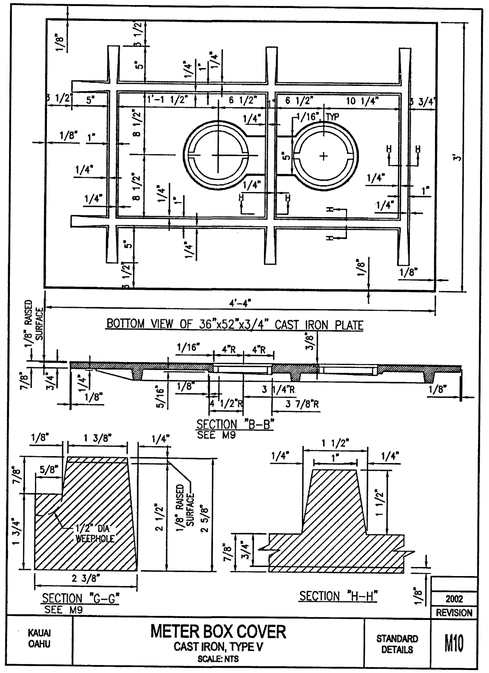
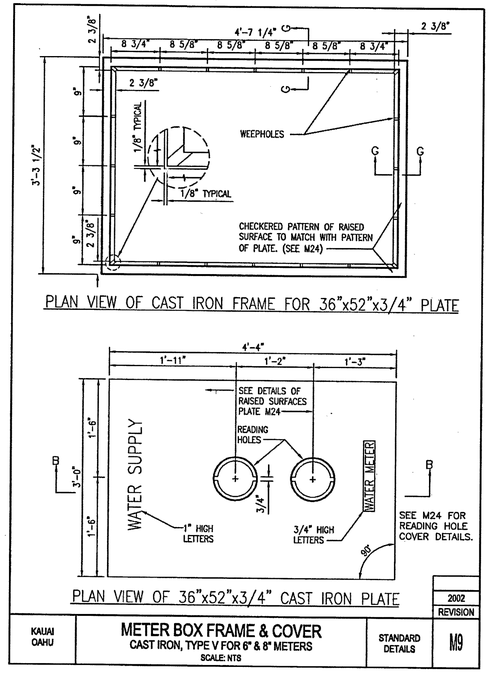
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 0572O(1)	2014	53E	145



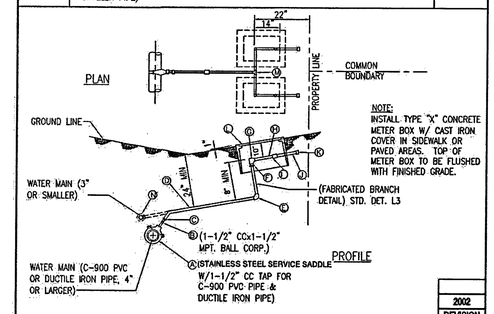
KAUAI OAHU | METER BOX COVER | CAST IRON, TYPE V | SCALE: NTS | STANDARD DETAILS | M10 | 2002 REVISION



KAUAI OAHU | METER BOX FRAME & COVER | CAST IRON, TYPE V FOR 6" & 8" METERS | SCALE: NTS | STANDARD DETAILS | M9 | 2002 REVISION

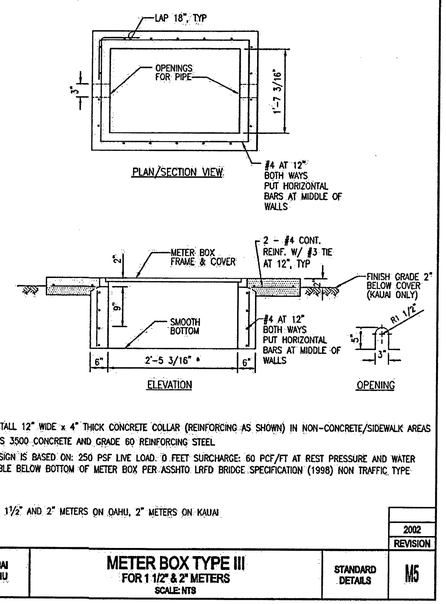
SCHEDULE OF FITTINGS

ITEM	DESCRIPTION	DOUBLE SERVICE
A	STAINLESS STEEL SERVICE SADDLE W/ 1-1/2" CC TAP FOR C-900 PVC PIPE AND DUCTILE IRON PIPE	1
B	1-1/2" CC x 1-1/2" MPT BALL CORPORATION	1
C	PACK JOINT COUPLING (FORD C14-66 OR APPROVED EQUAL)	1
D	1-1/2" COPPER TUBE, TYPE "K" SOFT	2
E	1" 90° COPPER ELBOW, S x S	2
F	1" COPPER MALE ADAPTER, S x T	2
G	ANGLE BALL VALVE, 1" FEMALE IPT INLET x 3/4" METER COUPLING NUT OUTLET (FORD BA13-342W OR APPROVED EQUAL)	2
H	METER SPACER, SUPPLIED BY DEPT. OF WATER & INSTALLED BY CONTRACTOR	2
I	BALL VALVE W/ HANDLE, 3/4" METER COUPLING NUT INLET x 1" FEMALE IPT OUTLET (FORD B13-342 W/ HT-34 HANDLE OR APPROVED EQUAL)	2
J	LINESETTER, 1" COPPER TUBE, TYPE "K" SOFT, 12" LONG (SEE STD. DET. L3)	2
K	1" PLASTIC THREAD PROTECTOR	2
L	TYPE "B" CONCRETE METER BOX WITH CAST IRON COVER	2
M	1" x 1" x 1-1/2" COPPER TEE, S x S x S	1
N	TEE W/ 1-1/2" BUSHING (WHEN CONNECTING TO 3" OR SMALLER PIPE)	1



NOTE:
INSTALL TYPE "K" CONCRETE METER BOX W/ CAST IRON COVER IN SIDEWALK OR PAVED AREAS. TOP OF METER BOX TO BE FLUSHED WITH FINISHED GRADE.

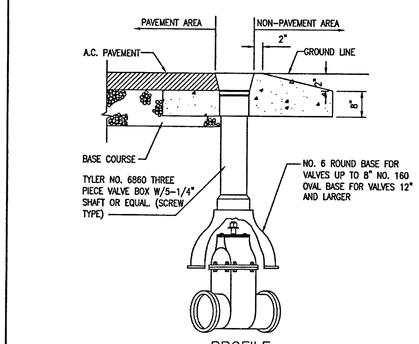
KAUAI | DOUBLE SERVICE LATERAL | PLAN, PROFILE & MATERIAL LIST | SCALE: NTS | STANDARD DETAILS | L2 | 2002 REVISION



NOTE:
1. INSTALL 12" WIDE x 4" THICK CONCRETE COLLAR (REINFORCING AS SHOWN) IN NON-CONCRETE/SIDEWALK AREAS.
2. DWS 3500 CONCRETE AND GRADE 60 REINFORCING STEEL.
3. DESIGN IS BASED ON: 250 PSF LIVE LOAD, 0 FEET SURCHARGE: 60 PCF/FT AT REST PRESSURE AND WATER TABLE BELOW BOTTOM OF METER BOX PER AASHTO LRFD BRIDGE SPECIFICATION (1998) NON TRAFFIC TYPE

* FOR 1½" AND 2" METERS ON OAHU, 2" METERS ON KAUAI

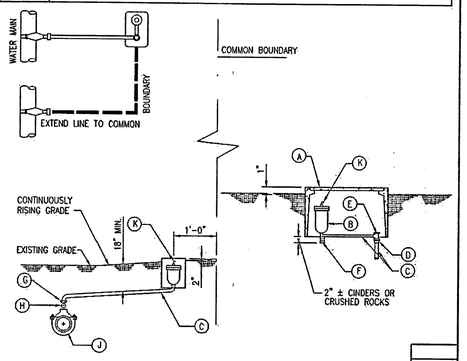
KAUAI OAHU | METER BOX TYPE III | FOR 1 1/2" & 2" METERS | SCALE: NTS | STANDARD DETAILS | M5 | 2002 REVISION



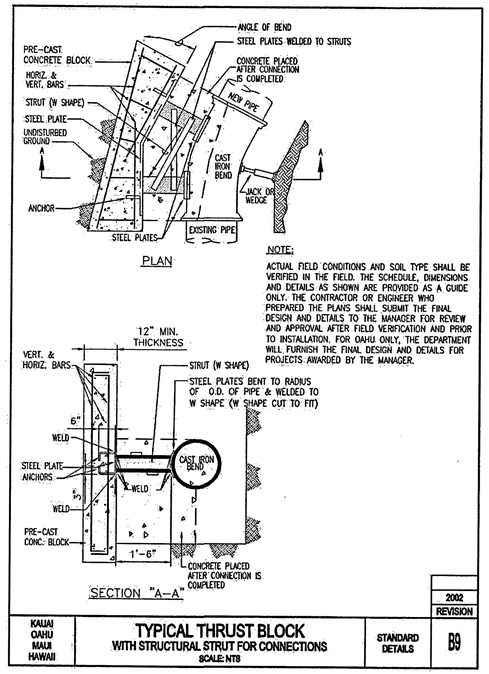
GENERAL NOTES:
1. PAVEMENT AREA: 2'-0" DIA. OR 2'-0" X 2'-0" SQUARE X 4" THICK CONC. SETTLEMENT SLAB.
2. NON-PAVEMENT AREA: 3'-0" DIA. OR 3'-0" X 3'-0" SQUARE X4" THICK CONC. SETTLEMENT SLAB.
3. COVER TO BE DROP LID COVER.

KAUAI | CAST IRON VALVE BOX DETAILS | SCALE: NTS | STANDARD DETAILS | V11 | 2002 REVISION

ITEM	MATERIALS LIST
A	TYPE "K" METER BOX W/ CAST IRON COVER
B	1" PRESSURE AIR RELIEF VALVE
C	1" COPPER (TYPE "K", SOFT)
D	1" COPPER MALE ADAPTER
E	ANGLE BALL VALVE (FORD BA13-344W OR APPROVED EQUAL)
F	2" X 4" X 8" BRICK SADDLE
G	PACK JOINT COUPLING (FORD C14-44 OR APPROVED EQUAL)
H	1" CC x 1" MPT BALL CORPORATION
J	STAINLESS STEEL SERVICE SADDLE W/ 1" CC TAP FOR USE ON C-900 PVC PIPE AND DUCTILE IRON PIPE OR PVC TEE W/ 1" PVC BUSING FOR USE ON 3" AND 4" PVC PIPE. SMITH-BLAIR TYPE 342 PLASTIC SERVICE SADDLE W/ 1" CC TAP FOR 3" AND 4" PVC PIPE.
K	ELBOWS AND SCREEN



KAUAI | AUTOMATIC PRESSURE RELIEF VALVE | SCALE: NTS | STANDARD DETAILS | V10 | 2002 REVISION



NOTE:
ACTUAL FIELD CONDITIONS AND SOIL TYPE SHALL BE VERIFIED IN THE FIELD. THE SCHEDULE, DIMENSIONS AND DETAILS AS SHOWN ARE PROVIDED AS A GUIDE ONLY. THE CONTRACTOR OR ENGINEER WHO PREPARED THE PLANS SHALL SUBMIT THE FINAL DESIGN AND DETAILS TO THE MANAGER FOR REVIEW AND APPROVAL AFTER FIELD VERIFICATION AND PRIOR TO INSTALLATION. FOR OAHU ONLY, THE DEPARTMENT WILL FURNISH THE FINAL DESIGN AND DETAILS FOR PROJECTS AWARDED BY THE MANAGER.

KAUAI OAHU MAUI HAWAII | TYPICAL THRUST BLOCK | WITH STRUCTURAL STRUT FOR CONNECTIONS | SCALE: NTS | STANDARD DETAILS | B9 | 2002 REVISION

DEPARTMENT OF WATER
COUNTY OF KAUAI
APPROVED:
for MANAGER & CHIEF ENGINEER DEPT. OF WATER
9/26/14 DATE

FIONA K. VAN AMMERS LICENSED PROFESSIONAL ENGINEER No. 11907-C HAWAII, U.S.A.

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

WATER DETAILS

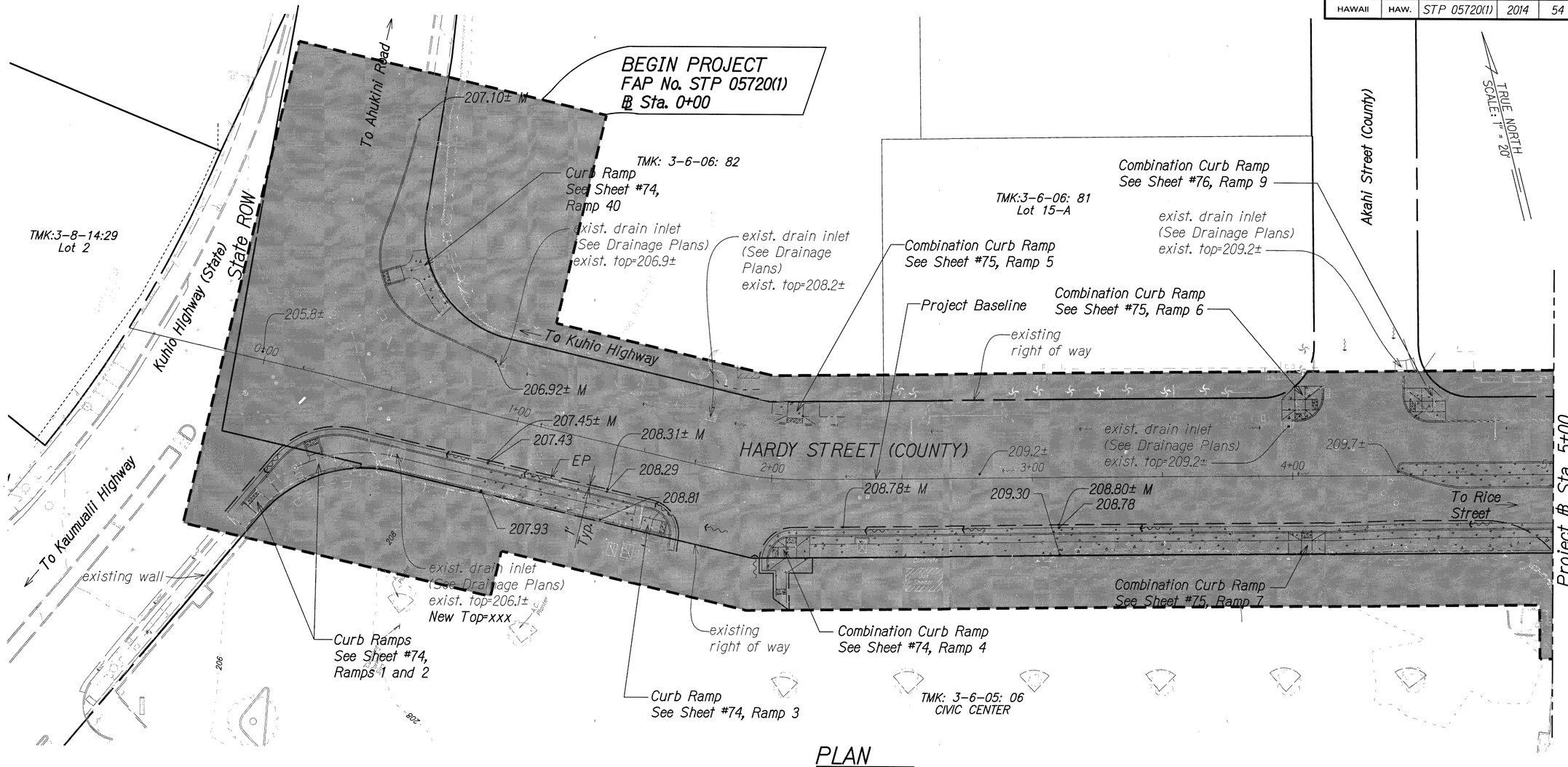
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 0572O(1)

Scale: As Noted Date: September, 2014

SHEET No. 7 OF 7 SHEETS

100% SUBMITTAL 53E

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	54	145



PLAN
Scale: 1" = 20'

LEGEND:

———	Project Baseline
— — — —	Property Line
—— 180 ——	Existing Major Contour
— — — — —	Grade Control
~~→	Proposed Flow Arrow
~~→	Existing Flow Arrow
100.00	Finish Grade Spot Elevation
100.00 TC	Finish Grade at Top of Curb
100.00 BC	Finish Grade at Bottom of Curb
191.90± M	Match to Existing Grade
191.9±	Existing Grade Spot Elevation

NOTES:

1. Provide smooth transition when proposed improvements connect to existing pavement/sidewalk/curb and gutter.
2. Contractor to verify existing grades.
3. See Drainage Plans for drainage improvements.
4. See Electrical Plans for electrical improvements.
5. 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 4-24-14

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

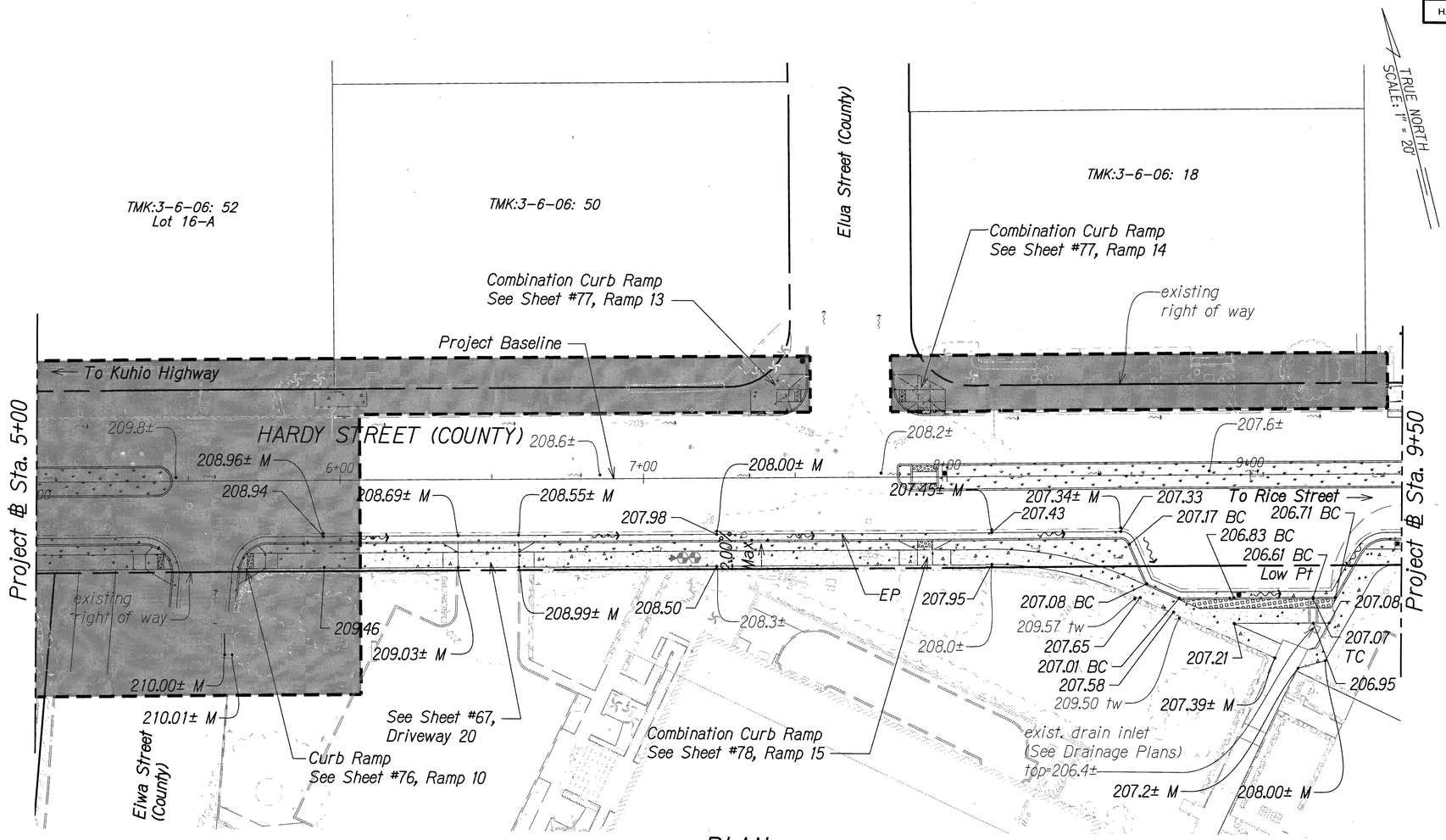
GRADING PLAN

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	55	145



PLAN
Scale: 1" = 20'

LEGEND:

Project Baseline	100.00 Finish Grade Spot Elevation
Property Line	100.00 TC Finish Grade at Top of Curb
180 existing grade	100.00 BC Finish Grade at Bottom of Curb
Grade Control/Grade Break	191.90± M Match to Existing Grade
Proposed Flow Arrow	191.9± Existing Grade Spot Elevation
Existing Flow Arrow	

NOTES:

1. Provide smooth transition when proposed improvements connect to existing pavement/sidewalk/curb and gutter.
2. Contractor to verify existing grades.
3. See Drainage Plans for drainage improvements.
4. See Electrical Plans for electrical improvements.
5. 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

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

GRADING PLAN

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

Scale: As Noted — Date: September, 2014

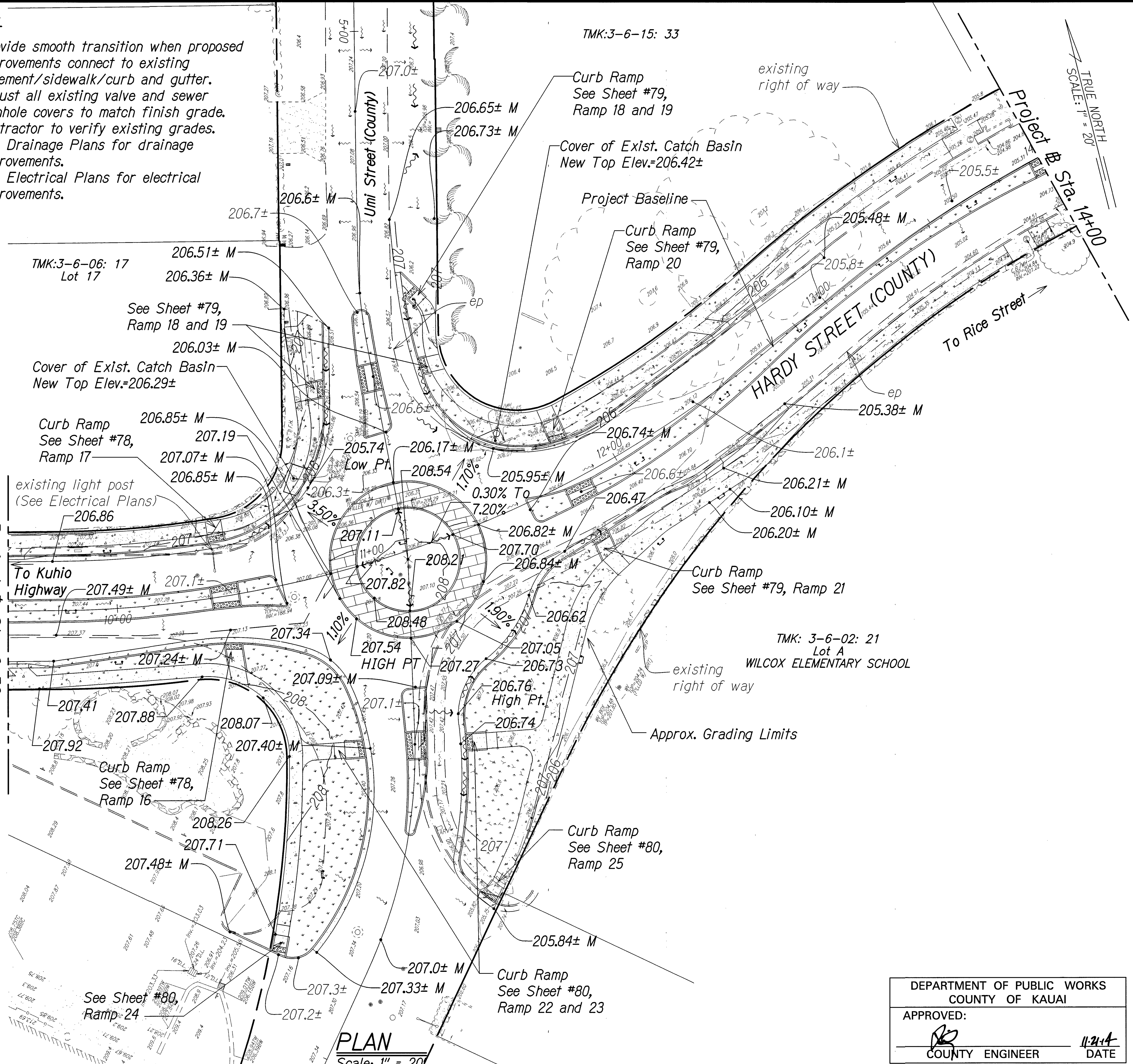
SHEET No. 2 OF 7 SHEETS

100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	56	145

NOTE:

1. Provide smooth transition when proposed improvements connect to existing pavement/sidewalk/curb and gutter.
2. Adjust all existing valve and sewer manhole covers to match finish grade.
3. Contractor to verify existing grades.
4. See Drainage Plans for drainage improvements.
5. See Electrical Plans for electrical improvements.



LEGEND:

(solid line)	Project Baseline
(long dash line)	Property Line
— — 180 — —	Finish Grade
— — 180 — —	existing grade
— — — — —	Grade Control/Grade Break
(arrow)	Proposed Flow Arrow
(arrow)	existing flow arrow
100.00	Finish Grade (Top of Pavement/Top of Sidewalk)
191.90± M	Match to Existing Grade
191.9±	existing grade spot elevation

GRAPHICAL SCALES:

20' 10' 0 20' 40'

Scale: 1" = 20'

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

FIONA K. VAN AMMERS LICENSED PROFESSIONAL ENGINEER No. 11907-C HAWAII, U.S.A.

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

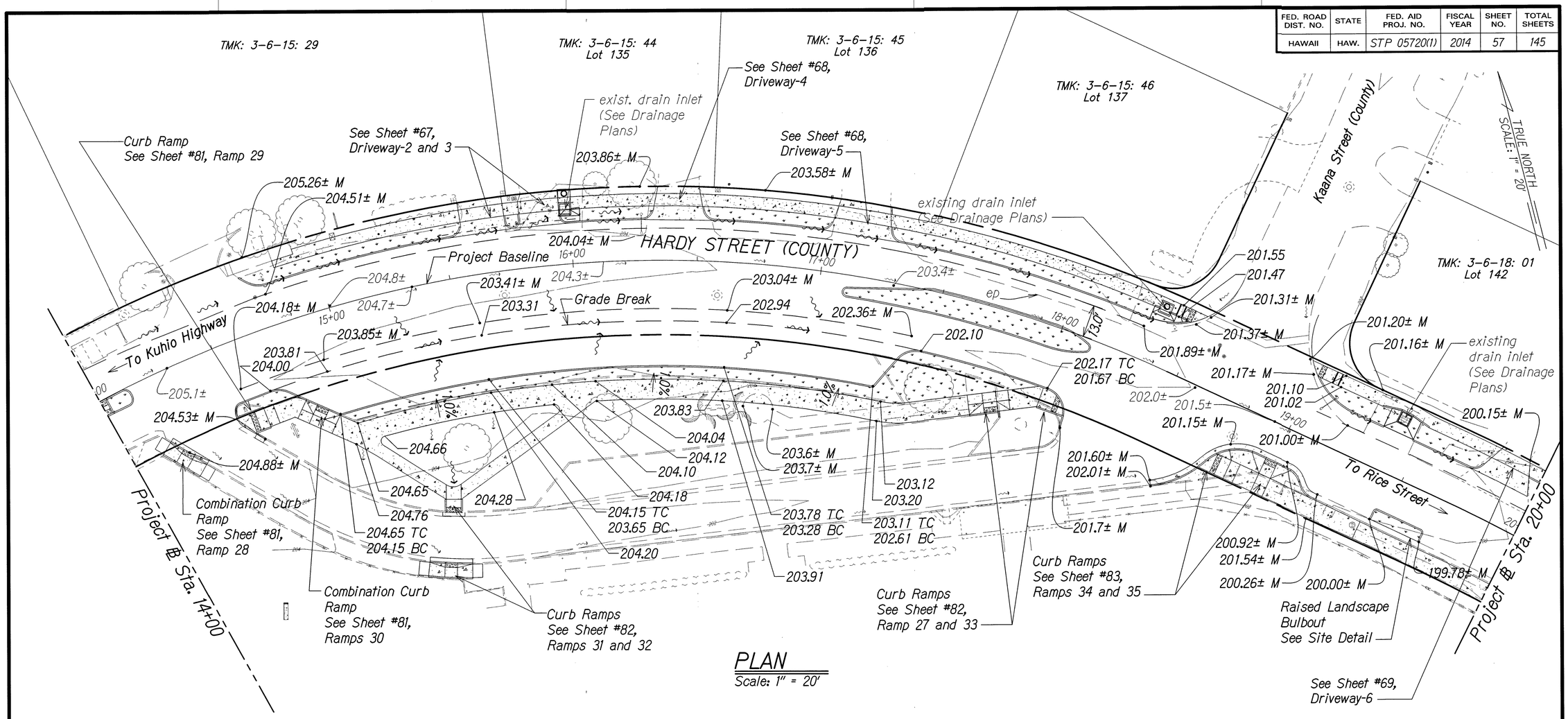
GRADING PLAN

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	57	145



PLAN
Scale: 1" = 20'

LEGEND:

	Project Baseline	100.00	Finish Grade (Top of Pavement/Top of Sidewalk)
	Property Line	100.00 TC	Finish Grade at Top of Curb
180	Existing Major Contour	100.00 BC	Finish Grade at Bottom of Curb
	Proposed Flow Arrow	191.90± M	Match to Existing Grade
	Existing Flow Arrow	191.9±	Existing Grade Spot Elevation
	Grade Control/Grade Break		

NOTE:
1. Provide smooth transition when proposed improvements connect to existing pavement/sidewalk/curb and gutter.
2. Contractor to verify existing grades.
3. See Roadway Sections.
4. See Driveway Details.
5. See Drainage Plans for drainage improvements.
6. See Electrical Plans for electrical improvements.

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

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

FIONA K. VAN AMMERS LICENSED PROFESSIONAL ENGINEER No. 11907-C HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

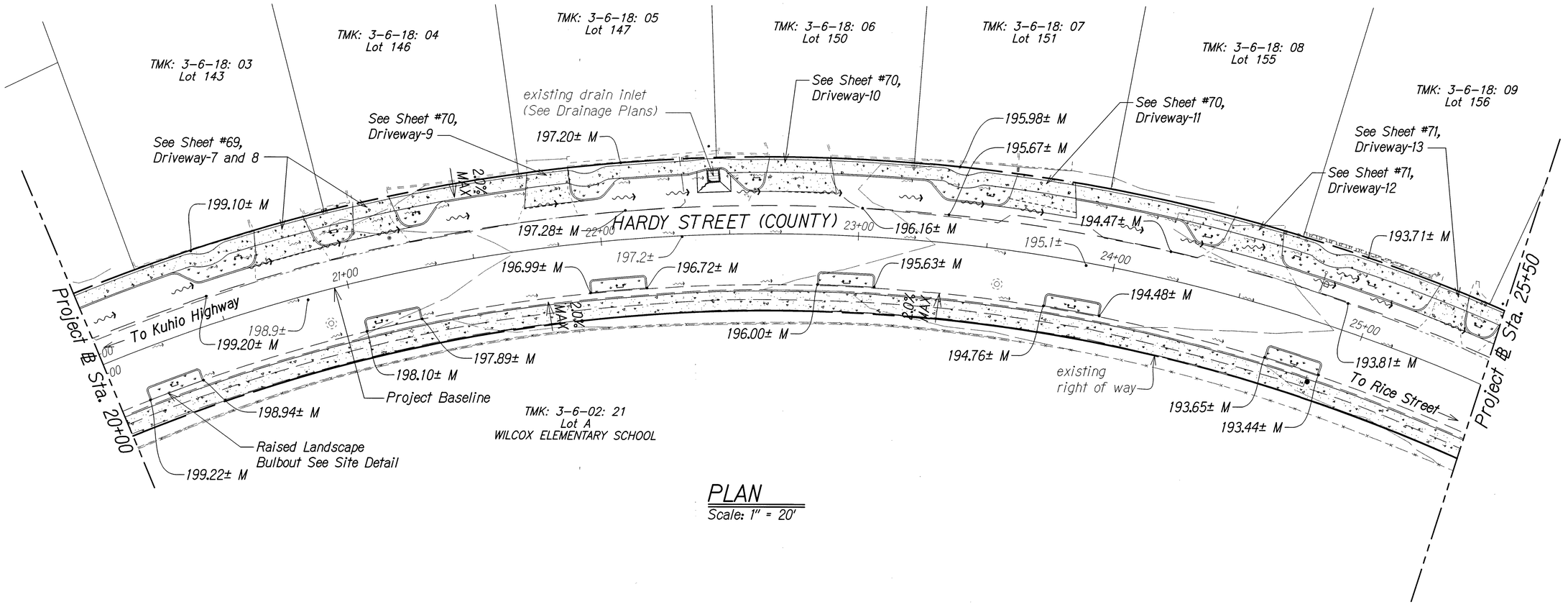
GRADING PLAN

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 0572O(1)	2014	58	145



PLAN
Scale: 1" = 20'

LEGEND:

Project Baseline	100.00 — Finish Grade Spot Elevation (Top of Pavement/ Top of Sidewalk)
Property Line	100.00 TC — Finish Grade at Top of Curb
180 — existing Major Contour	100.00 BC — Finish Grade at Bottom of Curb
Grade Control/Grade Break	191.9± M — Match to Existing Grade
Proposed Flow Arrow	191.9± — Existing Grade Spot Elevation
Existing Flow Arrow	

NOTE:

1. Provide smooth transition when proposed improvements connect to existing pavement/sidewalk/curb and gutter.
2. Contractor to verify existing grades.
3. See Roadway Sections.
4. See Driveway Details.
5. See Drainage Plans for drainage improvements.
6. See Electrical Plans for electrical improvements.

GRAPHICAL SCALES:

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

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

GRADING PLAN

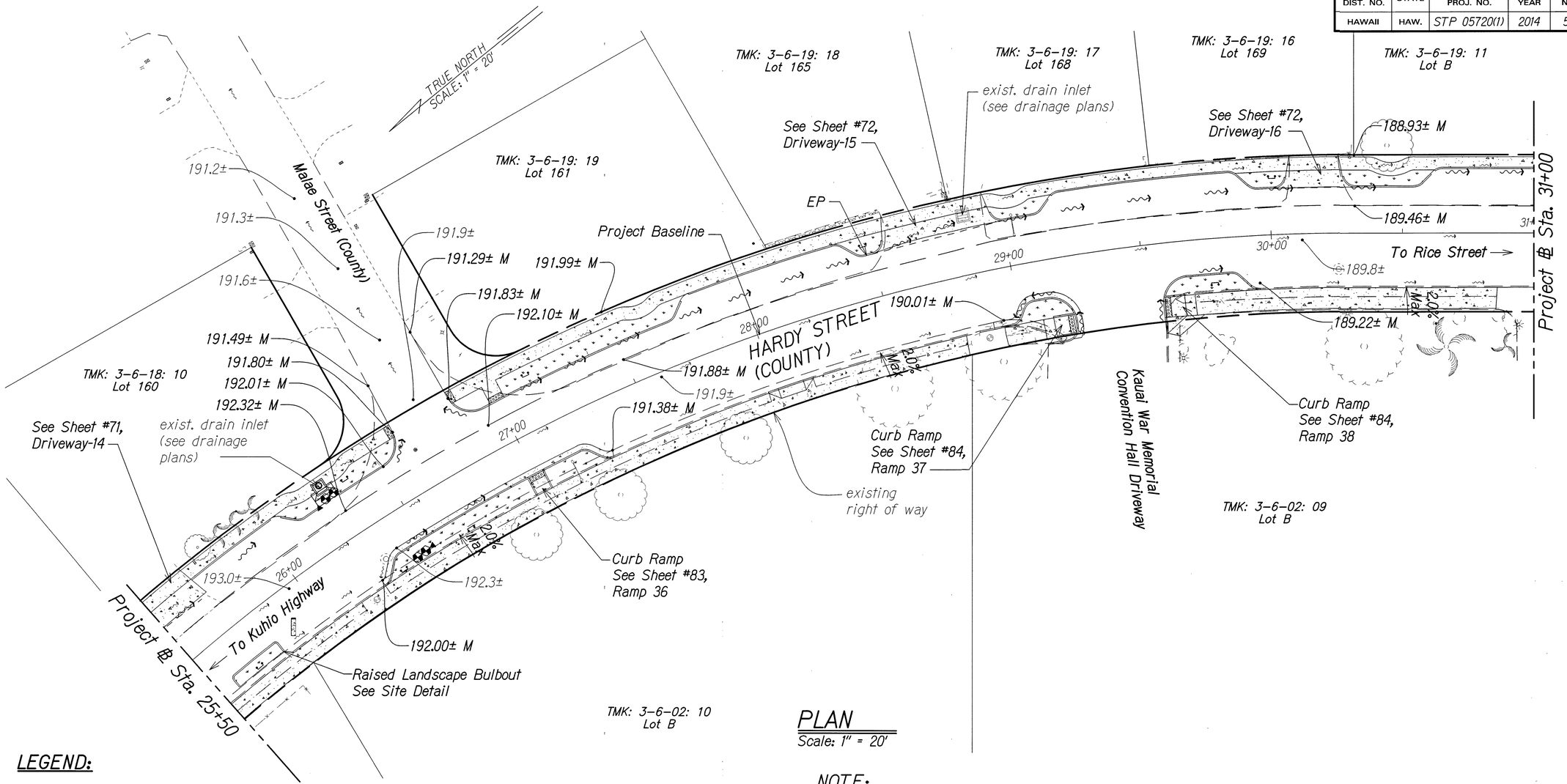
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 0572O(1)

Scale: As Noted — Date: September, 2014

SHEET No. 5 OF 7 SHEETS

100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	59	145



LEGEND:

Project Baseline	
Property Line	
180	existing grade
Grade Control/Grade Break	
Proposed Flow Arrow	
Existing Flow Arrow	
100.00	Finish Grade (Top of Pavement/ Top of Sidewalk)
100.00 TC	Finish Grade at Top of Curb
100.00 BC	Finish Grade at Bottom of Curb
191.9± M	Match to Existing Grade
191.9±	Existing Grade Spot Elevation

PLAN

Scale: 1" = 20'

NOTE:

1. Provide smooth transition when proposed improvements connect to existing pavement/sidewalk/curb and gutter.
2. Contractor to verify existing grades.
3. See Roadway Sections.
4. See Driveway Details.
5. See Drainage Plans for drainage improvements.
6. See Electrical Plans for electrical improvements.

GRAPHICAL SCALES:

20' 10' 0 20' 40'

Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:

COUNTY ENGINEER — DATE 11.21.14

FIONA K. VAN ANMEERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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

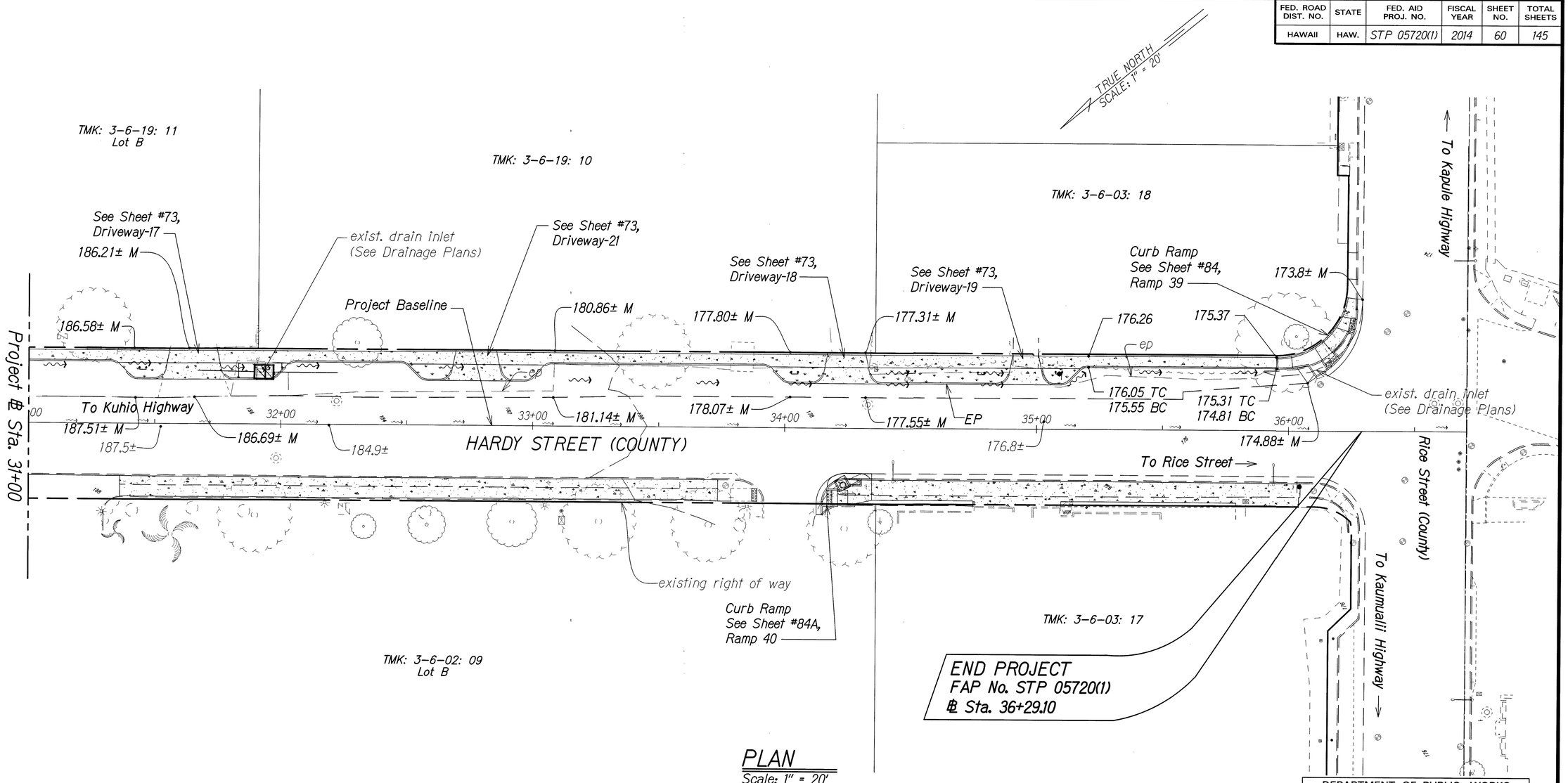
GRADING PLAN

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	60	145



PLAN
Scale: 1" = 20'

LEGEND:

Project Baseline	
Property Line	
180	existing grade
Grade Control/Grade Break	
Proposed Flow Arrow	
Existing Flow Arrow	
100.00	Finish Grade (Top of Pavement/ Top of Sidewalk)
100.00 TC	Finish Grade at Top of Curb
100.00 BC	Finish Grade at Bottom of Curb
191.9± M	Match to Existing Grade
191.9±	Existing Grade Spot Elevation

NOTE:

1. Provide smooth transition when proposed improvements connect to existing pavement/sidewalk/curb and gutter.
2. Contractor to verify existing grades.
3. See Roadway Sections.
4. See Driveway Details.
5. See Drainage Plans for drainage improvements.
6. See Electrical Plans for electrical improvements.

GRAPHICAL SCALES:

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

FIONA K. VAN ANNERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — 11.21.14 DATE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

GRADING PLAN

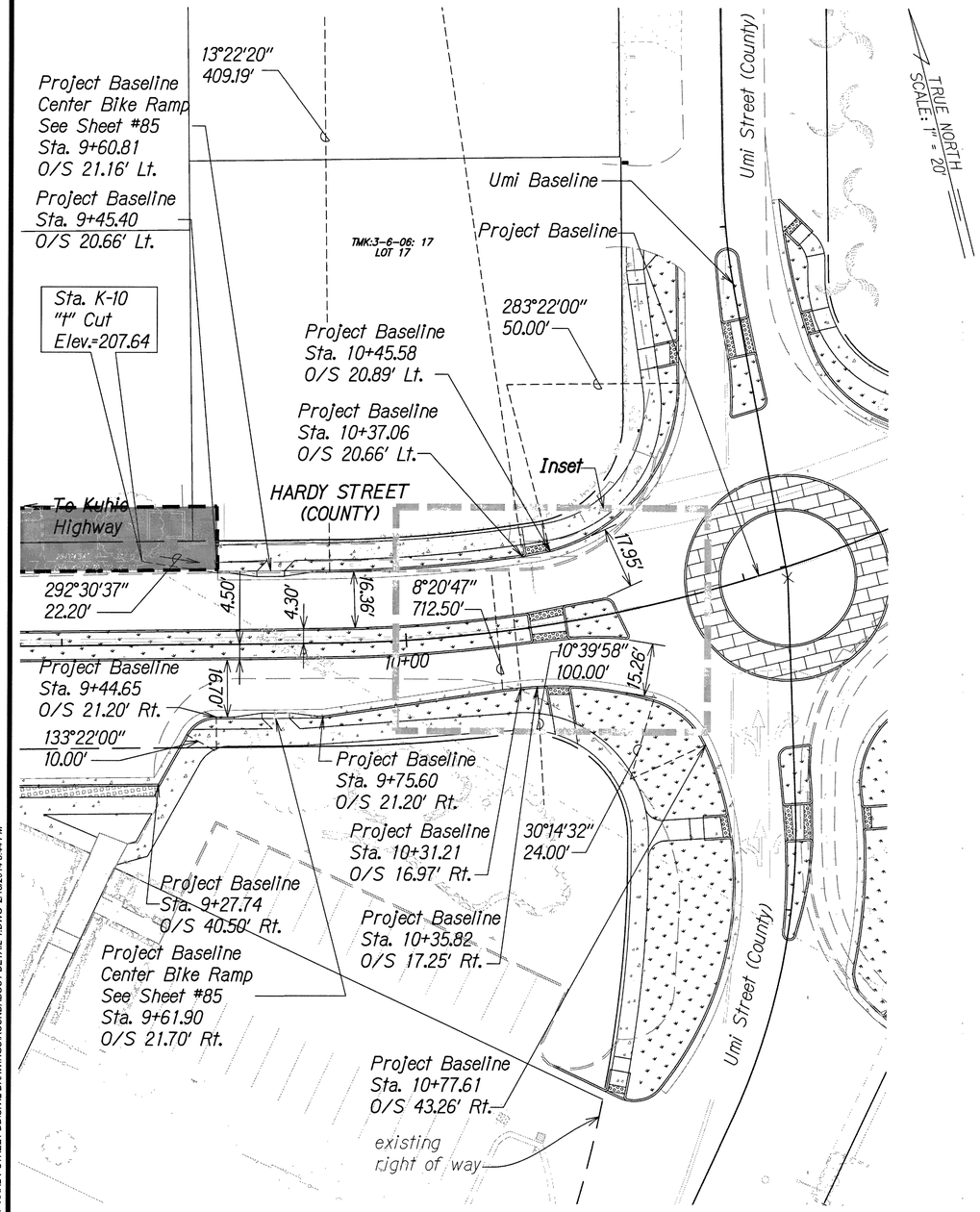
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

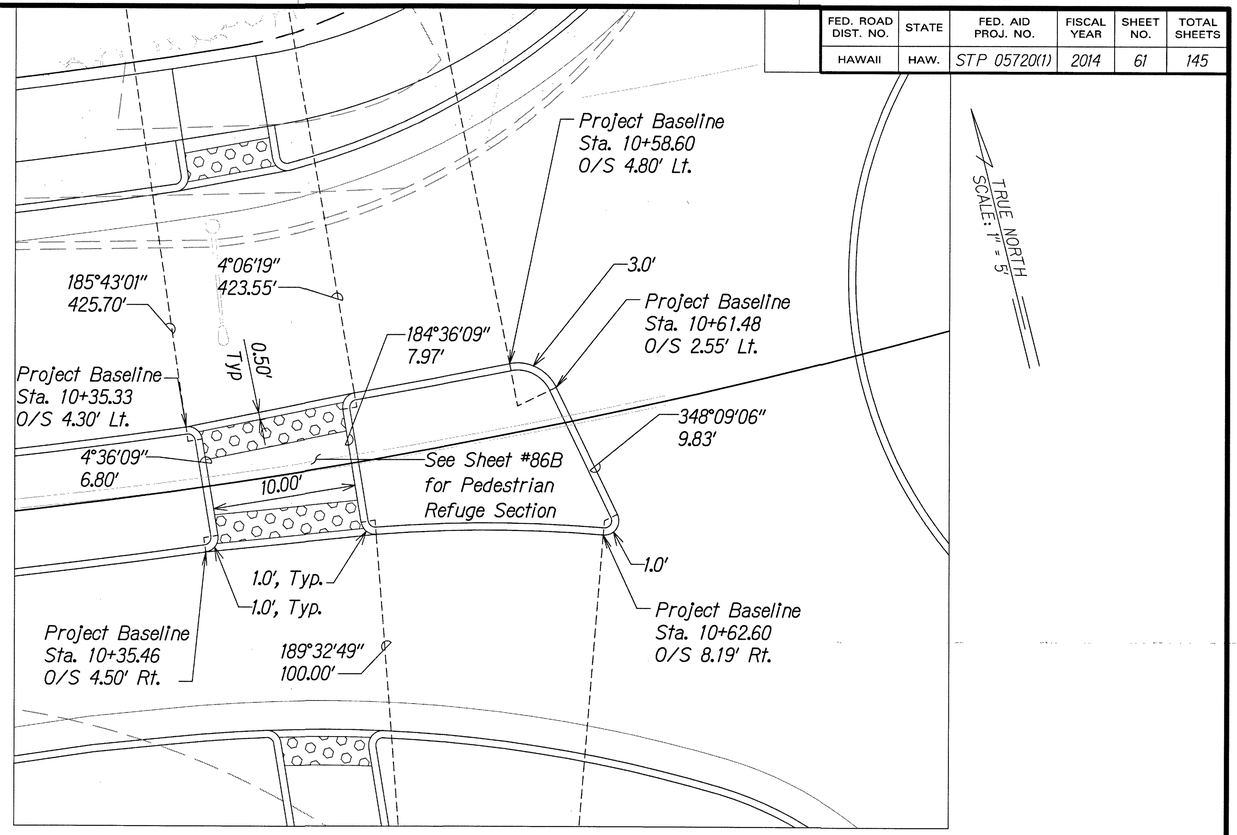
SHEET No. 7 OF 7 SHEETS

100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	61	145



Plan
Scale: 1" = 20'



Inset
Scale: 1" = 5'

GRAPHICAL SCALE:

5' 0 5' 10'

Scale: 1" = 5'

GRAPHICAL SCALE:

20' 10' 0 20' 40'

Scale: 1" = 20'

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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

ROUNDABOUT DETAIL

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

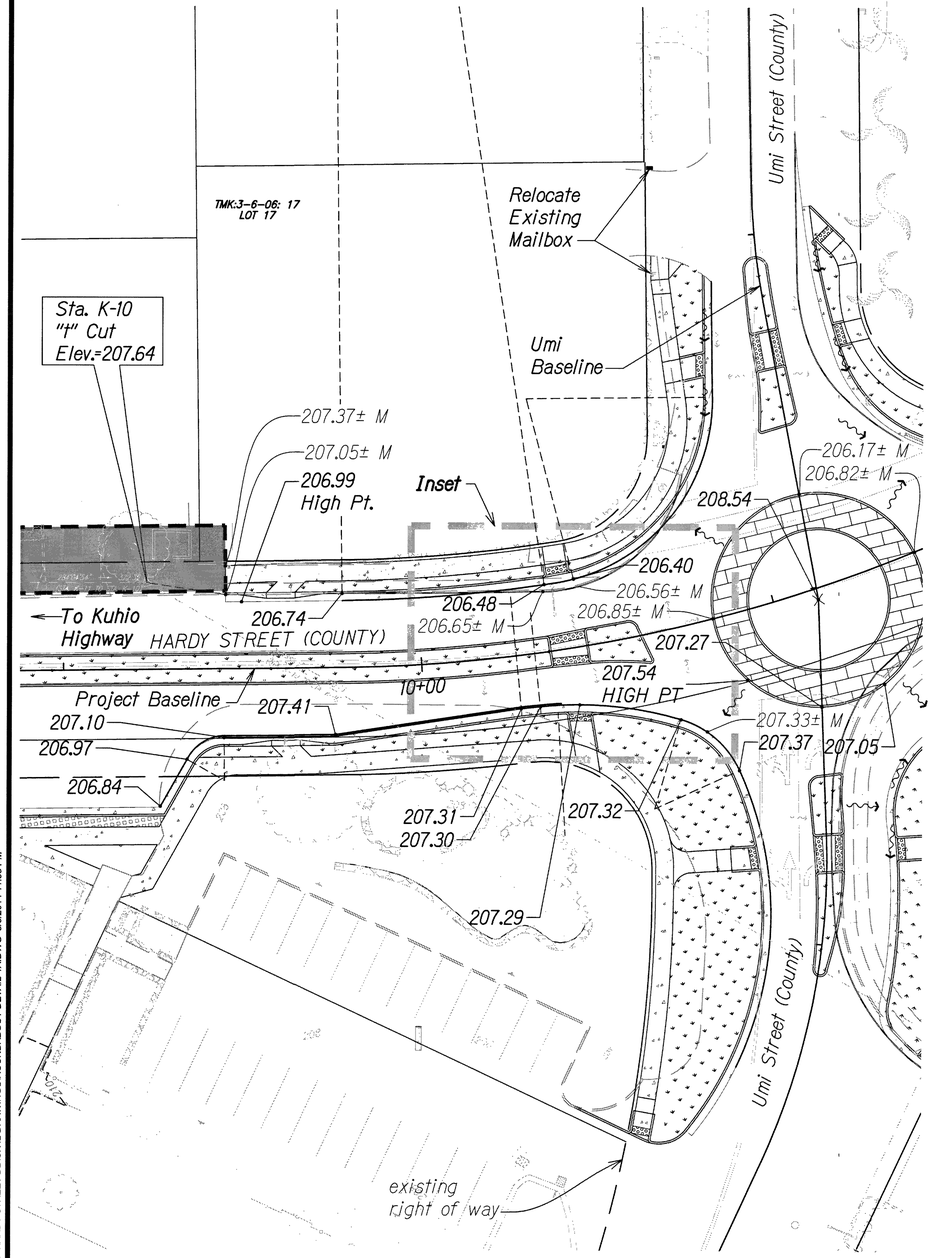
Scale: As Noted — Date: September, 2014

SHEET No. 1 OF 8 SHEETS

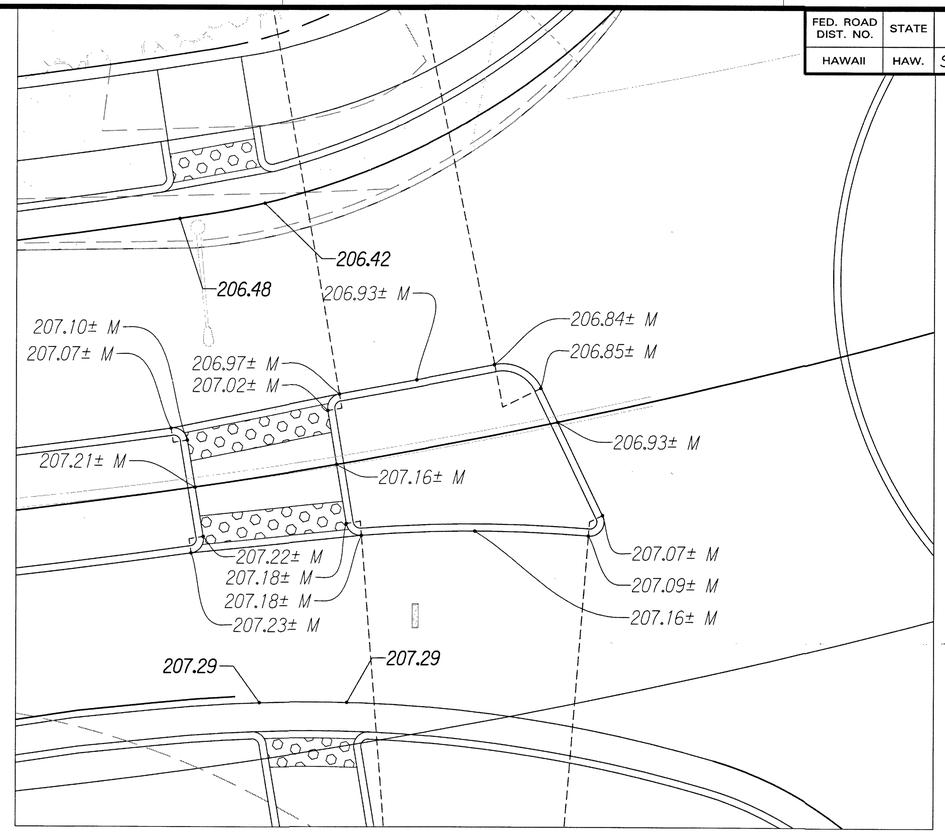
W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROUNDABOUT DETAIL-1.DWG 2/18/2014 3:44 PM

100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	61A	145



Plan
Scale: 1" = 20'



Inset
Scale: 1" = 5'

LEGEND:

- Project Baseline
- Property Line
- 180 — Existing Major Contour
- Grade Control
- 100.00 — Finish Grade Spot Elevation
- 191.9± M — Match to Existing Grade
- Proposed Flow Arrow
- existing flow arrow

GRAPHICAL SCALE:

5' 0 5' 10'
Scale: 1" = 5'

GRAPHICAL SCALE:

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

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 4-21-14

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROUNDABOUT GRADING DETAIL

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

Scale: As Noted — Date: September, 2014

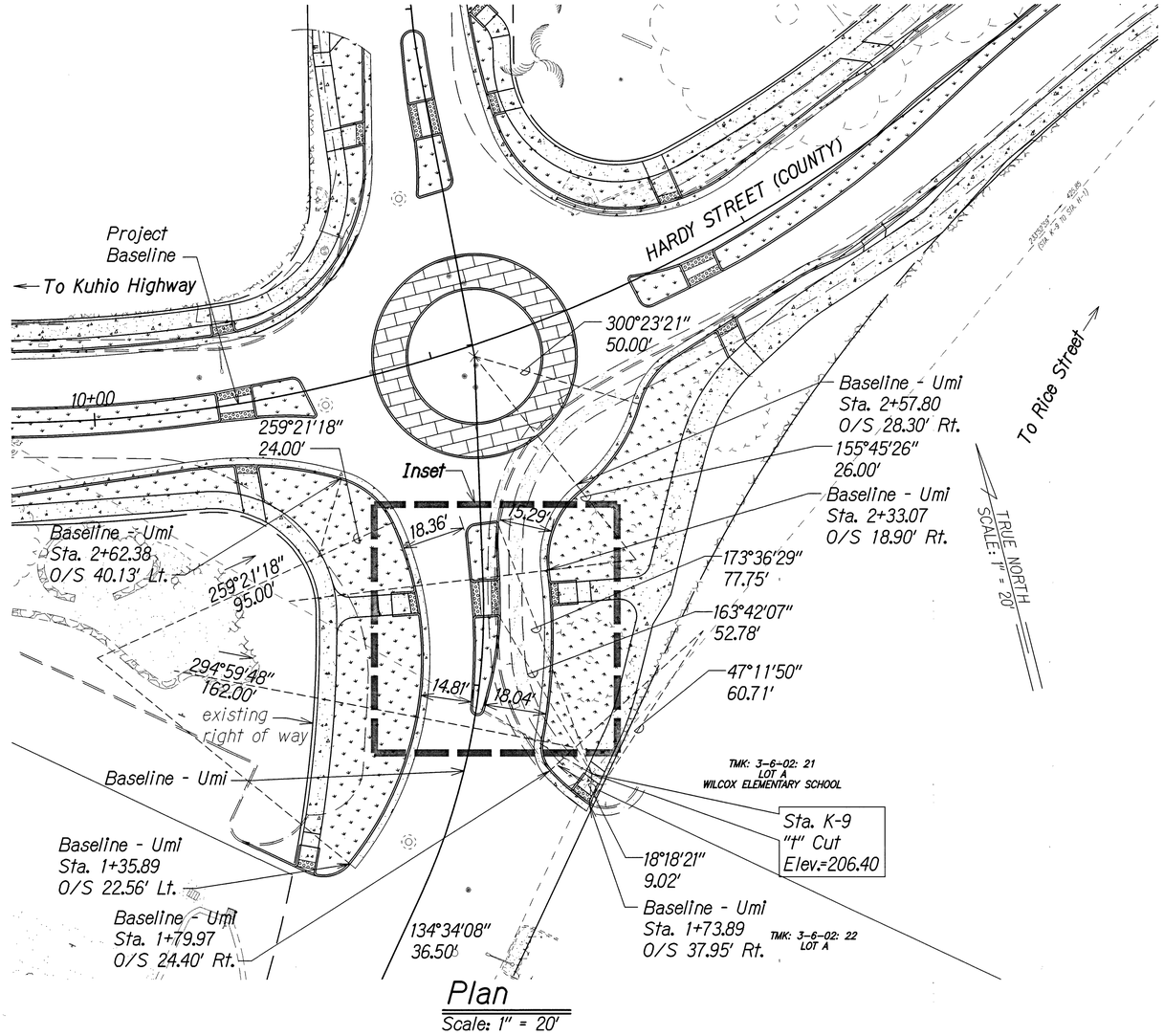
SHEET No. 2 OF 8 SHEETS

100% SUBMITTAL

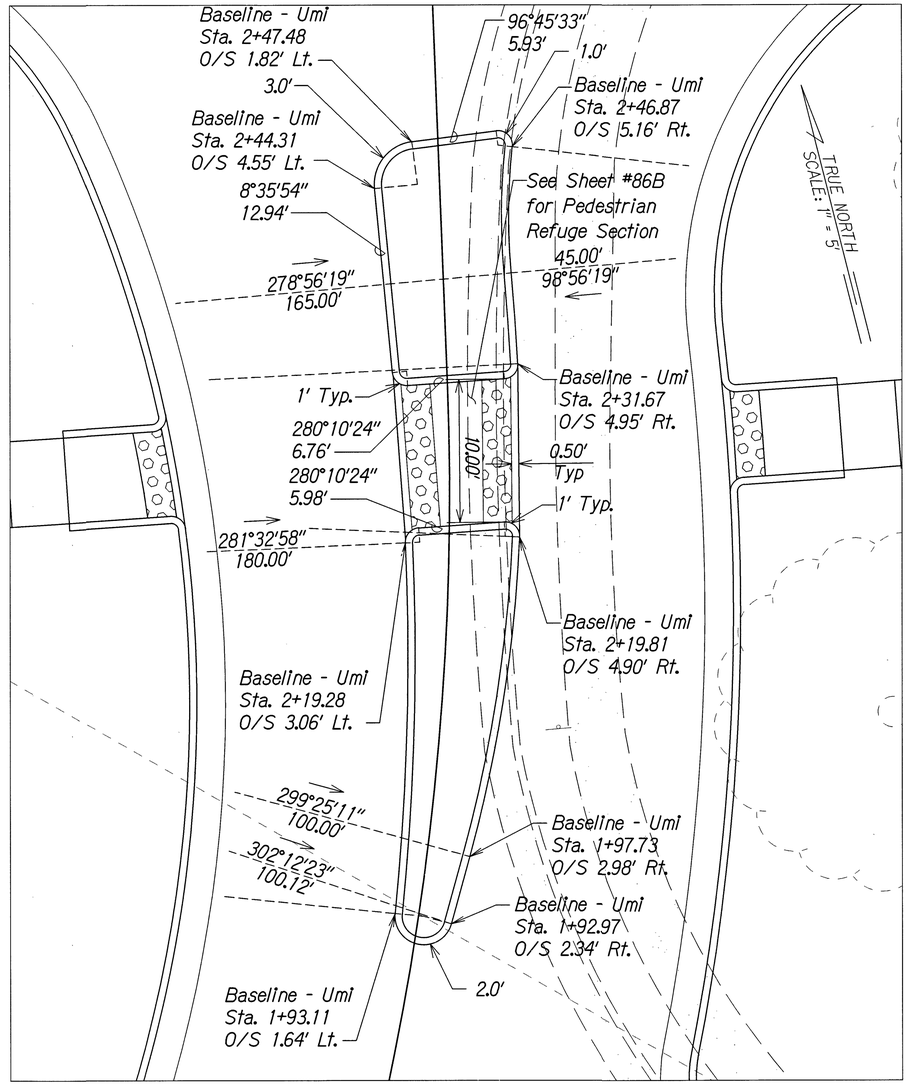
61A

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROUNDABOUT DETAIL-1A.DWG 5/5/2014 11:38 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	62	145



Plan
Scale: 1" = 20'



Inset
Scale: 1" = 5'

GRAPHICAL SCALE:
5' 0 5' 10'
Scale: 1" = 5'

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

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROUNDABOUT DETAIL

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

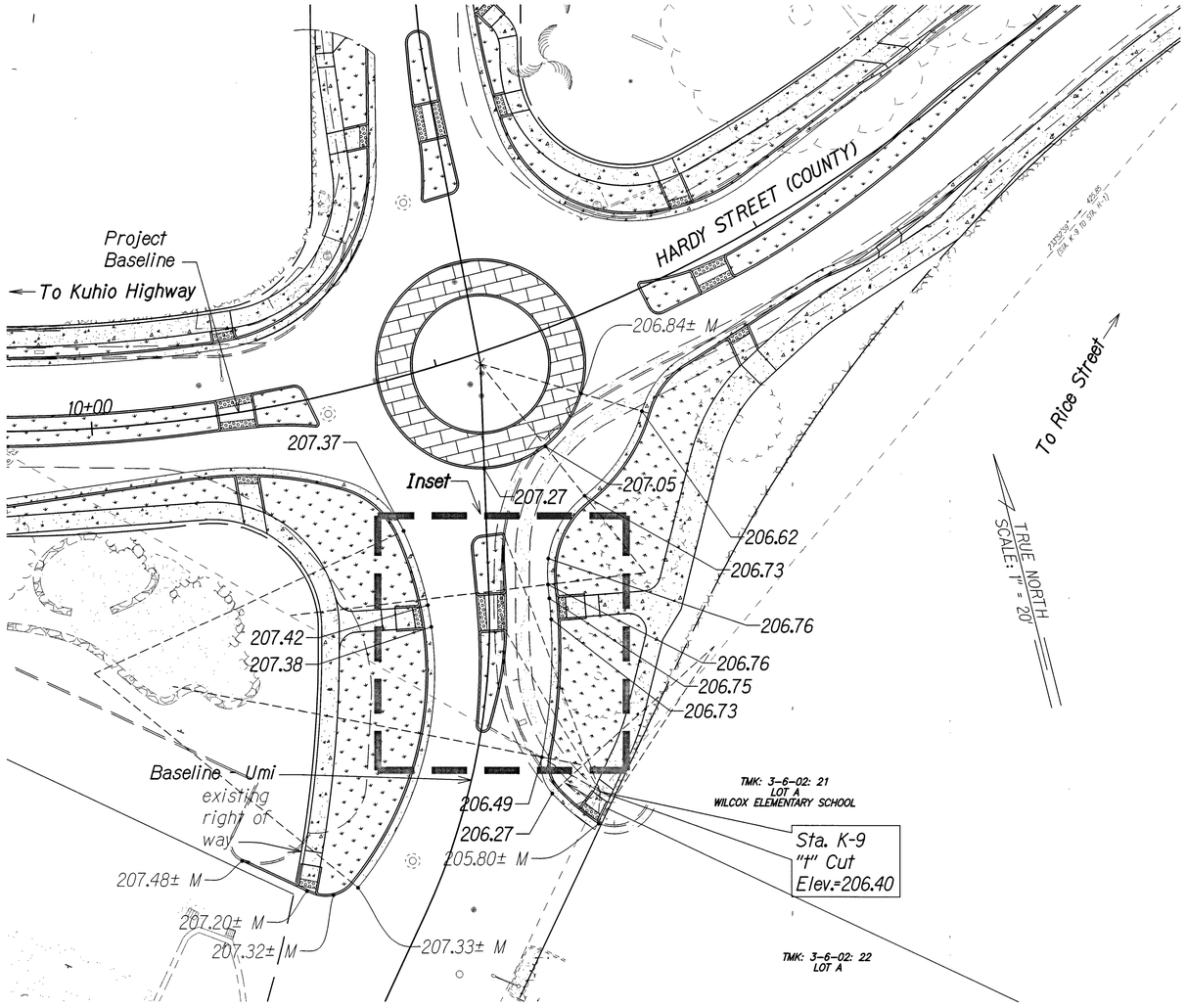
Scale: As Noted — Date: September, 2014

SHEET No. 3 OF 8 SHEETS

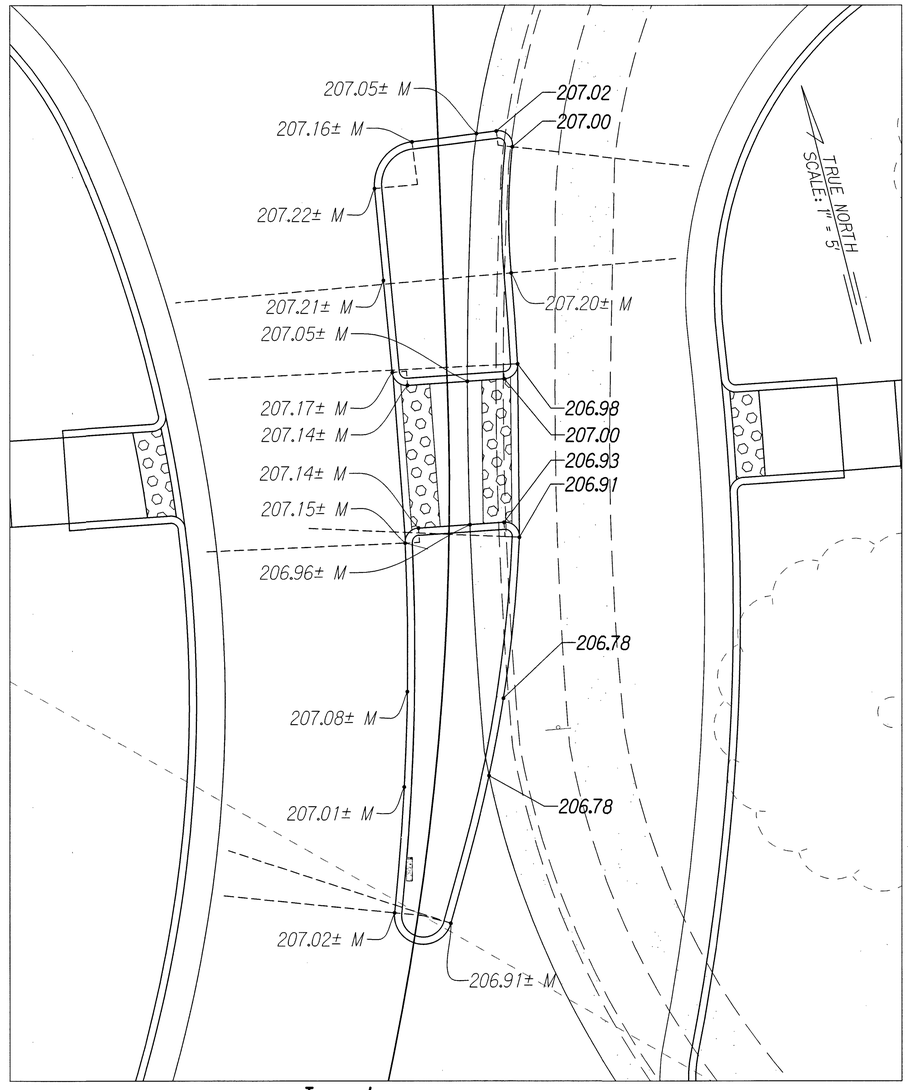
100% SUBMITTAL

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROUNDABOUT DETAIL-2.DWG 2/18/2014 3:44 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	62	145



Plan
Scale: 1" = 20'



Inset
Scale: 1" = 5'

LEGEND:

- Project Baseline
- Property Line
- 180 — Existing Major Contour
- Grade Control
- 100.00 — Finish Grade Spot Elevation
- 191.9± M — Match to Existing Grade
- Proposed Flow Arrow
- existing flow arrow

GRAPHICAL SCALE:
5' 0 5' 10'
Scale: 1" = 5'

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

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 11.21.14

FIONA K. VAN AMMERS
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No. 11907-C
HAWAII, U.S.A.

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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROUNDABOUT GRADING DETAIL

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

Scale: As Noted — Date: September, 2014

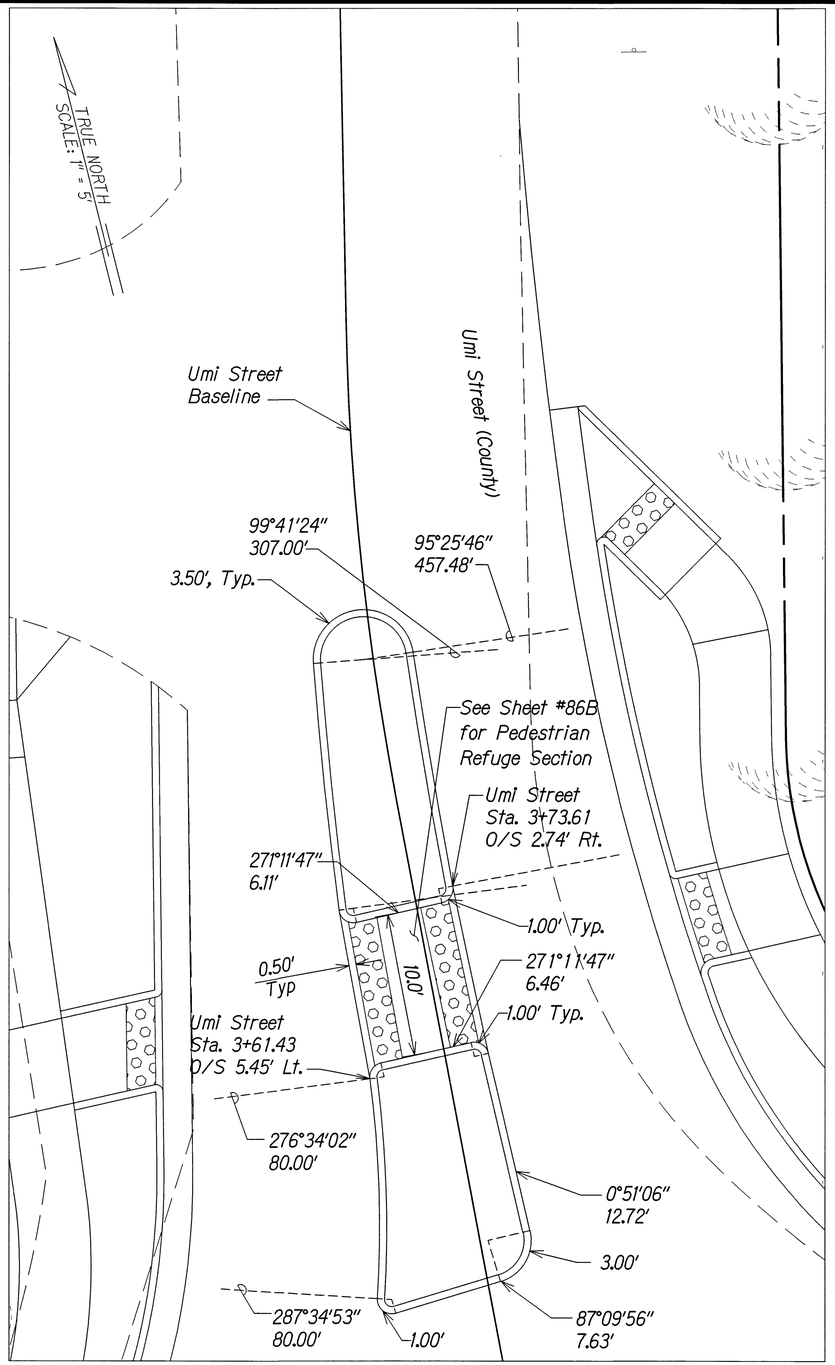
SHEET No. 4 OF 8 SHEETS

100% SUBMITTAL

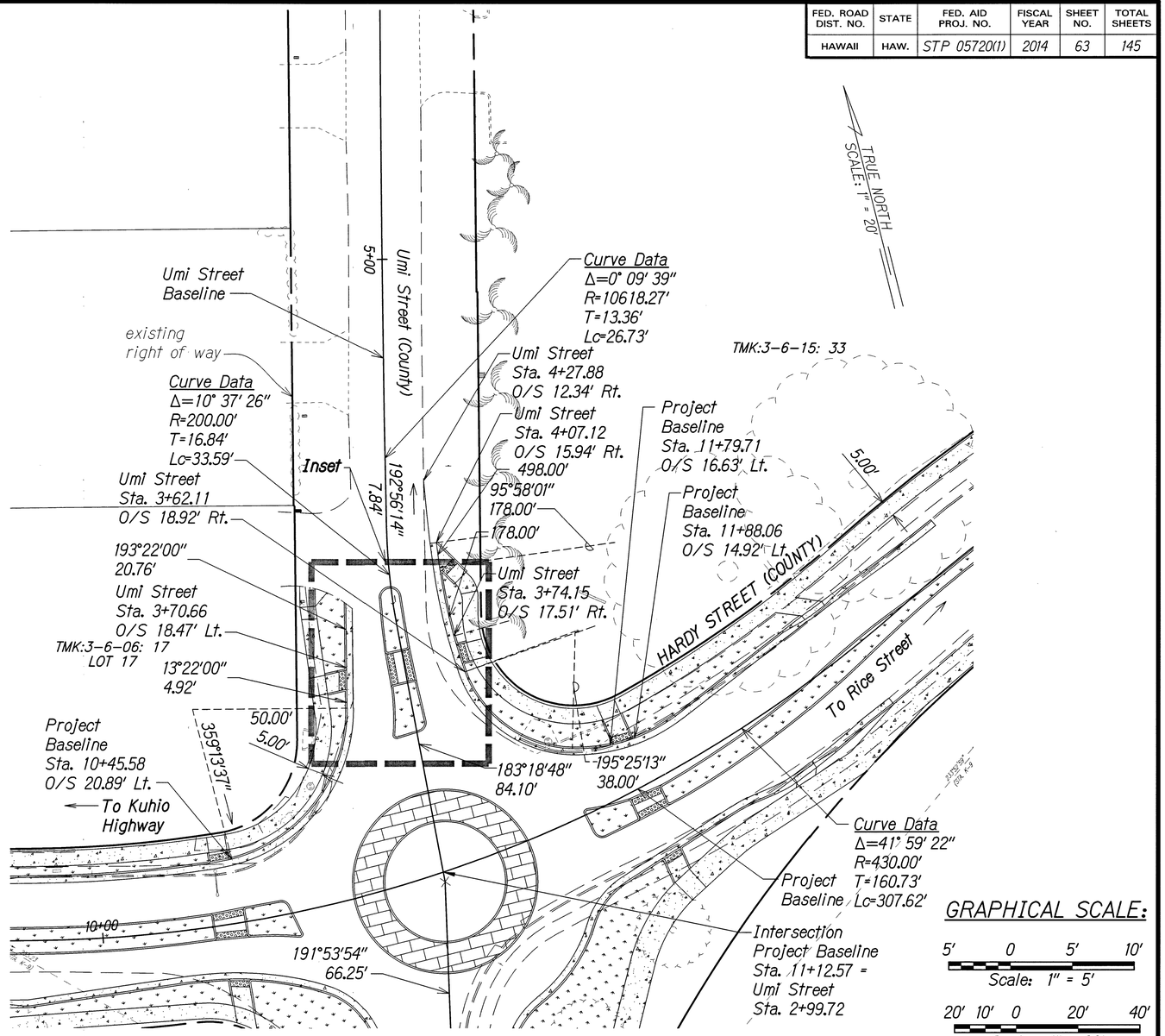
62A

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROUNDABOUT DETAIL-2A.DWG 5/8/2014 12:08 AM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	63	145



Inset
Scale: 1" = 5'



Plan
Scale: 1" = 20'

GRAPHICAL SCALE:

5' 0 5' 10'
Scale: 1" = 5'

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

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROUNDABOUT DETAIL

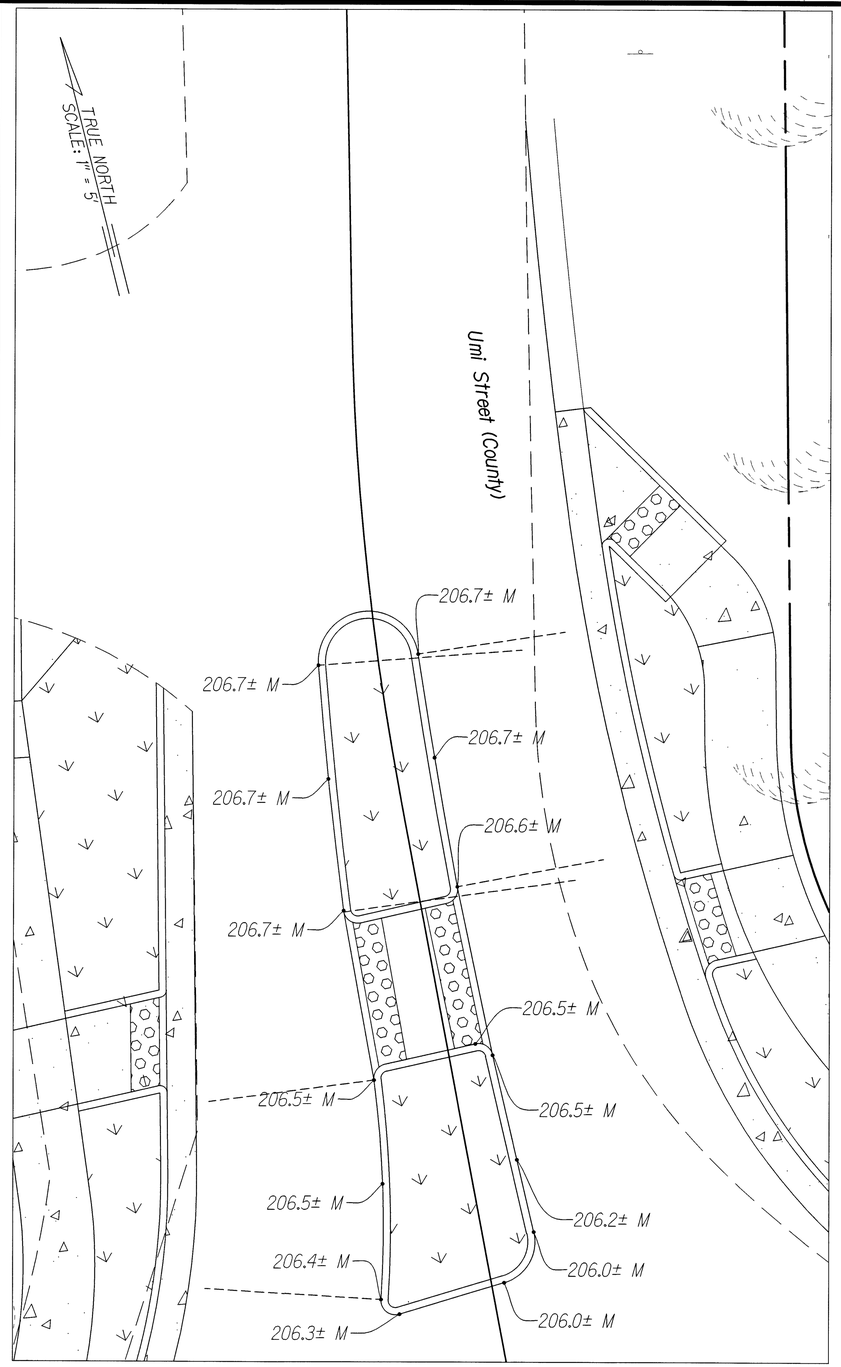
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

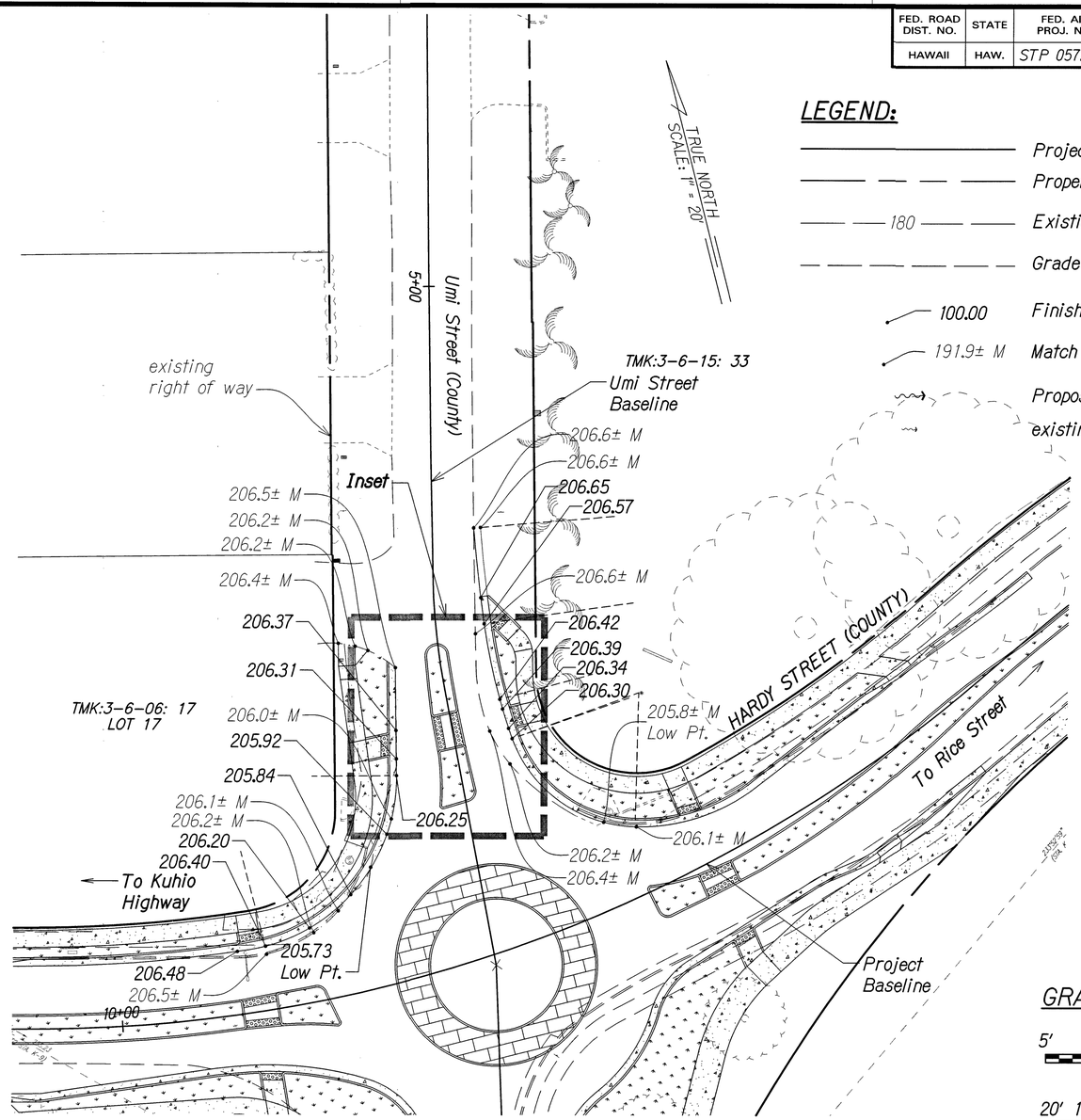
SHEET No. 5 OF 8 SHEETS

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROUNDABOUT DETAIL-3.DWG 2/23/2014 3:08 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 0572O(1)	2014	63	145



Inset
Scale: 1" = 5'



Plan
Scale: 1" = 20'

LEGEND:

- Project Baseline
- Property Line
- 180 — Existing Major Contour
- Grade Control
- 100.00 — Finish Grade Spot Elevation
- 191.9± M — Match to Existing Grade
- Proposed Flow Arrow
- existing flow arrow

GRAPHICAL SCALE:

5' 0 5' 10'
Scale: 1" = 5'

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

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROUNDABOUT GRADING DETAIL

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 0572O(1)

Scale: As Noted — Date: September, 2014

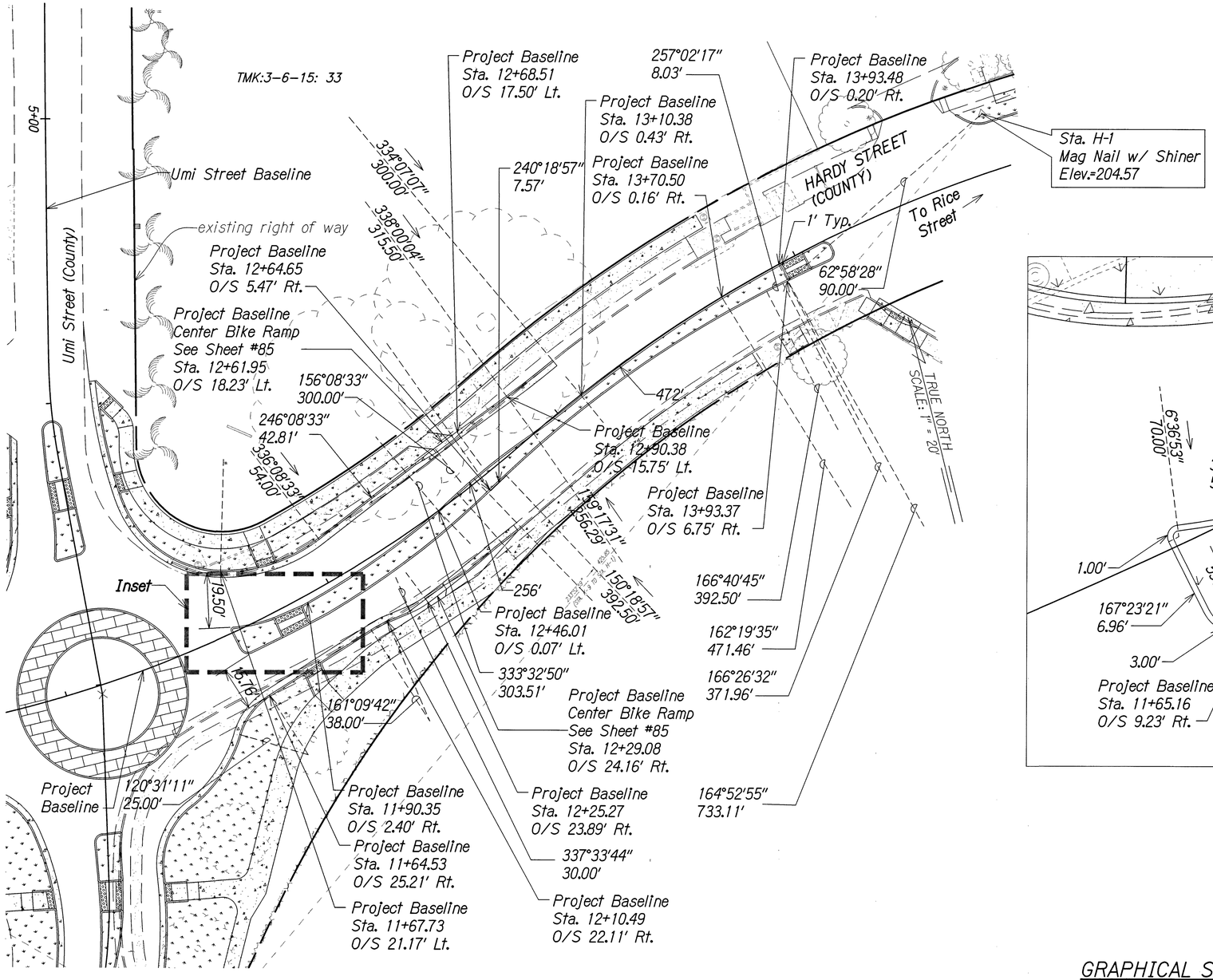
SHEET No. 6 OF 8 SHEETS

100% SUBMITTAL

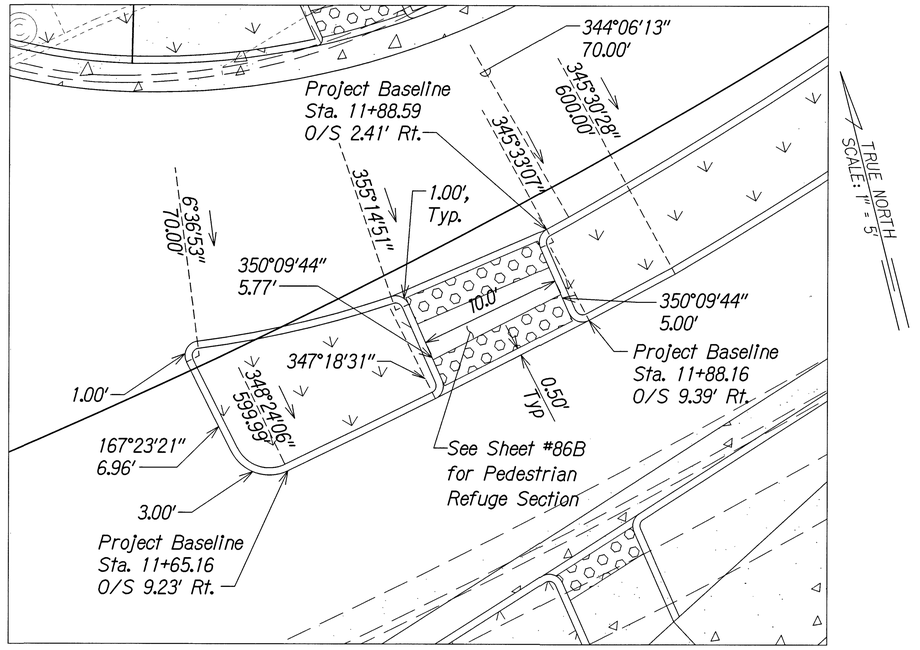
63A

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROUNDABOUT DETAIL-3A.DWG 9/8/2014 12:15 AM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	64	145



Plan
Scale: 1" = 20'



Inset
Scale: 1" = 5'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 11.21.14

GRAPHICAL SCALE:
5' 0 5' 10'
Scale: 1" = 5'

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROUNDABOUT DETAIL

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

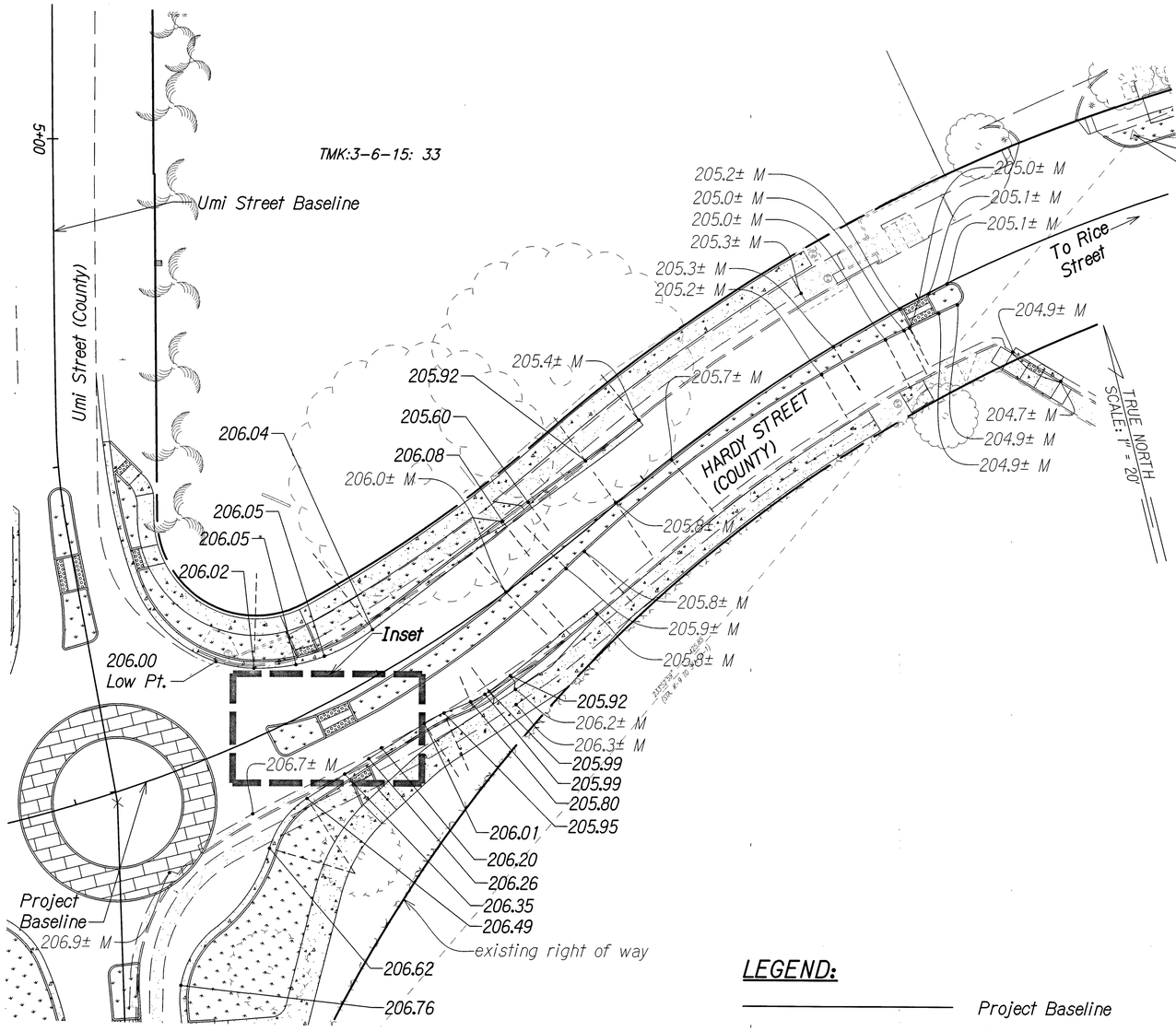
Scale: As Noted — Date: September, 2014

SHEET No. 7 OF 8 SHEETS

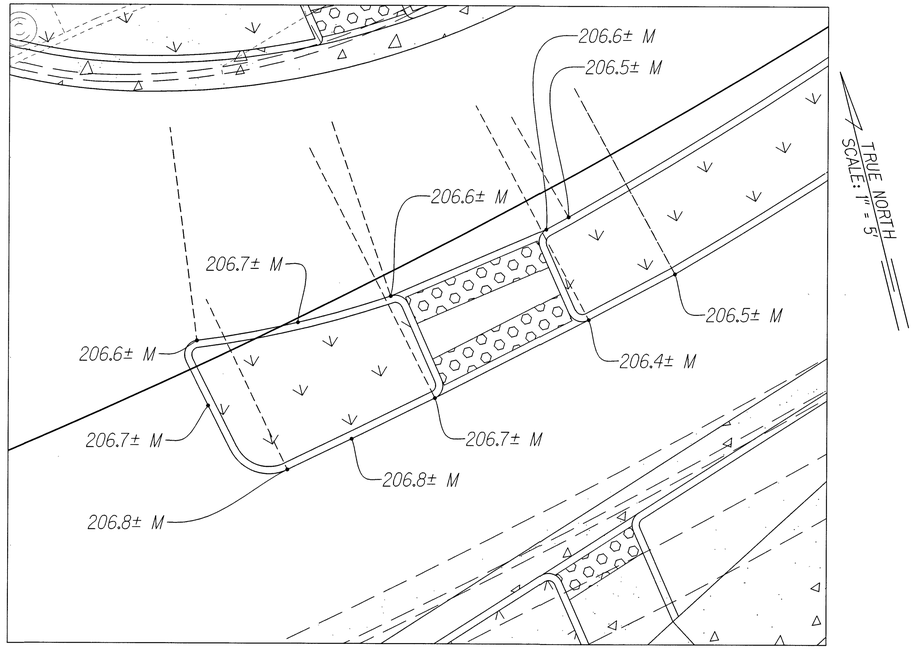
100% SUBMITTAL

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DBC\CIVIL DRAWINGS\ROUNDABOUT DETAIL 4.DWG 2/23/2014 3:08 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	64	145



Plan
Scale: 1" = 20'



Inset
Scale: 1" = 5'

LEGEND:

- Project Baseline
- Property Line
- 180 — Existing Major Contour
- Grade Control
- 100.00 — Finish Grade Spot Elevation
- 191.9± M — Match to Existing Grade
- Proposed Flow Arrow
- existing flow arrow

GRAPHICAL SCALE:
5′ 0 5′ 10′
Scale: 1" = 5'

GRAPHICAL SCALE:
20′ 10′ 0 20′ 40′
Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 11.24.14

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROUNDABOUT GRADING DETAIL

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

Scale: As Noted — Date: September, 2014

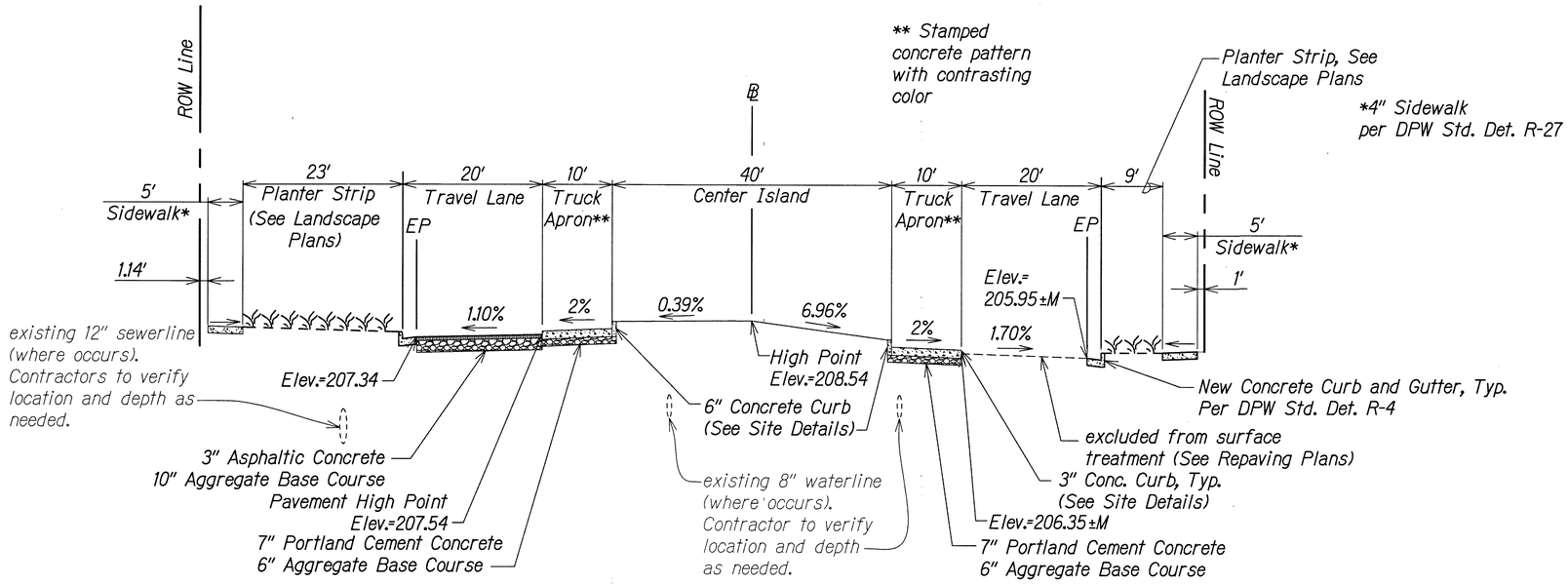
SHEET No. 8 OF 8 SHEETS

100% SUBMITTAL

64A

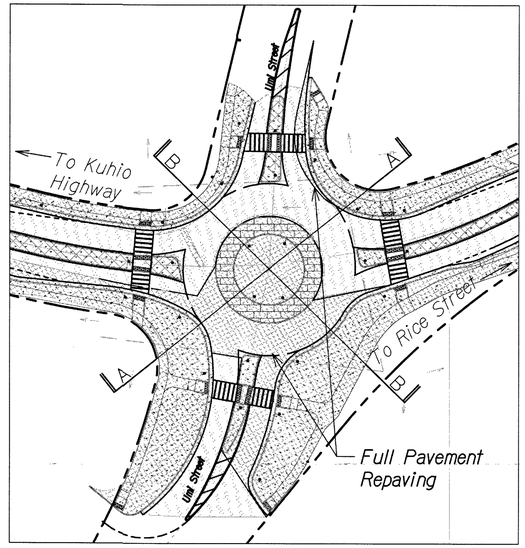
W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROUNDABOUT DETAIL-4A.DWG 5/6/2014 12:16 AM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	65	145

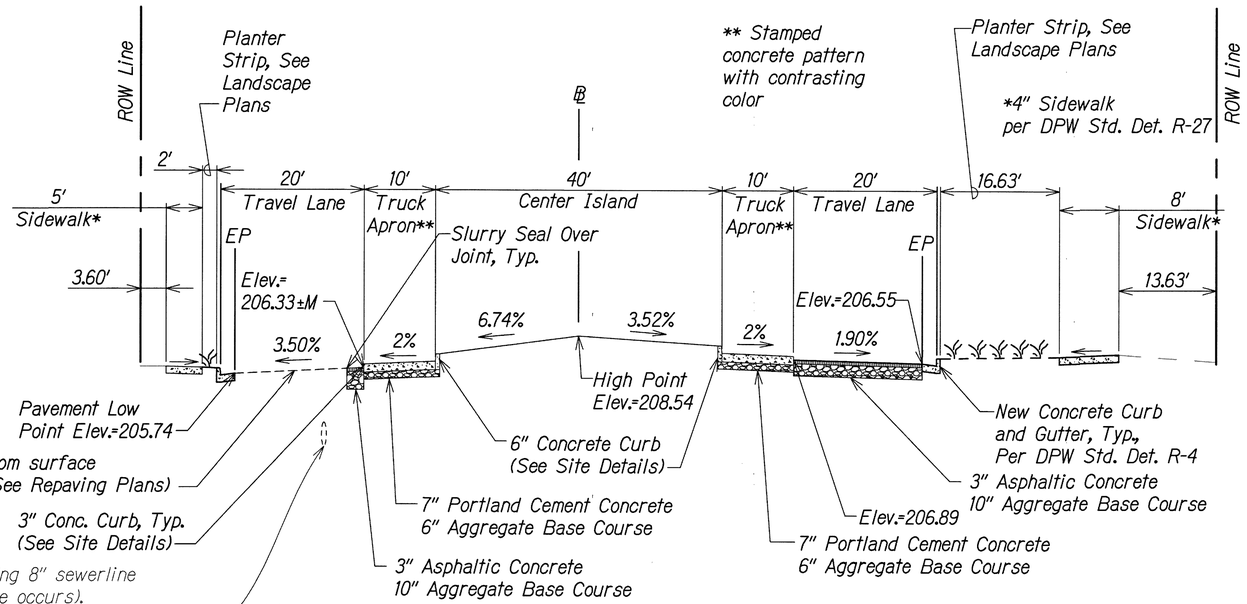


Hardy Street - Roundabout Section A-A

Scale: Not to Scale



KEYMAP
Not to scale



Hardy Street - Roundabout Section B-B

Scale: Not to Scale

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 11-2014

FIONA K. VAN AMERES
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROADWAY ROUNDABOUT SECTIONS

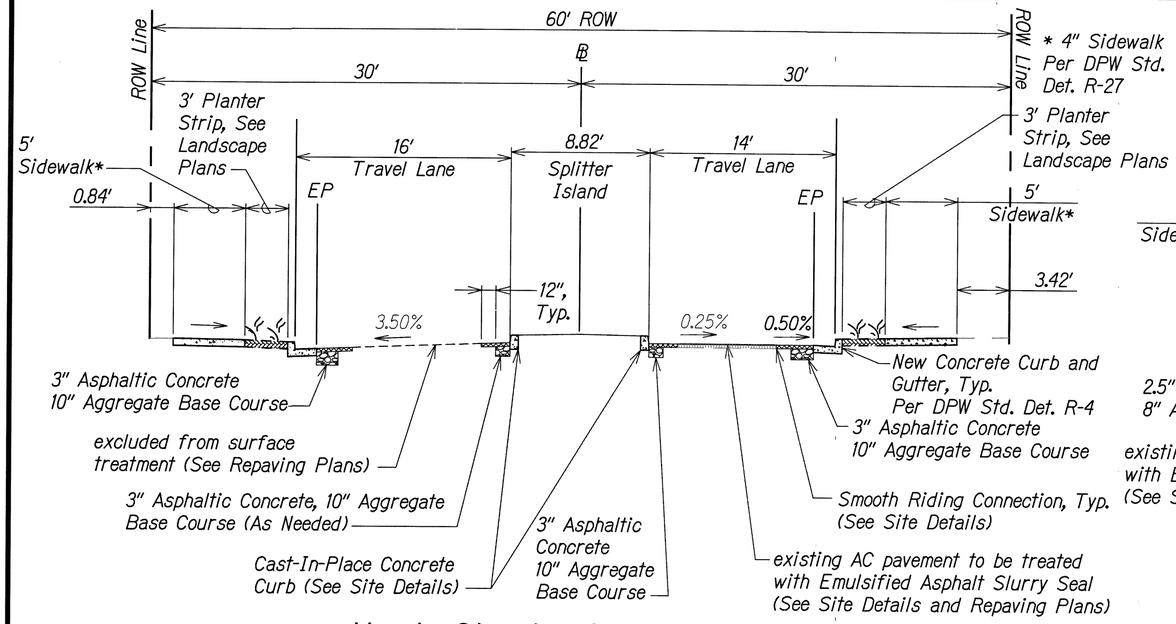
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

SHEET No. 1 OF 2 SHEETS

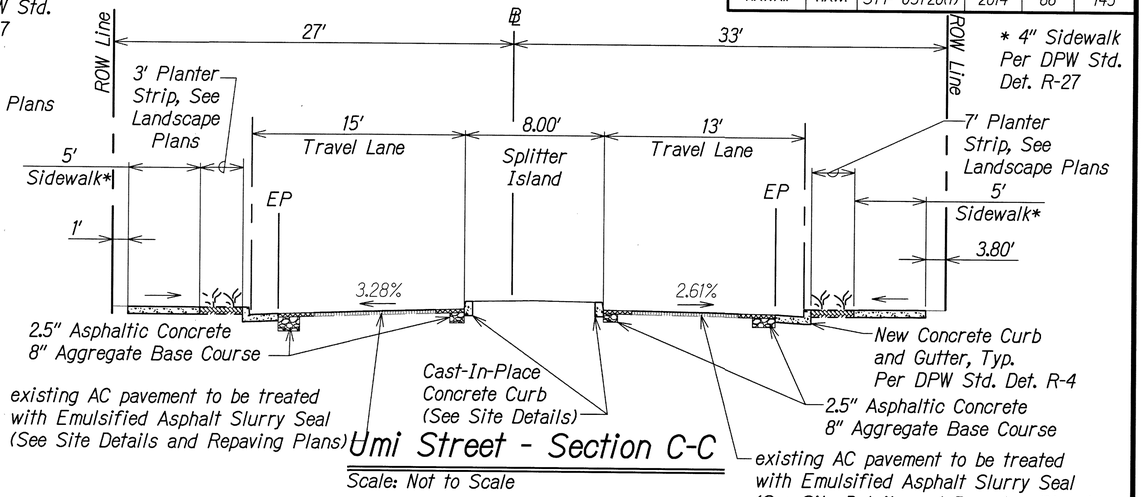
100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	66	145



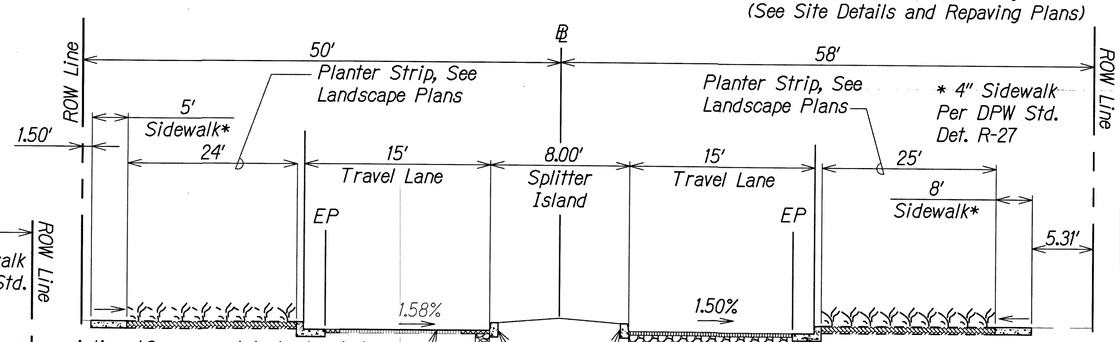
Hardy Street - Section A-A

Scale: Not to Scale



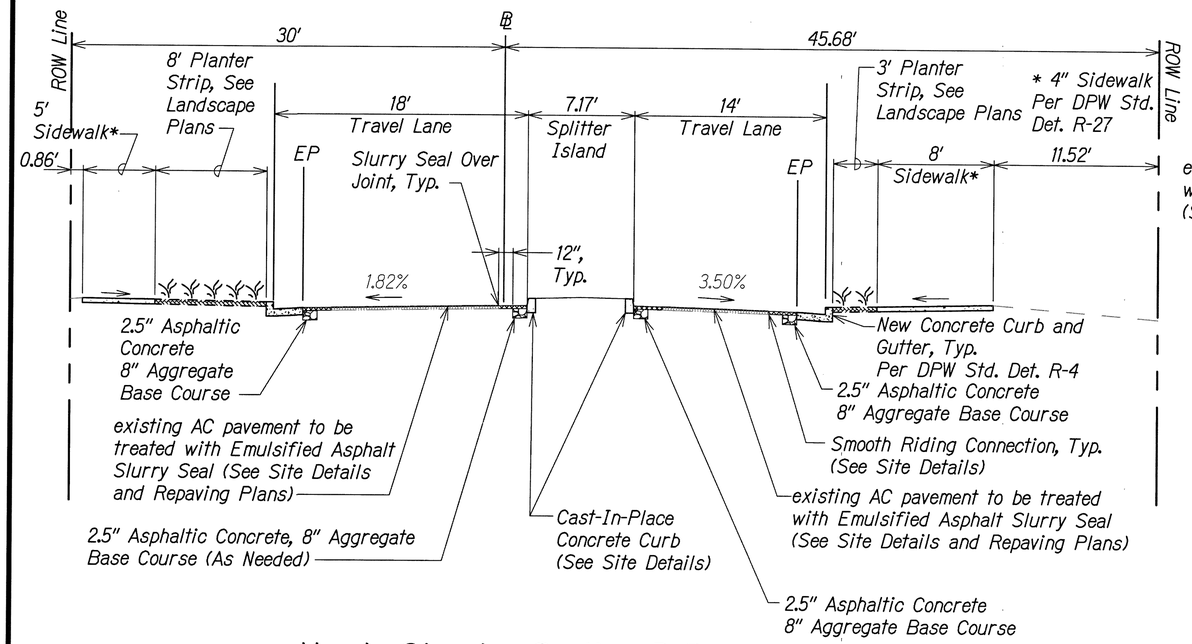
Umi Street - Section C-C

Scale: Not to Scale



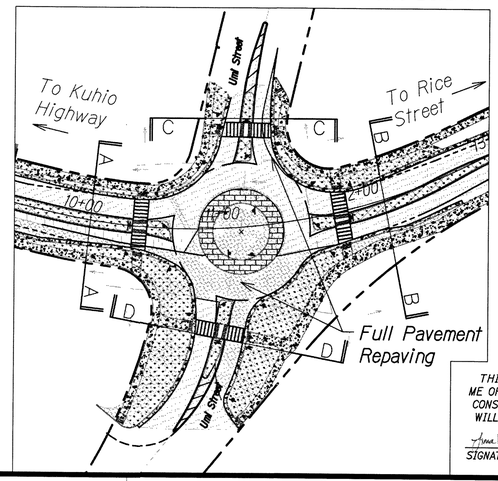
Umi Street - Section D-D

Scale: Not to Scale



Hardy Street - Section B-B

Scale: Not to Scale



KEYMAP
Not to scale

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROADWAY ROUNDABOUT SECTIONS

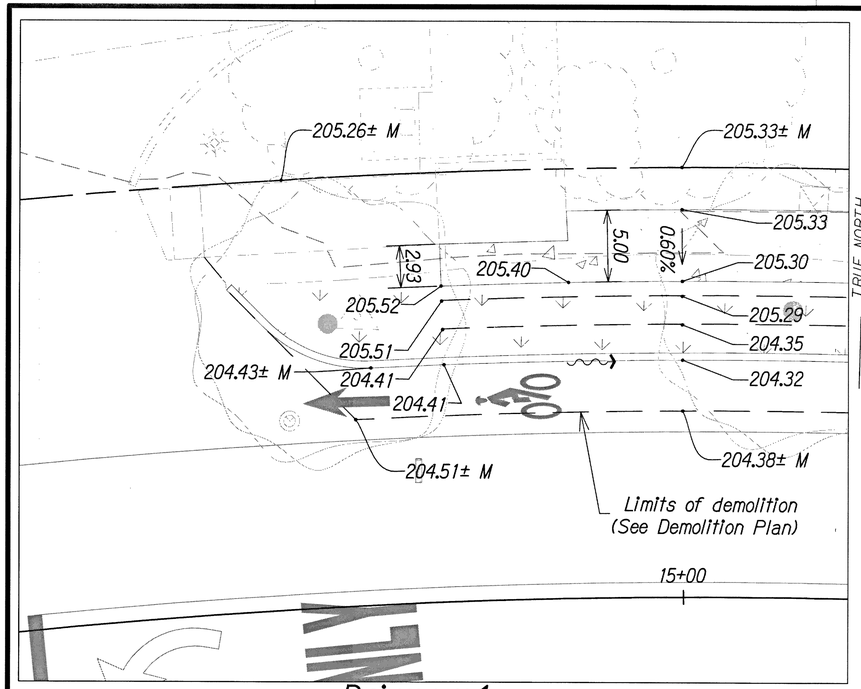
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

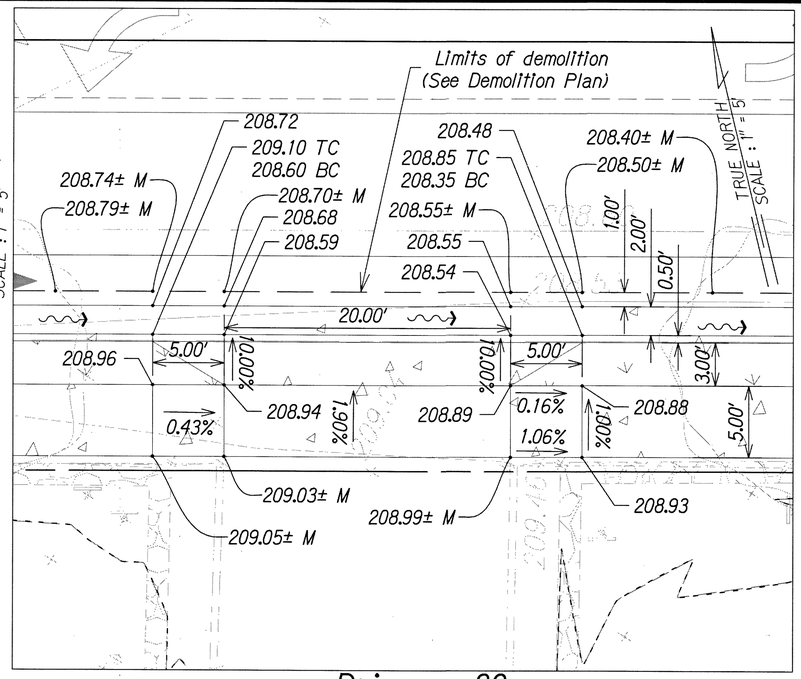
SHEET No. 2 OF 2 SHEETS

100% SUBMITTAL

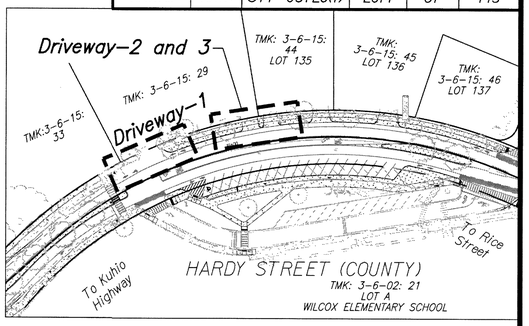
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	67	145

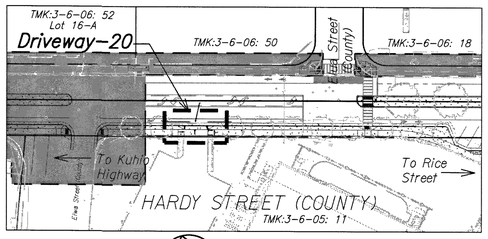


Driveway-1
Scale: 1" = 5'

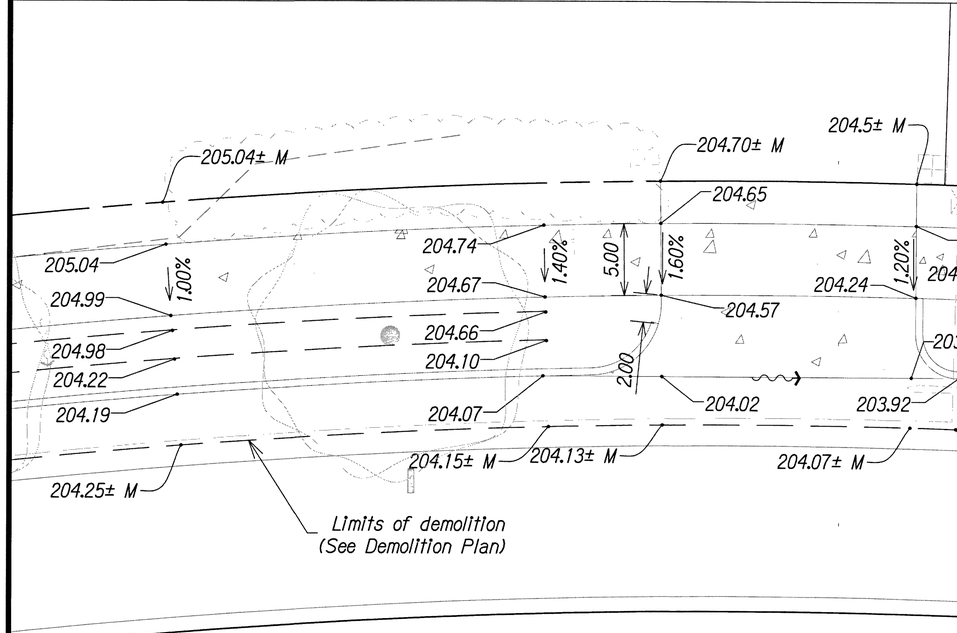


Driveway-20
Scale: 1" = 5'





KEYMAP
Not to Scale



Driveway-2 and 3
Scale: 1" = 5'

LEGEND:

- Project Baseline
- Property Line
- 180 — existing grade
- Grade Control/Break
- Pavement Marking
- Proposed Flow Arrow
- Existing Flow Arrow
- 100.00 — Finish Grade (Top of Pavement/ Top of Sidewalk)
- 191.9± M — Match to Existing Grade
- 191.9± — Existing Grade Spot Elevation

GRAPHICAL SCALES:

5' 0 5' 10'

Scale: 1" = 5'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI

APPROVED:

COUNTY ENGINEER — DATE 11/2/14

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

DRIVEWAY DETAILS

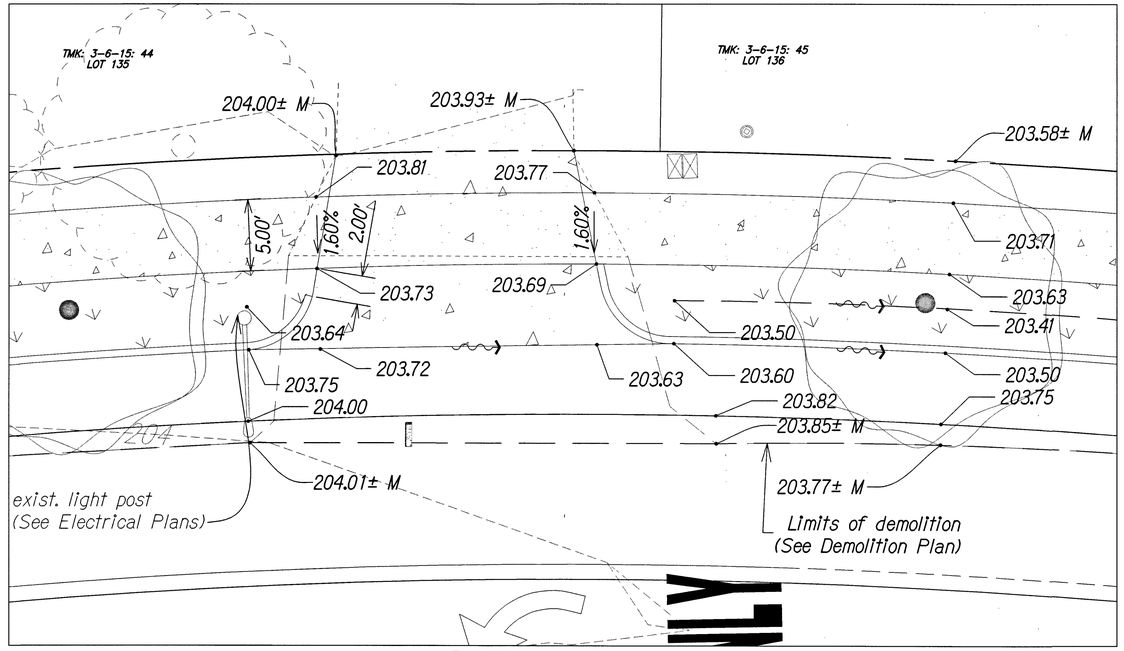
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

SHEET No. 1 OF 7 SHEETS

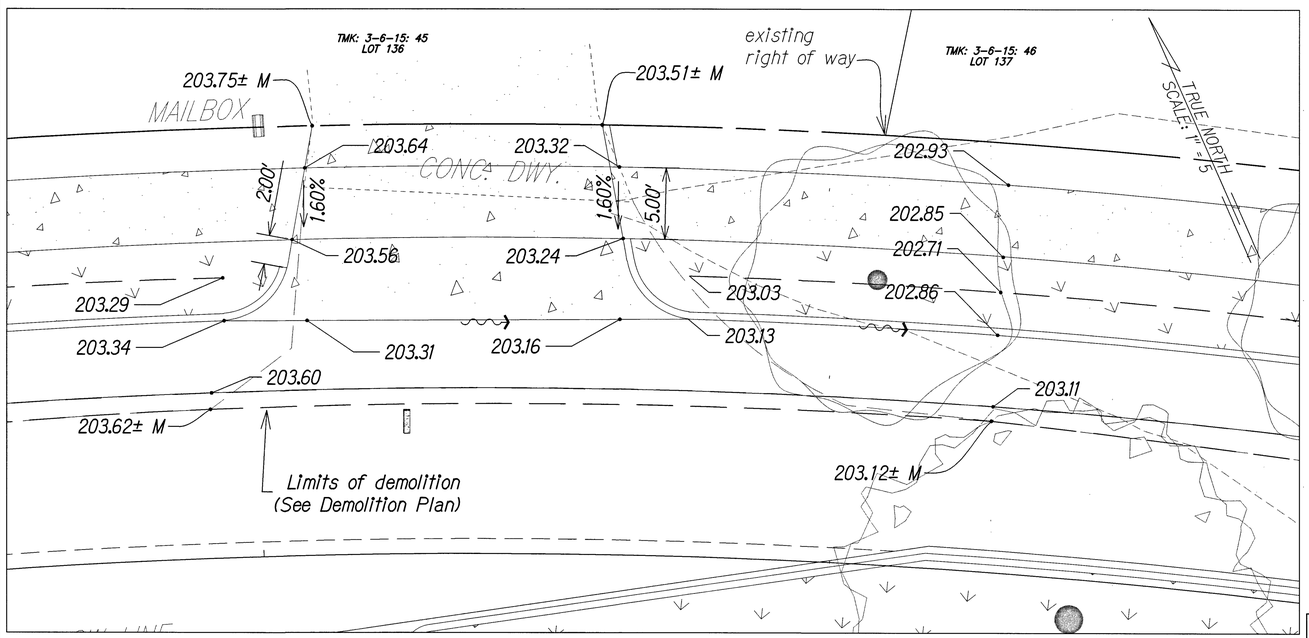
100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	68	145



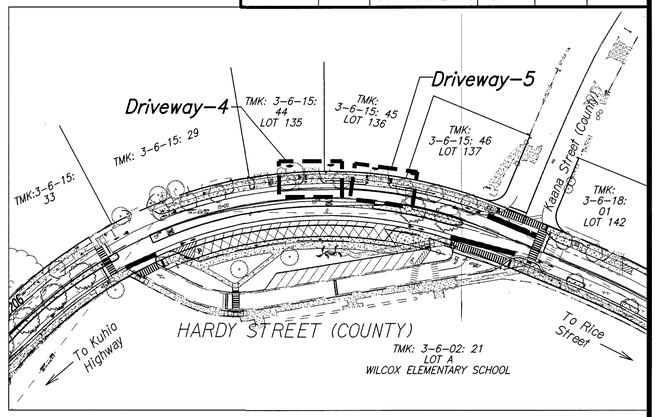
TRUE NORTH
SCALE: 1" = 5'

Driveway-4
Scale: 1" = 5'



TRUE NORTH
SCALE: 1" = 5'

Driveway-5
Scale: 1" = 5'



KEYMAP
Not to scale

LEGEND:

- Project Baseline
- Property Line
- 180 — existing grade
- Grade Control/Break
- Pavement Marking
- Proposed Flow Arrow
- Existing Flow Arrow
- 100.00 — Finish Grade (Top of Pavement/ Top of Sidewalk)
- 191.9± M — Match to Existing Grade
- 191.9± — Existing Grade Spot Elevation

GRAPHICAL SCALES:

5' 0 5' 10'
Scale: 1" = 5'

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

DRIVEWAY DETAILS

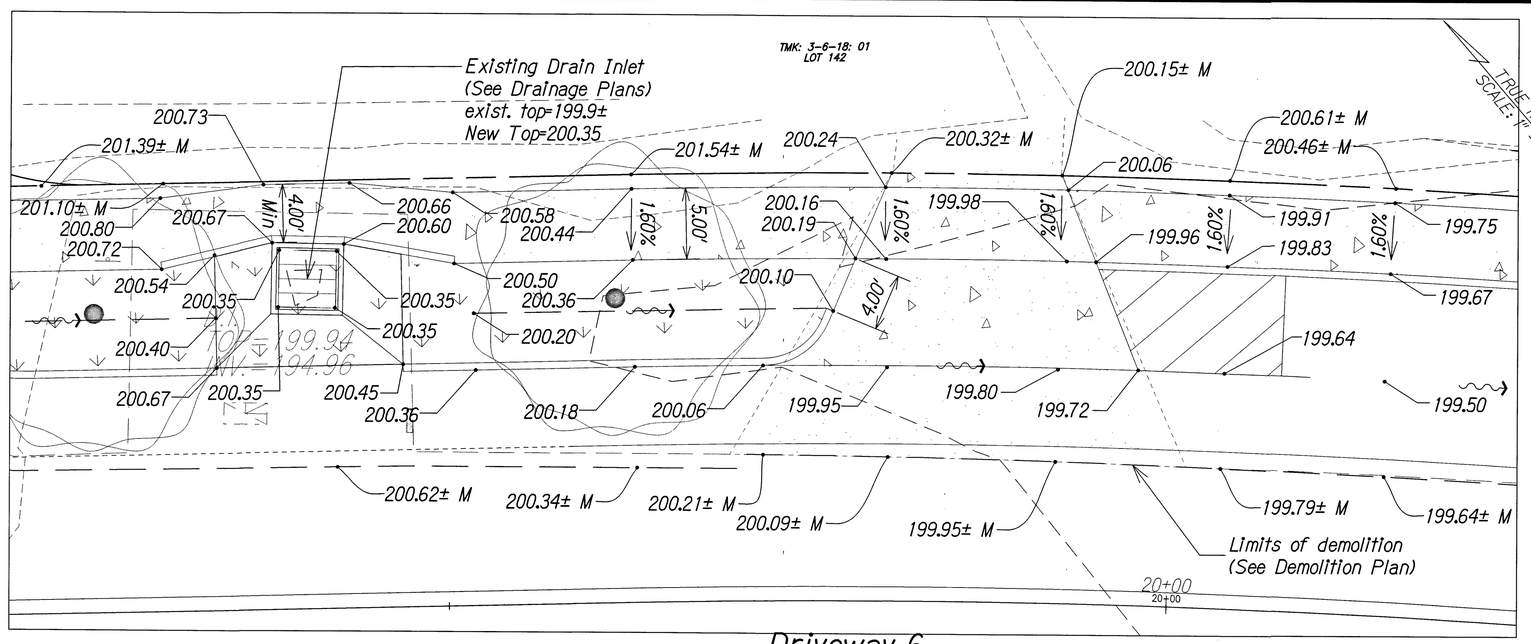
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

SHEET No. 2 OF 7 SHEETS

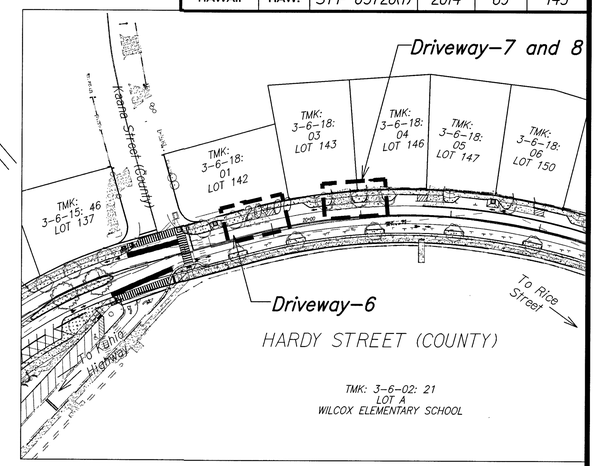
100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	69	145



Driveway-6

Scale: 1" = 5'

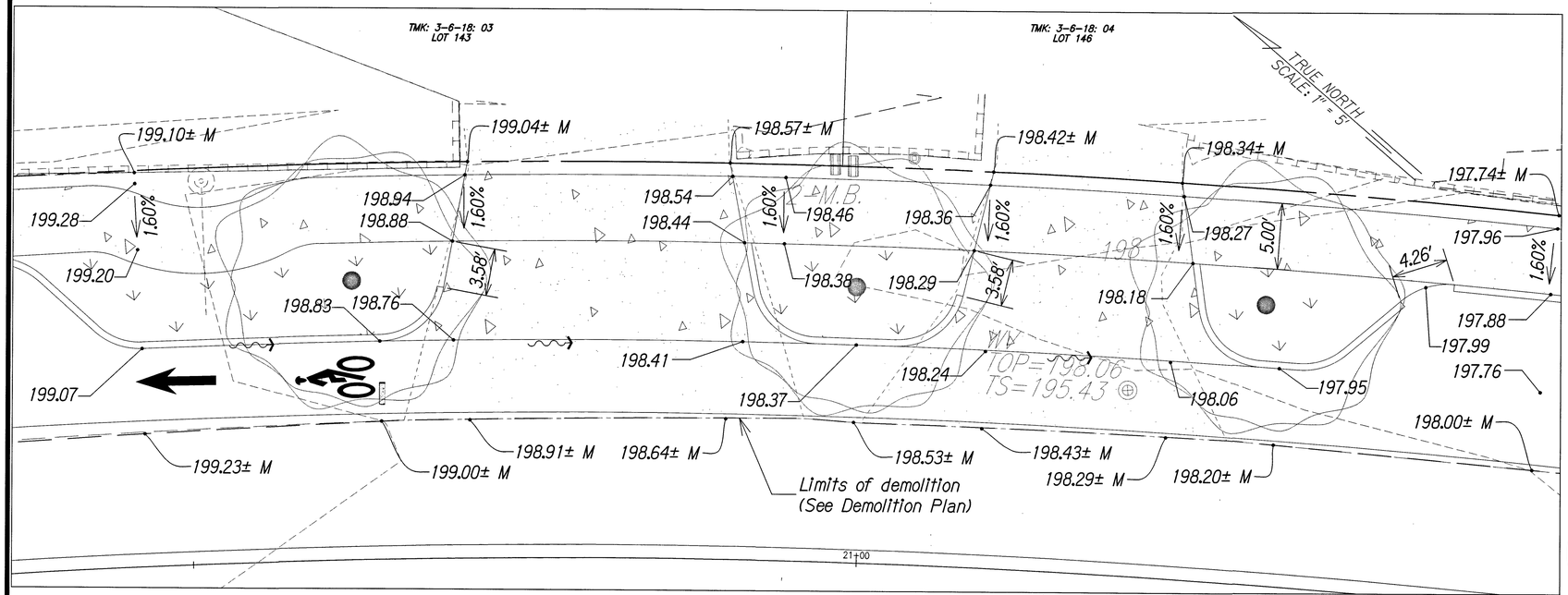


KEYMAP

Not to scale

LEGEND:

- Project Baseline
- Property Line
- 180 existing grade
- Grade Control/Break
- Pavement Marking
- Proposed Flow Arrow
- Existing Flow Arrow
- 100.00 Finish Grade (Top of Pavement/ Top of Sidewalk)
- 191.9± M Match to Existing Grade
- 191.9± Existing Grade Spot Elevation



Driveway-7 and 8

Scale: 1" = 5'

GRAPHICAL SCALES:

5' 0 5' 10'

Scale: 1" = 5'

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

FIONA K. VAN AMMERS
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No. 11907-C
HAWAII, U.S.A.

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

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

DRIVEWAY DETAILS

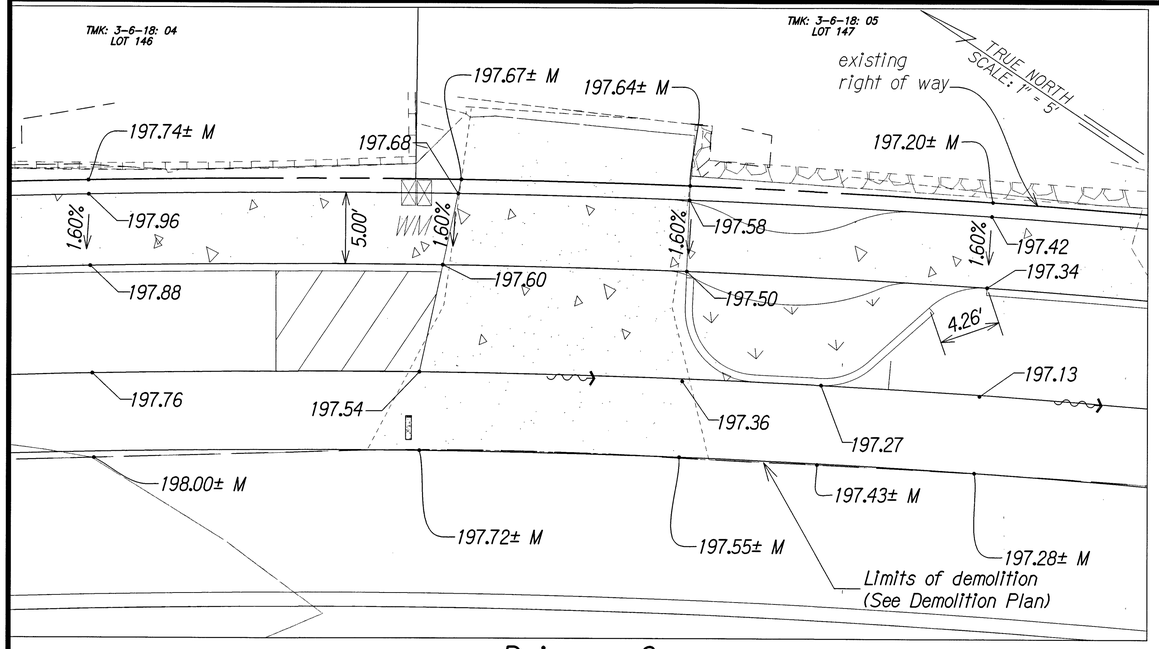
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

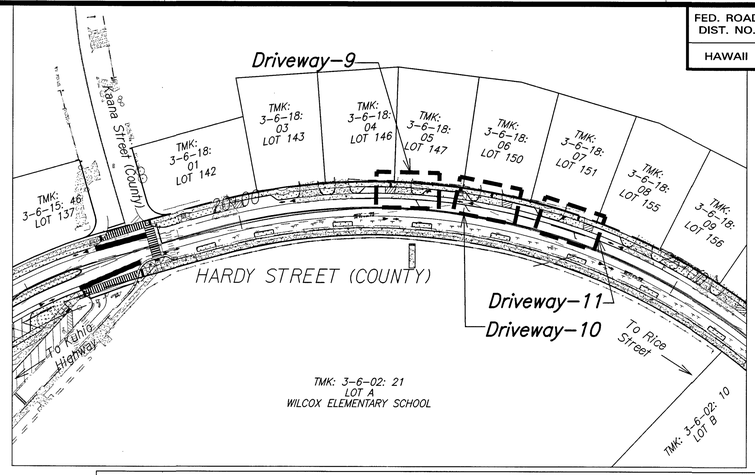
SHEET No. 3 OF 7 SHEETS

100% SUBMITTAL

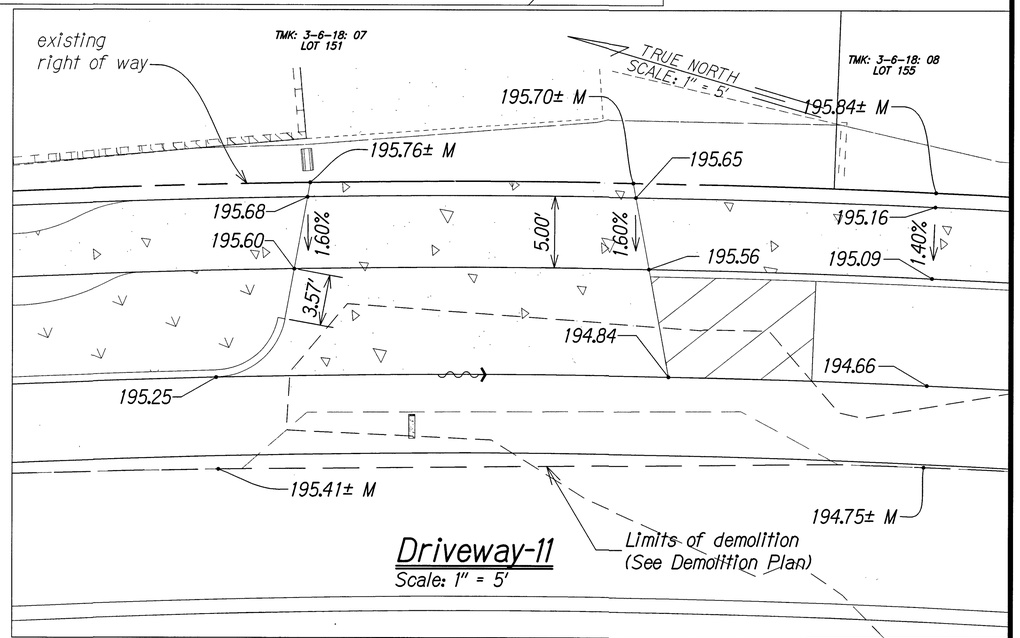
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	70	145



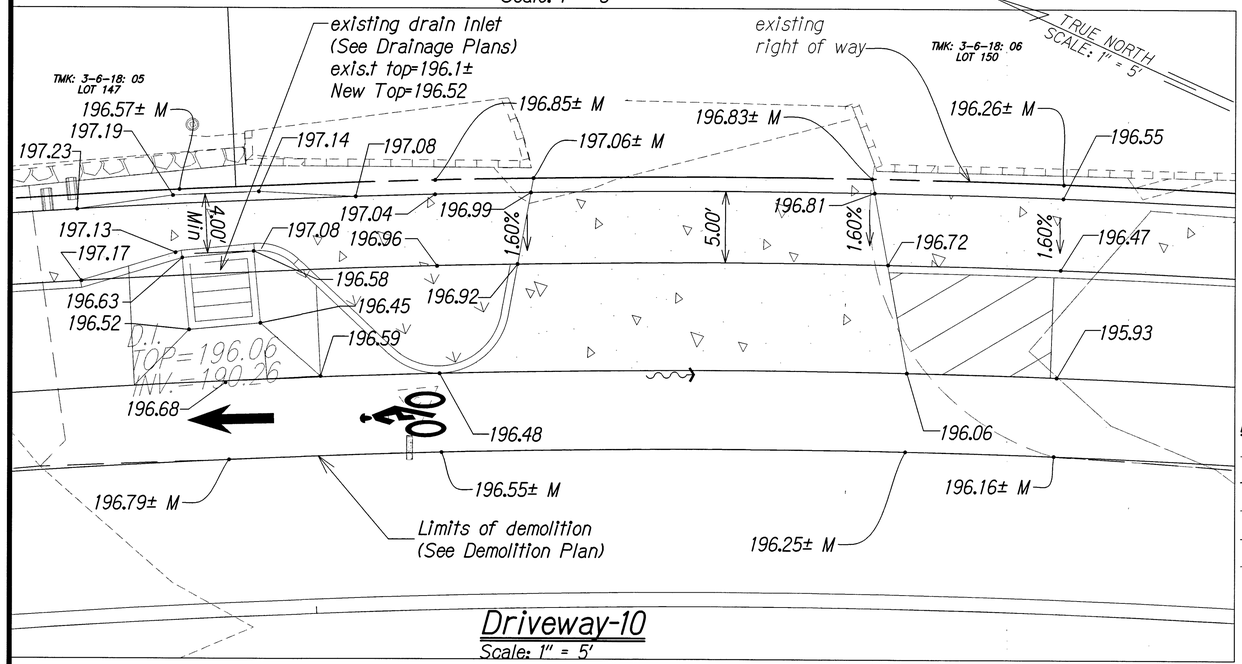
Driveway-9
Scale: 1" = 5'



KEYMAP
Not to scale



Driveway-11
Scale: 1" = 5'



Driveway-10
Scale: 1" = 5'

LEGEND:

- Project Baseline
- Property Line
- 180 — existing grade
- Grade Control/Break
- Pavement Marking
- Proposed Flow Arrow
- Existing Flow Arrow
- 100.00 — Finish Grade (Top of Pavement/ Top of Sidewalk)
- 191.9± M — Match to Existing Grade

GRAPHICAL SCALES:
5' 0 5' 10'
Scale: 1" = 5'

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

DRIVEWAY DETAILS

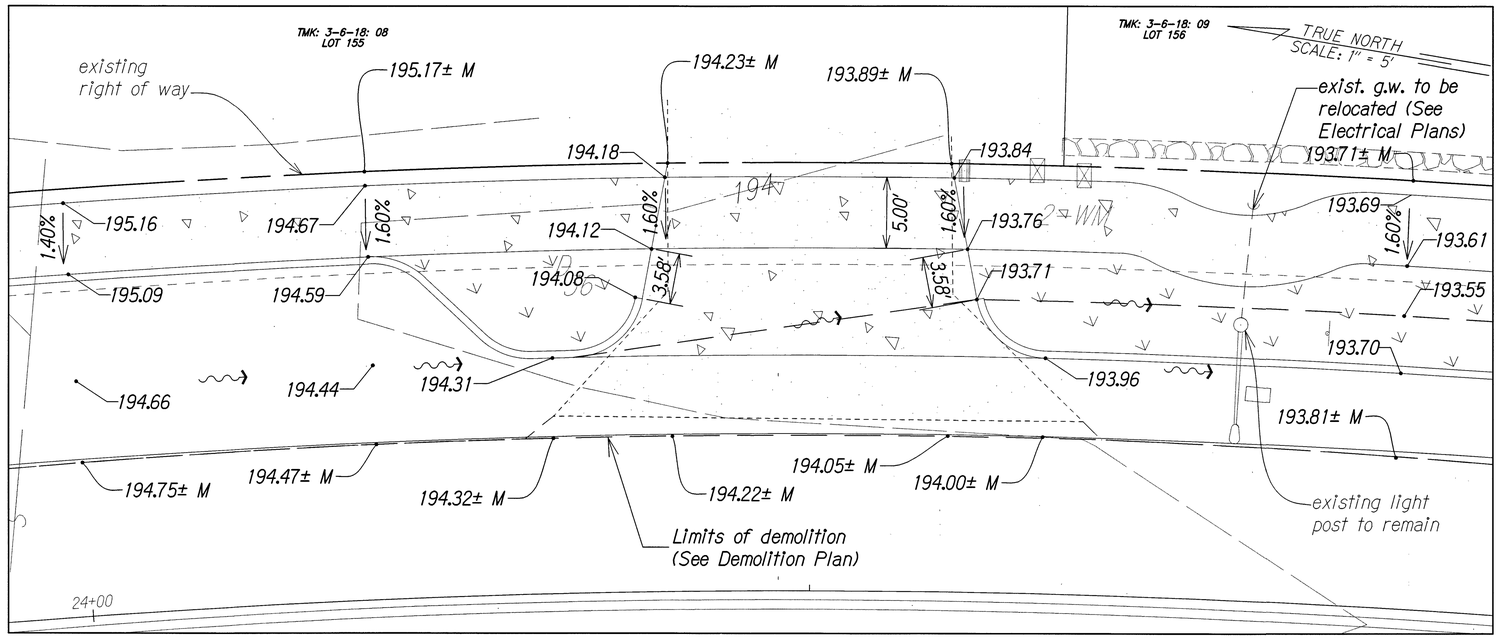
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

SHEET No. 4 OF 7 SHEETS

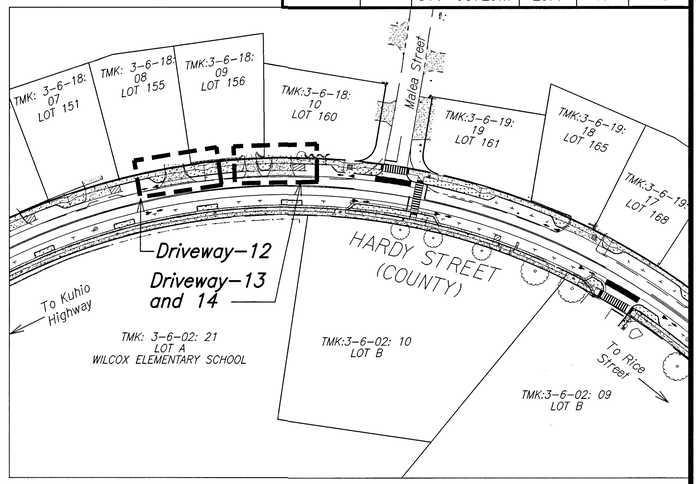
100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	71	145



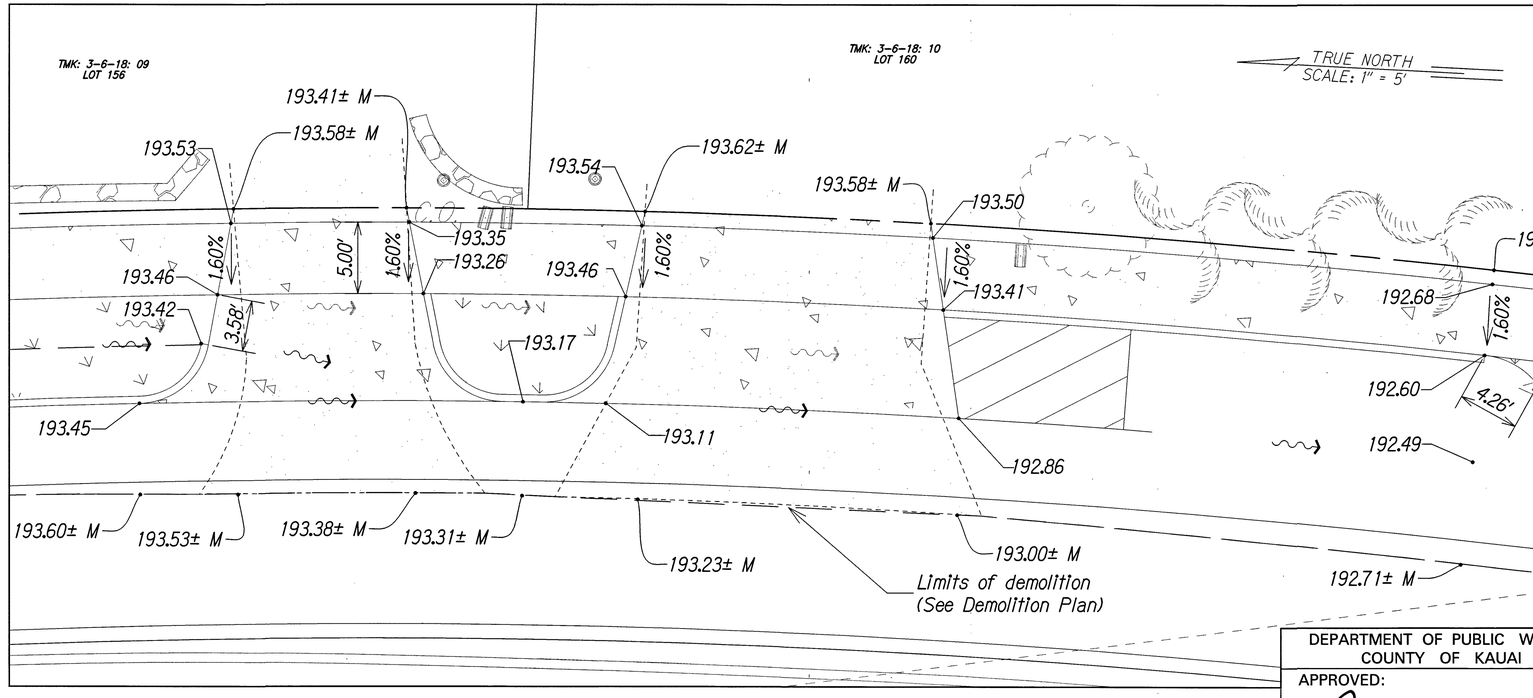
Driveway-12

Scale: 1" = 5'



KEYMAP

Not to scale



Driveway-13 and 14

Scale: 1" = 5'

LEGEND:

- Project Baseline
- Property Line
- 180 — existing grade
- Grade Control/Break
- Pavement Marking
- Proposed Flow Arrow
- Existing Flow Arrow
- 100.00 — Finish Grade (Top of Pavement/ Top of Sidewalk)
- 191.9± M — Match to Existing Grade

GRAPHICAL SCALES:

5' 0 5' 10'

Scale: 1" = 5'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI

APPROVED:

COUNTY ENGINEER — DATE 11-24-14

FIONA K. VAN AMMERS
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No. 11907-C
HAWAII, U.S.A.

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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

DRIVEWAY DETAILS

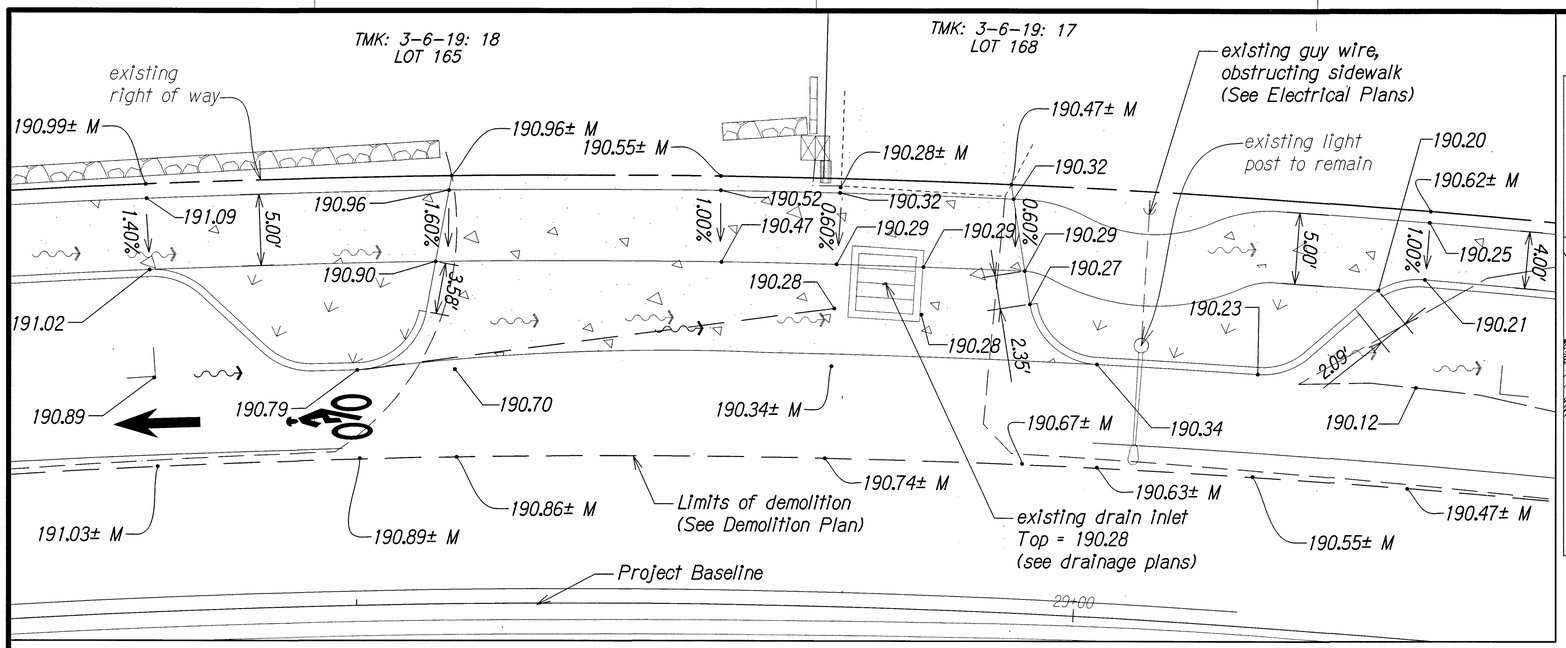
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

SHEET No. 5 OF 7 SHEETS

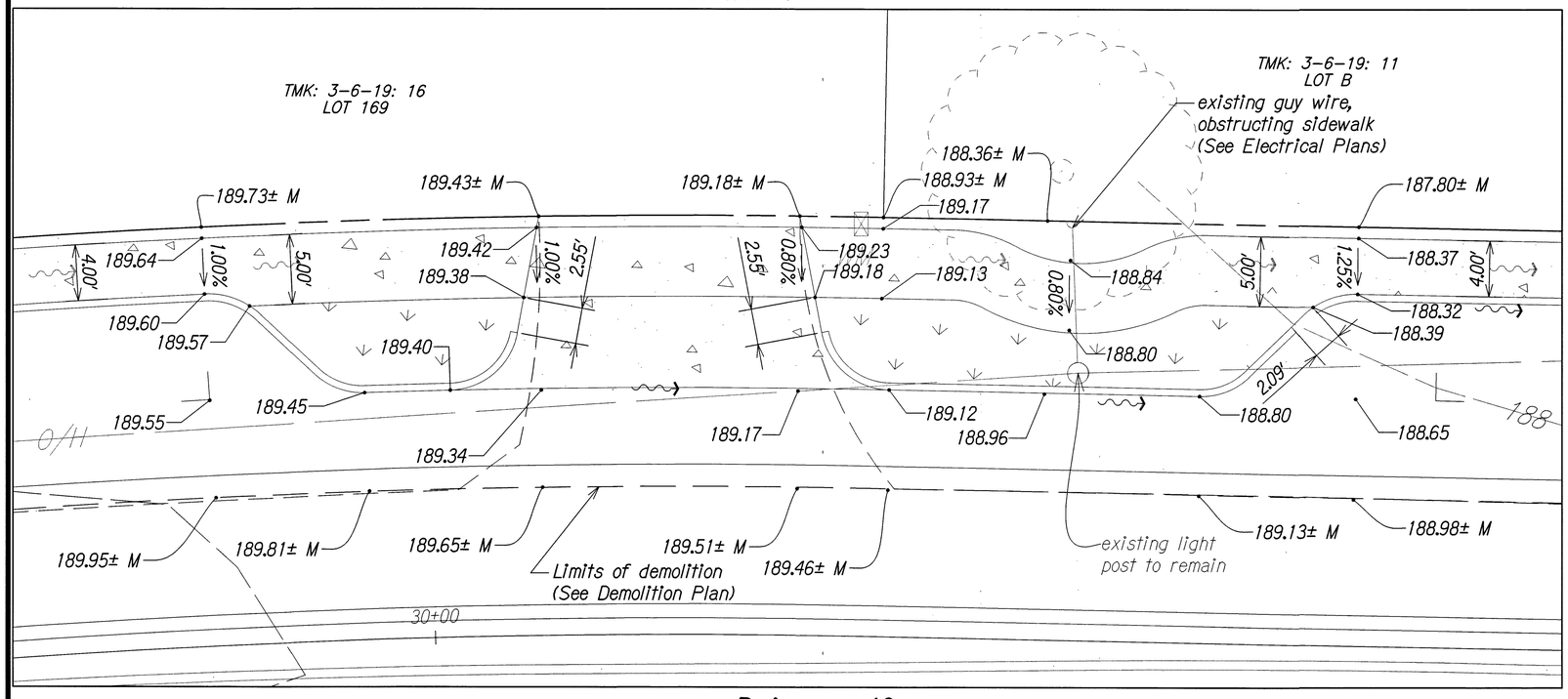
100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	72	145



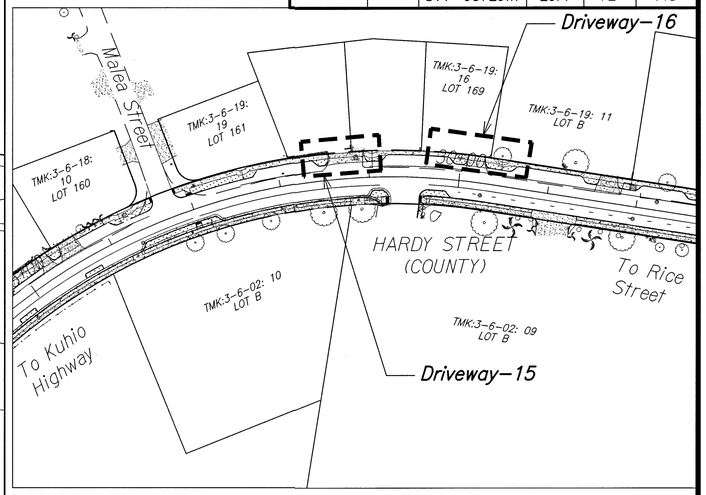
Driveway-15

Scale: 1" = 5'



Driveway-16

Scale: 1" = 5'



KEYMAP

Not to scale

LEGEND:

- Project Baseline
- Property Line
- 180 existing grade
- Grade Control/Break
- Pavement Marking
- Proposed Flow Arrow
- Existing Flow Arrow
- 100.00 Finish Grade (Top of Pavement/ Top of Sidewalk)
- 191.9± M Match to Existing Grade
- 191.9± Existing Grade Spot Elevation

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

GRAPHICAL SCALES:

5' 0 5' 10'
Scale: 1" = 5'

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No. 11907-C
HAWAII, U.S.A.

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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

DRIVEWAY DETAILS

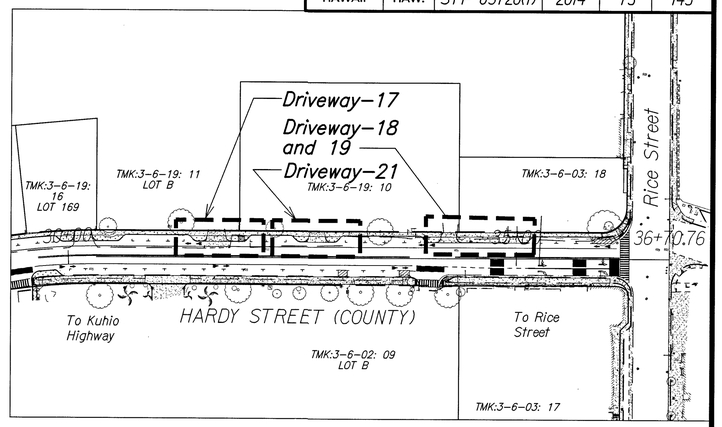
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

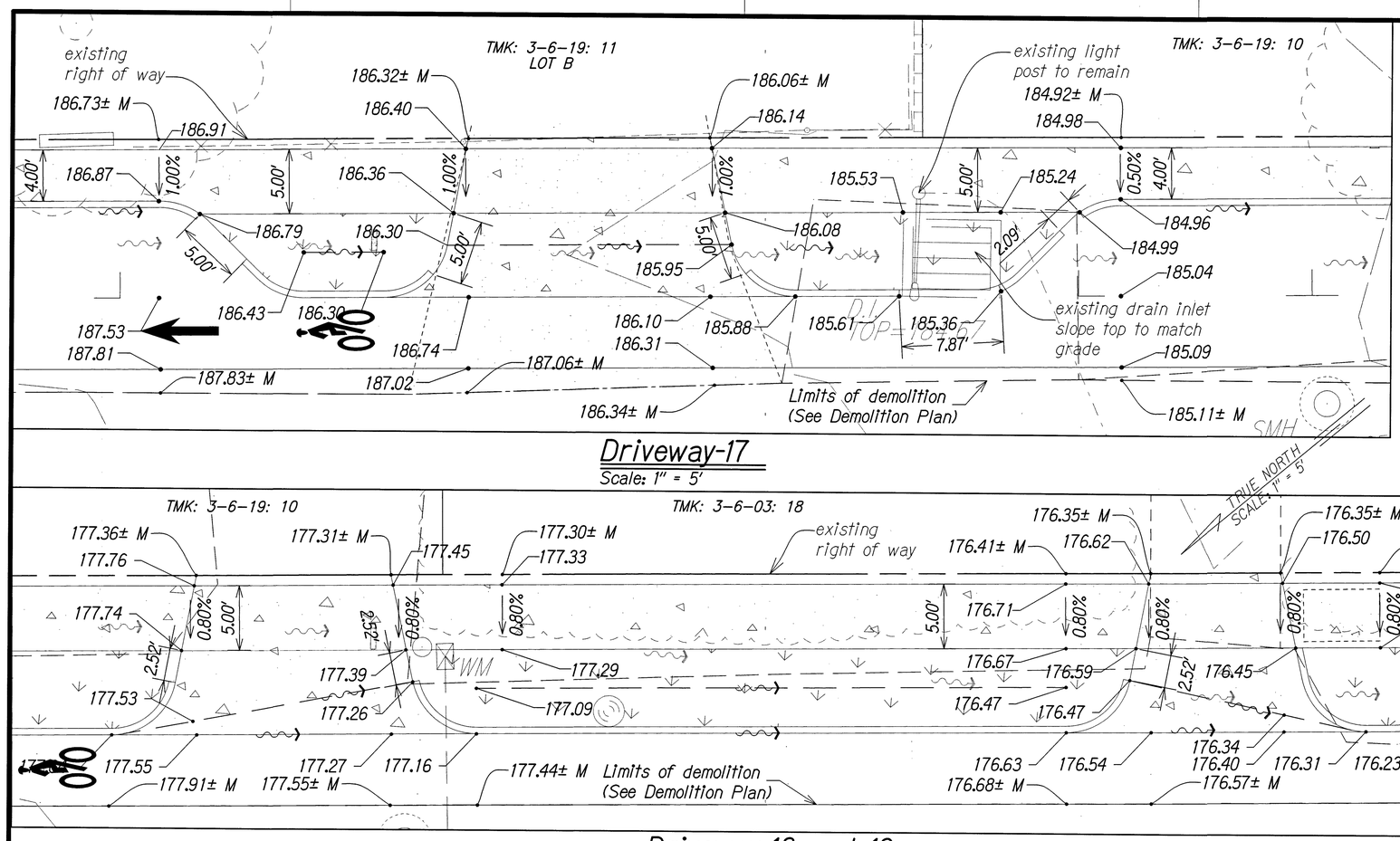
Scale: As Noted — Date: September, 2014

SHEET No. 6 OF 7 SHEETS

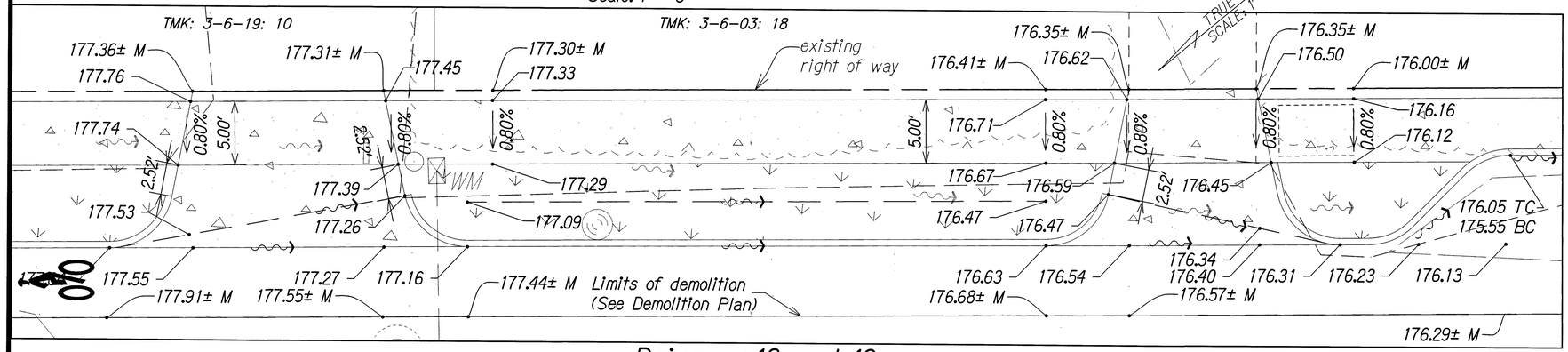
100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	73	145

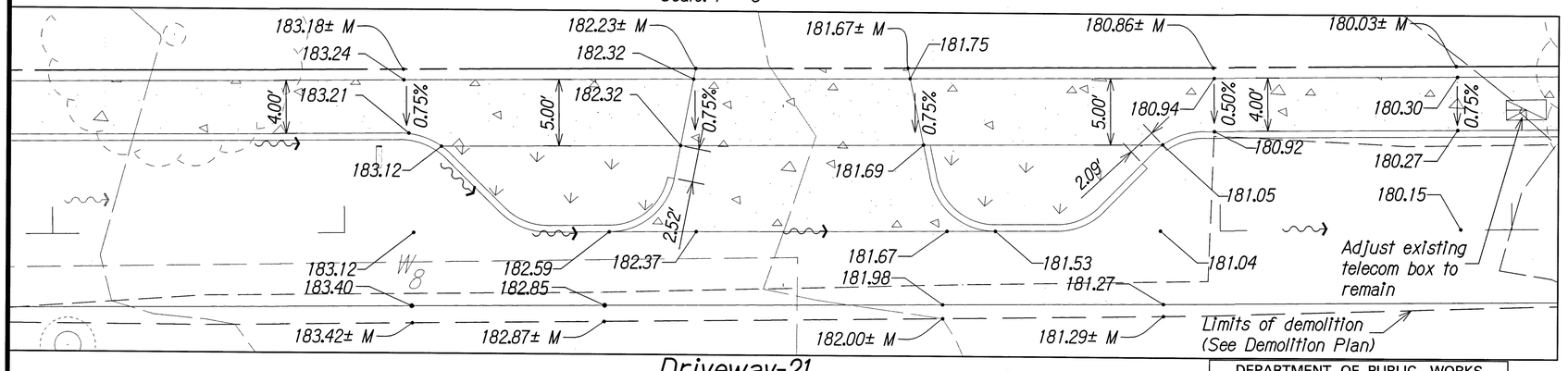




Driveway-17
Scale: 1" = 5'



Driveway-18 and 19
Scale: 1" = 5'



Driveway-21
Scale: 1" = 5'

KEYMAP
Not to scale

LEGEND:

- Project Baseline
- Property Line
- 180 — existing grade
- Grade Control/Break
- Pavement Marking
- Proposed Flow Arrow
- Existing Flow Arrow
- 100.00 — Finish Grade (Top of Pavement/ Top of Sidewalk)
- 191.9± M — Match to Existing Grade
- 191.9± — existing grade spot elevation

GRAPHICAL SCALES:
5' 0 5' 10'
Scale: 1" = 5'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 11-21-16

FIONA K. VAN AMMERS
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No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

DRIVEWAY DETAILS

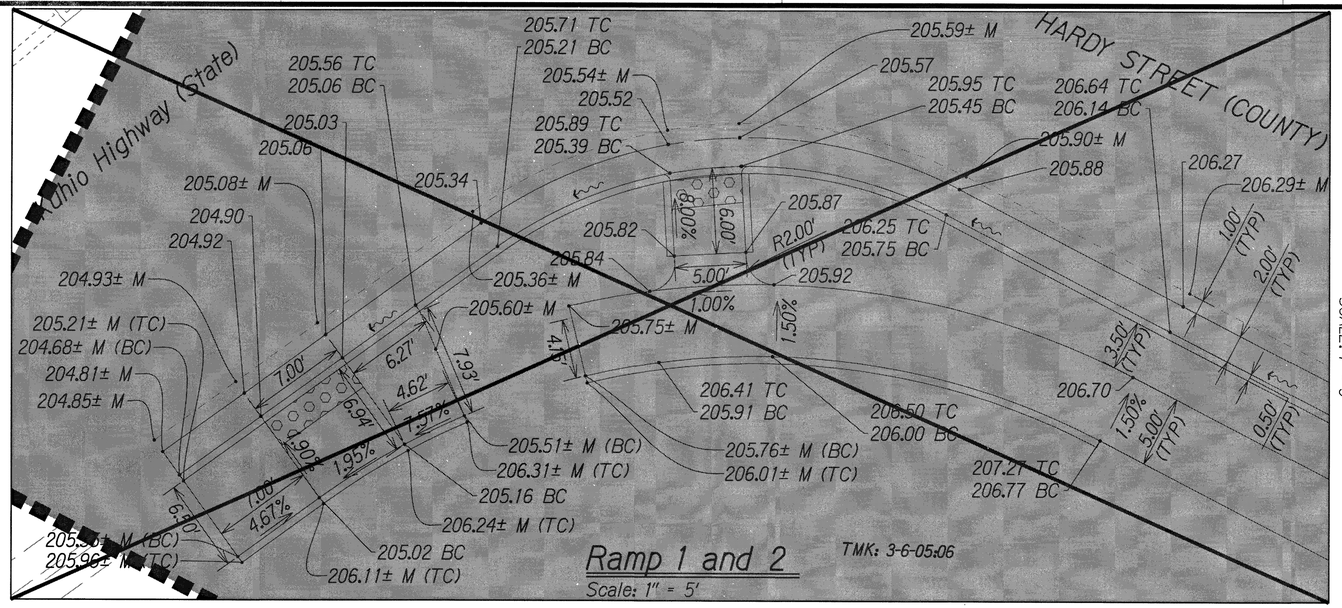
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

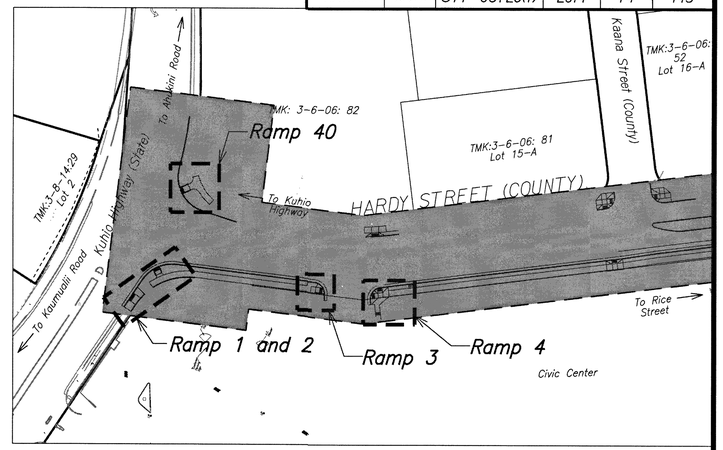
SHEET No. 7 OF 7 SHEETS

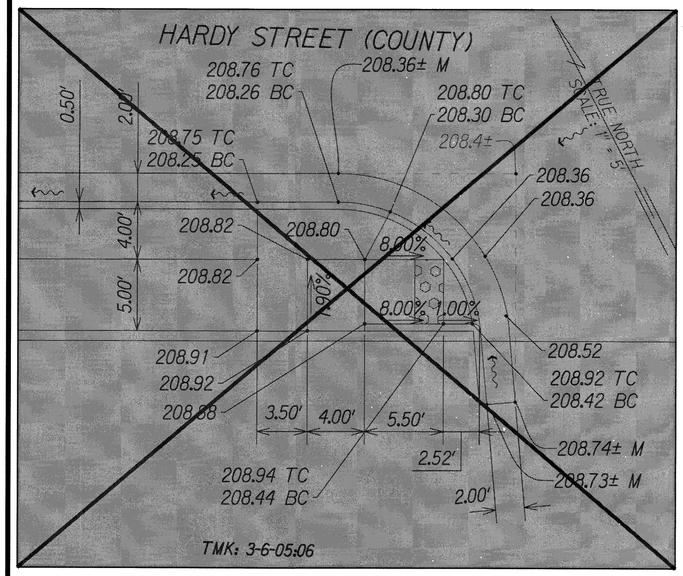
100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	74	145

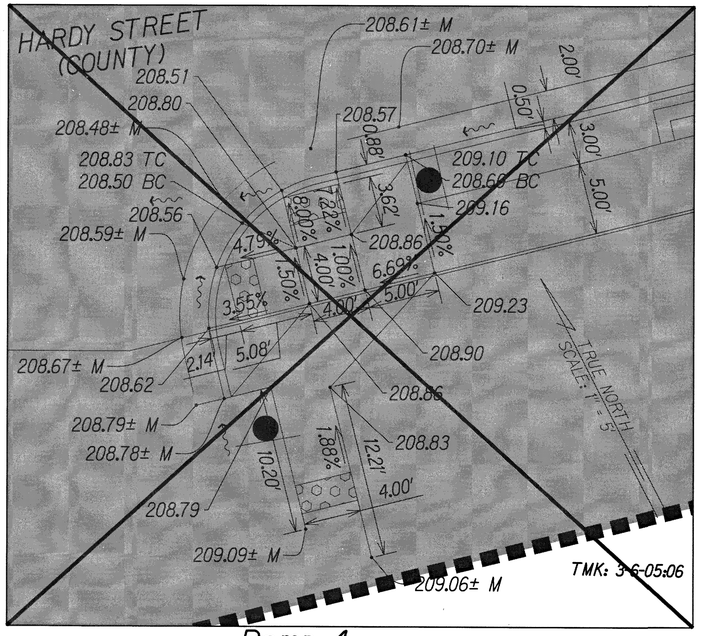


Ramp 1 and 2
Scale: 1" = 5'

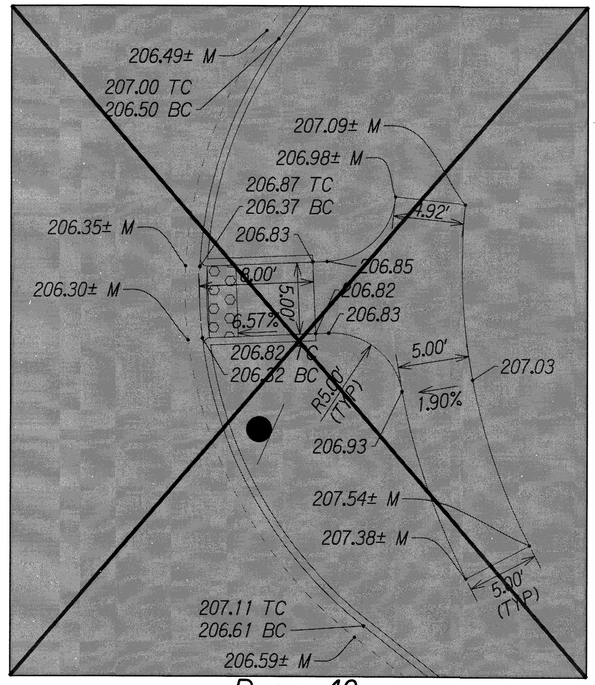




Ramp 3
Scale: 1" = 5'



Ramp 4
Scale: 1" = 5'



Ramp 40
Scale: 1" = 5'

KEYMAP
Not to scale

NOTES:

1. Contractor to layout all accessible ramps and landings to confirm that slopes do not exceed requirements:
   - 8.33% Max. for run slope
   - 2.00% Max. for cross slope
2. The Contractor shall verify that finished cross slopes or running slopes of all accessible routes and curb ramps meet and comply with the minimum ADA standards.
3. 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.

LEGEND:

Property Line	
Proposed Flow Arrow	
Existing Flow Arrow	
100.00	Finish Grade (Top of Pavement/ Top of Sidewalk)
100.00 TC	Finish Grade at Top of Curb
100.00 BC	Finish Grade at Bottom of Curb
191.9± M	Match to Existing Grade
191.9±	Existing Grade Spot Elevation

GRAPHICAL SCALES:

5' 0 5' 10'
Scale: 1" = 5'

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

CURB RAMP DETAILS

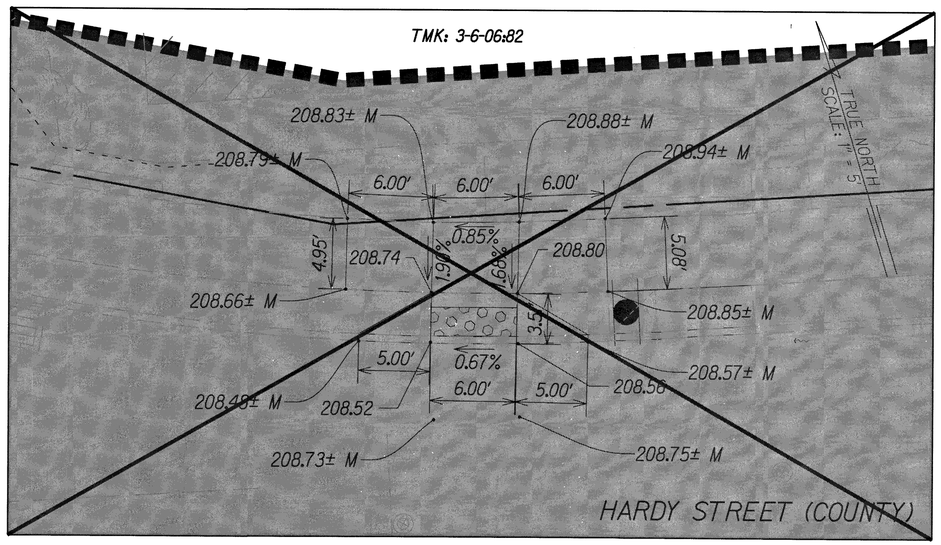
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

SHEET No. 1 OF 12 SHEETS

100% SUBMITTAL

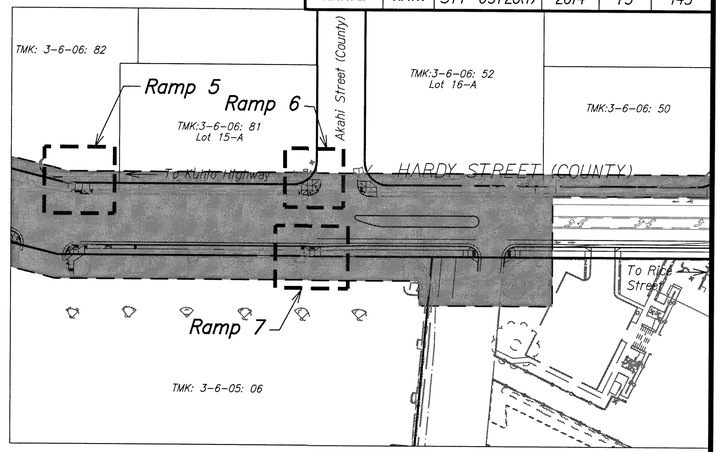
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	75	145



Ramp 5
Scale: 1" = 5'

NOTE:

1. Contractor to layout all accessible ramps and landings to confirm that slopes do not exceed requirements:
   8.33% Max. for run slope
   2.00% Max. for cross slope
2. The Contractor shall verify that finished cross slopes or running slopes of all accessible routes and curb ramps meet and comply with the minimum ADA standards.
3. 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.



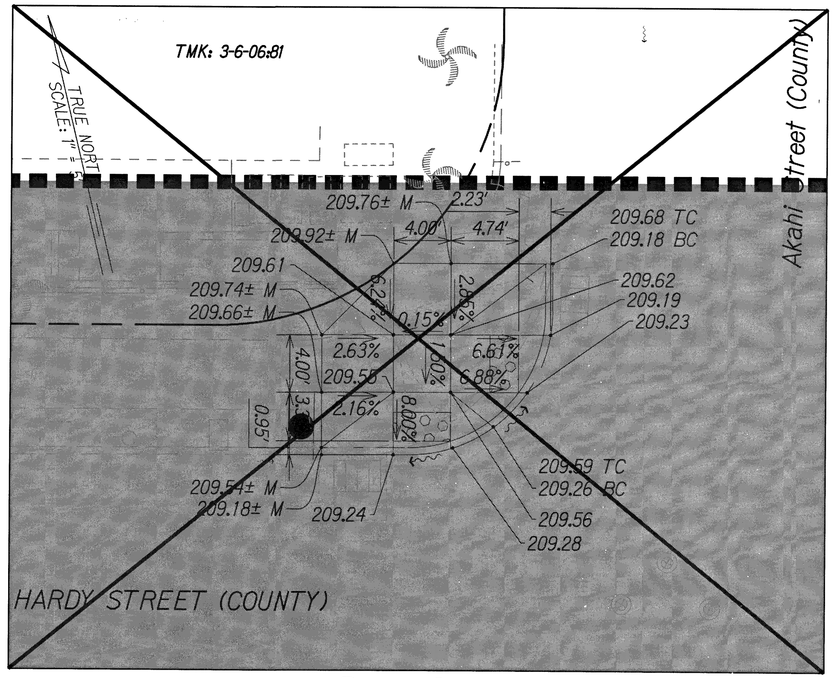
KEYMAP
Not to scale

LEGEND:

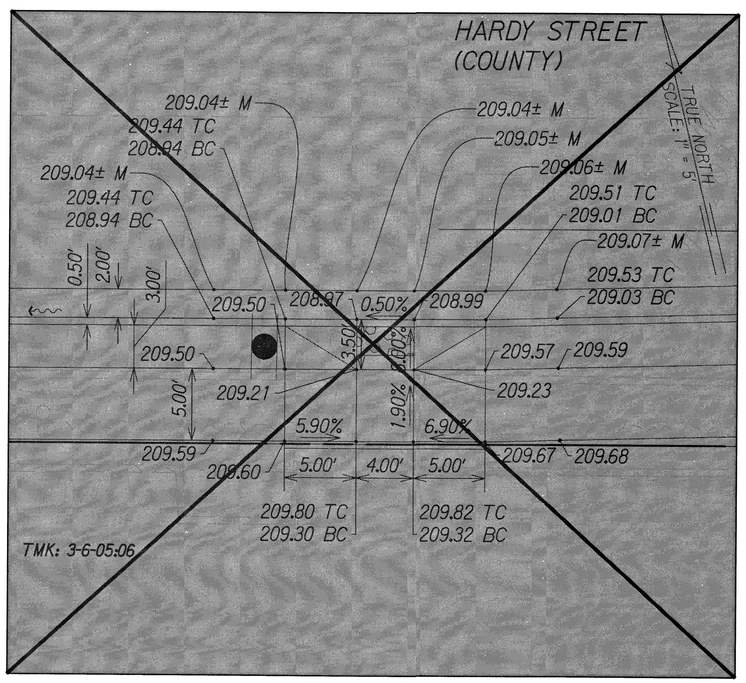
- Property Line
- Proposed Flow Arrow
- Existing Flow Arrow
- 100.00 — Finish Grade (Top of Pavement/ Top of Sidewalk)
- 100.00 TC — Finish Grade at Top of Curb
- 100.00 BC — Finish Grade at Bottom of Curb
- 191.9± M — Match to Existing Grade

GRAPHICAL SCALES:

5' 0 5' 10'
Scale: 1" = 5'



Ramp 6
Scale: 1" = 5'



Ramp 7
Scale: 1" = 5'

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

CURB RAMP DETAILS

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

Scale: As Noted — Date: September, 2014

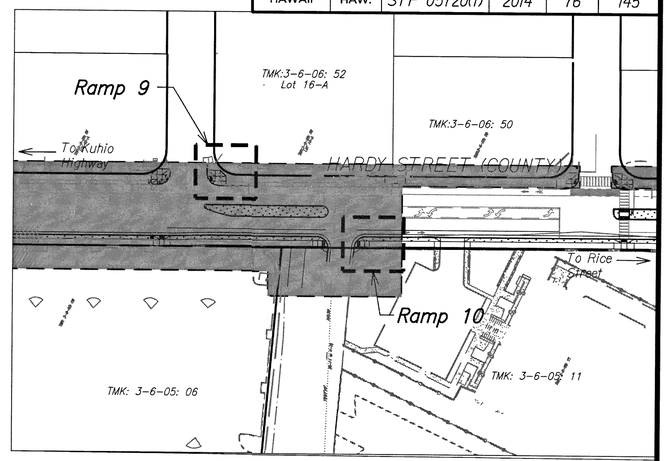
SHEET No. 2 OF 12 SHEETS

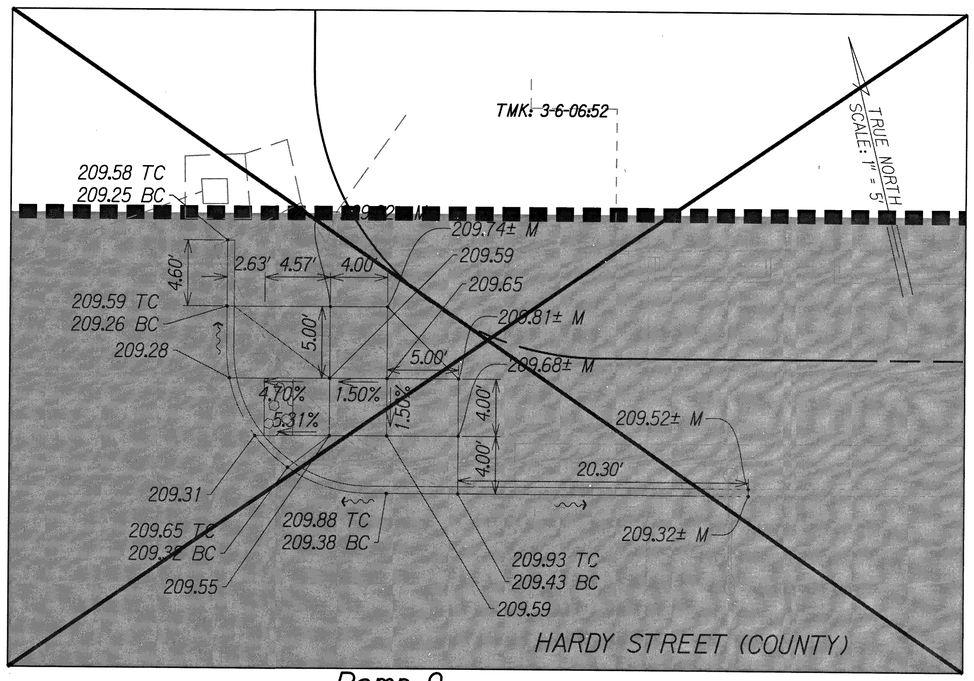
100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	76	145

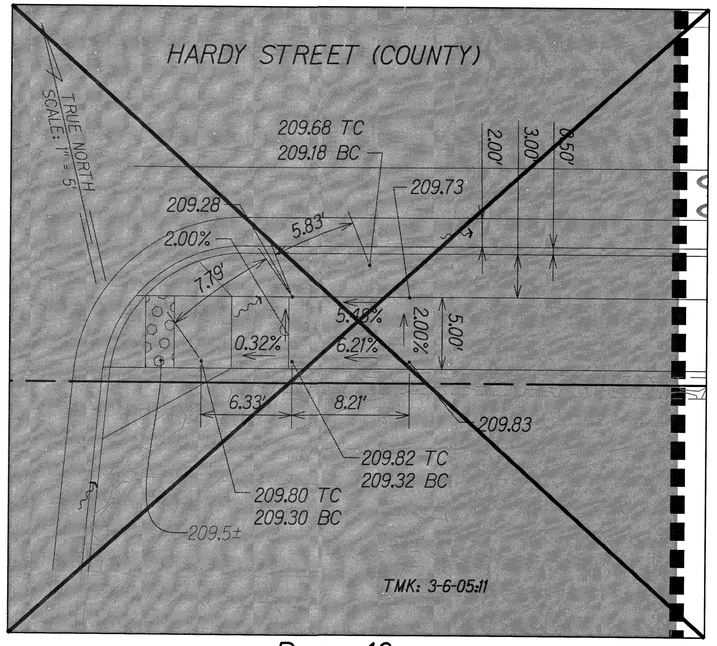
LEGEND:

——— — — ———	Property Line
~~→	Proposed Flow Arrow
~~→	Existing Flow Arrow
100.00	Finish Grade (Top of Pavement/ Top of Sidewalk)
100.00 TC	Finish Grade at Top of Curb
100.00 BC	Finish Grade at Bottom of Curb
191.9±	Existing Grade Spot Elevation





Ramp 9
Scale: 1" = 5'



Ramp 10
Scale: 1" = 5'

KEYMAP
Not to Scale

NOTES:

1. Contractor to layout all accessible ramps and landings to confirm that slopes do not exceed requirements:
   8.33% Max. for run slope
   2.00% Max. for cross slope
2. The Contractor shall verify that finished cross slopes or running slopes of all accessible routes and curb ramps meet and comply with the minimum ADA standards.
3. 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.

GRAPHICAL SCALES:

5′ 0 5′ 10′
Scale: 1" = 5'

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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

CURB RAMP DETAILS

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

Scale: As Noted — Date: September, 2014

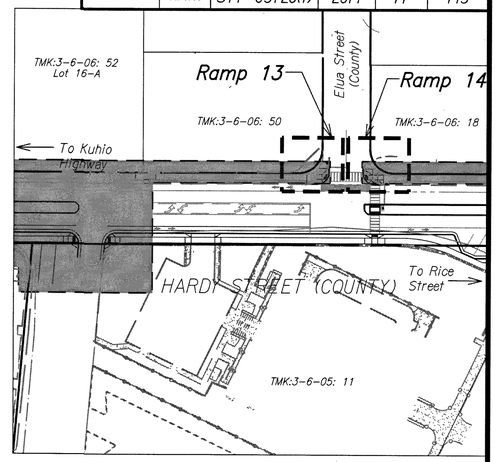
SHEET No. 3 OF 12 SHEETS

100% SUBMITTAL

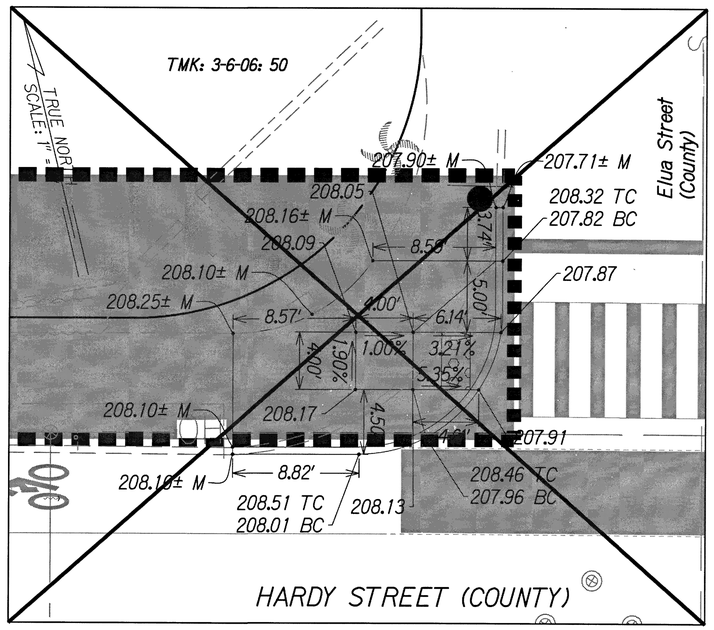
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	77	145

NOTE:

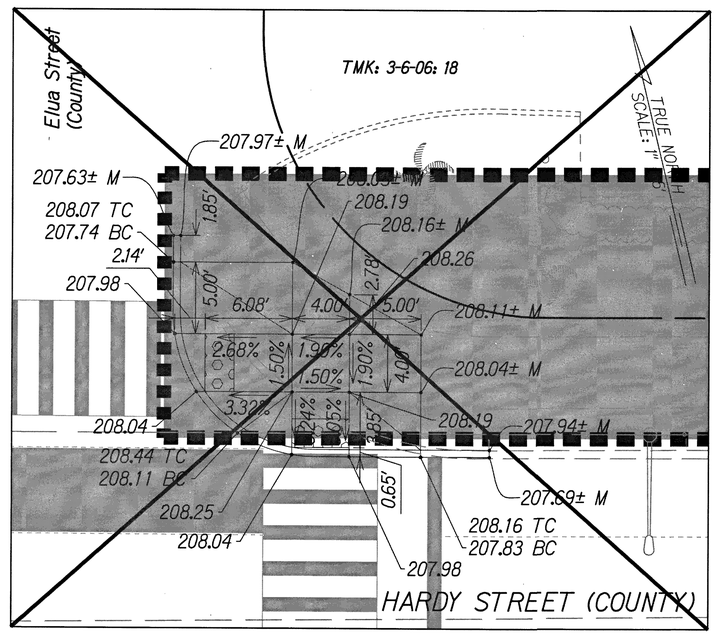
1. Contractor to layout all accessible ramps and landings to confirm that slopes do not exceed requirements:
   8.33% Max. for run slope
   2.00% Max. for cross slope
2. The Contractor shall verify that finished cross slopes or running slopes of all accessible routes and curb ramps meet and comply with the minimum ADA standards.
3. 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.



KEYMAP
Not to Scale



Ramp 13
Scale: 1" = 5'



Ramp 14
Scale: 1" = 5'

LEGEND:

- Project Baseline
- Property Line
- 180 existing grade
- Proposed Flow Arrow
- Existing Flow Arrow
- 100.00 Finish Grade (Top of Pavement/ Top of Sidewalk)
- 100.00 TC Finish Grade at Top of Curb
- 100.00 BC Finish Grade at Bottom of Curb
- 191.9± M Match to Existing Grade
- 191.9± Existing Grade Spot Elevation

GRAPHICAL SCALES:

5' 0 5' 10'
Scale: 1" = 5'

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

CURB RAMP DETAILS

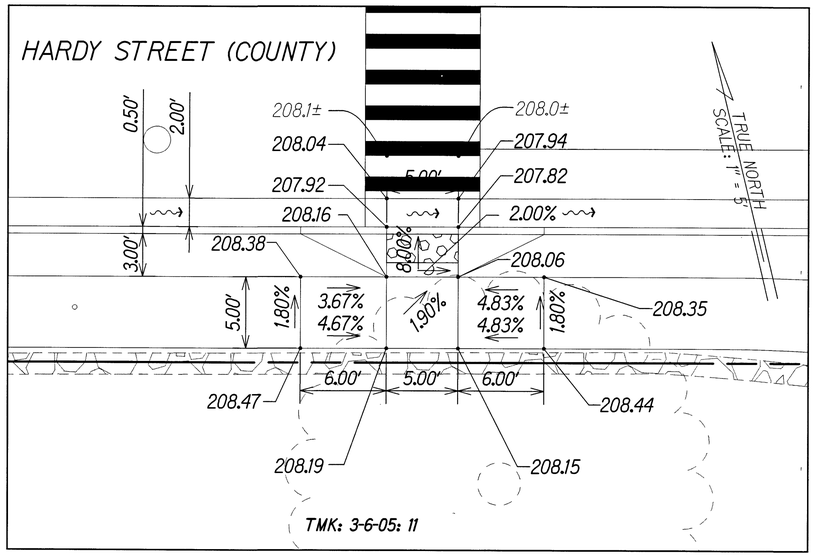
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

SHEET No. 4 OF 12 SHEETS

100% SUBMITTAL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	78	145

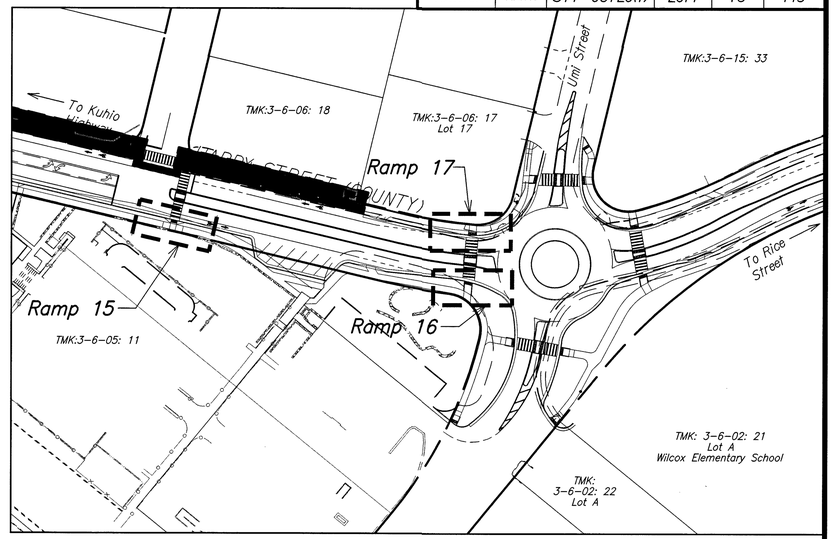


Ramp 15
Scale: 1" = 5'

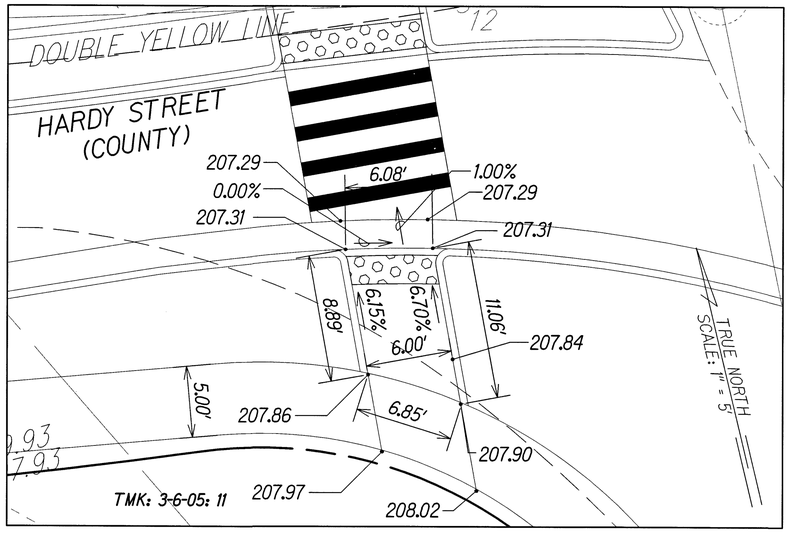
NOTE:

1. Contractor to layout all accessible ramps and landings to confirm that slopes do not exceed requirements:
   8.33% Max. for run slope
   2.00% Max for cross slope

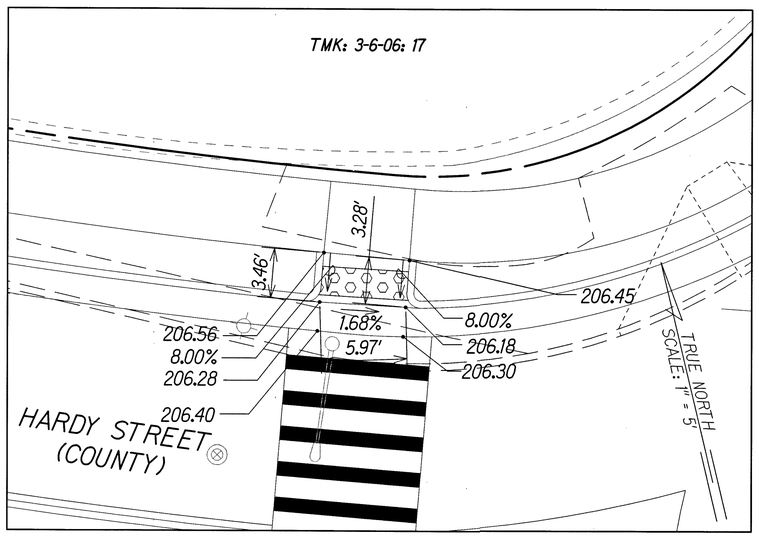
2. The Contractor shall verify that finished cross slopes or running slopes of all accessible routes and curb ramps meet and comply with the minimum ADA standards.



N **KEYMAP**
Not to scale



Ramp 16
Scale: 1" = 5'



Ramp 17
Scale: 1" = 5'

LEGEND:

——— — — ———	Property Line
⇝	Proposed Flow Arrow
⇝	Existing Flow Arrow
100.00	Finish Grade (Top of Pavement/ Top of Sidewalk)
100.00 TC	Finish Grade at Top of Curb
100.00 BC	Finish Grade at Bottom of Curb

GRAPHICAL SCALES:

5' 0 5' 10'
Scale: 1" = 5'

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

FIONA K. VAN AMMERS
LICENSED PROFESSIONAL ENGINEER
No. 11907-C
HAWAII, U.S.A.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

CURB RAMP DETAILS

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

Scale: As Noted — Date: September, 2014

SHEET No. 5 OF 12 SHEETS

100% SUBMITTAL