

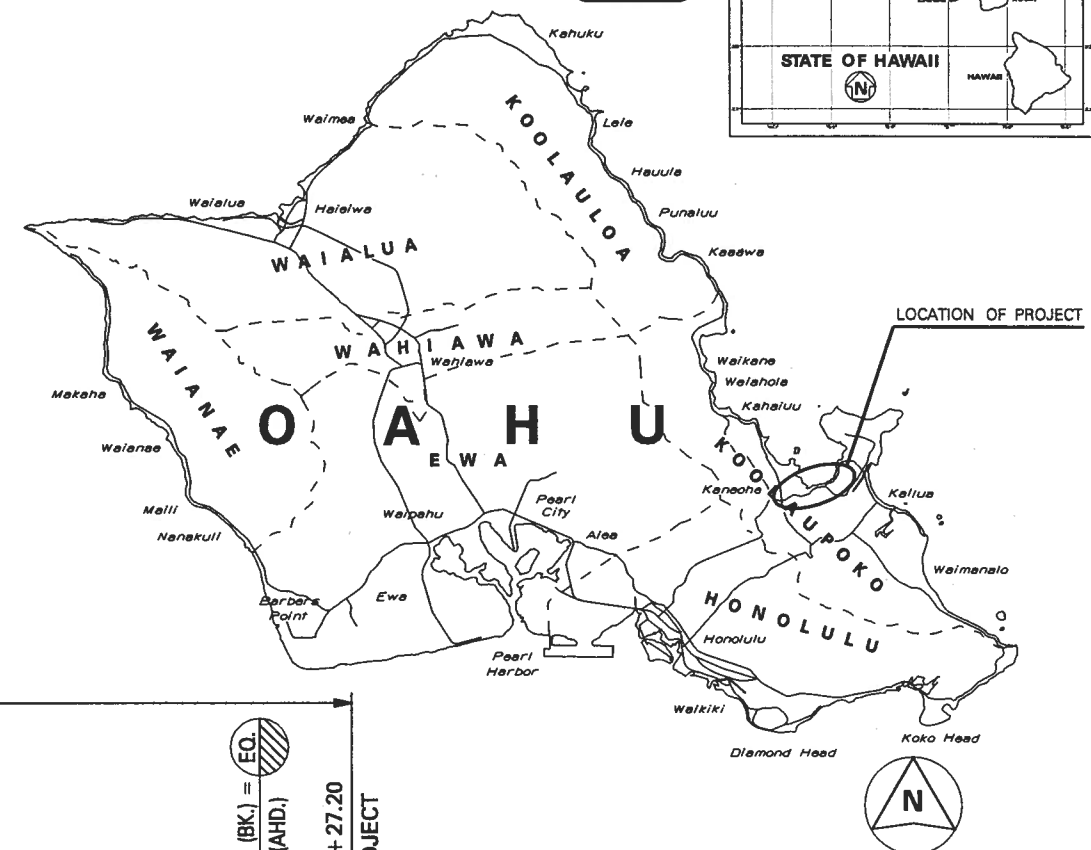
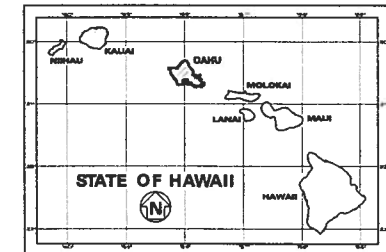
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HONOLULU, HAWAII

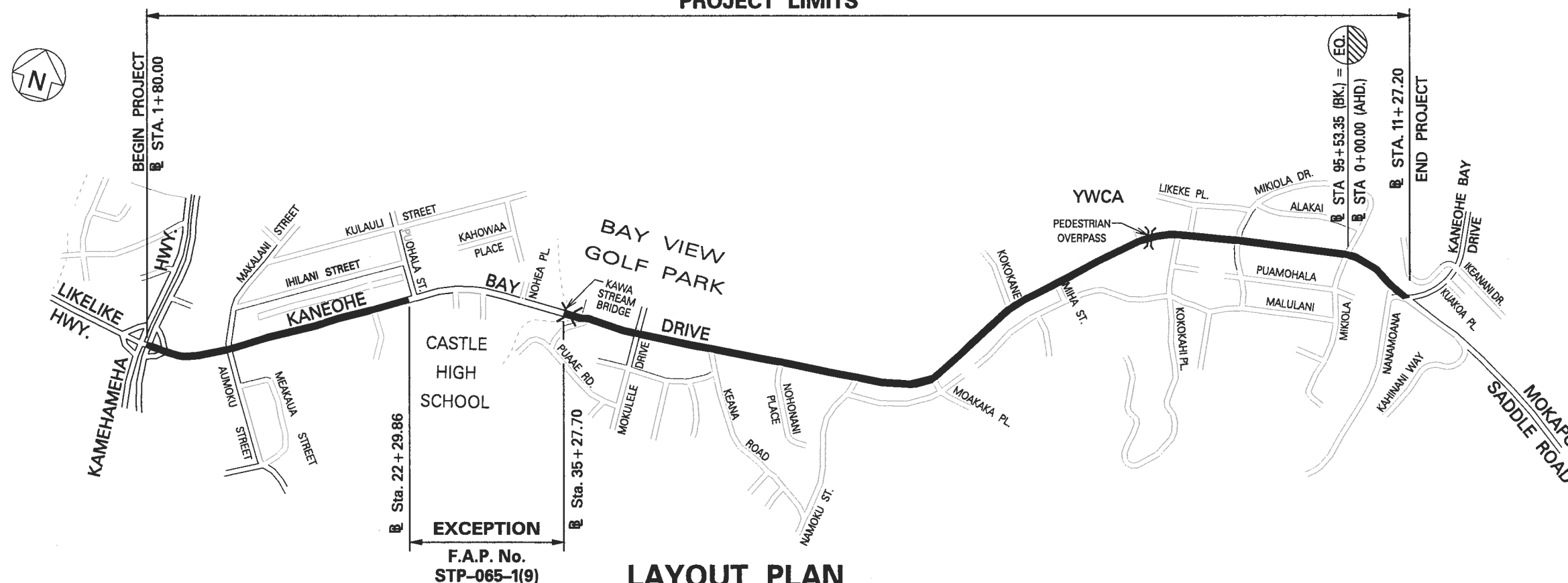
PLANS FOR
KANEOHE BAY DRIVE REHABILITATION
KAMEHAMEHA HIGHWAY TO NANAMOANA STREET
PROJECT NO. 65AB-01-04M

DISTRICT OF KOOLAUPOKO
ISLAND OF OAHU

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	1	X

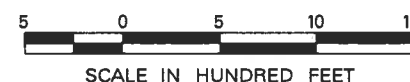


PROJECT LIMITS



LAYOUT PLAN

GROSS LENGTH OF PROJECT.....2.00 MILES
NET LENGTH OF PROJECT.....1.73 MILES



SCALE IN MILES

MILE POST 0.00 TO MILE POST 1.99

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

HWY-D DESIGNED BY
HWY-DD MANAGED BY
692-7570 PHONE
X DATE

GENERAL NOTES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	3	X

1. The scope of work for this project consists of resurfacing with asphalt concrete; cold planing; reconstructing weakened pavement areas; repairing damaged sidewalk; upgrading drainage facilities; adjusting manhole and valve box frame and cover; installing guardrail; pedestrian railing work; and installing loop detector, pavement marking and sign.

2. The Contractor is reminded of the requirements of Subsection 108.01 - Subletting of Contract, which requires him to perform work 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: Subsection 104.11 - Utilities and Services; Subsection 107.06 - Contractor Duty Regarding Public Convenience; 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 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 placement 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, the Oahu Transit Services, Lowell Tom (848-4578) or Ed Sniffen (848-4571), two (2) weeks prior to construction, informing them of location, scope of work, and closure of Name of Highway and/or traffic lanes and dates of closure. (For Oahu projects only. For other islands, check with your local bus company.)

7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.

8. The Contractor shall obtain a Community Noise permit from the State Department of Health, Noise and Radiation Branch, 591 Ala Moana Blvd., Room 136, Honolulu, HI 96813-2498; Telephone No. 586-4700. This shall be considered incidental to the various contract items and will not be paid for separately.

9. The Contractor shall indemnify and 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 shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to any culvert work or 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. 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. This work shall be considered incidental to asphalt concrete and will not be paid for seperately.

13. The Contractor shall clean and remove any accumulation of aggregates along the roadside within 10 feet of the edge of pavement. This includes any slurry or waste generated by the cutting operations. This work shall be considered incidental to bulk of work or the various contract items and will not be paid for seperately.

14. Removal and disposal of existing curb and gutter, curb, sidewalk and asphalt concrete pavement, curb, sidewalk and any debris shall be considered incidental to their respective bid items.

15. All saw cutting work including slurry or waste generated by cutting operation shall be considered incidental to Roadway Excavation or Asphalt Concrete or Various Contract Items or their respective bid 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. The top of the Plant Mix Glassphalt Concrete Base Course prior to placement of the new A.C. Pavement, Mix No. IV shall comply with the ten-foot straight edge requirement. The variation of the surface from a straight edge with two contacts with the surface, shall not exceed 3/16."

18. Concrete sidewalk shall be reinforced with 6x6 W1.4xW1.4 welded wire fabric.

19. Dressing of sidewalk shall consist of clearing and grubbing, grading, reshaping and compacting with suitable material the area adjacent to the improvement as shown on the plans and/or as directed by the Engineer and shall be considered incidental to Sidewalk.

20. All curbing angle points within the curb ramps shall be rounded with R=6."

21. New Shoulder/Sidewalk adjacent to the New Bike Lane shall be paid for under their respective bid items. New Asphalt Concrete Sidewalk shall be paid for under Item No. 635.0100 - Hot Mix Asphalt Sidewalks.

22. 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 curb ramps, or sidewalk, or the various contract items and will not be paid for seperately.

23. 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 V or steel and/or wood planks 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 curb ramps, or sidewalk, or the various contract items and will not be paid for seperately.

24. Provide smooth transition where new sidewalk construction meets the existing grade or sidewalk. Transition shall not be steeper than 2% cross and longitudinal slopes and not less 6.0 feet long or as specified on the plans. This work shall be considered incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for seperately.

25. 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 seperately.

26. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designed 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 Oahu District Office at telephone no. 831-6712.

27. The exact locations and limits or areas to be reconstructed and cold planed shall be determined in the field by the Engineer.

28. All cold planed and excess materials not used 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 the various contract items and will not be paid for separately.

29. The Contractor shall coordinate with property owners about trimming existing tree and/or shrubberies fronting their properties. This work shall not be paid for separately but shall be considered incidental to landscape maintenance item.

30. Construct asphalt concrete surface at new guardrail installation according to Guardrail Details and Notes plan sheet.

31. All 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.

32. The Contractor shall maintain all street lights within the project limits at no cost to the State. All street lights shall be operating within 24 hours of discovery of a malfunction.

ORIGINAL PLAN	DATE
NOTED BY	DATE
DESIGNED BY	DATE
CHECKED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

KANEHOE BAY DRIVE REHABILITATION

Kamehameha Highway to Nanamoana Street

Project No. 65AB-01-04M

Date: July, 2008

SHEET No. 1 OF 2 SHEETS

3

THE GAS COMPANY CONSTRUCTION NOTES

1. The Gas Company gas pipelines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipelines.
2. Written clearances must be obtained from The Gas Company, Maps and Records Department, 515 Kamakee Street, at least five (5) working days prior to starting excavation near these gas pipelines.
3. Since gas line locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call USA North a minimum of two (2) working days before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 1-800-227-2600.
4. The Contractor shall excavate and backfill around gas pipelines in the presence of a representative of The Gas Company. All backfill within six inches of any gas pipeline shall be select cushion material approved by The Gas Company.
5. For relocation of any gas pipeline, the Contractor shall notify The Gas Company five (5) working days before starting work. The telephone number is 594-5574. The Contractor shall provide the necessary excavation and backfill, obtain traffic permits, and restore pavement, sidewalks, and other facilities. Any relocation of gas facilities shall be done by The Gas Company and paid for by the Contractor.
6. The Contractor shall notify The Gas Company immediately after any damage has been caused to existing gas pipelines, coatings, or its cathodic protection devices. The telephone number is 535-5933, 24 hours a day. The Contractor shall be liable for any damage to The Gas Company facilities. Repair work on such damage shall be done by The Gas Company with payment for this work to be borne by the Contractor.
7. Minimum vertical and horizontal clearance between the gas pipelines and other pipelines, conduits, ductlines, or other facilities shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by The Gas Company.
8. The Contractor shall work in an expeditious manner in order to keep the uncovered gas pipelines exposed for as short a period of time as possible.

DRAINAGE NOTES:

1. Existing drainage systems 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 shall be incidental to the various Contract Items.
2. 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.
3. For added reinforcing around culverts at new drainage structures, see Standard Plan H-04.
4. Chamfer all exposed concrete edges 1".
5. Grading around Type "I2I12I6P" GDI shall not be paid for separately, but shall be considered incidental to Type "I2I12I6P" GDI.

PAVING AROUND MANHOLES/VALVE BOXES:

1. The Contractor shall place hot asphalt concrete around manholes/valve boxes and compact properly with a vibrating plate compactor.
2. If a plate compactor is not used, the Contractor shall use a pneumatic roller to roll the area around manholes/valve boxes which are not rolled by the steel roller.
3. Work paving around manholes/valve boxes in the travelway will be considered incidental to asphalt concrete item and will not be paid separately.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	4	X

LEGEND

	7" Cold Planing		Existing 6" Gas Line
	Reconstruction Areas		Existing Gas Valve Box
	Resurfacing & Cold Planing Limits		Adjusted Gas Valve Box
	Existing Electrical Line		Existing Gas Manhole
	Existing Joint Pole		Adjusted Gas MH Frame/Cover
	Existing Power Pole		Existing Monument
	Existing Electric Manhole		Adjusted Monument
	Existing Electric Pullbox		Existing 24" Drain Line
	Existing Telephone Line		New 24 " RCP Drain Line
	Existing Telephone Pole		Existing Storm Drain Manhole
	Existing Telephone Manhole		Adjusted Storm Drain MH Frame/Cover
	Existing Signal Corps Line		Existing Grated Drop Inlet
	Existing TV Cable		Existing Catch Basin
	Existing 12" Water Line		Existing Traffic Sign
	Existing Water Manhole		Existing Highway Lighting Standard
	Adjusted Water MH Frame/Cover		Existing Traffic Signal Pole
	Existing Water Air Valve		Existing Traffic Signal Pullbox
	Adjusted Water Air Valve		Existing Metal Guardrail
	New Water Air Valve		New Metal Guardrail
	Existing Water Valve Box		Existing Tree
	Adjusted Water Valve Box		Existing Fence
	Existing Water Meter		
	Adjusted Water Meter		
	Existing Fire Hydrant		
	Existing Sewer Line		
	Existing Sewer Manhole		
	Adjusted Sewer MH Frame/Cover		

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	12/28/11
add/kate/5/ten	TRACED BY	
N. Thompson	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
GENERAL NOTES
KANEOHE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoana Street
Project No. 65AB-01-04M
Date: April, 2005
SHEET No. 2 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	4	0

WATER POLLUTION AND EROSION CONTROL NOTES:

A. GENERAL:

- See Section 209 - Temporary Water Pollution, Dust, 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.
- 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.
- 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.
- 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.
- 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.
- For projects that require an NPDES Permit from the Department of Health, install a rain gauge prior to any field work including the installation of any site-specific best management practices. The rain gauge 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 gauge 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:

- 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.
- Maintain all measures in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.
- Remove built-up sediment from silt fence when it has reached one-third the height of the fence.
- 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.

- Inspect temporary and permanent seeding and planting for bare spots, washouts and healthy growth.
- 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.
- 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 12 inches or as recommended by the soils engineer 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.
- Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.
- Submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- 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.
- 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.

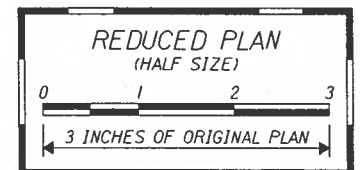
h. Conduct a daily inspection to ensure proper use and disposal of materials onsite.

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.



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
WATER POLLUTION & EROSION CONTROL NOTES
KANEHOE BAY DRIVE REHABILITATION
Kamehameha Hwy. to Nanamoana St.
Project No.: 65AB-01-04M
Date: July, 2010

SHEET No. 1 OF 2 SHEETS

SURVEY PLOTTED BY	DATE
PLAN	7/1/08
DESIGNED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	
BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	5	0

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:

- 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.
- 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.
- 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.
- 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.

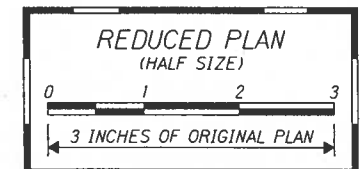
4. Spill Control Plan

- Post a spill prevention plan to include measures to prevent and clean up each spill.
- 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.
- Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.
- Keep materials and equipment necessary for spill cleanup in the material storage area onsite.
- Clean up all spills immediately after discovery.
- Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size.

E. PERMIT REQUIREMENTS:

- 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.
- 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.
- Comply with all applicable State and Federal Permit conditions. Permits may include but are not limited to the following:

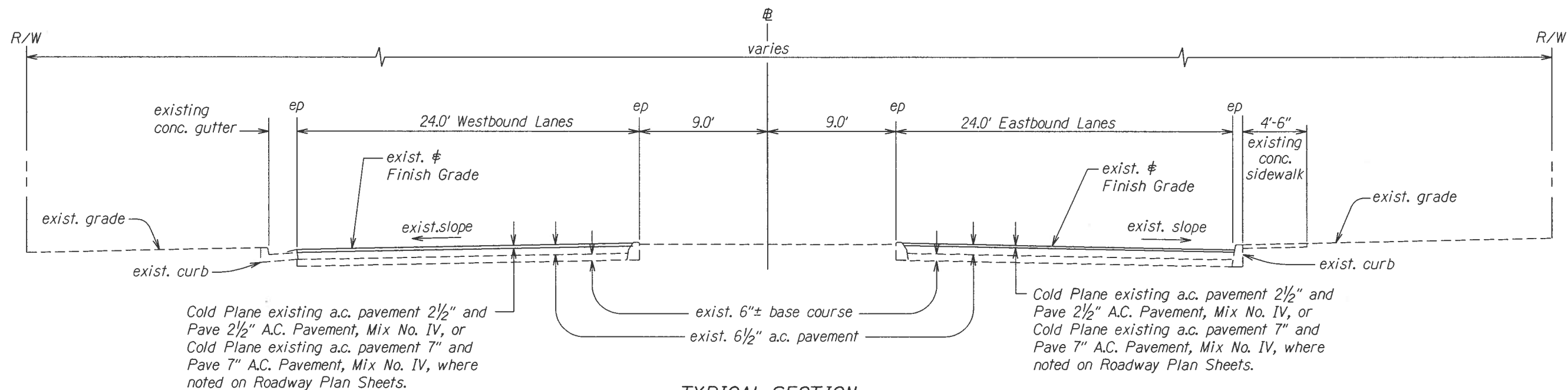
- NPDES Permit for Construction Activities



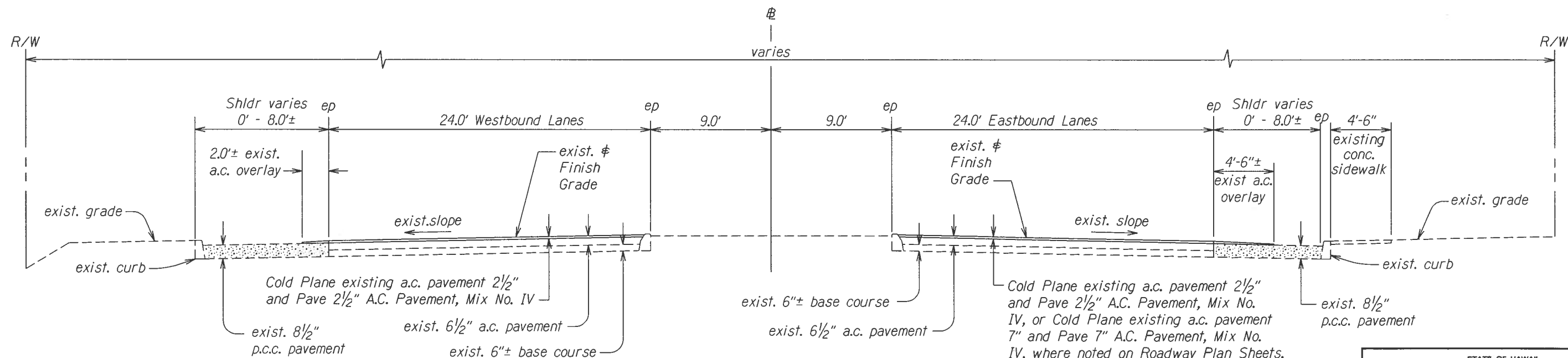
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ORIGINAL PLAN	
NOTE BOOK	
DATE	
NO.	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
WATER POLLUTION & EROSION CONTROL NOTES
Kaneohe Bay Drive Rehabilitation
Kamehameha Hwy. to Nanamoa St.
Project No.: 65AB-01-04M
Date: July, 2010
SHEET No. 2 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	5	X



TYPICAL SECTION
 Sta. 2+90 to Sta. 16+00
 Scale: ¼"=1'-0"



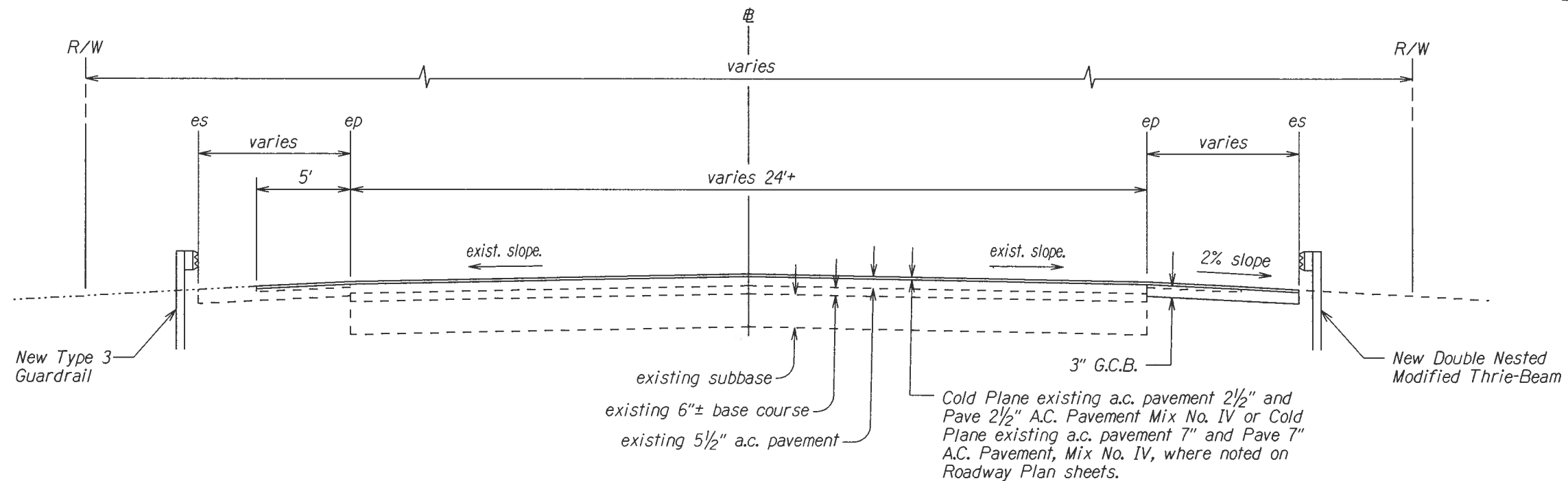
TYPICAL SECTION
 Sta. 16+00 to Sta. 22+80
 Scale: ¼"=1'-0"

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SURVEY PLOTTED BY	_____
DRAWN BY	_____
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ORIGINAL PLAN	_____
NOTE BOOK	_____
FILE	_____
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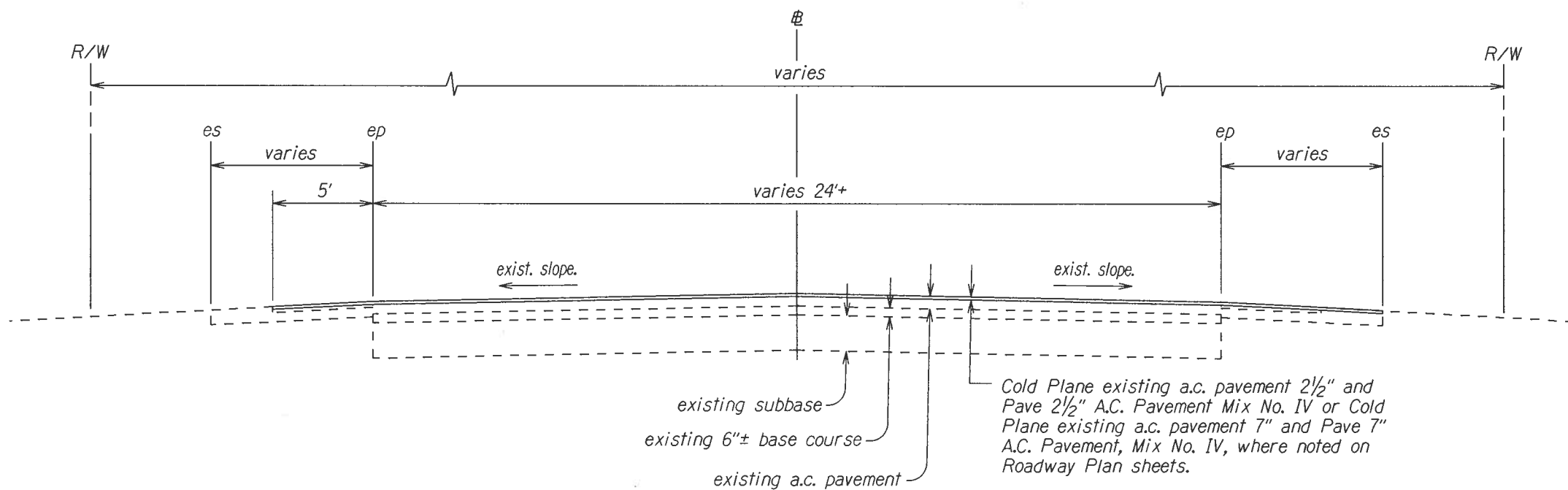
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTION
KANEHOE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoa Street
Project No. 65AB-01-04M
Scale: ¼" = 1'-0" Date: April, 2005
SHEET No. 1 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	6	X



TYPICAL SECTION
 # STA. 35+27.70± TO # STA. 36+20±
 Scale: 1/4"=1'-0"



TYPICAL SECTION
 # STA. 36+20± TO # STA. 46+00±
 # STA. 86+20± TO # STA. 91+00±
 Scale: 1/4"=1'-0"

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

TYPICAL SECTION

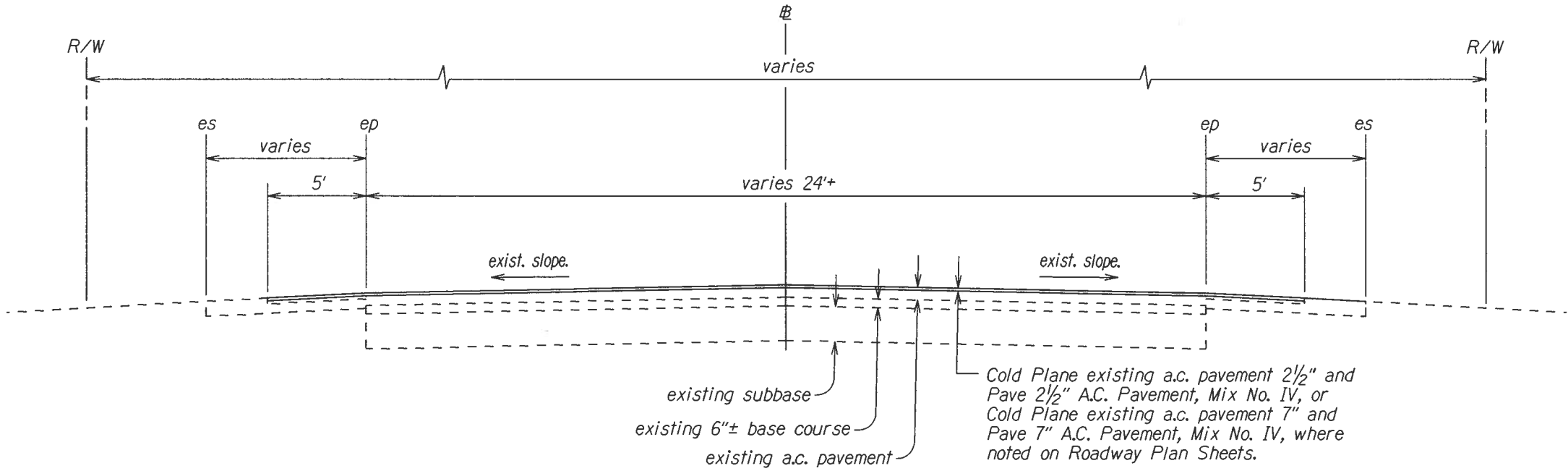
KANEHOE BAY DRIVE REHABILITATION
 Kamehameha Highway to Nanamoa Street
 Project No. 65AB-01-04M

Scale: 1/4" = 1'-0" Date: May, 2008

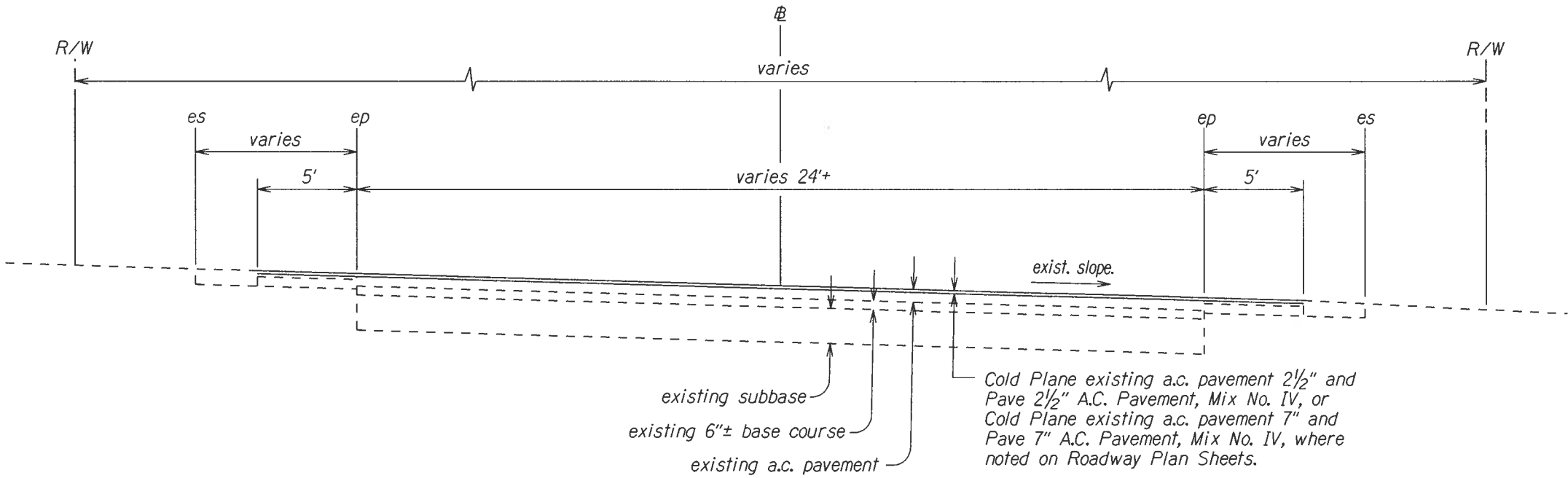
SHEET No. 2 OF 5 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	7	X



TYPICAL SECTION
STA. 46+00± TO STA. 59+00±
STA. 67+00± TO STA. 68+00±
STA. 77+50± TO STA. 82+00±
Scale: 1/4"=1'-0"



TYPICAL SUPERELEVATED SECTION
STA. 59+00± TO STA. 67+00±
STA. 68+00± TO STA. 77+50±
STA. 82+00± TO STA. 86+20±
Scale: 1/4"=1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTION

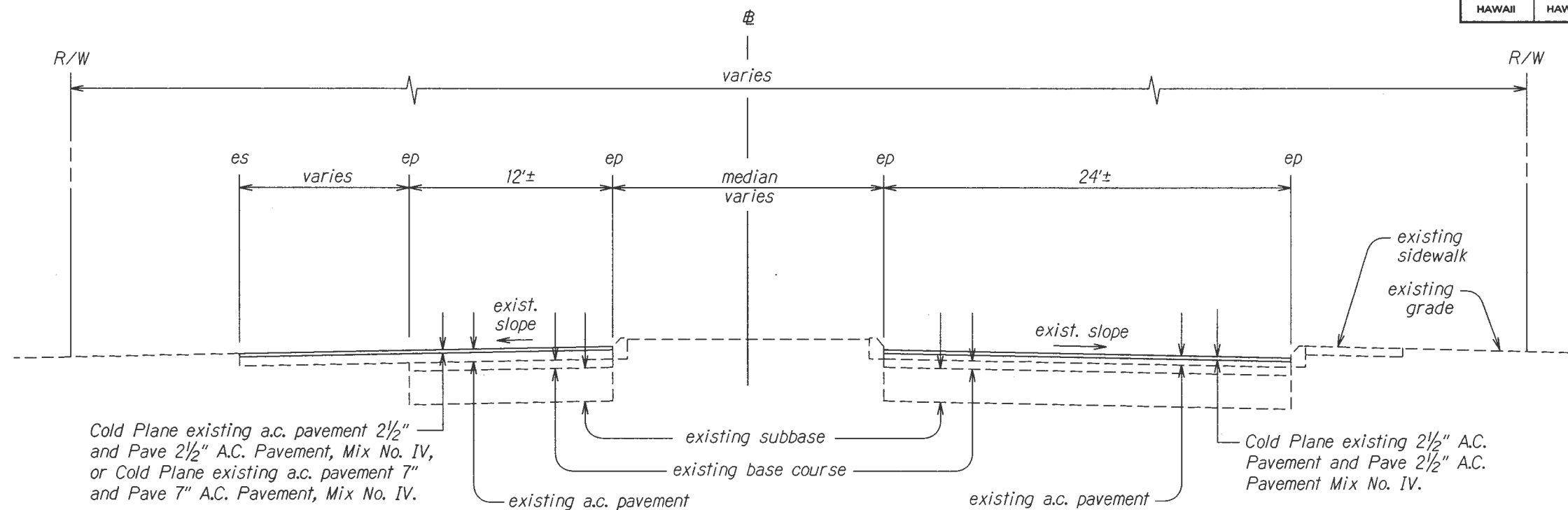
KANE OHE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoana Street
Project No. 65AB-01-04M

Scale: 1/4" = 1'-0" Date: July, 2008

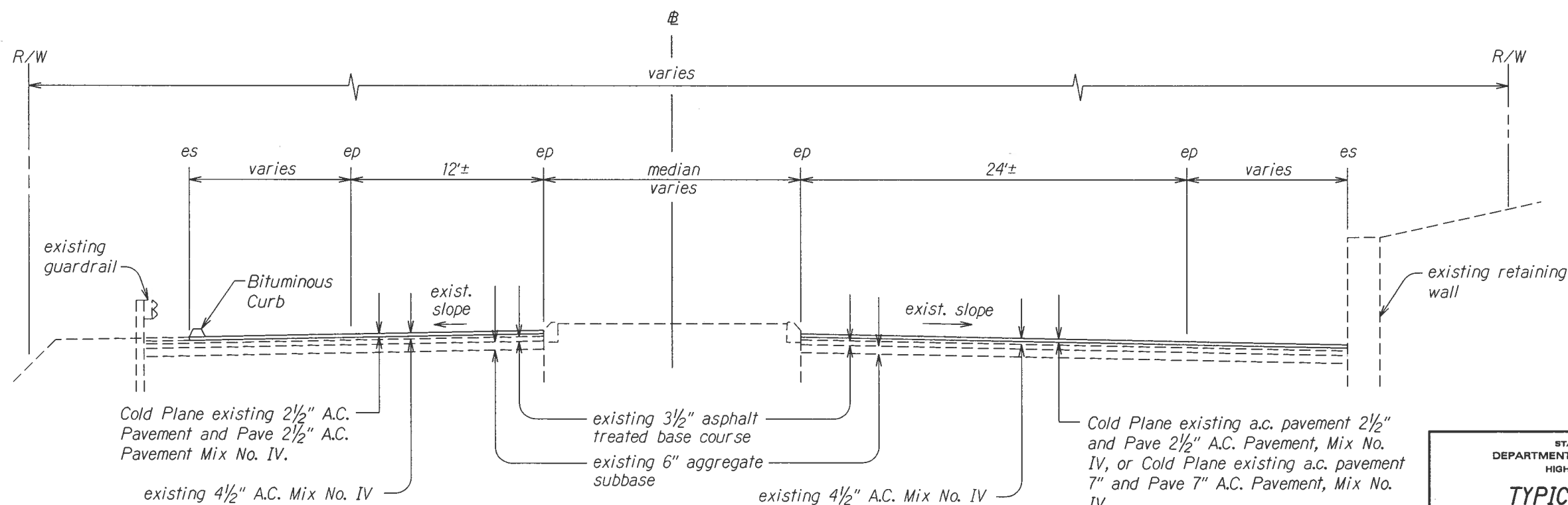
SHEET No. 3 OF 5 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
DATE	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	8	X



TYPICAL SECTION
 ± STA. 91+00± TO ± STA. 3+00±
 Scale: 1/4"=1'-0"



TYPICAL SECTION
 ± STA. 3+00± TO ± STA. 10+96±
 Scale: 1/4"=1'-0"

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

TYPICAL SECTION

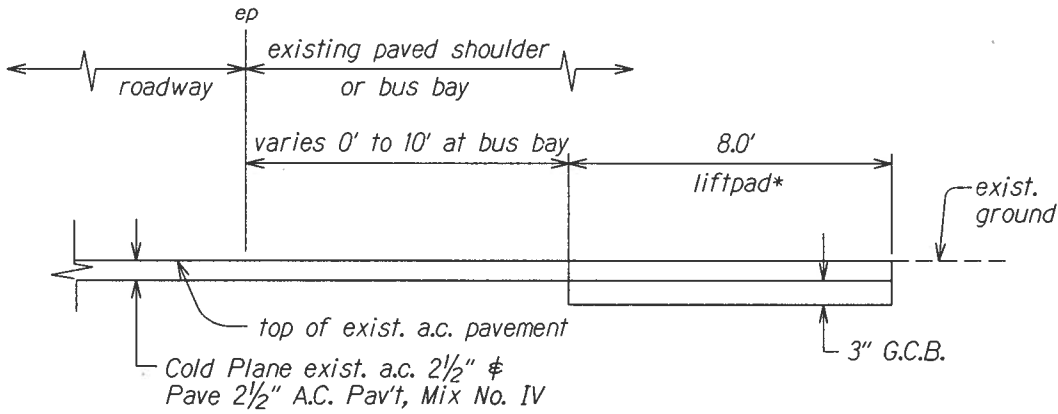
KANE OHE BAY DRIVE REHABILITATION
 Kamehameha Highway to Nanamoana Street
 Project No. 65AB-01-04M

Scale: 1/4" = 1'-0" Date: May, 2008

SHEET No. 4 OF 5 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	

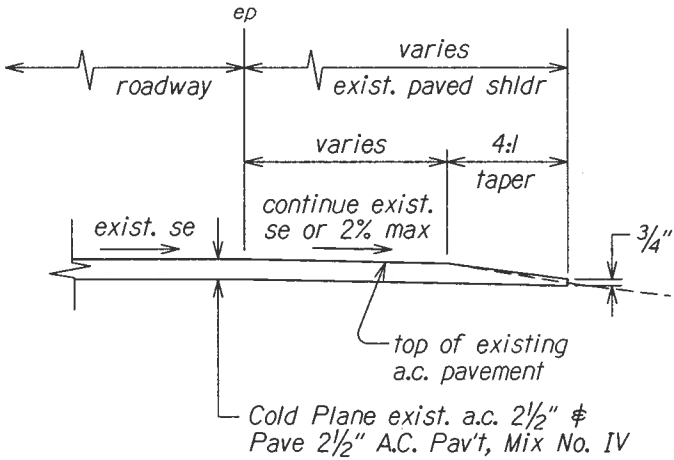
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	9	00



* Liftpad 8.0' x 5.0' @ bus bay

TYPICAL SECTION AT BUS BAYS

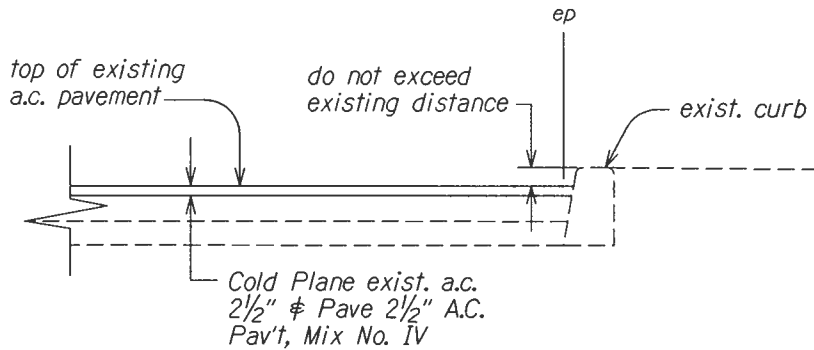
Scale: N.T.S.



TYPICAL SECTION AT EXISTING PAVED SHOULDERS

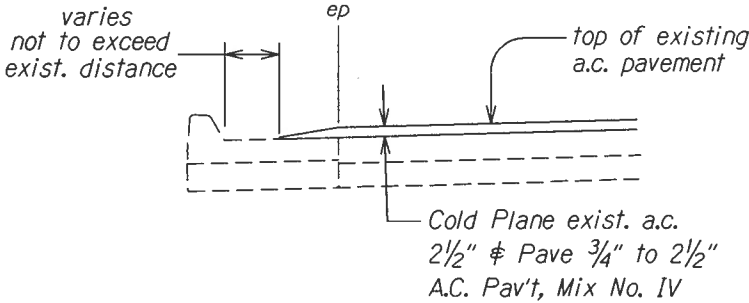
STA. 35+27.70± TO # STA. 40+20±

Scale: N.T.S.



TYPICAL UNDIVIDED SECTION

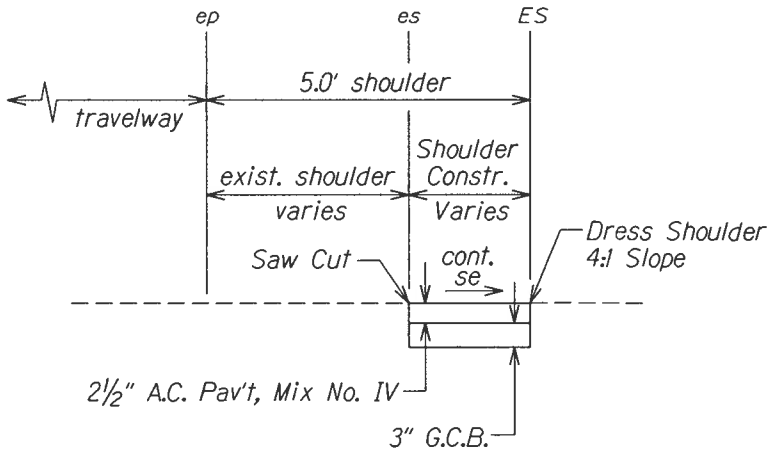
Scale: N.T.S.



Note: Where pedestrian ramps occur, provide smooth pavement transition. Maximum slope of adjoining gutter and/or road surface immediately fronting curb ramp shall not exceed 5% for type A, D & combination ramp and 8.33% for type B, C & E ramp.

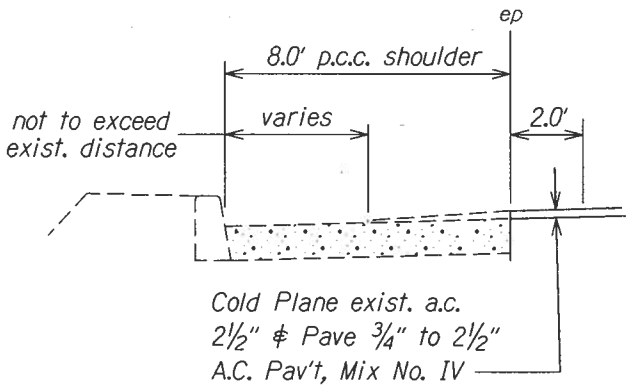
TYPICAL SECTION AC PAVEMENT @ CURB & GUTTER

Scale: N.T.S.



TYPICAL SECTION SHOULDER CONSTRUCTION

Scale: N.T.S.



TYPICAL SECTION AC PAVEMENT @ 8' CONC. SHLDR

Scale: N.T.S.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TYPICAL SECTION

KANEHOE BAY DRIVE REHABILITATION

Kamehameha Highway to Nanamoana Street

Project No. 65AB-01-04M

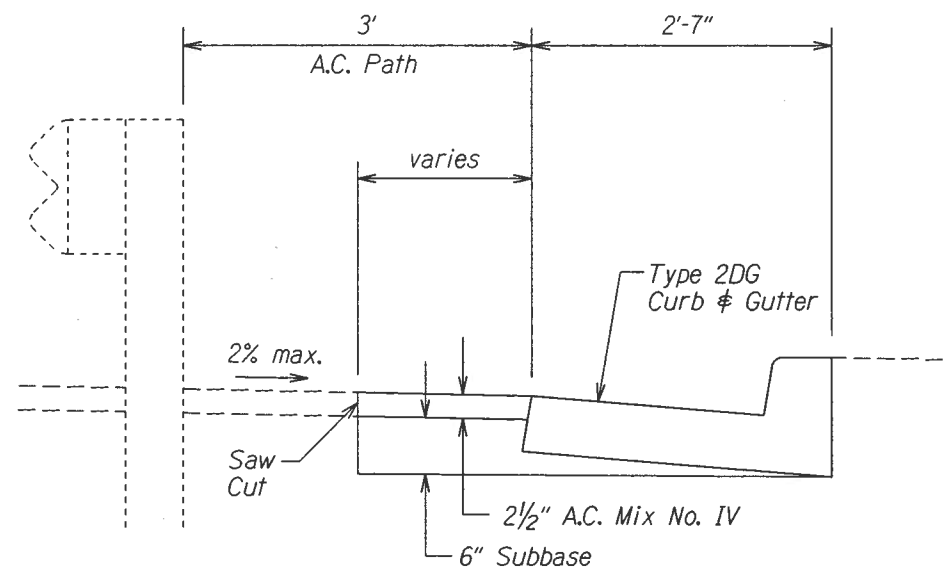
Scale: NTS

Date: September, 2005

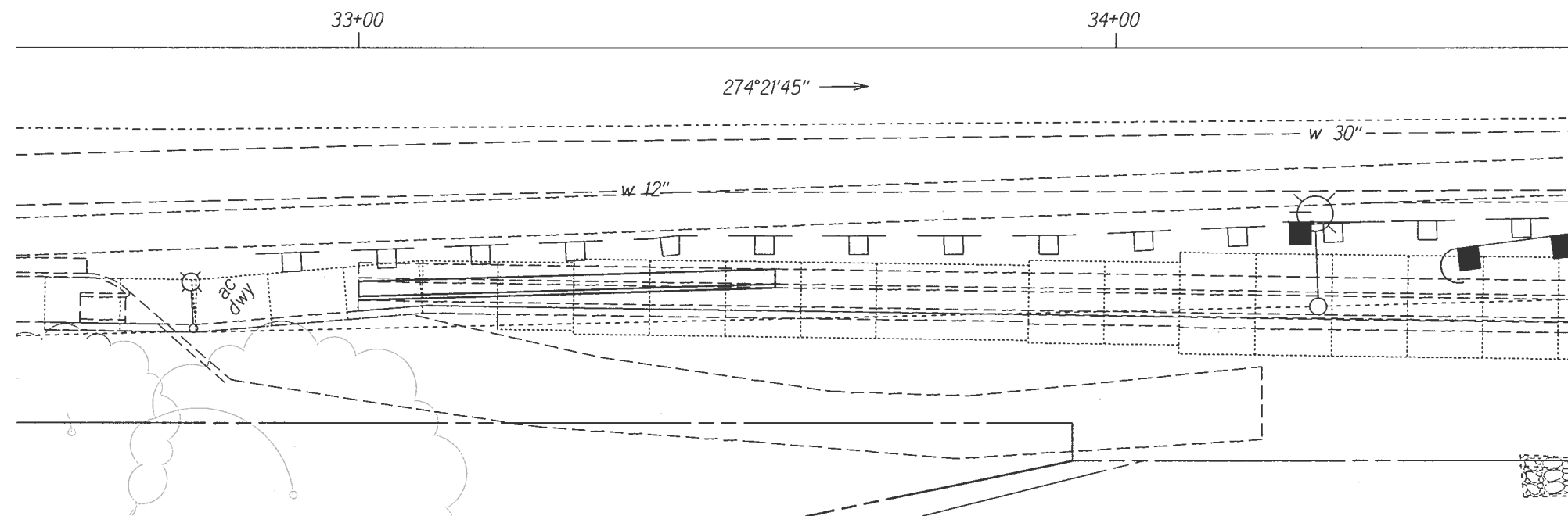
SHEET No. 5 OF 5 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
QUANTITIES BY	DESIGNED BY	
CHECKED BY	5/24/2005	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	0	0



TYPICAL SECTION
Scale: NTS



± Sta. 33+00± to ± Sta. 33+55± Rt.
Remove existing curb and gutter. Construct
New Type 2DG Curb and Gutter, and A.C.
Path.

PLAN
CURB AND GUTTER ADJUSTMENT
Scale: 1"=10'

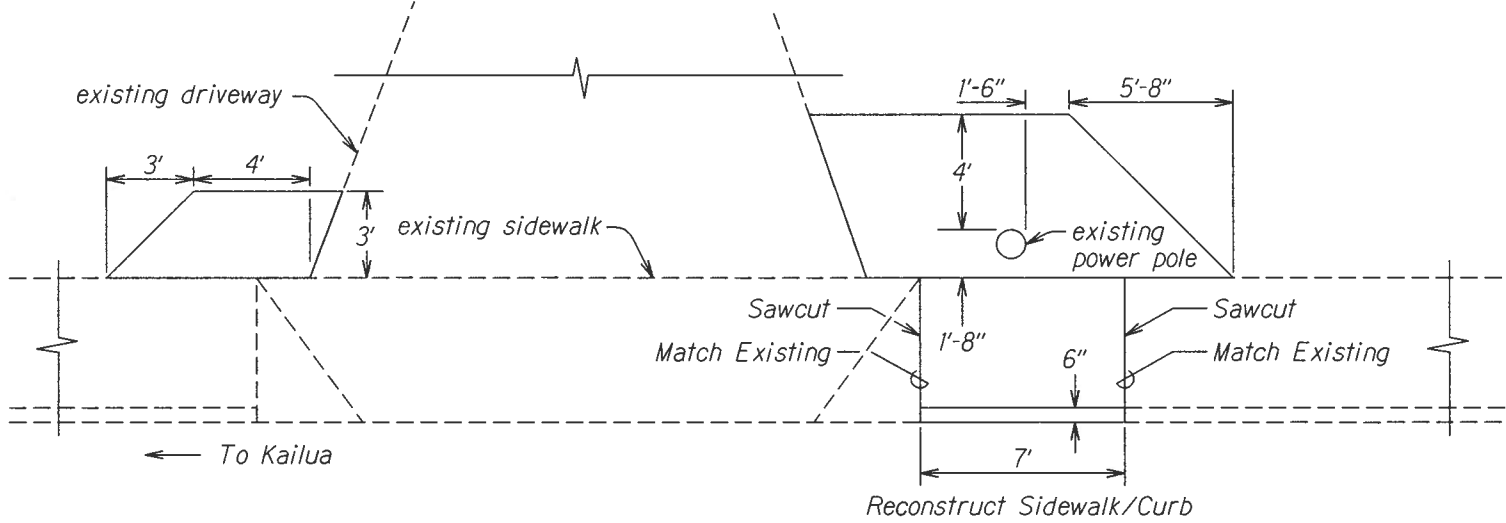
TRUE NORTH
SCALE: 1" = 10'

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
Stamp	
N. detail/sign	

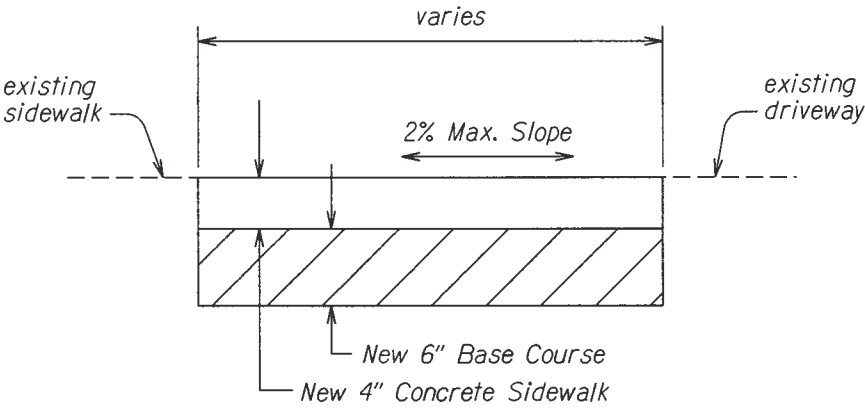
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS
KANEHOE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoana Street
Project No. 65AB-01-04M
Scale: As Noted Date: July, 2008
SHEET No. X OF X SHEETS

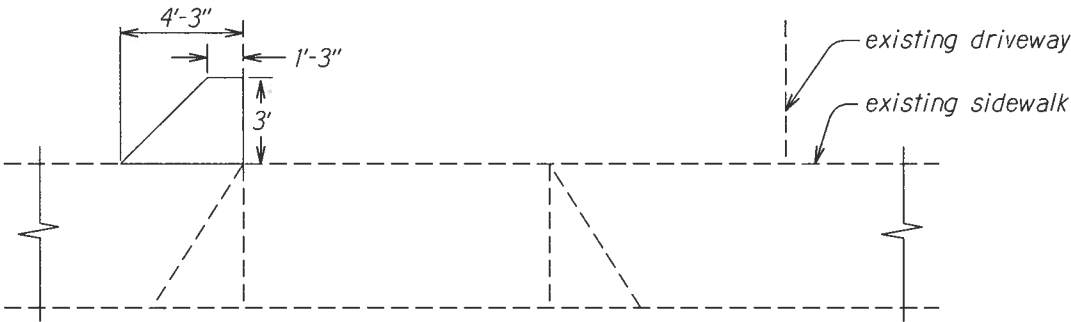
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	20xx	0	0



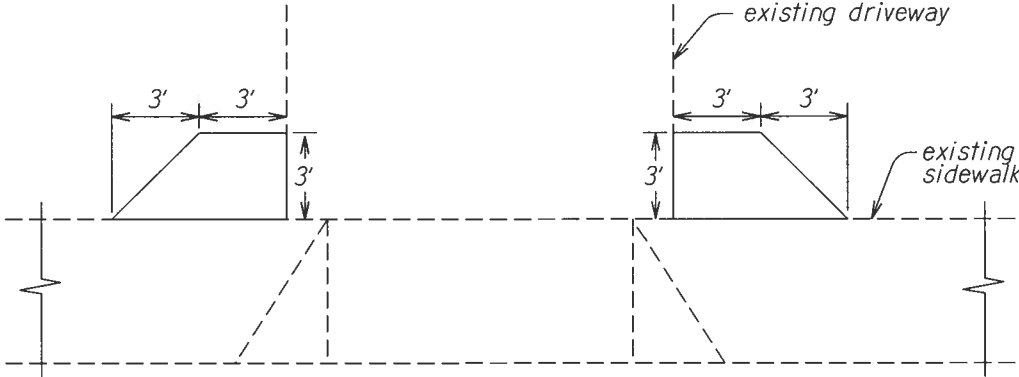
PLAN
 ± STA. 6+24± to ± STA. 6+84± RT.
 Scale: NTS



TYPICAL EXTENSION DETAIL
 Scale: NTS



PLAN
 ± STA. 10+80± RT.
 Scale: NTS



PLAN
 ± STA. 11+28± TO ± STA. 11+56± RT.
 Scale: NTS

APRON OFFSET SIDEWALK EXTENSION DETAIL

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

DETAILS

KANEOHE BAY DRIVE REHABILITATION

Kamehameha Highway to Nanamoaana Street

Project No. 65AB-01-04M

Scale: NTS

Date: December, 2008

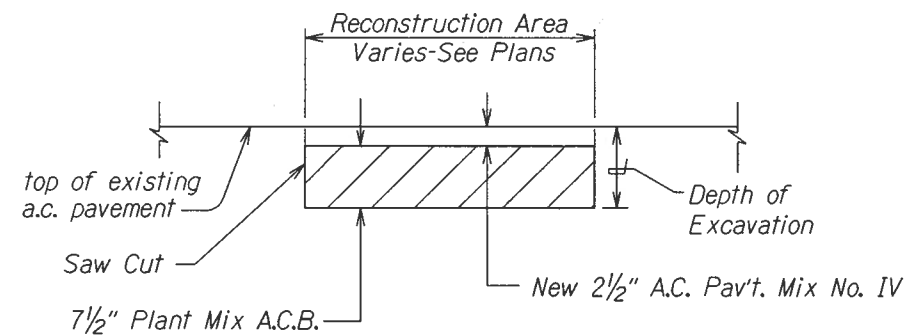
SHEET No. X

OF X

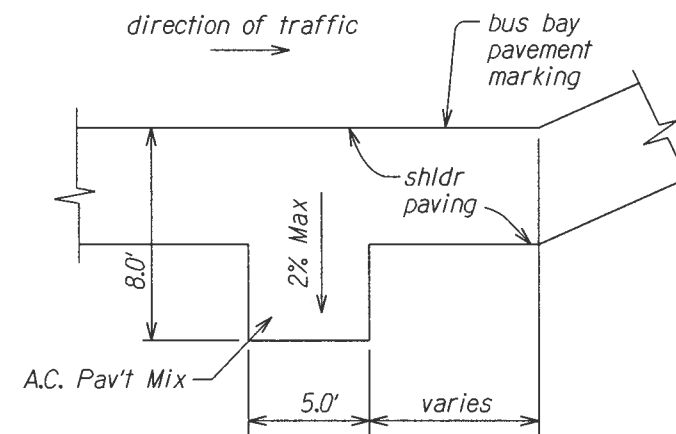
SHEETS

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

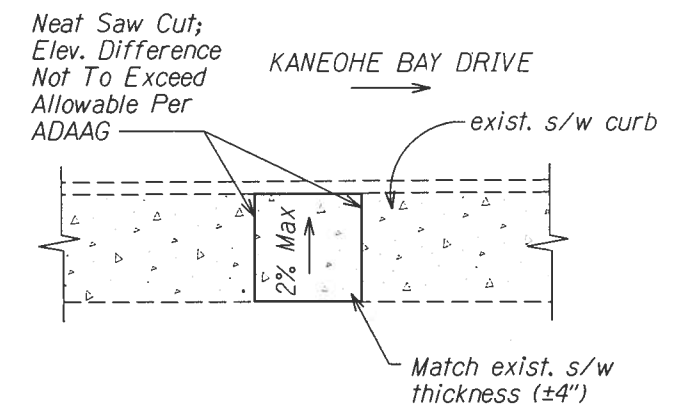
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	00	00



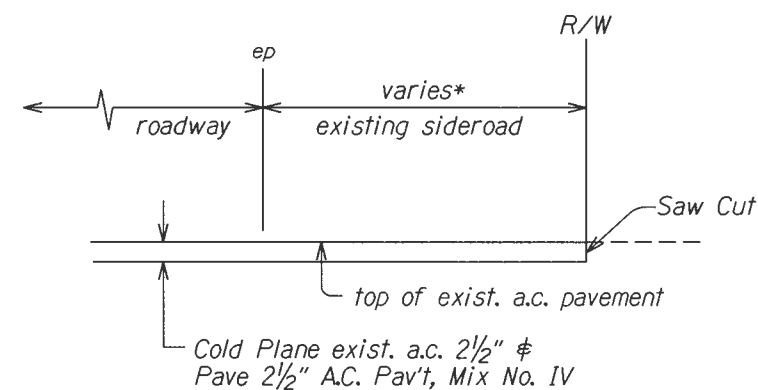
A.C. PAVEMENT RECONSTRUCTION DETAIL
Scale: N.T.S.



BUS BAY LIFT PAD DETAIL
Scale: N.T.S.

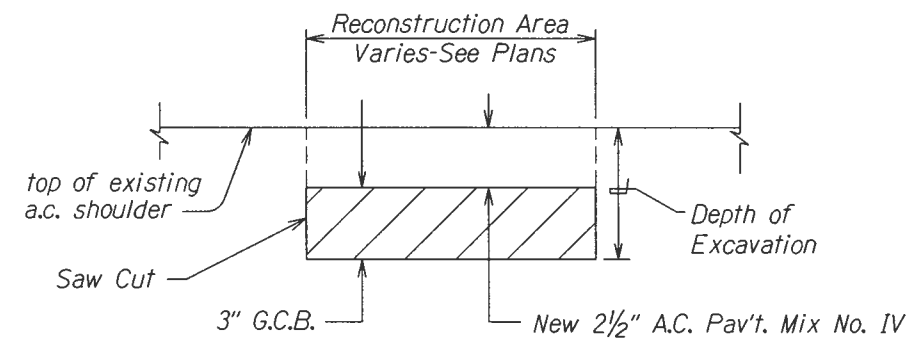


SIDEWALK RECONSTRUCTION DETAIL
Scale: N.T.S.

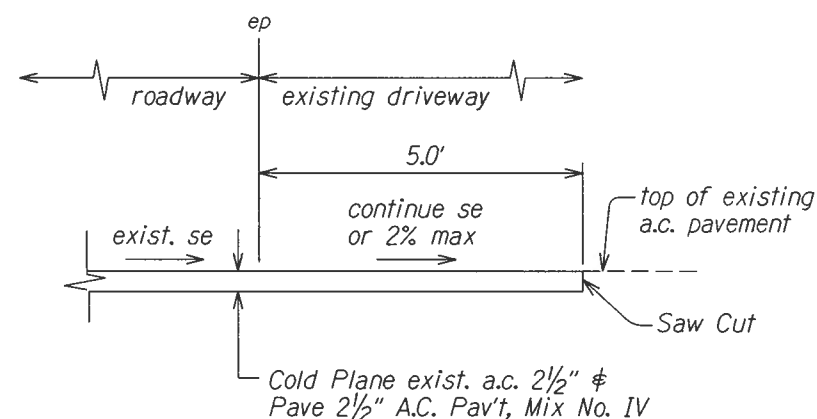


* At sideroads this dimension shall be 40' max.

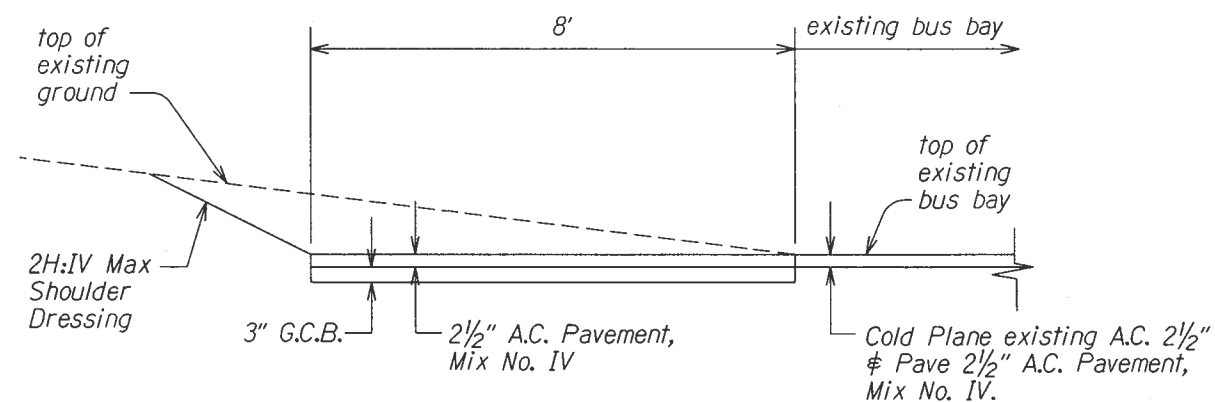
DETAIL OF PAVING AT PAVED SIDEROADS
Scale: N.T.S.



A.C. SHOULDER RECONSTRUCTION DETAIL
Scale: N.T.S.



DETAIL OF PAVING AT EXISTING PAVED DRIVEWAYS
Scale: N.T.S.



TYPICAL SHOULDER CONSTRUCTION
@ STA. 67+40± TO @ STA. 68+05± LT.
 Scale: N.T.S.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS

KANEOHE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoa Street
Project No. 65AB-01-04M

Scale: NTS Date: September, 2005

SHEET No. 4 OF 4 SHEETS

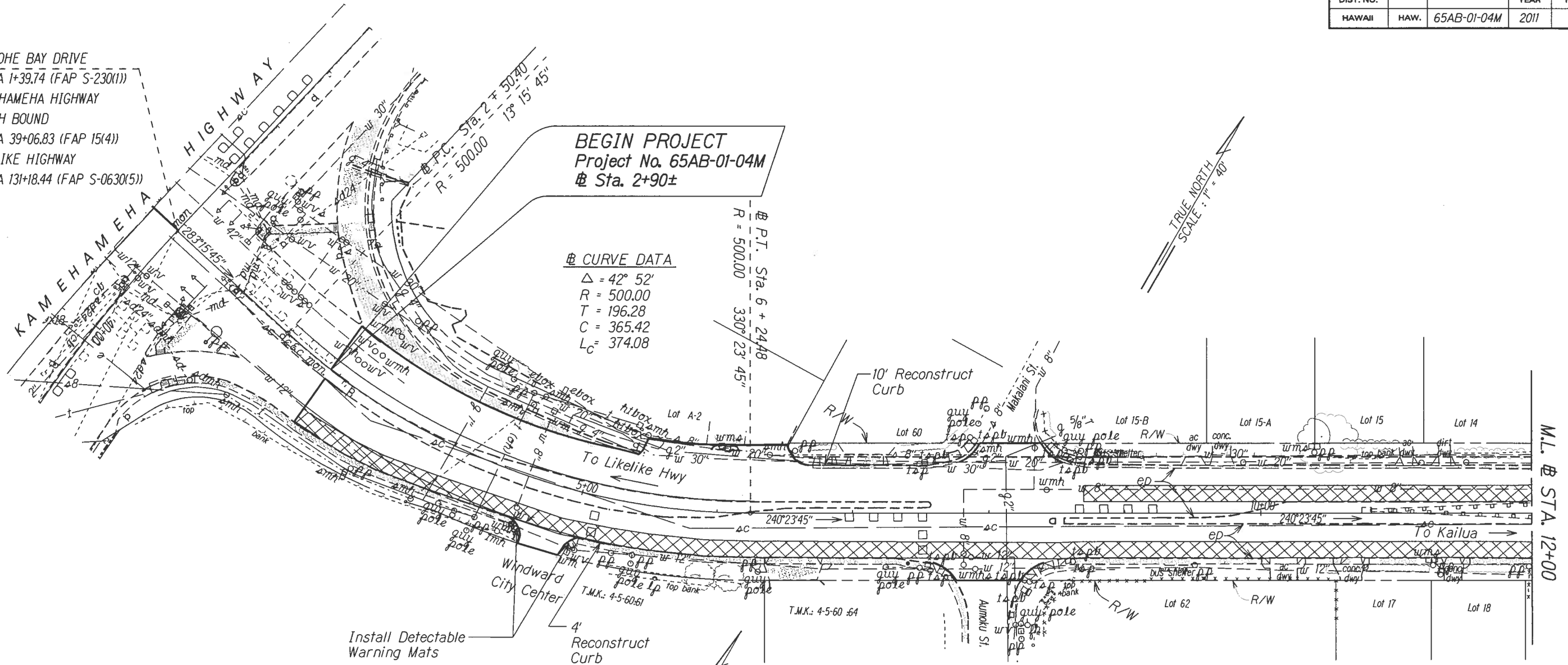
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	X	X

KANE OHE BAY DRIVE
@ STA 1+39.74 (FAP S-230(1))
KAMEHAMEHA HIGHWAY
NORTH BOUND
@ STA 39+06.83 (FAP 15(4))
LIKELIKE HIGHWAY
@ STA 131+18.44 (FAP S-0630(5))

BEGIN PROJECT
Project No. 65AB-01-04M
@ Sta. 2+90±

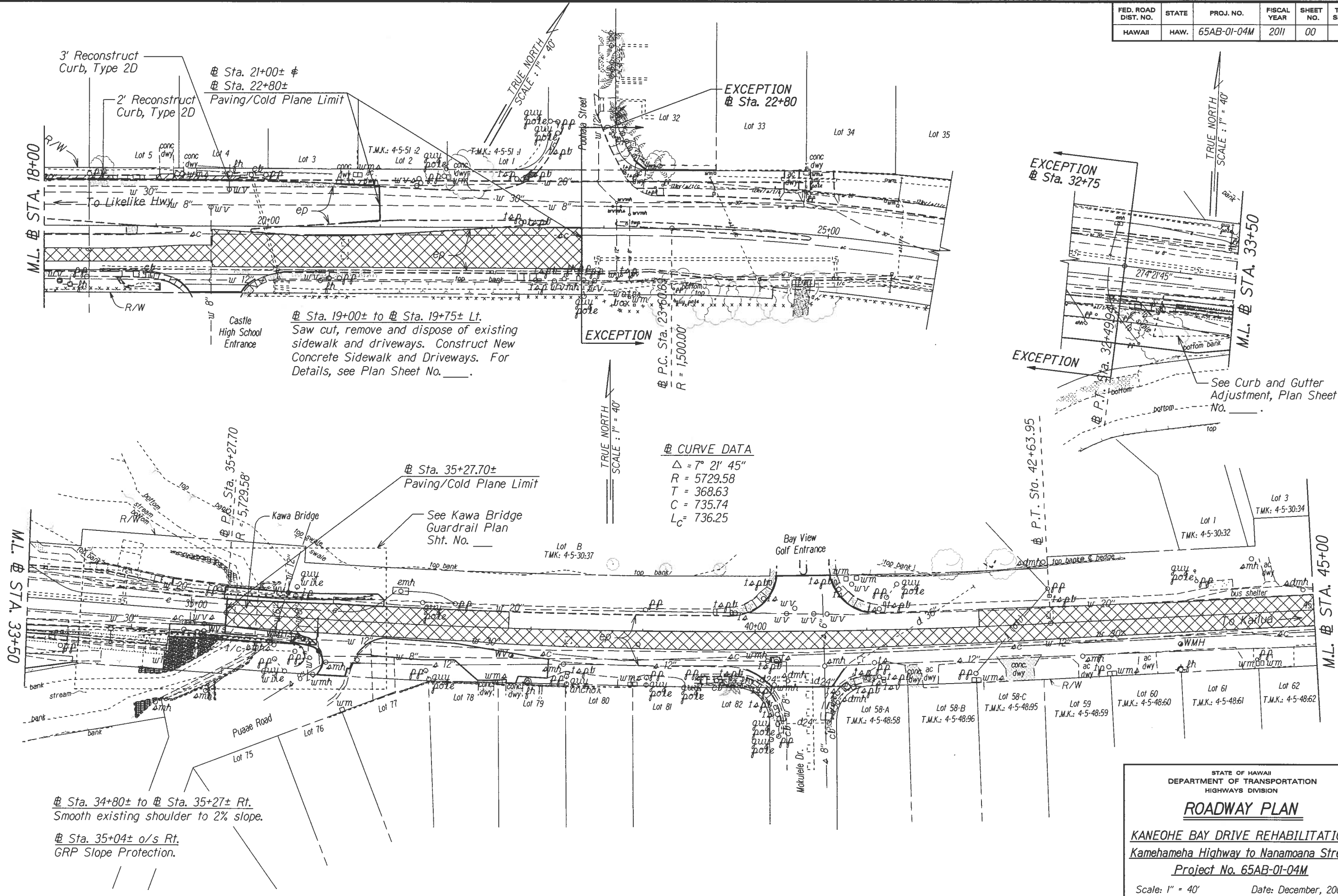
CURVE DATA
 $\Delta = 42^\circ 52'$
 $R = 500.00$
 $T = 196.28$
 $C = 365.42$
 $L_c = 374.08$

TRUE NORTH
SCALE: 1" = 40'



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	00	00

DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	X	X

CURVE DATA

$\Delta = 7^\circ 21' 45''$
 $R = 5729.58$
 $T = 368.63$
 $C = 735.74$
 $L_C = 736.25$

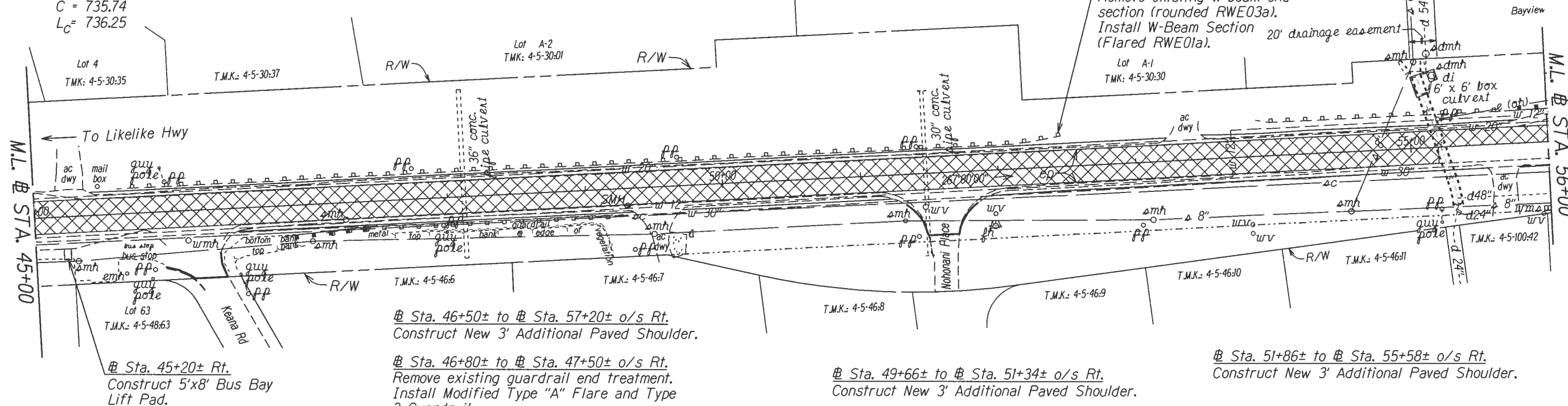
Sta. 45+00± to Sta. 56+24± o/s Lt.
 Construct New 3' Additional Paved Shoulder.

Sta. 53+48± to Sta. 56+00± o/s Lt.
 Construct New 3' Additional Paved Shoulder.

Sta. 55+80± to Sta. 56+20± o/s Lt.
 Remove existing guardrail end treatment.
 Install Fleet 350.

Sta. 52+56± Lt.

Remove existing w-beam end section (rounded RWE03a).
 Install W-Beam Section (Flared RWE01a).



Sta. 45+20± Rt.
 Construct 5'x8' Bus Bay Lift Pad.

Sta. 46+50± to Sta. 57+20± o/s Rt.
 Construct New 3' Additional Paved Shoulder.

Sta. 46+80± to Sta. 47+50± o/s Rt.
 Remove existing guardrail end treatment.
 Install Modified Type "A" Flare and Type 3 Guardrail.

Sta. 49+66± to Sta. 51+34± o/s Rt.
 Construct New 3' Additional Paved Shoulder.

Sta. 51+86± to Sta. 55+58± o/s Rt.
 Construct New 3' Additional Paved Shoulder.

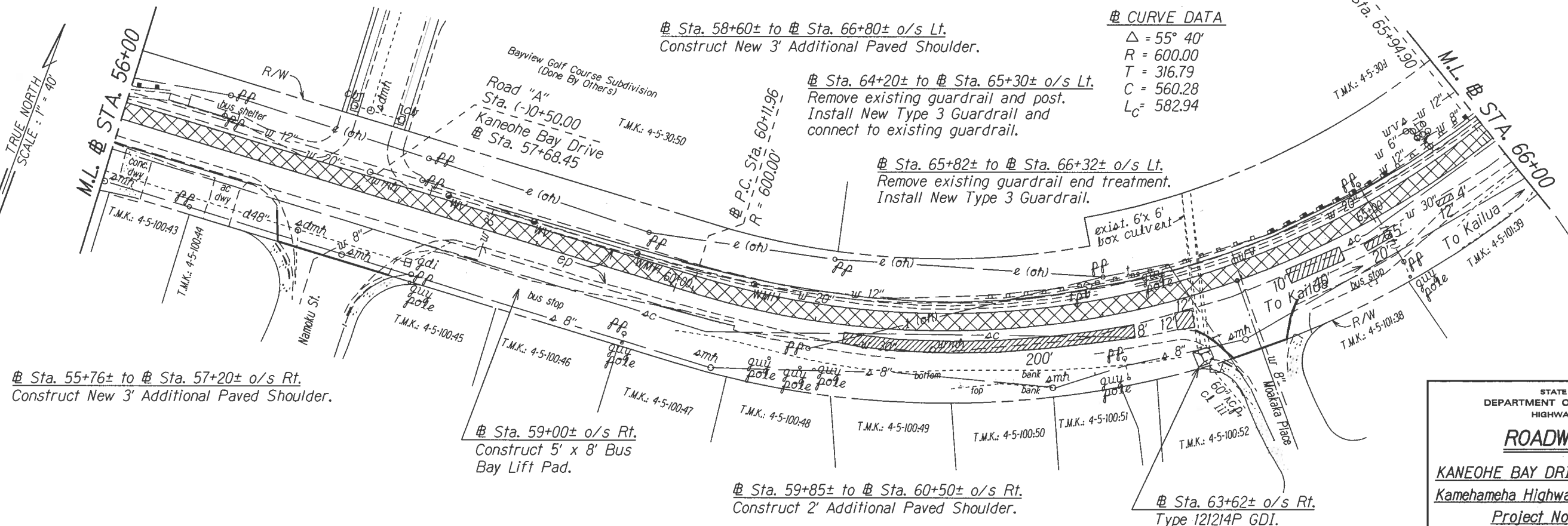
Sta. 58+60± to Sta. 66+80± o/s Lt.
 Construct New 3' Additional Paved Shoulder.

Sta. 64+20± to Sta. 65+30± o/s Lt.
 Remove existing guardrail and post.
 Install New Type 3 Guardrail and connect to existing guardrail.

Sta. 65+82± to Sta. 66+32± o/s Lt.
 Remove existing guardrail end treatment.
 Install New Type 3 Guardrail.

CURVE DATA

$\Delta = 55^\circ 40'$
 $R = 600.00$
 $T = 316.79$
 $C = 560.28$
 $L_C = 582.94$



Sta. 55+76± to Sta. 57+20± o/s Rt.
 Construct New 3' Additional Paved Shoulder.

Sta. 59+00± o/s Rt.
 Construct 5' x 8' Bus Bay Lift Pad.

Sta. 59+85± to Sta. 60+50± o/s Rt.
 Construct 2' Additional Paved Shoulder.

Sta. 63+62± o/s Rt.
 Type 121214P GDI.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLAN
KANEOHE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoa Street
Project No. 65AB-01-04M
 Scale: 1" = 40' Date: December, 2008
 SHEET No. 3 OF 6 SHEETS

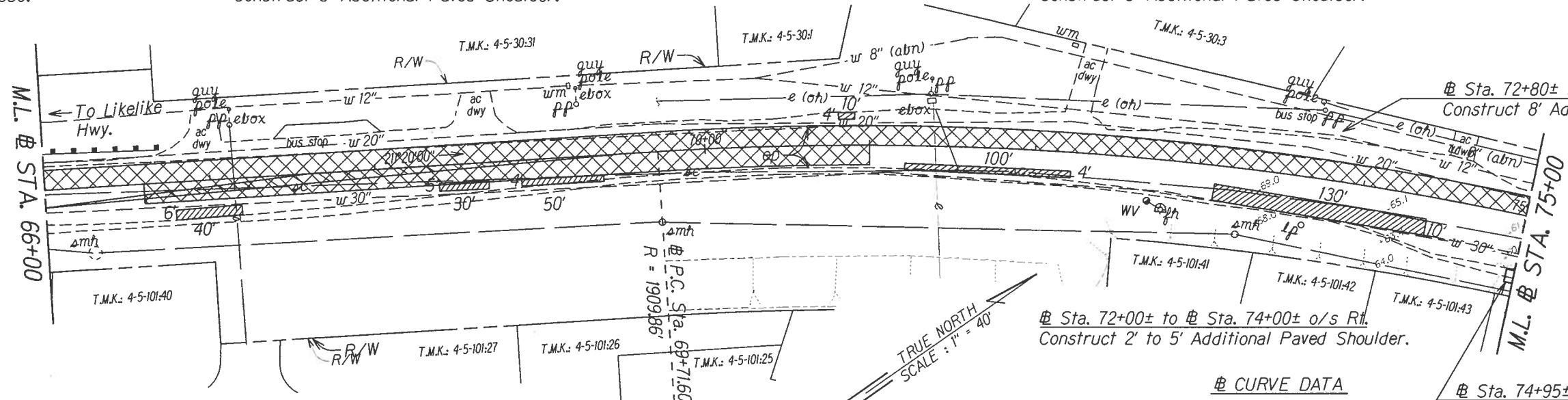
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	X	X

Sta. 66+32± to Sta. 66+70± Lt.
Install Fleet 350.

Sta. 67+40± to Sta. 68+05± o/s Lt.
Construct 8' Additional Paved Shoulder.

Sta. 72+40± to Sta. 72+80± o/s Lt.
Construct 3' Additional Paved Shoulder.

Sta. 72+80± to Sta. 74+10± o/s Lt.
Construct 8' Additional Paved Shoulder



Sta. 66+00± to Sta. 67+50± o/s Rt.
Construct 2' Additional Paved Shoulder.

Sta. 69+00± to Sta. 71+00± o/s Rt.
Construct 2' Additional Paved Shoulder.

Sta. 81+10± to Sta. 81+45± o/s Lt.
Construct New 4' Additional Paved Shoulder

CURVE DATA
 $\Delta = 17^\circ 10'$
 $R = 1909.86$
 $T = 288.27$
 $C = 570.08$
 $L_c = 572.22$

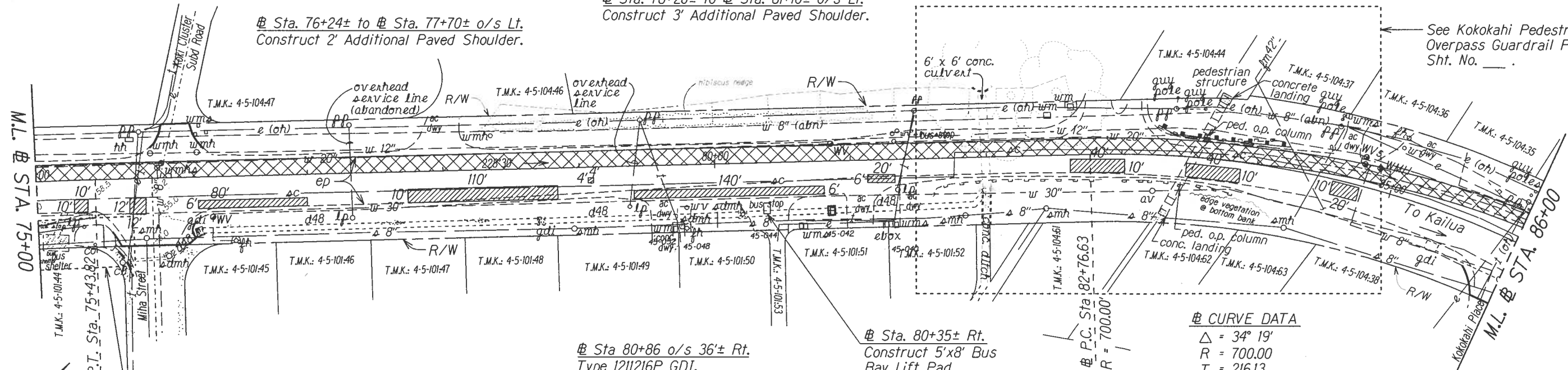
Sta. 81+45± to Sta. 82+70± o/s Lt.
Construct 5' Additional Paved Shoulder

Sta. 74+80± to Sta. 75+80± o/s Lt.
Construct 2' Additional Paved Shoulder.

Sta. 76+24± to Sta. 77+70± o/s Lt.
Construct 2' Additional Paved Shoulder.

Sta. 78+20± to Sta. 81+10± o/s Lt.
Construct 3' Additional Paved Shoulder.

See Kokokahi Pedestrian
Overpass Guardrail Plan
Sht. No. ____



Sta 80+86 o/s 36'± Rt.
Type 1211216P GDI.
See Detail on Sheet No. H1.
Inv. = 29.05± (exist 48" RCP)
Grade Around New GDI.
See Detail on Sheet No. Hx.

Sta. 80+35± Rt.
Construct 5'x8' Bus
Bay Lift Pad.

CURVE DATA
 $\Delta = 34^\circ 19'$
 $R = 700.00$
 $T = 216.13$
 $C = 413.02$
 $L_c = 419.26$

Sta. 81+60± to Sta. 83+70± o/s Rt.
Construct 3' Additional Paved Shoulder.

See Miha Street A.C. Work
Plan Sht. No. ____.

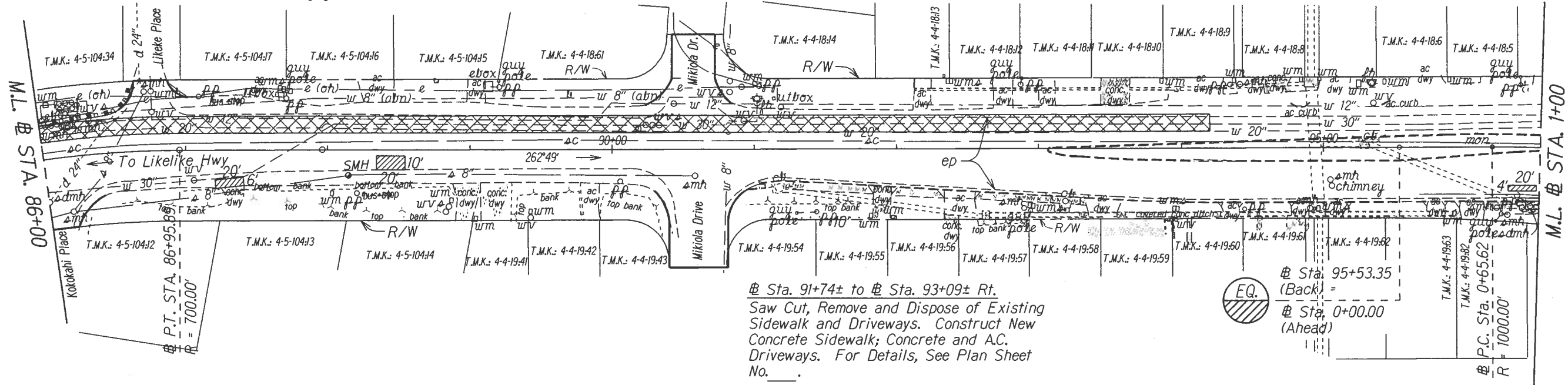
DATE	____
SURVEY PLOTTED BY	____
DRIVEN BY	____
NOTED BY	____
CHECKED BY	____
ORIGINAL PLAN	____
NOTE BOOK	____
QUANTITIES BY	____
____	____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
KANEIHE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoaana Street
Project No. 65AB-01-04M
Scale: 1" = 40' Date: December, 2008
SHEET No. 4 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	X	X

@ Sta. 86+00± to @ Sta. 86+62± Lt.
 Remove existing guardrail, post and end treatment.
 Install New Type 3 Guardrail and Modified Type
 G End Treatment. Connect to existing guardrail.



@ Sta. 91+74± to @ Sta. 93+09± Rt.
 Saw Cut, Remove and Dispose of Existing
 Sidewalk and Driveways. Construct New
 Concrete Sidewalk; Concrete and A.C.
 Driveways. For Details, See Plan Sheet
 No. _____.



@ Sta. 95+53.35
 (Back) =
 @ Sta. 0+00.00
 (Ahead)

Replace existing bituminous
 curb with new bituminous
 curb.
 Install Detectable
 Warning Mat

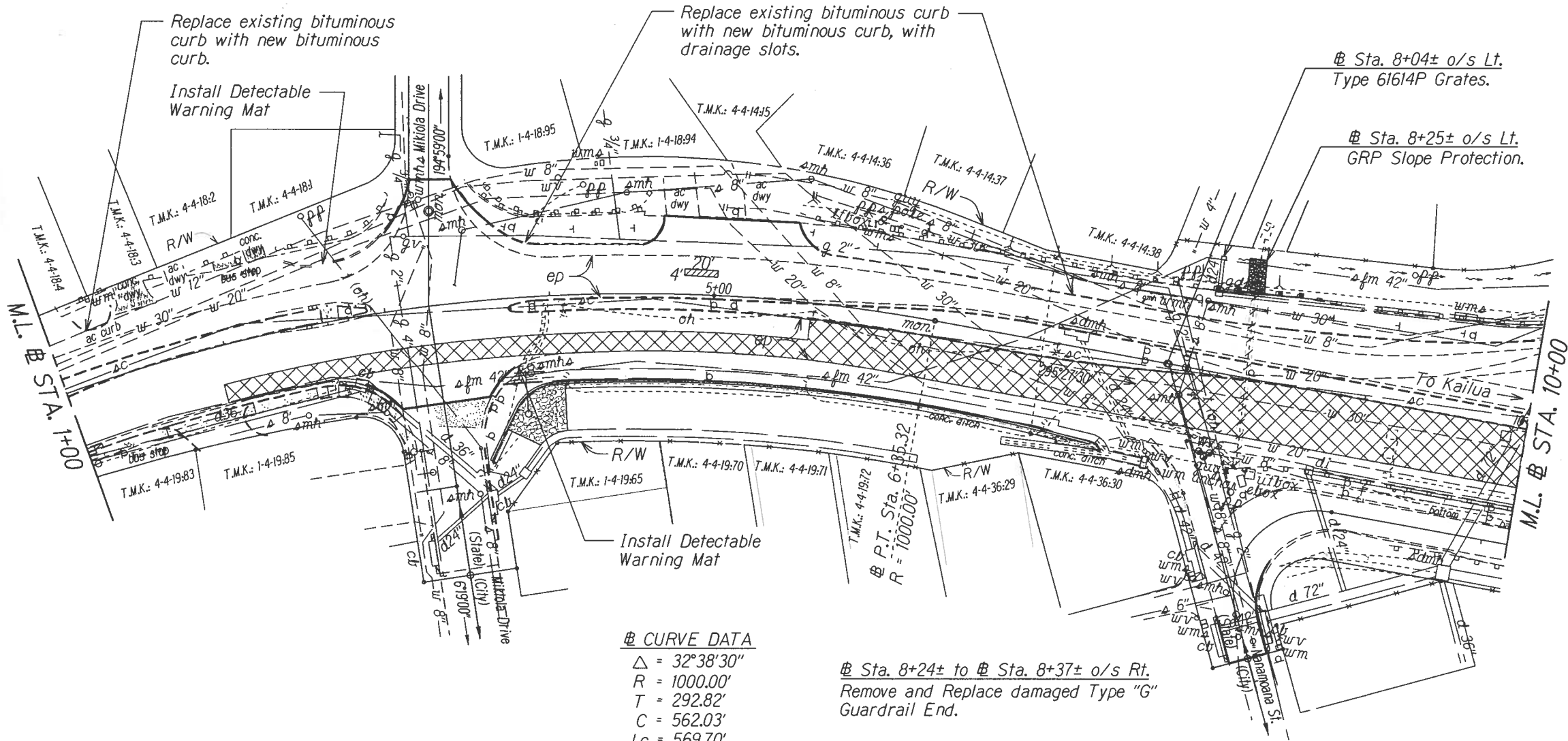
Replace existing bituminous curb
 with new bituminous curb, with
 drainage slots.

@ Sta. 8+04± o/s Lt.
 Type 61614P Grates.

@ Sta. 8+25± o/s Lt.
 GRP Slope Protection.

@ Sta. 0+40± to @ Sta. 0+64± Rt.
 Saw Cut, Remove and Dispose Existing
 Driveway. Construct New Concrete
 Driveway. For Details, See Plan Sheet
 No. _____.

@ Sta. 7+90± to 8+60± Lt.
 Remove existing guardrail and post.
 Install New Type 3 Guardrail and
 connect to existing guardrail.



@ CURVE DATA
 Δ = 32°38'30"
 R = 1000.00'
 T = 292.82'
 C = 562.03'
 Lc = 569.70'

@ Sta. 8+24± to @ Sta. 8+37± o/s Rt.
 Remove and Replace damaged Type "G"
 Guardrail End.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN
 KANEHOE BAY DRIVE REHABILITATION
 Kamehameha Highway to Nanamoana Street
 Project No. 65AB-01-04M
 Scale: 1" = 40' Date: December, 2008
 SHEET No. 5 OF 6 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
DESIGNED BY	CHECKED BY	
QUANTITIES BY		
NO. 5600005		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	X	X

@ Sta. 10+40± to @ Sta. 10+80± Lt.
Remove existing guardrail and post.
Install New Type 3 Guardrail and
connect to existing guardrail.

END OF PROJECT
Project No. 65AB-01-04M
@ Sta. 1+60±

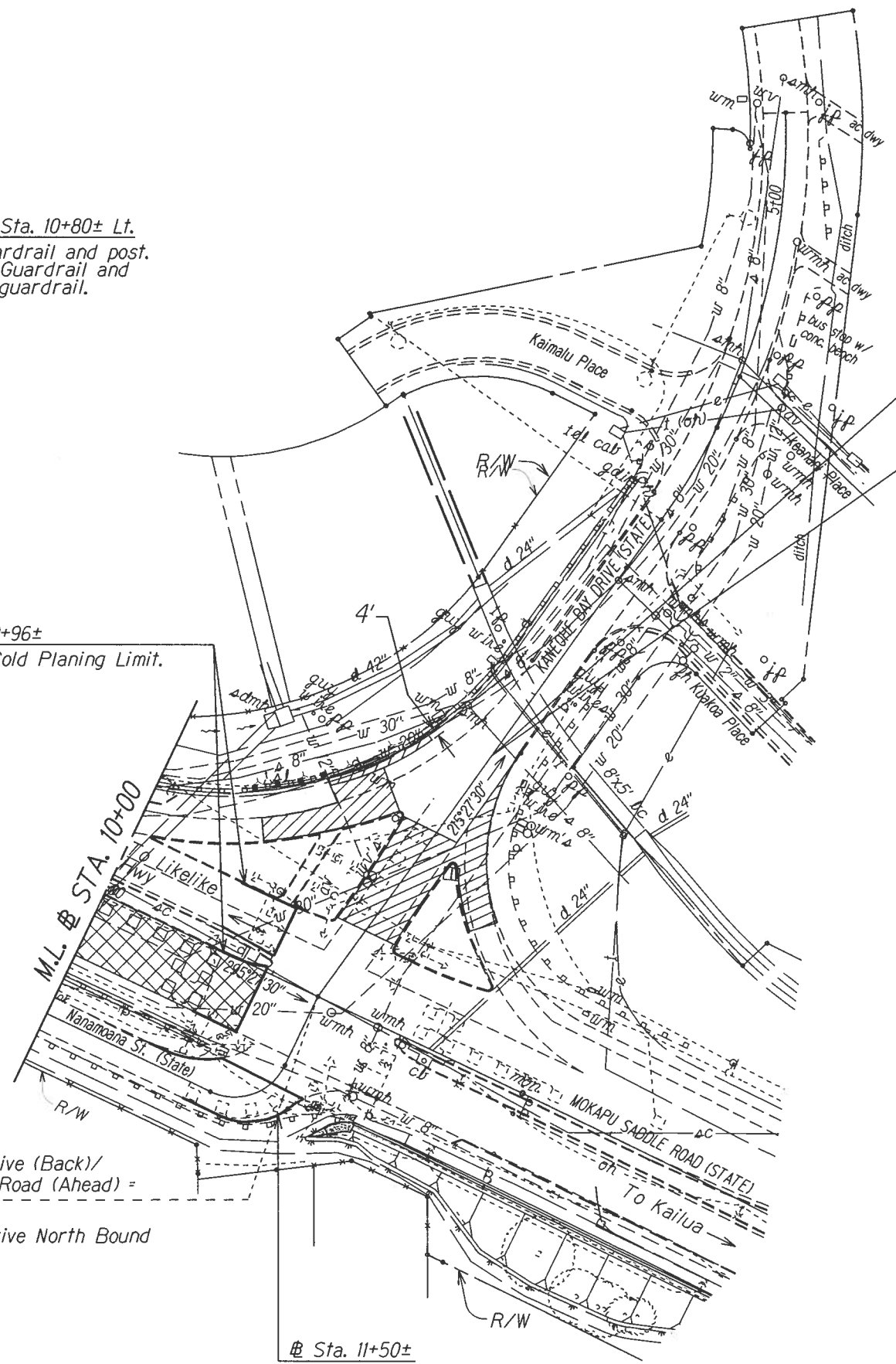
@ Sta. 10+96±
Paving/Cold Planing Limit.

@ Sta. 11+27.20
Kaneohe Bay Drive (Back)/
Mokapu Saddle Road (Ahead) =
@ Sta. 0+00.00
Kaneohe Bay Drive North Bound



@ Sta. 11+50±
Paving/Cold Planing Limit.

TRUE NORTH
SCALE : 1" = 40'



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
ddi	
N. Skandip06	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

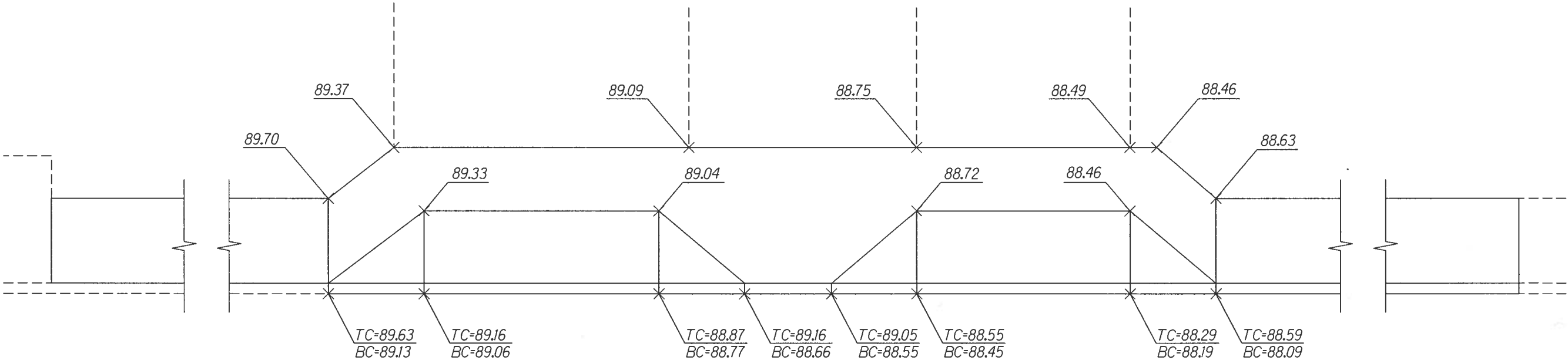
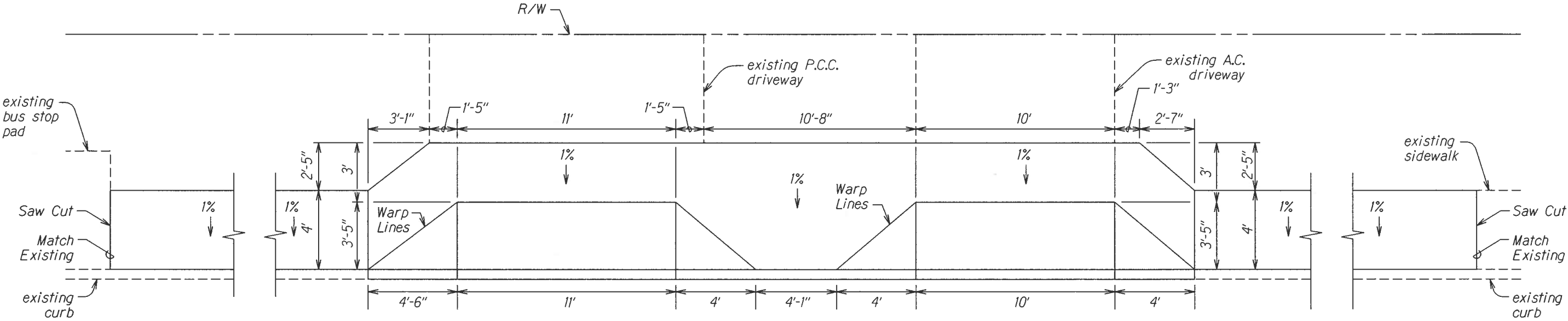
ROADWAY PLAN

Kaneohe Bay Drive Rehabilitation
Kamehameha Highway to Nanamoana Street
Project No. 65AB-01-04M

Scale: 1" = 40' Date: December, 2008

SHEET No. 6 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	20xx	0	0



DRIVEWAYS & SIDEWALKS
@ STA. 17+12± TO @ STA. 18+63± LT.
Scale: 3/8" = 1'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

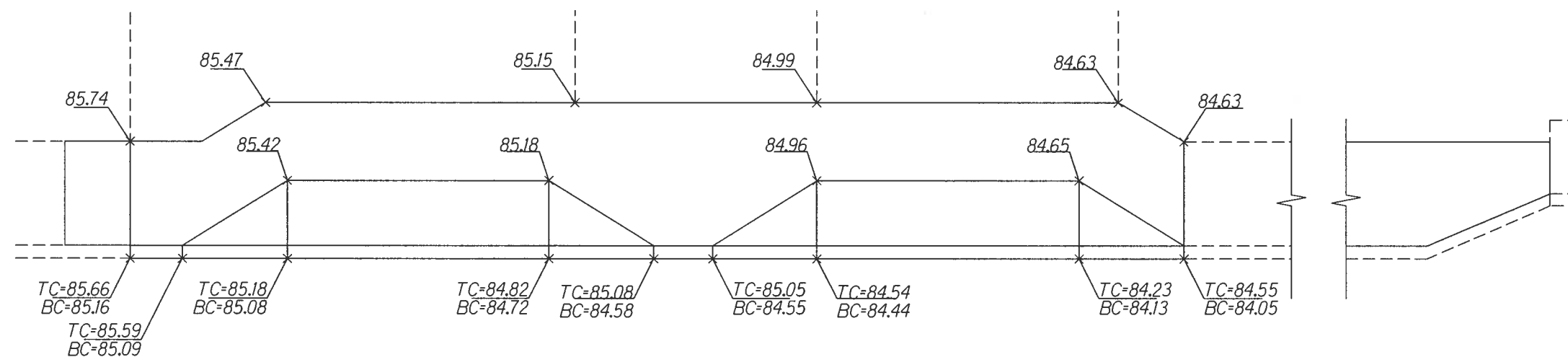
DRIVEWAY DETAIL

KANE OHE BAY DRIVE REHABILITATION
Kamehameha Hwy. to Nanamoana St.
Project No. 65AB-01-04M

Scale: 3/8"=1' Date: November, 2008

SHEET No. X OF X SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
665/510	DESIGNED BY	
665/510	QUANTITIES BY	
665/510	CHECKED BY	

[illegible]

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRIVEWAY DETAIL

KANEOHE BAY DRIVE REHABILITATION

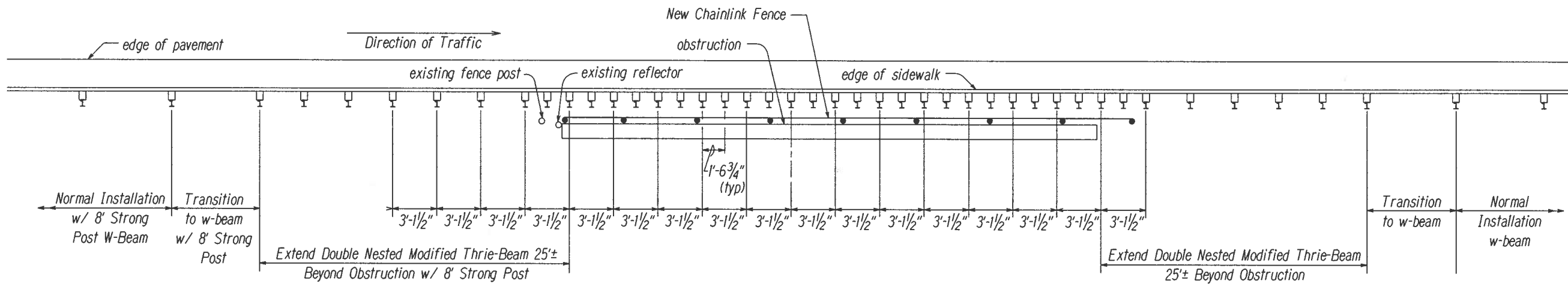
Kamehameha Hwy. to Nanamoana St.

Project No. 65AB-01-04M

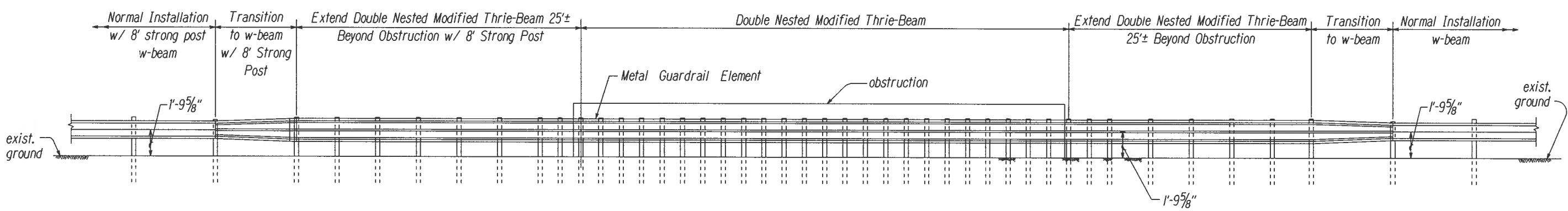
Scale: $\frac{3}{8}" = 1'$ Date: December, 2008

SHEET No. X OF X SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	X	X



PLAN



ELEVATION

SPECIAL DETAIL OF GUARDRAIL INSTALLATION AT OBSTRUCTION
AT KAWA BRIDGE (MAUKA)

- NOTES:
1. All Guardrail and Concrete Barrier Designs at obstructions shall be approved by the Engineer.

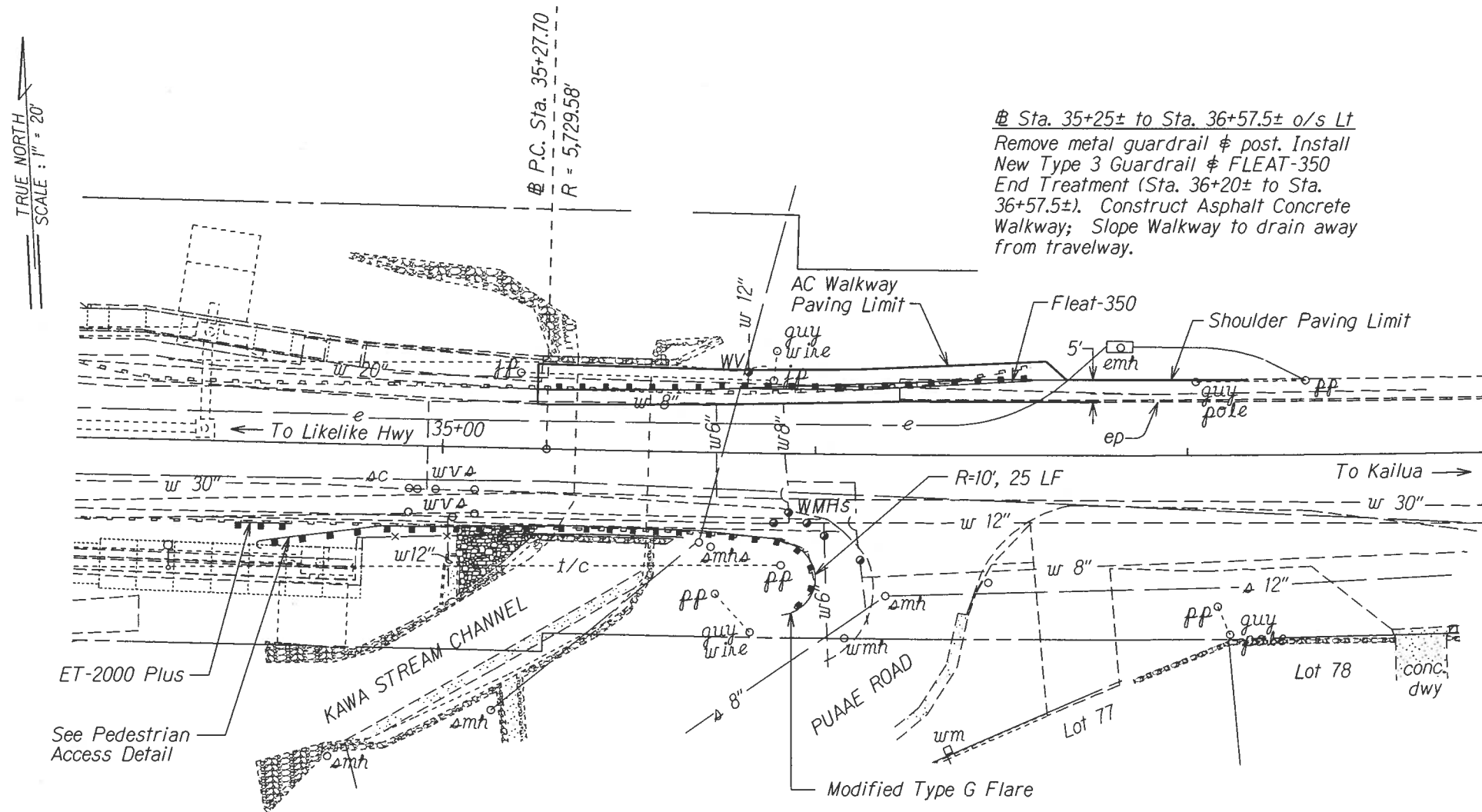
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
DESIGNED BY	CHECKED BY	
QUANTITIES BY		
NO.		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL DETAILS
 (AT OBSTRUCTION - SPECIAL DESIGN)
 AT KAWA BRIDGE (MAUKA)
 KANEŌHE BAY DRIVE REHABILITATION
 Kamehameha Highway to Nanamoana Street
 Project No. 65AB-01-04M
 Scale: NTS Date: September, 2005

SHEET No. X OF X SHEETS
 00

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	X	X



Sta. 34+43± to Sta. 34+77± Rt
Remove existing guardrail and post. Install New Type 3 Guardrail with New Modified Type G Flare at Approach End.

Sta. 34+77± to Sta. 35+00± Rt
Remove existing guardrail and post. Install New Type 3 Guardrail with 8' Strong Post. Transition to New Double Nested Modified Thrie-Beam.

Sta. 35+00± to Sta. 35+87± Rt
Remove existing guardrail and post. Install New Double Nested Modified Thrie Beam Transition to New Type 3 Guardrail on Trailing and Approach End.

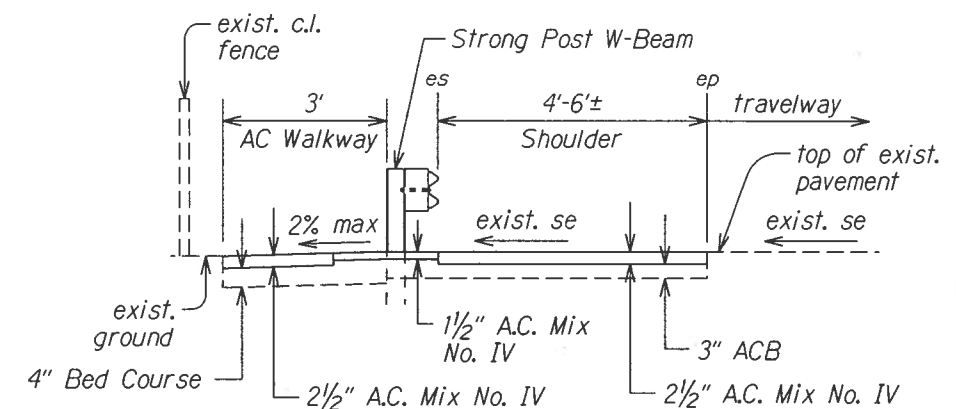
Sta. 35+87± to Sta. 36+00± Rt
Remove existing guardrail and post. Install New Type 3 Guardrail with New Modified Type G Flare at Trailing End. Transition to New Double Nested Modified Thrie-Beam.

Sta. 35+00± to Sta. 36+00± o/s Rt
Extend existing shoulder to guardrail using A.C. Mix No. IV, while maintaining 2% slope; Grub & Compact existing ground.

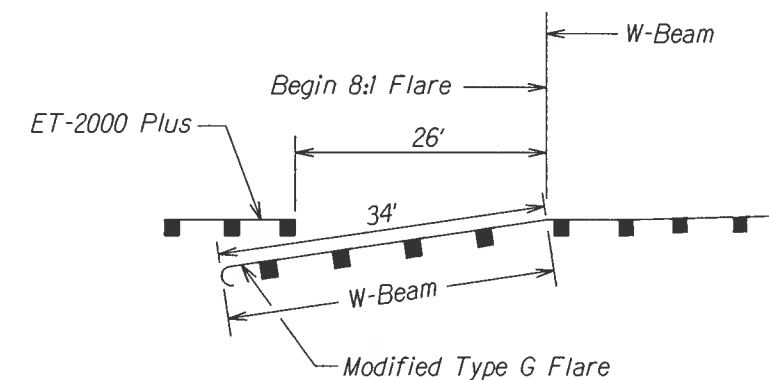
Sta. 35+25± to Sta. 35+65± o/s Rt
Remove existing chainlink fence. Install 5' high Chainlink Fence without top rail behind guardrail.

Kawa Bridge Right & Left
Extreme care shall be taken to avoid disturbing or damaging utility or bridge deck.

PLAN
KAWA BRIDGE GUARDRAIL
Scale: 1" = 20'



SECTION
KAWA BRIDGE LT
Scale: N.T.S.



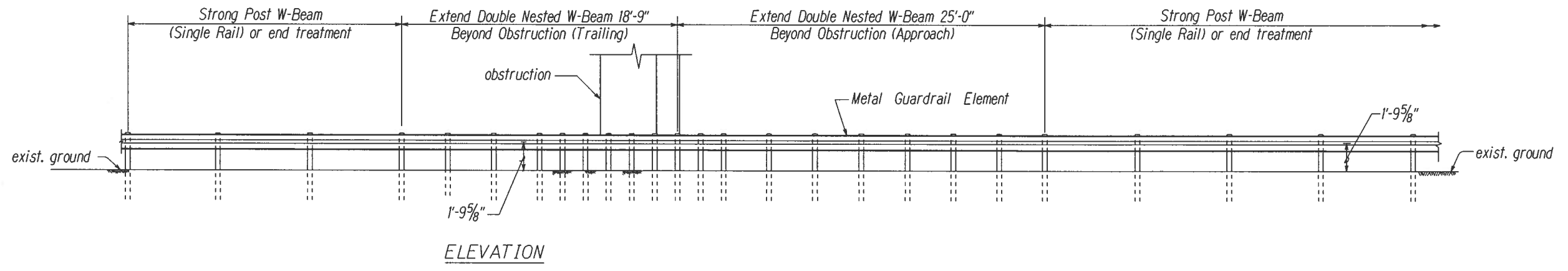
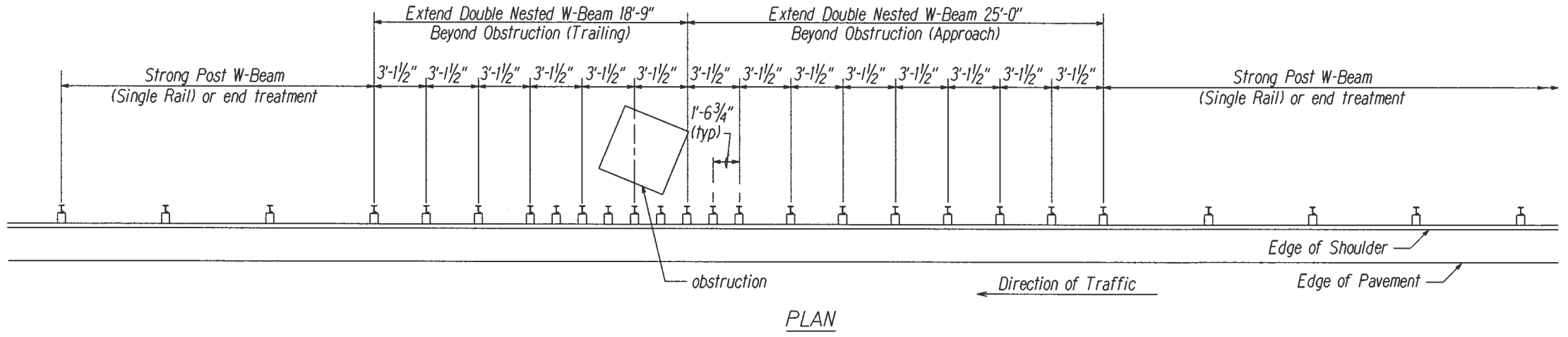
PLAN
PEDESTRIAN ACCESS DETAIL
KAWA BRIDGE RT.
Scale: N.T.S.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL DETAILS
AT KAWA BRIDGE
KANEHOE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoana Street
Project No. 65AB-01-04M
Scale: As Noted Date: September, 2005
SHEET No. X OF X SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2006	X	X



SPECIAL DETAIL OF GUARDRAIL INSTALLATION AT OBSTRUCTION
AT KOKOKAHI PEDESTRIAN OVERPASS

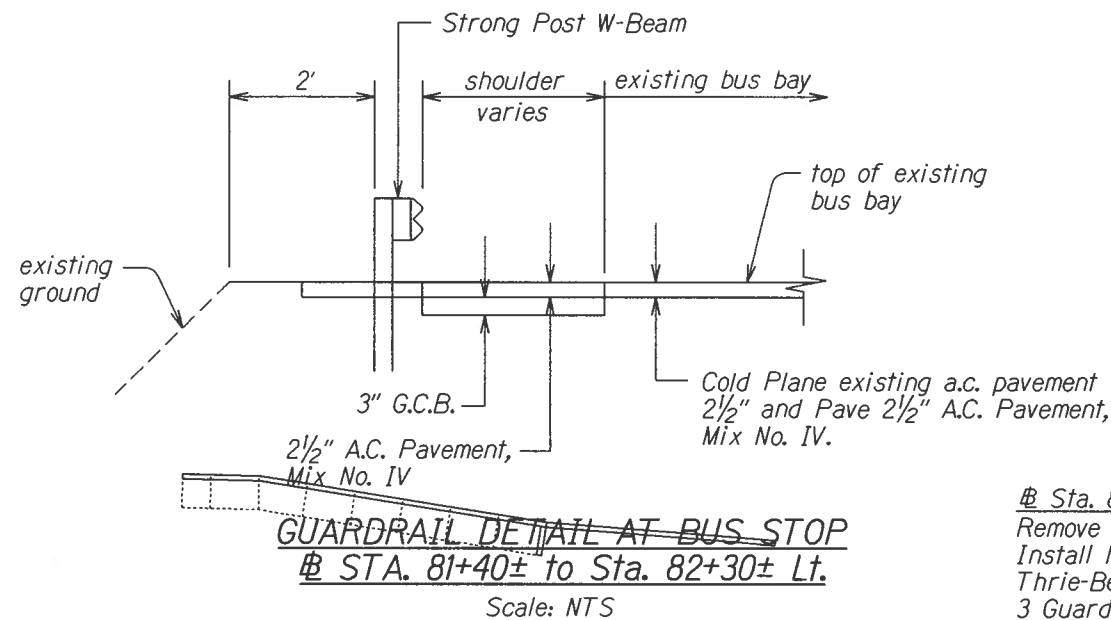
- NOTES:
1. All Guardrail and Concrete Barrier Designs at Obstructions shall be approved by the Engineer.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
DESIGNED BY	CHECKED BY	
QUANTITIES BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL DETAILS
(AT OBSTRUCTION - SPECIAL DESIGN)
KOKOKAHI PEDESTRIAN OVERPASS
KANEHOE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoana Street
Project No. 65AB-01-04M
Scale: NTS Date: September, 2005
SHEET No. 0 OF 0 SHEETS

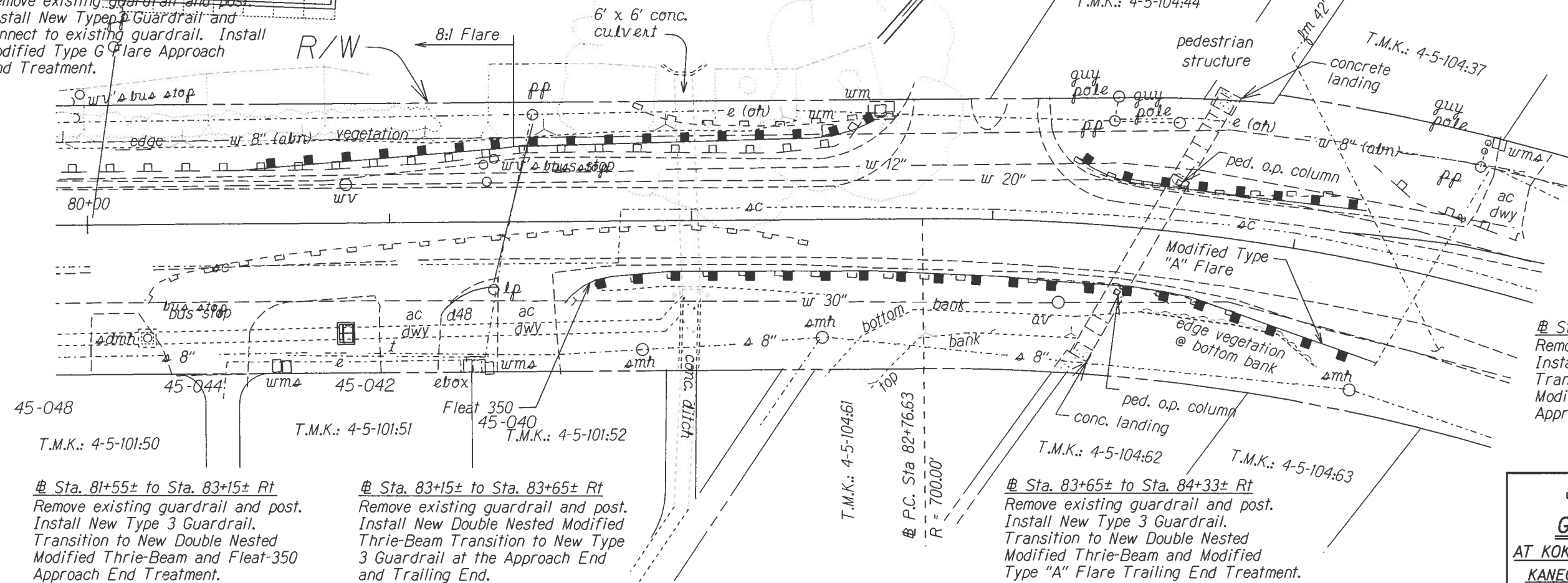
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65AB-01-04M	2011	X	X



Sta. 83+40± to Sta. 83+90± Lt
Remove existing guardrail and post.
Install New Double Nested Modified
Thrie-Beam. Transition to New Type
3 Guardrail at the Approach End and
Trailing End.

Sta. 83+25± to Sta. 83+40± Lt
Remove existing guardrail and post.
Install New Type 3 Guardrail.
Transition to New Double Nested
Modified Thrie-Beam and Modified
Type G Flare Trailing End Treatment.

Sta. 80+50± to Sta. 82+60± Lt
Remove existing guardrail and post.
Install New Type 3 Guardrail and
connect to existing guardrail. Install
Modified Type G Flare Approach
End Treatment.

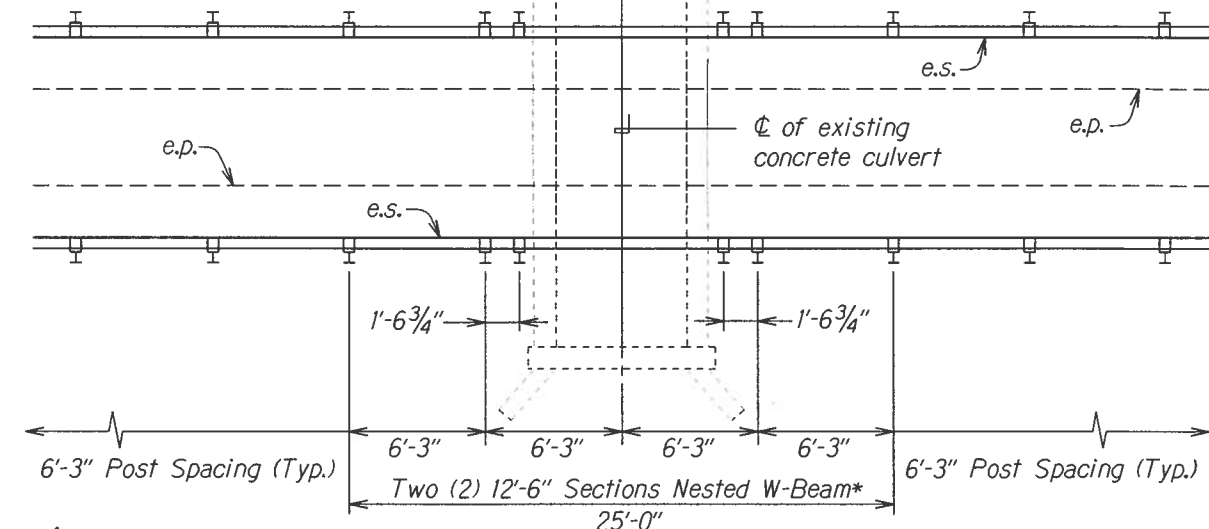


Sta. 81+55± to Sta. 83+15± Rt
Remove existing guardrail and post.
Install New Type 3 Guardrail.
Transition to New Double Nested
Modified Thrie-Beam and Fleet-350
Approach End Treatment.

Sta. 83+15± to Sta. 83+65± Rt
Remove existing guardrail and post.
Install New Double Nested Modified
Thrie-Beam Transition to New Type
3 Guardrail at the Approach End
and Trailing End.

Sta. 83+65± to Sta. 84+33± Rt
Remove existing guardrail and post.
Install New Type 3 Guardrail.
Transition to New Double Nested
Modified Thrie-Beam and Modified
Type "A" Flare Trailing End Treatment.

*To be paid under Item No. 606.3100, W-Beam Guardrail w/Strong Post
GUARDRAIL DETAIL OVER CATCH BASIN # STA. 81+97±
Scale: NTS



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL DETAILS

AT KOKOKAHI PEDESTRIAN OVERPASS

KANE OHE BAY DRIVE REHABILITATION

Kamehameha Highway to Nanamoana Street

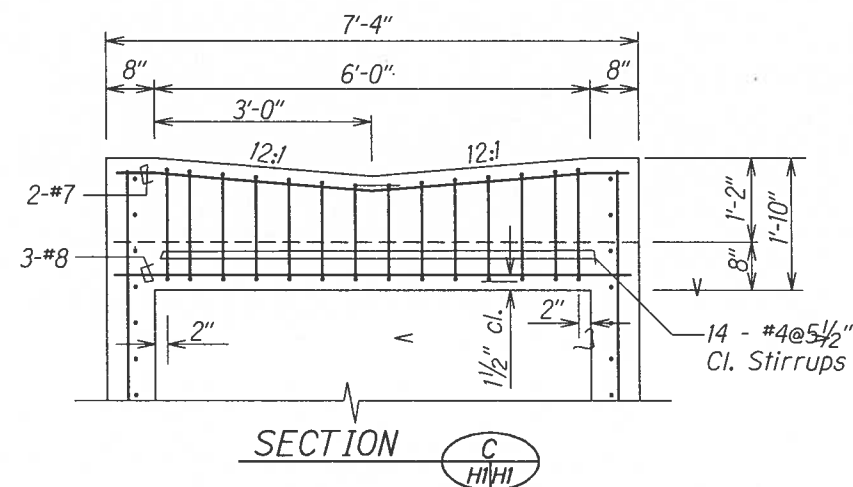
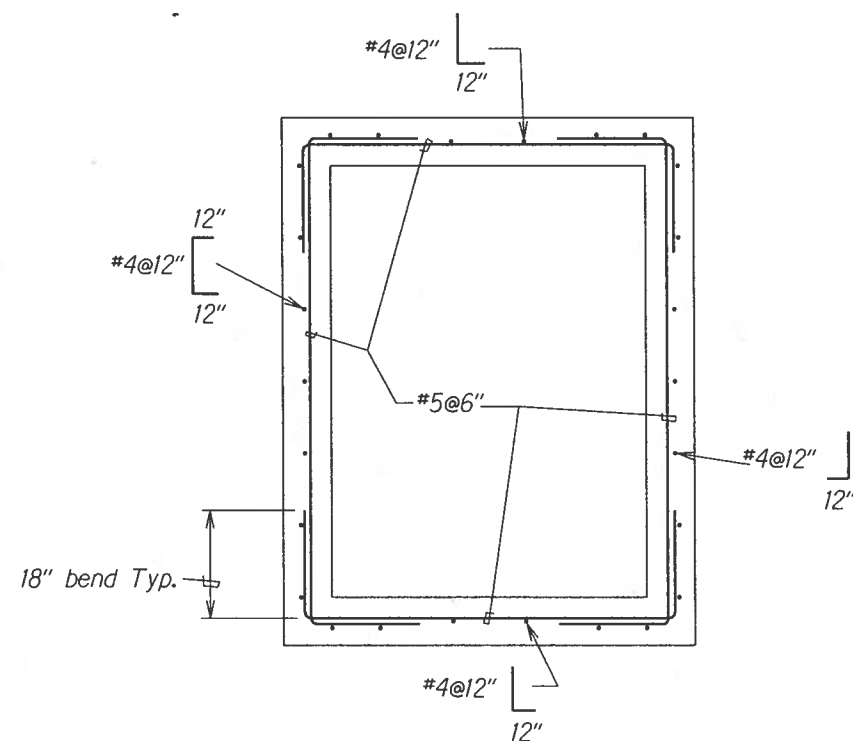
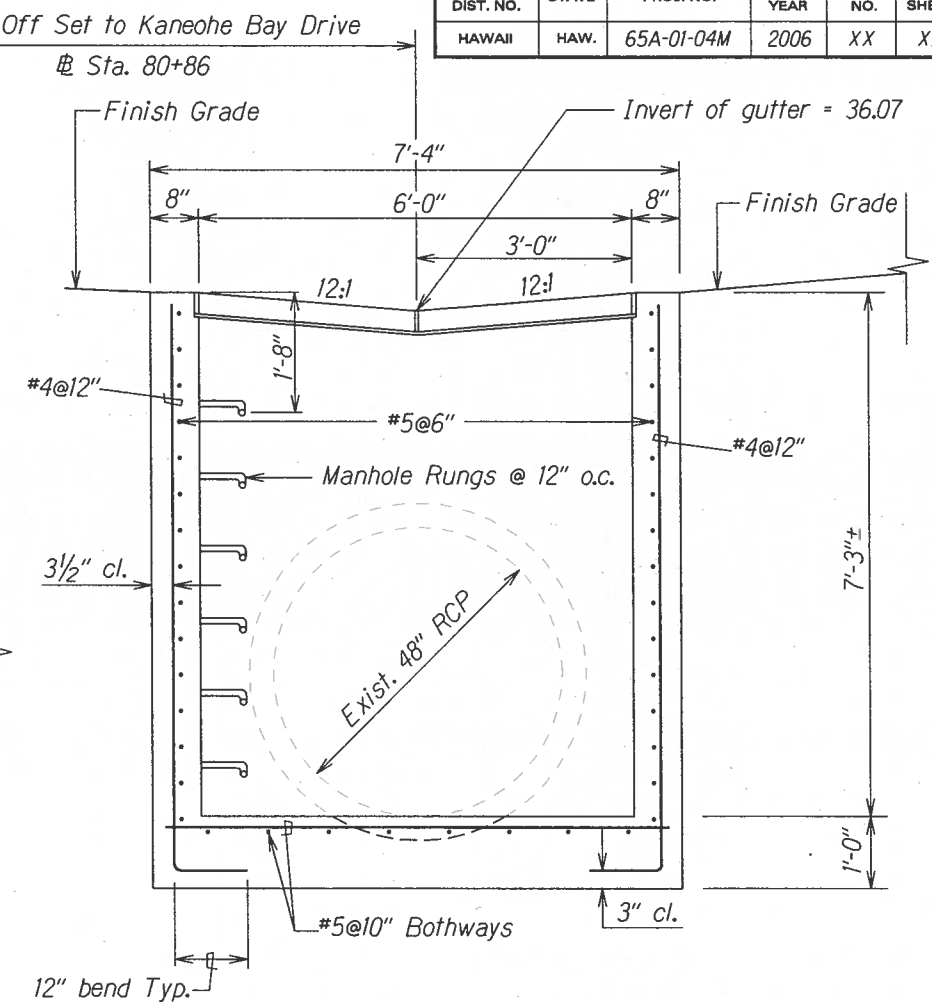
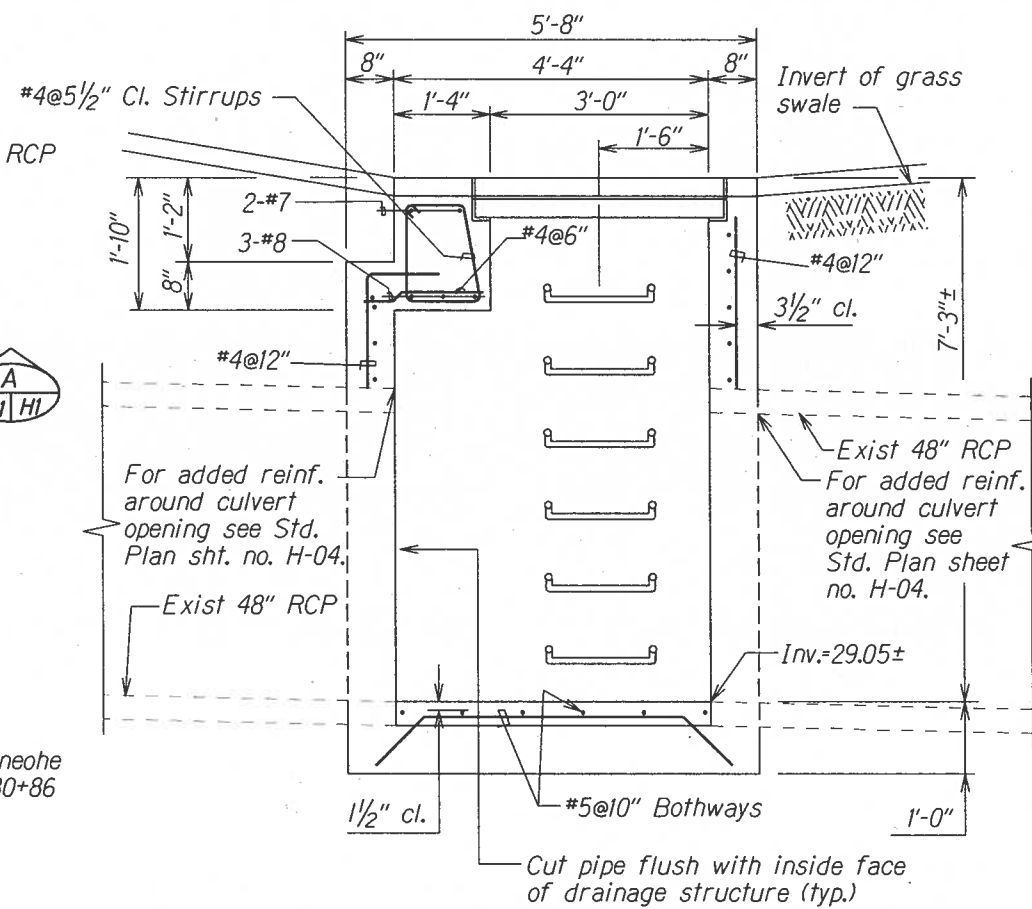
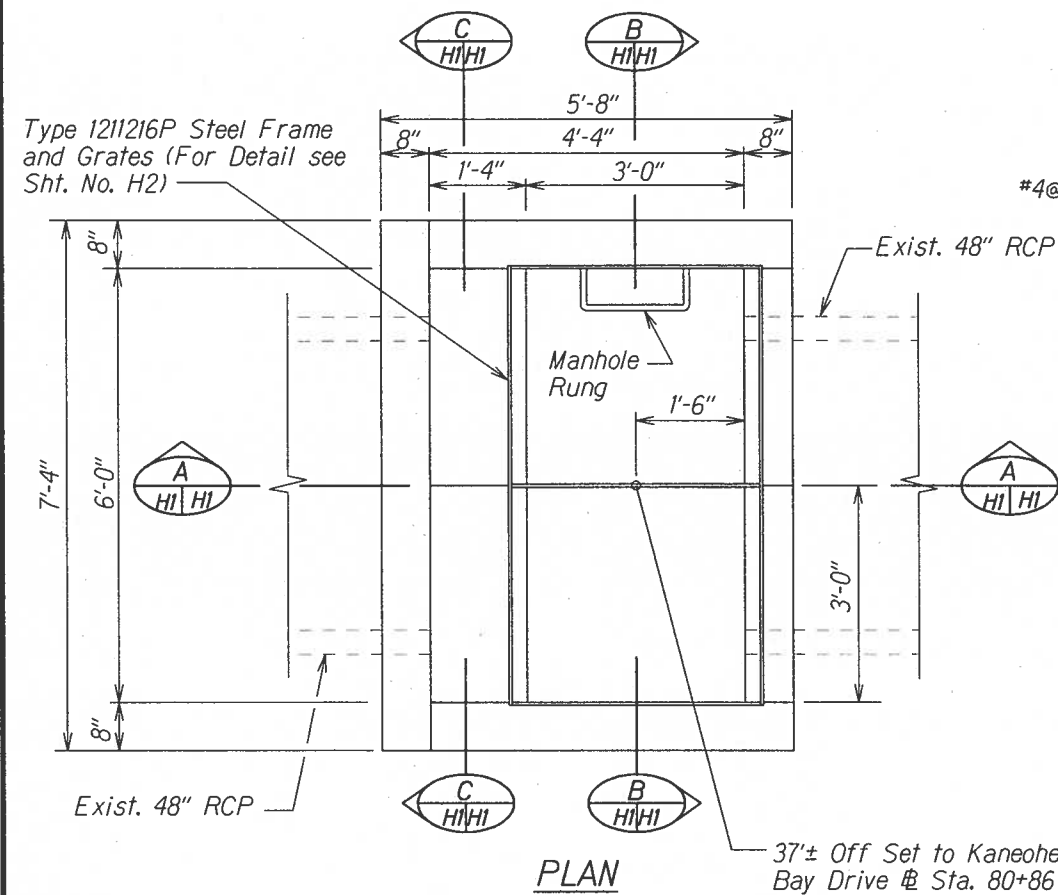
Project No. 65AB-01-04M

Scale: As Noted Date: October, 2008

SHEET No. X OF X SHEETS

ORIGINAL PLAN	DATE
DESIGNED BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
DESIGNED BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
DESIGNED BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65A-01-04M	2006	XX	XXX



PLAN VIEW OF WALL REINFORCING

SECTION C
H/H

SECTION B
H1/H1

SECTION

DETAILS OF TYPE 1211216P GRATED DROP INLET AT ~~ST~~ STA. 80+86 O/S 37'± RT.

ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE: <u>1/14/05</u>
NOTE BOOK	DRAWN BY <u>IBC</u>
<u>33606-0555</u>	TRACED BY _____
<u>33606-0555</u>	DESIGNED BY <u>BL & CM</u>
<u>33606-0555</u>	QUANTITIES BY _____
<u>33606-0555</u>	CHECKED BY _____

REDUCED PLAN
(HALF SIZE)

0 1 2

3 INCHES OF ORIGINAL PLAN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

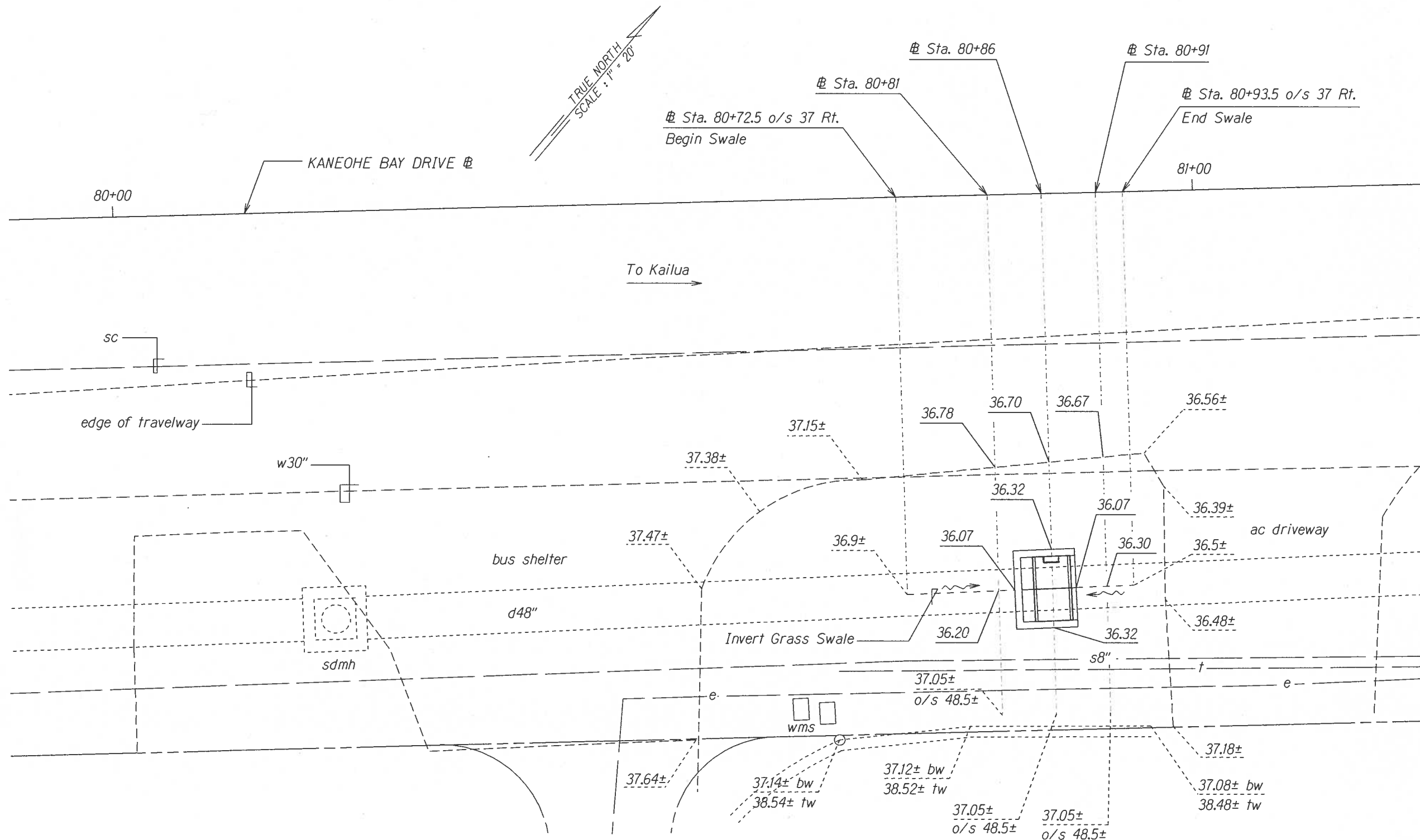
DRAINAGE DETAILS

KANEOHE BAY DRIVE REHABILITATION
Kamehameha Hwy to Nanamoana Street
Project No. 65A-01-04M

Scale: $\frac{3}{4}" = 1' - 0"$ Date: February, 2006

SHEET No. *HI* OF *X* SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65A-01-04M	2006		



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

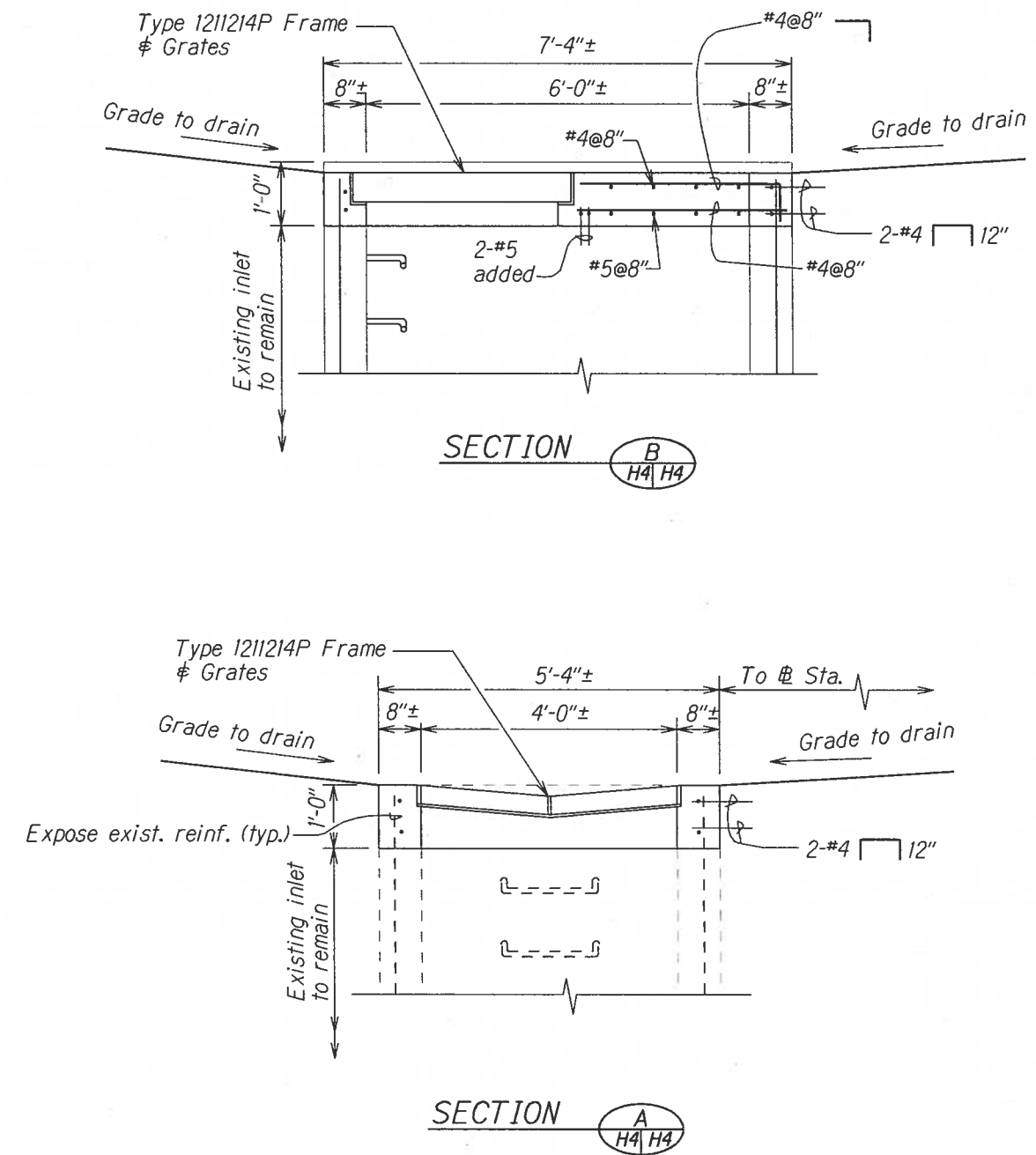
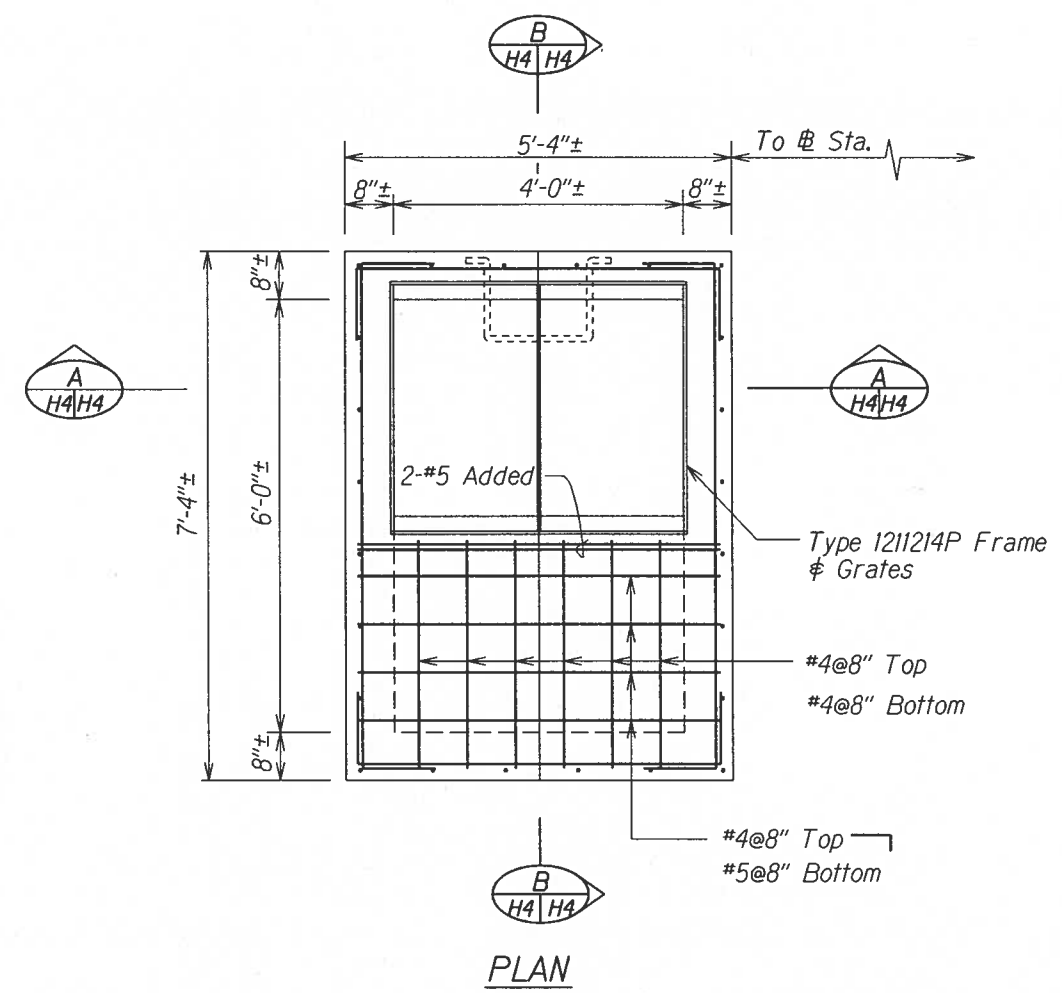
DRAINAGE DETAILS

Kaneohe Bay Drive Rehabilitation
Kamehameha Highway to Nanamoana Street
Project No. 65A-01-04M

Scale: 1" = 5' Date: February, 2006

SHEET No. H3 OF X SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65A-01-04M	2006	0	0



DETAILS OF MODIFIED TYPE 121214P GDI AT KANEHOE BAY DRIVE @ STA. 63+62± O/S RT.

ORIGINAL PLAN	DATE
NOTED	DESIGNED BY
QUANTITIES BY	CHECKED BY

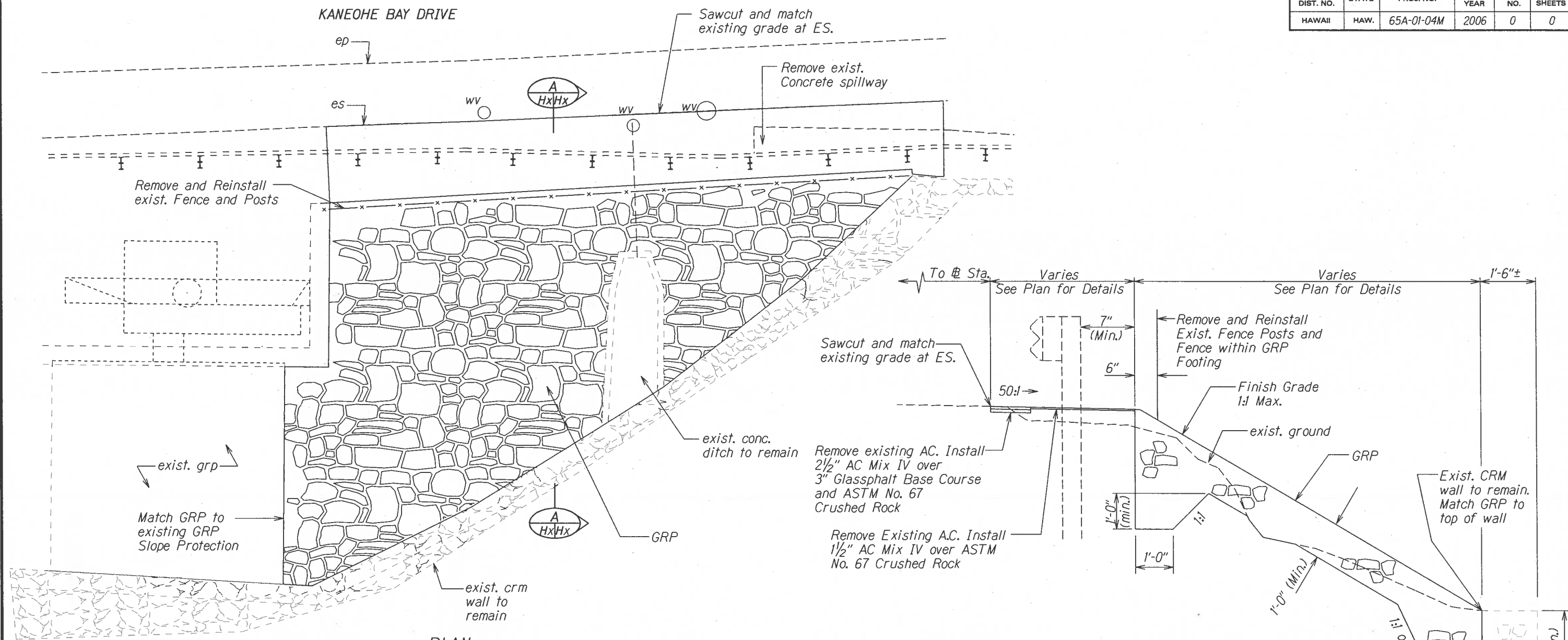
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAIL

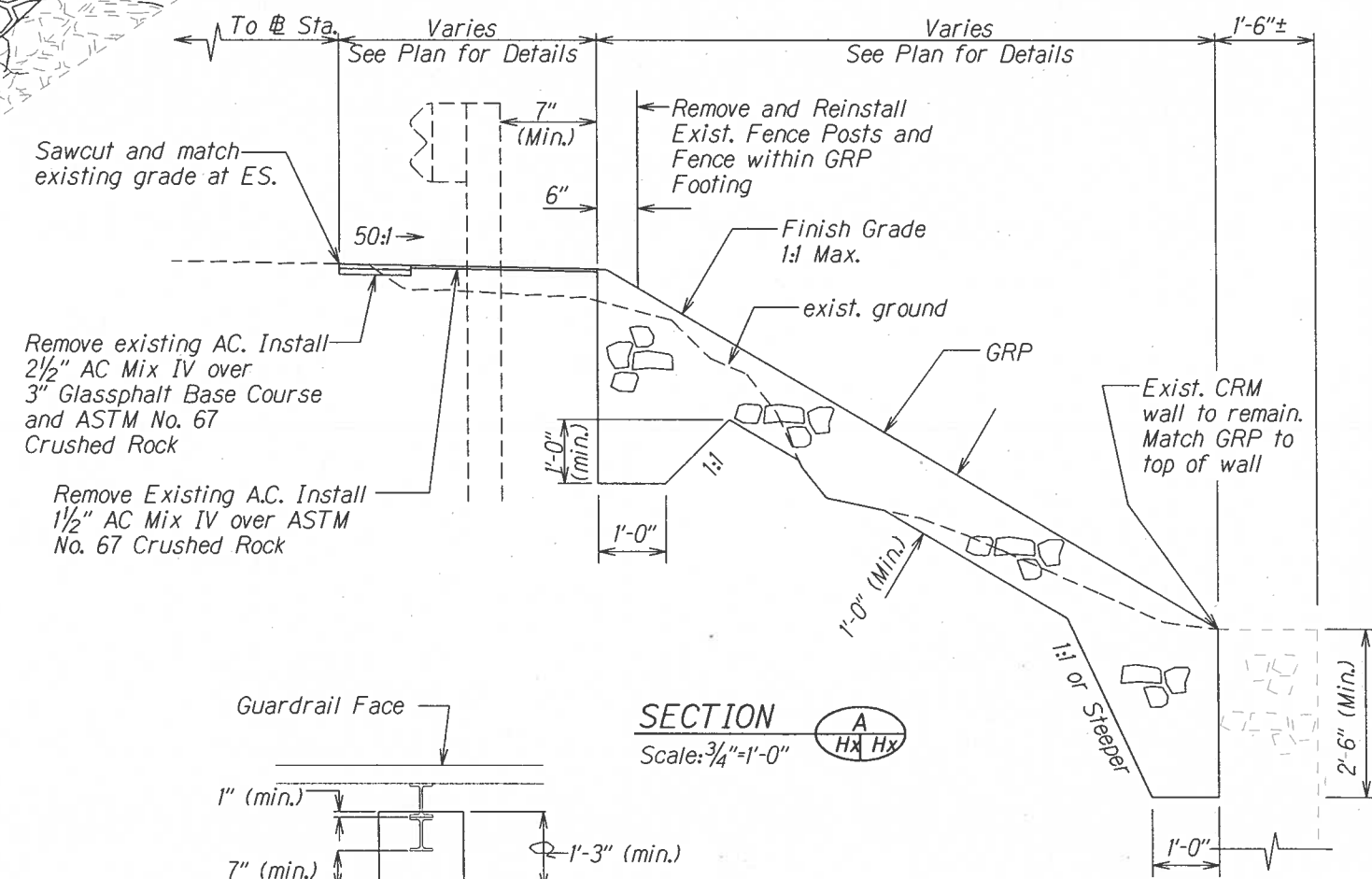
KANEHOE BAY DRIVE REHABILITATION
Kamehameha Highway to Nanamoa Street
Project No. 65A-01-04M
Scale: 3/4"=1'-0" Date: February 2006

SHEET No. H4 OF X SHEETS

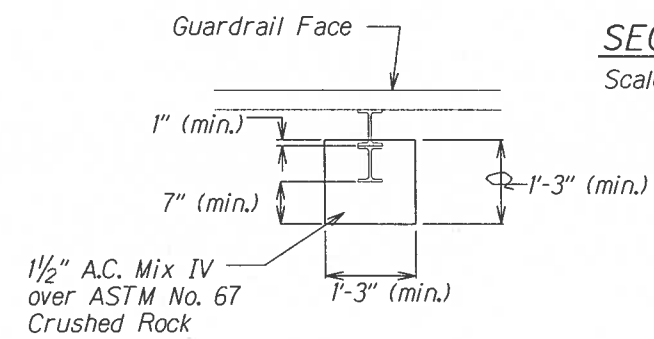
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65A-01-04M	2006	0	0



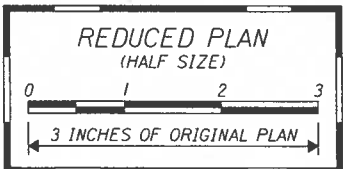
PLAN
Scale: 1/4"=1'-0"



SECTION
Scale: 3/4"=1'-0"



LEAVE OUT DETAIL
Scale: 3/4"=1'-0"



Notes:

1. Fill slope surface depressions with Grouted Rubble Paving. Fill material shall not be used.
2. Removing and reinstalling existing fence posts and placing foundation within the GRP shall not be paid for separately, but shall be considered incidental to Grouted Rubble Paving. Space fence posts such that post is not directly behind guardrail post.
3. The location of the guardrail posts and fence line are approximate. The Contractor is responsible for verifying the locations. In locations where the back of the guardrail post is less than 7 inches to the Grouted Rubble Paving install Leave Out Detail.
4. Removing existing concrete spillway shall not be paid for separately, but shall be considered incidental to Grouted Rubble Paving.
5. ASTM No. 67 Crushed Rock and Roadway Excavation shall not be paid for separately, but shall be considered incidental to AC Mix No. IV.
6. Removing and reinstalling existing metal guardrail and posts shall not be paid for separately, but shall be considered incidental to Strong Post W Beam Guardrail.

DETAILS OF GRP SLOPE PROTECTION @ STA. 34+80± RT. TO @ STA. 35+27.7± RT.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAIL

Kaneohe Bay Drive Rehabilitation
Kamehameha Hwy to Nanamoana Street
Project No. 65A-01-04M

Scale: As Shown Date: Feb, 2006

SHEET No. Hx OF x SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	