ELECTRICAL SYMBOLS LEGEND SWITCHING COMMUNICATIONS SYMBOL DESCRIPTION SYMBOL DESCRIPTION PILOT LIGHT SWITCH TELEPHONE OUTLET - WALL MOUNTED TELEPHONE CABINET SINGLE POLE SWITCH - LETTER INDICATES SWITCH LEG TIMER SWITCH TELEPHONE OUTLET BOX DOUBLE POLE SWITCH CLOCK HANGER OUTLET NUMBER BY SYMBOL INDICATES THREE-WAY SWITCH SENSOR SWITCH - WALL MOUNTED; SEE LIGHTING DATA OUTLET BOX QUANTITY OF JACKS. ZERO CLOCK - WALL MOUNTED CONTROL SCHEME NARRATIVE FOR TYPE PHONE OUTLET BOX - CEILING MOUNTED INDICATES EMPTY OUTLET BOX, FOUR-WAY SWITCH CLOCK - CEILING MOUNTED (DOUBLE FACE) BLANK PLATE AND CONDUIT. DIMMER SWITCH SENSOR - CEILING MOUNTED; SEE LIGHTING NUMBER INDICATES ZONE DATA OUTLET BOX - CEILING MOUNTED J CONTROL SCHEME NARRATIVE FOR TYPE CLASSROOM CLOCK & SPEAKER OF LUMINAIRES TO BE HORSEPOWER RATED SWITCH CONTROLLED BY SENSOR(S) SENSOR - WALL MOUNTED; SEE LIGHTING PROGRAM BELL FUSED SWITCH NO NUMBER INDICATES ALL CONTROL SCHEME NARRATIVE FOR TYPE COMBINATION TELEPHONE/DATA OUTLET BOX - (NUMBERS INDICATE ROOM LUMINAIRES TO BE INTERCOM CALL SWITCH THERMAL ELEMENT QUANTITY OF TELEPHONE AND DATA JACKS RESPECTIVELY) CONTROLLED BY SENSOR(S). DAYLIGHT SENSOR - CEILING MOUNTED INTERCOM ADMINISTRATION STATION (LETTER INDICATES TYPE) MOMENTARY CONTACT SWITCH DATA OUTLET BOX - BLANK PLATE, 1" CONDUIT LIGHTING CONTROL STATION - LETTER INDICATES TYPE INTERCOM CLASSROOM/STAFF STATION (LETTER INDICATES TYPE) MICROPHONE OUTLET (NUMBER INDICATES QUANTITY) KEY OPERATED SWITCH AUDIO/VISUAL AUXILIARY OUTLET (LETTER INDICATES TYPE) HM # MICROPHONE OUTLET - WALL MOUNTED (NUMBER INDICATES QUANTITY) LIGHTING T.V. ANTENNA OUTLET LINE INPUT OUTLET (NUMBER INDICATES QUANTITY) LABEL INFORMATION A,# LETTER INDICATES LUMINAIRE INDICATES SINGLE ZONE ZONE IDENTIFIER, NO NUMBER INDICATES SINGLE ZONE LETTER INDICATES LUMINAIRE MARK, NUMBER INDICATES INTERCOM/PAGING VOLUME CONTROL LINE INPUT OUTLET - WALL MOUNTED (NUMBER INDICATES QUANTITY) SOUND SYSTEM VOLUME CONTROL INTERCOM/PAGING SPEAKER - CEILING MOUNTED WALL MOUNTED LUMINAIRE SOUND SYSTEM COMBINATION VOLUME CONTROL & SELECTOR SWITCH WALL MOUNTED LUMINAIRE - NIGHT LIGHT INTERCOM/PAGING SPEAKER - WALL MOUNTED LUMINAIRE - LAMPS SWITCHED SEPARATE WALL MOUNTED LUMINAIRE - EMERGENCY INTERCOM/PAGING SPEAKER HORN - WALL MOUNTED LUMINAIRE WITH AUXILIARY LIGHT NOTE: SYMBOLS SHOWN "STACKED" ON THE FLOOR PLANS INDICATE THAT THE DEVICES ARE TO BE LOCATED IN THE SAME EXIT SIGN - WALL/CEILING MOUNTED SOUND SYSTEM SPEAKER - CEILING MOUNTED LUMINAIRE - EMERGENCY OUTLET BOX AND FACEPLATE. (I.E. 1) COMBINATION EXIT SIGN/EMERGENCY LIGHTING UNIT SOUND SYSTEM SPEAKER - WALL MOUNTED LUMINAIRE - NIGHT LIGHT PHOTOCELL, DAYLIGHT SENSOR \Box WALL MOUNTED LUMINAIRE FIRE ALARM EXTERIOR LUMINAIRE - POLE MOUNTED WALL MOUNTED LUMINAIRE - EMERGENCY EXTERIOR LUMINAIRE - POLE MOUNTED WALL MOUNTED LUMINAIRE - NIGHT LIGHT HEAT DETECTOR - COMBINATION FIRE ALARM HORN - CEILING MOUNTED EXTERIOR LUMINAIRE - POLE MOUNTED STRIP LUMINAIRE HEAT DETECTOR - FIXED TEMPERATURE FIRE ALARM VISUAL SIGNAL - CEILING MOUNTED EXTERIOR LUMINAIRE - POLE MOUNTED STRIP LUMINAIRE - EMERGENCY FIRE ALARM COMBINATION HORN/VISUAL - CEILING MOUNTED FLOOD LIGHT LUMINAIRE HEAT DETECTOR - FIXED TEMPERATURE (CONNECTED TO ELEVATOR RECALL) STRIP LUMINAIRE - NIGHT LIGHT -EMERGENCY BATTERY PACK FIRE ALARM SPEAKER - CEILING MOUNTED SMOKE DETECTOR EMERGENCY LUMINAIRE REMOTE HEADS LUMINAIRE - NIGHT LIGHT FIRE ALARM COMBINATION SPEAKER/VISUAL - CEILING MOUNTED SMOKE DETECTOR - DUCT MOUNTED LUMINAIRE - EMERGENCY $\nabla \nabla \nabla$ TRACK LUMINAIRE FLOW SWITCH SMOKE DETECTOR (CONNECTED TO ELEVATOR RECALL) POWER DEVICES TAMPER SWITCH FIRE ALARM MANUAL STATION SINGLE RECEPTACLE LIGHTING & APPLIANCE PANELBOARD FIRE ALARM HORN - WALL MOUNTED DUCT DETECTOR REMOTE ALARM INDICATOR POWER DISTRIBUTION EQUIPMENT DUPLEX RECEPTACLE FIRE ALARM VISUAL SIGNAL - WALL MOUNTED FOUR-PLEX RECEPTACLE - TWO DUPLEX RECEPTACLES FAN SHUT-DOWN RELAY TRANSFORMER FIRE ALARM COMBINATION HORN/VISUAL - WALL MOUNTED RANGE RECEPTACLE MAGNETIC DOOR HOLDER ENCLOSED CIRCUIT BREAKER SPECIAL RECEPTACLE FIRE ALARM SPEAKER - WALL MOUNTED CABINET (TYPE INDICATED) SMOKE BEAM DETECTOR DUPLEX RECEPTACLE - GROUND-FAULT CIRCUIT-INTERRUPTER MOTOR STARTER, LIGHTING CONTACTOR FIRE ALARM COMBINATION SPEAKER/VISUAL - WALL MOUNTED SMOKE BEAM REFLECTOR ÐıG DUPLEX RECEPTACLE - ISOLATED GROUND FIRE ALARM BELL - WALL MOUNTED DUPLEX RECEPTACLE -COMBINATION MOTOR STARTER & SAFETY SWITCH WEATHER-RESISTANT GROUND-FAULT CIRCUIT-INTERRUPTER SECURITY DUPLEX RECEPTACLE - ON APPLIANCE CIRCUIT CORD DROP (J-BOX AT CEILING) DUPLEX RECEPTACLE - TAMPER-RESISTANT PUSHBUTTON STATION MOTION DETECTOR CORD DROP (SPECIAL RECEPTACLE AT CEILING) DUPLEX RECEPTACLE - ARC-FAULT RATED PUSHBUTTON STATION, 'P' INDICATES PILOT KEYPAD DUPLEX RECEPTACLE - MOUNTED IN MILLWORK MULTI-OUTLET ASSEMBLY DOOR MONITOR SWITCH ELECTRIC STRIKE FLUSH FLOOR BOX **DUPLEX RECEPTACLE - MOUNTED BELOW COUNTER** DOOR SWITCH CARD READER DUPLEX RECEPTACLE - CEILING MOUNTED FLUSH POKE-THRU PS DOOR BELL CHIME/BUZZER POWER SUPPLY DUPLEX RECEPTACLE - BOTTOM HALF SWITCHED DAMPER SPLIT-WIRE RECEPTACLE DOOR CONTACT / DOOR SAFETY SWITCH SECURITY CAMERA SOLENOID JUNCTION BOX **NURSE CALL RACEWAYS** NURSE CALL DOME LIGHT EMERGENCY CALLS ONLY DOUBLE BED NURSE CALL STATION (2 CORD SETS) NURSE CALL DOME LIGHT EMERGENCY/NORMAL CALLS HOME RUN TO PANEL TELEPHONE CONDUIT NURSE CALL ANNUNCIATOR & POWER SUPPLY UNSWITCHED LIGHTING CIRCUIT CONDUIT UP EMERGENCY CALL SWITCH NURSE CALL DUTY STATION MASTER SATELLITE FIXTURE CONNECTION CONDUIT DOWN CODE BLUE STATION NURSE CALL STAFF STATION EMERGENCY CIRCUIT CONDUIT SEAL SINGLE BED NURSE CALL STATION (1 CORD SET) / NL < NIGHT LIGHTING CIRCUIT RTLS (REAL-TIME LOCATING SYSTEM) MONITOR -··-CABLE TRAY S SOUND SYSTEM RACEWAY CONDUIT SLEEVE (NUMBER INDICATES SIZE) MISCELLANEOUS EQUIPMENT IDENTIFICATION TAG WEATHER-PROOF WIRE GUARD EXPLOSION PROOF FIRE ALARM CONTROL PANEL FACP 30/3/10/3R RATED AMPACITY/NO. POLES/FUSING REQ'D/NEMA ENCL. NO. \mathbb{P}_{X} FIRE ALARM ANNUNCIATOR PANEL PROJECTOR INPUT STATION - LETTER INDICATES TYPE HOA HAND-OFF-AUTO HPROJECTOR CONTROL STATION CCT. CIRCUIT LIGHT LINEWORK = EXISTING OR DEMOLITION PART. CCT. PARTIAL CIRCUIT

DARK LINEWORK = NEW

NON-FUSED

NOTE: SEE SIEMENS AND GE HEALTHCARE FINAL SITE PREPARATION SUPPORT DOCUMENT(S) DRAWINGS SHOWING ADDITIONAL WORK REQUIREMENTS FOR SIEMENS AND GE HEALTHCARE EQUIPMENT TO BE INCLUDED AND PROVIDED IN THIS CONTRACT. THESE DRAWINGS ARE INCLUDED IN THIS SET OF DOCUMENTS.

> DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL FARRIS ENGINEERING PLANS.

GENERAL ELECTRICAL DEMOLITION NOTES APPLY TO ALL ELECTRICAL SHEETS

- COMPLETELY REMOVE ALL ELECTRICAL WIRING, CONDUIT, SWITCHES, DISCONNECTS, LUMINAIRES, AND ASSOCIATED ANCILLARY EQUIPMENT SHOWN CROSSHATCHED, OR REMOVE AND SALVAGE INDICATED EQUIPMENT/DEVICES AND CIRCUITING AS NOTED. ITEMS INDICATED FOR REMOVAL ARE ONLY SUGGESTIVE OF THE AMOUNT OF DEMOLITION WORK INVOLVED. PERFORM A SITE INVESTIGATION TO AID IN DETERMINING THE COMPLETE EXTENT OF DEMOLITION WORK.
- COORDINATE AND SCHEDULE ALL NECESSARY POWER OUTAGES WITH THE CONTRACTING OFFICERS REPRESENTATIVE (COR) PRIOR TO PROCEEDING WITH SUCH WORK SO OPERATIONS IN ADJACENT OCCUPIED PORTIONS OF THE BUILDING ARE NOT INTERRUPTED OR RESTRICTED WITHOUT PRIOR
- REMOVE ALL EXISTING BRANCH CIRCUITS INDICATED AS COMPLETELY AS POSSIBLE. REMOVE EXISTING CONDUCTORS COMPLETELY FROM THEIR RACEWAYS AND DO NOT REUSE EXCEPT WHERE SPECIFICALLY INDICATED. WHERE AN EXISTING DEVICE IS REMOVED FROM AN EXISTING CIRCUIT. PROVIDE NEW WIRING AND MAINTAIN CONTINUITY OF EXISTING CIRCUIT.
- REMOVE EXISTING LUMINAIRES, LAMPS, BALLASTS, AND RELATED COMPONENTS INDICATED AS COMPLETELY AS POSSIBLE. DELIVER EQUIPMENT CONSIDERED SALVAGEABLE BY THE COR AND NOT SHOWN FOR REUSE TO THE OWNER'S STORAGE LOCATION. REMOVE NON-SALVAGEABLE EQUIPMENT FROM THE SITE. PROPERLY DISPOSE OF LAMPS AND BALLASTS CONSIDERED HAZARDOUS WASTE.
- REMOVE EXISTING SURFACE MOUNTED BOXES, CONDUIT, SURFACE METAL RACEWAY, WIREWAY, ETC. INDICATED AS COMPLETELY AS POSSIBLE. PATCH ABANDONED PENETRATIONS FROM REMOVED FASTENERS. ABANDON IN PLACE NON-ACCESSIBLE BOXES SHOWN REMOVED AND COVER WITH STAINLESS STEEL COVER PLATES. ABANDON IN PLACE NON-ACCESSIBLE CONDUIT SHOWN REMOVED AND CAP OFF IN A SUITABLE MANNER PER LOCAL INSPECTOR'S REQUIREMENTS. CHISEL RACEWAYS STUBBED FROM A CONCRETE FLOOR OR WALL 2 INCHES BELOW ADJACENT SURFACE, GROUT,
- COORDINATE REUSED EXISTING BOX AND CONDUIT LOCATIONS WITH NEW WORK LOCATIONS.
- REMOVE ELECTRICAL WORK AT ALL MECHANICAL EQUIPMENT SHOWN REMOVED. COORDINATE EQUIPMENT REMOVAL LOCATIONS WITH MECHANICAL DRAWINGS.

GENERAL ELECTRICAL NOTES APPLY TO ALL ELECTRICAL SHEETS

- MOUNTING HEIGHTS INDICATED ARE TO CENTER OF ROUGH-IN ABOVE FINISHED FLOOR (AFF).
- INSTALL ALL CONDUCTORS IN CONTINUOUS RACEWAY. PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTOR.
- PROVIDE DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT PHASE CONDUCTOR. EXCEPTION: WHERE AN EQUIPMENT MANUFACTURER REQUIRES A MULTIWIRE BRANCH CIRCUIT FOR ONLY ONE UTILIZATION EQUIPMENT AND WHERE ALL UNGROUNDED CONDUCTORS OF THAT CIRCUIT ARE OPENED SIMULTANEOUSLY BY THE BRANCH CIRCUIT OVERCURRENT
- CONCEAL ALL CONDUITS IN NEW WALLS, EXISTING STUD WALLS, OR ABOVE SUSPENDED CEILINGS.
- WHERE CONDUIT CANNOT BE CONCEALED IN EXISTING WALL OR CEILING CAVITIES, INSTALL CONDUCTORS IN SURFACE METAL RACEWAYS; SURFACE CONDUIT OR METAL SURFACE RACEWAY AT ENGINEER'S DISCRETION.
- PAINT SURFACE CONDUIT IN FINISHED AREAS, WHEN ALLOWED, TO MATCH SURROUNDING SURFACES. COORDINATE FINISHES WITH ARCHITECT.
- METAL SURFACE RACEWAYS SHALL BE WIREMOLD #V500, #V700, OR #V2400 SERIES WITH FACTORY IVORY FINISH OR APPROVED EQUIVALENT. METAL SURFACE RACEWAYS FOR TELEVISION CABLE SHALL BE WIREMOLD #V700 OR LARGER. METAL SURFACE RACEWAYS FOR TELECOMMUNICATIONS CABLES SHALL BE #V2400 OR LARGER. COMPLY WITH EIA/TIA STANDARDS FOR CABLE BENDING RADIUS.
- INSTALL EXPOSED OR CONCEALED RACEWAY NEAR METAL CORRUGATED SHEET ROOF DECKING SO NEAREST OUTER RACEWAY SURFACE IS NOT LESS THAN 6 INCHES FROM THE NEAREST SURFACE OF THE ROOF DECKING. EXCEPTION: RIGID METAL CONDUIT AND INTERMEDIATE METAL CONDUIT SHALL NOT BE REQUIRED TO MAINTAIN THIS CLEARANCE.
- PATCH, PAINT, REPAIR OR REPLACE ALL WALLS, CEILINGS, OR OTHER BUILDING ELEMENTS DISTURBED DURING INSTALLATION OF ELECTRICAL
- USE ROOM NUMBERS ASSIGNED BY OWNER AND NOT ROOM NUMBERS LISTED ON DRAWINGS FOR LABELING OF PANELBOARD DIRECTORIES, FIRE ALARM PANEL PROGRAMMING, ETC. INCLUDE A DESCRIPTION OF LOAD SUCH AS LIGHTS, RECEPTACLES, MECHANICAL UNIT LOCATIONS, ETC. ON TYPED PANELBOARD DIRECTORIES.
- LOCATIONS AND QUANTITIES OF OCCUPANCY SENSORS ON THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE ONLY THE ROOM/AREA CONTROLLED BY THE SENSORS. PROVIDE ADDITIONAL SENSORS AND RELATED EQUIPMENT FOR COMPLETE COVERAGE AND SWITCHING ARRANGEMENTS INDICATED.
- CONNECT SMOKE AND FIRE/SMOKE DAMPERS TO 120V POWER AND CONTROL WITH FIRE ALARM SYSTEM. VERIFY EXACT QUANTITY AND LOCATION OF DAMPERS WITH MECHANICAL DRAWINGS.
- COORDINATE LOCATION OF RECESSED LUMINAIRES, SPEAKERS, ETC. WITH FIRE RATED CEILINGS. PROVIDE ENCLOSURES TO MAINTAIN THE FIRE INTEGRITY RATING OF THE CEILING. COORDINATE EXACT LOCATIONS OF FIRE RATED CEILINGS WITH ARCHITECTURAL DRAWINGS.
- WORK INDICATED BY THESE DOCUMENTS INVOLVES THE INSTALLATION OF CIRCUITING, DEVICES AND EQUIPMENT IN EXISTING AND NEW LEAD LINED WALLS. THE CONTRACTOR SHALL VERIFY WITH ARCHITECTURAL DRAWINGS WHICH WALLS ARE LEAD LINED AND COORDINATE THE INSTALLATION OF CONDUIT, DEVICES, LIGHT FIXTURES, JUNCTION BOXES, ETC. WHICH PENETRATE THE LEAD SHIELDING. THE CONTRACTOR SHALL PROVIDE LEAD SHIELDING OR EQUIVALENT AROUND OR BEHIND SUCH PENETRATIONS TO MAINTAIN BARRIER PROPERTIES. SPECIAL BAFFLE DESIGNS MAY BE NECESSARY FOR SOME CONDUIT OR LARGER PENETRATIONS. DESIGN OF SHIELDING OF ANY MAJOR PENETRATIONS SHOULD BE REVIEWED AND APPROVED BY THE CONSULTING RADIATION PHYSICIST.

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	438-18-103					
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		CONSULTANT		ARCHITECT/EN	GINEER OF RECORD STAMP		Office of	General Electrical Notes & Symbols	Phase BID DOCUMENTS	Project Title Second CT Scal	nner	Project Number 438-18-103		
	10/10/2018 9/28/2018	/28/2018 Farris Engineering	Structural Engineering: Shaffer & Stevens, P.C. 9910 N 48th Street	A/E: CLH Architects 3705 N 200th St	C D D D D D D D D D D D D D D D D D D D	PROFESSION	Construction and Facilities	Legend	DID DOGGINIZITIO	II		Building Number 5	Building Number 5	
CONSTRUCTION DOCUMENTS 100% SUBMITTAL DESIGN DEVELOPMENT 90% SUBMITTAL	9/7/2018 8/3/2018	Omaha, NE 68154	Omaha, NE 68152	Elkhorn, NE 68022	Calvin L. Hinz	J5A46 O/ JZ	Management	Approved: Project Director		Location Sioux Falls, SD		Drawing Number		
SCHEMATIC DESIGN 36% SUBMITTAL 2 SCHEMATIC DESIGN 35% SUBMITTAL	7/5/2018 6/6/2018	(402) 330-5900 Robert Hotovy	(402) 455-7698 Donn Shaffer	(402) 291-6941 Tim Werner	ARCHITECTS. P.C.				FULLY SPRINKLERED	Issue Date	Checked Drawn	EG101		
Revisions:	Date:		Domi Granoi		**************************************	MDAK 10/10/18	U.S. Department of Veterans Affairs			October 10, 2018	RJH DMM	LG101		

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