FORM C ATTACHMENT A-3

Portions of Contract Plans

INDEX TO DRAWINGS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STANDARD PLANS SUMMARY
3	GENERAL NOTES & LEGEND
4 – 6	WATER POLLUTION AND EROSION CONTROL NOTES
7 – 9	TYPICAL SECTIONS
10 – 14	ROADWAY PLANS
15	PAVEMENT MARKING, NOTES, LEGEND, AND SIGN DETAILS
16 – 20	PAVEMENT MARKING AND TRAFFIC SIGNING PLAN
21 – 22	TRAFFIC COUNTING STATION PLANS NOTES & DETAILS
23	HIGH SPEED UNDIVIDED HIGHWAY WORK ZONE SIGNING PLAN, NOTES & DETAILS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	1	23

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

HONOLULU, HAWAII

PLANS FOR

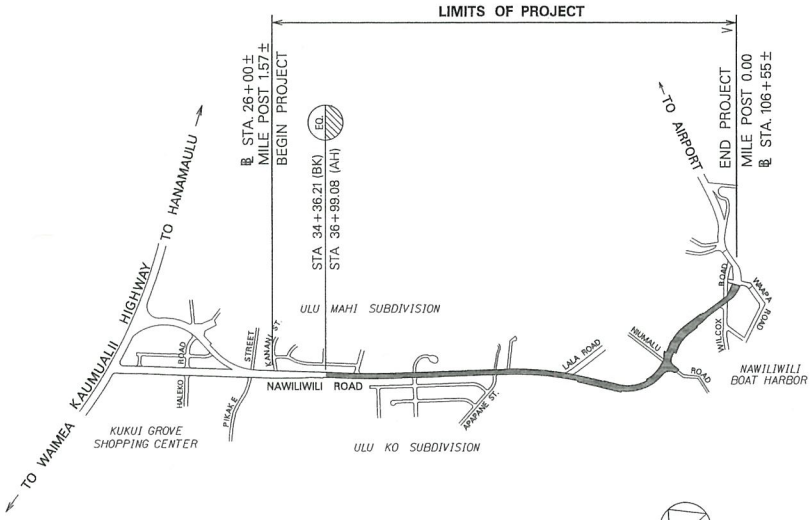
NAWILIWILI ROAD RESURFACING

KANANI STREET TO WAAPA ROAD

FEDERAL-AID PROJECT NO. NH-058-1(007)

DISTRICT OF LIHUE

ISLAND OF KAUAI



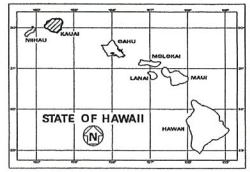
LAYOUT PLAN

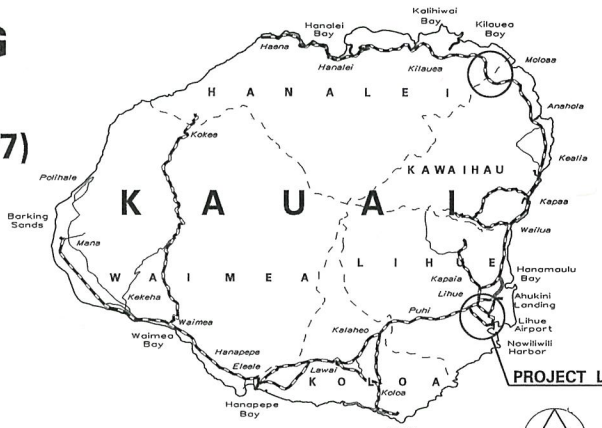
GROSS LENGTH OF PROJECT.....1.57 MILE

NET LENGTH OF PROJECT.....1.57 MILE

2 0 2 4 6

SCALE IN THOUSAND FEET





FEDERAL AID PROJECTS PREVIOUSLY CONSTRUCTED OR UNDER CONSTRUCTION

MILE POST 0.0 TO MILE POST 1.57

DESIGN DESIGNATION

ADT (2013).....13,400
ADT (2023).....17,000
DHV 1,620
D 55/45
T .....5.0 %
V .....40 M.P.H.

HWY-K DESIGNED BY

HWY-KE MANAGED BY

241-3000 PHONE

JULY 2016 DATE

DEPARTMENT OF TRANSPORTATION STATE OF HAWAII	
APPROVED:	
DIR. OF TRANSPORTATION	DATE

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	3	23

GENERAL NOTES

1. The scope of work for this project includes reconstructing weakened pavement areas; cold planing; resurfacing; removing existing pavement markers and traffic counting station lead cables and sensor, installing new pavement markers traffic counting station lead cables and sensor; cleaning existing culvert and drainage structures and hydro-mulch seeding of dressed shoulder.
2. The Contractor is reminded of the requirements of Subsection 105.16 - Subcontracts.
3. The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 107.06 - Contractor Duty Regarding Public Convenience; Subsection 104.11 - Utilities and Services; and Section 645 - Work Zone 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 be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
6. The exact locations and limits or areas to be excavated, reconstructed and cold planed shall be determined in the field by the Engineer.
7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
8. All lanes shall be open to traffic during peak hours from 5:00 A.M. to 8:00 P.M. 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 108.09 of the Special Provisions.

   No nightwork shall be performed from September 15 through December15 due to the Peak Shearwater Fledging season. Night time working hours are specified in Section 107 of the Special Provisions.
9. The Contractor shall remove and dispose of all existing raised pavement markers and traffic tapes prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to Item No. 401.0400 - HMA Pavement, Mix No. V and will not be paid separately.
10. 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.
11. Trimming and dressing of shoulder, sidewalk and bus turnout shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by the Engineer. Suitable materials shall include materials from roadway excavation, including topsoil and base material therefrom, and if necessary, additional materials from borrow outside the limits of the right of way. Asphalt concrete removed from cold planing, reconstruction and roadway excavation shall not be used for dressing of shoulder, sidewalk or bus turnout. All graded and dressed shoulders shall be considered incidental to various contract items and will not be paid separately.
12. Removal and disposal of existing traffic signs shall be considered incidental to various contract iems.
13. Existing drainage system will be functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items.
14. The Contractor shall provide 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.
15. All saw cutting work shall be considered incidental to Item No. 401.0400 - HMA Pavement, Mix No. V and will not be paid for separately.
16. Prior to his resurfacing operations, the Contractor shall be responsible for locating, preserving and marking all utility & highway facilities that will require adjustments to the new finished pavement grade. Additionally, the Contractor shall submit to the Engineer a list of all items, including water, drainage, sewer, electrical, telephone and cable utilities to be adjusted to the new finished grade.
17. After completion of resurfacing, the Contractor and the Engineer will test for, and determine ponding areas (i.e. low spots within the resurfaced area). It shall be the responsibility of the Contractor to correct and resurface and/or repair all such ponding areas.
18. Contractor shall exercise extreme caution to preserve BENCHMARKS (Survey Monuments). Whenever the center of a Survey Monument is less than three (3) feet from the edge of construction, the Contractor shall retain a Licensed Land Surveyor to reference the location of said Survey Monument.

    Benchmarks that are disturbed or destroyed shall be restored under a Licensed Land Surveyor's direction. Copies of field notes, descriptions and new values of the new benchmark shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.
19. Any work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other various contract items and shall not be paid for separately.
20. All asphalt concrete materials from cold planing, reconstruction and roadway excavation operations shall become the property of the State. The Contractor shall deliver these materials to the Lihue Airport's baseyard stockpile area. The Contractor shall separate the clean cold-planed material from the cold-planed material mixed with base course. This work shall be considered incidental to the various contract items.
21. 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 Engineer. If use of location is approved by the Engineer, the Contractor shall obtain a permit to use the property within the highway right-of-way from the State Highways Division at telephone no. 241-3000.
22. Prior to commencing his operations, the Contractor shall contact the County of Kauai, Department of Water Operations Division (Phone No. 245-5444) and make arrangements for the Department to locate and mark the existing water facilities within the project limits, such as waterlines, valve boxes and manhole frame/covers (including ones that may have been inadvertently paved over on previous resurfacing projects). The tops of the existing valve boxes, manhole frame/covers, etc., shall be adjusted to match the new finished grades noted on the construction plans.
23. All workers within the State right-of-way who are exposed to either vehicles using the roadway or to construction equipment shall wear high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of ANSI/ISEA 107-2004. "Workers" is defined as people on foot whose duties place them with the State right-of-way, such as, but not limited to construction and maintenance forces, equipment operators, survey crews, utility crews, responders to incidents (e.g., EMT and firemen), and law enforcement personnel directing traffic, investigating accidents, handling lane closures and obstructed roadways.
24. Install new Type II Object Marker on all utility poles and trees that are shown on the pavement marking and traffic signing plans. Refer to Standard Plan TE-15 for details.
25. Prior to construction, the contractor shall contact the various utility agencies for location of existing utilities within the project limits. The Contractor shall locate and protect all existing utilities whether or not shown on the plans, Any costs incurred by damages to existing utilities will be borne by the Contractor. Contractor shall request from One-Call Center, Ph: 1-866-423-7287. The Contractor shall also call the County of Kauai, Department of Water, Ph: 245-5444 and the Wastewater Division, Ph: 241-6642 for toning waterlines and sewerlines respectively.
26. Should historic remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find. The Contractor shall immediately notify the Planning Department at (808) 241-4050 and State Historic Preservation Division at (808) 692-8015, which will assess the significance of the find and recommend the appropriate mitigation measures, if necessary.

LEGEND

	Reconstruction Areas		Existing Metal Guardrail
	Cold Planing Areas & Resurfacing Limits		New Metal Guardrail
			Adjusted and/or Relocated Metal Guardrail
°pp	Existing Power Pole	°fh	Existing Fire Hydrant
°emh	Existing Electric Manhole	—s—12—	Existing Sewer Line
°EMH	Adjusted Elec. MH Frame/Cover	—S—12—	New 12" Sewer Line
▭tspb	Existing Traffic Signal Pullbox	°smh	Existing Sewer Manhole
°tmh	Existing Telephone Manhole	°SMH	Adjusted Sewer Manhole
°TMH	Adjusted Tel. MH Frame/Cover	•SMH	New Sewer Manhole
▭tpb	Existing Telephone Pullbox	°mon.	Existing Monument
—w—12—	Existing 12" Water Line	°MON.	Adjusted Monument
°wmh	Existing Water Manhole	°MON.	New Monument
°WMH	Adjusted Water MH Frame/Cover	---d--24---	Existing 24" Drain Line
°av	Existing Water Air Valve	°sdmh	Existing Storm Drain Manhole
°AV	Adjusted Water Air Valve	°SDMH	Adjusted Storm Drain Manhole
°wv	Existing Water Valve Box	⊟gdi	Existing Grated Drop Inlet
°WV	Adjusted Water Valve Box	⊟GDI	New Grated Drop Inlet
▭wm	Existing Water Meter Box	▬GDI	Adjusted/Reconstructed Drain Inlet or Replaced Steel Grate
▭WM	Adjusted Water Meter Box		
▭WM	New Type "X" Water Meter Box		
⊦	Existing Traffic Sign		
⊦	New Traffic Sign		

ORIGINAL PLAN — SURVEY PLOTTED BY — DATE — PLANS BY — TRACED BY — DESIGNED BY — QUANTITIES BY — CHECKED BY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

NAWILIWILI ROAD RESURFACING
Kanani Street to Waapa Road
Federal-Aid Project No. NH-058-1(007)

Date: Oct. 2014

SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	4	23

WATER POLLUTION AND EROSION CONTROL NOTES:

A. GENERAL:

1. See Special Provisions 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. In addition, Appendix A lists potential pollutant sources and corresponding BMPs used to mitigate the pollutants.

2. Follow the guidelines in the current HDOT Construction Best Management Practices Field Manual in developing, installing and maintaining the Best Management Practices (BMP) for the project. For any conflicting requirements between the Manual and applicable bid documents, the applicable bid documents will govern. Should a requirement not be clearly described within the applicable bid documents, the Contractor shall notify the Engineer immediately for interpretation. For the purposes of clarification under Note A.2, "applicable bid documents" include the construction plans, standard specifications, Special Provisions, Permits, and the Storm Water Pollution Prevention Plan (SWPPP) when applicable.

3. 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 on Maui, Molokai, Kauai, and Hawaii.

4. 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 and special provisions, 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. If necessary, 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. Install the rain gage on the project site in an area that will not deter rainfall from entering the gage opening. Do not install in a location where rain water may splash into rain gage. 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.

7. Submit Site-Specific BMP Plan to the Engineer along with a completed Site-Specific BMP Review Checklist within 30 calendar days of contract execution. The Site-Specific BMP Review Checklist may be obtained from http://www.stormwaterhawaii.com.

B. WASTE DISPOSAL:

1. Waste Materials
Collect and store all waste materials in a securely lidded metal dumpster or roll off container with cover to keep rain out or loss of waste during windy conditions. 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 weekly or when the container is two-thirds full, whichever is sooner. 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, on a weatherproof bulletin board, or other accessible location acceptable to the Engineer. The Contractor shall be responsible for seeing that these procedures are followed. Submit the Solid Waste Disclosure Form for Construction Sites to the Engineer within 30 calendar days of contract execution. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste to the Engineer monthly. This should also include documentation from any intermediary facility where solid waste is handled or processed.

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. Position sanitary facilities where they are secure and will not be tipped over or knocked down.

C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

1. For projects with an NPDES Permit for Construction Activities, inspect at the following intervals. For construction areas discharging to nutrient or sediment impaired waters, inspect all control measures at least once each week and within 24 hours of any rainfall event of 0.25 inches or greater within a 24 hour period. For construction areas discharging to waters not impaired for nutrient or sediments, inspect all control measures weekly. Inspections are only required during the project's normal working hours. The discharge point water classification may be found in the SWPPP.

2. For projects without an NPDES Permit for Construction Activities, inspect all control measures weekly.

3. Maintain all erosion and sediment control measures in good working order. If repair is necessary, initiate repair immediately and complete by the close of the next work day if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance. When installation of a new erosion or sediment control or a significant repair is needed, install the new or modified control or complete the repair no later than 7 calendar days from the time of discovery. "Immediately" means the Contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day.

4. Remove built-up sediment from silt fence when it has reached one-third the height of the fence. Remove sediment from other perimeter sediment control devices when it has reached one-half the height of the device.

5. 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.

6. Inspect temporary and permanent seeding and planting for bare spots, washouts and healthy growth.

7. Complete and submit to the Engineer a maintenance inspection report within 24 hours after each inspection.

8. Provide a stabilized construction entrance at all points of exit onto paved roads 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 12 inches or as recommended by the soils engineer and underlain with geo-textile fabric. If minimum dimensions cannot be met, provide other stabilization techniques that remove sediment prior to exit. 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. Do not hose down the street without containing or vacuuming wash water. Cover dump trucks hauling material from the construction site with a tarpaulin. Remove sediment tracked onto the street, sidewalk, or other paved area by the end of the day in which the track-out occurs.

9. Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.

10. Submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.

11. 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.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION & EROSION CONTROL NOTES

NAWILIWILI ROAD RESURFACING
Kanani Street to Waapa Road
Federal-Aid Project No.: NH-058-1(007)

Date: Oct. 2014

SHEET No. 1 OF 3 SHEETS

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DATE 2/18/14
NOTE BOOK
DESIGNED BY
QUANTITIES BY
CHECKED BY

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.):

12. Contain, remove, and dispose slurry generated from saw cutting of pavement in accordance with approved BMP practices. Do not allow discharge into the drainage system or State waters.

13. For projects with an NPDES Permit for Construction Activities, immediately initiate stabilizing exposed soil areas upon completion of earth-disturbing activities for areas where earth-disturbing activities have permanently or temporarily ceased. Earth-disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future. For construction areas discharging into waters not impaired for nutrients sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities. For construction areas discharging into nutrient or sediment impaired waters, complete initial stabilization within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities. Classification of water at the discharge point may be found in the SWPPP.

14. For projects without an NPDES Permit for Construction Activities, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

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	Cleaning Solvents
Detergents	Wood
Paints (enamel and latex)	Masonry Block
Metal Studs	Herbicides and Pesticides
Tar	Curing Compounds
Fertilizers	Adhesives
Petroleum Based Products	

   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 Safety Data Sheets (SDS), formerly Material Safety Data Sheets (MSDS).
   c. Dispose of surplus products according to manufacturers' instructions and local and State regulations.

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 and federal, state, and local requirements. Avoid applying just before a heavy rain event. Apply at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth. Once applied, work fertilizer into the soil to limit exposure to storm water. Do not apply to storm conveyance channels with flowing water. Storage shall be in a covered shed or in an area where fertilizer will not come into contact with precipitation or stormwater. 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 drainage system, sanitary sewer system, or State waters. Dispose properly according to manufacturers' instructions and State and local regulations.

   d. Concrete Trucks:
   Washout or discharge concrete truck drum wash water only at a designated site as far as practicable from storm drain inlets or State waters. Do not discharge water in the drainage system or State waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the Engineer.

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 on a weatherproof bulletin board or other accessible location acceptable to the Engineer 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 ample 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. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, the Contractor shall notify the Engineer as soon as the Contractor has knowledge of the discharge. The Engineer will notify the National Response Center (NRC) at (800) 424-8802, the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital Operator at 247-2191 and the Clean Water Branch (DOH-CWB) via email at cleanwaterbranch@doh.hawaii.gov during non-business hours immediately. The Contractor shall also provide to the Engineer, within 7 calendar days of knowledge of the release, a description of the release, the circumstances leading to the release, and the date of the release. The Engineer will provide this information to the DOH-CWB. The Engineer will provide information to the NRC if requested.

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	5	23

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE 2/10/14

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION & EROSION CONTROL NOTES

NAWILIWILI ROAD RESURFACING
Kanani Street to Waapa Road
Federal-Aid Project No.: NH-058-1(007)

Date: Oct. 2014

SHEET No. 2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	6	23

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.):

E. PERMIT REQUIREMENTS:

1. A National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities of one acre or more of disturbed area is required for this project. If the Contractor requires extra land disturbance, including staging and storage areas, that is not covered by the NPDES Permit obtained by the State, the Contractor shall be responsible for obtaining the required NPDES Construction Activities Permit to cover this additional disturbed area. See Hawaii Administrative Rules Chapter 11-55, Appendix C for definition of land disturbance. The Contractor's attention is directed to the applicable NPDES Permit documents on the bid package compact disc.

   a. Deadlines for initiating and completing initial stabilization
   b. Increased inspection frequency and installation of rain gage if applicable
   c. Deadlines to initiate and complete repairs to BMPs
   d. Reporting requirements and corrective action reports

2. Comply with all applicable State and Federal Permit conditions. Permits may include, but 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

F. SITE-SPECIFIC BMP REQUIREMENTS:

Each BMP below is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual and appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Stormwater Management Program Website at http://www.stormwaterhawaii.com/resources under Construction Best Management Practices Field Manual. Supplemental BMP sheets are located at http://stormwaterhawaii.com/contractors/contractors_BMPmanual.aspx under Concrete Curing and Irrigation Water.

The requirements for Water Pollution, Dust, and Erosion Control submittals are included in Section 209 of the Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and applicable Special Provisions. A list of pollutant sources and corresponding BMP used to mitigate the pollutants are included in Section 209 of the Special Provisions under Appendix A.

Follow the requirements below:

1. Protect all Drainage Inlets receiving runoff from disturbed areas (SC-2).

2. Contain on-site runoff using Perimeter Sediment Controls
   a. SC-1 Silt Fence
   b. SC-5 Vegetated Filter Strips and Buffers
   c. SC-8 Compost Filter Berm
   d. SC-13 Sandbag Barrier
   e. SC-14 Brush or Rock Filter

3. Control offsite runoff from entering construction area
   a. EC-8 Run-On Diversion
   b. SC-6 Earth Dike
   c. SC-7 Temporary Drains and Swales

4. Incorporate applicable Site Management BMP
   a. SM-1 Employee Training
   b. SM-2 Material Delivery and Storage
   c. SM-3 Material Use
   d. SM-4 Protection of Stockpiles
   e. SM-6 Solid Waste Management
   f. SM-7 Sanitary/Septic Waste Management
   g. SM-9 Hazardous Waste Management
   h. SM-10 Spill Prevention and Control
   i. SM-11 Vehicle and Equipment Cleaning
   j. SM-12 Vehicle and Equipment Maintenance
   k. SM-13 Vehicle and Equipment Refueling
   l. SM-14 Scheduling
   m. SM-15 Location of Potential Sources of Sediment
   n. SM-16 Preservation of Existing Vegetation
   o. SM-18 Dust Control

5. Contain pollutants within the Construction Staging/Storage Area BMP with applicable Perimeter Sediment Controls and Site Management BMP. Include a Stabilized Construction Entrance/Exit (EC-2) for all areas which exit onto a paved street. Restrict vehicle access to these points.

6. Manage Concrete Waste including installing a Concrete Washout Area (SM-5) and properly disposing of Concrete Curing Water (California Stormwater BMP Handbook NS-12 Concrete Curing).

7. Remove saw cut slurry and hydrodemolition water from the site by vacuuming. Provide storm drain protection and/or perimeter sediment controls during saw cutting and hydrodemolition work.

ORIGINAL PLAN

SURVEY PLOTTED BY ____ DATE 2/10/14
TRANS & QTYS BY ____
TRACED BY ____
DESIGNED BY ____
QUANTITIES BY ____
CHECKED BY ____

NOTE BOOK DATA

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

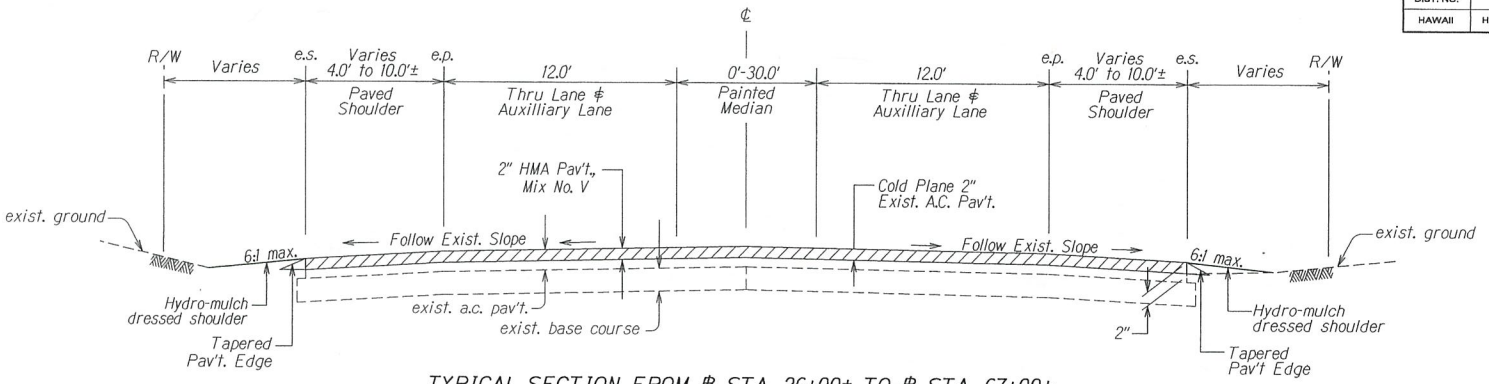
WATER POLLUTION & EROSION CONTROL NOTES

NAWILIWILI ROAD RESURFACING
Kanani Street to Waapa Road
Federal-Aid Project No.: NH-058-1(007)

Date: Oct. 2014

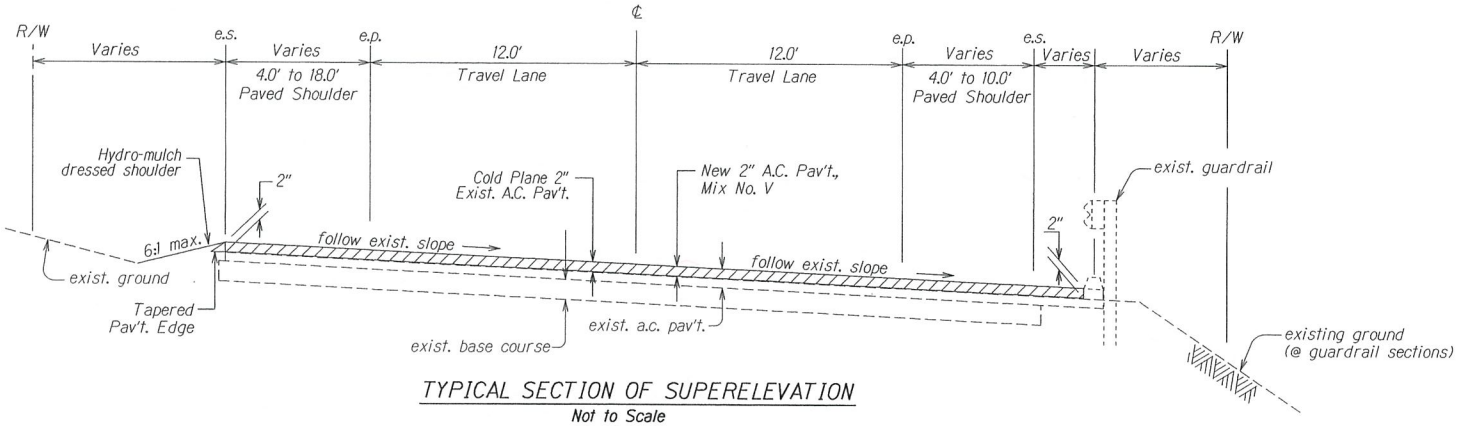
SHEET No. 3 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	7	23



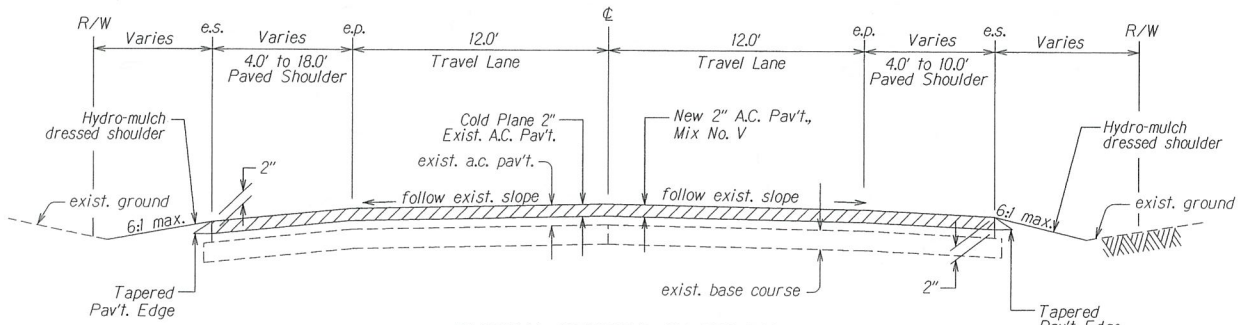
TYPICAL SECTION FROM ℄ STA. 26+00± TO ℄ STA. 67+00±

Not to scale



TYPICAL SECTION OF SUPERELEVATION

Not to Scale



TYPICAL SECTION ON TANGENT

Not to Scale

ORIGINAL PLANS
SURVEY PLOTTED BY
PLANS BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

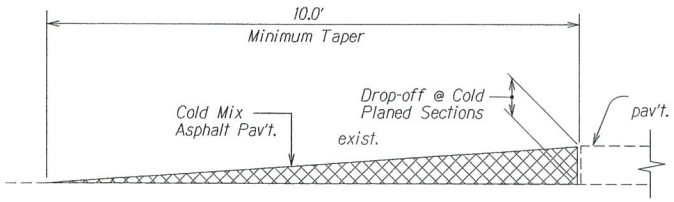
TYPICAL SECTIONS

NAWILIWILI ROAD RESURFACING
Kanani Street to Waapa Road
Federal-Aid Project No. NH-058-1(007)

Not to scale Date: Oct.2014

SHEET No. 1 OF 3 SHEETS

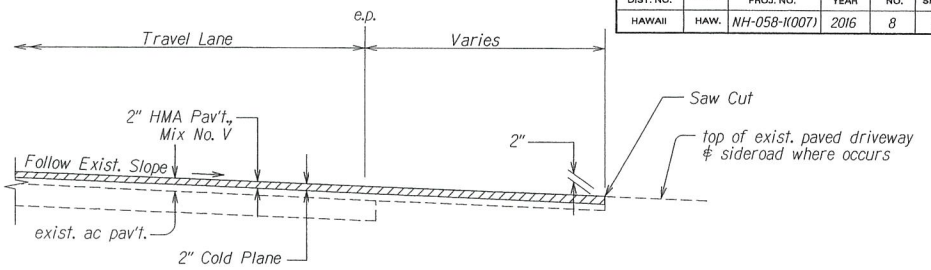
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	8	23



TEMPORARY TRANSITION AT COLD PLANED AREAS

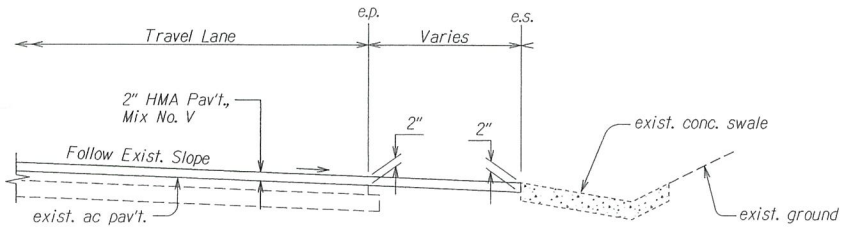
Not to Scale

Note: Contractor shall construct temporary pavement taper to prevent sharp pavement drop-offs at all cold planed sections. Prior to final Hot Mix Asphalt Pavement, Mix No. IV placement, temporary pavement taper shall be removed.



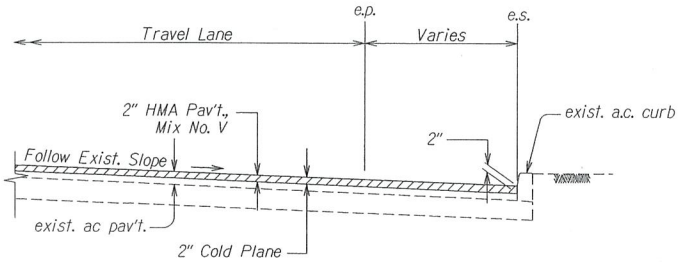
RESURFACING AT PAVED SIDEROADS/DRIVEWAYS

Not to Scale



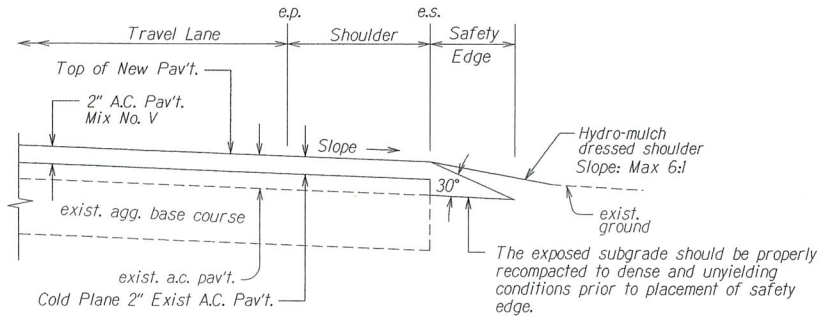
RESURFACING AT CONCRETE SWALE

Not to Scale



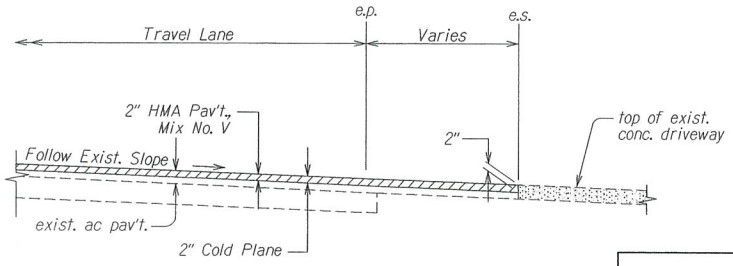
RESURFACING AT A.C. CURB

Not to Scale



TYPICAL PAVEMENT EDGE DETAIL

Not to Scale



RESURFACING AT CONCRETE DRIVEWAYS

Not to Scale

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAFT BY
	TRACED BY
NOTE BOOK REFERENCE	DESIGNED BY
	QUANTITIES BY
	CHECKED BY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

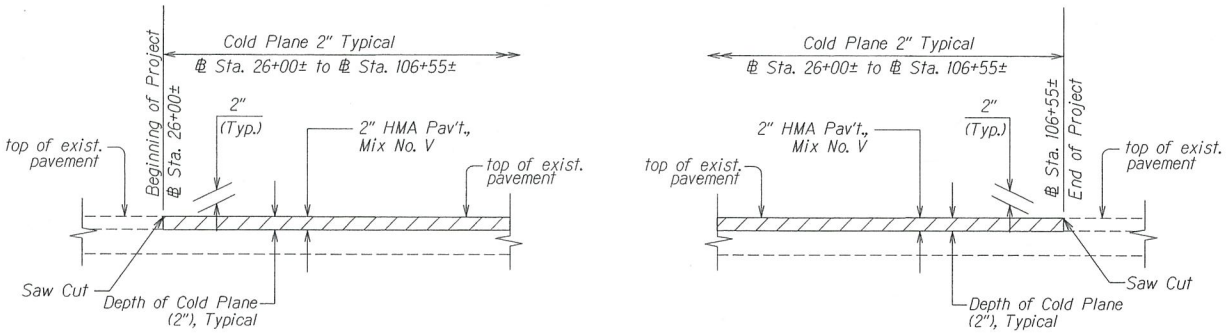
TYPICAL SECTIONS

NAWILIWILI ROAD RESURFACING
Kanani Street to Waapa Road
Federal-Aid Project No. NH-058-1(007)

Not to Scale Date: Oct. 2014

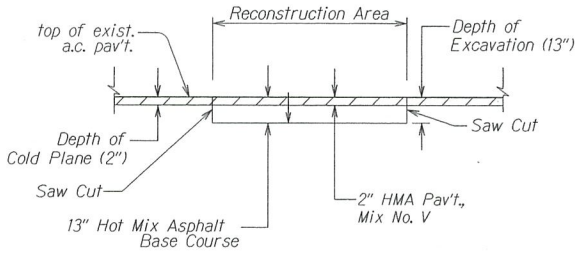
SHEET No. 2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	9	23



COLD PLANED TRANSITION TO EXISTING A.C. PAVEMENT AT THE BEGINNING AND END OF PROJECT

Not to Scale



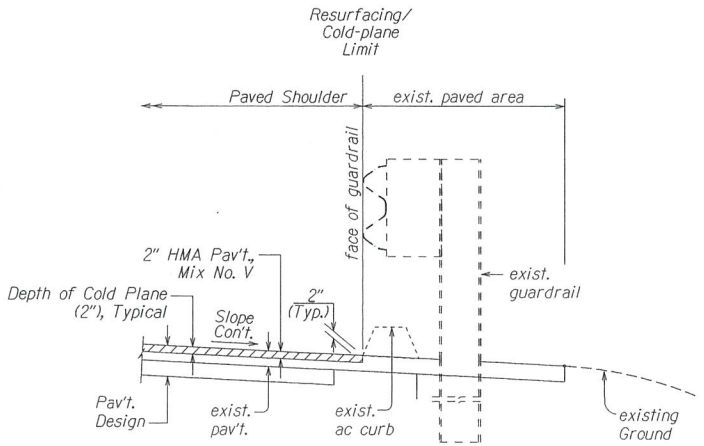
A.C. PAVEMENT RECONSTRUCTION DETAIL

Not to Scale

Note:

1.0 Reconstruct weakened pavement areas prior to cold plane.

2.0 The exposed remaining base course or subbase materials should be properly recompacted to dense and unyielding conditions prior to placement of the asphalt concrete base layer.



RESURFACING AT GUARDRAIL

Not to Scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS

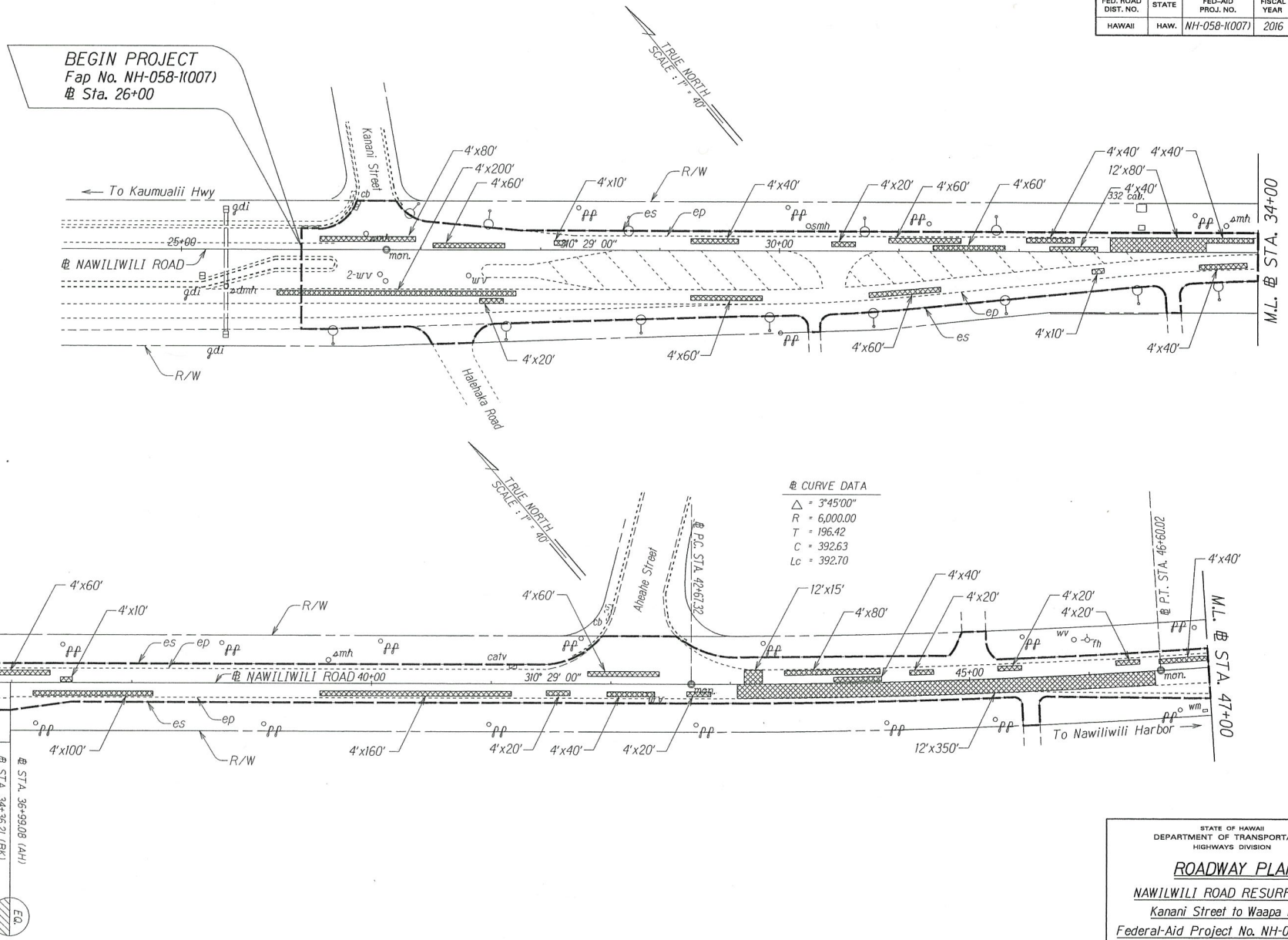
NAWILIWILI ROAD RESURFACING
Kanani Street to Waapa Road
Federal-Aid Project No. NH-058-1(007)

Not to Scale Date: Oct. 2014

SHEET No. 3 OF 3 SHEETS

ORIGINAL PLOTTED BY ... DATE
SURVEY PLOTTED BY ...
DESIGNED BY ...
TRACED BY ...
DESIGNED BY ...
QUANTITIES BY ...
CHECKED BY ...
NOTE BOOK
16.0.5e16
QUANTITIES
CHECKED BY

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	10	23



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

NAWILWILI ROAD RESURFACING

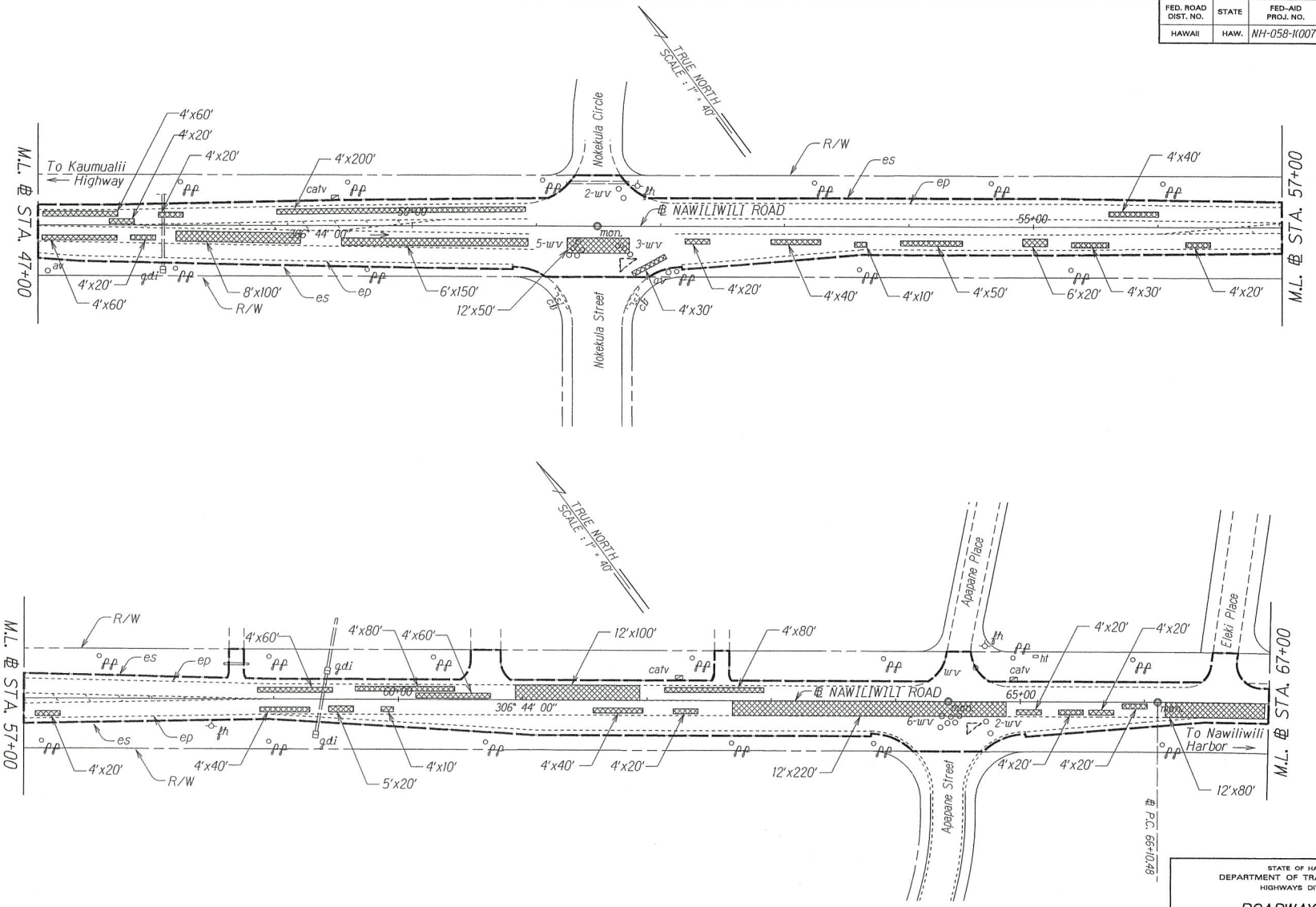
Kanani Street to Waapa Road

Federal-Aid Project No. NH-058-1(007)

Scale: 1" = 40' Date: Oct. 2014

SHEET No. 1 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	11	23



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

NAWILWILI ROAD RESURFACING

Kanani Street to Waapa Road

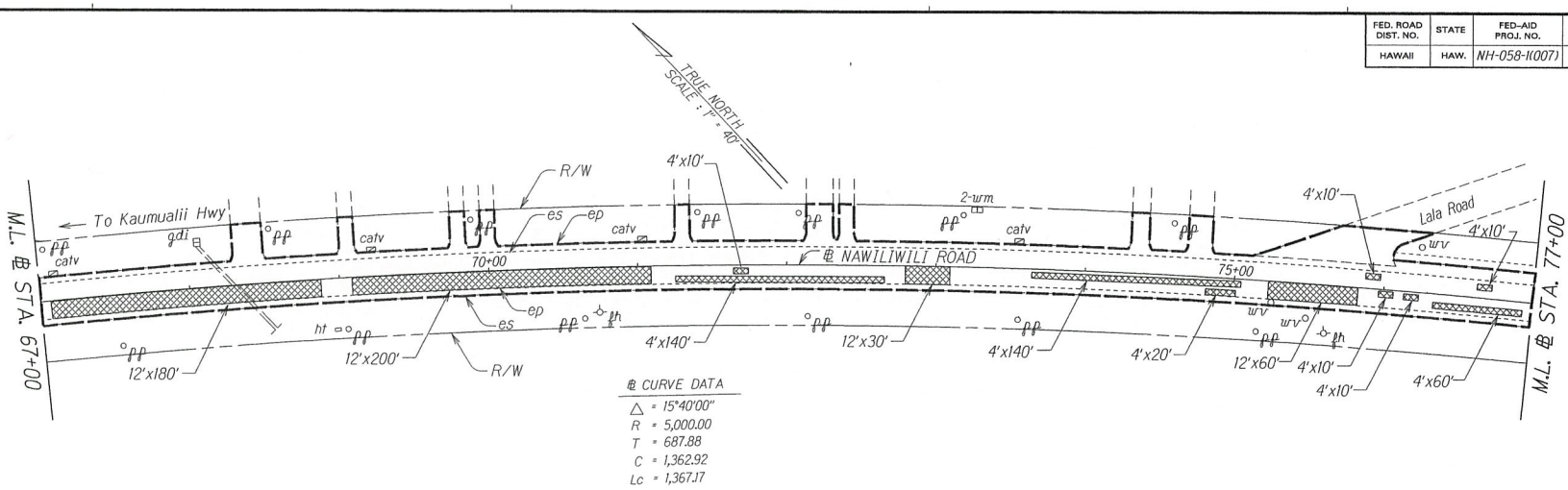
Federal-Aid Project No. NH-058-1(007)

Scale: 1" = 40' Date: Oct. 2014

SHEET No. 2 OF 5 SHEETS

ORIGINAL PLANS SURVEY PLOTTED BY ... DATE ...
DRAWN BY ...
TRACED BY ...
DESIGNED BY ...
QUANTITIES BY ...
CHECKED BY ...
NOTE BOOK
N. CWB/CDP

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	12	23



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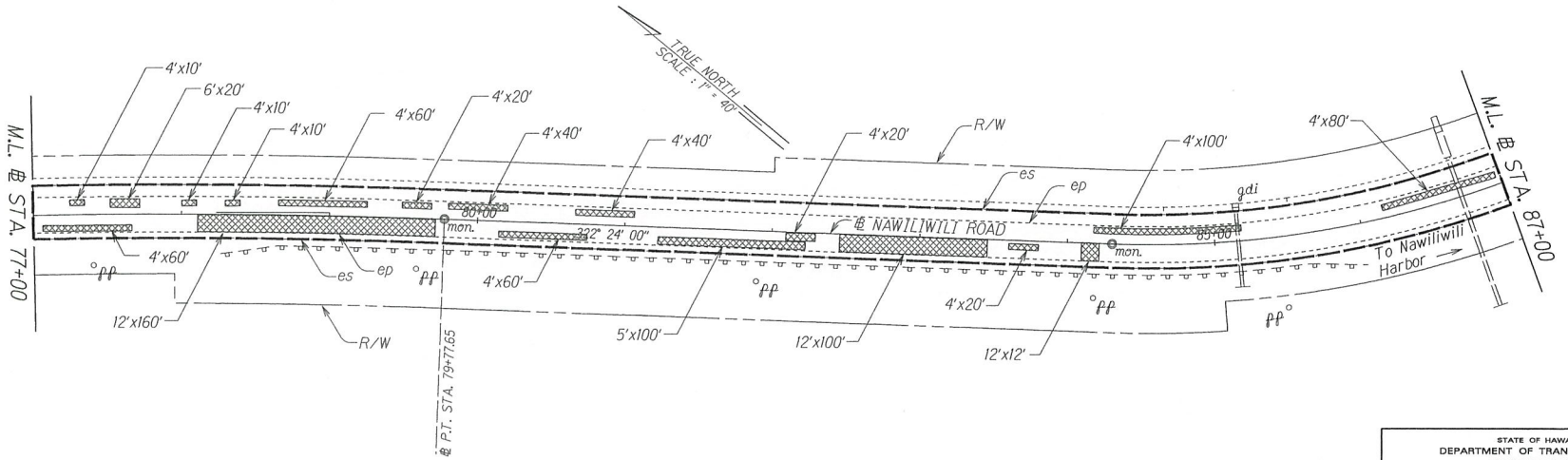


℄ P.T. STA. 79+77.65

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

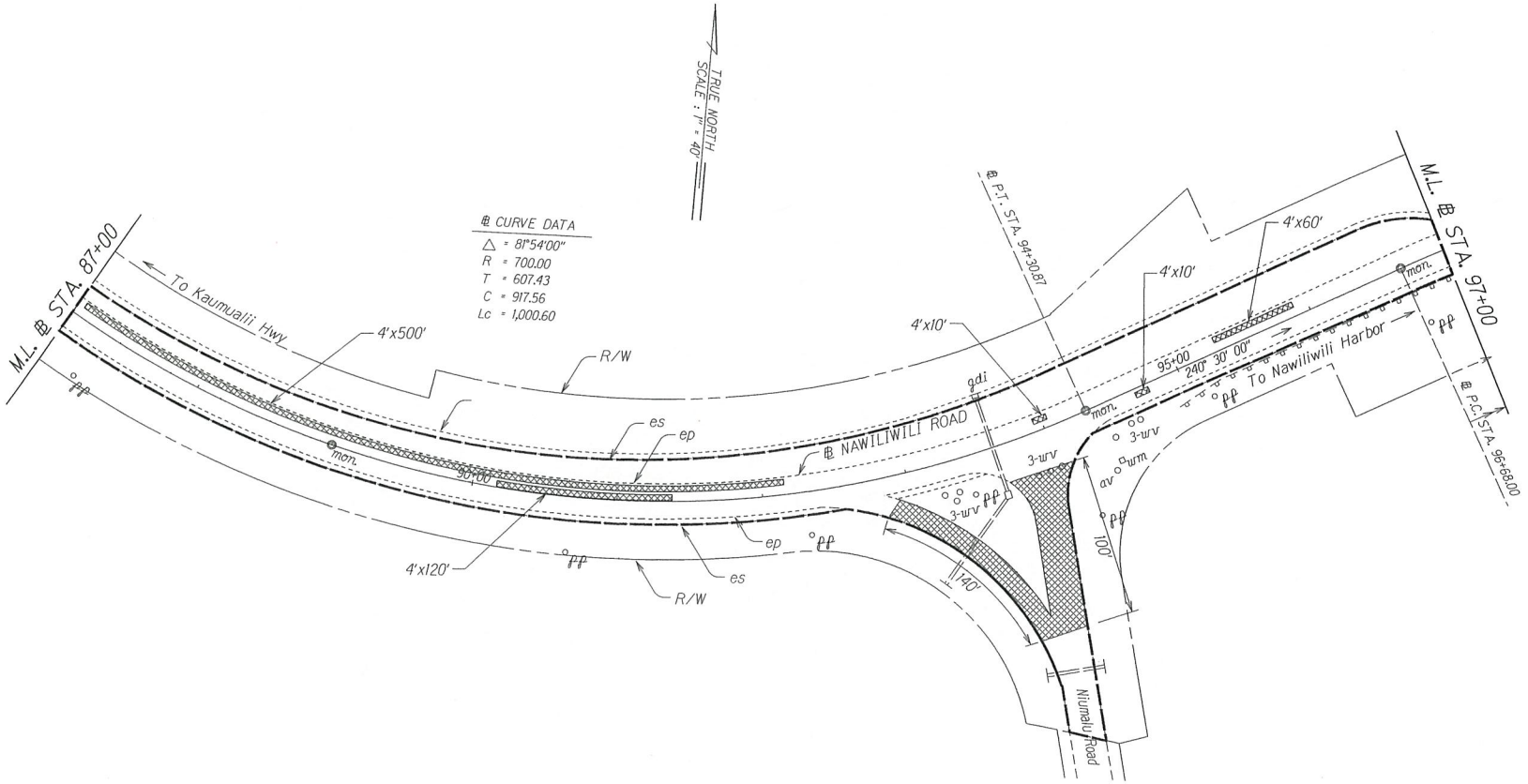
NAWILWILI ROAD RESURFACING
Kanani Street to Waapa Road
Federal-Aid Project No. NH-058-1(007)

Scale: 1" = 40' Date: Oct. 2014

SHEET No. 3 OF 5 SHEETS

ORIGINAL PLAN | SURVEY PLOTTED BY ____ DATE ____ | DRAWN BY J | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | NOTE: ROUTINE REVISIONS ONLY

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	13	23



ORIGINAL PLAN
SURVEY PLOTTED BY ____ DATE ____
DRAWN BY "
TRACED BY "
DESIGNED BY "
QUANTITIES BY "
CHECKED BY "
NOTE BOOK
N. Ohrt/Kalo

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

NAWILWILI ROAD RESURFACING

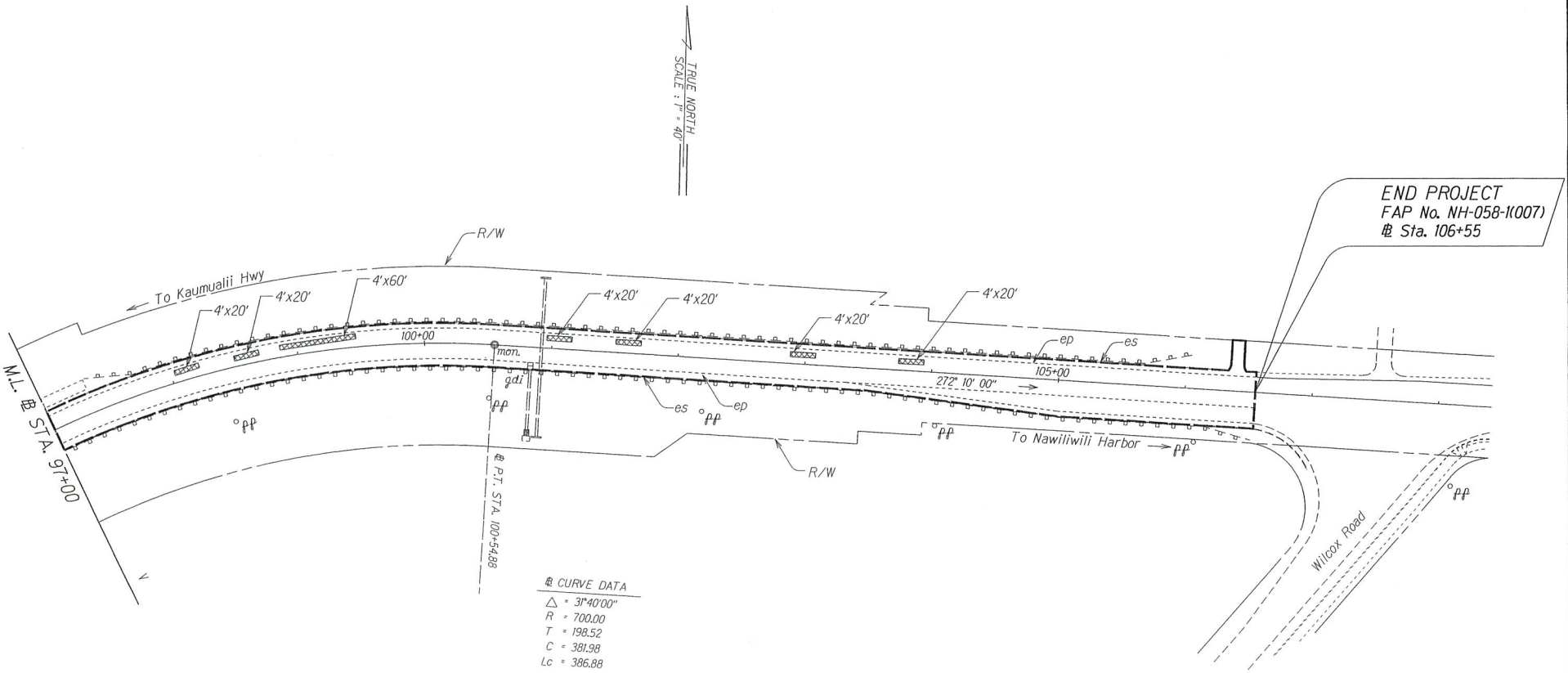
Kanani Street to Waapa Road

Federal-Aid Project No. NH-058-1(007)

Scale: 1" = 40' Date: Oct. 2014

SHEET No. 4 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-058-1(007)	2016	14	23



℄ CURVE DATA

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C = 381.98
Lc = 386.88

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE
NOTE ADDITIONS, DELETIONS & CHANGES IN DESIGN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

NAWILWILI ROAD RESURFACING
Kanani Street to Waapa Road
Federal-Aid Project No. NH-058-1(007)

Scale: 1" = 40' Date: Oct. 2014

SHEET No. 5 OF 5 SHEETS