STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION
DESIGN AND CONSTRUCTION DIVISION

JUNEAU, ALASKA

SOUTHEAST REGION
TRAFFIC SIGNAL SYSTEMS
EMERGENCY POWER

FHWA NO. STPG-000S(158)
PROJECT NO. 71625

"AS-BUILT" PLANS

Contractor: Cave Electric, Inc.
Project Engr.: Soc Kreuzenstein
Begin Const.: September 9, 1995
End Const.: July 1, 1996

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION DESIGN SECTION

APPROVED
Regional Reconstruction Engineer

APPROVED
Director, S.C. Region Design & Construction

AS-BUILT

DATE
APRIL, 1995

71625
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GENERAL NOTES

1. LOCATIONS SHOWN FOR THE EMERGENCY BACKUP POWER SUPPLIES ARE APPROXIMATE AND MAY BE ADJUSTED TO FIT EXISTING SITE CONDITIONS AS APPROVED BY THE ENGINEER.

2. CONDUIT SIZES SHOWN ARE APPROXIMATE AND SHALL BE ADJUSTED IF THEY CONFLICT WITH THE POWER SUPPLY MANUFACTURER'S RECOMMENDATION.

3. NEW J-BOXES SHALL BE CONSTRUCTED OF POLYMER CONCRETE AND REINFORCED WITH A HEAVY-WEAVE FIBERGLASS. COVERS SHALL BE STEEL.

4. ALL EMERGENCY POWER SUPPLIES SHALL BE PROGRAMMED TO OPERATIONAL MODE A (FULL STANDBY).

5. ALL BATTERIES SHALL HAVE CABINET HEATERS.


DETAIL

TYPICAL EMERGENCY BACKUP POWER SUPPLY
INSTALL TYPE I-A JUNCTION BOX

EXISTING CONDUIT IN 6" CASING

EXISTING TRAFFIC SIGNAL

LIGHTING CIRCUIT TO REMAIN IN PLACE AND OPERATIONAL

ABANDON EXISTING TRAFFIC SIGNAL POWER SUPPLY CIRCUIT

INSTALL NEW 2 INCH RMC AT EDGE OF PAVEMENT. (APPROX. 180 FEET)
INTERCEPT AND CONNECT TO EXISTING CONDUIT (PVC) WITH JUNCTION BOX
AT TRAFFIC SIGNAL CABINET. INSTALL NEW CONDUCTORS (4 RED, 2-NO. 14 AWG)
FROM TRAFFIC SIGNAL TO EMERGENCY BACKUP POWER SUPPLY. INSTALL GROUND CONDUCTOR FOR SAME
LENGTH. (APPROX. 180 FEET).

HURLOCK ST.

INSTALL 2
2 INCH RMC UNDER ROADWAY. INSTALL
TWO NEW TYPE I-A JUNCTION BOXES

REPLACE FOUR EXISTING
JUNCTION BOXES WITH
NEW TYPE I-A JUNCTION BOXES.

INSTALL 1 INCH RMC FOR CONTROL CABLE FROM
TRAFFIC SIGNAL CABINET TO EMERGENCY BACKUP
POWER SUPPLY. (APPROX. 180 FEET).

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

NOTE: THE NEW CONDUCTOR SIZE FOR THE TRAFFIC SIGNAL FROM THE LOAD CENTER TO THE
TRAFFIC SIGNAL SHALL BE NO. 4 AWG.
TRAFFIC CONTROL NOTES

1. TRAFFIC SIGNAL SHUTDOWNS ARE NOT ALLOWED EXCEPT FOR MOMENTARILY (LESS THAN ONE MINUTE) CONNECTING, AND DISCONNECTING A GENERATOR OR THE NEW EMERGENCY POWER SUPPLY. MOMENTARY SHUTDOWNS ARE NOT ALLOWED FROM 6:00 AM TO 8:00 AM OR FROM 11:00 AM TO 7:00 PM.

2. NO LANE CLOSURES ON EWAN DRIVE ARE ALLOWED INBOUND FROM 7:00 AM TO 9:00 AM AND OUTBOUND FROM 3:00 PM TO 6:00 PM. NO LANE CLOSURES ON OTHER STREETS ARE ALLOWED DURING THE ABOVE TIMES.

FORMULAS FOR L (TAPER LENGTH)

\[ L = \frac{w_s^2}{24} \]

WHERE: \( w_s \) = WIDTH OF OFFSET
\( s_p \) = POSTED SPEED LIMIT OR ANTICIPATED OPERATING SPEED

DRUM OR CONE SPACING = \( s \) (IN FEET)

ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE CONES ALONG THE WORK AREA ARE NO CLOSER THAN 10' TO CENTERLINE) THE CENTERLINE CONES FOR THE OPOSSING LANE MAY BE DELETED.

SHOULDER WORK

(NO ENCROACHMENT INTO TRAVELED WAY)

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

AS-BUILT

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SOUTHEAST REGION DESIGN & CONSTRUCTION

TRAFFIC SIGNAL SYSTEMS
EMERGENCY POWER
PROJECT NO. 7626-0000-LAB0716425
TRAFFIC CONTROL PLAN
ALASKA

DESIGNED BY:
JON AALBERG
PROJECT NO.
7626

DRAWN BY:
C. ANDERSON
DATE:
APRIL 1994

CHECKED BY:
K. SMITH
SHEET 10 OF 10