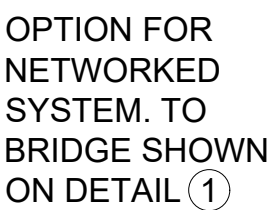
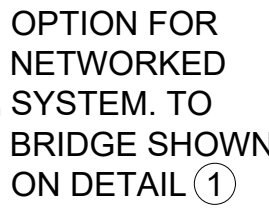


## NOTES

- 5 MINUTES BEFORE THE LIGHTS IS SCHEDULED TO TURN OFF, THE LIGHTS WILL TURN OFF FOR 1 SECOND AND THEN GO BACK TO ITS PREVIOUS DIMMING LEVEL. THIS BLINK WARNING PREVENTS FALSE OFFS AND GIVES AUTHORIZED PERSONNEL A WARNING TO PRESS WALL SWITCH TO ACTIVATE A 2-HOUR OVERRIDE. OWNER TO VERIFY TIME SCHEDULE.
- \*\* AUTOMATIC SCHEDULING CONTROLS SHALL BE CAPABLE OF LIGHTING SETBACK CONTROL IN ACCORDANCE TO **C405.2.6.2** FOR DECATAGON FIXTURES AND **C405.6.2.3** FOR NON-DECATAGON FIXTURES
- LIGHTING IN OPEN AREAS (E.G. LOBBIES, STAIRS, ETC.) SHALL BE CONTROLLED SEPARATELY IN CONTROL ZONES NOT GREATER THAN 600 SQUARE. THE FIXTURES IN THE OCCUPIED CONTROL ZONES WILL BE ON AT 100% FULL BRIGHT AND THE FIXTURES IN THE UNOCCUPIED (AFTER 7.5 MINUTES OF NO DETECTED MOVEMENT) CONTROL ZONES WILL BE AT 20% FULL BRIGHT. IF ALL AREAS ARE UNOCCUPIED (AFTER 10 MINUTES OF NO DETECTED MOVEMENT IN ALL CONTROL ZONES) THEN THE LIGHTS WILL TURN OFF.



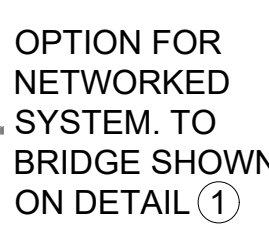
- DETAILS AND DESIGN IS BASED ON AN UHLIGHT LIGHTING CONTROLS SYSTEM
2. DETAILS ARE PARAMETRIC AND FOR REFERENCE OF SYSTEM AND TYPE. THE MANUFACTURER SHALL FURNISH THE FOLLOWING TYPE REQUIREMENTS TO MEET BASIS OF DESIGN. REFER TO MANUFACTURER SHOP DRAWINGS FOR QUANTITIES AND DIMENSIONS. THE MANUFACTURER SHALL FURNISH THE FOLLOWING DOCUMENTS NOT LIMITED TO FOLLOWING:
- 1. LIGHTING CONTROL SUBMITTALS FOR NETWORKED SYSTEM SHALL BE PROVIDED BY THE MANUFACTURER OR FACTORY REPRESENTATIVE TO THE ARCHITECT AND ENGINEER. THE MANUFACTURER SHALL SUBMIT THE FOLLOWING DOCUMENTS NOT LIMITED TO FOLLOWING:
  - 2. MANUFACTURER SINGLE LINE DIAGRAM
  - 3. BASIS OF DESIGN PROGRAMMING OPERATION FOR EACH LIGHTING CONTROL SYSTEM
  - 4. DEVICE CUTSHEETS
4. MANUFACTURER OR FACTORY REPRESENTATIVE TO INCLUDE THE FOLLOWING INFORMATION IN THE LIGHTING CONTROLS SYSTEM MUST INCLUDE A SITE VISIT FOR THE FOLLOWING:
- 1. THE PROJECT TO CONFIRM DESIGN AND FIELD INSTALLATION REQUIREMENTS.
  - 2. PROGRAMMING AND COMMISSIONING OF THE LIGHTING CONTROLS SYSTEM SHALL BE PROVIDED BY THE MANUFACTURER OR FACTORY REPRESENTATIVE TO THE ARCHITECT AND ENGINEER. THE MANUFACTURER SHALL WALK THROUGH FOR MAKING FINAL ADJUSTMENTS TO PROGRAMMING.
5. CONTRACTOR SHALL FURNISH AND INSTALL ALL LIGHTING CONTROLS CABLES TO THE FIELD TO THE MANUFACTURER'S RECOMMENDATION TO PROVIDE A CONTINUOUSLY RATED CABLE TO THE LIGHTING CONTROLS SYSTEM.
6. CONTRACTOR SHALL TEST ALL LOW VOLTAGE NETWORK CABLES IN THE FIELD TO THE VERIFICATION AND DOCUMENTED BY THE MANUFACTURER PRIOR TO SYSTEM STARTUP.
7. ALL DEVICES SHALL BE MOUNTED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION FOR BEST FIELD LOCATIONS IN THE FIELD.
8. CONTRACTOR TO VERIFY COMPATIBILITY BETWEEN DRIVING POWERPOWERS AND INSTALLED TYPINGS.
9. CONTRACTOR SHALL PROVIDE COMPLETE LIGHTING CONTROLS SYSTEM.

1. OCCUPANT SENSOR CONTROLS, [SECTION C405.2.1](#)
2. TIME-SWITCH CONTROLS, [SECTION C405.2.2](#)
3. DAYLIGHT-RESPONSIVE CONTROLS, [SECTION C405.2.3](#)
4. SPECIFIC APPLICATION CONTROLS, [SECTION C405.2.4](#)
5. MANUAL CONTROLS, [SECTION C405.2.5](#)
6. EXTERIOR LIGHTING CONTROLS, [SECTION C405.2.6](#)
7. ENHANCED DIGITAL LIGHTING CONTROLS, [SECTION C406.4](#)
8. FUNCTIONAL TESTING OF LIGHTING CONTROLS, [SECTION C408.3](#)
9. CONTACT HILA FOR COMPLETE ILLUMINATING CONTROLS BOM, [CONTACTS@IH-LTG.COM](mailto:CONTACTS@IH-LTG.COM) • PHONE: 808-683-9344.

### BUILDING MANAGEMENT SYSTEMS INTEGRATION SPECIFICATIONS:

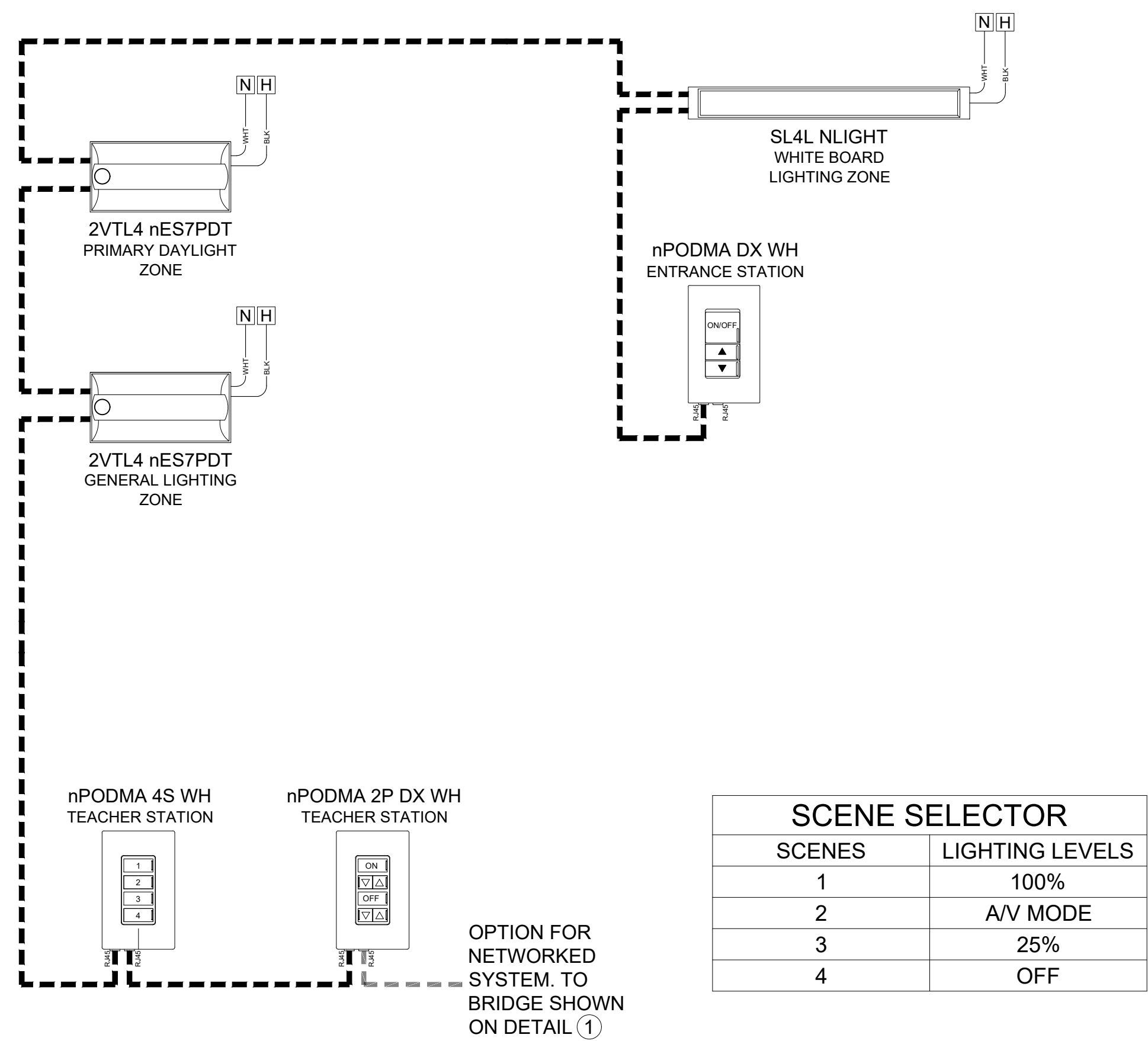
1. **BACNET TESTING LABORATORIES (BTL) LISTING AS A BACNET BUILDING CONTROLLER (B-BCC)**
2. **OPTIONAL AUTOMATIC DEMAND RESPONSE CENSTION**  
CONTRACTOR SHALL PROVIDE A BACNET CONTROLLER WITH  
MINIMUM 16MB OF FLASH MEMORY TO STORE ALL LOGGING  
LEVELS THROUGH AN OPERATOR'S DOW VIRTUAL END-  
POINT. CONTRACTOR SHALL PROVIDE A CONNECTION TO  
UTILIZATION DATA.
3. **ENHANCED SECURITY PROVIDED BY BOTH:**  
- HTTPS  
- U.S. GOVERNMENT SECURITY STANDARD OF FEDERAL  
INFORMATION PROCESSING STANDARDS (FIPS) 140-2  
LEVEL 1, INSIDE (VALIDATION CERTIFICATE PENDING).
4. **THE INSTALLING CONTRACTOR WILL BE RESPONSIBLE FOR THE FOLLOWING WHEN INTEGRATING LIGHTING CONTROL SYSTEM TO BACNET:**
- 1. PROVIDING A PHYSICAL CONNECTION FROM LIGHTING CONTROL SYSTEM TO BAC VIA BACNET IP.
  - 2. PROVIDING A CONNECTION FROM BACNET TO SPECIAL LABELING CONFIGURATIONS THAT THE LIGHTING CONTROL PROGRAMMER & EMS/CONTROLS CONTRACTOR CAN USE FOR SEAMLESS INTEGRATION OF THE TWO SYSTEMS.
  - 3. CONFIRMING THAT THE LIGHTING CONTROL SYSTEM CONTROLS PROGRAMMER & EMS/CONTROLS CONTRACTOR CAN INTERACT WITH BMS.

1. 2-HOUR ONSITE OR REMOTE TRAINING.
2. 2-DAY IN PERSON OR REMOTE TRAINING @ HILA, AT CUSTOMER LOCATION, OR VIDEOCONFERENCING SOFTWARE.
3. VIDEO TRAINING GIVEN TO EVERYONE WHO PARTICIPATES IN THE 2-DAY IN PERSON OR REMOTE TRAINING.
4. CONTACT HILA FOR TRAINING, CONTROLS@HILA-ITG.COM - PHONE # 808-683-9344.

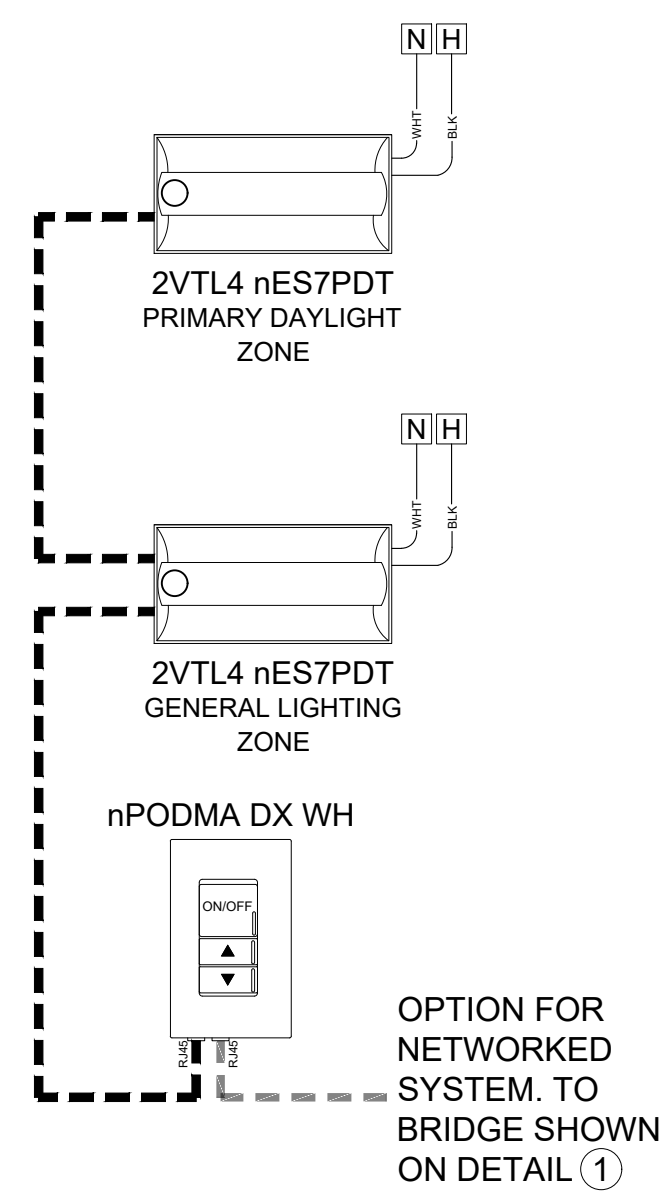




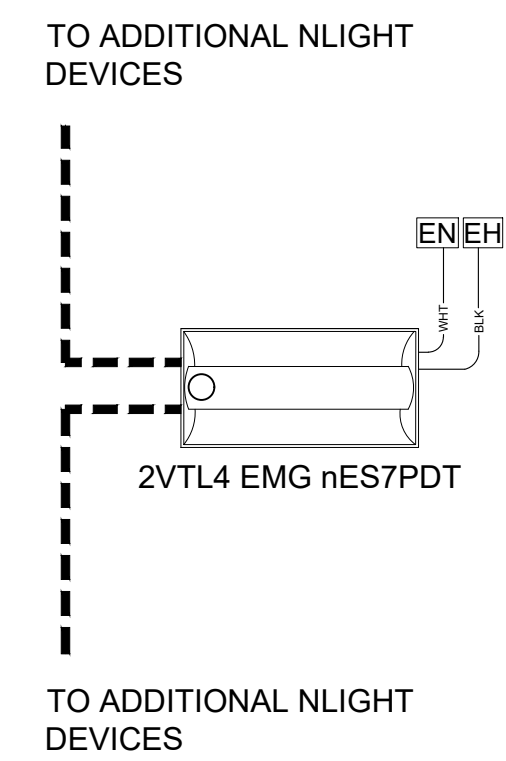
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DWG Ref:	



8 CLASSROOM DETAIL  
N.T.S.



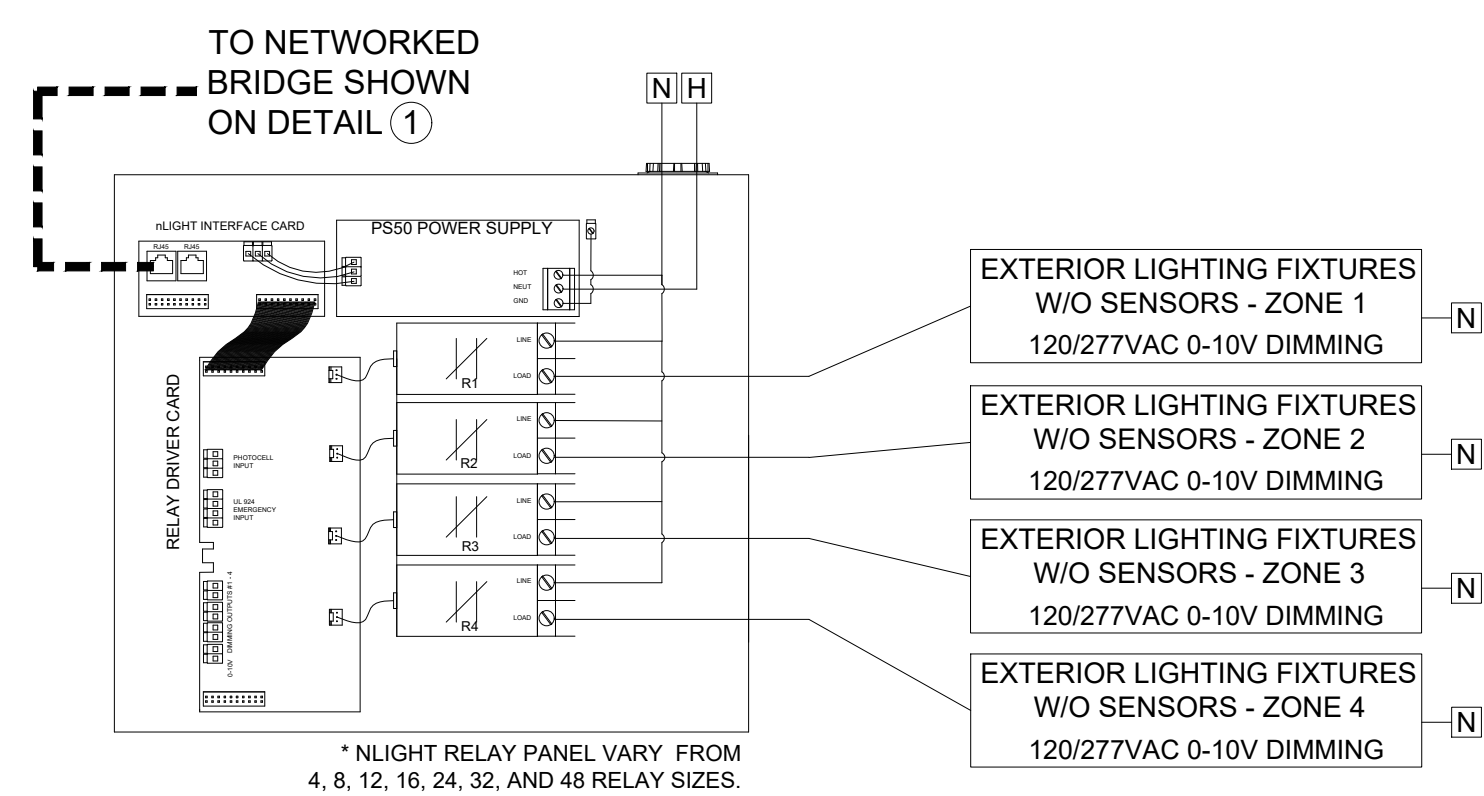
9 LAB DETAIL  
N.T.S.



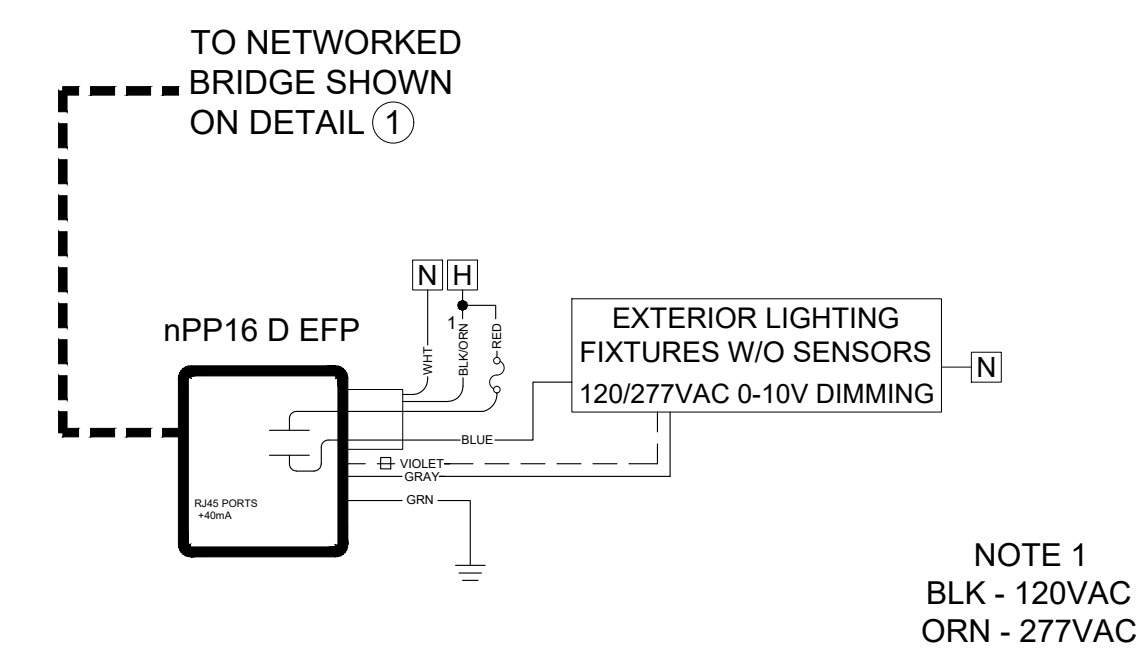
10 EMERGENCY ENABLED FIXTURE TYPICAL  
N.T.S.



11 EXTERIOR DETAIL A  
N.T.S.



12 EXTERIOR DETAIL B  
N.T.S.



13 EXTERIOR DETAIL C  
N.T.S.



14 GARAGE DETAIL  
N.T.S.