

ABBREVIATIONS	
A	AMPERE
A.F.F.	ABOVE FINISH FLOOR
C	CONDUIT
C/B	CIRCUIT BREAKER
CCT	CIRCUIT
CLG	CEILING
DED	DEDICATED CIRCUIT
E.C.	ELECTRICAL CONTRACTOR
EX OR X	EXISTING TO REMAIN
GFI, GFCI	GROUND FAULT CURRENT INTERRUPTER
GRD	GROUND
HP	HORSEPOWER
J-BOX, JB	JUNCTION BOX
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
MTD	MOUNTED
N	NEW
N.I.C.	NOT IN CONTRACT
NL	NIGHTLIGHT
N.T.S.	NOT TO SCALE
PB	PULLBOX
PNL	PANEL
SWBD	SWITCHBOARD
TYP	TYPICAL
V	VOLTS
VA	VOLTS - AMPERES
W	WATTS OR WIRE
WG	WIRE GUARD
WP	WEATHERPROOF
XFMR	TRANSFORMER
1P	SINGLE POLE
2P	TWO POLE
3P	THREE POLE
Ø	PHASE

SECURITY / MISC.	
	ACCESS CONTROL, CARD READER.
	ELECTRIC STRIKE OR ELECTRIC LOCK, REFER TO HARDWARE DRAWINGS AND SPECIFICATIONS.
	PANIC (DURESS) BUTTON, MOUNTED BELOW DESK.
	CAMERA - SINGLE DOME.
	KEYPAD.
	INTERCOM CALL STATION.
	INTERCOM MASTER STATION.
	DOOR RELEASE.
	DOOR CONTACT.
	ADA ACCESS CONTROL BUTTON
	MOTORIZED DOOR OPENER
	REQUEST TO EXIT BUTTON
	POLICE PULL STATION

FIRE ALARM	
	FIRE ALARM SYSTEM PULL STATION INSTALLED +48" A.F.F. WITH OR WITHOUT STOPPER II COVER
	FIRE ALARM SYSTEM AUDIOVISUAL HORN INSTALLED IN CEILING
	FIRE ALARM SYSTEM VISUAL SIGNAL INSTALLED +80" A.F.F.
	FIRE ALARM SYSTEM VISUAL SIGNAL INSTALLED CEILING MOUNTED
	FIRE ALARM SYSTEM CEILING SMOKE DETECTOR.
	FIRE ALARM SYSTEM CEILING HEAT DETECTOR "FT" DENOTES FIXED TEMPERATURE.
	FIRE ALARM MAGNETIC DOOR HOLD OPEN DEVICE.
	FIRE ALARM CONTROL PANEL.
	FIRE ALARM SYSTEM DUCT MOUNTED SMOKE DETECTOR.
	DUCT SMOKE DETECTOR REMOTE INDICATING LIGHT WITH KEY OPERATED TEST SWITCH.
	FIRE ALARM SYSTEM CEILING MOUNTED CARBON MONOXIDE DETECTOR, UNLESS NOTED OTHERWISE.
	FIRE ALARM SYSTEM AUDIOVISUAL SIGNAL INSTALLED CEILING MOUNTED
	FIRE ALARM SYSTEM AUDIO INSTALLED CEILING MOUNTED
	FIRE ALARM SYSTEM AUDIOVISUAL SIGNAL INSTALLED WALL MOUNTED
	FIRE ALARM SYSTEM SPEAKER INSTALLED WALL MOUNTED - WEATHER PROOF.

CLOCK, PAGING AND SOUND	
	ANALOG CLOCK, CONNECT TO CLOCK SYSTEM BY OWNERS VENDOR, NOT-IN-CONTRACT.
	FLUSH CEILING MOUNTED SPEAKER. (INTERCOM SPEAKER) BY OWNERS VENDOR, NOT-IN-CONTRACT.
	PROJECTION TYPE WALL MOUNTED SPEAKER. "VR" DENOTES VANDAL RESISTANT HOUSING & "WP" DENOTES WEATHERPROOF ENCLOSURE. BY OWNERS VENDOR, NOT-IN-CONTRACT.
	TWO POSITION CALL SWITCH (NORMAL-EMERGENCY) INSTALLED 48" A.F.F. BY OWNERS VENDOR, NOT-IN-CONTRACT.
	LOCAL SOUND SYSTEM SPEAKER WITH CABLING TO SOUND SYSTEM RACK.

SERVICE AND DISTRIBUTION	
	NON-FUSED SAFETY DISCONNECT SWITCH, AMPERE RATING AND NUMBER OF POLES AS NOTED.
	FUSED DISCONNECT SWITCH, AMPERE RATING AND NUMBER OF POLES AS NOTED.
	COMBINATION MOTOR STARTER WITH FUSED DISCONNECT SWITCH
	CONTROL OR MISC. PANEL AS NOTED.
	CIRCUIT BREAKER PANELBOARD.
	DISTRIBUTION PANEL.
	MOTOR CONNECTION, HORSEPOWER, VOLTAGE AND PHASE AS NOTED.
	METER.
	TRANSFORMER.

DATA, VOICE AND VIDEO	
	SINGLE VOICE JACK. +16" A.F.F. PROVIDE 1 GANG EXTRA DEEP BACKBOX WITH 3/4"C. STUBBED INTO ACCESSIBLE CEILING SPACE. "W" DENOTES WALL MOUNTED +48" A.F.F.
	DUAL DATA JACK. +16" A.F.F. PROVIDE 2 GANG EXTRA DEEP BACKBOX WITH 3/4"C. STUBBED INTO ACCESSIBLE CEILING SPACE. IN SURFACE RACEWAY PROVIDE OPENING IN RACEWAY WITH ADEQUATE SLEEVE TO ACCESSIBLE CEILING.
	SINGLE VOICE/DUAL DATA JACK. +16" A.F.F. PROVIDE 2 GANG EXTRA DEEP BACKBOX WITH 3/4"C. STUBBED INTO ACCESSIBLE CEILING SPACE.
	APPROXIMATE LOCATION OF DATA JACK FOR WIRELESS NETWORK, WITH 15'-0" OF CAT 6A COILED CABLE AND CAT 6 PLUG. FIELD VERIFY EXACT LOCATION WITH OWNER'S REPRESENTATIVE.
	CEILING MOUNTED LCD PROJECTOR, REFER TO DETAILS.
	DISPLAY MONITOR FLUSH MOUNTED IN WALL CONSISTING OF TWO (2) DATA, TWO (2) HDMI, AND TWO (2) POWER RECEPTACLES. REFER TO DETAILS.

WIRING DEVICES	
	SINGLE POLE 20 AMP 120-277 VOLT SWITCH INSTALLED 48" A.F.F. BROWN IN COLOR.
	SINGLE POLE 20 AMP 120-277 VOLT KEY TYPE SWITCH INSTALLED 48" A.F.F. REFER TO PLANS FOR SPEC.
	MOMENTARY CONTACT SWITCH.
	THREE WAY 20 AMP 120-277 VOLT TOGGLE SWITCH INSTALLED 48" A.F.F. "K" DENOTES KEY TYPE. BROWN IN COLOR.
	SINGLE POLE 20 AMP DIMMER SLIDE SWITCH INSTALLED 48" A.F.F. COMPATIBLE WITH VOLTAGE TYPE AND LAMP TYPE SERVED BY SWITCH.
	20 AMP 2P; 3 WIRE, GROUNDING TYPE, 120 VOLT SPECIFICATION GRADE DUPLEX RECEPTACLE NEMA 5-20R INSTALLED 16" A.F.F. UNLESS NOTED OTHERWISE. WHITE IN COLOR. "GFI" DENOTES RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER.
	20 AMP 2P; 3 WIRE, GROUNDING TYPE, 120 VOLT SPECIFICATION GRADE DUPLEX RECEPTACLE NEMA 5-20R INSTALLED ABOVE COUNTER TOP OR COUNTER TOP BACK SPLASH. WHITE IN COLOR. "GFI" DENOTES RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER.
	TWO 20 AMP 2P; 3 WIRE, GROUNDING TYPE, 120 VOLT SPECIFICATION GRADE DUPLEX RECEPTACLES NEMA 5-20R INSTALLED 16" A.F.F. UNLESS NOTED OTHERWISE. WHITE IN COLOR. "GFI" DENOTES RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTER.

RACEWAY AND BOXES	
	CEILING JUNCTION BOX.
	WALL MOUNTED JUNCTION BOX.
	JUNCTION BOX WITH FLEXIBLE CONDUIT AND FINAL CONNECTION TO EQUIPMENT.
	CONDUIT ROUTED CONCEALED IN WALLS AND CEILING. HASH MARKS DENOTE QUANTITY OF #12 CONDUCTORS OR AS NOTED.
	CONDUIT ROUTED EXPOSED. INSTALL PARALLEL TO WALLS AND CEILINGS. HASH MARKS DENOTE QUANTITY OF #12 CONDUCTORS OR AS NOTED.
	FLEXIBLE CONDUIT.
	WIREMOLD V700 SERIES OR EQUAL. FINISHED OR PAINTED TO MATCH WALL. PROVIDE RECEPTACLES AND/OR OUTLET BOXES AS SHOWN.
	POWER POLE FROM ACCESSIBLE CEILING ABOVE.
	DENOTES SURFACE MOUNTED RACEWAY, REFER TO PLANS FOR SPEC.
	EXISTING COMED PRIMARY CABLE TO BE PROTECTED AND REMAIN.
	EXISTING TO REMAIN
	NEW
	EXISTING TO BE REMOVED

LIGHTING	
	2' X 4' LIGHT FIXTURE, RECESSED OR SURFACE MOUNTED PER LIGHTING FIXTURE SCHEDULE.
	2' X 2' LIGHT FIXTURE, RECESSED OR SURFACE MOUNTED PER LIGHTING FIXTURE SCHEDULE.
	1' X 4' LIGHT FIXTURE, RECESSED OR SURFACE MOUNTED PER LIGHTING FIXTURE SCHEDULE.
	TYPICAL - HALF SHADING DENOTES LIGHTING FIXTURE UNSWITCHED (EMERGENCY LIGHT OR NIGHTLIGHT).
	LIGHT FIXTURE; WALL, CEILING OR PENDANT MOUNTED PER LIGHTING FIXTURE SCHEDULE.
	STRIP LIGHT FIXTURE, PER LIGHTING FIXTURE SCHEDULE.
	LIGHT FIXTURE, RECESSED OR SURFACE MOUNTED PER LIGHTING FIXTURE SCHEDULE.
	WALL MOUNTED FIXTURE, PER LIGHTING FIXTURE SCHEDULE.
	LINEAR WALL MOUNTED FIXTURE, PER LIGHTING FIXTURE SCHEDULE.
	EMERGENCY EXIT FIXTURE, SURFACE CEILING MOUNTED, SINGLE OR DOUBLE FACE, WITH OR WITHOUT DIRECTIONAL ARROWS PER EXIT SIGN SCHEDULE.
	EMERGENCY EXIT FIXTURE, SURFACE WALL MOUNTED, SINGLE OR DOUBLE FACE, WITH OR WITHOUT DIRECTIONAL ARROWS PER EXIT SIGN SCHEDULE.
	EMERGENCY, DUAL HEAD, BATTERY PACK LIGHTING FIXTURE, SURFACE WALL MOUNTED.
	EMERGENCY, DUAL HEAD, BATTERY PACK LIGHTING FIXTURE, RECESSED CEILING MOUNTED.
	WALL MOUNTED, DUAL TECHNOLOGY, ULTRASONIC AND PASSIVE INFRARED OCCUPANCY SENSOR SWITCH.
	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR, TYPE AND LAYOUT BY MANUFACTURER'S RECOMMENDATIONS ("GUARANTEED LAYOUT").
	CEILING MOUNTED DAYLIGHT HARVESTING SENSOR, TYPE AND LAYOUT BY MANUFACTURER'S RECOMMENDATIONS.

NOTE:
ALL SYMBOLS, ABBREVIATIONS, ETC... ARE GENERAL OFFICE STANDARD AND ARE NOT ALL NECESSARILY USED IN THIS PROJECT.

Revisions:	ISSUED FOR BID

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ELECTRICAL SYMBOLS AND ABBREVIATIONS

2025 HVAC UPGRADES
Murphy Elementary School, 220 Greenwood Dr, Round Lake Park, IL 60073
Round Lake Middle School, 2000 N Lotus Dr, Round Lake Heights, IL 60073
ROUND LAKE CUSD 116
510 N. CEDAR LAKE ROAD
ROUND LAKE, IL 60073

Issue Date:
18 SEP 2025

Drawn By:
CS2

Job Number:
886-S-1

E3.0

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09-18-2025