NOTE:

1. Contractor to layout all accessible ramps and landings to confirm that slopes do not exceed requirements.

6.33% 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 A.D.A. standards.
LEGEND:

- Project Baseline
- Property Line
- Existing grade
- Grade Control/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
- 191.94 M
- Match to Existing Grade
- 191.93
- Existing Grade Spot Elevation

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.

CURB RAMP DETAILS

COUNTY OF KAUA'I
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 057201

Scale As Noted
Date: September 2014

CURB RAMP DETAILS

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUA'I

APPROVED:
COUNTY ENGINEER

PROJECT sheets: 12 of 15 SHEETS
SHEET 00 SUBMITTAL
844
EXISTING CONCRETE CURB DETAIL

SMOOTH RIDING CONNECTION

SURFACE TREATMENT DETAIL

CAST IN PLACE INTEGRAL CURB AND GUTTER

TABLE

CAST IN PLACE INTEGRAL DRIVEWAY CURB AND GUTTER

SITE DETAILS
### ROLLED CURB TRANSITION

**NOT TO SCALE**

<table>
<thead>
<tr>
<th>STREET</th>
<th>TRANSITION</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.6%</td>
<td>10' Min.</td>
<td></td>
</tr>
<tr>
<td>0.7%</td>
<td>12'</td>
<td></td>
</tr>
<tr>
<td>0.8%</td>
<td>10'</td>
<td></td>
</tr>
<tr>
<td>0.9%</td>
<td>9'</td>
<td></td>
</tr>
<tr>
<td>1.0%</td>
<td>8'</td>
<td></td>
</tr>
<tr>
<td>1.1%</td>
<td>7'</td>
<td></td>
</tr>
<tr>
<td>1.2-1.5%</td>
<td>6'</td>
<td></td>
</tr>
</tbody>
</table>

*Apply to 5' and 6' curbs

**NOTE:**
1. Minimum lengths indicated in table are applicable only when flow is as shown.
2. Use minimum length of 5' for all steep grades as flow is not applicable to that shown.
3. Curb height of standard curb is 6" higher than rolled curb.
4. Use a 6" diameter pipe for liquid flow in conjunction with 5" curb height.

---

**CAST IN PLACE ROLLED CURB**

**SCALE:** 1/16" = 1'-0"

**NOTES:**
1. ROLLED CURB SHALL NOT BE PERMITTED.
2. WHERE ROAD GRADIENTS ARE GREATER THAN 10%,
3. ON OTHER THAN MINOR STREETS IN RESIDENTIAL ZONES,
4. AT INTERSECTIONS, BRIDGES AND APPROACHES.
5. FOR TRANSITION LENGTHS TO STANDARD CURB, SEE R-6.
DIRECTIONAL ARROW PAVEMENT MARKINGS DETAILS

TYPICAL STRIPING:

- Pavement Arrow (Thermoplastic Extrusion or Tape Type II)
  See Directional Arrow Pavement Marking Details
- Channelizing Island (Thermoplastic Extrusion)
- 4" Double Solid Yellow Stripe (Thermoplastic Extrusion)
- 4" Single Yellow Stripe (Thermoplastic Extrusion)
- Transverse Median Marking (Thermoplastic Extrusion)
- 8" Single Yellow Stripe (Thermoplastic Extrusion)
- Type H Raised Pavement Markers at 20'-0" O.C.
- 6" White Dash Bike Lane Line (3', 6', 3' Pattern)

BIKE LANE DETAIL

BIKE SHARED LANE MARKING DETAIL

NOTES:
1. All rounded corners shall have 6" radius.

CROSSWALK PAVEMENT MARKINGS DETAILS

CROSSWALK DETAIL "A"

NOTES:
1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. Existing pavement markings and striping not incorporated in the final traffic pattern shall be removed as directed by the Engineer.
3. Raised pavement markers shall not be installed within the crosswalks.
4. Final locations of all signs shall be approved by the Engineer prior to any installation work.
5. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer.
6. Final locations of all stop lines shall be approved by the Engineer prior to installation.
7. All pavement striping shall be per plans.
Plan
Scale 1" = 20'

NOTE:
1. Intersection of Kulolo Highway and Hardy Street is not included for construction. Final design and approval is still pending. Approved design and plans to be provided as part of change order.
CONSTRUCTION NOTES FOR TRAFFIC CONTROL PLAN

1. GUIDELINES FROM THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION, PART 6-TEMPORARY TRAFFIC CONTROL, SHALL BE FOLLOWED FOR THESE TRAFFIC CONTROL PLANS.

2. THE PERMITTEE SHALL MAKE MINOR ADJUSTMENTS AT INTERSECTIONS, DRIVeways, BRIDGES, STRUCTURES, ETC., TO FIT FIELD CONDITIONS.

3. CONES AND DELINEATORS SHALL BE INSTALLED AT 25 G/2. MAX. ON TAPERS AND 50 G/2. ON TANGENTS.

4. CONES AND DELINEATORS SHALL BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.

5. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED SUCH THAT THE SIGN OR DEVICE FARthest FROM THE WORK AREA SHALL BE PLACED FIRST. THE OTHERS SHALL THEN BE PLACED PROGRESSIVELY TOWARD THE WORK AREA.

6. REGULATORY AND WARNING SIGNS WITHIN THE CONSTRUCTION ZONE THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR COVERED. ALL SIGNS SHALL BE RESTORED UPON COMPLETION OF THE WORK.

7. ALL PEDESTRIAN FACILITIES/PATHS PROVIDED SHOULD BE A MINIMUM OF 3 FEET WIDE.

8. FLAGGERS AND/or POLICE OFFICERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.

9. WHEN REQUIRED BY THE ISSUING OFFICE, THE PERMITTEE SHALL INSTALL A FLASHING ARROW SIGNAL AS SHOWN ON THE TRAFFIC CONTROL PLANS.

10. SSN SPACINGS (TAPER LENGTHS) (1) AND SPACING OF CONES OR DELINELATORS SHALL BE AS SHOWN IN TABLE 1 UNLESS OTHERWISE NOTED ON THE TRAFFIC CONTROL PLANS.

11. ALL TEMPORARY TRAFFIC LANES SHALL BE A MINIMUM OF 10 FEET WIDE.

12. ALL CONSTRUCTION WARNING SIGNS SHALL BE PROMPTLY REMOVED, TORN OFF OR COVERED WHENEVER THE MESSAGE IS NOT APPLICABLE, OR NOT IN USE.

13. THE BACKS OF ALL SIGNS USED FOR TRAFFIC CONTROL SHALL BE APPROPRIATELY COVERED TO PRECLUDE THE DISPLAY OF INAPPLICABLE SIGN MESSAGES (IE, WHEN SIGNS HAVE MESSAGES ON BOTH SIDES).

14. AT THE END OF EACH DAY'S WORK OR SOON AS THE WORK IS COMPLETED, THE PERMITTEE SHALL REMOVE ALL TRAFFIC CONTROL DEVICES NO LONGER NEEDED TO PERMIT FREE AND SAFE PASSAGE. REMOVAL SHALL BE IN THE REVERSE ORDER OF INSTALLATION.

15. NO PARKING SIGNS SHALL BE ADDED WHERE REQUIRED WHEN EXISTING STALLS WILL BE IMPAICTED BY CONSTRUCTION.

16. TRAFFIC CONTROL DEVICES LEFT OVERNIGHT SHALL BE REFLECTORIZED OR EQUIPPED WITH LIGHTING DEVICES.

17. TRAFFIC CONTROL PHASING ASSUMES CONSTRUCTION ALONG THE SAME SEGMENT OF ROAD WILL PROCEED NUMERICALLY. THEREFORE, EXCLUDING ONE SIDE OF HARD STREET WILL HAVE AN ACCESSIBLE SIDEWALK AT ALL TIMES DURING CONSTRUCTION.

PEDESTRIAN NOTES:

1. PEDESTRIAN SAFETY REQUIREMENTS AS STATED IN MUTCD CHAPTER 60 MUST BE ADHERED TO DURING CONSTRUCTION.

2. WHEN CROSSWALKS OR OTHER PEDESTRIAN FACILITIES ARE CLOSED OR RELOCATED, TEMPORARY FACILITIES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES.

3. THE WIDTH OF THE EXISTING PEDESTRIAN FACILITY SHOULD BE PROVIDED FOR THE TEMPORARY FACILITY IF PRACTICAL. WHEN IT IS NOT PRACTICAL TO MAINTAIN A WIDTH OF 60 INCHES THROUGHOUT THE ENTIRE LENGTH OF THE PEDESTRIAN PATH, A 48 INCH X 60 INCH PASSING SPACE SHOULD BE PROVIDED AT LEAST EVERY 20 FEET TO ALLOW INDIVIDUALS IN WHEELCHAIRS TO PASS.

---

TABLE 1 FOR TRAFFIC CONTROL PLAN

<table>
<thead>
<tr>
<th>POSTED SPEED LIMIT (MPH)</th>
<th>TAPER LENGTH (FT) (FEET)</th>
<th>LONGITUDINAL BUFFER SPACE (IN FEET)</th>
<th>SPACING OF CONES OR DELINELATORS (FEET)</th>
<th>WORK AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>250</td>
<td>0 (0)</td>
<td>10 (10)</td>
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<td>30</td>
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<td>40</td>
<td>250</td>
<td>0 (0)</td>
<td>10 (10)</td>
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<tr>
<td>50</td>
<td>250</td>
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<td>80</td>
<td>250</td>
<td>0 (0)</td>
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<td>90</td>
<td>250</td>
<td>0 (0)</td>
<td>10 (10)</td>
<td>10</td>
</tr>
</tbody>
</table>

---
NOTE:
1. No Parking Signs Shall Be Added Where Required When Existing Stalls Are Impacted By Construction.
2. Work Zone Length May Be Reduced Where Activities Are In Progress. Refer to TCP Notes Table 1 For Recommended Sign Spacing.

TRAFFIC CONTROL PLAN - PHASE IA (ROUNDBAUTH)
ROUNDABOUT, SPLITTER ISLANDS AND ADJACENT MEDIAN ISLANDS

LEGEND:
- Work Area
- Construction Sign
- Traffic Cone
- Type 2 Barricade
- With Sign
- Direction of Traffic

Posed Speed = 25mph
School Zone = 15mph
Construction speed zone = 25mph

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUAI

APPROVED:

COUNTY ENGINEER

DATE:

HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 0612001
Scale As Shown
Date: September, 2019

100% SUBMITTAL
NOTES:
1. See Detail Drawing for Lane Shift, Single Lane Closure, Sidewalk Detour and Work in Center of Roadway Details.
2. Work Zone Length May Be Reduced Where Activities Are In Progress. Refer to TCP Notes Table 1 for Recommended Sign Spacing.
3. Implement Full Street Closure Details During Phases 1B, 1C and 1D.

GRAPHICAL SCALES:

TRAFFIC CONTROL PLAN - PHASE 1B (ROUNDBOUT)

Scale 1" = 40'
ROUNDABOUT, SPLITTER ISLANDS AND ADJACENT MEDIAN ISLANDS

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUA‘I

APPROVED: COUNTY ENGINEER DATE

COUNTY OF KAUA‘I
DEPARTMENT OF PUBLIC WORKS
BUILDING DIVISION

TRAFFIC CONTROL PLAN - PHASE 1B (ROUNDBOUT)
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 058(300)
Scale As Shown Date September 2023
TRAFFIC CONTROL PLAN - PHASE 1C (ROUNDABOUT)

Scale: 1" = 40'

GRAPHICAL SCALES:
40' 20' 0 40' 80'
SCALE: 1" = 40'

NOTE:
1. Work Zone Length May Be Reduced Where Activities Are in Progress. Refer to TCP Notes Table 1 For Recommended Sign Spacings.
2. Implement Uni Street Closure Detail During Phases IB, IC and ID.

LEGEND:
- Work Area
- Construction Sign
- Traffic Cone
- Type 2 Barricade with Sign
- Type 3 Barricade with Sign
- Direction of Traffic

Posted Speed = 25mph
School Zone = 15mph
Construction Speed zone = 25mph
NOTE:
1. See Detail Drawing for Lane Shift,  
   Single Lane Closure, Sidewalk  
   Detour and Work in Center of  
   Roadway Details.
2. Work Zone Length May Be Reduced  
   Where Activities Are In Progress.  
   Refer to TCP Notes Table 1 For  
   Recommended Sign Spacing.
3. Implement U-turn Street Closure Detail  
   During Phases IB, IC and ID.

GRAPHICAL SCALES:

TRAFFIC CONTROL PLAN - PHASE 1D (ROUNDABOUT)

DEPARTMENT OF PUBLIC WORKS  
COUNTY OF KAUA'I

APPROVED:  
COUNTY ENGINEER  
DATE

COUNTY OF KAUA'I  
DEPARTMENT OF PUBLIC WORKS  
BUILDING DIVISION

TRAFFIC CONTROL PLAN -  
PHASE 1D (ROUNDABOUT)

HARDY STREET IMPROVEMENTS  
Federal Aid Project No. STP 0572001

SHEET No. 7 OF 13 SHEETS

94
1. No Parking Signs Shall Be Added Where Required When Existing Shails Are Impacted By Construction.

2. See Detail Drawing For Lane Shift, Single Lane Closure, Sidewalk Detour and Work In Center of Roadway Details.

3. Work Zone Length May Be Reduced Where Activities Are In Progress. Refer to TCP Notes Table 1 For Recommended Sign Spacing.

TRAFFIC CONTROL PLAN - PHASE 2 (SHOULDER WORK)

GRAPHICAL SCALES:

RICE STREET BOUND SIDE OF HARDY STREET,
FROM STA 12+80 TO KAANA STREET

LEGEND:

- Work Area
- Construction Sign
- Traffic Cone
- Type 2 Barricade
  with Sign
- Direction of Traffic

- Posted Speed = 25mph
- School Zone = 15mph
- Construction speed zone = 25mph

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUNA

APPROVED:
COUNTY ENGINEER DATE

COUNTY OF KAUNA DEPARTMENT OF PUBLIC WORKS
TRAFFIC CONTROL PLAN - PHASE 2 (SHOULDER WORK)
STA. 12+80 TO KAANA ST.
HARDY STREET IMPROVEMENTS

Federal Aid Project No. STP 057200
Scale As Shown
Date: September, 2004
Sheet No. 8 OF 19 SHEETS

100% SUBMITTAL
NOTE:

1. See Detail Drawing For Lane Shift, Single Lane Closure, Sidewalk Detour and Work In Center of Roadway Details.

2. Work Zone Length May Be Reduced Where Activities Are In Progress. Refer to TCP Notes Table 1 For Recommended Sign Spacing.

GRAPHICAL SCALES:

Scale 1: 40

TRAFFIC CONTROL PLAN - PHASE 3 (SHOULDER WORK)

KUHIO HIGHWAY BOUND SIDE OF HARDY STREET,
FROM UMI STREET TO KAANA STREET

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAAI

APPROVED:
COUNTY ENGINEER DATE

HARDY STREET IMPROVEMENTS
STREET TO KAANA ST

FEDERAL AID PROJECT NO. STP 0572001

Scale As Worked: Date September 2024

100% SUBMITTAL
NOTES:

1. See Detail Drawing For Lane Shift, Single Lane Closure, Sidewalk Detour and Work in Center of Roadway Details.

2. Work Zone Length May Be Reduced Where Activities Are in Progress. Refer to TCP Notes Table 1 For Recommended Sign Spacing.

TRAFFIC CONTROL PLAN - PHASE 3 (SHOULDER WORK)

Scale: 1" = 40'

KUHIO HIGHWAY BOUND SIDE OF HARDY STREET, FROM UMI STREET TO KAANA STREET

LEGEND:

- Work Area
- Construction Sign
- Traffic Cone
- Type 2 Barricade with Sign
- Direction of Traffic

Posted Speed = 25mph
School Zone = 15mph
Construction speed zone = 25mph

DEPARTMENT OF PUBLIC WORKS
COUNTY OF KAUA'I

APPROVED:
COUNTY ENGINEER

DATE

COUNTY OF KAUA'I
DEPARTMENT OF PUBLIC WORKS

TRAFFIC CONTROL PLAN - PHASE 3 (SHOULDER WORK)
UMI STREET TO KAANA ST.
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 0572001
Scale As Shown

Date: September, 2001

100% SUBMITTAL
TRAFFIC CONTROL PLAN - PHASE 4 (SHOULDER WORK)

KUHO Highway Bound Side of Hardy Street, From Kaana Street to Rice Street

NOTE:
1. No Parking Signs Shall Be Added Where Required When Existing Stalls Are Impacted By Construction.
2. See Detail Drawing For Lane Shift, Single Lane Closure, Sidewalk Detour and Work In Center of Roadway Details.
3. Work Zone Length May Be Reduced Where Activities Are in Progress. Refer to TCP Notes Table 1 For Recommended Sign Spacing.

GRAPHICAL SCALES:

40' 20' 0 40' 80'

SCALE: F' = 40

LEGEND:

- Work Area
- Construction Sign
- Traffic Cone
- Type 2 Barricade with Sign
- Direction of Traffic

Posted Speed = 25mph
School Zone = 15mph
Construction speed zone = 25mph
TRAFFIC CONTROL PLAN - PHASE 4 (SHOULDER WORK)

KUHI'O HIGHWAY BOUND SIDE OF HARDY STREET, FROM KAANA STREET TO RICE STREET

Graphical Scales:

Scales: F = 40

Legend:

- Work Area
- Construction Sign
- Traffic Zone
- Type 2 Barricade
- With Sign
- Direction of Traffic

NOTE:
1. No Parking Signs Shall Be Added Where Required When Existing Stalls Are Impacted By Constructions.
2. See Detail Drawing For Lane Shift, Single Lane Closure, Sidewalk Detour and Work in Center of Roadway Details.
3. Work Zone Length May Be Reduced Where Activities Are In Progress. Refer to TCP Notes Table 1 For Recommended Sign Spacing.

Department of Public Works
County of Kauai

TRAFFIC CONTROL PLAN - PHASE 4 (SHOULDER WORK)
KAANA ST. TO RICE ST.
HARDY STREET IMPROVEMENTS
Federal Aid Project No. STP 057200

Sheet No. 12 of 19 Sheets
100% Submittal

Date: September 30, 2003
TRAFFIC CONTROL PLAN - PHASE 5 (SHOULDER WORK)

NOTE:
1. No Parking Signs Shall Be Added Where Required When Existing Sheds Are Impacted By Construction.
2. See Detail Drawing For Lane Shift; Single Lane Closure, Sidewalk Delour and Work In Center of Roadway Details.
3. Work Zone Length May Be Reduced Where Activities Are In Progress. Refer to TCP Notes Table 1 For Recommended Sign Spacing.

GRAPHICAL SCALES:

Scale: 1" = 40'

LEGEND:
- Work Area
- Construction Sign
- Traffic Cone
- Type 2 Barricade
- with Sign
- Direction of Traffic

Project Baseline
Right of Way

Existing Centerline Striping

Scale 1" = 40'
NOTE:

1. No Parking Signs Shall Be Added Where Required When Existing Stalls Are Impacted By Construction.

2. See Detail Drawing For Lane Shift, Single Lane Closure, Sidewalk Detour and Work in Center of Roadway Details.

3. Work Zone Length May Be Reduced Where Activities Are In Progress, Refer to TCP Notes Table 1 For Recommended Sign Spacing.

TRAFFIC CONTROL PLAN - PHASE 9 (MIDIAN WORK)

Scales 1" = 40'

Legend:
- Traffic Cone
- Type 2 Barricade
- Sign
- Direction of Traffic

Posted Speed = 25mph
School Zone = 15mph
Construction Zone Speed = 25mph

Graphical Scale:

SCALE: 1" = 40'
1. No Parking Signs Shall Be Added Where Required. When Existing Stalls Are Impacted by Construction.

2. See Detail Drawing For Lane Shift, Single Lane Closure, Sidewalk Detour and Work in Center of Roadway Details.

3. Work Zone Length May Be Reduced Where Activities Are In Progress. Refer to TCP Notes Table 1 For Recommended Sign Spacing.

LEGEND:

- Work Area
- Construction Sign
- Traffic Cone
- Type 2 Barricade with Sign
- Direction of Traffic

 Posted Speed = 25mph
 School Zone = 15mph
 Construction speed zone = 25mph

TRAFFIC CONTROL PLAN - PHASE 9 (MEDIAN WORK)

Scale: 1" = 40'

GRAPHICAL SCALE:

40' 20' 0' 40' 80'

SCALE: 1" = 40'