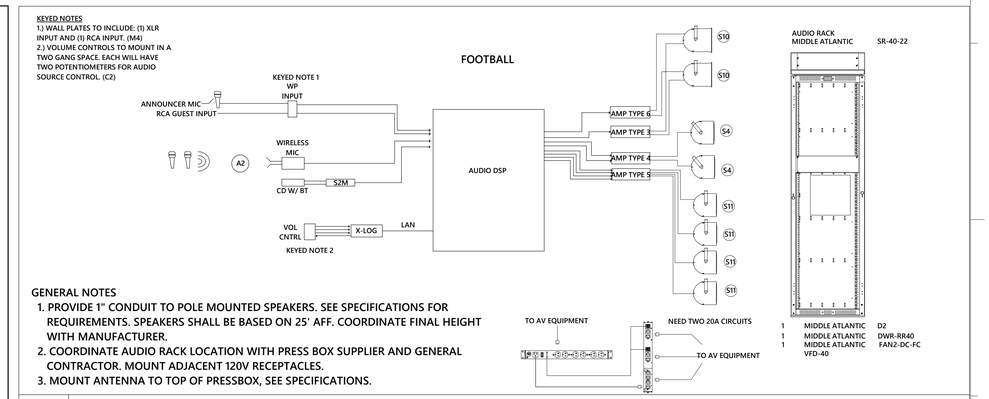
NOTES:
1. SCOREBOARD AND STRUCTURE PROVIDED BY ELECTRICAL CONTRACTOR, SEE SPECIFICATIONS FOR EXACT REQUIREMENTS.
2. CONCRETE BASE/STRUCTURE SHALL BE DESIGNED FOR 120 MPH WIND. STRUCTURE AND BASE SHALL BE THE SCOREBOARD MANUFACTURER.

7 SCOREBOARD AND STRUCTURE
NOT TO SCALE



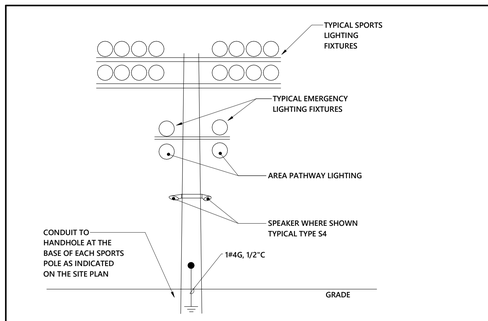
NOTES:
1. BASED ON PEDOC OUTLET BOX, INTEGRAL BASE AND PEDESTAL. APPROVE EQUALS SHALL BE UL LISTED.
2. STAINLESS STEEL WITH POWER COATING. NEMA 3R RATED. COLOR BASED ON GRAY, 30" HEIGHT.
3. DIMENSION BASED ON 30" HIGH, 5" WIDE AND 2.5" DEEP.

6 RECEPTACLE PEDESTAL
NO SCALE



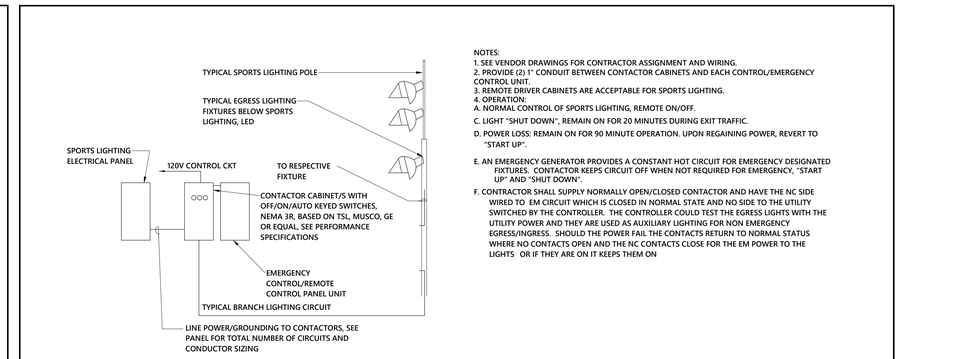
GENERAL NOTES
1. PROVIDE 1" CONDUIT TO POLE MOUNTED SPEAKERS. SEE SPECIFICATIONS FOR REQUIREMENTS. SPEAKERS SHALL BE BASED ON 25' AFF. COORDINATE FINAL HEIGHT WITH MANUFACTURER.
2. COORDINATE AUDIO RACK LOCATION WITH PRESS BOX SUPPLIER AND GENERAL CONTRACTOR. MOUNT ADJACENT 120V RECEPTACLES.
3. MOUNT ANTENNA TO TOP OF PRESSBOX, SEE SPECIFICATIONS.

5 STADIUM SOUND SYSTEM
NO SCALE



NOTES:
1. SEE SPECIFICATIONS FOR ALL POLE REQUIREMENTS. POLE STRUCTURAL SYSTEM, ANCHORING, BASE, STRUCTURAL ARMS, MOUNTING, AND INSTALLATION ARE PART OF THE MANUFACTURER EQUIPMENT.
2. SEE E010F AND SPECIFICATIONS FOR FIXTURE QUANTITIES, POLE HEIGHTS, SYSTEM REQUIREMENTS ETC.

10 SPORTS POLE
NO SCALE



NOTES:
1. SEE VENDOR DRAWINGS FOR CONTRACTOR ASSIGNMENT AND WIRING.
2. PROVIDE (2) 1" CONDUIT BETWEEN CONTACTOR CABINETS AND EACH CONTROL/EMERGENCY CONTROL UNIT.
3. REMOTE DRIVER CABINETS ARE ACCEPTABLE FOR SPORTS LIGHTING.
4. OPERATION:
A. NORMAL CONTROL OF SPORTS LIGHTING, REMOTE ON/OFF.
C. LIGHT "SHUT DOWN", REMAIN ON FOR 20 MINUTES DURING EXIT TRAFFIC.
D. POWER LOSS: REMAIN ON FOR 90 MINUTE OPERATION. UPON REGAINING POWER, REVERT TO "START UP".
E. AN EMERGENCY GENERATOR PROVIDES A CONSTANT HOT CIRCUIT FOR EMERGENCY DESIGNATED FIXTURES. CONTACTOR KEEPS CIRCUIT OFF WHEN NOT REQUIRED FOR EMERGENCY, "START UP" AND "SHUT DOWN".
F. CONTRACTOR SHALL SUPPLY NORMALLY OPEN/CLOSED CONTACTOR AND HAVE THE NC SIDE WIRED TO EM CIRCUIT WHICH IS CLOSED IN NORMAL STATE AND NO SIDE TO THE UTILITY SWITCHED BY THE CONTROLLER. THE CONTROLLER COULD TEST THE EGRESS LIGHTS WITH THE UTILITY POWER AND THEY ARE USED AS AUXILIARY LIGHTING FOR NON EMERGENCY EGRESS/INGRESS. SHOULD THE POWER FAIL THE CONTACTS RETURN TO NORMAL STATUS WHERE NO CONTACTS OPEN AND THE NC CONTACTS CLOSE FOR THE EM POWER TO THE LIGHTS OR IF THEY ARE ON IT KEEPS THEM ON

8 SPORTS LIGHTING CONTROL SYSTEM
NO SCALE

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

ELECTRICAL DETAILS

E-005

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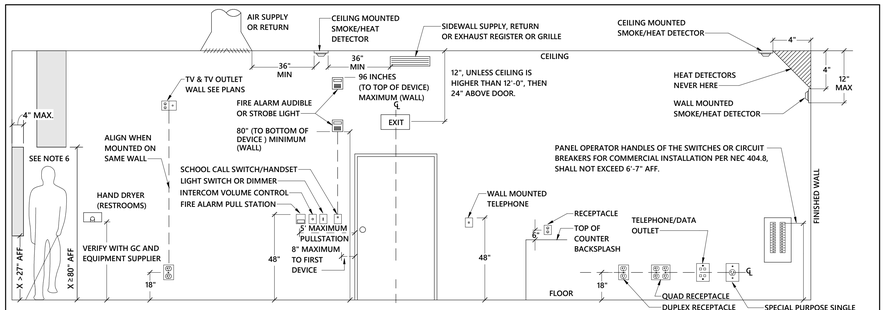
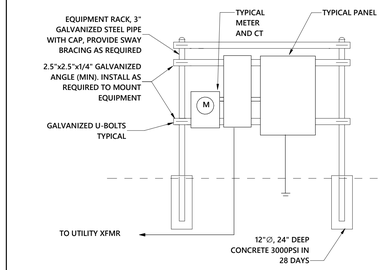
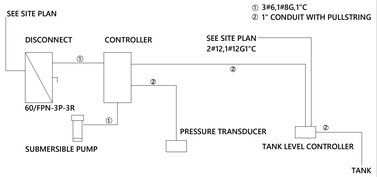


NOTES:
1. LOCATIONS WHERE TV MOUNT IS BACK TO BACK ON SAME WALL, AN OFFSET OF 8-12" WILL BE NEEDED FOR INSTALLATION OF JACK/RECEPTACLE.
2. DEVICES ABOVE COUNTER TOPS SHALL BE A MAXIMUM OF 48" TO TOP OF DEVICE.
3. DEVICES NEXT TO DOOR EXIT SHALL BE WITHIN 8" (MAXIMUM) TYPICAL OF DOOR UNLESS OBSTACLES SUCH AS SIDELITES, ETC.
4. DEVICES REQUIRED TO BE ADA ACCESSIBLE SHALL BE INSTALLED PER ANSI A117.1.
5. ALL METALLIC & NON-METALLIC, SWITCH AND RECEPTACLE BOXES INSTALLED IN FRAME WALLS SHALL INCLUDE APPROVED FIRESTOP PUTTY PADS APPPLIED ON THE BACK AND ALL SIDES OF BOX NOT TOUCHING THE WOOD STUD.

3 MOUNTING HEIGHTS OF DEVICES - ELEVATION
NOT TO SCALE

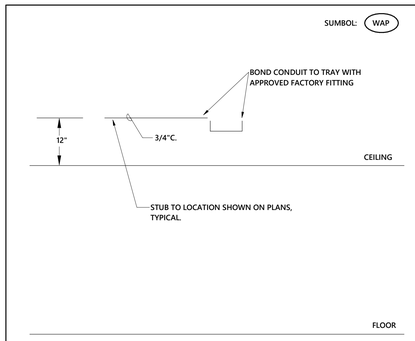


1 RISER RACK DETAIL
NOT TO SCALE



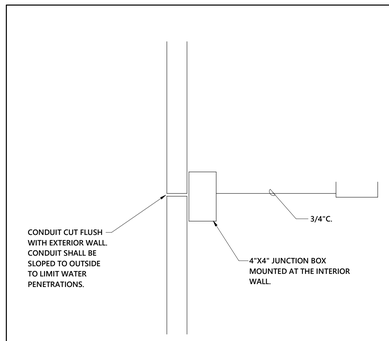
NOTES:
1. PIMP BASED ON 7.5HP 208V 3 PHASE
2. CIRCUITS DISCONNECT AND CONDUIT SHOWN ARE BY THE ELECTRICAL CONTRACTOR
3. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR FOR ALL REQUIEMENTS.
4. IRRIGATION PUMP ASSEMBLY AS INCLUDED PER ALLOWANCE NO. 13.

9 IRRIGATION PUMP ASSEMBLY
NO SCALE



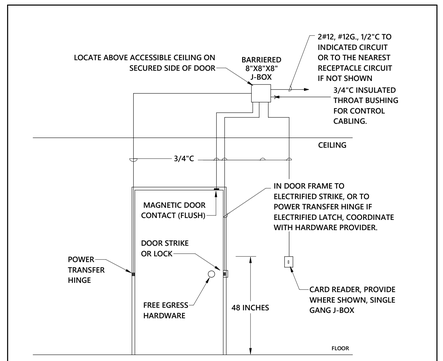
NOTES:
1. NO OPEN JUNCTION BOXES WILL BE PERMITTED.
2. THIS DETAIL IS FOR DEVICE LOCATIONS NOT DIRECTLY NEXT TO A CABLE TRAY.

7 WIRELESS AP OUTLET PATHWAYS
NOT TO SCALE



NOTES:
1. ALL EXTERIOR CAMERA LOCATIONS SHALL BE INSTALLED AS SHOWN IN THE ABOVE DETAIL

6 EXTERIOR CAMERA BOX DETAIL
NOT TO SCALE



5 CARD READER/DOOR ACCESS
NO SCALE

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

ELECTRICAL DETAILS

E-006

CONSTRUCTION DOCUMENTS

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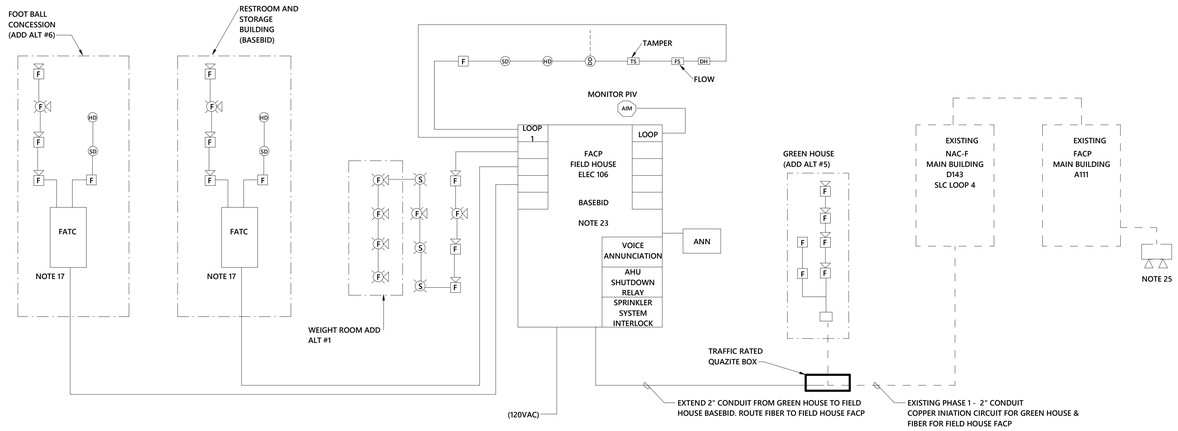


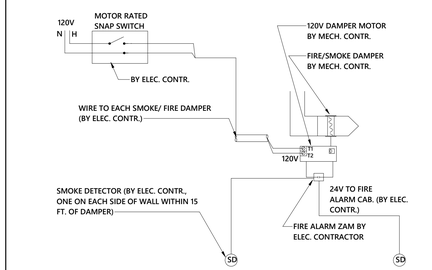
2 FIRE ALARM RISER
NO SCALE

FIRE ALARM NOTES

1. EVAC SHALL HAVE A MINIMUM 24HR. BATTERY BACKUP.
2. EVAC SHALL BE FULLY ANALOG ADDRESSABLE.
3. EVAC SHALL BE CONNECTED TO A UL APPROVED CENTRAL STATION.
4. N/A.
5. COORDINATE QUANTITY AND LOCATIONS OF DEVICES WITH CONTRACT DRAWINGS.
6. LOCATE SMOKE DETECTOR WITHIN 5' OF THE MAGNETIC HOLD OPEN DOORS. (TYPICAL)
7. LOCATE FIRE ALARM PULL STATION WITHIN 5' OF THE EXIT DOOR.
8. LOCATE SMOKE/HEAT DETECTOR WITHIN 5' OF THE FA EQUIPMENT (FACP, FATC, NAC).
9. LOCATION OF CEILING MOUNTED SMOKE/HEAT DETECTOR SHALL BE FIELD COORDINATED PRIOR TO ROUGH IN. THE DETECTOR SHALL BE A MINIMUM OF 2' AWAY FROM LIGHT FIXTURE AND A MINIMUM OF 3' AWAY FROM AIR DISTRIBUTION DEVICES.
10. AUTOMATIC DOOR CLOSING SHALL BE ACCOMPLISHED BY THE ACTIVATION OF THE LOCAL SMOKE DETECTORS AT THAT DOOR. SMOKE DETECTOR ACTIVATION SHALL ALERT THE BUILDING FIRE ALARM SYSTEM. THE FIRE ALARM SYSTEM SHALL CAUSE LOCAL HOLD OPEN DOORS TO CLOSE UPON ALARM ZONE ACTIVATION.
11. ACTIVATION OF AN ALARM ZONE SHALL CAUSE LOCAL AIR HANDLING EQUIPMENT TO SHUT DOWN (ALL LOCAL DAMPERS, AIR HANDLERS AND EXHAUST FANS MUST STOP).
12. ACTIVATION OF KITCHEN HOOD SUPPRESSION SYSTEM PROVIDES SIGNAL TO FACP WHICH IN TURN ACTIVATES ALL ANNUNCIATING ZONES & CUTS OFF AHU SUPPLY AIR.
13. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ALL FLOW, PRESSURE, & TAMPER SWITCHES WITH FIRE PROTECTION CONTRACTOR PRIOR TO INSTALLATION.
14. SYSTEM IS VOICE ANNUNCIATION AT ALL LOCATIONS INCLUDING WHERE SHOWN AT SITE BUILDINGS
15. ALL FIRE ALARM CABLING SHALL BE NON-PLENUM RATED AND INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE CONCEALED IN WALLS, OR CEILINGS.
16. VOICE SYSTEM.
17. THE FIRE ALARM SYSTEM MANUFACTURER SHALL PROVIDE NOTIFICATION APPLIANCE CIRCUIT (NAC) POWER EXTENDERS AS REQUIRED.
18. THE DUCT SMOKE DETECTORS SHALL COMPLY WITH IFC 907.2.12.1.2 AND 907.12.
19. PROVIDE DITEK #DTK-DF120S1 SERIES OR EQUAL TVSS FOR 120V SUPPLY TO FIRE ALARM CONROL PANELS, WITH TVSS DRY CONTACTOR TO BE MONITORED BY FACP. PROVIDE DITEK DTK-2MHLP24F-WP OR EQUAL FOR ALL FIRE ALARM CABLES THAT EXIT THE PHYSICAL BUILDING. TAMPER SWITCHES DTK-2MHLP24B-WB, AND EACH LIB/EXTENDER FIRE ALARM PANEL. NAC, PIV, IDC SURGE: DTK-2MHLP24B-WB OR EQUAL. DIALER SURGE:DTK-2MHTPWB FIBER MEDIA CONVERTER PROTECTOR DTK-PVPIP OR EQUAL.
20. THE CIRCUIT FEEDING THE FIRE ALARM PANEL IS DEDICATED FOR THE FIRE ALARM ONLY. BREAKER SHALL BE PROVIDED WITH A LABEL "FIRE ALARM CIRCUIT" AND SHALL BE FACTORY RED (NON-PAINTED). PROVIDE BREAKER LOCK ON DEVICE.
21. PROVIDE REMOTE LIGHT FOR DUCT SMOKE DETECTOR ON CEILING WHERE RETURN VENT IS ABOVE CEILING.
22. CONTACTOR RESPONSIBLE FOR SHOP DRAWINGS AS REQUIRED BY LOCAL AHJ.
23. PROVIDE FUTURE OUTPUT TO FIELD HOUSE AND BASEBALL HOUSE FOR SUB FIRE ALARM CONTROL INTERLINK PANELS WITH FIBER AS RECOMMENDED BY MANUFACTURER. SUB PANEL SHALL NOT HAVE A SEPARATE DIALER.
24. EC SHALL VERIFY THE QUANTITY AND LOCATION OF DUCT DETECTORS WITH THE MECHANICAL DRAWINGS. TOTAL QUANTITY MINIMUM SHALL BE BASED ON BOTH MECHANICAL SCHEDULES AND MECHANICAL PLAN LOCATIONS AND ELECTRICAL PLANS. WHEN DEVICE QUANTITIES (ELECTRICAL VS. MECHANICAL) ARE IN CONFLICT, PROVIDE THE GREATER NUMBER OF DETECTORS.
25. EXISTING DIGITAL ALARM COMMUNICATOR TRANSMITTER SHALL BE ACCEPTABLE TO THE REMOTE CENTRAL STATION AND SHALL COMPLY WITH UL 632. CELLULAR LINE - SINGLE MAIN SOURCE. PROVIDE NAPCO STARLINK (SLD-CMDA-FIRE) FIRE ALARM COMMUNICATOR AND SLE-ANTEXT50 EXTERNAL ANTENNA OR EQUAL AND COORDINATED WITH THE CELLULAR DIAL OUT SERVICE. CELLULAR DIAL OUT SHALL BE BACKED UP AS PART OF BATTERY BACKUP AS WELL AS GENERATOR BACKED UP WHERE AVAILABLE. FUNCTIONAL PERFORMANCE: UNIT SHALL RECEIVE AN ALARM, SUPERVISORY, OR TROUBLE SIGNAL FROM FIRE-ALARM CONTROL UNIT AND AUTOMATICALLY CAPTURE A PRESET NUMBER FOR A REMOTE CENTRAL STATION. WHEN CONTACT IS MADE WITH CENTRAL STATION(S), SIGNALS SHALL BE TRANSMITTED. IF SERVICE ON THE CELLULAR LINE IS INTERRUPTED FOR LONGER THAN 45 SECONDS, TRANSMITTER SHALL INITIATE A LOCAL TROUBLE SIGNAL. TRANSMITTER SHALL AUTOMATICALLY REPORT CELLULAR SERVICE RESTORATION TO THE CENTRAL STATION. IF SERVICE IS LOST, TRANSMITTER SHALL INITIATE THE LOCAL TROUBLE SIGNAL.
26. ALL AUDIO DEVICES IN THE HIGH SCHOOL, FIELDHOUSE, STORAGE AND CONCESSION SHALL BE SPEAKER BASED VOICE ANNUNCIATION.
27. PROVIDE OUTPUT TO BASEBALL, SOFTBALL AND FOOTBALL PA SYSTEM, AND SOUND SYSTEMS FOR SHUNTING AUDIO SYSTEM. 1" CONDUIT AND CONTROL CABLE TO AUDIO SYSTEM.
28. DEVICES SHALL NOT HAVE "FIRE" LABELED ON THEM.
29. COORDINATE WITH OWNER THE MESSAGE PRIORITY OF PERSONEL MIC MESSAGE AND ALARM SIGNAL.

FIRE ALARM SYSTEM MATRIX	BUILDING SYSTEM OUTPUTS																														
	ACTIVATE COMMON ALARM SIGNAL INDICATOR	ACTIVATE AUDIBLE ALARM SIGNAL	ACTIVATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTIVATE AUDIBLE SUPERVISORY SIGNAL	ACTIVATE COMMON TROUBLE SIGNAL INDICATOR	ACTIVATE AUDIBLE TROUBLE SIGNAL	ACTUATE ZONE OR DEVICE ALARM ADDRESS INDICATOR	ACTUATE GENERAL EVACUATION SIGNAL	DISPLAY CHANGE OF STATUS	ACTIVATE ENGUN SIGNAL	TRANSMIT FIRE ALARM SIGNAL TO CO DETECTOR	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	DELAYED REMOVAL OF POWER TO CENTRAL STATION	FIREMAN'S HAT ALARM TO CENTRAL STATION	RETURN ELEVATOR TO ALTERNATE FLOOR	RETURN ELEVATOR TO FIRST FLOOR	SHUT DOWN ATTIC ELEV. REMOTE FLOOR	CLOSE ALL FIRE/SMOKE DAMPERS	ACTIVATE SPRINKLER BELL CONTINUOUSLY	RELEASE MAGNETICALLY HELD DOORS
MANUAL FIRE ALARM PULL BOXES	X	X					X	X	X		X								X	X		X								
DUCT SMOKE DETECTOR			X	X			X		X			X										X								
AREA HEAT DETECTOR	X	X					X	X	X		X								X	X		X								
SMOKE DETECTOR	X	X									X											X								
CARBON MONOXIDE DETECTOR			X	X						X			X																	
SPRINKLER WATER FLOW	X	X					X	X	X		X								X	X	X	X								
SPRINKLER TAMPER			X	X			X		X			X																		
NOTIFICATION DEVICE SHORT CIRCUIT					X	X			X				X																	
OPEN CIRCUIT					X	X			X				X						X											
GROUND FAULT					X	X			X				X																	
FIRE ALARM A.C. POWER FAILURE					X	X			X				X																	
FIRE ALARM SYSTEM LOW BATTERY					X								X																	
GENERATOR RUNNING									X																					
GENERATOR SYSTEM NOT IN AUTOMATIC			X	X			X				X																			
GENERATOR FAULT			X	X			X				X																			
AREA OF REFUGE TWO-WAY COMMUNICATION STATUS			X	X			X				X																			
SPRINKLER DRY SYSTEM PRESSURE			X	X			X				X																			
SPRINKLER CONTROL LOW/ HIGH PRESSURE			X	X			X				X																			
BDA SYSTEM					X	X	X					X																			

3 FIRE ALARM MATRIX
NOT TO SCALE



NOTE:
1. ALL FIRE/SMOKE DAMPERS SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR. ALL FIRE ALARM WIRING INSTALLED BY ELECTRICAL CONTRACTOR. 120V WIRING TO DAMPER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
2. DAMPER SHALL BE INSTALLED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

1 SMOKE/FIRE DAMPER WIRING
NOT TO SCALE

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State Board of Registration for Professional Engineers and Surveyors.
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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

LIFE SAFETY DETAILS

E-007

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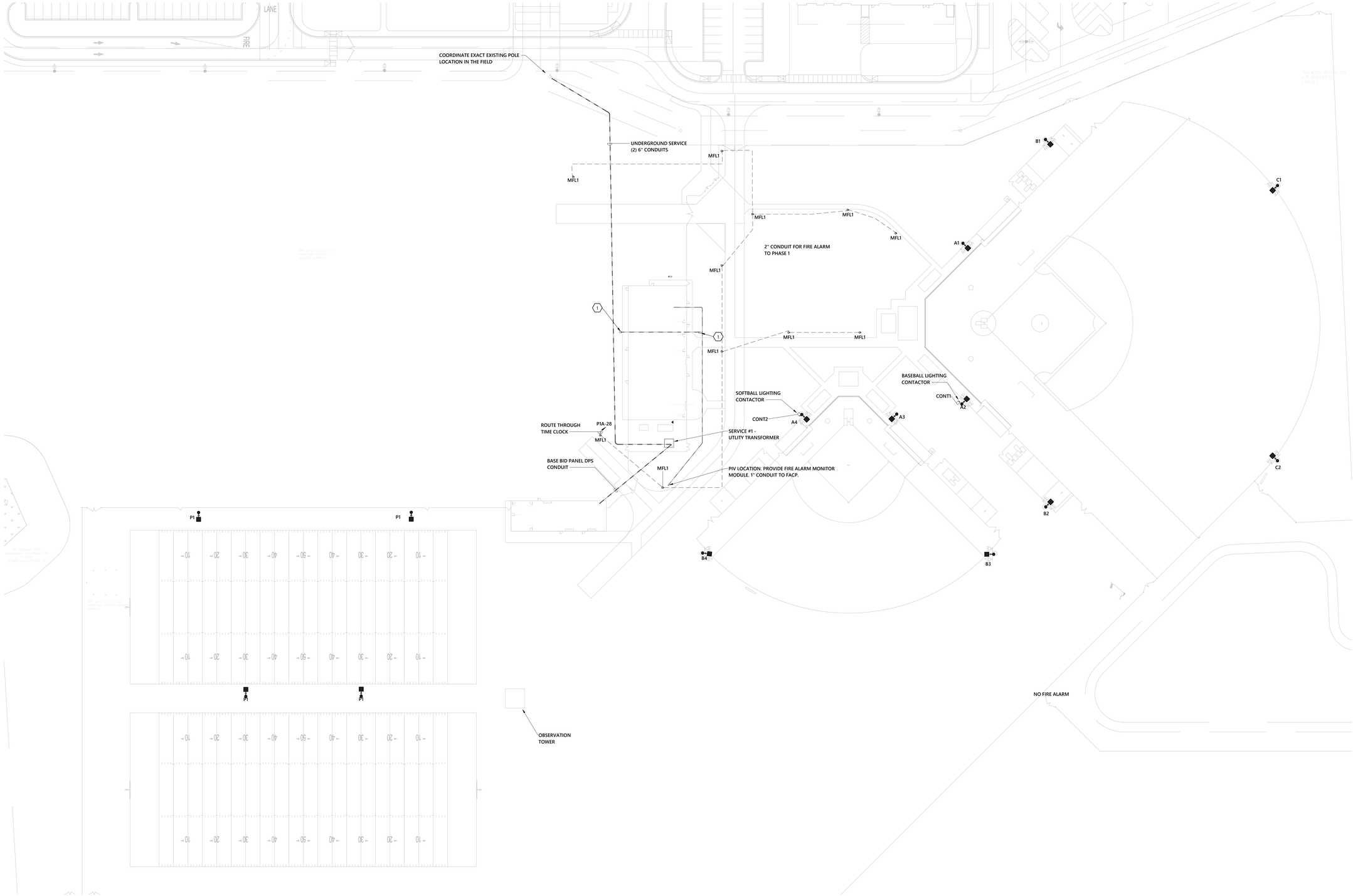

1 ELECTRICAL SITE PLAN (BASE BID)

1" = 40'-0"

1. 3'x'3 INGROUND QUAZITE TRAFFIC RATED BOX. STUB CONDUITS INTO BOX FOR FUTURE WORK.
   (3) 3" ROUTED TO MSB1
   (3) 2" ROUTED TO P1A
   (4) 3" STUBBED A.F.F. FOR DATA (ELEC LS 106B)
   (2) 4" SPARE
   (2) 1" SPARE

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OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

ELECTRICAL SITE PLAN (BASE BID)

E-050

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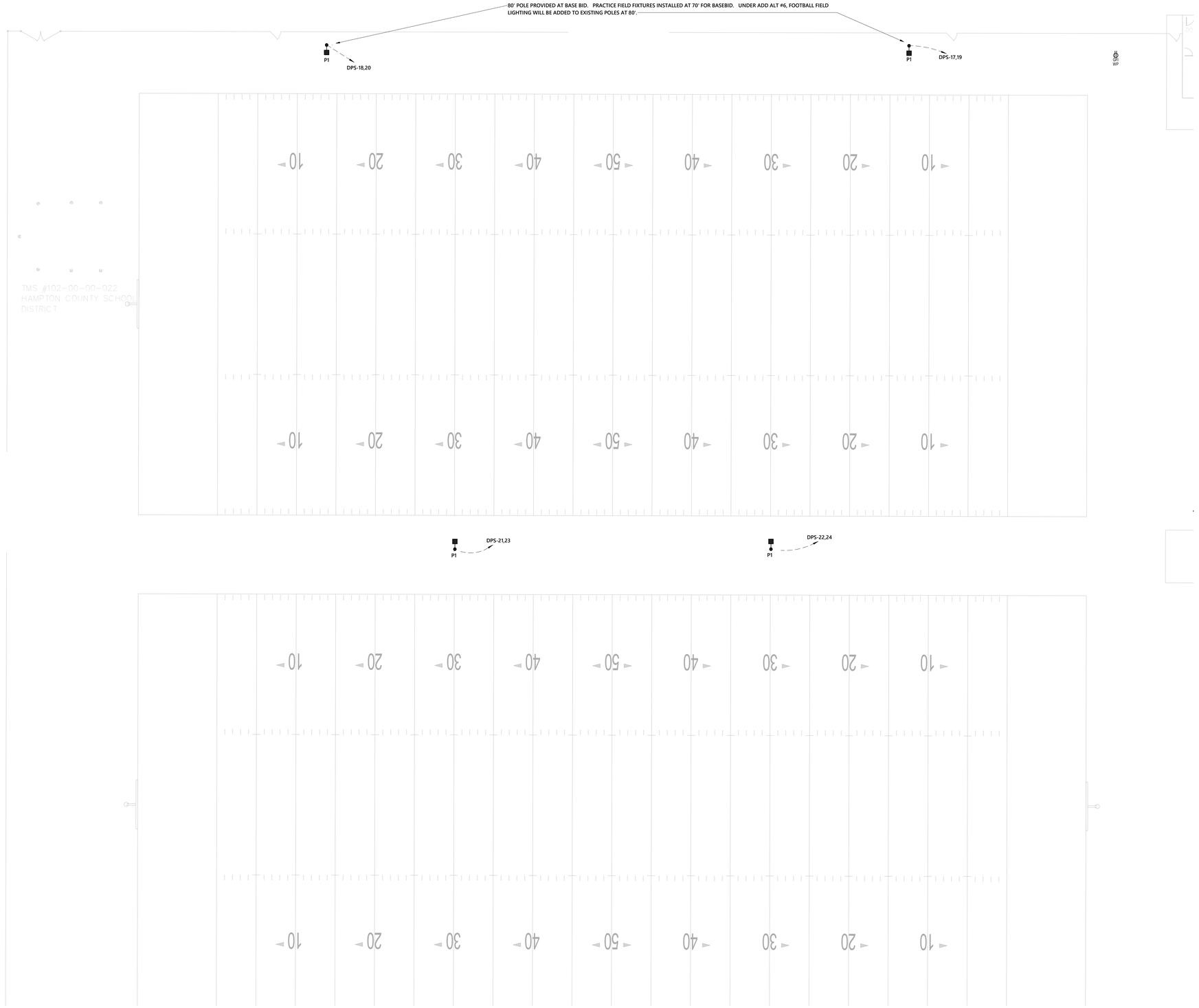

1 ELECTRICAL SITE PLAN - OVERALL - PRACTICE FIELDS
1/16" = 1'-0"

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ELECTRICAL PRACTICE FIELDS (BASE BID)

E-101

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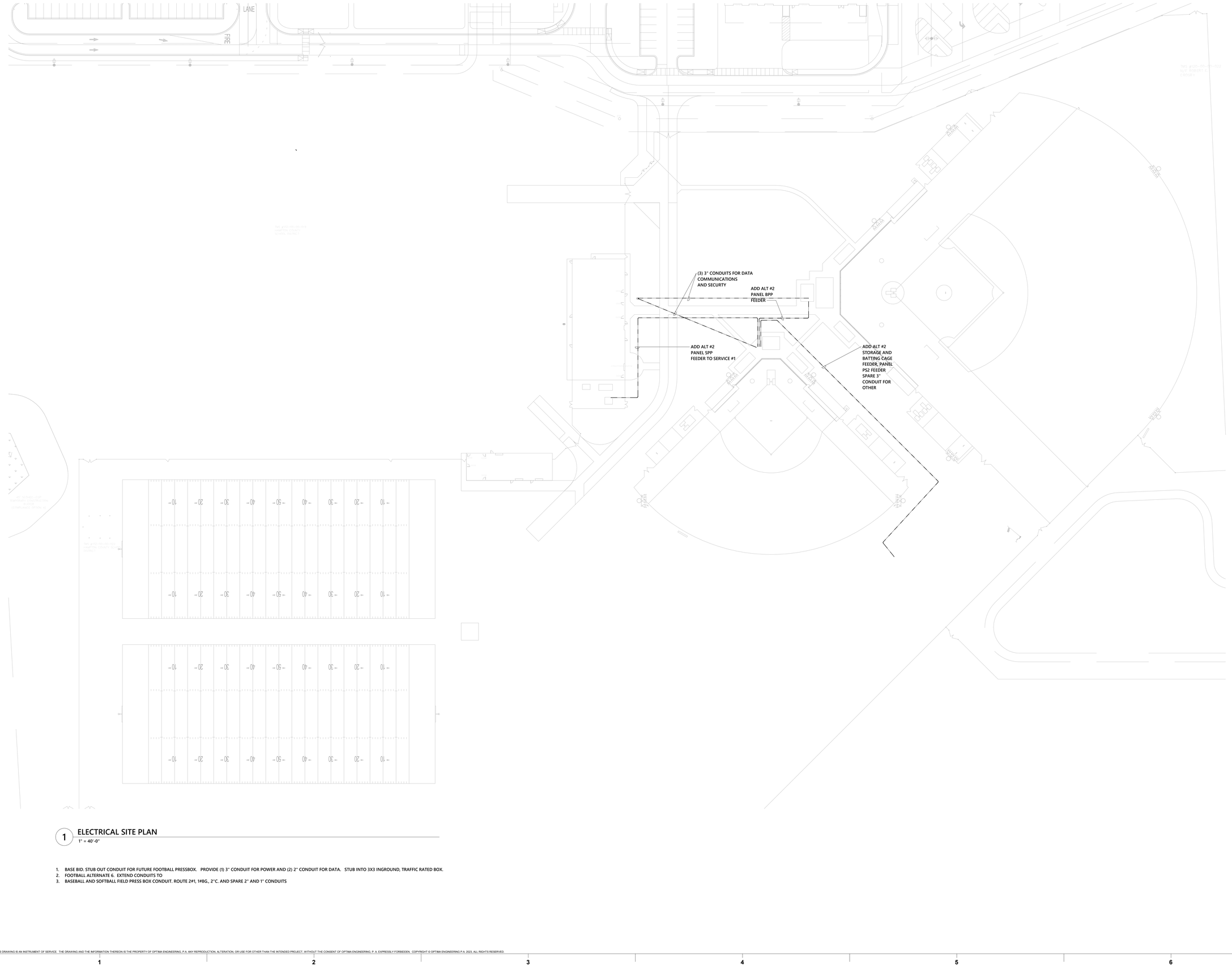

1 ELECTRICAL SITE PLAN

1" = 40'-0"

1. BASE BID. STUB OUT CONDUIT FOR FUTURE FOOTBALL PRESSBOX. PROVIDE (1) 3" CONDUIT FOR POWER AND (2) 2" CONDUIT FOR DATA. STUB INTO 3X3 INGROUND, TRAFFIC RATED BOX.
2. FOOTBALL ALTERNATE 6. EXTEND CONDUITS TO
3. BASEBALL AND SOFTBALL FIELD PRESS BOX CONDUIT. ROUTE 2#1, 1#8G,, 2"C. AND SPARE 2" AND 1" CONDUITS

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ELECTRICAL SITE PLAN (ADD ALT #2)

E-120

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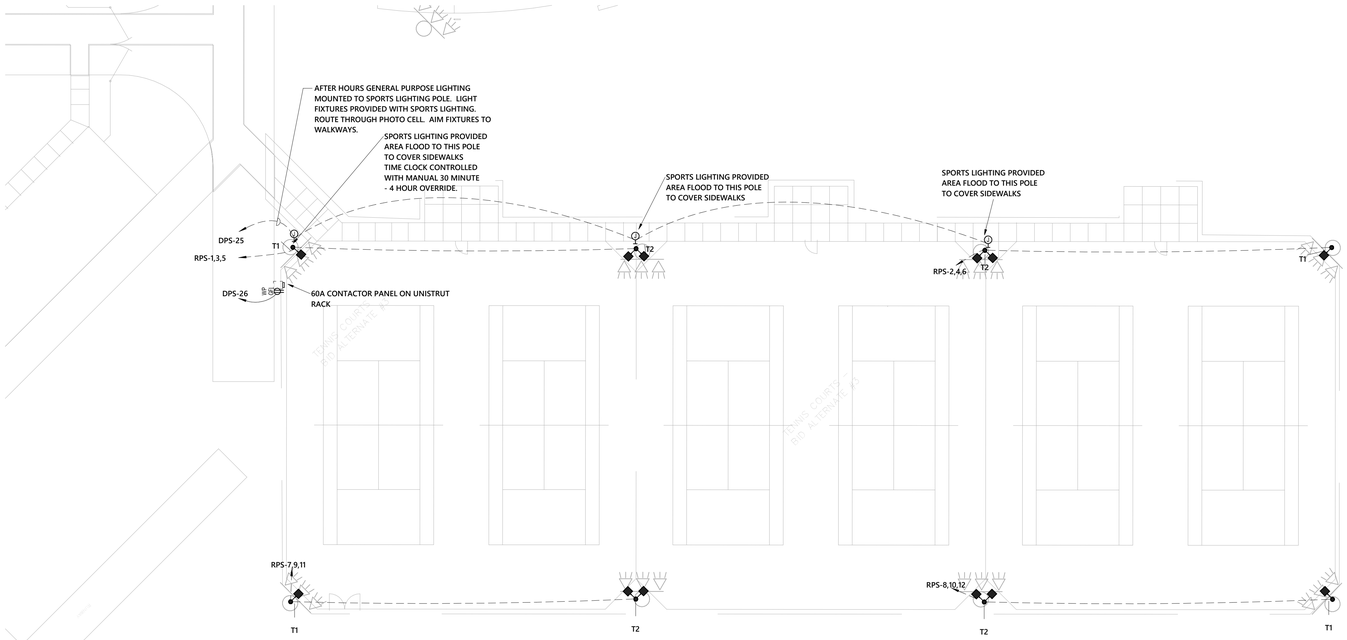

1 TENNIS COURT ELECTRICAL PLANS - ADD ALT #3
1" = 20'-0"

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ELECTRICAL SITE PLAN - TENNIS COURTS (ADD ALT #3)

E-130

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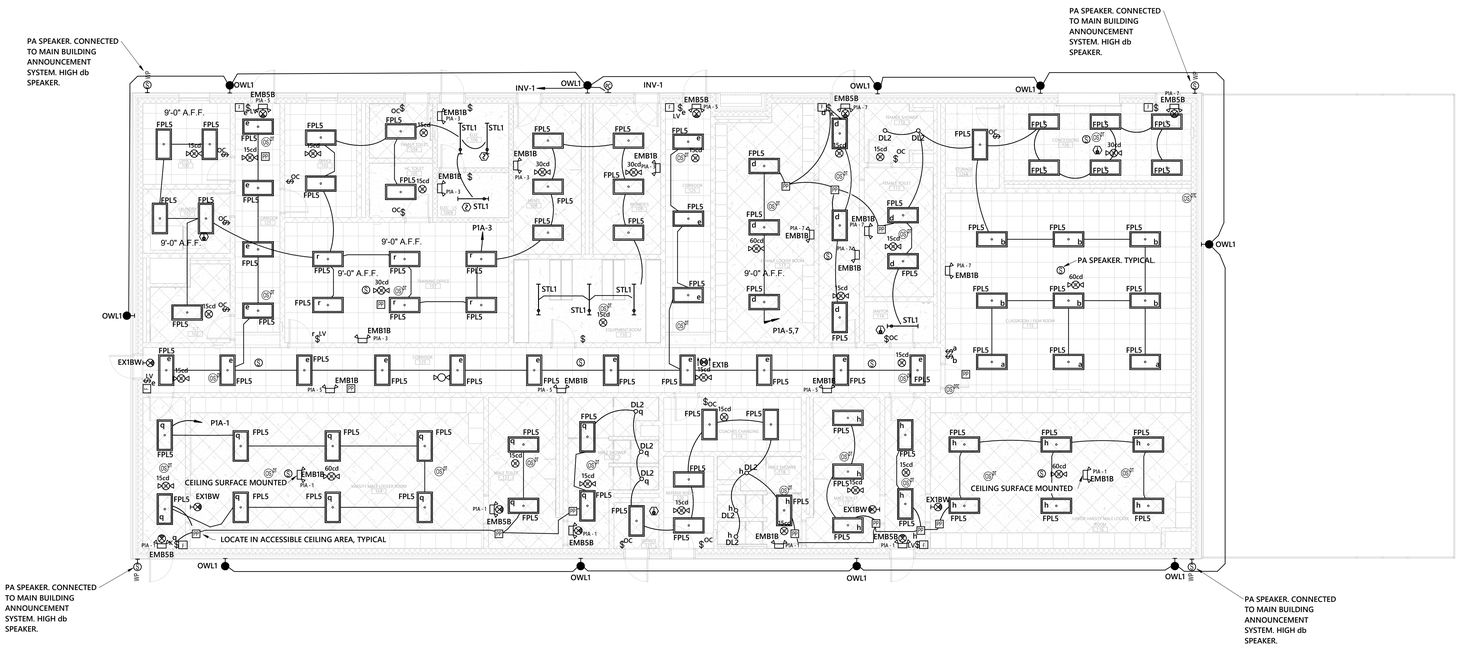
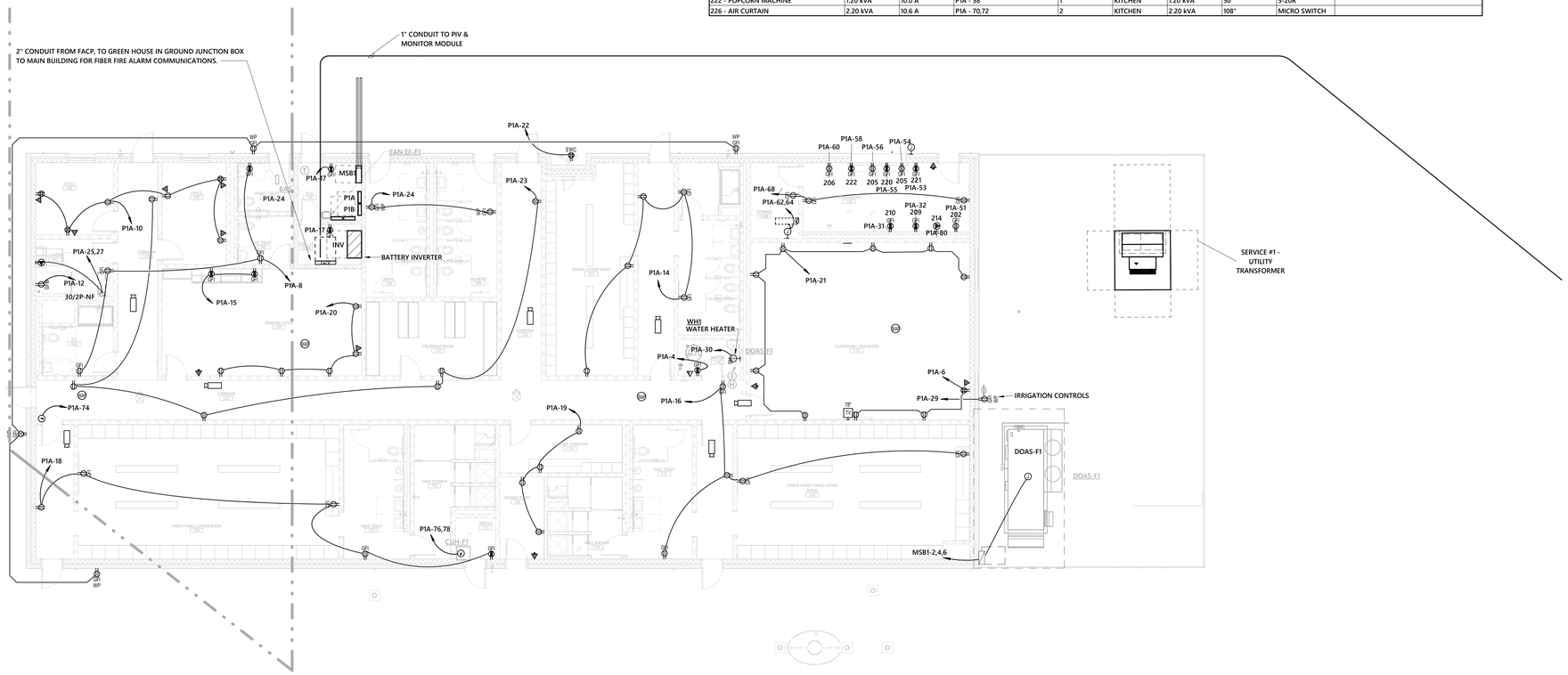


2 FIELD HOUSE LIGHTING PLAN (BASE BID)

1/8" = 1'-0"



1 FIELD HOUSE POWER PLAN (BASE BID)

1/8" = 1'-0"

FIELD HOUSE CONCESSION KITCHEN EQUIPMENT SCHEDULE

Load Name	Apparent Load	Apparent Current	PANEL AND CIRCUIT	Number of Poles	Load Classification	KITCHEN Connected	MOUNTING HEIGHT	NEMA RECEPTACLE	Comments
202 - REFRIGERATOR	0.70 kVA	5.8 A	P1A - 51	1	KITCHEN	0.70 kVA	24"	5-20R	
203 - ICE MAKER	2.20 kVA	10.6 A	P1A - 62,64	2	KITCHEN	2.20 kVA	66"	DIRECT CONN	
205 - UNDERCOUNTER REFRIG	0.80 kVA	6.7 A	P1A - 54	1	KITCHEN	0.80 kVA	24"	5-20R	
205 - UNDERCOUNTER REFRIG	0.80 kVA	6.7 A	P1A - 56	1	KITCHEN	0.80 kVA	24"	5-20R	
206 - MOBILE HOT CABINET	1.20 kVA	10.0 A	P1A - 60	1	KITCHEN	1.20 kVA	66"	5-20R	
209 - NACHO CHEESE WARMER	0.60 kVA	5.0 A	P1A - 32	1	KITCHEN	0.60 kVA	50"	5-20R	
210 - POPCORN	1.20 kVA	10.0 A	P1A - 31	1	KITCHEN	1.20 kVA	50"	5-20R	
214 - FRYER	7.60 kVA	63.3 A	P1A - 80	1	KITCHEN	7.60 kVA	50"	6-50R	
220 - P.O.S	1.50 kVA	12.5 A	P1A - 55	1	KITCHEN	1.50 kVA	50"	5-20R	
221 - PIZZA DISPLAY CAB	1.50 kVA	12.5 A	P1A - 53	1	KITCHEN	1.50 kVA	50"	5-20R	
222 - POPCORN MACHINE	1.20 kVA	10.0 A	P1A - 58	1	KITCHEN	1.20 kVA	50"	5-20R	
226 - AIR CURTAIN	2.20 kVA	10.6 A	P1A - 70,72	2	KITCHEN	2.20 kVA	108"	MICRO SWITCH	

GENERAL NOTES - POWER

A.	WHERE CONNECTED TO A 20A. BRANCH CIRCUIT SUPPLYING AN INDIVIDUAL RECEPTACLE (SIMPLEX OR DUPLEX), THE RECEPTACLE SHALL BE RATED AT 20A.
B.	PROVIDE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED AND GRADE MOUNTED ELECTRICAL EQUIPMENT. MINIMUM REQUIREMENTS: 4" HIGH, 4% AIR ENTRAINED, POLYFIBER REINFORCED CONCRETE, 4" WIDER AND 4" LONGER THAN EQUIPMENT TO BE PLACED ON IT. REFER TO ELECTRICAL DETAIL DRAWINGS FOR TRANSFORMER, GENERATOR, OR SWITCHGEAR PADS THAT MAY EXCEED THESE REQUIREMENTS.
C.	REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
D.	COORDINATE ALL DEVICE PLACEMENT WITH ARCHITECTURAL CASEWORK PLANS.
E.	ALL DEVICES SHALL BE FLUSH MOUNTED, UNLESS NOTED OTHERWISE, WITH NO EXPOSED CONDUIT.

GENERAL NOTES - LIGHTING

A.	ALL RECESSED LIGHTING FIXTURES IN LAY-IN CEILINGS SHALL BE INSTALLED WITH 6' LONG FLEXIBLE METAL CONDUIT.
B.	ALL MOUNTING HEIGHTS FOR LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURES UNLESS INDICATED OTHERWISE.
C.	SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTING HEIGHTS OF EXTERIOR LIGHTING FIXTURES.
D.	REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
E.	ALL LOW VOLTAGE SWITCHES IN THE CORRIDOR TO CONTROL LOCAL CORRIDOR CIRCUIT VIA LIGHTING CONTROL PANEL RELAY.
F.	CONNECT ALL EXIT SIGNS AND EMERGENCY FIXTURES AHEAD OF SWITCHING. CONNECT TO LOCAL CIRCUIT.
G.	ALL LOW VOLTAGE SWITCHES IN THE CORRIDOR TO CONTROL LOCAL CORRIDOR CIRCUIT VIA LIGHTING CONTROL PANEL RELAY.

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No.	Description	Date

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POWER PLAN - FIELD HOUSE (BASE BID)

E-201

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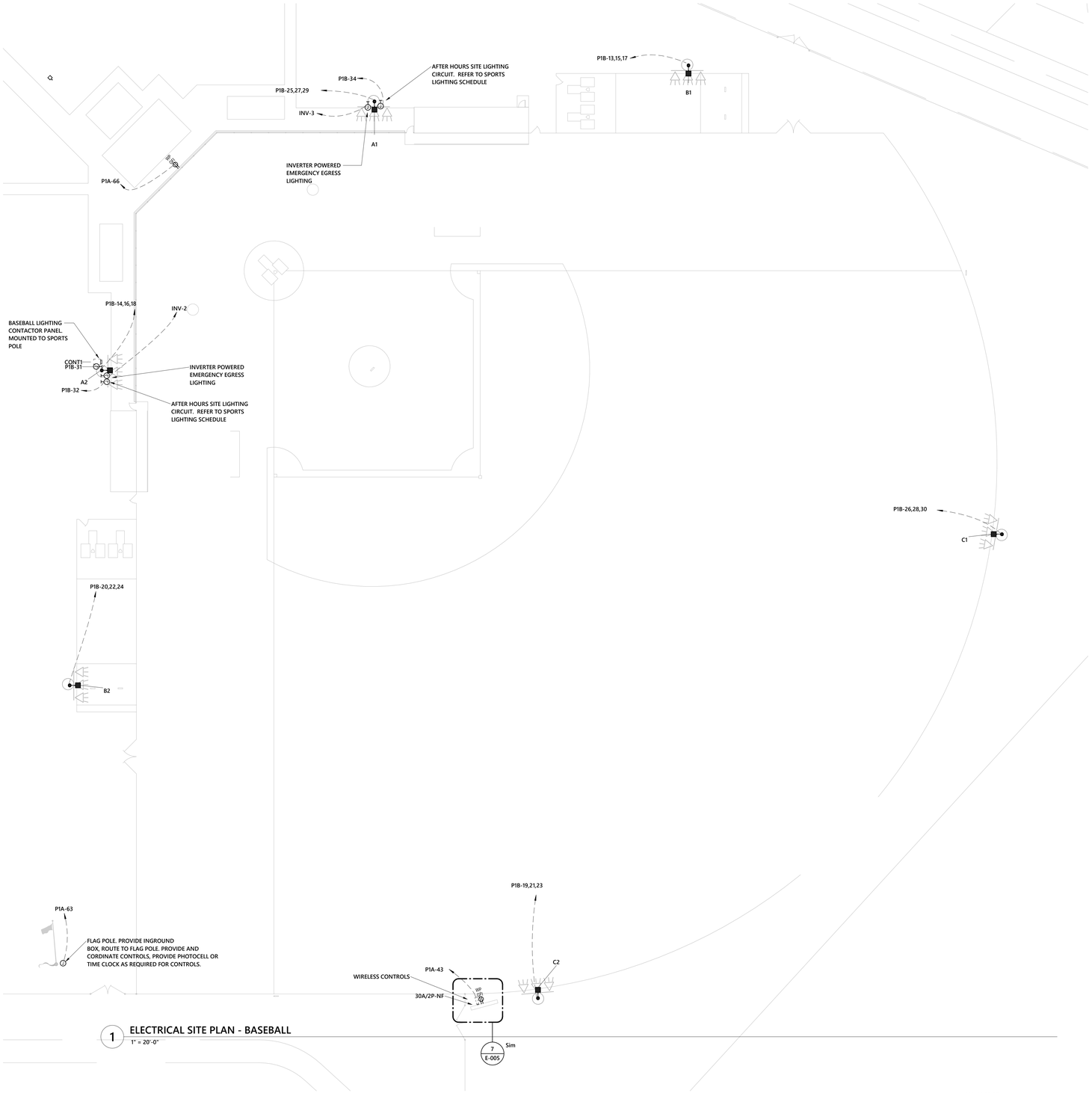
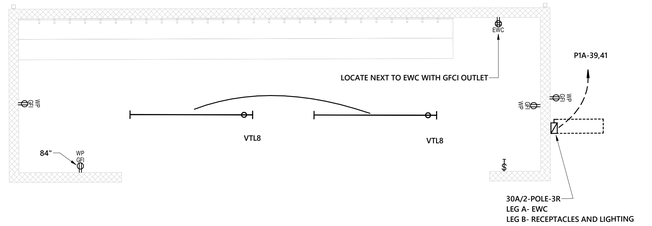
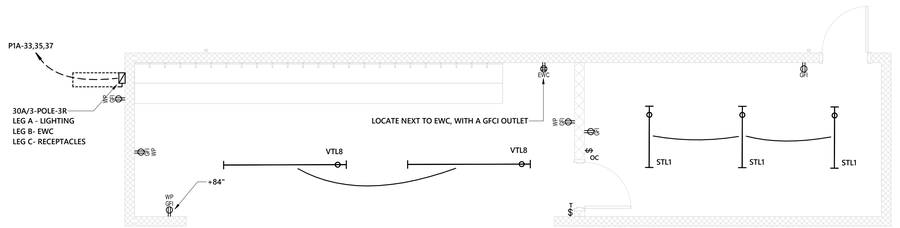


1 ELECTRICAL SITE PLAN - BASEBALL
1" = 20'-0"



2 ELECTRICAL AWAY TEAM DUGOUT PLAN
1/4" = 1'-0"



3 ELECTRICAL HOME TEAM DUGOUT PLAN
1/4" = 1'-0"

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No.	Description	Date

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LS3P PROJECT: 1201-217190
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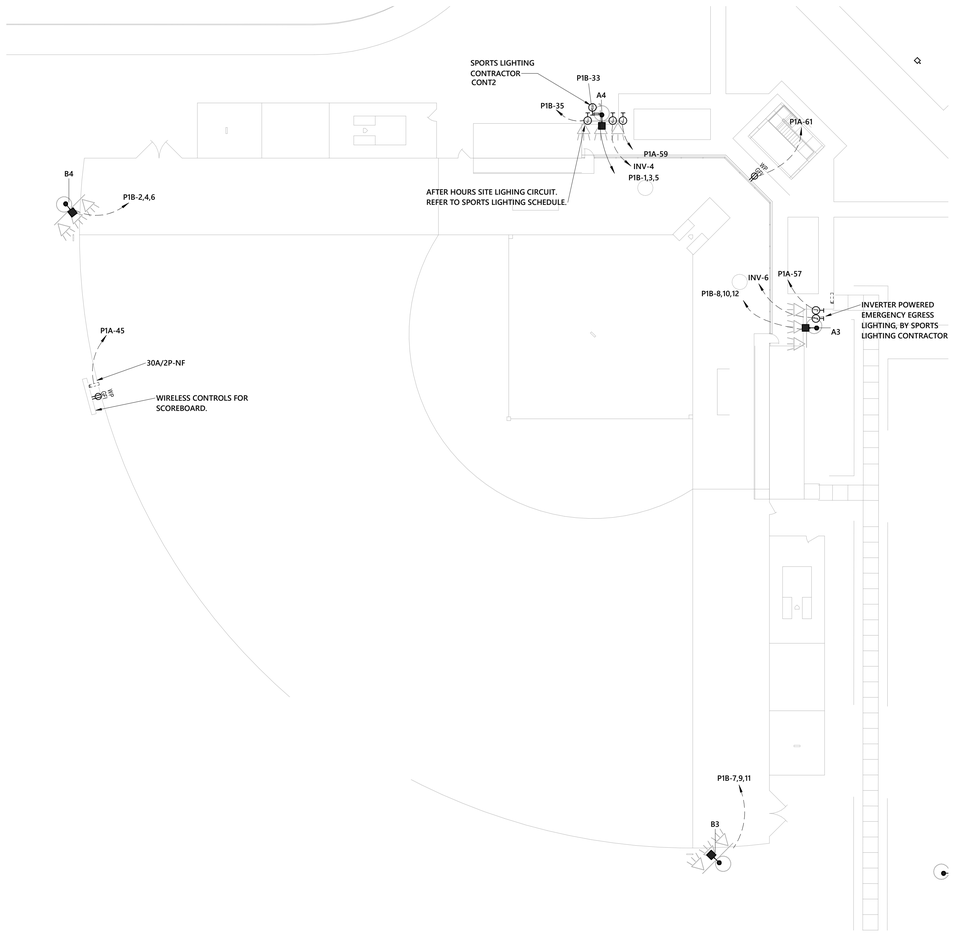
POWER PLAN - BASEBALL FIELD (BASE BID)

E-202

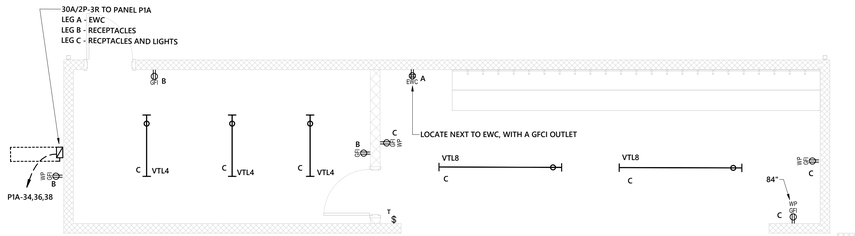
CONSTRUCTION DOCUMENTS



1 ELECTRICAL SITE PLAN - SOFT BALL
1" = 20'-0"



2 SOFTBALL AWAY TEAM ELECTRICAL PLANS
1/4" = 1'-0"



3 SOFTBALL HOME TEAM ELECTRICAL PLANS
1/4" = 1'-0"

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LS3P PROJECT: 1201-217190
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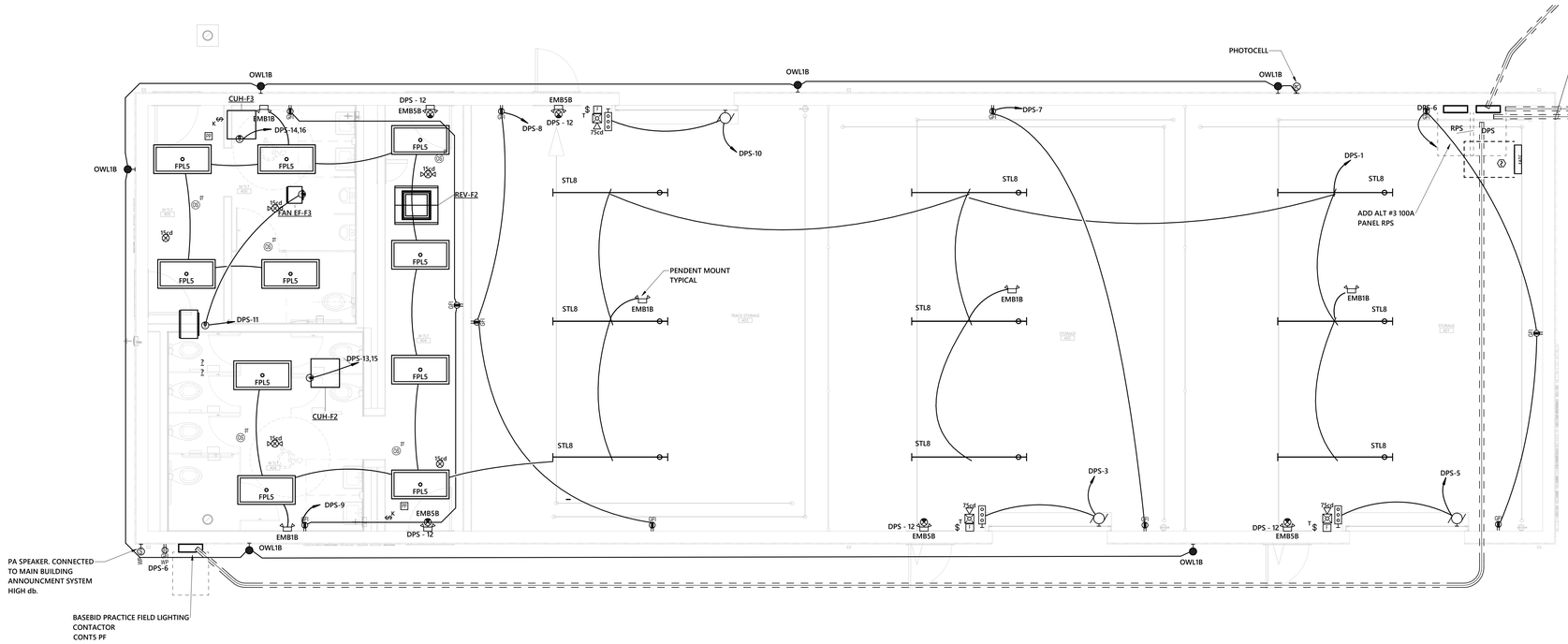
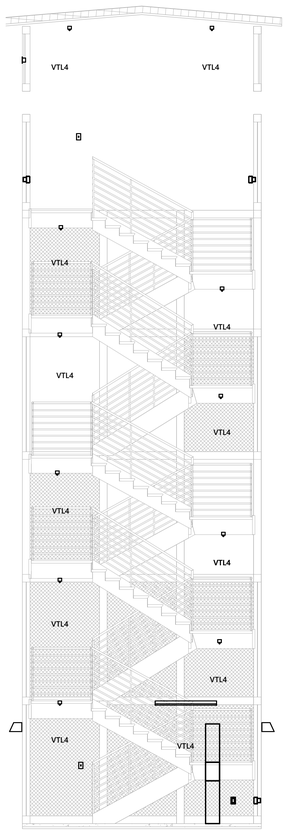
POWER PLAN - SOFTBALL FIELD (BASE BID)

E-203

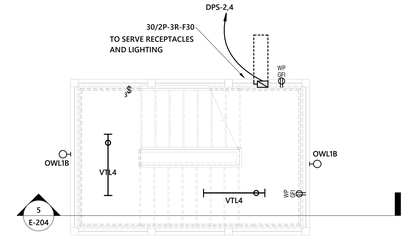
CONSTRUCTION DOCUMENTS



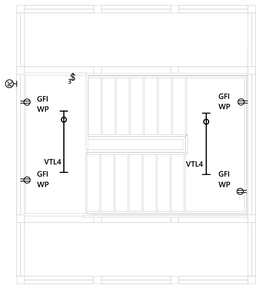
1 ELECTRICAL STORAGE BUILDING 1 (BASE BID)
1/4" = 1'-0"



5 OBSERVATION TOWER
1/4" = 1'-0"



2 ELECTRICAL GROUND LEVEL OBSERVATION TOWER (BASE BID)
1/4" = 1'-0"



COORDINATE WITH OWNER. BID 2 CIRCUITS ROUTED TO UPPER LEVEL, 4 RECEPTACLES AT UPPER LEVEL, 2 RECEPTACLES AT LOWER LEVEL AND LIGHT FIXTURES SHOWN. COORDINATE WITH OWNER FOR EXACT LOCATIONS FOR RECEPTACLES THAT MAY POWER SECURITY, CAMERAS, GEN RECEPTACLE POWER, SPEAKER AND/OR LIGHTING.

3 ELECTRICAL UPPER LEVEL OBSERVATION TOWER (BASE BID)
1/4" = 1'-0"

GENERAL NOTES - POWER

A.	WHERE CONNECTED TO A 20A, BRANCH CIRCUIT SUPPLYING AN INDIVIDUAL RECEPTACLE (SIMPLEX OR DUPLEX), THE RECEPTACLE SHALL BE RATED AT 20A.
B.	PROVIDE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED AND GRADE MOUNTED ELECTRICAL EQUIPMENT. MINIMUM REQUIREMENTS: 4" HIGH, 4% AIR ENTRAINED, POLYFIBER REINFORCED CONCRETE, 4" WIDER AND 4" LONGER THAN EQUIPMENT TO BE PLACED ON IT. REFER TO ELECTRICAL DETAIL DRAWINGS FOR TRANSFORMER, GENERATOR, OR SWITCHGEAR PADS THAT MAY EXCEED THESE REQUIREMENTS.
C.	REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
D.	COORDINATE ALL DEVICE PLACEMENT WITH ARCHITECTURAL CASEWORK PLANS.
E.	ALL DEVICES SHALL BE FLUSH MOUNTED, UNLESS NOTED OTHERWISE, WITH NO EXPOSED CONDUIT.

GENERAL NOTES - LIGHTING

A.	ALL RECESSED LIGHTING FIXTURES IN LAY-IN CEILINGS SHALL BE INSTALLED WITH 6' LONG FLEXIBLE METAL CONDUIT.
B.	ALL MOUNTING HEIGHTS FOR LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURES UNLESS INDICATED OTHERWISE.
C.	SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTING HEIGHTS OF EXTERIOR LIGHTING FIXTURES.
D.	REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
E.	ALL LOW VOLTAGE SWITCHES IN THE CORRIDOR TO CONTROL LOCAL CORRIDOR CIRCUIT VIA LIGHTING CONTROL PANEL RELAY.
F.	CONNECT ALL EXIT SIGNS AND EMERGENCY FIXTURES AHEAD OF SWITCHING. CONNECT TO LOCAL CIRCUIT.
G.	ALL LOW VOLTAGE SWITCHES IN THE CORRIDOR TO CONTROL LOCAL CORRIDOR CIRCUIT VIA LIGHTING CONTROL PANEL RELAY.

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No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

POWER PLAN - RESTROOM & STORAGE MAINTENANCE (BASE BID)

E-204

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GENERAL NOTES - POWER

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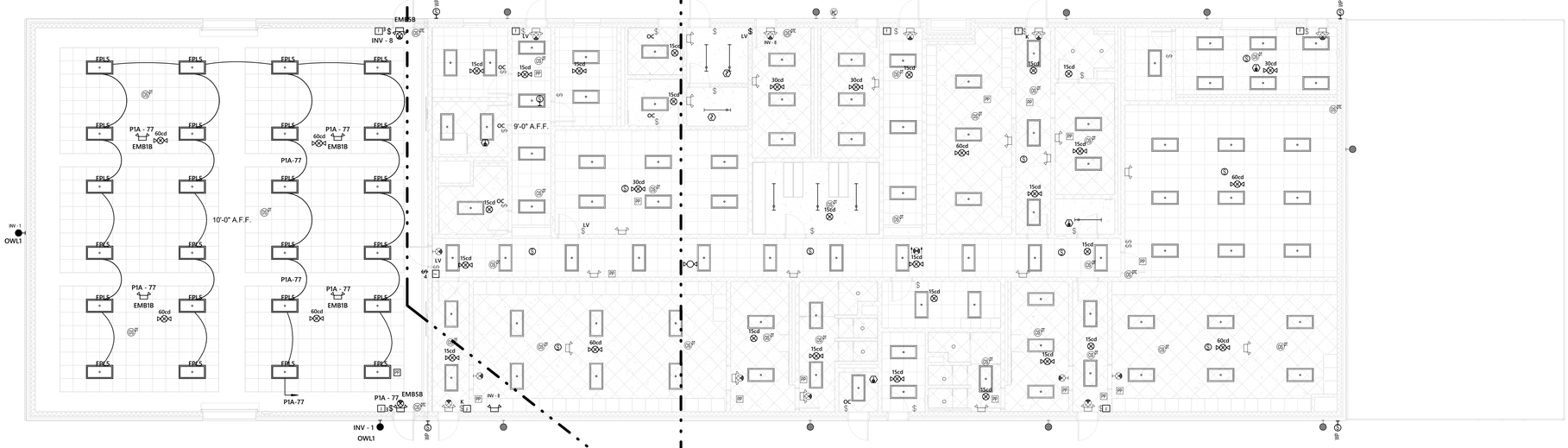
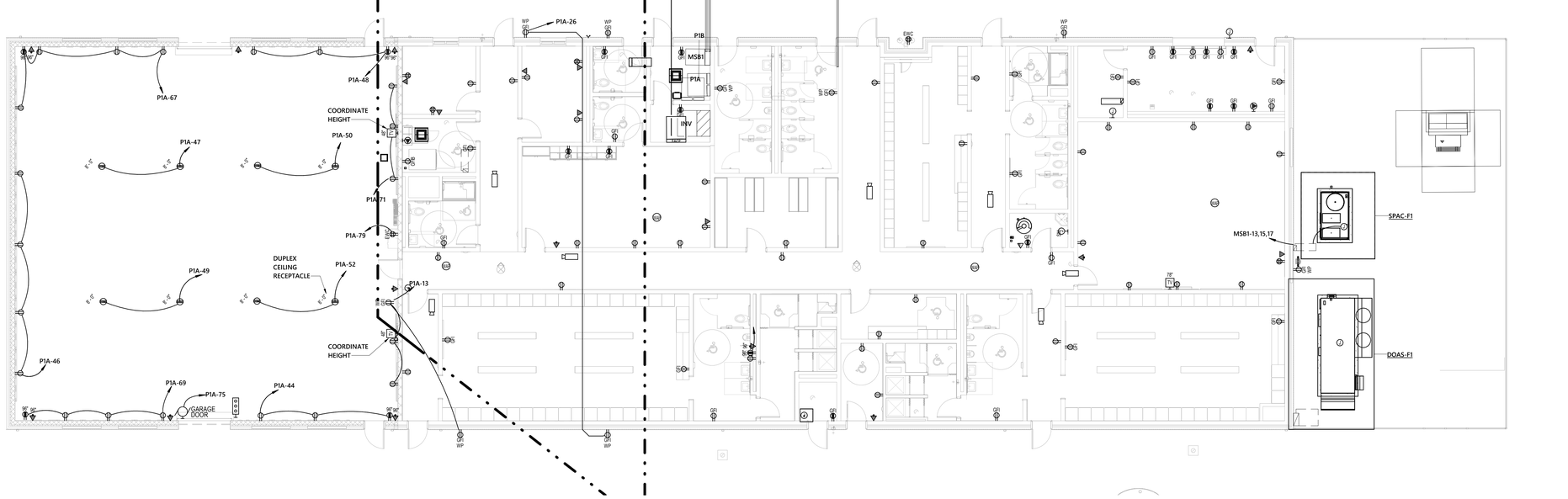
B.	PROVIDE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED AND GRADE MOUNTED ELECTRICAL EQUIPMENT. MINIMUM REQUIREMENTS: 4" HIGH, 4% AIR ENTRAINED, POLYFIBER REINFORCED CONCRETE. 4" WIDER AND 4" LONGER THAN EQUIPMENT TO BE PLACED ON IT. REFER TO ELECTRICAL DETAIL DRAWINGS FOR TRANSFORMER, GENERATOR, OR SWITCHGEAR PADS THAT MAY EXCEED THESE REQUIREMENTS.
C.	REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
D.	COORDINATE ALL DEVICE PLACEMENT WITH ARCHITECTURAL CASEWORK PLANS.
E.	ALL DEVICES SHALL BE FLUSH MOUNTED, UNLESS NOTED OTHERWISE, WITH NO EXPOSED CONDUIT.

GENERAL NOTES - LIGHTING

A.	ALL RECESSED LIGHTING FIXTURES IN LAY-IN CEILINGS SHALL BE INSTALLED WITH 6' LONG FLEXIBLE METAL CONDUIT.
B.	ALL MOUNTING HEIGHTS FOR LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURES UNLESS INDICATED OTHERWISE.
C.	SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTING HEIGHTS OF EXTERIOR LIGHTING FIXTURES.
D.	REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
E.	ALL LOW VOLTAGE SWITCHES IN THE CORRIDOR TO CONTROL LOCAL CORRIDOR CIRCUIT VIA LIGHTING CONTROL PANEL RELAY.
F.	CONNECT ALL EXIT SIGNS AND EMERGENCY FIXTURES AHEAD OF SWITCHING. CONNECT TO LOCAL CIRCUIT.
G.	ALL LOW VOLTAGE SWITCHES IN THE CORRIDOR TO CONTROL LOCAL CORRIDOR CIRCUIT VIA LIGHTING CONTROL PANEL RELAY.



2 FIELD HOUSE LIGHTING PLAN - WEIGHT ROOM (ADD ALT #1)
1/8" = 1'-0"



1 FIELD HOUSE ELECTRICAL PLAN - WEIGHTROOM (ADD ALT #1)
1/8" = 1'-0"

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SOUTH CAROLINA — REGISTERED — No. 27318 — PROFESSIONAL ENGINEER — JOSEPH M. HOLT

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OPT PROJECT: 23-0084
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POWER PLAN - WEIGHT ROOM (ADD ALT 1)

E-211

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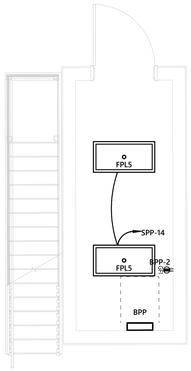
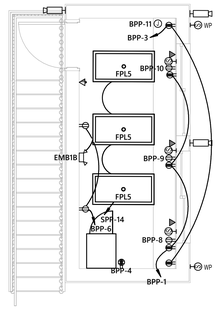
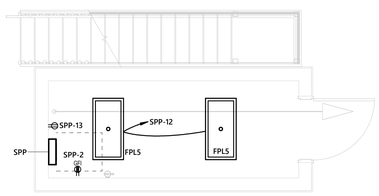


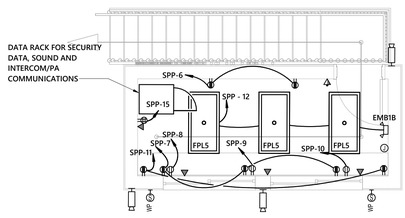
1 ELECTRICAL BASEBALL PRESS BOX - FIRST FLOOR (ADD ALT #2)
1/4" = 1'-0"



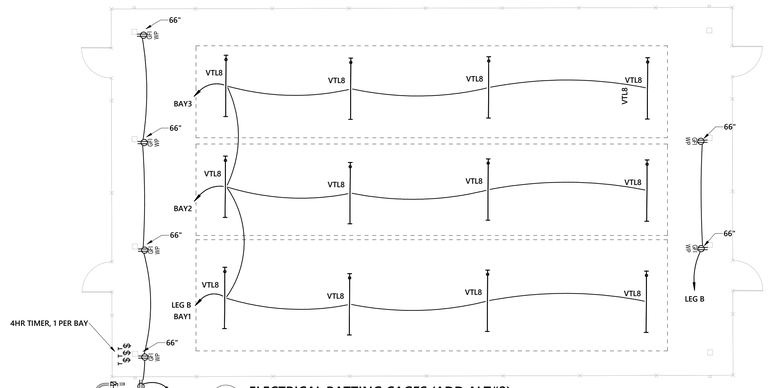
2 ELECTRICAL BASEBALL PRESS BOX - SECOND FLOOR (ADD ALT #2)
1/4" = 1'-0"



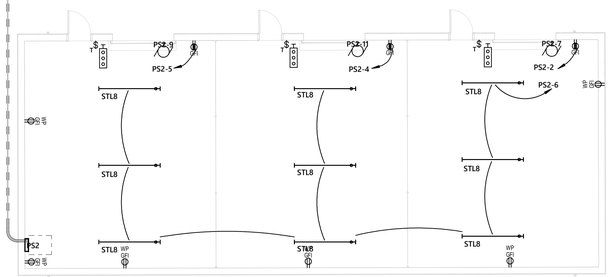
4 ELECTRICAL SOFTBALL PRESS BOX - FIRST FLOOR (ADD ALT #2)
1/4" = 1'-0"



5 ELECTRICAL SOFTBALL PRESS BOX - SECOND FLOOR (ADD ALT #2)
1/4" = 1'-0"



7 ELECTRICAL BATTING CAGES (ADD ALT#2)
1/8" = 1'-0"



8 ELECTRICAL STORAGE BUILDING 2 (ADD ALT#2)
1/8" = 1'-0"

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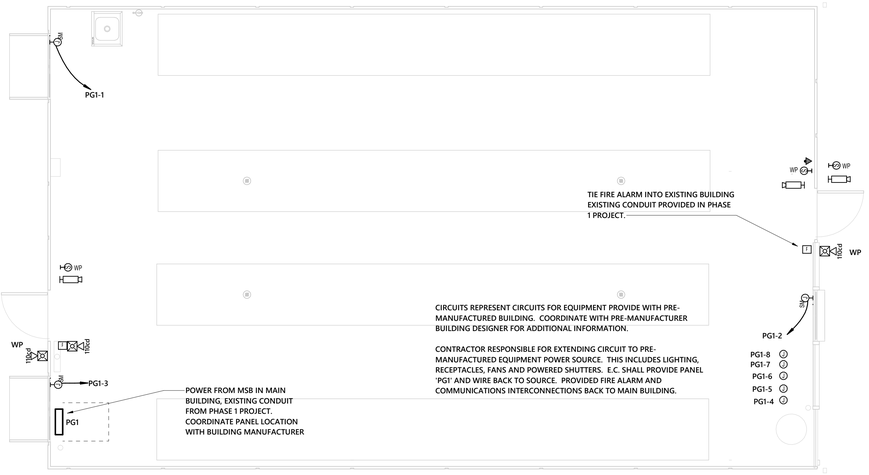
POWER PLAN - BASEBALL AND SOFTBALL FIELD ACCESSORY BUILDINGS (ADD ALT #2)

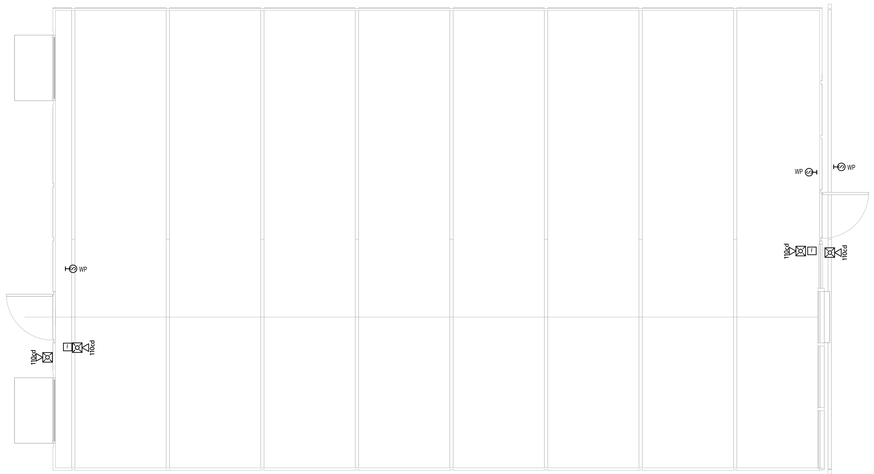
E-220

CONSTRUCTION DOCUMENTS



1 ELECTRICAL GREENHOUSE (ADD ALT #5)

1/4" = 1'-0"



2 LIGHTING PLAN - GREENHOUSE ADD ALT 5

1/4" = 1'-0"

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POWER PLAN - GREENHOUSE (ADD ALT #5)

E-251

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UTILITY SERVICE #3
POLE MOUNTED TRANSFORMER
COORDINATE WITH UTILITY TO EXTEND OVERHEAD LINE TO THIS POINT AND ROUTE SERVICE UNGROUND TO PANEL DFP.

1 E-006 Sim

DFP-18

INV2

CONT6 FB

DFP

PFP-

PANEL AND BRANCH CIRCUIT WORK BY PRESSBOX MANUFACTURE. COORDINATE WITH MANUFACTURE FOR FINAL CONNECTIONS

10 E-005 Sim

F1

DFP-2,4,6

DFP-13

INV2-2,4

F1

DFP-1,3,5

DFP-14

INV2-1,3

UNGROUND TO UTILITY POLE

SERVICE #2 - UTLITY TRANSFORMER PAD MOUNTED

DFP-26

FLAG POLE. PROVIDE INGROUND BOX. ROUTE TO FLAG POLE. PROVIDE AND CORDINATE CONTROLS. PROVIDE PHOTOCELLOR TIME CLOCK AS REQUIRED FOR CONTROLS.

EMERGENCY LIGHT COVERAGE REQUIRED.

DFP-17

7 E-005 Sim

EXISTING 3'X2' JUNCTION BOX

HIGH db, PA ANNOUNCEMENTS SPEAKER. CONNECTED TO MAIN BUILDING.

DFP-8,10,12

INV2-5,7

DFP-15

F1

DFP-7,9,11

DFP-16

INV2-6,8

F1

HIGH db, PA ANNOUNCEMENTS SPEAKER. CONNECTED TO MAIN BUILDING.

1 ELECTRICAL SITE PLAN - FOOTBALL FIELD (ADD ALT #6)

1" = 20'-0"

1. EXTEND CONDUITS TO PRESS BOX. (3) 3" CONDUITS. COMMUNCATIONS, DATA, FIRE ALARM.
2. EXTEND CONDUITS TO CONCESSION (3) 3" CONDUITS. COMMUNCATIONS, DATA FIRE ALARM.

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Autodesk Docs://1201-217190 Hampton County HS\23-0084_Athletic Fieldhouse_Hampton County HS_ELEC_v2022.rvt
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POWER PLAN - FOOTBALL FIELD (ADD ALT #6)

E-260

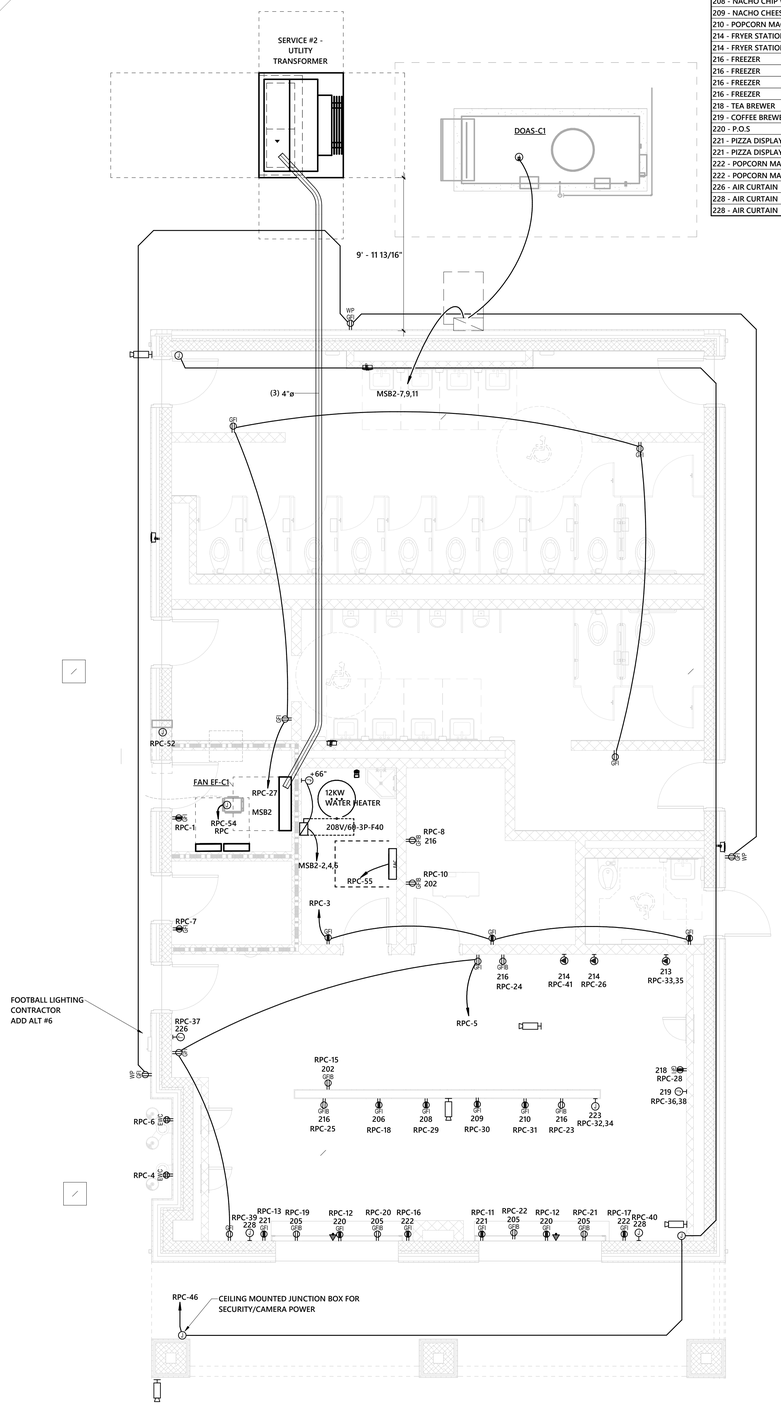
CONSTRUCTION DOCUMENTS

CONCESSION KITCHEN EQUIPMENT SCHEDULE

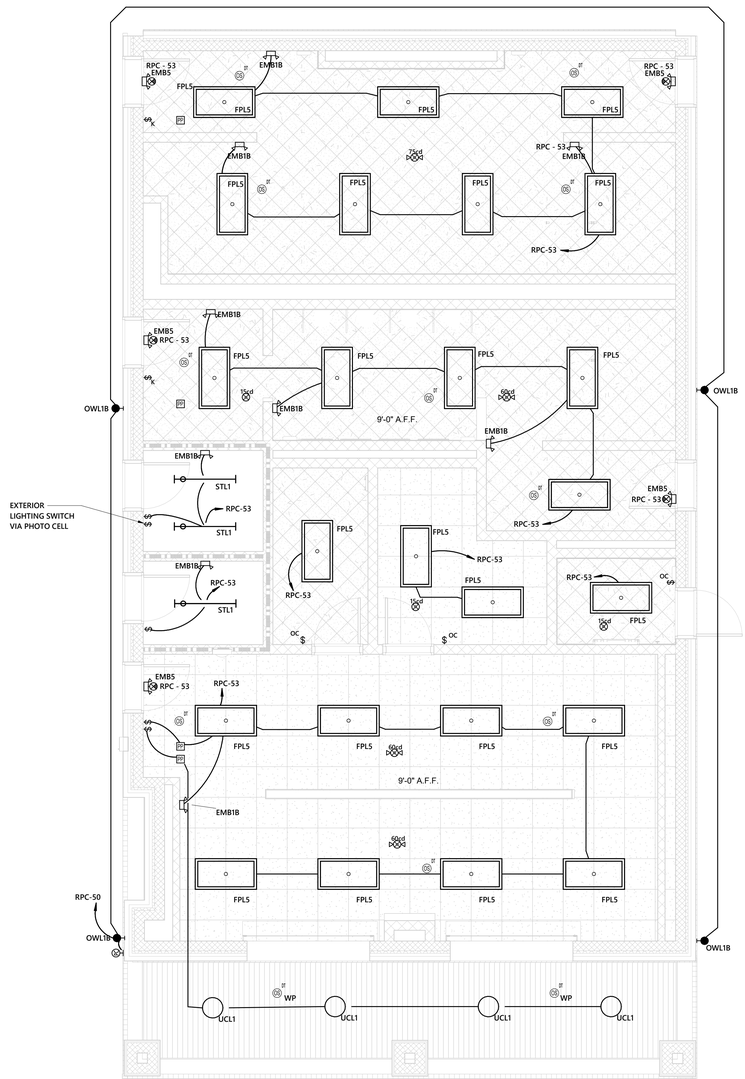
Load Name	Apparent Load	Apparent Current	PANEL AND CIRCUIT	Number of Poles	Load Classification	KITCHEN Connected	MOUNTING HEIGHT	NEMA RECEPTACLE	Comments
202 - REFRIGERATOR	0.69 kVA	5.8 A	RPC - 10	1	KITCHEN	0.69 kVA	24"	5-20R	
202 - REFRIGERATOR	0.69 kVA	5.8 A	RPC - 15	1	KITCHEN	0.69 kVA	24"	5-20R	
203 - ICE MAKER	1.50 kVA	7.2 A	RPC - 32,34	2	KITCHEN	1.50 kVA	72"	DIRECT CONN	PROVIDE 30A/2P -NF DISCONNECT
205 - UNDERCOUNTER REFRIG	0.76 kVA	6.3 A	RPC - 19	1	KITCHEN	0.76 kVA	24"	5-20R	
205 - UNDERCOUNTER REFRIG	0.76 kVA	6.3 A	RPC - 20	1	KITCHEN	0.76 kVA	24"	5-20R	
205 - UNDERCOUNTER REFRIG	0.76 kVA	6.3 A	RPC - 22	1	KITCHEN	0.76 kVA	24"	5-20R	
205 - UNDERCOUNTER REFRIG	0.76 kVA	6.3 A	RPC - 21	1	KITCHEN	0.76 kVA	24"	5-20R	
206 - MOBILE HOT CABINET	1.40 kVA	11.7 A	RPC - 18	1	KITCHEN	1.40 kVA	+66"	5-20R	
208 - NACHO CHIP WARMER	1.08 kVA	9.0 A	RPC - 29	1	KITCHEN	1.08 kVA	50"	5-20R	
209 - NACHO CHEESE WARMER	0.60 kVA	5.0 A	RPC - 30	1	KITCHEN	0.60 kVA	50"	5-20R	
210 - POPCORN MACHINE	1.20 kVA	10.0 A	RPC - 31	1	KITCHEN	1.20 kVA	50"	5-20R	
214 - FRYER STATION	7.60 kVA	63.3 A	RPC - 41	1	KITCHEN	7.60 kVA	50"	6-50R	COORDINATE PLUG TYPE AND BREAKER WITH VENDOR
214 - FRYER STATION	7.60 kVA	63.3 A	RPC - 26	1	KITCHEN	7.60 kVA	50"	6-50R	COORDINATE PLUG TYPE AND BREAKER WITH VENDOR
216 - FREEZER	0.75 kVA	6.3 A	RPC - 25	1	KITCHEN	0.75 kVA	24"	5-20R	
216 - FREEZER	0.75 kVA	6.3 A	RPC - 8	1	KITCHEN	0.75 kVA	24"	5-20R	
216 - FREEZER	0.75 kVA	6.3 A	RPC - 23	1	KITCHEN	0.75 kVA	24"	5-20R	
216 - FREEZER	0.76 kVA	6.3 A	RPC - 24	1	KITCHEN	0.76 kVA	24"	5-20R	
218 - TEA BREWER	1.44 kVA	12.0 A	RPC - 28	1	KITCHEN	1.44 kVA	50"	5-20R	
219 - COFFEE BREWER	3.00 kVA	14.4 A	RPC - 36,38	2	KITCHEN	3.00 kVA	50"	DIRECT CONN	PROVIDE MOTOR RATED SWITCH
220 - P.O.S	1.00 kVA	8.3 A	RPC - 12	1	KITCHEN	1.00 kVA	24"'	5-20R	
221 - PIZZA DISPLAY CAB	1.44 kVA	12.0 A	RPC - 13	1	KITCHEN	1.44 kVA	50"	5-20R	
221 - PIZZA DISPLAY CAB	1.44 kVA	12.0 A	RPC - 11	1	KITCHEN	1.44 kVA	50"	5-20R	
222 - POPCORN MACHINE	1.20 kVA	10.0 A	RPC - 16	1	KITCHEN	1.20 kVA	50"	5-20R	
222 - POPCORN MACHINE	1.20 kVA	10.0 A	RPC - 17	1	KITCHEN	1.20 kVA	50"	5-20R	
226 - AIR CURTAIN	2.00 kVA	16.7 A	RPC - 37	1	KITCHEN	2.00 kVA		DIRECT CONN	COORDINATE ALL REQUIREMENTS WITH VENDOR
228 - AIR CURTAIN	2.00 kVA	16.7 A	RPC - 39	1	KITCHEN	2.00 kVA		DIRECT CONN	COORDINATE ALL REQUIREMENTS WITH VENDOR
228 - AIR CURTAIN	2.00 kVA	16.7 A	RPC - 40	1	KITCHEN	2.00 kVA		DIRECT CONN	COORDINATE ALL REQUIREMENTS WITH VENDOR

GENERAL NOTES - POWER

A.	WHERE CONNECTED TO A 20A. BRANCH CIRCUIT SUPPLYING AN INDIVIDUAL RECEPTACLE (SIMPLEX OR DUPLEX), THE RECEPTACLE SHALL BE RATED AT 20A.
B.	PROVIDE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED AND GRADE MOUNTED ELECTRICAL EQUIPMENT. MINIMUM REQUIREMENTS: 4" HIGH, 4% AIR ENTRAINED, POLYFIBER REINFORCED CONCRETE, 4" WIDER AND 4" LONGER THAN EQUIPMENT TO BE PLACED ON IT. REFER TO ELECTRICAL DETAIL DRAWINGS FOR TRANSFORMER, GENERATOR, OR SWITCHGEAR PADS THAT MAY EXCEED THESE REQUIREMENTS.
C.	REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
D.	COORDINATE ALL DEVICE PLACEMENT WITH ARCHITECTURAL CASEWORK PLANS.
E.	ALL DEVICES SHALL BE FLUSH MOUNTED, UNLESS NOTED OTHERWISE, WITH NO EXPOSED CONDUIT.



1 POWER PLAN - CONCESSION (ADD ALT 6)
1/4" = 1'-0"



2 LIGHTING PLAN - CONCESSION (ADD ALT #6)
1/4" = 1'-0"

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POWER PLAN - CONCESSION (ADD ALT #6)

E-263

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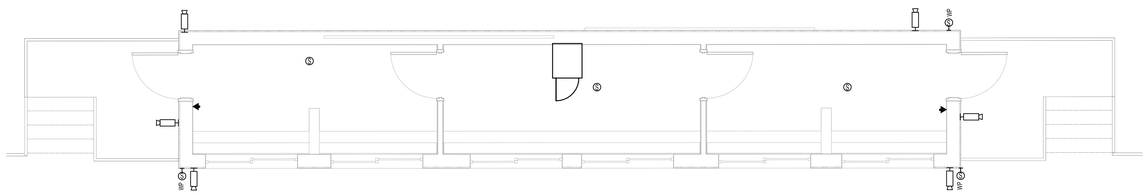
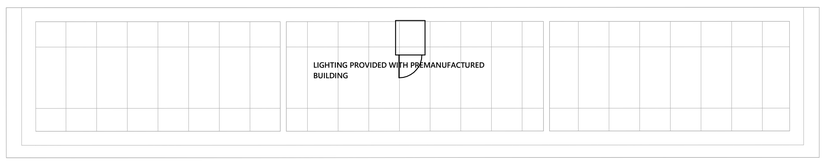
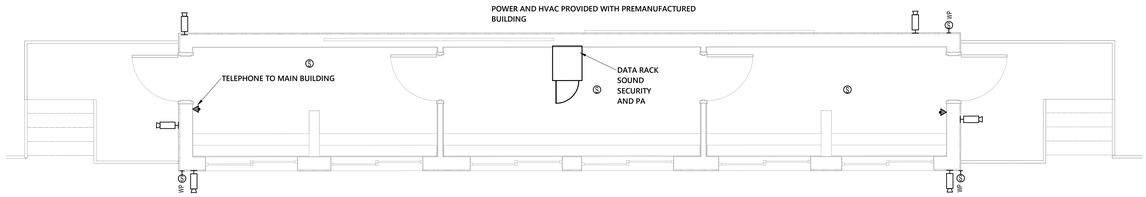


1 SYSTEMS PLAN- FOOTBALL PRESSBOX (ADD ALT #6)
1/4" = 1'-0"



2 LIGHTING PLAN - FOOTBALL PRESSBOX (ADD ALT #6)
1/4" = 1'-0"



3 POWER PLAN- FOOTBALL PRESSBOX (ADD ALT #6)
1/4" = 1'-0"

PRESS BOX IS PREFABRICATED. CORDINATE WITH MANUFACTURER. E.C. RESPONSIBLE FOR FEED AND FINAL CONNECTIONS TO PRE-FAB UNIT.

120/240 1 PHASE , 3 WIRE LOAD CENTER
PLUG IN BREAKERS
15 AMP SWITCHES

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POWER PLAN - FOOTBALL PRESS BOX (ADD ALT #6)

E-264

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CONDUCTOR LENGTH TABLE

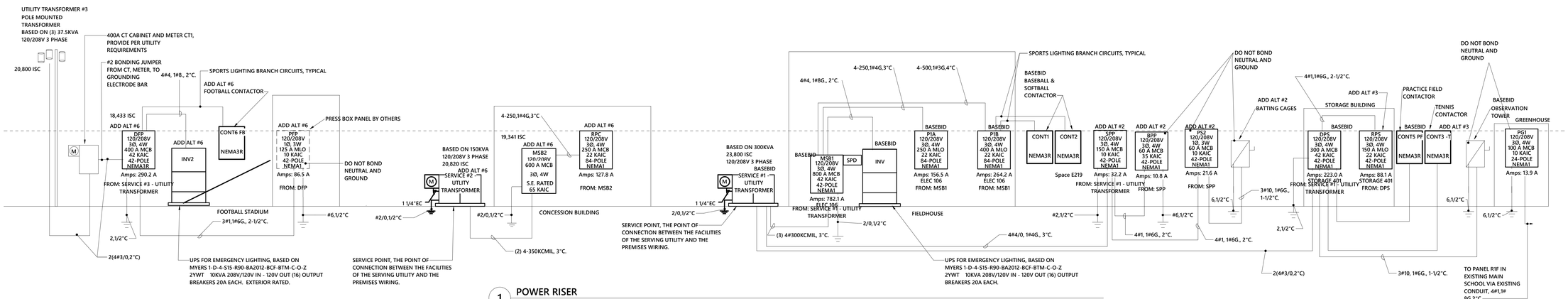
THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR MEETING ALL NEC VOLTAGE DROP REQUIREMENTS REGARDLESS OF WHAT THE PANEL SCHEDULE INDICATES. BRANCH CIRCUIT (COPPER CONDUCTORS) ARE TO BE SIZED TO ALLOW A MAXIMUM OF 3% VOLTAGE DROP FROM THE CIRCUIT BREAKER TO THE FIRST DEVICE ON THE BRANCH CIRCUIT AND ACHIEVE A MAXIMUM OF 5% VOLTAGE DROP ACROSS THE ENTIRE BRANCH CIRCUIT: SEE BELOW FOR THIS PROJECTS COMMONLY USED BRANCH CIRCUIT TYPES.

DISTANCE	AMPS	VOLTAGE	BRANCH CIRCUIT
0 - 60FT	20	120V 1-PHASE	#12
60 - 100FT	20	120V 1-PHASE	#10
100 - 160FT	20	120V 1-PHASE	#8
160 - 260FT	20	120V 1-PHASE	#6
260 - 400FT	20	120V 1-PHASE	#4
400 - 700FT	20	120V 1-PHASE	#2

GENERAL RISER NOTES:
1. PROVIDE 1 1/4" CONDUIT FROM ELECTRIC AND GAS METERS TO BMS (BAS) CONTROL PANEL WITH #18 STRANDED PAIR WIRE. COORDINATE FINAL CONNECTIONS WITH LOCAL UTILITY AND MECHANICAL CONTROLS CONTRACTOR. PROVIDE MONITORING CABLES PER MONITORING REQUIREMENTS. PROVIDE CONDUIT FROM SECONDARY OF UTILITY TRANSFORMER FOR CT MONITORING.
2. PROVIDE PERMANENT PLACARD LOCATED ABOVE THE MAIN SERVICE DISCONNECT AND AT THE ATS INDICATING THE NAME AND LOCATION OF THE OTHER MAIN SERVICE DEVICE.
3. PROVIDE 4" HIGH RE-ENFORCED CONCRETE HOUSEKEEPING PAD FOR ALL FLOOR MOUNTED ELECTRICAL GEAR WHETHER SHOWN OR NOT SHOWN.
4. PROVIDE AN ARC FLASH ANALYSIS PER NFPA 70E AND OSHA 29 CFR 1910 AND LABEL ALL PANELS ACCORDINGLY WITH THE SPECIFIC HAZARD LEVEL. SEE SPECIFICATIONS.
5. INSTALL COPY OF FINAL RISER DIAGRAM ON MAIN ELECTRICAL ROOM WALL ADJACENT TO MAIN DISTRIBUTION PANEL. RISER SHALL BE LAMINATED AND FRAMED IN PLEXIGLASS. MINIMUM SIZE SHALL BE 24"X36".
6. SEE EQUIPMENT RISER SCHEDULE FOR ALL FEEDER SIZES. ALL CONDUCTORS ARE COPPER.
7. PROVIDE PERMANENT NAMEPLATE LOCATED AT MAIN SERVICE DISCONNECTS INDICATING "SERVICE 1 OF 2" AND "SERVICE 2 OF 2" AND THE LOCATION OF THE OTHER ELECTRICAL SERVICE. PROVIDE SERVICE DISCONNECTING MEANS AT THE GENERATOR.
8. ELECTRICAL CONTRACTOR SHALL PROVIDE CONCRETE PAD FOR UTILITY TRANSFORMER. COORDINATE WITH GENERAL CONTRACTOR AND LOCAL UTILITY.
9. ELECTRICAL CONTRACTOR SHALL PROVIDE CONCRETE PAD FOR TRANSFORMERS. COORDINATE WITH GENERAL CONTRACTOR.
10. PROVIDE (1) SPARE CONDUIT OF THE SAME SIZE FOR EACH UTILITY SERVICE.
11. SWITCHBOARD SHALL BE FRONT ACCESSIBLE ONLY.
12. SEE RISER AND PANEL SCHEDULES FOR REQUIRED POLES PER PANEL. FEED THRU SECTIONS TO PANELS SHALL BE PROVIDED WITH MATCHING FEEDER CALLED OUT BY THE TRANSFORMER SCHEDULE AND ELECTRICAL EQUIPMENT RISER SCHEDULE. FOR EACH RESPECTIVE SECTION FEEDER.
13. BOND SERVICE GROUND CONDUCTORS TOGETHER THAT ARE SERVED FROM THE SAME UTILITY TRANSFORMER.
14. EMERGENCY FEEDERS ("LS/LR/ELEV" PANELS) SHALL BE 2 HOUR PROTECTED AND/OR ROUTED UNDERGROUND TO MEET REQUIREMENTS OF NEC 700.10(C)(D).

ELECTRICAL EQUIPMENT RISER SCHEDULE

PANEL NAME	SHORT CIRCUIT RATING	Voltage	Isc Input	MAINS	CALCULATED MAXIMUM 80%	TOTAL ESTIMATED DEMAND CIRCUIT	Number of Poles	NUMBER OF WIRES	PANEL LOCATION	PANEL FED FROM	Phase Created
MSB1	42 KAIC	120/208V		800 A	640 A	782 A	3	4	ELEC 106	SERVICE #1 - UTILITY TRANSFORMER	Base Bid
MSB2	65 KAIC	120/208V		600 A	480 A	288 A	3	4		SERVICE #2 - UTLITY TRANSFORMER	Add Alt 6 - Football Stadium
P1B	22 KAIC	120/208V		400 A	320 A	264 A	3	4	ELEC 106	MSB1	Base Bid
DFP	42 KAIC	120/208V		400 A	320 A	290 A	3	4		SERVICE #3 - UTILITY TRANSFORMER	Add Alt 6 - Football Stadium
DPS	42 KAIC	120/208V		300 A	240 A	223 A	3	4	STORAGE 401	SERVICE #1 - UTILITY TRANSFORMER	Base Bid
P1A	22 KAIC	120/208V		250 A	200 A	157 A	3	4	ELEC 106	MSB1	Base Bid
RPC	22 KAIC	120/208V		250 A	200 A	128 A	3	4		MSB2	Add Alt 6 - Football Stadium
SPP	10 KAIC	120/208V		150 A	120 A	32 A	3	4		SERVICE #1 - UTILITY TRANSFORMER	Add Alt 2 - B&S Accessory Structures
RPS	22 KAIC	120/208V		150 A	120 A	88 A	3	4	STORAGE 401	DPS	Base Bid
PFP	10 KAIC	120/208V		125 A	100 A	87 A	2	3		DFP	Add Alt 6 - Football Stadium
PG1	10 KAIC	120/208V		100 A	80 A	14 A	3	4			Add Alt 5 - Greenhouse
PS2	10 KAIC	120/208V		60 A	48 A	22 A	2	3		SPP	Add Alt 2 - B&S Accessory Structures
BPP	35 KAIC	120/208V		60 A	48 A	11 A	3	4		SPP	Add Alt 2 - B&S Accessory Structures



1 POWER RISER
NOT TO SCALE

LOAD SUMMARY CALCULATION

SERVICE #1 - UTILITY TRANSFORMER	355.21 kVA
TOTAL DEMAND VOLT AMPERES	373.24 kVA

ELECTRICAL LOAD ESTIMATE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND LOAD
LIGHTS	8.28 kVA	125.00%	10.35 kVA
LIGHTING - EXTERIOR	131.12 kVA	125.00%	163.90 kVA
HEATING	6.00 kVA	100.00%	6.00 kVA
COOLING	69.00 kVA	100.00%	69.00 kVA
VENTILATION	0.44 kVA	100.00%	0.44 kVA
MOTORS	0.00 kVA	0.00%	0.00 kVA
KITCHEN	21.50 kVA	65.00%	13.98 kVA
RECEPTACLES	28.36 kVA	67.22%	19.06 kVA
WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MISC.	28.95 kVA	100.00%	28.95 kVA
Spare	0.00 kVA	0.00%	0.00 kVA
ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LAUNDRY	0.00 kVA	0.00%	0.00 kVA
APARTMENT LOADS	0.00 kVA	0.00%	0.00 kVA
GUEST RM LTS/RCPT-NEC 220.42	0.00 kVA	0.00%	0.00 kVA
HEATING - FUTURE	0.00 kVA	0.00%	0.00 kVA
HEATING - UNITS	0.00 kVA	0.00%	0.00 kVA
LIGHTING - FUTURE	0.00 kVA	0.00%	0.00 kVA
RECEPTACLE - FUTURE	0.00 kVA	0.00%	0.00 kVA
TOTAL VOLT AMPERES	355.21 kVA		373.24 kVA
CALCULATED AMPERES	986.0 A		1036.0 A

Notes:
N/A.

LOAD SUMMARY CALCULATION

SERVICE #2 - UTLITY TRANSFORMER	124.23 kVA
TOTAL DEMAND VOLT AMPERES	103.84 kVA

ELECTRICAL LOAD ESTIMATE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND LOAD
LIGHTS	1.38 kVA	125.00%	1.73 kVA
LIGHTING - EXTERIOR	0.48 kVA	125.00%	0.59 kVA
HEATING	0.00 kVA	0.00%	0.00 kVA
COOLING	50.00 kVA	100.00%	50.00 kVA
VENTILATION	0.00 kVA	0.00%	0.00 kVA
MOTORS	0.00 kVA	0.00%	0.00 kVA
KITCHEN	57.13 kVA	65.00%	37.13 kVA
RECEPTACLES	3.42 kVA	74.74%	2.56 kVA
WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MISC.	11.82 kVA	100.00%	11.82 kVA
Spare	0.00 kVA	0.00%	0.00 kVA
ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LAUNDRY	0.00 kVA	0.00%	0.00 kVA
APARTMENT LOADS	0.00 kVA	0.00%	0.00 kVA
GUEST RM LTS/RCPT-NEC 220.42	0.00 kVA	0.00%	0.00 kVA
HEATING - FUTURE	0.00 kVA	0.00%	0.00 kVA
HEATING - UNITS	0.00 kVA	0.00%	0.00 kVA
LIGHTING - FUTURE	0.00 kVA	0.00%	0.00 kVA
RECEPTACLE - FUTURE	0.00 kVA	0.00%	0.00 kVA
TOTAL VOLT AMPERES	124.23 kVA		103.84 kVA
CALCULATED AMPERES	344.8 A		288.2 A

Notes:
N/A.

LOAD SUMMARY CALCULATION

SERVICE #3 - UTILITY TRANSFORMER	90.61 kVA
TOTAL DEMAND VOLT AMPERES	104.56 kVA

ELECTRICAL LOAD ESTIMATE

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND LOAD
LIGHTS	0.00 kVA	0.00%	0.00 kVA
LIGHTING - EXTERIOR	55.81 kVA	125.00%	69.76 kVA
HEATING	0.00 kVA	0.00%	0.00 kVA
COOLING	0.00 kVA	0.00%	0.00 kVA
VENTILATION	0.00 kVA	0.00%	0.00 kVA
MOTORS	0.00 kVA	0.00%	0.00 kVA
KITCHEN	0.00 kVA	0.00%	0.00 kVA
RECEPTACLES	0.00 kVA	0.00%	0.00 kVA
WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MISC.	34.80 kVA	100.00%	34.80 kVA
Spare	0.00 kVA	0.00%	0.00 kVA
ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LAUNDRY	0.00 kVA	0.00%	0.00 kVA
APARTMENT LOADS	0.00 kVA	0.00%	0.00 kVA
GUEST RM LTS/RCPT-NEC 220.42	0.00 kVA	0.00%	0.00 kVA
HEATING - FUTURE	0.00 kVA	0.00%	0.00 kVA
HEATING - UNITS	0.00 kVA	0.00%	0.00 kVA
LIGHTING - FUTURE	0.00 kVA	0.00%	0.00 kVA
RECEPTACLE - FUTURE	0.00 kVA	0.00%	0.00 kVA
TOTAL VOLT AMPERES	90.61 kVA		104.56 kVA
CALCULATED AMPERES	251.5 A		290.2 A

Notes:
N/A.

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HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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10/31/25
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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

POWER RISER DIAGRAM AND SCHEDULES

E-701

CONSTRUCTION DOCUMENTS

PANEL: MSB1

VOLTAGE: 208Y/120 3Ø | **FED FROM:** SERVICE #1 - UTILITY TRANSFORMER
MOUNTING: SURFACE | **MAIN TYPE:** MCB | **MFR:**
ENCLOSURE: NEMA1 | **PHASE:** 3 | **TYPE:**
MAIN: 800 A | **WIRE:** 4 | **AIC:** 42 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
				1		25.81 16.67			2					MIS C.; C...
F	PANEL P1B	SR	400 A	3	3		25.81 16.67		3	4	225 A	4/0	DOAS F1	
				5				24.61 16.67		6				
F	PANEL 'P1A'	SR	350 A	7	3	28.07 20.40				8				HVA C
				9			21.64 20.40		3	10	200 A	3/0	C2, ALT #6	
				11				18.21 20.40		12				
MIS C.; C...	SPAC- F1 ADD ALT #1	4	70 A	13		6.33 --			1	14	--	-	SPACE ONLY	
				15	3		6.33 --		1	16	--	-	SPACE ONLY	
				17				6.33 --	1	18	--	-	SPACE ONLY	
				19		0.00 --			1	20	--	-	SPACE ONLY	
Spare	SPARE	-	100 A	21	3		0.00 --		1	22	--	-	SPACE ONLY	
				23				0.00 --	1	24	--	-	SPACE ONLY	
	SPACE ONLY	-	--	25	1	-- --			1	26	--	-	SPACE ONLY	
	SPACE ONLY	-	--	27	1		-- --		1	28	--	-	SPACE ONLY	
	SPACE ONLY	-	--	29	1			-- --	1	30	--	-	SPACE ONLY	
	SPACE ONLY	-	--	31	1	-- --			1	32	--	-	SPACE ONLY	
	SPACE ONLY	-	--	33	1		-- --		1	34	--	-	SPACE ONLY	
	SPACE ONLY	-	--	35	1			-- --	1	36	--	-	SPACE ONLY	
	SPACE ONLY	-	--	37	1	-- 0.00				38				
	SPACE ONLY	-	--	39	1		-- 0.00		3	40	60 A	-	SPD	Spare
	SPACE ONLY	-	--	41	1			-- 0.00		42				

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	6.22 kVA	125.00%	7.77 kVA
LE	LIGHTING - EXTERIOR	79.23 kVA	125.00%	99.03 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	69.00 kVA	100.00%	69.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	21.50 kVA	65.00%	13.98 kVA
R	RECEPTACLES	19.26 kVA	66.73%	12.85 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	17.58 kVA	100.00%	17.58 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. THIS PANEL SHALL BE U.L. LISTED FOR USE AS S.E. EQUIP.
8. 100% RATED MAIN.

TOTAL KVA...	274.34 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	281.77 kVA	816.6 A	763.0 A	718.5 A
TOTAL AMP....	761 A			
TOTAL AMP. (DEMAND):	782 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: INV

VOLTAGE: 208Y/120 3Ø | **FED FROM:**
MOUNTING: | **MAIN TYPE:** 24KW | **MFR:** MYERS
ENCLOSURE: Type 1 | **PHASE:** 3 | **TYPE:**
MAIN: | **WIRE:** 4 | **AIC:**

LC Abbr	Load Served	Wire	Fuse	Ckt No	Pole	A	B	C	Pole	Ckt No	Fuse	Wire	Load Served	LC Abbr
LI...	FEILD HOUSE LIGHTING - EXTERIOR	12	20 A	1	1	1.55 1.20			1	2	20 A	12	BASEBALL LIGHTING - EXTERIOR	LI...
LI...	BASEBALL LIGHTING - EXTERIOR	12	20 A	3	1		1.20 1.20		1	4	20 A	12	SOFTBALL LIGHTING - EXTERIOR	LI...
				5				1.20	1	6	20 A	12	SOFT BALL LIGHTING - EXTERIOR	LI...
				7		0.01			1	8	20 A	12	FIELD HOUSE INTERIOR EM LIGHTS	LI...
				9						10				
				11						12				
				13						14				
				15						16				

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.01 kVA	125.00%	0.01 kVA
LE	LIGHTING - EXTERIOR	6.35 kVA	125.00%	7.93 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	0.00 kVA	0.00%	0.00 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	0.00 kVA	0.00%	0.00 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA
E	ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LD	LAUNDRY	0.00 kVA	0.00%	0.00 kVA

NOTES:

TOTAL KVA...	6.36 kVA	TOTAL PER PHASE: (CONNECTED)	
TOTAL KVA (DEMAND):	7.94 kVA	24.5 A	21.5 A	10.0 A
TOTAL AMP....	18 A	TOTAL PER PHASE: (CONNECTED @ 125%)	
TOTAL AMP. (DEMAND):	22 A	30.6 A	26.9 A	12.5 A

PANEL: SPP

VOLTAGE: 208Y/120 3Ø | **FED FROM:** SERVICE #1 - UTILITY TRANSFORMER
MOUNTING: SURFACE | **MAIN TYPE:** MCB | **MFR:**
ENCLOSURE: NEMA1 | **PHASE:** 3 | **TYPE:**
MAIN: 150 A | **WIRE:** 4 | **AIC:** 10 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
				1		1.44 0.18			1	2	20 A	12	RECEPTACLES	R...
Spare; R...	PANEL 'BPP'	SR	60 A	3	3		1.72 1.11		1	4	20 A	12	SECURITY POWER JUNCTION BOX	MI...
				5				1.54 0.36	1	6	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	7	1	0.54 0.18			1	8	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	9	1		0.18 0.18		1	10	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	11	1			0.36 0.23	1	12	20 A	12	LIGHTS	LI...
R...	RECEPTACLES	12	20 A	13	1	0.18 0.23			1	14	20 A	12	LIGHTS	LI...
R...	RECEPTACLES	12	20 A	15	1		0.36 2.38		2	16	60 A	SR	PANEL PS2	Spare;...
Sp...	SPARE	-	20 A	17	1			0.00 2.00		18				
Sp...	SPARE	-	20 A	19	1	0.00 0.00				20				
Sp...	SPARE	-	20 A	21	1		0.00 0.00		3	22	30 A	-	SPARE	Spare
Sp...	SPARE	-	20 A	23	1			0.00 0.00		24				
				25		0.00 0.00			1	26	20 A	-	SPARE	Sp...
Spare	SPARE	-	30 A	27	3		0.00 0.00		1	28	20 A	-	SPARE	Sp...
				29				0.00 0.00	1	30	20 A	-	SPARE	Sp...
	SPACE ONLY	-	--	31	1	-- --			1	32	--	-	SPACE ONLY	
	SPACE ONLY	-	--	33	1		-- --		1	34	--	-	SPACE ONLY	
	SPACE ONLY	-	--	35	1			-- --	1	36	--	-	SPACE ONLY	
	SPACE ONLY	-	--	37	1	-- --			1	38	--	-	SPACE ONLY	
	SPACE ONLY	-	--	39	1		-- --		1	40	--	-	SPACE ONLY	
	SPACE ONLY	-	--	41	1			-- --	1	42	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	1.02 kVA	125.00%	1.27 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	6.76 kVA	73.24%	4.95 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	5.39 kVA	100.00%	5.39 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. THIS PANEL SHALL BE U.L. LISTED FOR USE AS S.E. EQUIP.
8. 100% RATED MAIN.

TOTAL KVA...	13.17 kVA	TOTAL PER PHASE: (CONNECTED)	
TOTAL KVA (DEMAND):	11.62 kVA	22.9 A	51.7 A	39.6 A
TOTAL AMP....	37 A		
TOTAL AMP. (DEMAND):	32 A		

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: P1A

VOLTAGE: 208Y/120 3Ø | **FED FROM:** MSB1
MOUNTING: SURFACE | **MAIN TYPE:** MLO | **MFR:**
ENCLOSURE: NEMA1 | **PHASE:** 3 | **TYPE:**
MAIN: 250 A | **WIRE:** 4 | **AIC:** 22 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
LI...	LIGHTS - LOCKER/GENERAL *	12	20 A	1	1	1.51 0.50			1	2	20 A	12	FIRE ALARM (NOTE 9)	MI...
LI...	LIGHTS *	12	20 A	3	1		1.21 0.18		1	4	20 A	12	RECEPTACLES	R...
LI...	LIGHTS *	12	20 A	5	1			0.83 0.90	1	6	20 A	12	RECEPTACLES	R...
LI...	LIGHTS *	12	20 A	7	1	1.20 0.72			1	8	20 A	12	RECEPTACLES	R...
LI...	LIGHTS	12	20 A	9	1		0.06 1.08		1	10	20 A	12	RECEPTACLES	R...
LI...	LIGHTS	12	20 A	11	1			0.31 1.00	1	12	20 A	12	DRYER (NOTE 8)	MI...
R...	EXTERIOR RECEPTACLE	12	20 A	13	1	1.26 0.90			1	14	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	15	1		0.36 0.90		1	16	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	17	1			0.36 0.90	1	18	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	19	1	0.72 0.90			1	20	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	21	1		1.26 0.18		1	22	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	23	1			1.08 0.36	1	24	20 A	12	RECEPTACLES	R...
MISC.	WASHER (NOTE 8)	12	15 A	25	2	0.50 0.36			1	26	20 A	12	REC - EXTERIOR	R...
				27			0.50 1.41		1	28	20 A	12	LIGHTING - EXTERIOR	LI...
R...	IRRIGATION POWER	12	20 A	29	1			0.18 0.20	1	30	20 A	12	WATER HEATER	MI...
KI...	210 - POPCORN	12	20 A	31	1	1.20 0.60			1	32	20 A	12	209 - NACHO CHEESE WARMER	KI...
MISC.	BASEBALL HOME DUGOUT	10	30 A	33	3		1.00 0.80		1	34				
				35				0.60 0.54	3	36	30 A	10	SOFTBALL HOME DUGOUT	MISC.
				37		0.60 0.90				38				
MISC.	BASEBALL AWAY DUGOUT	10	30 A	39	2		1.00 1.00			40				
				41				0.60 0.60	2	42	30 A	10	SOFTBALL AWAY DUGOUT	MISC.
MI...	BASEBALL SCOREBOARD	12	20 A	43	1	0.60 0.90			1	44	20 A	12	REC - WEIGHT RM ALT #1	R...
MI...	SOFTBALL SCOREBOARD	12	20 A	45	1		1.20 0.72		1	46	20 A	12	REC - WEIGHT RM ALT #1	R...
R...	CEILING REC - WEIGHTRM ALT #1	12	20 A	47	1			0.36 0.54	1	48	20 A	12	REC - WEIGHT RM ALT #1	R...
R...	CEILING REC - WEIGHTRM ALT #1	12	20 A	49	1	0.36 0.36			1	50	20 A	12	CEILING REC - WEIGHTRM ALT #1	R...
KI...	202 - REFRIGERATOR	12	20 A	51	1		0.70 0.36		1	52	20 A	12	CEILING REC - WEIGHTRM ALT #1	R...
KI...	221 - PIZZA DISPLAY CAB	12	20 A	53	1			1.50 0.80	1	54	20 A	12	205 - UNDERCOUNTER REFRIG	KI...
KI...	220 - P.O.S	12	20 A	55	1	1.50 0.80			1	56	20 A	12	205 - UNDERCOUNTER REFRIG	KI...
LI...	SPORTS POLE - POWER (SEC/COMM)	12	20 A	57	1		1.00 1.20		1	58	20 A	12	222 - POPCORN MACHINE	KI...
LI...	SPORTS POLE - POWER (SEC/COMM)	12	20 A	59	1			1.00 1.20	1	60	20 A	12	206 - MOBILE HOT CABINET	KI...
R...	SOFTBALL HOME PLATE REC	12	20 A	61	1	0.18 1.10			2	62	20 A	12	203 - ICE MAKER	KIT C...
MI...	BASEBALL/SOFTBALL FLAG POLE	10	20 A	63	1		1.00 1.10			64				
Sp...	SPARE	-	20 A	65	1			0.00 0.18	1	66	20 A	12	BASEBALL HOME PLATE REC	R...
R...	REC - WEIGHT RM ALT #1	12	20 A	67	1	0.90 0.54			1	68	20 A	12	RECEPTACLES	R...
R...	REC - WEIGHT RM ALT #1	12	20 A	69	1		0.72 1.10		2	70	20 A	12	226 - AIR CURTAIN	KIT C...
R...	REC - WEIGHT RM ADD ALT #1	12	20 A	71	1			0.72 1.10		72				
Sp...	SPARE	-	20 A	73	1	0.00 1.00			1	74	20 A	12	SECURITY POWER	MI...
Ot...	GARAGE DOOR ADD ALT #1	12	20 A	75	1		0.36 1.25		2	76	30 A	10	CUH-F1	MISC.
LI...	WEIGHT RM LIGHTS - ADD ALT #1 *	12	20 A	77	1			1.10 1.25		78				
R...	EWC - WEIGHT RM ALT #1	12	20 A	79	1	0.36 7.60			1	80	50 A	6	214 - FRYER	KI...
Sp...	SPARE	-	20 A	81	1		0.00 --		1	82	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	83	1			0.00 --	1	84	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	6.22 kVA	125.00%	7.77 kVA
LE	LIGHTING - EXTERIOR	3.41 kVA	125.00%	4.26 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	21.50 kVA	65.00%	13.98 kVA
R	RECEPTACLES	19.26 kVA	66.73%	12.85 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	17.18 kVA	100.00%	17.18 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. THIS PANEL SHALL BE U.L. LISTED FOR USE AS S.E. EQUIP.
8. PROVIDE CLASS A GFI (6mA-PERSONNEL) BRKR (250' MAX).
9. PROVIDE BREAKER WITH RED HANDLE AND LOCK-ON.

* - INDICATES UNIT BATTERY WITH HANDLE LOCK ON.

TOTAL KVA...	67.92 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	56.39 kVA	238.3 A	184.7 A	151.8 A
TOTAL AMP....	189 A			
TOTAL AMP. (DEMAND):	157 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: P1B

VOLTAGE: 208Y/120 3Ø | **FED FROM:** MSB1
MOUNTING: SURFACE | **MAIN TYPE:** MLO | **MFR:**
ENCLOSURE: NEMA1 | **PHASE:** 3 | **TYPE:**
MAIN: 400 A | **WIRE:** 4 | **AIC:** 22 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
				1		0.96 2.25			2					
LIGHTING - SOFTBALL A4		12	20 A	3	3		0.96 2.25		4	20 A	12	LIGHTING - SOFTBALL B4	LIGHTING...	
				5				0.96 2.25	6					
LIGHTING - SOFTBALL B3		12	20 A	9	3	2.25 0.96			8					
				11			2.25 0.96		3	10	20 A	12	LIGHTING - SOFTBALL A3	LIGHTING...
				13		3.08 2.37			12					
LIGHTING - BASEBALL B1		4	60 A	15	3		3.08 2.37		14					
				17				3.08 2.37	3	16	30 A	10	LIGHTING - BASEBALL A2	LIGHTING...
				19		3.08 3.21			18					
LIGHTING - BASEBALL C2		10	30 A	21	3		3.08 3.21		20					
				23				3.08 3.21	3	22	60 A	4	LIGHTING - BASEBALL B2	LIGHTING...
				25		2.37 3.08			24					
LIGHTING - BASEBALL A1		10	30 A	27	3		2.37 3.08		26					
				29				2.37 3.08	3	28	30 A	10	LIGHTING - BASEBALL C1	LIGHTING...
BASEBALL CONTACTOR PANEL...		12	20 A	31	1	0.20 2.00			30					
SOFTBALL CONTACTOR PANEL...		12	20 A	33	1		0.20 2.00		1	32	30 A	10	SITE LIGHTING - VIA TIME CLOCK	LI...
SITE LIGHTING VIA TIME...		10	30 A	35	1			1.00 0.00	1	34	30 A	10	SITE LIGHTING VIA TIME CLOCK	LI...
				37		0.00 0.00			36					
SPARE		-	60 A	39	3		0.00 0.00		3	38	30 A	-	SPARE	Spare
				41				0.00 0.00	40					
				43		0.00			3	42	15 A	12	SPARE	Spare
SPACE ONLY		-	--	45	1		-- 0.00		44					
SPACE ONLY		-	--	47	1			-- 0.00	1	46	20 A	-	SPARE	Sp...
SPACE ONLY		-	--	49	1	-- 0.00			1	48	15 A	12	SPARE	Sp...
SPACE ONLY		-	--	51	1		-- 0.00		1	50	30 A	-	SPARE	Sp...
SPACE ONLY		-	--	53	1			-- 0.00	1	52	20 A	-	SPARE	Sp...
SPACE ONLY		-	--	55	1	-- --			1	54	--	-	SPACE ONLY	
SPACE ONLY		-	--	57	1		-- --		1	56	--	-	SPACE ONLY	
SPACE ONLY		-	--	59	1			-- --	1	58	--	-	SPACE ONLY	
SPACE ONLY		-	--	61	1	-- --			1	60	--	-	SPACE ONLY	
SPACE ONLY		-	--	63	1		-- --		1	62	--	-	SPACE ONLY	
SPACE ONLY		-	--	65	1			-- --	1	64	--	-	SPACE ONLY	
SPACE ONLY		-	--	67	1	-- --			1	66	--	-	SPACE ONLY	
SPACE ONLY		-	--	69	1		-- --		1	68	--	-	SPACE ONLY	
SPACE ONLY		-	--	71	1			-- --	1	70	--	-	SPACE ONLY	
SPACE ONLY		-	--	73	1	-- --			1	72	--	-	SPACE ONLY	
SPACE ONLY		-	--	75	1		-- --		1	74	--	-	SPACE ONLY	
SPACE ONLY		-	--	77	1			-- --	1	76	--	-	SPACE ONLY	
SPACE ONLY		-	--	79	1	-- --			1	78	--	-	SPACE ONLY	
SPACE ONLY		-	--	81	1		-- --		1	80	--	-	SPACE ONLY	
SPACE ONLY		-	--	83	1			-- --	1	82	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	75.82 kVA	125.00%	94.77 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	0.00 kVA	0.00%	0.00 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	0.40 kVA	100.00%	0.40 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. PROVIDE FEED THRU LUGS.

TOTAL KVA...	76.22 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	95.17 kVA	216.6 A	216.6 A	205.1 A
TOTAL AMP....	212 A			
TOTAL AMP. (DEMAND):	264 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: BPP

VOLTAGE: 208Y/120 3Ø | **FED FROM:** SPP
MOUNTING: SURFACE | **MAIN TYPE:** MCB | **MFR:**
ENCLOSURE: NEMA1 | **PHASE:** 3 | **TYPE:**
MAIN: 60 A | **WIRE:** 4 | **AIC:** 35 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
R...	RECEPTACLES	12	20 A	1	1	0.54 0.18			1	2	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	3	1		0.36 1.00		1	4	20 A	12	DATA RACK	R...
Sp...	SPARE	-	20 A	5	1			0.00 0.36	1	6	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	7	1	0.54 0.18			1	8	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	9	1		0.18 0.18		1	10	20 A	12	RECEPTACLES	R...
MI...	SECURITY POWER	12	20 A	11	1			1.00 0.18	1	12	20 A	12	RECEPTACLES	R...
Sp...	SPARE	-	20 A	13	1	0.00 --			1	14	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	15	1		0.00 --		1	16	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	17	1			0.00 --	1	18	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	19	1	0.00 --			1	20	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	21	1		0.00 --		1	22	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	23	1			0.00 --	1	24	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	25	1	0.00 --			1	26	--	-	SPACE ONLY	
	SPACE ONLY	-	--	27	1		-- --		1	28	--	-	SPACE ONLY	
	SPACE ONLY	-	--	29	1			-- --	1	30	--	-	SPACE ONLY	
	SPACE ONLY	-	--	31	1	-- --			1	32	--	-	SPACE ONLY	
	SPACE ONLY	-	--	33	1		-- --		1	34	--	-	SPACE ONLY	
	SPACE ONLY	-	--	35	1			-- --	1	36	--	-	SPACE ONLY	
	SPACE ONLY	-	--	37	1	-- --			1	38	--	-	SPACE ONLY	
	SPACE ONLY	-	--	39	1		-- --		1	40	--	-	SPACE ONLY	
	SPACE ONLY	-	--	41	1			-- --	1	42	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	3.70 kVA	78.35%	2.90 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	1.00 kVA	100

PANEL: PS2

VOLTAGE: 120/208 1Ø | FED FROM: SPP
MOUNTING: SURFACE | MAIN TYPE: MCB | MFR:
ENCLOSURE: NEMA1 | PHASE: 1 | TYPE:
MAIN: 60 A | WIRE: 3 | AIC: 10 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A		B		C		Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
MISC...	BATTING CAGE CIRCUITS	12	20 A	1	2	1.10	0.18					1	2	20 A	12	RECEPTACLES	RE...
				3				1.10	0.18			1	4	20 A	12	RECEPTACLES	RE...
RE...	RECEPTACLES	12	20 A	5	1	0.18	0.56					1	6	20 A	12	LIGHTS	LIG...
MI...	GARAGE DOOR	12	20 A	7	1			0.36	0.00			1	8	20 A	-	SPARE	Sp...
MI...	GARAGE DOOR	12	20 A	9	1	0.36	0.00					1	10	20 A	-	SPARE	Sp...
MI...	GARAGE DOOR	12	20 A	11	1			0.36	0.00			1	12	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	13	1	0.00	0.00					1	14	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	15	1			0.00	0.00			1	16	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	17	1	0.00	0.00					1	18	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	19	1			0.00	0.00			1	20	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	21	1	0.00						1	22				
				23								1	24				
				25			--					1	26	--	-	SPACE ONLY	
	SPACE ONLY	-	--	27	1			--	--			1	28	--	-	SPACE ONLY	
	SPACE ONLY	-	--	29	1	--	--					1	30	--	-	SPACE ONLY	
	SPACE ONLY	-	--	31	1			--	--			1	32	--	-	SPACE ONLY	
	SPACE ONLY	-	--	33	1	--	--					1	34	--	-	SPACE ONLY	
	SPACE ONLY	-	--	35	1			--	--			1	36	--	-	SPACE ONLY	
	SPACE ONLY	-	--	37	1	--	--					1	38	--	-	SPACE ONLY	
	SPACE ONLY	-	--	39	1			--	--			1	40	--	-	SPACE ONLY	
	SPACE ONLY	-	--	41	1	--	--					1	42	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.56 kVA	125.00%	0.70 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	0.54 kVA	96.67%	0.52 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	3.28 kVA	100.00%	3.28 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. SERVICE ENTRANCE RATED.

		TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA...	4.38 kVA			
TOTAL KVA (DEMAND):	4.50 kVA	0.0 A	22.4 A	19.2 A
TOTAL AMP....	21 A			
TOTAL AMP. (DEMAND):	22 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: MSB2

VOLTAGE: 208Y/120 3Ø | FED FROM: SERVICE #2 - UTILITY TRANSFORMER
MOUNTING: SURFACE | MAIN TYPE: MCB | MFR:
ENCLOSURE: NEMA1 | PHASE: 3 | TYPE:
MAIN: 600 A | WIRE: 4 | AIC: 65 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A		B		C		Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
				1		19.39	4.00						2				
F	PANEL 'RPC'	SR	250 A	3	3			18.07	4.00			3	4	60 A	4	WATER HEATER	WATER H...
				5						24.77	4.00		6				
MISC...	DOAS - C1	1/0	150 A	7	3	16.67	0.00						8				
				9				16.67	0.00			3	10	100 A	-	SPARE	Spare
				11						16.67	0.00		12				
Spare	SPARE	-	100 A	13	3	0.00	--					1	14	--	-	SPACE ONLY	
				15				0.00	--			1	16	--	-	SPACE ONLY	
				17						0.00	--	1	18	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	1.38 kVA	125.00%	1.73 kVA
LE	LIGHTING - EXTERIOR	0.48 kVA	125.00%	0.59 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	50.00 kVA	100.00%	50.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	57.13 kVA	65.00%	37.13 kVA
R	RECEPTACLES	3.42 kVA	74.74%	2.56 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	11.82 kVA	100.00%	11.82 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. THIS PANEL SHALL BE U.L. LISTED FOR USE AS S.E. EQUIP.
8. 100% RATED.

		TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA...	124.23 kVA			
TOTAL KVA (DEMAND):	103.84 kVA	335.5 A	322.8 A	380.4 A
TOTAL AMP....	345 A			
TOTAL AMP. (DEMAND):	288 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: INV2

VOLTAGE: 208Y/120 3Ø | FED FROM: DFP
MOUNTING: | MAIN TYPE: | MFR: MYERS
ENCLOSURE: Type 1 | PHASE: 3 | TYPE:
MAIN: 100 A | WIRE: 4 | AIC:

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A		B		C		Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
MISC...	FOOTBALL STADIUM EM LGT	12	20 A	1	2	1.10	1.10					2	2	20 A	12	FOOTBALL STADIUM EM LGT	MISC...
				3				1.10	1.10				4				
MISC...	FOOTBALL STADIUM EM LGT	12	20 A	5	2	1.10	1.10			1.10	1.10	2	6	20 A	12	FOOTBALL STADIUM EM LGT	MISC...
				7									8				
				9									10				
				11									12				
				13									14				
				15									16				
				17									18				
				19									20				
				21									22				
				23									24				

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	45.13 kVA	65.00%	29.33 kVA
R	RECEPTACLES	3.42 kVA	74.74%	2.56 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	8.80 kVA	100.00%	8.80 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:

		TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA...	8.80 kVA			
TOTAL KVA (DEMAND):	8.80 kVA	36.7 A	18.3 A	18.3 A
TOTAL AMP....	24 A			
TOTAL AMP. (DEMAND):	24 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: DPS

VOLTAGE: 208Y/120 3Ø | FED FROM: SERVICE #1 - UTILITY TRANSFORMER
MOUNTING: SURFACE | MAIN TYPE: MCB | MFR:
ENCLOSURE: NEMA1 | PHASE: 3 | TYPE:
MAIN: 300 A | WIRE: 4 | AIC: 42 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A		B		C		Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
LI...	LIGHTING	12	20 A	1	1	1.03	2.00					2	2	30 A	10	FIELD TOWER DISCONNECT	MISC...
MI...	GARAGE DOOR	12	20 A	3	1			0.36	2.00				4				
MI...	GARAGE DOOR	12	20 A	5	1					0.36	0.72	1	6	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	7	1	0.36	0.54					1	8	20 A	12	RECEPTACLES	R...
R...	RECEPTACLES	12	20 A	9	1			0.54	0.36			1	10	20 A	12	GARAGE DOOR	MI...
V...	FAN EF-F2 AND EF-F3	12	20 A	11	1					0.44	0.73	1	12	20 A	12	LIGHTING - EXTERIOR	LI...
HEA TI...	CUH-F2 HEATING	10	30 A	13	2	1.50	1.50					2	14	20 A	12	CUH-F3 HEATING	HEA TI...
				15				1.50	1.50				16				
LIG H...	P1 LIGHTING - EXTERIOR	8	40 A	17	2					3.22	3.22	2	18	40 A	8	P1 LIGHTING - EXTERIOR	LIG H...
				19		3.22	3.22						20				
LIG H...	P1 LIGHTING - EXTERIOR	8	40 A	21	2			3.22	3.22			2	22	40 A	8	P1 LIGHTING - EXTERIOR	LIG H...
				23						3.22	3.22		24				
MI...	TENNIS AREA LGT - VIA PHOTO CELL	12	20 A	25	1	0.90	0.18					1	26	20 A	12	REC TENNIS CONTACTOR	R...
				27				8.47	0.00			1	28	20 A	-	SPARE	Sp...
F	RPS	SR	150 A	29	3					8.47	0.00	1	30	20 A	-	SPARE	Sp...
				31		8.47	0.00					1	32	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	33	1			0.00	0.00			1	34	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	35	1					0.00	0.00	1	36	20 A	-	SPARE	Sp...
	SPACE ONLY	-	--	37	1	--	--					1	38	--	-	SPACE ONLY	
	SPACE ONLY	-	--	39	1			--	--			1	40	--	-	SPACE ONLY	
	SPACE ONLY	-	--	41	1					--	--	1	42	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	1.05 kVA	125.00%	1.31 kVA
LE	LIGHTING - EXTERIOR	51.89 kVA	125.00%	64.87 kVA
H	HEATING	6.00 kVA	100.00%	6.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.44 kVA	100.00%	0.44 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	2.34 kVA	73.85%	1.73 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	5.98 kVA	100.00%	5.98 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. THIS PANEL SHALL BE U.L. LISTED FOR USE AS S.E. EQUIP.
8. 100% RATED MAIN.

		TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA...	67.70 kVA			
TOTAL KVA (DEMAND):	80.32 kVA	193.2 A	176.4 A	199.0 A
TOTAL AMP....	188 A			
TOTAL AMP. (DEMAND):	223 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: RPC

VOLTAGE: 208Y/120 3Ø | FED FROM: MSB2
MOUNTING: SURFACE | MAIN TYPE: MCB | MFR:
ENCLOSURE: NEMA1 | PHASE: 3 | TYPE:
MAIN: 250 A | WIRE: 4 | AIC: 22 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A		B		C		Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
R...	ELEC RM RECEPTACLES	12	20 A	1	1	0.18	0.54					1	2	20 A	12	EXTERIOR RECEPTACLES	R...
R...	REC - HW, STOR, RR	12	20 A	3	1			0.54	0.36			1	4	20 A	12	EWC	R...
R...	REC - CONCESSION	12	20 A	5	1					0.54	0.36	1	6	20 A	12	EWC	R...
R...	LS RM - RECEPTACLES	12	20 A	7	1	0.18	0.75					1	8	20 A	12	216 - FREEZER	KI...
				9					0.69			1	10	20 A	12	202 - REFRIGERATOR	KI...
KI...	221 - PIZZA DISPLAY CAB	12	20 A	11	1					1.44	1.00	1	12	20 A	12	220 - P.O.S	KI...
KI...	221 - PIZZA DISPLAY CAB	12	20 A	13	1	1.44	--					1	14	--	-	SPACE ONLY	
KI...	202 - REFRIGERATOR	12	20 A	15	1			0.69	1.20			1	16	20 A	12	222 - POPCORN MACHINE	KI...
KI...	222 - POPCORN MACHINE	12	20 A	17	1					1.20	1.40	1	18	20 A	12	206 - MOBILE HOT CABINET	KI...
KI...	205 - UNDERCOUNTER REFRIG	12	20 A	19	1	0.76	0.76					1	20	20 A	12	205 - UNDERCOUNTER REFRIG	KI...
KI...	205 - UNDERCOUNTER REFRIG	12	20 A	21	1			0.76	0.76			1	22	20 A	12	205 - UNDERCOUNTER REFRIG	KI...
KI...	216 - FREEZER	12	20 A	23	1					0.75	0.76	1	24	20 A	12	216 - FREEZER	KI...
KI...	216 - FREEZER	12	20 A	25	1	0.75	7.60					1	26	50 A	6	214 - FRYER STATION	KI...
R...	REC - RESTROOM	12	20 A	27	1			0.72	1.44			1	28	20 A	12	218 - TEA BREWER	KI...
KI...	208 - NACHO CHIP WARMER	12	20 A	29	1					1.08	0.60	1	30	20 A	12	209 - NACHO CHEESE WARMER	KI...
KI...	210 - POPCORN MACHINE	12	20 A	31	1	1.20	0.75					2	32	20 A	12	203 - ICE MAKER	KIT C...
MISC...	213 - GRIDDLE	4	60 A	33	2			4.16	0.75				34				
				35						4.16	1.50	2	36	35 A	8	219 - COFFEE BREWER	KIT C...
KI...	226 - AIR CURTAIN	10	30 A	37	1	2.00	1.50						38				
KI...	228 - AIR CURTAIN	10	30 A	39	1			2.00	2.00			1	40	30 A	10	228 - AIR CURTAIN	KI...
KI...	214 - FRYER STATION	6	50 A	41	1					7.60	0.00	1	42	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	43	1	0.00	0.00					1	44	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	45	1			0.00	1.00			1	46	20 A	12	CAMERA/SECURITY POWER	MI...
Sp...	SPARE	-	20 A	47	1					0.00	--	1	48	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	49	1	0.00	0.48					1	50	20 A	12	LIGHTING - EXTERIOR *	LI...
Sp...	SPARE	-	20 A	51	1			0.00	1.00			1	52	20 A	12	MECH BAS	MI...
LI...	CONCESSION LIGHTING *	12	20 A	53	1					1.38	1.00	1	54	20 A	12	FAN EF-C1	MI...
MI...	FIRE ALARM (NOTE 9)	12	20 A	55	1	0.50	--					1	56	--	-	SPACE ONLY	
				57					--			1	58	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	59	1					0.00	--	1	60	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	61	1	0.00	--					1	62	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	63	1			0.00	--			1	64	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	65	1					0.00	--	1	66	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	67	1	0.00	--					1	68	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	69	1			0.00	--			1	70	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	71	1					0.00	--	1	72	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	73	1	0.00	--					1	74	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	75	1			0.00	--			1	76	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	77	1					0.00	--	1	78	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	79	1	0.00	--					1	80	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	81	1			0.00	--			1	82	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	83	1					0.00	--	1	84	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	1.38 kVA	125.00%	1.73 kVA
LE	LIGHTING - EXTERIOR	0.48 kVA	125.00%	0.59 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	45.13 kVA	65.00%	29.33 kVA
R	RECEPTACLES	3.42 kVA	74.74%	2.56 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	11.82 kVA	100.00%	11.82 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. PROVIDE FEED THRU LUGS.
8. PROVIDE CLASS A GFI (6mA-PERSONNEL) BRKR (250' MAX).
9. FPROVIDE BREAKER WITH RED HANDLE AND LOCK-ON.
* - INDICATES UNIT BATTERY WITH HANDLE LOCK-ON.

		TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA...	62.23 kVA			
TOTAL KVA (DEMAND):	46.04 kVA	163.2 A	150.6 A	208.1 A
TOTAL AMP....	173 A			
TOTAL AMP. (DEMAND):	128 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: PG1

VOLTAGE: 208Y/120 3Ø | FED FROM:
MOUNTING: SURFACE | MAIN TYPE: MCB | MFR:
ENCLOSURE: NEMA1 | PHASE: 3 | TYPE:
MAIN: 100 A | WIRE: 4 | AIC: 10 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A		B		C		Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
MI...	VENT FANS	-	20 A	1	1	0.00	0.00					1	2	20 A	-	VENT FANS	MI...
MI...	HAF FANS	-	20 A	3	1			0.00	1.00			1	4	20 A	12	MOTORIZED SHUTTERS	MI...
MI...	LIGHTING CIRCUIT	12	20 A	5	1					1.00	1.00	1	6	20 A	12	RECEPTACLE CIRCUIT	MI...
MI...	RECEPTACLE CIRCUIT	12	20 A	7	1	1.00	1.00					1	8	20 A	12	GREEN HOUSE CONTROLLER	MI...
Sp...	SPARE	-	20 A	9	1			0.00	--			1	10	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	11	1					0.00	--	1	12	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	13	1	0.00	--					1	14	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	15	1			0.00	--			1	16	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	17	1					0.00	--	1	18	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	19	1	0.00	--					1	20	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	21	1			0.00	--			1	22	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	23	1					0.00	--	1	24	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	0.00 kVA	0.00%	0.00 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	5.00 kVA	100.00%	5.00 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7.

		TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA...	5.00 kVA			
TOTAL KVA (DEMAND):	5.00 kVA	17.9 A	8.3 A	17.9 A
TOTAL AMP....	14 A			
TOTAL AMP. (DEMAND):	14 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

PANEL: DFP

VOLTAGE: 208Y/120 3Ø | FED FROM: SERVICE #3 - UTILITY TRANSFORMER
MOUNTING: SURFACE | MAIN TYPE: MCB | MFR:
ENCLOSURE: NEMA3R | PHASE: 3 | TYPE:
MAIN: 400 A | WIRE: 4 | AIC: 42 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A		B		C		Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
				1		4.65	4.65						2				
LIGHTI N...	FOOTBALL LIGHTING - F1	4	60 A	3	3			4.65	4.65			3	4	60 A	4	FOOTBALL LIGHTING - F1	LIGHTI N...
				5						4.65	4.65		6				
				7		4.65	4.65						8				
LIGHTI N...	FOOTBALL LIGHTING - F1	4	60 A	9	3			4.65	4.65			3	10	60 A	4	FOOTBALL LIGHTING - F1	LIGHTI N...
				11						4.65	4.65		12				
MI...	MISC. - POWER (SEC/COMM)	12	20 A	13	1	1.00	1.00					1	14	20 A	12	MISC. - POWER (SEC/COMM)	MI...
MI...	MISC. - POWER (SEC/COMM)	12	20 A	15	1			1.00	1.00			1	16	20 A	12	MISC. - POWER (SEC/COMM)	MI...
MI...	FOOTBALL SCOREBOARD	12	20 A	17	1					2.00	1.00	1	18	20 A	12	CONT6 FB LGT CONTACTOR PNL	MI...
Sp...	SPARE	-	20 A	19	1	0.00	4.40						20				
F	PANEL 'PFP'	SR	125 A	21	2			9.00	2.20			3	22	50 A	SR	PANEL INV2	MISC...
				23						9.00	2.20		24				
				25		0.00	1.00						26	20 A	12	FOOTBALL FLAG POLE	MI...
Spare	SPARE	-	50 A	27	3			0.00	0.00			1	28	20 A	-	SPARE	Sp...
				29						0.00	0.00	1	30	20 A	-	SPARE	Sp...
				31		0.00	--					1	32	--	-	SPACE ONLY	
Spare	SPARE	-	30 A	33	3			0.00	--			1	34	--	-	SPACE ONLY	
				35						0.00	--	1	36	--	-	SPACE ONLY	
Sp...	SPARE	-	20 A	37	1	0.00	--					1	38	--	-	SPACE ONLY	
	SPACE ONLY	-	--	39	1			--	--			1	40	-

PANEL: RPS

VOLTAGE: 208Y/120 3Ø
FED FROM: DPS
MOUNTING: SURFACE
MAIN TYPE: MLO
MFR:
ENCLOSURE: NEMA1
PHASE: 3
TYPE:
MAIN: 150 A
WIRE: 4
AIC: 22 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
				1		2.12 2.12				2				
LIGHTIN...	TENNIS LIGHTING - EXTERIOR	10	30 A	3	3		2.12 2.12		3	4	30 A	10	TENNIS LIGHTING - EXTERIOR	LIGHTIN...
				5				2.12 2.12		6				
				7		2.12 2.12				8				
LIGHTIN...	TENNIS LIGHTING - EXTERIOR	10	30 A	9	3		2.12 2.12		3	10	30 A	10	TENNIS LIGHTING - EXTERIOR	LIGHTIN...
				11				2.12 2.12		12				
				13		0.00 0.00				14				
Spare	SPARE	-	20 A	15	3		0.00 0.00		3	16	20 A	-	SPARE	Spare
				17				0.00 0.00		18				
Sp...	SPARE	-	20 A	19	1	0.00 0.00			1	20	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	21	1		0.00 0.00		1	22	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	23	1			0.00 0.00	1	24	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	25	1	0.00 0.00			1	26	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	27	1		0.00 0.00		1	28	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	29	1			0.00 --	1	30	--	-	SPACE ONLY	
	SPACE ONLY	-	--	31	1	-- --			1	32	--	-	SPACE ONLY	
	SPACE ONLY	-	--	33	1		-- --		1	34	--	-	SPACE ONLY	
	SPACE ONLY	-	--	35	1			-- --	1	36	--	-	SPACE ONLY	
	SPACE ONLY	-	--	37	1	-- --			1	38	--	-	SPACE ONLY	
	SPACE ONLY	-	--	39	1		-- --		1	40	--	-	SPACE ONLY	
	SPACE ONLY	-	--	41	1			-- --	1	42	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	25.40 kVA	125.00%	31.75 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	0.00 kVA	0.00%	0.00 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	0.00 kVA	0.00%	0.00 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.

TOTAL KVA...	25.40 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	31.75 kVA	70.6 A	70.6 A	70.6 A
TOTAL AMP....	71 A			
TOTAL AMP. (DEMAND):	88 A			

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

PANEL SCHEDULES

E-704

CONSTRUCTION DOCUMENTS

MECHANICAL HEATER CONNECTIONS

ID	COMPONENT INFORMATION: ELECTRIC HEAT HEATING ELEMENT POWER	CIRCUIT INFORMATION: EQUIP. WATTS	EQUIPMENT INFORMATION: DEVICE BREAKER	FUSE	VOLT	PH	CIRCUIT INFORMATION: LOAD CLASSIFICATION	DISCONNECT
CUH-F1	2 kW	0.00 kVA	Yes	Yes	208 V	1	HEATING	BY MC
CUH-F2	5 kW	0.00 kVA	Yes	Yes	208 V	1	HEATING	BY MC
CUH-F3	3 kW	0.00 kVA	Yes	Yes	208 V	1	HEATING	BY MC

MECHANICAL DOAS UNIT

ID	KILLOWATTS	COMPONENT INFORMATION: COMPRESSOR MOTOR POWER	CIRCUIT INFORMATION: EQUIP. WATTS	COMPONENT INFORMATION: COMPRESSOR MOTOR RLA	EQUIPMENT INFORMATION: FLA	MCA	MOCP	VOLT	PH	CIRCUIT INFORMATION: LOAD CLASSIFICATION
Air Handling Unit										
DOAS-2*	33.8 kW	25.0 hp	33.75 kVA	12.8 A	40.6 A	43.8 A	45.0 A	480 V	3	MOTORS

DISCONNECT: 200/FPN-3P-3R

NOTES: MECHANICAL TO PROVIDE MOTOR RATED SWITCH UNLESS OTHERWISE NOTED.

MECHANICAL FAN SCHEDULE

ID	EQUIP. WATTS	MOTOR POWER	EQUIPMENT INFORMATION: VOLT	PH	DISCONNECT	CONTROL TYPE	NOTE
FAN EF-C1	0.02 kVA		115 V	1	BY MC	1	
FAN EF-F1	0.02 kVA		115 V	1	BY MC	1	
FAN EF-F2	0.18 kVA		115 V	1	BY MC	2	VENTILATION
FAN EF-F3	0.14 kVA		115 V	1	BY MC	2	VENTILATION

EXHAUST FANS SCHEDULE CONTROLS
1. WALL MOUNTED THERMOSTAT.
2. INTERLOCK WITH ROOM LIGHT SWITCH.
3. WALL MOUNTED ON/OFF SWITCH WITH IDENTIFICATION LABEL.
4. WALL MOUNTED MUSHROOM PUSH BUTTON SWITCH/STARTER WITH IDENTIFICATION LABEL.
5. CONTROLLED BY BUILDING AUTOMATION SYSTEM.
6. CONTINUOUS OPERATION.
7. INTERLOCK WITH KITCHEN HOOD CONROLS.
8. INTERLOCK WITH RANGE HOOD.
10. INTERLOCK WITH FUME HOOD.
11. INTERLOCK WITH CO MONITOR ALARM CONDITION.
12. WALL MOUNTED TWIST TIMER WITH 0-30 MINUTE RANGE WITH LABEL.
13. INTERLOCK WITH ROOM OXYGEN DEPLETION SENSOR.

MECHANICAL RTU SCHEDULE

ID	MOTOR: POWER	QTY	COMPONENT INFORMATION: COMPRESSOR MOTOR RLA	EQUIPMENT INFORMATION: MCA	MOCP	VOLT	PH	CIRCUIT INFORMATION: LOAD CLASSIFICATION	DISCONNECT
DOAS-C1	3.0 hp	1	29.8 A	140.3 A	150.0 A	208 V	3	COOLING	200A/3/FPN/3R
DOAS-F1	10.0 hp	1	51.3 A	176.6 A	225.0 A	208 V	3	COOLING	400A/3/FPN/3R
SPAC-F1	3.0 hp		21.8 A	53.0 A	70.0 A	208 V	3	COOLING	100A/3/FPN/3R

PLUMBING EQUIPMENT SCHEDULE

REFER TO PLUMBING PLANS.

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10/31/25

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

E-705

CONSTRUCTION DOCUMENTS

LIGHTING SCHEDULE

TYPE	DESCRIPTION	MINIMUM LUMENS	CCT	TOTAL FIXURE WATTAGE	DRIVER	VOLT	VOLTAGE	MANUFACTURER	MODEL	REMARKS
DL2	6" RECESSED LED DOWNLIGHT	2,000	4000K	25.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	120 V	UNIV	MAXILUME OR APPROVED EQUAL	HH6-LED	MINIMUM 10% DIMMING DLC/ENERGY STAR LISTED WET LISTED
EMB1	EMERGENCY AC BUG EYE FIXTURE			2.0 W	INTEGRAL LED DRIVER	120 V	UNIV	LITHONIA LIGHTALARMS DUAL-LITE MULE SURE-LITES	ELM2L SEL25 EVHC SELA	TEST SWITCH PROVIDED AC POWERED
EMB1B	EMERGENCY BATTERY BUG EYE FIXTURE			2.0 W	INTEGRAL LED DRIVER	120 V	UNIV	LITHONIA LIGHTALARMS DUAL-LITE MULE SURE-LITES	ELM2L SEL25 EVHC SELA	TEST SWITCH PROVIDED SEALED 90 MINUTE BATTERY
EMB5	INTERIOR EMERGENCY AC EGRESS LIGHT AND EXIT COMBO	[redacted]	3500K	3.0 W	INTEGRAL LED DRIVER	120 V	UNIV	LITHONIA CHLORIDE DUAL-LITE MULE SURE-LITES	LHQM LED VLLCR2R HCXUR CEU COMBO LPXC	TEST SWITCH PROVIDED AC POWERED
EMB5B	INTERIOR EMERGENCY BATTERY EGRESS LIGHT AND EXIT COMBO		3500K	3.0 W	INTEGRAL LED DRIVER	120 V	UNIV	LITHONIA CHLORIDE DUAL-LITE MULE SURE-LITES	LHQM LED VLLCR2R HCXUR CEU COMBO LPXC	TEST SWITCH PROVIDED SEALED 90 MINUTE BATTERY
EX1B	CLEAR EDGE-LIT EXIT SIGN ON BATTERY			1.0 W	INTEGRAL LED DRIVER	277 V	UNIV	LITHONIA CHLORIDE DUAL-LITE MULE SURE-LITE	LRP ER44DU1/2RX *LSNX CEL EUX	EXIT SIGN, SEE PLANS FOR FACE STYLE, MOUNTING AND QTY, AC ONLY, TEST SWITCH PROVIDED, UL LISTED FOR DAMP LOCATIONS
EX1BW	CLEAR EDGE-LIT EXIT SIGN - BATTERY		3500K	1.0 W	INTEGRAL LED DRIVER	277 V	UNIV	LITHONIA CHLORIDE DUAL-LITE MULE SURE-LITE	LRP ER44DU1/2RX *LSNX CEL EUX	EXIT SIGN, NICKEL CADMIUM 90 MINUTE BATTERY, SEE PLANS FOR FACE STYLE, MOUNTING AND QTY, AC ONLY, TEST SWITCH PROVIDED, UL LISTED FOR DAMP LOCATIONS
FPL5	2X4 LED LAY-IN TROFFER	4,800	4000K	45.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	120 V	UNIV	LITHONIA DAYBRITE H.E. WILLIAMS COOPER	EPANL 2X4 2FPZ 50-G-S24 24FPSLSCT9	UL LISTED DAMP LOCATIONS DLC LISTED 4000K 48000 MINIMUM LUMENS UL LISTED DAMP LOCATIONS
MFL1	EXTERIOR SIDEWALK POLE	3,600	4000K	36.0 W	INTEGRAL LED DRIVER (0-10V DIMMING)	120 V	UNIV	LIGMAN LIGHTIN USA	UAR-20973-VW-W30-01-120/277V	UAR-20973 TOP LIGHT, 9.8 FOOT POLE
OWL1	WALL PACK TRAPEZOID LED	6,000	4000K	107.0 W	INTEGRAL LED DRIVERS (2)	120 V	UNIV	GARDCO LITHONIA HUBBELL BROWNLEE MCGRAW-EDISON	101L-32L WST LED 2 700 mA SR2 MVOLT TRPC-13LU 5K BZ DT A032 MCGRAW IST B02 LED E1 GZW	COLOR CHOSEN BY ARCHITECT LS 101 EMERGENCY COMPLIANT 7"HX16"WX9"D 6000 LUMENS (WIDE ANGLE)
OWL1B	WALL PACK TRAPEZOID LED W/ BATTERY	6,000	4000K	107.0 W	INTEGRAL LED DRIVERS (2)	120 V	UNIV	GARDCO LITHONIA HUBBELL BROWNLEE MCGRAW-EDISON	101L-32L - EBPC WST LED 2 700 mA SR2 MVOLT TRPC-13LU 5K BZ DT A032 MCGRAW IST B02 LED E1 GZW	COLOR CHOSEN BY ARCHITECT LS 101 EMERGENCY COMPLIANT 90 MINUTE EMERGENCY BATTERY 7"HX16"WX9"D 6000 LUMENS (WIDE ANGLE)
STL1	4 FT. LED STRIP	4,000	4000K	39.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	120 V	UNIV	ELITE LITHONIA METALUX	4-OEC-LED-5000L-DIM10-MVOLT-40K-85 CLX L48 4000LM SEF WDL MVOL GZ10 40K 80CRI 4SNLED LDS 41SL LW UNV L840 CD 1	PROVIDE CHAIN FOR PENDANT MOUNTING PROVIDE WIRE GUARD LENSED DLC LISTED 4000 MINIMUM LUMENS
STL8	8 FT. LED STRIP	8,000	4000K	61.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	120 V	UNIV	ELITE LITHONIA METALUX	8-OEC-LED-8000L-DIM10-MVOLT-40K-85 CLX L96 8000LM SEF WDL MVOL GZ10 40K 80CRI 8SNLED LDS 81SL LW UNV L840 CD 1	PROVIDE CHAIN FOR PENDANT MOUNTING PROVIDE WIRE GUARD LENSED DLC LISTED 4000 MINIMUM LUMENS
UCL1	SURFACE MOUNTED LED CANOPY LIGHT	2,500	4000K	30.0 W	INTEGRAL LED DRIVER (2)	120 V	UNIV	KENALL LUMINAIRE BROWNLEE	MR17FD PP 25L40K 277 APPROVED EQUAL APPROVED EQUAL	4000K PENDANT MOUNT 12'-0" AFF TO BOTTOM OF FIXTURE MINIMUM 2,500 LUMENS FINISH CHOSEN BY ARCHITECT UL LISTED WET LOCATION
VTL4	VAPORTITE LED STRIP	4,000	4000K	30.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	120 V	UNIV	METALUX LUMAX APPROVED EQUAL	2VT2-LD5 VWBTLED APPROVED EQUAL	PROVIDE CHAIN FOR PENDANT MOUNTING PROVIDE WIRE GUARD OR HEAVY DUTY SHADDER RESISTANT FOR DUGOUTS LENSED, DLC LISTED 4000 MINIMUM LUMENS
VTL8	VAPORTITE LED STRIP 8' TOTAL OR 2 FIXTURES	8,000	4000K	61.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	120 V	UNIV	METALUX LUMAX APPROVED EQUAL	(2) 2VT2-LD5 (2) VWBTLED APPROVED EQUAL	PROVIDE CHAIN FOR PENDANT MOUNTING PROVIDE WIRE GUARD OR HEAVY DUTY SHADDER RESISTANT FOR DUGOUTS LENSED, DLC LISTED 4000 MINIMUM LUMENS

SPORTS LIGHTING POLE/LIGHTING SCHEDULE

TYPE	DESCRIPTION	MINIMUM LUMENS	CCT	TOTAL FIXURE WATTAGE	DRIVER	VOLT	VOLTAGE	MANUFACTURER	LUMINAIRE TYPE AND QUANTITY	REMARKS	Count
A1	BASEBALL LIGHTING - 70' POLE	[redacted]		3700.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(2) W40 (2) NARROW (6) MEDIUM (2) XWIDE EMERGENCY FED (3) XWIDE TIME CLOCK SITE LIGHTING		1
A2	BASEBALL LIGHTING - 70' POLE			3700.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(2) W40 (2) NARROW (6) MEDIUM (2) XWIDE EMERGENCY FED (3) XWIDE TIME CLOCK SITE LIGHTING		1
A3	SOFTBALL LIGHTING - 70' POLE			1500.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(1) NARROW (1) MEDIUM (2) WIDE (2) XWIDE EMERGENCY FED		1
A4	SOFTBALL LIGHTING - 70' POLE			1500.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(1) NARROW (1) MEDIUM (2) WIDE (2) XWIDE EMERGENCY FED (3) XWIDE TIME CLOCK SITE LIGHTING		1
B1	BASEBALL LIGHTING - 70' POLE			4800.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(4) NARROW (8) MEDIUM (2) XWIDE		1
B2	BASEBALL LIGHTING - 70' POLE			5000.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(5) NARROW (7) MEDIUM (2) XWIDE		1
B3	SOFTBALL LIGHTING - 70' POLE			3500.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(4) NARROW (4) MEDIUM (2) XWIDE		1
B4	SOFTBALL LIGHTING - 70' POLE			3500.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(4) NARROW (4) MEDIUM (2) XWIDE		1
C1	BASEBALL LIGHTING - 70' POLE			4800.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(3) NARROW (9) MEDIUM (2) XWIDE		1
C2	BASEBALL LIGHTING - 70' POLE			4800.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(3) NARROW (9) MEDIUM (2) XWIDE		1
F1	FOOTBALL LIGHTING - 80' POLE			7250.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(12) N15 (2) M20		4
P1	PRACTICE FIELD LIGHT - 80' POLE			5800.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT	(5) M20 (1) W40	(2) P1 PRACTICE FIELD POLES WILL SHARE POLE WITH "F1" FOOTBALL FIELD POLES. REFER TO PLANS.	4
T1	TENNIS LIGHTING 50' POLE			1500.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(2) MEDIUM (1) WIDE (1) XWIDE (2) XWIDE TIME CLOCK CONTROLLED SITE LIGHTING WHERE SHOWN ADDITIONAL CIRCUIT ON PLANS.		4
T2	DOUBLE HEAD TENNIS LIGHTING 50' POLE			1800.0 W	INTEGRAL LED DRIVER	208 V	UNIV	GEOSPORT MUSCO LIGHTING	(1) MEDIUM (3) WIDE (1) XWIDE (2) XWIDE TIME CLOCK CONTROLLED SITE LIGHTING WHERE SHOWN ADDITIONAL CIRCUIT ON PLANS.		4

M20
GEOSPORT STADIUM TSL 1000W
LIGHT LOSS FACTOR = 0.950
WATTS PER LUMINAIRE = 970

N15
GEOSPORT STADIUM TSL 1000W
LIGHT LOSS FACTOR = 0.950
WATTS PER LUMINAIRE = 961

W40
GEOSPORT STADIUM TSL 1000W
LIGHT LOSS FACTOR = 0.950
WATTS PER LUMINAIRE = 952

NARROW
GEOSPORT STADIUM TSL 1000W
LIGHT LOSS FACTOR = 0.950
WATTS PER LUMINAIRE = 629

XWIDE
GEOSPORT STADIUM TSL 1000W
LIGHT LOSS FACTOR = 0.950
WATTS PER LUMINAIRE = 636

MEDIUM
GEOSPORT STADIUM TSL 1000W
LIGHT LOSS FACTOR = 0.950
WATTS PER LUMINAIRE = 637

LIGHT FIXTURE NOTES

1. ALL FIXTURES SHALL BE LED UNLESS OTHERWISE SPECIFIED. COLOR TEMPERATURE SHALL BE 3500K UNLESS OTHERWISE NOTED.
2. LED DRIVERS SHALL BE PROVIDED FROM PER MANUFACTURER RECOMMENDATION. AS PART OF THIS RECOMMENDATION COORDINATE THE REQUIRED WAVE OUTPUT SO THEY ARE COMPATIBLE. THIS INCLUDES EMERGENCY DRIVERS.
3. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT FIXTURE LOCATIONS.
4. FIXTURES IN FIRE RATED CEILING SHALL BE PROVIDED WITH FIRE RATED TENTS AS REQUIRED.
5. SUSPEND ALL FOUR CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
6. FIXTURES WITH EMERGENCY BATTERY PACKS SHALL BE SUPPLIED WITH 1100 LUMEN INVERTERS.
7. PROVIDE INTEGRAL SURGE PROTECTION ON ALL EXTERIOR LED DRIVER FIXTURE TYPES.
8. DIMMING OF FIXTURES SHALL BE WITH A SWITCH AS RECOMMENDED BY THE DRIVER MANUFACTURER.
9. THE CONTRACTOR SHALL VERIFY THE LEAD TIME OF ALL PRODUCTS SPECIFIED IN THIS SCHEDULE AT THE TIME OF PACKAGE QUOTE.
10. DURING THE BID PROCESS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DELIVERY/SCHEDULING ISSUES.
11. NO SUBSTITUTIONS WILL BE ALLOWED DUE TO LACK OF COORDINATION OF DELIVERY DATES AND CONSTRUCTION SCHEDULE AFTER BID.
12. ALL EXPEDITED EXPENSES SHALL BE THE RESPONSIBILTY OF THE CONTRACTOR.
13. FIXTURES TO BE INSTALLED IN CEILINGS, INDICATED ON ARCHITECTURAL PLANS AS HAVING INSULATION IN CONTACT WITH CEILING SURFACE, SHALL BE IC RATED BY MANUFACTURER.
14. LED DRIVERS LOCATED IN UNCONDITIONED SPACES SHALL BE RATED FOR 90 DEGREES F.
15. PROVIDE 90 MINUTE EMERGENCY BATTERY BACK UP. EMERGENCY BACK UP SHALL BE BASED ON TYPE OF FIXTURE, LED DRIVER, BALLAST, ETC. EMERGENCY BACKUP SHALL BE DUAL INPUT FOR BOTH SWITCHING AND CHARGING. PROVIDE UNSWITCHED "HOT" FROM LOCAL CIRCUIT UNLESS OTHERWISE INDICATED ON PLANS. PROVIDE WITH INDICATOR LIGHT. INSTALL LED INDICATOR ON LIGHT FIXTURE UNLESS DECORATIVE. DECORATIVE FIXTURES SHALL HAVE INDICATOR PLACED AT LOCAL CEILING. BODINE, PHILLIPS, POWER SENTRY OR EQUAL.
16. PROVIDE EMERGENCY RELAY BASED ON MINIMUM BODINE GLCD-20B OR EQUAL. SEE PLANS FOR INTENT. PROVIDE EMERGENCY GENERATOR/INVERTER CIRCUIT AND SWITCH LEG NORMAL CIRCUIT. SEE DETAIL.
17. POLES PROVIDED FOR LED FIXTURES SHALL BE METAL, REGARDLESS OF SPECIFICATION FOR GROUNDING PURPOSES.

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

LIGHTING FIXTURE SCHEDULE

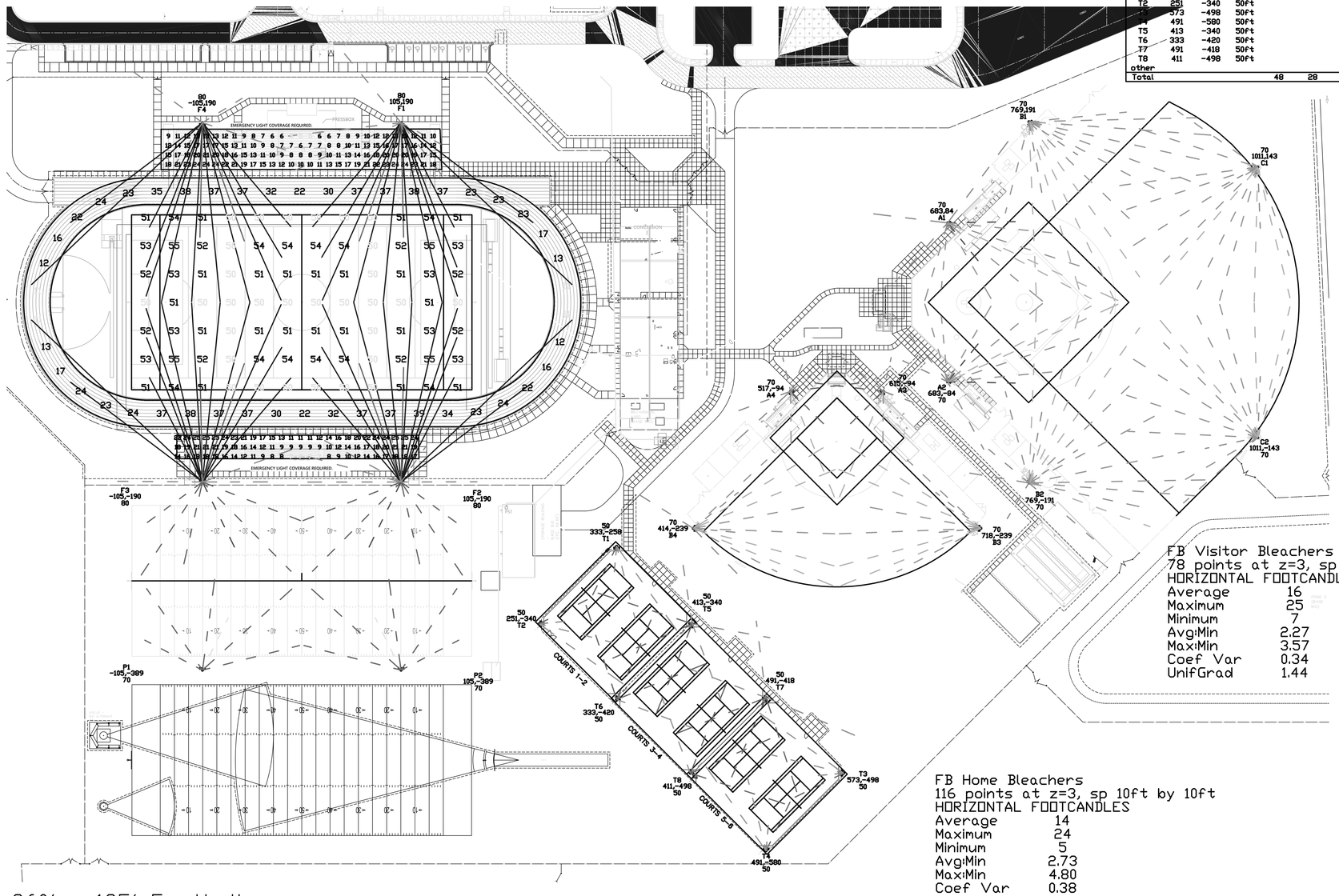
E-800

CONSTRUCTION DOCUMENTS

GEO SPORT LIGHTING
A TENCATE COMPANY

DASHED LINES = FIXTURES TURNED OFF
ALL PATHWAY FIXTURES TO BE FIELD AIMED
POLES F1–F2, F3–F4 A3–A4, & B2 2 PATHWAY FIXTURES MOUNTED 50' ABG
POLES F1–F2 4 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES F3–F4 2 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES A1–A4 1 EMERGENCY EGRESS FIXTURE MOUNTED 40' ABG
POLES A1–A2, A4, B2, B4, T5, & T7 2 FIELD AIMED EGRESS MOUNTED 40' ABG
NEW POLES

Pole	x-loc	y-loc	height	N15	M20	W40	EW60	NARROW	MEDIUM	WIDE	XWIDE	Total	kw
A1	683	84	70ft			2		2	6			10	7.0
A2	683	-84	70ft			2		2	6			10	7.0
A3	615	-94	70ft					1	1	2		4	2.5
A4	517	-94	70ft					1	1	2		4	2.5
B1	769	191	70ft					4	8		2	14	8.9
B2	769	-191	70ft					5	7		2	14	8.9
B3	718	-239	70ft					4	4		2	10	6.3
B4	414	-239	70ft					4	4		2	10	6.3
C1	1011	143	70ft					3	9		2	14	8.9
C2	1011	-143	70ft					3	9		2	14	8.9
F1	105	190	80ft	12	2							14	13.5
F2	105	-190	80ft	12	7	1						14-6	19.3
F3	-105	-190	80ft	12	7	1						14-6	19.3
F4	-105	190	80ft	12	2							14	13.5
P1	-105	-389	70ft		5		1					6	5.8
P2	105	-389	70ft		5		1					6	5.8
T1	333	-258	50ft						2	1	1	4	2.5
T2	251	-340	50ft						2	1	1	4	2.5
T3	573	-498	50ft						2	1	1	4	2.5
T4	491	-580	50ft						2	1	1	4	2.5
T5	413	-340	50ft						1	3	1	5	3.2
T6	333	-420	50ft						1	3	1	5	3.2
T7	491	-418	50ft						1	3	1	5	3.2
T8	411	-498	50ft						1	3	1	5	3.2
other											44	44	28.0
Total				48	28	6	2	29	67	20	64	264	193.3



360' x 185' Football
84 points at z=3, sp 30ft by 30ft
HORIZONTAL FOOTCANDLES

Average	52
Maximum	55
Minimum	50
Avg:Min	1.03
Max:Min	1.10
Coef Var	0.03
UnifGrad	1.08

Track
46 points at z=3, sp 30ft by 30ft
HORIZONTAL FOOTCANDLES

Average	26
Maximum	39
Minimum	11
Avg:Min	2.37
Max:Min	3.55
Coef Var	0.37

FB Visitor Bleachers
78 points at z=3, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	16
Maximum	25
Minimum	7
Avg:Min	2.27
Max:Min	3.57
Coef Var	0.34
UnifGrad	1.44

FB Home Bleachers
116 points at z=3, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	14
Maximum	24
Minimum	5
Avg:Min	2.73
Max:Min	4.80
Coef Var	0.38
UnifGrad	1.40

EW60
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 946
Number luminaires used = 2
kw these luminaires = 1.9

M20
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 970
Number luminaires used = 28
kw these luminaires = 27.2

N15
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 961
Number luminaires used = 48
kw these luminaires = 46.1

W40
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 952
Number luminaires used = 6
kw these luminaires = 5.7

NARROW
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 629
Number luminaires used = 29
kw these luminaires = 18.2

XWIDE
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 636
Number luminaires used = 64
kw these luminaires = 40.7

WIDE
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 640
Number luminaires used = 20
kw these luminaires = 12.8

MEDIUM
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 637
Number luminaires used = 67
kw these luminaires = 42.7

GEOSPORT LIGHTING
A TENCATE COMPANY

HAMPTON COUNTY HIGH SCHOOL, HAMPTON COUNTY, SC, D1

Revision 2	10/27/25	Drawing 1 of 8	877-663-5968 WWW.GEOSPORTLIGHTING.COM

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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State Board of Registration for Professional Engineers and Surveyors
10/31/25

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REVISIONS:

No.	Description	Date

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LS3P PROJECT: 1201-217190
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SPORTS FIELD PHOTOMETRIC 1

E-801

CONSTRUCTION DOCUMENTS

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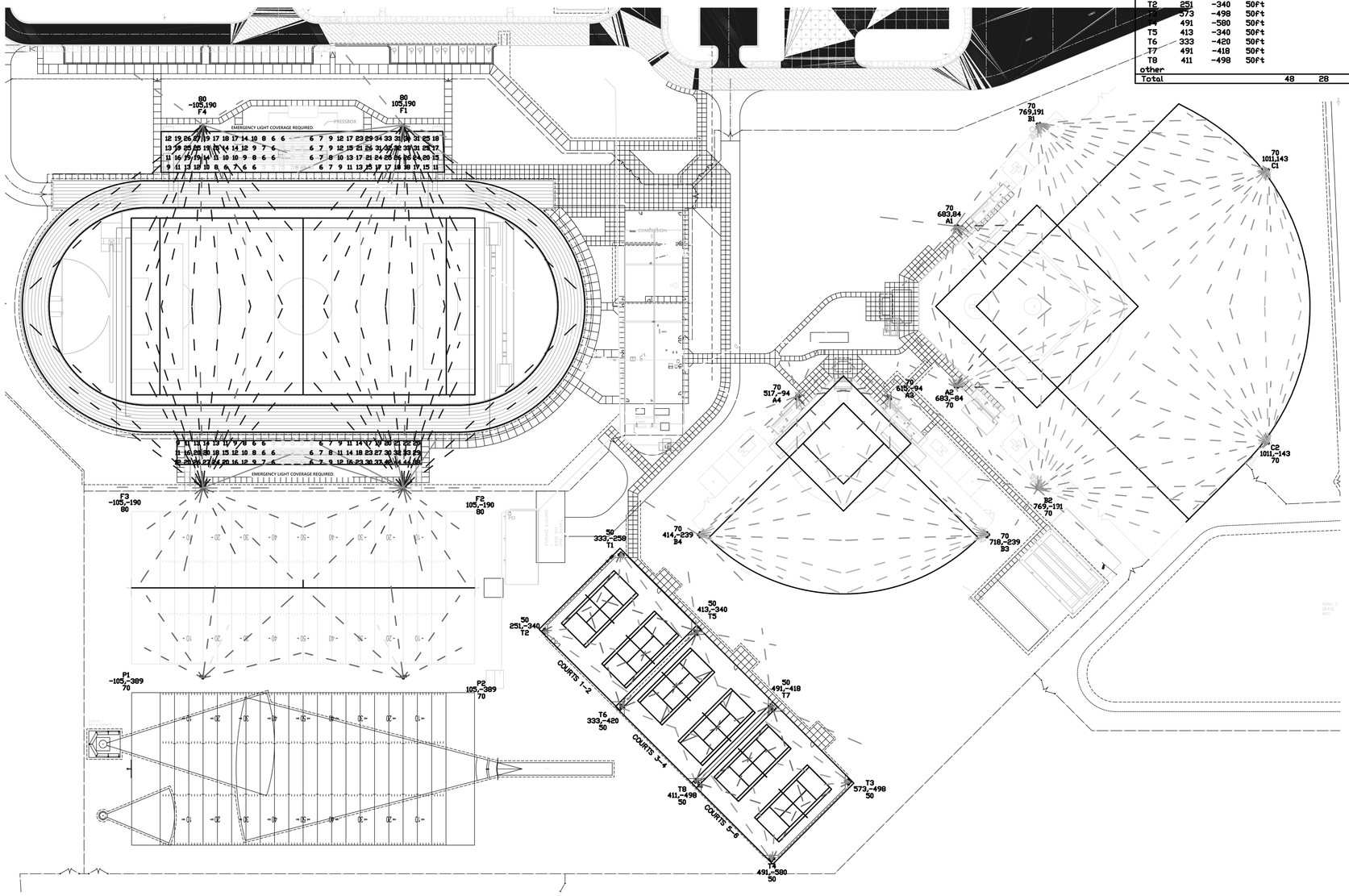
DASHED LINES = FIXTURES TURNED OFF

EMERGENCY EGRESS FOR BLEACHERS

Pole	x-loc	y-loc	height	N15	M20	W40	EV60	NARROW	MEDIUM	WIDE	XWIDE	Total	kw
A1	683	84	70ft			2		2	6			10	7.0
A2	683	-84	70ft			2		2	6			10	7.0
A3	615	-94	70ft					1	1	2		4	2.5
A4	517	-94	70ft					1	1	2		4	2.5
B1	769	191	70ft					4	8		2	14	8.9
B2	769	-191	70ft					5	7		2	14	8.9
B3	718	-239	70ft					4	4		2	10	6.3
B4	414	-239	70ft					4	4		2	10	6.3
C1	1011	143	70ft					3	9		2	14	8.9
C2	1011	-143	70ft					3	9		2	14	8.9
F1	105	190	80ft	12	2							14	13.5
F2	105	-190	80ft	12	7	1						14-6	19.3
F3	-105	-190	80ft	12	7	1						14-6	19.3
F4	-105	190	80ft	12	2							14	13.5
P1	-105	-389	70ft		5		1					6	5.8
P2	105	-389	70ft		5		1					6	5.8
T1	333	-258	50ft						2	1	1	4	2.5
T2	251	-340	50ft						2	1	1	4	2.5
T3	573	-498	50ft						2	1	1	4	2.5
T4	491	-580	50ft						2	1	1	4	2.5
T5	413	-340	50ft						1	3	1	5	3.2
T6	333	-420	50ft						1	3	1	5	3.2
T7	491	-418	50ft						1	3	1	5	3.2
T8	411	-498	50ft						1	3	1	5	3.2
other											44	44	28.0
Total				48	28	6	2	29	67	20	64	264	195.3



EV60
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 946
Number luminaires used = 2
kw these luminaires = 1.9

M20
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 970
Number luminaires used = 28
kw these luminaires = 27.2

N15
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 961
Number luminaires used = 48
kw these luminaires = 46.1

W40
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 952
Number luminaires used = 6
kw these luminaires = 5.7

NARROW
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 629
Number luminaires used = 29
kw these luminaires = 18.2

XWIDE
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 636
Number luminaires used = 64
kw these luminaires = 40.7

WIDE
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 640
Number luminaires used = 20
kw these luminaires = 12.8

MEDIUM
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 637
Number luminaires used = 67
kw these luminaires = 42.7

FB Home Bleachers
116 points at z=3, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	15
Maximum	34
Minimum	5
Avg:Min	2.92
Max:Min	6.80
Coef Var	0.57
UnifGrad	1.67

FB Visitor Bleachers
78 points at z=3, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	15
Maximum	44
Minimum	5
Avg:Min	3.05
Max:Min	8.80
Coef Var	0.67
UnifGrad	1.67

GEOSPORT LIGHTING
A TENCATE COMPANY

HAMPTON COUNTY HIGH SCHOOL, HAMPTON COUNTY, SC, D2

Revision 2	10/27/25	Drawing 2 of 8	877-663-5968 WWW.GEOSPORTLIGHTING.COM

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

optima engineering
1927 South Tryon St.,Suite 300, Charlotte NC 28203
Phone: 704.338.1292 www.optimaengineering.com
South Carolina License Number C-00710

LS3P
WWW.LS3P.COM

OPTIMA ENGINEERING PA No. C00710 CERTIFICATE OF AUTHORIZATION

PE 27318 STATE OF SOUTH CAROLINA

State Board of Registration for Professional Engineers and Surveyors.
10/31/25

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

SPORTS FIELD PHOTOMETRIC 2

E-802

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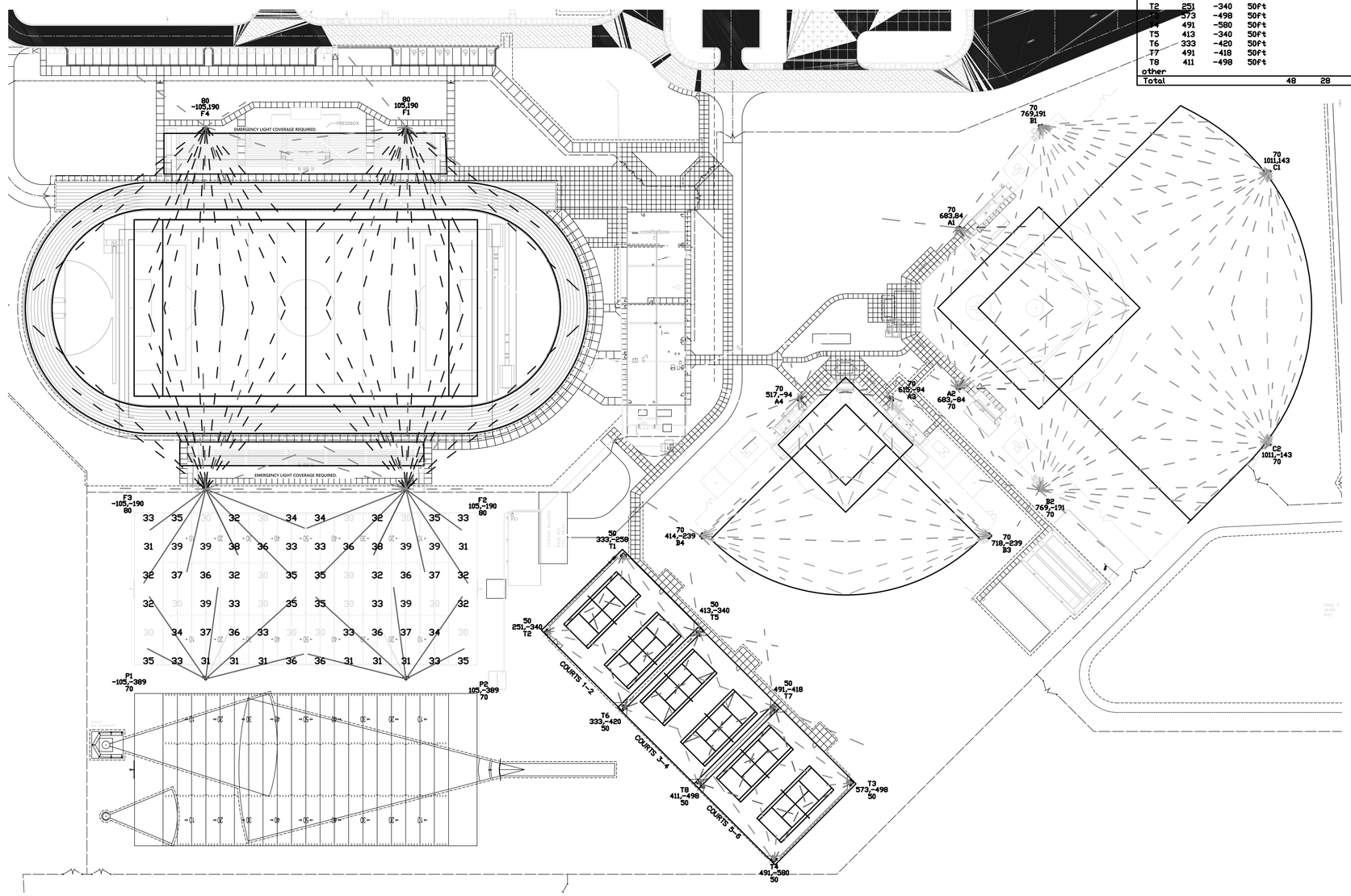
GEO SPORT LIGHTING
A TENCATE COMPANY

DASHED LINES = FIXTURES TURNED OFF
ALL PATHWAY FIXTURES TO BE FIELD AIMED
POLES F1–F2, F3–F4 A3–A4, & B2 2 PATHWAY FIXTURES MOUNTED 50' ABG
POLES F1–F2 4 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES F3–F4 2 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES A1–A4 1 EMERGENCY EGRESS FIXTURE MOUNTED 40' ABG
POLES A1–A2, A4, B2, B4, T5, & T7 2 FIELD AIMED EGRESS MOUNTED 40' ABG
NEW POLES

Pole	x-loc	y-loc	height	N15	M20	W40	EW60	NARROW	MEDIUM	WIDE	XWIDE	Total	kw
A1	683	84	70ft			2		2	6			10	7.0
A2	683	-84	70ft			2		2	6			10	7.0
A3	615	-94	70ft					1	1	2		4	2.5
A4	517	-94	70ft					1	1	2		4	2.5
B1	769	191	70ft					4	8		2	14	8.9
B2	769	-191	70ft					5	7		2	14	8.9
B3	718	-239	70ft					4	4		2	10	6.3
B4	414	-239	70ft					4	4		2	10	6.3
C1	1011	143	70ft					3	9		2	14	8.9
C2	1011	-143	70ft					3	9		2	14	8.9
F1	105	190	80ft	12	2							14	13.5
F2	105	-190	80ft	12	7	1						14-6	19.3
F3	-105	-190	80ft	12	7	1						14-6	19.3
F4	-105	190	80ft	12	2							14	13.5
P1	-105	-389	70ft		5		1					6	5.8
P2	105	-389	70ft		5		1					6	5.8
T1	333	-258	50ft						2	1	1	4	2.5
T2	251	-340	50ft						2	1	1	4	2.5
T3	573	-498	50ft						2	1	1	4	2.5
T4	491	-580	50ft						2	1	1	4	2.5
T5	413	-340	50ft						1	3	1	5	3.2
T6	333	-420	50ft						1	3	1	5	3.2
T7	491	-418	50ft						1	3	1	5	3.2
T8	411	-498	50ft						1	3	1	5	3.2
other											44	44	28.0
Total				48	28	6	2	29	67	20	64	264	195.3



360' x 160' Practice Field
72 points at z=3, sp 30ft by 30ft
HORIZONTAL FOOTCANDLES

Average	34
Maximum	39
Minimum	30
Avg:Min	1.12
Max:Min	1.30
Coef Var	0.08
UnifGrad	1.30

EW60
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 946
Number luminaires used = 2
kw these luminaires = 1.9

M20
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 970
Number luminaires used = 28
kw these luminaires = 27.2

N15
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 961
Number luminaires used = 48
kw these luminaires = 46.1

W40
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 952
Number luminaires used = 6
kw these luminaires = 5.7

NARROW
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 629
Number luminaires used = 29
kw these luminaires = 18.2

XWIDE
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 636
Number luminaires used = 64
kw these luminaires = 40.7

WIDE
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 640
Number luminaires used = 20
kw these luminaires = 12.8

MEDIUM
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 637
Number luminaires used = 67
kw these luminaires = 42.7

GEOSPORT LIGHTING
A TENCATE COMPANY

HAMPTON COUNTY HIGH SCHOOL, HAMPTON COUNTY, SC, D3

Revision 2	10/27/25	Drawing 3 of 8	877-663-5968 WWW.GEOSPORTLIGHTING.COM

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

optima engineering
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Phone: 704.338.1292 www.optimaengineering.com
South Carolina License Number C-00710

LS3P
WWW.LS3P.COM

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SOUTH CAROLINA PE 27518 REGISTERED PROFESSIONAL ENGINEER

State Board of Registration for Professional Engineers and Surveyors.
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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

SPORTS FIELD PHOTOMETRIC 3

E-803

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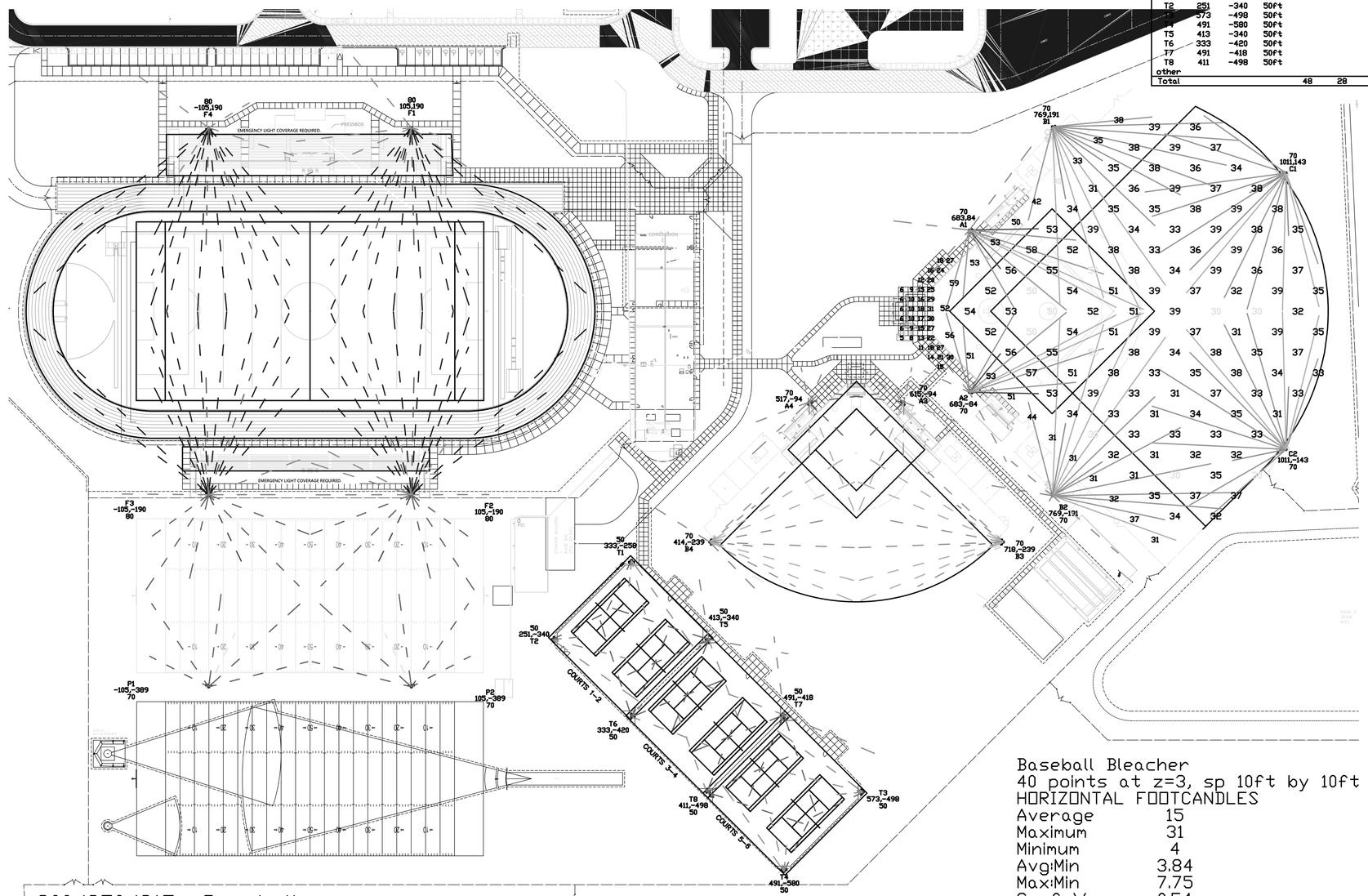
GEO SPORT LIGHTING
A TENCATE COMPANY

DASHED LINES = FIXTURES TURNED OFF
ALL PATHWAY FIXTURES TO BE FIELD AIMED
POLES F1–F2, F3–F4 A3–A4, & B2 2 PATHWAY FIXTURES MOUNTED 50' ABG
POLES F1–F2 4 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES F3–F4 2 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES A1–A4 1 EMERGENCY EGRESS FIXTURE MOUNTED 40' ABG
POLES A1–A2, A4, B2, B4, T5, & T7 2 FIELD AIMED EGRESS MOUNTED 40' ABG
NEW POLES

Pole	x-loc	y-loc	height	N15	M20	W40	EW60	NARROW	MEDIUM	WIDE	XWIDE	Total	kw
A1	683	84	70ft			2		2	6			10	7.0
A2	683	-84	70ft			2		2	6			10	7.0
A3	615	-94	70ft					1	1	2		4	2.5
A4	517	-94	70ft					1	1	2		4	2.5
B1	769	191	70ft					4	8		2	14	8.9
B2	769	-191	70ft					5	7		2	14	8.9
B3	718	-239	70ft					4	4		2	10	6.3
B4	414	-239	70ft					4	4		2	10	6.3
C1	1011	143	70ft					3	9		2	14	8.9
C2	1011	-143	70ft					3	9		2	14	8.9
F1	105	190	80ft	12	2							14	13.5
F2	105	-190	80ft	12	7	1						14-6	19.3
F3	-105	-190	80ft	12	7	1						14-6	19.3
F4	-105	190	80ft	12	2							14	13.5
P1	-105	-389	70ft		5		1					6	5.8
P2	105	-389	70ft		5		1					6	5.8
T1	333	-258	50ft						2	1	1	4	2.5
T2	251	-340	50ft						2	1	1	4	2.5
T3	573	-498	50ft						2	1	1	4	2.5
T4	491	-580	50ft						2	1	1	4	2.5
T5	413	-340	50ft						1	3	1	5	3.2
T6	333	-420	50ft						1	3	1	5	3.2
T7	491	-418	50ft						1	3	1	5	3.2
T8	411	-498	50ft						1	3	1	5	3.2
other											44	44	28.0
Total				48	28	6	2	29	67	20	64	264	195.3



EW60
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 946
Number luminaires used = 2
kw these luminaires = 1.9

M20
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 970
Number luminaires used = 28
kw these luminaires = 27.2

N15
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 961
Number luminaires used = 48
kw these luminaires = 46.1

W40
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 952
Number luminaires used = 6
kw these luminaires = 5.7

NARROW
GeoSport Cllr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 629
Number luminaires used = 29
kw these luminaires = 18.2

XWIDE
GeoSport Cllr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 636
Number luminaires used = 64
kw these luminaires = 40.7

WIDE
GeoSport Cllr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 640
Number luminaires used = 20
kw these luminaires = 12.8

MEDIUM
GeoSport Cllr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 637
Number luminaires used = 67
kw these luminaires = 42.7

Baseball Bleacher
40 points at z=3, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	15
Maximum	31
Minimum	4
Avg:Min	3.84
Max:Min	7.75
Coef Var	0.54
UnifGrad	1.81

300/350/315 Baseball
116 points (25 infield, 91 outfield) at z=3, sp 30ft by 30ft
HORIZONTAL FOOTCANDLES

	Outfield	Infield
Average	35	53
Maximum	39	58
Minimum	30	50
Avg:Min	1.17	1.06
Max:Min	1.30	1.16
Coef Var	0.08	0.04
UnifGrad	1.30	1.12

Extended Foul Territory
21 points at z=3, sp 30ft by 30ft
HORIZONTAL FOOTCANDLES

Average	43
Maximum	59
Minimum	30
Avg:Min	1.42
Max:Min	1.97
Coef Var	0.23

GEOSPORT LIGHTING
A TENCATE COMPANY

HAMPTON COUNTY HIGH SCHOOL, HAMPTON COUNTY, SC, D4

Revision 2	10/27/25	Drawing 4 of 8	877–663–5968 WWW.GEOSPORTLIGHTING.COM

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

optima engineering
1927 South Tryon St.,Suite 300, Charlotte NC 28203
Phone: 704.338.1292 www.optimaengineering.com
South Carolina License Number C-00710

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WWW.LS3P.COM

SOUTH CAROLINA — OPTIMA ENGINEERING PA No. C00710 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — P.E. 27518 — REGISTERED PROFESSIONAL ENGINEER

State Board of Registration for Professional Engineers and Surveyors.
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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

SPORTS FIELD PHOTOMETRIC 4

E-804

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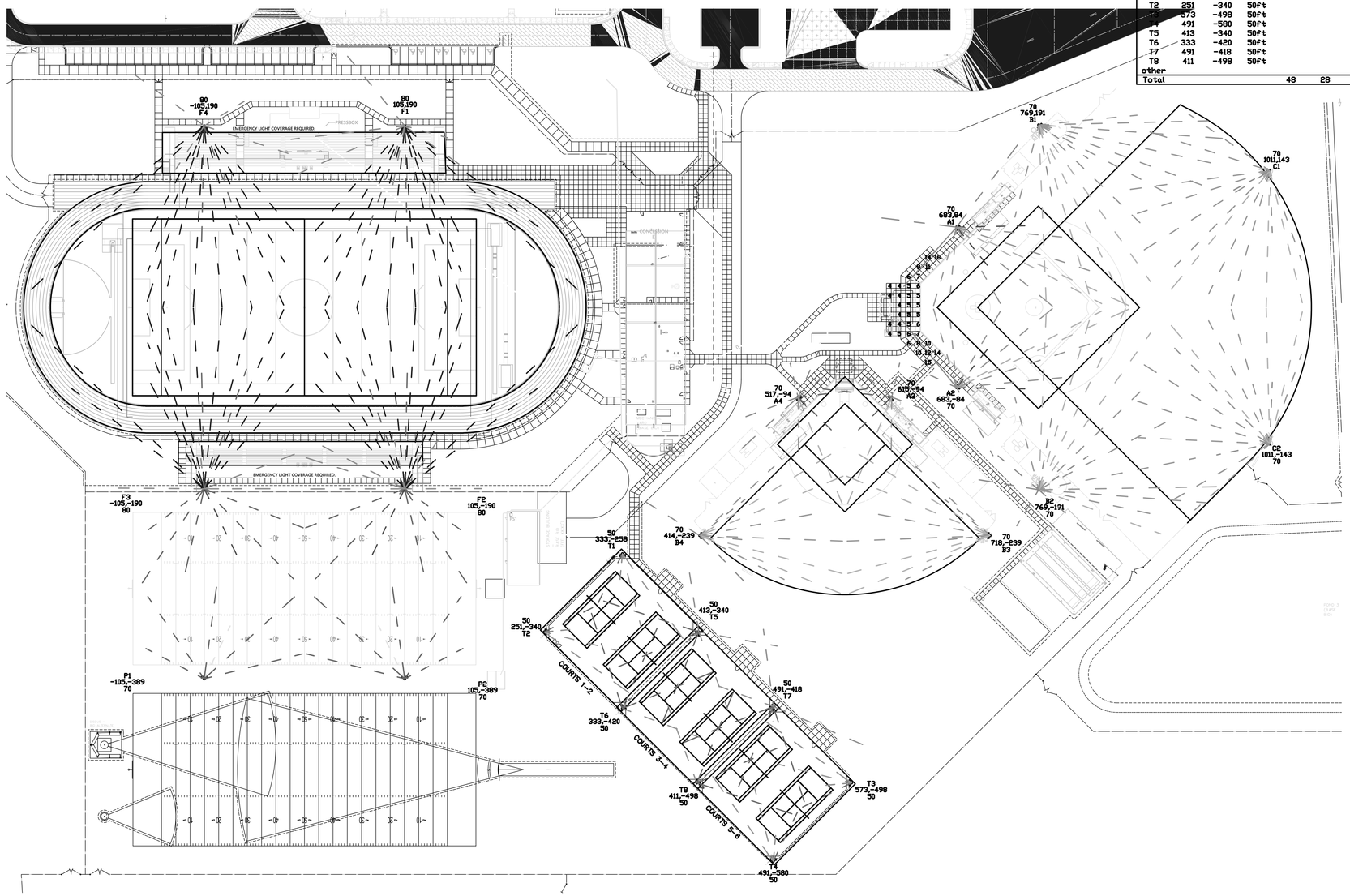
CONSTRUCTION DOCUMENTS

DASHED LINES = FIXTURES TURNED OFF

EMERGENCY EGRESS FOR BLEACHERS

Pole	x-loc	y-loc	height	N15	M20	W40	EW60	NARROW	MEDIUM	WIDE	XWIDE	Total	kw
A1	683	84	70ft			2		2	6			10	7.0
A2	683	-84	70ft			2		2	6			10	7.0
A3	615	-94	70ft					1	1	2		4	2.5
A4	517	-94	70ft					1	1	2		4	2.5
B1	769	191	70ft					4	8		2	14	8.9
B2	769	-191	70ft					5	7		2	14	8.9
B3	718	-239	70ft					4	4		2	10	6.3
B4	414	-239	70ft					4	4		2	10	6.3
C1	1011	143	70ft					3	9		2	14	8.9
C2	1011	-143	70ft					3	9		2	14	8.9
F1	105	190	80ft	12	2							14	13.5
F2	105	-190	80ft	12	7	1						14-6	19.2
F3	-105	-190	80ft	12	7	1						14-6	19.3
F4	-105	190	80ft	12	2							14	13.5
P1	-105	-389	70ft		5		1					6	5.8
P2	105	-389	70ft		5		1					6	5.8
T1	333	-258	50ft						2	1	1	4	2.5
T2	251	-340	50ft						2	1	1	4	2.5
T3	573	-498	50ft						2	1	1	4	2.5
T4	491	-580	50ft						2	1	1	4	2.5
T5	413	-340	50ft						1	3	1	5	3.2
T6	333	-420	50ft						1	3	1	5	3.2
T7	491	-418	50ft						1	3	1	5	3.2
T8	411	-498	50ft						1	3	1	5	3.2
other											44	44	28.0
Total				48	28	6	2	29	67	20	64	264	195.3



EW60
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 946
Number luminaires used = 2
kw these luminaires = 1.9

M20
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 970
Number luminaires used = 28
kw these luminaires = 27.2

N15
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 961
Number luminaires used = 48
kw these luminaires = 46.1

W40
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 952
Number luminaires used = 6
kw these luminaires = 5.7

NARROW
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 629
Number luminaires used = 29
kw these luminaires = 18.2

XWIDE
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 636
Number luminaires used = 64
kw these luminaires = 40.7

WIDE
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 640
Number luminaires used = 20
kw these luminaires = 12.8

MEDIUM
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 637
Number luminaires used = 67
kw these luminaires = 42.7

Baseball Bleacher
40 points at z=3, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	6
Maximum	16
Minimum	3
Avg:Min	2.16
Max:Min	5.33
Coef Var	0.54
UnifGrad	1.33

GEOSPORT LIGHTING
A TENCATE COMPANY

HAMPTON COUNTY HIGH SCHOOL, HAMPTON COUNTY, SC, D5

Revision 2	10/27/25	Drawing 5 of 8	877-663-5968 WWW.GEOSPORTLIGHTING.COM

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

optima engineering
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South Carolina License Number C-00710

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OPTIMA ENGINEERING P.A.
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CERTIFICATE OF AUTHORIZATION

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PE
27318
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State Board of Registration for Professional Engineers and Surveyors.
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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

SPORTS FIELD PHOTOMETRIC 5

E-805

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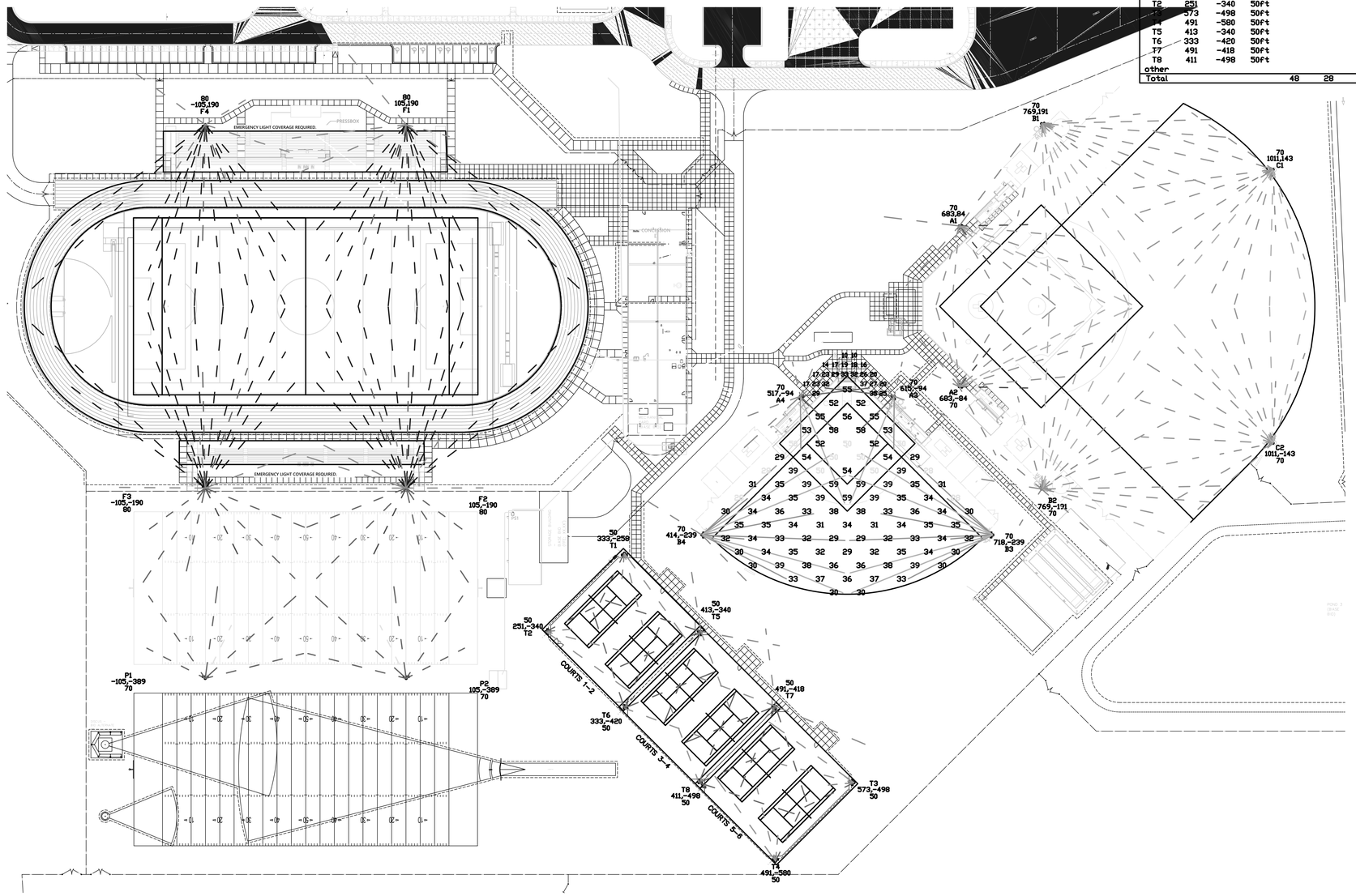
A TENCATE COMPANY

DASHED LINES = FIXTURES TURNED OFF
ALL PATHWAY FIXTURES TO BE FIELD AIMED
POLES F1–F2, F3–F4 A3–A4, & B2 2 PATHWAY FIXTURES MOUNTED 50' ABG
POLES F1–F2 4 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES F3–F4 2 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES A1–A4 1 EMERGENCY EGRESS FIXTURE MOUNTED 40' ABG
POLES A1–A2, A4, B2, B4, T5, & T7 2 FIELD AIMED EGRESS MOUNTED 40' ABG
NEW POLES

Pole	x-loc	y-loc	height	N15	M20	W40	EW60	NARROW	MEDIUM	WIDE	XWIDE	Total	kw
A1	683	84	70ft			2		2	6			10	7.0
A2	683	-84	70ft			2		2	6			10	7.0
A3	615	-94	70ft					1	1	2		4	2.5
A4	517	-94	70ft					1	1	2		4	2.5
B1	769	191	70ft					4	8		2	14	8.9
B2	769	-191	70ft					5	7		2	14	8.9
B3	718	-239	70ft					4	4		2	10	6.3
B4	414	-239	70ft					4	4		2	10	6.3
C1	1011	143	70ft					3	9		2	14	8.9
C2	1011	-143	70ft					3	9		2	14	8.9
F1	105	190	80ft	12	2							14	13.5
F2	105	-190	80ft	12	7	1						14-6	19.3
F3	-105	-190	80ft	12	7	1						14-6	19.3
F4	-105	190	80ft	12	2							14	13.5
P1	-105	-389	70ft		5		1					6	5.8
P2	105	-389	70ft		5		1					6	5.8
T1	333	-258	50ft						2	1	1	4	2.5
T2	251	-340	50ft						2	1	1	4	2.5
T3	573	-498	50ft						2	1	1	4	2.5
T4	491	-580	50ft						2	1	1	4	2.5
T5	413	-340	50ft						1	3	1	5	3.2
T6	333	-420	50ft						1	3	1	5	3.2
T7	491	-418	50ft						1	3	1	5	3.2
T8	411	-498	50ft						1	3	1	5	3.2
other											44	44	28.0
Total				48	28	6	2	29	67	20	64	264	195.3



200/200/200 Softball
98 points (25 infield, 73 outfield) at z=3, sp 20ft by 20ft
HORIZONTAL FOOTCANDLES

	Outfield	Infield
Average	34	54
Maximum	39	59
Minimum	28	50
Avg:Min	1.20	1.07
Max:Min	1.39	1.18
Coef Var	0.10	0.06
UnifGrad	1.34	1.18

Softball Bleacher
24 points at z=3, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	22
Maximum	37
Minimum	9
Avg:Min	2.49
Max:Min	4.11
Coef Var	0.36
UnifGrad	1.90

EW60
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 946
Number luminaires used = 2
kw these luminaires = 1.9

M20
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 970
Number luminaires used = 28
kw these luminaires = 27.2

N15
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 961
Number luminaires used = 48
kw these luminaires = 46.1

W40
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 952
Number luminaires used = 6
kw these luminaires = 5.7

NARROW
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 629
Number luminaires used = 29
kw these luminaires = 18.2

XWIDE
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 636
Number luminaires used = 64
kw these luminaires = 40.7

WIDE
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 640
Number luminaires used = 20
kw these luminaires = 12.8

MEDIUM
GeoSport Clr TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 637
Number luminaires used = 67
kw these luminaires = 42.7

GEOSPORT LIGHTING
A TENCATE COMPANY

HAMPTON COUNTY HIGH SCHOOL, HAMPTON COUNTY, SC, D6

Revision 2	10/27/25	Drawing 6 of 8	877-663-5968 WWW.GEOSPORTLIGHTING.COM

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

optima engineering
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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

SPORTS FIELD PHOTOMETRIC 6

E-806

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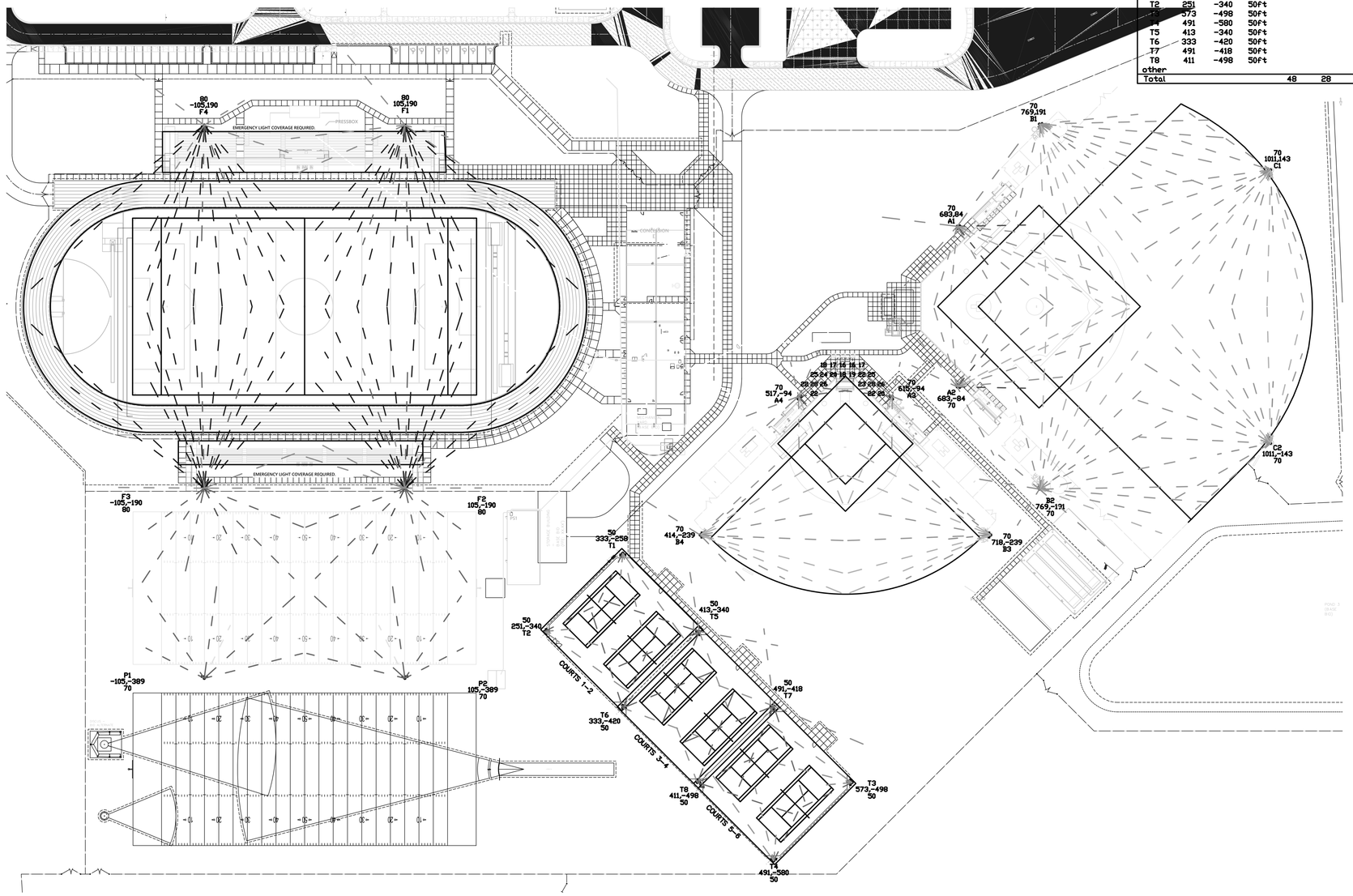
DASHED LINES = FIXTURES TURNED OFF
EMERGENCY EGRESS FOR BLEACHERS

Pole	x-loc	y-loc	height	N15	M20	W40	EW60	NARROW	MEDIUM	WIDE	XWIDE	Total	kw
A1	683	84	70Ft			2		2	6			10	7.0
A2	683	-84	70Ft			2		2	6			10	7.0
A3	615	-94	70Ft					1	1	2		4	2.5
A4	517	-94	70Ft					1	1	2		4	2.5
B1	769	191	70Ft					4	8		2	14	8.9
B2	769	-191	70Ft					5	7		2	14	8.9
B3	718	-239	70Ft					4	4		2	10	6.3
B4	414	-239	70Ft					4	4		2	10	6.3
C1	1011	143	70Ft					3	9		2	14	8.9
C2	1011	-143	70Ft					3	9		2	14	8.9
F1	105	190	80Ft	12	2							14	13.5
F2	105	-190	80Ft	12	7	1						14-6	19.3
F3	-105	-190	80Ft	12	7	1						14-6	19.3
F4	-105	190	80Ft	12	2							14	13.5
P1	-105	-389	70Ft		5		1					6	5.8
P2	105	-389	70Ft		5		1					6	5.8
T1	333	-258	50Ft						2	1	1	4	2.5
T2	251	-340	50Ft						2	1	1	4	2.5
T3	573	-498	50Ft						2	1	1	4	2.5
T4	491	-580	50Ft						2	1	1	4	2.5
T5	413	-340	50Ft						1	3	1	5	3.2
T6	333	-420	50Ft						1	3	1	5	3.2
T7	491	-418	50Ft						1	3	1	5	3.2
T8	411	-498	50Ft						1	3	1	5	3.2
other											44	44	28.0
Total				48	28	6	2	29	67	20	64	264	195.3



EW60
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 946
Number luminaires used = 2
kw these luminaires = 1.9

M20
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 970
Number luminaires used = 28
kw these luminaires = 27.2

N15
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 961
Number luminaires used = 48
kw these luminaires = 46.1

W40
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 952
Number luminaires used = 6
kw these luminaires = 5.7

NARROW
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 629
Number luminaires used = 29
kw these luminaires = 18.2

XWIDE
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 636
Number luminaires used = 64
kw these luminaires = 40.7

WIDE
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 640
Number luminaires used = 20
kw these luminaires = 12.8

MEDIUM
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 637
Number luminaires used = 67
kw these luminaires = 42.7

Softball Bleacher
24 points at z=3, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES

Average	21
Maximum	28
Minimum	13
Avg:Min	1.58
Max:Min	2.15
Coef Var	0.22
UnifGrad	1.33

GEOSPORT LIGHTING
A TENCATE COMPANY

HAMPTON COUNTY HIGH SCHOOL, HAMPTON COUNTY, SC, D7

Revision 2	10/27/25	Drawing 7 of 8	877-663-5968 WWW.GEOSPORTLIGHTING.COM

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

SPORTS FIELD PHOTOMETRIC 7

E-807

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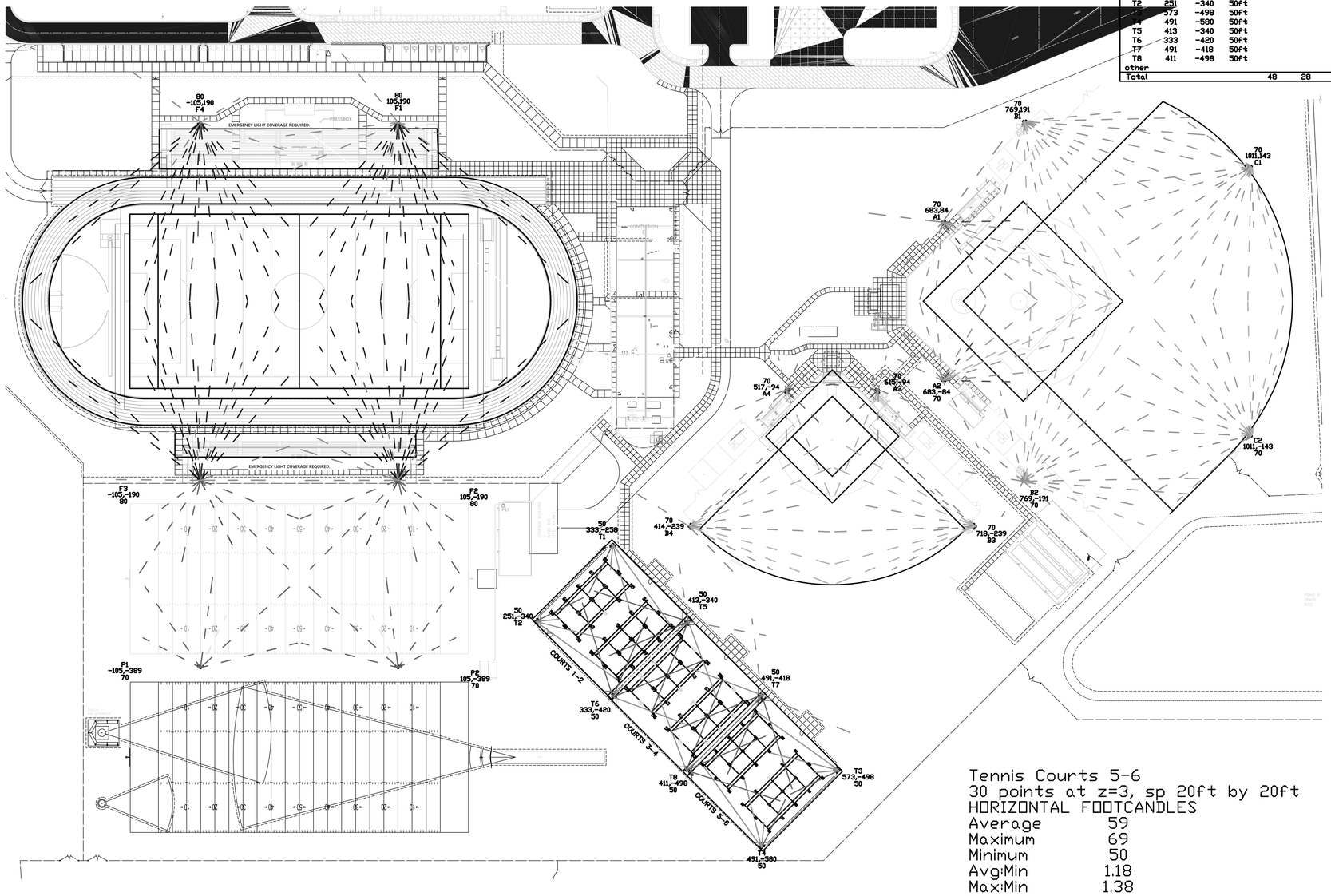
GEO SPORT LIGHTING
A TENCATE COMPANY

DASHED LINES = FIXTURES TURNED OFF
ALL PATHWAY FIXTURES TO BE FIELD AIMED
POLES F1–F2, F3–F4 A3–A4, & B2 2 PATHWAY FIXTURES MOUNTED 50' ABG
POLES F1–F2 4 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES F3–F4 2 EMERGENCY EGRESS FIXTURES MOUNTED 40' ABG
POLES A1–A4 1 EMERGENCY EGRESS FIXTURE MOUNTED 40' ABG
POLES A1–A2, A4, B2, B4, T5, & T7 2 FIELD AIMED EGRESS MOUNTED 40' ABG
NEW POLES

Pole	x-loc	y-loc	height	N15	M20	W40	EW60	NARROW	MEDIUM	WIDE	XWIDE	Total	kw
A1	683	84	70ft			2		2	6			10	7.0
A2	683	-84	70ft			2		2	6			10	7.0
A3	615	-94	70ft					1	1	2		4	2.5
A4	517	-94	70ft					1	1	2		4	2.5
B1	769	191	70ft					4	8		2	14	8.9
B2	769	-191	70ft					5	7		2	14	8.9
B3	718	-239	70ft					4	4		2	10	6.3
B4	414	-239	70ft					4	4		2	10	6.3
C1	1011	143	70ft					3	9		2	14	8.9
C2	1011	-143	70ft					3	9		2	14	8.9
F1	105	190	80ft	12	2							14	13.5
F2	105	-190	80ft	12	7	1						14-6	19.3
F3	-105	-190	80ft	12	7	1						14-6	19.3
F4	-105	190	80ft	12	2							14	13.5
P1	-105	-389	70ft		5		1					6	5.8
P2	105	-389	70ft		5		1					6	5.8
T1	333	-258	50ft						2	1	1	4	2.5
T2	251	-340	50ft						2	1	1	4	2.5
T3	573	-498	50ft						2	1	1	4	2.5
T4	491	-580	50ft						2	1	1	4	2.5
T5	413	-340	50ft						1	3	1	5	3.2
T6	333	-420	50ft						1	3	1	5	3.2
T7	491	-418	50ft						1	3	1	5	3.2
T8	411	-498	50ft						1	3	1	5	3.2
other											44	44	28.0
Total				48	28	6	2	29	67	20	64	264	195.3



Tennis Courts 1-2
30 points at z=3, sp 20ft by 20ft
HORIZONTAL FOOTCANDLES

Average	59
Maximum	69
Minimum	50
Avg:Min	1.17
Max:Min	1.38
Coef Var	0.10

Tennis Courts 3-4
30 points at z=3, sp 20ft by 20ft
HORIZONTAL FOOTCANDLES

Average	55
Maximum	63
Minimum	50
Avg:Min	1.11
Max:Min	1.26
Coef Var	0.09
UnifGrad	1.26

Tennis Courts 5-6
30 points at z=3, sp 20ft by 20ft
HORIZONTAL FOOTCANDLES

Average	59
Maximum	69
Minimum	50
Avg:Min	1.18
Max:Min	1.38
Coef Var	0.11
UnifGrad	1.38

EW60
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 946
Number luminaires used = 2
kw these luminaires = 1.9

M20
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 970
Number luminaires used = 28
kw these luminaires = 27.2

N15
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 961
Number luminaires used = 48
kw these luminaires = 46.1

W40
GeoSport Stadium TSL 1000W
Light Loss Factor = 0.950
Watts per luminaire = 952
Number luminaires used = 6
kw these luminaires = 5.7

NARROW
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 629
Number luminaires used = 29
kw these luminaires = 18.2

XWIDE
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 636
Number luminaires used = 64
kw these luminaires = 40.7

WIDE
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 640
Number luminaires used = 20
kw these luminaires = 12.8

MEDIUM
GeoSport Clir TSL SV 650W
Light Loss Factor = 0.950
Watts per luminaire = 637
Number luminaires used = 67
kw these luminaires = 42.7

GEOSPORT LIGHTING
A TENCATE COMPANY

HAMPTON COUNTY HIGH SCHOOL, HAMPTON COUNTY, SC, D8

Revision 2	10/27/25	Drawing 8 of 8	877–663–5968 WWW.GEOSPORTLIGHTING.COM

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

SPORTS FIELD PHOTOMETRIC 8

E-808

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CONSTRUCTION DOCUMENTS

TARGETING: CALCULATED AS SPECIFIED

NOTES:
- WHEN THE LLF IS NOT 0.9 OR 1.0 THE WATTAGE INFORMATION WILL BE CONSIDERED AS APPROXIMATE.
- SURFACE REFLECTANCES - 80/50/20 U.N.O.
- LUMINAIRES DEFINED AS SPECIFIED
- LUMINAIRES PLACED AT SPECIFIED LOCATIONS

Luminaire Schedule

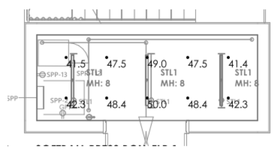
Symbol	Qty	Label	Arrangement	Luminaire Lumens	LLF	Luminaire Watts	Total Watts	Description	[MANUFAC]
	9	STL8	Single	8141	0.900	60	540	FSS880L840-UNV-DIM	DAY-BRITE / CFI
	12	VTL8	GROUP	N.A.	0.900	N.A.	1113.6	V2WAE51L840-8-UNV	PHILIPS DAY-BRITE - PHILIPS CFI
	12	STL1	Single	4077	0.900	29.9	358.8	FSS440L840-UNV-DIM	DAY-BRITE / CFI

Calculation Summary

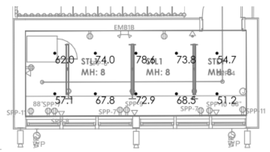
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Point Spacing	Calc. Plane Height
BASEBALL PRESS BOX_FLR 1_Floor	Illuminance	Fc	46.45	52.5	36.7	1.27	1.43	3	0
BASEBALL PRESS BOX_FLR 2_ Workplane	Illuminance	Fc	65.25	74.0	57.3	1.14	1.29	3	2.5
BATTING CAGES_Workplane	Illuminance	Fc	28.41	52.8	6.0	4.74	8.80	3	3
SOFTBALL PRESS BOX_FLR 1_Floor	Illuminance	Fc	45.83	50.0	41.4	1.11	1.21	3	0
SOFTBALL PRESS BOX_FLR 2_ Workplane	Illuminance	Fc	66.06	78.6	51.2	1.29	1.54	3	2.5
STORAGE BUILDING 2_Floor	Illuminance	Fc	23.72	34.8	9.7	2.45	3.59	3	0

Room Summary

Label	Type	Wall Height
BASEBALL PRESS BOX_FLR 1	Polygon-Flat	8
BASEBALL PRESS BOX_FLR 2	Polygon-Flat	8
BATTING CAGES	Polygon-Flat	14
SOFTBALL PRESS BOX_FLR 1	Polygon-Flat	8
SOFTBALL PRESS BOX_FLR 2	Polygon-Flat	8
STORAGE BUILDING 2	Polygon-Flat	12



PHOTOMETRY - SOFTBALL PRESS BOX - LEVEL 1
Scale: 1 inch= 4 Ft.



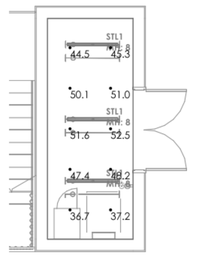
PHOTOMETRY - SOFTBALL PRESS BOX - LEVEL 2
Scale: 1 inch= 4 Ft.



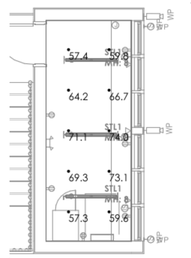
PHOTOMETRY - STORAGE BUILDING
Scale: 1 inch= 4 Ft.



PHOTOMETRY - BATTING CAGES
Scale: 1 inch= 4 Ft.



PHOTOMETRY - BASEBALL PRESS BOX - LEVEL 1
Scale: 1 inch= 4 Ft.



PHOTOMETRY - BASEBALL PRESS BOX - LEVEL 2
Scale: 1 inch= 4 Ft.

SESCO LIGHTING

optima engineering
1927 South Tryon St.,Suite 300, Charlotte NC 28203
Phone: 704.338.1292 - www.optimaengineering.com
South Carolina License Number C-00710

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WWW.LS3P.COM

HAMPTON COUNTY HIGH SCHOOL - PHASE 2

Disclaimer:
SESCO Lighting provides this photometric report for purposes of comparison and coordination with the specified luminaires only. The information provided is based on standardized industry procedures.

This laboratory performance will always differ from that observed in the field due to a great number of variables, both known and unknown (installation methods, power quality, lamping, recoverable and non-recoverable light loss factors, etc.)

In general, SESCO Lighting considers numerical studies to be predictive in that they cannot characterize the visual performance of any luminaire, single or multiple, in an actual installation. Actual performance is a function of good experience, consultation with the manufacturer, and, above all, common sense.

Sales Rep: RYAN TROTTER
Office: CHARLOTTE
Contact: 980-220-9286
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HAMPTON COUNTY HIGH SCHOOL

Date:10/28/2025

Page 1 of 1

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27318
REGISTERED PROFESSIONAL ENGINEER
RYAN M. TROTTER
State Board of Registration for Professional Engineers and Surveyors.
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REVISIONS:

No.	Description	Date

OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
DATE: 10.31.2025

BASEBALL ACCESSORY BUILDING PHOTOMETRIC 9

E-809

CONSTRUCTION DOCUMENTS

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TARGETING: CALCULATED AS SPECIFIED

NOTES:
- WHEN THE LLF IS NOT 0.9 OR 1.0 THE WATTAGE INFORMATION WILL BE CONSIDERED AS APPROXIMATE.
- SURFACE REFLECTANCES - 80/50/20 U.N.O.
- LUMINAIRES DEFINED AS SPECIFIED
- LUMINAIRES PLACED AT SPECIFIED LOCATIONS

Luminaire Schedule

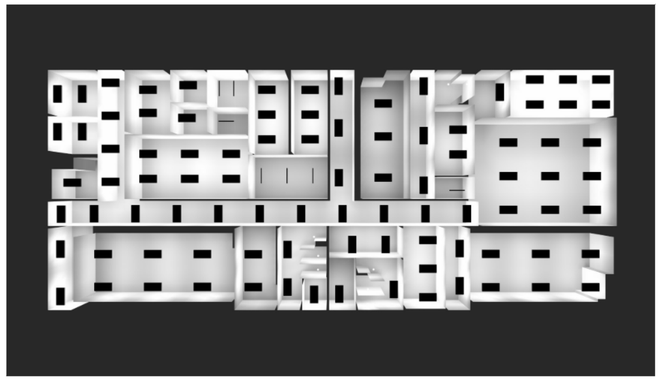
Symbol	Qty	Label	Arrangement	Luminaire Lumens	LLF	Luminaire Watts	Total Watts	Description	[MANUFAC]
⊖	8	DL2	Single	2290	0.900	20.4	163.2	M6RDL209CSWCL-4000K	LIGHTOLIER BY SIGNIFY
▭	91	FPL5	Single	5039	0.900	37.3	3394.3	50G-S24-L59-840-SAF12125-(L48)-DIM-UNV	WILLIAMS INDOOR
═	7	STL1	Single	4077	0.900	29.9	209.3	FSS440L840-UNV-DIM	DAY-BRITE / CFI

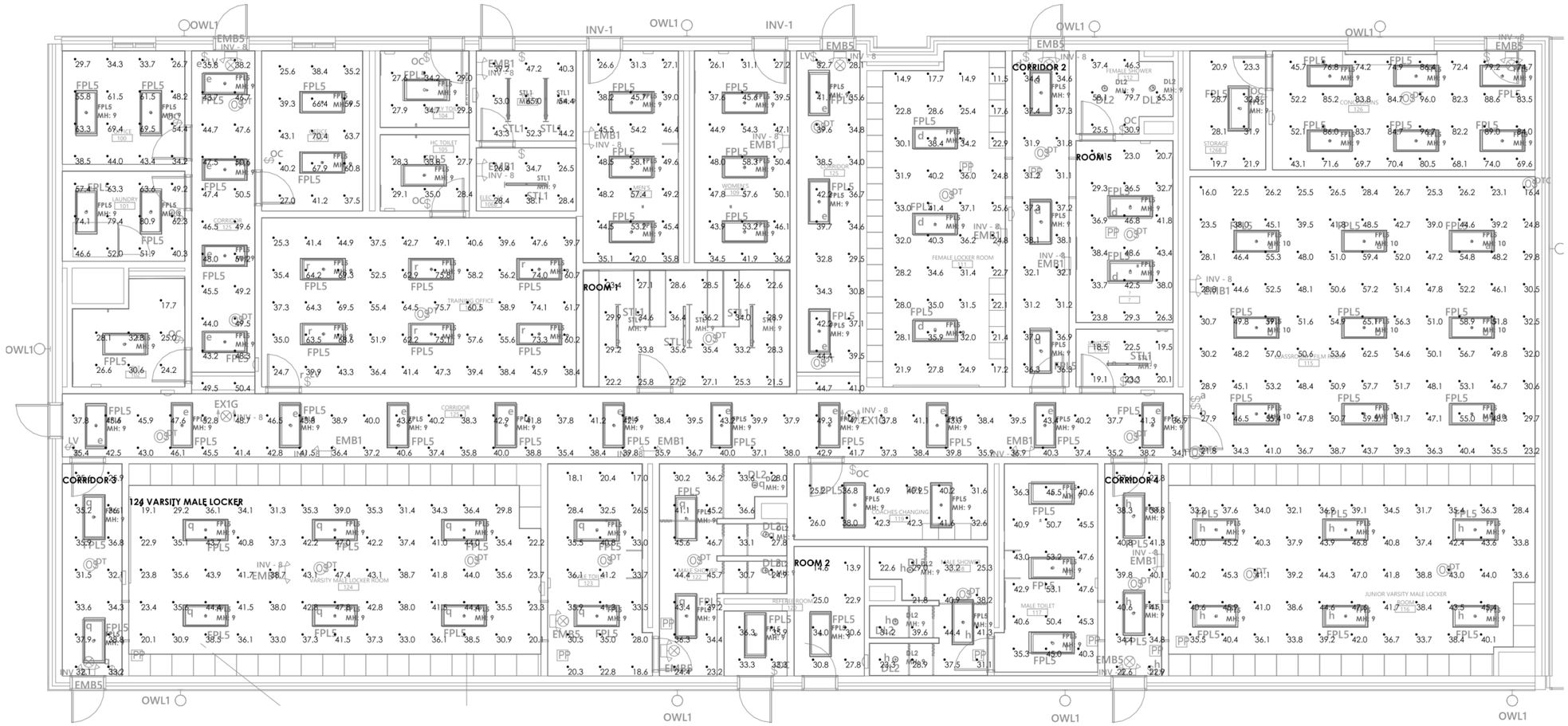
Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Point Spacing	Calc. Plane Height
100 OFFICE_Workplane	Illuminance	Fc	48.01	69.5	26.7	1.80	2.60	3	2.5
101 LAUNDRY_Workplane	Illuminance	Fc	60.08	80.9	40.3	1.49	2.01	3	3
102 TLT_Floor	Illuminance	Fc	26.36	32.3	17.7	1.49	1.82	3	0
103 OFFICE_Workplane	Illuminance	Fc	47.75	70.4	25.6	1.87	2.75	3	2.5
104 FAMILY TLT_Floor	Illuminance	Fc	30.45	34.7	27.6	1.10	1.26	3	0
105 HC TOILET_Floor	Illuminance	Fc	30.38	35.0	27.7	1.10	1.26	3	0
106 ELEC_Workplane	Illuminance	Fc	48.77	65.0	39.2	1.24	1.66	3	2.5
106B ELEC_Workplane	Illuminance	Fc	30.42	38.1	26.4	1.15	1.44	3	2.5
107 TRAINING OFFICE_Workplane	Illuminance	Fc	52.75	75.8	24.7	2.14	3.07	3	2.5
108 MENS_Floor	Illuminance	Fc	43.86	58.1	26.6	1.65	2.18	3	0
109 WOMENS_Floor	Illuminance	Fc	43.88	58.3	26.1	1.68	2.23	3	0
111 FEMALE LOCKER RM_Floor	Illuminance	Fc	28.13	41.4	11.5	2.45	3.60	3	0
112 FEMALE SHOWER_Workplane	Illuminance	Fc	49.03	79.7	25.5	1.92	3.13	3	4
114 JANITOR_Floor	Illuminance	Fc	20.50	23.3	18.5	1.11	1.26	3	0
115 CLASSROOM_Workplane	Illuminance	Fc	42.94	65.1	16.0	2.68	4.07	3	2.5
116 JUNIOR VARSITY MALE LOCKER_Floor	Illuminance	Fc	39.49	47.6	28.4	1.39	1.68	3	0
117 MALE TLT_Floor	Illuminance	Fc	44.66	53.2	35.3	1.27	1.51	3	0
118 MALE SHOWER_Floor	Illuminance	Fc	32.55	44.4	21.8	1.49	2.04	3	0
119 COACHES CHANGING_Floor	Illuminance	Fc	36.53	42.3	25.2	1.45	1.68	3	0
120 REFEREE RM_Floor	Illuminance	Fc	34.70	36.3	33.3	1.04	1.09	3	0
122 MALE SHOWER_Floor	Illuminance	Fc	35.75	46.7	23.2	1.54	2.01	3	0
123 MALE TLT_Floor	Illuminance	Fc	29.96	41.3	17.0	1.76	2.43	3	0
124 VARSITY MALE LOCKER_Floor	Illuminance	Fc	36.19	47.8	19.1	1.89	2.50	3	0
125 CORRIDOR_Floor	Illuminance	Fc	41.02	52.8	28.1	1.46	1.88	3	0
126 CONCESSIONS_Workplane	Illuminance	Fc	76.44	96.7	43.1	1.77	2.24	3	3
126B STORAGE_Floor	Illuminance	Fc	25.91	32.8	19.7	1.32	1.66	3	0
CORRIDOR 2_Floor	Illuminance	Fc	34.69	38.1	31.1	1.12	1.23	3	0
CORRIDOR 3_Floor	Illuminance	Fc	33.50	38.8	25.6	1.31	1.52	3	0
CORRIDOR 4_Floor	Illuminance	Fc	35.06	41.3	22.6	1.55	1.83	3	0
ROOM 1_Floor	Illuminance	Fc	29.23	36.4	21.5	1.36	1.69	3	0
ROOM 2_Floor	Illuminance	Fc	24.95	34.0	13.9	1.79	2.45	3	0
ROOM 5_Floor	Illuminance	Fc	33.93	48.6	19.1	1.78	2.54	3	0

Room Summary

Label	Type	Wall Height
100 OFFICE	Polygon-Flat	9
101 LAUNDRY	Polygon-Flat	9
102 TLT	Polygon-Flat	9
103 OFFICE	Polygon-Flat	9
104 FAMILY TLT	Polygon-Flat	9
105 HC TOILET	Polygon-Flat	9
106 ELEC	Polygon-Flat	9
106B ELEC	Polygon-Flat	9
107 TRAINING OFFICE	Polygon-Flat	9
108 MENS	Polygon-Flat	9
109 WOMENS	Polygon-Flat	9
111 FEMALE LOCKER RM	Polygon-Flat	9
112 FEMALE SHOWER	Polygon-Flat	9
114 JANITOR	Polygon-Flat	9
115 CLASSROOM	Polygon-Flat	10
116 JUNIOR VARSITY MALE LOCKER	Polygon-Flat	9
117 MALE TLT	Polygon-Flat	9
118 MALE SHOWER	Polygon-Flat	9
119 COACHES CHANGING	Polygon-Flat	9
120 REFEREE RM	Polygon-Flat	9
122 MALE SHOWER	Polygon-Flat	9
123 MALE TLT	Polygon-Flat	9
124 VARSITY MALE LOCKER	Polygon-Flat	9
125 CORRIDOR	Polygon-Flat	9
126 CONCESSIONS	Polygon-Flat	9
126B STORAGE	Polygon-Flat	9
CORRIDOR 2	Polygon-Flat	9
CORRIDOR 3	Polygon-Flat	9
CORRIDOR 4	Polygon-Flat	9
ROOM 1	Polygon-Flat	9
ROOM 2	Polygon-Flat	9
ROOM 5	Polygon-Flat	9





PHOTOMETRY - FIELD HOUSE
Scale: 1 inch= 4 Ft.

SESCO LIGHTING

Disclaimer:
SESCO Lighting provides this photometric report for purposes of comparison within the SESCO Lighting product line only. The information provided is based on standardized industry procedures.

This laboratory performance will always differ from that observed in the field due to a great number of variables, both known and unknown (installation methods, power quality, lamping, recoverable and non-recoverable light loss factors, etc.).

In general, SESCO Lighting considers numerical studies to be predictive in the sense that actual results should fall within the range of the values cited or grouped. As such, specification decisions must be thoroughly based upon experience, consultation with the manufacturer, and, above all, common sense.

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HAMPTON COUNTY HIGH SCHOOL

Date:10/28/2025

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HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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OPT PROJECT: 23-0084
LS3P PROJECT: 1201-217190
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FIELD HOUSE PHOTOMETRIC 10

E-810

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- LUMINAIRES PLACED AT SPECIFIED LOCATIONS

Luminaire Schedule

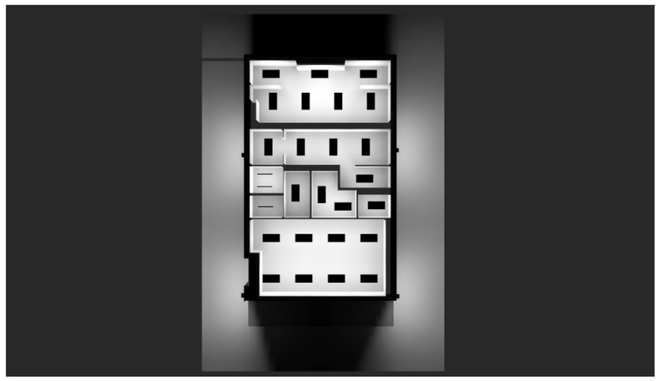
Symbol	Qty	Label	Arrangement	Luminaire Lumens	LLF	Luminaire Watts	Total Watts	Description	[MANUFAC]
	4	OWL1	Single	6393	0.900	52	208	101L-32L-530-NW-G2-3	SIGNIFY GARDCO
	24	FPL5	Single	5039	0.900	37.3	895.2	50G-S24-L59-840-SAF12125-(L48)-DIM-UNV	WILLIAMS INDOOR
	3	STL1	Single	4077	0.900	29.9	89.7	FSS440L840-UNV-DIM	DAY-BRITE / CFI

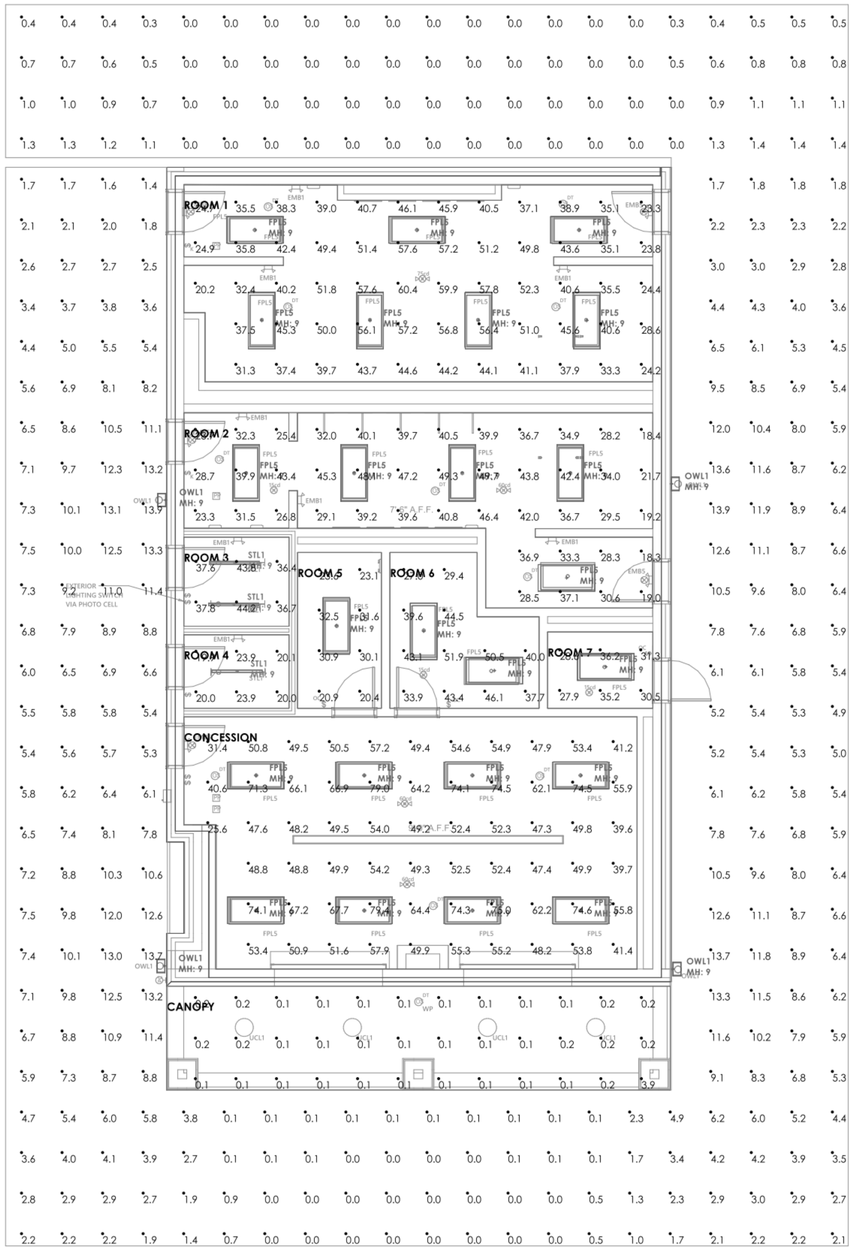
Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Point Spacing	Calc. Plane Height
CANOPY_Floor	Illuminance	Fc	0.23	3.9	0.1	2.30	39.00	3	0
CONCESSION_Workplane	Illuminance	Fc	55.41	79.4	25.6	2.16	3.10	3	3
GRADE_Planar	Illuminance	Fc	4.30	13.9	0.0	N.A.	N.A.	3	0
ROOM 1_Floor	Illuminance	Fc	42.19	60.4	20.2	2.09	2.99	3	0
ROOM 2_Floor	Illuminance	Fc	34.58	49.7	18.3	1.89	2.72	3	0
ROOM 3_Floor	Illuminance	Fc	39.42	44.2	36.4	1.08	1.21	3	0
ROOM 4_Floor	Illuminance	Fc	21.30	23.9	19.9	1.07	1.20	3	0
ROOM 5_Floor	Illuminance	Fc	26.64	32.5	20.4	1.31	1.59	3	0
ROOM 6_Floor	Illuminance	Fc	40.59	51.9	27.0	1.50	1.92	3	0
ROOM 7_Floor	Illuminance	Fc	31.62	36.2	27.9	1.13	1.30	3	0

Room Summary

Label	Type	Wall Height
CANOPY	Polygon-Flat	9
CONCESSION	Polygon-Flat	9
ROOM 1	Polygon-Flat	9
ROOM 2	Polygon-Flat	9
ROOM 3	Polygon-Flat	9
ROOM 4	Polygon-Flat	9
ROOM 5	Polygon-Flat	9
ROOM 6	Polygon-Flat	9
ROOM 7	Polygon-Flat	9





PHOTOMETRY - CONCESSION / RESTROOM BUILDING
Scale: 1 inch= 4 Ft.

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HAMPTON COUNTY HIGH SCHOOL

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HAMPTON COUNTY HIGH SCHOOL - PHASE 2

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CONCESSIONS RESTROOM PHOTOMETRIC 11

E-811

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CONSTRUCTION DOCUMENTS