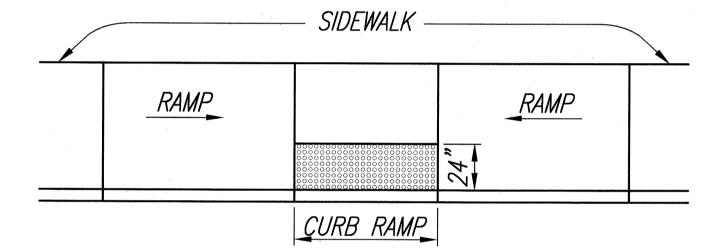
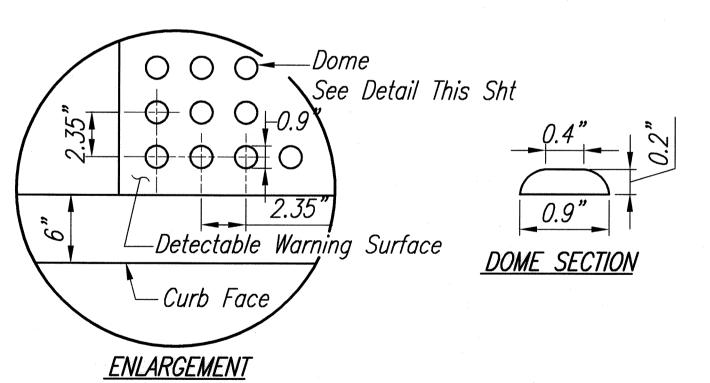
DETECTABLE WARNING NOTES:

- Detectable Warnings Shall Be 24 Inches In The Direction Of Travel And Extend The Full Width Of The Curb Ramp Or Flush Surface (Does Not Include Flares).
- Truncated Domes Shall Have A Diameter Of 0.9 Inch At The Bottom, A Diameter Of 0.4 Inch At The Top, A Height Of 0.2 Inch And A Center-To-Center Spacing Of 2.35 Inches Measured Along One Side Of A Square Arrangement.
- Domes Shall Be Aligned On A Square Grid In The Predominant Direction Of Travel To Permit Wheels To Roll Between The Domes.
- There Shall Be A Minimum Of 70 Percent Contrast In Light Reflectance Between The Detectable Warning And An Adjoining Surface, Or The Detectable Warning Shall Be "Safety Yellow".
- 5. The Material Used To Provide Visual Contrast Shall Be An Integral Part Of The Detectable Warning Surface.
- The Detectable Warning Shall Be Located So That The Edge Nearest The Curb Line Or Other Potential Hazard Is 6 To 8 Inches From The Curb Line.



TRANSITION RAMP WITH DETECTABLE WARNING



TYPICAL DETECTABLE WARNING DETAIL Not To Scale



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SHEET No.

MISCELLANEOUS DETAILS - 1

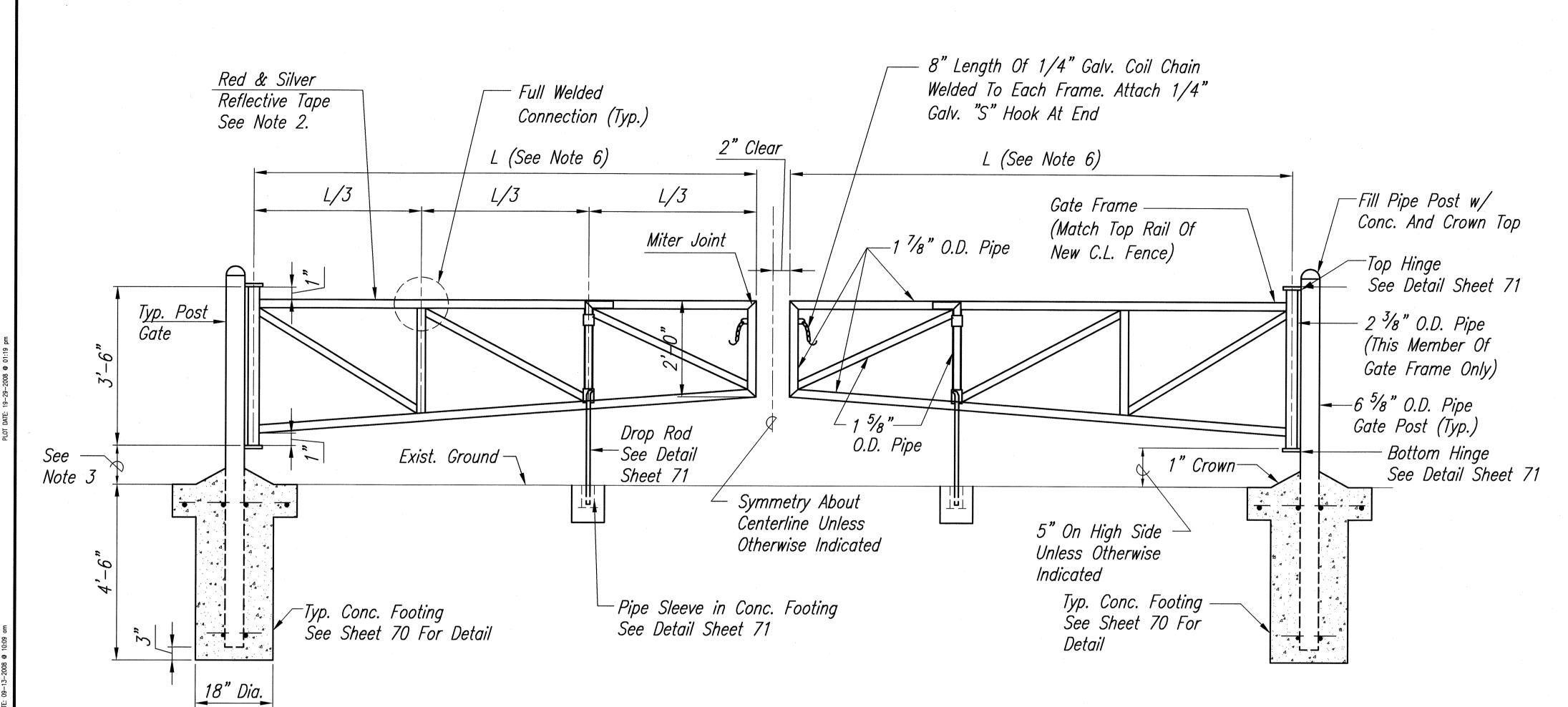
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

Honoapiilani Highway Widening Lahainaluna Road to Aholo Road Project No. STP-030-1(39)

OF 4

Scale: As Shown

Date: October 2008



NOTES:

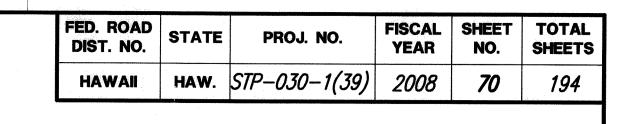
- 1. All Pipes Shall Be Schedule 40, ASTM A53 Galvanized Steel. All Materials Such As Structural Steel Shapes, Plates, Bolts, Washers, Nuts Etc. Shall Be Hot Dip Galvanized. All Welds Shall Be Ground Smooth And Touched-Up With Galvanize.
- 2. Wrap Reflective Tape Around Entire New Pipe Frame Gates And Posts (Except At Welded Connections). Alternate 12" Bands Of Red And Silver Tape. (See Specifications)
- Adjust Dimension To Make Gate Frames Level To Each Other.
- 4. Provide 2 Padlocks For Each Pair Of Double Swing Gates. Padlocks Shall Be Keyed Alike. Locks Shall Be Masterkeyed To The School's System Unless Otherwise Indicated.

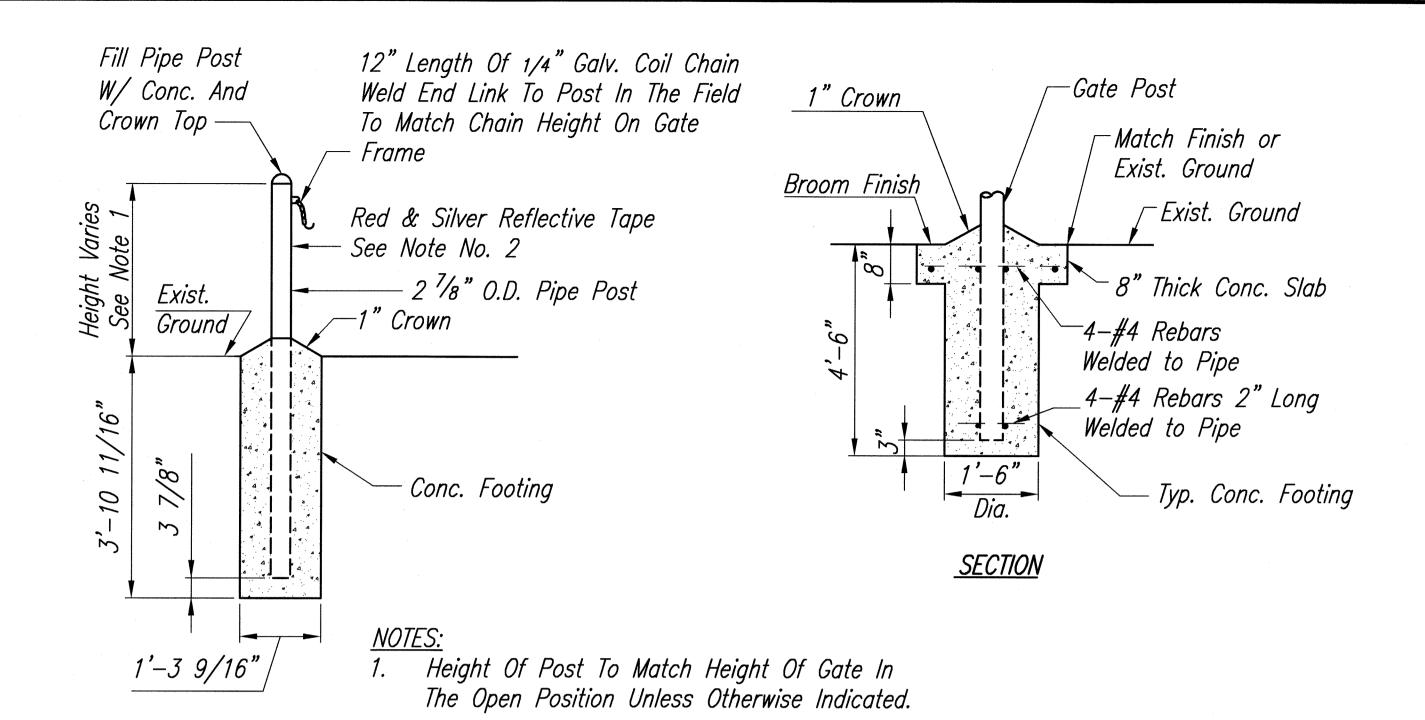
NOTES CONTINUED:

- 5. Hand Excavate For Post Footings Near Existing Underground Utilities.
- 6. "L" As Required Per Field Conditions. Refer To Mill Street, Sheet 94.
- 7. Gate is included in the 'Traffic Control' payment item number 645.0100.
- 8. Gate to remain in place after construction is completed.

TYPICAL GATE DETAIL Not To Scale

SHEETS





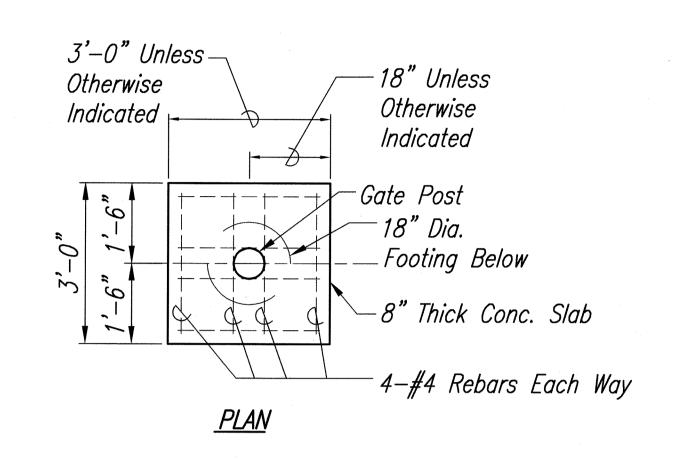
Wrap Reflective Tape Around The Entire Post.

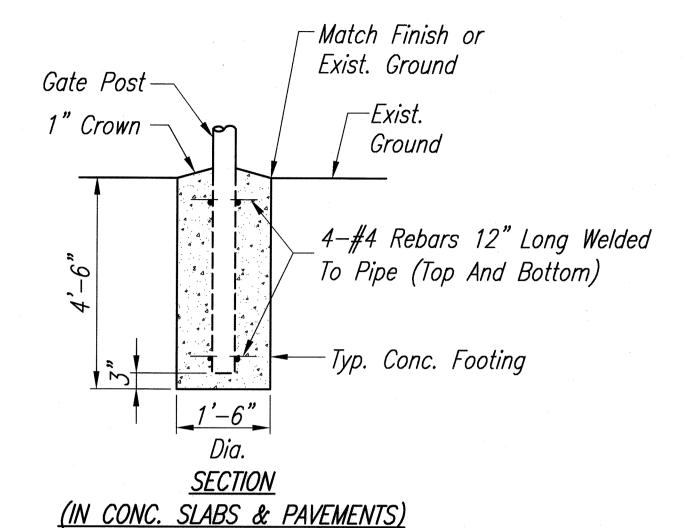
Specs).

TYPICAL GATE STOP POST

Not To Scale

Alternate 12" Bands Or Red And Silver (See

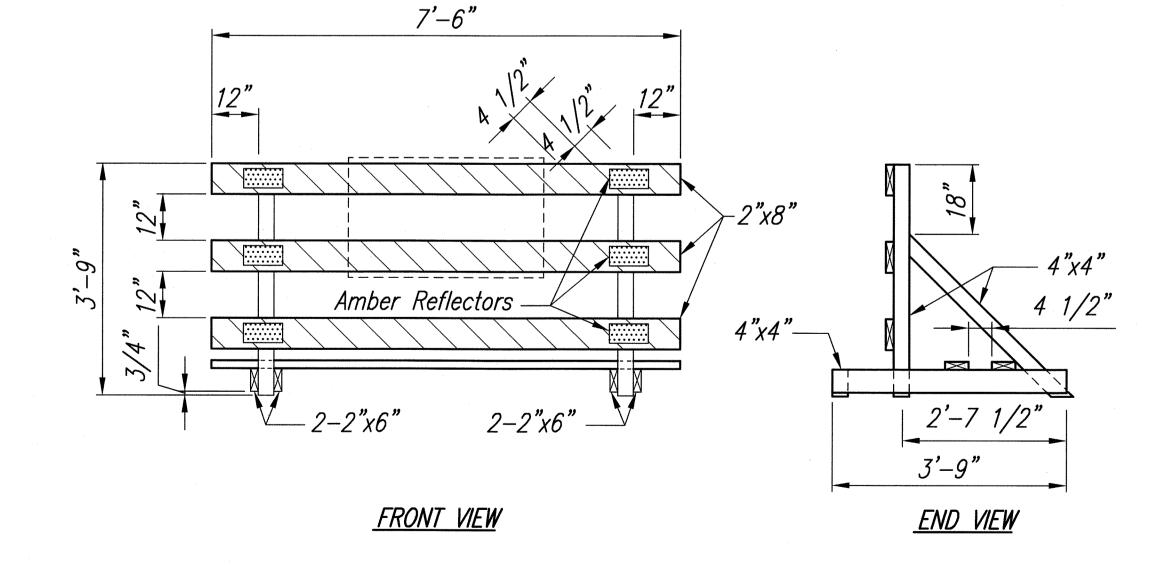




TYPICAL GATE POST FOOTING Not To Scale

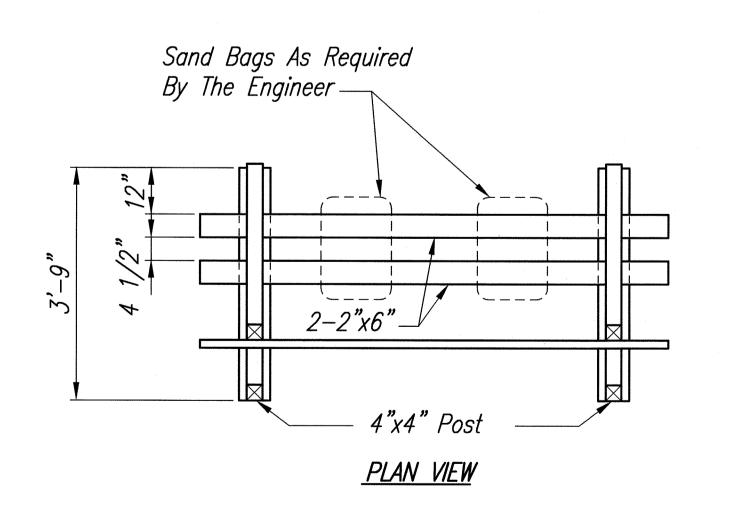
NOTES:

- Omit 8" Thick Conc. Slab & Rebars When Gate Post Is Installed In Conc. Walks & Conc. Pavements. (Make Saw-Cut In Existing Conc. When Installing Gate Posts In Conc. Walk & Pavements)
- 2. Where The Existing Grade Slopes, The Finish Grade Of The 8" Slab Shall Follow The General Slope Of The Ground.



<u>TYPE 3 STANDARD BARRICADE</u>

Not To Scale



- The Orange And White Stripes Shall Slant Downward Toward The Side On Which Traffic Is To Pass And Shall Be Reflectorized With Reflective Sheeting.
- 2. The Contractor May Submit Alternate Designs For Approval.
- Barricade Details Shall Conform To The "Manual On Uniform Traffic Control Devices For Streets And Highways," 2003, By The Federal Highway Administration And As Amended.



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HIGHWAYS DIVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

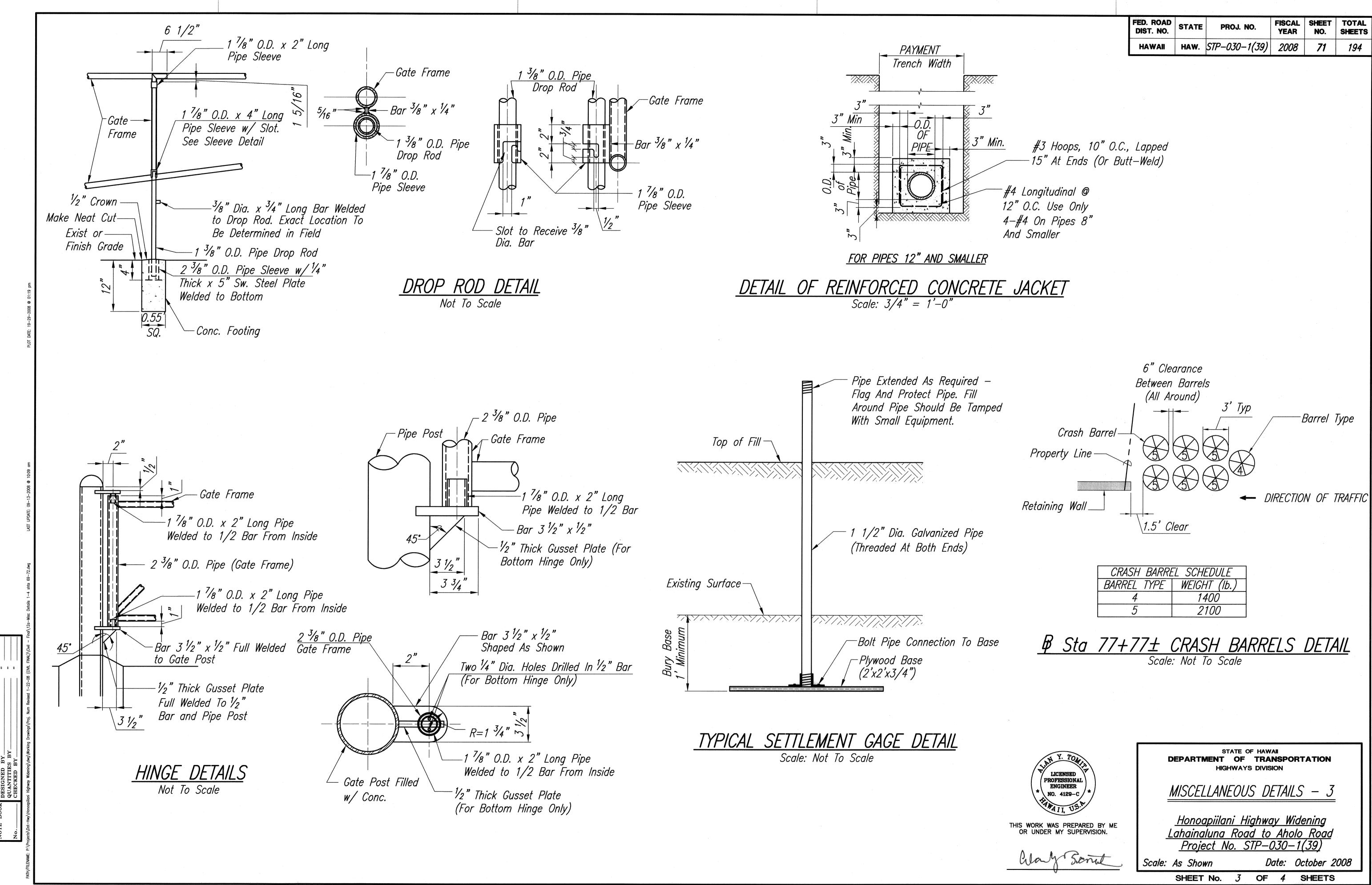
MISCELLANEOUS DETAILS - 2

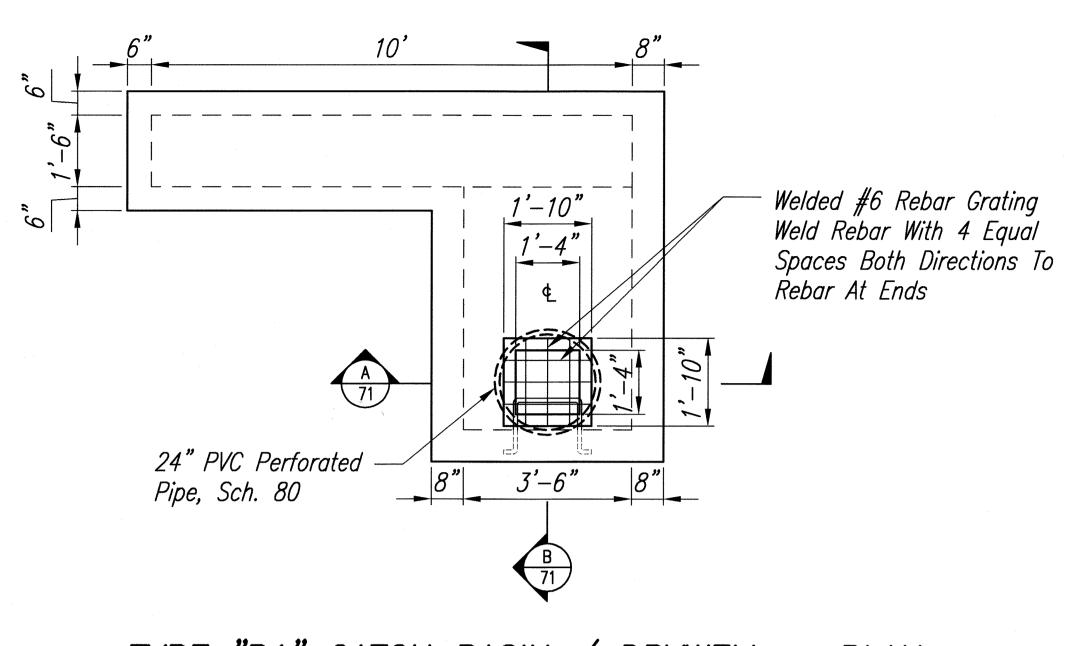
Honoapiilani Highway Widening Lahainaluna Road to Aholo Road Project No. STP-030-1(39)

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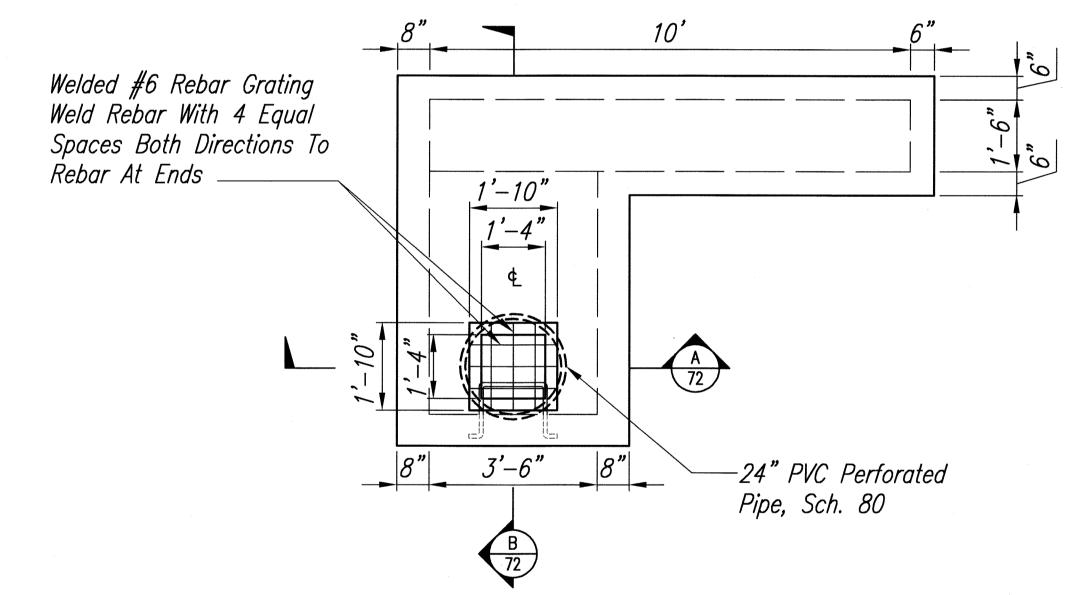
OF 4 SHEET No. 2 SHEETS





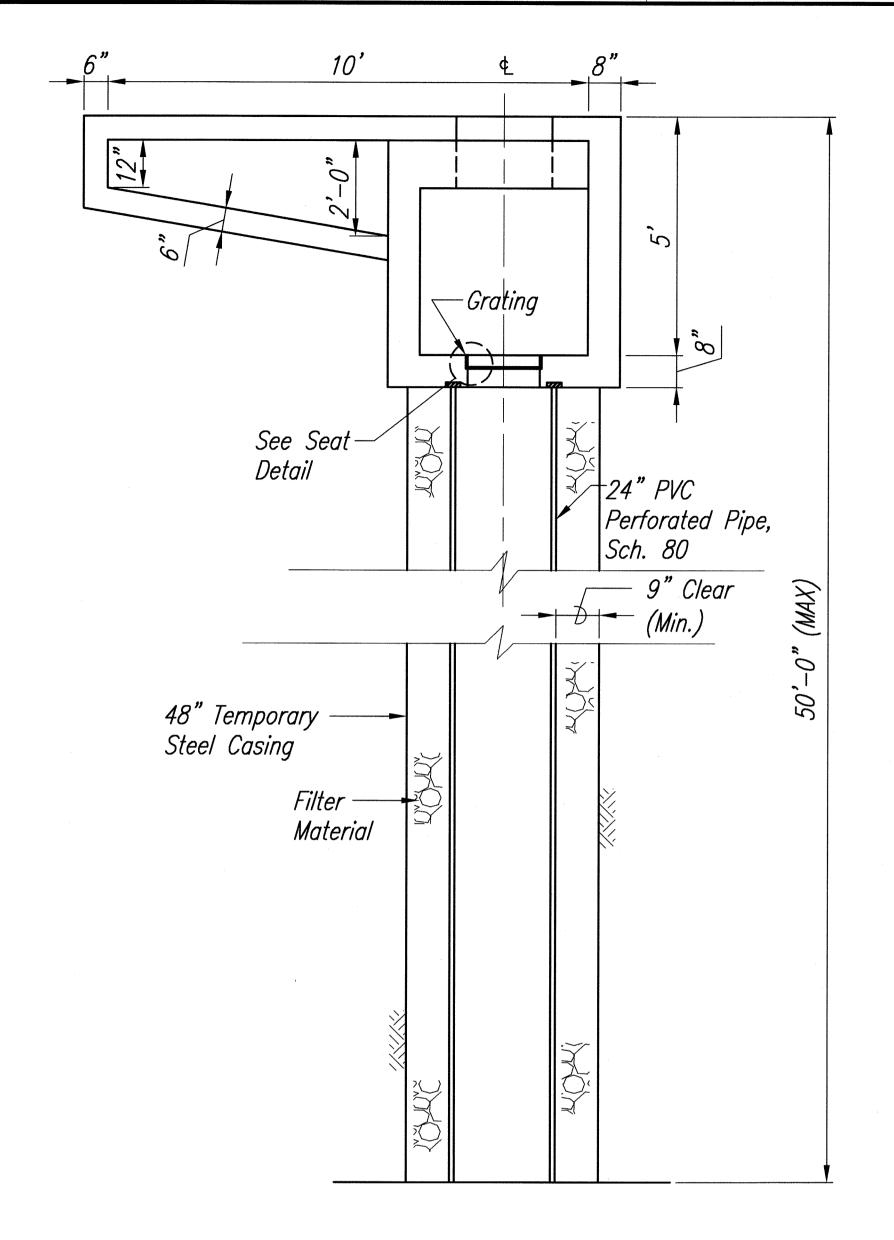
TYPE "B1" CATCH BASIN / DRYWELL - PLAN

Scale: 1/2" = 1'-0"



TYPE "C1" CATCH BASIN / DRYWELL - PLAN

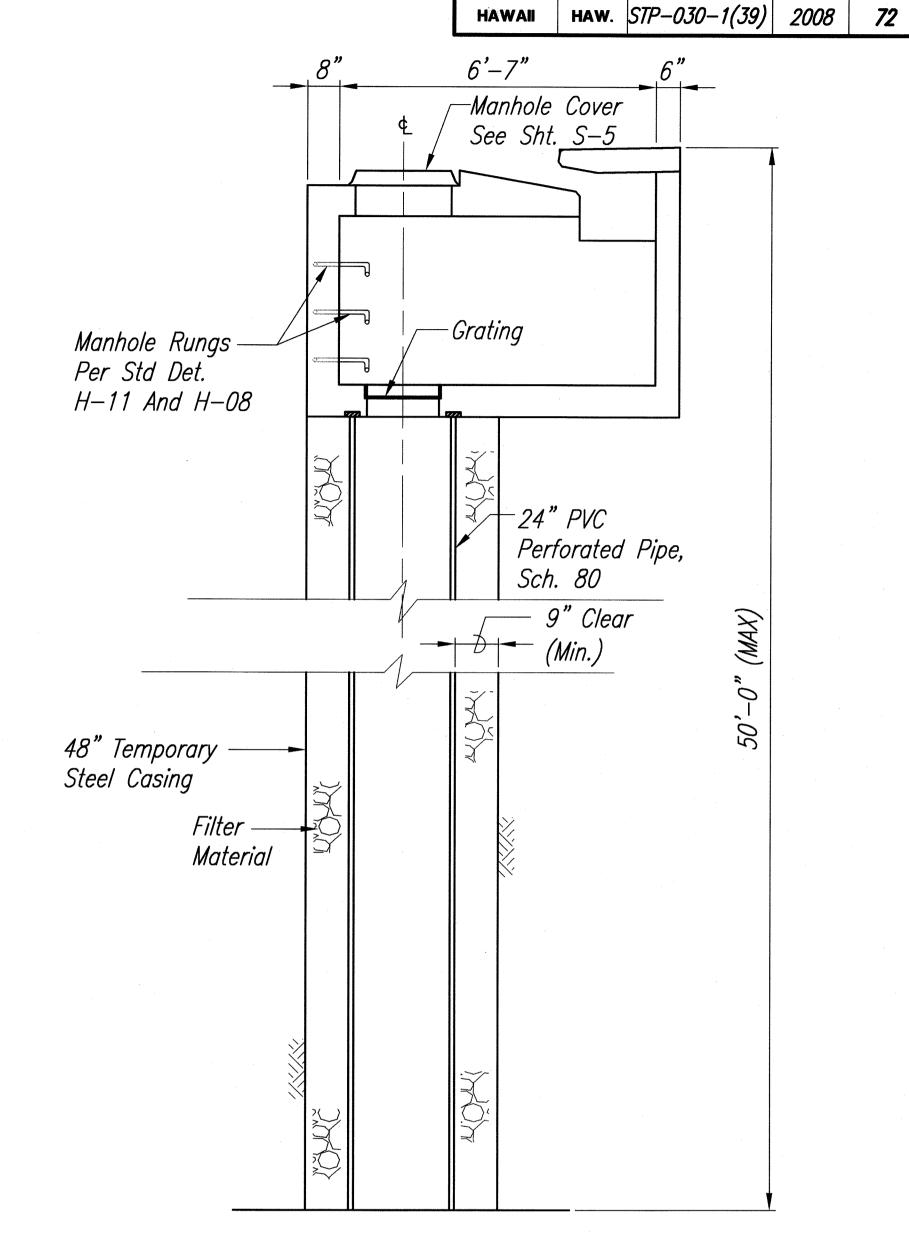
Scale: 1/2" = 1'-0"



TYPE "B1" & "C1" CATCH BASIN / DRYWELL <u>SECTION</u> "A" Scale: 1/2" = 1'-0"

NOTE:

See Structural Sht. S-5 for Reinforcing.

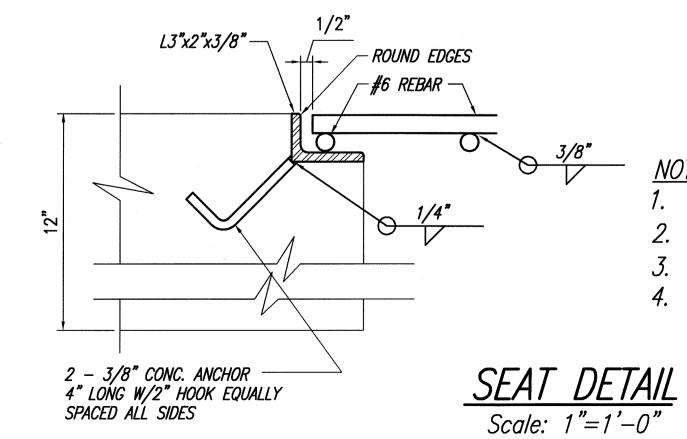


FED. ROAD STATE

PROJ. NO.

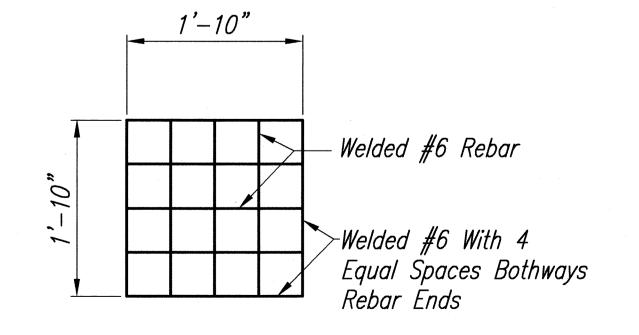
FISCAL SHEET TOTAL YEAR NO. SHEETS

TYPE "B1" & "C1" CATCH BASIN / DRYWELL <u>SECTION</u> "B" Scale: 1/2" = 1'-0"

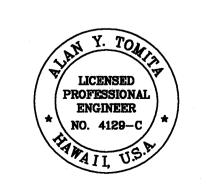


- Grating Shall Be Hot Dipped Galvanized After Fabrication.
- All Steel Shall Be Structural Grade (ASTM A36 Min.)
- All Welds 5/16" Unless Otherwise Noted.
- All Welding Shall Be in Accordance With Current Edition Of Reinf. Steel Welding Code AWS D1.4.

Scale: 1"=1'-0"



<u>PLAN — REBAR GRATING</u>



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STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

MISCELLANEOUS DETAILS - 4

Honoapiilani Highway Widening Lahainaluna Road to Aholo Road Project No. STP-030-1(39)

Scale: As Shown

Date: October 2008 OF 4 SHEETS SHEET No. 4