ANIMAL NUTRITION CENTER
CONSTRUCTION DOCUMENTS

CAL POLY
SANT LUIS OBISPO

PROJECT DESCRIPTION
CONSTRUCTION OF A NEW ANIMAL NUTRITION CENTER INCLUDING A HAY BARN, PROCESSING BUILDING WITH DRIVE-THRU CAPABILITIES AND ACCESS ROAD.

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CONTACT: RON CHURCH, G.E.

VICINITY MAP

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CAL POLY ANIMAL NUTRITION CENTER
TITLE SHEET

CALIFORNIA POLYTECHNIC STATE UNIVERSITY
SAN LUIS OBISPO, CA
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CSU Project
Code Reviewed
by Willdan

Plans and documents bearing this stamp have been reviewed for compliance with the applicable provisions in California Code of Regulations, Title 24, for the identified subjects.

Structural    Plumbing
Fire Life Safety    Energy
Electrical    Accessibility
Mechanical

Approval Recommended
by Willdan Plan Examiners

Date: 02/28/06

CSU Project
Access Compliance Reviewed
by Willdan

Plans and documents bearing this stamp have been reviewed for compliance with the applicable accessibility provisions in California Code of Regulations, Title 24.

Approval Recommended
by Willdan Plan Examiners

Date: 02/28/06

ENGINEER OF RECORD:
GERALD L. MICHAEL
\[128500010345551C002\]
STATE OF CALIFORNIA

DATE: 2/6/06
1. South Elevation

2. West Elevation

3. Wall Section
Scale Ramp Plan

Scale Ramp Section

Foundation Plan
### LIGHTING FIXTURES SCHEDULE

<table>
<thead>
<tr>
<th>FIXTURE TYPE</th>
<th>DESCRIPTION</th>
<th>LAMPS</th>
<th>MANUFACTURER &amp; CATALOG NUMBER OR AGREED EQUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FX-1</td>
<td>PENDANT MOUNTED HD HD FLUORESCENT FIXTURE WITH HIGH INTENSITY DISCHARGE BALLAST, COMPLETE MOUNTING HARDWARE AND ASSEMBLY.</td>
<td>(1) 100W HPS 4000K</td>
<td>O-HITHEE-5250-7X-277 CUL-1AR25</td>
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<tr>
<td>FX-2</td>
<td>PENDANT MOUNTED HD HD FLUORESCENT FIXTURE WITH HIGH INTENSITY DISCHARGE BALLAST, COMPLETE MOUNTING HARDWARE AND ASSEMBLY.</td>
<td>(1) 400W HPS 4000K</td>
<td>O-HITHEE-5250-7X-277 CUL-1AR25</td>
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<tr>
<td>FX-3</td>
<td>360° PENDANT MOUNTED Fluorescent FIXTURE WITH HIGH INTENSITY DISCHARGE BALLAST, COMPLETE MOUNTING HARDWARE AND ASSEMBLY.</td>
<td>(2) 54W 120V HPS</td>
<td>EUC-32176-32-777-11B</td>
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<tr>
<td>FX-4</td>
<td>SAME AS TYPE FX-3 EXCEPT WITH 90 MIN. EMERGENCY BATTERY PACK UNIT.</td>
<td>(2) 23W 120V HPS</td>
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<td>FX-5</td>
<td>24&quot; PENDANT MOUNTED Fluorescent FIXTURE WITH HIGH INTENSITY DISCHARGE BALLAST, COMPLETE MOUNTING HARDWARE AND ASSEMBLY.</td>
<td>(4) 36W 120V HPS</td>
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<td>FX-6</td>
<td>48&quot; RECESSED MOUNTED Fluorescent FIXTURE WITH ELECTRICAL WIRING DUCTS, HIGH INTENSITY DISCHARGE BALLAST AND ENERGY SAVING LAMPS.</td>
<td>(2) 70W 120V HPS</td>
<td>EUC-32176-32-777-11B</td>
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<td>FX-7</td>
<td>SAME AS FX-6 EXCEPT WITH 90 MIN. EMERGENCY BATTERY PACK UNIT.</td>
<td>(2) 70W 120V HPS</td>
<td>EUC-32176-32-777-11B</td>
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<td>FX-8</td>
<td>48&quot; RECESSED MOUNTED Fluorescent FIXTURE WITH HIGH INTENSITY DISCHARGE BALLAST AND ENERGY SAVING LAMPS.</td>
<td>(2) 70W 120V HPS</td>
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<td>FX-9</td>
<td>WALL MOUNTED HD LIGHTING FIXTURE WITH HD CAST ALUMINUM HOUSING COMPLETE WITH MOUNTING HARDWARE AND ASSEMBLY.</td>
<td>(1) 100W HPS 4000K</td>
<td>O-HITHEE-5250-7X-277 CUL-1AR25</td>
</tr>
<tr>
<td>FX-10</td>
<td>WALL MOUNTED EMERGENCY LIGHT FIXTURE; DOUBLE HEAD LAMPS FULLY ASSEMBLED WITH 90 MIN. BATTERY PACK UNIT AND TEST SWITCH.</td>
<td>(2) 6W HALOGEN</td>
<td>O-HITHEE-800-7X-277 CUL-1AR25</td>
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<tr>
<td>FX-11</td>
<td>WALL MOUNTED PHOTOLUMINESCENT EXIT SIGN WITH UNIVERSAL MOUNTING DEPLOYEMENT ARM AS INDICATED ON GREEN LETTERS.</td>
<td>--</td>
<td>O-HITHEE-770-7X-277 CUL-1AR25</td>
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<tr>
<td>FX-2A</td>
<td>HD LIGHT FIXTURE WITH HIGH INTENSITY DISCHARGE BALLAST PROVIDE COMPLETE MOUNTING HARDWARE ASSEMBLY AND SUITABLE FOR IN Met LOCATION.</td>
<td>(1) 100W HPS 4000K</td>
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<td>FX-2B</td>
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### ELECTRICAL NOTES:

1. **2001 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 7, TITLE 24 C.C.R.**
2. **2001 CALIFORNIA BUILDING CODE (BSC), PART 2, TITLE 24 C.C.R.**
3. **2004 CALIFORNIA ELECTRICAL CODE (CEC), PART 2, TITLE 24 C.C.R.**
4. **COMMERCIAL ELECTRONIC BOARD WITH 2M**
5. **FIRE PROOF SYSTEM CP-2150+ BEARING U.L. CLASSIFICATION**
6. **CONDUCT SHALL BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL.**
7. **SEE U.L. DOCUMENT FOR COMPLETE COMPONENTS & INSTALLATION REQUIREMENTS.**

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### ABBREVIATIONS:

- **A.F.P:** ABOVE FLOOR PLATE
- **G.R.D:** GROUND RESISTANCE
- **C.P.C:** CIRCUIT PROTECTOR
- **L.E.D:** LIGHT-EMITTING DIODE
- **D.E.H:** DISTRIBUTED EQUIPMENT HANGER
- **O.D.F.C:** OWNER FURNISHES COMPONENTS
- **A.F.E.H:** ACCESSORY FURNISHES EQUIPMENT
- **D.E.H:** DISTRIBUTED EQUIPMENT HANGER
- **E.L.O.D:** END OF LINE RESISTOR
- **W.P.L.H.P.S:** WASHABLE PRIMARY LABELS
- **C.F.E.M.C:** CALIFORNIA FURNITURE EXHIBIT MUSEUM COMMISSIONER
- **D.C.E.M.W.A.C:** DENTAL CODE EXECUTIVE COMMITTEE OF AMERICAN DENTAL ASSOCIATION
- **D.C.E.M.W.A.C:** DENTAL CODE EXECUTIVE COMMITTEE OF AMERICAN DENTAL ASSOCIATION
- **D.C.F.E.M.W.A.C:** DENTAL CODE EXECUTIVE COMMITTEE OF AMERICAN DENTAL ASSOCIATION
- **D.C.F.E.M.W.A.C:** DENTAL CODE EXECUTIVE COMMITTEE OF AMERICAN DENTAL ASSOCIATION
# Feeder Schedule

<table>
<thead>
<tr>
<th>FEEDER NO.</th>
<th>FROM</th>
<th>TO</th>
<th>COND. SIZE</th>
<th>WIRE SIZE</th>
<th>P.L.A.</th>
<th>F.W.L.A.</th>
<th>Ct</th>
<th>AMPERES</th>
<th>KV.A.</th>
<th>REMARKS</th>
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<td>0-1</td>
<td>SFS 1</td>
<td>SFS 2</td>
<td>3/0</td>
<td>4/0</td>
<td>1014</td>
<td>506.7</td>
<td>232.0</td>
<td>26,700</td>
<td>1200</td>
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<td>MS-1</td>
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<td>3/0</td>
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<td>246.6</td>
<td>65,000</td>
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<td>SFS 2</td>
<td>3/0</td>
<td>4/0</td>
<td>137</td>
<td>127.4</td>
<td>114.7</td>
<td>50,181</td>
<td>1200</td>
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<td>SFS 2</td>
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<td>53.8</td>
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<td>49.7</td>
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<td>180</td>
<td>149.5</td>
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<td>2.1</td>
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<td>4/0</td>
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<td>74.1</td>
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<tr>
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<td>4/0</td>
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<td>4/0</td>
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<td>T-1</td>
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<tr>
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<td>3/0</td>
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<td>4/0</td>
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<td>654</td>
<td>1200</td>
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<td>5.4</td>
<td>5.4</td>
<td>956</td>
<td>1200</td>
<td>SEE THRU.</td>
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</tbody>
</table>

## Notes:
1. Terminate conduit per Cal Poly San Luis Obispo requirements. Coordinate with piping drawing for additional information.
2. All devices in metering boards shall have an interrupting rating of 3,000 A.
3. All feeder circuit breakers shall have current limiting type by square D.

---

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Tel: (313) 581-2629  Fax: (313) 581-7139  
California Polytechnic State University  
San Luis Obispo, CA
LIGHT FIXTURE INSTALLATION DETAIL

BUILDING SECTIONS

NOTE:
1. SEE GROUND FLOOR PLAN-LIGHTING AND SITE PLAN-ELECTRICAL ON SHEETS E-2 AND E-3 FOR EXACT LOCATION OF LIGHT FIXTURE.
### Motor Control Center "MCC-A" (N.I.C. by Ibererson)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Equipment Description</th>
<th>H.P.</th>
<th>F.A.</th>
<th>F.L.A.</th>
<th>Amps Ranks</th>
<th>Encoder</th>
<th>Size</th>
<th>Wire</th>
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<tr>
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<td>DRAG CONVEYOR 102</td>
<td>5</td>
<td>6.3</td>
<td>7.6</td>
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### Motor Control Center "MCC-B" (N.I.C. by Ibererson)

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<tr>
<th>Item No.</th>
<th>Equipment Description</th>
<th>H.P.</th>
<th>F.A.</th>
<th>F.L.A.</th>
<th>Amps Ranks</th>
<th>Encoder</th>
<th>Size</th>
<th>Wire</th>
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<td>30 3</td>
<td>3/4''</td>
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<td>378</td>
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### Notes:
- Sub-Total: 120.4 x 150.8
- Total Conn. Load: 1417.37 W
- By: Ibererson

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**Motor Control Center Schedules**

**Motor Control Center "MCC-A"**

**Motor Control Center "MCC-B"**

**Delphéy/Gerdes Engineering, Inc.**

3555 S. 50th St. Vernon, Calif. 90058

Tel: (310) 581-2825 Fax: (310) 581-7339

**California Polytechnic State University**

San Luis Obispo, CA
**Plan Details**

- **Equipment Foundation**
  - Dimensions: 24" x 24" x 24" min. (typical)
  - Bases:
    - 4" dia. steel pipe (4" min. wall)
    - Filled with concrete
  - Railroad rail (90 lb/mILE) or SI 14.75
  - Dimensions: 6.75" dia. x 3.5" x 3.0"
  - Special bases by prior notice:
    - S.C.E. CO. Approval

- **Bollard Detail**
  - Scale: N.I.S.
  - Equipment frame or anchor plate
  - Anchor bolt
  - Concrete pad
  - 3 1/2"

- **Transformer Anchoring Details**
  - Scale: N.I.S.
  - No. 12-14 Teks/3
  - Screw
  - 3/16" thick
  - Power anchor fasteners: typical

- **Unistrut Connection**
  - 16" x 5" Sq. St. Pole
  - No. 12-14 Teks/3 top & bottom
  - Mounting bolts (typical)
  - A 3/8" x 5" sq. St. pole
  - P101-3 Unistrut (columnless)

- **Surface Mounted Panel/Terminal Board Installation Detail**

**Lighting Control System Panel "H1"**

- Not to scale

**Panel "H1" Lighting Contactors**

- Not to scale

**Lighting Control System Detail**

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**Delphé-Gerdes Engineering, Inc.**

365 S. 50th St. Vernon, Cali. 90058

Tel. (323) 581-2625 Fax (323) 581-7235

**California Polytechnic State University**

San Luis Obispo, CA
REFERENCE NOTES

1. INSTALL 1/2" GREY AND 1/2" COPPER U/PVC PIPE TO SERVICE PANEL AS SHOWN ON PLAN.
2. INSTALL 1/2" GREY AND 1/2" COPPER CONDUIT U/PVC PIPE TO SERVICE PANEL AS SHOWN ON PLAN.
3. PROVIDE REQUIRED FUTURING FOR SERVICE PANEL CONNECTION TO 1/2" GREY CONDUIT.
4. INSTALL 1/2" GREY STUD W/2" SCREW TO SERVICE PANEL AS SHOWN ON PLAN.
5. INSTALL 1/2" GREY AND 1/2" COPPER SERVICE PANEL CONNECTOR TO SERVICE PANEL AS SHOWN ON PLAN.
6. PROVIDE REQUIRED FUTURING FOR SERVICE PANEL CONNECTION TO 1/2" GREY CONDUIT.
7. INSTALL 1/2" GREY AND 1/2" COPPER SERVICE PANEL CONNECTOR TO SERVICE PANEL AS SHOWN ON PLAN.
8. PROVIDE REQUIRED FUTURING FOR SERVICE PANEL CONNECTION TO 1/2" GREY CONDUIT.
9. INSTALL 1/2" GREY AND 1/2" COPPER SERVICE PANEL CONNECTOR TO SERVICE PANEL AS SHOWN ON PLAN.
10. PROVIDE REQUIRED FUTURING FOR SERVICE PANEL CONNECTION TO 1/2" GREY CONDUIT.

PARTIAL SINGLE LINE DIAGRAM

ELECTRICAL SITE PLAN

SCALE: 1" = 40' - 0"