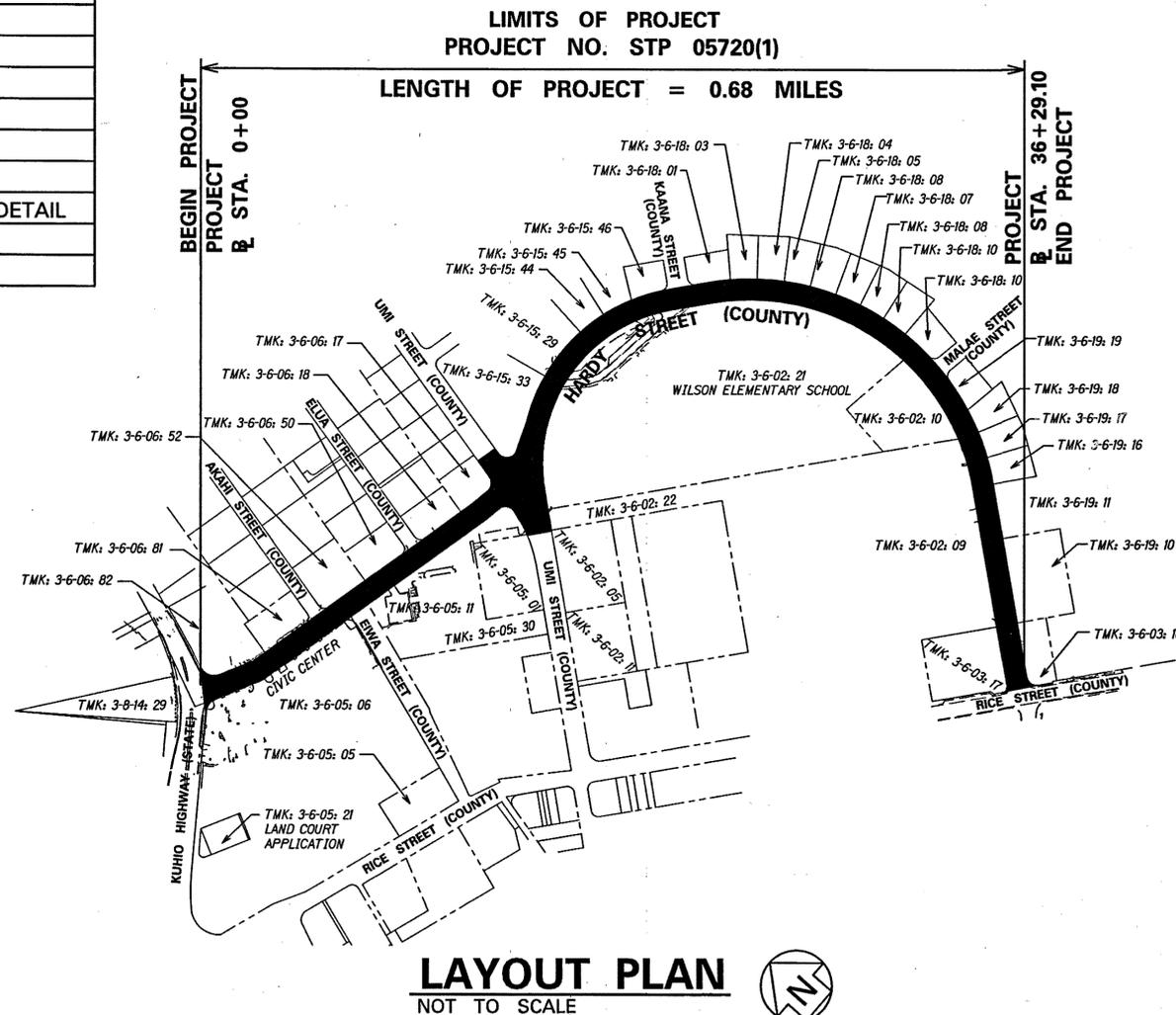
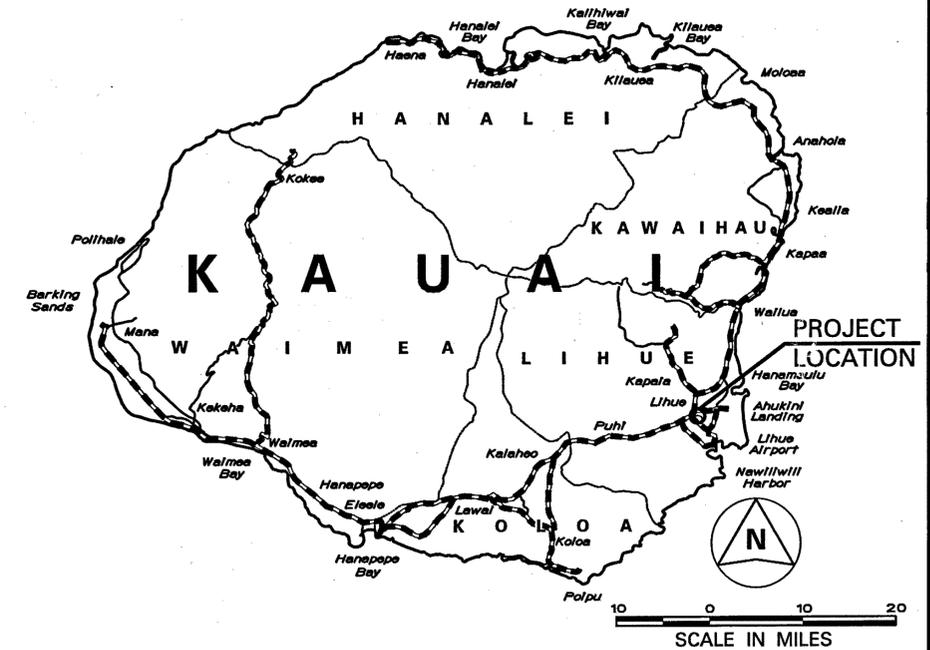
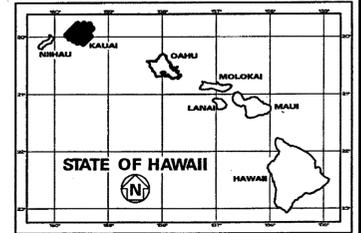


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COUNTY OF KAUAI
 DEPARTMENT OF PUBLIC WORKS
 BUILDING DIVISION
 LIHUE, HAWAII
 PLANS FOR
HARDY STREET IMPROVEMENTS
DESIGN-BUILD
KUHIO HIGHWAY TO RICE STREET
FEDERAL AID PROJECT NO. STP 05720(1)
 DISTRICT OF LIHUE
 ISLAND OF KAUAI

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	1	145



--- FEDERAL AID INTERSTATE PROJECTS PREVIOUSLY CONSTRUCTED OR UNDER CONSTRUCTION

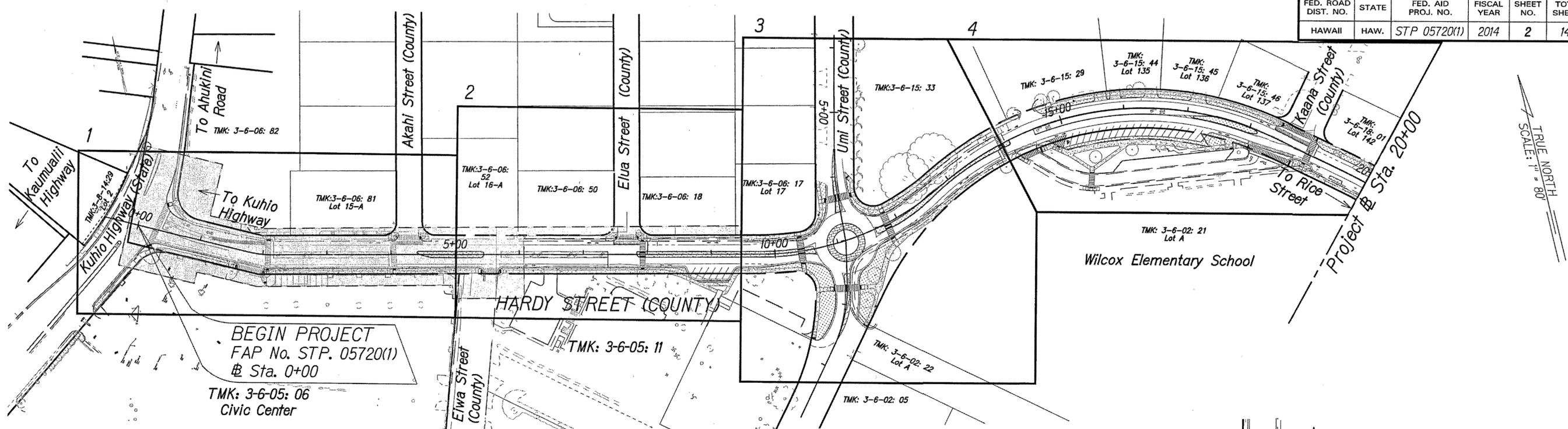
DEPARTMENT OF WATER
 COUNTY OF KAUAI
 APPROVED: *[Signature]* 9/24/14
 DATE
 MANAGER & CHIEF
 ENGINEER DEPT. OF WATER

DEPARTMENT OF PUBLIC WORKS
 COUNTY OF KAUAI
 APPROVED: *[Signature]* 11/2/14
 DATE
 COUNTY ENGINEER

DEPARTMENT OF TRANSPORTATION
 STATE OF HAWAII
 APPROVED: *[Signature]* 12/1/14
 DATE
 DISTRICT ENGINEER, KAUAI

SSFM INTERNATIONAL, INC. KECHO KITASHIMA 356-1267 SEPT 2014
 DESIGNED BY PHONE MANAGED BY DATE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	2	145

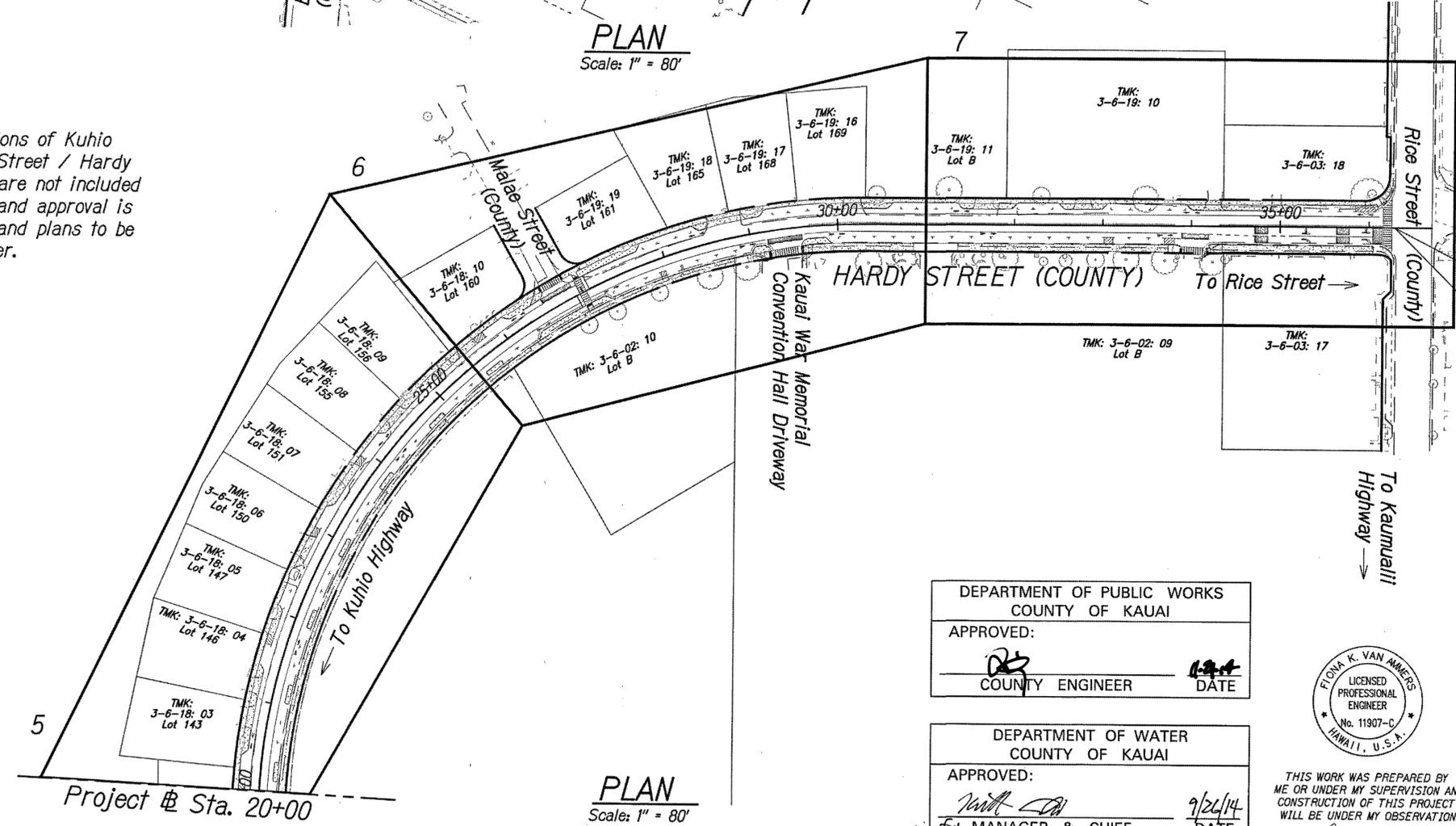


BEGIN PROJECT
FAP No. STP. 05720(1)
@ Sta. 0+00
TMK: 3-6-05: 06
Civic Center

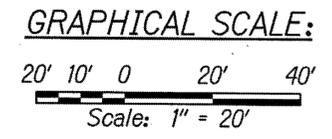
PLAN
Scale: 1" = 80'

NOTES:

1. Hatched areas at the intersections of Kuhio Highway / Hardy Street, Eiwa Street / Hardy Street, and along Hardy Street are not included for construction. Final design and approval is still pending. Approved design and plans to be provided as part of change order.

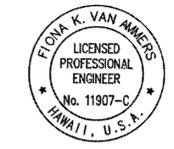


END PROJECT
FAP No. STP. 05720(1)
@ Sta. 36+29.10



DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
[Signature] DATE: 11/24/14
COUNTY ENGINEER

DEPARTMENT OF WATER
COUNTY OF KAUAI
APPROVED:
[Signature] DATE: 9/24/14
FOR MANAGER & CHIEF
ENGINEER DEPT. OF WATER



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
APRIL 30, 2016
EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

OVERALL SITE PLAN

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014
SHEET No. 1 OF 1 SHEETS

STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	3	145

STANDARD PLAN NO.	TITLE	DATE	STANDARD PLAN NO.	TITLE	DATE	STANDARD PLAN NO.	TITLE	DATE	STANDARD PLAN NO.	TITLE	DATE
B-01	Notes & Miscellaneous Details	05/31/07	H-01A	Type A Catch Basin	05/31/07	TE-09	Bike Route Sign & Supplementary Plates	07/11/08	TE-24	Solid Aluminum Extruded Sign Panel And Accessory Details	05/31/07
B-03	Backfill Details at Earth Retaining Structures	05/31/07	H-01B	Type B Catch Basin	05/31/07	TE-10	Interstate Route Marker	07/11/08	TE-25	Guide Signs Luminaire Mountings	07/11/08
B-12	Prestressed Concrete Piles & Compression Splice Can Details	05/31/07	H-01C	Type C Catch Basin	05/31/07	TE-11	State Route Marker and Auxiliary Markers	07/11/08	TE-26	Raise Pavement Markers and Striping	07/11/08
B-12A	Prestressed Concrete Piles, Pile & Compression Splice Can Details & Notes	05/31/07	H-01D	Type D Catch Basin	05/31/07	TE-12	State Route Marker and Border Detail For Guide Signs	07/11/08	TE-27	Raise Pavement Markers and Striping	07/11/08
B-12B	Pile Interaction Diagram	05/31/07	H-01E	Catch Basin Sections	05/31/07	TE-12A	Route Sign Assemblies	07/11/08	TE-28	Entrance And Exit Pavement Markings	07/11/08
B-13	Prestressed Concrete Pile Build-Up Details	05/31/07	H-02A	Type A1 Catch Basin	05/31/07	TE-13	Street Name Sign On Mast Arm	07/11/08	TE-28A	Miscellaneous Pavement Markings	07/11/08
			H-02B	Type B2 Catch Basin	05/31/07	TE-14	Miscellaneous Reflector Markers	07/11/08	TE-29	Pavement Arrows And Symbols	07/11/08
			H-02C	Type C1 Catch Basin	05/31/07	TE-15	Object Markers	07/11/08	TE-30	Pavement Alphabets, Numbers & Symbols	07/11/08
			H-02D	Type D1 Catch Basin	05/31/07	TE-16	Mile Posts	07/11/08	TE-31	Pavement Alphabets, Numbers & Symbols	07/11/08
			H-02E	Catch Basin Section	05/31/07	TE-17A	Canilever Overhead Sign Elevation & Details	05/31/07	TE-32	Type I & II Traffic Signal System Misc. Details	05/31/07
			H-03	Type A, B, And C Storm Drain Manhole	05/31/07	TE-17B	Canilever Sign Frame Detail And Section	05/31/07	TE-33	Type II Traffic Signal System	08/16/06
D-01	Cattle Gate	05/31/07	H-04	Type D Storm Drain Manhole	05/31/07	TE-17C	Canilever Sign Frame Detail	05/31/07	TE-33AJ	Type II Traffic Signal Standard	05/31/07
D-02	Chain Link Fence With Toprail	05/31/07	H-05	Typical Reinforcing Details For Drainage Structures	05/31/07	TE-17D	Canilever Sign Frame Section	05/31/07	TE-33A2	Type II Traffic Signal Standard	05/31/07
D-03	Chain Link Fence Without Toprail	05/31/07	H-06	Typical Reinforcing Details For Drainage Structures	05/31/07	TE-17E	Canilever Sign Frame Details	05/31/07	TE-34	Loop Detector Details	07/11/08
D-04	Wire Fence With Metal Posts	05/31/07	H-07	Catch Basin and Manhole Castings	05/31/07	TE-17F	Canilever Sign Frame Details	05/31/07	TE-35	Loop Detectors & Duct Details	07/11/08
D-05	Typical Details of Curbs And/Or Gutters	05/31/07	H-08	Type IA-9 And IA-9P Grated Drop Inlet	05/31/07	TE-18A	Two Post Overhead Sign Frame Elevations	05/31/07	TE-36	Traffic Signal Details	07/11/08
D-06	Typical Detail of Reinforced Concrete Drop Driveway	05/31/07	H-09	Type 2A-9 And 2A-9P Grated Drop Inlet	05/31/07	TE-18B	Two Post Sign Framing Plan Section	05/31/07	TE-37	Pullbox & Cover Details	07/11/08
D-07	Centerline And Reference Survey Monuments	05/31/07	H-10	Type A-9 Or A-9P Steel Frames	05/31/07	TE-18C	Two Post Sign Framing Sections And Details	05/31/07	TE-37A	Type "A" Traffic Pullbox	05/31/07
D-08	Street Survey Monument	05/31/07	H-11	Type A-9 And A-9P Steel Frames	05/31/07	TE-18D	Two Post Sign Frame Details	05/31/07	TE-37B	Type "A" Traffic Pullbox Reinforcing	05/31/07
D-15	Concrete Sidewalk	05/31/07	H-12	Type 61614P and 1211214P Grated Drop Inlet	05/31/07	TE-18E	Two Post Sign Frame Details	05/31/07	TE-37C	Type "B" Traffic Pullbox	05/31/07
D-16	P.C.C. Bus Pad	05/31/07	H-13	Type 61616P and 1211216P Grated Drop Inlet	05/31/07	TE-19A	Overhead Sign Framing Schedule	05/31/07	TE-37D	Type "B" Traffic Pullbox Reinforcing	05/31/07
D-17	P.C.C. Bus Pad	05/31/07	H-14	Type 61214P Grated Drop Inlet	05/31/07	TE-19B	Sign Post Drilled Shaft Foundation	05/31/07	TE-37E	Type "B" Traffic Pullbox Foundation	05/31/07
D-18	P.C.C. Pavement Layout	05/31/07	H-15	Type 1211214, 1211214P, 1211216, 1211216P Steel Frame And Grates	05/31/07	TE-19C	Spread Footing	05/31/07	TE-37F	Type "C" Traffic Pullbox	05/31/07
D-19	P.C.C. Pavement w/ Permeable Base Joint Details	05/31/07	H-16	Type 61614, 61614P, 61616, 61616P Steel Frame And Grates	05/31/07	TE-19D	Sign Frame Foundation Schedule	05/31/07	TE-37G	Type "C" Traffic Pullbox Reinforcing	05/31/07
D-20	P.C.C. Pavement w/ Permeable Base Joint Details	05/31/07	H-17	Type 61214 Steel Frames and Grates	05/31/07	TE-19D.2	Sign Frame Foundation Schedule	05/31/07	TE-37H	Type "C" Traffic Pullbox Foundation	05/31/07
D-21	P.C.C. Longitudinal Joint Details	05/31/07	H-18	Type 61214 Steel Frames and Grates	05/31/07	TE-19D.3	Sign Frame Foundation Schedule	05/31/07	TE-37J	Traffic Pullbox Cover And Details	05/31/07
D-22	P.C.C. Connection To Curb and Gutters	05/31/07	H-19	Type 61214P Steel Grates	05/31/07	TE-19D.4	Sign Frame Foundation Schedule	05/31/07	TE-38	Type III Traffic Signal Standard	05/31/07
D-23	Joints	05/31/07	H-20	Type 61614B Steel Frame And Grates	05/31/07	TE-19D.5	Sign Frame Foundation Schedule	05/31/07	TE-38AJ	Type III Traffic Signal Standard	05/31/07
			H-21	Cement Rubble Masonry Structures	05/31/07	TE-19E	Anchorage Details	05/31/07	TE-38A2	Type III Traffic Signal Standard	05/31/07
L-01	Tree Planting	08/16/06	H-22	Concrete and Cement Rubble Masonry Structures	05/31/07	TE-19F	Anchorage Details	05/31/07	TE-39	Metal Guardrail Connection To Concrete Barrier	07/11/08
L-02	Tree Planting	08/16/06	H-23	Inlet/Outlet Structure	05/31/07	TE-19G	Miscellaneous Sign Frame Details	05/31/07	TE-40	Concrete Barrier Transition	05/31/07
L-03	Tree Transplanting	08/16/06	H-24	Inlet/Outlet Structure	05/31/07	TE-19H	Luminaire Walkway Support	05/31/07	TE-40A	Concrete Barrier Transition Sections	05/31/07
L-04	Palm Planting	08/16/06	H-25	Flared End Section For Culverts	05/31/07	TE-19I	Fixed Message Luminaire Support	05/31/07	TE-41	Guardrail Type 4 (Rigid Barrier)	05/31/07
L-05	Shrub Planting	08/16/06	H-26	Flared End Section For Culverts	05/31/07	TE-19J	Miscellaneous Sign Details	05/31/07	TE-42	Portable Concrete Barrier	05/31/07
L-06	Landscape Details	08/16/06	H-27	Concrete Spillway Inlet	05/31/07	TE-19K	Miscellaneous Sign Details	05/31/07	TE-43	Portable Concrete Barrier	05/31/07
L-07	Landscape Details	08/16/06	H-28	Cap Coupling Details Standard Joint	05/31/07	TE-19L	Miscellaneous Sign Details	05/31/07	TE-44	Guardrail Type 4 Miscellaneous Details	07/11/08
L-08	Landscape Details	08/16/06	H-29	Reinforced Concrete Collar & Jacket	05/31/07	TE-19M	Miscellaneous Sign Frame Details	05/31/07	TE-45	Barricades	07/11/08
L-09	Landscape Details	08/16/06	H-30	Underdrain Cleanout Steel Frame And Cover	05/31/07	TE-20	Supports For Ground Mounted Guide Sign	05/31/07	TE-46	Delineation & Pavement Markings At Narrow Bridges	07/11/08
L-10	Landscape Details	08/16/06				TE-20A	Supports For Ground Mounted Guide Sign	05/31/07	TE-47	Highway Light Standard	05/31/07
L-11	Planting Details	08/16/06				TE-20B	Supports For Ground Mounted Guide Sign	05/31/07			
L-12	Irrigation Details	08/16/06				TE-20C	Supports For Ground Mounted Guide Sign	05/31/07			
L-13	Irrigation Details	08/16/06				TE-21A	Sign Breakaway Mounts	05/31/07			
L-14	Irrigation Details	08/16/06	TE-01	Sign Height And Location	07/11/08	TE-21B	Sign Breakaway Mounts	05/31/07			
L-15	Irrigation Details	08/16/06	TE-1A	Sign Installation	07/11/08	TE-22	Laminated Aluminum Sign Panels (Overhead)	05/31/07			
L-16	Irrigation Details	08/16/06	TE-02A	Galvanized Flanged Channel Sign Post Mounting	05/31/07	TE-23	Laminated Aluminum Sign Panels (Ground Mounted)	07/11/08			
L-17	Irrigation Details	08/16/06	TE-02B	Galvanized Flanged Channel Sign Post Mounting	05/31/07						
L-18	Irrigation Details	08/16/06	TE-02C	Galvanized Flanged Channel Sign Post Mounting	05/31/07						
L-19	Irrigation Details	08/16/06	TE-03A	Galvanized Square Tube Sign Post Mounting	05/31/07						
L-20	Irrigation Details	08/16/06	TE-03B	Galvanized Square Tube Sign Post Mounting	05/31/07						
L-21	Irrigation Details	08/16/06	TE-04	Regulatory Signs	07/11/08						
L-22	Irrigation Details	08/16/06	TE-05	Warning Signs	07/11/08						
L-23	Irrigation Details	08/16/06	TE-06	Miscellaneous Signs	07/11/08						
L-24	Irrigation Notes	08/16/06	TE-07	Construction Signs	07/11/08						
			TE-08	Miscellaneous Intersection Signs	07/11/08						

Note:
Standard plans applicable to this project are indicated by "●" next to the standard plan no. (for example: D-07 ●)

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI

APPROVED: _____
COUNTY ENGINEER

11-21-14
DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

SIGNATURE

APRIL 30, 2016
EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

STANDARD PLAN SUMMARY

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	4	145

LEGEND

ABBREVIATION LIST

	Approximate existing pavement to be treated with Emulsified Asphalt Slurry Seal	∞ bfp	Existing Water Backflow Preventer
	Approximate removal of existing pavement, striping, curb and gutter, sidewalk, landscaping and structures	—s—12—	Existing Sewer Line
	Proposed improvements (full depth pavement/curb and gutter/sidewalk/planters)	°smh	Existing Sewer Manhole
	Resurfacing Limits	°SMH	Adjusted Sewer MH Frame/Cover
—e—	Existing Electrical Line	—g—6—	Existing 6" Gas Line
—E—	New Electrical Line	°gv	Existing Gas Valve Box
°jp	Existing Joint Pole	°GV	Adjusted Gas Valve Box
°pp	Existing Power Pole	°gmh	Existing Gas Manhole
°emh	Existing Electric Manhole	°GMH	Adjusted Gas MH Frame/Cover
°EMH	Adjusted Elec. MH Frame/Cover	°mon.	Existing Monument
°EMH	New Electric Manhole	°MON.	Adjusted Monument
—t—	Existing Telephone Line	°MON.	New Monument
—T—	New Telephone Line	----d---24---	Existing 24" Drain Line
°tp	Existing Telephone Pole	<u>24" RCP</u>	New 24" RCP Drain Line
°tmh	Existing Telephone Manhole	°sdmh	Existing Storm Drain Manhole
°tpb	Existing Telephone Pullbox	°SDMH	Adjusted Storm Drain MH Frame/Cover
°TMH	Adjusted Tele. MH Frame/Cover	°SDMH	New Storm Drain Manhole
°TMH	New Telephone Manhole	EqdI	Existing Grated Drop Inlet
----sc----	Existing Signal Corps Line	ob	Existing Catch Basin
----SC----	New Signal Corps Line	†	Existing Traffic Sign With 1 Post
----tv----	Existing TV Cable	†	New Traffic Sign With 1 Post
----TV----	New TV Cable	‡	Existing Traffic Sign With 2 Posts
--w--12--	Existing 12" Water Line	‡	New Traffic Sign With 2 Posts
--W--12--	New 12" Water Line	‡	Existing Traffic Sign With 3 Posts
°wmh	Existing Water Manhole	‡	New Traffic Sign With 3 Posts
°WMH	Adjusted Water MH Frame/Cover	☼	Existing Highway Lighting Standard
°WMH	New Water Manhole	—o—	Existing Single Metal Guardrail
°av	Existing Water Air Valve	====	Existing Double Metal Guardrail
°AV	Adjusted Water Air Valve	----x----	Existing Fence
°AV	New Water Air Valve	-----■-----	New Fence
°wv	Existing Water Valve Box	°tsb	Existing Traffic Signal Box
°WV	Adjusted Water Valve Box	□ tsp	Existing Traffic Signal Pole
°WV	New Water Valve Box	□ lpb	Existing Street Lamp Pullbox
□WM	Existing Water Meter		
◻WM	Adjusted Water Meter		
■WM	New Water Meter		
•hyd	Existing Hydrant		
•Hyd	New Hydrant		

ABAND.	Abandoned	STA.	Station
AC	Asphalt Concrete American	STD.	Standard
ADA	Disability Act	T.M.K.	Tax Map Key
ARV	Air Relief Valve	TC	Top of Curb
BC	Bottom of Curb	TEL	Telephone
BW	Bottom of Wall	TRV	Traverse
C L	Center Line	W	Top of Wall
C	Concrete	TYP.	Typical
CLR.	Clearance	W	Width
CMU	Concrete Masonry Unit	W8	8" Waterline
CO	Cleanout	WM	Water Meter
CONC.	Concrete	WV	Water Valve
CRM	Concrete Rubble Masonry	X-ING	Crossing
CTR	Center	X-WALK	Crosswalk
D	Diameter		
D.L.	Drain Line 24"		
D24	Drain Line		
DET.	Detail		
DIV.	Division		
DMH	Drain Manhole		
DPW	Department of Public Works		
E.P.	Edge of Pavement Electric		
ep	existing edge of pavement		
ELEC.	Electric/Electrical		
ELEV.	Elevation		
EXIST.	Existing		
F.A.P.	Federal Aid Project Finish		
FG	Grade		
HYD	Hydrant		
FT.	Foot		
GV	Gate Valve		
GRP	Grouted Rubble Pavement		
H	Height		
HR	Hour		
INV.	Invert		
LF	Linear Feet		
MH	Manhole		
N.D.	Nominal Diameter		
N.I.C.	Not in Contract		
O/S	Offset		
P	Pavement		
PC	Point of Curvature		
PCC	Portland Cement Concrete		
PED	Pedestrian		
PT	Point of Tangency		
PVC	Polyvinyl Chloride		
RD	Road		
S	Spread		
SW	Sidewalk		
SDMH	Storm Drain Manhole Sheet		
SHT.	Street		
ST.			

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER DATE 11/24/14

DEPARTMENT OF WATER
COUNTY OF KAUAI
APPROVED:
MANAGER & CHIEF ENGINEER DEPT. OF WATER DATE 7/24/14



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
APRIL 30, 2016
EXPIRATION DATE OF THE LICENSE
SIGNATURE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

LEGEND AND ABBREVIATIONS

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 1 OF 1 SHEETS

GENERAL CONSTRUCTION NOTES:

1. All construction work except as noted in the plans, is to be in accordance with the publications "Hawai'i Standard Specifications for Road and Bridge Construction, 2005" and its amendments and "Standard Details for Public Works Construction, September 1984", as amended of the Department of Public Works, City and County of Honolulu, and The Counties of Kaua'i, Maui and Hawai'i. The Standard Details are available at The County of Kaua'i clerk's office.
2. No grading between 7 p.m. to 7 a.m. on any given day or on Saturdays, Sundays and holidays without written permission from the county engineer and the State Department of Health.
3. Contractor to notify Public Works Department five (5) business days prior to commencing any grading work. When completed and ready for final inspection; notify Public Works Department inspection section.
4. Construction plans are valid for a period of one year from the date of approval; if construction does not commence within this one-year time from the date of approval, the construction plans shall be resubmitted to all approving agencies for review, approval and recertification of the plan.
5. All grading, grubbing and stockpiling work shall be performed in accordance with County of Kauai Ordinance No. 808.
6. The Contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways and other areas. The cost incurred for any necessary remedial action by the County Engineer shall be payable by the Contractor.
7. During cleaning operations, the contractor shall supply a water truck for dust control purposes until vegetation has re-established itself. Excess water, including silt and dirt shall not be allowed to run-off the property.
8. Best Management Practices (BMP's) shall be employed at all times to the maximum extent practicable to prevent damage by sedimentation, erosion or dust to streams, water courses, natural areas and property of others.
9. Surveys shall be done under the supervision of a Land Surveyor licensed in the State of Hawai'i.
10. Topographical Survey was completed on December 2013 by Esaki Surveying and Mapping, Inc.
11. Prior to starting any excavation activities, the Contractor shall contact the Hawai'i One Call Center at 1-866-423-7287.

NOTES FOR WORK WITHIN THE COUNTY RIGHT-OF-WAY:

1. All damaged pavement shall be restored to its original condition in accordance with County of Kaua'i, "Hawai'i Standard Specifications for Road and Bridge Construction (2005)" and Its Amendments and the "Standard Details for Public Works Construction, September 1984", as Amended by the Department for Public Works, City and County of Honolulu, and the Counties of Kaua'i, Maui and Hawai'i, with 3" minimum A.C. pavement and 10" aggregate base course (Kuhio Highway to Umi Street) and 2.5" minimum A.C. pavement and 8" aggregate base course (Umi Street to Rice Street).
2. The Contractor shall provide, install, maintain all necessary signs, lights, flares, barricades, markers, cones and other protective facilities and shall take all necessary precautions for the protection and for the convenience and safety of the public traffic. All such protective facilities and precautions to be taken shall conform with Rules and Regulations Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways adopted by the Highway Safety Coordinator and U.S. Federal Highway Administration Manual on Uniform Traffic Control Devices for Streets and Highways dated 2009 and its amendments.
3. The Contractor shall, whenever necessary, properly sheet and brace all excavations to render it secure and shall remove all such sheeting and bracing before completion of the backfill for water mains. The minimum cover requirements (from top of pipe to finished grade over pipe) is three (3) feet.
4.
 - A. Permit shall be obtained by the Contractor from the Department of Public Works, County of Kaua'i before work on any portion of public street or highway may begin. Permit fees shall be at the contractor's expense when applicable to project.
 - B. Driveways shall be kept open unless owners of the abutting lots using these right-of-way are otherwise provided for satisfactorily.
 - C. All work including repair of damaged pavement and shoulders shall be inspected and approved by the Department of Public Works. All unapproved work shall be considered unacceptable and shall be reworked and corrected as directed by the Department of Public Works, at the Contractor's expense.
 - D. Damaged shoulders shall be restored to a condition equal to or better than existing condition.
 - E. Work within the County right-of-way area may be performed only between the hours of 8:00 a.m. to 3:30 p.m. Monday through Friday, except on holidays recognized by the County of Kaua'i, unless otherwise permitted in writing by the County Engineer.
 - F. During non-working hours, all trenches shall be covered with a safe non-skid bridging material and lanes shall be opened to public vehicular and pedestrian traffic. See Traffic Management Plans.
 - G. No material and/or equipment shall be stockpiled or otherwise stored within County right-of-way except at locations designated in writing and approved by the County Engineer.
 - H. The Contractor shall conduct his operations so as to offer the least possible obstructions and inconvenience to the public and he shall have under construction no greater length or amount of work that he can execute properly with due regard to the rights of the public.

- I. All existing drainage flow conditions shall be maintained.
5. The Contractor shall retain the services of a Geotechnical Engineer for quality control. Certification from the Geotechnical Engineer shall be submitted to the Department of Public Works at the completion of the construction work. The Geotechnical Engineer shall certify that the construction work meets "Standard Specifications". The Geotechnical Engineer shall also submit test results as requested by the Department of Public Works.
6. The Contractor shall hold a pre-construction meeting with the construction-design section of the Department of Public Works before commencing any work.
7. The 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 surveyor to reference the location of said survey monument.
8. Benchmarks that are disturbed or destroyed shall be restored under a licensed land surveyor's direction. Copies of filed notes, descriptions and new values of the new bench mark shall be sent to the Department of Public Works Survey Section for review and approval prior to final acceptance of the Project.
9. The Contractor shall be responsible for all overtime or night work payments for County's staff and inspection personnel including consultants when the contract requires overtime or night work to be performed, or directs the contractor to work additional shifts or overtime for County's convenience.
10. If system conditions require non-emergency nighttime work during the autumn seabird fall season (September 15 through December 15), use of lightning shall be restricted between 9:00pm to 4:30 am. If lightning of the work area is required in such situation, all light shall be shielded (minimum light spill towards the sky) and directed downwards to the maximum extent practicable. Minimum requirements for lightning by Hiosh and Osha shall be provided and assured by the Contractor. The Contractor shall train all employees working at night (records retained by the Contractor) in how to handle any retrieved downed birds and shall have appropriate equipment as approved by save our shearwaters (SOS) on site to hold and transport any retrieved birds to an SOS facility. This requirement does not allow lighting as may be restricted by other Government Agencies.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	5	145

DEPARTMENT OF PUBLIC WORKS COUNTY OF KAUAI	
APPROVED:	
	
COUNTY ENGINEER	DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
 APRIL 30, 2016
 EXPIRATION DATE OF THE LICENSE
 SIGNATURE

COUNTY OF KAUAI DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION	
CONSTRUCTION NOTES	
HARDY STREET IMPROVEMENTS	
Federal Aid Project No. STP 05720(1)	
Scale: As Noted	Date: September, 2014
SHEET No. 1 OF 4 SHEETS	

WATER CONSTRUCTION NOTES:

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	6	145

1. Unless otherwise specified, all materials and construction of water facilities and appurtenances shall be in accordance with the "Water System Standards, 2002" as adopted by the Department of Water, County of Kauai, including all subsequent amendments and additions.
2. The contractor shall arrange a pre-construction conference at least ten (10) calendar days before construction and shall notify the Department of Water at least three (3) working days prior to the start of construction.
3. The contractor shall submit the names and telephone numbers of its authorized job superintendent and at least three (3) additional persons to contact in case of an emergency during non-working hours.
4. The contractor shall notify the Department of Water at least 24 hours prior to any trenching, pipe laying, backfilling, testing or disinfection activities to insure that inspection services will be available.
5. All materials (pipe, lubricants, paints, sealants, form oil, concrete admixtures, etc.) in direct contact with the potable water shall have National Sanitation Foundation (NSF) certifications. The contractor shall submit these certifications to the Department of Water for review and approval prior to its application.
6. The location of existing water mains and appurtenances shown on the plans are approximate only. The contractor shall verify the exact locations in the field. Excavation around any existing water main shall be done by hand.
7. The contractor shall provide unobstructed access to existing hydrants, valves and water meters at all times.
8. The contractor shall secure all excavations in accordance with OSHA regulations.
9. There shall be no physical connection between a public or private potable water system and a non-potable water system, sewer, or appurtenance thereto which could permit the passage of any sewage or polluted water into the potable water supply.
10. Trench excavation, backfilling in lifts, and repaving shall conform to the "Hawai'i Standard Specifications for Road and Bridge Construction, 2005" as amended.
11. Warning tape shall be in accordance with Division 200, Section 212.08 of the "Water System Standards." The warning tape shall be four mil thick, non-metallic, acid and alkali resistant polyethylene and 6-inches wide with minimum strength of 1750 psi lengthwise and 1500 psi crosswise. Tape color shall be "safety precaution blue" and shall bear a continuous printed inscription "Caution water line buried below". Inscription shall be 2-inches high, black text.
12. All hydrants shall receive a minimum SSPC SP3 surface preparation and coated in accordance with Division 200, Section 206.01 of the "Water System Standards."
13. Unless otherwise directed, prior to the connection of any pipelines and/or laterals to the existing main, the pipelines/laterals installed shall be cleaned, pressure tested, chlorinated, flushed, and sampled in accordance with Division 300, Sections 302.27 to 302.29 of the "Water System Standards."

Water samples shall be tested for total coliforms by a laboratory certified by the State of Hawaii to perform coliform analysis. Presence of coliform

bacteria is unacceptable.

In addition to the test for coliforms, a separate test for Heterotrophic Plate Count (HPC) shall be conducted. The HPC count shall be less than 300 cfu/ml.

Prior to chlorination, a water chlorination and sanitation contractor with a C-37D license shall submit a chlorination plan with water source, injection points, sampling points and procedure clearly defined for approval by the DOW.

The tested pipelines and/or laterals must be connected to the existing DOW system within 14 calendar days of pulling the first disinfection sample tested by a certified laboratory. The Department of Water will require the contractor to redo the cleaning, pressure testing, and/or disinfection of the pipelines and/or laterals at the contractor's expense if the connection is not completed within these 14 calendar days.

14. Polyurethane foam "pigs" shall be "pushed" through the length of the installed pipeline using pressurized water.

15. All connections shall be scheduled in coordination with the Department of Water.

a. An advance deposit is required for operating valves, flushing lines and notifying consumers affected by a water shutdown during connections. The contractor will be charged the actual cost.

b. The contractor shall place the deposit prior to scheduling the connection date.

c. Connections shall be scheduled on Tuesdays through Thursdays. No connections shall be scheduled on Mondays, Fridays, weekends, and holidays.

d. All materials shall be on hand and approved by the Engineer prior to scheduling the connection date.

e. Pumps used to de-water the connection area shall be operated in the presence of the Engineer prior to scheduling the connection date.

f. All connections shall be performed in the presence of the Engineer.

16. In order to prevent damage to the polyethylene encasement from excessive handling, the polywrap shall be installed around the barrel of the ductile iron pipe at its final location along the trenchline. The polyethylene encased pipe shall be lifted using a fabric type sling or a suitably padded cable or chain to prevent damage to the polyethylene.

17. The contractor shall take all necessary compaction tests while the waterline trench is being backfilled and while the subbase/basecourse is being placed. If the test results indicate that additional compaction is required, the corrective work shall be completed before any additional trench excavation or placing of subbase/basecourse is allowed.

The contractor shall retain the services of a registered geotechnical engineer for quality control. The compaction test results shall be certified by the geotechnical engineer and submitted to the Department of Water, State Highways Division (for work done within State R/W) and the Department of Public Works (for work done within County R/W). The geotechnical engineer shall certify that the compaction results meet the requirements of the current Standard Specifications for Road and Bridge Construction.

18. The contractor shall connect all existing consumer piping to the new service laterals. The Department of Water will transfer the existing water meters only.

19. All fittings shall be mechanical joint (MJ) at each end unless otherwise noted. "Megalug" retainer glands shall be used with all mechanical joint fittings and valves used in connecting new water mains to existing water mains unless otherwise noted.

20. All water valves that will be abandoned in place shall be placed in the "Closed" position. Remove top section of valve box and concrete settlement slab. Fill remainder of valve box with concrete. place backfill and repair pavement section to applicable State or County standards. Backfill to finish grade in road shoulder area.

21. The contractor shall obtain all applicable Department of Health permits prior to the start of construction. Permits include, but are not limited to, National Pollution Discharge Elimination System (NPDES) permits for storm water, hydrostatic test, dewatering, and for construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area.

The contractor shall be responsible for the proper disposal of storm water discharges and effluent associated with construction activities including hydrotesting and disinfection operations, to safeguard public health and safety in accordance with applicable Department of Health requirements. All permits and licenses for storm water and construction water disposal, including all application, charges, fees, and taxes, are the responsibility of the contractor.

22. The contractor is responsible for dewatering trench as necessary where groundwater is encountered. all associated costs for dewatering shall be borne by the contractor.

23. The use of known sewer pump trucks is prohibited for DOW projects for any use, including but not limited to dewatering and testing of new facilities.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
 11/21/14
COUNTY ENGINEER DATE

DEPARTMENT OF WATER
COUNTY OF KAUAI
APPROVED:
 9/24/14
MANAGER & CHIEF ENGINEER DEPT. OF WATER DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
 APRIL 30, 2016
SIGNATURE EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION
CONSTRUCTION NOTES
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)
Scale: As Noted Date: September, 2014
SHEET No. 2 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	7	145

WATER CONSTRUCTION NOTES (Cont'd):

24. The contractor shall verify outside diameter of all existing asbestos-cement (AC) waterlines to be connected. Contractor shall verify use of proper gaskets prior to connection. AC pipe and gasket information shall be submitted to Engineer for approval.
25. All connections to existing AC pipe shall be at the nearest AC pipe joint. AC pipe shall be removed by entire length(s) to facilitate the connection. Cutting of AC pipe is prohibited.
26. The contractor shall follow all applicable OSHA, HIOSH, and federal regulations in handling and disposal of asbestos-cement pipe. Disposal of the pipe shall be at an approved asbestos material disposal site.
27. All waterworks brass fittings shall be in compliance with the Amended Section 1417 of Safe Drinking Water Act (SDWA) which takes effect on January 4, 2014. The amendment includes a change to the definition of "lead-free" by reducing lead content from 8% to a weighted average of not more than 0.25% in the wetted surface material. All waterworks brass fittings installed for potable water service on January 4, 2014 and beyond shall conform to the amended definition of "lead-free."

As indicated in Section 211 of Water System Standards - Brass Products, all brass fittings shall conform to NSF Standard 61 and Section 1417 of the Safe Drinking Water Act (SDWA). In addition, all brass fittings shall conform to NSF Standard 372.

DOW SPECIAL NOTES:

- Certification of Completion for these water system facilities will not be issued until:
1. All water improvements are complete and dedicated to the Department of Water.
 2. As-built tracings are submitted to the Department of Water.
 3. Final cost breakdown for the water improvements are submitted and approved by the Department of Water. The owner shall certify costs.
 4. Roadway and pipeline easements are conveyed to the Department of Water, if applicable.
 5. Payment of all applicable fees for the development have been received by the Department of Water.
 6. Other required conditions are completed, if applicable.

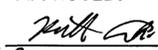
HISTORICAL PRESERVATION NOTES:

1. 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 and the find shall be protected from further damage. The Contractor shall cordon off the area and 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. If human burials are found, the Contractor shall immediately notify the County of Kauai Police Department at (808) 241-1711.

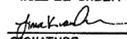
PAVEMENT AND TRENCH RESTORATION NOTES:

1. Trench repaving shall be a minimum 8-inches thick base course and 2-inches minimum asphalt concrete (State Mix IV). If the existing pavement structure is greater in thickness and quality, the repaving shall match the existing pavement structure.
2. Pavement resurfacing work shall include 2-inch thickness of existing A.C. to be cold planed and construction of minimum of 2-inch of new A.C. (State Mix V) layer.
3. Road restoration for trenches aligned along the longitudinal direction shall include pavement resurfacing as follows:
 - A. Roads with pavement widths of less than 12 feet wide shall be repaved the entire width.
 - B. Roadways between 12 feet and 28 feet wide with no striping shall be paved for half of the roadway.
 - C. Roadways with no striping and pavement widths greater than 28 feet shall have a 12-foot wide travel way resurfaced.
4. Road restoration for trenches aligned perpendicular to the roadway shall include road resurfacing for a minimum of 6 feet beyond the trench edges.
5. The entire road intersection shall be resurfaced whenever trench repaving is required within any portion of an intersection. The limits of resurfacing shall be the curve returns of the roadways of the intersections.
6. All existing pavement striping disturbed by this project shall be restored. The striping materials shall be thermoplastic tape or thermoplastic extrusion. Painting is not acceptable.
7. The limits of road restoration work may be revised by the engineering division of the County Department of Public Works during processing of road permits for this project.

DEPARTMENT OF PUBLIC WORKS COUNTY OF KAUAI	
APPROVED:	
	11/24/14
COUNTY ENGINEER	DATE

DEPARTMENT OF WATER COUNTY OF KAUAI	
APPROVED:	
	9/24/14
MANAGER & CHIEF ENGINEER DEPT. OF WATER	DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
 Signature:  APRIL 30, 2016
 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION	
CONSTRUCTION NOTES	
HARDY STREET IMPROVEMENTS	
Federal Aid Project No. STP 05720(1)	
Scale: As Noted	Date: September, 2014
SHEET No. 3 OF 4 SHEETS	

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	8	145

1. The Contractor shall obtain a Construction Permit from the State's Highway District Engineer at 1720 Haleukana Street, Lihue, Hawaii prior to commencement of work within State Highway right-of-way (Ph. 808-241-3000).

2. Construction and restoration of all existing highway facilities within State right-of-way shall be done in accordance with all applicable sections of the current "Hawaii Standard Specifications for Road and Bridge Construction 2005, and the "Specification for Installation of Miscellaneous Improvements within State Highways," of the State Highway Division.

3. All lanes shall be open to traffic during the morning peak hours from 6:30 a.m. to 8:30 a.m., and during the afternoon peak hours from 3:30 p.m. to 5:30 p.m., and during off work hours.

4. The Contractor shall provide, install, and maintain all necessary signs, light, flares, barricades, markers, cones, and other protective facilities and shall take all necessary precautions for the protection and for the convenience and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI - Traffic Control for Highway Construction and Maintenance Operations 2009". If lane closures are required during construction, a traffic control plan shall be incorporated into the construction plans and must be approved by the division prior to the issuance of the permit.

5. The minimum pavement structure shall consist of:
- a. Commercial driveways, side roads and utility installations on minor highways
 - (1) 2-1/2" asphalt concrete, 8" aggregate base course and 12" aggregate subbase, or 2" asphalt concrete and 8" aggregate base course.
 - (2) 8" of class "A" concrete reinforced with 6"X6" - W2.9XW2.9 wire mesh on 12" aggregate subbase, if deemed necessary by the Engineer.

6. No material and/or equipment shall be stockpiled or otherwise stored within highway rights-of-way, except at locations designated in writing and approved by the District 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, Ph. 241-3000.

7. Compaction tests shall be taken in accordance with the specifications for installation of miscellaneous improvements within state highways, as follows:
- a. subbase: one (1) compaction test(s) for every 300 lineal feet of travel way.
 - b. base course: one (1) compaction test(s) for every 300 lineal feet of travel way.
 - c. One (1) compaction test(s) for each 300 lineal feet of trench.

8. Prior to commencing trench excavation work, the Contractor shall take a

profile along the new centerline of utility trench and that such information shall be used in the verification of restoring the roadway to its original condition. A copy of the profile shall be submitted to the District Engineer.

9. The Contractor shall be required to provide adequate, safe, nonskid bridging material over the trench, including shoring, when trenching in pavement areas to handle all types of vehicular traffic.

10. No trench shall be opened more than 200 feet in advance of the installed and tested pipe and/or ductline.

11. Longitudinal drainage along the highway shall be maintained at all times.

12. Pavement striping and marking shall be done by Contractor at no cost to the State.

13. Approval of permit construction plans shall be valid for a period of one (1) year thereof from the date of notification of approval to the applicant. In the event construction does not commence within this one-year period, the applicant will be required to resubmit his construction plans for Division's review and approval.

14. All regulatory, guide and construction signs and barricades shall be of high intensity reflective sheeting.

15. Contractor shall inform the State Highways Office (Ph. 808-241-3000) at least 2 days prior to closing any lanes.

16. The Contractor shall reference to the satisfaction of the District Engineer, all existing traffic signs, posts, and pavement markings prior to the commencement of construction. The contractor shall replace or repair all traffic signs, posts, and pavement markings disturbed by his activities unless directed otherwise by the District Engineer or his Representative.

17. The Contractor shall exercise care when excavating in areas with utilities, streetlights, signals, etc. Damage to these existing facilities shall be immediately reported to the respective utility companies, county, or state agency. The repair work shall be done at the Contractor's expense.

18. The permit to perform work upon State Highways may be revoked because of default in any of the following:

- a. Work performed before or after permitted hours;
- b. Failure to maintain roadway surfaces in a smooth and safe condition;
- c. Failure to clear up construction debris generated from project work;
- d. Failure to provide proper traffic control;
- e. Failure to replace damaged pavement marking and signs.

19. Where applicable, the Contractor shall comply with the traffic control plans and sign spacing table.

20. Contractor shall implement Best Management Practices (BMP) for erosion and silt control for work within the State ROW.

21. Prior to construction, the contractor shall contact the various agencies for the 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 toning of utilities from One-Call Center, Phone 1-866-423-7287. The Contractor shall also call the County of Kaua'i Department of Water, Phone 808-245-5411 and the Wastewater Division, Phone 808-241-6642 for toning waterlines and sewerlines respectively.

22. Work within the State right of way may be performed from 7:00 a.m. Monday to 5:30 p.m. Friday, except State holidays, unless otherwise permitted by the District Engineer.

23. The Contractor shall notify the State Highways Division, Kaua'i District Office, Area Engineer three (3) days prior to commencing work.

24. Unless otherwise requested in writing by the Contractor and approved in writing by the District Engineer, use of steel plates within the travel way will not be permitted at any time. When permitted, only one steel plate will be used within the travel way at any time.

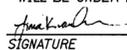
25. Any work that disrupts, damages, or destroys existing traffic loop detectors shall be followed with re-establishment of the traffic loops before reopening the lanes to traffic. The Contractor may also use temporary pole mounted presence detectors to replace any loops taken out of service. The cost for the temporary detectors shall be considered incidental to pavement work.

26. Night work shall not be done during the period from September 15 to December 31 of each year.

27. 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/SEA 107-2004. "Workers" is defined as people on foot whose duties place them within the state right-of-way such as but no 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, and handling lane closures and obstructed roadways.

DEPARTMENT OF PUBLIC WORKS COUNTY OF KAUAI	
APPROVED:	
	
COUNTY ENGINEER	DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
 Signature:  APRIL 30, 2016
 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION	
CONSTRUCTION NOTES	
HARDY STREET IMPROVEMENTS	
Federal Aid Project No. STP 05720(1)	
Scale: As Noted	Date: September, 2014
SHEET No. 4 OF 4 SHEETS	

WATER POLLUTION AND EROSION CONTROL NOTES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	9	145

A. GENERAL:

- See Section 209 of the Hawaii Standard Specifications for Road and Bridge Construction dated 2005, and applicable Special Provisions. Section 209 describes but is not limited to: submittal requirements; scheduling of a water pollution and erosion control conference with the Engineer; construction requirements; method of measurement; and basis of payment.
- 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 an conflicting requirements between the Manual and applicable contract documents, the contract 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 contract documents" include the construction plans, standard specifications, Special Provisions, Permits, and the Storm Water Pollution prevention Plan (SWPPP) when applicable.
- Follow the guidelines in the Honolulu City & County "Rules Relating to Soil Erosions Standards and Guidelines" along with applicable Soil Erosion Guidelines for projects on Kauai.
- The Engineer may assess the 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 County Engineer may deduct the cost from the progress payment for all citations received by the Department for non-compliance, or the contractor shall reimburse the state and/or county for the full amount of the outstanding cost incurred by the state and/or county.
- 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.

B. WASTE DISPOSAL:

- 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.
- 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.
- Sanitary Waste**
Collect all sanitary waste from the portable units a minimum of once per week, or as required. Position sanitary waste facilities where they are secure and will not be flipped over or knocked down.

C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

- For projects with an NPDES Permit for Construction Activities, inspect at the following intervals. 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.
- All measures shall be maintained in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.
- 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 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.
- 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.
- 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 plating for bare spots, washouts and healthy growth.
- Complete and submit to the engineer a maintenance inspection report within 24 hours after each inspection.
- 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. 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. Remove sediment tracked onto the street, sidewalk, or other paved area by the end of the day in which track-out occurs.
- 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.

DEPARTMENT OF PUBLIC WORKS COUNTY OF KAUAI	
APPROVED:	
	11/21/14 DATE
COUNTY ENGINEER	



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 APRIL 30, 2016
 SIGNATURE:  EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION	
WATER POLLUTION AND EROSION CONTROL NOTES	
HARDY STREET IMPROVEMENTS	
Federal Aid Project No. STP 05720(1)	
Scale: As Noted	Date: September, 2014
SHEET No. 1 OF 5 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	10	145

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.):

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.

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. An effort shall be made to store only enough products as is required to do the job.

c. Store all materials 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 surplus products according to manufacturer's instructions or local and State regulations.

3. ONSITE AND OFFSITE PRODUCTS SPECIFIC PLANS:

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 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 the manufacturer's instruction or State and Local regulations.

d. Concrete trucks:

Wash out or discharge concrete truck drum wash water only at a designated site. Do not discharge water into the roadway drainage system or waters of the United States. Contact Department of Health, Drinking Water Branch at (808) 586-4258 to receive permission to designate a disposal site. Clean disposal site as required or as requested by the Owner's representative.

4. SPILL CONTROL PLAN:

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

b. The Contractor shall be the spill prevention and cleanup coordinator. Designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. Post the names of responsible spill personnel in the material storage area on a weatherproof bulletin board or other accessible location acceptable to the Engineer and in the office trailer onsite.

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

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

e. Clean up all spill 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 size.

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 for the project, 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 disturbed area. The Contractor's attention is directed to the applicable NPDES Permit documents.

DEPARTMENT OF PUBLIC WORKS COUNTY OF KAUAI	
APPROVED:	
	11-24-14
COUNTY ENGINEER	DATE



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 APRIL 30, 2016
 SIGNATURE OF THE LICENSEE

COUNTY OF KAUAI DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION	
WATER POLLUTION AND EROSION CONTROL NOTES	
HARDY STREET IMPROVEMENTS	
Federal Aid Project No. STP 05720(1)	
Scale: As Noted	Date: September, 2014
SHEET No. 2 OF 4 SHEETS	

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.):

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	10	145

2. The Contractor shall obtain and comply with the NPDES requirements for Kaua'i District Permit projects. This is available at the Kaua'i District Office at 3060 Eiwa Street, Suite 205. Due to the potential cost impacts, the Contractor needs to be aware of these requirements.
3. The Contractor shall complete and submit a Contractor's certification of NPDES compliance, including completion of the Best Management Practice (BMP) checklist and submittal of a written BMP plan and drawings, prior to issuance of a grading 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://www.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.

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-8 Compost Filter Berm
 - b. SC-14 Brush or Rock Filter
3. Control offsite runoff from entering Construction Area
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 Management
 - 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.

DEPARTMENT OF PUBLIC WORKS COUNTY OF KAUAI	
APPROVED:	
	11-21-14
COUNTY ENGINEER	DATE



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COUNTY OF KAUAI DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION	
WATER POLLUTION AND EROSION CONTROL NOTES	
HARDY STREET IMPROVEMENTS	
Federal Aid Project No. STP 05720(1)	
Scale: As Noted	Date: September, 2014
SHEET No. 3 OF 5 SHEETS	

ENVIRONMENTAL NOTES

1. In accordance with Chapter 11-60.1, Air Pollution Control, Title 11, Hawai'i Administrative Rules, the Contractor shall be responsible for ensuring that effective control measures are provided to minimize or prevent any visible dust emission caused by the construction work from impacting the surrounding areas including the off-site roadways used to enter/exit the project. These measures include but are not limited to the use of water wagons, sprinkler systems, dust fences, etc.
2. In accordance with Chapter 11-55, Water Pollution Control and Chapter 11-54, Water Quality Standards, Title 11, Hawai'i Administrative Rules, the Contractor shall be responsible ensuring that the Best Management Practice (BMP) to minimize or prevent discharge of sediments, debris and other water pollutants into state waters is provided at all times.
3. In accordance with Chapter 11-58, Solid Waste Management Control, Title 11, Hawai'i Administrative Rules, the Contractor shall be responsible for ensuring that grub material, demolition waste and construction waste generated by the project are disposed of in a manner or at a site approved by the State Department of Health. Disposal of any of these wastes by burning is prohibited.
4. The Contractor shall be responsible for obtaining and paying for all applicable permits from the Department of Health including but not limited to National Pollutant Discharge Elimination System (NPDES), Notice of Intent and general permit for storm water, hydrostatic test and dewatering discharges prior to commencing construction. NPDES permit shall be required prior to grading or grubbing work over an area of one acre or more.
5. After each rainfall event, the Contractor shall remove all silt and debris resulting from this work and deposited in drainage facilities, roadways and other areas. The cost incurred for any necessary remedial action by the County engineer shall be payable by the contractor.
6. Best Management Practices (BMP's) shall be employed at all times to the maximum extent practicable prevent damage by sedimentation. Erosion or dust to streams, water courses, natural areas and the property of others.
7. The Contractor shall obtain and comply with National Pollution Discharge Elimination System (NPDES) permit requirements for all projects which will disturb one (1) acre or more of land. The Contractor shall not start construction until Notice of General Permit Coverage (NGPC) is received from the Department of Health, State of Hawaii, and has satisfied any other permitting requirements of the NPDES permit program.
8. In accordance with Chapter 11-46, Community Noise, Hawai'i Administrative Rules, the Contractor and the Property Owner/Developer shall be responsible for providing the effective control measures to minimize or prevent construction related noise from impacting the residents in the immediate area. If required, noise reduction measures shall be implemented by the contractor during construction work.
9. The Property may harbor rodents which will be dispersed to the surrounding areas when the site is cleared. In accordance with Chapter 11-26, entitled Vector Control of Title, 11, HAR, the applicant shall ascertain the presence or absence of rodents on the property. Should the presence of rodents be determined, the applicant shall eradicate the rodents prior to clearing the site.
10. A copy of the plans, construction schedule and/or written measures that is required to be submitted by the Contractor (dust control measures/plans) should be sent to the Department of Health for monitoring purposes.

EROSION CONTROL NOTES AND BEST MANAGEMENT PRACTICES (BMP)

1. Measures to control erosion and other pollutants shall be in place before any construction work is initiated. These measures shall be properly constructed and maintained throughout the construction period.
2. All control measures shall be checked and repaired as necessary.
3. Install site specific BMPs as shown per plans.
4. All storm drain inlets that may receive runoff as a result of the construction work shall use an inlet filter device (under grate drain guard or curb inlet guard as shown on plans) shall remain until completion of construction work. Contractor shall periodically inspect inlet filters, especially during heavy rainfall, to ensure drainage through material is maintained.
5. At the end of grading operation, existing storm drain inlets surrounding the project site shall be inspected and any accumulated sediment and debris found in the storm drain inlets shall be removed. Flushing into the the storm drains is prohibited.
6. Good housekeeping shall be utilized to ensure protection of roadways from mud, dirt, and debris.
7. The contractor shall ensure that all tires of construction vehicles are sufficiently cleaned off so that dirt and debris is not tracked off the construction site. Washing off tires with water will not be acceptable unless the runoff is contained and does not enter the storm drain system or into State's right of way.
8. The contractor shall ensure that existing roadways used to access the project are cleaned of all debris, trash, dirt, mud, etc., throughout the working day.
9. All grading work shall be done in accordance with local agency standards and the project's Geotechnical Soils Report by Hirata and Associates dated February 10, 2014.
10. The contractor shall maintain all temporary BMP measures until the entire area is completely stabilized. All BMP measures shall be removed immediately after the area is completely stabilized.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	11	145

DEPARTMENT OF PUBLIC WORKS COUNTY OF KAUAI	
APPROVED:	
	<u>4-21-14</u> DATE
COUNTY ENGINEER	



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 APRIL 30, 2016
 SIGNATURE:  EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION	
<u>WATER POLLUTION AND EROSION CONTROL NOTES</u>	
<u>HARDY STREET IMPROVEMENTS</u>	
<u>Federal Aid Project No. STP 05720(1)</u>	
Scale: As Noted	Date: September, 2014
SHEET No. 4 OF 5 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	11A	145

GRADING NOTES

Temporary Dust Control Measures for Grading

1. The graded or project site that is cleared of vegetation shall be kept damp with water continuously for seven (7) days a week. At the end of each day, the site shall be sufficiently dampened with water on a continual basis so that the site will remain moistened during the night.
2. The Contractor shall conduct his operations so that excavation, embankment, and imported material shall be dampened with water on a continual basis to prevent dust problems.
3. In applying for a grading permit, the Contractor shall submit plans, schedules and/or written measures which provides for dust control. The dust control measures shall contain positive statements which require actions or work that prevent dust problems. No permits will be issued unless the county is assured that dust problems will be minimized.

Temporary Erosion Control Measures for Grading

1. Temporary vegetative cover shall be planted within a period of 30 calendar days after the site has been graded or bared of vegetation or if the site will be suspended for more than 30 calendar days.
2. Temporary vegetative cover shall consist of 40 lbs. common rye grass seed per acre, 400 lbs. per acre 10-10-10 or equivalent fertilizer worked into the seed bed before planting. Temporary sprinkler system is to be installed concurrently with all plantings and maintenance of grass shall conform to the "Hawaii Standard Specifications for Road and Bridge Construction, 2005" and its amendments.

Permanent Erosion Control Measures for Grading

1. The Contractor shall grass the entire project site, except paved areas with Bermuda grass sprigs. The grass shall be planted, fertilized, and maintained in accordance with the "Hawaii Standard Specifications for Road and Bridge Construction, 2005" and its amendments.
2. The Contractor shall grass all exposed areas that have been constructed to final grades within a period of 30 calendar days.
3. In lieu of grass sprigs (note 1), the Contractor may use hydromulch with seedings and irrigation sprinkler system.

Grading Phases

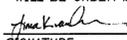
1. When grading work is done in phases, the engineer must accept the completed phase prior to start of work on the next phase. Even after a completed phase has been accepted, the grassing or other means of stabilization must be maintained until project completion.

ENVIRONMENTAL CONTROL NOTES FOR GRADING

1. In accordance with Chapter 11-60.1, Air Pollution Control, Title 11, Hawai'i Administrative Rules, the property owner/developer shall be responsible for ensuring that effective control measures are provided to minimize or prevent any visible dust emission caused by the construction work from impacting the surrounding areas including the off-site roadways used to enter/exit the project. these measures include but are not limited to the use of water wagons, sprinkler system, dust fences, etc.
2. In accordance with Chapter 11-55, Water Pollution Control and Chapter 11-54, Water Quality Standards, Title 11, Hawai'i Administrative Rules, the property owner/developer shall responsible for ensuring that the Best Management Practices (BMP) to minimize or prevent the discharge of sediments, debris and other water pollutant into state waters is provided at all times.
3. In accordance with Chapter 11-58, Solid Waste Management Control, Title 11, Hawai'i Administrative Rules, the property owner/developer shall be responsible for ensuring that grub material, demolition waste and construction waste generated by the project are disposed of in a manner or at a site approved by the State Department of Health. Disposal of any of these wastes by burning is prohibited.
4. The property owner/developer shall be responsible for obtaining and paying for all applicable permits from the department of health including but not limited to National Pollution Discharge Elimination System (NPDES), notice of intent and general permit for storm water, hydrostatic test and dewatering discharges prior to commencing construction. NPDES permit shall be required prior to grading or grubbing work over an area of one acre or more.
5. After each rainfall event, the Contractor shall remove all silt and debris resulting from this work and deposited in drainage facilities, roadways and other areas. The cost incurred for any necessary remedial action by the county engineer shall be payable by the Contractor.
6. Best Management Practices (BMP's) shall be employed at all times to the maximum extent practicable to prevent damage by sedimentation, erosion or dust to streams, water courses, natural areas and the property of others.
7. The Contractor shall obtain and comply with National Pollution Discharge Elimination System (NPDES) permit requirements for all projects which will disturb one (1) acre or more of land. The Contractor shall not start construction until Notice of General Permit Coverage (NGPC) is received from the Department of Health, state of Hawai'i and has satisfied any other permitting requirements of the NPDES permit program.
8. In accordance with Chapter 11-46, Community Noise, Hawai'i Administrative Rules, the Contractor and the property owner/developer shall be responsible for providing effective control measures to minimize or prevent construction related noise from impacting the residents in the immediate area. If required, noise reduction measures shall be implemented by the Contractor during the construction work.
9. The property may harbor rodents which will be dispersed to the surrounding areas when the site is cleared. in accordance with Chapter 11-26, entitled Vector Control of Title 11, HAR, the applicant shall ascertain the presence or absence of rodents on the property. Should the presence of rodents be determined, the applicant shall eradicate the rodents prior to clearing the site.
10. A copy of the plans, construction schedule and/or written measures that is required to be submitted by the Contractor (dust control measures/plans) should also be sent to the Department of Health for monitoring purposes.

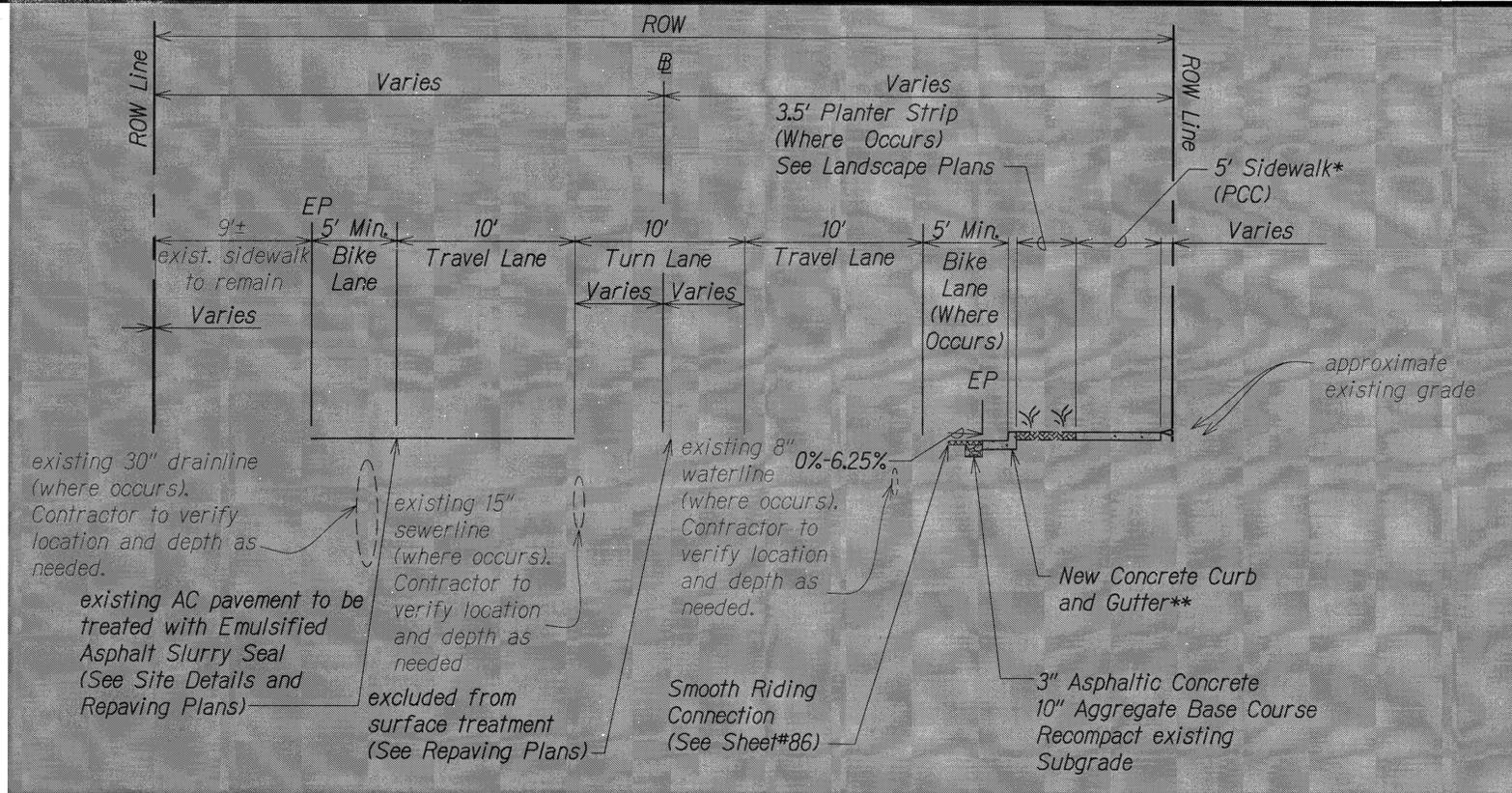
DEPARTMENT OF PUBLIC WORKS COUNTY OF KAUAI	
APPROVED:	
	11-21-14
COUNTY ENGINEER	DATE



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EXPIRATION DATE
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COUNTY OF KAUAI DEPARTMENT OF PUBLIC WORKS BUILDING DIVISION	
GRADING NOTES	
HARDY STREET IMPROVEMENTS	
Federal Aid Project No. STP 05720(1)	
Scale: As Noted	Date: September, 2014
SHEET No. 4 OF 4 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	12	145



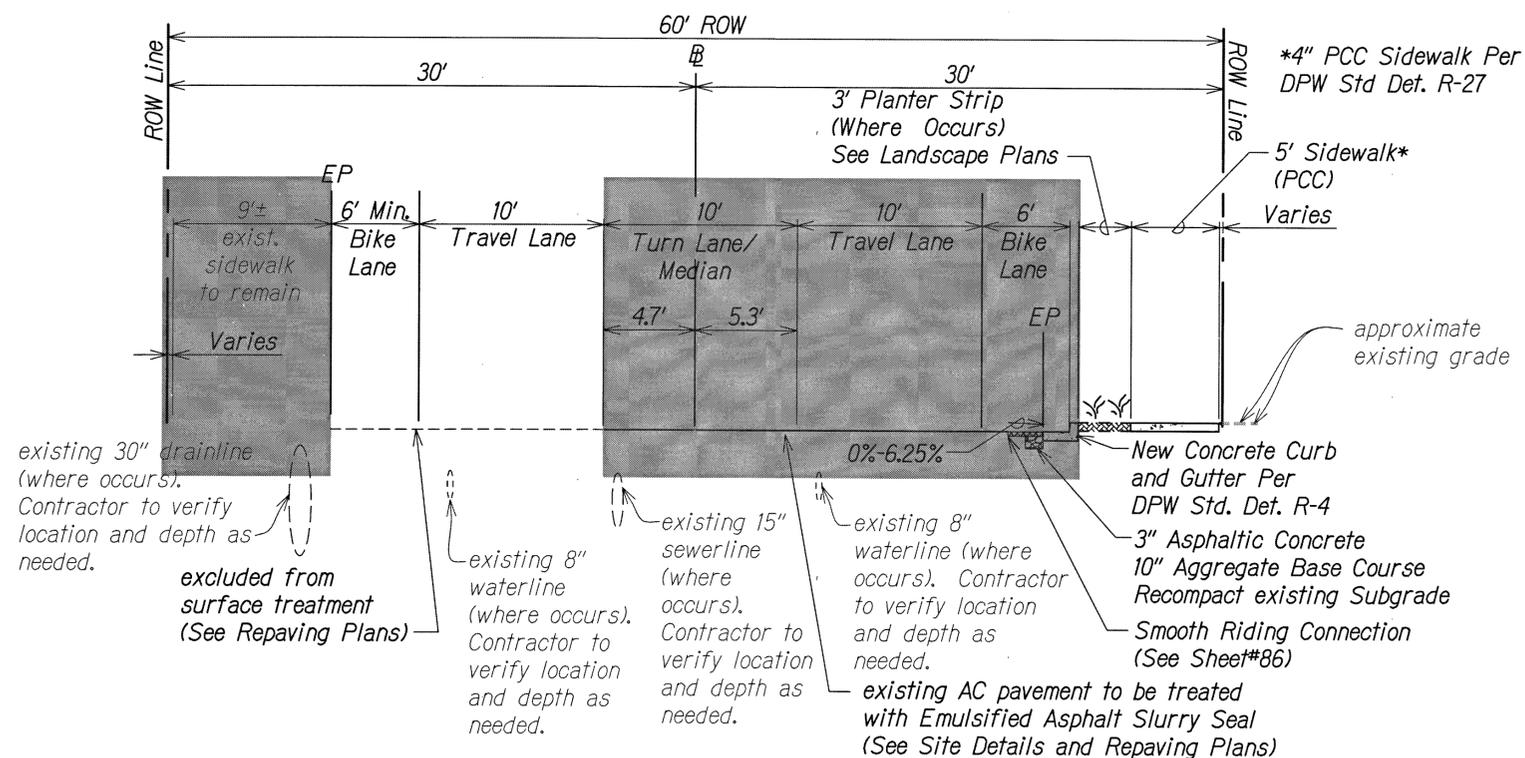
*Use 4" Sidewalk, Class A concrete per HDOT Std Plan D-15 for Sta. 0+00 to Sta. 0+43±
 Use 4" Sidewalk, Class B concrete per DPW Std Det. R-27 for Sta. 0+43± to 1+85±

**Use Type 2DG Curb and Gutter per HDOT Std. Plan D-05 for Sta. 0+00 to Sta. 0+43±
 Use DPW Std. Det R-4 for Sta. 0+43± to 1+85±

NOTE:
 Hatched areas at the intersection of Kuhio Highway, and along Hardy Street are not included for construction. Final design and approval is still pending. Approved design and plans to be provided as part of change order.

Hardy Street - Kuhio Highway to Akahi Street (Sta. 0+00 to Sta. 1+85±)

Scale: Not to Scale



Hardy Street - Kuhio Highway to Akahi Street (Sta. 1+85± to Sta. 4+27±)

Scale: Not to Scale

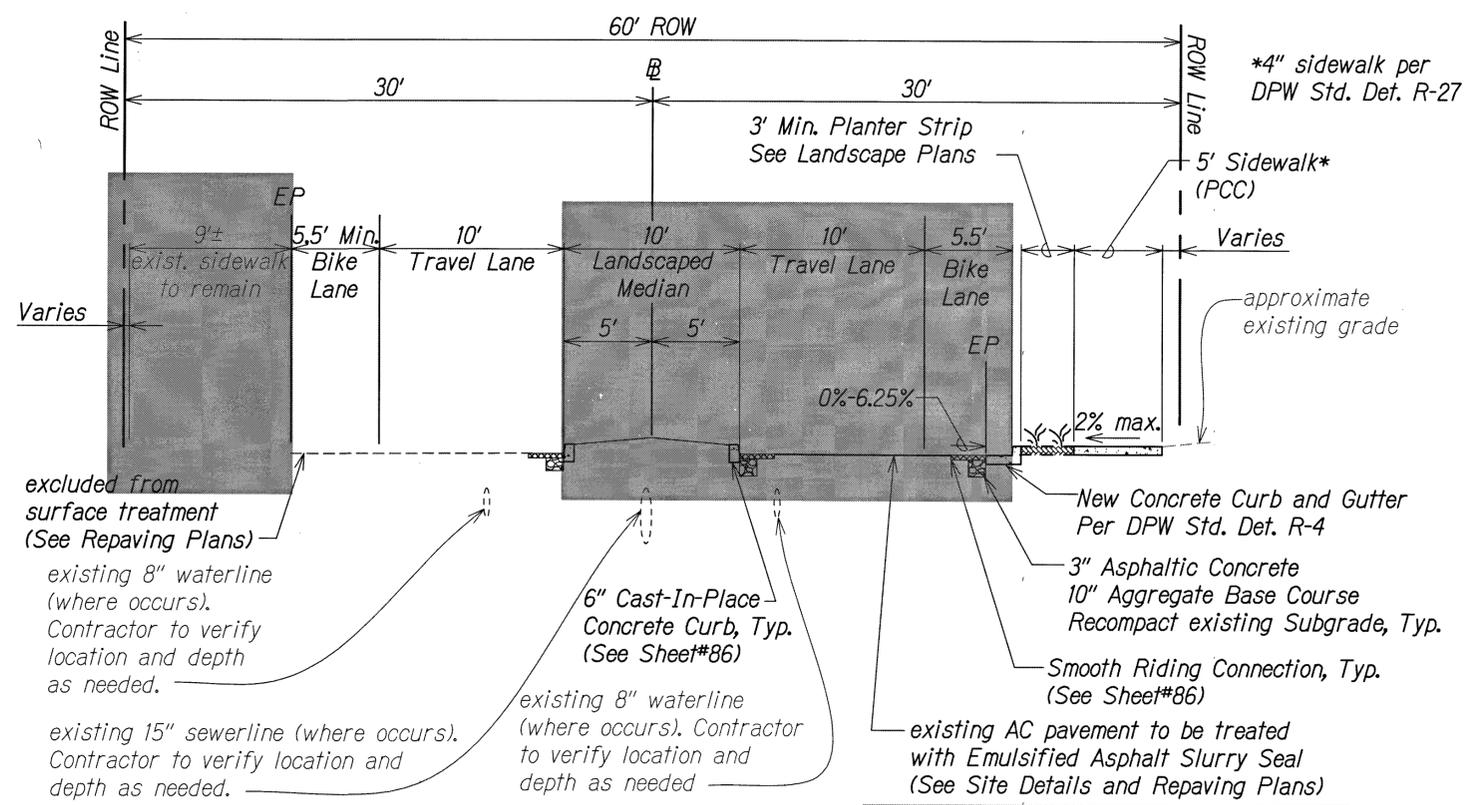
DEPARTMENT OF PUBLIC WORKS
 COUNTY OF KAUAI
 APPROVED:
 COUNTY ENGINEER DATE: 11-24-14



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 SIGNATURE: Fiona K. Van Amers
 EXPIRATION DATE OF THE LICENSE: APRIL 30, 2016

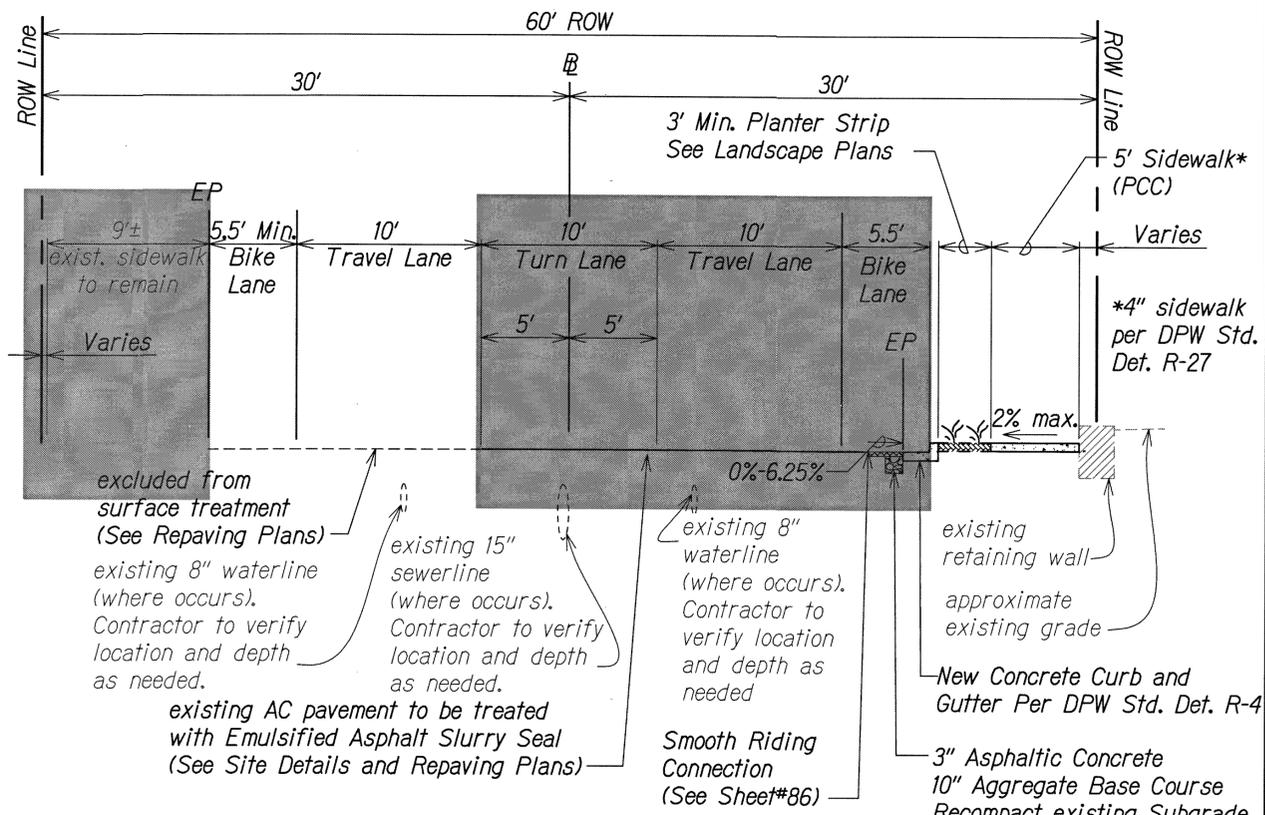
COUNTY OF KAUAI
 DEPARTMENT OF PUBLIC WORKS
 BUILDING DIVISION
ROADWAY SECTIONS
HARDY STREET IMPROVEMENTS
 Federal Aid Project No. STP 05720(1)
 Scale: As Noted Date: September, 2014
 SHEET No. 1 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	13	145



Hardy Street - Akahi Street to Eiwa Street (Sta. 4+63± to Sta. 5+40±)

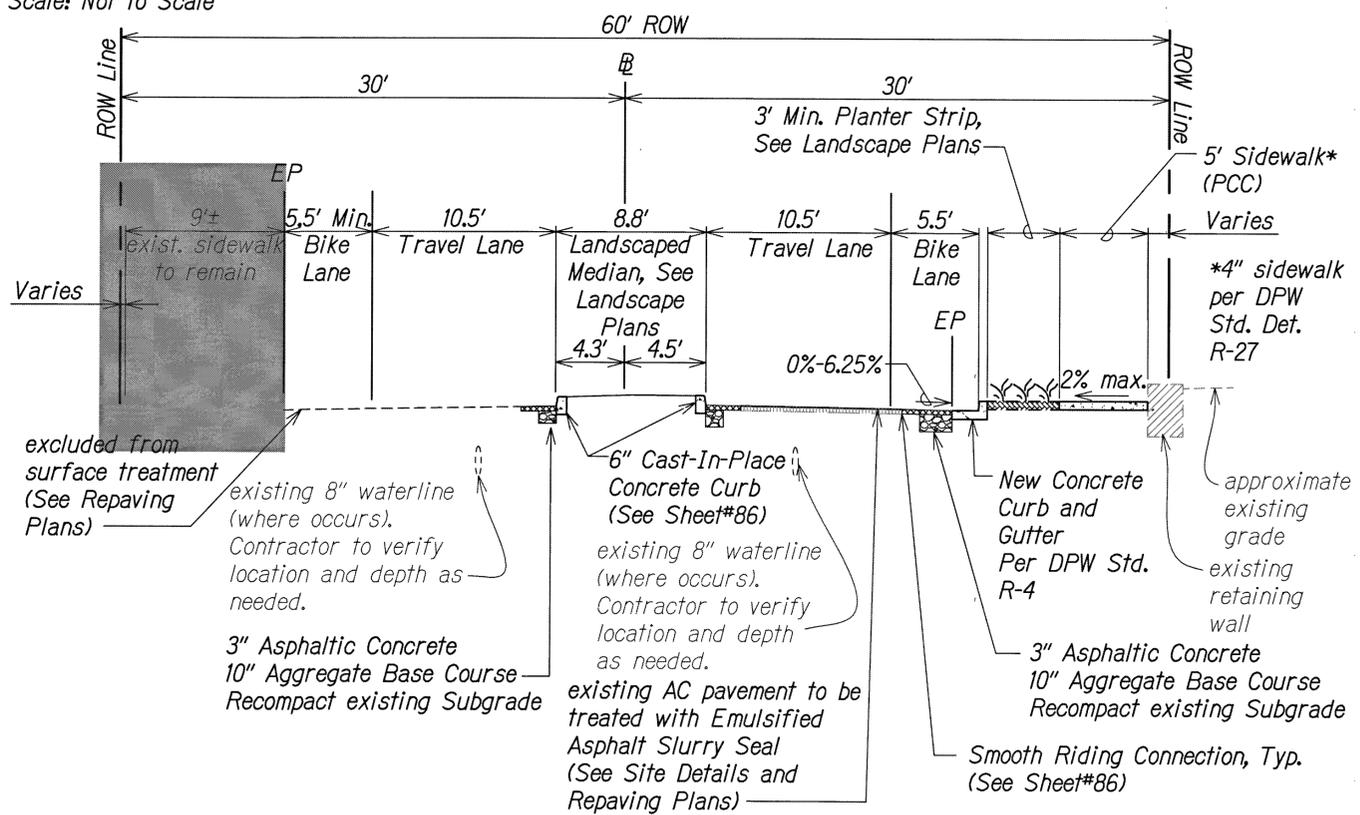
Scale: Not to Scale



Hardy Street - Eiwa Street to Elua Street (Sta. 5+72± to Sta. 7+40±)

Scale: Not to Scale

NOTE:
Hatched stations and areas along Hardy Street are not included for construction. Final design and approval is still pending. Approved design and plans to be provided as part of change order.



Hardy Street - Elua Street to Umi Street (Sta. 7+68± to Sta. 8+64±)

Scale: Not to Scale

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
[Signature]
COUNTY ENGINEER DATE



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APRIL 30, 2016
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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

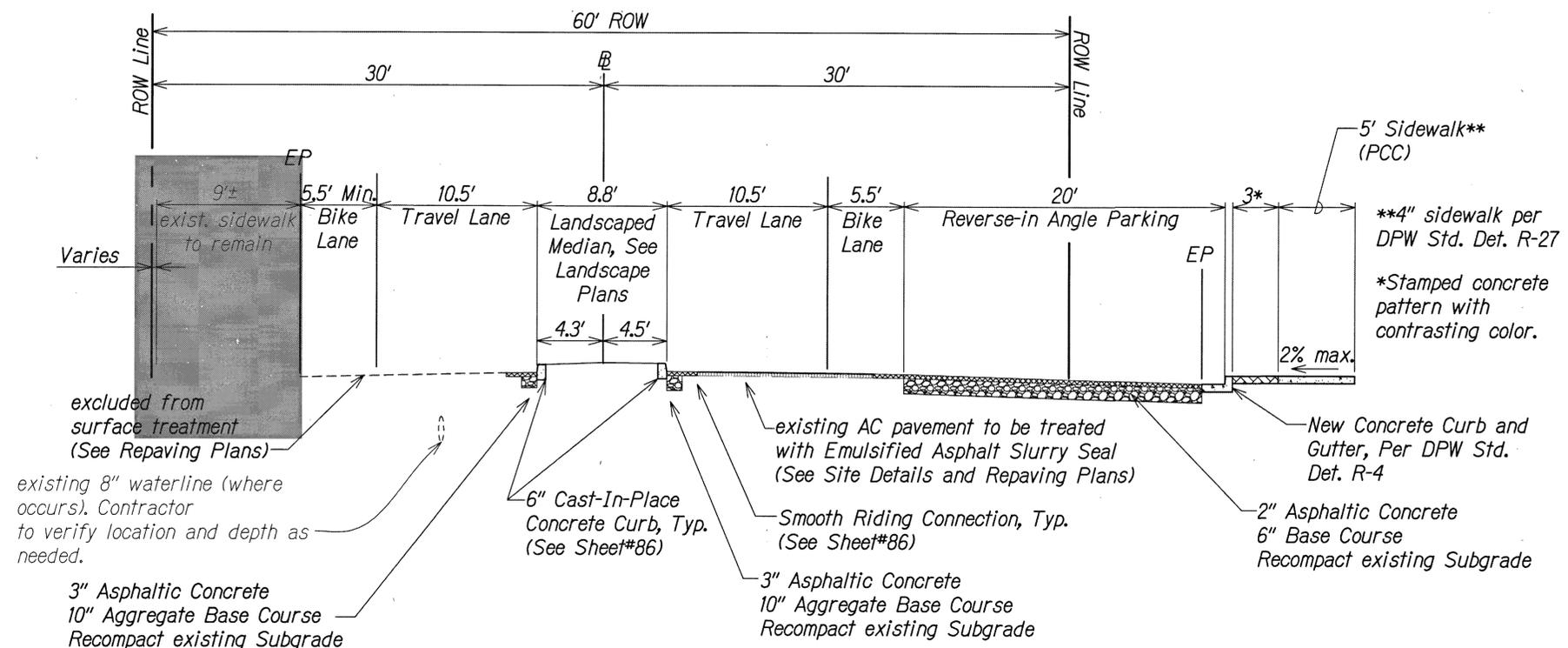
ROADWAY SECTIONS

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 2 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	13A	145



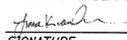
Hardy Street - Elua Street to Umi Street (Sta. 8+64± to Sta. 9+45±)
 Scale: Not to Scale

NOTE:
 Hatched areas along Hardy Street are not included for construction. Final design and approval is still pending. Approved design and plans to be provided as part of change order.

DEPARTMENT OF PUBLIC WORKS
 COUNTY OF KAUAI
 APPROVED:

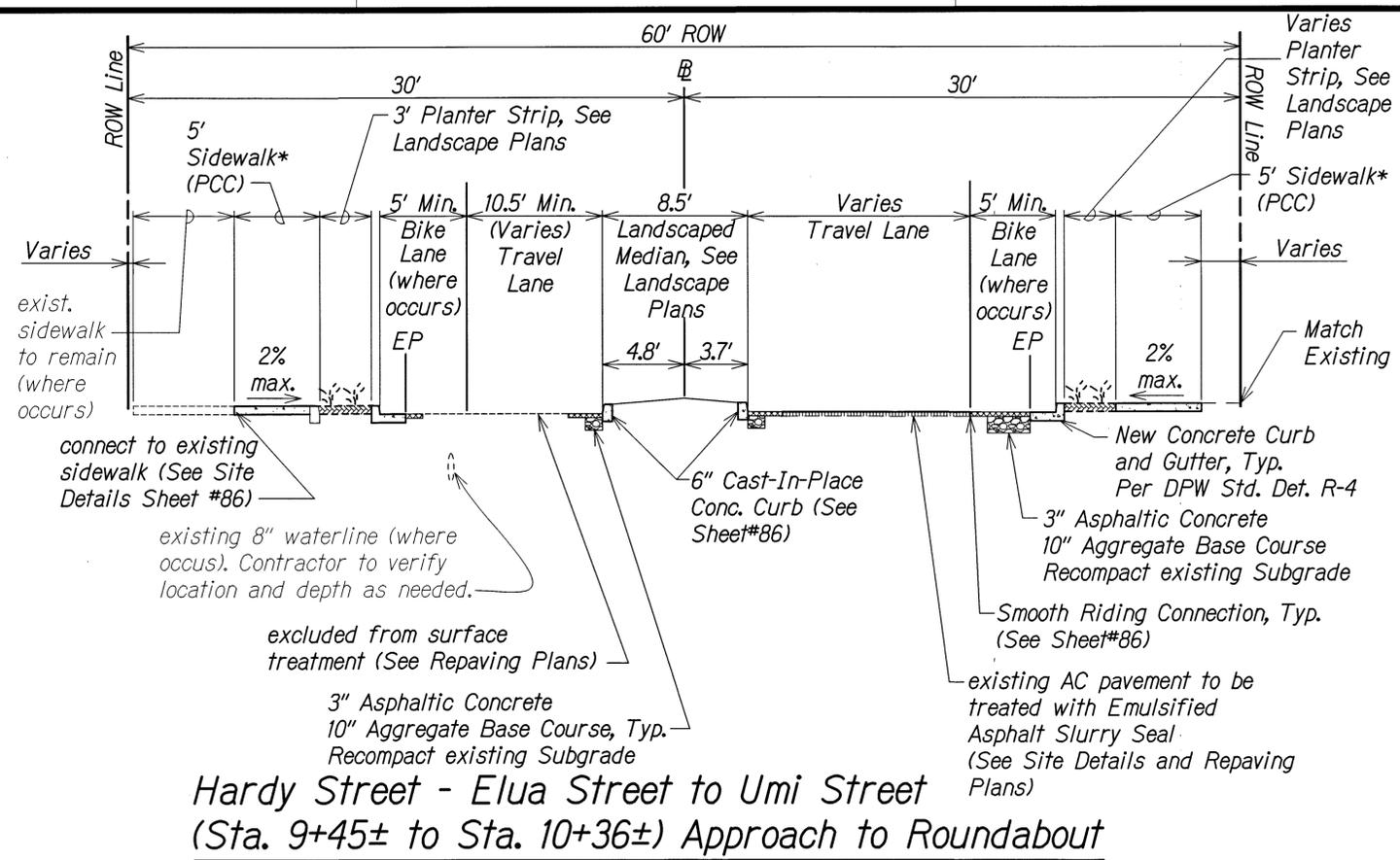
 COUNTY ENGINEER DATE: 11-24-14



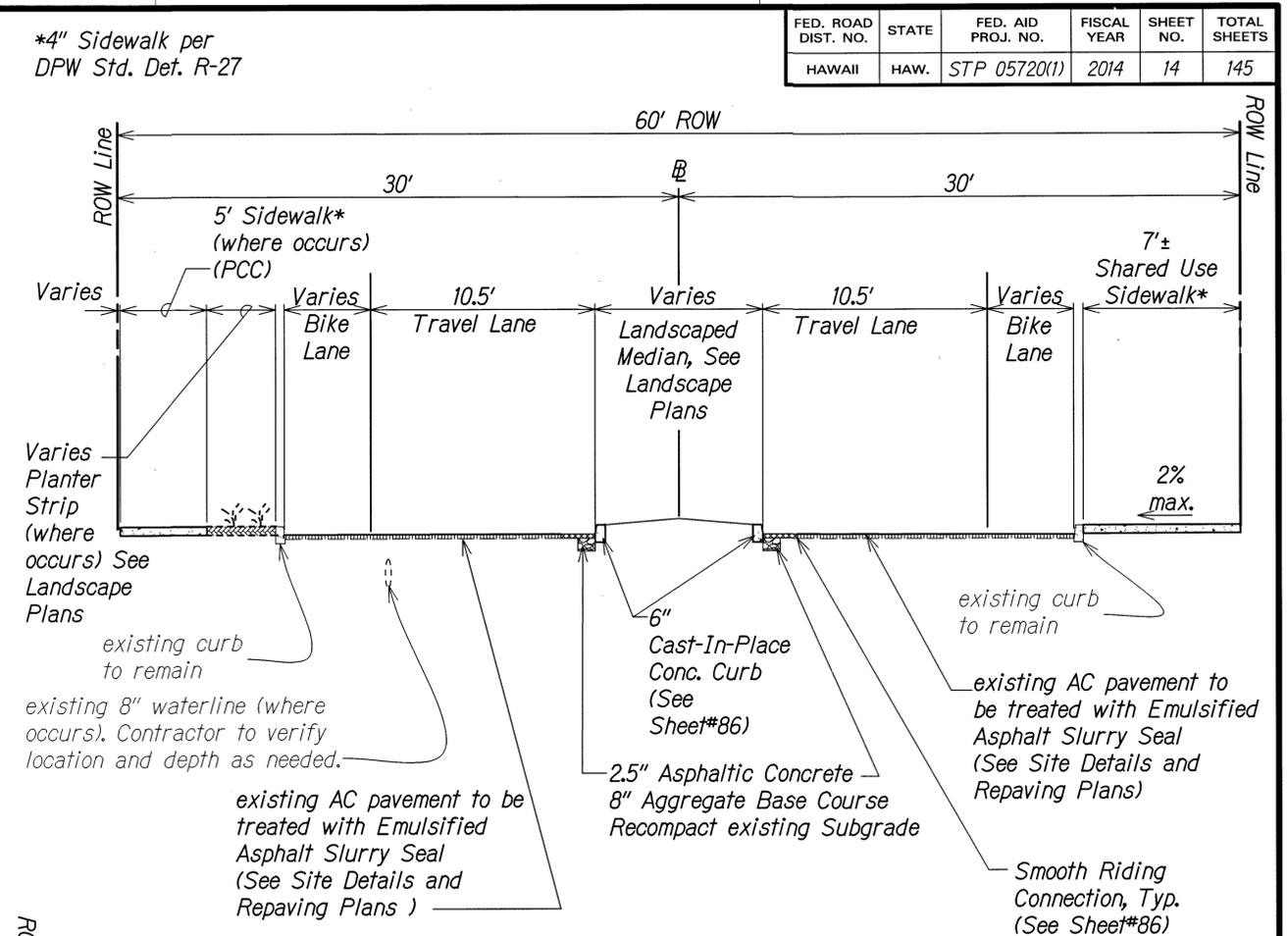
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COUNTY OF KAUAI
 DEPARTMENT OF PUBLIC WORKS
 BUILDING DIVISION
ROADWAY SECTIONS
HARDY STREET IMPROVEMENTS
 Federal Aid Project No. STP 05720(1)
 Scale: As Noted Date: September, 2014
 SHEET No. 3 OF 6 SHEETS

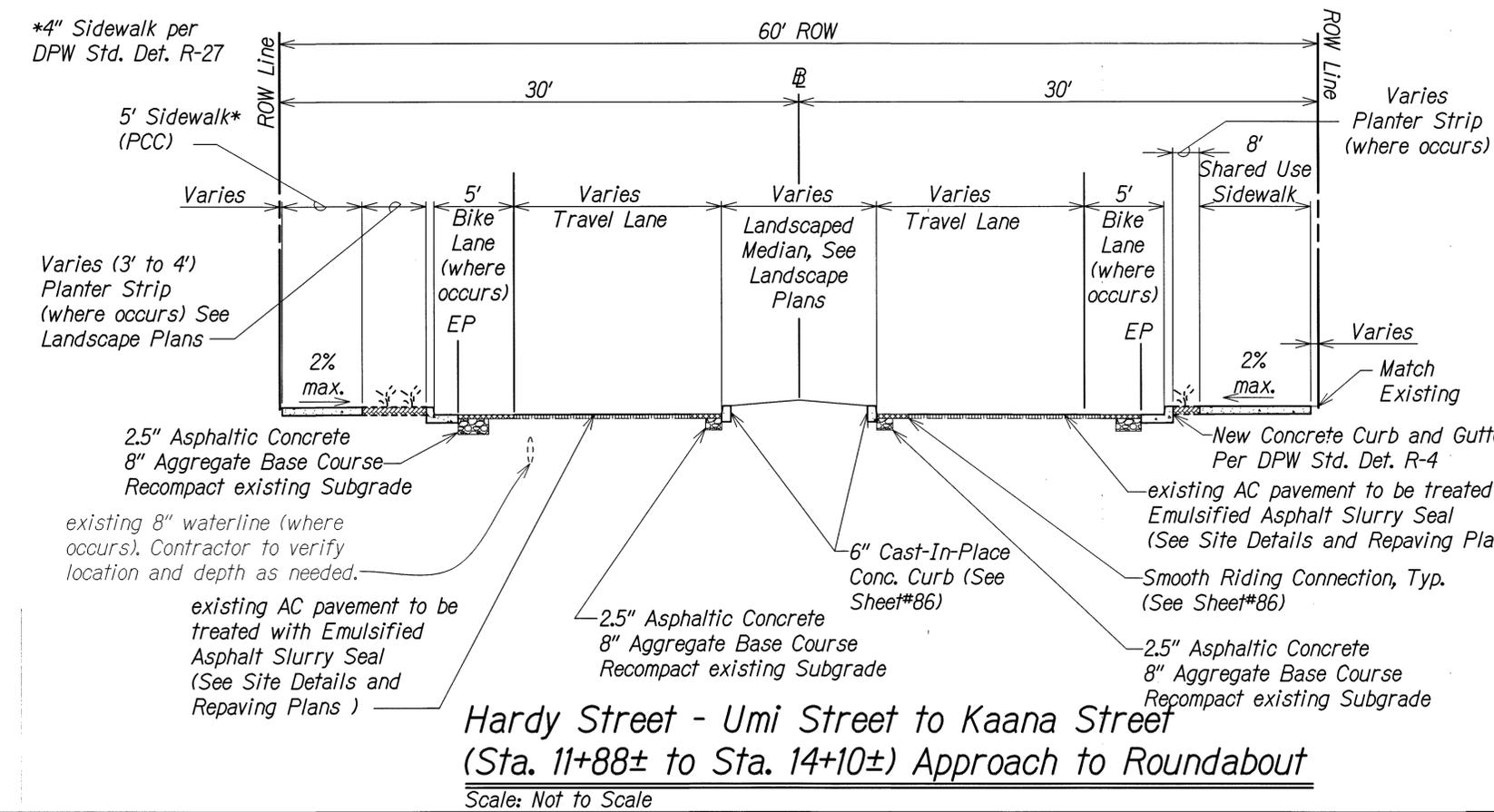
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	14	145



**Hardy Street - Elua Street to Umi Street
(Sta. 9+45± to Sta. 10+36±) Approach to Roundabout**
Scale: Not to Scale



**Maintain Existing Curb
Hardy Street - Umi Street to Kaana Street
(Sta. 13+10± to Sta. 14+10±) Approach to Roundabout**
Scale: Not to Scale



**Hardy Street - Umi Street to Kaana Street
(Sta. 11+88± to Sta. 14+10±) Approach to Roundabout**
Scale: Not to Scale

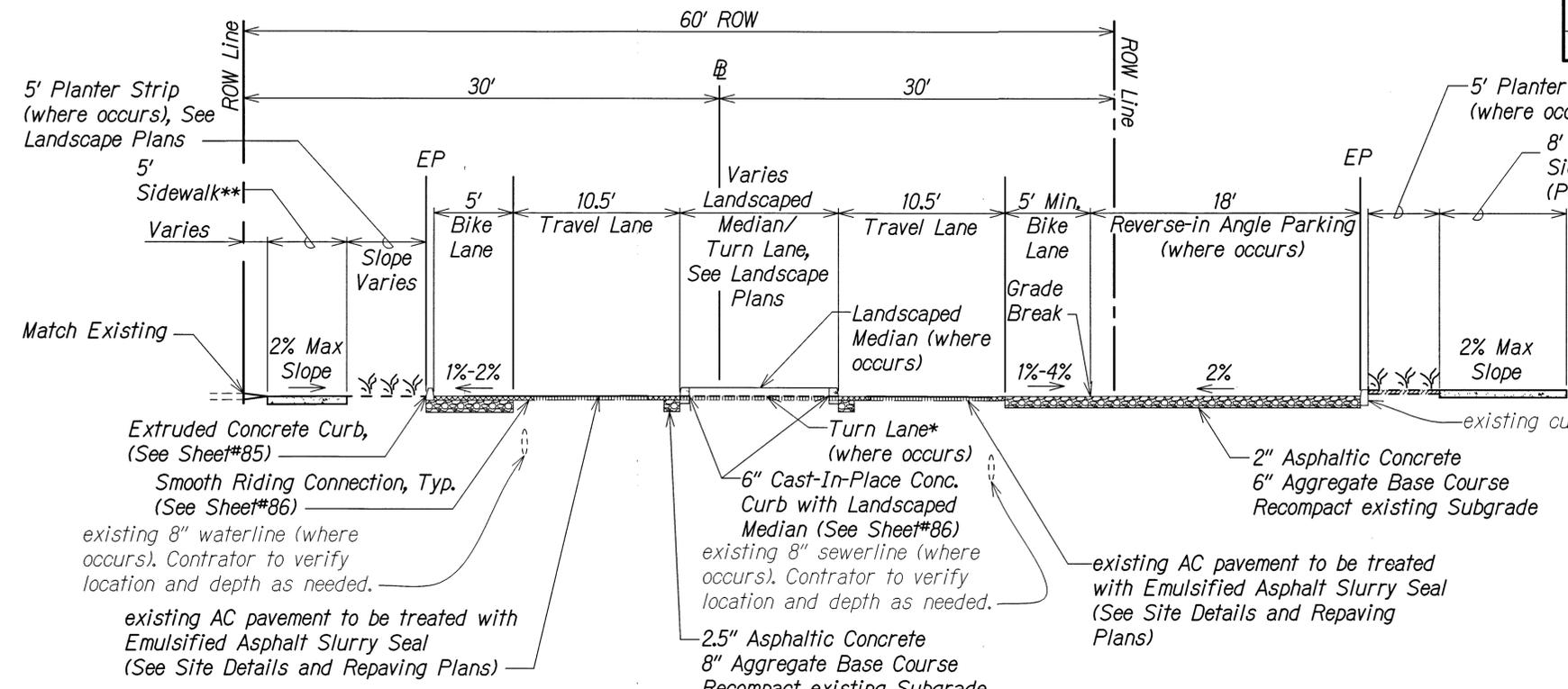
DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED: _____ DATE: 11/21/14
COUNTY ENGINEER



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
SIGNATURE: _____ DATE: APRIL 30, 2016
EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION
ROADWAY SECTIONS
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)
Scale: As Noted Date: September, 2014
SHEET No. 4 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	15	145

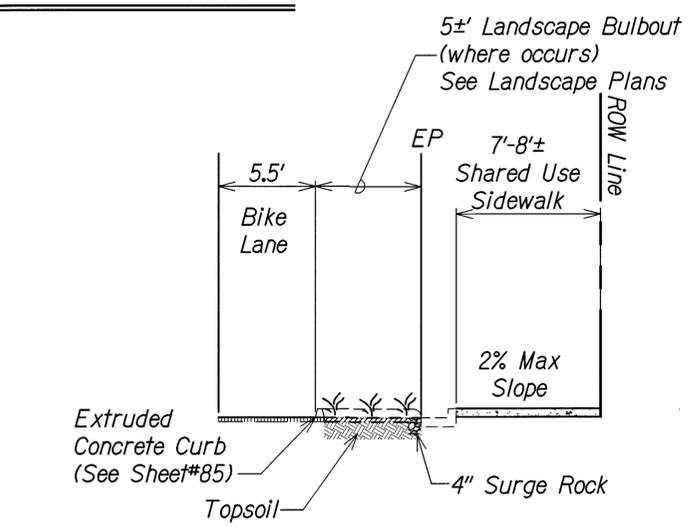
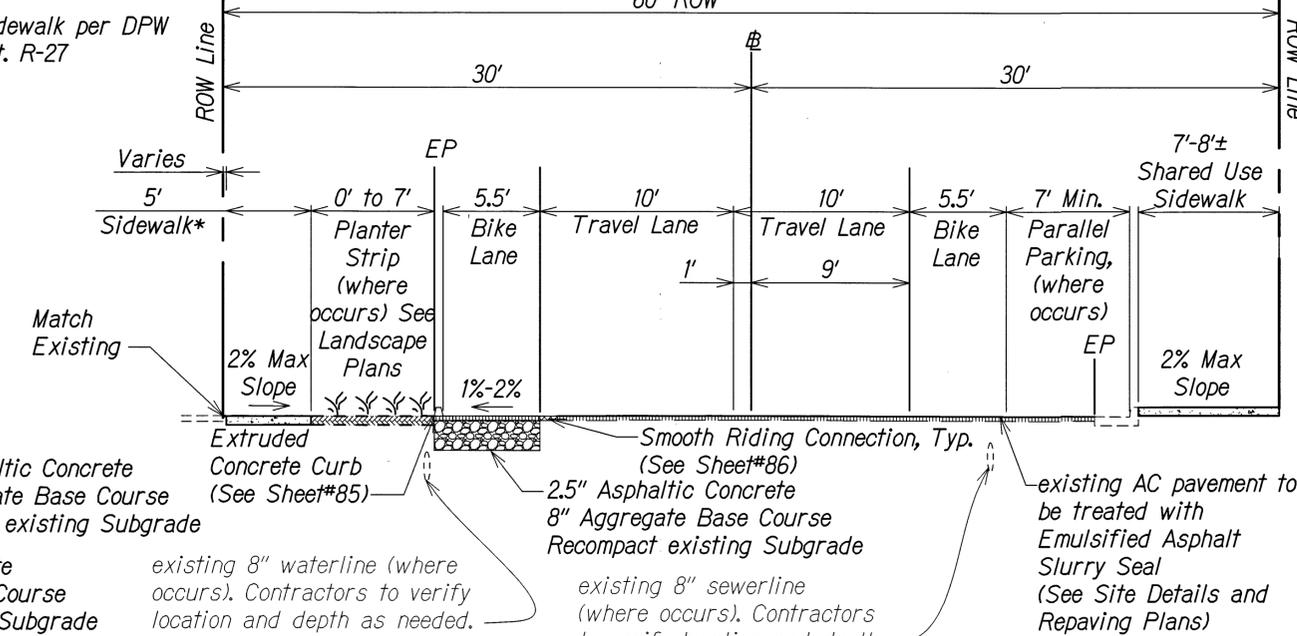
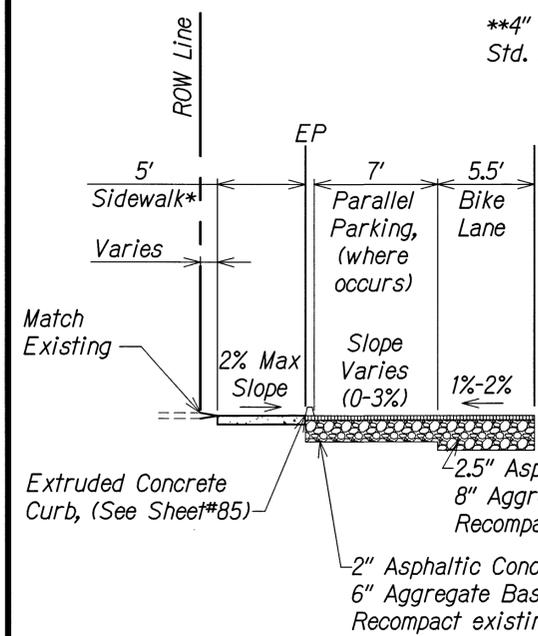


*Turn Lane (where occurs). Existing AC pavement to be treated with Emulsified Asphalt Slurry Seal (See Site Details and Repaving Plans)

**4" Sidewalk per DPW Std. Det. R-27

Hardy Street - Umi Street to Kaana Street (Sta. 14+84± to Sta. 18+75±)

Scale: Not to Scale



**Where Landscape Bulbout Occurs
Hardy Street - Kaana Street to Malae Street (Sta. 18+75± to Sta. 26+73±)**

Scale: Not to Scale

Where Parking Occurs Hardy Street - Kaana Street to Malae Street (Sta. 20+07± to Sta. 26+73±)

Scale: Not to Scale

Hardy Street - Kaana Street to Malae Street (Sta. 18+75± to Sta. 26+73±)

Scale: Not to Scale

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED: *[Signature]*
COUNTY ENGINEER



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[Signature] APRIL 30, 2016
SIGNATURE EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

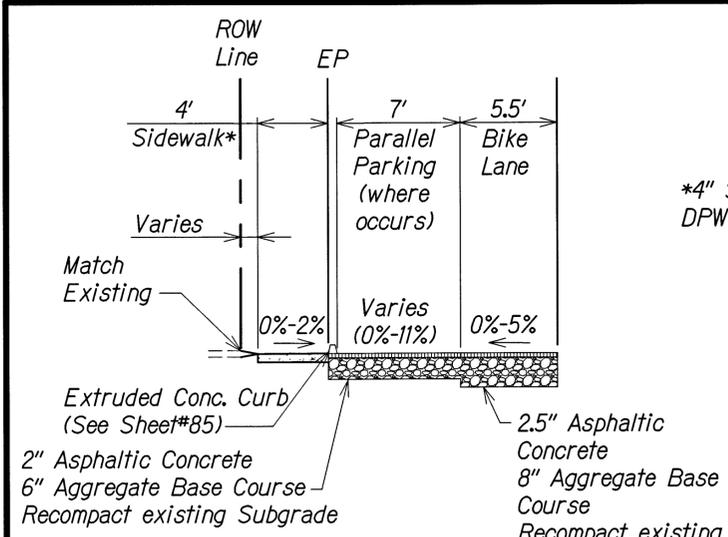
ROADWAY SECTIONS

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

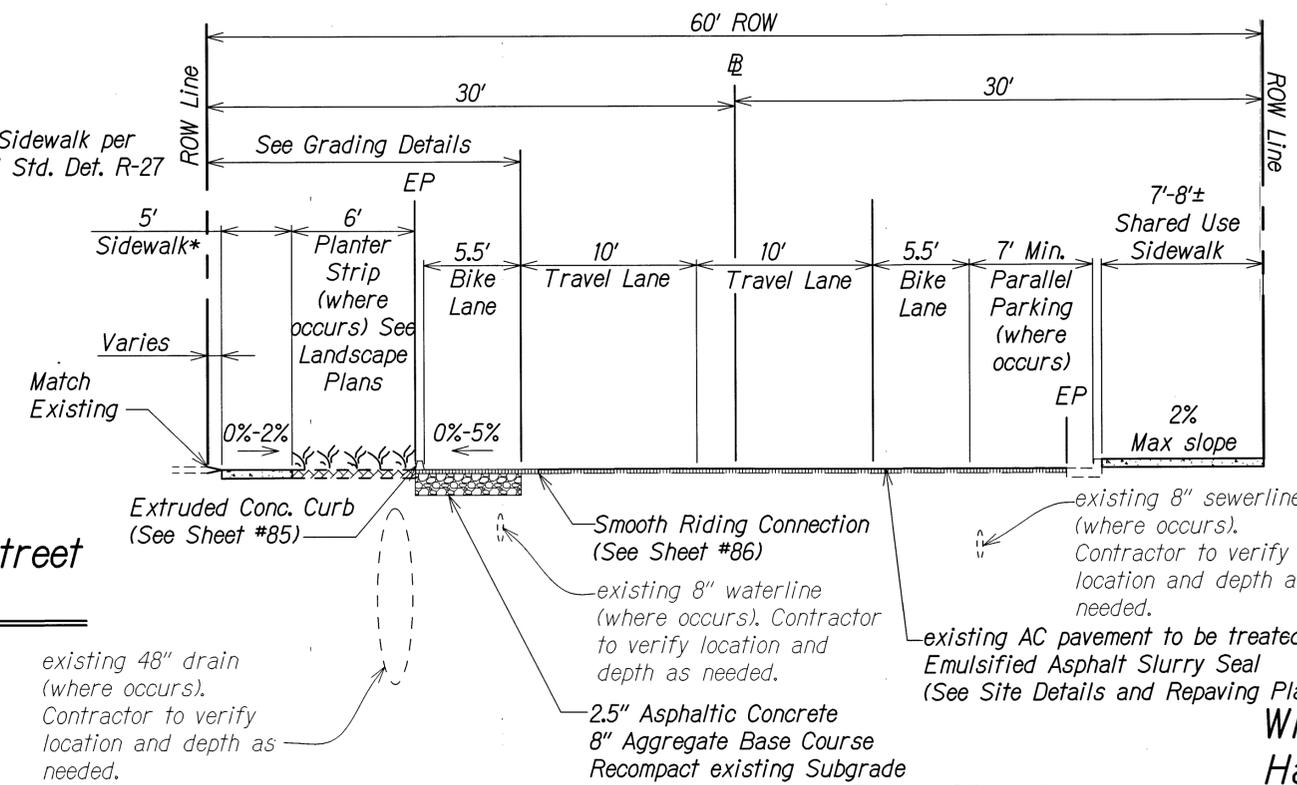
Scale: As Noted Date: September, 2014

SHEET No. 5 OF 6 SHEETS

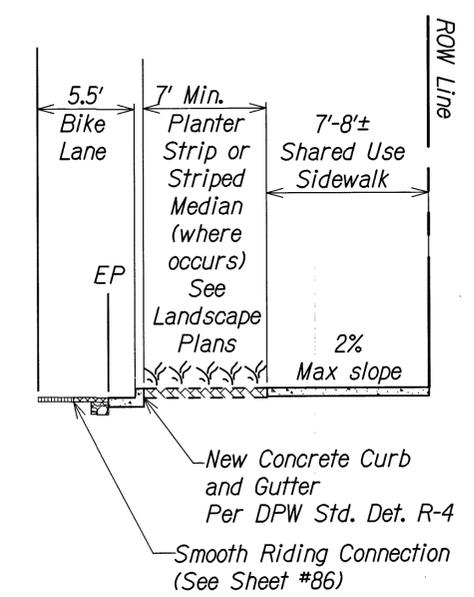
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	16	145



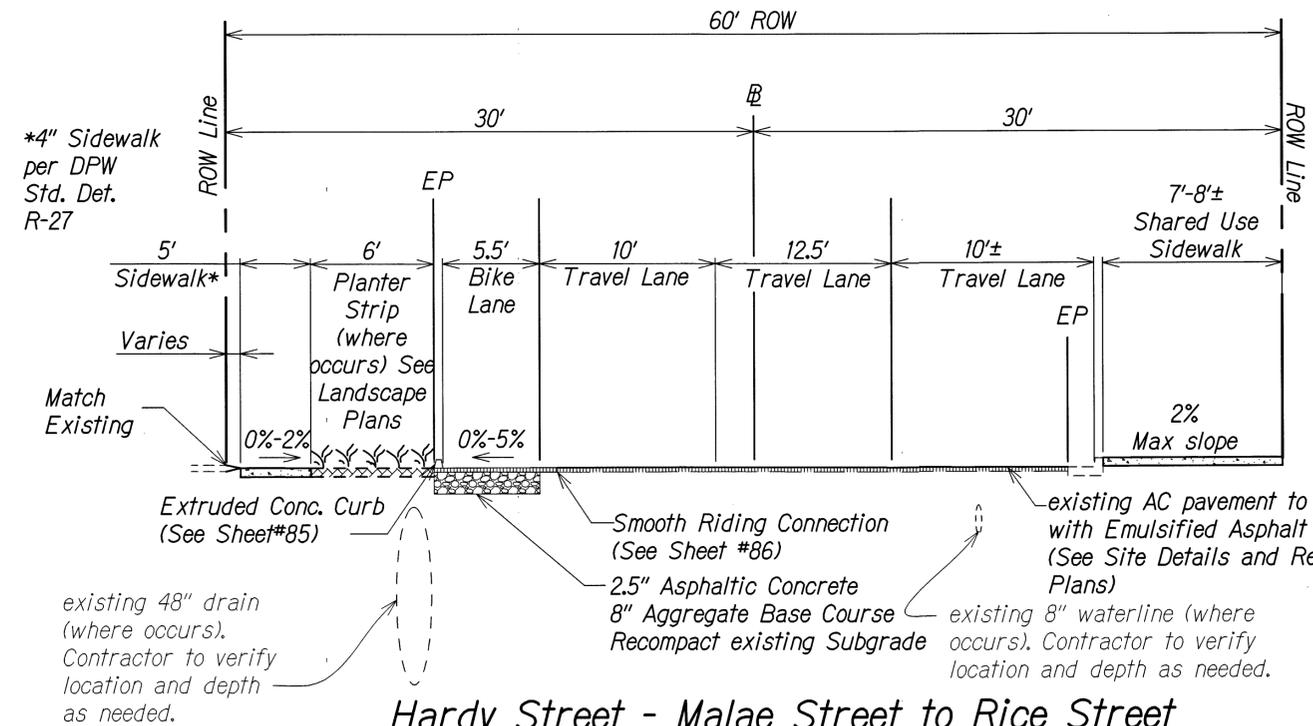
Where Parking Occurs
Hardy Street - Malae Street to Rice Street
(Sta. 26+73± to Sta. 36+26±)
 Scale: Not to Scale



Where Planter Strip Occurs
Hardy Street - Malae Street to Rice Street
(Sta. 26+73± to Sta. 34+20±)
 Scale: Not to Scale



Where Planter Strip Occurs
Hardy Street - Malae Street to Rice Street
(Sta. 26+73± to Sta. 34+20±)
 Scale: Not to Scale



Hardy Street - Malae Street to Rice Street
(Sta. 34+20± to Sta. 36+26±)
 Scale: Not to Scale

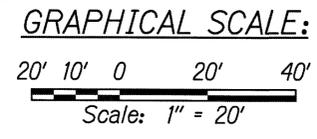
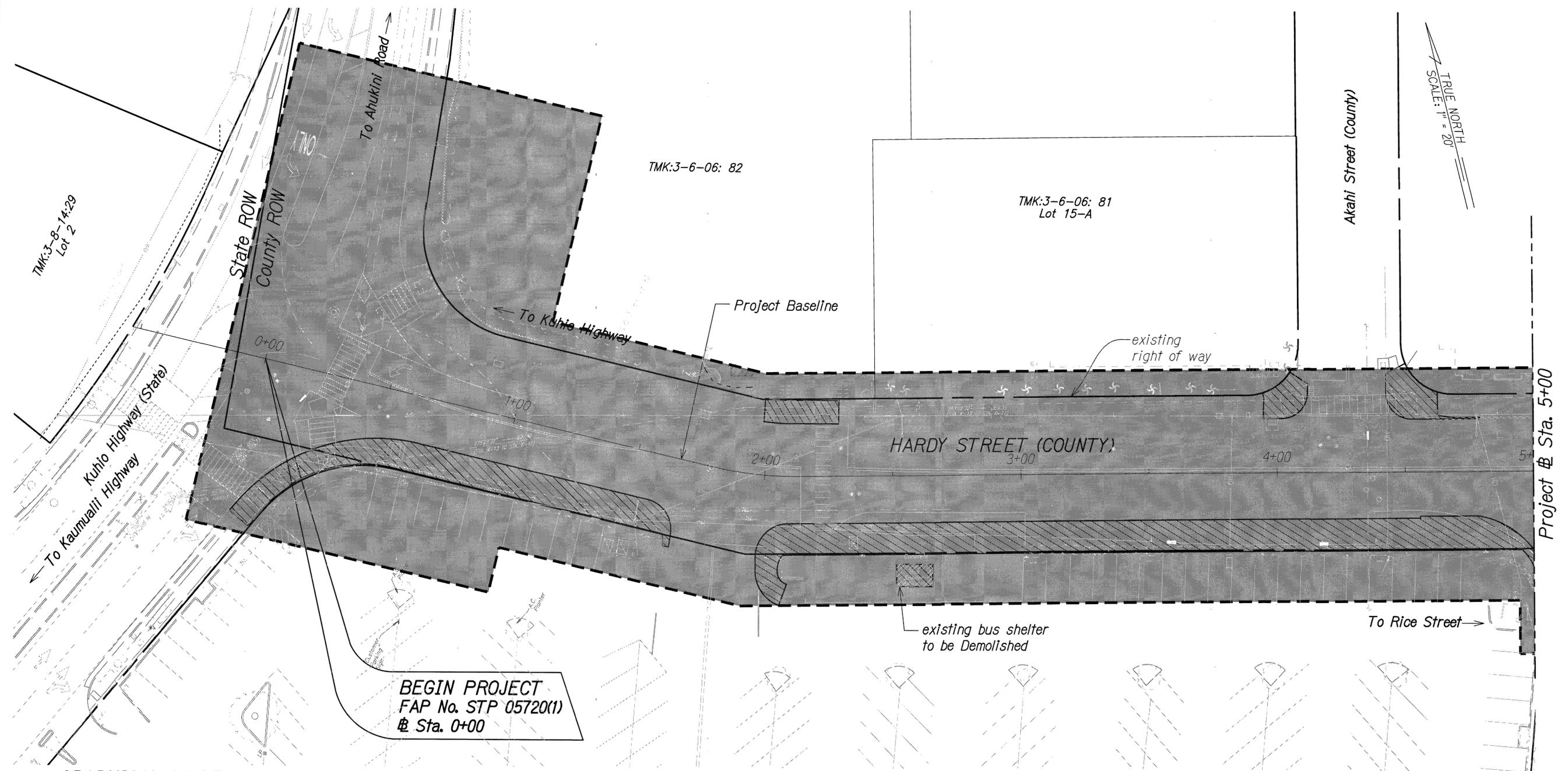


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 APRIL 30, 2016
 SIGNATURE OF THE LICENSEE

DEPARTMENT OF PUBLIC WORKS
 COUNTY OF KAUAI
 APPROVED:
 COUNTY ENGINEER
 DATE: 11-21-14

COUNTY OF KAUAI
 DEPARTMENT OF PUBLIC WORKS
 BUILDING DIVISION
ROADWAY SECTIONS
HARDY STREET IMPROVEMENTS
 Federal Aid Project No. STP 05720(1)
 Scale: As Noted Date: September, 2014
 SHEET No. 6 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	17	145



LEGEND:

Approximate limits of demolition include removal of existing pavement, curb, gutter, sidewalk, landscaping and structures. Limits also include clearing, grubbing, grading, and other site preparations.

- NOTES:**
1. See Striping and Signage Plans for signs that will be removed, relocated and re-used.
 2. See Repaving Plans for limits of pavement to be treated and proposed improvements.
 3. See Water and Sewer Plans, Irrigation Plans, Drainage Plans and Electrical Plans for utilities that will be removed, relocated and re-used.
 4. Hatched areas along Hardy Street are not included for construction. Final design and approval is still pending. Approved design and plans to be provided as part of change order.

PLAN
Scale: 1" = 20'

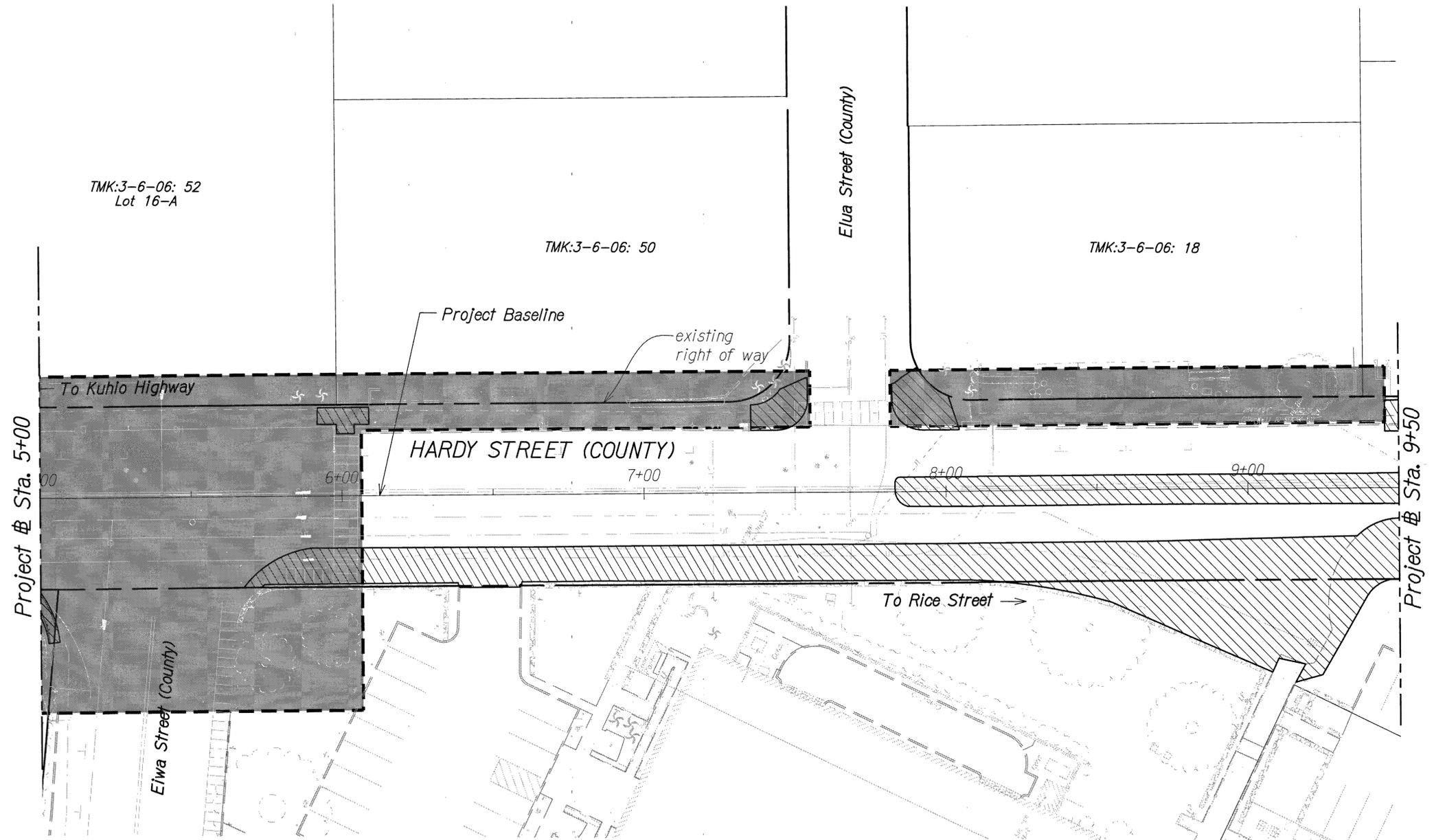
BEGIN PROJECT
FAP No. STP 05720(1)
@ Sta. 0+00

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED: **12/14**
COUNTY ENGINEER DATE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
SIGNATURE: EXPIRATION DATE OF THE LICENSE: APRIL 30, 2016

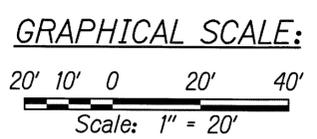
COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION
EXISTING CONDITION AND DEMOLITION LIMITS PLAN
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)
Scale: As Noted Date: September, 2014
SHEET No. 1 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	18	145



TRUE NORTH
SCALE: 1" = 20'

PLAN
Scale: 1" = 20'



LEGEND:

Approximate limits of demolition include removal of existing pavement, curb, gutter, sidewalk, landscaping and structures. Limits also include clearing, grubbing, grading, and other site preparations.

- NOTES:**
1. See Striping and Signage Plans for signs that will be removed, relocated and re-used.
 2. See Repaving Plans for limits of pavement to be treated and proposed improvements.
 3. See Water and Sewer Plans, Irrigation Plans, Drainage Plans and Electrical Plans for utilities that will be removed, relocated and re-used.
 4. Hatched areas along Hardy Street are not included for construction. Final design and approval is still pending. Approved design and plans to be provided as part of change order.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI

APPROVED:

COUNTY ENGINEER

4-24-14 DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

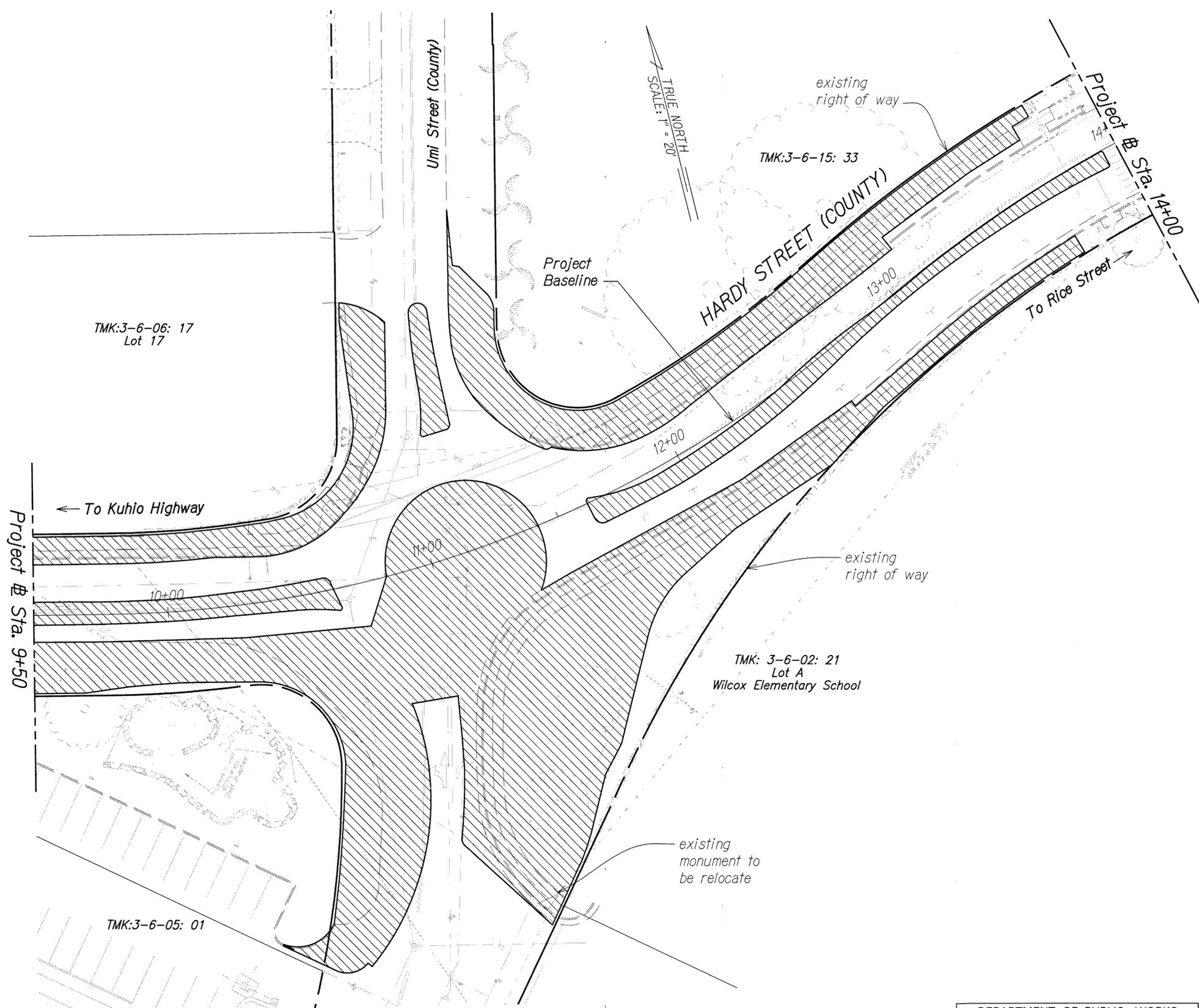
EXISTING CONDITION AND DEMOLITION LIMITS PLAN

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 2 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	19	145



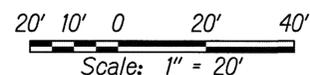
LEGEND:

 Approximate limits of demolition include removal of existing pavement, curb, gutter, sidewalk, landscaping and structures. Limits also include clearing, grubbing, grading, and other site preparations.

NOTE:

1. See Striping and Signage Plans for signs that will be removed, relocated and re-used.
2. See Repaving Plans for limits of pavement to be treated and proposed improvements.
3. See Water and Sewer Plans, Irrigation Plans, Drainage Plans and Electrical Plans for utilities that will be removed, relocated and re-used.

GRAPHICAL SCALES:



PLAN
Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:

COUNTY ENGINEER DATE 11-24-14



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 APRIL 30, 2016
SIGNATURE EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

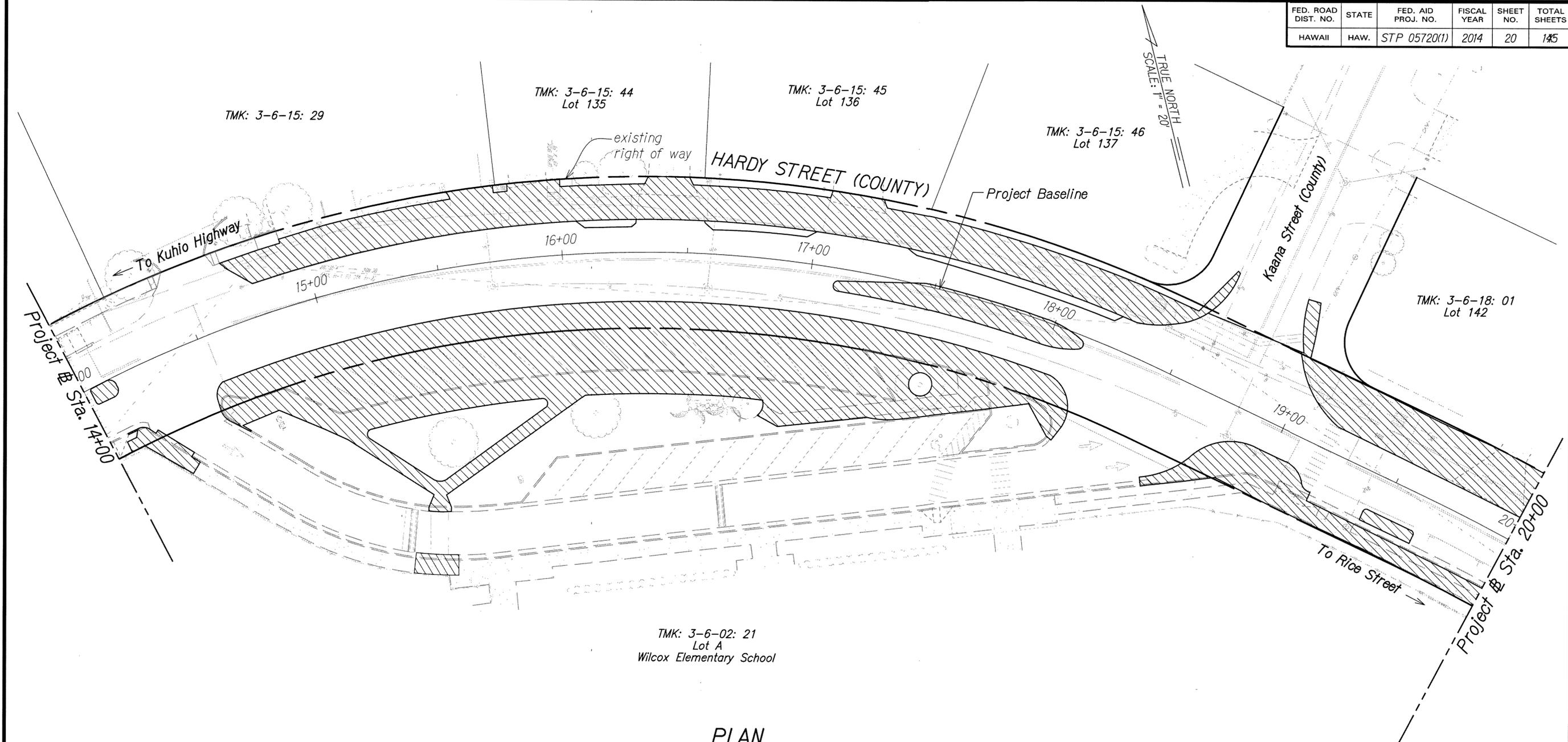
EXISTING CONDITION AND DEMOLITION PLAN

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 3 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	20	145



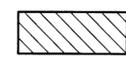
TMK: 3-6-02: 21
Lot A
Wilcox Elementary School

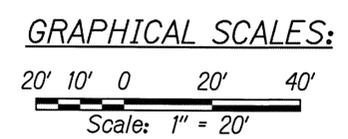
PLAN
Scale: 1" = 20'

NOTE:

1. See Striping and Signage Plans for signs that will be removed, relocated and re-used.
2. See Repaving Plans for limits of pavement to be treated and proposed improvements.
3. See Water and Sewer Plans, Irrigation Plans, Drainage Plans and Electrical Plans for utilities that will be removed, relocated and re-used.

LEGEND:

 Approximate limits of demolition include removal of existing pavement, curb, gutter, sidewalk, landscaping and structures. Limits also include clearing, grubbing, grading, and other site preparations.



DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:

COUNTY ENGINEER DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

SIGNATURE EXPIRATION DATE OF THE LICENSE APRIL 30, 2016

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

EXISTING CONDITION AND DEMOLITION PLAN

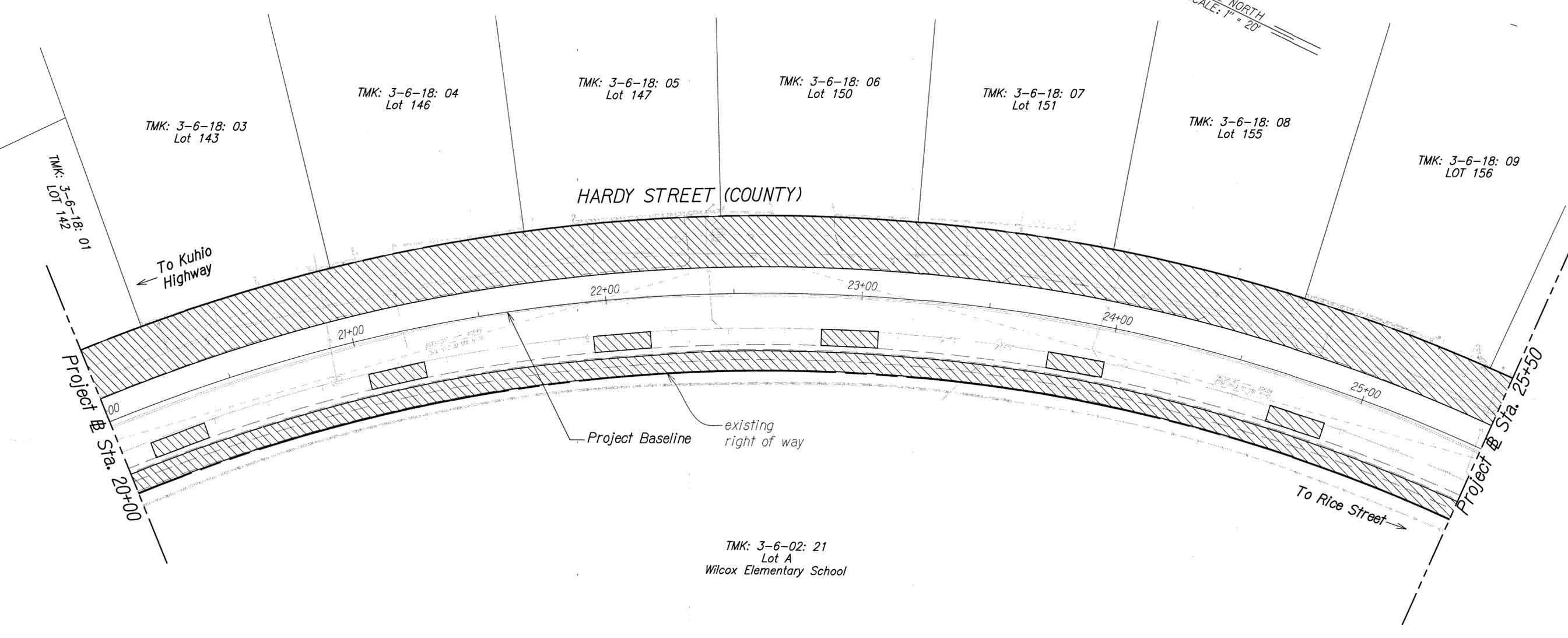
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 4 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	21	145

TRUE NORTH
SCALE: 1" = 20'



PLAN
Scale: 1" = 20'

GRAPHICAL SCALES:
20' 10' 0 20' 40'
Scale: 1" = 20'

LEGEND:
 Approximate limits of demolition include removal of existing pavement, curb, gutter, sidewalk, landscaping and structures. Limits also include clearing, grubbing, grading, and other site preparations.

- NOTE:**
1. See Striping and Signage Plans for signs that will be removed, relocated and re-used.
 2. See Repaving Plans for limits of pavement to be treated and proposed improvements.
 3. See Water and Sewer Plans, Irrigation Plans, Drainage Plans and Electrical Plans for utilities that will be removed, relocated and re-used.

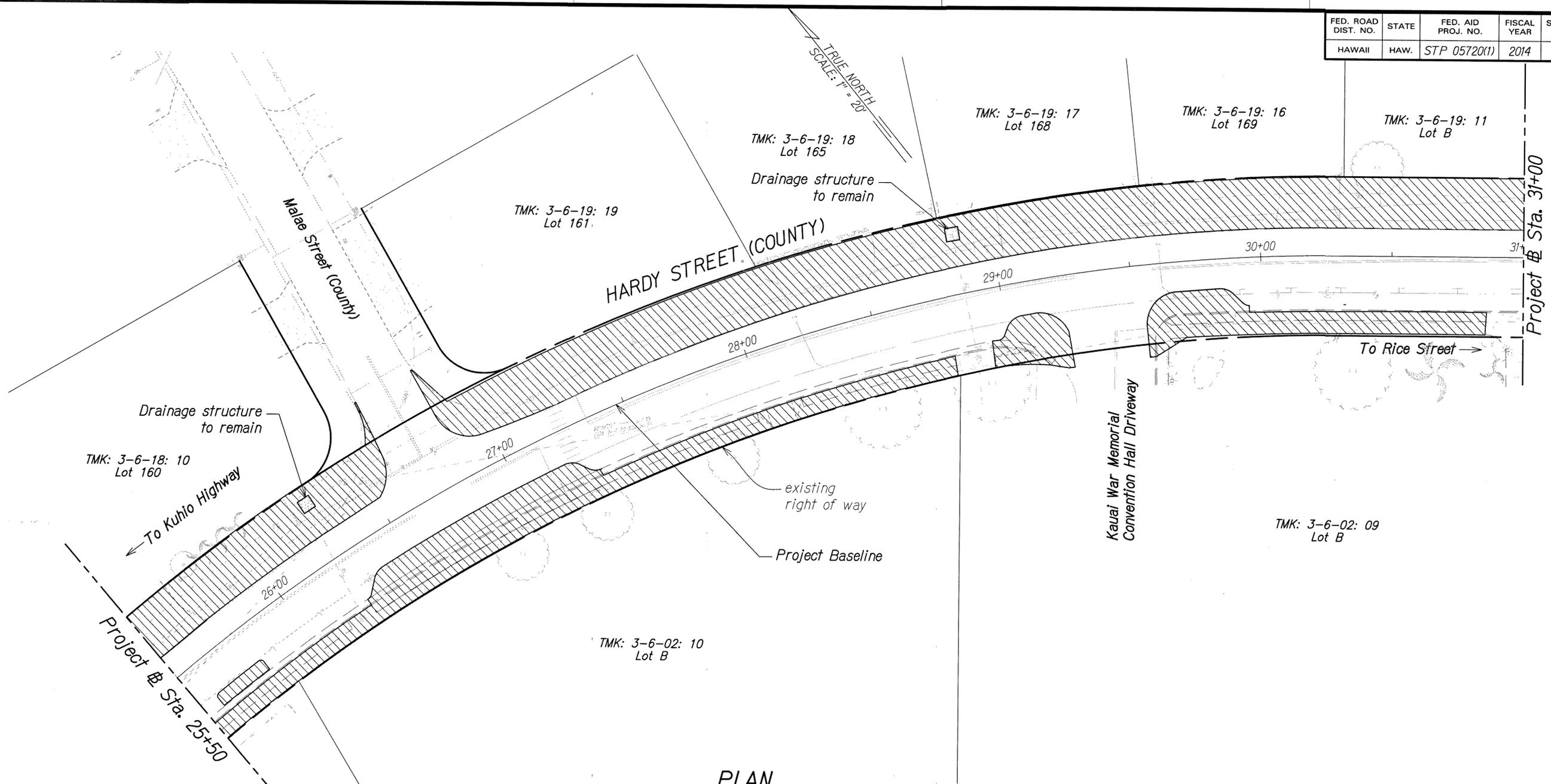


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SIGNATURE: *Fiona K. Van Amels* EXPIRATION DATE: APRIL 30, 2016 OF THE LICENSE

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
 COUNTY ENGINEER
DATE: 11-24-14

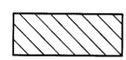
COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION
EXISTING CONDITION AND DEMOLITION PLAN
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)
Scale: As Noted Date: September, 2014
SHEET No. 5 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	22	145



PLAN
Scale: 1" = 20'

GRAPHICAL SCALES:
20' 10' 0 20' 40'
Scale: 1" = 20'

LEGEND:
 Approximate limits of demolition include removal of existing pavement, curb, gutter, sidewalk, landscaping and structures. Limits also include clearing, grubbing, grading, and other site preparations.

- NOTE:**
1. See Striping and Signage Plans for signs that will be removed, relocated and re-used.
 2. See Repaving Plans for limits of pavement to be treated and proposed improvements.
 3. See Water and Sewer Plans, Irrigation Plans, Drainage Plans and Electrical Plans for utilities that will be removed, relocated and re-used.



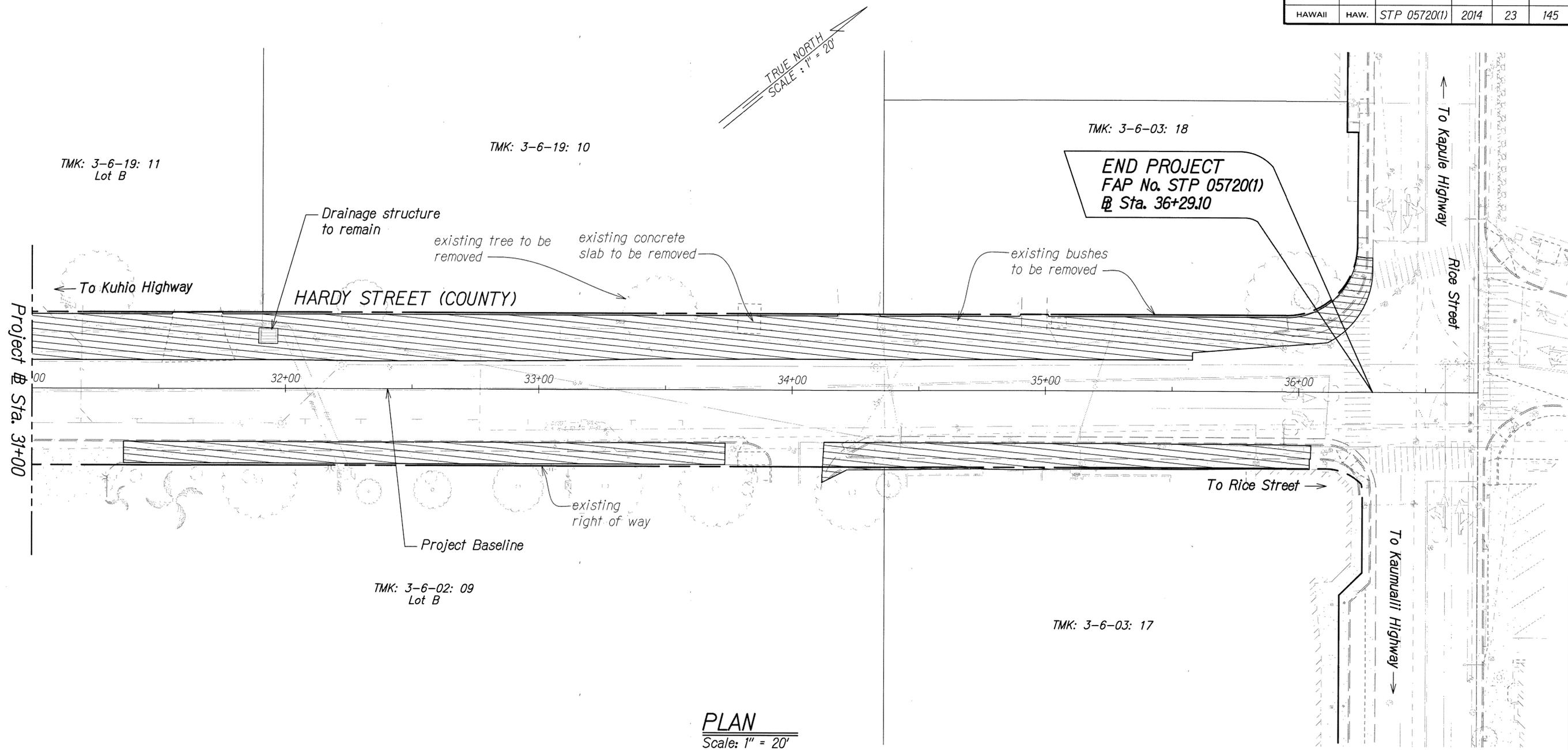
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
APRIL 30, 2016
SIGNATURE OF THE LICENSEE

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:

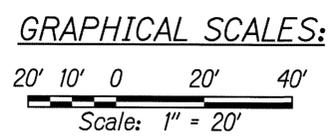
COUNTY ENGINEER DATE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION
EXISTING CONDITION AND DEMOLITION PLAN
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)
Scale: As Noted Date: September, 2014
SHEET No. 6 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	23	145



PLAN
Scale: 1" = 20'



LEGEND:

Approximate limits of demolition include removal of existing pavement, curb, gutter, sidewalk, landscaping and structures. Limits also include clearing, grubbing, grading, and other site preparations.

- NOTE:**
1. See Striping and Signage Plans for signs that will be removed, relocated and re-used.
 2. See Repaving Plans for limits of pavement to be treated and proposed improvements.
 3. See Water and Sewer Plans, Irrigation Plans, Drainage Plans and Electrical Plans for utilities that will be removed, relocated and re-used.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI

APPROVED:

COUNTY ENGINEER **11-24-14** DATE



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APRIL 30, 2016
SIGNATURE EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

EXISTING CONDITION AND DEMOLITION PLAN

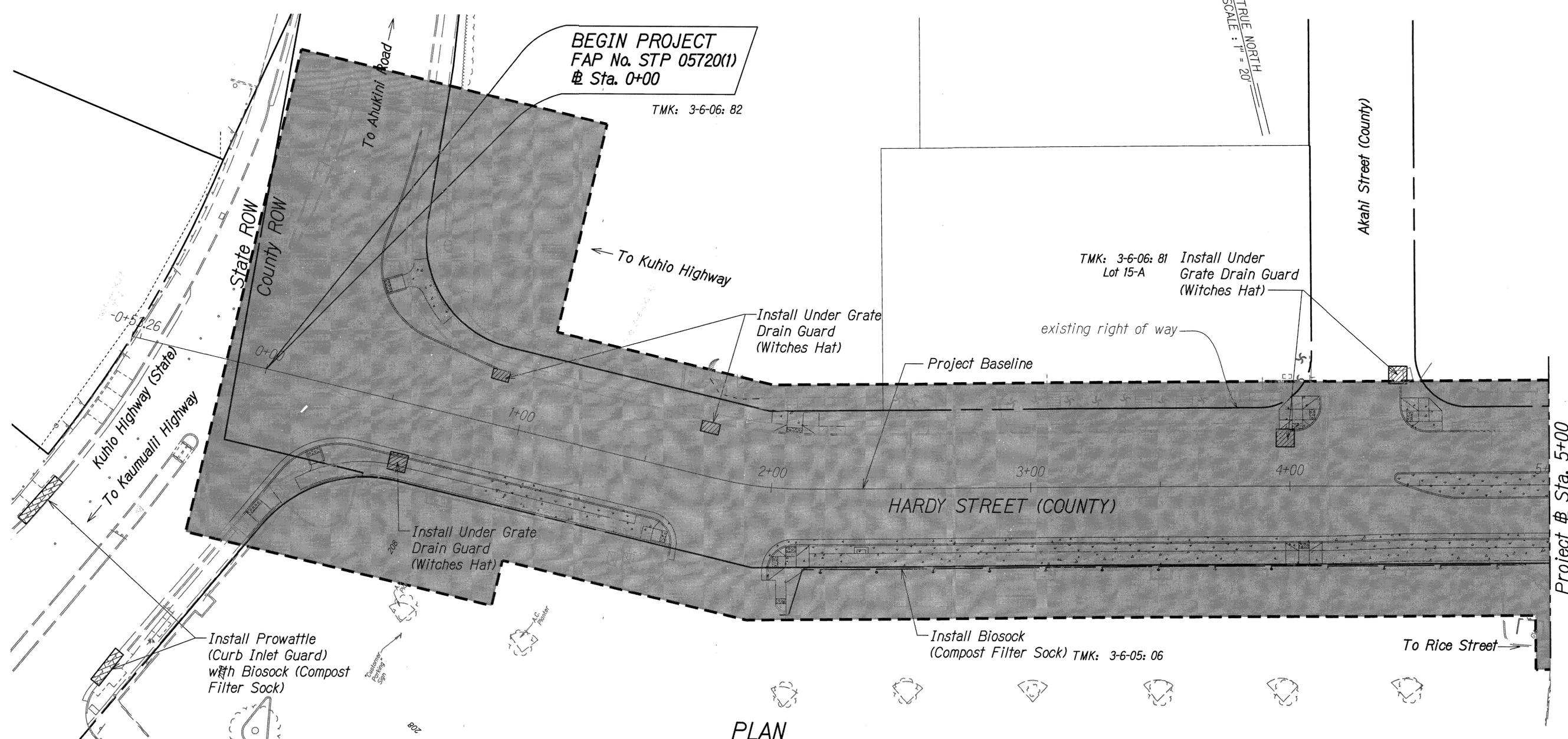
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 7 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	24	145

TRUE NORTH
SCALE: 1" = 20'



PLAN
Scale: 1" = 20'

LEGEND:

- Project Baseline
- Property Line
- existing grade
- Biosock (Compost Filter Sock)
- Under Grate Drain Guard (Witches Hat)
- Prowattle (Curb Inlet Guard) with Biosock (Compost Filter Sock) as needed to prevent sediment from leaving the limits of disturbance

NOTES:

- Hatched areas along Hardy Street are not included for construction. Final design and approval is still pending. Approved design and plans to be provided as part of change order.
- Erosion Control Plan based on the approved National Pollutant Discharge Elimination System (NPDES) permit. Please refer to the Notice of General Permit Coverage (NGPC) document dated March 5, 2014, File No. HI R10E307.

GRAPHICAL SCALES:
20' 10' 0' 20' 40'
Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:

COUNTY ENGINEER DATE: 11-24-14



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SIGNATURE:
EXPIRATION DATE OF THE LICENSE: APRIL 30, 2016

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

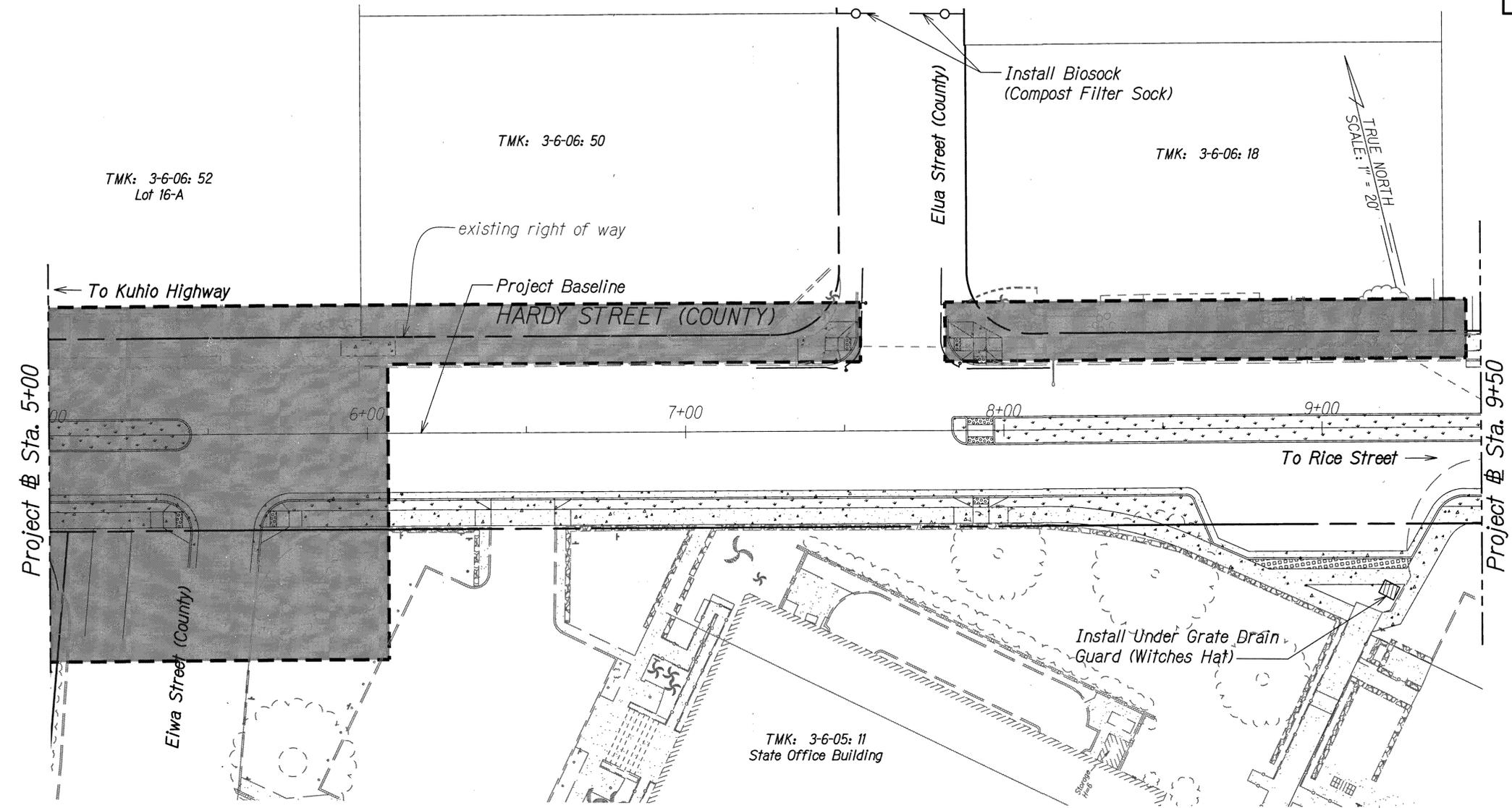
EROSION CONTROL PLAN

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 1 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	25	145



PLAN
Scale: 1" = 20'

LEGEND:

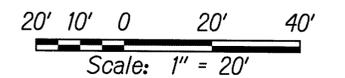
- Project Baseline
- - - - - Property Line
- - - - -180- - - - - existing grade
- Biosock (Compost Filter Sock)
- ▨ Under Grate Drain Guard (Witches Hat)
- ▩ Prowattle (Curb Inlet Guard) with Biosock (Compost Filter Sock) as needed to prevent sediment from leaving the limits of disturbance

NOTES:

1. Hatched areas along Hardy Street are not included for construction. Final design and approval is still pending. Approved design and plans to be provided as part of change order.
2. Erosion Control Plan based on the approved National Pollutant Discharge Elimination System (NPDES) permit. Please refer to the Notice of General Permit Coverage (NGPC) document dated March 5, 2014, File No. HI R10E307.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED: _____
COUNTY ENGINEER DATE 11-24-14

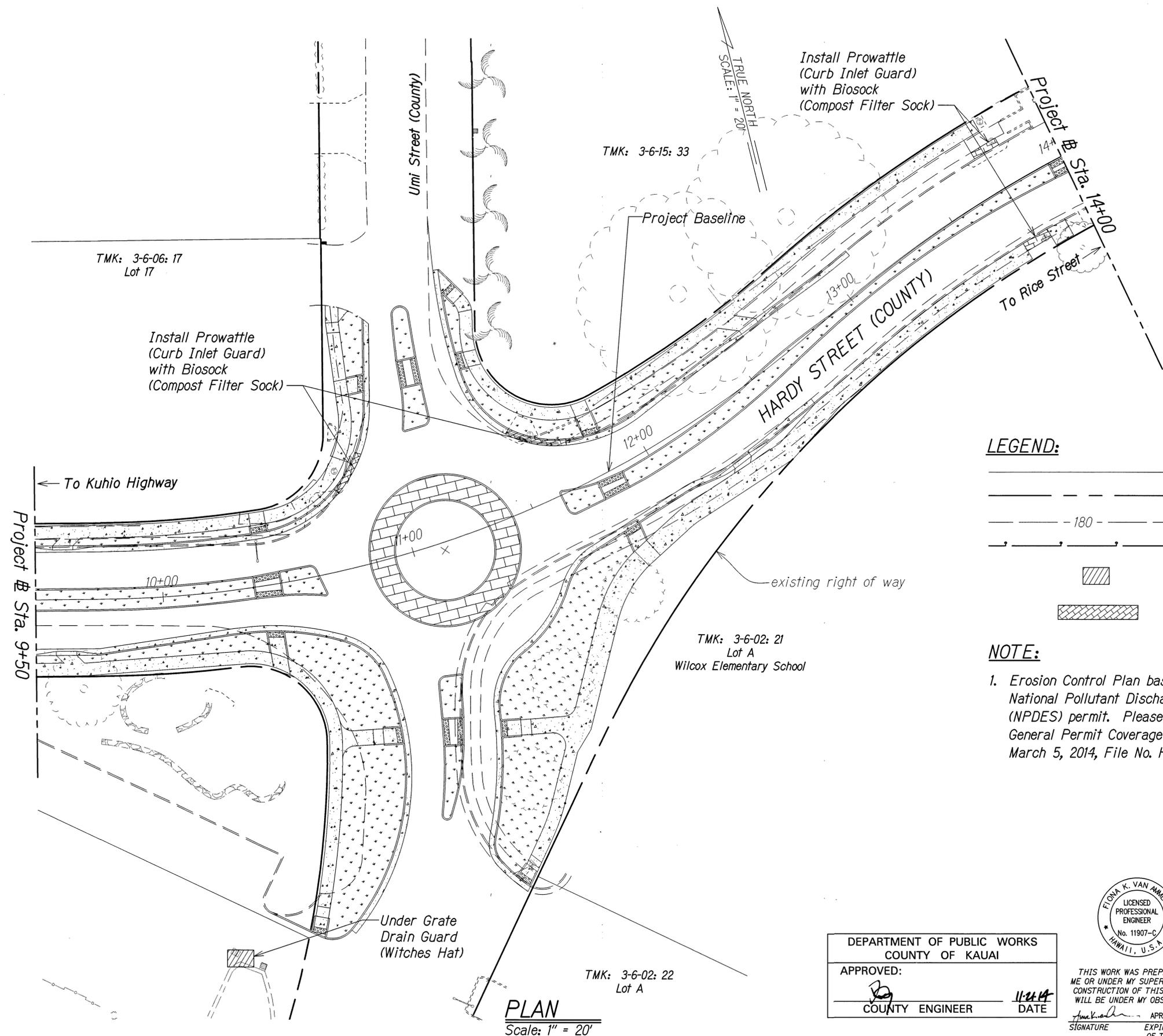
GRAPHICAL SCALES:



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
SIGNATURE _____ EXPIRATION DATE OF THE LICENSE APRIL 30, 2016

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION
EROSION CONTROL PLAN
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)
Scale: As Noted Date: September, 2014
SHEET No. 2 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	26	145



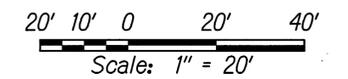
LEGEND:

- Project Baseline
- - - Property Line
- - - 180 - - - existing grade
- Biosock (Compost Filter Sock)
- ▨ Under Grate Drain Guard (Witches Hat)
- ▩ Prowattle (Curb Inlet Guard) with Biosock (Compost Filter Sock) as needed to prevent sediment from leaving the limits of disturbance

NOTE:

1. Erosion Control Plan based on the approved National Pollutant Discharge Elimination System (NPDES) permit. Please refer to the Notice of General Permit Coverage (NGPC) document dated March 5, 2014, File No. HI R10E307.

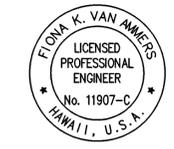
GRAPHICAL SCALES:



PLAN
Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI

APPROVED: _____ 11/24/14
COUNTY ENGINEER DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

APRIL 30, 2016
EXPIRATION DATE OF THE LICENSE

Signature: _____
SIGNATURE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

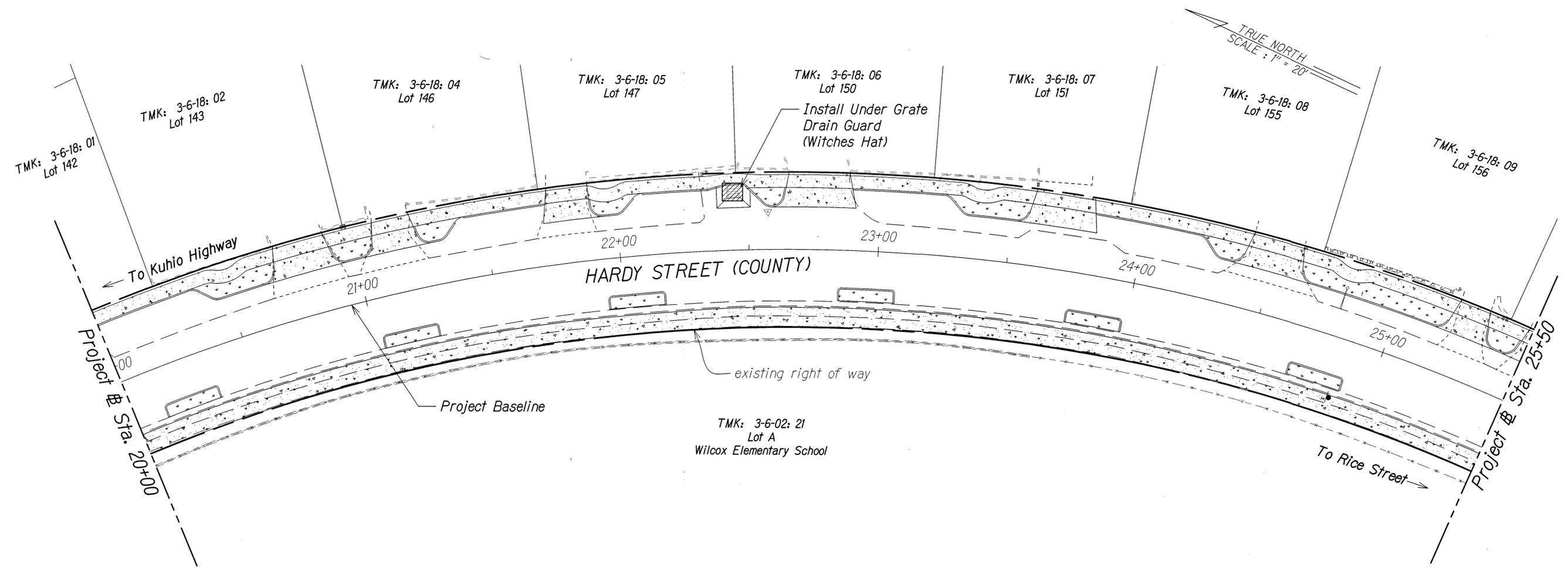
EROSION CONTROL PLAN

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

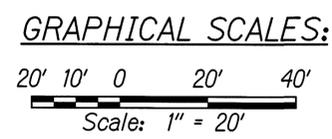
SHEET No. 3 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	28	145



PLAN
Scale: 1" = 20'

- LEGEND:**
- Project Baseline
 - Property Line
 - existing grade
 - Under Grate Drain Guard (Witches Hat)
 - Prowattle (Curb Inlet Guard) with Biosock (Compost Filter Sock) as needed to prevent sediment from leaving the limits of disturbance



NOTE:

- Erosion Control Plan based on the approved National Pollutant Discharge Elimination System (NPDES) permit. Please refer to the Notice of General Permit Coverage (NGPC) document dated March 5, 2014, File No. HI R10E307.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:

COUNTY ENGINEER 12/4
DATE

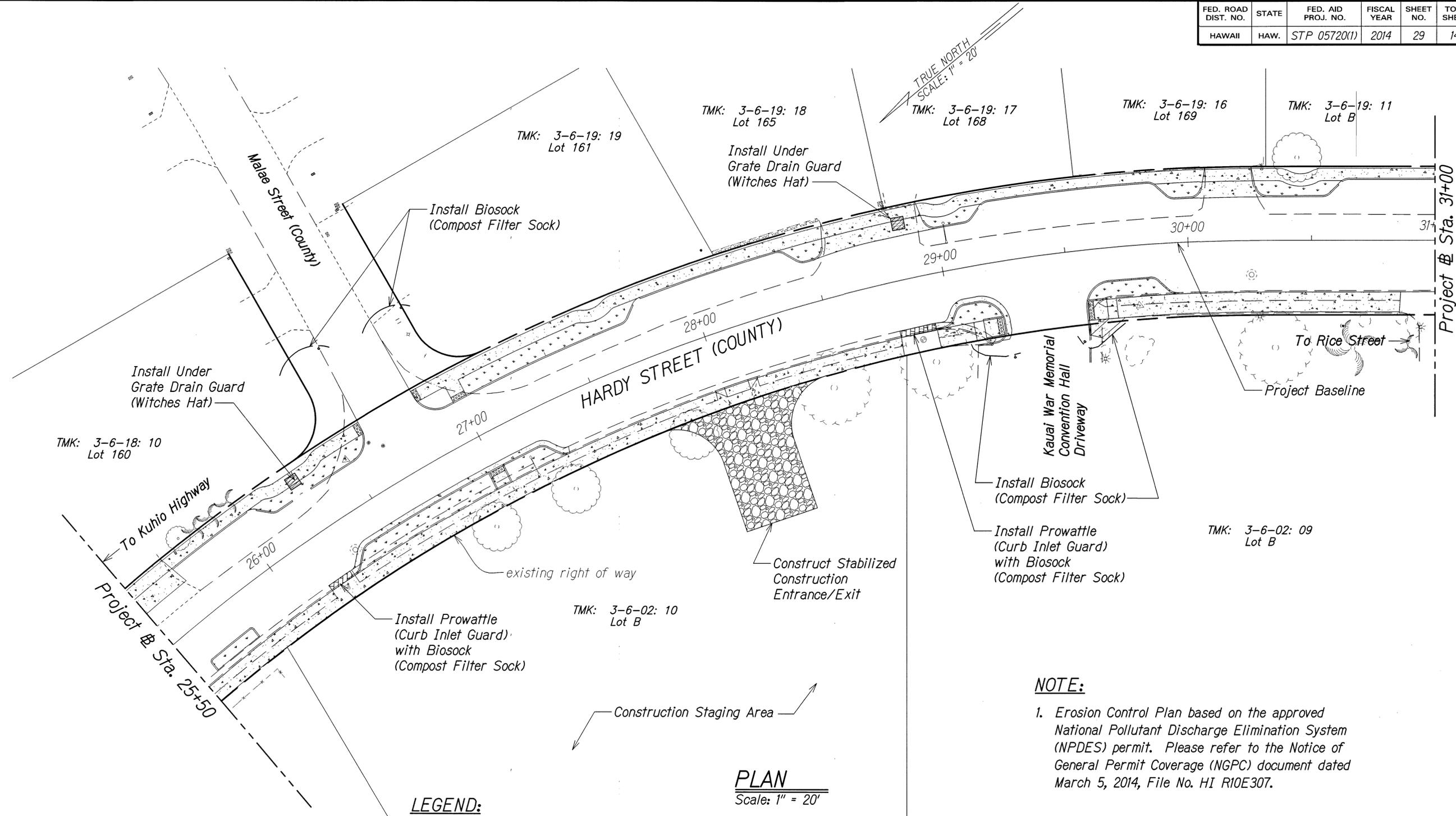


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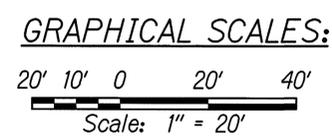
SIGNATURE APRIL 30, 2016
EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION
EROSION CONTROL PLAN
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)
Scale: As Noted Date: September, 2014
SHEET No. 5 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	29	145



NOTE:
 1. Erosion Control Plan based on the approved National Pollutant Discharge Elimination System (NPDES) permit. Please refer to the Notice of General Permit Coverage (NGPC) document dated March 5, 2014, File No. HI R10E307.



- LEGEND:**
- Project Baseline
 - - - Property Line
 - - - -180- - - existing grade
 - Biosock (Compost Filter Sock)
 - ▨ Under Grate Drain Guard (Witches Hat)
 - ▩ Prowattle (Curb Inlet Guard) with Biosock (Compost Filter Sock) as needed to prevent sediment from leaving the limits of disturbance

PLAN
 Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
 COUNTY OF KAUAI
 APPROVED:

 COUNTY ENGINEER
 DATE: 11-24-14



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 EXPIRATION DATE OF THE LICENSE: APRIL 30, 2016

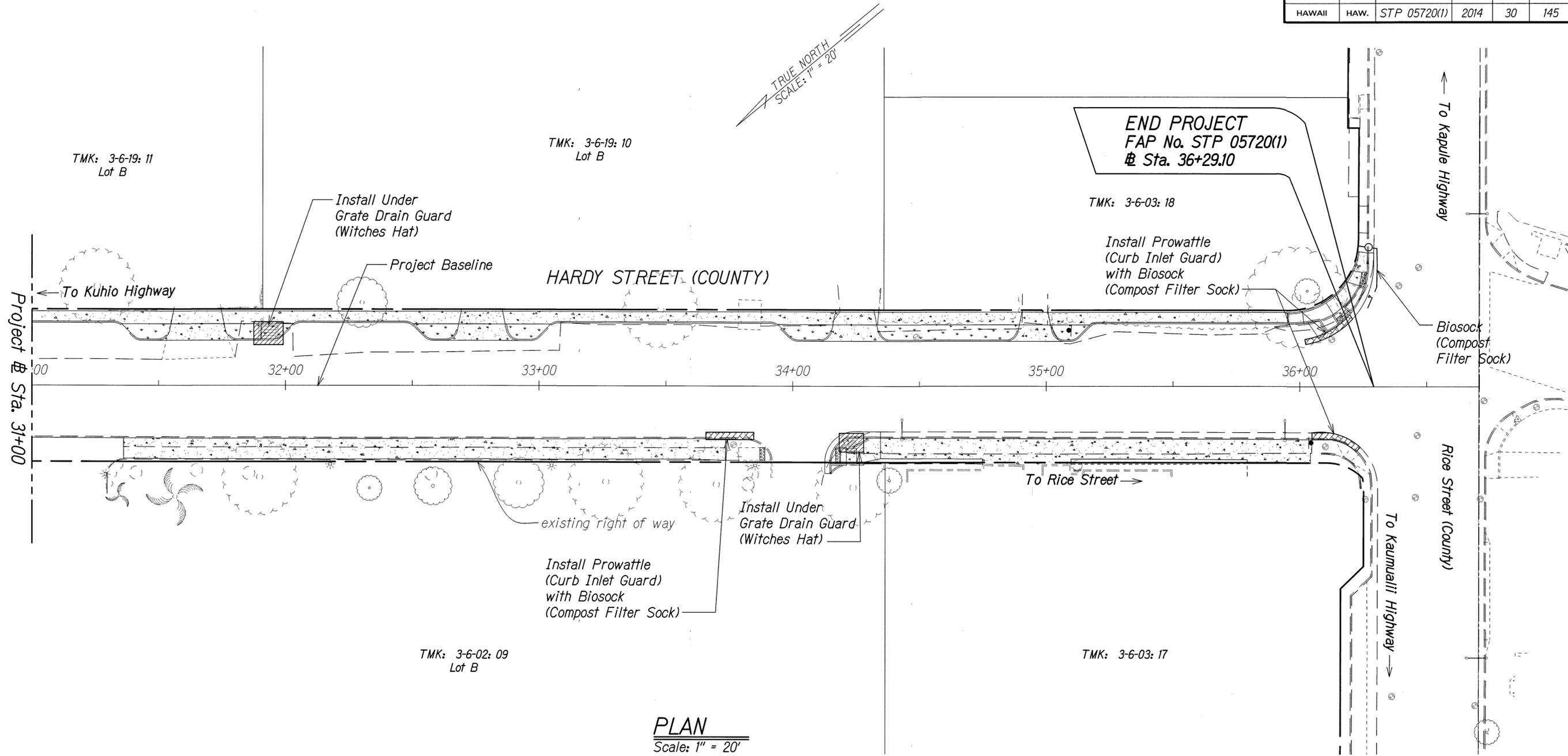
COUNTY OF KAUAI
 DEPARTMENT OF PUBLIC WORKS
 BUILDING DIVISION

EROSION CONTROL PLAN

HARDY STREET IMPROVEMENTS
 Federal Aid Project No. STP 05720(1)

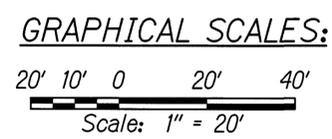
Scale: As Noted Date: September, 2014
 SHEET No. 6 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	30	145



PLAN
Scale: 1" = 20'

- LEGEND:**
- Project Baseline
 - - - - - Property Line
 - - - - -180- existing grade
 - - - - - Biosock (Compost Filter Sock)
 - ▨ Under Grate Drain Guard (Witches Hat)
 - ▨ Prowattle (Curb Inlet Guard) with Biosock (Compost Filter Sock) as needed to prevent sediment from leaving the limits of disturbance



NOTE:

- Erosion Control Plan based on the approved National Pollutant Discharge Elimination System (NPDES) permit. Please refer to the Notice of General Permit Coverage (NGPC) document dated March 5, 2014, File No. HI R10E307.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI

APPROVED: _____
COUNTY ENGINEER

11-21-14
DATE



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APRIL 30, 2016
EXPIRATION DATE OF THE LICENSE

SIGNATURE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

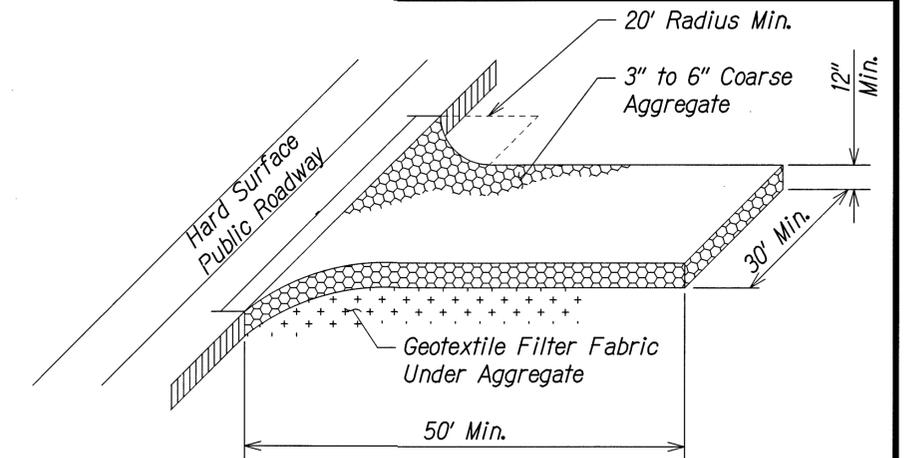
EROSION CONTROL PLAN

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

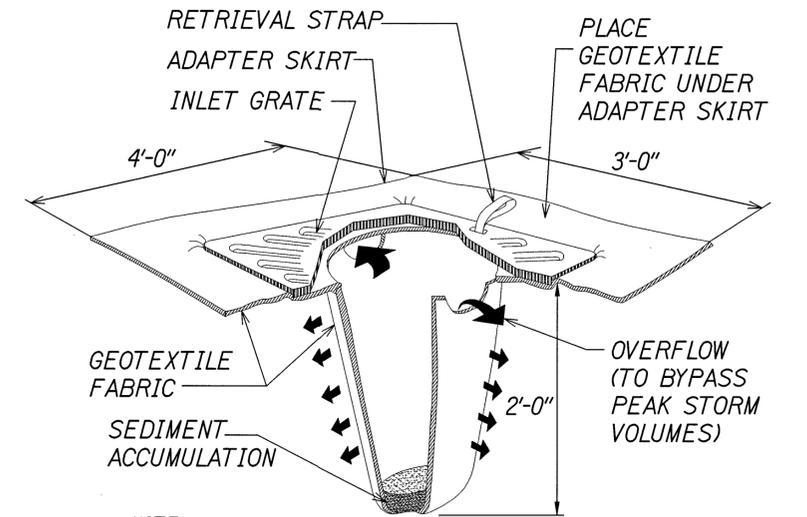
SHEET No. 7 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	30A	145



STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL

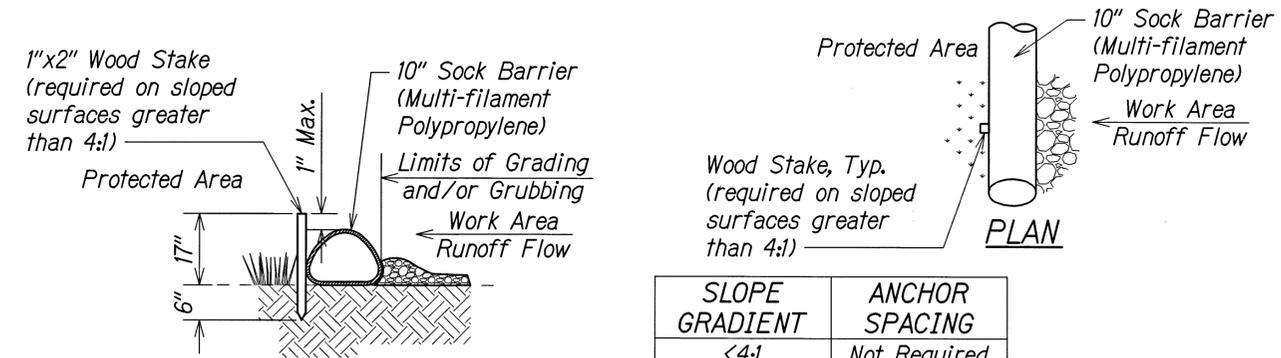
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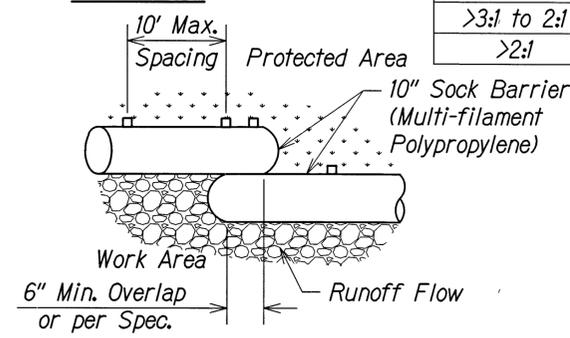
NOTE:
IN THE EVENT OF ABOVE NORMAL RAINFALL, CONTRACTOR SHALL REMOVE INLET PROTECTION AND REPLACE AFTER EVENT HAS PASSED.

GRATE DRAIN GUARD DETAIL

Scale: NTS



SECTION



OVERLAP

COMPOST FILTER SOCK DETAILS

Scale: NTS

SLOPE GRADIENT	ANCHOR SPACING
<4:1	Not Required
4:1 to 3:1	10'
>3:1 to 2:1	5' to 10'
>2:1	5'

NOTES:

1. Sock Barrier fill composition is wood mulch.
2. Sock Barrier fill shall not contain biosolids and should be consistent with EPA Guidelines.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED: 
COUNTY ENGINEER DATE 11-21-14



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APRIL 30, 2016
SIGNATURE EXPIRATION DATE OF THE LICENSE

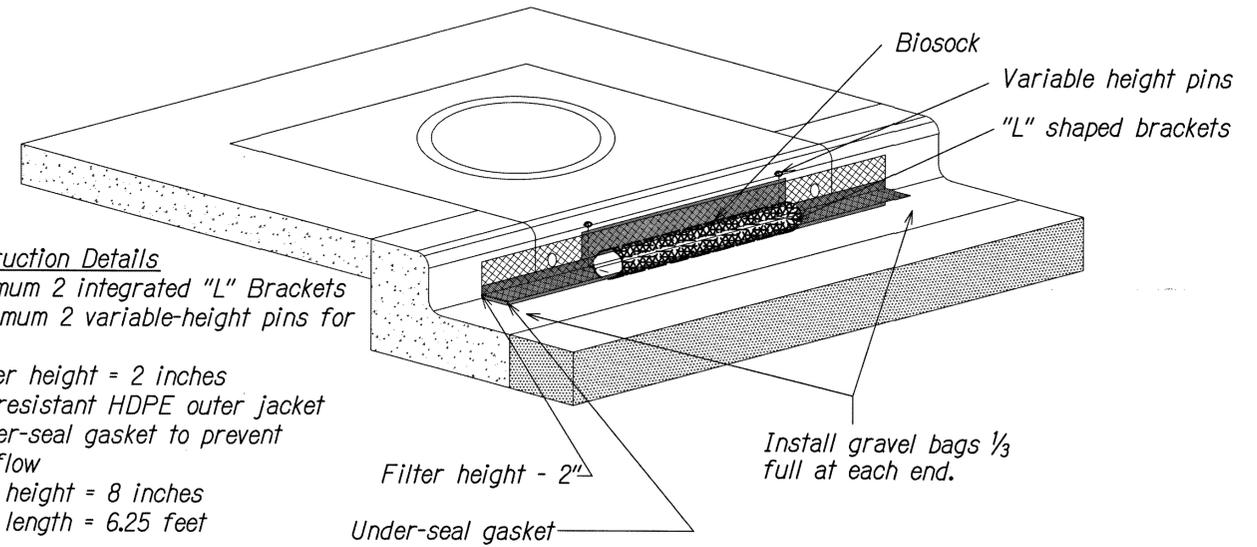
COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

EROSION CONTROL DETAILS

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014
SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	30A	145



Construction Details

- * Minimum 2 integrated "L" Brackets
- * Minimum 2 variable-height pins for curb
- * Filter height = 2 inches
- * UV resistant HDPE outer jacket
- * Under-seal gasket to prevent underflow
- * CIG height = 8 inches
- * CIG length = 6.25 feet

Installation Details

- * Placement: place CIG tightly against drain opening with metal variable height pins at top.
- * Change height for high openings: extend variable height pins upward if necessary.
- * Interconnecting for long curb openings: overlap segments so the bottom gasket provides a continuous seal (one side has a cut-out). Each 6.25" segment fits a 5 foot opening or smaller. Use 2 segments for 8 to 10 feet. Use 3 segments for 15 feet, etc.
- * Anchoring: install gravel bags at each end and at overlaps. Use 1/3 full gravel bags for low profile and best traffic avoidance. Use clean gravel at drain inlets - not sand. Select bags with long term UV exposure and toughness for resistance to traffic. Where not possible to install gravel bags due to traffic proximity, it is acceptable to anchor with concrete anchors, or masonry nails - one at each end. Anchor Curb Inlet Guard so that water cannot flow behind it. Use 1" washers.

Install gravel bags 1/3 full at each end.

Inlet Size	# of CIG Segments
5'	1
10'	2
15'	3
20'	4
25'	5
30'	6

CURB INLET GUARD WITH BIOSOCK DETAIL

Scale: NTS

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED: _____
COUNTY ENGINEER DATE 11/2/14



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SIGNATURE: _____ APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

EROSION CONTROL DETAILS

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)
Scale: As Noted Date: September, 2014

SHEET No. 2 OF 2 SHEETS