Menlo Park City School District
181 Encinal Avenue
Atherton, CA  94027

Oak Knoll Elementary School
Lighting Replacement & ELC - Project No. 2
1895 Oak Knoll Lane
Menlo Park, CA  94025

BID SET
04/15/2019
KEYNOTES
1. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. REFER TO SHEET A-501 FOR CASEWORK AND INTERIOR DETAILS.

GENERAL NOTES
1. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. REFER TO SHEET A-501 FOR CASEWORK AND INTERIOR DETAILS.

KEYNOTE
(E) DOOR AND TRANSOM TO REMAIN, PROTECT
(D) TOILET, SPD.
5. NOT USED.
6. TOILET PARTITION W/ 12" CLEAR VERTICAL OPENING FROM FLOOR FINISH, SEE DETAIL
7. LAVATORY, SPD.
8. TOILET PAPER DISPENSER.
9. MIRROR.
10. TRASH RECEPTACLE.
11. PAPER TOWEL DISPENSER.
12. CERAMIC WALL TILES.
13. SINK, SPD.
14. DISHWASHER, SPD.
15. FIRE EXTINGUISHER CABINET.
16. 5'-0" HIGH PARTIAL HEIGHT PLUMBING CHASE WALL.
17. RUBBER BASE.
18. (E) WALL, PAINT.
4.04 Oak Knoll E.S. Keyplan: Ceiling Assembly Details Suspended

8.01 Other devices within the ceiling shall be attached to the ceiling grid. In addition, devices weighing more than 10 lbs. shall be supported directly from the structure above by not less than four (4) taut #12 gage hanger wires attached from the terminal or service to the structure above or other approved hangers.

7.04 Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 56 lbs. shall have minimum yield strength (Fy) of 30 ksi and minimum ultimate strength (Fu) of 48 ksi. Power-actuated fasteners in concrete are not permitted for bracing wires.

6.04 All light fixtures shall be positively attached to the ceiling suspension systems by mechanical means. Installation of the ceiling assembly shall be in accordance with American Institute of Steel Construction (AISC) Manual for Steel Construction, 2007 Edition, Section 6.2.1.4. Power-actuated fasteners shall be field tested for 200 lbs. in tension. All other post-installed anchors in concrete shall be tested in accordance with CBC Section 1913A.7. Post-installed anchors in concrete used to attach bracing wires shall be tested at a frequency of 50 percent in accordance with CBC Section 1913A.7.

6.02 All light fixtures shall be positively attached to the ceiling suspension systems by mechanical means. The clamping device shall completely surround the supporting ceiling runner and provide positive attachment of the fixture to the runner without crushing the material. The clamping device shall be field tested for attachment strength equal to 50 percent of the weight of the fixture. Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

6.01 Surface-mounted light fixtures shall be attached to the main runner with at least two positive clamping devices. The clamping device shall completely surround the supporting ceiling runner and provide positive attachment of the fixture to the runner without crushing the material. The clamping device shall be field tested for attachment strength equal to 50 percent of the weight of the fixture. Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

5.02 Power-Actuated Fasteners shall be: SEE 12/SI, XL 8320 MRC, KWIK BOLT TZ ESR 1917, ARMSTRONG SEE 12/SI, BERK 7301 HD.

4.07 Sheet metal screws shall comply with ASTM C1513-10, ASME B18.6.4-89 (R2005). Penetration of wire, screw eyes in wood must be installed so they align closely with the direction of the wire, etc.) All Light fixtures weighing greater than 56 lbs. shall have minimum yield strength (Fy) of 30 ksi and minimum ultimate strength (Fu) of 48 ksi. Power-actuated fasteners in concrete are not permitted for bracing wires.

4.06 Power-actuated fasteners in concrete are not permitted for bracing wires.

4.05 Screws through joined material shall not be less than three exposed threads.

4.04 Ceiling system components shall comply with ASTM C635-07 and Section 5.1 of ASTM E580-10a. Post-installed anchors in concrete shall be tested at a frequency of 50 percent in accordance with CBC Section 1913A.7. Post-installed anchors in concrete used to attach bracing wires shall be tested at a frequency of 50 percent in accordance with CBC Section 1913A.7.

4.03 Shear panel and the wall on the sides of the ceiling free to slip. For all other ceiling panel types, provide 3/4" clearance between the acoustical tile panels and the wall on the sides of the ceiling free to slip.

4.02 Screws through joined material shall not be less than three exposed threads.

4.01 Ceiling system components shall comply with ASTM C635-07 and Section 5.1 of ASTM E580-10a.

3.05 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to: fixtures, clamping devices. The clamping device shall completely surround the supporting ceiling runner and provide positive attachment of the fixture to the runner without crushing the material. The clamping device shall be field tested for attachment strength equal to 50 percent of the weight of the fixture. Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

3.04 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to: fixtures, clamping devices. The clamping device shall completely surround the supporting ceiling runner and provide positive attachment of the fixture to the runner without crushing the material. The clamping device shall be field tested for attachment strength equal to 50 percent of the weight of the fixture. Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

3.02 Ceiling panels shall not support any light fixtures, air terminals or devices.

3.01 Ceiling panels shall not support any light fixtures, air terminals or devices.

2.03 Panel and the wall on the sides of the ceiling free to slip. For all other ceiling panel types, provide 3/4" clearance between the acoustical tile panels and the wall on the sides of the ceiling free to slip.

2.02 Panel and the wall on the sides of the ceiling free to slip. For all other ceiling panel types, provide 3/4" clearance between the acoustical tile panels and the wall on the sides of the ceiling free to slip.

2.01 Panel and the wall on the sides of the ceiling free to slip. For all other ceiling panel types, provide 3/4" clearance between the acoustical tile panels and the wall on the sides of the ceiling free to slip.

1.06 Ceiling panels shall not support any light fixtures, air terminals or devices.

1.05 Ceiling panels shall not support any light fixtures, air terminals or devices.

1.04 Ceiling panels shall not support any light fixtures, air terminals or devices.

1.01 Ceiling panels shall not support any light fixtures, air terminals or devices.
### GENERAL NOTES

1.注明任何在该工程中可能使用到的特殊材料和产品。这些材料和产品应符合相关的质量和安全标准。
2.施工现场应在可及范围内设置警告标志和安全标识。
3.应遵守所有当地的建筑法规和标准。
4.施工过程中应尽量减少对环境的影响，采取措施确保施工过程中的安全。
5.施工过程中任何可能对附近居民和设施造成的影响应事先通知。

### GENERAL NOTES (CONTINUATION)

- 施工过程中应确保所有人员的安全和健康。
- 施工过程中应遵循所有相关的环境保护法规。
- 施工过程中应确保所有设备和材料的正确使用和处理。
- 施工过程中应确保所有人员的健康和安全。

### LEGEND

- ** suites A & C & D **
- ** 1895 Oak Knoll Lane, Menlo Park, CA 94027 **
- ** Project #2 **
- ** Buildings A, C & D **

### DRAWING INDEX

- ** PROJECT NO. 101-19-01 **
- ** Oak Knoll E.S. Lighting & ELC Project **
- ** 417 Montgomery Street, Suite 400, San Francisco, CA 94104 USA **
- ** (415) 981-2345 **
- ** WWW.HED.DESIGN **

### LIST OF APPLICABLE CODES

- ** ICC 2015 Building Code **
- ** NFPA 70-2017 Electrical Code **
- ** ASHRAE 90.1-2016 Energy Standard **
- ** UL 2010 Standard **
- ** NFPA 101 Life Safety Code **
- ** NFPA 220-2017 Emergency Lighting Code **
- ** NFPA 2017 Fire Prevention Code **
- ** NFPA 700 Standard for Fire Protection Plan Development **

### ABBREVIATIONS

- ** HVAC **
- ** MEP **
- ** BIM **
- ** RFI **
- ** P&ID **
- ** 3D **
- ** CAD **
- ** BIM **
- ** RFI **
- ** P&ID **
- ** 3D **
- ** CAD **
# Electrical Schedules

**Electrical Equipment Schedule**

<table>
<thead>
<tr>
<th>Location</th>
<th>Load</th>
<th>Type</th>
<th>Circuit</th>
<th>Fuses</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>250W</td>
<td>3</td>
<td>40A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>100W</td>
<td>3</td>
<td>20A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>50W</td>
<td>3</td>
<td>15A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>25W</td>
<td>3</td>
<td>10A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Electrical Panel Schedule**

<table>
<thead>
<tr>
<th>Panel #</th>
<th>Location</th>
<th>Load</th>
<th>Type</th>
<th>Circuit</th>
<th>Fuses</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>101-19-01</td>
<td>400W</td>
<td>3</td>
<td>100A</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>101-19-02</td>
<td>250W</td>
<td>3</td>
<td>50A</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>101-19-03</td>
<td>100W</td>
<td>3</td>
<td>25A</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>101-19-04</td>
<td>50W</td>
<td>3</td>
<td>15A</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Electrical System Schedule**

<table>
<thead>
<tr>
<th>System</th>
<th>Load</th>
<th>Type</th>
<th>Circuit</th>
<th>Fuses</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting</td>
<td>3000W</td>
<td>3</td>
<td>500A</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>HVAC</td>
<td>200W</td>
<td>3</td>
<td>50A</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td>100W</td>
<td>3</td>
<td>20A</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Other**

- **Electrical Panel:** 101-19-01
- **Electrical System:** Lighting, HVAC, Electrical
- **Location:** Buildings A, C & D

**Project No.**

- Oak Knoll E.S.
- Lighting & ELC

**Date & Scale:**

- 2018-04-15
- Scale: 1/4" = 1'-0"