

| SWITCH LEGEND | | |
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| SYMBOL | DESCRIPTION | NOTES |
| \$ _D | DIMMER SWITCH | RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO |
| \$ ₀₀ | OCCUPANCY SENSOR WALL SWITCH, DIMMER | RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO |
| \$ ₀₂ | OCCUPANCY SENSOR WALL SWITCH, DUAL CKT, DUAL TECHNOLOGY | RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO; CONFIGURE OUTPUT FOR DUAL LEVEL SWITCHING |
| \$ ₀₁ | OCCUPANCY SENSOR WALL SWITCH, SINGLE CKT, DUAL TECHNOLOGY | RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO |
| ⊕ | OCCUPANCY SENSOR, DUAL TECHNOLOGY; CEILING MTD | INCORPORATE POWER PACK FOR CIRCUITRY SWITCHING, SEE WIRING DIAGRAMS |
| ☉ | PHOTOCELL, EXTERIOR; MOUNT ON NORTH FACE OF BLDG, FACING NORTH | |
| \$ _{ST} | STACKED SWITCHES TO BE REMOVED | |
| \$ | TOGGLE SWITCH, SINGLE POLE | 120/277V, 20A; MTD 42" AFF UNO |

| DATA & TELEPHONE OUTLET LEGEND | | | |
|--------------------------------|---|--|--|
| SYMBOL | DESCRIPTION | MOUNTING | NOTES |
| ◀ AP | DATA OUTLET FOR WIRELESS ACCESS POINT | FIRST FLOOR: SURFACE MOUNT WHERE NO GRID, 3/4"C TO EXISTING CABLE TRAY. SECOND FLOOR: 4" SQUARE BOX MOUNTED 24" ABOVE CEILING WHERE GRID INSTALLED. | INSTALL (1) CAT 6A CABLE TO IT ROOM. MOUNT OWNER PROVIDED EQUIPMENT AT CEILING OR WALL MOUNTED IF INDICATED. PROVIDE PATCH CORD FROM OUTLET TO EQUIPMENT. |
| ⊙ | EXISTING CABLE TV OUTLET TO BE REMOVED | | |
| ◀ C | DATA / TELEPHONE OUTLET | WALL, MTD 6" ABOVE COUNTER HEIGHT AFF UNO; 4" SQUARE, DEEP BOX | STUB 1"C TO 6" ABOVE CEILING |
| ◀ | DATA / TELEPHONE OUTLET | WALL, 18" AFF UNO; 5" SQUARE, 2.875" DEEP BOX, 64 CUBIC INCHES; WITH CABLE MANAGEMENT POSTS. DESIGN BASIS: STEEL CITY #82181T SERIES | AREAS WITH LAY-IN CEILING: STUB 1"C TO 6" ABOVE CEILING INSTALL (2) CAT 6 CABLES TO IT ROOM AREAS WITHOUT LAY-IN CEILING: STUB 1"C TO CABLE TRAY INSTALL (2) CAT 6 CABLES TO IT ROOM. |
| ⊞ | EQUIPMENT RACK, 19" X 7" | FLOOR | |
| ⊞ | DATA / TELEPHONE OUTLET | FLOOR POKE-THRU, INTEGRAL TO POWER FLOOR BOX WITH DIVIDER SEPARATING POWER & COMMUNICATIONS | ROUTE (2) 1" C UNDERSLAB, TURN UP INTO WALL CAVITY, & STUB UP TO 6" ABOVE CEILING INSTALL (2) CAT 6 CABLES TO IT ROOM |
| ◀ AD | TELEPHONE OUTLET FOR PANIC ALARM SYSTEM AUTO DIALER | WALL, 18" AFF UNO; 4" SQUARE, DEEP BOX | STUB 1"C TO CABLE TRAY IN ROOM INSTALL TELEPHONE CABLE TO TELEPHONE SYSTEM DEMARC |
| ◀ PIM | IT OUTLET FOR WIRELESS ACCESS CONTROL DEVICE | 4" SQUARE BOX | CONTRACTOR SHALL PROVIDE AND INSTALL SCHLAGE/ALLEGION #PIM400-1501 CONTROLLER. INSTALL (1) CAT 6 CABLE TO IT ROOM. PROVIDE PATCH CORD FROM OUTLET TO EQUIPMENT. |
| ◀ T | DATA / TELEPHONE OUTLET FOR TEACHER | WALL, 18" AFF UNO; 3-GANG EXTRA DEEP BOX | SEE DETAILS A/E5.4 AND B/E5.4. PROVIDE (2) HDMI PATCH CABLES AND (1) USB-B PATCH CABLE IN EACH CLASSROOM. |
| ◀ VE | VIDEO EQUIPMENT OUTLET | WALL; COORDINATE EXACT LOCATION AND MTG HEIGHT WITH ARCHITECT. | VIDEO EQUIPMENT PROVIDED BY OWNER. INSTALLED BY CONTRACTOR. PROVIDE (2) HDMI PATCH CABLES AND (1) USB-A PATCH CABLE IN EACH CLASSROOM. SEE DETAILS A/E5.4 AND B/E5.4. |
| ◀ ELEV | TELEPHONE OUTLET FOR ELEVATOR COMMUNICATION | COORDINATE INSTALLATION LOCATION WITH ELEVATOR VENDOR/INSTALLER | STUB 1"C TO 6" ABOVE CEILING INSTALL CAT 6 TELEPHONE CABLE TO IT ROOM |
| ◀ FA | COMMUNICATIONS OUTLET FOR FIRE ALARM SYSTEM | 3/4"C FOR (1) TELEPHONE CABLE 3/4"C FOR (1) TELEPHONE CABLE AND (1) DATA CABLE | ROUTE CONDUITS DIRECTLY INTO FIRE ALARM SYSTEM ENCLOSURE. |
| ◀ SEC | COMMUNICATIONS OUTLET FOR SECURITY SYSTEM | (1) TELEPHONE CABLE IN 3/4" CONDUIT FOR SECURITY COMMUNICATION. (1) DATA DROP IN 3/4" CONDUIT FOR FUTURE USE. | ROUTE CONDUITS DIRECTLY INTO SECURITY PANEL |

FIRE ALARM LEGEND

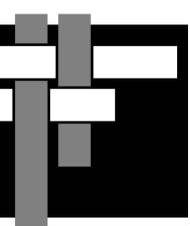
| SYMBOL | DESCRIPTION | MOUNTING |
|------------------|---|--------------|
| ⊞ | BEAM DETECTOR, TRANSMITTER WITH ASSOCIATED REFLECTOR | WALL |
| ⊞ ₁₅ | SPEAKER/STROBE, 15 CANDELA WATTAGE AS INDICATED | CEILING |
| ⊞ ₃₀ | SPEAKER/STROBE, 30 CANDELA WATTAGE AS INDICATED | CEILING |
| ⊞ ₇₅ | SPEAKER/STROBE, 75 CANDELA WATTAGE AS INDICATED | CEILING |
| ⊞ ₁₈₅ | SPEAKER/STROBE, 185 CANDELA WATTAGE AS INDICATED | CEILING |
| ⊞ | CONTROL / RELAY MODULE | |
| ⊞ _{ST} | CONTROL / RELAY MODULE FOR SHUNT TRIP ACTIVATION; SEE DETAIL S/E5.2 | |
| ⊞ _S | CONTROL / RELAY MODULE FOR SPEAKER BYPASS SEE DETAIL Q/E5.2 | |
| ⊞ | DOOR HOLDER, MAGNETIC | |
| ⊞ | FIRE ALARM CONTROL PANEL | |
| ⊞ | FLOW SWITCH | |
| ⊞ | HEAT DETECTOR | CEILING |
| ⊞ _E | HEAT DETECTOR; FOR ELEVATOR SHUNT TRIP ACTIVATION | CEILING/WALL |
| ⊞ | HEAT DETECTOR | WALL |
| ⊞ ₁₅ | HORN/STROBE, 15 CANDELA | WALL |
| ⊞ | LOCAL OPERATOR CONSOLE | |
| ⊞ _{SS} | MONITOR MODULE FOR COOKING EXHAUST HOOD FIRE SUPPRESSION SYSTEM | |
| ⊞ _{MS} | MONITOR MODULE WITH SURGE SUPPRESSOR FOR CONNECTION OF EXTERNAL CIRCUITRY | |
| ⊞ | MONITOR MODULE FOR MONITORING A DRY CONTACT CLOSURE DEVICE | |
| ⊞ | POST INDICATOR VALVE TAMPER SWITCH | |
| ⊞ | PRESSURE SWITCH | |
| ⊞ | PULL STATION | WALL |
| ⊞ | REMOTE ANNUNCIATOR | WALL |
| ⊞ | SMOKE DETECTOR | CEILING |
| ⊞ | SMOKE DETECTOR | WALL |
| ⊞ _S | SPEAKER ONLY WATTAGE AS INDICATED | WALL |
| ⊞ ₁₅ | SPEAKER/STROBE, 15 CANDELA WATTAGE AS INDICATED | WALL |
| ⊞ ₃₀ | SPEAKER/STROBE, 30 CANDELA WATTAGE AS INDICATED | WALL |
| ⊞ ₇₅ | SPEAKER/STROBE, 75 CANDELA WATTAGE AS INDICATED | WALL |
| ⊞ ₁₁₅ | SPEAKER/STROBE, 115 CANDELA WATTAGE AS INDICATED | WALL |
| ⊞ ₁₈₅ | SPEAKER/STROBE, 185 CANDELA WATTAGE AS INDICATED | WALL |
| ⊞ ₁₅ | STROBE, 15 CANDELA | WALL |
| ⊞ | TAMPER SWITCH | |

| RECEPTACLE LEGEND | | | |
|----------------------|---------|------------|--|
| SYMBOL | NEMA | VOLTS | DESCRIPTION |
| ⊞ | 5-20R | 120V 1P 2W | DUPLEX, MTD 18" AFF UNO |
| ⊞ _{CPR} | 5-20R | 120V 1P 2W | DUPLEX FOR COPIER, MTD 18" AFF UNO |
| ⊞ _G | 5-20R | 120V 1P 2W | DUPLEX, MTD 6" ABOVE COUNTER HEIGHT UNO |
| ⊞ _{EWC} | 5-20R | 120V 1P 2W | DUPLEX GFCI, MTD 6" ABOVE COUNTER HEIGHT UNO |
| ⊞ _{W/G} | 5-20R | 120V 1P 2W | DUPLEX ELECTRIC WATER COOLER OUTLET; SUPPLY FROM GROUND FAULT TYPE C/B; COORDINATE MTG LOCATION TO CONCEAL OUTLET WHEN COOLER IS INSTALLED |
| ⊞ _{W/G} | 5-20R | 120V 1P 2W | DUPLEX GFCI, MTD 18" AFF UNO; LISTED WEATHER-RESISTANT TYPE; PROVIDE CAST ALUMINUM WEATHERPROOF IN-USE COVER WITH CAST ALUMINUM FD WEATHERPROOF BOX |
| ⊞ _G | 5-20R | 120V 1P 2W | DUPLEX; MTD IN POKE-THRU; SEE AUX SYS PLANS FOR SHARED BOX; PROVIDE DIVIDER FOR POWER SEPARATION FROM VOICE/DATA |
| ⊞ _G | 5-20R | 120V 1P 2W | DUPLEX GFCI, MTD 18" AFF UNO |
| ⊞ _{HB} | 5-20R | 120V 1P 2W | DUPLEX FOR HOT BOX HEATER; SUPPLY FROM GFEP C/B (30mA); LISTED WEATHER-RESISTANT TYPE; PROVIDE CAST ALUMINUM WEATHERPROOF IN-USE COVER WITH CAST ALUMINUM FD WEATHERPROOF BOX. COORDINATE MTG HEIGHT WITH ENCLOSURE PROVIDED. |
| ⊞ _{PROJ} | 5-20R | 120V 1P 2W | EXISTING PROJECTOR TO BE REMOVED. |
| ⊞ _R | 5-20R | 120V 1P 2W | DUPLEX FOR REFRIGERATOR; MOUNT 48" AFF UNO. SUPPLY FROM GFCI TYPE C/B. |
| ⊞ _{SPA} | 5-20R | 120V 1P 2W | DUPLEX POWER FOR SUMP PUMP ALARM PANEL. COORDINATE EXACT LOCATION WITH OWNER. |
| ⊞ _{UCR} | 5-20R | 120V 1P 2W | DUPLEX FOR REFRIGERATOR; SUPPLY FROM GFCI TYPE C/B; COORDINATE MOUNTING HEIGHT WITH CASEWORK DRAWINGS. |
| ⊞ _{2WY} | | 120V 1P 2W | POWER FOR 2-WAY COMMUNICATION MASTER CONSOLE |
| ⊞ _{DDC} | | 120V 1P 2W | J-BOX ABOVE CLG LEVEL FOR DDC OR MECHANICAL CONTROL POWER SOURCE |
| ⊞ _{FAP} | | 120V 1P 2W | POWER FOR FIRE ALARM CONTROL PANEL |
| ⊞ _{HT} | | 120V 1P 2W | HEAT TRACE CONNECTION POINT. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR. |
| ⊞ _{HTC} | | 120V 1P 2W | POWER FOR HEAT TRACE CONTROLLER. SUPPLY FROM 30mA GFEP C/B. |
| ⊞ _{SEC} | | 120V 1P 2W | POWER FOR SECURITY SYSTEM COMPONENT; TYPICALLY INSTALLED 12" ABOVE CLG |
| ⊞ _{SHUNT} | | 120V 1P 2W | POWER FOR SHUNT TRIP CIRCUITRY |
| ⊞ _{VE} | 5-20R | 120V 1P 2W | QUAD, MTD 18" AFF UNO |
| ⊞ _{VE} | 5-20R | 120V 1P 2W | QUAD FOR VIDEO EQUIPMENT LOCATED IN RECESSED OUTLET BOX (COORDINATE SPECIFIC LOCATION WITH OWNER/ARCHITECT). SEE AUXILIARY SYSTEMS PLANS FOR SHARED BOX WITH DATA OUTLET. DESIGN BASIS ARLINGTON #TVBS613 WITH COVER. SEE DETAIL A/E5.4. |
| ⊞ _{SUMP} | 5-20R | 120V 1P 2W | SIMPLEX OUTLET FOR SUMP PUMP; SUPPLIED FROM GFCI C/B; MOUNT 24" AFF/AFG. |
| ⊞ _{L6-20R} | L6-20R | 208V 2P 2W | DATA ROOM RECEPTACLE. MOUNT TO TOP OF RACK. |
| ⊞ _{L14-30R} | L14-30R | 208V 2P 2W | DATA ROOM RECEPTACLE. MOUNT TO TOP OF RACK. |
| ⊞ _F | | 120V 1P 2W | EXHAUST FAN; SEE MECHANICAL SCHEDULE. |

NOTE: PROVIDE TAMPER RESISTANT RECEPTACLES WHERE REQUIRED BY NEC 406.12

PA & SECURITY LEGEND

| SYMBOL | DESCRIPTION | MOUNTING | NOTES |
|-------------------|---|---|--|
| ⊞ _{CASE} | CLASSROOM AUDIO SOUND ENHANCEMENT SPEAKER | CEILING | CONNECT TO TEACHER WORKSTATION AUDIO. DESIGN BASIS: TOUCHBOARDS.COM #W01 2X2AMP-R2561 W/ 12V PLUG-IN POWER SUPPLY. CONNECT POWER SUPPLY TO RECEPTACLE AT VIDEO EQUIPMENT OUTLET & CIRCUIT 12V WIRES TO SPEAKER. PROVIDE PATCH CABLE FOR CONNECTION FROM TEACHER COMPUTER TO WALL OUTLET AUDIO JACK. |
| ⊞ | PA/INTERCOM SPEAKER | CEILING | |
| ⊞ | PA SPEAKER | WALL | |
| ⊞ _{EMER} | ELEVATOR EMERGENCY 2-WAY COMMUNICATION MASTER STATION | WALL | PROVIDE MANUFACTURER'S REQUIRED CABLING / CIRCUITRY BETWEEN MASTER & TWO-WAY COMMUNICATIONS SYSTEM REQUIRED BY 2018 NCSBC 1009.8 |
| ⊞ _{EMER} | ELEVATOR EMERGENCY 2-WAY COMMUNICATION REMOTE STATION | WALL | TWO-WAY COMMUNICATIONS SYSTEM REQUIRED BY 2018 NCSBC 1009.8 |
| ⊞ _{SEC} | SECURITY CAMERA | | 4" SQUARE BOX RECESSED; STUB 3/4"C TO INDICATED LOCATION OR NEAREST ACCESSIBLE CEILING SPACE. CAMERA PROVIDE AND INSTALLED BY NHCS. WHERE SURFACE MOUNTED ON 1ST FLOOR, 3/4"C TO EXISTING CABLE TRAY. |
| ⊞ ₃₆₀ | 360 DEGREE SECURITY CAMERA | | 4" SQUARE BOX RECESSED; STUB 3/4"C TO INDICATED LOCATION OR NEAREST ACCESSIBLE CEILING SPACE. CAMERA PROVIDE AND INSTALLED BY NHCS. WHERE SURFACE MOUNTED ON 1ST FLOOR, 3/4"C TO EXISTING CABLE TRAY. |
| ⊞ | DOOR SWITCH / CONTACT | RECESSED | 1/2" FLEXIBLE METALLIC CONDUIT CONCEALED IN DOOR FRAME HEADER TO JUNCTION BOX MTD ABOVE DOOR. 1/2"C FROM JUNCTION BOX TO EXISTING CABLE TRAY. CONFIGURE A DEDICATED ZONE PER CONTACT LOCATION. |
| ⊞ _{ES} | ELECTRIC STRIKE | | 1/2" FLEXIBLE METALLIC CONDUIT CONCEALED IN DOOR FRAME HEADER TO JUNCTION BOX MTD ABOVE DOOR. 1/2"C FROM JUNCTION BOX TO EXISTING CABLE TRAY. |
| ⊞ _{IP} | AIPHONE STATION FOR 2-WAY COMMUNICATION BETWEEN FRONT DOOR AND RECEPTION DESK | OUTDOOR UNIT: MTD 54" AFF TO TOP OF DEVICE; 4" SQUARE DEEP BOX WITH SINGLE GANG RING. PROVIDE (1) 1"C TO JUNCTION BOX LOCATED ABOVE ACCESSIBLE CEILING. MASTER INDOOR UNIT: DESK MOUNTED. ROUTE 1" BMC THROUGH FURNITURE CASEWORK, STUB UP NEAREST WALL TO FLUSH MTD 4" SQUARE BOX WITH SURFACE MTD. EXTENSION RING, ABOVE ACCESSIBLE CEILING. PROVIDE CABLE PLATE UNDER DESK. SEE DETAIL C/E5.3. SUB-MASTER INDOOR UNIT: PROVIDE RECESSED 4" SQUARE BOX WITH SINGLE GANG RING AND CABLE PLATE UNDER DESK. ROUTE (1) 1"C TO JUNCTION BOX ABOVE ACCESSIBLE CEILING. COORDINATE FINAL LOCATIONS WITH OWNER. SEE SPECIFICATIONS. CABLE PLATE DESIGN BASIS: ARLINGTON CEDI35 | |
| ⊞ | KEYPAD | WALL | SURFACE MOUNTED BOX MTD 42" AFF AT KEYPAD LOCATION WITH 3/4"C ABOVE CEILING TO EXISTING CABLE TRAY. |
| ⊞ ₃₆₀ | MOTION DETECTOR, 360 DEGREE COVERAGE | CEILING | PROVIDED AND INSTALLED BY CONTRACTOR. 3/4" TO EXISTING CABLE TRAY. CONFIGURE A DEDICATED ZONE PER DETECTOR. |
| ⊞ _{COR} | MOTION DETECTOR, CORRIDOR COVERAGE | SURFACE - CEILING / WALL | 3/4" TO EXISTING CABLE TRAY. CONFIGURE A DEDICATED ZONE PER DETECTOR. |
| ⊞ _{SS} | SECURITY SYSTEM CONTROLLER / CONTROL PANEL | | PROVIDED AND INSTALLED BY CONTRACTOR. |
| ⊞ _P | PANIC ALARM PUSHBUTTON | UNDER DESK | LISTED PANIC ALARM BUTTON WITH FALSE ALARM PREVENTION FEATURES. NEATLY ROUTE EXPOSED WIRING UNDER DESK TO SHARED DATA OUTLET BOX & CONDUIT AND CONTINUE TO JUNCTION BOX ABOVE CEILING; 3/4"C FROM JUNCTION BOX BACK TO AUTODIALER IN DATA ROOM LOCATED IN 2ND FLOOR DATA ROOM. PUSHBUTTON DESIGN BASIS: HONEYWELL 270R |
| ⊞ _{DR} | PUSHBUTTON FOR REMOTE DOOR RELEASE | UNDER DESK | SURFACE MTD, MOMENTARY PUSHBUTTON. CONTACTS RATED FOR REQUIRED LOAD. NEATLY ROUTE EXPOSED WIRING UNDER DESK TO SHARED DATA OUTLET BOX & CONDUIT AND CONTINUE TO JUNCTION BOX ABOVE CEILING. |
| ⊞ | PA SPEAKER TO BE REMOVED | CEILING | |
| ⊞ | PA SPEAKER | WALL | WET LOCATION LISTED WHEN SHOWN OUTSIDE |



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**Wrightsville
Beach
Elementary
School Addition
& Renovation**

220 Coral Drive
Wrightsville Beach, NC

Construction Drawings
February 20, 2019

Revisions:
⚠ ADDENDUM 2, 3/26/19

ELECTRICAL
LEGENDS

E0.2