

POWER DEVICE LEGEND	
SYMBOLS	DESCRIPTION
	SURFACE MOUNTED PANELBOARD, POWER AND LIGHTING
	RECESSED PANELBOARD, POWER AND LIGHTING
	HOMERUN TO PANELBOARD
	JUNCTION BOX - WALL MOUNTED
	JUNCTION BOX - CEILING MOUNTED
	MOTOR
	DISCONNECT SWITCH.
	MOTOR RATED DISCONNECT SWITCH.
	EMERGENCY PUSH BUTTON WITH KEY RESET

WIRING DEVICE LEGEND	
SYMBOLS	DESCRIPTION
	NEMA 5-20R SIMPLEX RECEPTACLE. "X" INDICATES CIRCUIT NUMBER. SYMBOL WITH LINE THRU IT DENOTES MOUNTED ABOVE COUNTER HEIGHT. COORDINATE HEIGHT WITH ARCHITECTS PLANS.
	NEMA 5-20R DUPLEX RECEPTACLE. "X" INDICATES CIRCUIT NUMBER. SYMBOL WITH LINE THRU IT DENOTES MOUNTED ABOVE COUNTER HEIGHT. COORDINATE HEIGHT WITH ARCHITECTS PLANS.
	NEMA 5-20R DUPLEX RECEPTACLE FOR WALL MOUNTED PROJECTOR. MOUNTED AT 90" AFF. UNLESS SPECIFICALLY NOTED OTHERWISE. "X" INDICATES CIRCUIT NUMBER. COORDINATE FINAL HEIGHT WITH PROJECTOR MANUFACTURER / OWNER.
	NEMA 5-20R DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER. "X" INDICATES CIRCUIT NUMBER. SYMBOL WITH LINE THRU IT DENOTES MOUNTED ABOVE COUNTER HEIGHT. COORDINATE HEIGHT WITH ARCHITECTS PLANS.
	NEMA 5-20R DOUBLE DUPLEX RECEPTACLE. "X" INDICATES CIRCUIT NUMBER. COORDINATE HEIGHT WITH ARCHITECTS PLANS.
	SPECIAL RECEPTACLE. "X" INDICATES CIRCUIT NUMBER. SYMBOL WITH LINE THRU IT DENOTES MOUNTED ABOVE COUNTER HEIGHT. COORDINATE RECEPTACLE TYPE WITH THE EQUIPMENT IT IS SERVING.
	DUAL COMPARTMENT SURFACE RACEWAY. SIMILAR TO WIREMOLD #4000. REFER TO THE DETAILS SHEET FOR ADDITIONAL INFORMATION.
	FLOOR BOX AND/OR POKE THRU DEVICE. SEE SCHEDULE FOR DETAILS. "X" INDICATES CIRCUIT NUMBER.
	SINGLE POLE LIGHT SWITCH 20A, 120/277V. "X" INDICATES FIXTURE CONTROLLED.
	DIMMER SWITCH 20A, 120/277V. "X" INDICATES FIXTURE CONTROLLED.
	THREE WAY LIGHT SWITCH 20A, 120/277V. "X" INDICATES FIXTURE CONTROLLED.
	SINGLE POLE DIMMER SWITCH 20A, 120/277V. "X" INDICATES FIXTURE CONTROLLED.
	SINGLE POLE EMERGENCY SHUNT RELAY (2 GANG BACKBOX), SIMILAR TO LIGHTING CONTROL AND DESIGN MODEL #GR2001-ES-277-DUAL, AND A SINGLE POLE LIGHT SWITCH 20A, 120/277V. THE SINGLE SWITCH SHALL CONTROL BOTH THE NORMAL AND EMERGENCY LIGHTING. IN THE EVENT OF A POWER OUTAGE, THE LIGHTS ON THE EMERGENCY CIRCUIT SHALL AUTOMATICALLY TURN ON REGARDLESS OF THE SWITCH POSITION. NOTE THAT SOME AREAS ON THE DRAWINGS CALL FOR A 3-WAY OR 4-WAY SWITCH IN LIEU OF THE SINGLE POLE SWITCH. REFER TO THE DETAILS SHEET FOR ADDITIONAL INFORMATION. "X" INDICATES FIXTURE CONTROLLED.
	KEYED LIGHT SWITCH 20A, 120/277V. "X" INDICATES FIXTURE CONTROLLED.
	LOW VOLTAGE PUSHBUTTON SWITCH. PROVIDE CAT 5e WIRE BETWEEN PREVIOUS AND NEXT DEVICE IN LINE. "X" INDICATES THE RELAY(S) IN THE RELAY PANEL CONTROLLED VIA THE SWITCH. "N" DENOTES THE NUMBER OF PROGRAMMABLE PUSH BUTTONS IN THE SWITCH.
	WALL MOUNTED DIGITAL TIME SWITCH
	RAISE / LOWER SWITCH FOR MOTORIZED SCREEN. COORDINATE TYPE WITH SCREEN MANUFACTURER
	LIGHTING FIXTURE TYPE: SEE LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
	PHOTO CELL.

LOW VOLTAGE DEVICE LEGEND	
SYMBOLS	DESCRIPTION
	DATA COMMUNICATIONS OUTLET FOR AV WIRING AT WALL MOUNTED PROJECTOR. 2-GANG RECESSED JUNCTION BOX MOUNTED AT 90" AFF. 2' CONDUIT AND PULLSTRING UP TO ACCESSIBLE CEILING, AND DEVICE PLATE(S) CAPABLE OF ACCEPTING THE FOLLOWING DEVICES (SUPPLIED BY OTHERS): * RJ45 JACK * HDMI JACK * VGA JACK * 3.5 MM AUDIO JACK * USB JACK * COMPOSITE VIDEO JACK WHERE SURFACE RACEWAY IS INDICATED, PROVIDE DUAL COMPARTMENT SURFACE RACEWAY. SIMILAR TO WIREMOLD #4000, IN LIEU OF RECESSED BOX AND CONDUIT. COORDINATE FINAL HEIGHT WITH PROJECTOR MANUFACTURER / OWNER.
	DATA COMMUNICATIONS OUTLET FOR AV WIRING AT TEACHERS DESK. 2-GANG RECESSED JUNCTION BOX MOUNTED AT 18" AFF. 2' CONDUIT AND PULLSTRING UP TO ACCESSIBLE CEILING, AND DEVICE PLATE(S) CAPABLE OF ACCEPTING THE FOLLOWING DEVICES (SUPPLIED BY OTHERS): * RJ45 JACK * HDMI JACK * VGA JACK * 3.5 MM AUDIO JACK * USB JACK * COMPOSITE VIDEO JACK WHERE SURFACE RACEWAY IS INDICATED, PROVIDE DUAL COMPARTMENT SURFACE RACEWAY. SIMILAR TO WIREMOLD #4000, IN LIEU OF RECESSED BOX AND CONDUIT. COORDINATE FINAL HEIGHT WITH PROJECTOR MANUFACTURER / OWNER.
	VOICE COMMUNICATIONS OUTLET: 1-GANG JUNCTION BOX WITH 3/4" CONDUIT AND PULLSTRING UP TO ACCESSIBLE CEILING, MOUNTED AT 48" AFF. UNLESS SPECIFICALLY NOTED OTHERWISE
	COMBINATION VOICE & DATA COMMUNICATION OUTLET: 1-GANG JUNCTION BOX WITH 3/4" CONDUIT AND PULLSTRING UP TO ACCESSIBLE CEILING, MOUNTED AT 18" AFF. UNLESS SPECIFICALLY NOTED OTHERWISE. SYMBOL WITH LINE THRU IT DENOTES MOUNTED ABOVE COUNTER HEIGHT. COORDINATE HEIGHT WITH ARCHITECTS PLANS.
	FUTURE CALL SWITCH LOCATION. 1-GANG JUNCTION BOX WITH BLANK COVER PLATE AND 3/4" CONDUIT AND PULLSTRING UP TO ACCESSIBLE CEILING.
	CATV JACK: 2-GANG JUNCTION BOX WITH 3/4" CONDUIT AND PULLSTRING UP TO ACCESSIBLE CEILING.
	MICROPHONE
	PAGING SPEAKER, CEILING MOUNTED (RECESSED)
	PAGING HORN SPEAKER
	SOUND SYSTEM SPEAKER. REFER TO THE DETAILS SHEET FOR ADDITIONAL INFORMATION.
	SPEAKER, WALL MOUNTED
	CLOCK, WALL MOUNTED
	INTERCOM
	CCTV CAMERA: 1-GANG JUNCTION BOX AND 3/4" CONDUIT UP TO ACCESSIBLE CEILING SPACE.
	CARD READER: 1-GANG JUNCTION BOX AND 3/4" CONDUIT UP TO ACCESSIBLE CEILING SPACE.
	AIPHONE: 1-GANG JUNCTION BOX AND 3/4" CONDUIT UP TO ACCESSIBLE CEILING SPACE.

OCCUPANCY / VACANCY SENSOR LEGEND	
SYMBOLS	DESCRIPTION
	WALL MOUNTED DECORATOR STYLE PASSIVE INFRARED OCCUPANCY SENSOR.
	CEILING MOUNTED OCCUPANCY SENSOR (AUTO ON / AUTO OFF) WITH 360° VIEW ANGLE. *DT* DENOTES DUAL TECHNOLOGY *U* DENOTES ULTRASONIC ONLY *PIR* DENOTES PASSIVE INFRARED
	CEILING MOUNTED OCCUPANCY SENSOR (AUTO ON / AUTO OFF) WITH 90° VIEW ANGLE. *DT* DENOTES DUAL TECHNOLOGY *U* DENOTES ULTRASONIC ONLY *PIR* DENOTES PASSIVE INFRARED
	WALL MOUNTED OCCUPANCY SENSOR (AUTO ON / AUTO OFF) WITH 90° VIEW ANGLE, MOUNTED AT SAME HEIGHT AS THE BOTTOM OF LIGHT FIXTURE *DT* DENOTES DUAL TECHNOLOGY *U* DENOTES ULTRASONIC ONLY *PIR* DENOTES PASSIVE INFRARED

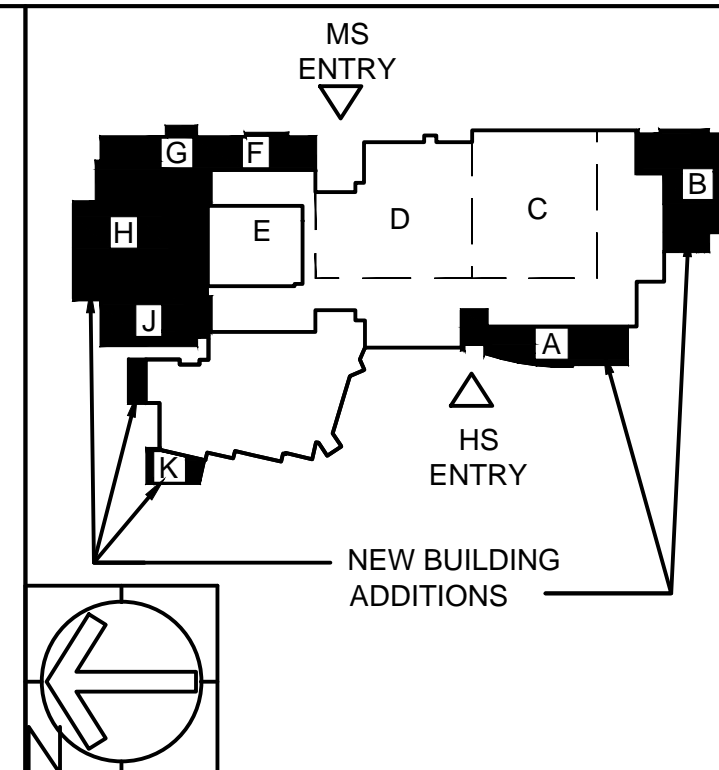
- OCCUPANCY SENSORS ARE SHOWN ON THE PLANS ONLY TO INDICATE ROOMS REQUIRING COVERAGE AND QUANTITY OF SENSORS SHOWN ON THE DRAWINGS ARE THE MINIMUM THAT MUST BE PROVIDED BY THE CONTRACTOR. EXACT QUANTITY OF SENSORS AND EXACT LOCATIONS WITHIN EACH ROOM SHALL BE BASED ON MANUFACTURERS RECOMMENDATIONS FOR TOTAL COVERAGE OF THE SPACE BASED ON THE SENSORS TO BE INSTALLED. SUBMIT SHOP DWG SHOWING SENSOR COVERAGE AND DEMONSTRATING THAT EACH SPACE/ROOM WITH SENSORS SHOWN IS COMPLETELY COVERED WITH NO "DEAD ZONES"
- PROVIDE ALL REQUIRED RELAYS, TRANSFORMERS, POWER PACKS, ETC AS REQUIRED FOR CONTROL OF THE RESPECTIVE ROOM BY THE OCCUPANCY SENSORS. PROVIDE ALL REQUIRED WIRING/CONDUIT AND MAKE ALL FINAL TERMINATIONS.

FIRE ALARM DEVICE LEGEND	
SYMBOLS	DESCRIPTION
	FIRE ALARM HORN / STROBE
	FIRE ALARM STROBE
	FIRE ALARM MANUAL PULL STATION
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUCIATOR PANEL
	DUCT SMOKE DETECTOR
	CEILING MOUNTED SMOKE DETECTOR. *A* INDICATES MOUNTED ABOVE CEILING.
	CEILING MOUNTED HEAT DETECTOR, 135° UON. *A* INDICATES MOUNTED ABOVE CEILING.
	BEAM DETECTOR
	DOOR HOLDER
	SPRINKLER SYSTEM TAMPER SWITCH. CONTRACTOR TO COORDINATE QTY AND LOCATION OF DEVICES WITH FIRE PROTECTION CONTRACTOR. FOR BID PURPOSES, ASSUME (5) DEVICES.
	SPRINKLER SYSTEM FLOW SWITCH. CONTRACTOR TO COORDINATE QTY AND LOCATION OF DEVICES WITH FIRE PROTECTION CONTRACTOR. FOR BID PURPOSES, ASSUME (5) DEVICES.
	ADDRESSABLE MONITOR MODULE
	ADDRESSABLE CONTROL MODULE
	REMOTE TEST KEY SWITCH AND INDICATING LIGHT FOR SMOKE DUCT DETECTOR.

FLOOR BOX/POKE THRU SCHEDULE	
SYMBOLS	DESCRIPTION
	2-GANG CAST IRON FLOOR BOX: WALKER #880CS2-1 WITH (1) #827B FLUSH BRASS FLANGE, (1) #828R BRASS COVER PLATE [FOR POWER], (1) #828GFITC BRASS COVER PLATE [FOR TELEDATA], AND THE FOLLOWING DEVICE(S): (1) 120V, 1Ø, 20A DUPLEX RECEPTACLE.
	2-GANG CAST IRON FLOOR BOX: WALKER #880CS2-1 WITH (1) #827B FLUSH BRASS FLANGE, (2) #828R BRASS COVER PLATES, AND THE FOLLOWING DEVICE(S): (2) 120V, 1Ø, 20A DUPLEX RECEPTACLE.
	3-GANG CAST IRON FLOOR BOX: WALKER #880CS3-1 WITH (1) #837B FLUSH BRASS FLANGE, (2) #828R BRASS COVER PLATE [FOR POWER], (1) #828GFITC BRASS COVER PLATE [FOR TELEDATA], AND THE FOLLOWING DEVICE(S): (2) 120V, 1Ø, 20A DUPLEX RECEPTACLES.
	3-GANG CAST IRON FLOOR BOX: WALKER #880CS3-1 WITH (1) #837B FLUSH BRASS FLANGE, (1) #828R BRASS COVER PLATE [FOR POWER], (2) #828GFITC BRASS COVER PLATE [FOR TELEDATA & SECURITY], AND THE FOLLOWING DEVICE(S): (1) 120V, 1Ø, 20A DUPLEX RECEPTACLES.
	2-GANG CAST IRON FLOOR BOX: WALKER #880CS2-1 WITH (1) #827B FLUSH BRASS FLANGE, (2) #829CK-3/4 BRASS COVER PLATE, AND THE FOLLOWING DEVICE(S): (2) FLEXIBLE WHIPS FROM BOX TO TERMINATIONS IN FURNITURE.
	1-GANG CAST IRON FLOOR BOX: WALKER #880CS1-1 WITH (1) #817B FLUSH BRASS FLANGE, (1) #828R BRASS COVER PLATE AND THE FOLLOWING DEVICE(S): (1) 120V, 1Ø, 20A DUPLEX RECEPTACLE.
	WIREMOLD 6" BRASS POKE THRU #6ATCPAVBS WITH (2) COMMUNICATIONS PORTS, AN AV MOUNTING PLATE, AND THE FOLLOWING DEVICE(S): (1) 120V, 1Ø, 20A DUPLEX RECEPTACLES.
	1-GANG CAST IRON FLOOR BOX: WALKER #880CS1-1 WITH (1) #817B FLUSH BRASS FLANGE, (1) #829CK-3/4 BRASS COVER PLATE, AND THE FOLLOWING DEVICE(S): (1) FLEXIBLE WHIPS FROM BOX TO TERMINATIONS IN FURNITURE.

ELECTRICAL ABBREVIATIONS			
A	AMPERE	INST	INSTRUMENT
AC	ABOVE COUNTER	JB	JUNCTION BOX
AFF	ABOVE FINISHED FLOOR	KVA	KILOVOLT AMPERE
AFG	ABOVE FINISHED GRADE	KW	KILOWATT
AWG	AMERICAN GAUGE WIRE	KWH	KILOWATT HOUR
BLDG	BUILDING	LCP	LOCAL CONTROL PANEL
C	CONDUIT	LTG	LIGHTING
CAB	CABINET	MAX	MAXIMUM
CAT	CATALOG	MCB	MAIN CIRCUIT BREAKER
CB	CIRCUIT BREAKER	MC	MECHANICAL CONTRACTOR
CH	COUNTER HEIGHT	MCM	THOUSAND CIRCULAR MILS
CKT	CIRCUIT	MECH	MECHANICAL
CL	CENTER LINE	MER	MECHANICAL EQUIPMENT ROOM
CLG	CEILING	MFS	MAIN FUSED SWITCH
CLOS	CLOSET	MIN	MINIMUM
CNTL	CONTROL	MLO	MAIN LUGS ONLY
CO	CONDUIT ONLY	MOD	MOTOR OPERATED DAMPER
COMM	COMMUNICATION	MTD	MOUNTED
CONT	CONTINUATION	MTG	MOUNTING
CT	CURRENT TRANSFORMER	MUFS	MAIN UNFUSED SWITCH
CU	COPPER	N	NEUTRAL
DIA	DIAMETER	NC	NORMALLY CLOSED
DISC	DISCONNECT	NIC	NOT IN CONTRACT
DN	DOWN	NL	NIGHT LIGHT
DWG	DRAWING	NO	NORMALLY OPEN
EA	EACH	NTS	NOT TO SCALE
EC	ELECTRICAL CONTRACTOR	OC	ON CENTER
EG	EQUIPMENT GROUND	OD	OUTSIDE DIAMETER
EL	ELEVATION	P	POLE
ELEC	ELECTRICAL	PB	PULL BOX
ELEV	ELEVATOR	PBS	PUSH BUTTON SWITCH
EMER	EMERGENCY	Ø	PHASE
EMT	ELECTRICAL METALLIC TUBING	PNL	PANEL
EQUIP.EQPT	EQUIPMENT	PS	PRESSURE SWITCH
ETR	EXISTING TO REMAIN	RECEPT	RECEPTACLE
EWC	ELECTRIC WATER COOLER	REQ	REQUIRED
EXIST	EXISTING	RGS	RIGID GALVANIZED STEEL
EXT	EXTERIOR	RM	ROOM
FA	FIRE ALARM	SCHED	SCHEDULE
FBO	FURNISHED BY OTHER DIVISION OF WORK	SD	SMOKE DETECTOR
FCU	FAN COIL UNIT	SDP	SMOKE DETECTION PANEL
FDR	FEEDER	SECT	SECTION
FDS	FUSED DISCONNECT SWITCH	SIG	SIGNAL
FIXT	FIXTURE	SN	SOLID NEUTRAL
FL	FLOOR	SPEC	SPECIFICATION
FLEX	FLEXIBLE	SPD	SURGE PROTECTIVE DEVICE
FLUOR	FLUORESCENT	SPKR	SPEAKER
FT	FEET OR FOOT	SS	SURGE SUPPRESSION
G	GROUND	SW	SWITCH
GFI	GROUND FAULT INTERRUPTER	SYS	SYSTEMS
HC	HUNG CEILING	T/C	TIME CLOCK
HP	HORSE POWER	TEL	TELEPHONE
HV	HIGH VOLTAGE	TV	TRANSIENT VOLTAGE
HZ	HERTZ	TYP	TYPICAL
IC	INTERRUPTING CAPACITY	UNF	UNFUSED
ID	INSIDE DIAMETER	UON	UNLESS OTHERWISE NOTED
IG	ISOLATED GROUND	V	VOLT OR VOLTAGE
IL	INTERLOCKED	W	WATT
INCAN	INCANDESCENT	WP	WEATHERPROOF

MOUNTING HEIGHTS	
SYMBOLS	DESCRIPTION
10'-0"	EMERGENCY BATTERY UNITS (OR 1'-0" BELOW CLG)
90" TO 6" BELOW CLG	FIRE ALARM AUDIBLE ALARM SIGNALS
7'-6" TO 8'-0"	FIRE ALARM COMBINATION ALARM SIGNALS
7'-0" TO 8'-0"	FIRE ALARM VISUAL SIGNALS
6'-6"	TOP OF ELECTRICAL PANEL BOARDS (LIGHTING OR POWER)
6'-0"	TOP OF HIGHEST ELECTRICAL DISCONNECT SWITCH OR STARTER
4'-0"	TOP OF WALL MOUNTED DEVICES SUCH AS LIGHT SWITCHES, MANUAL MOTOR STARTERS, THERMOSTATS, TELEPHONE/INTERCOM HANDSETS, FIRE ALARM PULLSTATIONS, ETC.
4'-0"	TOP OF WALL MOUNTED WIREMOLD (U.N.O.)
2'-0"	BOTTOM OF RECEPTACLES IN MECHANICAL ROOMS AND EXTERIOR OF BUILDING.
1'-6"	BOTTOM OF RECEPTACLES, TELEPHONE/TELEDATA OUTLETS, TELEVISION JACKS, ETC
0'-0"	FINISHED FLOOR ELEVATION.



di cara | rubino
architects

30 galesi drive
wayne, nj 07470
tel 973.256.0202 | fax 973.256.0227

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

GERMANO RUBINO, AIA NJ # AI 08084
JOSEPH DI CARA, AIA NJ # AI 08265

NOT VALID FOR BUILDING UNLESS SIGNED AND SEALED BY ARCHITECT

X
Board President of Schools,

X
Superintendent of Schools,

FRENCH & PARRELLO
ASSOCIATES, PA., CONSULTING ENGINEERS

1800 Route 34, Suite 101 • Wall, NJ • 07719 • 732 312-9800

AMIN H. GOMAA, PE
PROFESSIONAL ENGINEER, NJ LIC. No. 24GE04842100

BUILDING ADDITION AND INTERIOR RENOVATIONS AT :
SECAUCUS MIDDLE HIGH SCHOOL
11 MILL RIDGE ROAD
SECAUCUS, NJ 07094

SECAUCUS BOARD OF EDUCATION

ELECTRICAL SYMBOLS, NOTES & ABBREVIATIONS

REV.	DATE:	DRN	CHK	
	9/2/14	GS	AHG	PROGRESS SET FOR CM
	9/22/14	GS	AHG	80% CODE REVIEW
	11/5/14	GS	AHG	CODE REVIEW
	1/5/15	GS	AHG	BID SET

STATE PROJECT NO.
4730-050-13-1000

PROJECT NO. SHEET NO.
2718 E1.1