

ORIGINAL PLAN	SURVEY PLOTTED	DATE
	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
	NOTED BY	
NOTE BOOK	No.	

SCOPE OF WORK for this project consists of realigning the intersection of Kaumualii Highway, Kuhio Highway and Rice Street, work includes: asphaltic concrete roadway; construction of a Mechanically Stabilized Earth Retaining Wall (MSERW); construction of roadway drainage and a three barrel culvert under the roadway; relocation of utilities including Lihue Plantation facilities; installation of traffic signal system and highway lighting; standard centerline and reference survey monuments; adjusting utility boxes and manholes; removing and installing pavement markings and signs; dressing of shoulders; replacing existing water mains and replacing sidewalk, curb, gutters and appurtenances.

GENERAL NOTES

- The Contractor is reminded of the requirements of Subsection 108.01–Subletting of Contract, which requires him to perform work amounting 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.
- 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
Section 645 –Traffic Control
- All necessary permits shall be obtained by the Contractor at his own cost.
- The Contractor shall comply with the State of Hawaii’s Occupational Safety and Health Law (DOSH).
- 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 all existing utilities with the respective owners. Existing utilities damaged by the Contractor shall be repaired by the Contractor at his own expense.
- A minimum of 36 inches clear width and 80 inches headroom clearance height shall be provided along walkways.
- The surface of an accessible route shall comply with the latest “American with Disabilities Act Accessibility Guidelines.”
- At the end of each day’s work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
- Smooth riding connections shall be constructed at all limits of paving, including the beginning and end of project, connecting approaches, side streets, walkways and driveways as shown on the plans and/or as directed by the Engineer.
- Dressing of shoulder and sidewalk shall consist of clearing, grubbing, grading reshaping and compacting with suitable material as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to the various contract items.
- The Contractor shall provide for access to and from all existing side streets at all times.

NOTES FOR WORK WITHIN COUNTY RIGHT-OF-WAY

- All work shall be done in accordance with the County of Kauai Department of Public Works “Standard Details for Public Works Construction,” dated September, 1984 and “Hawaii Standard Specifications for Road, Bridge and Public Works Construction, 1994.”
- The contractor shall verify the location of all existing utilities, whether shown on the plan or not, and shall be responsible for the repair or replacement of same in the event of damages due to his construction practices. The contractor shall coordinate his work with the respective utility companies.
- The contractor shall provide and install traffic control devices in conformance with the “Manual of Uniform Traffic Control Devices for Streets and Highways,” and as directed by the Chief Engineer.
- The contractor shall notify the Department of Public Works 48 hours before the commencement of any utility work to schedule a field review and secure approval of the proposed utility line location within the County right-of-way.
- The proposed utility line location shall be laid out in the field prior to the conducting of the field review by the Department of Public Works.
- Field adjustments shall be made as directed by the Department of Public Works prior to the commencement of any utility line work.
- The Contractor shall apply and pay for all necessary construction permits prior to start of construction. A road permit shall be obtained from the Department of Public Works.
- The contractor shall provide at least one (1) lane for traffic movement at all times. Two (2) lanes for traffic movement shall be provided between the hours of 3:30 p.m. to 8:30 a.m.
- The existing pavement shall be saw-cut before commencement of trenching work.
- Any pavement outside the contract zone limits damaged as a result of construction operations shall be restored to its original or better condition as directed by the Chief Engineer.
- A temporary cold mix patch shall be applied immediately upon completion of backfilling operation and shall be maintained until a permanent patch is authorized by the Department of Public Works.
- No material, except for the trench excavated material, shall be stockpiled closer than six (6) feet from the existing edge of pavement.
- No construction equipment shall be parked within the road right-of-way in such a manner that the equipment will obstruct the normal movement and sight distance of the driving motorist, except at locations designated in writing and approved by the County Engineer.
- Except during actual working hours, all signs which do not pertain to the construction activity such as “Men Working” and “Flagman Ahead” shall be covered or laid down. However, all signs necessary for the safety of the public shall be maintained.
- Any pavement markings, structures, and appurtenances damaged by the waterline installation shall be retained or reconstructed satisfactory to the Department of Public Works.
- During non-working hours, all trenches shall be covered with a safe non-skid bridging material and all lanes shall be open to traffic.
- The permittee shall maintain to the satisfaction of the Department of Public Works the area worked within the government right-of-way including any repairs to pavement and shoulder damaged as a result of the installation work for a period of one (1) year from the date of final inspection as noted by the Department of Public Works. The permittee shall undertake repairs expeditiously whenever directed by the Chief Engineer during the maintenance period.
- All work including repair of damaged pavement and shoulder shall be inspected and approved by the Department of Public Works. All unapproved work shall be considered unacceptable and shall be reworked and corrected as directed by the Department of Public Works at the contractor’s expense.
- Damaged shoulders shall be restored to a condition equal to or better than existing condition.
- The Contractor shall conduct his operations so as to offer the least possible obstruction and inconvenience to the public and he shall have under construction no greater length or amount of work than he can prosecute properly with due regards to the rights of the public.
- The Contractor shall retain the services of a Geotechnical Engineer for quality control. Certification from the registered Geotechnical Engineer shall be submitted to the Department of Public Works at the completion of construction work. Geotechnical Engineer shall certify that the construction work meet “Standard Specifications”. Geotechnical Engineer shall also submit test results as requested by the Department of Public Works.

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY

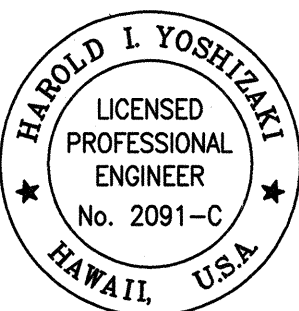
- All construction work shall be done in accordance with these plans, all applicable sections of the Standard Specifications for Road, Bridge and Public Works Construction, dated 1994 as amended, of the State Highways Division, Dept. of Transportation & the project’s Special Provisions, unless otherwise specified.
- The Contractor shall provide, install and maintain all necessary signs, lights, flares, temporary concrete guardrails, barricades, markers, cones and other protective facilities and shall take all necessary precautions for the protection & for the convenience & safety of public traffic. All such protective facilities & precautions to be taken shall conform with the “Rules and Regulations Governing the Use of Traffic Control Devices at Work Sites On or Adjacent to Public Streets and Highways” adopted by the Highway Safety Coordinator & the U.S. Federal Highway Administration’s “Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI – Traffic Controls for Highway Construction and Maintenance Operations,” dated 1988 and all revisions.
- Full compensation for all additional materials & labor, not specifically shown or called for which are necessary to complete the construction of the project, shall be considered incidental to the various contract items in the proposal & no additional compensation will be allowed therefor.
- The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing utility lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
- Traffic Control: Work may be performed only between the hours of 8:30 a.m. and 3:30 p.m., Mon.–Fri., except holidays.
Kaumualii Hwy & Kuhio Hwy:
Contractor shall provide for one lane of traffic each way, at all times, through the construction site.
No lane closures will be permitted at any time,except as noted on the detour plan. Traffic shall be routed through the construction site as provided for in the construction phasing plans.
Rice Street:
Lane closures will be permitted only as provided for in the construction phasing plans.
- The Contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways and other areas. The costs incurred for any necessary remedial action by the Engineer shall be payable by the Contractor.
- The Contractor, at his own expense, shall keep the project area and surrounding area from dust nuisance. The work shall be in conformance with the Air Pollution Control Standards and Regulations of the State Department of Health.
- All exposed areas shall be sodded or planted immediately after the grading work has been completed. All exposed, graded areas shall be grassed. Erosion control grassing shall be measured and paid for under Section 209 – Erosion Control.
- There are no known natural, historic or archaeological sites within the project area. In the event that sites are uncovered during construction, the Contractor shall halt work in the area and immediately notify the Engineer. The Engineer shall contact and advise the finding to the Historic Sites Office of the State Department of Land & Natural Resources and the Land Manager of Amfac Land Company, Ltd., Kauai Division.
- The Contractor shall obtain a Permit to Perform Work Upon State Highways from the State Highways District Engineer, at 3060 Iiwa St. Rm. 205, prior to commencement of work within the State’s highway right-of-way.
- No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way, except at locations designated in writing and approved by the District Engineer.
- The Contractor shall provide an adequate and safe non-skid bridging material, including shoring, over trenches in pavement areas. The bridging shall be able to support all types of vehicular traffic.
- Unless otherwise noted, no trench shall be opened more than 300 feet in advance of installed and tested pipeline and/or ductline.

FED.ROAD DIST.NO	STATE	PROJ. NO	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50E-01-98	1998	3	79

- Existing drainage systems shall be functional at all times.
- The Contractor shall exercise care to minimize damages to existing highway improvements. All damages shall be repaired by the Contractor, at his expense, to the satisfaction of the District Engineer.
- All regulatory, guide, and construction signs and barricades shall have a high-intensity reflective background.
- The Contractor shall inform the State Highways’ (274–3111) at least two (2) days prior to closing any lanes.
- Driveways shall be kept open unless the owners of the properties using these right-of-ways are otherwise provided for satisfactorily.
- Where pedestrian walkways exist, they shall be maintained in a safe and passable condition, or other facilities for pedestrians shall be provided. Passages between walkways for pedestrians shall be provided. Passages between walkways at intersections shall likewise be provided.
- The Contractor shall reference to the satisfaction of the District Engineer, all existing traffic signs, posts and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts and pavement markings disturbed by his activities, at his expense, unless directed otherwise by the District Engineer or his representative.
- The Contractor shall exercise care when performing work in or adjacent to the State highway right-of-way. Damages to existing facilities shall be immediately reported to the respective utility companies, and/or City or State agencies. The repair work shall be done at the Contractor’s expense.
- The Contractor shall notify the State Highways’ District Engineer (274–3111), three (3) working days prior to commencing work.
- Traffic signals shall be kept operational during construction or temporary traffic signal system shall be provided if deemed necessary by the District Engineer or his representative. All work shall be done in accordance to the requirements of the Highways Division and paid for by the Contractor.
- The Permit to Perform Work Upon State Highways may be revoked because of default in any of the following, but not limited to, conditions:
 - Work performed before or after permitted hours.
 - Failure to maintain roadway surfaces in a smooth and safe condition.
 - Failure to clean up construction debris generated from project work.
 - Failure to provide proper traffic control.
 - Failure to replace damaged pavement markings and signs.

APPROVED:

S. Spring 7/31/98
County Engineer, Dept. of Public Works Date
County of Kauai
(For work within County R/W)



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Harold I. Yoshizaki
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12th Avenue
Honolulu, Hawaii 96816

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES

KAUMUALII HIGHWAY, KUHIO HIGHWAY &
RICE STREET INTERSECTION IMPROVEMENTS
PROJECT NO. 50E-01-98

DATE:

WATER NOTES:

1. Unless otherwise specified, all materials and construction of Water System Facilities and appurtenances shall be in accordance with the "Water System Standards" Volume I and Volume II, 1985 as adopted by the Department of Water, County of Kauai, Board of Water Supply, City and County of Honolulu, Department of Water Supply, County of Maui, Department of Water Supply, County of Hawaii, and all subsequent amendments and additions for use in the design and construction of the Department's water system facilities.
2. The Contractor shall notify Department of Water, County of Kauai, in writing one week prior to commencing work on the main.
3. Unless specified, connections to existing water main, cleaning and chlorination of new mains shall be done by the Contractor with the Department of Water Inspector coordinating the work. Disinfection of the water line shall be done in conformance with "Standard Specifications for Water Works Construction."
4. The Contractor shall verify in the field the location of the existing water mains and appurtenances. The Contractor shall expose the existing water main prior to trenching. Excavation around existing water mains shall be done by hand.
5. The Contractor shall, whenever necessary, properly sheet and brace all excavations to render it secure and shall remove all such sheeting and bracing before completion of the backfill. For all water mains, the minimum cover requirement (from top of pipe to finish grade over pipe) is 3 feet.
6. Plastic pipes shall be PVC 1120, or PVC 1220 SDR 21, Class 200 PR with NSF seal of approval. Plastic pipes 1-1/2" and smaller may be of the solvent-weld type. All solvent-welded joints shall be made by Doublecheck using "Color-Guard" fittings as manufactured by the R & G Sloane Manufacturing Co., Inc. or approved equal.
7. Payment for cleaning all installed pipelines shall not be measured nor paid for directly but shall be considered incidental to various items in the proposal.
8. Trench excavations and backfilling in lifts shall conform to the "Standard Specifications for Roads, Bridges and Public Works Construction, dated 1994".
9. The Contractor shall submit the name of its authorized Superintendent on the job.
10. The Contractor shall arrange a preconstruction conference at least 10 days before construction and shall notify the Department at least 3 working days prior to start of construction.
11. The Contractor shall notify Department of Water, County of Kauai, at least 24 hours prior to any pipe laying, backfilling, testing or chlorination to insure the inspectional services will be available.
12. All nuts and bolts for use with flanged joints shall be hot-dip galvanized.
13. In order to prevent unapproved materials from being ordered, the Contractor is invited to submit his material list description to Department of Water for cross-check before ordering any material from the supplier.
14. Prior to the connection of any pipeline installed under this job to the existing main, the pipeline installed shall be thoroughly cleaned, flushed, chlorinated and tested.
15. Cleaning shall be by use of "Pigs" introduced in the pipeline and run completely through all installed pipelines excluding branch lines for fire hydrants and service laterals. "Pigs" shall consist of a cylindrical piece of polyurethane foam with density range of 1.25 to 1.45 pounds per cubic foot with a diameter 2" larger than the pipe to be cleaned and 18" long.
16. Existing fire hydrants called out on the plans to be relocated shall be removed, cleaned, painted and reinstalled.
17. The Contractor shall exercise extreme caution not to damage or break existing C.I. or A.C. Pipe water mains when excavation is over existing water mains. All damages shall be repaired and paid for by the Contractor.
18. All materials, pipe, pipe lubricants, paints, form oil, concrete admixtures, etc., in direct contact with the potable water shall obtain National Sanitation Foundation (NSF) approvals. The Contractor shall submit these approvals to the Department of Water for review and approval prior to its application.

TRAFFIC SIGNAL NOTES

1. All traffic signal equipment shall be completely wired in the cabinet and shall control the traffic signals as called for in the Plans.
2. The loop detector amplifier units furnished for this project shall be capable of operating the loop detector configurations shown on the plans.
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 whatsoever to the State. All repairs shall be done as soon as possible.
4. The location and relocation of the traffic signal standards, traffic signal standards with mast arm, pedestrian push buttons, traffic controller, pullboxes, barriers and loop detectors shall be staked out in the field by the Contractor and approval of the location obtained from the Engineer prior to construction and installation.
5. Restoration of existing pavements and improvements unavoidably damaged shall be restored to original or better condition and paid for by the Contractor.
6. All traffic signal work shall conform to the requirements of the "Manual on Uniform Traffic Control Devices for Streets and Highways," Federal Highway Administration (1988) and amendments.
7. 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 (1988) and as specified in the special provisions. The Contractor shall furnish and maintain adequate barricades, blinkers, construction signs, etc. for the safety of all public and pedestrian traffic.
8. Provide 18' minimum clearance to pavement grade from bottom of mast arms and signal indications for Type II Signal Standards.
9. Traffic signal system/head down-time shall be kept to a minimum and with the approval of the engineer.
10. Any down-time for any traffic signal system/head shall be during non-peak traffic hours.
11. Peak traffic hours are between 6:00 a.m. to 8:30 a.m. and 3:30 p.m. to 6:00 p.m.
12. Contractor shall repair, plug, touch-up paint, etc. all holes and damages due to the removal/relocation of the Electric Meter and appurtenances. All materials used to plug holes shall be water tight. The work shall not be measured or paid for separately but shall be incidental to other items in the Proposal.
13. The Contractor shall provide off-duty police officer(s) to control the flow of traffic as required by the Engineer.

MARKING, STRIPING, AND SIGNING NOTES


1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. Existing pavement markings and stripings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. The removal of the existing pavement markings shall not be paid for separately but shall be considered incidental to various pavement marking items.
3. Raised pavement markers shall not be installed within crosswalks.
4. Final locations of signs shall be approved by the Engineer prior to any installation work.
5. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or posts as designated on these plans or directed by the Engineer shall not be paid for and shall be considered incidental to various signing items.
6. Final location of all stop lines shall be approved by the Engineer prior to installation.
7. All pavement striping shall be as noted on the Legend or Plans.
8. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
9. Removal of existing delineators, signs, and posts as directed by the Engineer shall be considered incidental to the various signing items.
10. Existing signs that are to be replaced shall not be removed until new signs are installed as replacements, or the messages are no longer necessary.
11. Backing for all new regulatory and warning signs shall not be spliced.
12. All sign panels shall conform to Section 621 of the Special Provisions and the latest editions and amendments of the following FHWA publications:
 - a. "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD).
 - b. "Standard Highway Plans".
 - c. "Standard Alphabets for Highway Signs".
13. All new and relocated signs and markers installed on pipe post or light standard are to be mounted with band brackets and steel braces.
14. The Contractor shall erect at the beginning and end of the project advance construction warning signs as directed by the Engineer for the duration of the project and shall be maintained by the Contractor. These signs shall be placed in addition to the required traffic control signs called for in Section 645 - Traffic Control.

FED.ROAD DIST.NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50E-01-98	1998	4	79

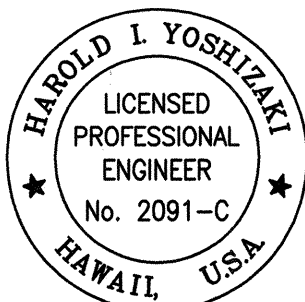
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL NOTES

1. Erosion and Sediment Control Inspection and Maintenance Practices.
 - A. The Contractor shall inspect the erosion and sediment control measures at least once a week or after 0.5 inches of rainfall.
 - B. The Contractor shall maintain the erosion and sediment control measures according to the contract. If a repair is necessary, the Contractor shall initiate the repairs within twenty-four (24) hours after the inspection such as:
 1. When sediment build-up reaches one-third (1/3) the height of the silt fence, the Contractor shall remove and dispose of the sediment build-up from the silt fence.
 2. When the depth of the sediment basin reaches ten percent (10%) of the design capacity, the Contractor shall remove and dispose of the sediment build-up.
 3. When tears are found on the silt fence, the Contractor shall replace the fabric.
 4. The Contractor shall check to see if the fabric is securely attached to the fence posts and to see that the fence posts are firmly in the ground.
 5. The Contractor shall inspect the diversion dike and repair the breaches.
 6. The Contractor shall inspect temporary and permanent seeding and planting for bare spots, washouts, and healthy growth.
 - C. The Contractor shall have its personnel make a maintenance inspection report promptly after each inspection. The Contractor shall select a minimum of three (3) personnel who will be responsible for inspection, maintenance, repair activities, and filling out the inspection and maintenance report. Personnel selected for the inspection and maintenance responsibilities will receive training from the Contractor. The Contractor shall train these personnel in the inspection and maintenance practices necessary for keeping the erosion and sediment used onsite according to the contract.
2. Submittal Requirements:
 - A. Construction activities of five (5) acres or more.
 1. An NPDES permit for Stormwater from the Department of Health (DOH) has been obtained. The Contractor shall develop and submit to the engineer four (4) sets of Site-Specific Best Management Plans (BMP) and erosion control plans.
 2. No construction activities will be authorized until the Contractor's Site-Specific BMP has been approved by the Highways Division.
 3. The Contractor shall submit the State accepted site specific best management practices (BMP) plan to the DOH for approval no later than thirty days prior to the commencement of construction activities. The BMP plan shall include an updated construction schedule, a discussion of construction methods and the manner in which existing drainage and sugar cane related flows will be diverted and/or managed during construction
 - B. Construction activities dewatering and/or hydrotesting water.
 1. Discharges into State waters due to dewatering and/or hydrotesting activities will require NPDES Permit(s) from DOH. If the Contractor options to discharge dewatering and/or hydrotesting effluent into State waters, the Contractor shall submit to the Engineer four (4) sets of Site-Specific Dewatering and/or Hydrotesting BMP, and four (4) copies of the Quality of Discharge Test results. The Plans and test results shall be submitted no later than thirty (30) calendar days after the award of Contract.
 2. No dewatering and/or hydrotesting activities will be authorized until the receipt of the NPDES (Permits) from DOH.


APPROVED:


Manager & Chief Engineer, Dept. of Water
County of Kauai

7/29/98
Date



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.


SHIMABUKURO/ENDO & YOSHIZAKI, INC.
1126 12th Avenue
Honolulu, Hawaii 96816

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
NOTES
KAUMUALII HIGHWAY, KUHIO HIGHWAY & RICE STREET INTERSECTION IMPROVEMENTS
PROJECT NO. 50E-01-98
DATE:

SHEET NO. 2 OF 2 SHEETS