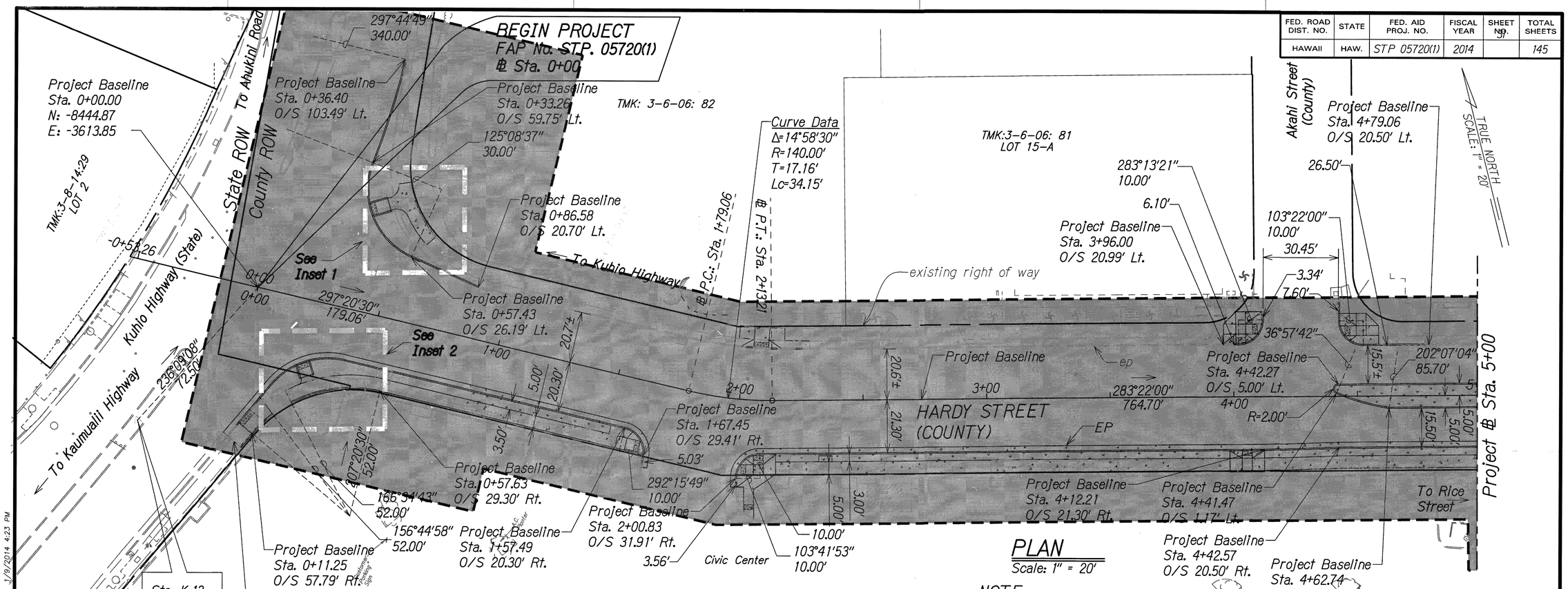
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	31	145



PLAN
Scale: 1" = 20'

NOTE:
1. Provide a smooth transition between the proposed improvements and the existing sidewalks and pavements.
2. See Repaving Plans for pavement improvements.
3. See Water and Sewer Plans for water and sewer improvements.
4. See Drainage Plans for drainage improvements.
5. See Electrical Plans for electrical improvements.
6. See Landscape Plans for landscape improvements.
7. 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.
8. See Sheets 67-73 for Driveway Details.
9. See Sheets 74-84 for Curb Ramp Details.

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

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 4-26-16

LEGEND:
- Landscape
- Concrete Curb and Gutter/Ramp /Sidewalk

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

ROADWAY IMPROVEMENT PLAN

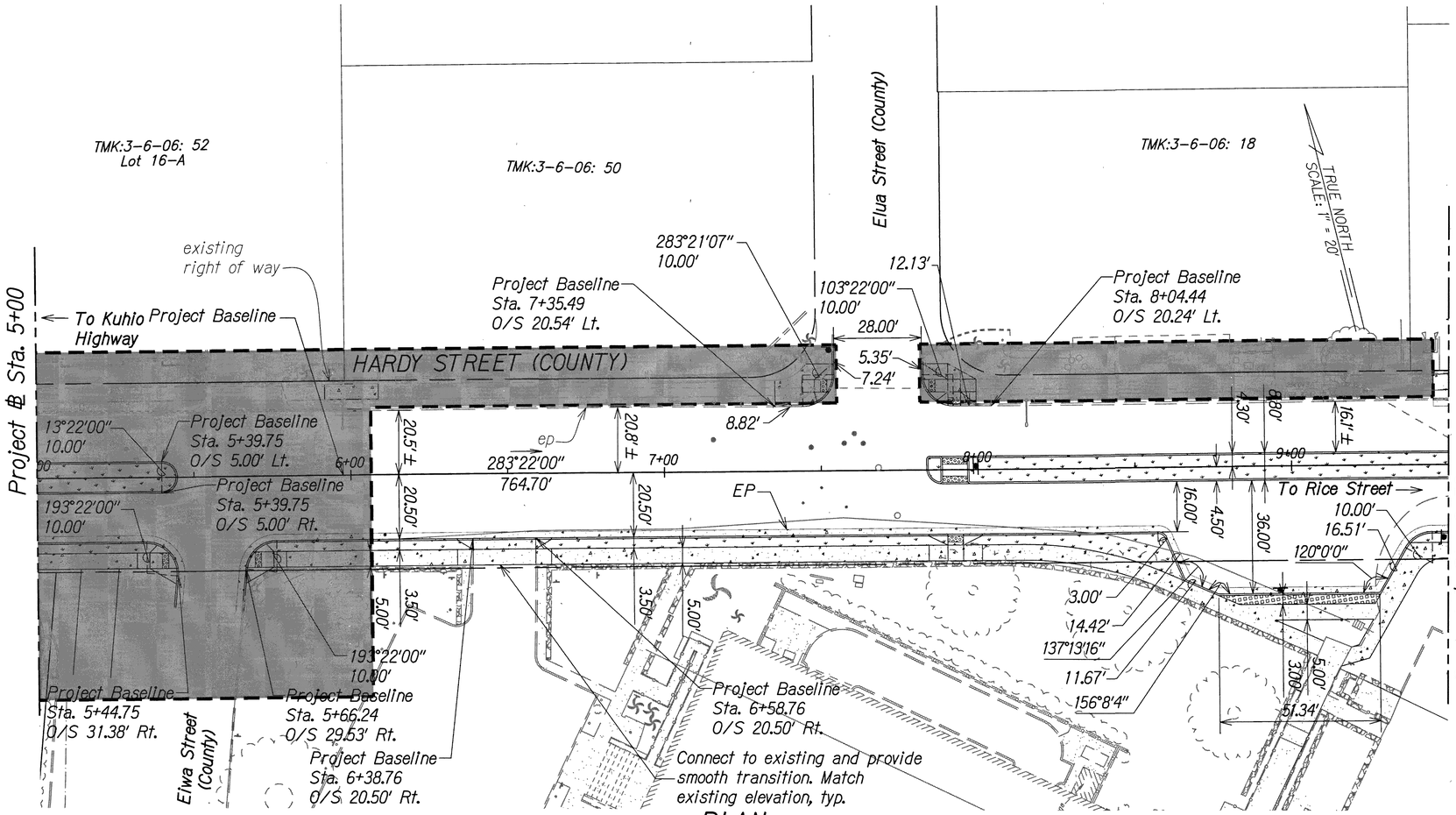
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

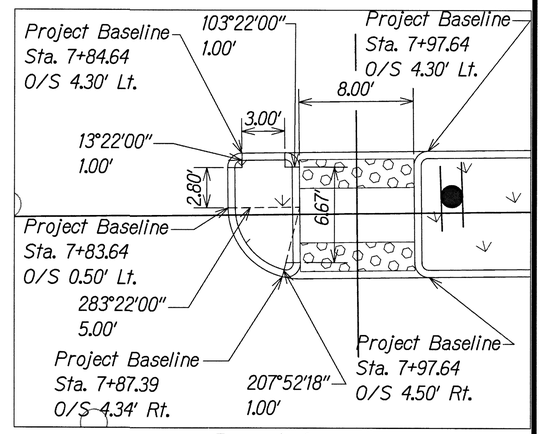
SHEET No. 1 OF 7 SHEETS

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROADWAY IMPROVEMENT PLAN-1.DWG 1/9/2014 4:23 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	32	145



PLAN
Scale: 1" = 20'



Inset 1
Scale: 1" = 5'

LEGEND:

- Landscape
- Concrete Curb and Gutter/Ramp/Sidewalk

NOTES:

1. Provide a smooth transition between the proposed improvements and the existing sidewalks and pavements.
2. See Repaving Plans for pavement improvements.
3. See Water and Sewer Plans for water and sewer improvements.
4. See Drainage Plans for drainage improvements.
5. See Electrical Plans for electrical improvements.
6. See Landscape Plans for landscape improvements.
7. 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.
8. See Sheets 67-73 for Driveway Details.
9. See Sheets 74-84 for Curb Ramp Details.

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

ROADWAY IMPROVEMENT PLAN

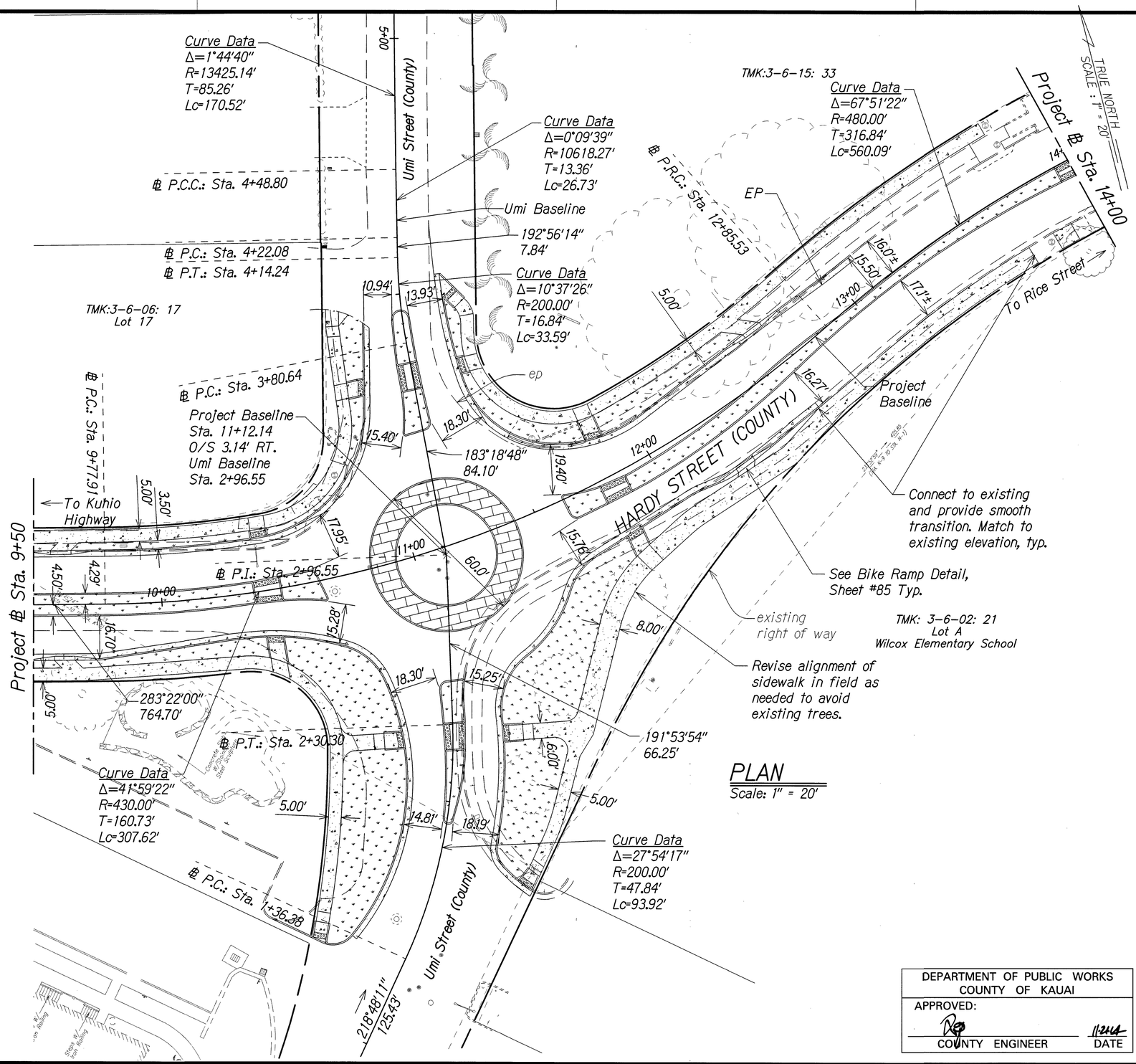
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 2 OF 7 SHEETS

W:_CIVIL 3D PROJECTS\2012_138.000 EWP HARDY STREET DBI\CIVIL DRAWINGS\ROADWAY IMPROVEMENT PLAN-2.DWG 1/9/2014 4:23 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	33	145



PLAN
Scale: 1" = 20'

LEGEND:

- Stamped Concrete Pattern
- Landscape
- Concrete Curb and Gutter/Ramp/Sidewalk

NOTE:

1. Provide a smooth transition between the proposed improvements and the existing sidewalks and pavements.
2. See Repaving Plans for pavement improvements.
3. See Water and Sewer Plans for water and sewer improvements.
4. See Drainage Plans for drainage improvements.
5. See Electrical Plans for electrical improvements.
6. See Landscape Plans for landscape improvements.
7. See Roundabout details for roundabout improvements.
8. See Sheets 67-73 for Driveway Details.
9. See Sheets 74-84 for Curb Ramp Details.

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

ROADWAY IMPROVEMENT PLAN

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

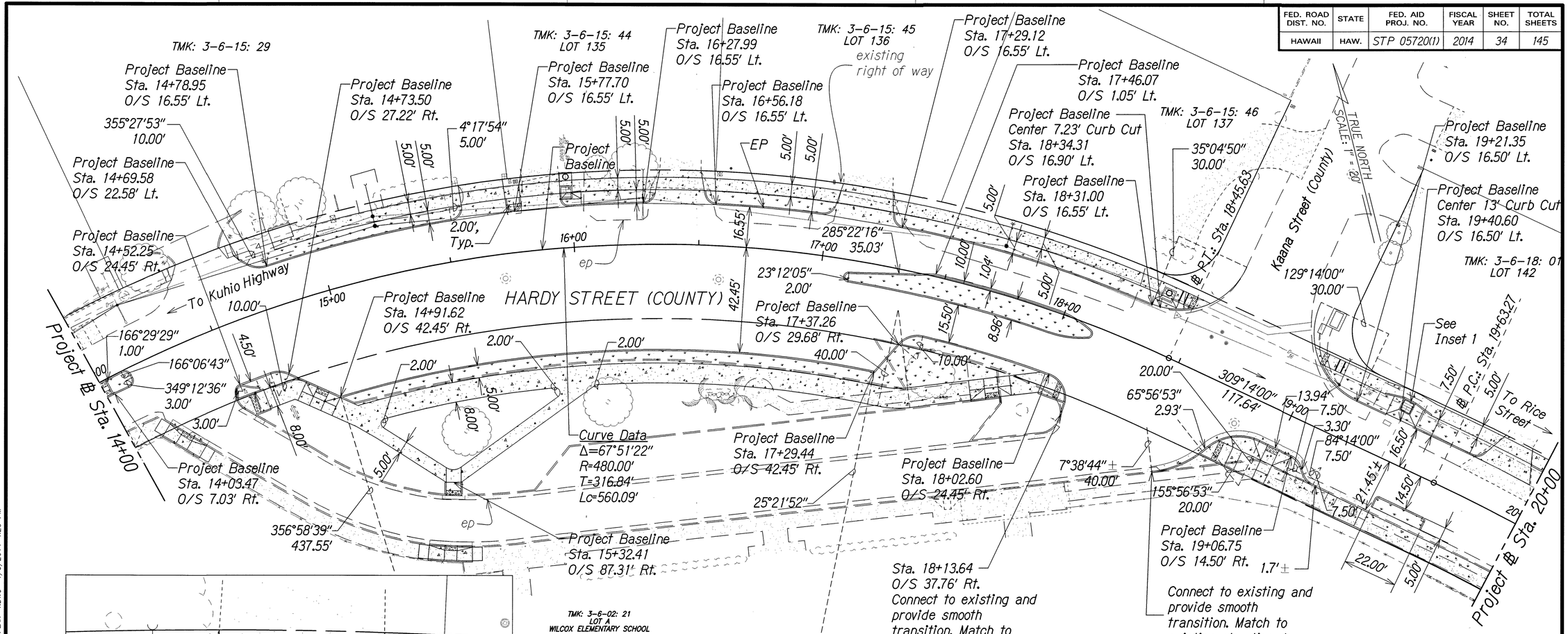
Scale: As Noted Date: September, 2014

SHEET No. 3 OF 7 SHEETS

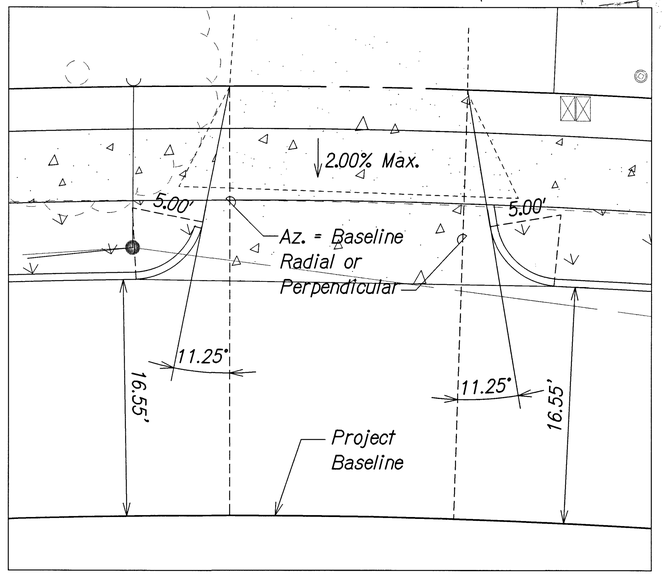
100% SUBMITTAL

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROADWAY IMPROVEMENT PLAN-3.DWG 1/9/2014 4:23 PM

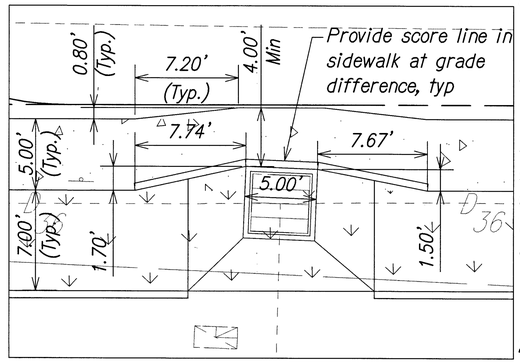
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	34	145



PLAN
Scale: 1" = 20'



Typical Driveway Detail
Scale: 1" = 5'



Inset 1
Scale: 1" = 5'

NOTES:
1. Provide a smooth transition between the proposed improvements and the existing sidewalks and pavements.
2. See Repaving Plans for pavement improvements.
3. See Water and Sewer Plans for water and sewer improvements.
4. See Drainage Plans for drainage improvements.
5. See Electrical Plans for electrical improvements.
6. See Landscape Plans for landscape improvements.
7. See Sheets 67-73 for Driveway Details.
8. See Sheets 74-84 for Curb Ramp Details.

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

LEGEND:
- Landscape
- Concrete Curb and Gutter/Ramp/Sidewalk

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

ROADWAY IMPROVEMENT PLAN

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

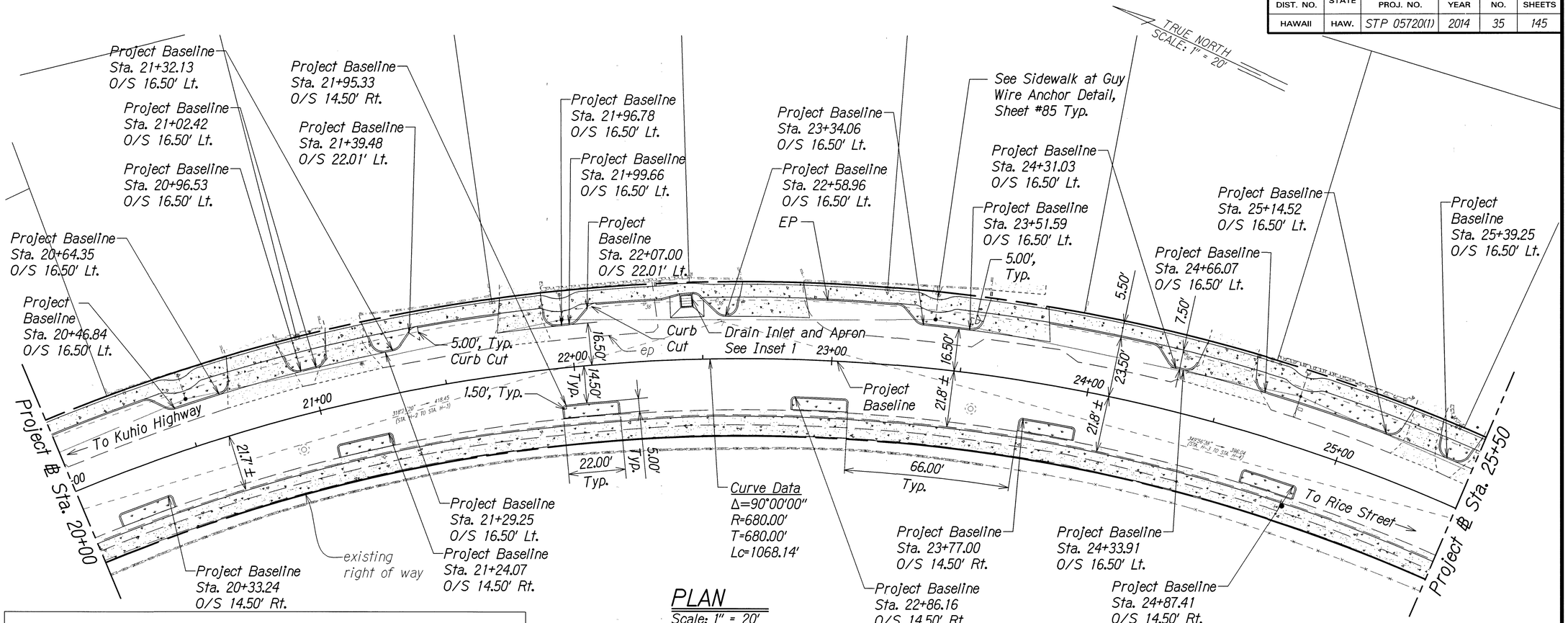
Scale: As Noted Date: September, 2014

SHEET No. 4 OF 7 SHEETS

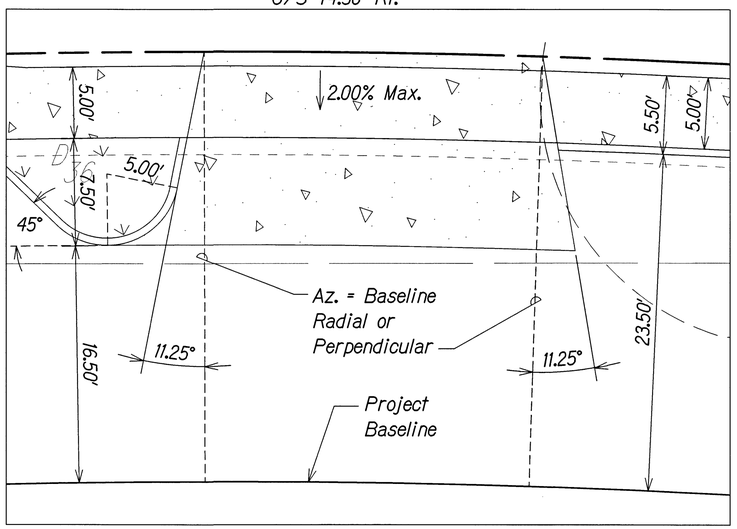
100% SUBMITTAL

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROADWAY IMPROVEMENT PLAN-4.DWG 1/9/2014 4:23 PM

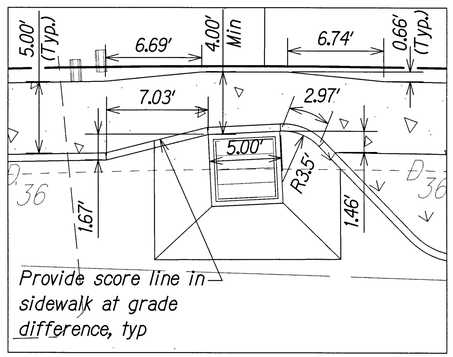
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	35	145



PLAN
Scale: 1" = 20'



Typical Driveway Detail
Scale: 1" = 5'



Inset 1
Scale: 1" = 5'

NOTE:
1. Provide a smooth transition between the proposed improvements and the existing sidewalks and pavements.
2. See Repaving Plans for pavement improvements.
3. See Water and Sewer Plans for water and sewer improvements.
4. See Drainage Plans for drainage improvements.
5. See Electrical Plans for electrical improvements.
6. See Landscape Plans for landscape improvements.
7. See Sheets 67-73 for Driveway Details.
8. See Sheets 74-84 for Curb Ramp Details.

LEGEND:
- Project Baseline
- Landscape
- Concrete Curb and Gutter/Ramp/Sidewalk

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

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 11-24-15

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

ROADWAY IMPROVEMENT PLAN

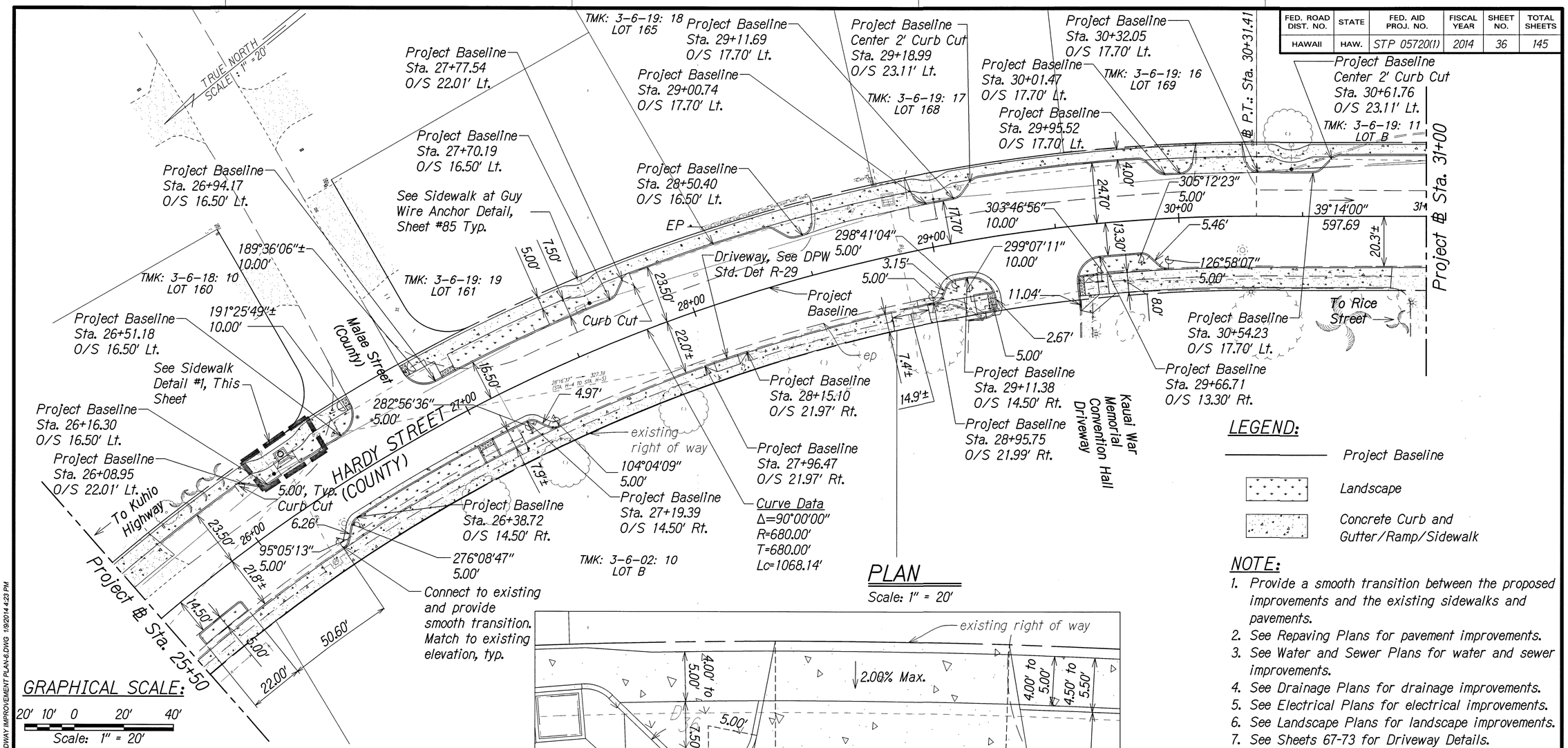
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

SHEET No. 5 OF 7 SHEETS

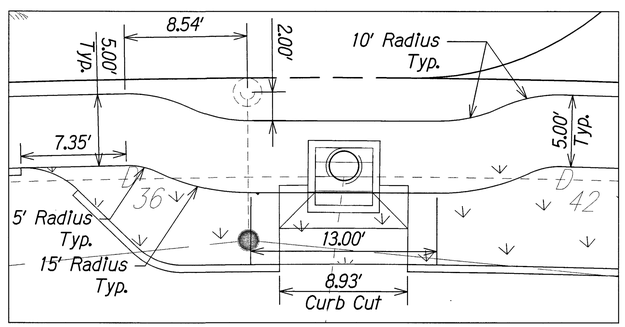
W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROADWAY IMPROVEMENT PLAN-5.DWG 1/9/2014 4:23 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	36	145

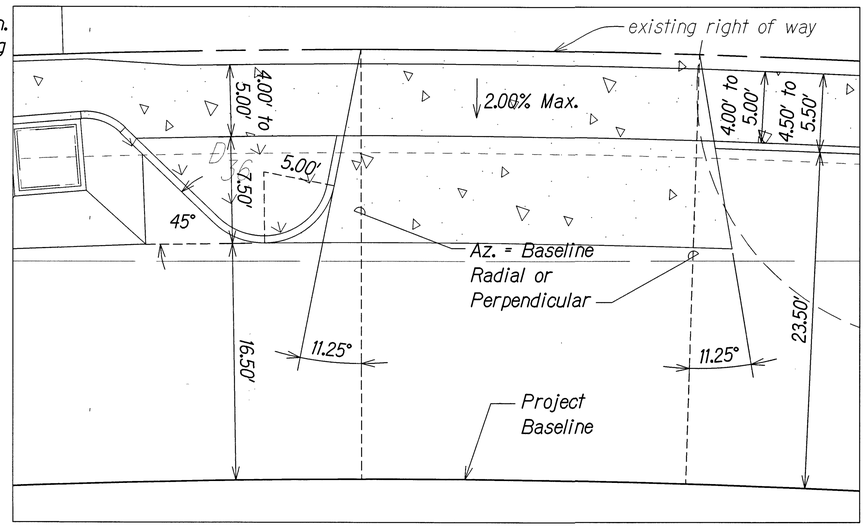


PLAN
Scale: 1" = 20'

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



Sidewalk Detail #1
Scale: 1" = 5'



Typical Driveway Detail
Scale: 1" = 5'

LEGEND:
- Project Baseline
- Landscape
- Concrete Curb and Gutter/Ramp/Sidewalk

NOTE:
1. Provide a smooth transition between the proposed improvements and the existing sidewalks and pavements.
2. See Repaving Plans for pavement improvements.
3. See Water and Sewer Plans for water and sewer improvements.
4. See Drainage Plans for drainage improvements.
5. See Electrical Plans for electrical improvements.
6. See Landscape Plans for landscape improvements.
7. See Sheets 67-73 for Driveway Details.
8. See Sheets 74-84 for Curb Ramp Details.

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

FIONA K. VAN ANMERS 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 IMPROVEMENT PLAN

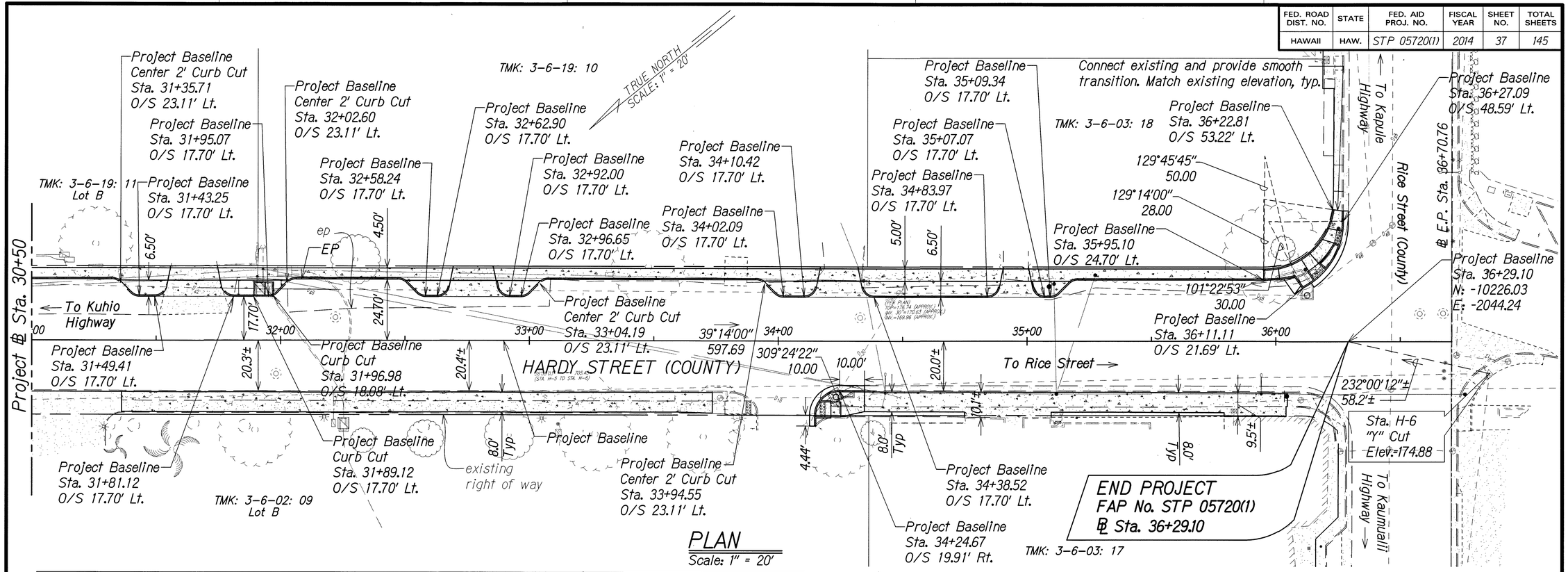
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

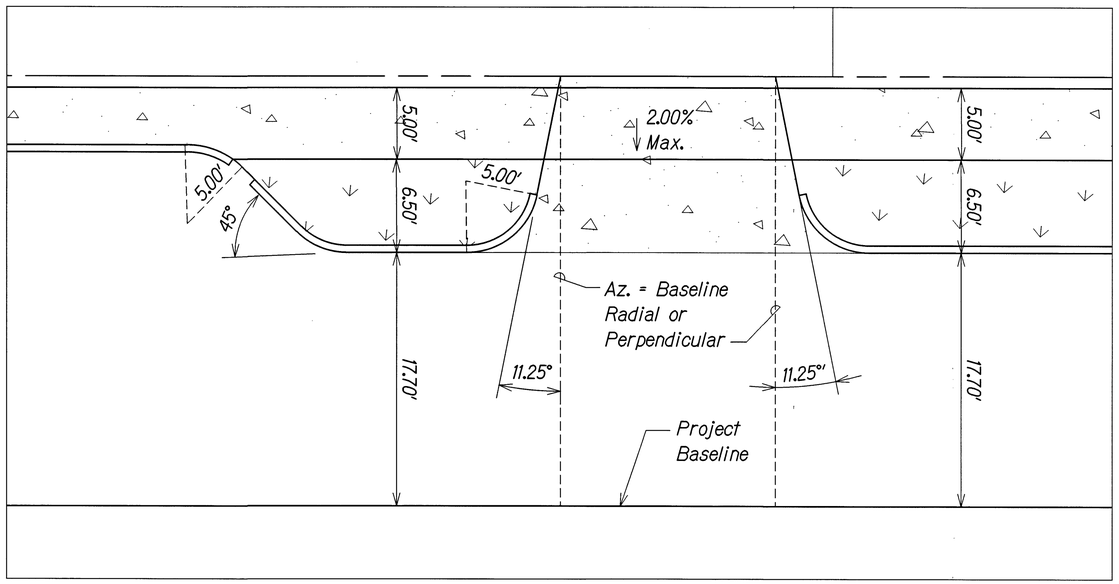
SHEET No. 6 OF 7 SHEETS

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\ROADWAY IMPROVEMENT PLAN-6.DWG 1/9/2014 4:23 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	37	145



PLAN
Scale: 1" = 20'



Typical Driveway Detail
Scale: 1" = 5'

LEGEND:

- Project Baseline
- Landscape
- Concrete Curb and Gutter/Ramp/Sidewalk

NOTE:

1. Provide a smooth transition between the proposed improvements and the existing sidewalks and pavements.
2. See Repaving Plans for pavement improvements.
3. See Water and Sewer Plans for water and sewer improvements.
4. See Drainage Plans for drainage improvements.
5. See Electrical Plans for electrical improvements.
6. See Landscape Plans for landscape improvements.
7. See Sheets 67-73 for Driveway Details.
8. See Sheets 74-84 for Curb Ramp Details.

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 — EXPIRATION DATE OF THE LICENSE: APRIL 30, 2016

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

ROADWAY IMPROVEMENT PLAN

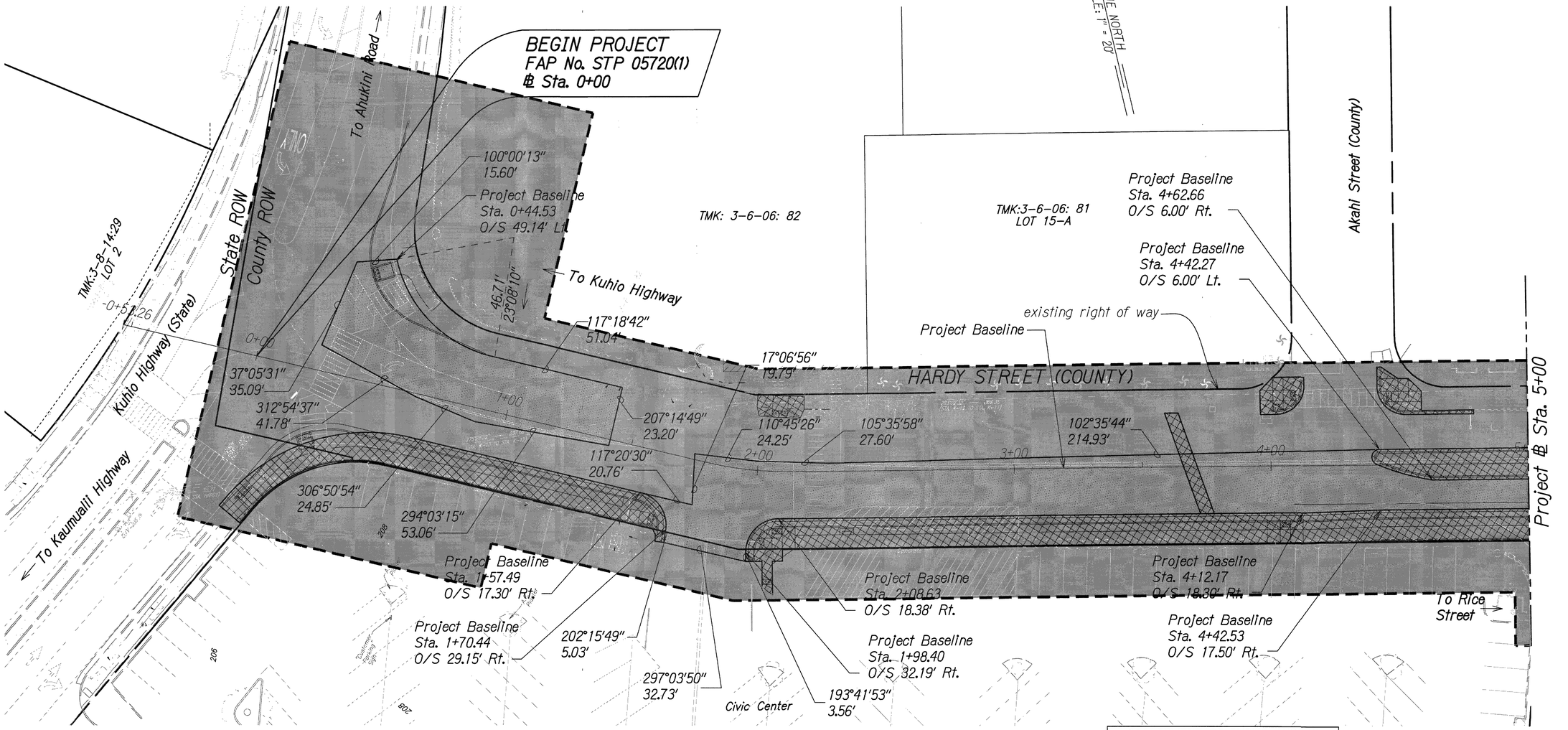
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted — Date: September, 2014

SHEET No. 7 OF 7 SHEETS

W:_CIVIL 3D PROJECTS\2012_136.000 EMP HARDY STREET DBIG\CIVIL DRAWINGS\ROADWAY IMPROVEMENT PLAN-7.DWG 11/9/2014 4:23 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	38	145



PLAN
Scale: 1" = 20'

NOTES:

1. Per DWS repaving plans Job. No. 05-06, no repaving required for existing pavement areas.
2. See Roadway Improvements Plans for Site Improvements.
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.

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

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

LEGEND:

Approximate limits of existing AC pavement to be treated with Emulsified Asphalt Slurry Seal

Proposed improvements (full depth pavement/curb and gutter/sidewalk/planters), see Road Improvement Plans for site improvements

FIONA K. VAN ANNERS
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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

REPAVING PLAN

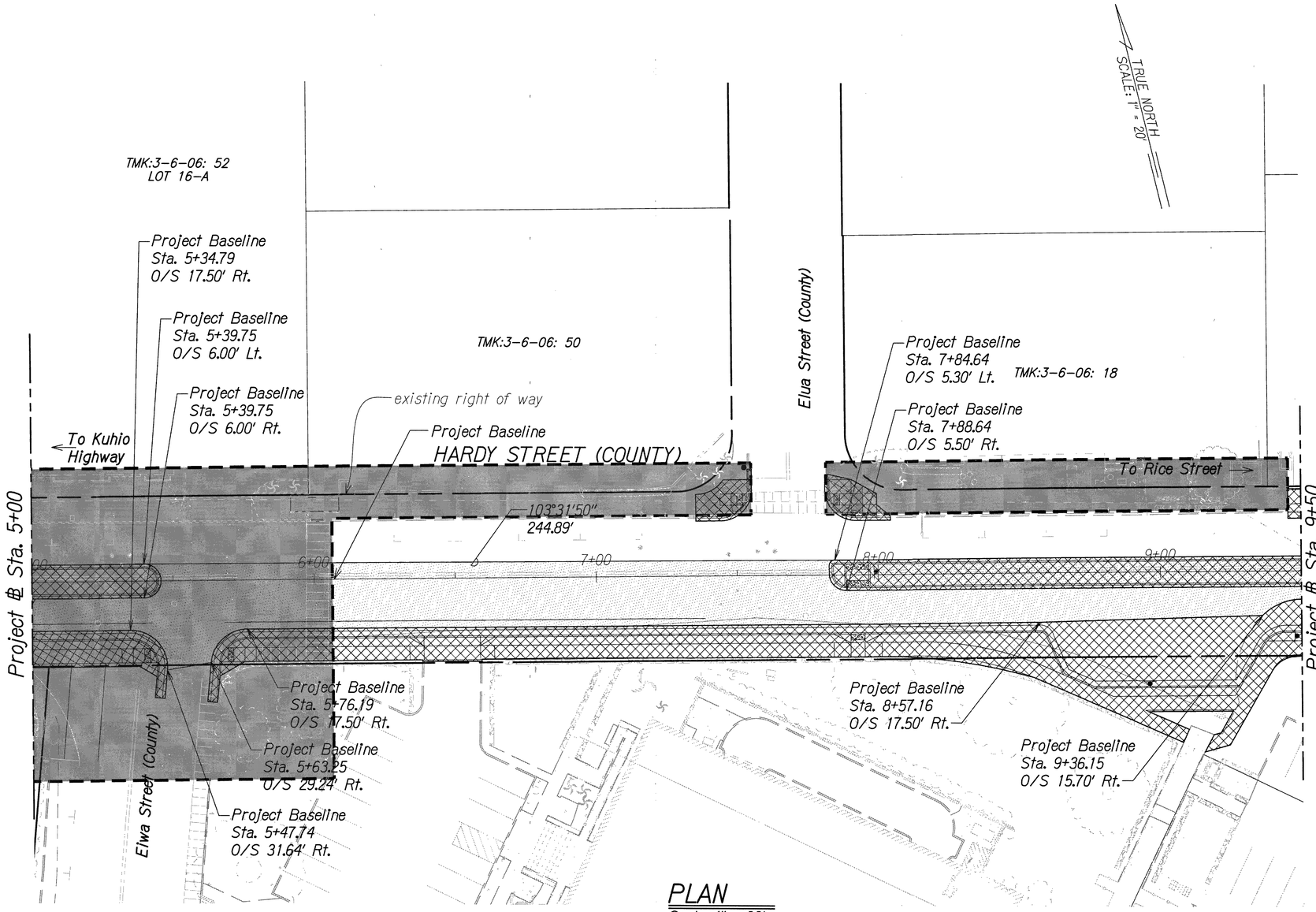
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

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	39	145



PLAN
Scale: 1" = 20'

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

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 8-24-16

LEGEND:

Approximate limits of existing AC pavement to be treated with Emulsified Asphalt Slurry Seal

Proposed improvements (full depth pavement/curb and gutter/sidewalk/planters), see Road Improvement Plans for site improvements

NOTES:

1. Per DWS repaving plans Job. No. 05-06, no repaving required for existing pavement areas.
2. See Roadway Improvements Plans for Site Improvements.
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.

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

REPAVING PLAN

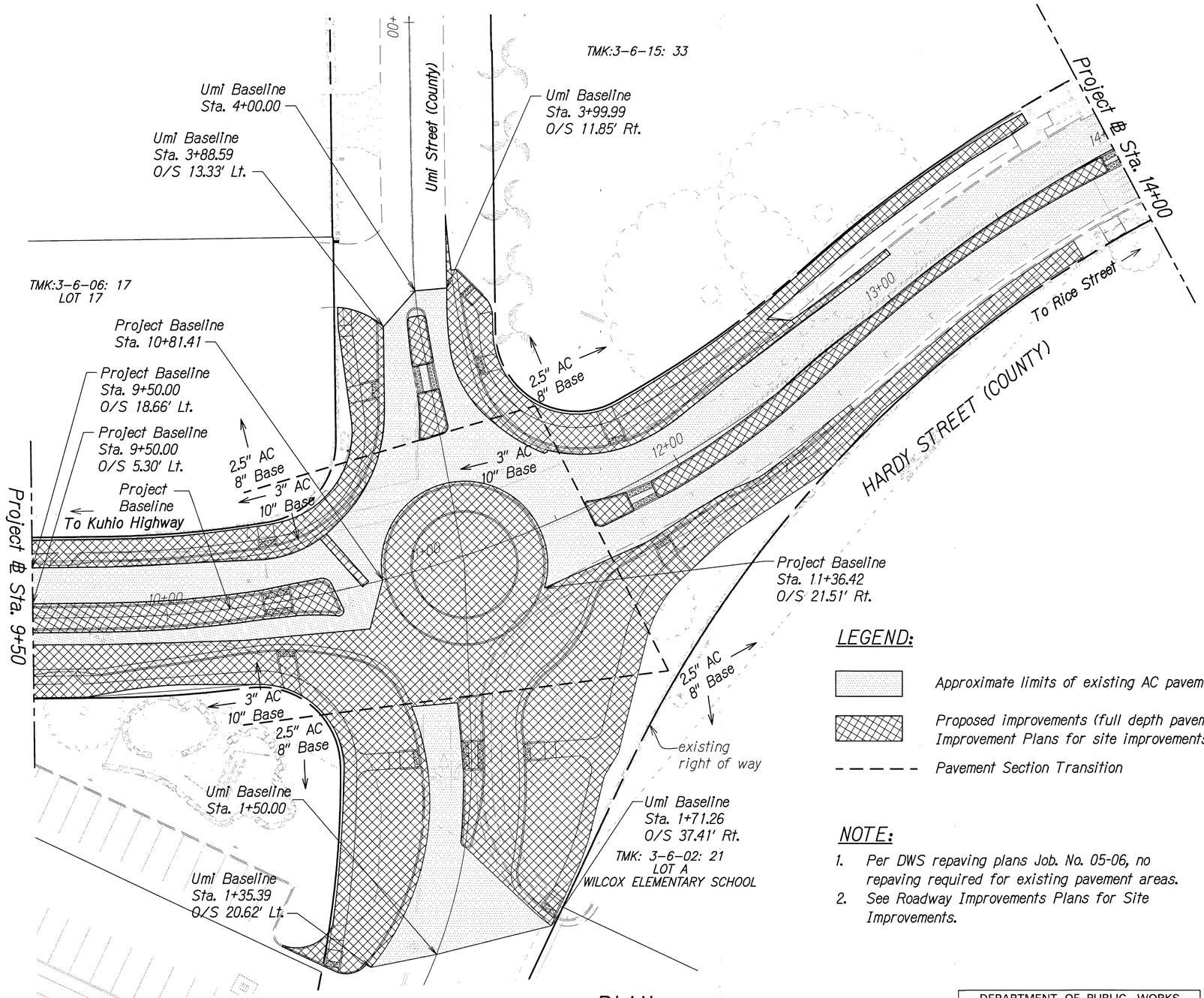
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

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	40	145



PLAN
Scale: 1" = 20'

LEGEND:

Approximate limits of existing AC pavement to be treated with Emulsified Asphalt Slurry Seal

Proposed improvements (full depth pavement/curb and gutter/sidewalk/planters), see Road Improvement Plans for site improvements

Pavement Section Transition

NOTE:

1. Per DWS repaving plans Job. No. 05-06, no repaving required for existing pavement areas.
2. See Roadway Improvements Plans for Site Improvements.

GRAPHICAL SCALES:

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

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 11-4-4

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

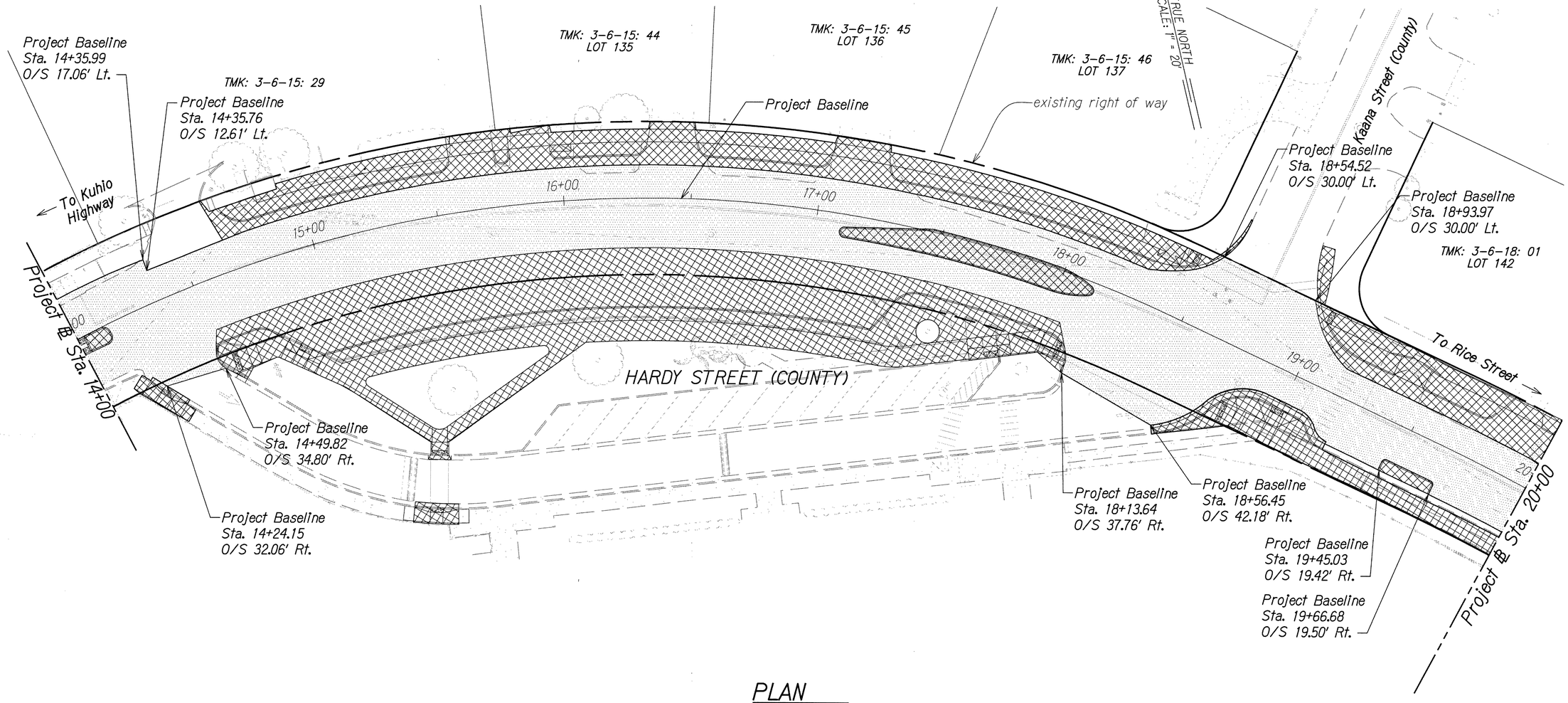
REPAVING PLAN

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	41	145



PLAN
Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 4-24-16

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

LEGEND:

Approximate limits of existing AC pavement to be treated with Emulsified Asphalt Slurry Seal

Proposed improvements (full depth pavement/curb and gutter/sidewalk/planters), see Road Improvement Plans for site improvements

NOTE:

1. Per DWS repaving plans Job. No. 05-06, no repaving required for existing pavement areas.
2. See Roadway Improvements Plans for Site Improvements.

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

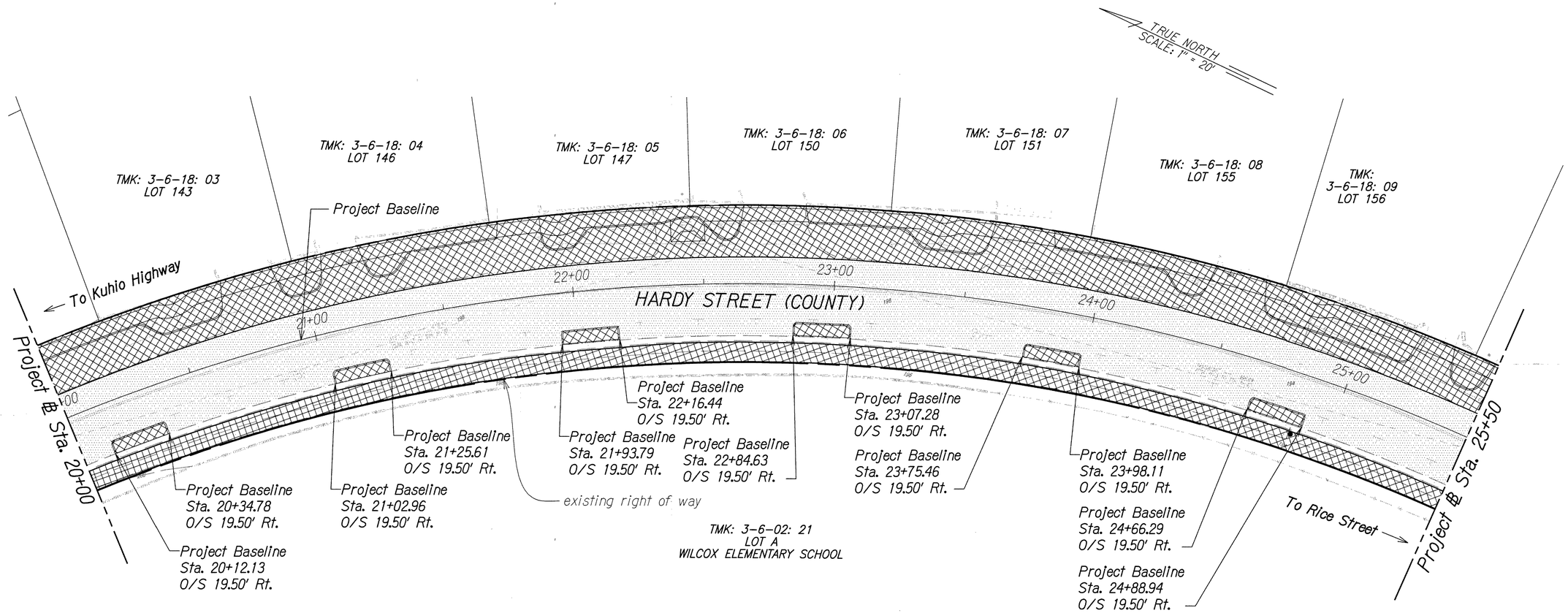
REPAVING PLAN

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	42	145



PLAN
Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 4-29-16

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

LEGEND:

Approximate limits of existing AC pavement to be treated with Emulsified Asphalt Slurry Seal

Proposed improvements (full depth pavement/curb and gutter/sidewalk/planters), see Road Improvement Plans for site improvements

NOTE:

1. Per DWS repaving plans Job. No. 05-06 no repaving required for existing pavement areas.
2. See Roadway Improvements Plans for Site Improvements.

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

REPAVING PLAN

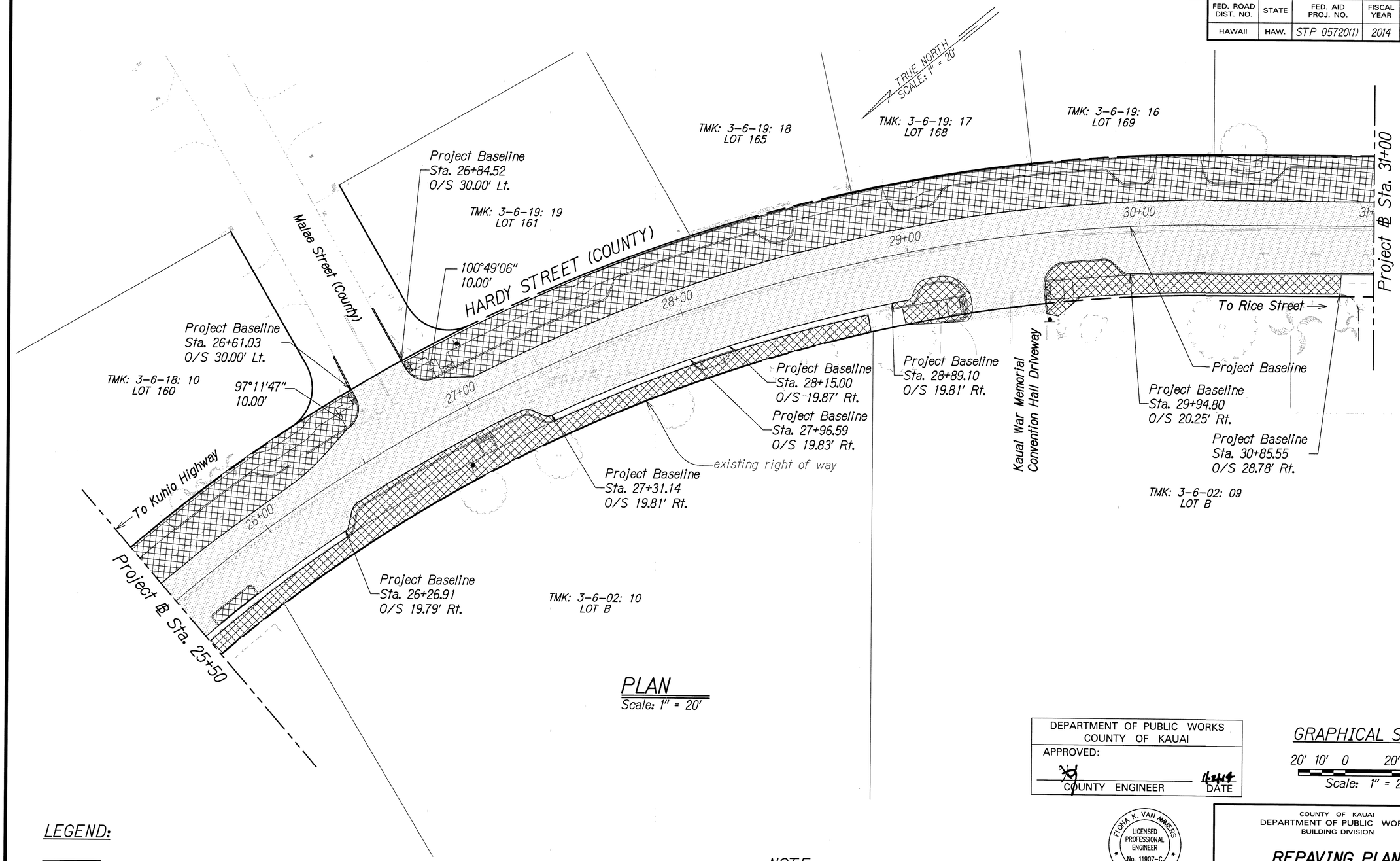
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 0572O(1)

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	43	145



PLAN
Scale: 1" = 20'

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

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 4/24/16

LEGEND:

Approximate limits of existing AC pavement to be treated with Emulsified Asphalt Slurry Seal

Proposed improvements (full depth pavement/curb and gutter/sidewalk/planters), see Road Improvement Plans for site improvements

NOTE:

1. Per DWS repaving plans Job. No. 05-06 no repaving required for existing pavement areas.
2. See Roadway Improvements Plans for Site Improvements.

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

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

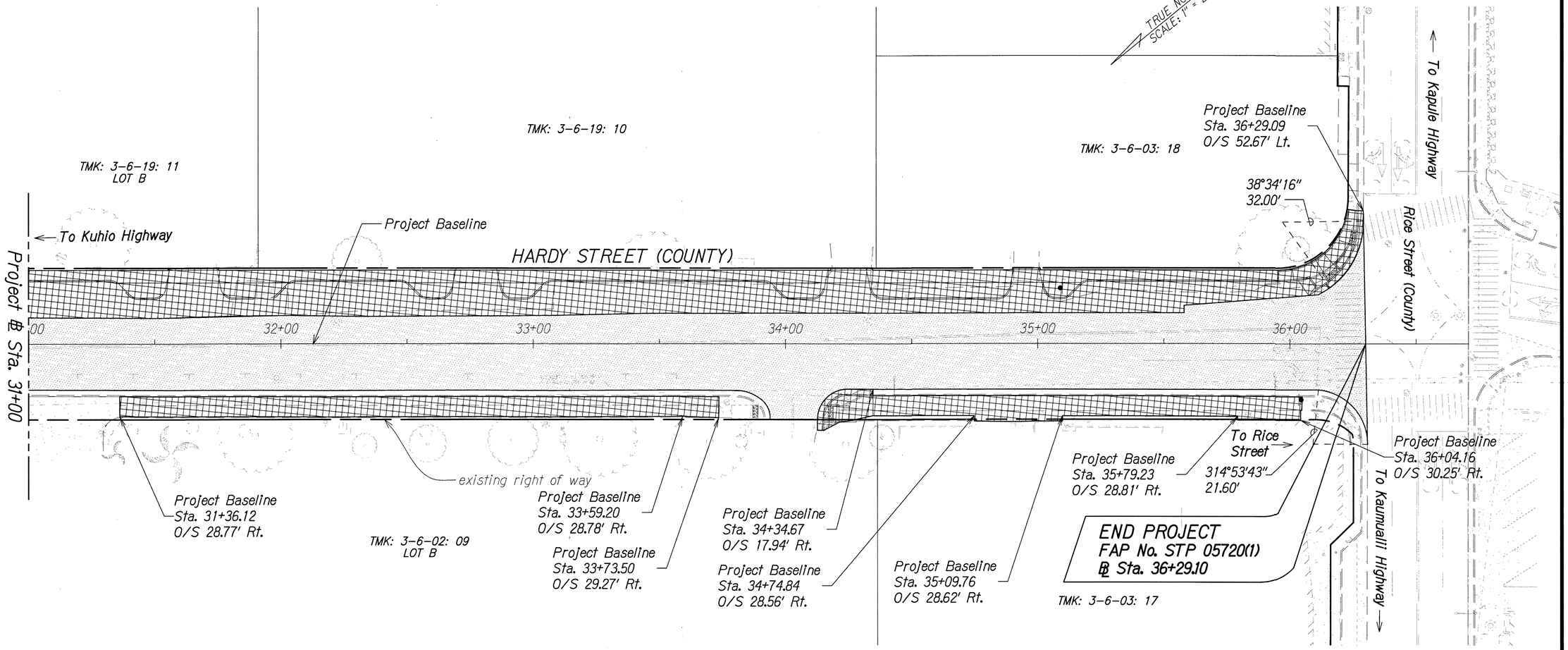
REPAVING PLAN

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 0572O(1)	2014	44	145



PLAN
Scale: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 11.2.14

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

LEGEND:

Approximate limits of existing AC pavement to be treated with Emulsified Asphalt Slurry Seal

Proposed improvements (full depth pavement/curb and gutter/sidewalk/planters), see Road Improvement Plans for site improvements

NOTE:

1. Per DWS repaving plans Job. No. 05-06 no repaving required for existing pavement areas.
2. See Roadway Improvements Plans for Site Improvements.

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SIGNATURE — APRIL 30, 2016 EXPIRATION DATE OF THE LICENSE

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

REPAVING PLAN

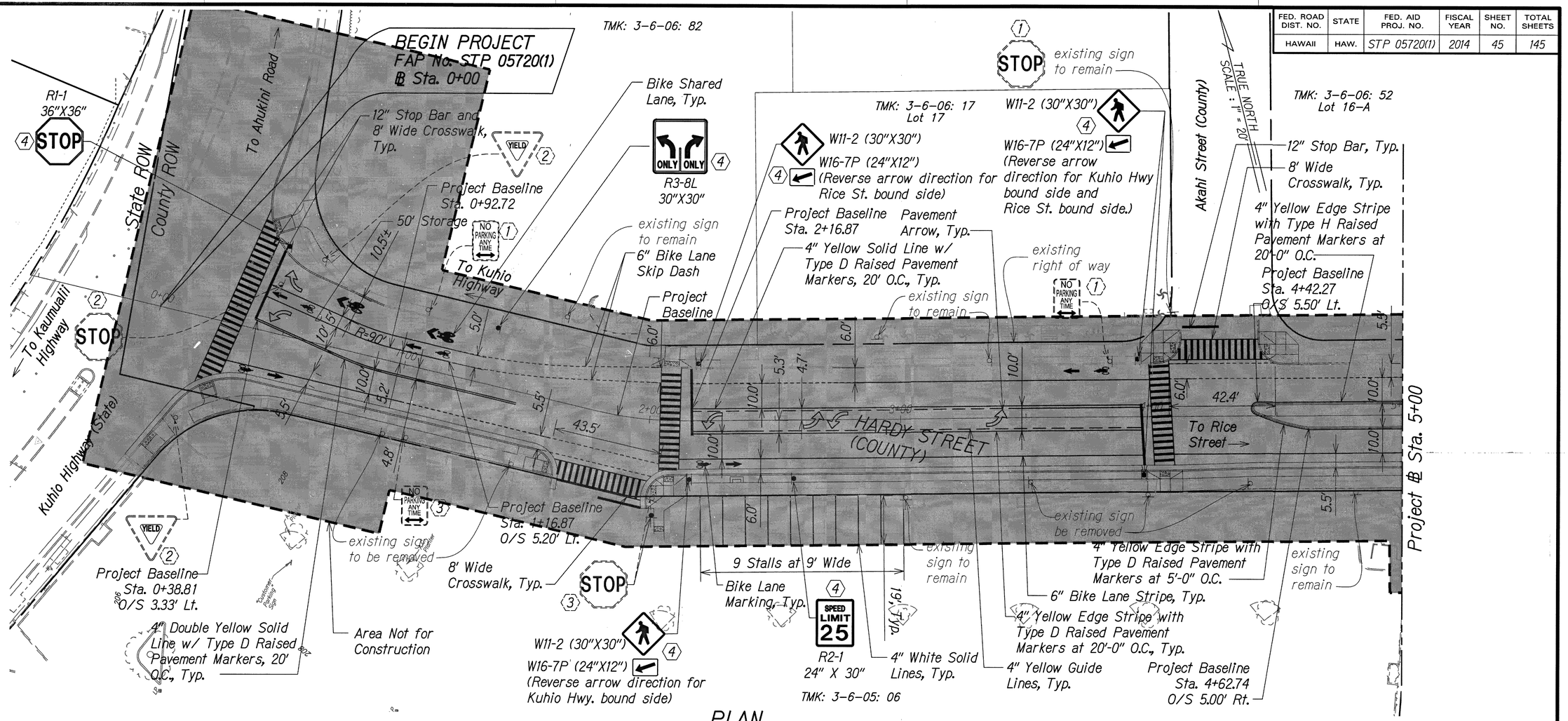
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 0572O(1)

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	45	145



PLAN
Scale: 1" = 20'

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. For striping and raised pavement marker details, refer to County of Kauai Department of Public Works Standard Detail T-8.

LEGEND:
(1) Existing sign and post(s) to remain

(2) Remove existing sign and post(s)

(3) Remove and Relocate existing sign and post(s)

(4) Install New Sign and Post(s)

Green Colored Bike Lane

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

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 11-2-16

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

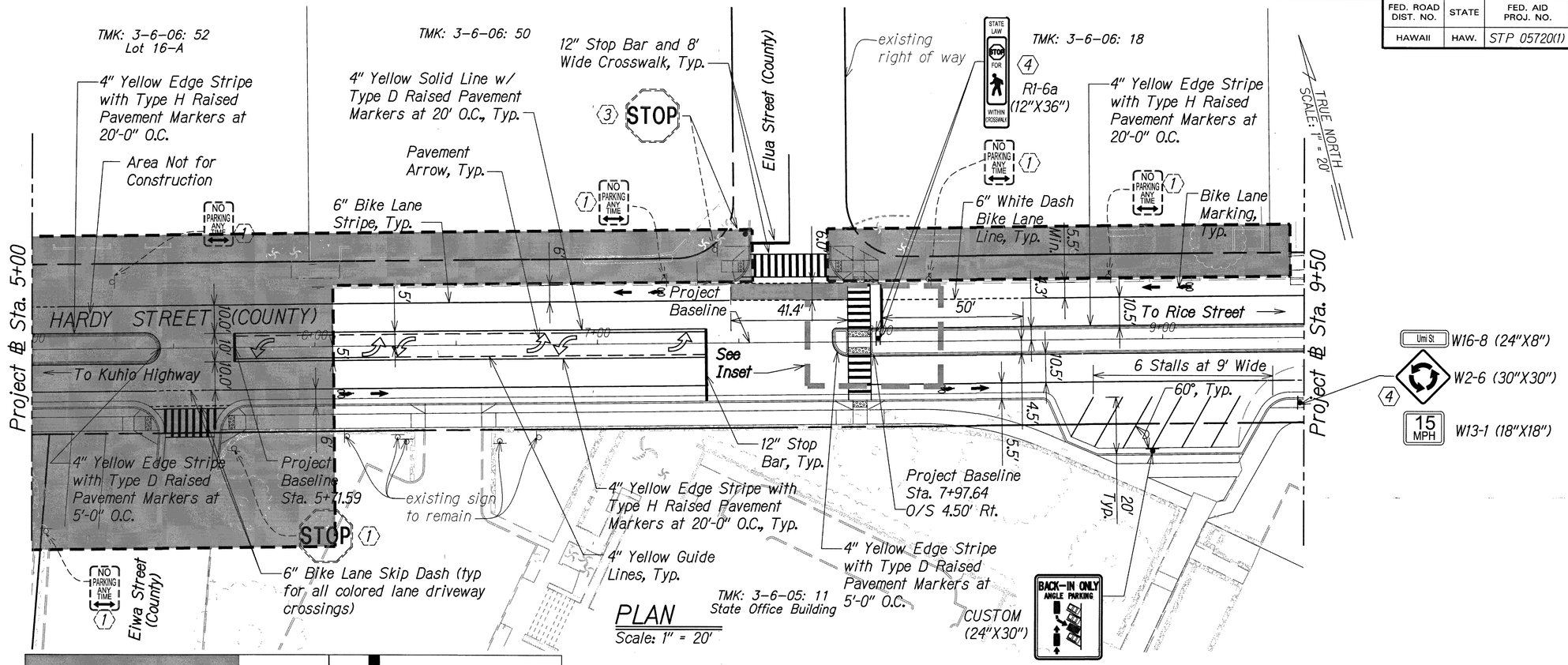
STRIPING AND SIGNAGE PLAN

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

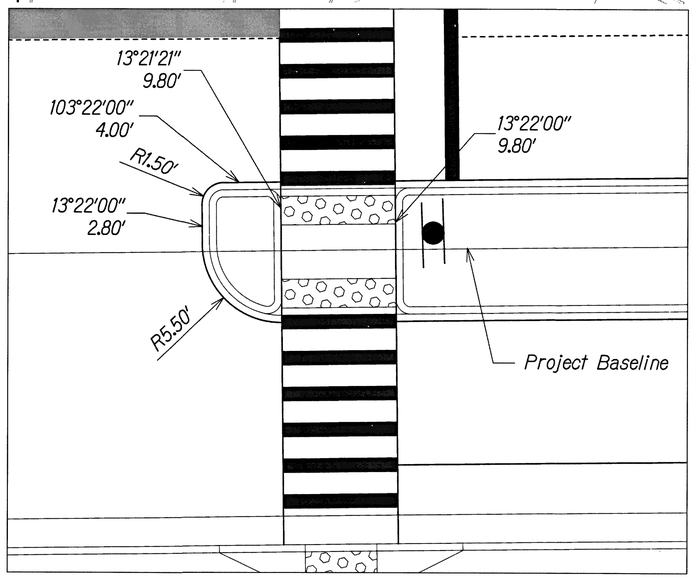
Scale: As Noted Date: September, 2014

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	46	145



PLAN
Scale: 1" = 20'



Inset
Scale: 1" = 5'

LEGEND:

1. Existing sign and post(s) to remain
2. Remove existing sign and post(s)
3. Remove and Relocate existing sign and post(s)
4. Install New Sign and Post(s)

Green Colored Bike Lane

GRAPHICAL SCALE:

20' 10' 0 20' 40'

Scale: 1" = 20'

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. For striping and raised pavement marker details, refer to County of Kauai Department of Public Works Standard Detail T-8.

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI
APPROVED:
COUNTY ENGINEER — DATE 4.24.17

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

STRIPING AND SIGNAGE 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

W:_CIVIL 3D PROJECTS\2012_138.000 EWP HARDY STREET DB\CIVIL DRAWINGS\STRIPING AND SIGNAGE PLAN-2.DWG 2/3/2014 3:31 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	47	145

LEGEND:

(1) Existing sign and post(s) to remain

(2) Remove existing sign and post(s)

(3) Remove and Relocate existing sign and post(s)

(4) Install New Sign and Post(s)

(5) Install LED Rectangular Rapid-Flash Beacon for Pedestrian Crossing

NOTES:

1. For striping and raised pavement marker details, refer to County of Kauai Department of Public Works Standard Detail T-8.

W16-8 (24"X8") Hardy St
W2-6 (30"X30") (4)
W13-1 (18"X18") 15 MPH
L=28.95'
R=192.18'
R=1.00', Typ.
Umi Street (County)
W11-2 (30"X30") (4)
W16-7P (24"X12")
STATE LAW STOP FOR WITHIN CROSSWALK (4)
R1-6a (12"X36")
D1-1d (24"X12") Umi St
R1-2 (30"X30"X30") YIELD (4)
TMK: 3-6-06: 17 Lot 17
STOP (2)
SPEED LIMIT 25 (2)
NO PARKING ANY TIME (2)
To Kuhio Highway
W11-2 (30"X30") (4)
W16-7P ((24"X12")
R1-6a (12"X36")
R6-4 (30"X24")
Hardy St D1-1d (24"X12")
11+00
10+00
Project ℄ Sta. 9+50
3.7'
15.8'
8.5'
17.0'
4.8'
SCHOOL SPEED LIMIT 15 7:30 AM TO 3:00PM WHEN CHILDREN ARE PRESENT (2)
END SCHOOL ZONE (4)
S5-2 (24"X30")
YIELD (4) R1-2 (30"X30"X30")
existing sign (Truck No Right Turn at Rice St) to be removed
W11-2 (30"X30")
W16-7P (24"X12") (4)
4" White Guide Line, Typ.
ONLY (2)
4" Yellow Edge Stripe, Typ.
4" White Edge Stripe, Typ.
4" Double Solid Yellow Stripe with Type H Raised Pavement Markers at 20'-0" O.C., Typ. See Striping and Signage Details for Transverse Median Marking Detail, Typ.
SPEED LIMIT 25 (1)
L=29.48'
R=583.08'
R1-2 (30"X30"X30") YIELD (4)
W11-2 (30"X30") (4)
W16-7P (24"X12")
4" Yellow Edge Stripe, Typ.
4" White Edge Stripe, Typ.
Cep
HARDY STREET (COUNTY)
TMK: 3-6-15: 33
existing right of way
W16-8 (24"X8") Umi St
W2-6 (30"X30") (4)
W13-1 (18"X18") 15 MPH
NO PARKING ANY TIME (2)
W11-2 (30"X30") (4)
W16-7P (24"X12")
4" Yellow Edge Stripe, Typ.
4" White Edge Stripe, Typ.
6" White Dash Bike Lane Line, Typ.
Hardy St D1-1d (24"X12")
STATE LAW STOP FOR WITHIN CROSSWALK (4) R1-6a (12"X36")
Project Baseline
Project Baseline Sta. 11+12.14
STOP (2)
12" White 2'-2' Pattern Stripe Typ.
Umi St D1-1d (24"X12")
YIELD (4) R1-2 (30"X30"X30")
4" Yellow Edge Stripe, Typ.
10' Wide Crosswalk, Typ.
STOP (1)
W11-2 (30"X30") (4)
W16-7P (24"X12")
(Reverse arrow direction for Rice St. bound side and Rice Street bound side.)
(4)(5) S1-1 (36"x36")
W16-7P (12"x12")
6" Bike Lane Stripe, Typ.
5' Min.
Project ℄ Sta. 14+00
TRUE NORTH SCALE: 1" = 20'
4.2'
15.5'
0.5'
To Rice Street
13+00
0.5'
4.5'
6.6'±
(2)
Bike Lane Marking, Typ.
4" Yellow Edge Stripe with Type H Raised Pavement Markers at 20'-0" O.C., Typ.
(4)(5) S1-1 (36"x36")
W16-7P (12"x12")
(Reverse arrow direction for Kuhio Hwy bound side)
SCHOOL S4-3P (24"X10")
SPEED LIMIT 15 (4) R2-1 (24"X30")
WHEN CHILDREN ARE PRESENT S4-2P (24"X10")
W11-2 (30"X30") (4)
W16-7P (24"X12")
TMK: 3-6-02: 21 Lot A Wilcox Elementary School
Hardy St W16-8 (24"X8")
W2-6 (30"X30") (4)
15 MPH W13-1 (18"X18")

PLAN
Scale: 1" = 20'

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

STRIPING AND SIGNAGE PLAN

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

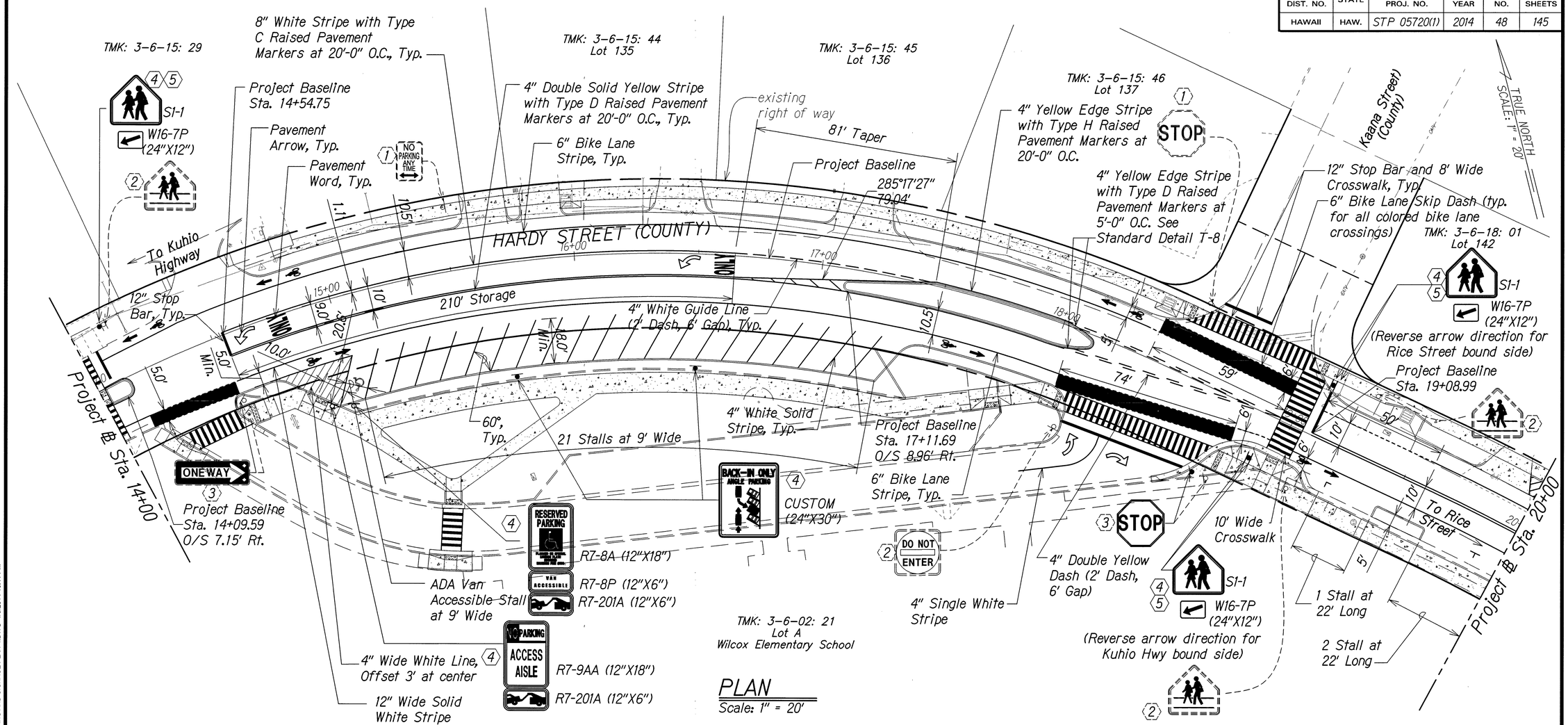
Scale: As Noted Date: September, 2014

SHEET No. 3 OF 7 SHEETS

100% SUBMITTAL

W:\ CIVIL 3D PROJECTS\2012_138.000 EWP HARDY STREET DBC\CIVIL DRAWINGS\STRIPING AND SIGNAGE PLAN-3.DWG 1/8/2014 10:41 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	48	145



PLAN
Scale: 1" = 20'

LEGEND:

1. Existing sign and post(s) to remain
2. Remove existing sign and post(s)
3. Remove and Relocate existing sign and post(s)
4. Install New Sign and Post(s)
5. Install LED Rectangular Rapid-Flash Beacon for Pedestrian Crossing

Green Colored Bike Lane

NOTES:

1. For striping and raised pavement marker details, refer to County of Kauai Department of Public Works Standard Detail T-8.

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
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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

STRIPING AND SIGNAGE PLAN

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

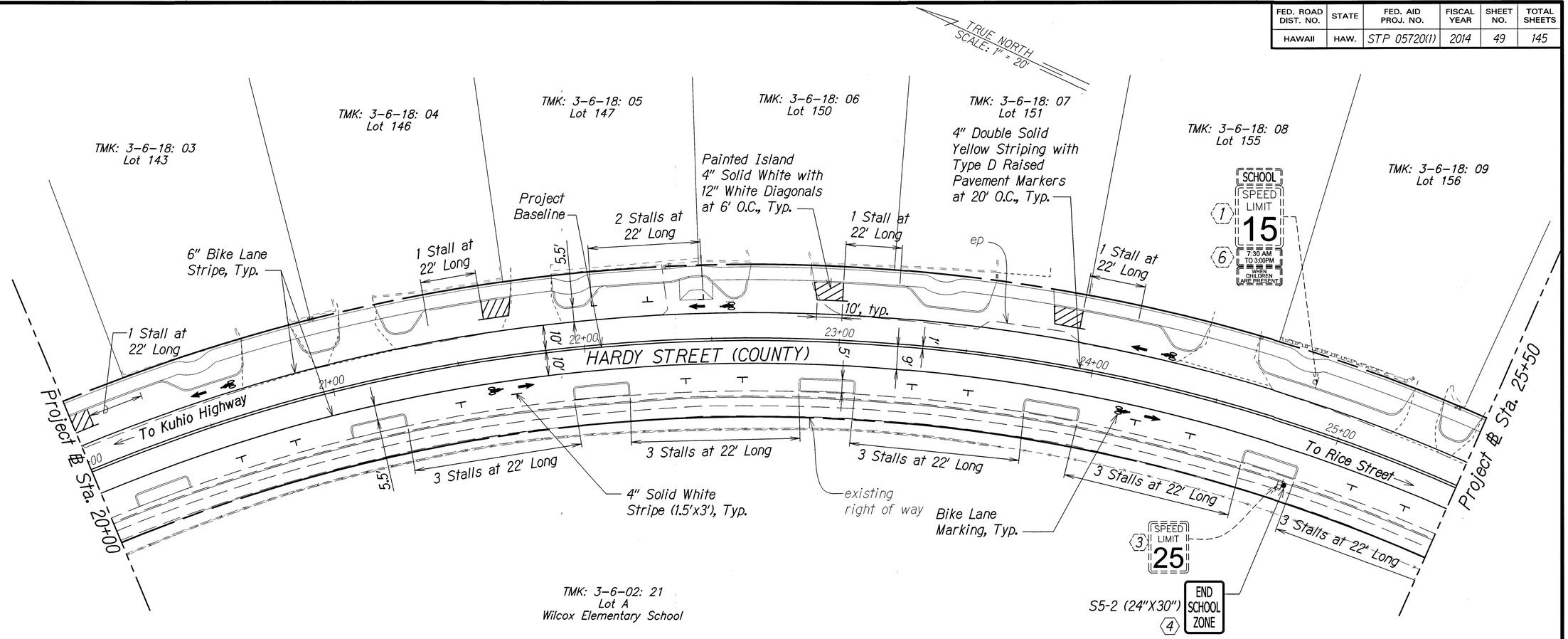
Scale: As Noted — Date: September, 2014

SHEET No. 4 OF 7 SHEETS

100% SUBMITTAL

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DBI\CIVIL DRAWINGS\STRIPING AND SIGNAGE PLAN-4.DWG 1/8/2014 10:41 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	49	145



PLAN
Scale: 1" = 20'

NOTES:

1. For striping and raised pavement marker details, refer to County of Kauai Department of Public Works Standard Detail T-8.

LEGEND:

(1) Existing sign and post(s) to remain

(2) Remove existing sign and post(s)

(3) Remove and Relocate existing sign and post(s)

(4) Install New Sign and Post(s)

(5) Install LED Rectangular Rapid-Flash Beacon for Pedestrian Crossing

(6) Remove "7:30am to 3:00pm" plaque from sign

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

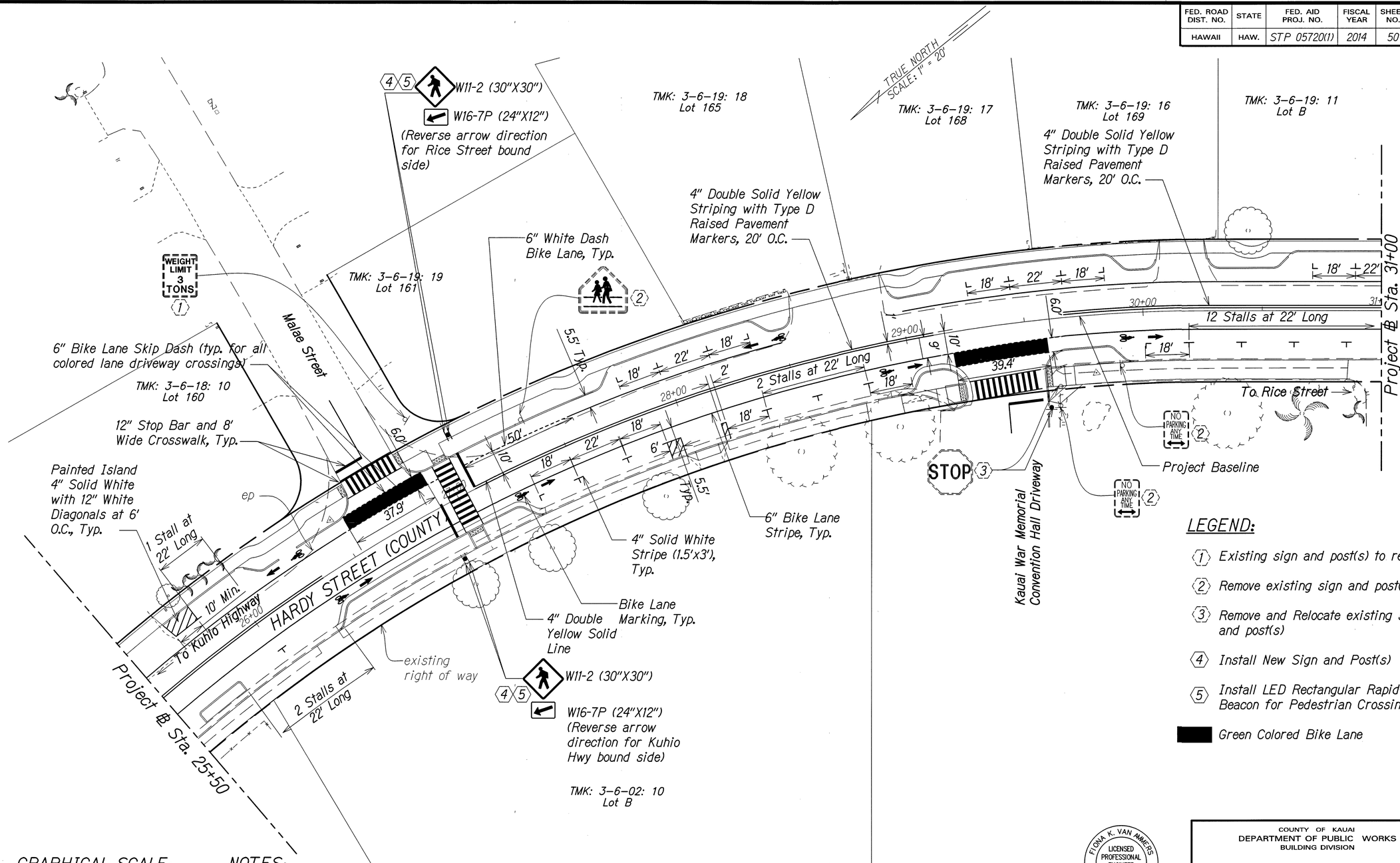
STRIPING AND SIGNAGE PLAN

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	50	145



LEGEND:

1. Existing sign and post(s) to remain
2. Remove existing sign and post(s)
3. Remove and Relocate existing sign and post(s)
4. Install New Sign and Post(s)
5. Install LED Rectangular Rapid-Flash Beacon for Pedestrian Crossing

Green Colored Bike Lane

GRAPHICAL SCALE:

20' 10' 0 20' 40'

Scale: 1" = 20'

NOTES:

1. For striping and raised pavement marker details, refer to County of Kauai Department of Public Works Standard Detail T-8.

PLAN

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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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

STRIPING AND SIGNAGE PLAN

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

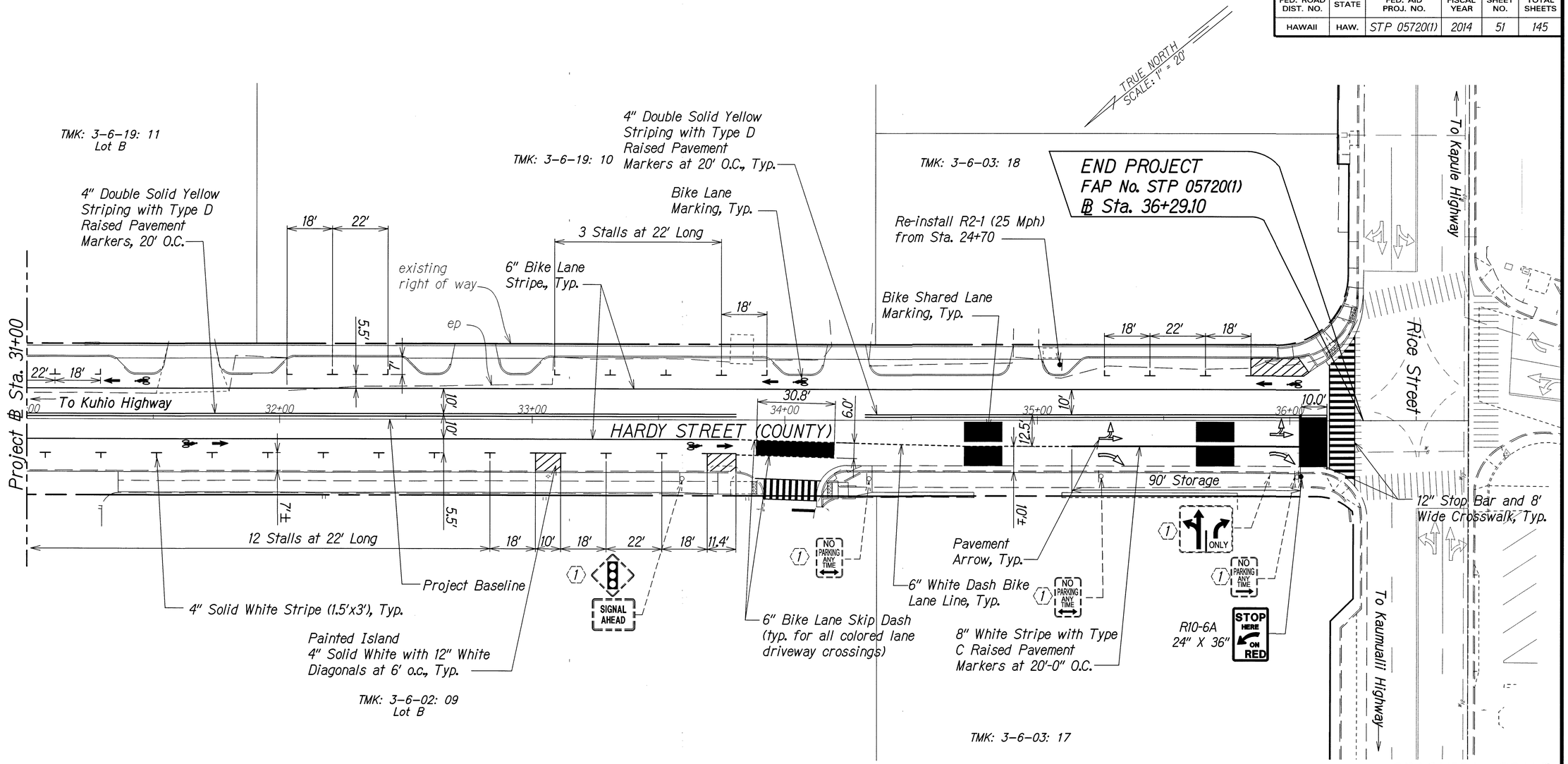
Scale: As Noted — Date: September, 2014

SHEET No. 6 OF 7 SHEETS

100% SUBMITTAL

W:_CIVIL 3D PROJECTS\2012_136.000 EWP HARDY STREET DB\CIVIL DRAWINGS\STRIPING AND SIGNAGE PLAN-6.DWG 1/8/2014 10:41 PM

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	51	145



NOTES:

1. For striping and raised pavement marker details, refer to County of Kauai Department of Public Works Standard Detail T-8.

LEGEND:

- (1) Existing sign and post(s) to remain
- (2) Remove existing sign and post(s)
- (3) Remove and Relocate existing sign and post(s)
- (4) Install New Sign and Post(s)
- Green Colored Bike Lane

PLAN

Scale: 1" = 20'

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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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

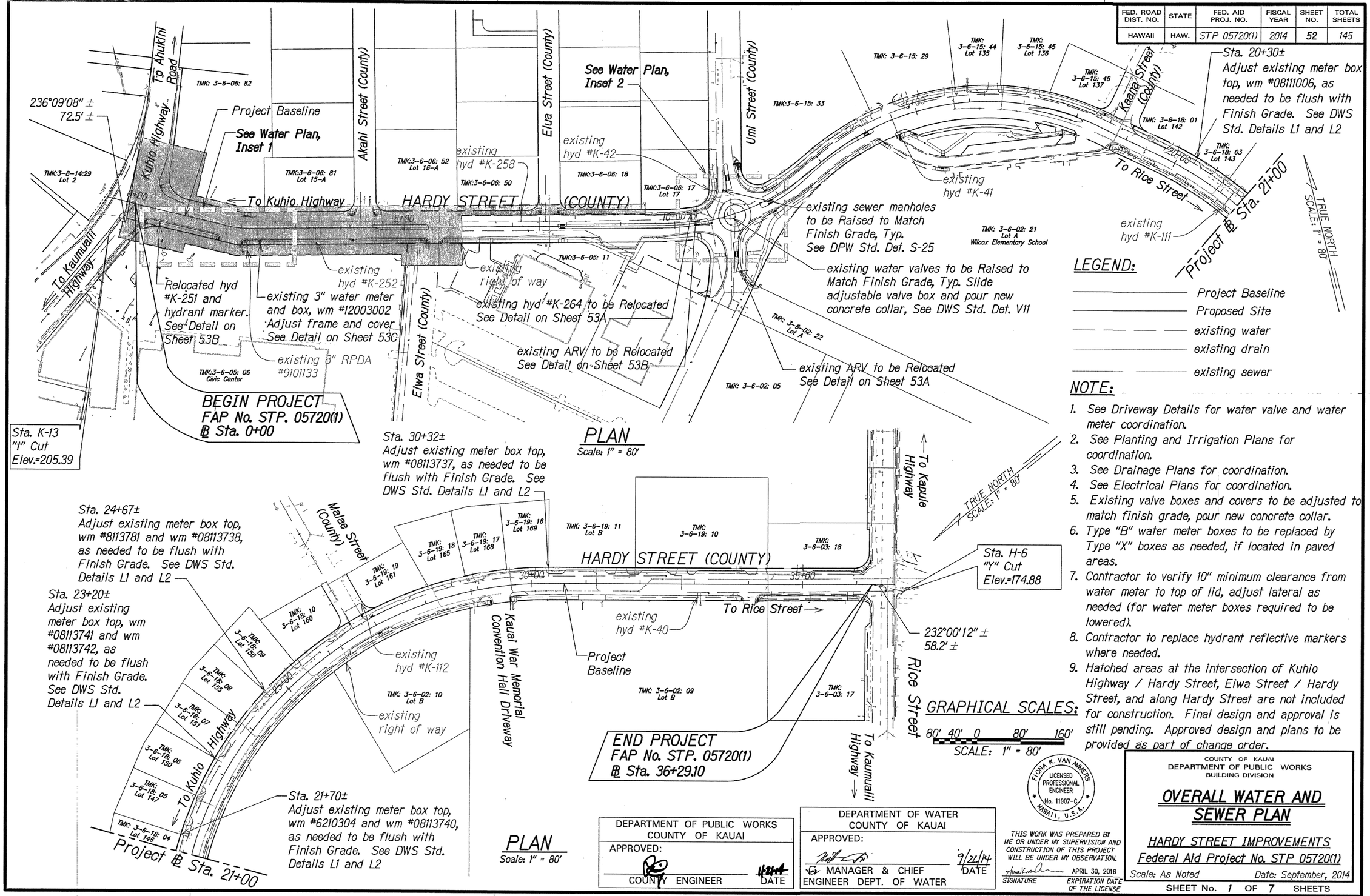
STRIPING AND SIGNAGE PLAN

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	52	145



PLAN
Scale: 1" = 80'

PLAN
Scale: 1" = 80'

LEGEND:

- Project Baseline
- Proposed Site
- existing water
- existing drain
- existing sewer

NOTE:

1. See Driveway Details for water valve and water meter coordination.
2. See Planting and Irrigation Plans for coordination.
3. See Drainage Plans for coordination.
4. See Electrical Plans for coordination.
5. Existing valve boxes and covers to be adjusted to match finish grade, pour new concrete collar.
6. Type "B" water meter boxes to be replaced by Type "X" boxes as needed, if located in paved areas.
7. Contractor to verify 10" minimum clearance from water meter to top of lid, adjust lateral as needed (for water meter boxes required to be lowered).
8. Contractor to replace hydrant reflective markers where needed.
9. Hatched areas at the intersection 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.

GRAPHICAL SCALES:
80' 40' 0 80' 160'
SCALE: 1" = 80'

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

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

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

OVERALL WATER AND SEWER PLAN

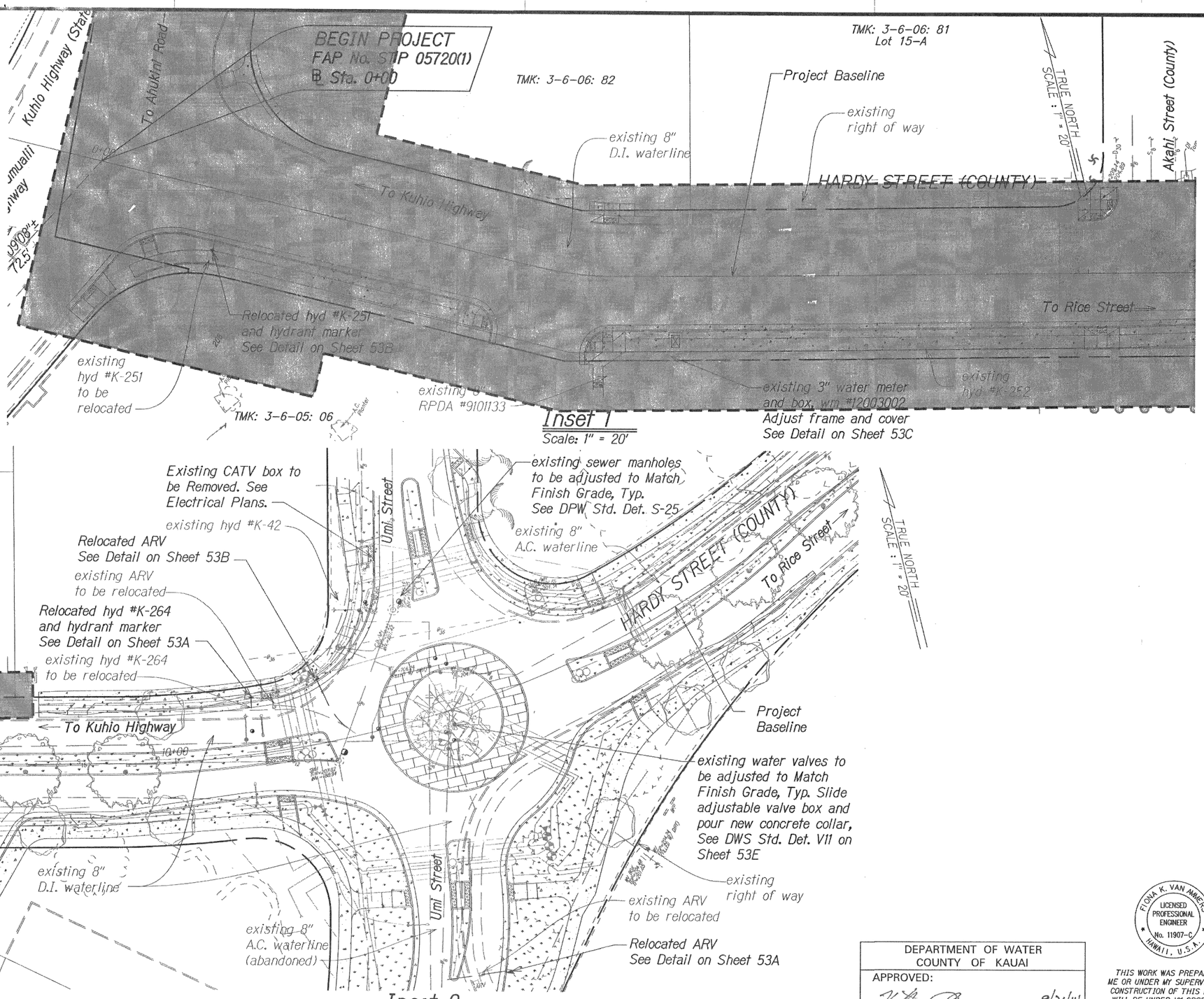
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

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	53	145



LEGEND:

- Project Baseline
- Proposed Site
- W_8 existing D.I. water
- W_8 existing A.C. water
- D_{36} existing drain
- S_8 existing sewer
- Irrigation (See Irrigation Plans)
- Drainage (See Drainage Improvement Plans)
- Electrical (See Electrical Plans)

NOTE:

1. See Driveway Details for water valve and water meter coordination.
2. See Planting and Irrigation Plans for coordination.
3. See Drainage Plans for coordination.
4. See Electrical Plans for coordination.
5. Existing valve boxes and covers to be adjusted to match finish grade, pour new concrete collar.
6. Hatched areas at the intersection of Kuhio Highway / 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.

GRAPHICAL SCALES:

20' 10' 0 20' 40'

Scale: 1" = 20'

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

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

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

WATER AND SEWER PLAN

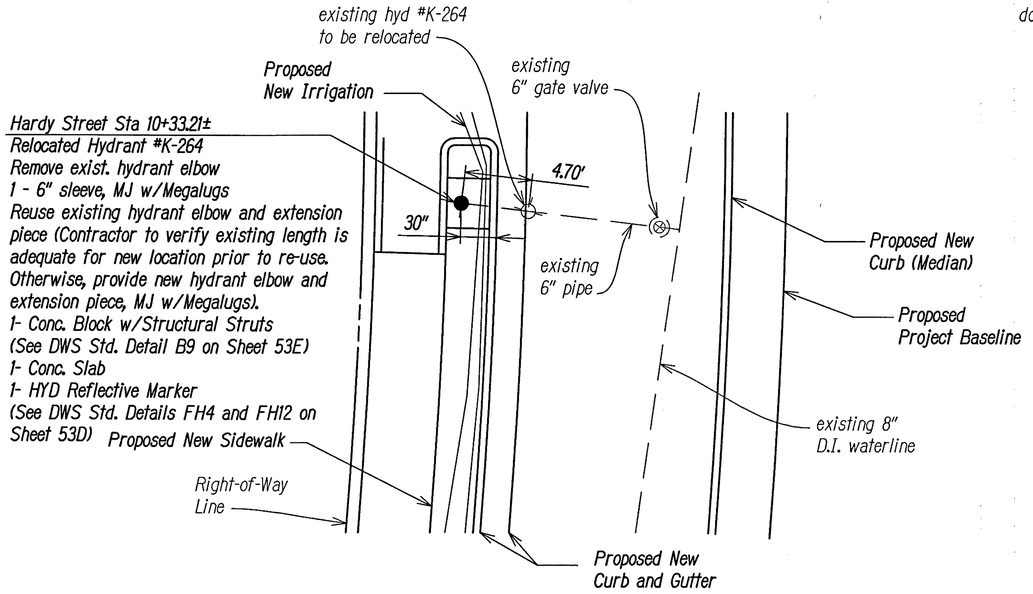
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 05720(1)

Scale: As Noted Date: September, 2014

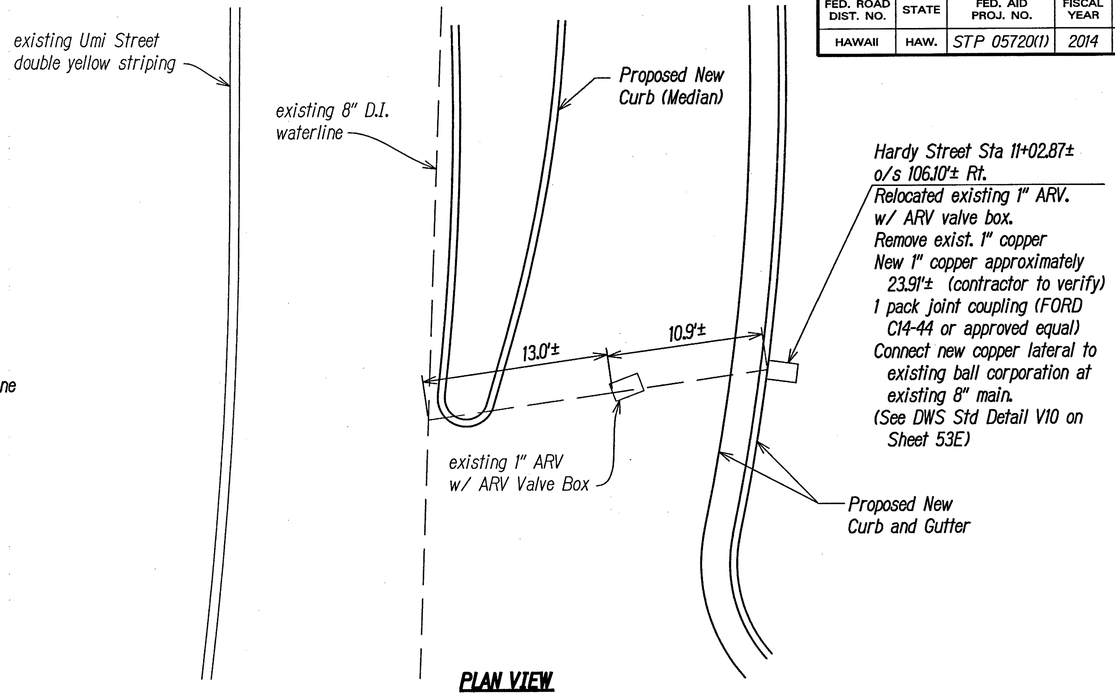
SHEET No. 2 OF 7 SHEETS

100% SUBMITTAL

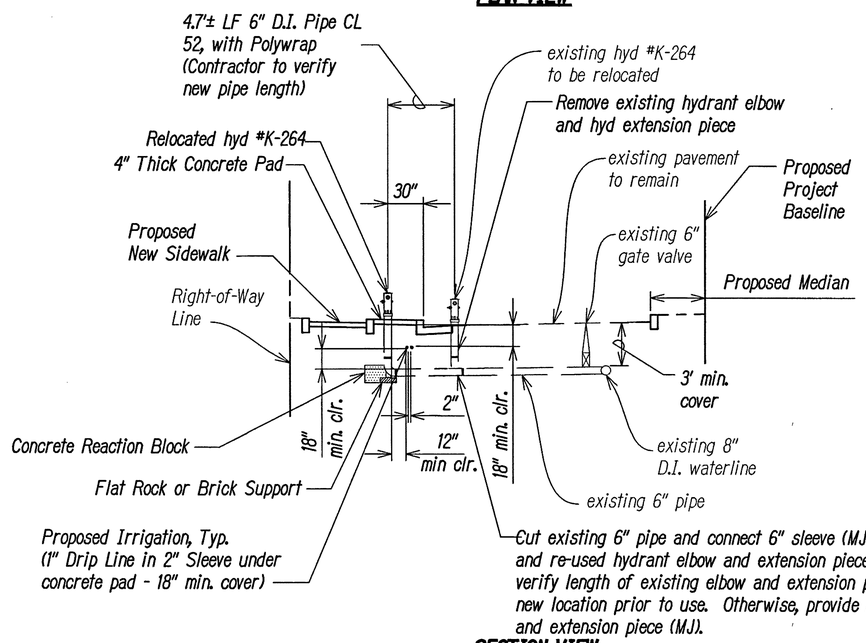
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 0572O(1)	2014	53A	145



PLAN VIEW



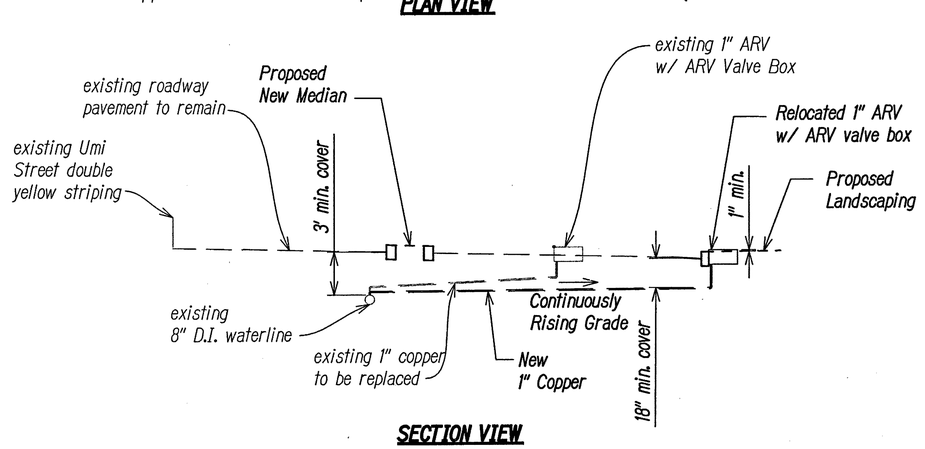
PLAN VIEW



SECTION VIEW

EXISTING HYDRANT #K-264 RELOCATION DETAIL

Scale: NTS



SECTION VIEW

UMI STREET ARV RELOCATION DETAIL

Scale: NTS

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

DEPARTMENT OF WATER COUNTY OF KAUAI	
APPROVED:	
for MANAGER & CHIEF ENGINEER DEPT. OF WATER	9/22/14 DATE

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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

WATER DETAILS

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

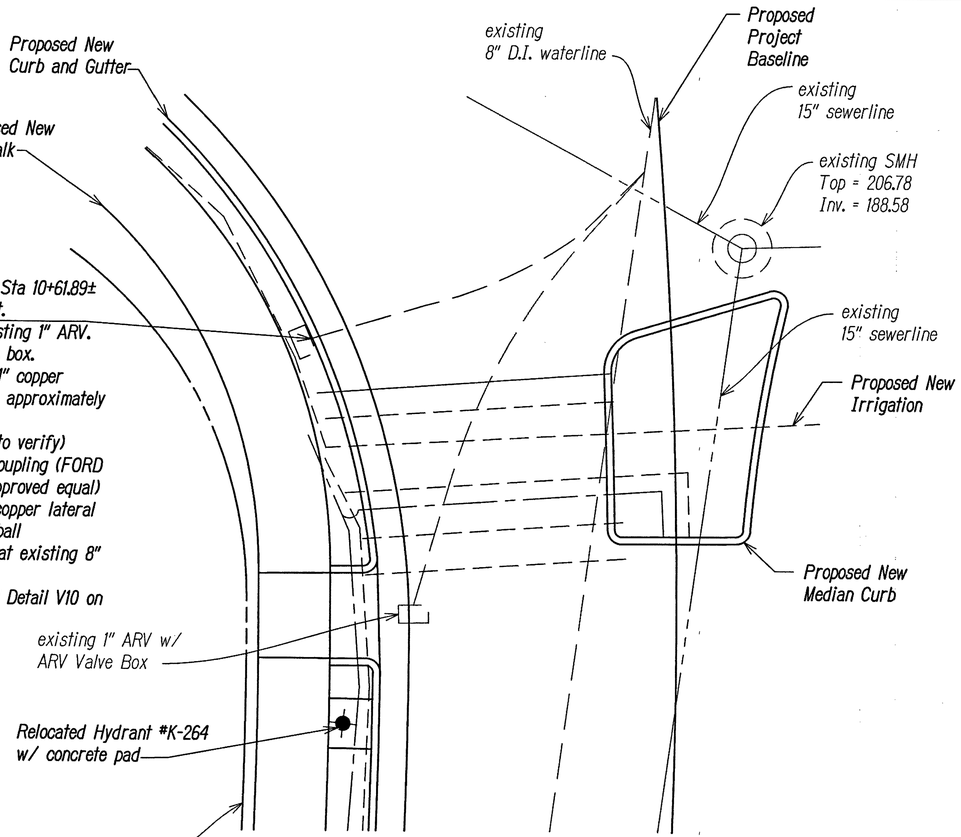
Scale: As Noted — Date: September, 2014

SHEET No. 3 OF 7 SHEETS

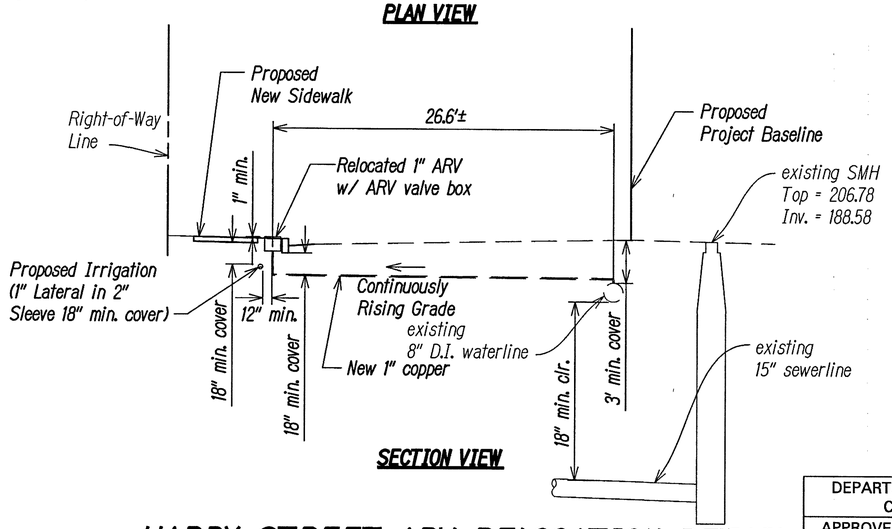
100% SUBMITTAL

53A

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



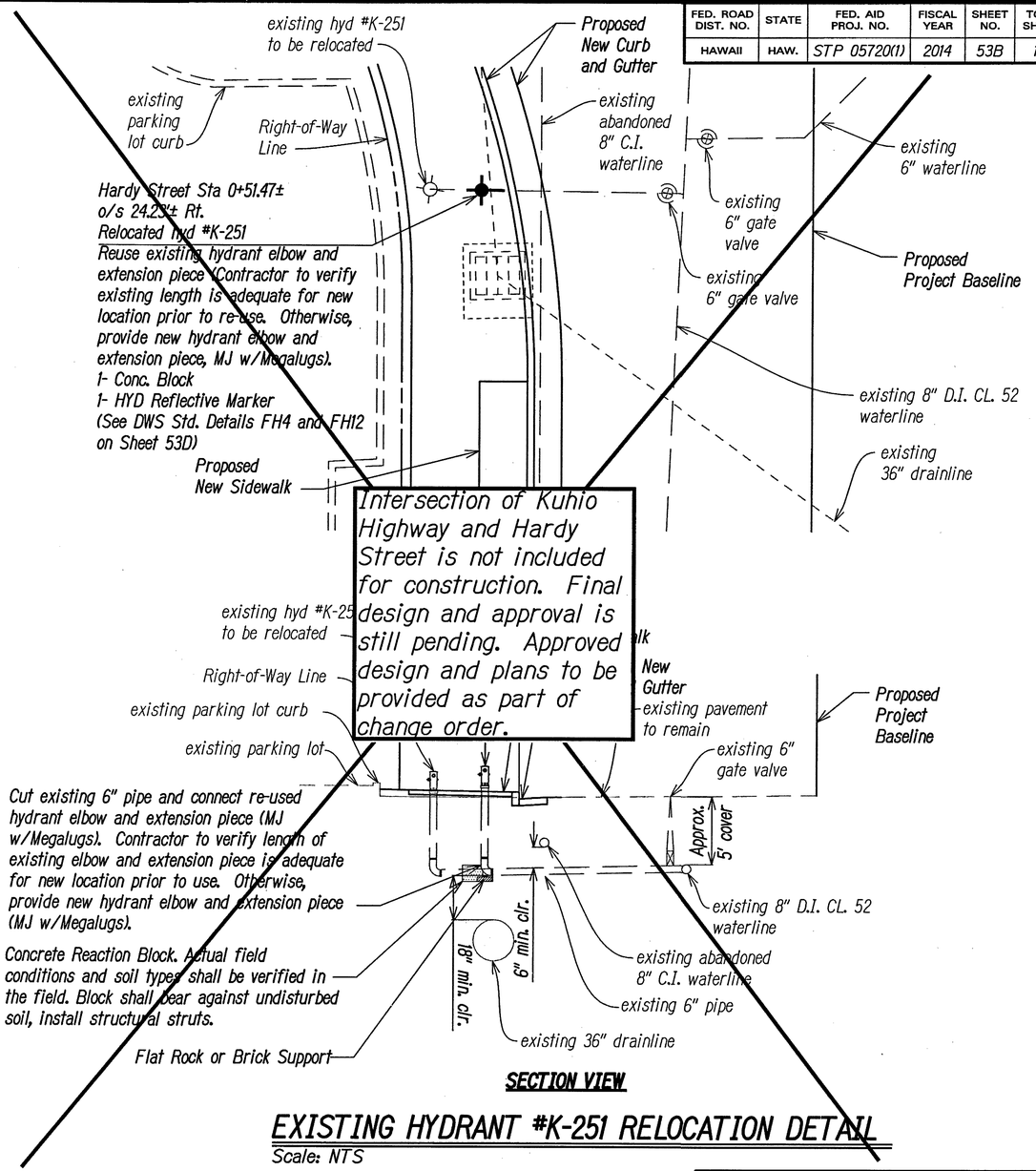
PLAN VIEW



SECTION VIEW

HARDY STREET ARV RELOCATION DETAIL

Scale: NTS



SECTION VIEW

EXISTING HYDRANT #K-251 RELOCATION DETAIL

Scale: NTS

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

DEPARTMENT OF WATER
COUNTY OF KAUAI
APPROVED:
for MANAGER & CHIEF ENGINEER DEPT. OF WATER — DATE 9/22/14

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

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

WATER DETAILS

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

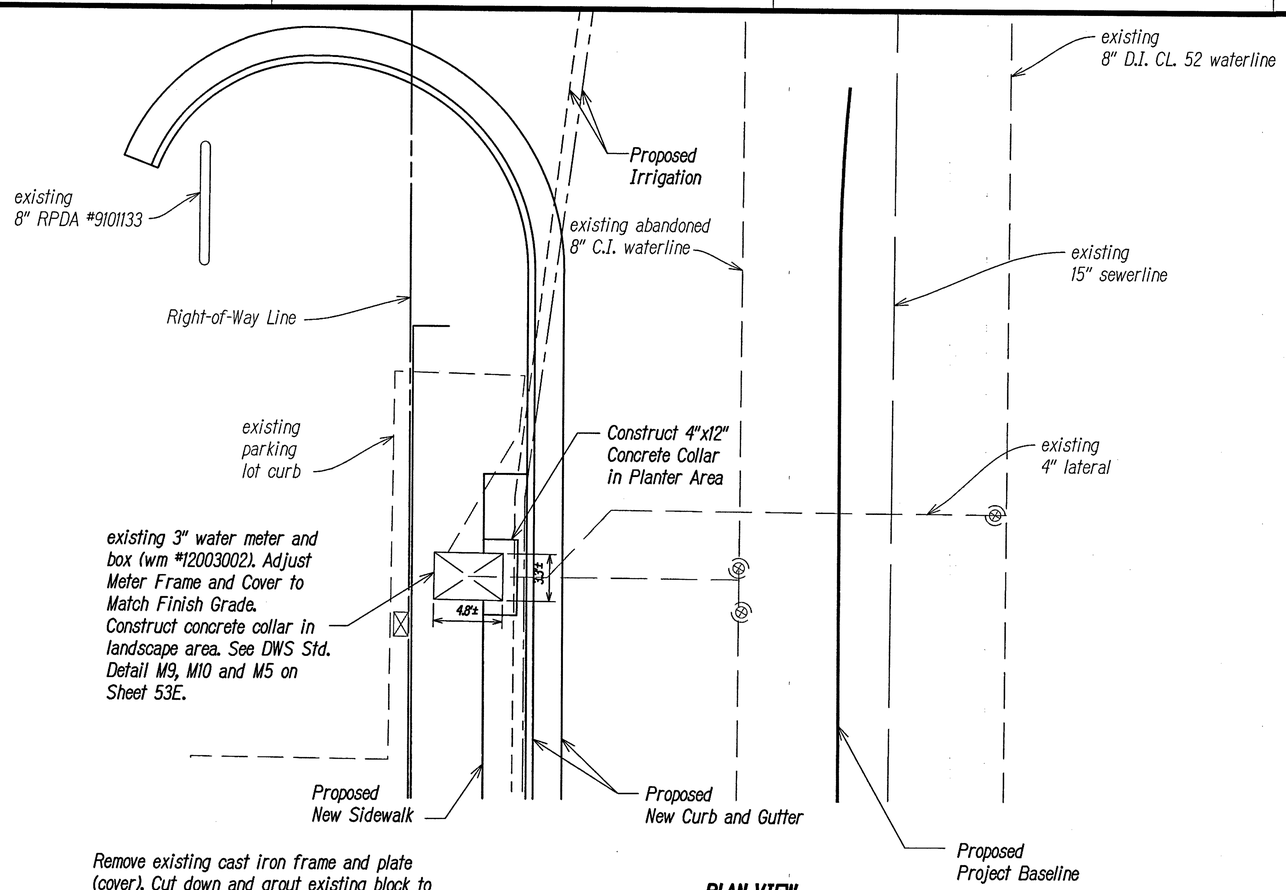
Scale: As Noted — Date: September, 2014

SHEET No. 4 OF 7 SHEETS

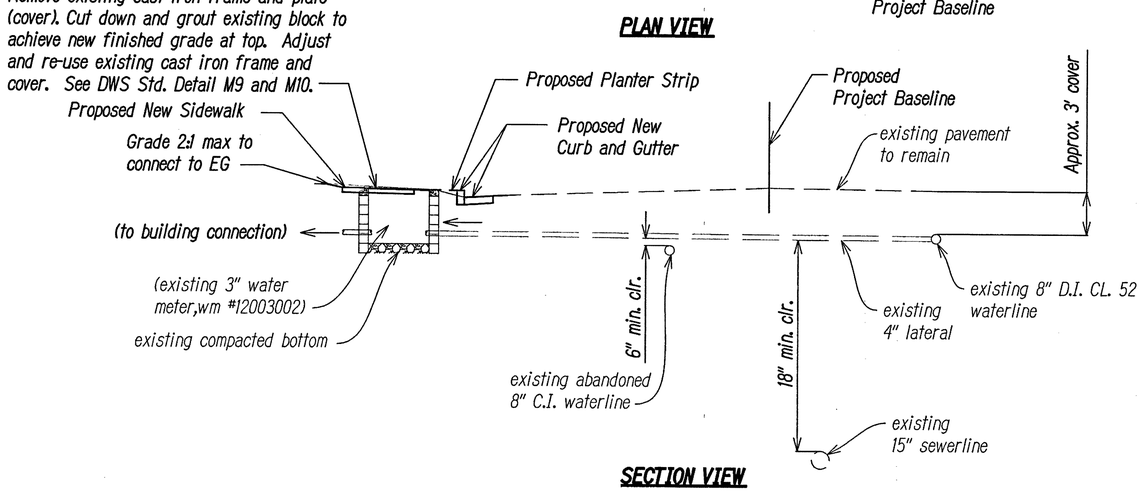
100% SUBMITTAL

53B

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	53C	145



PLAN VIEW



SECTION VIEW

EXISTING 3" METER #12003002 FRAME AND COVER ADJUSTMENT

Scale: NTS

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

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

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

COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

WATER 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

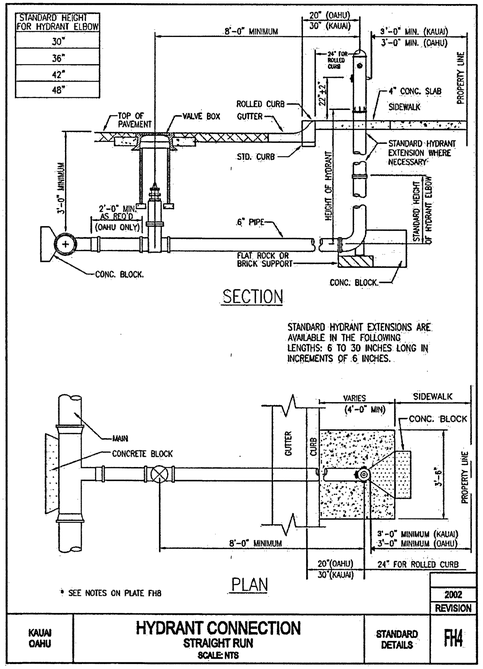
53C

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP 05720(1)	2014	53D	145

NOTE:

1. GASKETS FOR FLANGED JOINTS SHALL BE 1/8" DUCK-INSERTED RUBBER PACKING GARLOCK NO. 19.
2. BOLTS SHALL BE BREAK-OFF TYPE, 5/8" DIA. x 3" LONG MACHINE BOLTS WITH CUT THREADS, AMERICAN STANDARD COARSE HEXAGON HEADS, HOT DIPPED GALVANIZED OR SILICON BRONZE. INSTALL BOLT WITH THREADS FACING UP.
3. NUTS SHALL BE AMERICAN STANDARD HEAVY COLD PUNCHED HEXAGON NUTS, HOT DIPPED GALVANIZED OR SILICON BRONZE.
4. CONCRETE SHALL BE DWS 2500.
5. REFER TO PLATE FH11 FOR FIRE HYDRANT INSTALLATION WITH CURB GUARD. (OAHU & KAUAI ONLY). FOR MAUI, REFER TO PLATE FH9 WHERE NO STREET CURBING.
6. FLANGED OUTLET FOR THE TEE IS OPTIONAL FOR OAHU; MANDATORY FOR KAUAI AND MAUI.
7. TAPPING SLEEVE WITH TAPPING VALVE ASSEMBLY MAY BE USED FOR CONNECTION TO EXIST MAIN.
8. LUBRICATE HYDRANT NOZZLE THREADS WITH NON-TOXIC GREASE.
9. PROVIDE SLOTTED FLANGED RISER FOR HYDRANT AS NEEDED TO ALIGN 4-1/2" NOZZLE PERPENDICULAR TO CURB. (FOR MAUI ONLY)
10. INSTALL HYDRANT MARKERS. (SEE PLATES FH12 AND FH13)

			2002
			REVISION
KAUAI OAHU MAUI	HYDRANT CONNECTION NOTES SCALE: NTS	STANDARD DETAILS	FH8



* SEE NOTES ON PLATE FH8

			2002
			REVISION
KAUAI OAHU	HYDRANT CONNECTION STRAIGHT RUN SCALE: NTS	STANDARD DETAILS	FH4

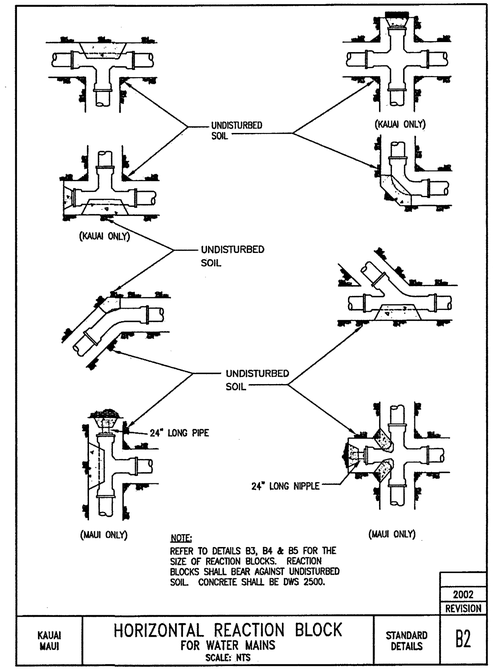
TOP VERTICAL THRUST BLOCK SCHEDULE

PIPE SIZE	BEND	PRESSURE 250 PSI CONCRETE BLOCK A	B	C	D	HANGER	"X" BAR	PRESSURE 200 PSI CONCRETE BLOCK A	B	C	D	HANGER	"X" BAR	PRESSURE 150 PSI CONCRETE BLOCK A	B	C	D	HANGER	"X" BAR
		LINE FIGURES UNDER 250 PSI																	
4"	1/4	4'-0"	4'-0"	2'-6"	2'-6"	(2)#4	(2)#3												
	1/8	3'-0"	3'-0"	1'-6"	2'-6"	(2)#3	(2)#3												
	1/16	2'-6"	2'-6"	1'-3"	2'-6"	(2)#3	(2)#3												
	1/32	2'-6"	2'-6"	1'-3"	2'-6"	(2)#3	(2)#3												
6"	1/4	4'-6"	4'-6"	3'-0"	2'-6"	(2)#4	(2)#3												
	1/8	3'-6"	3'-6"	1'-6"	2'-6"	(2)#3	(2)#3												
	1/16	3'-0"	3'-0"	1'-6"	2'-6"	(2)#3	(2)#3												
	1/32	2'-6"	2'-6"	1'-3"	2'-6"	(2)#3	(2)#3												
8"	1/4	5'-6"	5'-6"	4'-0"	2'-6"	(2)#4	(2)#3												
	1/8	4'-6"	4'-6"	2'-3"	2'-6"	(2)#3	(2)#3												
	1/16	3'-6"	3'-6"	1'-9"	2'-6"	(2)#3	(2)#3												
	1/32	3'-0"	3'-0"	1'-6"	2'-6"	(2)#3	(2)#3												
12"	1/4	8'-6"	7'-0"	5'-0"	4'-0"	(2)#4	(2)#3	8'-6"	7'-0"	5'-0"	4'-0"	(2)#4	(2)#3	8'-6"	7'-0"	5'-0"	4'-0"	(2)#4	(2)#3
	1/8	6'-6"	6'-6"	3'-3"	4'-0"	(2)#3	(2)#3	6'-6"	6'-6"	3'-3"	4'-0"	(2)#3	(2)#3	6'-6"	6'-6"	3'-3"	4'-0"	(2)#3	(2)#3
	1/16	5'-0"	5'-0"	2'-6"	4'-0"	(2)#3	(2)#3	5'-0"	5'-0"	2'-6"	4'-0"	(2)#3	(2)#3	5'-0"	5'-0"	2'-6"	4'-0"	(2)#3	(2)#3
	1/32	4'-0"	4'-0"	2'-0"	4'-0"	(2)#3	(2)#3	4'-0"	4'-0"	2'-0"	4'-0"	(2)#3	(2)#3	4'-0"	4'-0"	2'-0"	4'-0"	(2)#3	(2)#3

NOTE:

1. ACTUAL FIELD CONDITIONS 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 AND CHIEF ENGINEER, DEPT. OF WATER FOR APPROVAL. FOR OAHU ONLY, THE DEPARTMENT WILL FURNISH THE FINAL DESIGN AND DETAILS FOR PROJECTS AWARDED BY THE MANAGER.
2. DIMENSIONS IN SCHEDULE REFER TO B7.
3. SCHEDULE IS NOT APPLICABLE TO BLOCKS FULLY OR PARTLY SUBMERGED IN WATER.
4. SAFETY FACTOR 1.5 BASED ON PIPE LOCATION MINIMUM 2' BELOW GROUND.

			2002
			REVISION
KAUAI OAHU MAUI HAWAII	TOP VERTICAL THRUST BLOCK SCHEDULE SCALE: NTS	STANDARD DETAILS	B6



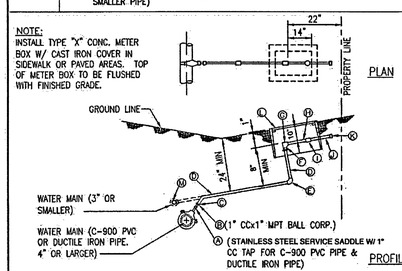
NOTE:
REFER TO DETAILS B3, B4 & B5 FOR THE SIZE OF REACTION BLOCKS. REACTION BLOCKS SHALL BEAR AGAINST UNDISTURBED SOIL. CONCRETE SHALL BE DWS 2500.

			2002
			REVISION
KAUAI MAUI	HORIZONTAL REACTION BLOCK FOR WATER MAINS SCALE: NTS	STANDARD DETAILS	B2

SCHEDULE OF FITTINGS

ITEM	DESCRIPTION	SINGLE SERVICE
A	STAINLESS STEEL SERVICE SADDLE W/ 1" CC TAP FOR C-900 PVC PIPE & D.I. PIPE	1
B	1" CC x 1" MPT BALL CORPORATION	1
C	PACK JOINT COUPLINGS (FORD C14-44 OR APPROVED EQUAL)	1
D	1" COPPER TUBE, TYPE "K" SOFT	1
E	1" 90° COPPER ELBOW, S x S	1
F	1" COPPER MALE ADAPTER, SXT	1
G	ANGLE BALL VALVE, 1" FEMALE IPT INLET x 3/4" METER COUPLING NUT OUTLET (FORD BA13-342W OR APPROVED EQUAL)	1
H	METER SPACER, SUPPLIED BY DEPT. OF WATER & INSTALLED BY CONTRACTOR	1
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)	1
J	LINESETTER, 1" COPPER TUBE, TYPE "K" SOFT, 12" LONG (SEE STD. DET. L3)	1
K	1" PLASTIC THREAD PROTECTOR	1
L	TYPE "B" CONCRETE METER BOX W/ CAST IRON COVER	1
M	TEE W/ 1" BUSHING (WHEN CONNECTING TO 3" OR SMALLER PIPE)	1

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



			2002
			REVISION
KAUAI	SINGLE SERVICE LATERAL PLAN, PROFILE & MATERIAL LIST SCALE: NTS	STANDARD DETAILS	L1

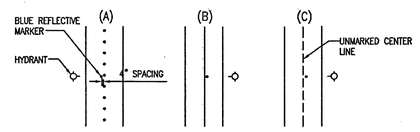


FIGURE 1
TWO LANE STREET

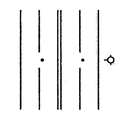


FIGURE 2
DIVIDED STREET

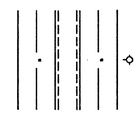


FIGURE 3
MULTI-LANE STREET W/ TURN LANE

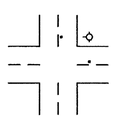


FIGURE 4
TWO LANE STREET @ INTERSECTION

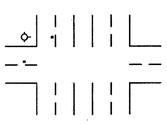


FIGURE 5
FOUR LANE STREET W/ TURN LANE @ INTERSECTION

HYDRANT MARKER LOCATION

			2002
			REVISION
KAUAI OAHU MAUI	HYDRANT MARKER LOCATION FOR STREETS SCALE: NTS	STANDARD DETAILS	FH12

DEPARTMENT OF WATER
COUNTY OF KAUAI
APPROVED:

for MANAGER & CHIEF ENGINEER DEPT. OF WATER — DATE 9/24/14

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COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

WATER 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 53D