



Electric Vehicle (EV) Meter Submittal Checklist

Lodi Electric Utility (LEU)

1331 S. Ham Ln. Lodi, CA. 95242, 209.333.6762

All EV installations require pre-approval from LEU prior to obtaining a building permit from the City of Lodi's Community Development Department. Incomplete submittals will not be accepted.

CUSTOMER INFORMATION

Name: _____
 Installation Addr: _____
 Ph.: _____
 Email: _____
 Customer Type
 (Circle one): RESIDENTIAL / COMMERCIAL

CONTRACTOR INFORMATION

Name: _____
 Address: _____
 Ph.: _____
 Email: _____

DOCUMENTS ATTACHED (PLEASE INDICATE VIA CHECK):

- Attached: Two sets of elec. drawings (including: 1-line, 3-line, metering & panel layout, site-plan showing equip. location).
- Attached: Service & Meter Application.
- Panel-upgrade permit #: _____ (if applicable; otherwise, write "none" or "N/A"). **Note: A separate permit is required to change-out/upgrade an electrical service panel. If work is being done to a main-panel or if the Utility disconnects power, a signed final-inspection of the main-panel from the Building Department is required before the Utility will reconnect power.**

I have fully and accurately completed and attached each of the above (omitted check-marks and mistakes in submittals will result in significant delays to your project).

Applicant's Signature: _____ Date: _____

Submit completed documents to: Lodi Electric Utility at 1331 S. Ham Ln. Lodi, CA. 95242, Ph.: 209. 333.6762.

FOR LEU USE ONLY:

- | | | |
|--|--|-------------|
| 1. Received by LEU staffer: | _____ | Date: _____ |
| 2. Assigned to Eng. staffer: | _____ | Date: _____ |
| 3. Circle one: | <u>PRE-APPROVED / DENIED</u> Please provide notes below if denied | Date: _____ |
| 4. Applicant notified by: | _____ | Date: _____ |
| 5. Conveyed to Building Dept. staffer: | _____ | Date: _____ |

Notes: _____



Service and Meter Application Load/Photovoltaic Information Sheet

Please complete a separate sheet for each service entrance panel.

Project Name: _____

Electrical Contact: _____

Site Address: _____

Title: _____

Location: _____

Phone: _____

Application:

- | | | |
|---|--|--|
| <input type="checkbox"/> New Construction _____ Sq. Ft. | <input type="checkbox"/> Residential _____ Sq. Ft. | <input type="checkbox"/> Overhead Service |
| <input type="checkbox"/> Building Addition _____ Sq. Ft. | <input type="checkbox"/> Commercial _____ Sq. Ft. | <input type="checkbox"/> Underground Service |
| <input type="checkbox"/> Relocating Existing Service Entrance | <input type="checkbox"/> Photovoltaic System | <input type="checkbox"/> EV Charge Meter |

Service Voltage (check one):

- | | | |
|---|--|---------------------------------------|
| <input type="checkbox"/> 120/240V 1-phase, 3-wire | <input type="checkbox"/> 277/480V 3-phase, 4-wire | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> 120/240V 3-phase, 4-wire | <input type="checkbox"/> 480V 3-phase, 3-wire (<i>Ungrounded—requires ground detection equip.</i>) | |
| <input type="checkbox"/> 120/208V 3-phase, 4-wire | <input type="checkbox"/> EV Rapid Charger (<i>EV charger station voltage must match main service voltage.</i>) | |

Timing:

Date of Ground Breaking (est.): _____

Date to Final Grade (est.): _____

Date to Energize: _____

Hours of Operation Per Day: 8 12 16 24

Service Disconnect:

Size (amps): _____

Switch Rating (percentage): _____

Total Connected Load Information:

| (KW or HP) | Description | Connected Load: | |
|-----------------------|-------------|-----------------|---------|
| | | 1-phase | 3-phase |
| Lighting: | | | |
| HVAC: | | | |
| Receptacle: | | | |
| Process Heat: | | | |
| Water Heat: | | | |
| Space Heat: | | | |
| Motors*: | | | |
| Welders**: | | | |
| EV Charge Service***: | | | |
| TOTAL LOAD | | | |

*Motor Load Detail included above:

| Description | Quantity | Size (HP) | Efficiency Rating | Phase / Voltage | Nema Code | Starts Per Hr. or Day | Starting Amps | Use |
|-------------|----------|-----------|-------------------|-----------------|-----------|-----------------------|---------------|-----|
| | | | | | | | | |
| | | | | | | | | |

**Welder Detail included above:

| Description | Quantity | Size (kVA) | Type | Max. Inst. Demand | P.F. at Peak | Welds Per Minute | Cycles Per Weld | Hours Per Day Use |
|-------------|----------|------------|------|-------------------|--------------|------------------|-----------------|-------------------|
| | | | | | | | | |
| | | | | | | | | |

***EV Vehicle Detail:

| Make | Model | Year | Mfg. Rated Connected Load | Comments |
|------|-------|------|---------------------------|----------|
| | | | | |
| | | | | |

Photovoltaic System:

| Equipment | Manufacturer | Model No. | Quantity | STC Rating | PTC Rating | Efficiency Rating |
|----------------|--------------|-----------|----------|------------|------------|-------------------|
| Panels/Modules | | | | | | N/A |
| Inverter | | | | N/A | N/A | |



Service and Meter Application Sequence of Events

Applying for a new or modified electrical service:

The City of Lodi Electrical Utility (LEU) wants your request to be handled in a timely, efficient manner. In order for this to happen smoothly, we will need some important information from you. Please complete the attached load information sheet and submit it with your building permit request. The more accurate your information, the better we can provide the service you need. If you have any questions regarding this form please contact LEU at (209) 333-6762. Information about LEU and its policies and regulations can be found on our website at www.lodielectric.com.

Fees:

General: Community Development will collect all building permit fees. At the time of application, the Engineering Department will estimate your "cost to connect" and you will be billed before work starts. Upon receipt of payment, the work will be scheduled. At the end of the job, actual costs incurred will be calculated, compared to the estimate, and your bill will be reconciled.

Residential: LEU will charge only the actual cost to connect your panel to our existing system. In the case of a subdivision, the entire subdivision will be handled as a commercial development.

Commercial Development: The developer is responsible for the entire cost of any new development. This includes the cost of the installation of all facilities that must be installed on-site for that development and those substructures and facilities that will need to be installed at that time for any future development. Typically that would mean additional empty conduit runs and/or vaults to serve adjacent properties.

Development Impact Fee: Development Impact Fees will be assessed for each project, based on the voltage, amperage and quantity of your panel(s). Please refer to the City of Lodi Municipal Code Sec.: 15.64.060 for full details.

Setting Your Meter:

Two things will have to happen before we can set your meter. First you must obtain a final inspection from the Building Department. An inspection can be scheduled by calling (209) 333-6716. Second, you must be signed up with the Finance Department for your new service. Once you have a signed final inspection, contact Billing Services at (209) 333-6717 to arrange for an electric meter set.

Customer/Contractor Signature: _____ Phone: _____

Building/Project Address: _____

Date: _____

GENERAL NOTES:

1. EV METER SHALL BE MOUNTED 10' (MAX) FROM SERVICE ENTRANCE PANEL.
2. REQUIRED FUSED LOCKABLE AC DISCONNECT TO BE ACCESSIBLE TO CITY OF LODI AT ALL TIMES. AC DISCONNECT SHALL BE DOUBLE POLE, SINGLE THROW, SIEMANS HNF 361 RPV6 OR APPROVED EQUAL.
3. ALL ELECTRICAL CONSTRUCTION MUST MEET CITY OF LODI MUNICIPAL CODES, NFPA, AND CALIFORNIA ELECTRIC CODE BOOK REQUIREMENTS.
4. ALL COMPONENTS SHOWN SHALL BE UL LISTED AND RATED FOR THE FULL LOAD THEY SERVE.
5. ALL COMPONENTS SHOWN MUST BE SEALABLE BY UTILITY.
6. NO LB-STYLE BENDS MAY BE USED.
7. ALL GUTTERS SHALL COME EQUIPPED WITH TERMINATING PROVISIONS, READY TO LAND WIRE.
8. ALL METER-CENTERS SHALL BE INSTALLED BETWEEN A HEIGHT OF 48 - 75".
9. WHERE A "DUAL-FEED" MAIN-PANEL IS IN USE, THE UNUSED CONNECTION SHALL BE THE PREFERRED SOURCE FOR THE EV METER.

Drawing name: M:\DATA\CADStandards\Sac\0942\0245.dwg Plotted: Oct 30, 2014 - 3:56pm

| | | | | | | |
|--|-------|----------|-----------|---|--------------|----------|
|  CITY OF LODI ELECTRIC UTILITY DEPARTMENT | | | | ENGINEERING STANDARD EV METERING GENERAL NOTES | | |
| 10/23/14 | RT | TC | <i>HS</i> | <i>[Signature]</i> | SHEET 1 OF 7 | 942 0245 |
| DATE | DRAWN | DESIGNED | CHECKED | APPROVAL | REVISION | |

EV METERING:

EV Metering will be provided by the City of Lodi in accordance with the established Rules and Regulations. After the customer has paid the appropriate fee, the City will set an EV Meter rated for the voltage supplied. Billing will be in accordance with the established City of Lodi Electric Rate Schedule.

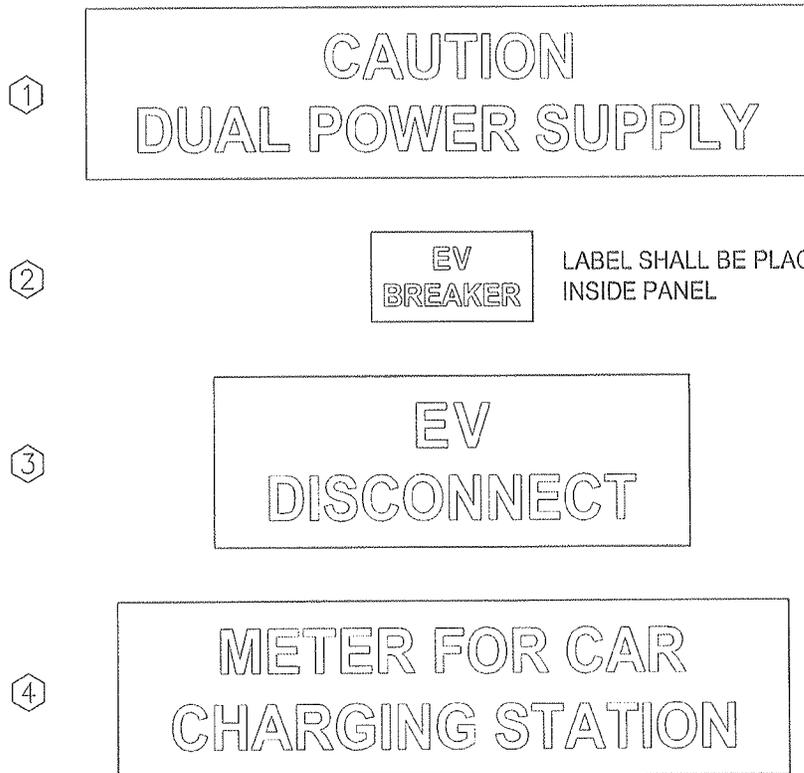
EV BI-DIRECTIONAL CHARGING:

Means shall be provided such that, upon loss of voltage from the utility, energy cannot be back fed through the electrical vehicle and the supply equipment to the premises wiring system. Equipment shall not be capable of bi-directional power feed.

EV LABELING:

EV systems must be labeled in accordance with the requirements of this standard. All labels shall be affixed in a permanent manner appropriate to the installed device.

LABELS SHOWN AT MINIMUM SIZE

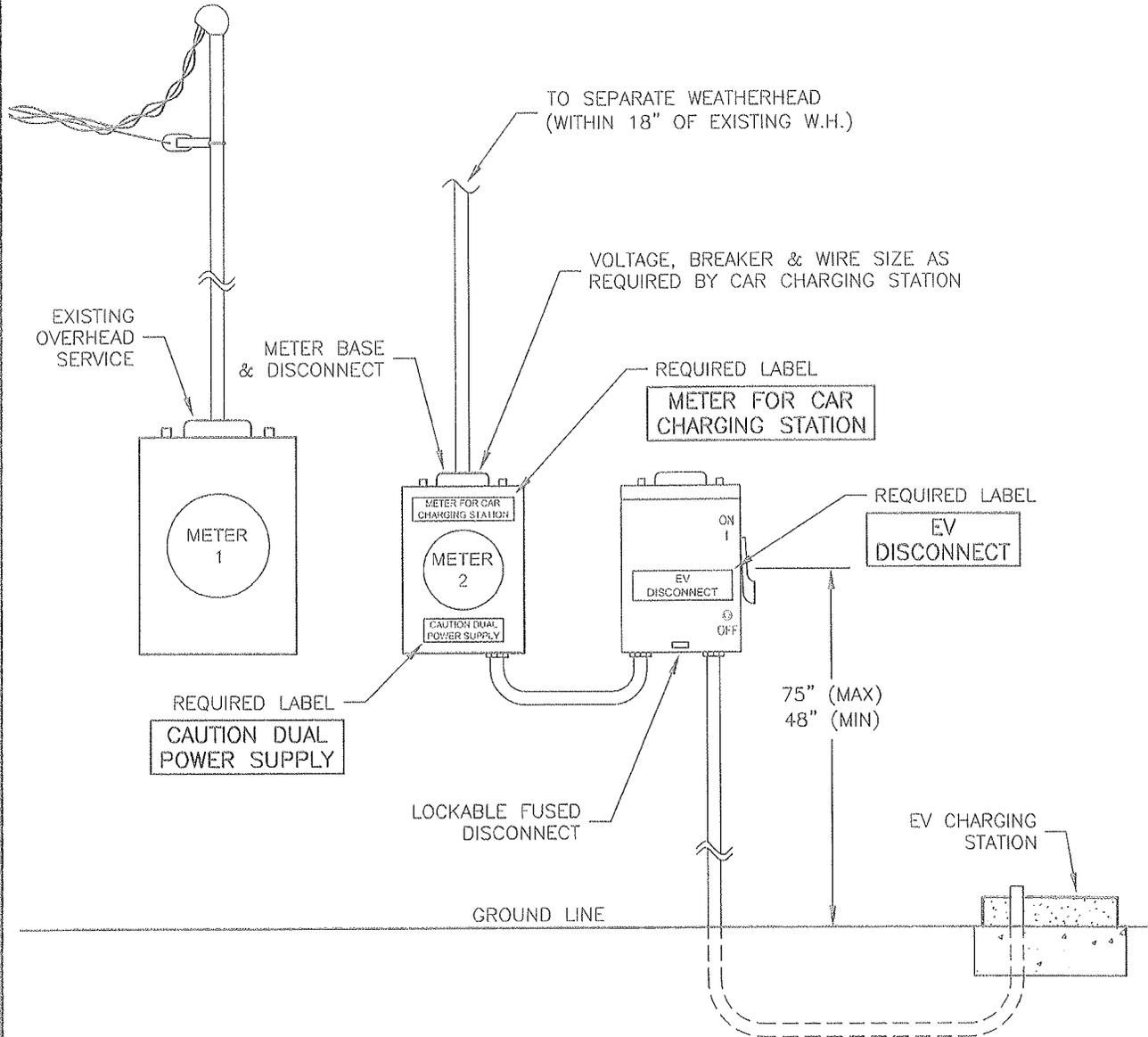


NOTES:

1. LABELS SHALL BE MADE OF RED LAMICOID/PHENOLIC MATERIAL WITH ENGRAVED WHITE LETTERS.
2. "EV BREAKER" LETTERS (PLACED INSIDE PANEL) TO BE 1/8" MINIMUM IN HEIGHT, ALL OTHER LETTERING TO BE 1/4" MINIMUM IN HEIGHT.

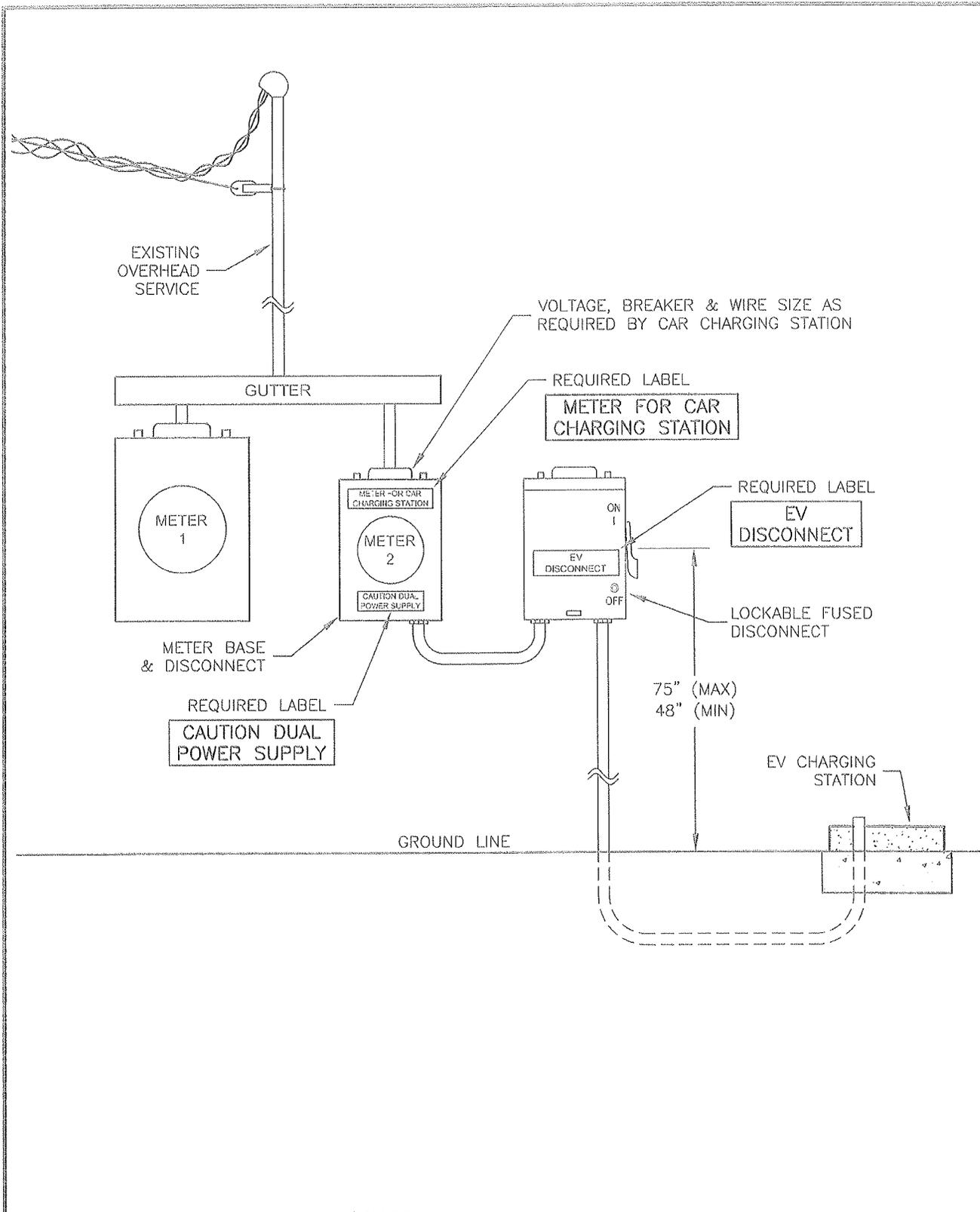
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|--|-------|----------|-----------|--|--------------|----------|
|  CITY OF LODI ELECTRIC UTILITY DEPARTMENT | | | | ENGINEERING STANDARD EV METERING LABEL SPECIFICATIONS | | |
| 10/23/14 | RT | TC | <i>HZ</i> | <i>[Signature]</i> | SHEET 2 OF 7 | 942 0245 |
| DATE | DRAWN | DESIGNED | CHECKED | APPROVAL | REVISION | |



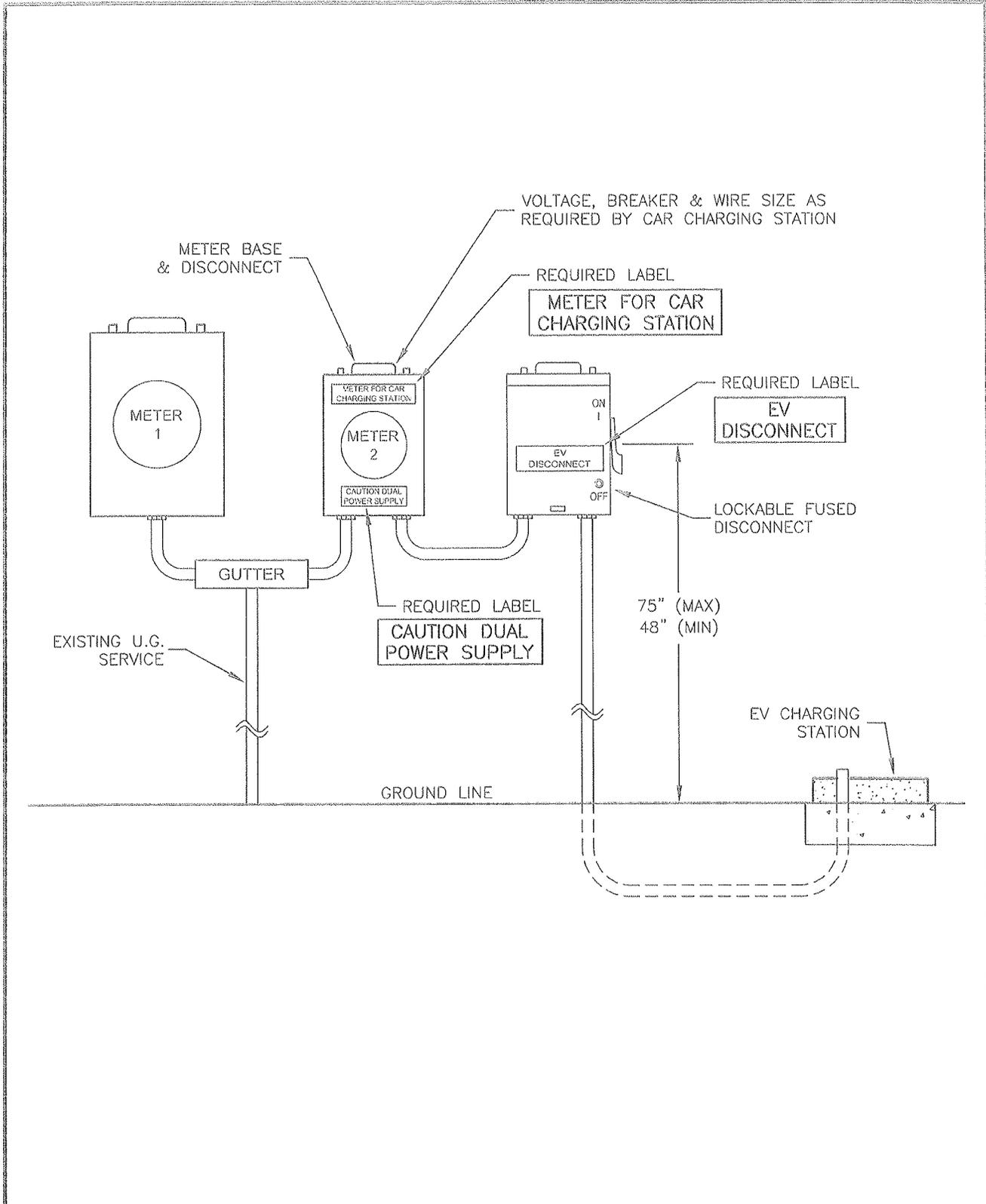
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| | | | | | | |
|--|-------|----------|-----------|---|--------------|-----------------|
|  CITY OF LODI ELECTRIC UTILITY DEPARTMENT | | | | ENGINEERING STANDARD EV METERING OVERHEAD OPTION 1 | | |
| 10/23/14 | RT | TC | <i>RT</i> | <i>[Signature]</i> | SHEET 3 OF 7 | 942 0245 |
| DATE | DRAWN | DESIGNED | CHECKED | APPROVAL | REVISION | |



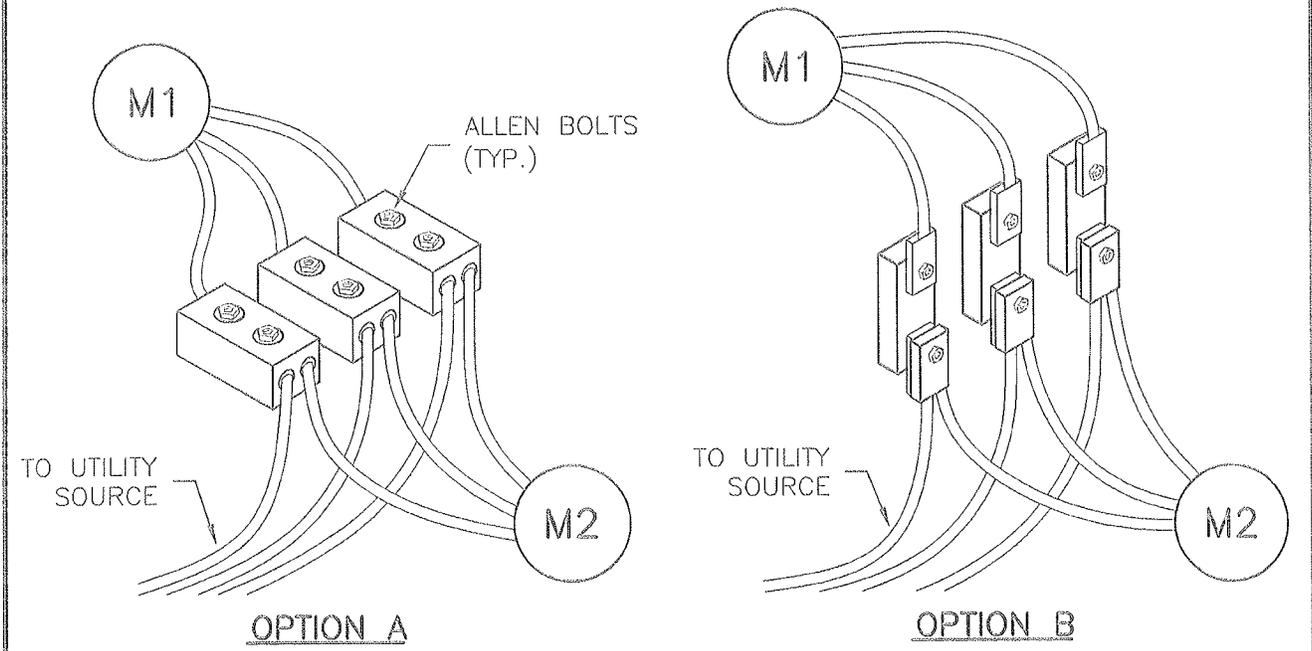
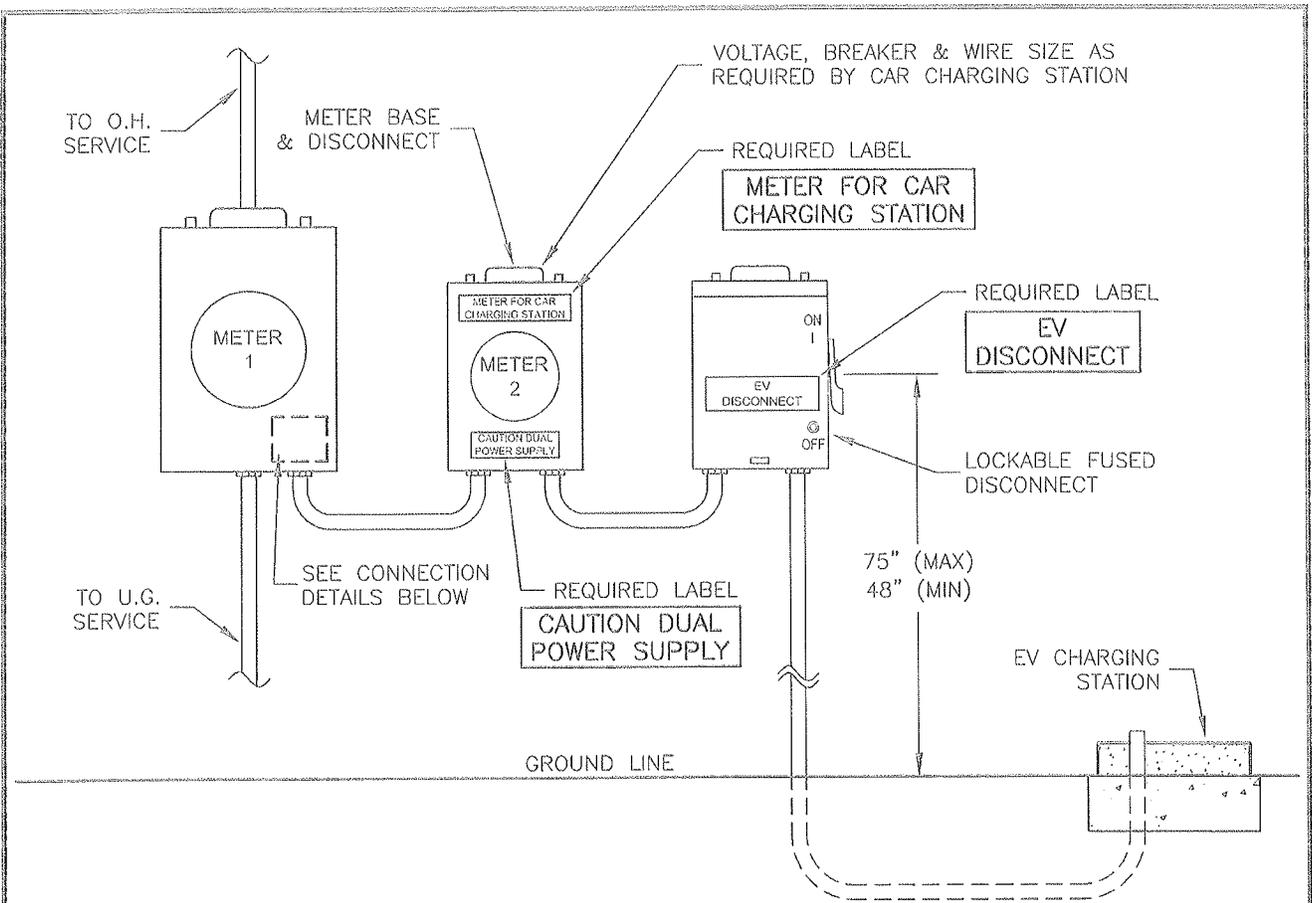
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| | | | | | | |
|--|-------|----------|-----------|----------------------|---|----------|
|  CITY OF LODI ELECTRIC UTILITY DEPARTMENT | | | | | ENGINEERING STANDARD EV METERING OVERHEAD OPTION 2 | |
| 10/23/14 | RT | TC | <i>H3</i> | <i>Mark Sabarwal</i> | SHEET 4 OF 7 | 942 0245 |
| DATE | DRAWN | DESIGNED | CHECKED | APPROVAL | REVISION | |



Drawn name: M:\DATA\CAD\Standards\Spec\9942\0245.dwg Plotted: Oct 30, 2014 - 9:06am

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|--|-------|----------|-----------|--|--------------|----------|
|  CITY OF LODI ELECTRIC UTILITY DEPARTMENT | | | | ENGINEERING STANDARD EV METERING UNDERGROUND OPTION | | |
| 10/23/14 | RT | TC | <i>HS</i> | <i>[Signature]</i> | SHEET 5 OF 7 | 942 0245 |
| DATE | DRAWN | DESIGNED | CHECKED | APPROVAL | REVISION | |

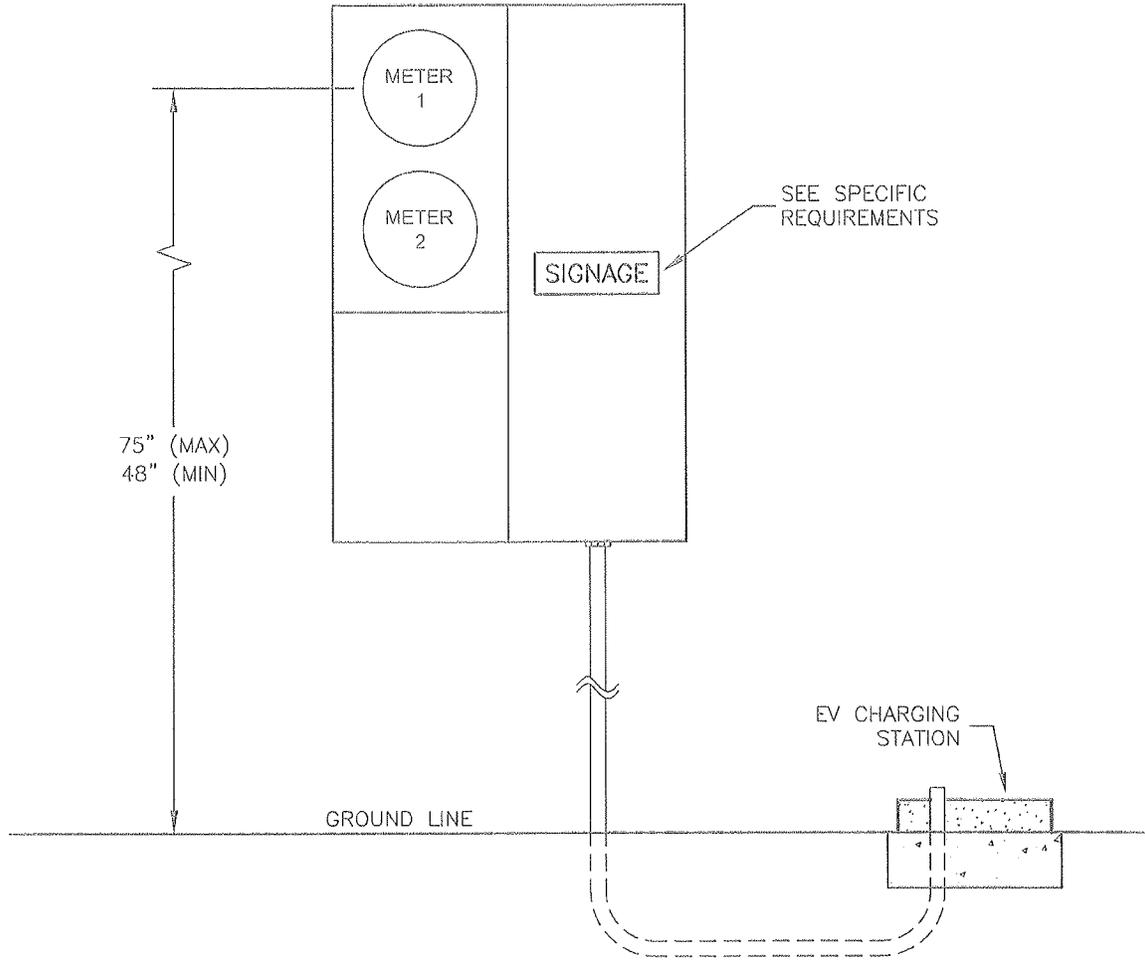


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CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

ENGINEERING STANDARD
EV METERING
OVERHEAD/UNDERGROUND OPTION

| | | | | | | |
|----------|-------|----------|-----------|--------------------|--------------|----------|
| 10/23/14 | RT | TC | <i>HS</i> | <i>[Signature]</i> | SHEET 6 OF 7 | 942 0245 |
| DATE | DRAWN | DESIGNED | CHECKED | APPROVAL | REVISION | |



Drawing name: MADATA\CAD\Standards\Spec\942\0245.dwg Plotted: Oct 30, 2014 - 9:08am



CITY OF LODI
ELECTRIC UTILITY DEPARTMENT

ENGINEERING STANDARD
EV METERING
OVERHEAD/UNDERGROUND (NEW INSTALLATION)

| | | | | | |
|----------|-------|----------|-----------|--------------------|--------------|
| 10/23/14 | RT | TC | <i>HS</i> | <i>[Signature]</i> | SHEET 7 OF 7 |
| DATE | DRAWN | DESIGNED | CHECKED | APPROVAL | REVISION |

942 0245