

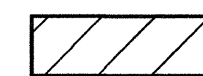



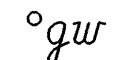
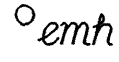
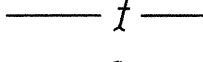
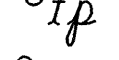
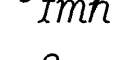
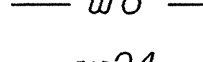
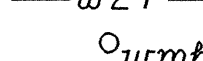

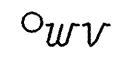

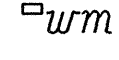

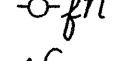

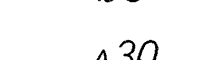
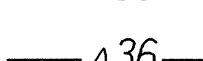



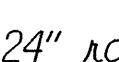
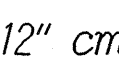


GENERAL NOTES


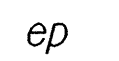

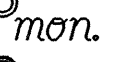

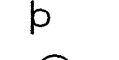

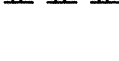

1. The scope of work for this project consists of reconstructing weakened pavement areas; cold planing; resurfacing; adjusting utilities and monuments; constructing PCC bus bay areas; cleaning of existing culverts; striping; and installing signing and pavement markings.
2. The Contractor is reminded of the requirements of Subsection 108.01 - Subletting of Contract, which requires him to perform work amounting to not less than 30 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 104.04 - Maintenance of Traffic; Subsection 107.13 - Public Convenience and Safety; Subsection 107.21 - Contractor's Responsibility for Utility Property and Services; and Section 645 - Traffic Control.
4. 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.
5. The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data, but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall tone for the exact locations and depths of all underground facilities, either shown on or omitted from the plans, in areas where work, such as the placements of sign posts, traffic signal conduits, etc. may affect these properties. Toning shall be considered incidental to the various contract items and will not be paid for separately. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
6. The Contractor shall notify in writing, the Oahu Transit Services Inc., Road Supervision office, 811 Middle St., Honolulu, HI 96819 (ph. # 848-4571) seven (7) days prior to any paving operations.
7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
8. Smooth riding connections shall be constructed at all limits of project, 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.
9. The Contractor shall be solely responsible for the protection of adjacent properties, utilities and existing structures from damages due to construction. Repairing any damage shall be at the Contractor's own expense, to the satisfaction of the Engineer.
10. Existing drainage system will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to the various contract items and will not be paid for separately.
11. Earth swale shall be graded to drain. This work shall be considered incidental to various contract items.
12. The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks and ADA access routes and side streets and cross streets at all times. This work shall be considered incidental to the various contract items and will not be paid for separately.
13. The Contractor shall clean and remove any accumulation of aggregates along the roadside within 10 feet of the edge of pavement. This work shall be considered incidental to the various contract items and will not be paid for separately.
14. Removal and disposal of existing asphalt concrete pavement and any debris shall be considered incidental to their respective bid items.
15. All saw cutting work, including saw cutting for A.C.C. Bus Pad, shall be considered incidental to Roadway Excavation or Asphalt Concrete or Various Contract Items.
16. Prior to placement of new aggregate subbase course, the existing subbase shall be compacted to a relative compaction greater than or equal to 95%.
17. Tack coat shall be incidental to the various Asphalt Concrete Pavement items.
18. The Contractor shall provide and maintain a temporary pedestrian-safe and easily accessible route or detour with barricades in or near the work zone. This temporary route or detour shall be paved at least an inch of Asphalt Concrete Pavement, Mix No. IV and shall be American with Disabilities Act (ADA) compliant (This is only applicable if existing surface is dirt and/or if existing surface is non-ADA compliant). This work shall be incidental to the various contract items and will not be paid for separately.
19. The Contractor shall remove and dispose of all existing raised pavement markers, thermoplastic line markings, traffic tapes, and epoxy adhesives prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to Asphalt Concrete Pavement, Mix No. IV and will not be paid for separately.
20. Asphalt Concrete removed by scarifying and excavating weakened pavement areas shall be used for "Recycled Plant Mix Asphalt Concrete Base Course" or otherwise it shall be the Contractor's property.
21. Any adjustments to the existing water system required during construction to meet requirements of B. W. S. Standards, whether shown on the plans or not, shall be done by the Contractor.
22. If the Contractor is not able to pave the full travelway or total width of roadway at the end of a work day, the longitudinal pavement drop between lane passes of the paver shall be paved with a 4:1 slope transition. Prior to resume paving the 4:1 slope transition shall be removed. This work shall be considered incidental Asphalt Concrete Pavement, Mix No. IV and shall not be paid for separately.
23. All work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to the various contract items and shall not be paid for separately.

PAVING AROUND MANHOLES/PULLBOXES

1. The Contractor shall place hot asphalt concrete around manholes/pullboxes and compact properly with a vibrating plate compactor.
2. If plate compactor is not used, the Contractor shall use a pneumatic roller to roll the area around the manholes/pullboxes which is not rolled by the steel roller.
3. The Contractor shall fog seal or brush emulsion seal on the material placed as backfill on the area around the manholes/pullboxes that was not compacted by the roller. Black sand shall be used to blot out the area if the fog is too heavy.
4. The Contractor shall first lower manholes/pullboxes more than 2" prior to cold planing. The work shall be considered incidental to the various paving contract items. Upon final paving, the manholes/pullboxes shall be raised and paid under various contract items pertaining to manholes/pullboxes adjustments.

LEGEND

	Reconstruction Areas
	Resurfacing Limits
	Existing Power Pole
	Existing Guy Pole
	Existing Guy Wire
	Existing Electric Manhole
	Existing Telephone Line
	Existing Telephone Pole
	Existing Telephone Manhole
	Existing 8" Water Line
	Existing 24" Water Line
	Existing Water Manhole
	Adjusted Water Manhole Frame/Cover
	Existing Water Valve Box
	Adjusted Water Valve Box
	Existing Water Meter
	Adjusted Water Meter
	Existing Fire Hydrant
	Existing 6" Sewer Line
	Existing 8" Sewer Line
	Existing 30" Sewer Line
	Existing 36" Sewer Line
	Existing Sewer Manhole
	Adjusted Sewer MH Frame/Cover
	Existing Storm Drain Manhole
	Existing 24" Reinforced Concrete Pipe
	Existing 12" Corrugated Metal Pipe

	Existing Edge of Shoulder
	Existing Edge of Pavement
	Right of Way
	Existing Monument
	Adjusted Monument
	Existing Traffic Sign
	Existing Highway Lighting Standard
	Existing Single Metal Guardrail
	Existing Fence

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
QUANTITIES BY	TRACED BY	
CHECKED BY	NOTED BY	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

FARRINGTON HIGHWAY RESURFACING  
ORANGE STREET TO KILI DRIVE  
Project No. 93B-01-03M

Date: April, 2005

SHEET No. 1 OF 2 SHEETS



BOARD OF WATER SUPPLY NOTES:

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the City and County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS", dated 2002, the "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", Volume 3, dated 1991, and all subsequent amendments and additions.
2. The Contractor shall notify the Board of Water Supply in writing one week prior to commencing work on the water system.
3. All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, etc., and drainage and other features of improvements shall not be the responsibility of the Board of Water Supply.
4. The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water line tees and bends wherever there is a possibility of water line movement due to removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measure necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying their construction methods.
5. The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles and shall pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.
6. Reapproval shall be required if this project is not under construction within a period of two years.
7. The Contractor shall verify all existing service lateral locations, whether or not shown on the plans, prior to commencing with any of the work and shall not assume that, where no services are shown, none exists.
8. Prior to any excavation, the Contractor shall verify in the field the location of existing water mains and appurtenances. The Contractor shall have existing mains toned before construction of work in the vicinity of water mains, call the Investigation Section at 527-5296 for toning services. The Contractor shall pay for all toning services.
9. Maintain 3'-0" minimum cover for all existing waterlines (18" minimum for service laterals) from new finish grade. The Contractor shall probe the waterline and service laterals and submit the probing data to BWS Construction Section. Any adjustments to the existing water system to meet the minimum cover and the requirements of the BWS standards, whether shown on plans or not, shall be done by the Contractor at no cost to BWS and the State.
10. The Contractor shall adjust all manhole frames/valve boxes within the resurfaced area prior to resurfacing. The Contractor shall be responsible for "referencing" these manholes/valve boxes to facilitate the adjustments.
11. Contractor shall cut and plug all existing unused laterals at the main whether or not shown on the plans. Meter and valve boxes to be or already abandoned shall be demolished or removed and properly disposed of. The damaged area shall be repaired to an equal or better condition than the immediate area. All work shall be done at the expense of the Contractor and at no cost to BWS and the State.
12. Board of Water Supply approval of these plans does not constitute a water commitment. Availability of water will be determined when building permit is presented to the Department. Water commitment will depend upon the status of the water system at that time. Should water service be made available, the water commitment will be effective when the project receives an approved building permit from the building department. All water commitments will be canceled in the event the building permit is canceled.

SEWER NOTES

1. All sewer construction shall be performed in accordance with the City's Standard Specifications, Sept. 1986, the Department of Public Works Standard Details, Sept. 1984, Current City Practices and Revised Ordinances of Honolulu, 1990 as amended, and the Design Standards of the Department of Wastewater Management Vol. 1, July 1993.
2. The Contractor shall notify the Inspection Section, Wastewater Branch, DDC at 527-5842 OR 523-4354 to arrange for inspection services and submit four sets of approved construction plans seven days prior to commencement of sewer work. The Contractor shall pay for all inspection costs.
3. The underground pipes, cables or ductlines known to exist by the Engineer from his research of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities, including and affecting sewer lines in the presence of the Wastewater Inspector, and shall exercise proper care in excavating the area. The Contractor shall be responsible and shall pay for all damaged utilities.
4. The Contractor shall be responsible for maintaining continuous sewer service to all affected areas during construction.
5. The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify the State Department of Health and utilize appropriate sampling and analyzing procedures. The Contractor shall be responsible for all public notification and press releases.
6. The Contractor shall maintain a minimum of five (5) feet clear width between street lighting poles and sewer lines.
7. **CONFINED SPACE**  
For entry by City personnel, including inspectors, into a permit required confined space as defined in 29 CFR PART 1910.146(B), the Contractor shall be responsible for providing:
  1. All safety equipment required by the confined space regulations applicable to all parties other than the construction industry, to include but not be limited to the following:
    - A. Full body harness for up to two personnel
    - B. Lifeline and associated clips
    - C. Ingress/egress and fall protection equipment
    - D. Two-way radios (walkie-talkies) if out of line-of-sight
    - E. Emergency (escape) respirator (10 minute duration)
    - F. Cellular telephone to call for emergency
    - G. Continuous gas detector (calibrated) to measure oxygen, hydrogen sulfide, carbon monoxide and flammables (capable of monitoring at a distance at least 20-feet away)
    - H. Personal multi-gas detector to be carried by inspector
  2. Continuous forced air ventilation adequate to provide safe entry conditions.
  3. One attendant/rescue personnel topside (two; if conditions warrant it).
8. For sewer manhole adjustments:
  1. For SMH adjustments <3" upwards, see DPW Std. Det. S-25.
  2. For SMH adjustments >3" upwards or any adjustment downward reconstruct SMH top from below the cone section.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-01-03M	2007	4	18

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
PLAN	DRAWN BY	
NOTE BOOK	FRAMES BY	
QUANTITIES BY	NOTES BY	
CHECKED BY	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

UTILITY NOTES

FARRINGTON HIGHWAY RESURFACING  
ORANGE STREET TO KILI DRIVE  
Project No. 93B-01-03M

Date: April, 2005

SHEET No. 2 OF 2 SHEETS