

GENERAL NOTES:

1. THE SCOPE OF WORK FOR THIS PROJECT CONSISTS OF COLD PLANING, RESURFACING OF EXISTING PAVEMENT, INSTALLING PAVEMENT MARKINGS AND SIGNING AND CLEANING EXISTING DRAINAGE CULVERTS.
2. THE CONTRACTOR IS REMINDED OF THE REQUIREMENTS OF SUBSECTION 105.16 SUBCONTRACT, WHICH REQUIRES HIM TO PERFORM WORK AMOUNTING TO NOT LESS THAN 30 PERCENT OF THE TOTAL CONTRACT COST LESS DEDUCTIBLE ITEMS. NONCOMPLIANCE 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 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. ALL NECESSARY PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS OWN COST.
6. THE CONTRACTOR SHALL COMPLY WITH THE STATE OF HAWAII'S OCCUPATIONAL SAFETY AND HEALTH LAW (DOSH).
7. 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 BE HELD LIABLE FOR ANY DAMAGES INCURRED TO THE EXISTING FACILITIES AND/OR IMPROVEMENTS AS A RESULT OF HIS OPERATIONS.
8. THE EXACT LOCATIONS AND LIMITS OR AREAS TO BE COLD PLANED SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. COLD PLANING TO BE DONE AT SIDE ROADS AND IN FRONT OF EXISTING CONCRETE GUTTERS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO ASPHALT CONCRETE PAVEMENT MIX IV.
9. A MINIMUM OF 36 INCHES CLEAR WIDTH AND 80 INCHES HEADROOM CLEARANCE HEIGHT SHALL BE PROVIDED ALONG WALKWAYS.
10. THE SURFACE OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH THE LATEST "AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES".
11. 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.
12. SMOOTH RIDING CONNECTIONS SHALL BE CONSTRUCTED AT ALL LIMITS OF RESURFACING, INCLUDING THE BEGINNING AND END OF PROJECT, CONNECTING APPROACHES, SIDE STREETS AND DRIVEWAYS AS SHOWN ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.
13. 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 VARIOUS CONTRACT ITEMS.
14. EARTH SWALE SHALL BE GRADED TO DRAIN. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.
15. THE CONTRACTOR SHALL PROVIDE FOR ACCESS TO AND FROM ALL EXISTING SIDE STREETS, DRIVEWAYS, WALKWAYS, ETC. AT ALL TIMES.
16. ALL SAW CUTTING WORK SHALL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS.
17. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING, TWO (2) WEEKS PRIOR TO THE STARTING OF PAVING OPERATIONS.
18. THE CONTRACTOR WILL BE REQUIRED TO LOCATE ALL EXISTING WATER VALVE BOXES AND MANHOLES BY SCHEDULING AN ON-SITE FIELD RECONNAISSANCE WITH THE DEPARTMENT OF WATER'S OPERATIONS DIVISION PRIOR TO ANY RESURFACING WORK. PHONE NO. 270-7633. FAILURE TO MEET THIS REQUIREMENT WILL SUBJECT THE CONTRACTOR TO ALL FUTURE COSTS INVOLVED IN LOCATING AND RAISING ANY AFFECTED WATER VALVE BOXES AND MANHOLES.
19. THE CONTRACTOR SHALL VERIFY AVAILABLE ROADWAY WIDTH TO DETERMINE THE ACCURACY OF THE DESIGNED "TYPICAL SECTION". ANY DISCREPANCIES SHALL BE BROUGHT UP TO THE ENGINEER FORE DIRECTION.
20. NO MATERIAL OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN HIGHWAY RIGHT-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE ENGINEER.
21. AFTER THE PROJECT IS COMPLETED, THE CONTRACTOR SHALL RESTORE GRADES AND GROUND COVER WITHIN THE PROJECT LIMITS TO A CONDITION EQUAL OR BETTER THAN EXISTING CONDITION PRIOR TO CONSTRUCTION.
22. ALL EXCESS MATERIALS NOT NEEDED FOR THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR. IF DISPOSED OF, IT SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY'S POLICIES AND GUIDELINES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS AND WILL NOT BE PAID FOR SEPARATELY.
23. ALL COLD PLANED MATERIAL FOR THIS PROJECT SHALL BE COME THE PROPERTY OF THE STATE. STOCKPILE LOCATION SHALL BE DETERMINED BY THE ENGINEER.
24. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING RAISED PAVEMENT MARKERS PRIOR TO THE OVERLAYING OF ASPHALT CONCRETE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ASPHALT CONCRETE PAVEMENT OVERLAY, MIX IV AND WILL NOT BE PAID FOR SEPARATELY.
25. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER.

GENERAL NOTES (CONT.):

26. CONSTRUCTION OUTSIDE THE STATE DEPARTMENT OF TRANSPORTATION (SDOT) RIGHT-OF-WAY IS SUBJECT TO PERMISSION OF THE AFFECTED OWNER AS VERIFIED BY SDOT.
27. ALL CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE STATE DEPARTMENT OF TRANSPORTATION AS AMENDED.
28. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER UPON UNCOVERING ANY POTENTIAL HISTORICAL ARTIFACTS OR ITEMS OF ARCHAEOLOGICAL SIGNIFICANCE.
29. THE CONTRACTOR SHALL PHASE WORK TO MINIMIZE TRAFFIC INTERRUPTIONS TO PUBLIC. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION PHASING PLAN FOR REVIEW AND APPROVAL BY THE ENGINEER FOUR (4) WEEKS PRIOR TO THE START OF CONSTRUCTION.
30. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING CULVERTS AND UTILITIES IN THE FIELD. ANY EXISTING CULVERTS AND UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.
31. PRIOR TO COLD PLANING OVER AN EXISTING STRUCTURE, THE CONTRACTOR SHALL DETERMINE THE ACTUAL DEPTH OF THE EXISTING ASPHALT CONCRETE PAVEMENT. THE CONTRACTOR SHALL TAKE SEVERAL CROSS SECTION MEASUREMENTS THROUGHOUT THE STRUCTURE. IF THE THICKNESS OF THE EXISTING PAVEMENT IS LESS THAN THE PROPOSED RESURFACING THICKNESS, THE CONTRACTOR SHALL REMOVE THE EXISTING PAVEMENT TO THE LEVEL OF THE STRUCTURE AND RESURFACE TO THE ORIGINAL THICKNESS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO COLD PLANING, AND WILL NOT BE PAID FOR SEPARATELY.
32. IN COLD PLANING THE PAVEMENT OVER A STRUCTURE, THE CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE ANY PORTION OF THE STRUCTURE (ESPECIALLY THE SLAB, JOINTS, DRAIN PIPES OR REINFORCEMENT). ANY DAMAGE TO THE STRUCTURE DURING THE COLD PLANING OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. REPAIR WORK SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL VERIFY THE EXISTING PAVEMENT THICKNESS BY HAND DIGGING AT VARIOUS LOCATIONS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO COLD PLANING, AND WILL NOT BE PAID FOR SEPARATELY.
33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY DAMAGED TRAFFIC CONTROL LOOPS.

PUBLIC HEALTH, SAFETY, & CONVENIENCE NOTES:

1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND COUNTY LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH AND SAFETY AND ENVIRONMENTAL QUALITY.
2. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH AND THE COUNTY GRADING ORDINANCE.
3. ALL LANES SHALL BE OPEN TO TRAFFIC DURING PEAK HOURS FROM 6:30 A.M. TO 8:30 A.M., DURING AFTERNOON PEAK HOURS FROM 3:30 P.M. TO 6:00 P.M. AND DURING OFF WORK HOURS. ONLY ONE LANE OF HIGHWAY SHALL BE CLOSED AT ANY OTHER TIME. FAILURE OF THE CONTRACTOR TO OPEN ALL LANES OF TRAFFIC DURING THE TIMES SPECIFIED ABOVE, SHALL RESULT IN ASSESSMENT OF LIQUIDATED DAMAGES AS SPECIFIED IN SECTION 108.08 OF THE SPECIAL PROVISIONS. EXCEPTIONS TO THE ABOVE PEAK HOURS SHALL BE WITH THE APPROVAL OF THE ENGINEER.

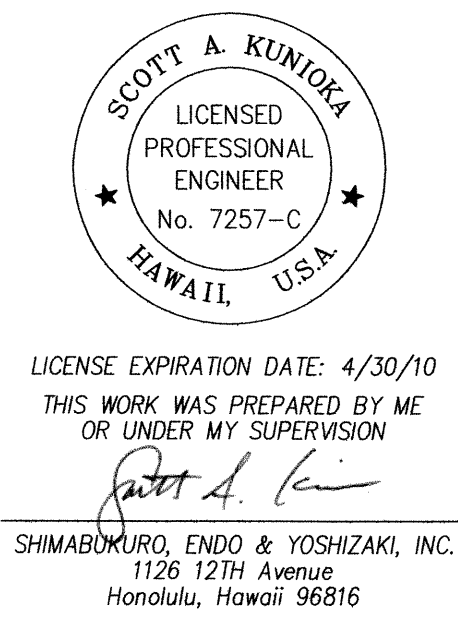
ARCHAEOLOGICAL NOTES:

PURSUANT TO CHAPTER 6E OF THE HAWAII REVISED STATUTES, ALL CONTRACTORS SHALL ENSURE THAT IN THE EVENT THAT ANY HUMAN SKELETAL REMAINS ARE INADVERTENTLY DISCOVERED DURING CONSTRUCTION, THE REMAINS SHALL NOT BE MOVED AND ANY ACTIVITY IN THE IMMEDIATE AREA THAT COULD DAMAGE THE REMAINS OR THE POTENTIAL HISTORIC SITE SHALL CEASE AND THE DEPARTMENT OF LAND AND NATURAL RESOURCES' HISTORIC PRESERVATION DIVISION (TELEPHONE: 692-8015), THE APPROPRIATE MEDICAL EXAMINER OR CORONER, AND THE POLICE DEPARTMENT (TELEPHONE: 244-6400), SHALL BE CONTACTED.

LEGEND

	Cold Planing and Resurfacing Limits		Adjust Water Meter
	Pavement Reconstruction Areas		New Water Meter
	Leveling Concrete Areas		Existing Fire Hydrant
	Transition Areas		New Fire Hydrant
	Grass/Mulch Areas		Existing Sewer Line
	Existing Electrical Line		New 12 inch Sewer Line
	New Electrical Line		Existing Sewer Manhole
	Existing Joint Pole		Adjust Sewer MH Frame and Cover
	Existing Power Pole		New Sewer Manhole
	Existing Guy Pole		Existing 6 inch Gas Line
	Existing Light Pole		New 6 inch Gas Line
	Existing Electrical Manhole		Existing Gas Valve Box
	Existing Street Light Box		Adjust Gas Valve Box
	Existing Traffic Signal Box		New Gas Valve Box
	Adjust Elec. MH Frame and Cover		Existing Gas Manhole
	New Electrical Manhole		Adjust Gas MH Frame and Cover
	Existing Traffic Light		New Gas Manhole
	Existing Telephone Line		Existing Monument
	New Telephone Line		Adjust Monument
	Existing Telephone Pole		New Monument
	Existing Telephone Manhole		Existing 24 inch Drain Line
	Adjust Tele. MH Frame and Cover		New 24 inch RCP Drain Line
	New Telephone Manhole		Existing Storm Drain Manhole
	Existing Signal Corps Line		Adjust Storm Drain MH Frame and Cover
	New Signal Corps Line		New Storm Drain Manhole
	Existing TV Cable		Existing Grated Drop Inlet
	New TV Cable		Existing Catch Basin
	Existing 12 inch Water Line		Existing Traffic Sign
	New 12 inch Water Line		Existing Highway Lighting Standard
	Existing Water Manhole		
	Adjust Water MH Frame and Cover		
	New Water Manhole		
	Existing Water Air Valve		
	Adjust Water Air Valve		
	New Water Air Valve		
	Existing Water Valve Box		
	Adjust Water Valve Box		
	New Water Valve Box		
	Existing Water Meter		

ORIGINAL PLAN	DATE
DESIGNED BY	
CHECKED BY	
NOTED BY	
DATE	



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**GENERAL NOTES, & LEGEND**

PIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE, LIPOA ST. TO KILOHANA DR.  
Fed. Aid Project No. ARR-031-1 (11)

Scale: None      Date: APRIL 2009

SHEET No. C-1 OF 31 SHEETS



**A. GENERAL:**

1. THE CONTRACTOR IS REMINDED OF THE REQUIREMENTS OF SECTION 209—WATER POLLUTION AND EROSION CONTROL, IN THE SPECIAL PROVISIONS. SECTION 209 DESCRIBES BUT IS NOT LIMITED TO: SUBMITTAL REQUIREMENTS; SCHEDULING OF A WATER POLLUTION AND EROSION CONTROL CONFERENCE WITH THE ENGINEER; CONSTRUCTION REQUIREMENTS METHOD OF MEASUREMENT; AND BASIS OF PAYMENT.
2. THE CONTRACTOR SHALL FOLLOW THE GUIDELINES IN THE "BEST MANAGEMENT PRACTICES MANUAL FOR CONSTRUCTION SITES IN HONOLULU", DATED MAY 1999 IN DEVELOPING, INSTALLING AND MAINTAINING THE BEST MANAGEMENT PRACTICES (BMP) FOR THE PROJECT.
3. THE CONTRACTOR SHALL FOLLOW THE GUIDELINES IN THE HONOLULU'S CITY & COUNTY "RULES RELATING TO SOIL EROSION STANDARDS AND GUIDELINES" ALONG WITH APPLICABLE SOIL EROSION GUIDELINES FOR PROJECTS IN MAUI, MOLOKAI, KAUAI, AND HAWAII.
4. THE ENGINEER MAY ASSESS LIQUIDATED DAMAGES OF UP TO \$27,500 FOR NONCOMPLIANCE OF EACH BMP REQUIREMENT AND EACH REQUIREMENT STATED IN SECTION 209, FOR EVERY DAY OF NON-COMPLIANCE. THERE IS NO MAXIMUM LIMIT ON THE AMOUNT ASSESSED PER DAY.
5. THE ENGINEER WILL DEDUCT THE COST FROM THE PROGRESS PAYMENT FOR ALL CITATIONS RECEIVED BY THE DEPARTMENT FOR NON-COMPLIANCE, OR THE CONTRACTOR SHALL REIMBURSE THE STATE FOR THE FULL AMOUNT OF THE OUTSTANDING COST INCURRED BY THE STATE.
6. FOR PROJECTS THAT REQUIRE AN NPDES PERMIT FROM THE DEPARTMENT OF HEALTH, INSTALL A RAIN GAGE PRIOR TO ANY FIELD WORK INCLUDING THE INSTALLATION OF ANY SITE-SPECIFIC BEST MANAGEMENT PRACTICES. THE RAIN GAGE SHALL HAVE A TOLERANCE OF AT LEAST 0.05 INCHES OF RAINFALL, AND HAVE AN OPENING OF AT LEAST ONE-INCH IN DIAMETER. INSTALL THE RAIN GAGE ON THE PROJECT SITE IN AN AREA THAT WILL NOT DETER RAINFALL FROM ENTERING THE GAGE OPENING. THE RAIN GAGE INSTALLATION SHALL BE STABLE AND PLUMBED. DO NOT BEGIN FIELD WORK UNTIL THE RAIN GAGE IS INSTALLED AND SITE-SPECIFIC BEST MANAGEMENT PRACTICES ARE IN-PLACE.

**B. WASTE DISPOSAL:**

1. WASTE MATERIALS  
ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER SHALL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER SHALL BE EMPTIED A MINIMUM OF TWICE PER WEEK OR AS OFTEN AS IS DEEMED NECESSARY. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ONSITE. THE CONTRACTOR'S SUPERVISORY PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES SHALL BE POSTED IN THE OFFICE TRAILER AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.
2. HAZARDOUS WASTE  
ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATIONS OR BY THE MANUFACTURER. THE CONTRACTOR'S SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES AND SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.
3. SANITARY WASTE  
ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK, OR AS REQUIRED.

**C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:**

1. ALL CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EACH WEEK AND FOLLOWING ANY RAINFALL EVENT OF 0.5 INCHES OR GREATER WITHIN A 24 HOUR PERIOD.
2. ALL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. IF REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS AFTER THE INSPECTION.
3. BUILT-UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
4. SILT SCREEN OR FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO VERIFY THAT THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS OR CONCRETE SLAB AND TO VERIFY THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND. THE BOTTOM OF THE SILT SCREEN SHALL BE INSPECTED AND VERIFIED THAT IT IS BURIED A MINIMUM OF 6 INCHES BELOW THE EXISTING GROUND.
5. TEMPORARY AND PERMANENT SEEDING AND PLANTING SHALL BE INSPECTED FOR BARE SPOTS, WASHOUTS AND HEALTHY GROWTH.
6. A MAINTENANCE INSPECTION REPORT SHALL BE MADE PROMPTLY AFTER EACH INSPECTION BY THE CONTRACTOR AND A COPY SHALL BE SUBMITTED TO THE ENGINEER NO LATER THAN ONE WEEK FROM THE DATE OF THE INSPECTION.
7. PROVIDE A STABILIZED CONSTRUCTION ENTRANCE TO REDUCE VEHICLE TRACKING OF SEDIMENTS. INCLUDE STABILIZED CONSTRUCTION ENTRANCE IN THE WATER POLLUTION, DUST, AND EROSION CONTROL SUBMITTALS. MINIMUM LENGTH SHOULD BE 50 FEET. MINIMUM WIDTH SHOULD BE 30 FEET. MINIMUM DEPTH SHOULD BE 6 INCHES AND UNDERLAIN WITH GEO-TEXTILE FABRIC. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE SHALL BE CLEANED DAILY OR AS REQUIRED TO REMOVE ANY EXCESS MUD, COLD PLANED MATERIALS, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIALS FROM THE CONSTRUCTION SITE SHALL BE COVERED WITH A TARPULIN.
8. INCLUDE DESIGNATED CONCRETE WASHOUT AREA(S) IN THE WATER POLLUTION, DUST, AND EROSION CONTROL SUBMITTALS.
9. THE CONTRACTOR SHALL SUBMIT THE NAME OF A SPECIFIC INDIVIDUAL DESIGNATED RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
10. PERSONNEL SELECTED FOR THE INSPECTION AND MAINTENANCE RESPONSIBILITIES SHALL RECEIVE TRAINING FROM THE CONTRACTOR. THEY SHALL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.
11. THE CONTRACTOR SHALL CONTAIN, REMOVE, AND DISPOSE SLURRY GENERATED FROM SAW CUTTING OF PAVEMENT IN ACCORDANCE WITH APPROVED BMP PRACTICES. PAYMENT FOR CONFINEMENT, REMOVAL, AND DISPOSAL OF SLURRY SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.

**D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:**

1. MATERIALS POLLUTION PREVENTION PLAN
- A. APPLICABLE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION. OTHER MATERIALS AND SUBSTANCES NOT LISTED BELOW SHALL BE ADDED TO THE INVENTORY.
- |                           |                          |
|---------------------------|--------------------------|
| CONCRETE                  | FERTILIZERS              |
| DETERGENTS                | PETROLEUM BASED PRODUCTS |
| PAINTS (ENAMEL AND LATEX) | CLEANING SOLVENTS        |
| METAL STUDS               | WOOD                     |
| TAR                       | MASONRY BLOCK            |
- B. MATERIAL MANAGEMENT PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT AS IS REQUIRED TO DO THE JOB.
- C. ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND IF POSSIBLE UNDER A ROOF OR OTHER ENCLOSURE.
- D. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- E. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- F. WHENEVER POSSIBLE, A PRODUCT SHALL BE USED UP COMPLETELY BEFORE DISPOSING OF THE CONTAINER.
- G. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
- H. THE CONTRACTOR SHALL CONDUCT A DAILY INSPECTION TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.
2. HAZARDOUS PRODUCT POLLUTION PREVENTION PLAN
- A. PRODUCTS SHALL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- B. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS (MSDS) SHALL BE RETAINED.
- C. SURPLUS PRODUCTS SHALL BE DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR LOCAL AND STATE RECOMMENDED METHODS.
3. ONSITE AND OFFSITE PRODUCT SPECIFIC PLAN
- THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ONSITE:
- A. PETROLEUM BASED PRODUCTS:  
ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCE USED ONSITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.
- B. FERTILIZERS:  
FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE SHALL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
- C. PAINTS:  
ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE HIGHWAY DRAINAGE SYSTEM BUT SHALL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
- D. CONCRETE TRUCKS:  
CONCRETE TRUCKS SHALL BE ALLOWED TO WASH OUT OR DISCHARGE DRUM WASH WATER ONLY AT A DESIGNATED SITE. WATER SHALL NOT BE DISCHARGED IN THE HIGHWAY DRAINAGE SYSTEM OR WATERS OF THE UNITED STATES. THE CONTRACTOR SHALL CONTACT DRINKING WATER BRANCH, DEPARTMENT OF HEALTH AT 586-4258 TO RECEIVE PERMISSION TO DESIGNATE A DISPOSAL SITE. THE CONTRACTOR SHALL CLEAN DISPOSAL SITE AS REQUIRED OR AS REQUESTED BY THE OWNER'S REPRESENTATIVE.
4. SPILL CONTROL PLAN
- A. A SPILL PREVENTION PLAN SHALL BE POSTED TO INCLUDE MEASURES TO PREVENT AND CLEAN UP EACH SPILL.
- B. THE CONTRACTOR SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR SHALL DESIGNATE AT LEAST THREE SITE PERSONNEL WHO SHALL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS SHALL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL SHALL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.
- C. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- D. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE.
- E. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
- F. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- G. SPILLS OF TOXIC HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.

F PERMIT REQUIREMENTS:

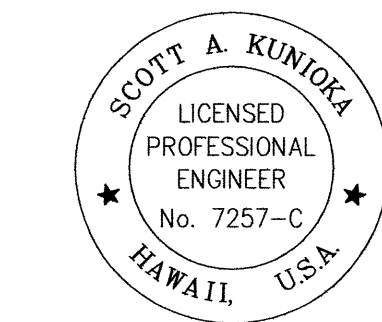
1. IF A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT IS REQUIRED FOR CONSTRUCTION ACTIVITIES OF ONE ACRE OR MORE, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER SIX SETS OF THE WATER POLLUTION AND EROSION CONTROL SUBMITTALS AS DETAILED IN SUBSECTION 209.03 OF THE SPECIFICATIONS.
2. IF AN NPDES PERMIT FOR CONSTRUCTION DEWATERING IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN THE PERMIT FROM THE DEPARTMENT OF HEALTH, CLEAN WATER BRANCH.
3. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL PERMIT CONDITIONS. PERMITS MAY INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
  - A. NPDES PERMIT FOR CONSTRUCTION ACTIVITIES
  - B. NPDES PERMIT FOR CONSTRUCTION DEWATERING
  - C. NPDES PERMIT FOR HYDROTESTING WATERS
  - D. WATER QUALITY CERTIFICATION
  - E. STREAM CHANNEL ALTERATION PERMIT
  - F. SECTION 404 ARMY CORPS OF ENGINEER PERMIT

MECO NOTES:

1. THE LOCATION OF MECO'S SURFACE FACILITIES SHOWN ON THE PLANS ARE TO BE DETERMINED BY THE CONTRACTOR BY REVIEWING EXISTING RECORDS WITH VARYING DEGREES OF ACCURACY AND ARE NOT GUARANTEED AS SHOWN. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY OF UNDERGROUND LINES AND SHALL MAINTAIN ADEQUATE CLEARANCE WHEN OPERATING EQUIPMENT WITHIN OR UNDER ANY OVERHEAD LINES.
2. THE CONTRACTOR SHALL COMPLY WITH THE STATE OF HAWAII'S OCCUPATIONAL SAFETY AND HEALTH LAW (DOSH).
3. FOR VERIFICATION OF UNDERGROUND LINES OR FOR ASSISTANCE IN SUPPORTING AND PROTECTING THESE LINES, THE CONTRACTOR SHALL CALL 1-866-423-7287 (ONE CALL) A MINIMUM OF 72 HOURS IN ADVANCE.
4. WHEN TRENCH EXCAVATION IS ADJACENT TO OR BENEATH OUR EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR IS RESPONSIBLE FOR:
  - A. SHEETING AND BRACING THE EXCAVATION TO PREVENT SLIDES, CAVE-INS, AND SETTLEMENTS.
  - B. PROTECTING EXISTING STRUCTURES OR FACILITIES WITH BEAMS, STRUTS, OR UNDERPINNINGS.
5. FOR POLE BRACING INSTRUCTIONS, THE CONTRACTOR SHALL CALL THE MECO DISPATCHER AT 871-7777 A MINIMUM OF 72 HOURS IN ADVANCE. THE DISPATCHER WILL CONTACT THE APPROPRIATE CONSTRUCTION SUPERVISOR.
6. ANY WORK REQUIRED TO RELOCATE MECO FACILITIES SHALL BE DONE BY MECO AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, AND FOR POSSIBLE COSTS IF APPLICABLE.
7. SHOULD IT BECOME NECESSARY TO TEMPORARILY RELOCATE ANY OF MECO FACILITIES TO ENABLE THE CONTRACTOR TO PERFORM HIS WORK IN A SAFE AND EXPEDITIOUS MANNER IN FULFILLING HIS CONTRACT OBLIGATIONS, THESE TEMPORARY RELOCATIONS WILL BE DONE BY MECO OR BY THE CONTRACTOR UNDER MECO'S SUPERVISION WITH ALL COSTS BORNE BY THE CONTRACTOR.
8. ANY DAMAGE TO MECO'S FACILITIES WILL BE REPORTED IMMEDIATELY TO MECO'S TROUBLE DISPATCHER AT 871-7777.
9. ALL MECO OVERHEAD AND UNDERGROUND FACILITIES SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION. COSTS FOR DAMAGES TO MECO FACILITIES SHALL BE BORNE BY THE CONTRACTOR. THIS REPAIR WORK SHALL BE DONE BY MECO OR BY THE CONTRACTOR UNDER MECO'S SUPERVISION.
10. ANY UNFORESEEN CONFLICT THAT WOULD RESULT IN THE REDESIGN OR RELOCATION (EITHER TEMPORARY OR PERMANENT) OF MECO'S ELECTRICAL FACILITIES MAY BE CAUSED FOR LENGTHY DELAYS. TO AVOID SUCH DELAYS, THE CONTRACTOR MUST NOTIFY MECO OF THE CONFLICT A MINIMUM OF 30 DAYS PRIOR TO THE START OF CONSTRUCTION.
11. THE CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS MECO FROM AND AGAINST ALL LOSSES, DAMAGES, CLAIMS, AND ACTIONS INCLUDING BUT NOT LIMITED TO REASONABLE ATTORNEY'S FEES AND COSTS BASED UPON OR ARISING OUT OF DAMAGE TO PROPERTY OR INJURIES TO PERSONS, OR OTHER TORTIOUS ACTS CAUSED OR CONTRIBUTED TO BY THE CONTRACTOR OR ANYONE ACTING UNDER ITS DIRECTION OR CONTROL OR ON ITS BEHALF, PROVIDED CONTRACTOR'S INDEMNITY SHALL NOT BE APPLICABLE TO ANY LIABILITY BASED UPON THE SOLE NEGLIGENCE OF MECO.
12. THE CONTRACTOR SHALL NOTIFY MECO 72 HOURS PRIOR TO POURING CONCRETE JACKETS AROUND MECO DUCTLINES. MECO WILL BE REQUIRED TO INSPECT THE CONTRACTORS WORK.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-031-1 (11)	2009	04	31

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
	DRAWN BY <i>C.E.</i> _____	" _____
NOTE BOOK	DESIGNED BY _____	" _____
	TRACED BY <i>S.K.</i> _____	" _____
No. _____	QUANTITIES BY _____	" _____
	CHECKED BY _____	" _____



LICENSE EXPIRATION DATE: 4/30/10  
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

## GENERAL NOTES

PIILANI HIGHWAY PAVEMENT PREVENTIVE  
MAINTENANCE, LIPOA ST. TO KILOHANA DR.

Fed. Aid Project No. ARR-031-1 (11)

Scale: None Date: APRIL 2009

SHEET No. C-2 OF 31 SHEETS