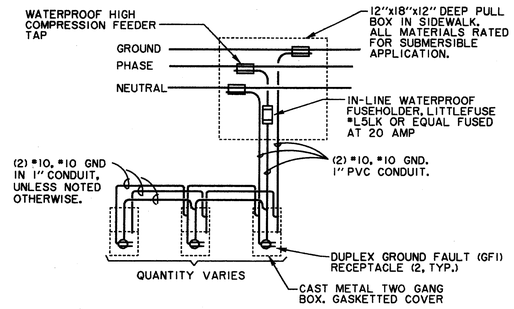
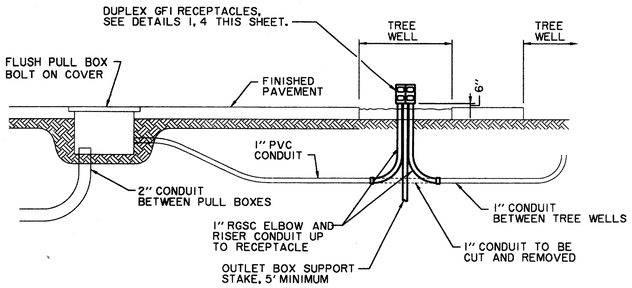
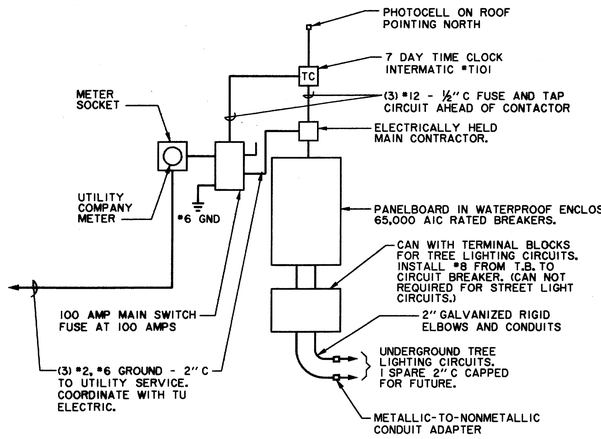



## ① TYPICAL TREE WELL POWER CIRCUIT
N.T.S.



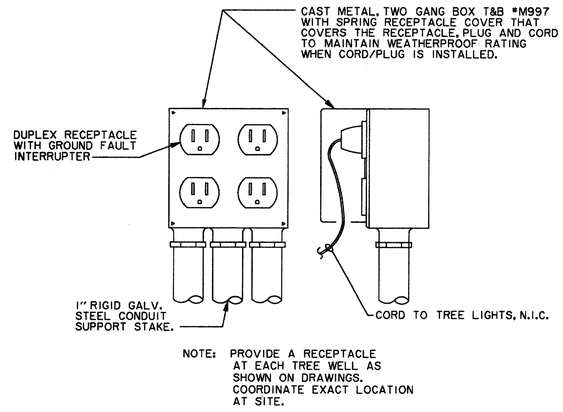

## ② TYPICAL TREE CIRCUIT CONDUIT INSTALLATION
N.T.S.




## ③ TYPICAL PANEL RISER DIAGRAM AT SERVICE POINTS J, K, M, N, & P
N.T.S.

NOTE:

1. PROVIDE ALL INSTALLATION HARDWARE INCLUDING UNISTRUT FRAMEWORK FOR SECURE INSTALLATION.
2. TERMINAL BLOCK CAN TO HAVE BLOCKS AND SPACE FOR MIN. OF 12 MORE CIRCUITS FOR FUTURE EXPANSION.
3. EXACT LOCATION OF PANEL TO BE DETERMINED AT PROJECT SITE.
4. SERIES RATING FOR CIRCUIT BREAKERS SHALL BE 65K AIC.
5. ENTIRE INSTALLATION TO BE RATED FOR OUTDOOR INSTALLATION. PANEL AND SWITCH SHALL HAVE PROVISIONS FOR LOCKING.
6. EXACT LOCATIONS OF EQUIPMENT SHALL BE DETERMINED AT THE PROJECT SITE.




NOTE: PROVIDE A RECEPTACLE AT EACH TREE WELL AS SHOWN ON DRAWINGS. COORDINATE EXACT LOCATION AT SITE.

## ④ GFI RECEPTACLE AT TREE WELL
N.T.S.

LIGHT FIXTURE SCHEDULE ⚠1

| TYPE | DESCRIPTION | LAMP | MANUFACTURER | CATALOGUE NO. | FINISH |
|---|---|---|---|---|---|
| A | CUSTOM STYLE | 175 MH | BEGA | 9801MH | BLACK |
| A-POLE | 15'-8" ROUND | | BEGA | 1508HR | BLACK |
| B | CUSTOM STYLE | 175 MH | BEGA | 9801MH | BLACK |
| B-POLE | 19'-8" ROUND | | BEGA | 1908HR | BLACK |
| C | CUSTOM STYLE | 175 MH | BEGA | 9801MH (2 PER POLE) | BLACK |
| C-POLE | 15'-8" ROUND | | BEGA | 1508HR | BLACK |
| D-POLE | 19'-8" ROUND W/ CABLE ATTACHMENT | | BEGA | SERIES 1908 WITHOUT HINGE OPTION | BLACK |

NOTES:

1. PROVIDE REINFORCED CONCRETE BASE, ANCHOR BOLTS AND REQUIRED ACCESSORIES.
2. BID SHALL BE BASED UPON THE ABOVE LISTED FIXTURES TO MATCH PHASE I FIXTURES.
3. PROVIDE MATCHING BASE COVER FOR EACH FIXTURE.
4. ALL FIXTURES ARE 240 VOLT AND REQUIRE DOUBLE FUSING.
⚠1 5. FIXTURES TYPE C TO BE INSTALLED 90° APART.
6. A CUSTOM HINGED POLE IS REQUIRED FOR FIXTURE TYPE A, B & C.
7. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

## GENERAL NOTES

| NUMBER | DESCRIPTION |
|---|---|
| 1 | THE TERM 'PROVIDE' SHALL MEAN FOR THE CONTRACTOR TO FURNISH AND INSTALL A COMPLETE OPERATING SYSTEM. |
| 2 | REFER TO PHASE I PUBLIC INFRASTRUCTURE DRAWINGS FOR ADDITIONAL INFORMATION ON TREE LIGHTING CONDUIT LOCATIONS. |

## KEY NOTES (SEE E2 AND E3)

| NUMBER | DESCRIPTION |
|---|---|
| ① | TU ELECTRIC TRANSFORMER YARD WITH SINGLE PHASE TRANSFORMER FOR STREET LIGHTING. VERIFY POINT OF CONNECTION WITH TU ELECTRIC. |
| ② | PROVIDE 120/240 VOLT, 1 PHASE, 3 WIRE, W/GND PANELBOARD WITH MAIN CONTACTOR. CONNECT TO ELECTRIC UTILITY AT DESIGNATED SERVICE POINTS. SEE DETAIL 3 ON SHEET E21. |
| ③ | STREET LIGHT FIXTURE TYPE A. INSTALL CONCRETE BASE, POLE, FIXTURE AND CONNECTIONS. REFER TO SHEET ST 13 FOR POLE BASE DETAIL. |
| ④ | CIRCUIT TO STREET LIGHTS OF 3 #8 - 2" C UNLESS NOTED OTHER WISE ON CIRCUIT SCHEDULE. |
| ⑤ | NOT USED ⚠ |
| ⑥ | ROUTE CIRCUITRY THROUGH CONDUITS AND PULL BOXES. MAKE SPLICE IN MAIN FEEDERS USING HIGH COMPRESSION SPLICE FITTING. PROVIDE INLINE FUSE PROTECTION AT EACH SPLICE. SEE DETAIL NO. 1 SHEET E21. |
| ⑦ | EXTEND CIRCUITRY IN PVC CONDUIT AND TERMINATE IN EACH TREE WELL. SEE DETAIL NO. 2 AND NO. 4 SHEET E21. |
| ⑧ | PHOTO ELECTRIC CELL(S) ON ROOF OF PARKING GARAGE FACING NORTH. |
| ⑨ | RECEPTACLE AT TREE WELL. REFER TO DETAIL 2 ON SHEET E21. |
| ⑩ | EXISTING PULL BOX. EXTEND 1" C WITH 3 #10 TO NEW TREE WELLS THIS PROJECT. CIRCUIT AS NOTED. |
| ⑪ | EXISTING TREE WELL EXTEND 1" C WITH 3 #10 TO NEW TREE WELL THIS PROJECT. |

## ELECTRICAL LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| ---------- | 2" CONDUIT FOR STREET LIGHTING CIRCUITS FROM PANELBOARD TO EACH PULL BOX AND TO EACH STREET LIGHT FIXTURE. 2" C FOR TREE LIGHTING CIRCUITS. |
| — — — - | 1" CONDUIT FOR TREE LIGHT BRANCH CIRCUITS BELOW GRADE FROM PULLBOX TO TREE WELLS. |
| □ | PULL BOX. |
| ▭ 11 | TREE WELL RECEPTACLE, CIRCUIT NO. AS NOTED. |
| (J1) | CONDUIT IDENTIFICATION FOR NEW MAIN FEEDERS. |
| J-2,4 | CIRCUIT NUMBERS FROM PANELS AT SERVICE POINTS INDICATED IN DRWG. E22. |
| ← | HOME RUN TO PANEL. PROVIDE CONDUIT AND WIRE FROM PULL BOX TO PANELBOARD. |
| ■ | STREET LIGHT FIXTURE TYPE 'A'. |
| ▼ | STREET LIGHT FIXTURE TYPE 'B' OR 'C'. |

## CIRCUIT SCHEDULE

| CONDUIT DESIGNATION | CIRCUIT NUMBERS | PANELBOARD | CIRCUIT BREAKER | CONDUCTORS |
|---|---|---|---|---|
| (J1) | J-2<br>J-4<br>J-6<br>J-8<br>J-10 | PANEL "J"<br>100 AMP M.C.B.<br>120/240 VOLT<br>1 PHASE, 3 WIRE<br>W/ GROUND<br>10-20A-1P C.B. | 20 AMP, 1 POLE<br>20 AMP, 1 POLE<br>20 AMP, 1 POLE<br>20 AMP, 1 POLE<br>20 AMP, 1 POLE | (2) #6<br>(2) #8<br>(2) #8<br>(2) #8<br>(2) #8<br>(2) #8 GROUND |
| (K1) | K1, 3<br>K5, 7<br>K9, 11<br>K13, 15 | PANEL "K"<br>100 AMP M.C.B.<br>120/240 VOLT<br>1 PHASE, 3 WIRE<br>W/ GROUND<br>10-20A-2P C.B. | 20 AMP, 2 POLE<br>20 AMP, 2 POLE<br>20 AMP, 2 POLE<br>20 AMP, 2 POLE | (2) #8<br>(2) #8<br>(2) #8<br>(2) #8<br>(1) #8 GROUND |
| (K2) | K-2, 4<br>K-6, 8 | | 20 AMP, 2 POLE<br>20 AMP, 2 POLE | (2) #10<br>(2) #10<br>(1) #10 GROUND |
| (M1) | M-1, 3<br>M-5, 7<br>M-9, 11<br>M-13, 15 | PANEL "M"<br>100 AMP M.C.B.<br>120/240 VOLT<br>1 PHASE, 3 WIRE<br>W/ GROUND<br>10-20A-2P C.B. | 20 AMP, 2 POLE<br>20 AMP, 2 POLE<br>20 AMP, 2 POLE<br>20 AMP, 2 POLE | (2) #8<br>(2) #8 ⚠1<br>(2) #8<br>(2) #8<br>(1) #8 GROUND |
| (N1) | N-1, 3<br>N-5, 7<br>N-9, 11 | PANEL "N"<br>100 AMP M.C.B.<br>120/240 VOLT<br>1 PHASE, 3 WIRE<br>W/ GROUND<br>6-20A-2P C.B. | 20 AMP, 2 POLE<br>20 AMP, 2 POLE<br>20 AMP, 2 POLE | (2) #8<br>(2) #8<br>(2) #10<br>(1) #8 GROUND |
| (P1) | P-2<br>P-4<br>P-6 | PANEL "P"<br>100 AMP M.C.B.<br>120/240 VOLT<br>1 PHASE, 3 WIRE<br>W/ GROUND<br>6-20A-1P C.B. | 20 AMP, 1 POLE<br>20 AMP, 1 POLE<br>20 AMP, 1 POLE | (2) #6 ⚠1<br>(2) #6<br>(2) #6<br>(1) #6 GROUND |

NOTES TO CIRCUIT SCHEDULE:

1. MAINTAIN ABOVE CONDUCTORS THROUGHOUT ALL PULL BOXES.
2. CONDUIT DESIGNATIONS ABOVE ARE ALL 2" CONDUITS.
3. DESIGN IS BASED UPON MAXIMUM OF 2 AMPS PER TREE AND 5% VOLTAGE DROP.

GENERAL ELECTRICAL NOTES FOR THIS PROJECT WHICH APPLY TO DRAWINGS E21 THROUGH E23:

1. LOCATIONS OF ALL LIGHT FIXTURES, PULL BOXES AND ROUTING OF CONDUITS SHALL BE IDENTIFIED ON THE SITE BY STAKES AND PAINT PRIOR TO ANY EXCAVATION. REQUIREMENTS FOR CONDUIT ROUTING ARE PROVIDED ON DRAWINGS AND SPECIFICATIONS. OWNER WILL REVIEW AT THE SITE AND PROVIDE DIRECTIONS ON FIELD ADJUSTMENTS OF UP TO 10 FOOT FROM LOCATIONS SHOWN ON THE DRAWINGS.
2. CONTRACTOR SHALL COORDINATE STORM WATER, WASTEWATER, WATER, IRRIGATION AND ELECTRICAL CONDUIT TRENCHING AND INSTALLATION TO MINIMIZE THE DISTURBANCE OF EXISTING TREE ROOTS.
3. ALL PULL BOXES ARE 12" X 18" X 12" DEEP CONCRETE BOX WITH BOLT ON CONCRETE COVER SIMILAR TO T.U. SUBSURFACE SECONDARY BOX. INSTALL CONDUITS NEAR CORNER OF BOX TO ALLOW CONDUCTORS TO LOOP THROUGH BOX.

RECORD DRAWING

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GERALD W. INZER, P.E. 56258 ON 2/25/98

STATE OF TEXAS · GERALD W. INZER · 56258 · REGISTERED PROFESSIONAL ENGINEER · 2/25/98

| DATE | DESCRIPTION | REF NO. |
|---|---|---|
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| | | |
| 2/25/98 | LIGHT FIXTURE SCHEDULE AND M1, P1 | ⚠1 |
| | CIRCUIT REVISIONS | |
| 10/3/97 | ISSUED FOR CONSTRUCTION | N/A |
| 7/14/97 | ISSUED FOR BID | N/A |

# TREE LIGHTING POWER PLAN

## ADDISON CIRCLE

PHASE II PUBLIC INFRASTRUCTURE

TOWN OF ADDISON, TEXAS

Huitt-Zollars, Inc./Engineering/Architecture
Dallas, Fort Worth, Houston, El Paso, Phoenix, Tustin, Ontario

| DESIGN | DRAWN | APPR. | SCALE | DATE | PROJECT NO. | NO. |
|---|---|---|---|---|---|---|
| HZI | HZI | GWI | N.T.S. | OCT. 97 | 01-1822-21 | E21 |

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