FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0460(14)	2009	3	26

GENERAL NOTES

1. The scope of work includes resurfacing existing pavement; adjusting guardrail posts; cold planing; installation of signs and pavement markings; cleaning of culverts; adjusting manholes, monuments, replace existing guardrail end terminals and all incidental work.
2. The Contractor's attention is directed to Subsection 107.13 - Public Convenience and Safety: Section 645 - Traffic Control and Subsection 104.04 Maintenance of Traffic.
3. 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.
4. 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.
5. The exact locations and limits or areas to be filled with leveling course, reconstructed and cold planed shall be determined in the field by the Engineer.
6. Prior to resurfacing, the existing surface shall be cleaned as described in Section 310 of the Standard Specifications and as amended. Payment shall be considered incidental to Item No. 401.0400 - Hot Mix Asphalt (HMA) Pavement.
7. The Contractor shall notify the State in writing, two (2) weeks prior to starting paving operations.
8. 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 Hot Mix Asphalt (HMA) Pavement and will not be paid for separately.
9. All holes, depressions, and wheel ruts and leveling areas as shown on the plans shall be filled and compacted with Asphalt Concrete Pavement, Mix No. V leveling course prior to resurfacing.
10. Unless directed by the Engineer, connections shall be cold planed at all limits of resurfacing including the beginning and end of project, connecting approaches, side streets and driveways.
11. Dressing shoulder, shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable excavated material as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to the various contract items. Shoulder areas without guardrails shall be dressed at 6:1 slope (max.) unless shown on plans or directed by the Engineer.
12. Existing drainage system will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow, the cost of which shall be considered incidental to the various contract items.
13. The Contractor shall provide for safe access to and from all existing driveways and streets at all times.
14. All saw cutting of existing pavement shall not be measured or paid for separately, but shall be considered incidental to various contract items.
15. Unless directed or approved by the Engineer, staggered paving resulting in longitudinal dropoff will not be permitted. In case of emergency, transition wedge with 10:1 slope shall be constructed along the longitudinal joint. Furthermore, temporary markings consisting of double, 4-inch yellow reflective tape with Type "D" markers at 20' o.c. shall be installed. Prior to resuming paving, the transition wedge shall be removed by saw cutting. Furnishing, paving and removing the transition wedge will not be paid for separately but will be considered incidental to Hot Mix Asphalt (HMA) Pavement.
16. At the end of each paving day, transverse joint must be constructed to provide a smooth riding connection. Transition wedge shall be constructed at 10:1 slope or flatter. Prior to resuming paving, the transition wedge shall be removed by saw cutting. Furnishing, paving and removing the transition wedge will not be paid for separately but will be considered incidental to Hot Mix Asphalt (HMA) Pavement.
17. Resetting or adjusting of existing guardrail heights shall include adjustment of terminal sections including foundations, etc. to required height.
18. Smooth riding connections shall be constructed at all limits of resurfacing including the beginning and end of project, connecting approaches and side streets as shown on the plans and/or as directed by the Engineer.
19. In cold planing the pavement over the structure, the Contractor shall exercise care not to damage any portion of the structure, specially the structure deck, joints, drain pipes or reinforcement. Any damage to the structure during the cold planing operation 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.
20. Contractor shall adjust pipe casings of existing centerline survey monument whether shown or not on the plans, in accordance with Standard Plan D-07 or any other method as directed by the Engineer to suit field condition. Contractor to verify existing conditions prior to construction. Adjustment of centerline monument will be paid for at the Contract Unit Price regardless of method used. Contractor shall clean existing monuments to expose survey pins.

LEGEND

- Cold Planing Areas
- Resurfacing Limits
- —w—12— Existing 12" Water Line
- WMH Adjusted Water MH Frame/Cover
- WV Adjusted Water Valve Box
- fh Existing Fire Hydrant
- mon. Existing Monument
- MON. Adjusted Monument
- Existing Traffic Sign Wtih 1 Post
- Existing Traffic Sign Wtih 2 Posts
- Existing Single Metal Guardrail
- New Single Metal Guardrail
- Existing Double Metal Guardrail
- RM-3

ORIGINAL PLAN

SURVEY PLOTTED BY _____ DATE 4/06
DRAWN BY JD
TRACED BY _____
REVISED BY JC
QUANTITIES BY _____
CHECKED BY _____

NOTE BOOK mel/jay

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

MAUNALOA HIGHWAY RESURFACING
Hoolehua to Vicinity of Keonelele Avenue
Federal-Aid Project No. ARR-0460(14)

Date: February, 2009

SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0460(14)	2009	4	26

WATER POLLUTION AND EROSION CONTROL NOTES:

A. GENERAL:

1. See Section 209 - Water Pollution and Erosion Control. 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. Effective October 1, 2008, follow the guidelines in the "Construction Best Management Practices Field Manual", dated January 2008 in developing, installing and maintaining the Best Management Practices (BMP) for the project.

3. The Engineer may assess liquidated damages of up to $27,500 for non-compliance 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.

4. 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.

5. 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
   Collect and store all waste materials in a securely lidded metal dumpster. The dumpster shall meet all local and State solid waste management regulations. Deposit all trash and construction debris from the site in the dumpster. Empty the dumpster a minimum of twice per week or as often as is deemed necessary. Do not bury construction waste materials onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Post notices stating these practices in the office trailer and the Contractor shall be responsible for seeing that these procedures are followed.

2. Hazardous Waste
   Dispose all hazardous waste materials in the manner specified by local or State regulations and 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
   Collect all sanitary waste from the portable units a minimum of once per week, or as required.

C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

1. Inspect all control measures at least once each week and within 24 hours of any rainfall event of 0.5 inches or greater within a 24 hour period.
2. Maintain all measures in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.
3. Remove built-up sediment from silt fence when it has reached one-third the height of the fence.
4. Inspect silt screen or fence 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. Inspect and verify the bottom of the silt screen is buried a minimum of 6 inches below the existing ground.
5. Inspect temporary and permanent seeding and planting for bare spots, washouts and healthy growth.
6. Make a maintenance inspection report promptly after each inspection. Submit a copy 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. Clean the paved street adjacent to the site entrance daily or as required to remove any excess mud, cold planed materials, dirt or rock tracked from the site. Cover dump trucks hauling material from the construction site with a tarpaulin.
8. Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.
9. 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. 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. Use Material Management Practices to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. Make an effort to store only enough product as is required to do the job.

   c. Store all materials stored onsite in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.

   d. Keep products in their original containers with the original manufacturer's label.

   e. Do not mix substances with one another unless recommended by the manufacturer.

   f. Whenever possible, use a product up completely before disposing of the container.

   g. Follow manufacturer's recommendations for proper use and disposal.

   h. Conduct a daily inspection to ensure proper use and disposal of materials onsite.

2. Hazardous Material Pollution Prevention Plan

   a. Keep products in original containers unless they are not resealable.

   b. Retain original labels and material safety data sheets (MSDS).

   c. Dispose of surplus products according to manufacturers' instructions and local and State regulations.

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY A
NOTE BOOK
TRACED BY T
DESIGNED BY T
QUANTITIES BY ddx
CHECKED BY kdgn
DATE 9/3/08

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION & EROSION CONTROL NOTES

MAUNALOA HIGHWAY RESURFACING
Hoolehua to Vicinity of Keonelele Avenue
Federal-Aid Project No. ARR-0460(14)

Date: February, 2009

SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ARR-0460(14)	2009	5	26

WATER POLLUTION AND EROSION CONTROL NOTES: -Cont.

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES: -Cont.

3. Onsite and Offsite Product Specific Plan

The following product specific practices shall be followed onsite:

a. Petroleum Based Products:
Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.

b. Fertilizers:
Apply fertilizers used only in the minimum amounts recommended by the manufacturer. Once applied, work fertilizer into the soil to limit exposure to storm water. Storage shall be in a covered shed. Transfer the contents of any partially used bags of fertilizer to a sealable plastic bin to avoid spills.

c. Paints:
Seal and store all containers when not required for use. Do not discharge excess paint to the highway drainage system. Dispose properly according to manufacturers' instructions or State and local regulations.

d. Concrete Trucks:
Wash out or discharge concrete truck drum wash water only at a designated site. Do not discharge water in the highway drainage system or waters of the United States. Contact Drinking Water Branch, Department of Health at 586-4258 to receive permission to designate a disposal site. Clean disposal site as required or as requested by the Owner's representative.

4. Spill Control Plan

a. Post a spill prevention plan to include measures to prevent and clean up each spill.

b. The Contractor shall be the spill prevention and cleanup coordinator. 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. Post the names of responsible spill personnel in the material storage area and in the office trailer onsite.

c. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.

d. Keep materials and equipment necessary for spill cleanup in the material storage area onsite.

e. Clean up all spills immediately after discovery.

f. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

g. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size.

E. PERMIT REQUIREMENTS:

1. If a National Pollutant Discharge Elimination System (NPDES) Permit is required for Construction Activities of one acre or more, 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. 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

ORIGINAL PLAN
SURVEY PLOTTED BY _____ DATE 3/31/08
DRAWN BY A
TRACED BY _____
DESIGNED BY Y
QUANTITIES BY _____
CHECKED BY _____
NOTE BOOK dhx.x
No. Edgn

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION & EROSION CONTROL NOTES

MAUNALOA HIGHWAY RESURFACING
Hoolehua to Vicinity of Keonelele Avenue
Federal-Aid Project No. ARR-0460(14)

Date: February, 2009

SHEET No. 2 OF 2 SHEETS