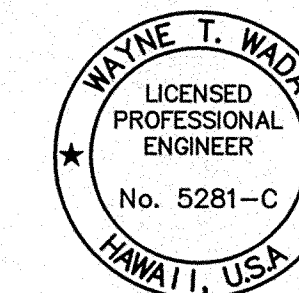


REVISION	DATE	DESCRIPTION	BY	APPROVED
6-20-12		TRAFFIC CONTROL PLAN REVISIONS	WW	

REVISIONS



THIS WORK WAS PREPARED
BY ME OR UNDER MY SUPERVISION

Wayne T. Wada
EXPIRES: APRIL 30, 2014

**PILANI MAI KE KAI SUBDIVISION
PHASE II**

Anahola, Kauai, Hawaii

Tax Map Key: (4) 4-8-16: 03
(4) 4-8-22: 89

Developer/Owner:

Department of Hawaiian Home Lands
91-5420 Kapelei Parkway
Kapolei, HI 96707

**TRAFFIC
CONTROL PLAN
FOR OFFSITE
WATERLINE**

APPROVED:

N/A
COUNTY ENGINEER, DEPT. OF PUBLIC WORKS, DATE
COUNTY OF KAUAI

MANAGER & CHIEF ENGINEER, DEPT. OF WATER, DATE
COUNTY OF KAUAI

DESIGNED BY: WW

DRAWN BY: CG

DATE: 03/27/12

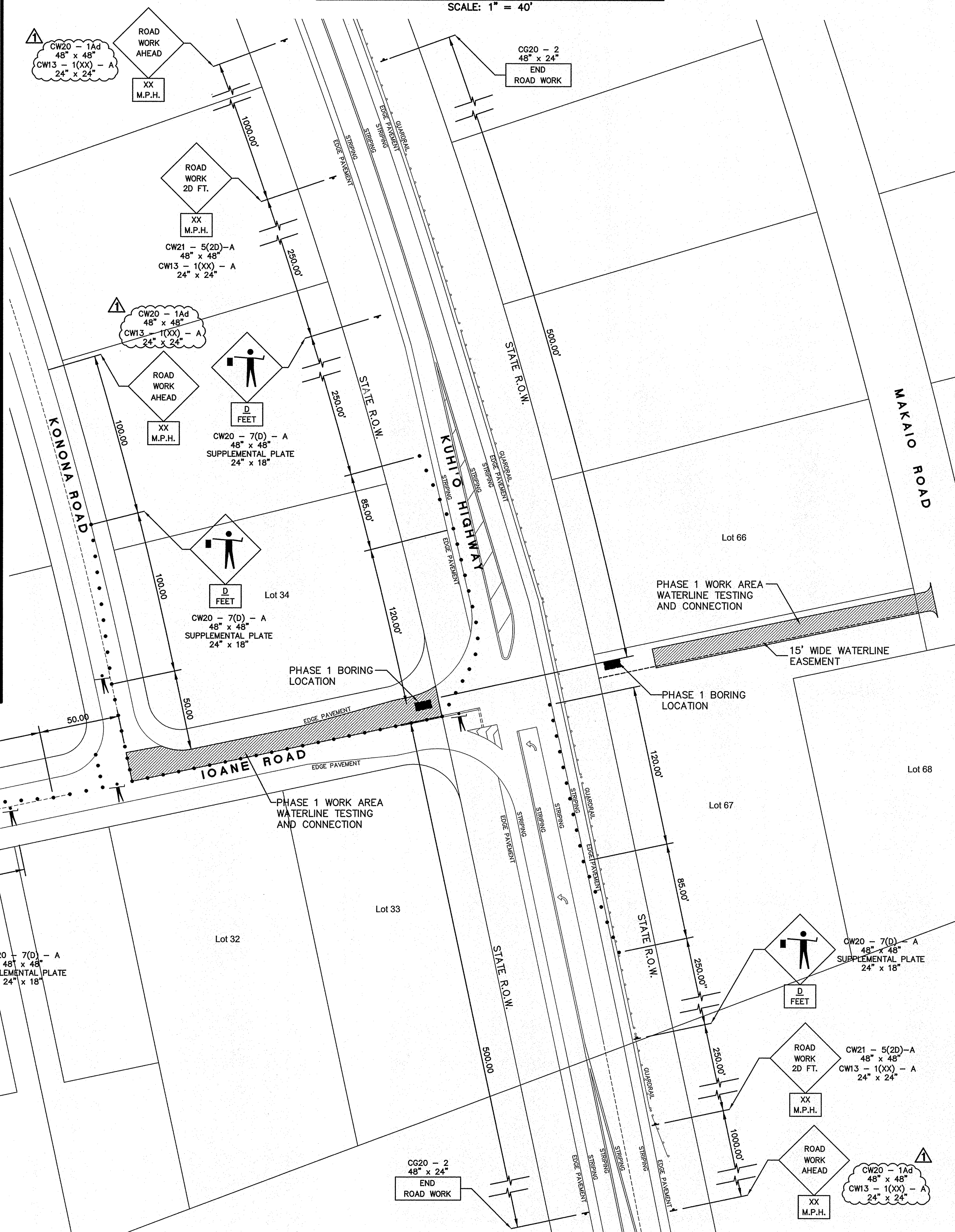
SHEET

C-42

42 OF 44 SHEETS

PHASE 1 TRAFFIC CONTROL PLAN

SCALE: 1" = 40'



PHASE 2 TRAFFIC CONTROL PLAN

SCALE: 1" = 40'

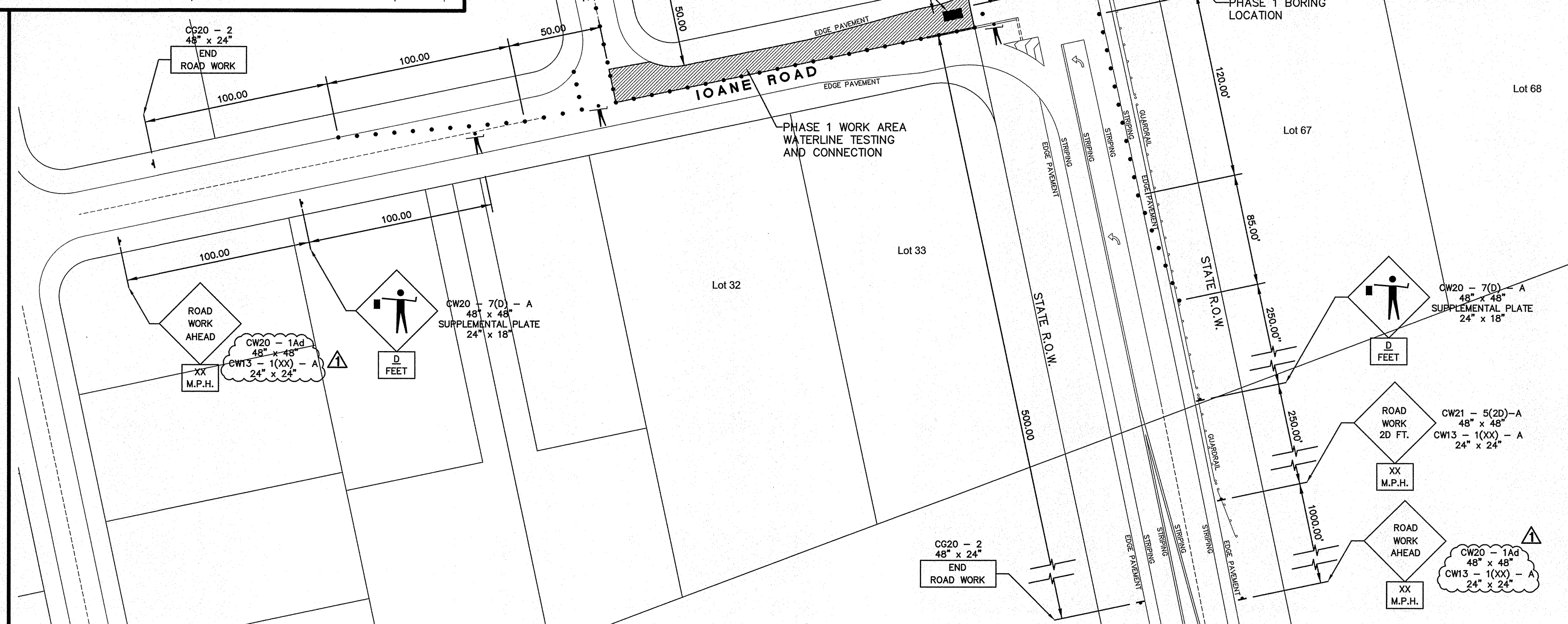


TABLE 1 FOR TRAFFIC CONTROL PLAN

POSTED SPEED LIMIT ① (M.P.H.)	SIGN SPACING (D) (FEET)	TAPER LENGTH (T) (FEET)		LONGITUDINAL BUFFER SPACE (B) (FEET)	SPACING OF CONES OR DELINEATORS (FEET) ③		
		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

FOR GENERAL NOTES FOR TRAFFIC CONTROL PLAN
SEE SHEET C-4

POSTED SPEED LIMIT ON KŪHIŌ HIGHWAY = 35 MPH
POSTED SPEED LIMIT ON IOANE ROAD = 20 MPH

ADDITIONAL NOTES:

- CW20-1Ad sign required for posted speed limit of 45 m.p.h. or greater.
- TABLE 1 for additional dimensions.
- ONE LANE ROAD (CW20-4) and FLAGGER AHEAD (CW20-7) signs shall be removed or covered when no work is being performed and lane is not closed.
- The advisory speed (XX) shall be determined by the Engineer.
- Cones or delineators shall be installed at 25' o.c. max. on tapers.
- During non-working hours two lanes are to be open and steel plates are to be used in work area. Ioane Road
- During working hours Type II barricades w/ steady burn lights are to be used in work area. Ioane Road

TABLE 1 NOTES:

- Use advisory speeds when posted
- W = width of lane, shoulder, or offset
- not applicable for two-lane highways

LEGEND

- SIGN
- CONE OR DELINEATOR
- DIRECTION OF TRAFFIC
- POLICE OFFICER/FLAGGER

NOTES FOR CONSTRUCTION
WITHIN STATE RIGHT-OF-WAY
(revised March 05, 2012)

- The Contractor shall obtain a construction permit from the State's Highway District Engineer at 1720 Haleukana Street, Lihue, Hawaii 96766 prior to commencement of work within State highway right-of-way (ph. 241-3000).
- Construction and restoration of all existing highway facilities within State right-of-way shall be done in accordance with all applicable sections of the current "Hawaii Standard Specifications for Road and Bridge Construction 2005," and the "Specification for Installation of Miscellaneous Improvements Within State Highways," of the State Highway Division.
- All lanes shall be open to traffic during the morning peak hours from 6:30 a.m. to 8:30 a.m., and during the afternoon peak hours from 3:30 p.m. to 5:30 p.m., and during off work hours.
- The Contractor shall provide, install, and maintain all necessary signs, light, flares, barricades, markers, cones, and other protective facilities and shall take all necessary precautions for the protection and for the convenience and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites On or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control devices for Streets and Highways, Part VI - Traffic Control for Highway Construction and Maintenance Operations". If lane closures are required during construction, a traffic control plan shall be incorporated into the construction plans and must be approved by the Division prior to the issuance of the permit.
- The minimum pavement structure shall consist of:
 - Commercial Driveways, Side roads and Utility Installations on Minor Highways
 - 2-1/2" asphalt concrete, 8" aggregate base course and 12" aggregate subbase, or 2-1/2" asphalt concrete and 8" asphalt concrete base course or asphalt concrete
 - 6" of Class "A" concrete reinforced with 6"x6" - 6/6 wire mesh on 12" aggregate subbase if deemed necessary by the Engineer.
- No material and/or equipment shall be stockpiled or otherwise stored within highway rights-of-way except at locations designed in writing and approved by the District Engineer. If use of location is approved by the Engineer, the contractor shall obtain a permit to use the property within the Highway R/W from the State Highways Division, Ph. 241-3000.
- Compaction tests shall be taken in accordance with the Specifications for Installation of Miscellaneous Improvements Within State Highways, as follows:
 - Subbase: one (1) compaction test(s) for every 300 lineal feet of travel way.
 - Base Course: one (1) compaction test(s) for every 300 lineal feet of travel way.
 - One (1) compaction test(s) for each 300 lineal feet of trench.
- Prior to commencing trench excavation work, the Contractor shall take a profile along the new centerline of utility trench and that such information shall be used in the verification of restoring the roadway to its original condition. A copy of the profile shall be submitted to the District Engineer.
- The Contractor shall be required to provide adequate, safe, nonskid bridging material over the trench, including shoring , when trenching in pavement areas to handle all types of vehicular traffic.
- No trench shall be opened more than 200 feet in advance of the installed and tested pipe and/or ductline.
- Longitudinal drainage along the highway shall be maintained at all times.
- Pavement striping and marking shall be done by Contractor at no cost to the State.
- Approval of permit construction plans shall be valid for a period of one year thereof from the date of notification of approval to the applicant. In the event construction does not commence within this one-year period, the applicant will be required to resubmit his construction plans for Division's review and approval.
- All regulatory, guide and construction signs and barricades shall be of high intensity reflective sheeting.
- Contractor shall inform the State Highways Office (phone# 241-3000) at least 2 days prior to closing any lanes.
- The Contractor shall reference to the satisfaction of the District Engineer, all existing traffic signs, posts, and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts, and pavement markings disturbed by his activities unless directed otherwise by the District Engineer or his representative.
- The Contractor shall exercise care when excavating in areas with utilities, streetlights, signals, etc. Damage to these existing facilities shall be immediately reported to the respective utility companies, county, or state agency. The repair work shall be done at the Contractor's expense.
- The permit to perform work upon state highways may be revoked because of default in any of the following:
 - Work performed before or after permitted hours;
 - Failure to maintain roadway surfaces in a smooth and safe condition;
 - Failure to clean up construction debris generated from project work;
 - Failure to provide proper traffic control;
 - Failure to replace damaged pavement marking and signs.
- The Contractor shall comply with the attached traffic control plans and sign spacing table.
- Contractor shall implement Best Management Practices (BMP) for erosion and silt control for work within the State R/W.
- Prior to construction, the Contractor shall contact the various agencies for location of existing utilities within the project limits. The Contractor shall locate and protect all existing utilities whether or not shown on the plans. Any costs incurred by damages to existing utilities will be borne by the Contractor. Contractor shall request toning of utilities from One-Call Center, Phone: 1-866-423-7287. The Contractor shall also call the County of Kauai Department of Water, Phone 245-5411 and the Wastewater Division, Phone 241-6642 for toning of waterlines and sewer lines, respectively.
- Work may be performed from 7:00 am Monday to 5:30 pm Friday, except State Holidays, unless otherwise permitted by the District Engineer.
- The Contractor shall notify the State Highways Division, Kaua'i District Office, Area Engineer three days prior to commencing work.
- Unless otherwise requested in writing by the contractor and approved in writing by the District Engineer, use of steel plates within the travelway will not be permitted at any time. When permitted, only one steel plate will be used within the travelway at any time.
- Any work that disrupts, damages, or destroys existing traffic loop detectors shall be followed with re-establishment of the traffic loops before reopening the lanes to traffic. The Contractor may also use temporary pole mounted presence detectors to replace any loops taken out of service. The cost for the temporary detectors shall be considered incidental to pavement work.
- Night work shall not be done during the period from September 15 to December 31 of each year.

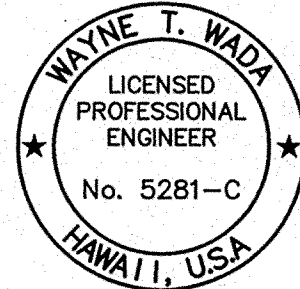
27. All workers with in the State Right-Of-Way who are exposed to either vehicles using the roadway or to construction equipment shall wear high visibility safety apparel that meets the performance class2 or 3 requirements of ANSI/SEA 107-2004. "Workers" is defined as people on foot whose duties place them within the State Right-Of-Way such as but no limited to construction and maintenance forces, equipment operators, survey crews, utility crews, responders to incidents (e.g. EMT and firemen) and law enforcement personnel directing traffic, investigating accidents, and handling lane closures and obstructed roadways.
28. Requirement to furnish Advisory signs per Hawaii Standard Specifications, Subsection 645.03(G) shall be waived for this project.

EROSION CONTROL / BMP NOTES

- Measures to control erosion and other pollutants shall be in place before any construction work is initiated. These measures shall be properly constructed and maintained throughout the construction period.
- All control measures shall be checked and repaired as necessary.
- Construct temporary silt fence as shown per plans.
- All storm drain inlets that may receive runoff as a result of the construction work shall use a inlet filter device. Inlet filters shall remain until completion of construction work. Contractor shall periodically inspect inlet filters, especially during heavy rainfall, to ensure drainage through material in maintained.
- At the end of the grading operation, existing storm drain inlets surrounding the project site shall be inspected and any accumulated sediment and debris found in the storm drain inlets shall be removed. Flushing into the storm drains is prohibited.
- Good housekeeping shall be utilized to ensure protection of roadways from mud, dirt, and debris.
- The contractor shall ensure that all tires of construction vehicles are sufficiently cleaned off so that dirt and debris is not tracked off the construction site. Washing off tires with water will not be acceptable unless the runoff is contained and does not enter the storm drain system or into State's ROW.
- The Contractor shall ensure that existing roadways used to access the project are cleaned of all debris, trash, dirt, mud, etc., throughout the working day.
- The final lift of each day's work shall be restored by seeded hydro-mulch. Contractor to ensure grass is fully established.

6-20-12	TRAFFIC CONTROL NOTE REVISION	WW		
REVISION	DATE	DESCRIPTION	BY	APPROVED

REVISIONS



THIS WORK WAS PREPARED
BY ME OR UNDER MY SUPERVISION

Wayne T. Wada
EXPIRES: APRIL 30, 2014

PILANI MAI KE KAI SUBDIVSION
PHASE II

Anahola, Kaua'i, Hawaii

Tax Map Key: (4) 4-8-16: 03
(4) 4-8-22: 89

Developer/Owner:

Department of Hawaiian Home Lands
91-5420 Kapolei Parkway
Kapolei, HI 96707

STATE D.O.T. NOTES

APPROVED:

COUNTY ENGINEER, DEPT. OF PUBLIC WORKS, DATE
COUNTY OF KAUAI

MANAGER & CHIEF ENGINEER, DEPT. OF WATER, DATE
COUNTY OF KAUAI

DESIGNED BY: WW

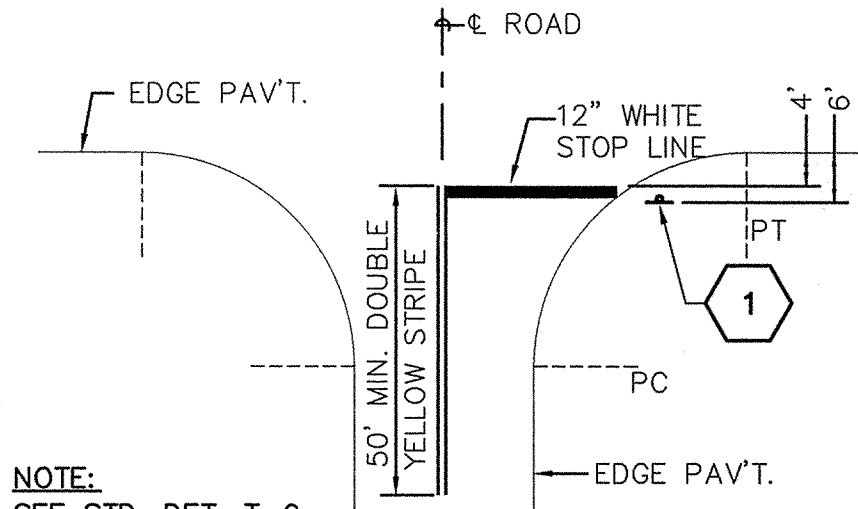
DRAWN BY: CG

DATE: 03/27/12

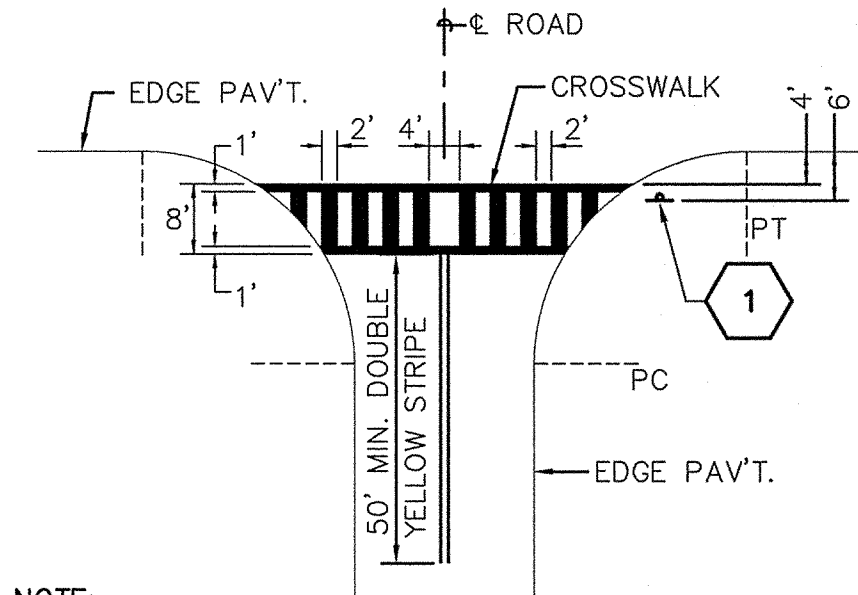
SHEET

C-43

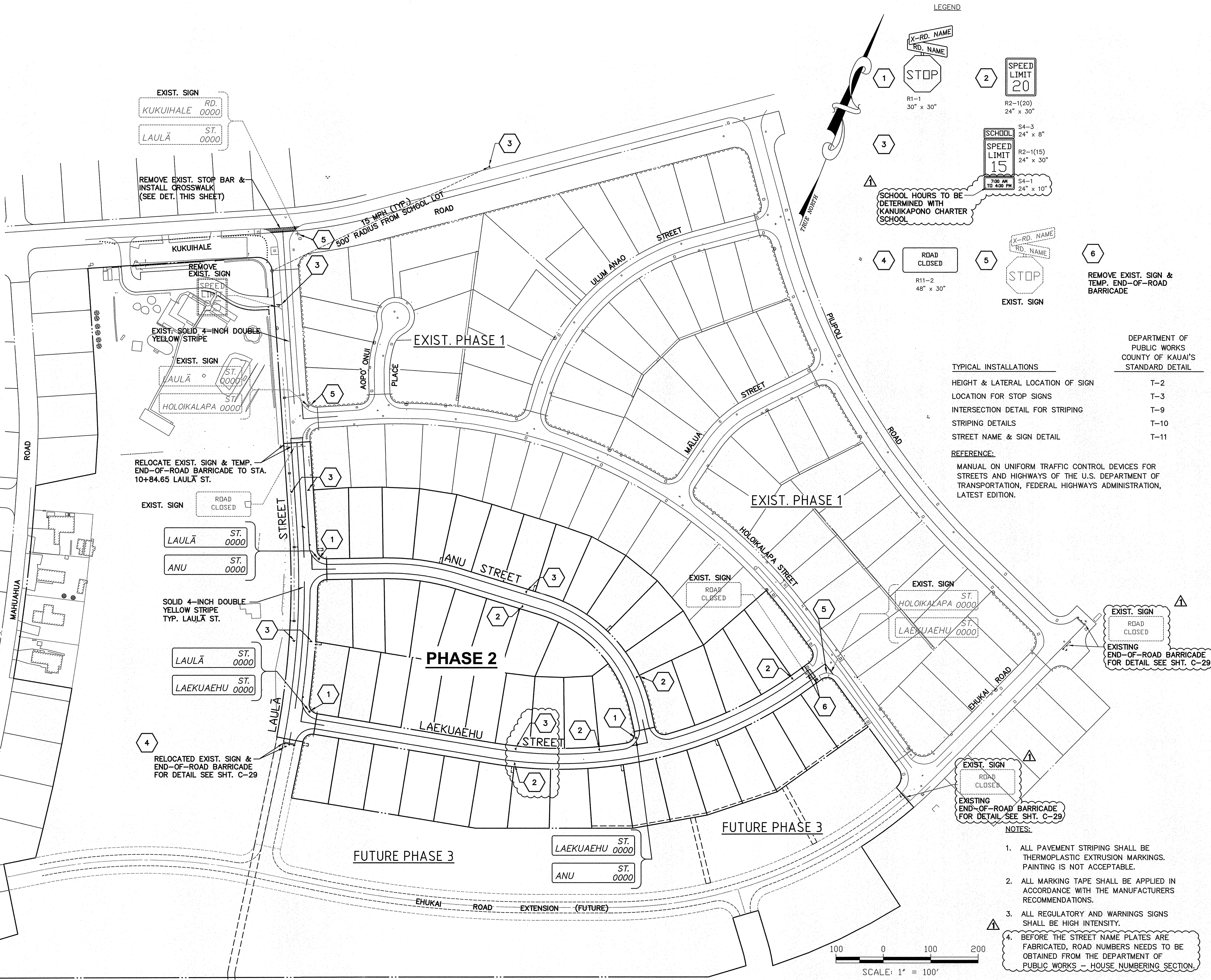
43 OF 44 SHEETS



1 TYPICAL LOCAL STREET INTERSECTION STRIPING



2 TYPICAL LOCAL STREET CROSSWALK STRIPING



LEGEND

1 STOP (R1-1, 30" x 30")

2 SPEED LIMIT 20 (R2-1(20), 24" x 30")

3 SCHOOL SPEED LIMIT 15 (S4-3, 24" x 8"; R2-1(15), 24" x 30"; S4-1, 24" x 10")

4 ROAD CLOSED (R11-2, 48" x 30")

5 STOP (EXIST. SIGN)

6 REMOVE EXIST. SIGN & TEMP. END-OF-ROAD BARRICADE

SCHOOL HOURS TO BE DETERMINED WITH KANUIKAPONO CHARTER SCHOOL

TYPICAL INSTALLATIONS	
HEIGHT & LATERAL LOCATION OF SIGN	T-2
LOCATION FOR STOP SIGNS	T-3
INTERSECTION DETAIL FOR STRIPING	T-9
STRIPING DETAILS	T-10
STREET NAME & SIGN DETAIL	T-11

REFERENCE:

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS OF THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAYS ADMINISTRATION, LATEST EDITION.

ESAKI SURVEYING AND MAPPING, INC.

1610 Halekono Street
Lihue, Kauai, Hawaii 96766
Ph. (808) 246-0625 Fax (808) 246-0229

CIVIL ENGINEERS • SURVEYORS • PLANNERS

REVISION	DATE	DESCRIPTION	BY	APPROVED
6-20-12		SIGNAGE & STRIPING REVISIONS	WW	

WAYNE T. WADA
LICENSED PROFESSIONAL ENGINEER
No. 5281-C
KAWAII, USA

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Wayne T. Wada
EXPIRES: APRIL 30, 2014

PILANI MAI KE KAI SUBDIVISION PHASE II

Anahola, Kauai, Hawaii

Tax Map Key: (4) 4-8-16: 03
(4) 4-8-22: 89

Developer/Owner:
Department of Hawaiian Home Lands
91-5420 Kapolei Parkway
Kapolei, HI 96707

SIGNAGE & PAVEMENT MARKING PLAN

APPROVED

COUNTY ENGINEER, DEPT. OF PUBLIC WORKS, COUNTY OF KAUAI DATE

N.A.
MANAGER & CHIEF ENGINEER, DEPT. OF WATER, COUNTY OF KAUAI DATE

DESIGNED BY: WW

DRAWN BY: CG

DATE: 03/27/12

SHEET

C-44

44 OF 44 SHEETS