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2' SQ

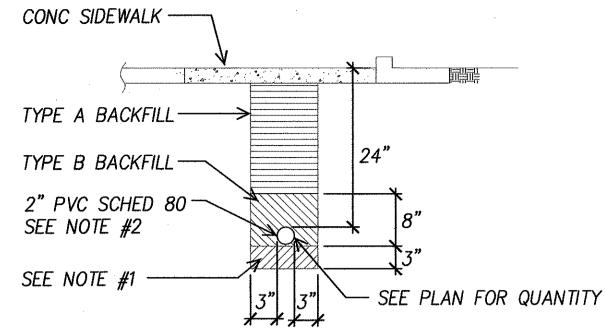
NOT TO SCALE

CONCRETE FOUNDATION FOR

RELOCATED TRAFFIC LIGHT POLE

FED. ROAD DIST. NO. STATE FEDERAL AID PROJ. NO. FISCAL SHEET NO. SHEETS

HAWAII HAWAII CMAQ-0300(92) 2004 156 187



DUCT SECTION (A)

TYPE "A": BEACH SAND, EARTH OR EARTH & GRAVEL.

IF EARTH & GRAVEL USED, MAX. ROCK SIZE SHALL BE 1" & MIXTURE SHALL CONTAIN NOT MORE THAN 50% BY VOLUME OR ROCK PARTICLES. 95% COMPACTION.

TYPE "B": SAME AS TYPE "A" EXCEPT THAT IF EARTH & GRAVEL USED.

THE MIXTURE MUST PASS A 1/2" MESH SCREEN & CONTAIN NOT MORE THAN 20% BY VOLUME OF ROCK PARTICLES. 95% COMPACTION.

NOTE: 1. IF THE NORMAL MATERIAL IN THE BOTTOM OR TRENCH IS NOT

TYPE "B" AN ADDITIONAL 3" SHALL BE EXCAVATED & TYPE "B"

BACKFILL SHALL BE PROVIDED.

2. FOR ROADWAY CROSSING & LANDSCAPE AREAS STREET LIGHT CONDUITS SHALL BE PVC SCHEDULE 40 WITH 3" CONCRETE JACKET. 2800PSI @ 28 DAYS COMPRESS STRENGTH.

DUCT SECTIONS

DTS, C&C HONOLULU DRAWING REVIEWED 12

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

SYMBOL LIST & DUCT SECTIONS MISCELLANEOUS DETAILS

HIGHWAYS DIVISION

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

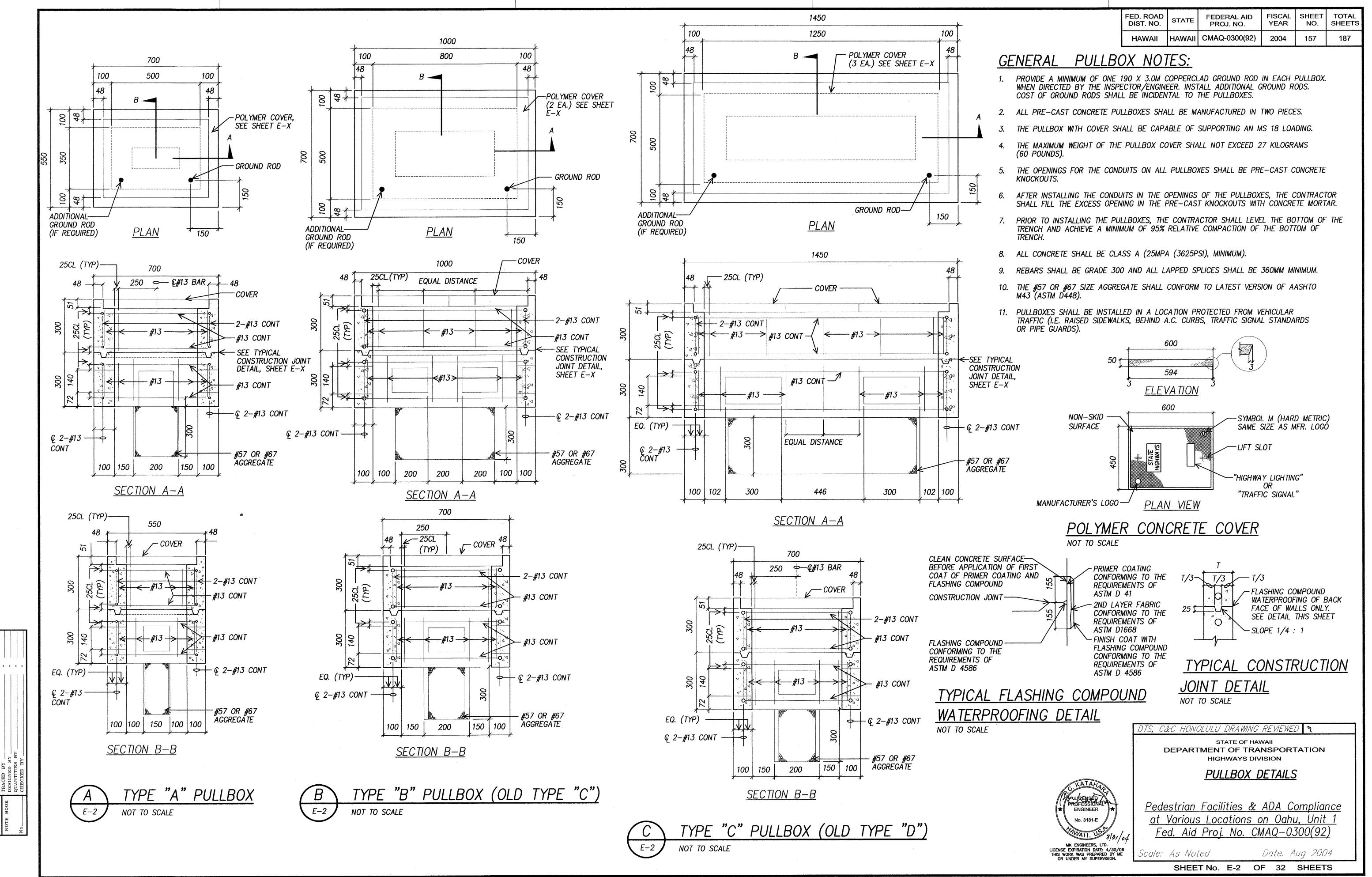
Scale: As Noted

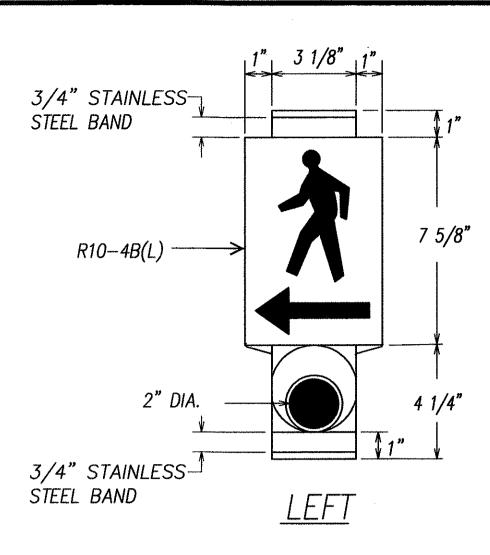
ENGINEER

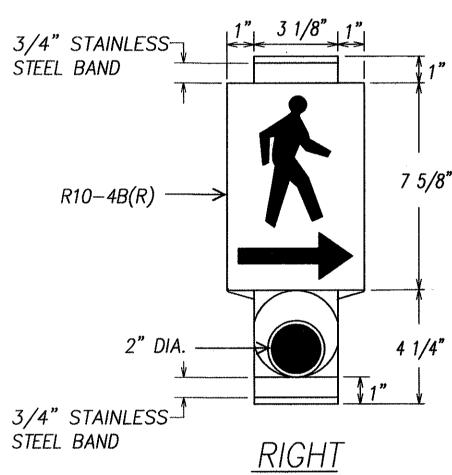
MK ENGINEERS, LTD.
LICENSE EXPIRATION DATE: 4/30/06
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OR UNDER MY SUPERVISION.

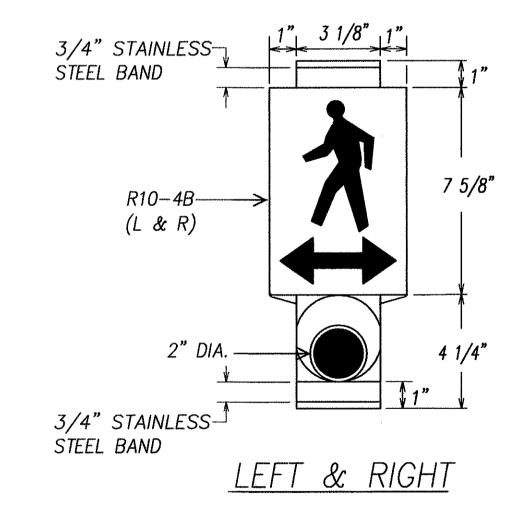
As Noted Date: Aug 2004

SHEET No. E-1 OF 32 SHEETS







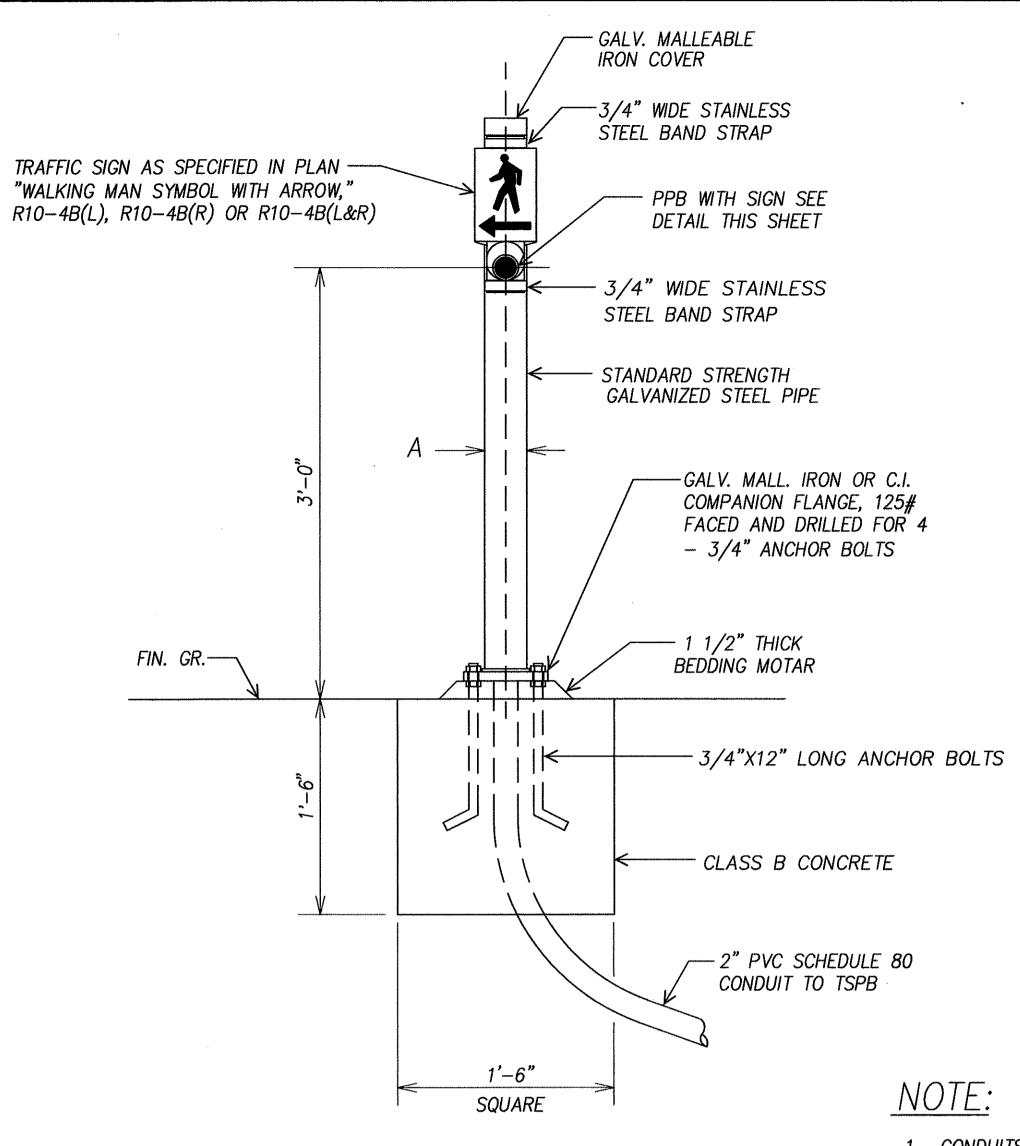


PEDESTRIAN PUSH BUTTON WITH SIGN

MAN, ARROW & PUSH BUTTON - WHITE BACKGROUND - BLACK

NOTE:

THERE SHALL BE A 30" X 48" LEVEL GROUND SURFACE (2% MAX. CROSS SLOPE, BOTH DIRECTIONS) FOR A FORWARD OR SIDE APPROACH, AS APPROPRIATE, TO A PEDESTRIAN PUSH BUTTON. LOCATION OF PEDESTRIAN PUSH BUTTON SHALL BE SHOWN ON CIVIL PLANS IN ADDITION TO ELECTRICAL PLANS.



PPB POST AND FOOTING DETAIL

	DATA TABLE FOR PPB POST					
AMOL	AMOUNT OF PPB		DIMEN	ISIONS		
AMOC			Α	В		
	1		3 1/2"	8"		
	2 →3		4 1/2"	9"		

STANDARD STRENGTH GALVANIZED STEEL PIPE HOLE FOR 3/4"

STATE

FEDERAL AID PROJ. NO.

___ C.I. COMPANION

FLANGE 125# F D

HAWAII CMAQ-0300(92)

FISCAL SHEET TOTAL YEAR NO. SHEETS

158

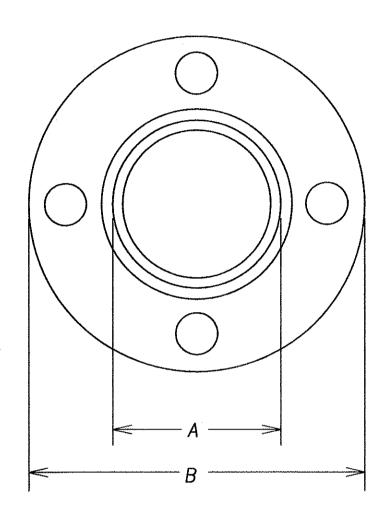
2004

<u>SECTION</u>

ANCHOR BOLT

(TYP.)

FED. ROAD DIST. NO.



TOP VIEW

FLANGE DETAIL

1. CONDUITS SHALL PROTRUDE 2" MAX. ABOVE FINISHED SURFACE OF FOUNDATION.

2. CONDUITS SHALL SLOPE AWAY FROM POST FOUNDATION.

C&C HONOLULU DRAWING REVIEWED 3

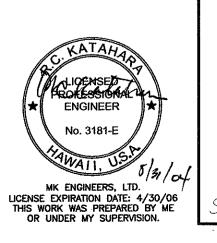
STATE OF HAWAII **DEPARTMENT OF TRANSPORTATION** HIGHWAYS DIVISION

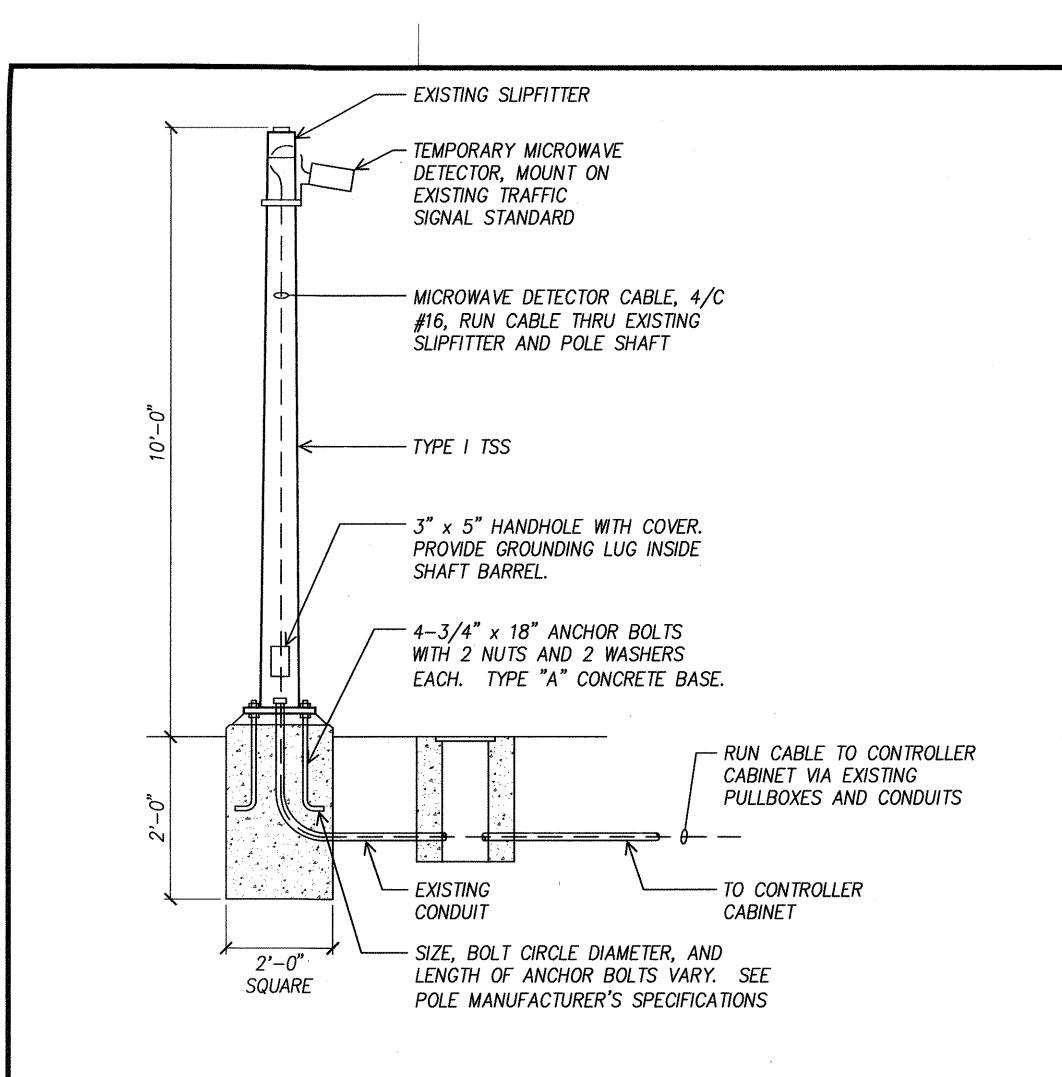
PEDESTRIAN PUSH BUTTON <u>DETAILS</u>

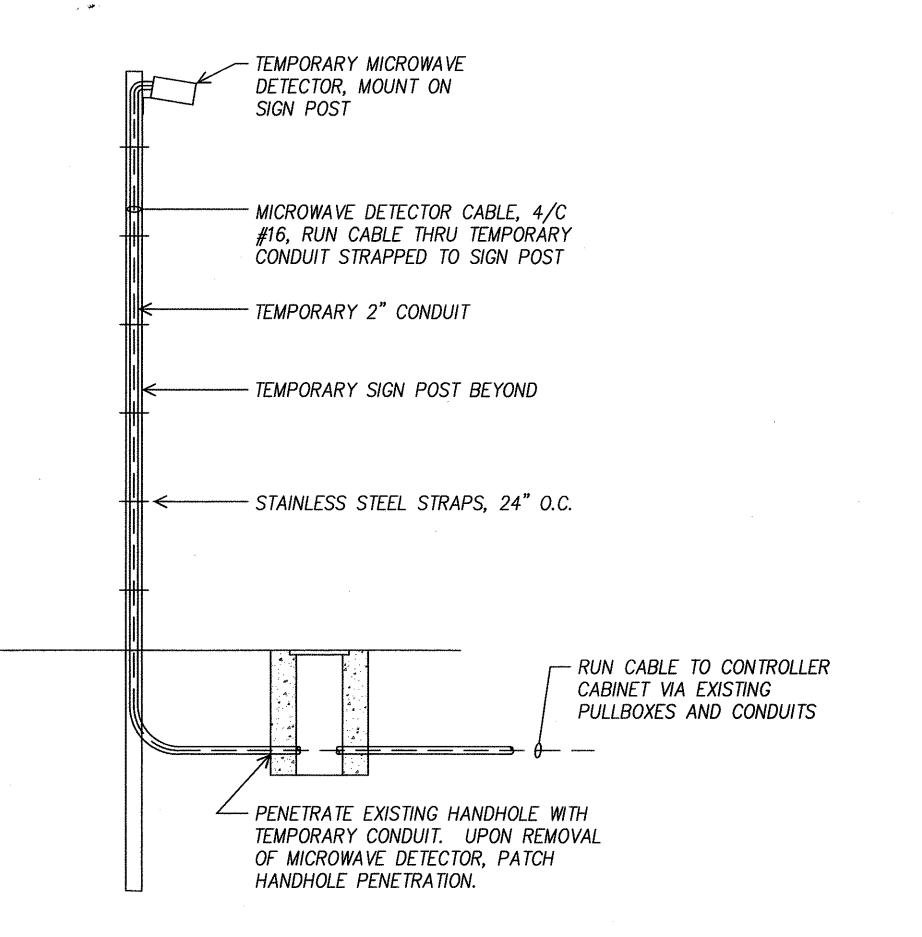
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

Scale: As Noted

Date: Aug 2004 SHEET No. E-3 OF 32 SHEETS



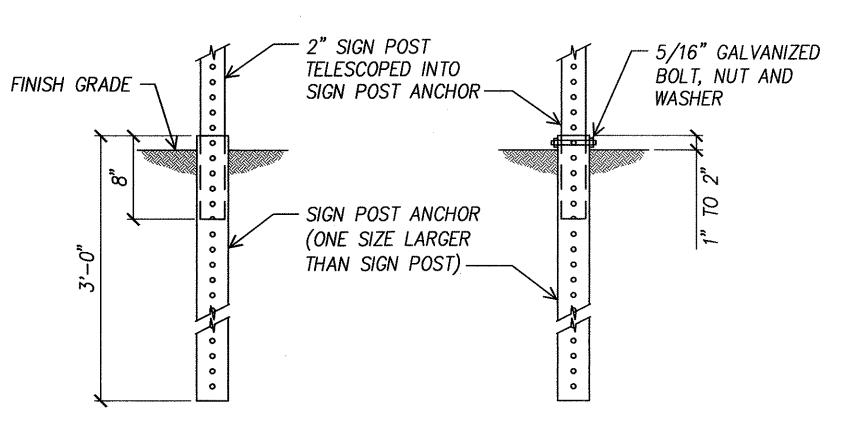




FISCAL | SHEET | TOTAL FEDERAL AID PROJ. NO. FED. ROAD STATE DIST. NO. YEAR NO. SHEETS HAWAII HAWAII CMAQ-0300(92) 2004 - SIGN POST

- SIGN POST ANCHOR

TOP VIEW



BACK VIEW

FRONT VIEW

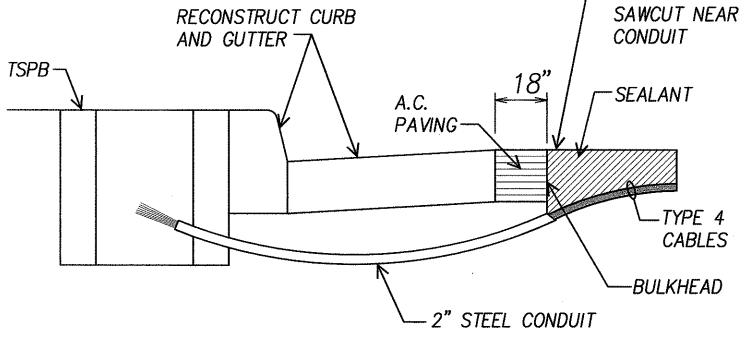


AT EXISTING TRAFFIC SIGNAL STANDARD

AT TEMP SIGN POST

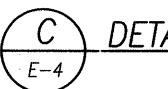
NOTES:

- STANDARDS SHALL BE DESIGNED IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS.
- CONCRETE SHALL BE CLASS "B".
- TYPE "A" CONCRETE BASE SHALL BE USED FOR TYPE I-10, TRAFFIC SIGNAL STANDARDS.
- CONDUIT BEND IS INCIDENTAL TO CONRETE BASE.



NOTES ON CONSTRUCTION AT END OF SAWCUT

- 1. SEAL ROADWAY END OF CONDUIT AFTER INSTALLATION OF CONDUCTORS.
- 2. INSTALL BULKHEAD ACROSS CONDUIT TRENCH.
- 3. PLACE HOT TAR IN SAWCUT.
- 4. BACKFILL OVER CONDUIT WITH NEW A.C.
- 5. RECONSTRUCT CURB AND GUTTER AS REQUIRED.



DETAIL OF SENSOR LOOP INSTALLATION AT EDGE OF ROADWAY



TEMPORARY MICROWAVE DETECTOR DETAIL E-4) NOT TO SCALE

NOTES:

- MICROWAVE DETECTOR SHALL BE OPERATIONAL BEFORE EXISTING LOOP DETECTORS ARE DEACTIVATED.
- 2. REMOVE MICROWAVE DETECTOR AND ALL ASSOCIATED CABLES AFTER NEW LOOP DETECTORS ARE INSTALLED AND OPERATIONAL.



C&C HONOLULU DRAWING REVIEWED 3

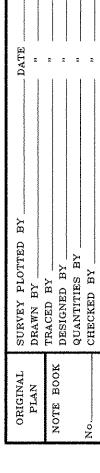
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

TEMPORARY MICROWAVE DETECTOR DETAIL

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

Scale: As Noted

Date: Aug 2004



SHEET No. E-4 OF 32 SHEETS

GENERAL CONSTRUCTION NOTES:

- 1. PLANS DO NOT INDICATE COMPLETE ELECTRICAL CONDITIONS. CONTRACTOR SHALL VISIT JOBSITE TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND EXTENT OF DEMOLITION AND NEW WORK PRIOR TO THE START OF WORK.
- 2. PRIOR TO THE START OF WORK. CONTRACTOR SHALL VISIT JOBSITE AND REPORT ANY DISCREPANCIES AND OR DIFFERENCE IN DRAWINGS, IN RESPECT TO EXISTING CONDITION, TO ENGINEER AND/OR OWNER.
- 3. CONTRACTOR SHALL RESOLVE ALL DISCREPANCIES AND QUESTIONS PRIOR TO START OF WORK. NO EXTRA PAYMENT SHALL BE ALLOWED ON ACCOUNT OF WORK MADE NECESSARY BY CONTRACTOR'S FAILURE TO VISIT THE SITE AND/OR FAILURE TO RESOLVE DISCREPANCIES AND QUESTIONS.
- 4. RETURN ALL SALVABLE APPARATUS. AS DETERMINED BY THE CITY OR HIS REPRESENTATIVES, TO A SITE DESIGNATED BY THE CITY OR HIS REPRESENTATIVES. AT NO ADDITIONAL COST TO THE CITY. DISPOSE OF ALL UNWANTED MATERIALS.
- 5. THE CONTRACTOR IS TO COMPLY WITH THE DIRECTIONS OF THE STATE OF HAWAII OCCUPATIONAL SAFETY AND HEALTH LAW (DOSH).
- 6. CONTRACTOR SHALL COORDINATE ALL WORK WITH HAWAIIAN ELECTRIC CO. (HECO) AND VERIZON HAWAII, INC., (HTCO).
- 7. CONTRACTOR SHALL NOTIFY HTCO'S INSPECTORS 72 HOURS PRIOR TO START OF HIS EXCAVATION WORK.
- 8. PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY WITH THE RESPECTIVE UTILITY COMPANIES AND GOVERNMENT AGENCIES, THE LOCATIONS OF ALL ELECTRIC, TELEPHONE, TRAFFIC SIGNAL, STREET LIGHT, FIRE ALARM, GAS, WATER, SEWER, DRAIN, AND OTHER LINES CROSSING THE EXCAVATION PATH OR IN EXCAVATION AREAS.
- 9. THE LOCATIONS OF ALL NEW TRAFFIC SIGNAL STANDARDS AND CONTROLLERS ON THE DRAWINGS ARE APPROXIMATE. EXACT LOCATION WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. CONFLICTS BETWEEN STANDARDS AND CROSSWALK LOCATIONS SHALL BE AVOIDED WHEREVER POSSIBLE. THE LOCATIONS OF TRAFFIC SIGNAL STANDARDS, CONTROLLERS, PULLBOXES, AND CONDUITS SHALL BE STAKED OUT BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ANY EXCAVATION.
- 10. ALL STRUCTURES, PAVEMENTS, UTILITIES, LANDSCAPING, AND OTHER TOPOGRAPHICAL FEATURES SHOWN ON THE INTERSECTION DRAWINGS ARE EXISTING AND ARE TO REMAIN UNLESS NOTED OR INDICATED OTHERWISE.
- 11. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES AND GOVERNMENT AGENCIES OF THEIR INTENT TO BEGIN CONSTRUCTION ON ANY INTERSECTION OR STREET AT LEAST TWO (2) WEEKS PRIOR TO THE START OF SUCH CONSTRUCTION.
- 12. THE CONTRACTOR MAY CLOSE ONLY ONE LANE OF TRAFFIC AT A TIME FOR ANY REASON. DURING THE PEAK TRAFFIC PERIODS FROM 6:00 TO 9:00 A.M. AND FROM 3:00 TO 6:00 P.M., MONDAY THRU FRIDAY, ALL LANES SHALL BE KEPT OPEN AND MAINTAINED AT ALL TIMES.
- 13. TYPE "A" BACKFILL EARTH AND GRAVEL, ROCK SIZE TO BE 1" AND THE MIXTURE TO CONTAIN NOT MORE THAN 50% BY VOLUME OF ROCK PARTICLES. 95% COMPACTION.
- 14. TYPE "B" BACKFILL EARTH AND GRAVEL, MIXTURE MUST PASS A 1/2" MESH SCREEN AND CONTAIN NOT MORE THAN 20% BY VOLUME OF ROCK PARTICLES. 95% COMPACTION.
- 15. IF NORMAL MATERIAL AT BOTTOM OF TRENCH IS NOT TYPE "B". AN ADDITIONAL 3" SHALL BE EXCAVATED AND TYPE "B" BACKFILL PROVIDED.
- 16. CONTRACTOR SHALL COMPLETELY RESTORE ALL SIDEWALKS, ROADWAYS. CURBS AND GUTTER DISTURBED BY THE CONSTRUCTION. ALL RESTORATION WORK SHALL CONFORM TO CITY DEPT. OF DESIGN AND CONSTRUCTION STANDARDS.
- 17. THE CONTRACTOR SHALL COORDINATE WITH THE CITY, ALL SPLICES AND CONNECTIONS IN PULLBOXES, HANDHOLES AND CABINET LOCATIONS PERTAINING TO TRAFFIC SIGNAL: SIGNAL HEADS, PED SIGNALS, PED PUSHBUTTONS, VEHICULAR DETECTORS, PREEMPTION DETECTORS AND INTERTIE CIRCUITS SHALL BE PERFORMED BY THE CITY.
- 18. THE CONTRACTOR SHALL DELIVER ALL EXCESS LAVA ROCK CURB TO THE HONOLULU CORPORATION YARD AT 99-1077 IWAENA STREET. IF ADDITIONAL LAVA ROCK CURB IS REQUIRED, CALL MR. MELVIN MIYATA AT 523-4287 FOR PICKUP.

TRAFFIC SIGNAL NOTES:

- 1. THE LOCATIONS OF THE TRAFFIC SIGNAL STANDARDS, PEDESTRIAN PUSH BUTTON, PULLBOXES. CONDUITS SHALL BE STAKED OUT IN THE FIELD BY THE CONTRACTOR AND APPROVAL OF THE LOCATIONS SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO CONSTRUCTION AND INSTALLATION.
- 2. ALL SPLICING SHALL BE DONE IN THE PULLBOXES.
- 3. SHOULD ANY DEFECT BE ENCOUNTERED DURING THE WARRANTY PERIOD, THE MANUFACTURER WILL BE NOTIFIED AND HE SHALL PROMPTLY CORRECT SUCH DEFECT. SERVICE CALL (BY FACTORY QUALIFIED REPRESENTATIVE) DURING THE WARRANTY PERIOD FOR REPAIRS OR OTHER MAINTENANCE SHALL BE ANSWERED WITHIN 24 HOURS AND SHALL BE DONE AT NO EXPENSE TO THE STATE. ALL REPAIRS SHALL BE DONE AS SOON AS POSSIBLE.
- 4. ALL TRAFFIC SIGNAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAY", FEDERAL HIGHWAY ADMINISTRATION (1988) AND AMENDMENTS
- 5. ALL CONDUITS BETWEEN PULLBOXES AND TRAFFIC SIGNAL STANDARDS SHALL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS.
- 6. AFTER INSTALLING ALL THE TRAFFIC SIGNAL CABLES, THE CONTRACTOR SHALL DUCT SEAL ALL CONDUITS IN THE PULLBOXES AND TRAFFIC SIGNAL STANDARDS. THE DUCT SEAL MATERIAL SHALL BE APPROVED BY THE TRAFFIC SIGNAL INSPECTOR/ENGINEER AND SHALL BE CONSIDERED INCIDENTAL TO THE DIRECT BURIED AND/OR CONCRETE ENCASED CONDUITS.
- 7. CONNECTING INTO EXISTING TRAFFIC SIGNAL SYSTEM AND MARKING ALL NECESSARY ADJUSTMENTS SHALL BE PAID FOR SEPARATELY, BUT CONSIDERED INCIDENTAL TO THE VARIOUS TRAFFIC SIGNAL CONTRACT ITEMS.
- 8. THE CONTRACTOR SHALL NOTIFY THE TRAFFIC CONTROL BRANCH, DEPARTMENT OF TRANSPORTATION SERVICES, CITY & COUNTY OF HONOLULU, (PHONE NO. 523-4589) THREE (3) WORKING DAYS PRIOR TO COMMENCING ANY WORK ON THE TRAFFIC SIGNAL SYSTEM.
- 9. THE DEPARTMENT OF TRANSPORTATION SERVICES, CITY & COUNTY OF HONOLULU, WILL ASSIST THE ENGINEER IN CONSTRUCTION INSPECTION OF THE TRAFFIC SIGNAL SYSTEM.
- 10. THE TRAFFIC SIGNAL SYSTEM SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION. ANY RELOCATION REQUIRED SHALL BE APPROVED BY THE TRAFFIC CONTROL BRANCH, DEPARTMENT OF TRANSPORTATION SERVICES. AND PAID FOR BY THE CONTRACTOR.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING TRAFFIC SIGNAL FACILITIES. INCLUDING THE TRAFFIC SIGNAL INTERCONNECT SYSTEM. ANY AND ALL DAMAGES TO THESE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS COST IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY AND COUNTY OF HONOLULU.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING TRAFFIC SIGNAL FIBER OPTIC CABLE SYSTEM. ANY AND ALL DAMAGES TO THESE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS COST IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY AND COUNTY OF HONOLULU.
- 13. THE CONTRACTOR SHALL PROVIDE MICROWAVE DETECTOR SYSTEM FOR ALL EXISTING SIGNALIZED INTERSECTIONS WHERE EXISTING LOOP DETECTOR SYSTEM WILL BE OUT OF SERVICE FOR MORE THAN ONE (1) WEEK. ALL WORK SHALL BE COORDINATED WITH THE TRAFFIC SIGNALS & TECHNOLOGY, DEPARTMENT OF TRANSPORTATION SERVICES. AND PAID FOR BY THE CONTRACTOR.

HIGHWAY LIGHTING NOTES:

- 1. THE CONTRACTOR SHALL NOTIFY THE STATE HIGHWAYS, HIGHWAY LIGHTING AND TRAFFIC SUPERVISOR 72 HOURS IN ADVANCE BEFORE COMMENCING ANY WORK ON THE HIGHWAY LIGHTING SYSTEM. PHONE: 837-8056.
- 2. THE CONTRACTOR SHALL HAVE ONE SET OF APPROVED PLANS AT THE JOB SITE AT ALL TIMES DURING THE CONSTRICTION WORK AND RECORD ALL CHANGES WHICH OCCUR DURING CONSTRUCTION OF THE HIGHWAY LIGHTING SYSTEM.
- 3. FINAL ACCEPTANCE AND INSPECTION WILL BE UNDERTAKEN ONLY AFTER ALL WORK HAS BEEN COMPLETED.
- 4. THE CONTRACTOR SHALL MAINTAIN EXISTING CIRCUITING AND OPERATION OF THE LIGHTING SYSTEM DURING THE HOURS OF DARKNESS.
- 5. THE CONTRACTOR SHALL LOCATE EXISTING BURIED UTILITY LINES IN THE VICINITY OF THE EXCAVATION WORK PRIOR TO COMMENCING EXCAVATION. AS A MINIMUM. AND ELECTRONIC MAGNETIC DEVICE FOR DETECTION OF BURIED LINES SHALL BE UTILIZED PRIOR TO EXCAVATION. TRENCHES SHALL BE EXCAVATED WITH CARE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING UTILITIES RESULTING FROM HIS NEGLIGENCE AND SHALL BEAR COAST OF REPAIRS TO THE UTILITIES METHOD OF REPAIR SHALL BE DETERMINED BY THE STATE.

FED. ROAD FEDERAL AID FISCAL SHEET TOTAL STATE DIST. NO. YEAR NO. SHEETS PROJ. NO. HAWAII HAWAII CMAQ-0300(92) 2004 160 187

PROPESSIONAL P ENGINEER No. 3181-E MK ENGINEERS, LTD. LICENSE EXPIRATION DATE: 4/30/06
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION. C&C HONOLULU DRAWING REVIEWED 1

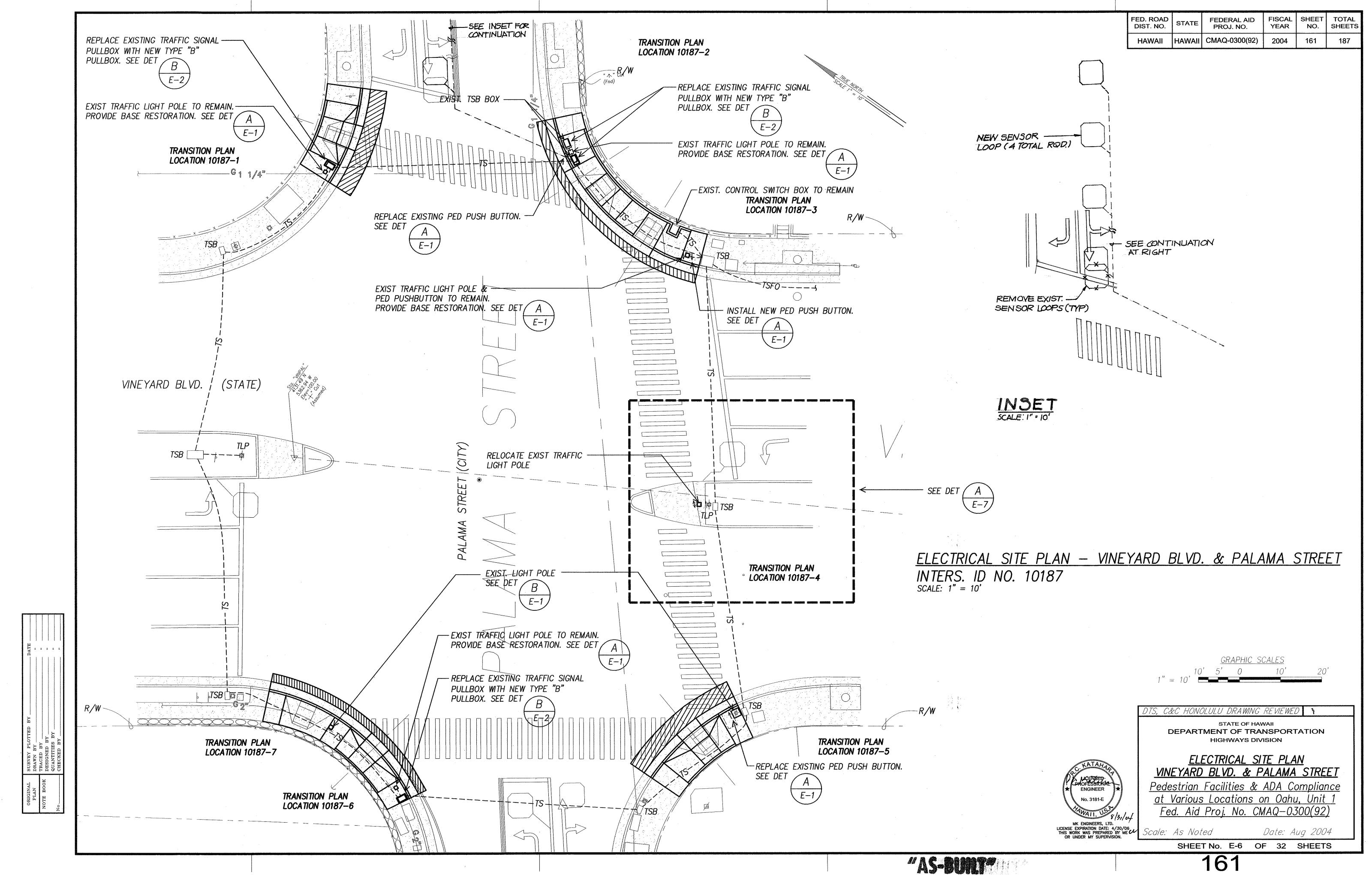
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

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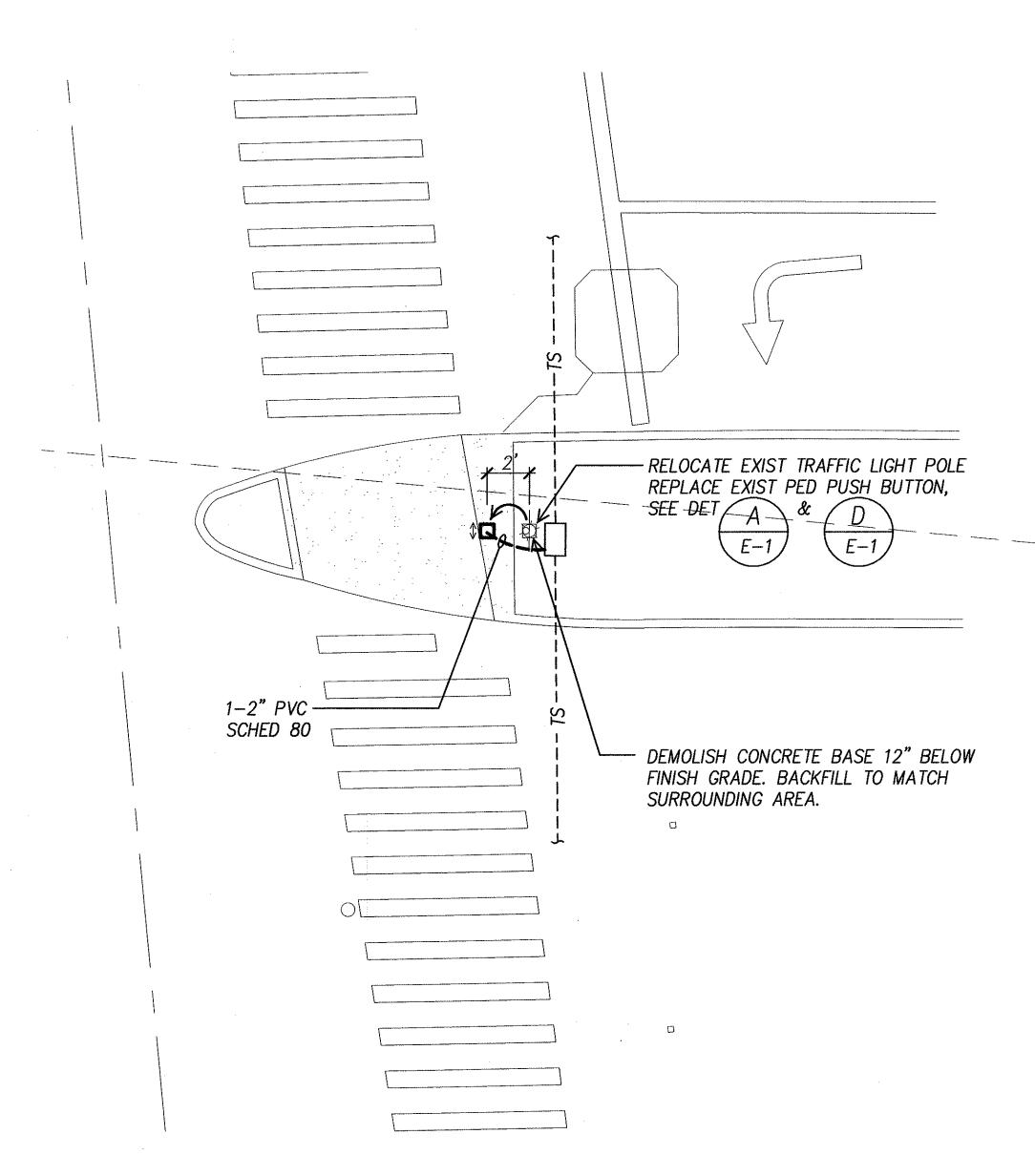
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit Fed. Aid Proj. No. CMAQ-0300(92)

Scale: As Noted

Date: Aug 2004 SHEET No. E-5 OF 32 SHEETS



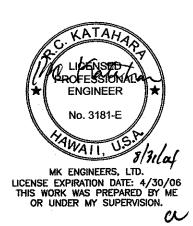
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR		TOTAL SHEETS	
HAWAII	HAWAII	CMAQ-0300(92)	2004	162	187	



ELECTRICAL PLAN — VINEYARD BLVD. & PALAMA STREET

INTERS. ID NO. 10187

SCALE: 1" = 5"



DTS, C&C HONOLULU DRAWING REVIEWED 1

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

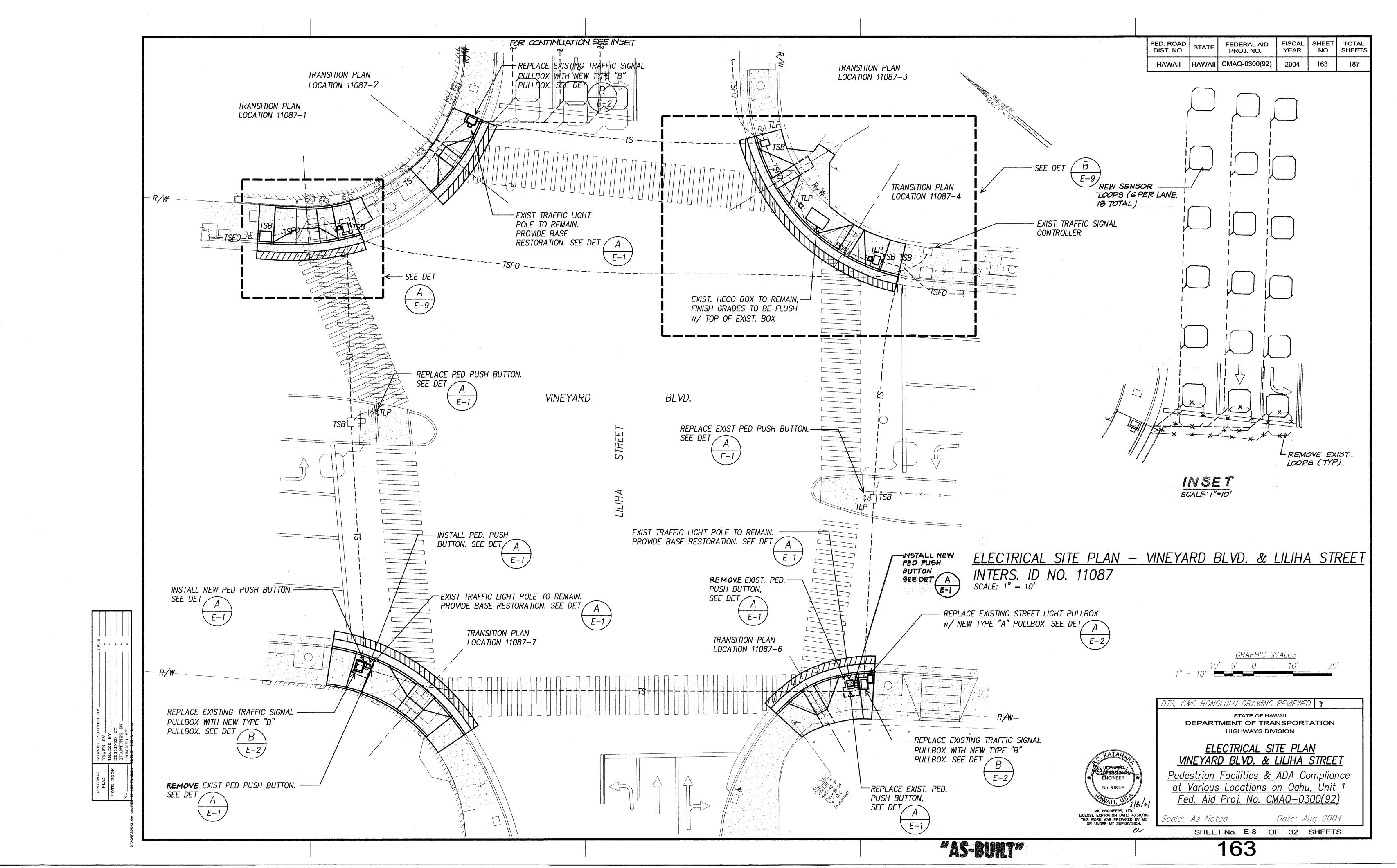
<u>ELECTRICAL PLAN</u> <u>VINEYARD BLVD. & PALAMA STREET</u>

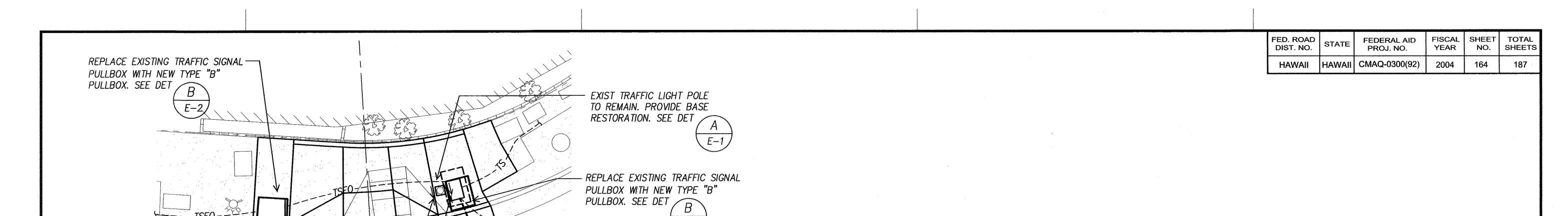
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

cale: As Not

Date: Aug 2004

SHEET No. E-7 OF 32 SHEETS





(E-2)

E-1

- TSF0----

REPLACE PEDESTRIAN PUSH BUTTON -

INSTALL PED PUSHBUTTON,

SEE DET

SEE DET

- REPLACE EXIST PED PUSH BUTTON. SEE DET E-1, - REPLACE EXISTING TRAFFIC SIGNAL PULLBOX WITH NEW TYPE "B" PULLBOX. SEE DET B E-2/ EXIST TRAFFIC LIGHT POLE TO REMAIN. -PROVIDE BASE RESTORATION. SEE DET A E-1 EXIST TRAFFIC SIGNAL CONTROLLER ADJUST COVER TO ⊱---TSFO _____ BE FLUSHED WITH FINISH GRADE EXIST TRAFFIC LIGHT POLE TO REMAIN. -PROVIDE BASE RESTORATION. SEE DET, - INSTALL PEDESTRIAN PUSH BUTTON SEE DET ELECTRICAL PLAN - RAMP "3" & "4"

REPLACE EXISTING TRAFFIC SIGNAL

PULLBOX WITH NEW TYPE "B"

PULLBOX. SEE DET B

ELECTRICAL PLAN - RAMP "1"

INTERS. ID NO. 11087

INTERS. ID NO. 11087 SCALE: 1" = 10'

SCALE: 1" = 10'

GRAPHIC SCALES

C&C HONOLULU DRAWING REVIEWED 1

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

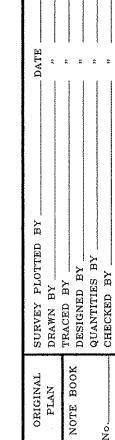
HIGHWAYS DIVISION

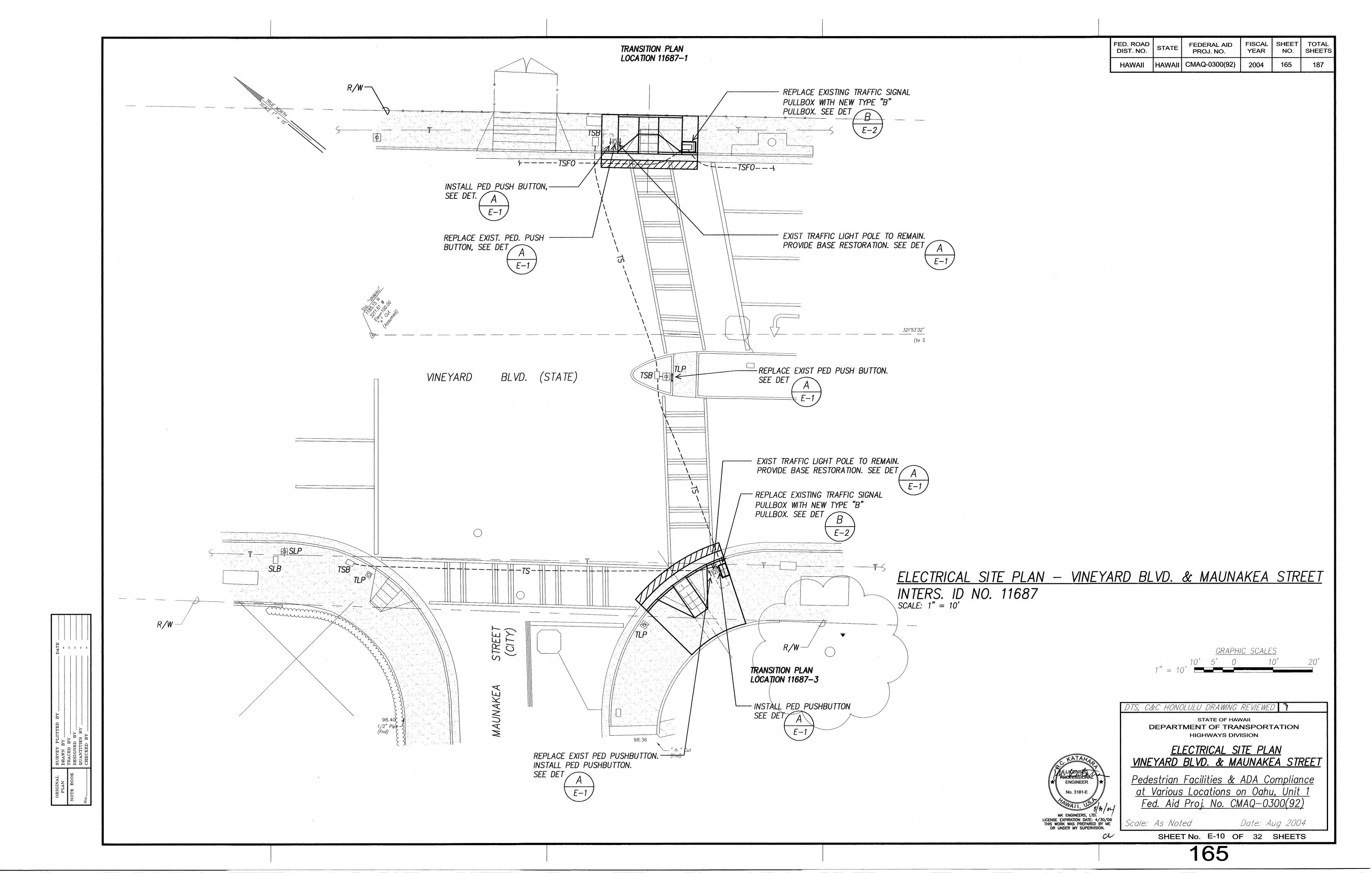
<u>ELECTRICAL PLAN</u> <u>VINEYARD BLVD. & LILIHA STREET</u>

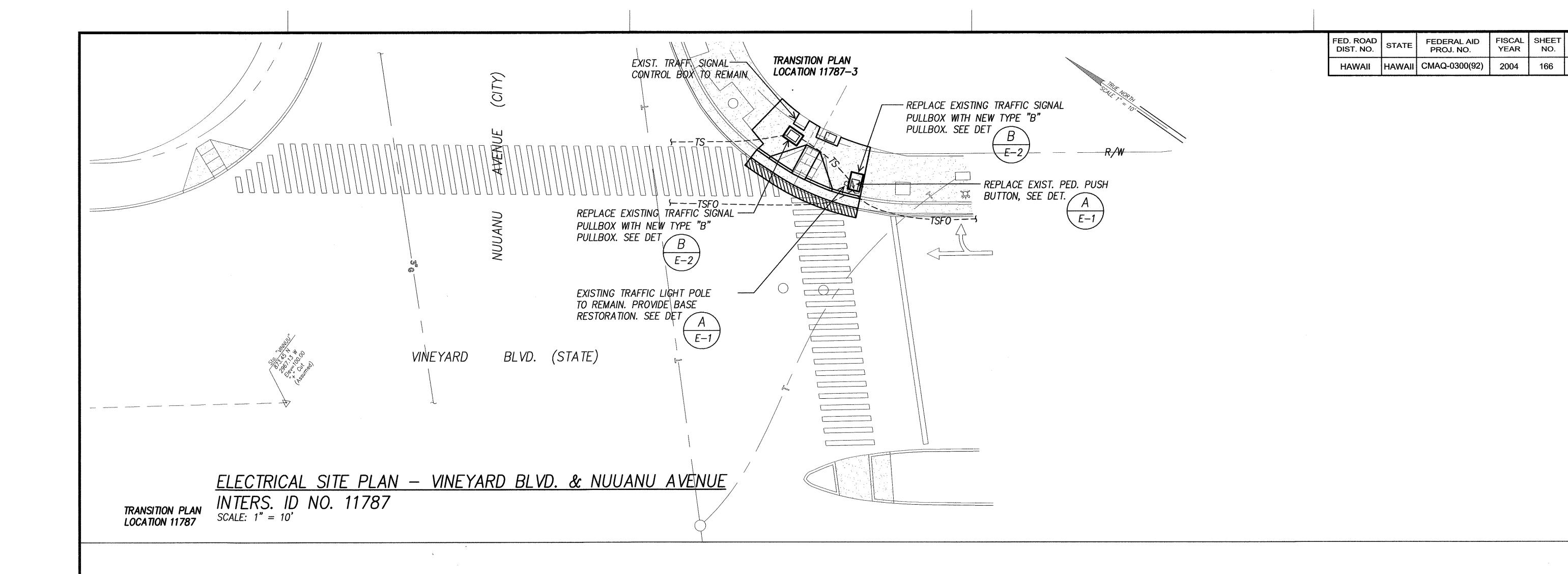
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

Scale: As Noted

Date: Aug 2004 SHEET No. E-9 OF 32 SHEETS







GRAPHIC SCALES

166

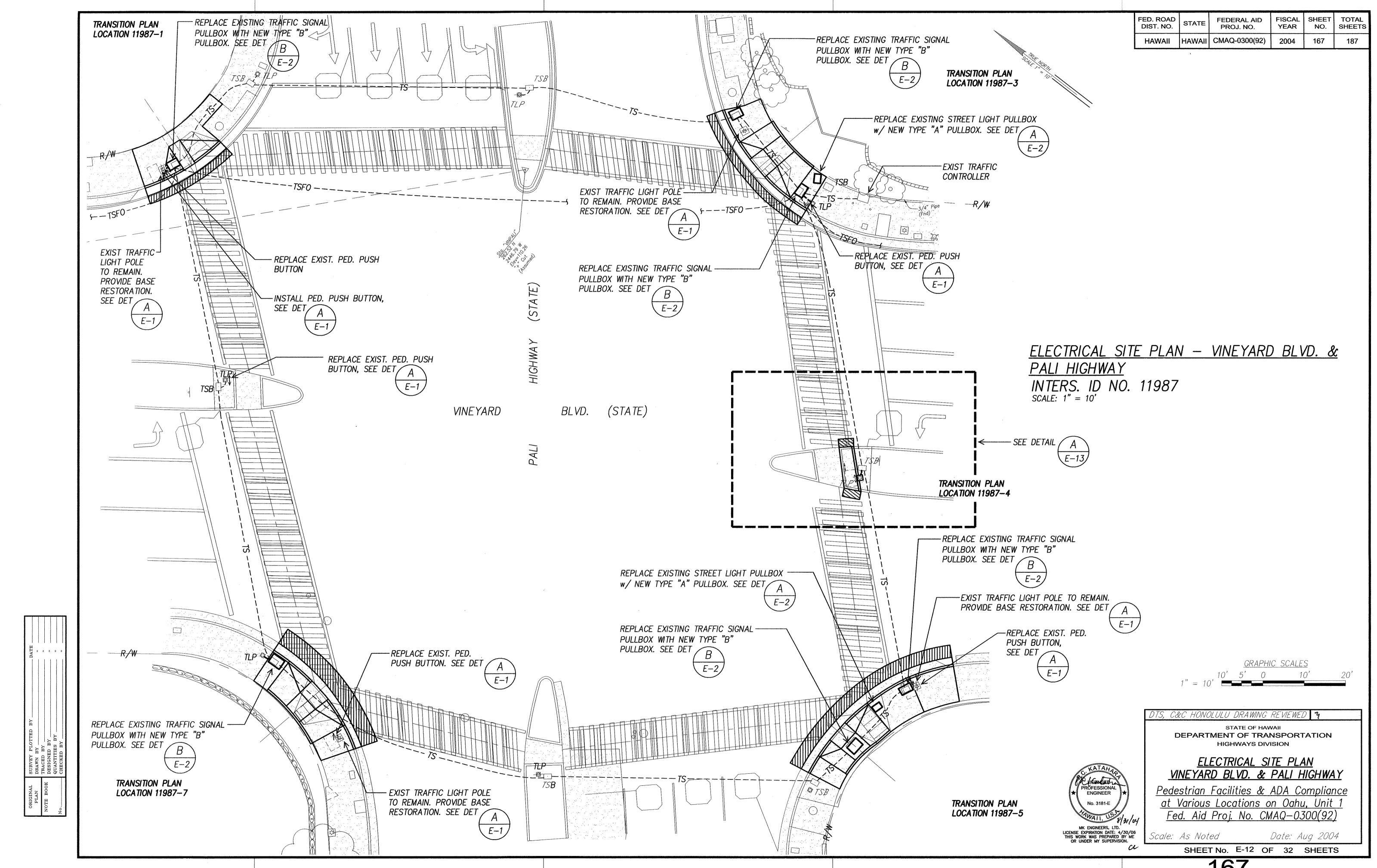
TS, C&C HONOLULU DRAWING REVIEWED

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

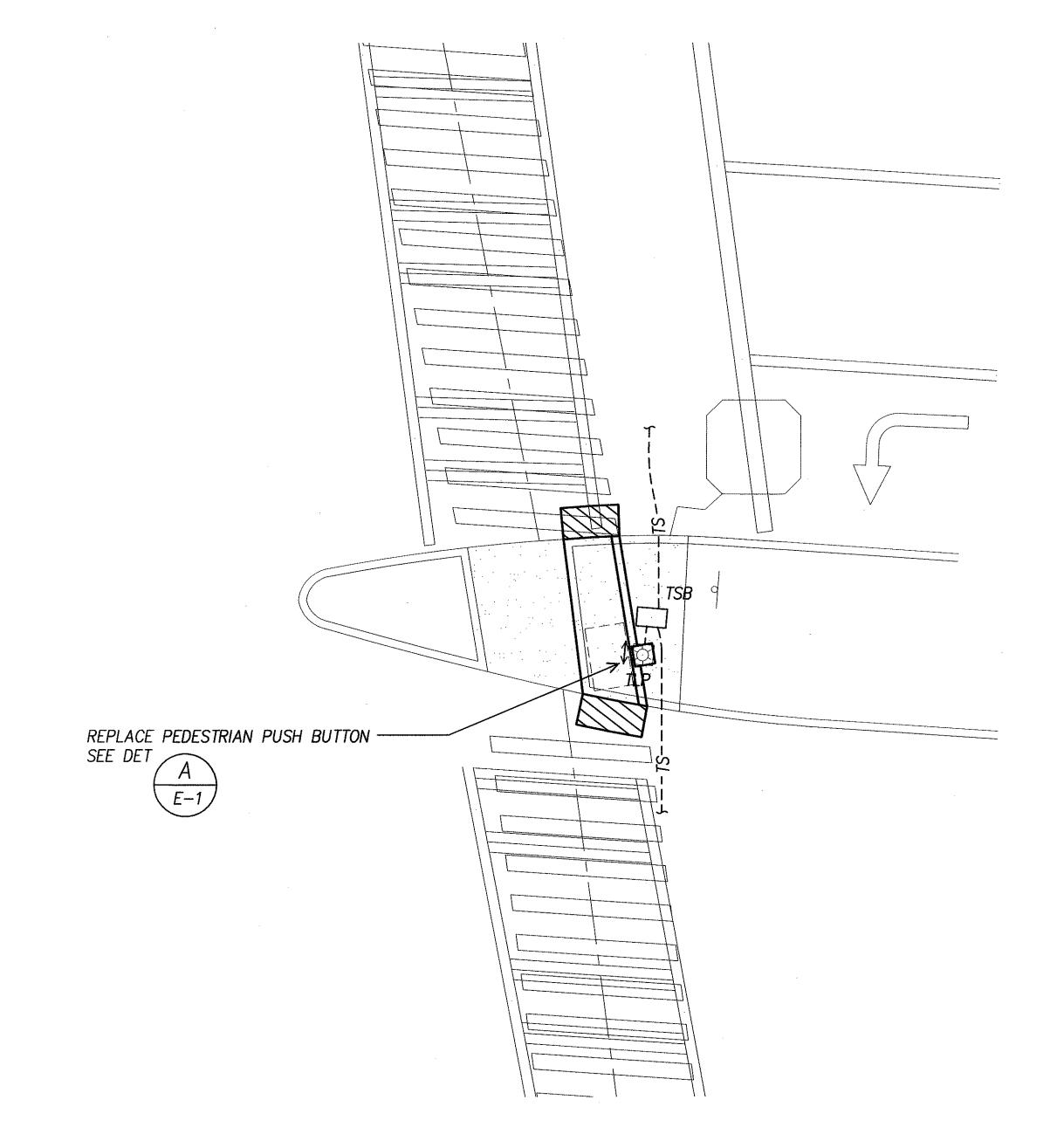
ELECTRICAL SITE PLAN VINEYARD BLVD. & NUUANU AVENUE

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

> Date: Aug 2004 SHEET No. E-11 OF 32 SHEETS



FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	CMAQ-0300(92)	2004	168	187



ELECTRICAL PLAN — VINEYARD BLVD. & PALI HIGHWAY INTERS. ID NO. 11987 SCALE: 1" = 5'





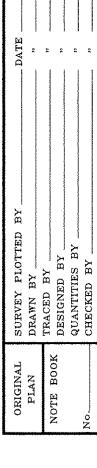
<u>ELECTRICAL PLAN</u> <u>VINEYARD BLVD & PALI HIGHWAY</u>

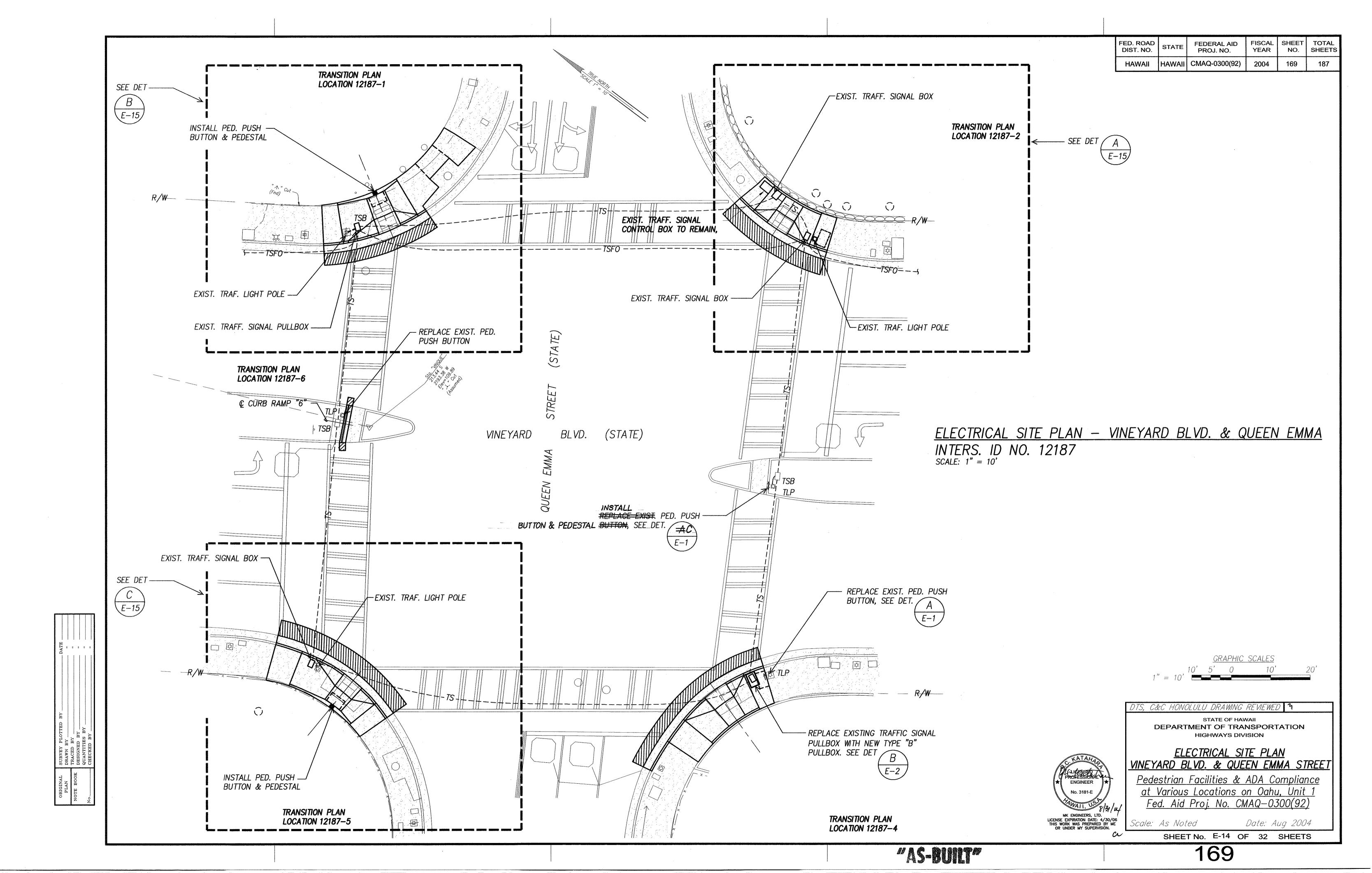
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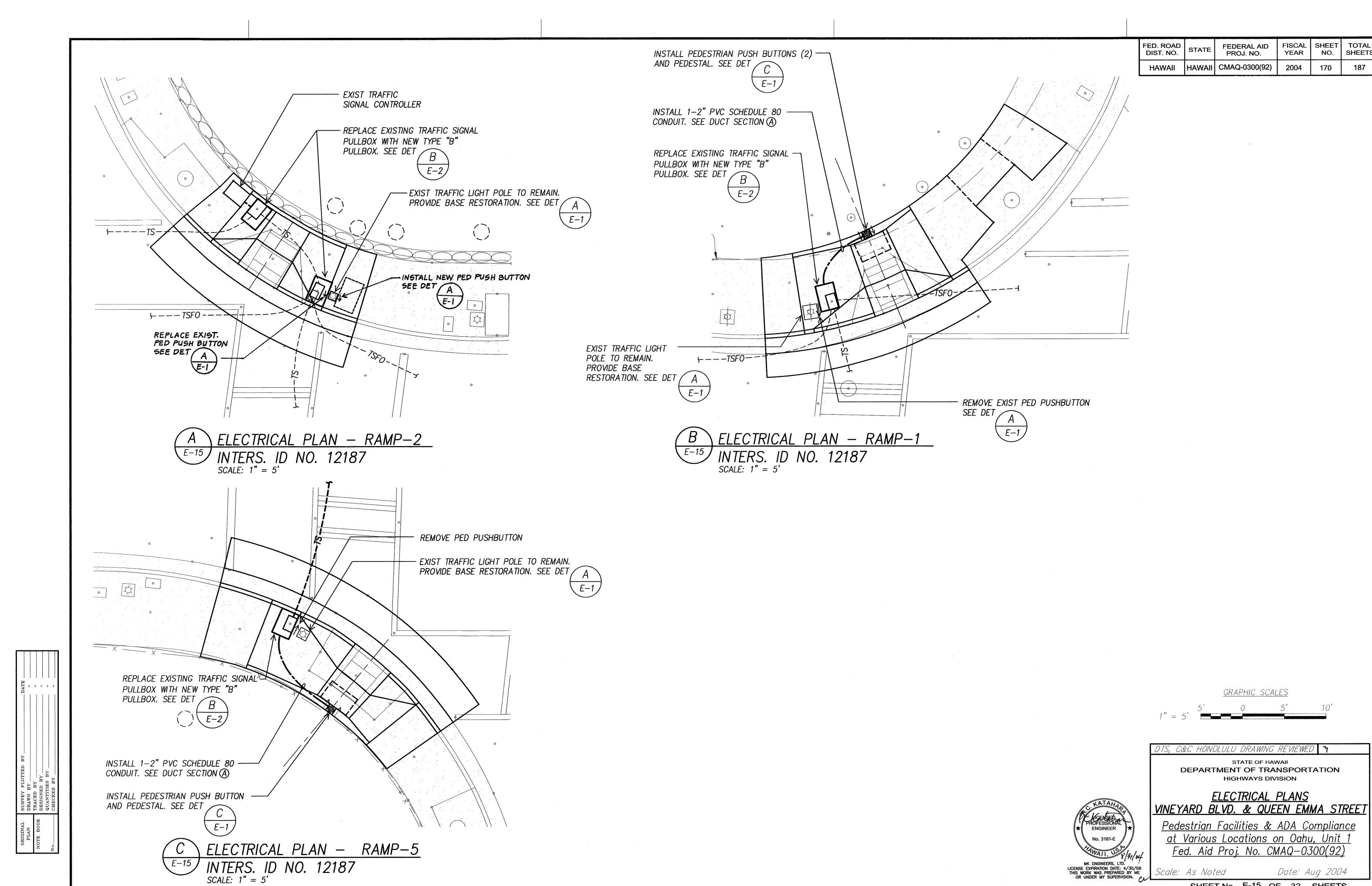
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

Scale: As Noted

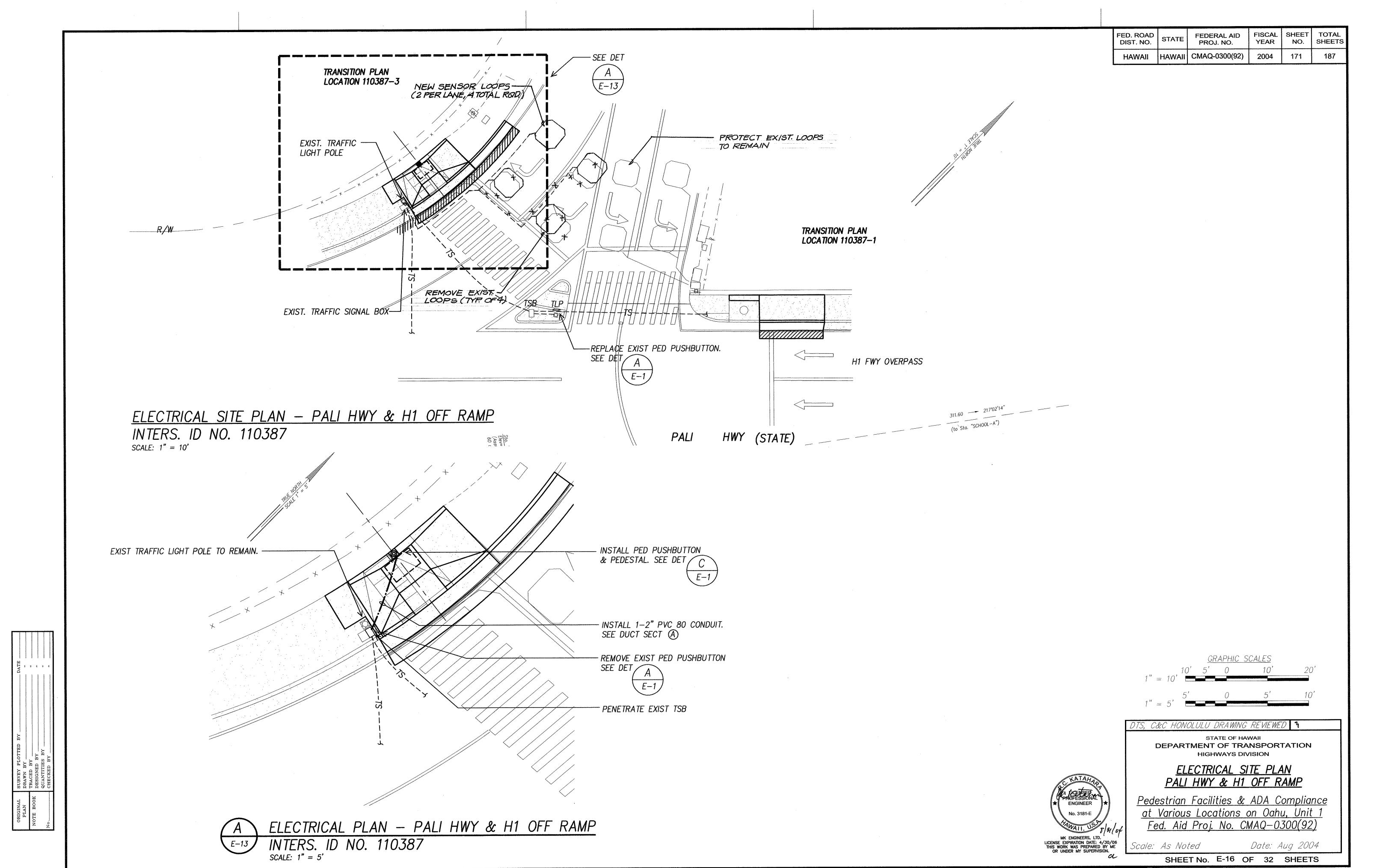
Date: Aug 2004 SHEET No. E-13 OF 32 SHEETS



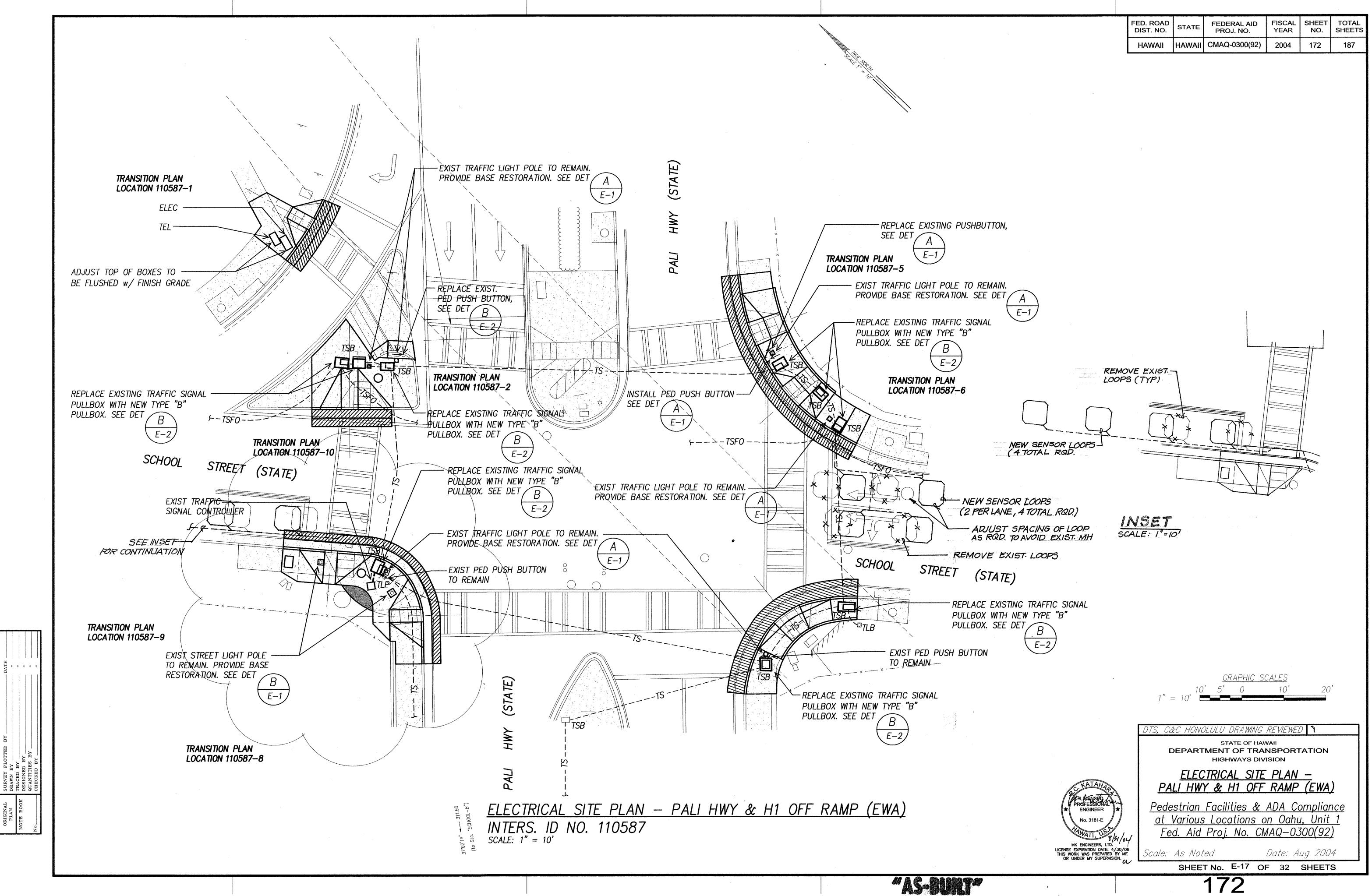


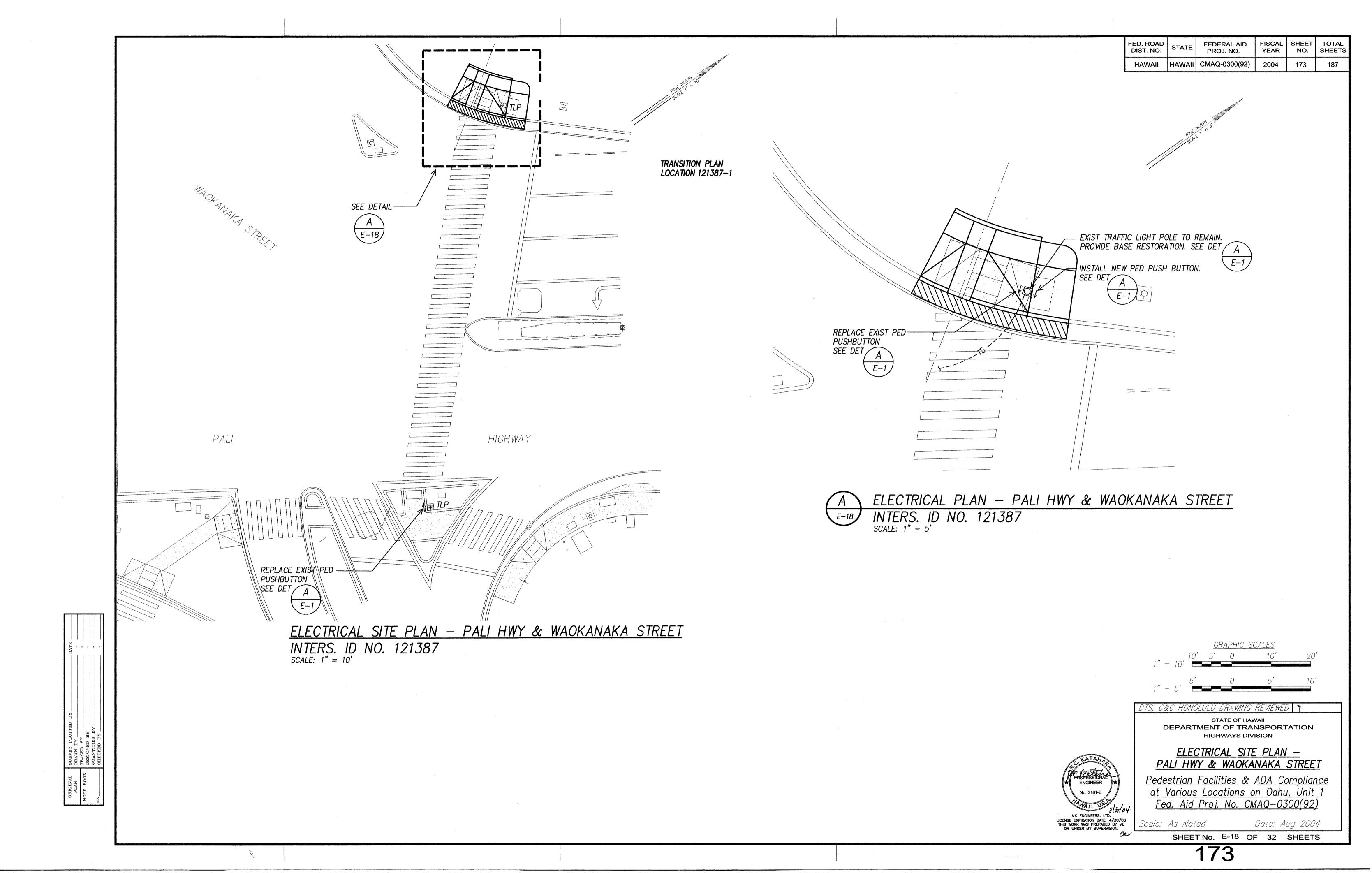


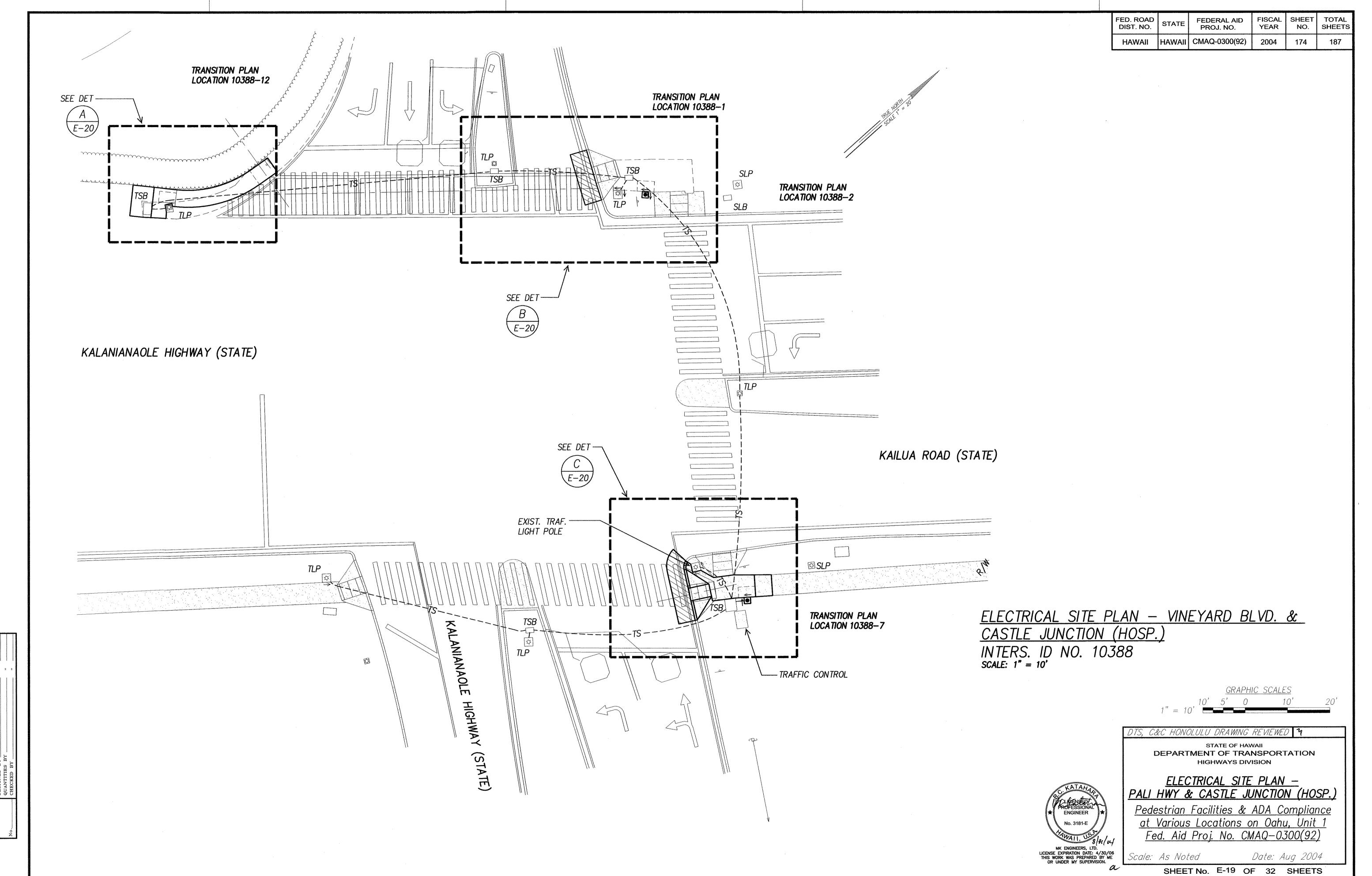
SHEET No. E-15 OF 32 SHEETS

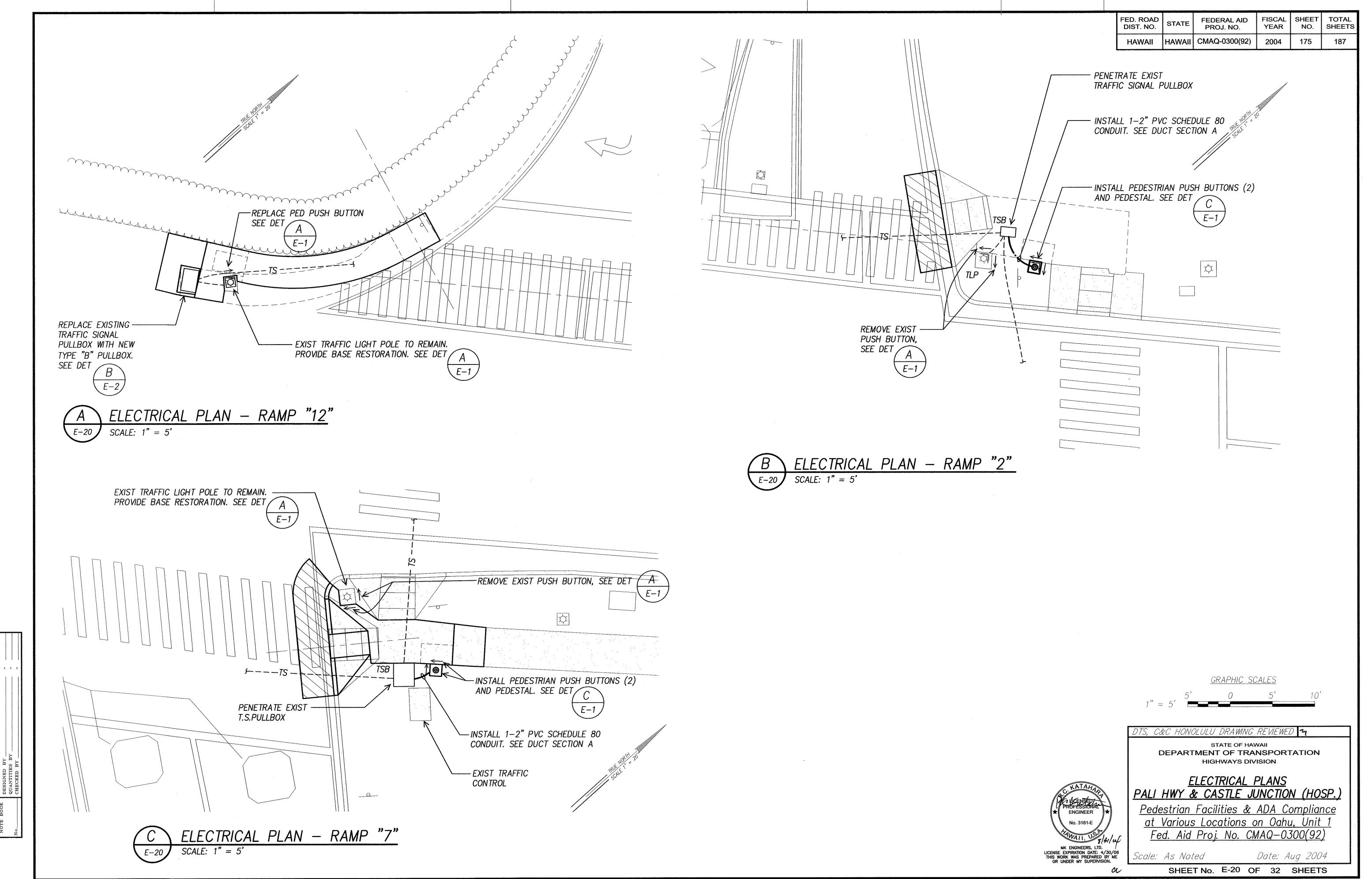


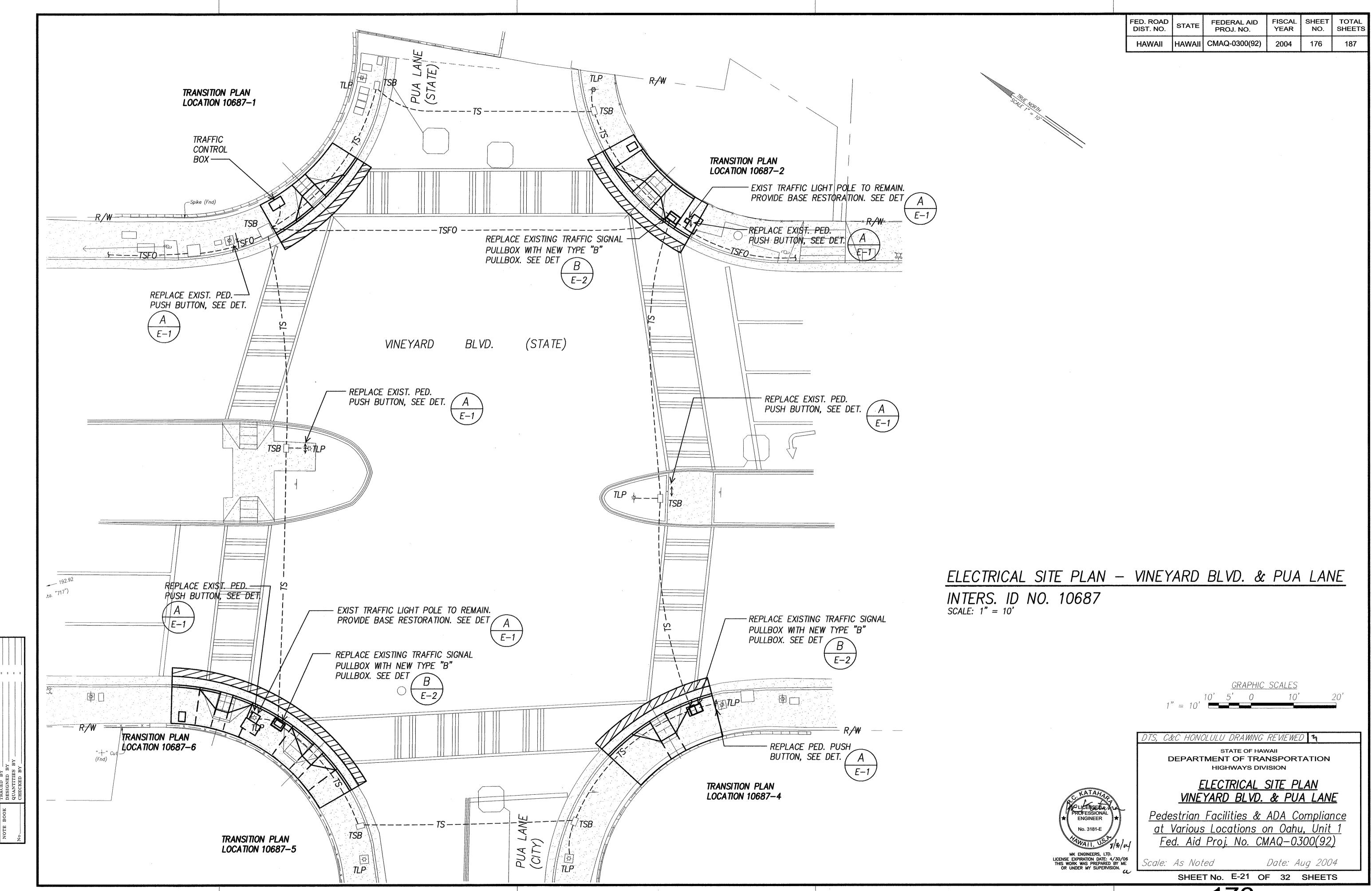
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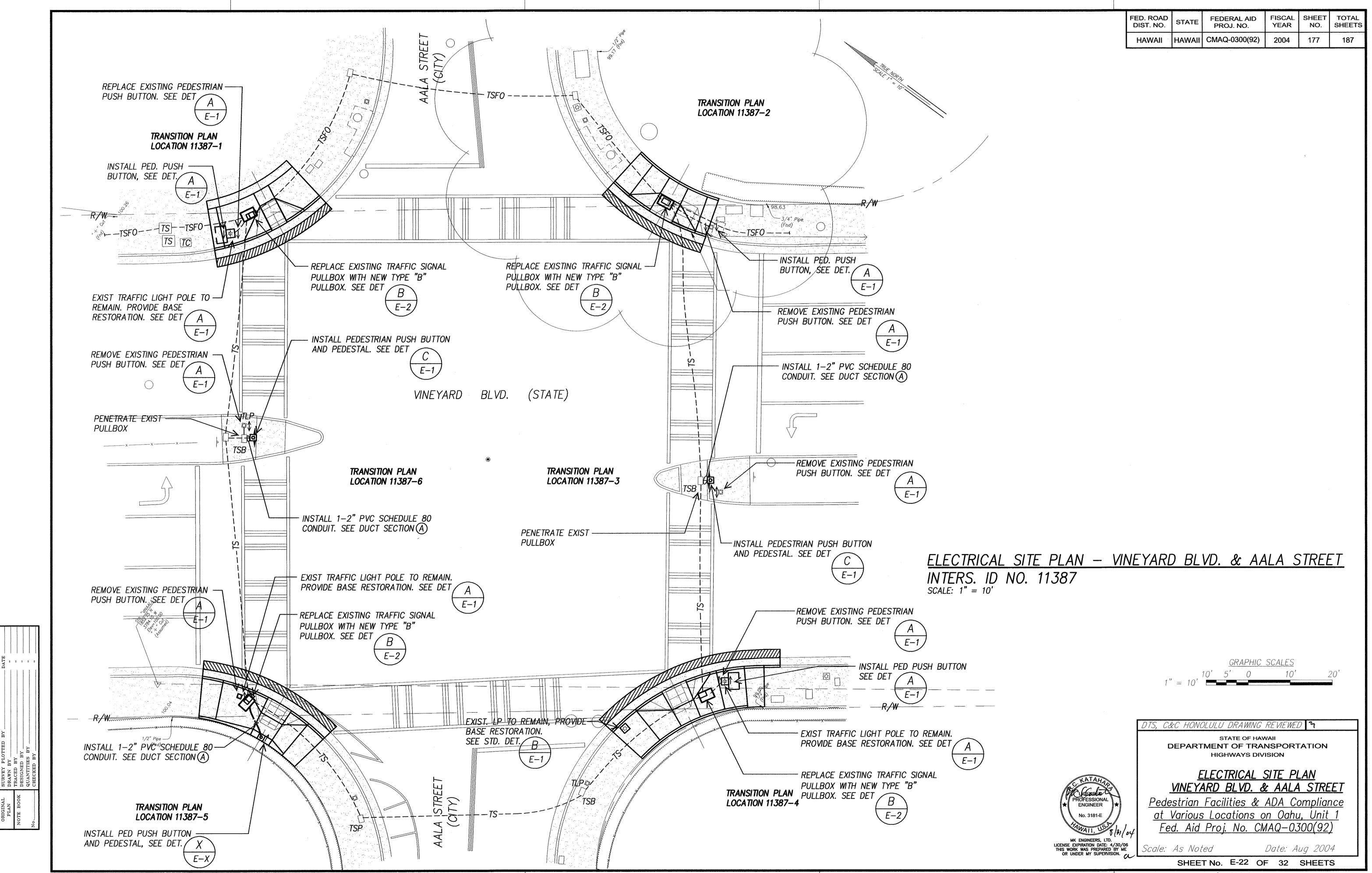


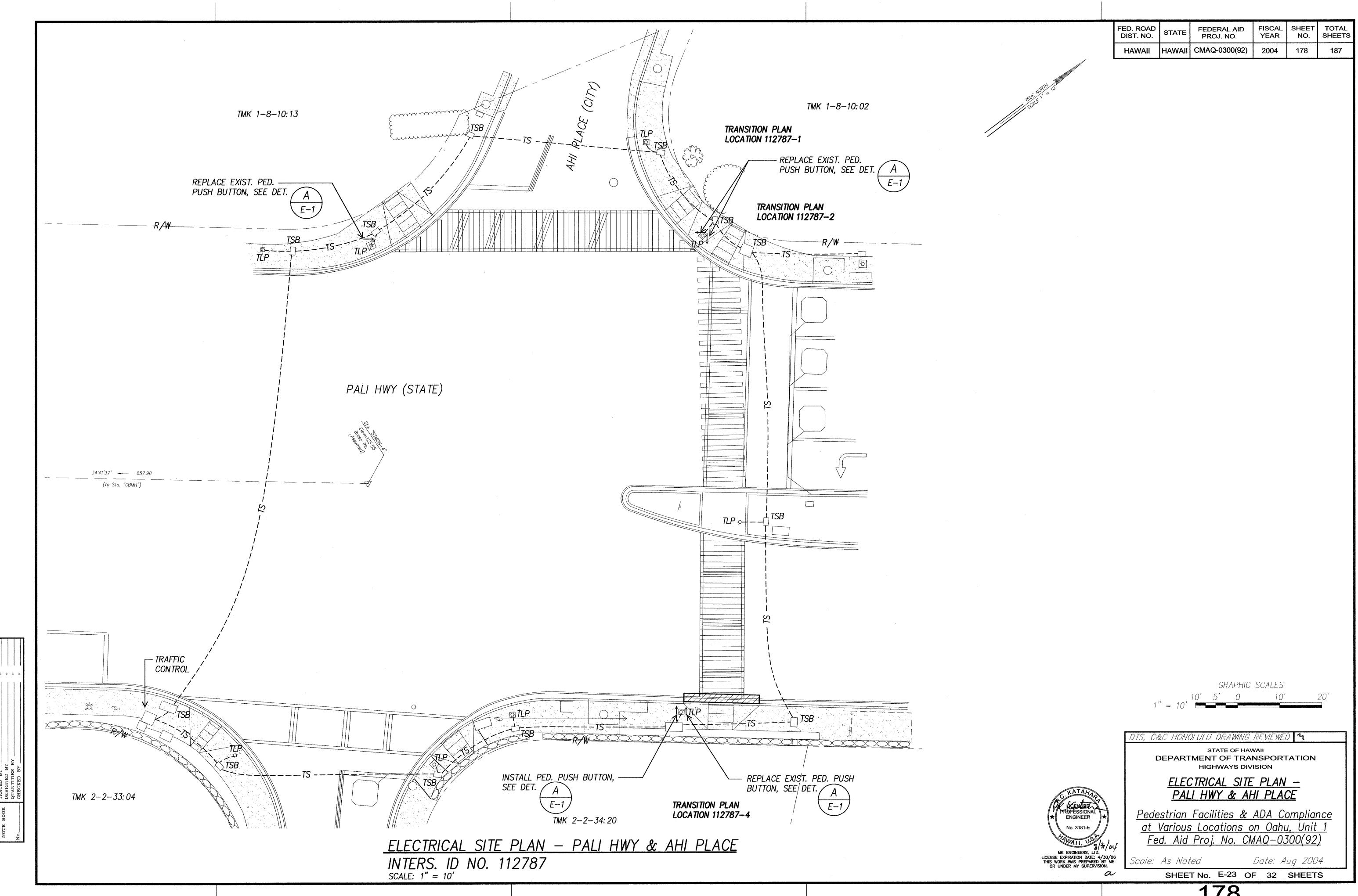




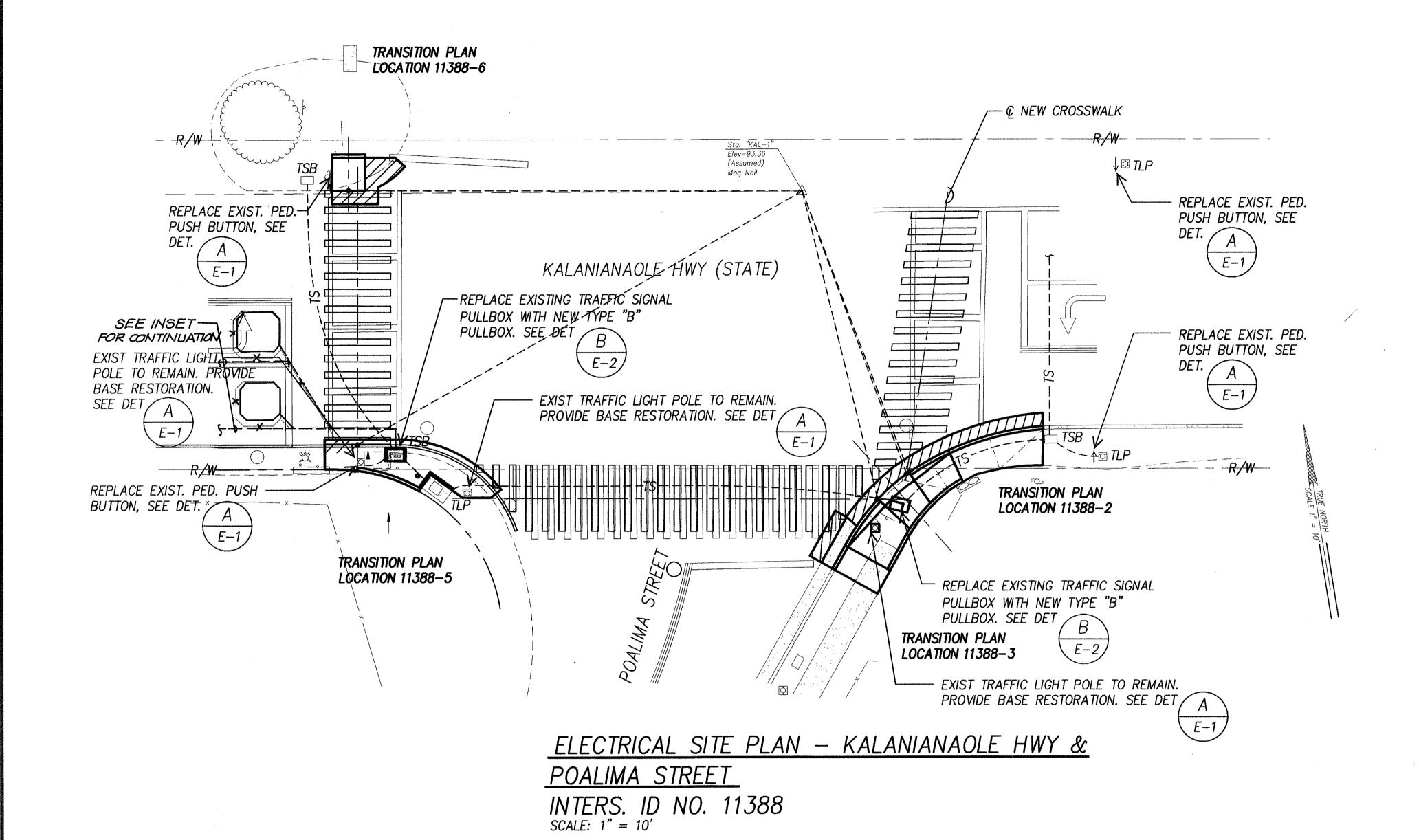


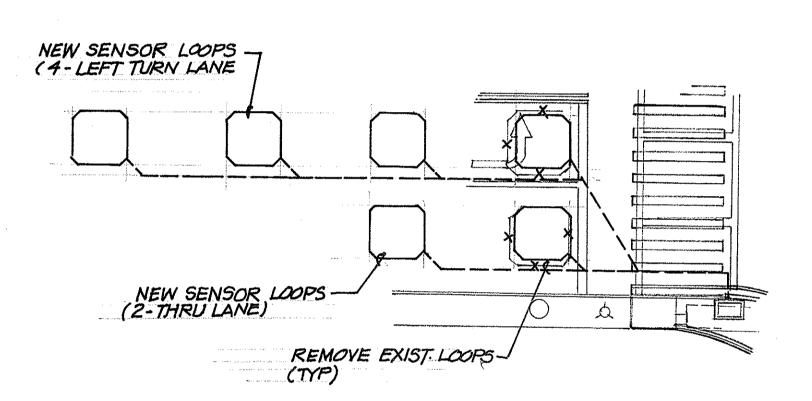




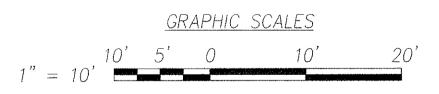


FED. ROAD DIST. NO. FISCAL YEAR FEDERAL AID PROJ. NO. SHEET HAWAII CMAQ-0300(92) 2004 C.O.179





INSET SCALE: 1"=10"





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MK ENGINEERS, LTD. LICENSE EXPIRATION DATE: 4/30/06

C&C HONOLULU DRAWING REVIEWEL

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

<u>SITE PLAN -</u> KALANIANAOLE HWY & POALIMA STREET

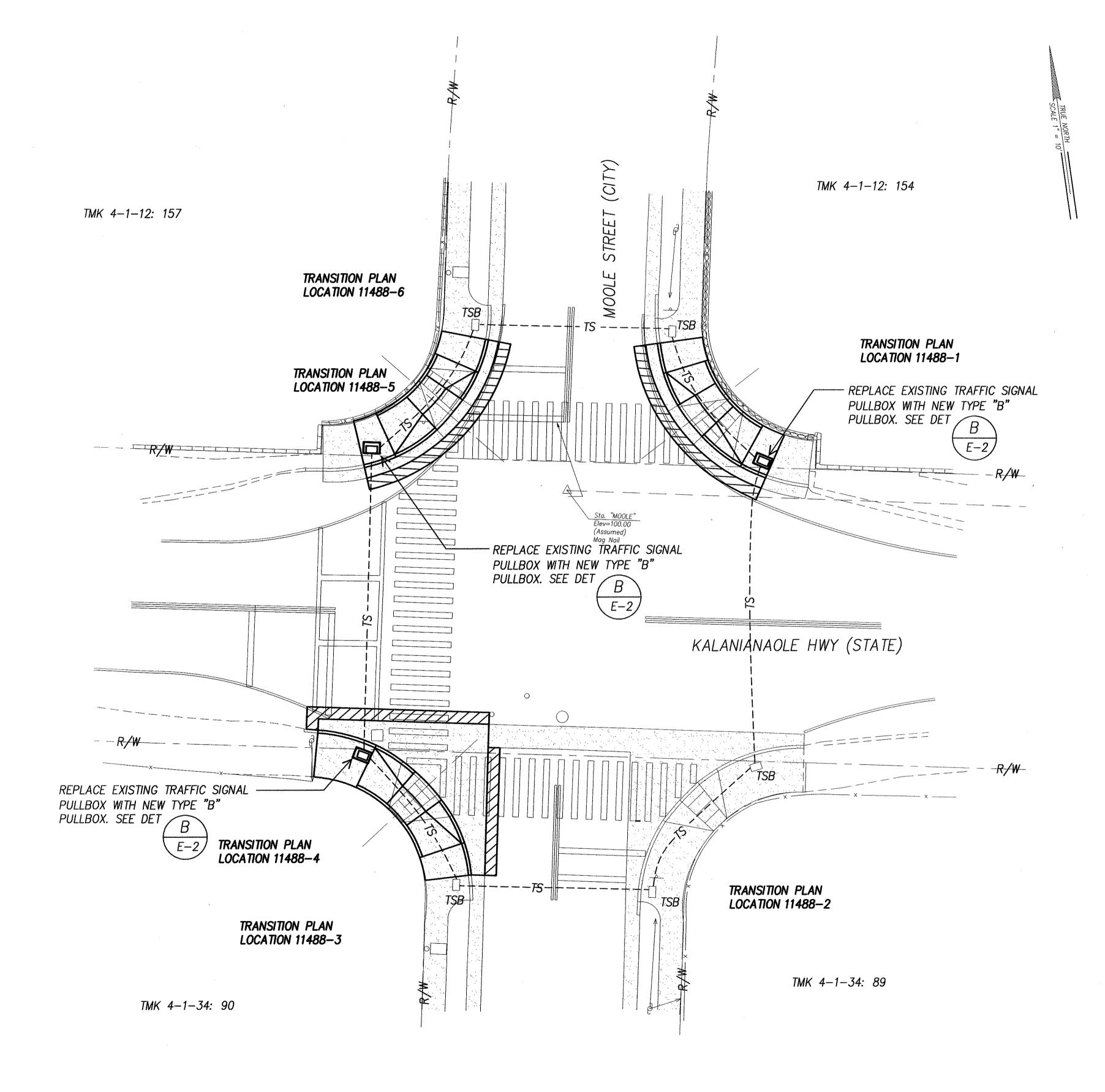
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

Scale: As Noted

Date: Aug 2004 SHEET No. E-24 OF 32 SHEETS

C.O. 179

				<u> </u>	
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	CMAQ-0300(92)	2004	180	187



, C&C HONOLULU DRAWING REVIEWED 14

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

<u>ELECTRICAL SITE PLAN —</u> KALANIANAOLE HWY & MOOLE STREET

GRAPHIC SCALES

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

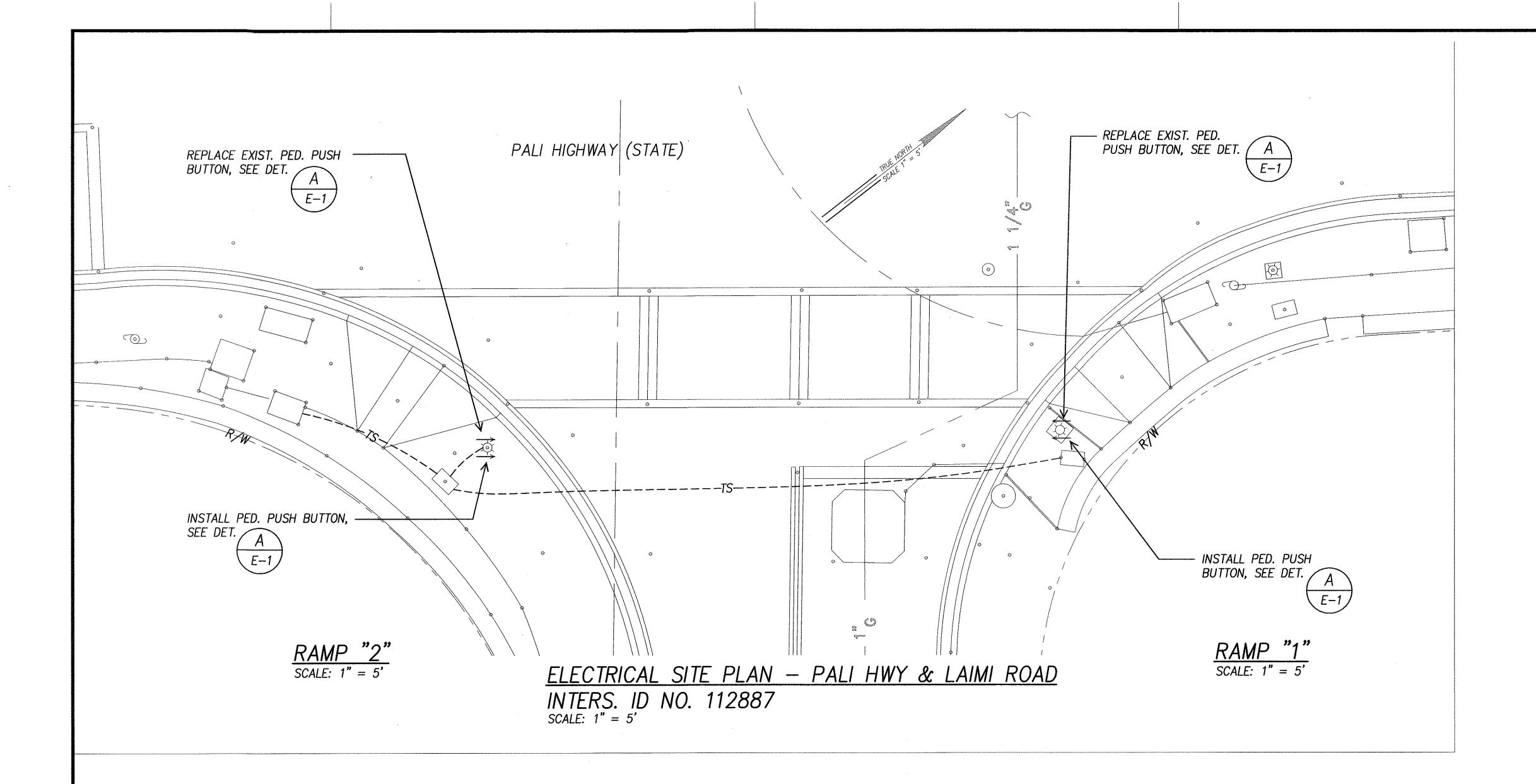
Scale: As Noted

Date: Aug 2004 SHEET No. E-25 OF 32 SHEETS

MK ENGINEERS, LTD.
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<u>ELECTRICAL SITE PLAN - KALANIANAOLE HWY & MOOLE STREET</u>

INTERS. ID NO. 11488 SCALE: 1" = 10'



FED. ROAD DIST. NO. STATE FEDERAL AID PROJ. NO. FISCAL SHEET NO. SHEETS

HAWAII HAWAII CMAQ-0300(92) 2004 181 187

COTE BOOK COTE BOOK COTE STATES BY COTE BOOK COTE STATES BY COTE S

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LICENSE EXPIRATION DATE: 4/30/06
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OR UNDER MY SUPERVISION.

DTS, C&C HONOLULU DRAWING REVIEWED 7

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

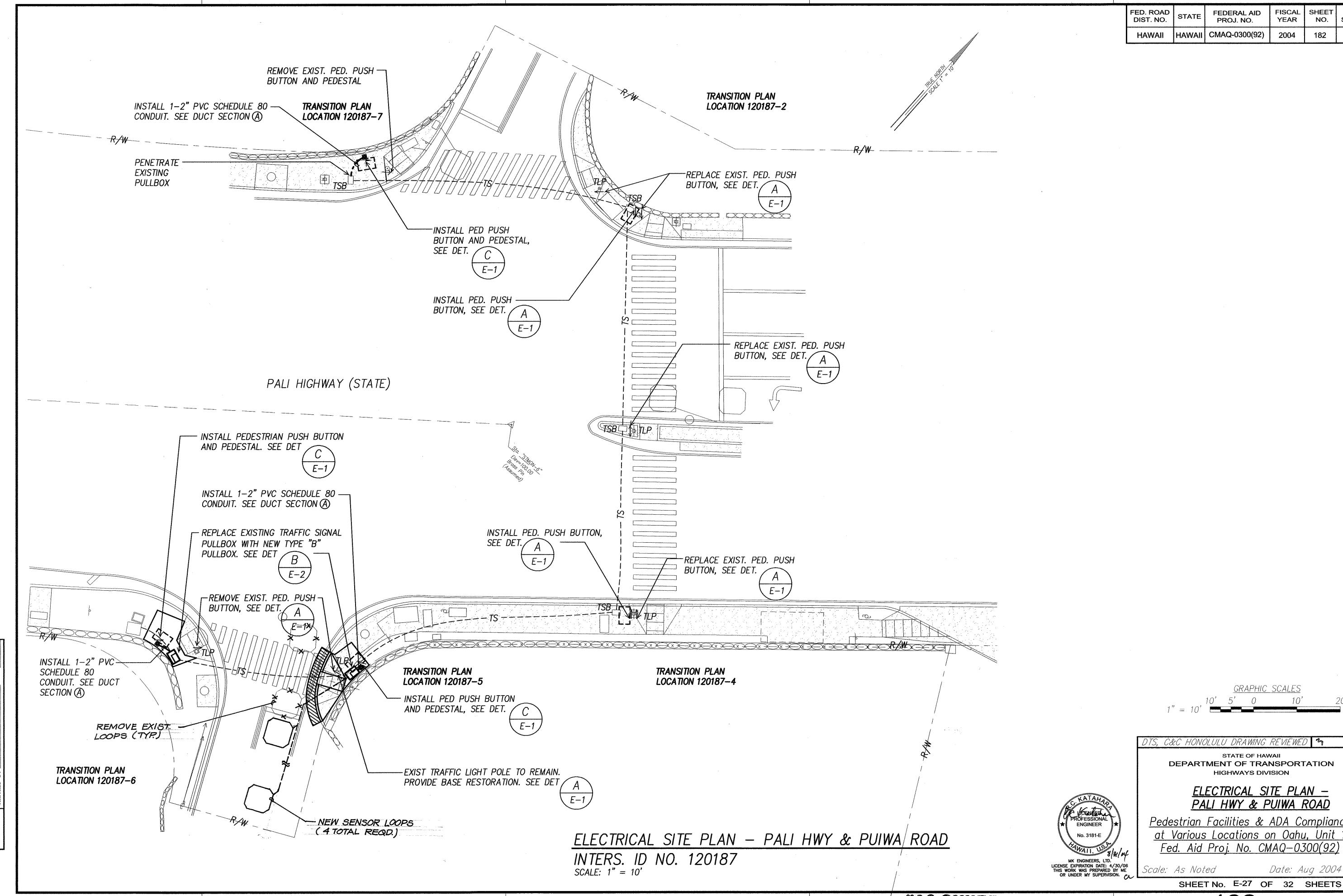
ELECTRICAL SITE PLAN — PALI HWY & LAIMI ROAD

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

Scale: As Noted

Date: Aug 2004

SHEET No. E-26 OF 32 SHEETS



FEDERAL AID PROJ. NO. FISCAL YEAR NO. HAWAII | HAWAII | CMAQ-0300(92) 2004 182

S, C&C HONOLULU DRAWING REVIEWED 🖣 🦘

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

> <u>ELECTRICAL SITE PLAN —</u> PALI HWY & PUIWA ROAD

GRAPHIC SCALES

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

Date: Aug 2004

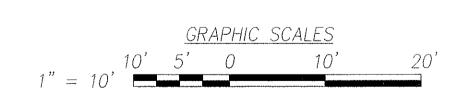
182

"AS-BUILT"

FEDERAL AID PROJ. NO. FISCAL SHEET TOTAL YEAR NO. SHEETS FED. ROAD DIST. NO. HAWAII HAWAII CMAQ-0300(92) 2004

TRANSITION PLAN LOCATION 62887-4 INSTALL PED PUSH BUTTON — AND ₱EDESTAL, SEE DET. ∕ E-1 INSTALL 1-2" PVC SCHEDULE 80 — CONDUIT. SEE DUCT SECTION (A) REPLACE EXISTING TRAFFIC SIGNAL -PULLBOX WITH NEW TYPE "B" PULLBOX. SEE DET B E-2) EXIST TRAFFIC LIGHT POLE TO REMAIN. — PROVIDE BASE RESTORATION. SEE DET - REMOVE EXISTING PEDESTRIAN PUSH BUTTOM. SEE DET LILIHA STREET (STATE) - EXIST TRAFFIC LIGHT POLE TO REMAIN. PROVIDE BASE RESTORATION. SEE DET, REPLACE EXISTING TRAFFIC SIGNAL -PULLBOX WITH NEW TYPE "B"
PULLBOX. SEE DET E-2/ EXIST. HT BOX TO REMAIN,— ADJUST TOP OF BOX TO BE ADJUST TOP OF BOX TO LE
FLUSH W/ FINISH GRADES
TRANSITION PLAN
LOCATION 62887-3 INSTALL PED. PUSH BUTTON, — SEE DET. A E-1- REPLACE EXISTING PEDESTRIAN PUSH BUTTOM. SEE DET

> ELECTRICAL SITE PLAN - LILIHA STREET & H1 ON RAMP INTERS. ID NO. 62887 SCALE: 1" = 10'



DTS, C&C HONOLULU DRAWING REVIEWED 14

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

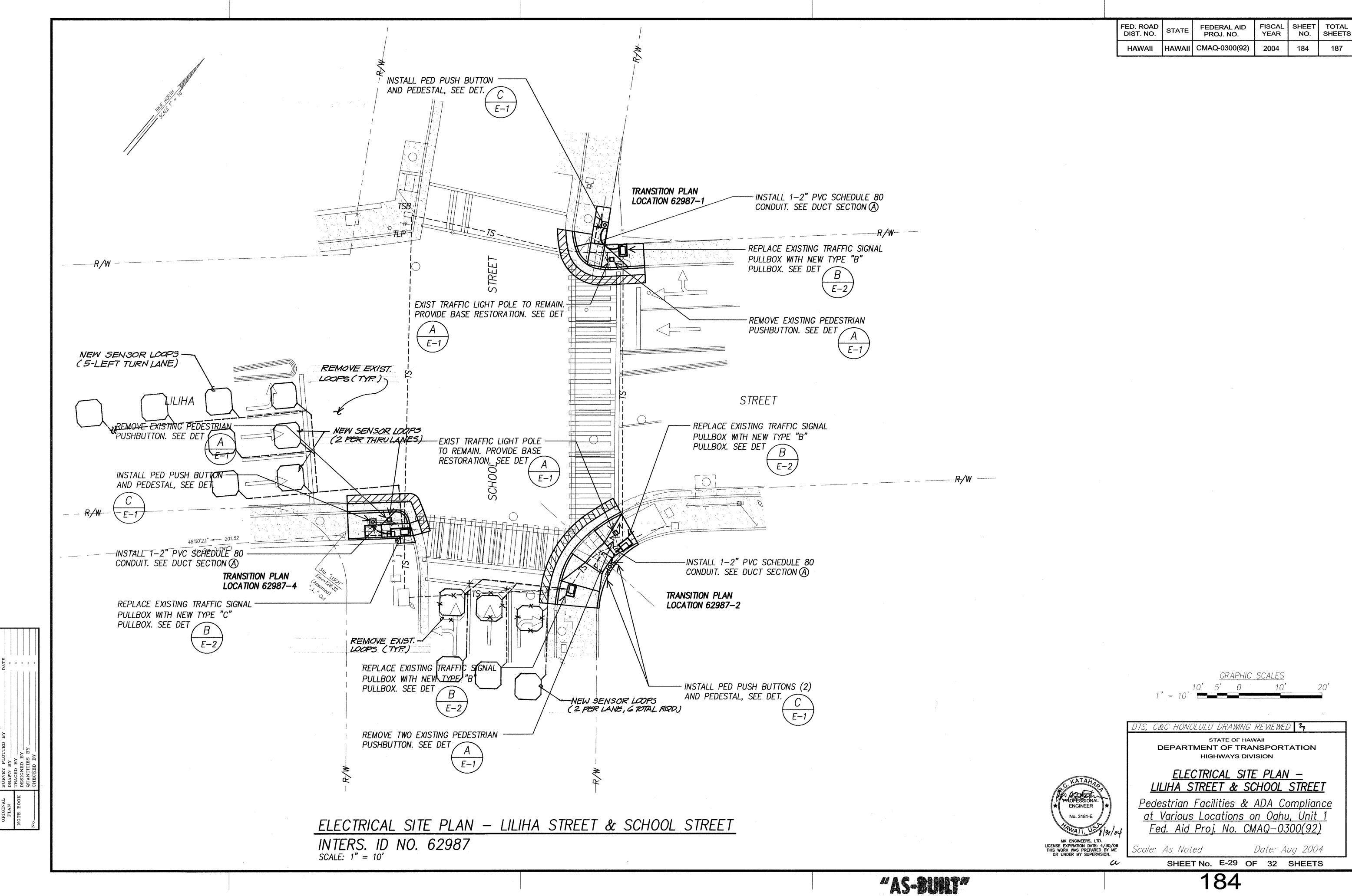
<u>ELECTRICAL SITE PLAN —</u> <u>LILIHA STREET & H1 ON RAMP</u>

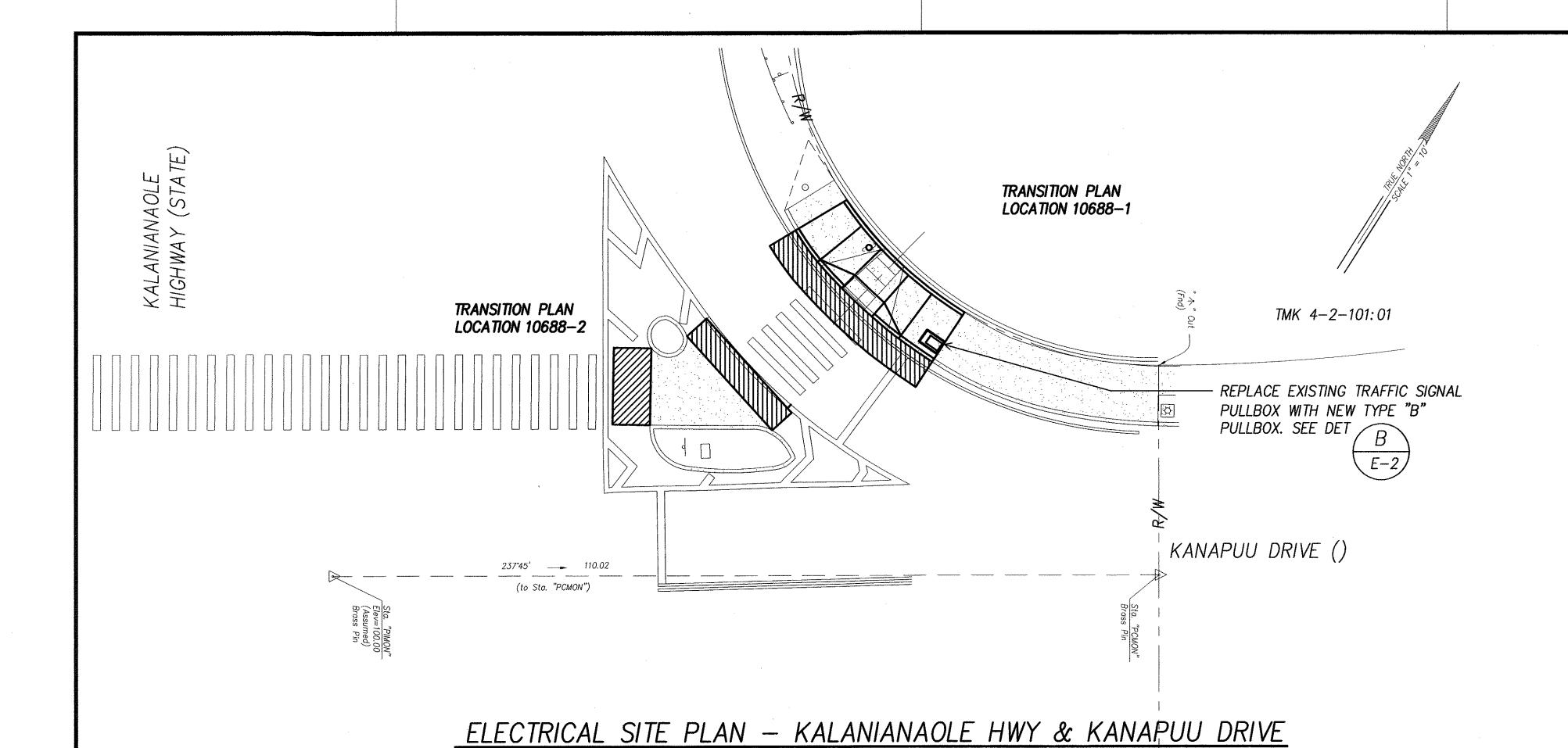
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

Scale: As Noted

MK ENGINEERS, LTD.
LICENSE EXPIRATION DATE: 4/30/06
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Date: Aug 2004 SHEET No. E-28 OF 32 SHEETS

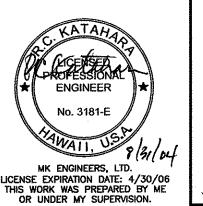




INTERS. ID NO. 10688 SCALE: 1" = 10'

FED. ROAD DIST. NO. FISCAL SHEET YEAR NO. FEDERAL AID PROJ. NO. HAWAII CMAQ-0300(92) 2004 185





OTS, C&C HONOLULU DRAWING REVIEWED 🛂

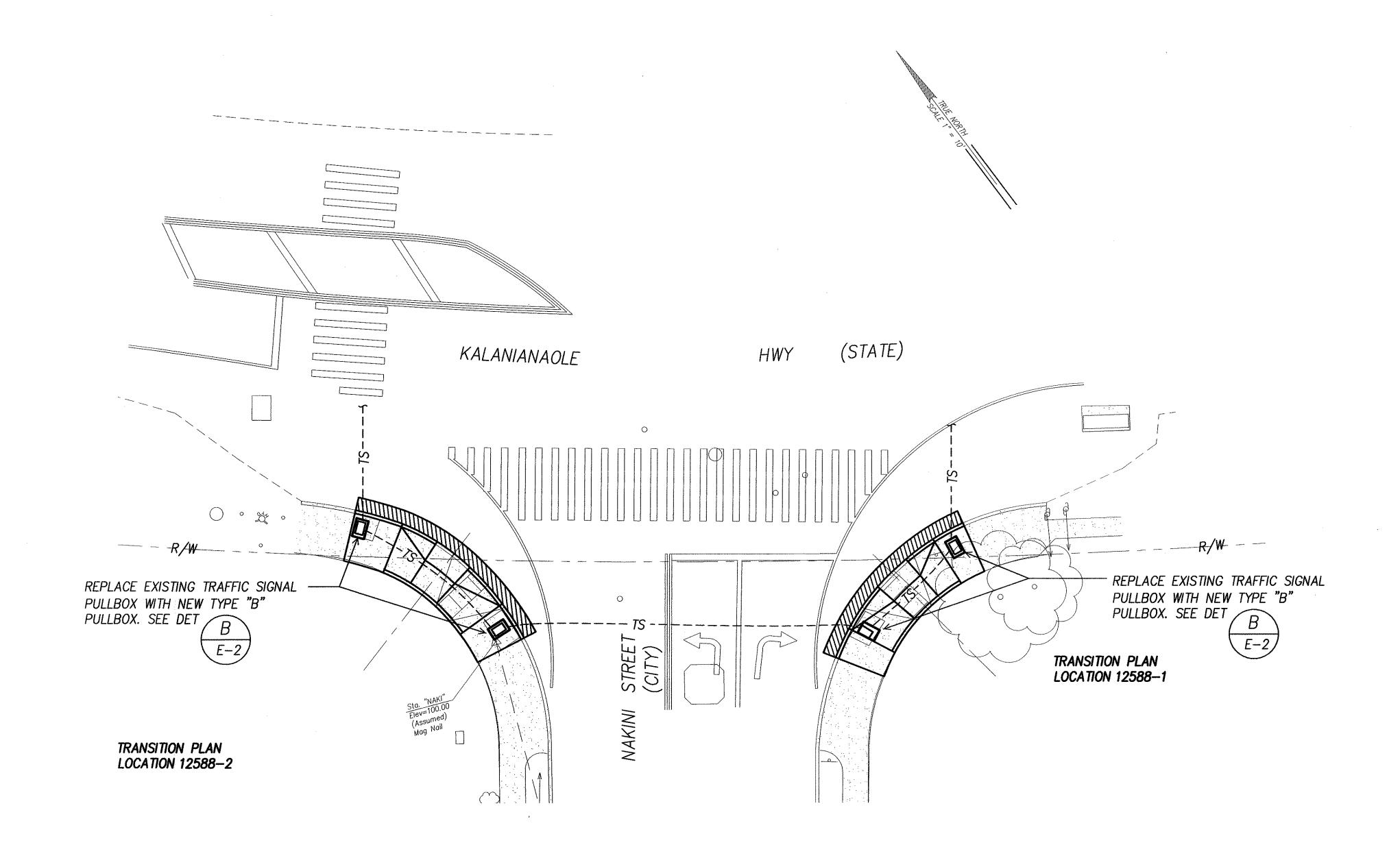
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

<u>ELECTRICAL SITE PLAN —</u> KALANIANAOLE HWY & KANAPUU DRIVE

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 1 Fed. Aid Proj. No. CMAQ-0300(92)

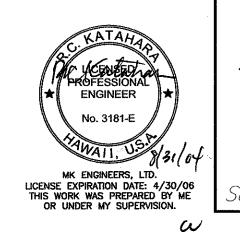
SHEET No. E-30 OF 32 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	CMAQ-0300(92)	2004	186	187



ELECTRICAL SITE PLAN - KALANIANAOLE HWY & NAKINI STREET INTERS. ID NO. 12588 SCALE: 1" = 10'





DTS, C&C HONOLULU DRAWING REVIEWED 3

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

ELECTRICAL SITE PLAN — KALANIANAOLE HWY & NAKINI STREET
Pedestrian Facilities & ADA Compliance
at Various Locations on Oahu, Unit 1
Fed. Aid Proj. No. CMAQ—0300(92)

Date: Aug 2004

SHEET No. E-31 OF 32 SHEETS

