

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	19J-01-02	2004	38	40

T.M.K.: 3RD DIV. 2-8-16:20

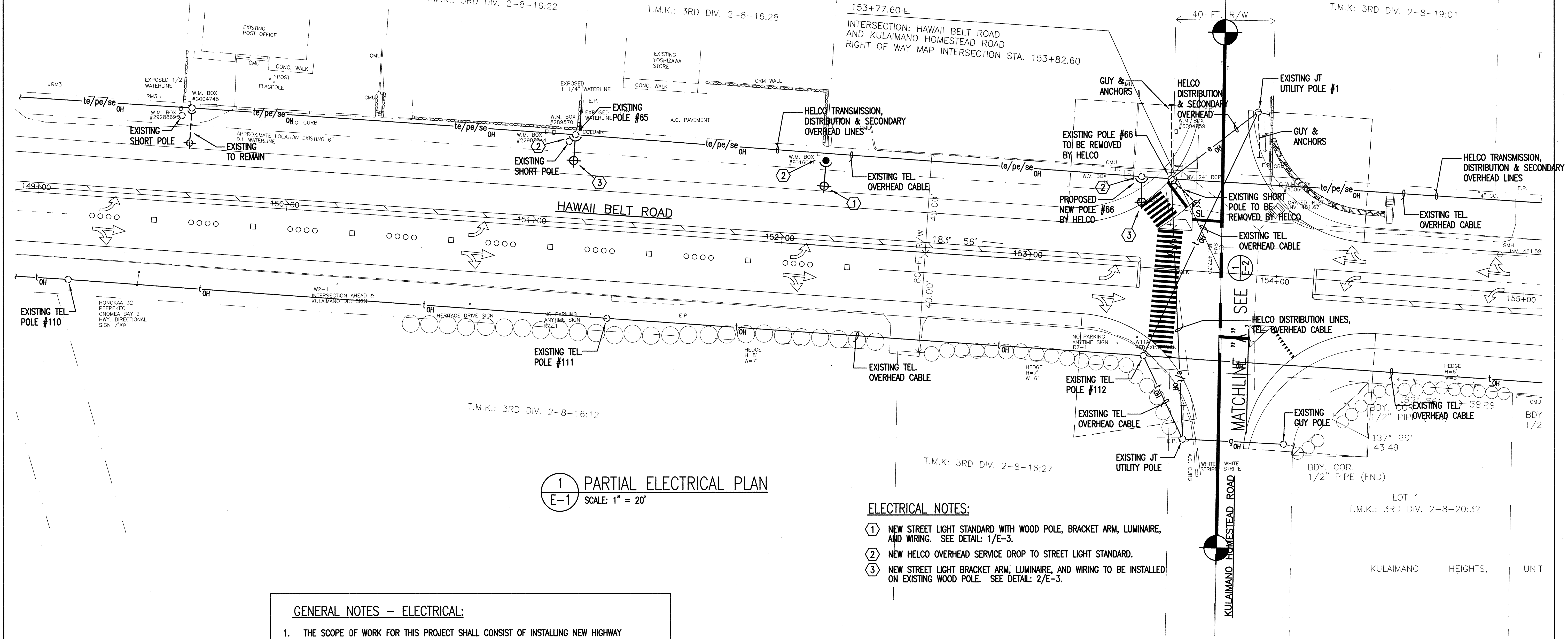
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T.M.K.: 3RD DIV. 2-8-16:22

T.M.K.: 3RD DIV. 2-8-16:28

T.M.K.: 3RD DIV. 2-8-16:24

TRUE NORTH
SCALE:
1 IN = 20 FT
T.M.K.: 3RD DIV. 2-8-19:01



1 PARTIAL ELECTRICAL PLAN
E-1 SCALE: 1" = 20'

- ELECTRICAL NOTES:
- 1 NEW STREET LIGHT STANDARD WITH WOOD POLE, BRACKET ARM, LUMINAIRE, AND WIRING. SEE DETAIL: 1/E-3.
 - 2 NEW HELCO OVERHEAD SERVICE DROP TO STREET LIGHT STANDARD.
 - 3 NEW STREET LIGHT BRACKET ARM, LUMINAIRE, AND WIRING TO BE INSTALLED ON EXISTING WOOD POLE. SEE DETAIL: 2/E-3.

GENERAL NOTES - ELECTRICAL:

1. THE SCOPE OF WORK FOR THIS PROJECT SHALL CONSIST OF INSTALLING NEW HIGHWAY LIGHTING, INCLUDING WOOD POLES, METAL BRACKETS, LUMINAIRES AND WIRING.
2. THE CONTRACTOR IS REMINDED OF THE REQUIREMENTS OF SUBSECTION 108.01 - SUBLETTING OF CONTRACT, WHICH REQUIRES HIM TO PERFORM WORK ACCOUNTING TO NOT LESS THAN 50 PERCENT OF THE TOTAL CONTRACT COST LESS DEDUCTIBLE ITEMS. NON-COMPLIANCE WITH THIS SUBSECTION MAY BE GROUNDS FOR REJECTION OF BID.
3. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FOLLOWING SECTIONS OF THE SPECIAL PROVISIONS:
SUBSECTION 107.13 - PUBLIC CONVENIENCE AND SAFETY
SUBSECTION 107.21 - CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES.
4. ALL NECESSARY PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS OWN COST.
5. THE CONTRACTOR SHALL COMPLY WITH THE STATE OF HAWAII'S OCCUPATIONAL SAFETY AND HEALTH LAW (DOSH).
6. LOCATIONS OF EXISTING UNDERGROUND STRUCTURES AND UTILITIES SUCH AS PIPELINES, CONDUITS, CABLES, MANHOLES, MONUMENTS, AND STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. IT IS NOT THE INTENT OF THESE PLANS TO SHOW THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF EXISTING UTILITIES WITH THE RESPECTIVE OWNERS. EXISTING UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN COST.

ELECTRICAL SYMBOL LIST

EXISTING	NEW	DESCRIPTION
		STREET LIGHT STANDARD WITH BRACKET ARM, LUMINAIRE, AND WIRING ON WOOD POLE.
		WOOD POLE FOR STREET LIGHT.
		OVERHEAD ELECTRIC LINES.
		DETAIL INDICATOR UPPER HALF: DETAIL NUMBER. LOWER HALF: SHEET NUMBER, DETAIL LOCATION.
		NOTE INDICATOR.

E-1

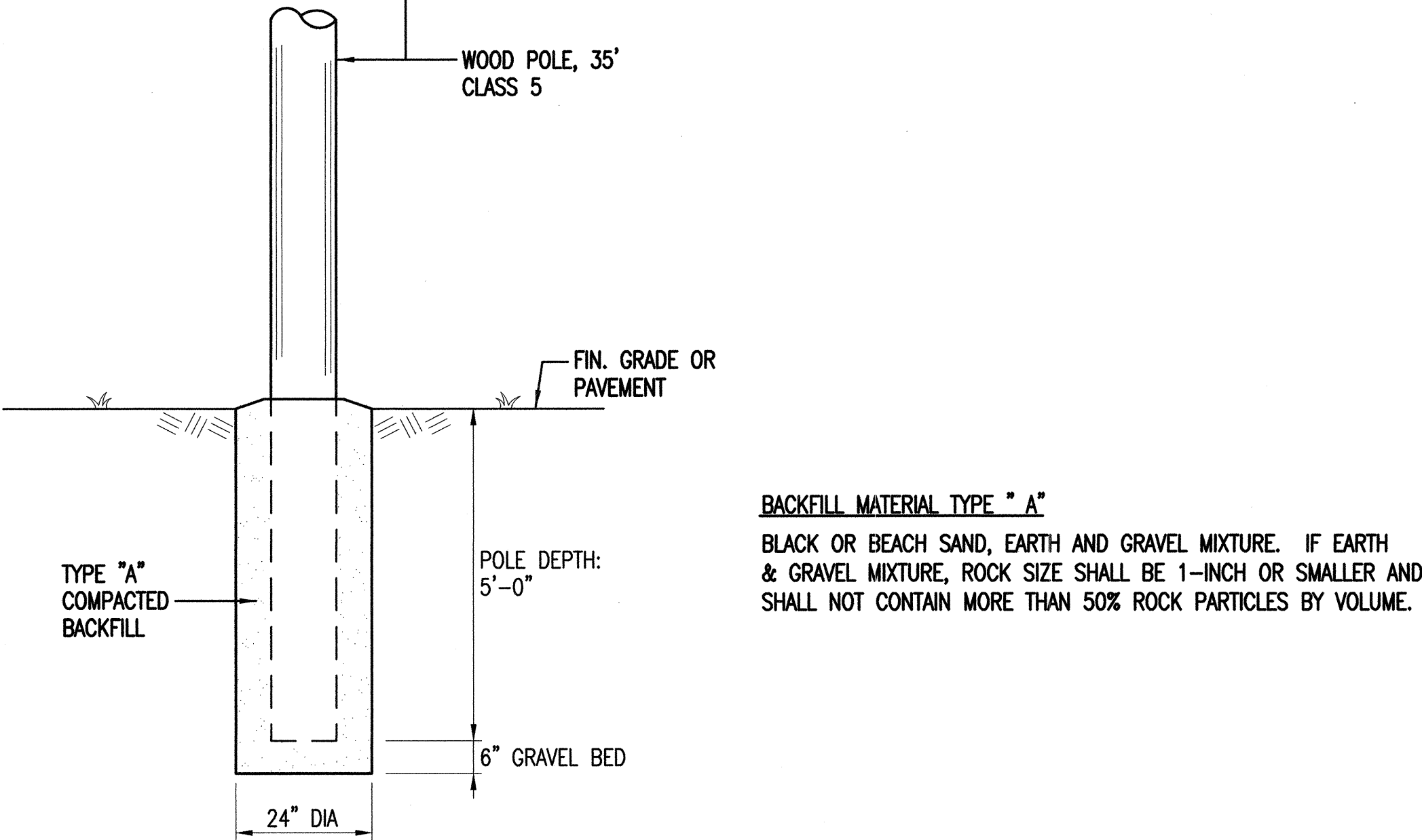
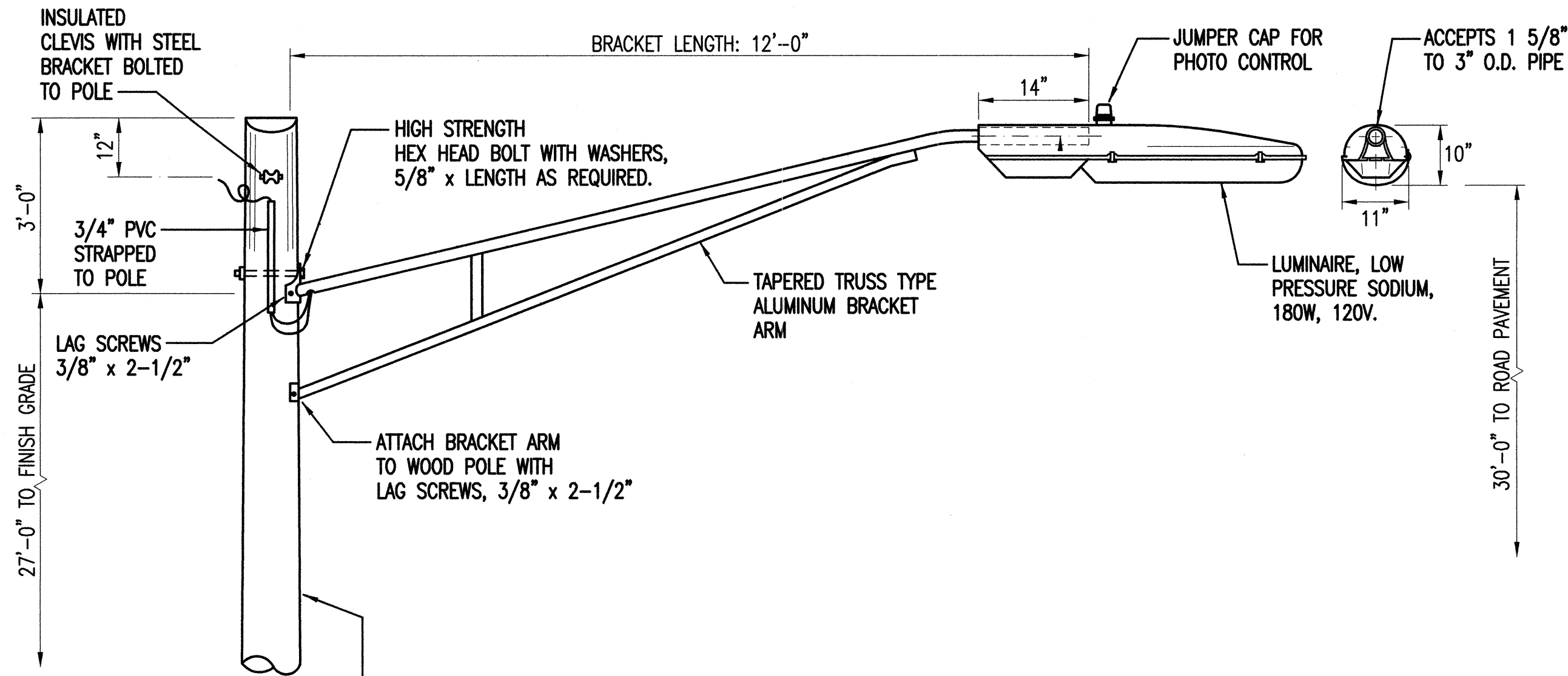
BRIAN T. ITOZAKI
LICENSED PROFESSIONAL ENGINEER
No. 9058-E
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
SIGNATURE
EXPIRATION DATE OF THE LICENSE: 04/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PARTIAL ELECTRICAL PLAN
Hawaii Belt Road
Traffic Operational Improvements
At Kulaimano Road
Project No. 19J-01-02
Scale: AS SHOWN DATE: DEC. 2003
SHEET No. 1 OF 3 SHEETS

GRAPHIC SCALE
0 10' 20' 40' 60'
SCALE: 1"=20'

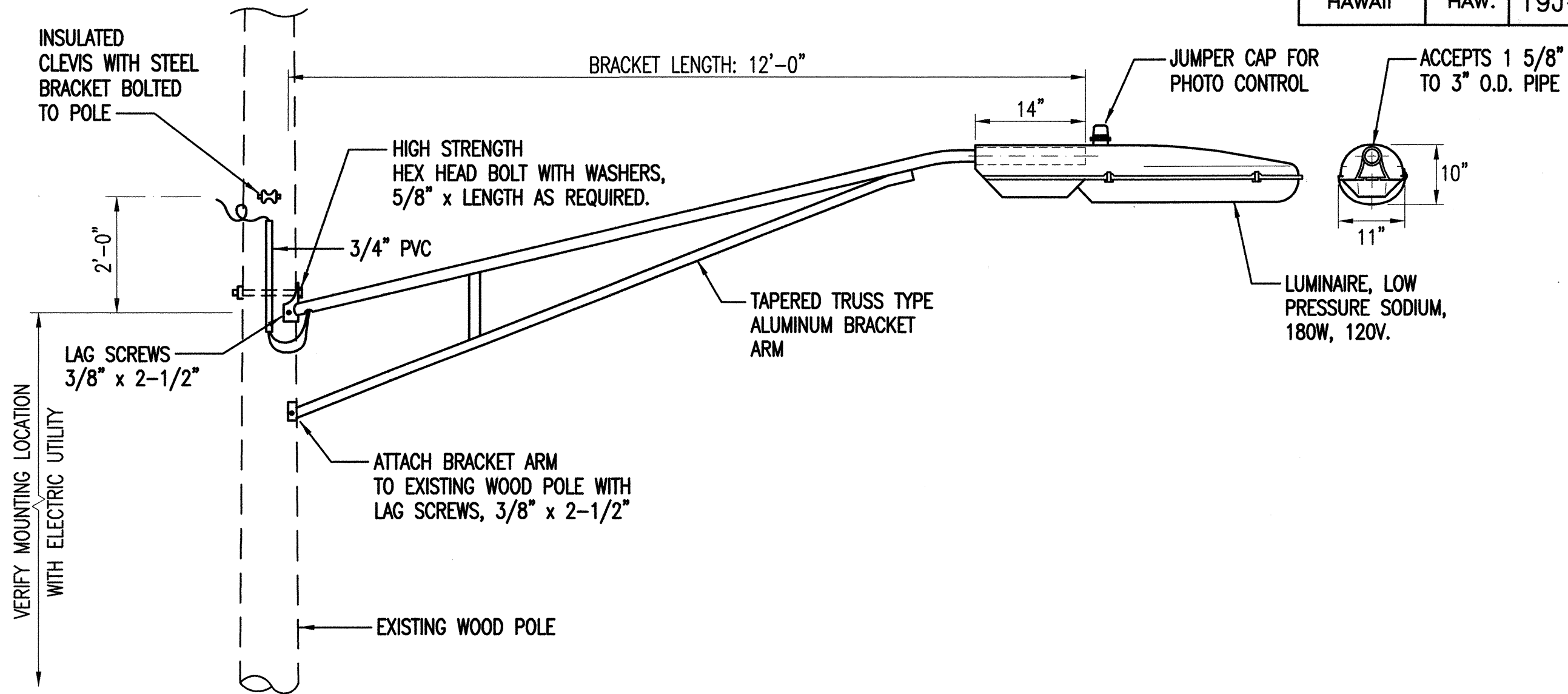
ORIGINAL SURVEY PLOTTED BY: DATE: _____
DRAWN BY: _____
CHECKED BY: _____
NOTE: _____
QUANTITIES BY: _____
CHECKED BY: _____
No. _____

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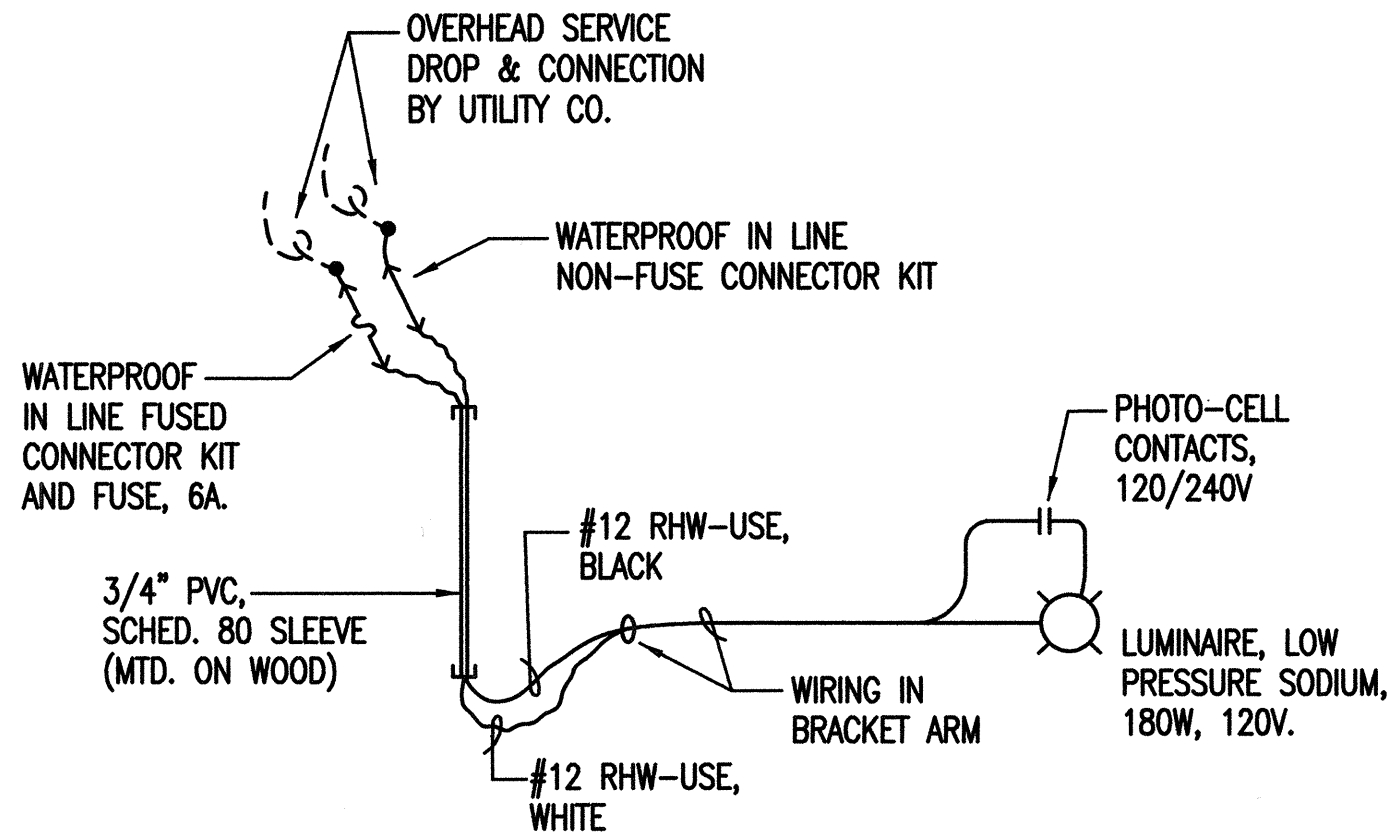


1
E-3
DETAIL - NEW LUMINAIRE ON NEW WOOD POLE
NOT TO SCALE

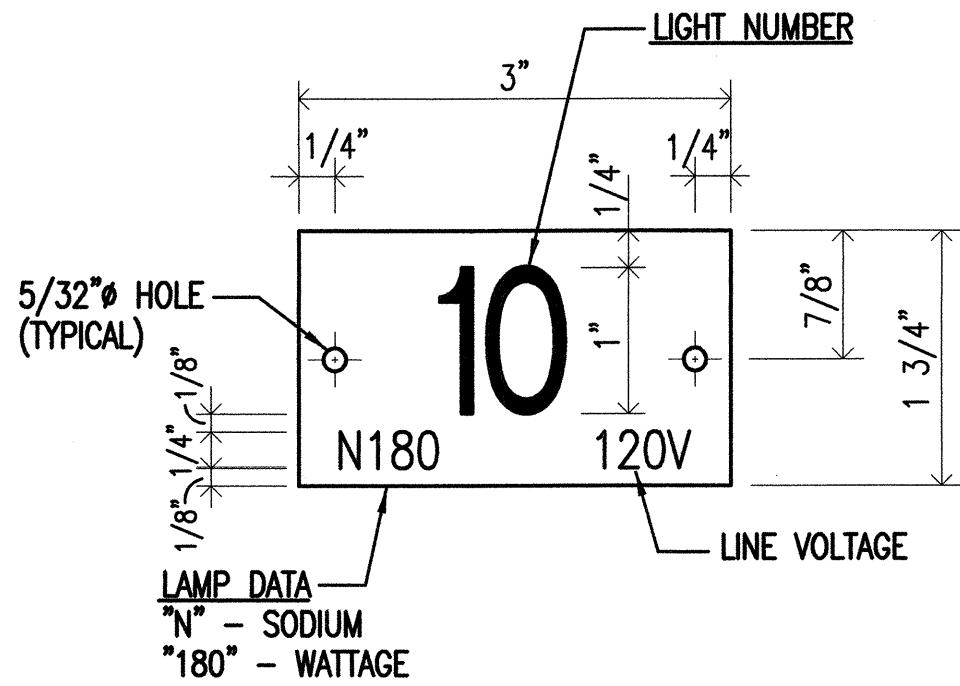
BACKFILL MATERIAL TYPE "A"
BLACK OR BEACH SAND, EARTH AND GRAVEL MIXTURE. IF EARTH & GRAVEL MIXTURE, ROCK SIZE SHALL BE 1-INCH OR SMALLER AND SHALL NOT CONTAIN MORE THAN 50% ROCK PARTICLES BY VOLUME.



2
E-3
DETAIL - NEW LUMINAIRE ON EXISTING WOOD POLE
NOT TO SCALE



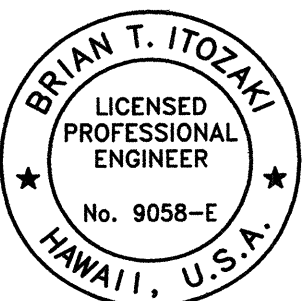
3
E-3
CONNECTION DIAGRAM
NOT TO SCALE



- NOTES:
- USE 2-PLY PLASTIC - BLACK, WHITE.
 - NUMBER SIZE SHALL BE 1" HIGH AND ENGRAVED 1" WIDE, WHITE IN COLOR (NUMBER AS REQUIRED).
 - NOMENCLATURE SHALL BE 1/4" HIGH AND ENGRAVED 1/32" WIDE, WHITE IN COLOR (WATTAGE AND VOLTAGE AS REQUIRED).
 - ATTACHED TO STEEL POLES WITH NO. 7 CADMIUM PLATED DRIVE SCREWS. (a) ATTACHED TO ALUMINUM POLES WITH NO. 7 ALUM. DRIVE SCREWS.
 - USE "N" FOR SODIUM LAMPS.

4
E-3
POLE IDENTIFICATION TAG
NOT TO SCALE

ORIGINAL SURVEY PLOTTED BY	DATE
PLAN DRAWN BY	
NOTES CHECKED BY	
QUANTITIES BY	
CHECKED BY	
No.	



THIS WORK WAS PREPARED BY ME
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAIL - LUMINAIRE
ON EXISTING/NEW WOOD POLE
Hawaii Belt Road
Traffic Operational Improvements
At Kulaimano Road
Project No. 19J-01-02

Scale: AS SHOWN DATE: DEC. 2003
SHEET No. 3 OF 3 SHEETS

E-3