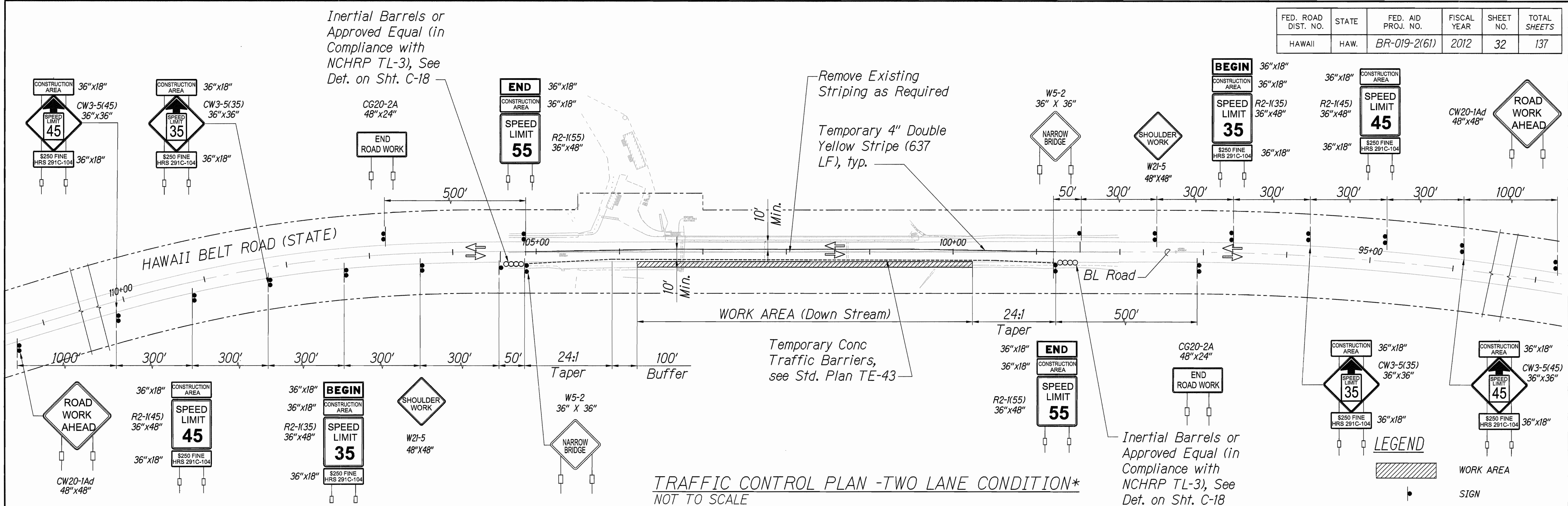


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(61)	2012	32	137



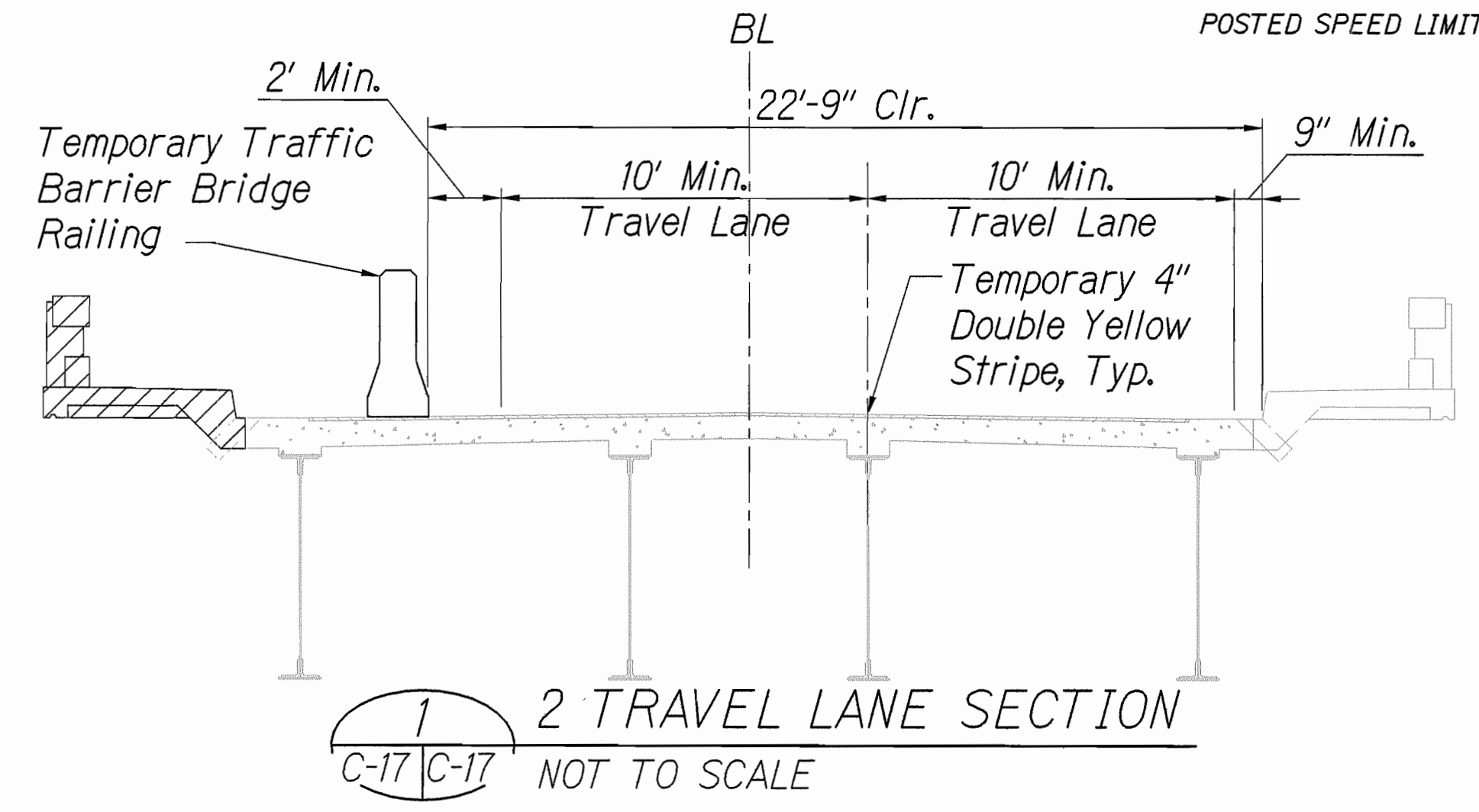
TRAFFIC CONTROL NOTES

- The permittee shall make minor adjustments at intersection, driveways, bridges, structures, etc., to fit field conditions.
- Cones or delineators shall be extended to a point where they are visible to approaching traffic.
- 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.
- Regulatory and warnings 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.
- Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
- When required by the issuing office, the permittee shall install a flashing arrow signal as shown on the traffic control plans.
- Sign spacings, (d) taper lengths (t) and spacing or cones or delineators shall be as shown in table 1, unless otherwise noted on the traffic control plans.
- All traffic lanes shall be a minimum of 10 feet wide.
- All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.

TABLE 1 FOR TRAFFIC CONTROL PLAN

POSTED SPEED LIMIT (M.P.H.)	SIGN SPACING (FEET) (L)	TAPER LENGTH (T) (FEET)		LONGITUDINAL BUFFER SPACE (B) (FEET)	SPACING OF CONES OR DELINEATORS (FEET)		
		W=12' OR LESS ②	W=GREATER THAN 12' ②		TAPER	TANGENT	WORK AREA
20	250	200	W x 17	35	20	20	10
25	250	200	W x 17	55	25	25	10
30	250	250	W x 20	85	30	30	10
35	250	250	W x 20	120	35	35	10
40	500	350	W x 30	170	40	40	10
45	500	550	W x 45	220	45	45	10
50	1000	600	W x 50	280	50	50	10
55	1000	700	W x 55	335	55	55	10

NOTE: ② W = WIDTH OF SHOULDER OR OFFSET



WILLIAM H. Q. BOW
LICENSED PROFESSIONAL ENGINEER
NO. 4904-C
HAWAII, USA

LICENSE EXPIRES: 4/30/14
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

William H. Q. Bow

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN

HAWAII BELT ROAD
Rehabilitation of Umauma Stream Bridge
Federal Aid Project No. BR-019-2(61)

Scale: None Date: July 25, 2012

SHEET No. C-17 OF 19 SHEETS

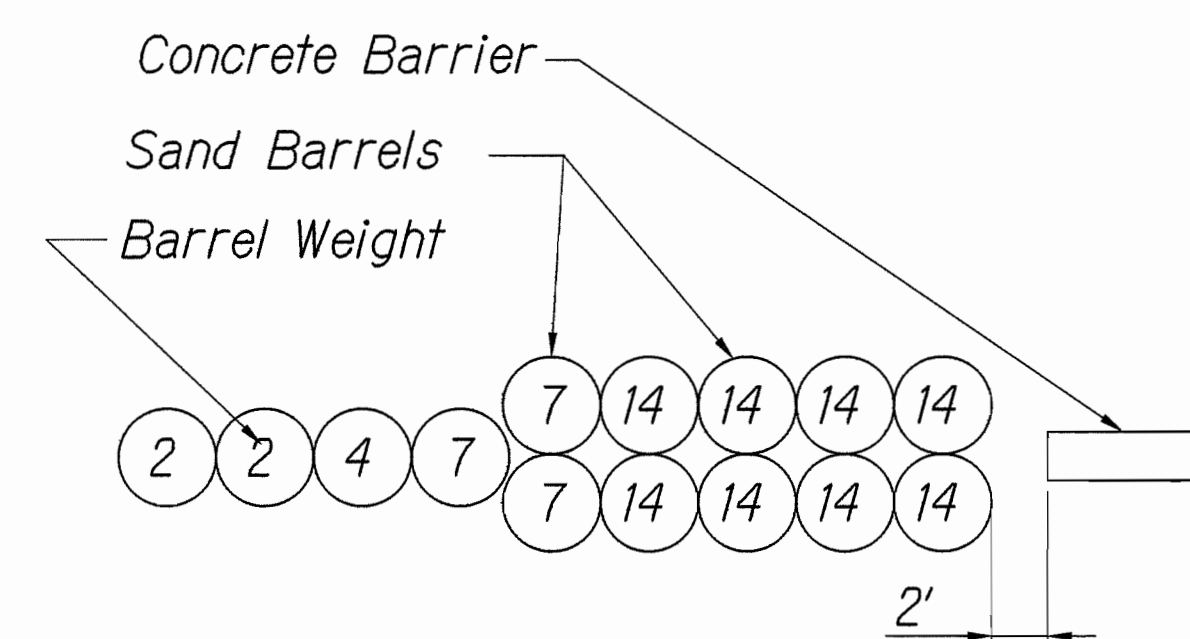
SURVEY PLOTTED BY: DATE: _____
 ORIGINAL PLAN: _____
 TRACED BY: _____
 DESIGNED BY: _____
 QUANTITIES BY: _____
 CHECKED BY: _____
 No. _____
 Plotted: Tue, 24 Jul 2012 7:00am By: DYANUS
 File Name: H:\Projects\2012\Hawaii Belt Road\Plan\PlanC-17.dwg C-18 UHMAIMA - Traffic Control Plan.dwg

For 1 Lane Section, See Sht. C-19

TRAFFIC CONTROL PLAN - ONE LANE CONDITION (SIGNALIZED)*
NOT TO SCALE
* Upstream Work Traffic Control Plan Opposite

LEGEND

10. *The backs of all signs for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have messages on both sides).*
11. *At the end of each day's work or as soon as the work is completed, the permittee shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in reverse order of installation.*
12. *Replace permanent pavement markings and traffic signs upon completion of each phase of work.*
13. *All work zone traffic control devices shall comply with the "Statewide Guideline for Work Zone Traffic Control Devices" dated September 13, 2000.*
14. *High level warning device (flag tree) shall be installed on approach to all work areas.*
15. *Install steady burn amber lamps on portable concrete barrier @ 20.0' o.c. Installing, maintaining, and changing batteries of the Portable Mounted Steady Burn Amber Lamps shall be considered incidental to the various items of work.*



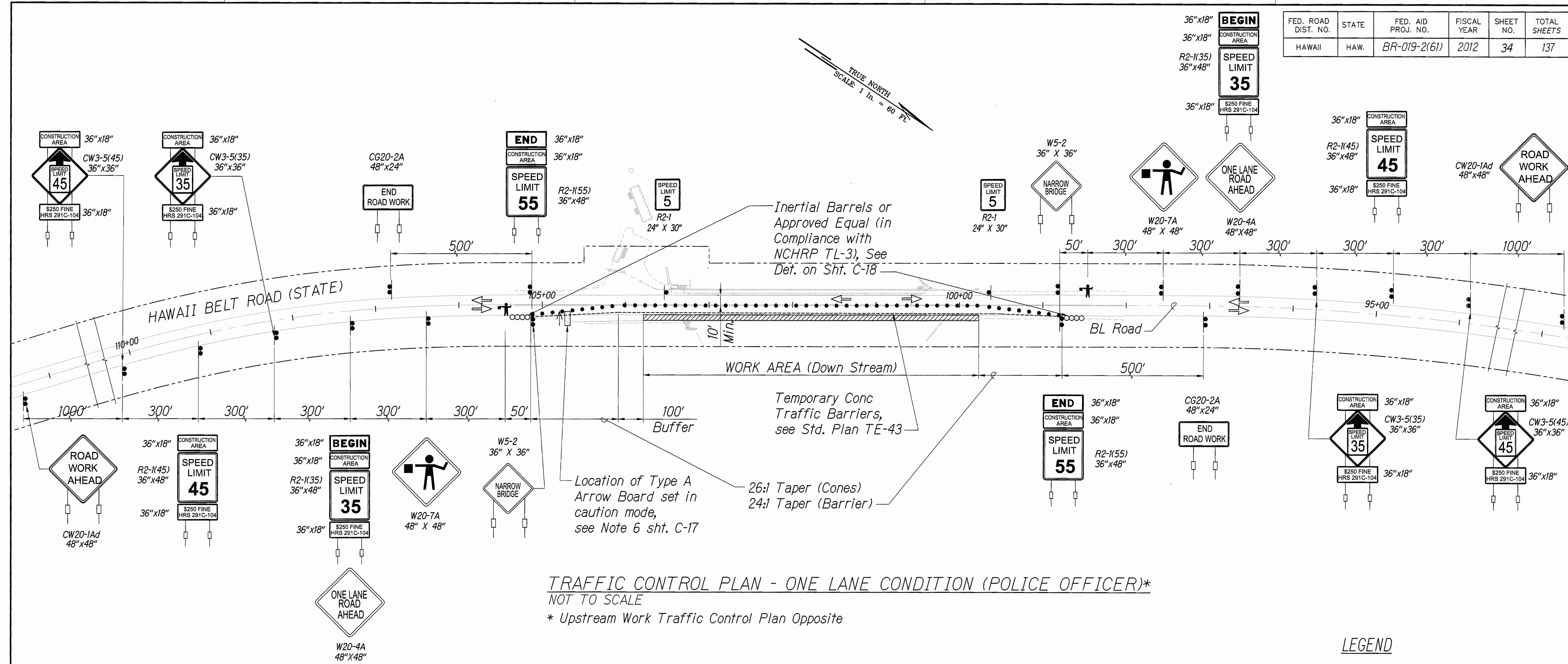
16. All signs shall be installed on 2 posts per std. plan TE-02A.
17. Each construction warning sign and work zone speed limit assembly shall have a minimum of two (2) Type II OM. Installation of each Type II OM shall be considered incidental to the various items of work.
18. Placement of construction signs shall not obstruct the path of pedestrians and bicyclists.

1. Numbers indicate weight of sand in 100 lb. units
2. Typical layout will vary based on speed and manufacturer of system used. Installation shall conform to Manufacturer's recommendations and Roadside Design Guide.
3. Ends of portable barriers shall be protected with Sand Filled Barrels as shown on Construction Phasing Plans.
4. Providing, transporting, placing, relocation of barrels shall be considered incidental to the various items of work.

	WORK AREA
	SIGN
	CONE OR DELINEATOR
	DIRECTION OF TRAFFIC
	TRAFFIC SIGNAL
	CONCRETE BARRIERS
	SAND FILLED BARRELS
<i>POSTED SPEED LIMIT = 55 MPH</i>	

33

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(61)	2012	34	137



TRAFFIC CONTROL PLAN - ONE LANE CONDITION (POLICE OFFICER)*
NOT TO SCALE

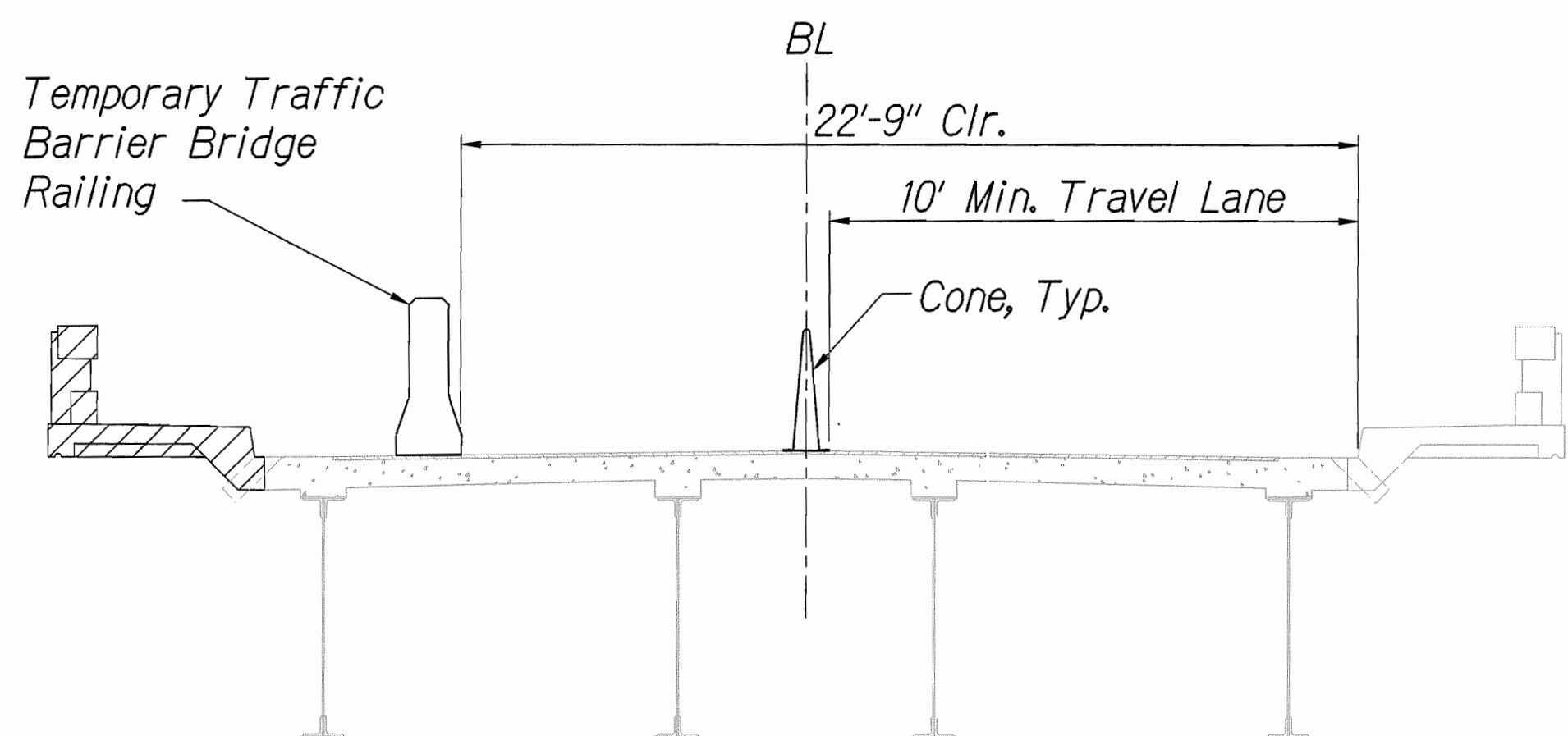
* Upstream Work Traffic Control Plan Opposite

LEGEND

- WORK AREA
- SIGN
- CONE OR DELINEATOR
- DIRECTION OF TRAFFIC
- POLICE OFFICER
- CONCRETE BARRIERS
- SAND FILLED BARRELS
- POSTED SPEED LIMIT = 55 MPH

Note:

Contractor Shall Provide a County Police Officer on Each Side of the Bridge During Phase 4 and 8 (as Shown on the Structural Sheet S15.1). The Police Officers Shall Direct Traffic And Enforce A 5 Mph Speed Limit For All Vehicles Traversing The Bridge. All Associated Costs Shall Be Paid Under Item 645.1000.



1 TRAVEL LANE SECTION
C-18 C-19/C-19 NOT TO SCALE

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
APPROVED BY	
NO.	

Project: I-90, 24 Jul 2012 - 7:40am By: DYANUS
 File Name: H:\C-19\08016 Umauma Bridge\07 Drawing\C-17 Tra C-19 UMAUMA - Traffic Control Plan.dwg

LICENSE EXPIRES: 4/30/14
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
William H. Q. Bow

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN

HAWAII BELT ROAD
Rehabilitation of Umauma Stream Bridge
Federal Aid Project No. BR-019-2(61)

Scale: None Date: July 25, 2012

SHEET No. C-19 OF 19 SHEETS