

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	36A-01-82	1982	2	23

LEGEND

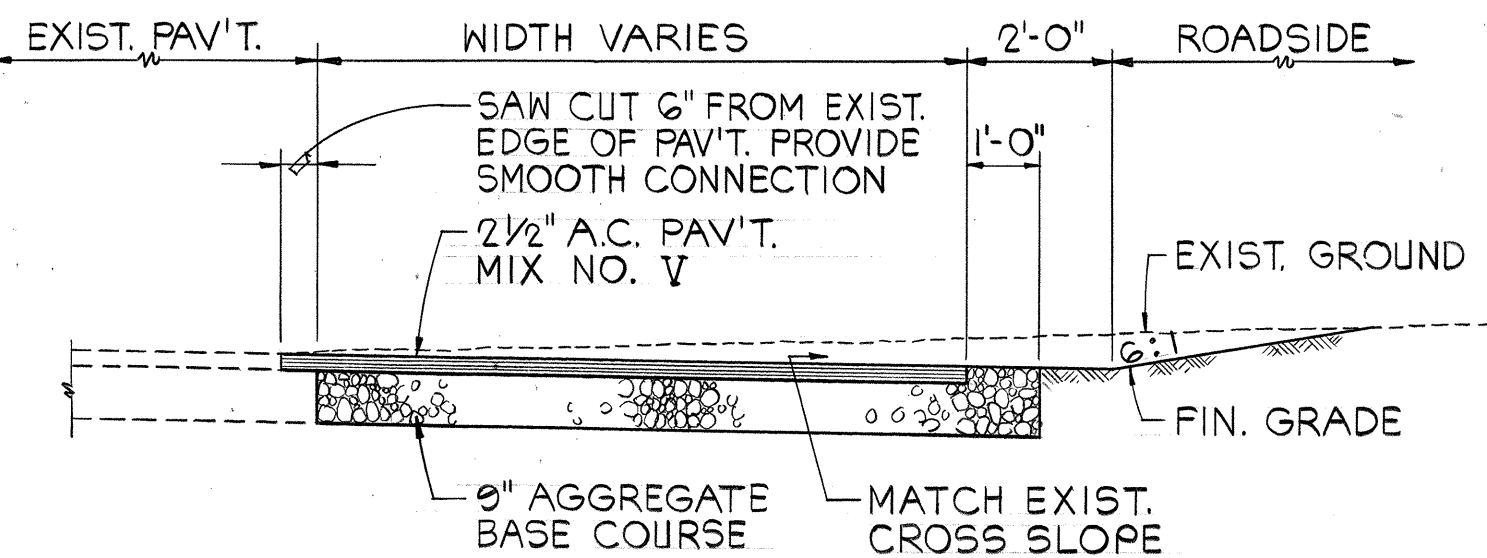
- 12" RY↑ TRAFFIC SIGNAL HEAD
- 12" RY← PROGRAMMED VISIBILITY TRAFFIC SIGNAL HEAD
- 12" RY↯ STANDARD TRAFFIC AND PEDESTRIAN SIGNAL HEADS MOUNTED ON TYPE I SIGNAL STANDARD, HEIGHT = 10'
- 12" RY← TRAFFIC SIGNAL HEAD
- TRAFFIC SIGNAL HEADS MOUNTED ON TYPE II SIGNAL STANDARD, ARM SPREAD SHOWN 24' AND DISTANCE BETWEEN SIGNAL HEADS SHOWN IS 10'
- TYPE "B" PULLBOX
- M TYPE "B" PULLBOX W/ MODIFIED COVER
- TYPE "A" PULLBOX
- LOOP DETECTOR, SERIES-PARALLEL CONNECTED
- LOOP DETECTOR, SERIES CONNECTED
- EXISTING TRAFFIC SIGNAL SYSTEM
- PB EXISTING PULLBOX
- D24--- EXISTING UNDERGROUND UTILITY LINES, SIZES INDICATED
D = STORM DRAIN
HT = TELEPHONE
- PP POWER POLE
- GP GUY POLE
- R/W RIGHT OF WAY
- ***** EXISTING STRIPING OR CURB TO BE REMOVED
- /// NEW A.C. PAVEMENT
- EXISTING PAVEMENT ARROW
- NEW PAVEMENT ARROW
- TS NEW TRAFFIC SIGNAL STANDARD
- TS EXISTING TRAFFIC SIGNAL STANDARD
- /// EXISTING CROSSWALK MARKINGS
- /// NEW CROSSWALK MARKINGS
- EXISTING STRIPING
- NEW STRIPING

CONSTRUCTION NOTES

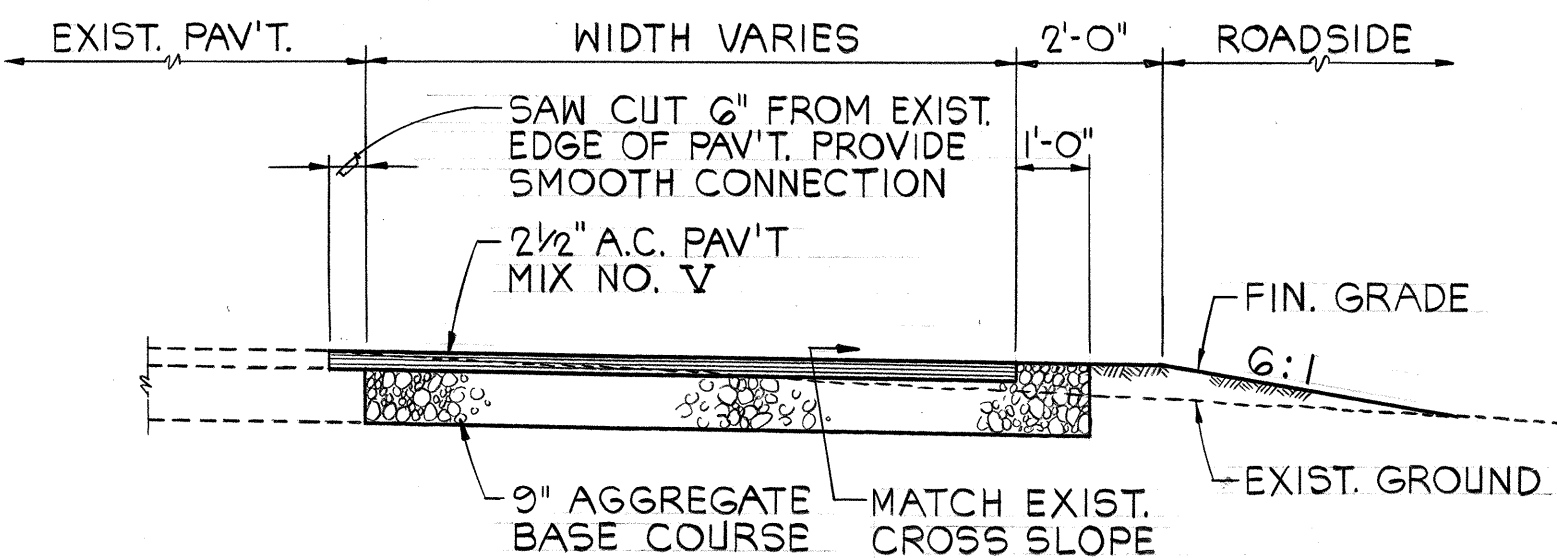
- LOCATIONS OF EXISTING UNDERGROUND STRUCTURES AND UTILITIES SUCH AS PIPELINES, CONDUITS, CABLES, ETC., SHOWN ON PLANS ARE APPROXIMATE ONLY. IT IS NOT THE INTENT OF THESE PLANS TO SHOW THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES WITH THE RESPECTIVE OWNERS. EXISTING UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN COST.
- THE LOCATIONS OF THE TRAFFIC SIGNAL STANDARDS, TRAFFIC SIGNAL STANDARDS WITH MAST-ARM, PEDESTRIAN PUSH BUTTONS, TRAFFIC CONTROLLER, PULLBOXES, CONDUITS AND LOOP DETECTORS 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.
- ALL TRAFFIC SIGNAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", FEDERAL HIGHWAY ADMINISTRATION (1978) AND AMENDMENTS.
- LOCATIONS OF TRAFFIC MARKINGS AND MARKERS (LANE LINES, STOP LINES, CROSSWALK, ETC.) SHOWN ON THE PLANS SHALL BE VERIFIED W/ THE ENGINEER PRIOR TO THE INSTALLATION OF THE TRAFFIC SIGNAL SYSTEM.
- REMOVAL OF PAVEMENT MARKINGS AND STRIPINGS SHALL BE DONE BY THE CONTRACTOR.
- EXISTING TRAFFIC SIGNAL SYSTEM SHALL REMAIN IN OPERATION UNTIL THE NEW TRAFFIC SIGNAL SYSTEM BECOMES OPERATIONAL. CONTRACTOR SHALL REMOVE THE EXISTING TRAFFIC SIGNAL SYSTEM AND DELIVER ALL TRAFFIC SIGNAL EQUIPMENT TO THE STATE HIGHWAYS MAINTENANCE BASEYARD AT 650 PALAPALA DRIVE, KAHULUI, MAUI.
- MAINTENANCE OF TRAFFIC THROUGH THE CONSTRUCTION AREA SHALL BE IN ACCORDANCE WITH PART VI OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", FEDERAL HIGHWAY ADMINISTRATION (1978) AND AS SPECIFIED IN THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ADEQUATE BARRICADES, BLINKERS, CONSTRUCTION SIGNS, ETC. FOR THE SAFETY OF THE MOTORING PUBLIC.
- REMOVAL OF EXISTING SIGNS SHALL ALSO INCLUDE THE REMOVAL OF POSTS AND FOUNDATIONS UNLESS OTHERWISE NOTED. ALL SIGN MATERIALS REMOVED BY THE CONTRACTOR SHALL BE DELIVERED TO THE STATE HIGHWAYS MAINTENANCE BASEYARD AT 650 PALAPALA DRIVE, KAHULUI, MAUI. COSTS FOR REMOVAL OF SIGNS AND DELIVERY TO THE STATE HIGHWAYS MAINTENANCE BASEYARD SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF WORK.
- RELOCATION OF EXISTING SIGN AND POSTS AND REFLECTOR MARKERS SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF WORK.
- EXISTING TRAFFIC SIGNAL FOUNDATIONS SHALL BE REMOVED TO AT LEAST 9" BELOW FINISHED GRADE AND THE IMMEDIATE AREA SHALL BE RESTORED TO MATCH THE ADJACENT SURFACE. EXISTING PULLBOXES WITHIN NEW OR EXISTING PAVEMENT AREAS SHALL BE COMPLETELY REMOVED AND THE GROUND SHALL BE BACKFILLED WITH BASE COURSE MATERIAL AND COMPACTED BEFORE PAVING TO MATCH THE ADJACENT AC. SECTION.
- EXISTING LOOP DETECTORS, CONDUITS AND PULLBOXES ARE TO BE ABANDONED IN PLACE UNLESS OTHERWISE NOTED ON PLAN OR SPECIFIED HEREIN.

TRAFFIC SIGNAL NOTES

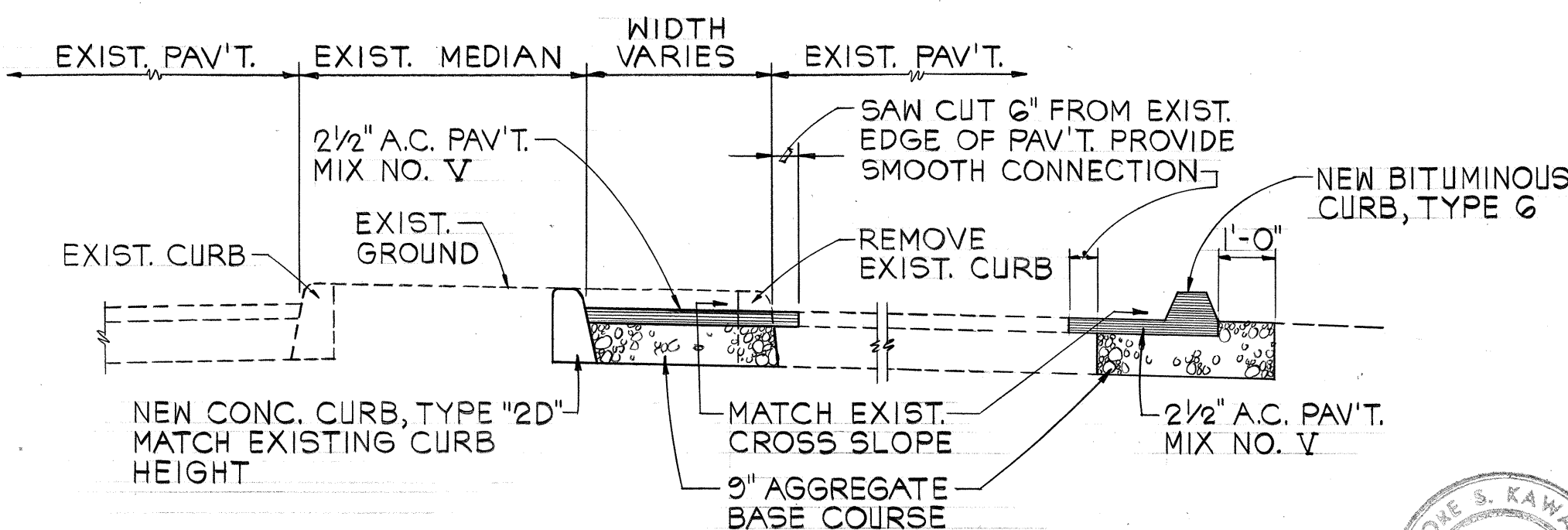
- ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT SHALL BE COMPLETELY WIRED IN THE CABINET AND SHALL CONTROL THE TRAFFIC SIGNALS AS CALLED FOR IN THE PLANS.
- SIGNAL INDICATIONS DURING CLEARANCE INTERVAL:
 - IF A SIGNAL IS G OR ~~G~~ AND WILL REMAIN G OR ~~G~~ DURING THE NEXT PHASE, IT SHALL BE G OR ~~G~~ DURING THE CLEARANCE INTERVAL.
 - IF A SIGNAL IS G OR ~~G~~ AND WILL BECOME R OR EXTINGUISHED DURING THE NEXT PHASE, IT SHALL BE Y OR ~~Y~~ DURING THE CLEARANCE INTERVAL.
 - IF A SIGNAL IS R AND WILL REMAIN R OR BECOMES G DURING THE NEXT PHASE, IT SHALL REMAIN R DURING THE CLEARANCE INTERVAL.
- THE CONTROLLER FURNISHED SHALL BE A 2-8 PHASE CONTROLLER. A COORDINATION UNIT IS NOT REQUIRED FOR THIS PROJECT. HOWEVER, THE CABINET SHALL BE WIRED FOR FUTURE INSTALLATION OF A COORDINATION UNIT OF THE SAME MANUFACTURER AS THE CONTROLLER UNIT.
- THE LOOP AMPLIFIER UNITS FURNISHED FOR THIS PROJECT SHALL BE CAPABLE OF OPERATING THE LOOP DETECTOR CONFIGURATIONS SHOWN ON THE PLANS.
- MINIMUM CONTROLLER CABINET SIZE SHALL BE 40" HIGH, 24" WIDE AND 14" DEEP.
- CONTRACTOR SHALL FURNISH A 50-AMP. CIRCUIT BREAKER.
- A SOLID #8 BARE COPPER WIRE SHALL BE PULLED WITH THE TRAFFIC CONTROL CABLE FOR EQUIPMENT GROUND. COST SHALL BE INCIDENTAL TO THE INSTALLATION OF THE CONTROL CABLE.



CUT SECTION



FILL SECTION



CURB SECTION

TYPICAL PAVEMENT SECTIONS

SCALE: 3/8" = 1'-0"



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
Theodore S. Kawahigashi
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LEGEND, NOTES AND TYPICAL PAVEMENT SECTIONS

HANA HIGHWAY
TRAFFIC SIGNALS AT
HALEAKALA HIGHWAY
PROJECT NO. 36A-01-82

SCALE: AS SHOWN DATE: 4-20-82

SHEET No. 1 OF 1 SHEETS