

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-02-98M	1998	2	14

GENERAL NOTES

MATERIALS:

1. CONCRETE MASONRY UNITS SHALL BE 8"x8"x16" CONCRETE HOLLOW BLOCK, BLUFF COLORED, GRADE N-1. SPECIFIED COMPRESSIVE STRENGTH, F'M SHALL BE 1,500 PSI.
2. MORTAR SHALL BE TYPE S.
3. REINFORCING SHALL BE ASTM A 615 GRADE 60.
4. 28-DAY CONCRETE COMPRESSIVE STRENGTH F'C SHALL BE 3,500 PSI.
5. ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED, A 307.
6. LUMBER SHALL BE DOUGLAS FIR LARCH, SELECT STRUCTURAL.
7. LUMBER & PLYWOOD TO BE USED FOR CABINETY WORK & THE COUNTER TOPS SHALL BE PRESSURE TREATED WITH WOOD PRESERVATIVE TREATMENT IN ACCORDANCE WITH PRESERVATIVE TREATED LUMBER SECTION OF THE SPECIFICATIONS.
8. LUMBER & PLYWOOD TO BE USED FOR WALL FRAMING, WINDOW FRAMING, AND BLOCKING SHALL BE PRESSURE TREATED WITH FIRE RETARDANT IN ACCORDANCE WITH FIRE RETARDED TREATED WOOD SECTION OF THE SPECIFICATIONS.

CONSTRUCTION:

1. FOR CONCRETE FINISH, SEE SPECIAL PROVISIONS.
2. STAGGER ALL REINFORCING SPLICES WHERE POSSIBLE.
3. REINFORCING SHALL BE SUPPORTED, BENT & PLACED AS PER "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES" ACE 315 (LATEST).
4. FOR CAST-IN-PLACE CONCRETE, MINIMUM REINFORCEMENT COVER: CONCRETE CAST AGAINST EARTH: 3" CL. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER: 2" CL.
5. ALL FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED, NATURAL SOILS OR PROPERLY COMPACTED FILLS.
6. LAP REINFORCING BARS IN CMU WALL 48 BAR DIAMETERS FOR GRADE 60 REINFORCING.
7. ALL LIGHT SWITCHES SHALL BE 48" ABOVE FINISHED FLOOR.

GENERAL:

1. THE ENGINEER WILL CONSIDER THE PRICE FOR ALL WORK INCLUDED IN THE CONTRACT PRICE FOR SECTION 657 - TESTING LAB RENOVATION.
2. THE CONTRACTOR SHALL VERIFY ALL GRADES & DIMENSIONS IN THE FIELD BEFORE COMMENCING WITH ANY WORK.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE DURING DEMOLITION/RENOVATION FOR THE PROTECTION OF ADJACENT PROPERTIES, UTILITIES, & EXISTING/NEW STRUCTURES. ANY DAMAGE DUE TO CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S OWN EXPENSE & SHALL MEET THE SATISFACTION OF THE ENGINEER. HE SHALL CONDUCT HIS WORK IN SUCH A MANNER & PROVIDE SUCH TEMPORARY SHORING OR OTHER MEASURES AS MAY BE NECESSARY TO INSURE THE SAFETY OF ALL CONCERNED AND TO PROTECT EXISTING STRUCTURES.
4. UNLESS NOTED OTHERWISE, CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".

WORK SCOPE

1. RENOVATE EXISTING STORAGE ROOM 'A'

- a. DEMOLISH AND REMOVE EXISTING WIRE MESH WALLS BY GRID LINE 'B' & 'C'.
- b. CONSTRUCT NEW GYPSUM PARTITION WALL, DOOR/FRAME AND INSTALL FINISH HARDWARE.
- c. RELOCATE EXISTING WALL HUNG FIRE EXTINGUISHER.
- d. INSTALL AIR CONDITIONING SYSTEM.
- e. CLOSE UP WOOD LOUVER WINDOWS & CONSTRUCT GYPSUM WALL INSIDE.
- f. REPAINT STORAGE ROOM WALLS & DOORS.
- g. INSTALL BASE CABINET AND WORK COUNTER.
- h. INSTALL WALL CABINET AND SHELVES.
- i. INSTALL LIGHTS AND ELECTRICAL OUTLETS.

2. CONSTRUCT NEW STORAGE ROOM 'B'

- a. EXCAVATE EXISTING GRAVEL BED & SAW CUT CONCRETE.
- b. CONSTRUCT NEW CONCRETE FOOTING AND CURB.
- c. CONSTRUCT NEW CONCRETE MASONRY WALL.
- d. CONSTRUCT NEW PARTITION WALL.
- e. INSTALL LOUVER WINDOW, METAL DOOR, & FINISH HARDWARE.
- f. PAINT ALL WALLS AND CEILING SURFACES EXPOSED TO VIEW.
- g. INSTALL ELECTRICAL LIGHT FIXTURES AND OUTLETS.

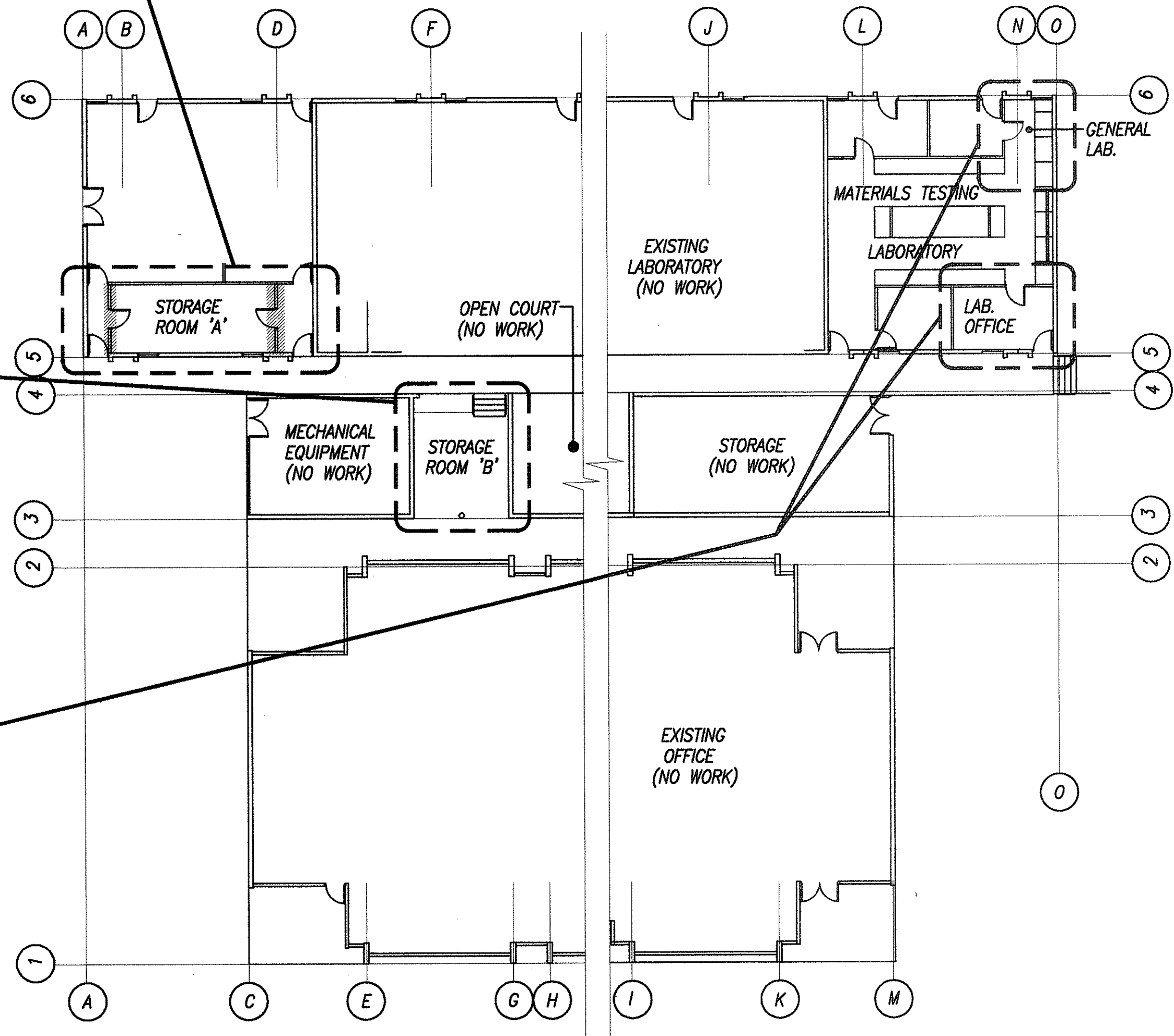
3. RENOVATE EXISTING MATERIAL TESTING LAB.

GENERAL LABORATORY:

- a. DEMOLISH & REMOVE EXISTING COUNTER & CABINET (INCLUDING CONCRETE BLOCK, POUR IN PLACE CONCRETE DECK, AND SUPPORTS).
- b. REMOVE AND PERMANENTLY CAP EXISTING ELECTRICAL, WATER/GAS SUPPLY LINES, AND WASTE LINES BEHIND THE NEW CABINET. RELOCATE ELECTRICAL OUTLET AS REQUIRED.
- c. CLOSE UP WOOD LOUVER WINDOW & CONSTRUCT GYPSUM WALL INSIDE.
- d. INSTALL NEW BASE CABINETS & COUNTER TOP, PAINT ALL NEW WORKS.

LAB. OFFICE:

- e. CLOSE UP WOOD LOUVER WINDOW & CONSTRUCT GYPSUM BOARD WALL INSIDE.
- f. REPAINT LABORATORY OFFICE WALLS & DOORS.
- g. INSTALL NEW CABINET & COUNTER TOP, PAINT ALL NEW WORKS



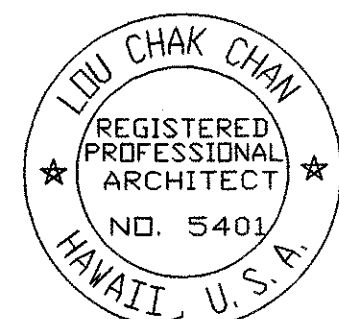
EXISTING FLOOR PLAN
SCALE: 1/16" = 1'-0"

CONSULTANTS:

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THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

A-1 WORK SCOPE AND GENERAL NOTES

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WORK SCOPE

MATERIALS TESTING LAB

FACILITY IMPROVEMENTS

Project No. HWY-0-02-98M

Scale: AS SHOWN Date: MAY, 1998

SHEET No. 2 OF 14 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	5/29/98
DESIGNED BY	L. Chan	
QUANTITIES BY	L. Chan	
CHECKED BY	L. Chan	
No.		

36'-0"±

11'-0"

EXIST. DOOR

EXIST. DOOR

EXIST. DOOR

EXIST. DOOR

EXISTING GYPSUM BOARD WALL

EXISTING CMU WALL

EXIST. CONC. WALKWAY

EXISTING FIRE EXTINGUISHER

DEMOLISH & REMOVE EXISTING WIRE MESH PARTITION. PATCH & REFINISH WALL.

DEMOLITION PLAN OF EXISTING STORAGE ROOM 'A'
SCALE: 1/4" = 1'-0"

4'-11" 26'-1"± 5'-0"

30" DEPTH COUNTER-CABINETS.
DEPTH WALL CABINETS (TYPICAL)

18"

ACCESSIBLE COUNTERTOP

REKEY
DOOR
LOCKSET

WALL MOUNTED A/C
COND. UNIT ON
STEEL BRACKET.
SEE MECH. DWG.

CEILING MOUNTED FAN
COIL UNIT. SEE
MECH. DWG. (VERIFY
LIGHT LOCATION)

INSTALL GYPSUM BOARD &
PLYWOOD SHEATHING OVER
EXISTING WOOD LOUVER WINDOW.
EXISTING WOOD LOUVER TO BE
PERMANENTLY LATCHED W/ (2) 1x6
(PAINT TO MATCH EXISTING COLOR
OF ADJACENT WALLS)

RELOCATE FIRE
EXTINGUISHER &
LIGHT SWITCH AS
REQUIRED

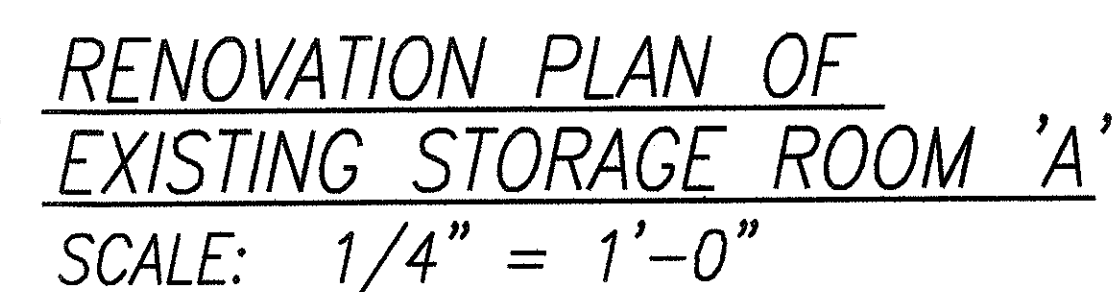
EXISTING WALLS
(INSIDE) TO BE
REPAINTED TO MATCH
EXISTING COLOR

GYPSUM BOARD WALL
EXTENDED TO BOTTOM OF
SUSPENDED CEILING (PAINT
TO MATCH EXISTING COLOR
OF ADJACENT WALLS)

ALTERNATIVE #1
ALTERNATIVE #2

AC

D 1
D 2
D 3
C A-4
C A-3
D A-3
E A-3



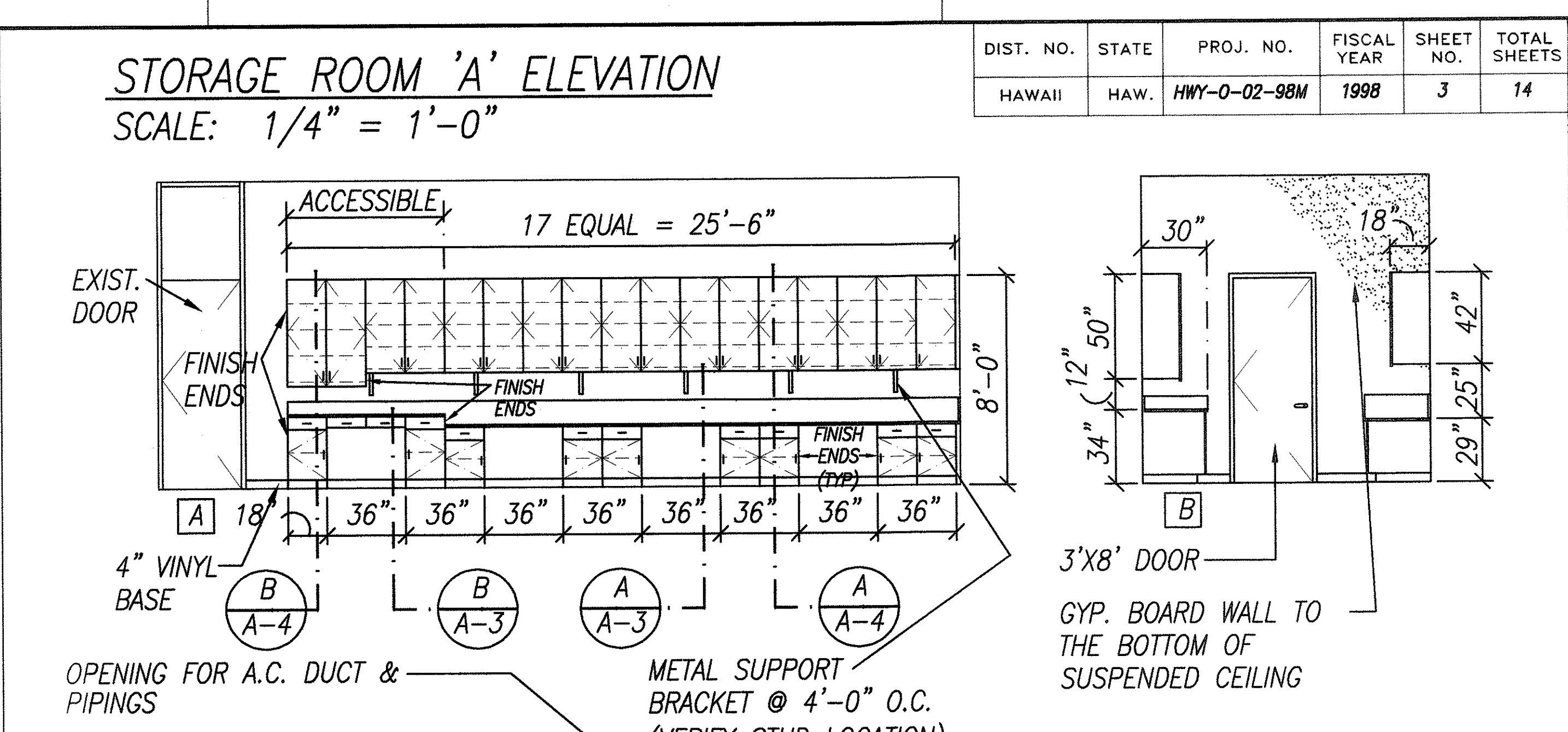
DOOR SCHEDULE
SCALE: $1/4" = 1'-0"$

 LOCKSET

LOCKSET SHALL BE
REKEYED ALIKE TO

 .

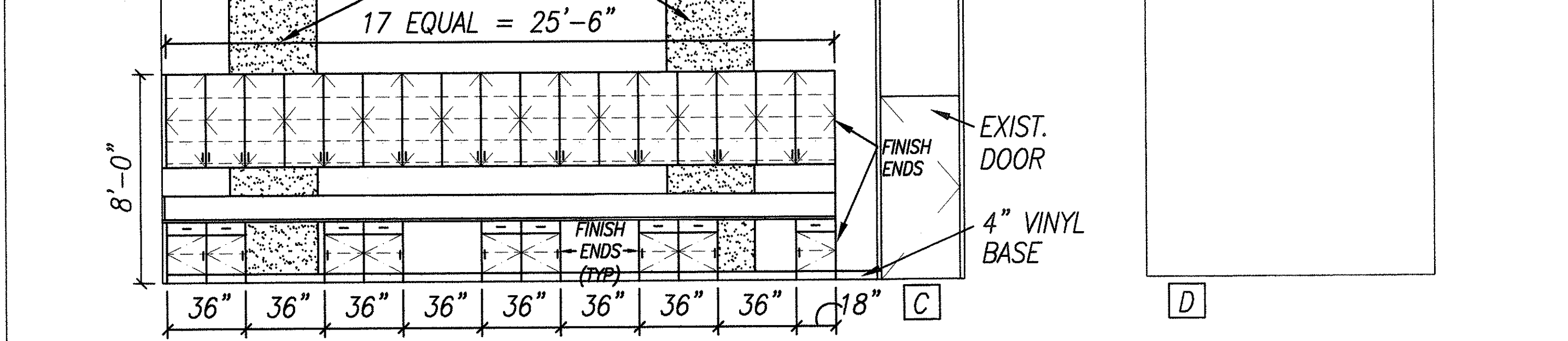
LOCKSETS SHALL NOT KEY
UNDER EXISTING
BUILDING'S MASTER KEY
SYSTEM.



GYP. BOARD OVER EXISTING WOOD LOUVERS

(VERIFY STUD LOCATION) TYP.

EXISTING CMU WALL



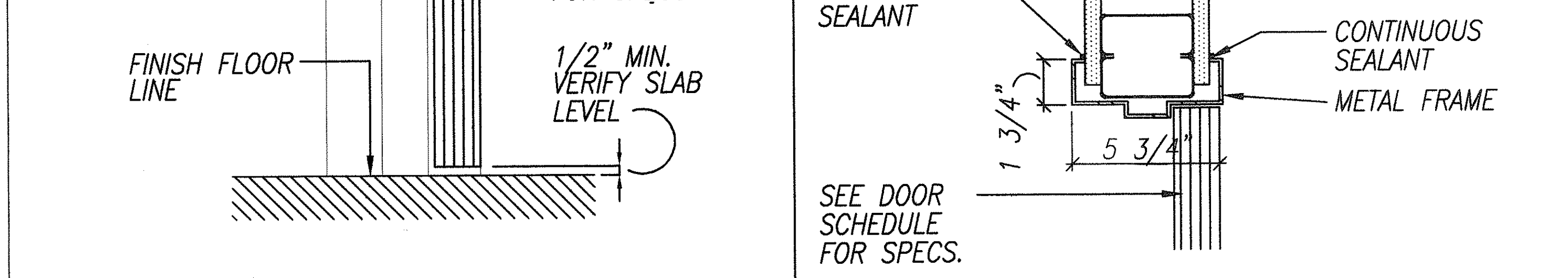
DOOR FRAME BEYOND

SEE DOOR SCHEDULE FOR SPECS.

5/8" TYPE 'X' GYPSUM BOARD

CONTINUOUS

5/8" TYPE 'X' GYPSUM BOARD



THRESHOLD DETAIL SCALE: 3" = 1'-0"	HEAD/JAMB DETAIL SCALE: 3" = 1'-0"
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A-2 RENOVATE EXISTING STORAGE ROOM 'A'

PLAN & ELEVATION

Project No. HWY-0-02-98M

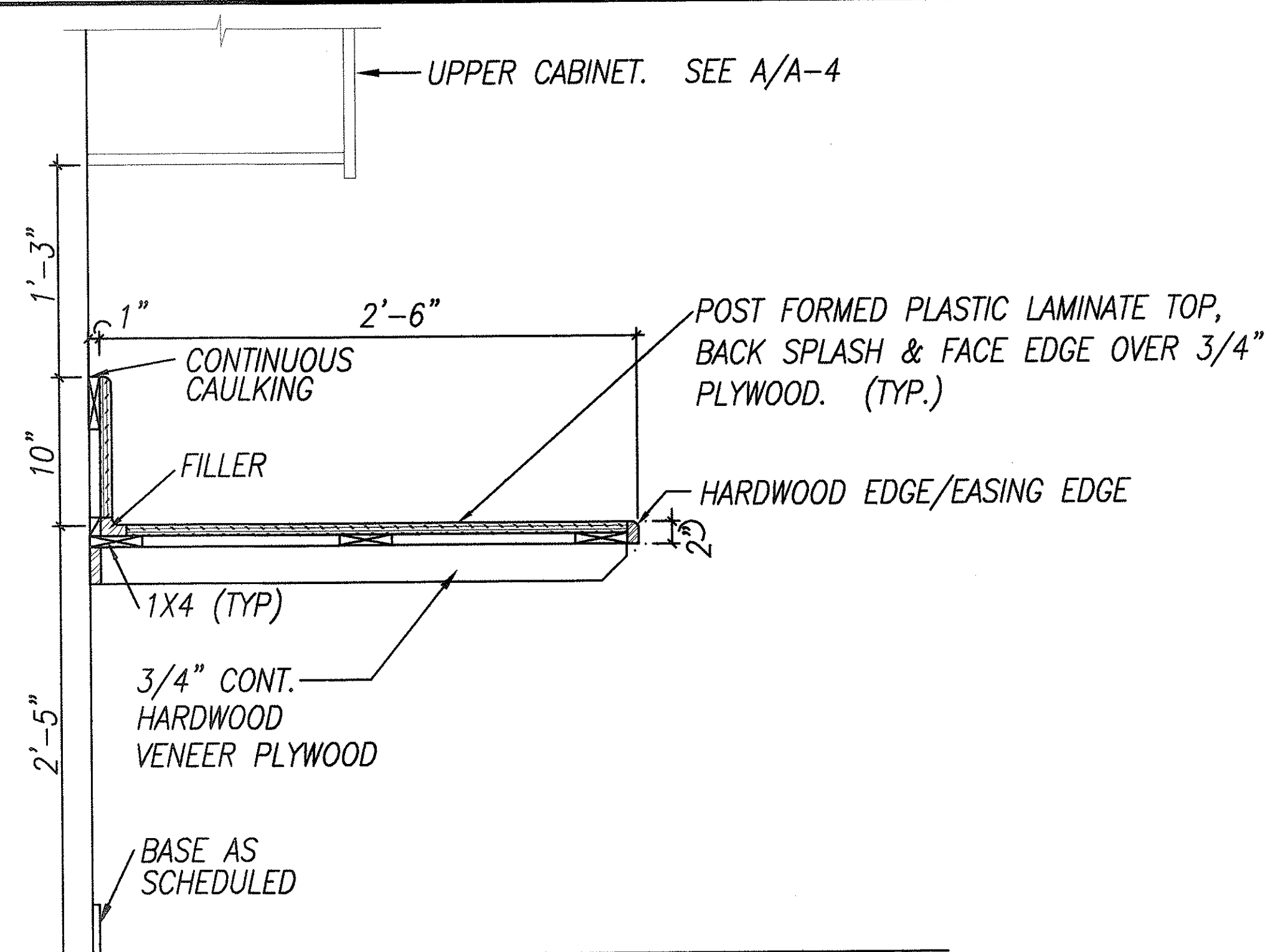
Scale: AS SHOWN Date: MAY, 1998

SHEET No. 3 OF 14 SHEETS

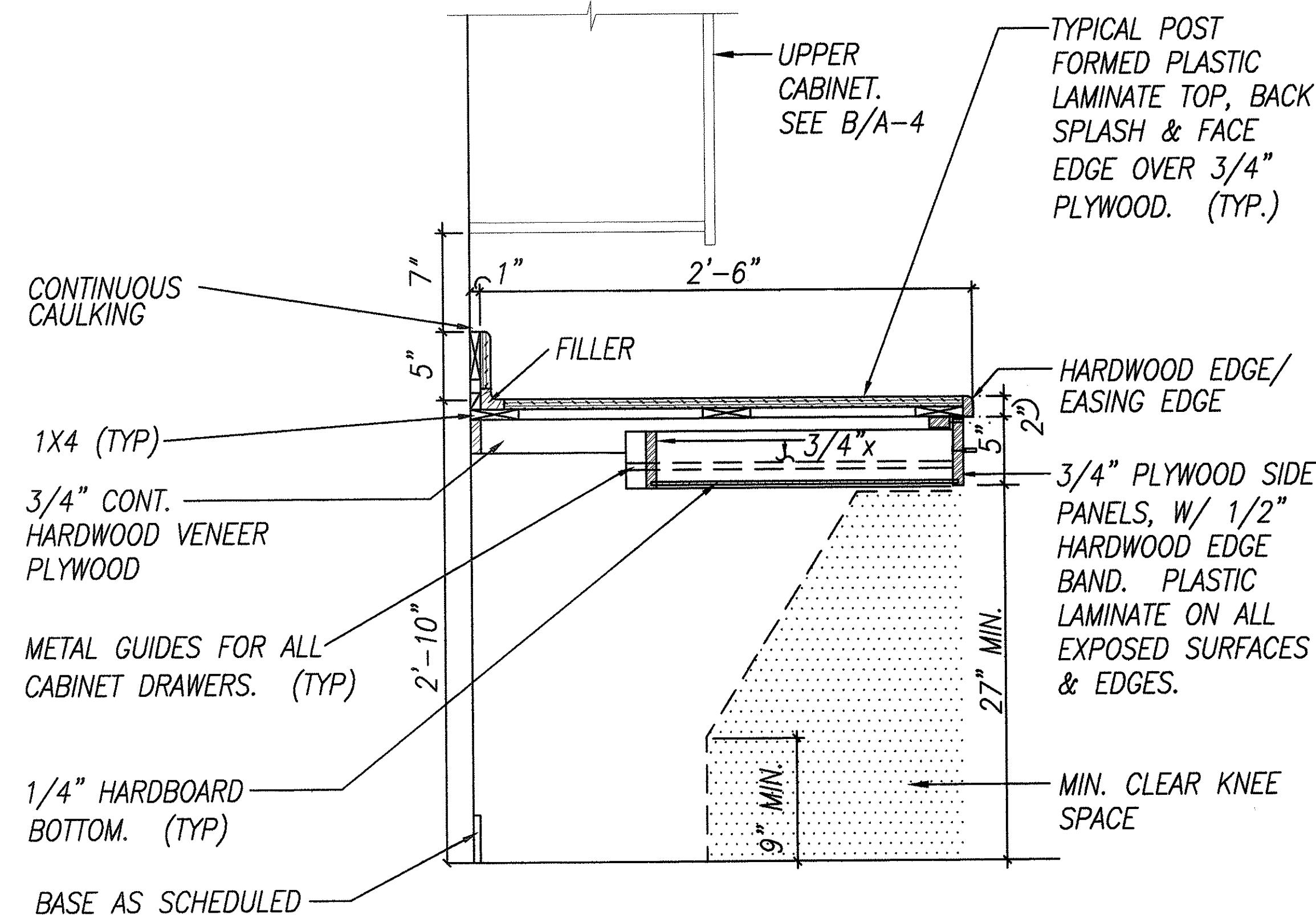
THIS WORK WAS PREPARED BY
MR UNDER MY SUPERVISION.



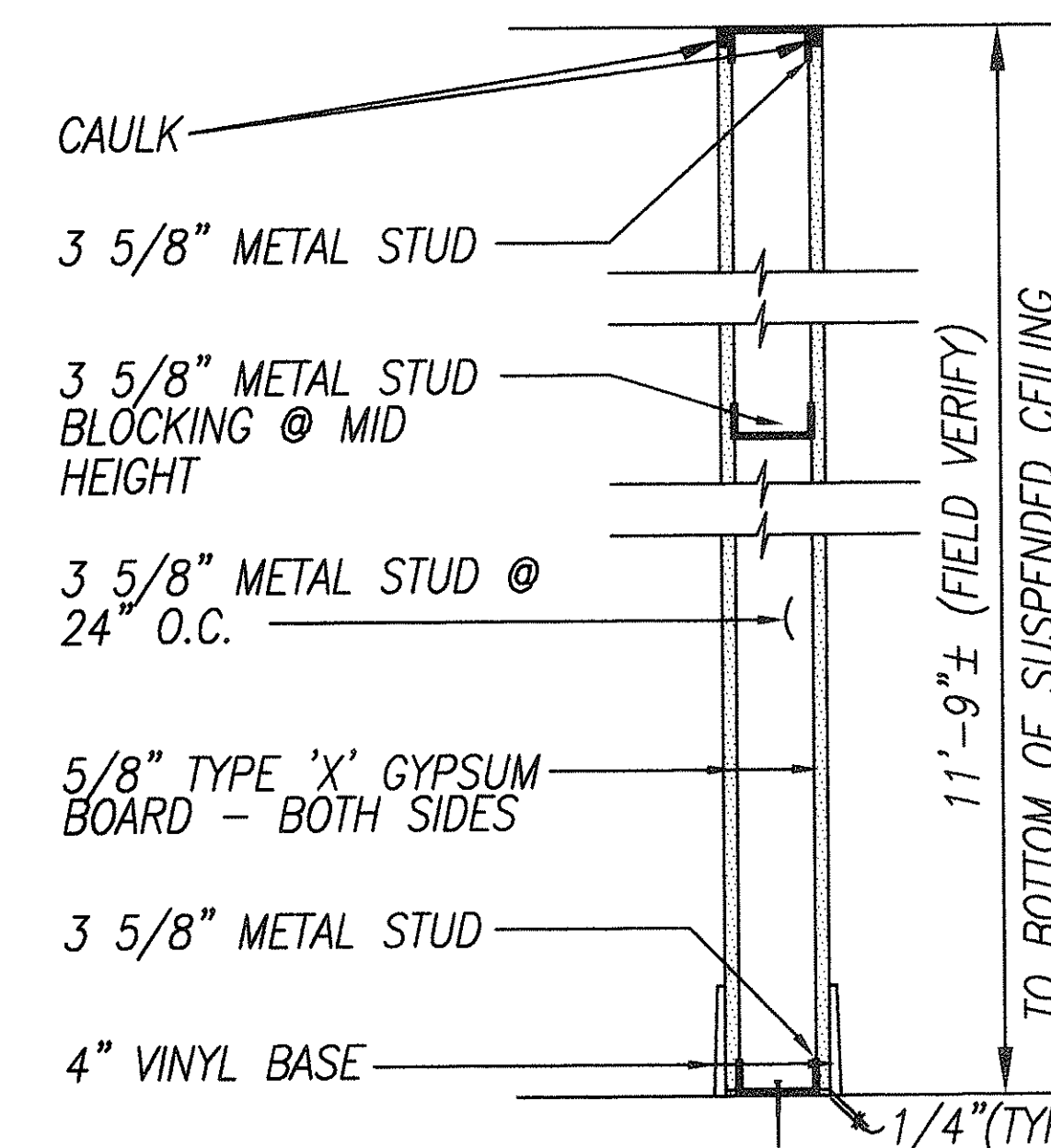
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-02-98M	1998	4	14



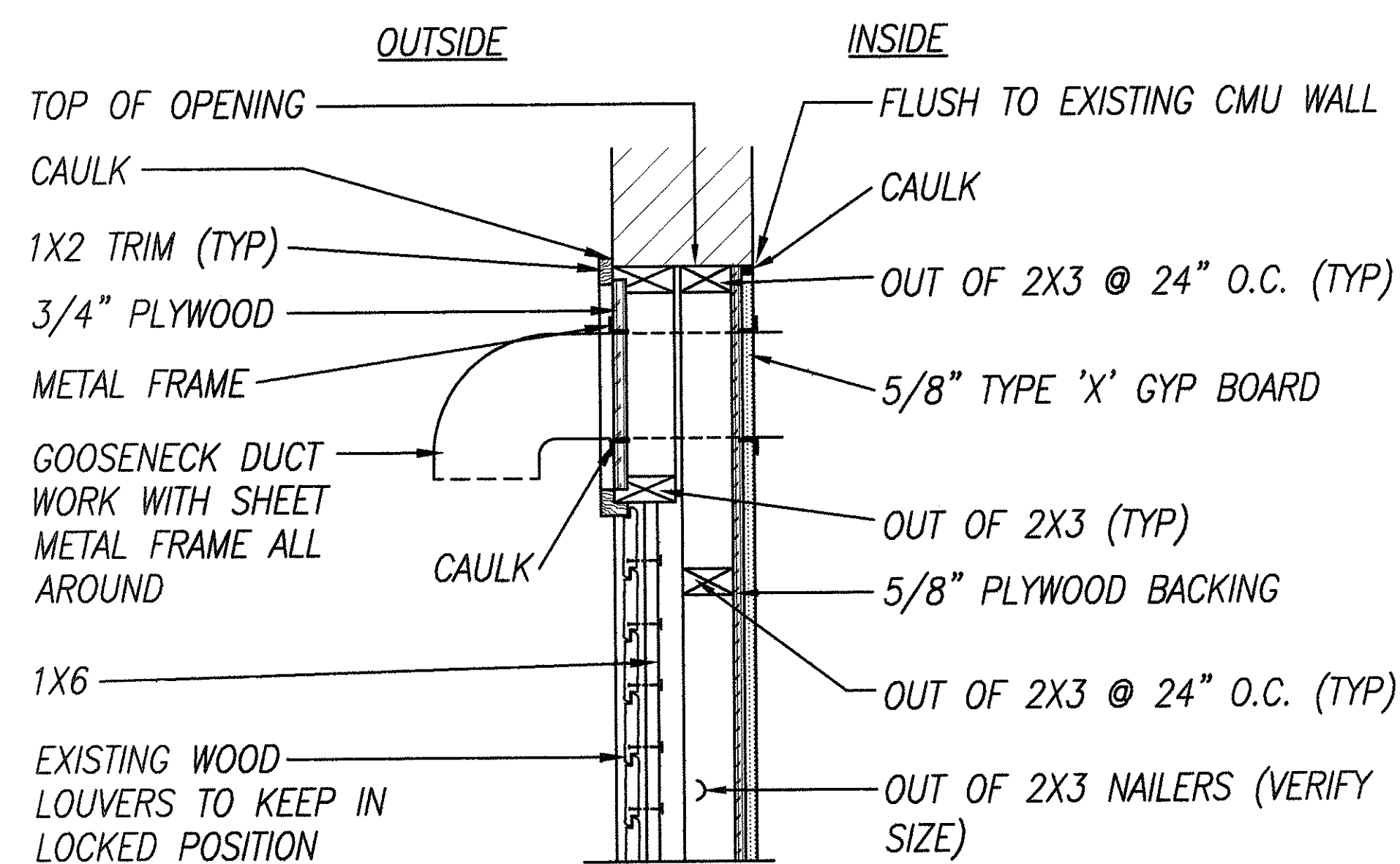
A TYPICAL BASE WORK
COUNTER DETAIL
SCALE 1 1/2" = 1'-0"



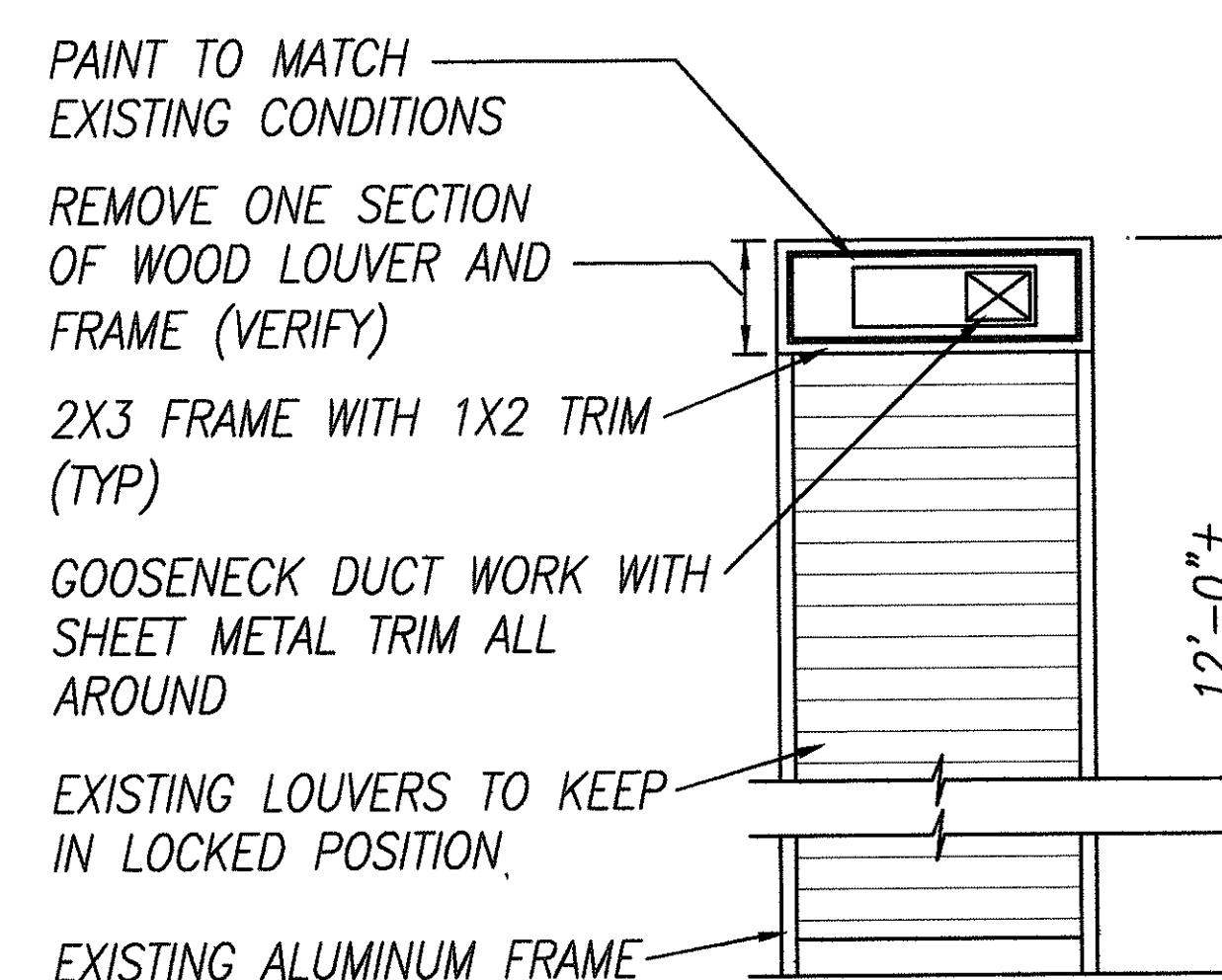
B TYPICAL ACCESSIBLE BASE
WORK COUNTER DETAIL
SCALE 1 1/2" = 1'-0"



E STORAGE RM. 'A'
WALL SECTION
SCALE: 1 1/2" = 1'-0"



C SECTION @ DUCT OPENING
SCALE: 1/2" = 1'-0"



D EXTERIOR ELEVATION
@ DUCT OPENING
SCALE: 1/2" = 1'-0"

ORIGINAL PLAN	DATE
NO. 1	5/29/98
NO. 2	
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A-3 STORAGE ROOM 'A' CABINET AND WALL
DETAILS



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OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS

MATERIALS TESTING LAB

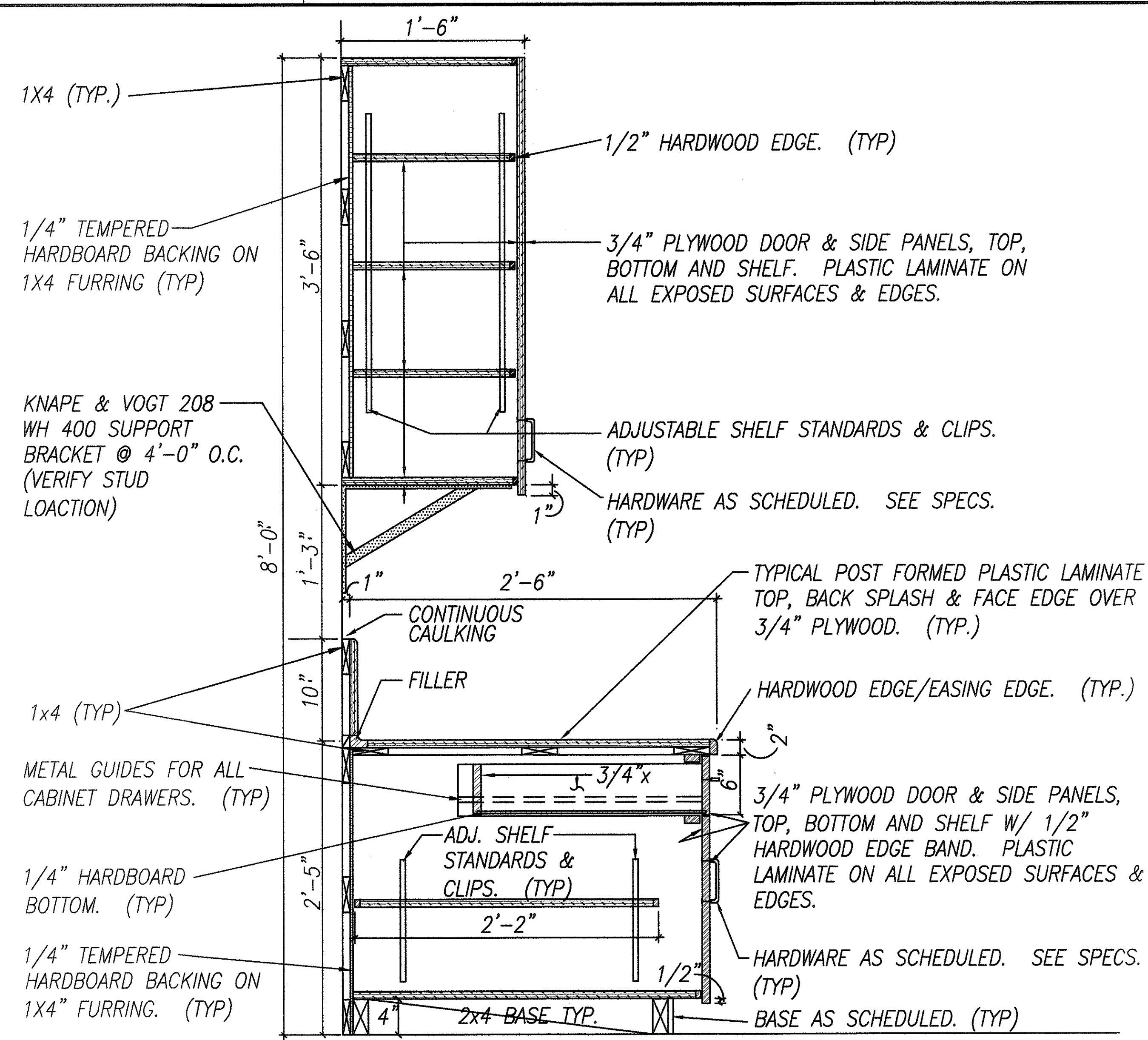
FACILITY IMPROVEMENTS

Project No. HWY-0-02-98M

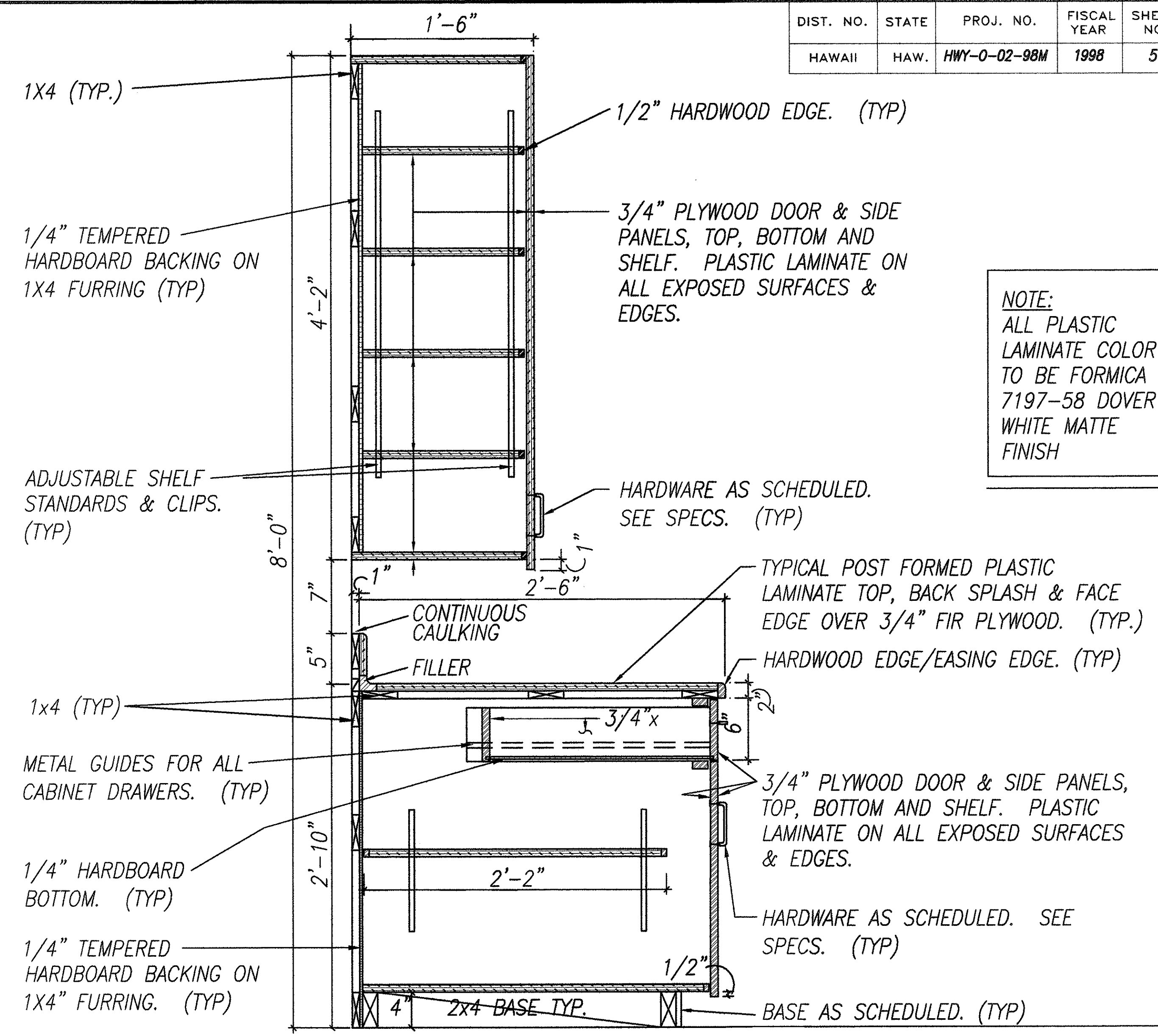
Scale: AS SHOWN Date: MAY, 1998

SHEET No. 4 OF 14 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-02-98M	1998	5	14

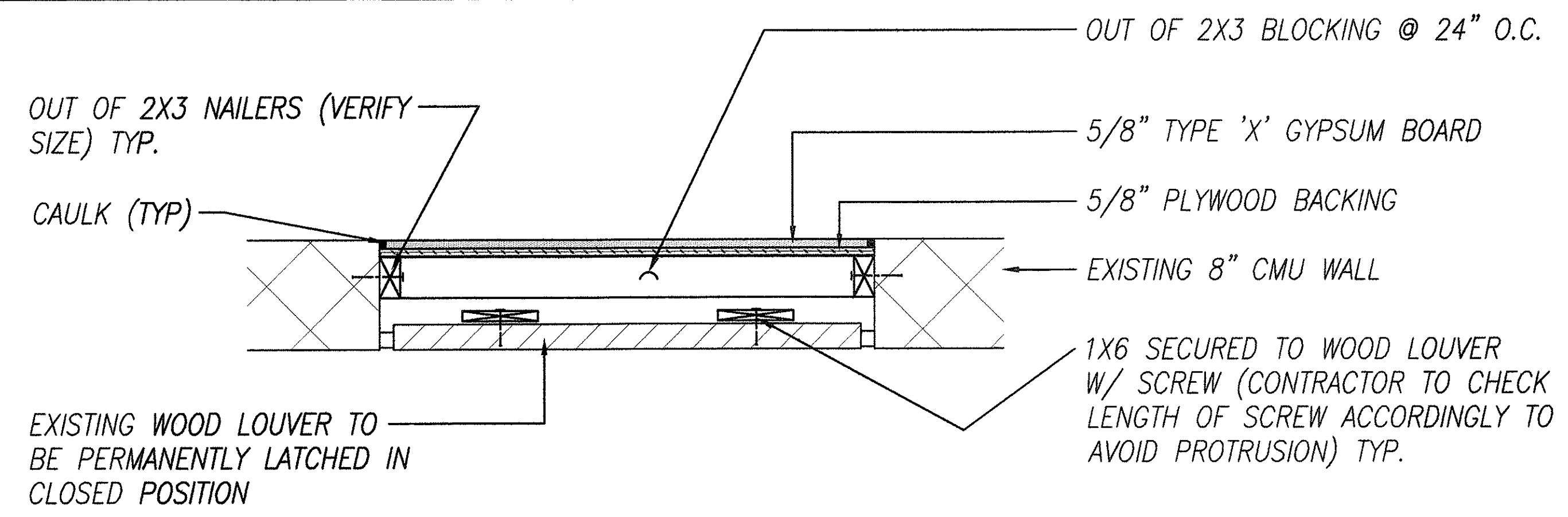


A TYPICAL CABINET DETAILS
SCALE: 1 1/2" = 1'-0"



B TYPICAL ADA ACCESSIBLE CABINET DETAILS
SCALE: 1 1/2" = 1'-0"

NOTE:
ALL PLASTIC LAMINATE COLOR TO BE FORMICA 7197-58 DOVER WHITE MATTE FINISH



C WALL FILLER DETAIL - PLAN VIEW
SCALE: 1 1/2" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	5/29/98
DESIGNED BY	DESIGNED BY	
CHECKED BY	CHECKED BY	
NO.		

A-4 STORAGE ROOM 'A' CABINET AND WALL DETAILS



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

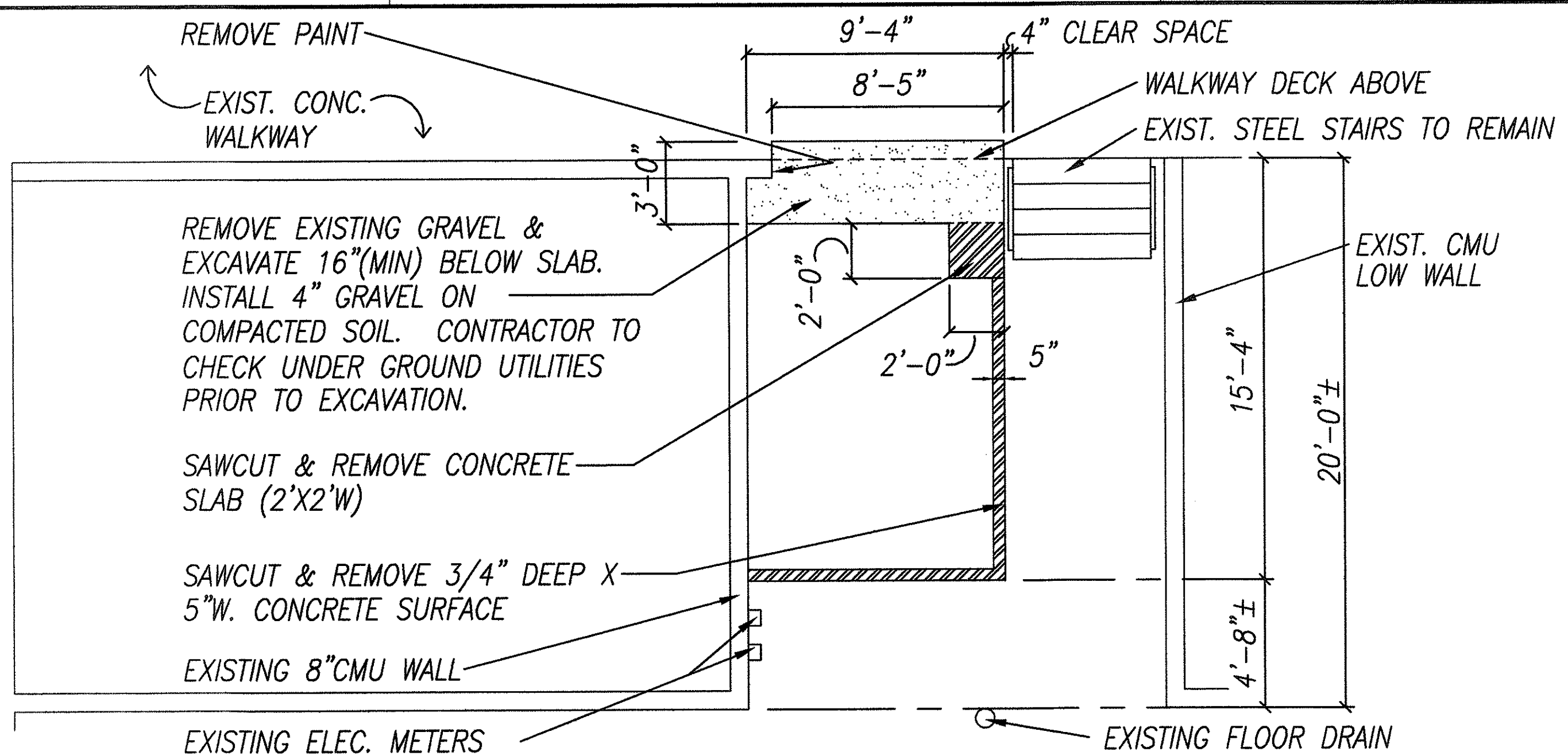
DETAILS

MATERIALS TESTING LAB
FACILITY IMPROVEMENTS
Project No. HWY-0-02-98M

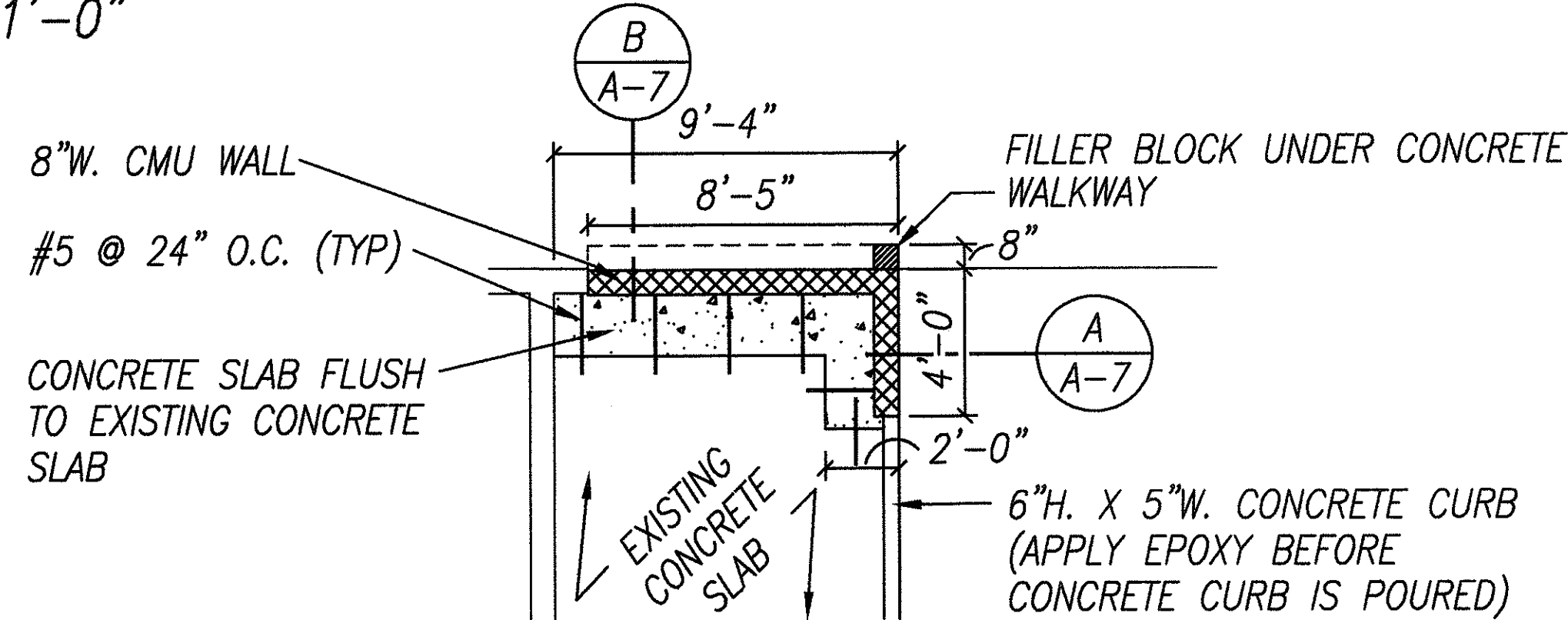
Scale: AS SHOWN Date: MAY, 1998

SHEET No. 5 OF 14 SHEETS

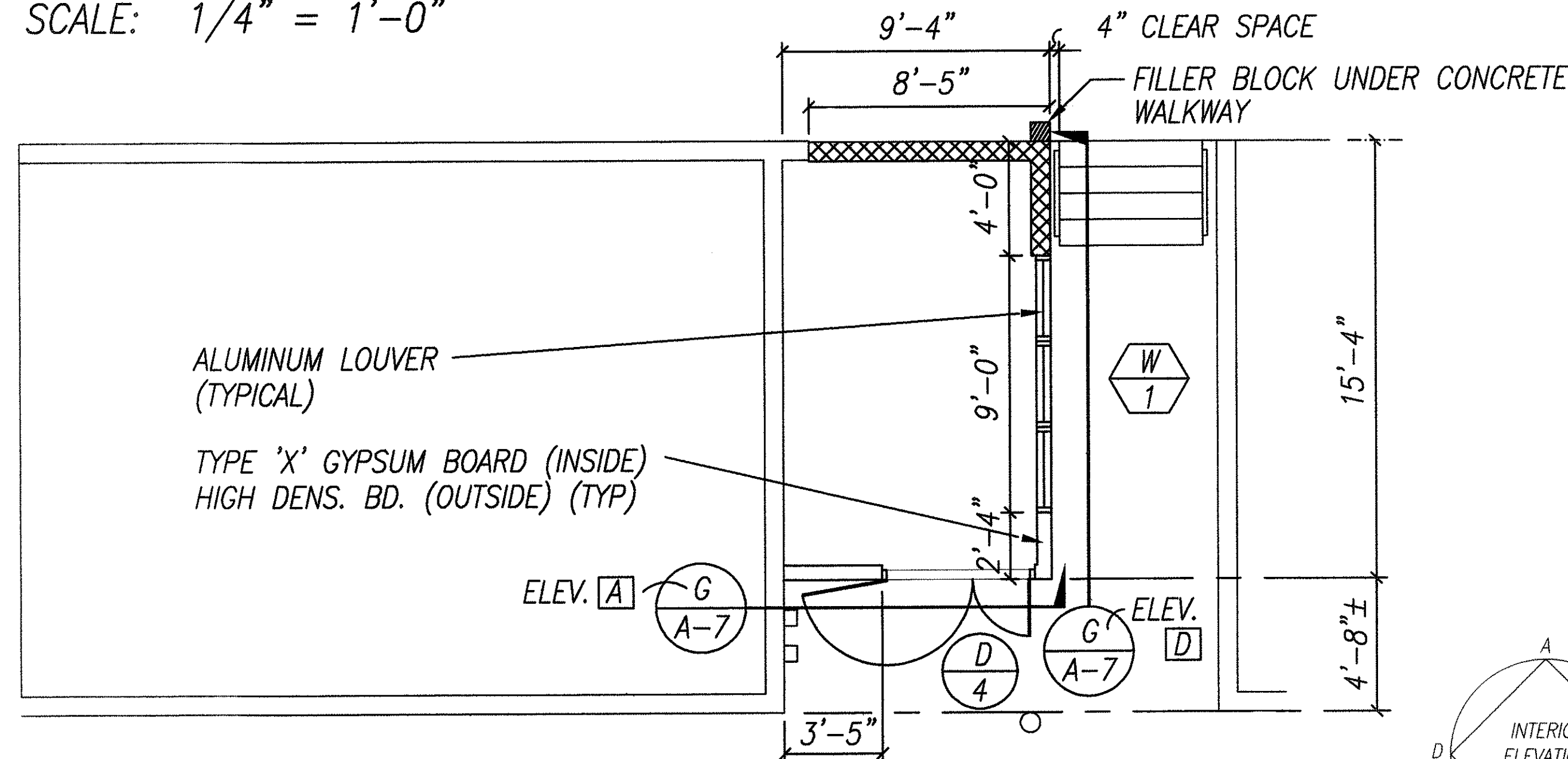
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HAWAII	HAW.	HWY-0-02-98M	1998	6	14



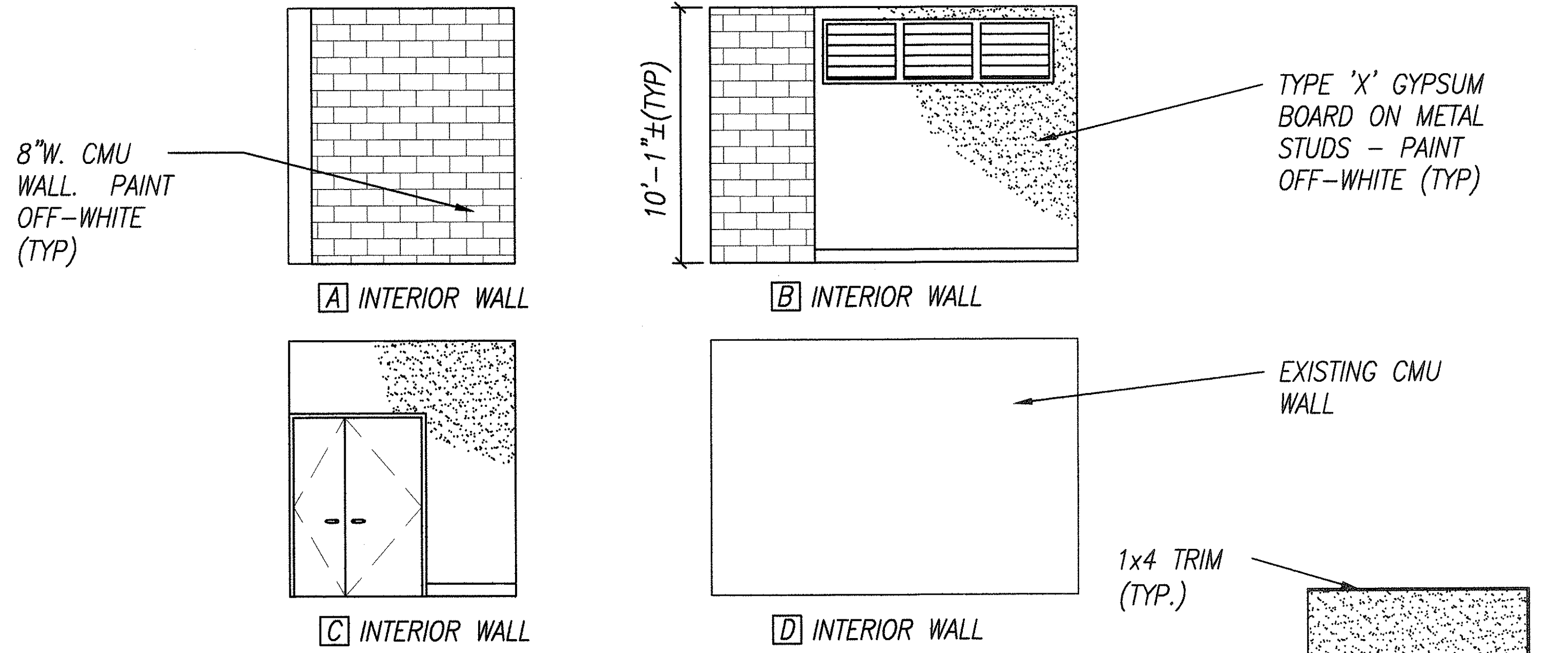
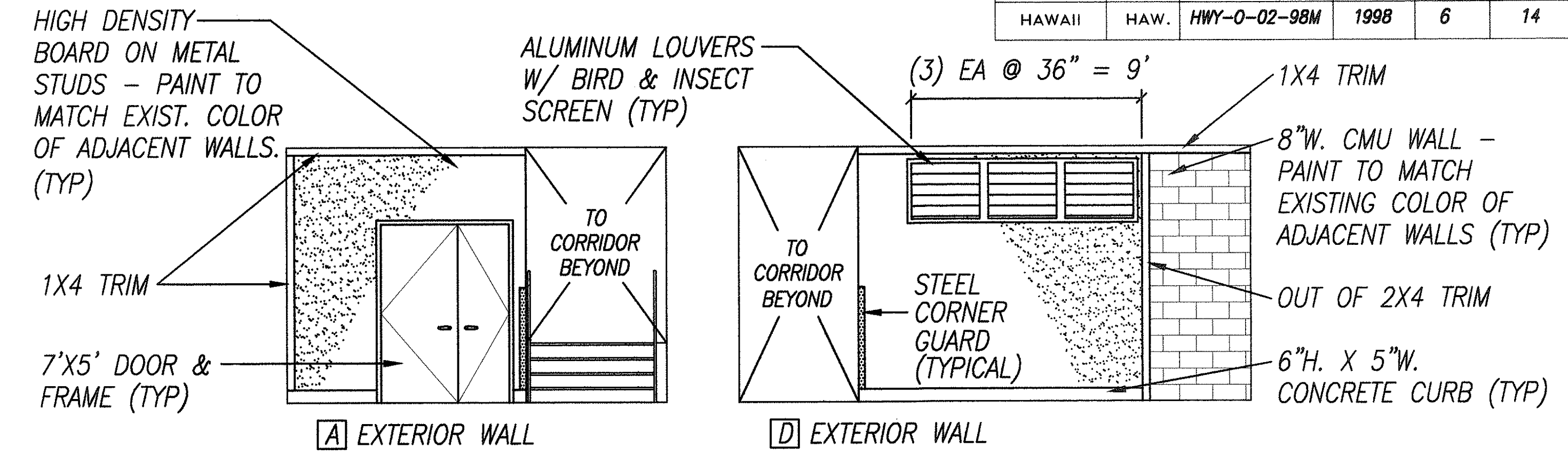
DEMOLITION PLAN (SITE OF STORAGE RM. 'B')
SCALE: 1/4" = 1'-0"



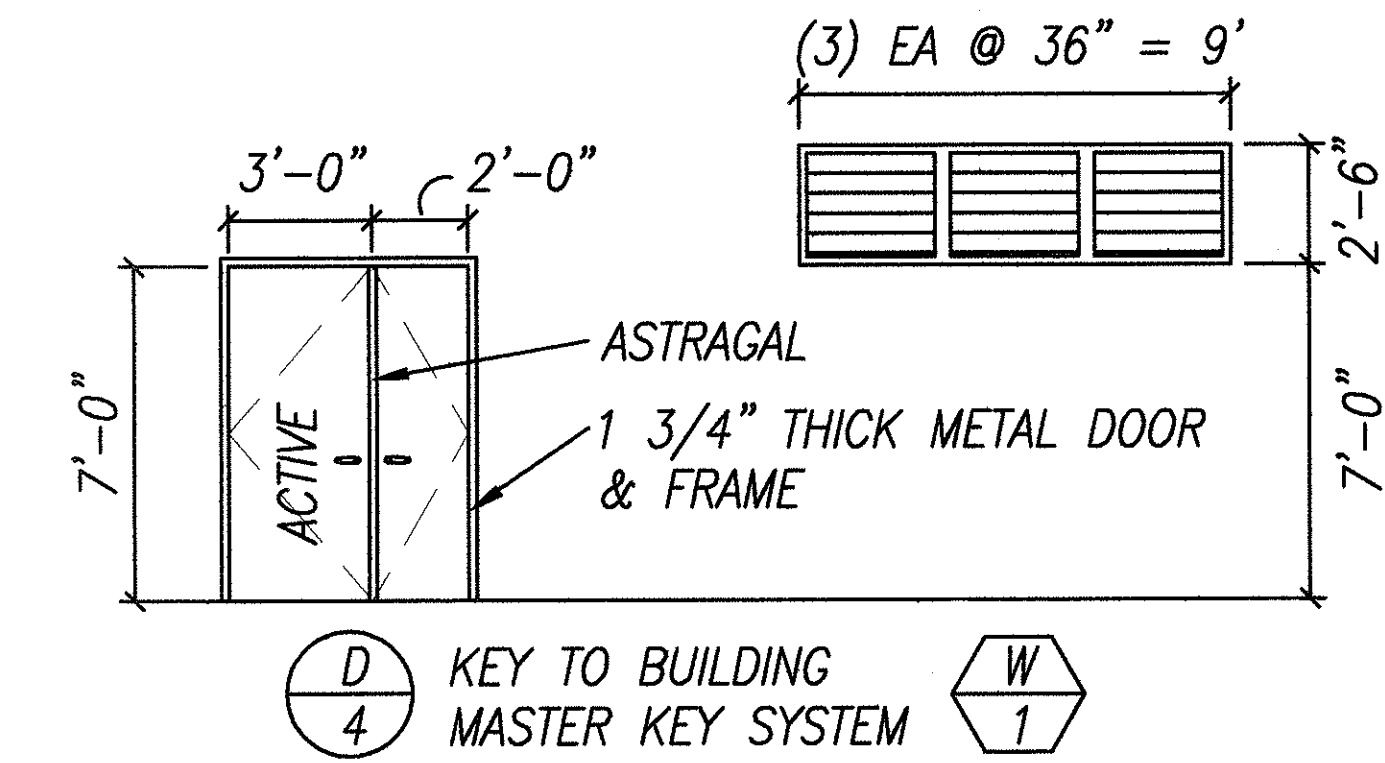
PARTIAL FOUNDATION PLAN - STORAGE RM. 'B'
SCALE: 1/4" = 1'-0"



NEW STORAGE RM. 'B' FLOOR PLAN
SCALE: 1/4" = 1'-0"

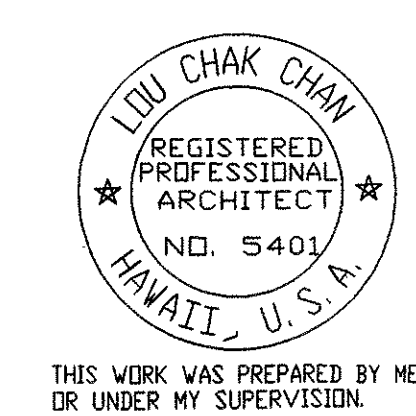


STORAGE ROOM 'B' ELEVATIONS
SCALE: 1/4" = 1'-0"



DOOR & WINDOW SCHEDULE
SCALE: 1/4" = 1'-0"

- STRUCTURAL NOTES:**
- ALL CONCRETE SHALL HAVE 28 DAY COMPRESSION STRENGTH OF 3000 P.S.I.
 - ALL LIGHT GAGE METAL MEMBERS, CORNER GUARDS, ANCHOR BOLTS, AND EXPANSION BOLTS SHALL BE HOT DIP GALVANIZED.



A-5 CONSTRUCT NEW STORAGE ROOM 'B'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN & ELEVATIONS

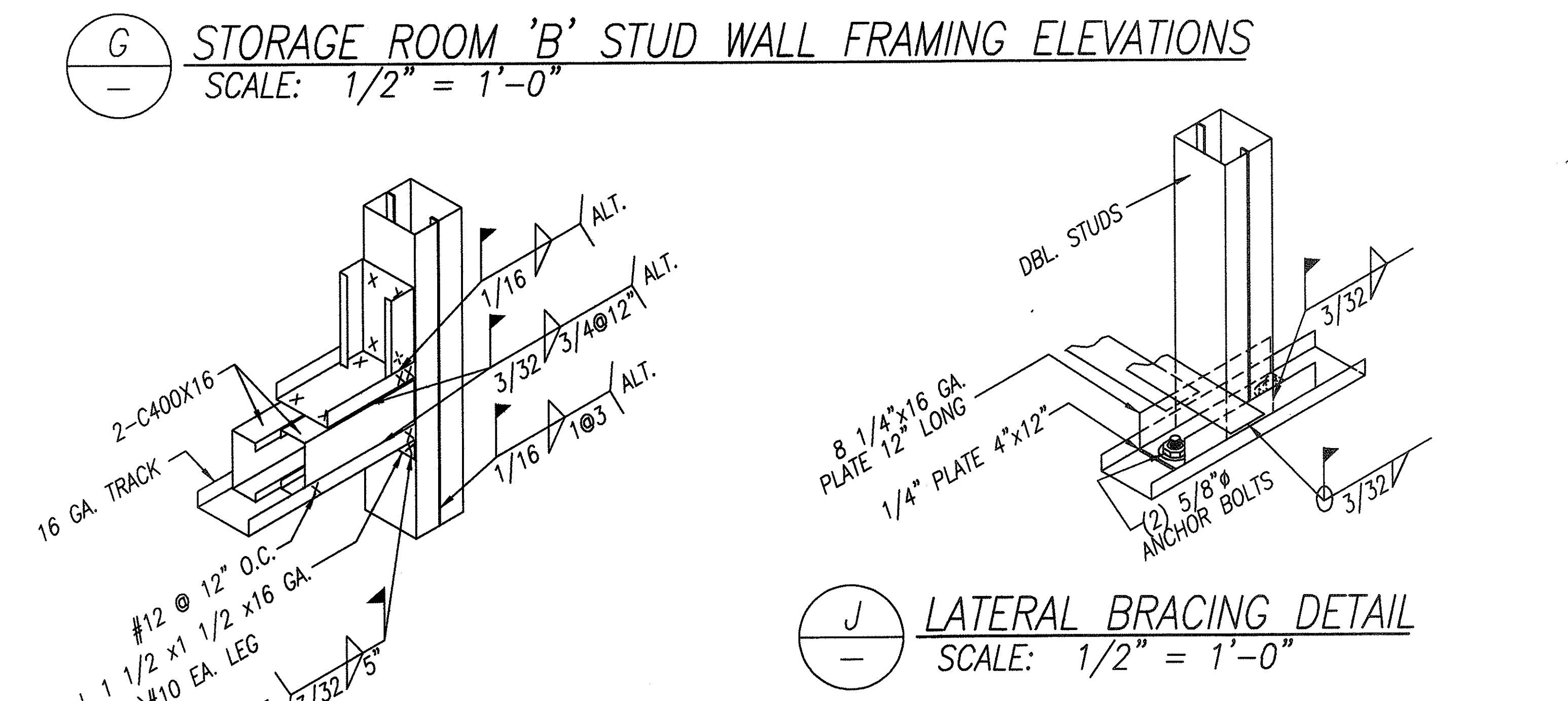
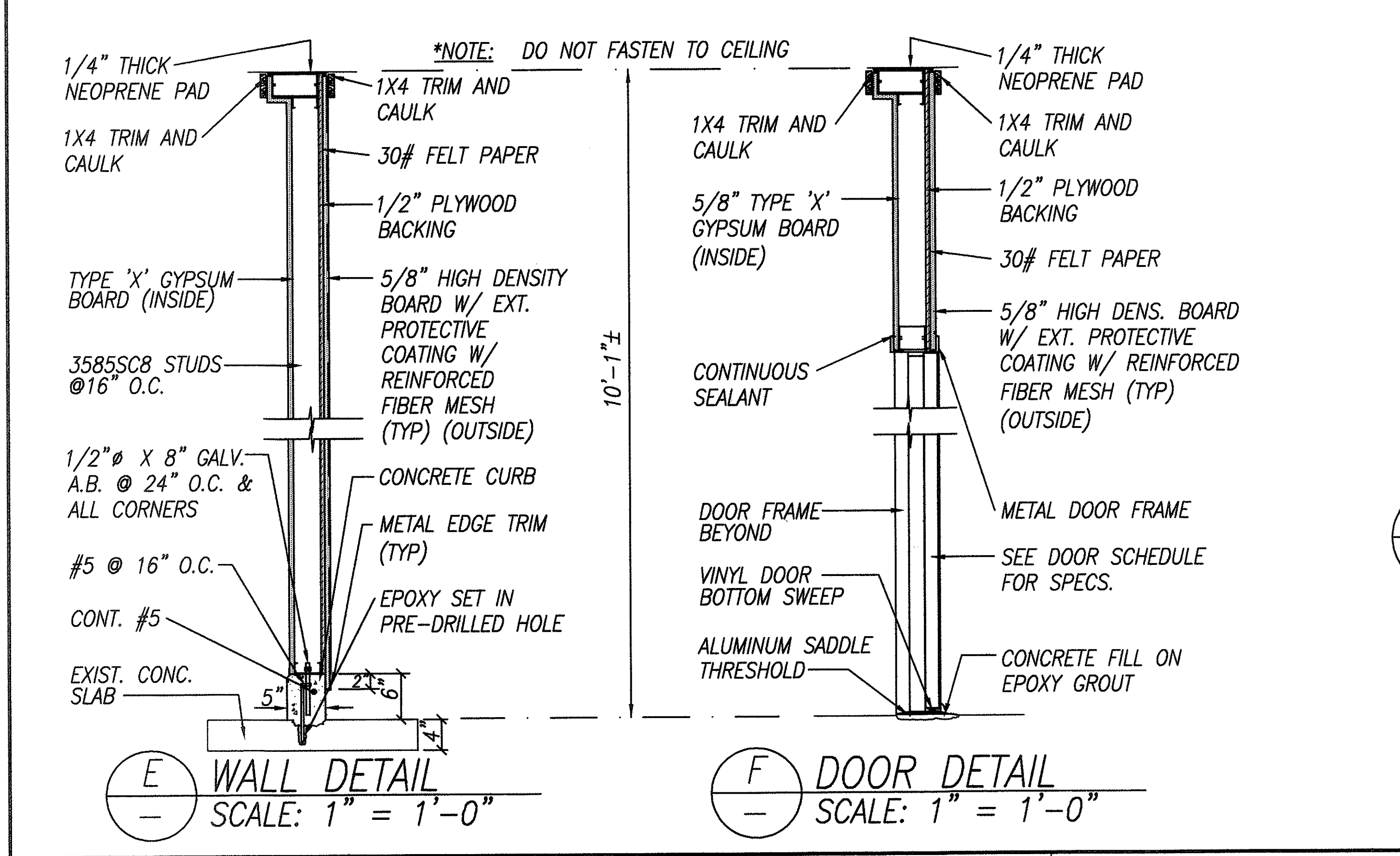
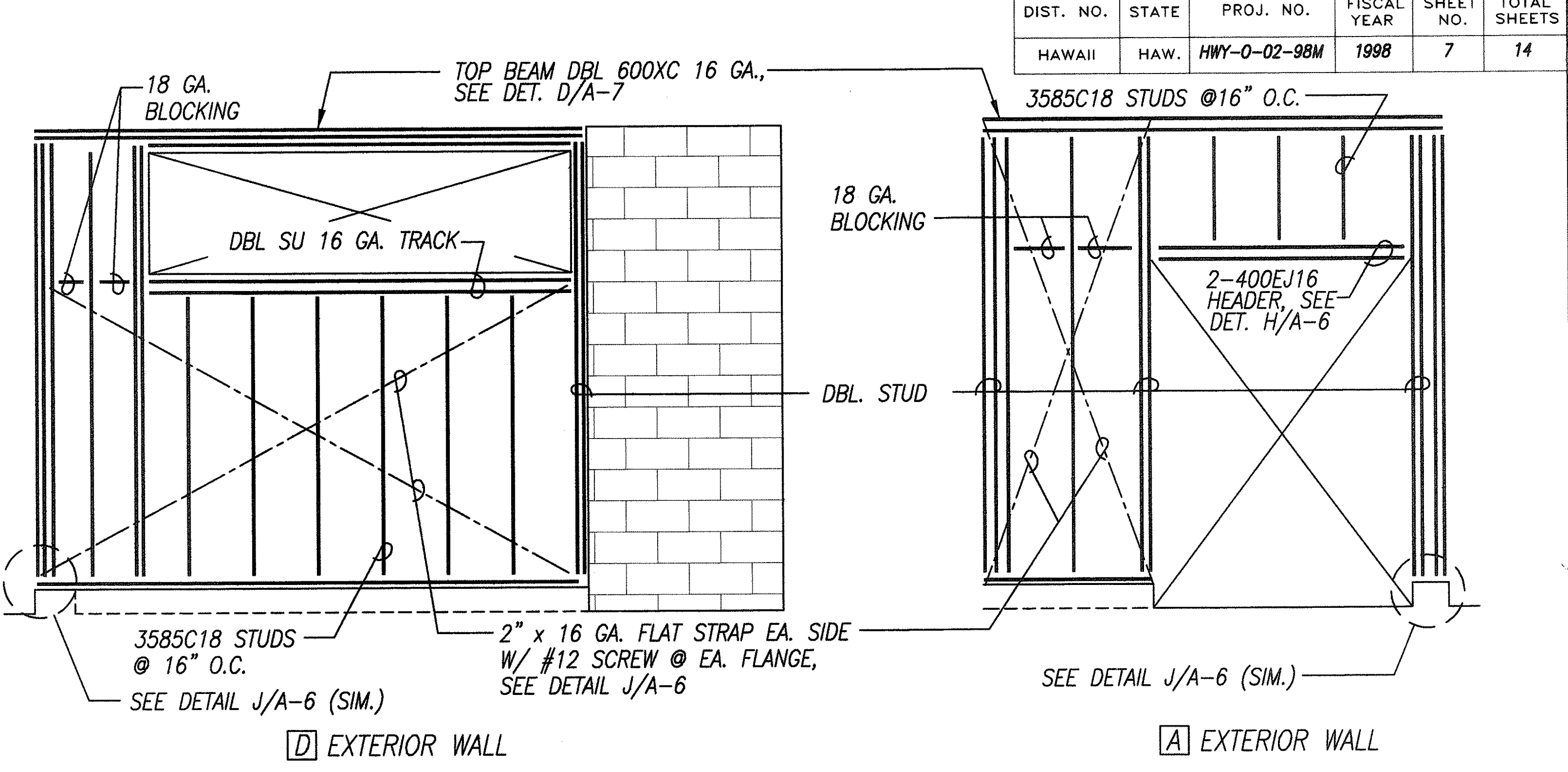
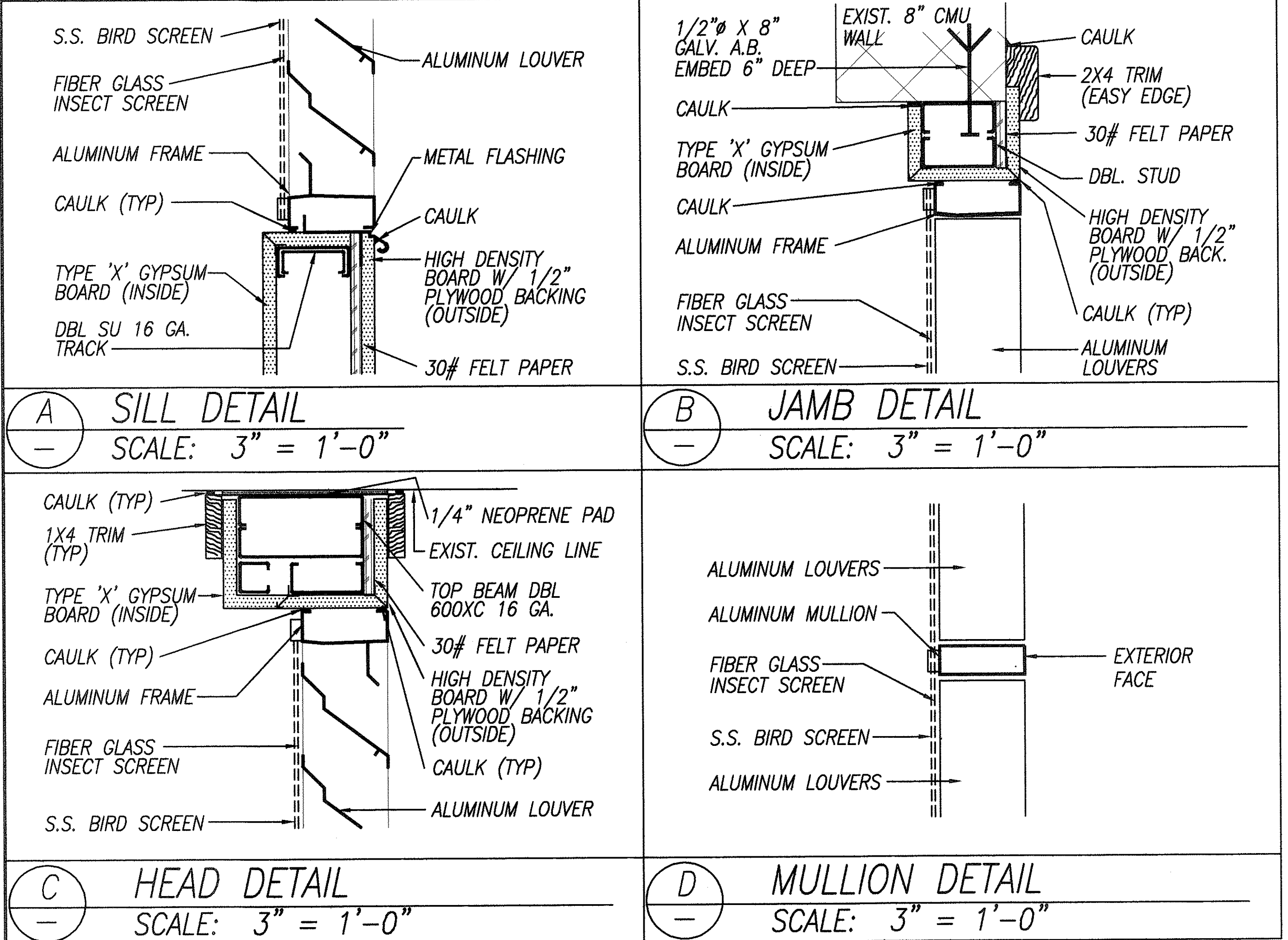
MATERIALS TESTING LAB
FACILITY IMPROVEMENTS
Project No. HWY-0-02-98M

Scale: AS SHOWN Date: MAY, 1998

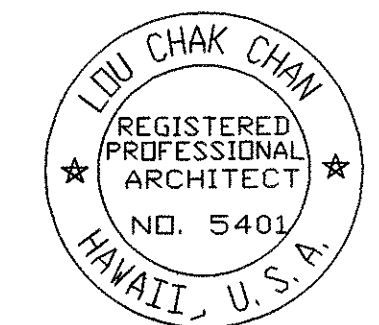
SHEET No. 6 OF 14 SHEETS

ORIGINAL SURVEY PLOTTED BY	DATE
DRAWN BY	5/29/98
TRACED BY	
DESIGNED BY	
CHECKED BY	
NO.	

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-02-98M	1998	7	14



ORIGINAL PLAN	DATE
5/29/98	
DESIGNED BY	
CHECKED BY	
NO.	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

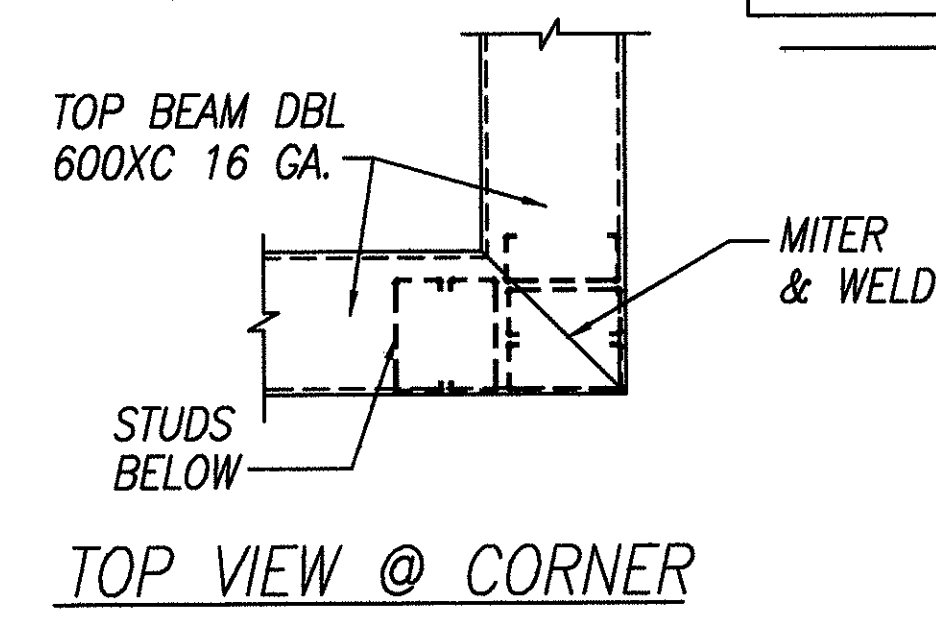
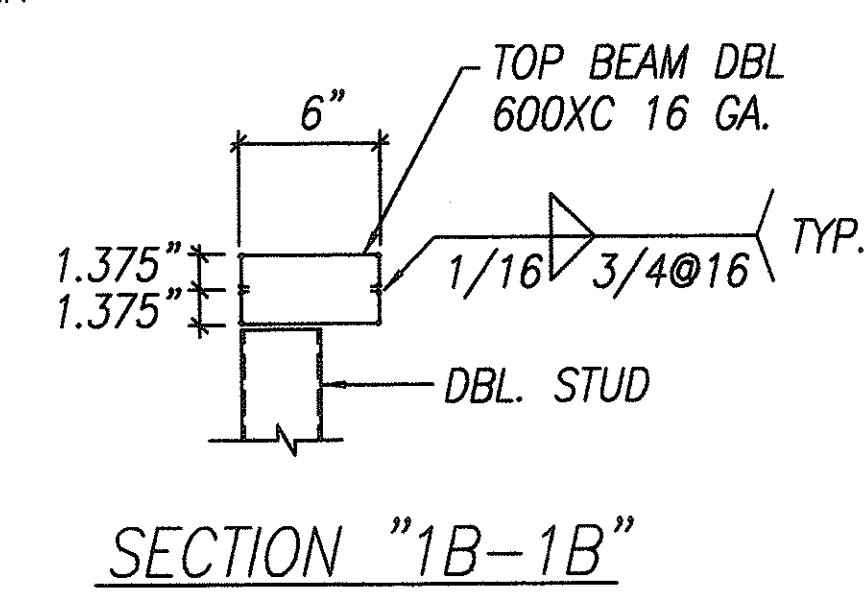
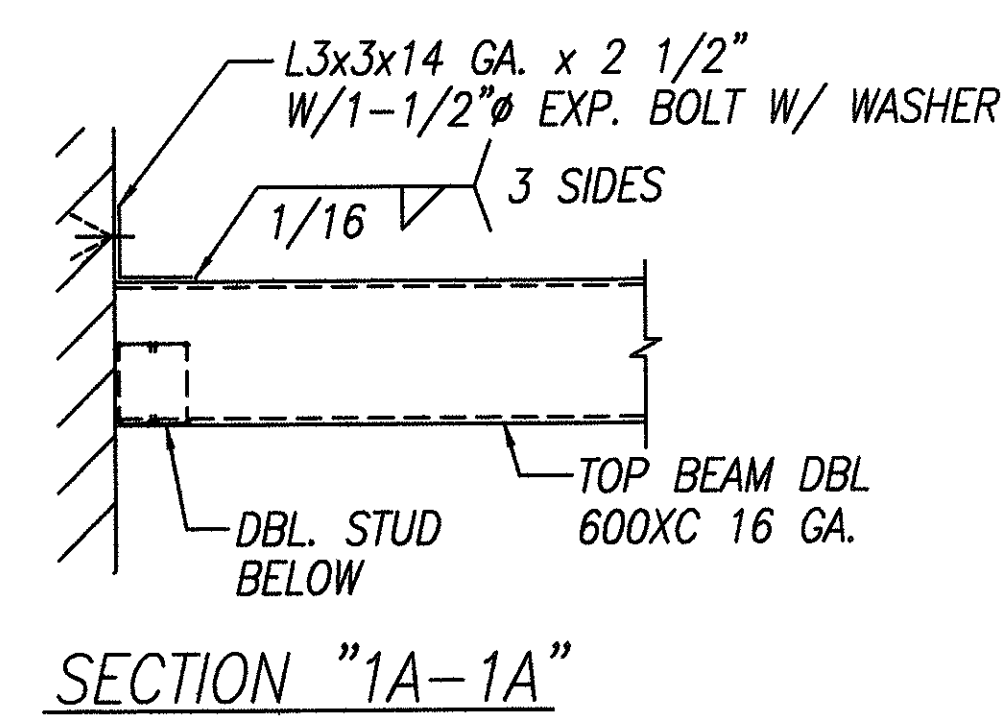
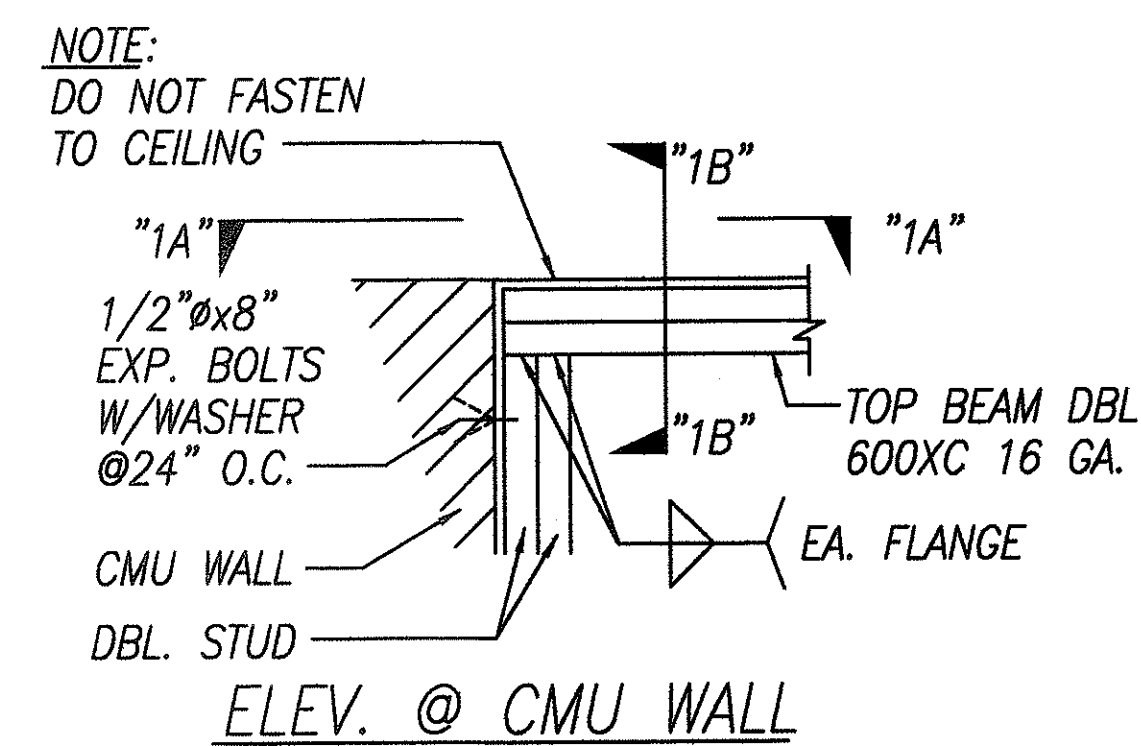
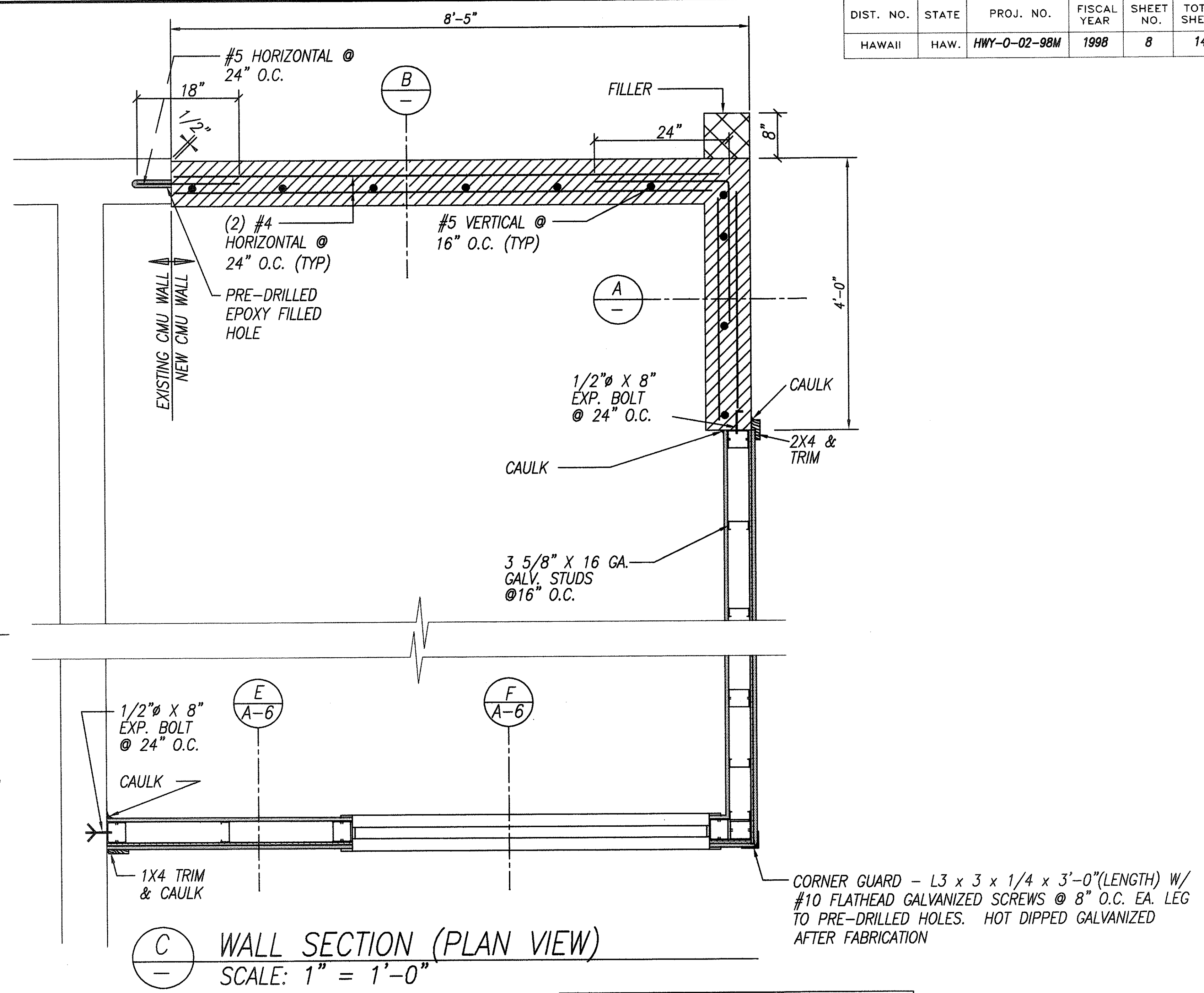
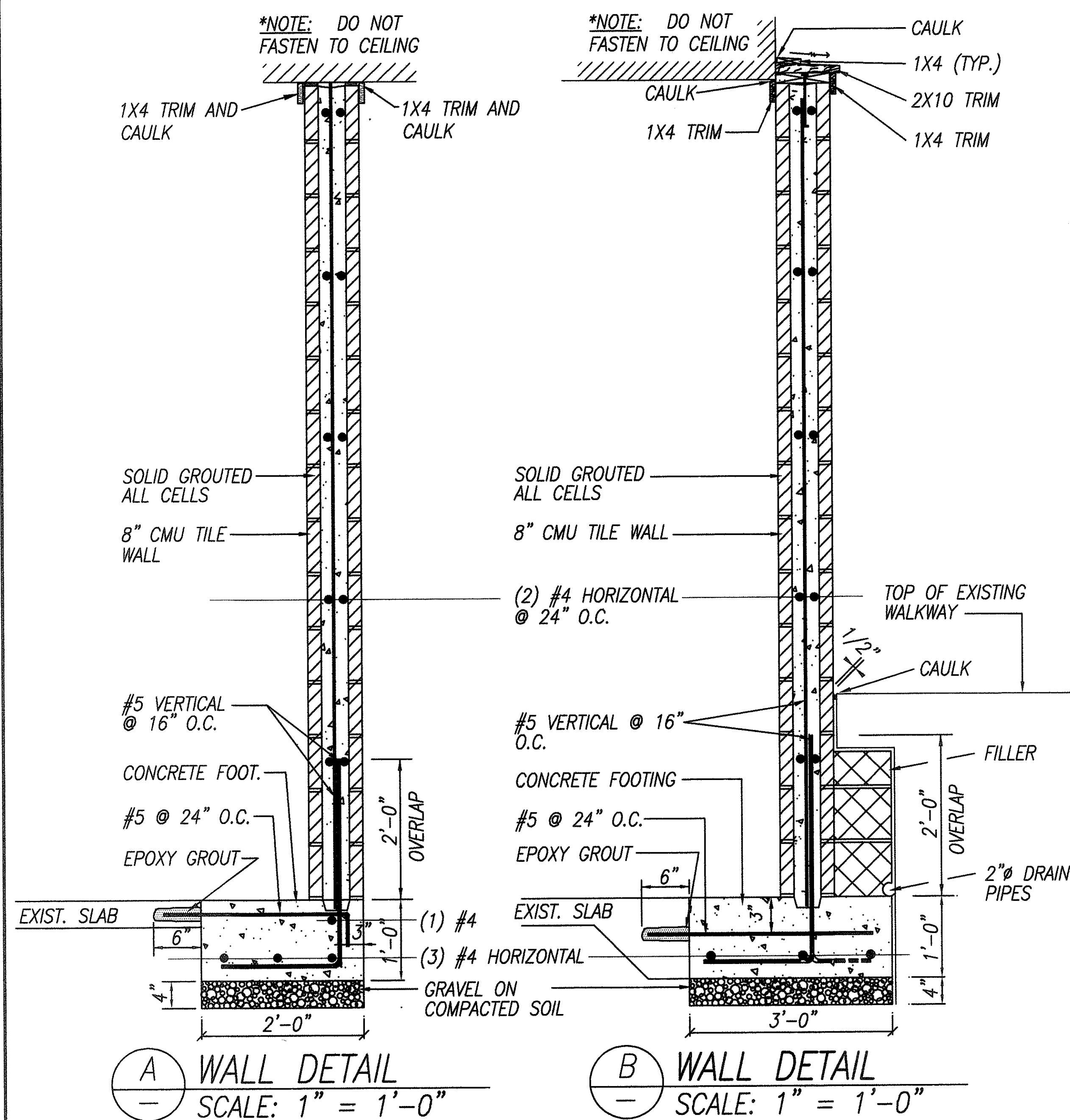
DETAILS

MATERIALS TESTING LAB
FACILITY IMPROVEMENTS
Project No. HWY-0-02-98M

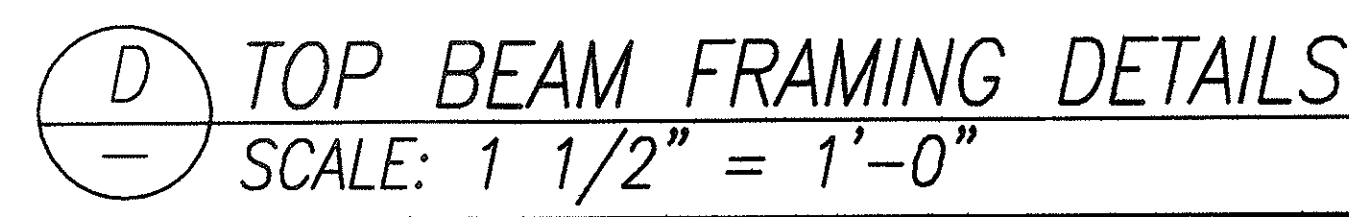
Scale: AS SHOWN Date: MAY, 1998

SHEET No. 7 OF 14 SHEETS

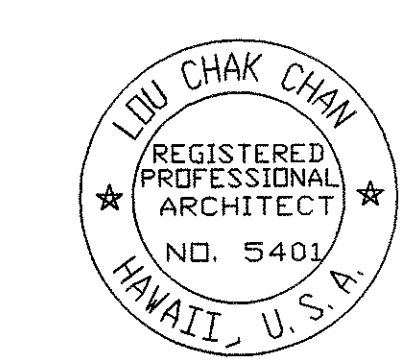
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-02-98M	1998	8	14



NOTE:
ALL STEEL MEMBERS, FASTENERS SHALL BE
HOT DIPPED GALVANIZED.



A-7 STORAGE ROOM 'B' WALL DETAILS



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS

**MATERIALS TESTING LAB
FACILITY IMPROVEMENTS**

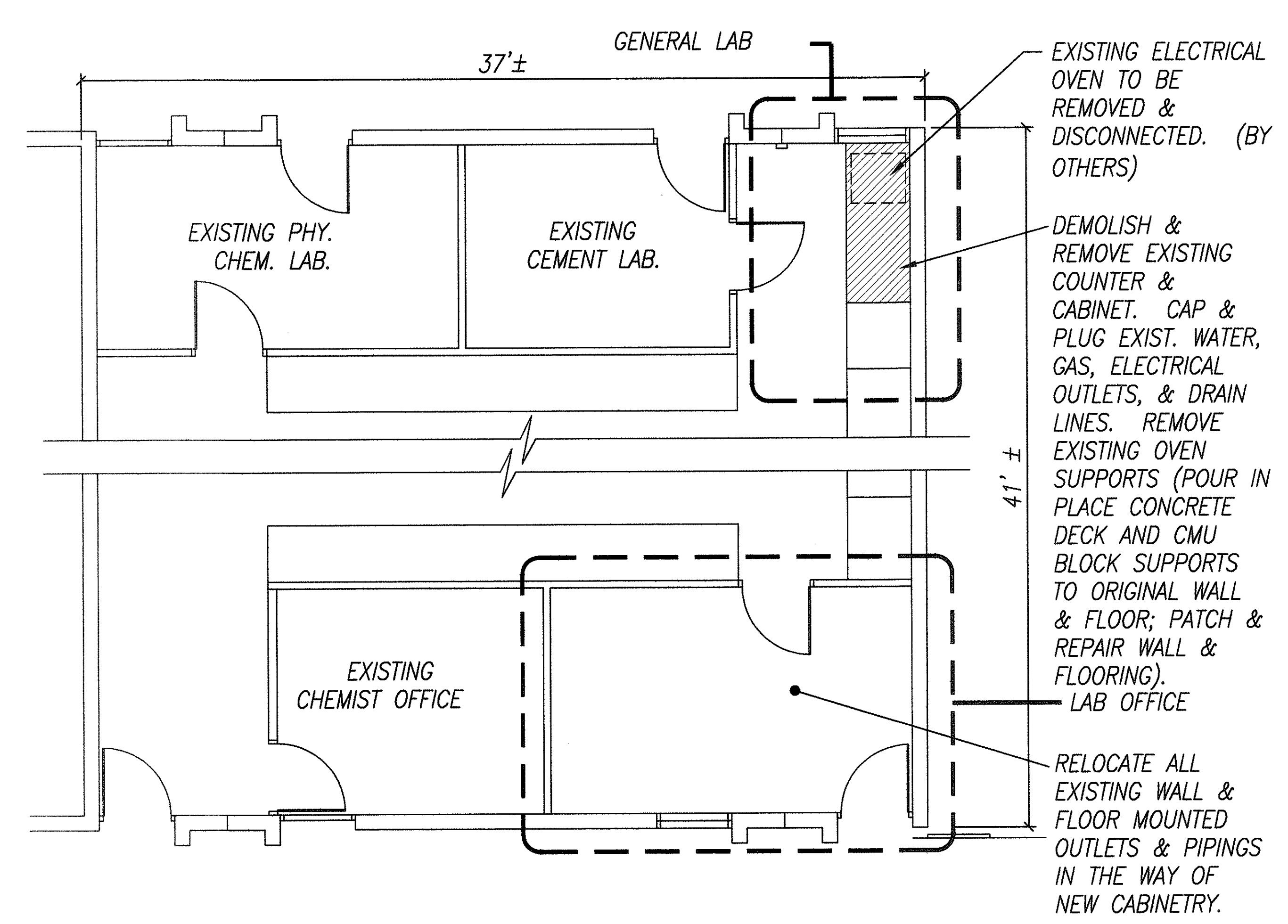
Project No. HWY-0-02-98M

Scale: AS SHOWN Date: MAY, 1998

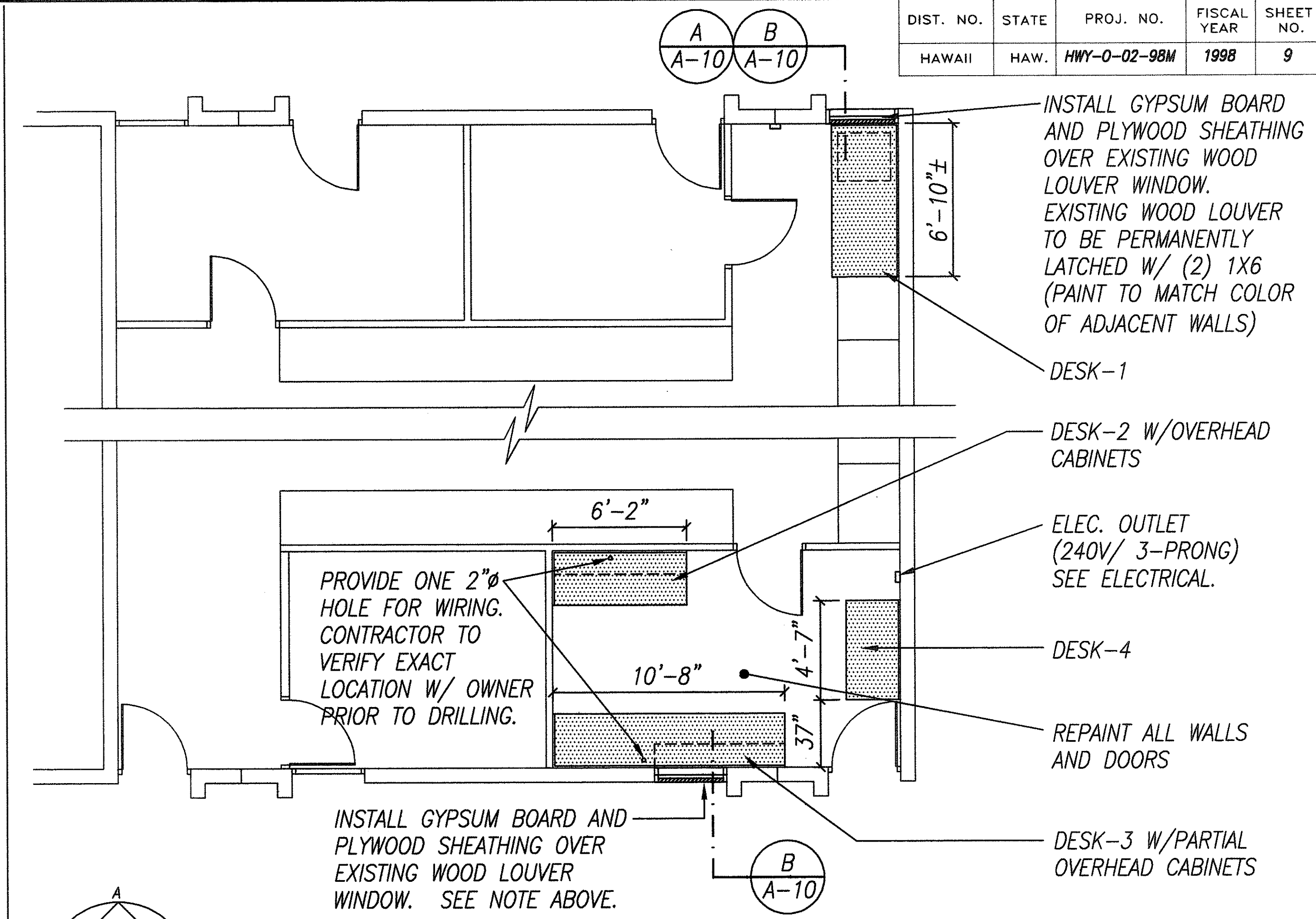
SHEET No. 8 OF 14 SHEETS

ORIGINAL SURVEY PLOTTED BY DATE
DRAWN BY M. Fitzgerald 5/29/98
CHECKED BY L. Chan
NOTED BY L. Chan
No.

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-02-98M	1998	9	14

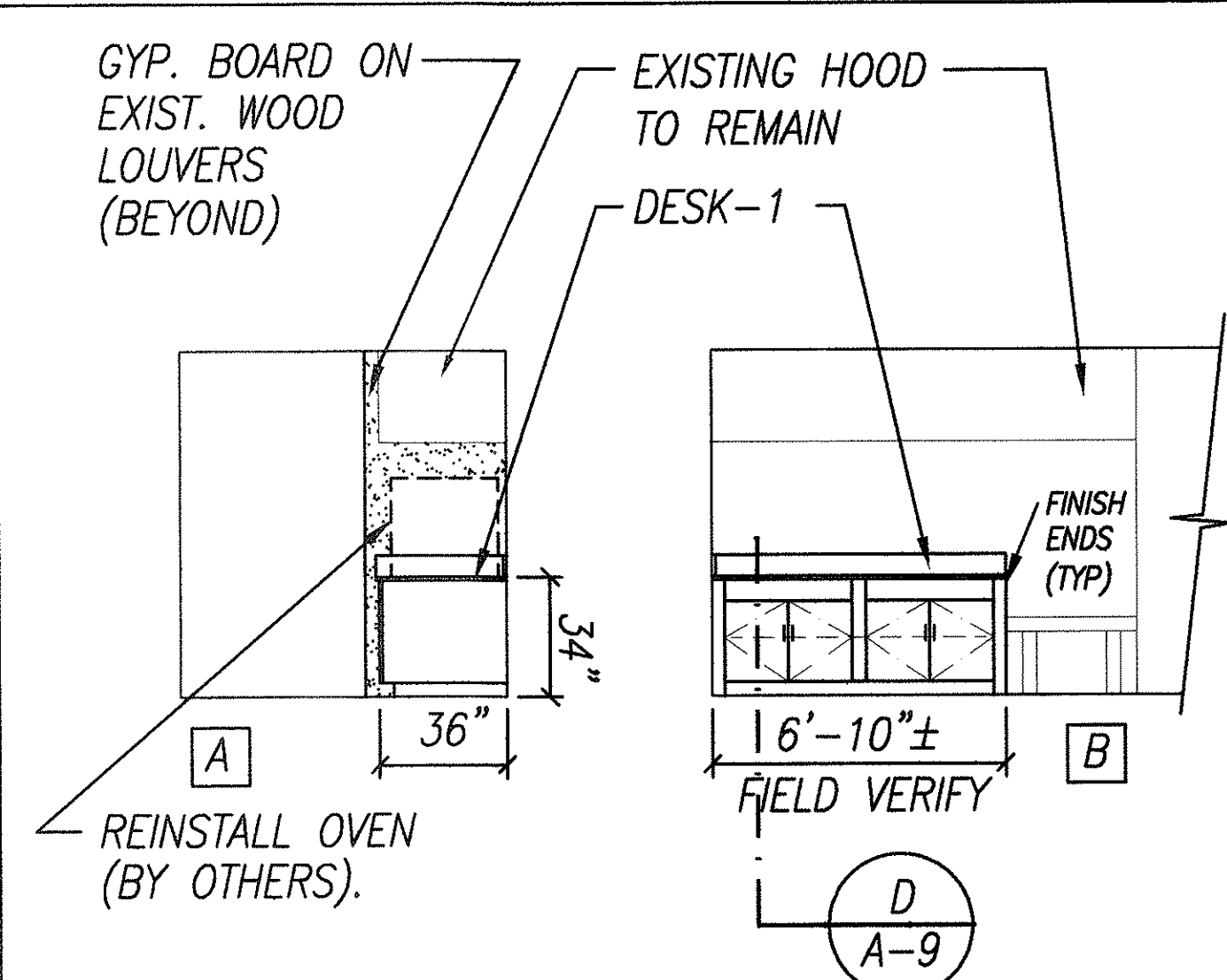


DEMOLITION PLAN – MATERIALS TESTING LAB.
SCALE: 1/4" = 1'-0"

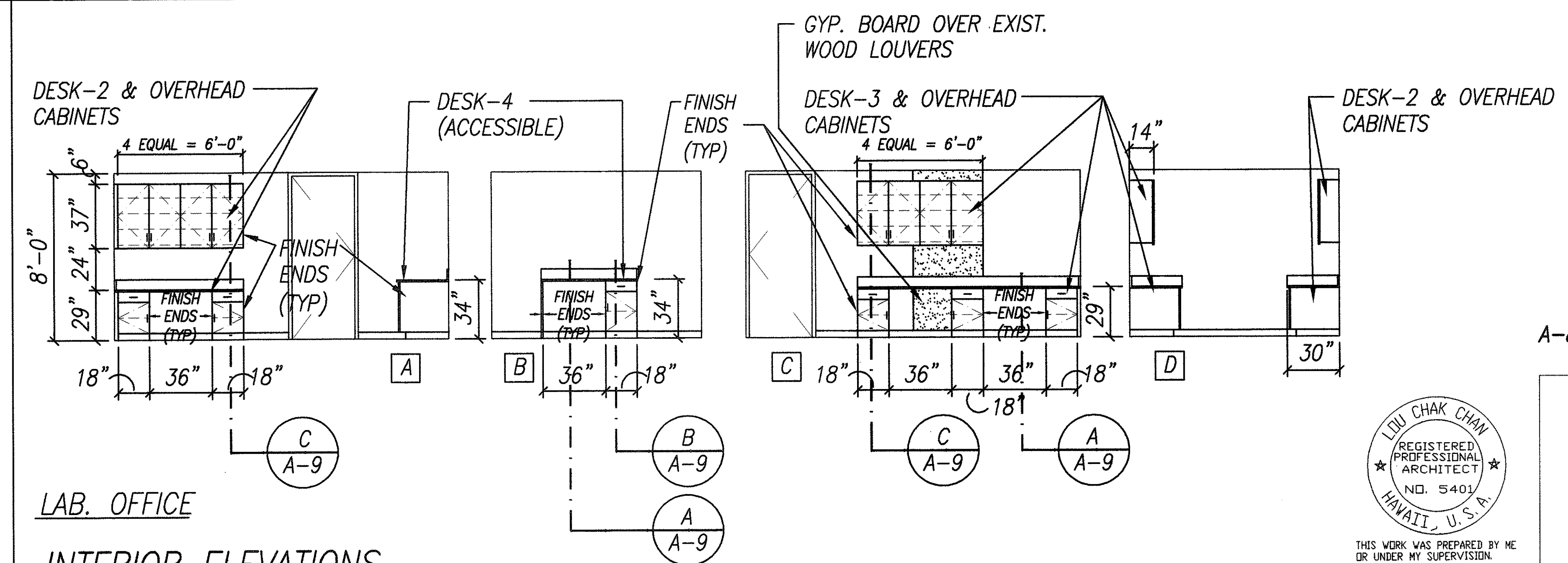


MATERIALS TESTING LAB. – NEW PARTIAL PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"

NOTE: COUNTER TOPS & BACK SPLASHES OF DESK 1,2,3,4 SHALL BE OF BLACK MODIFIED EPOXY RESIN.

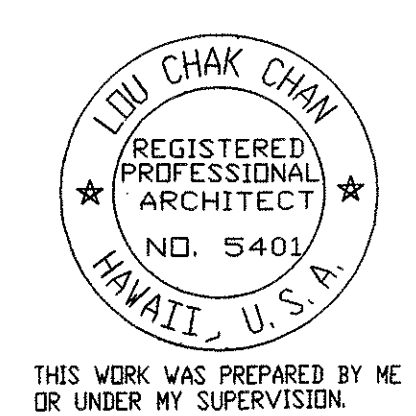


GENERAL LAB.
INTERIOR ELEVATIONS
SCALE: 1/4" = 1'-0"



LAB. OFFICE
INTERIOR ELEVATIONS
SCALE: 1/4" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	M. Fritzel	3/23/98
DESIGNED BY	L. Chan	"
QUANTITIES BY	L. Chan	"
CHECKED BY	L. Chan	"
No.		



A-8 RENOVATE EXISTING MATERIALS TESTING LABORATORY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

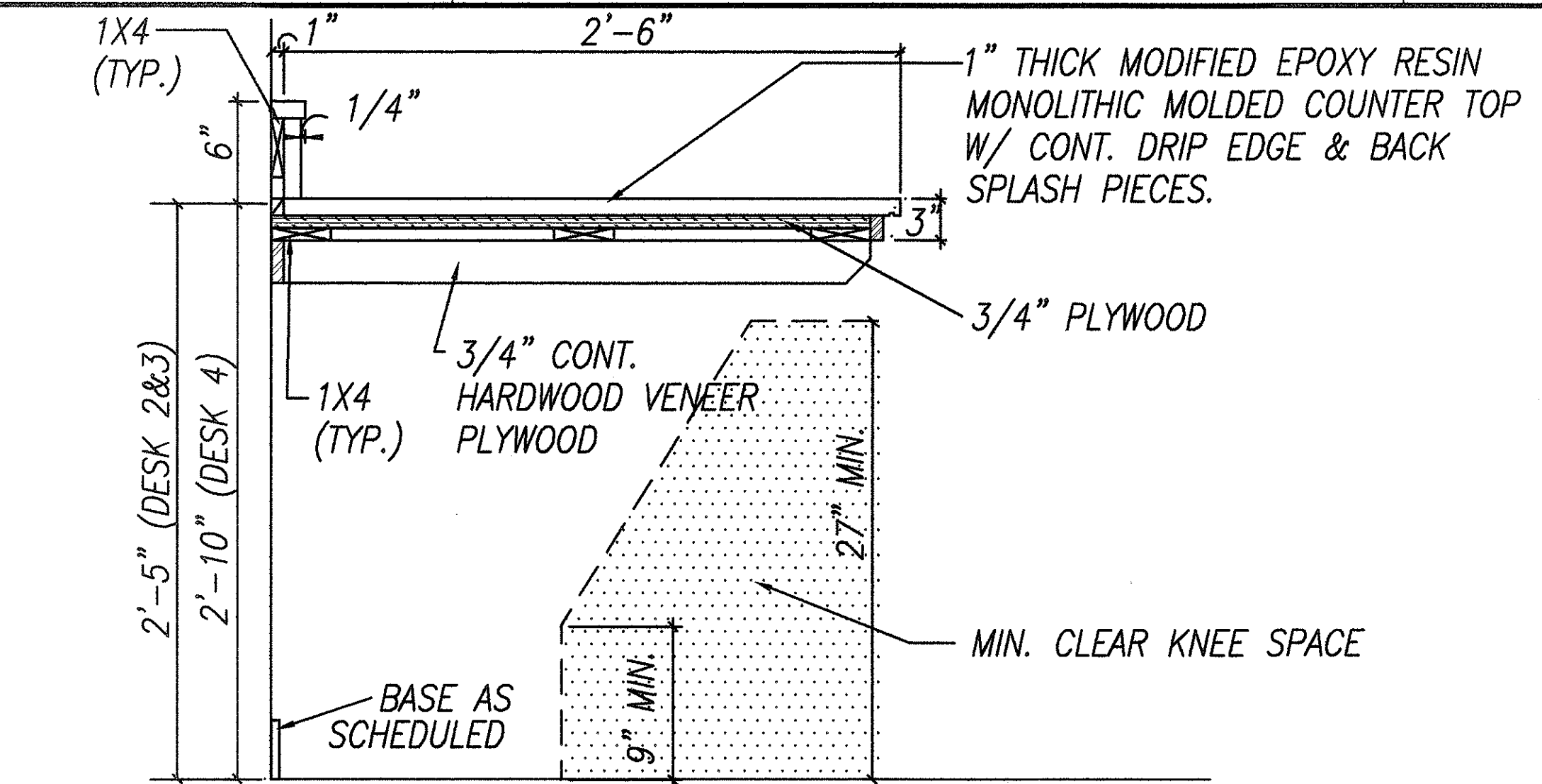
PLAN & ELEVATIONS

MATERIALS TESTING LAB
FACILITY IMPROVEMENTS
Project No. HWY-0-02-98M

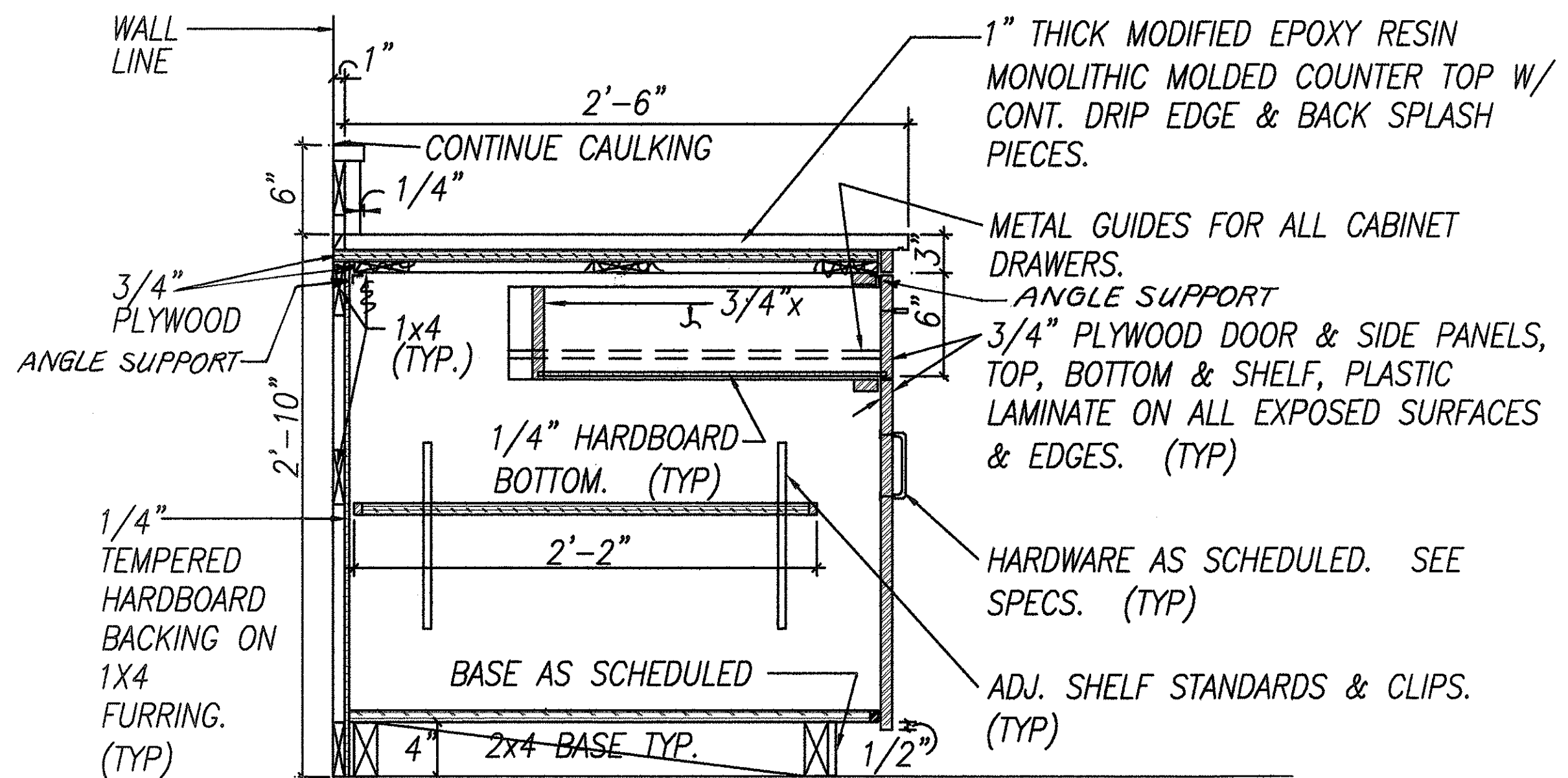
Scale: AS SHOWN Date: MAY, 1998

SHEET No. 9 OF 14 SHEETS

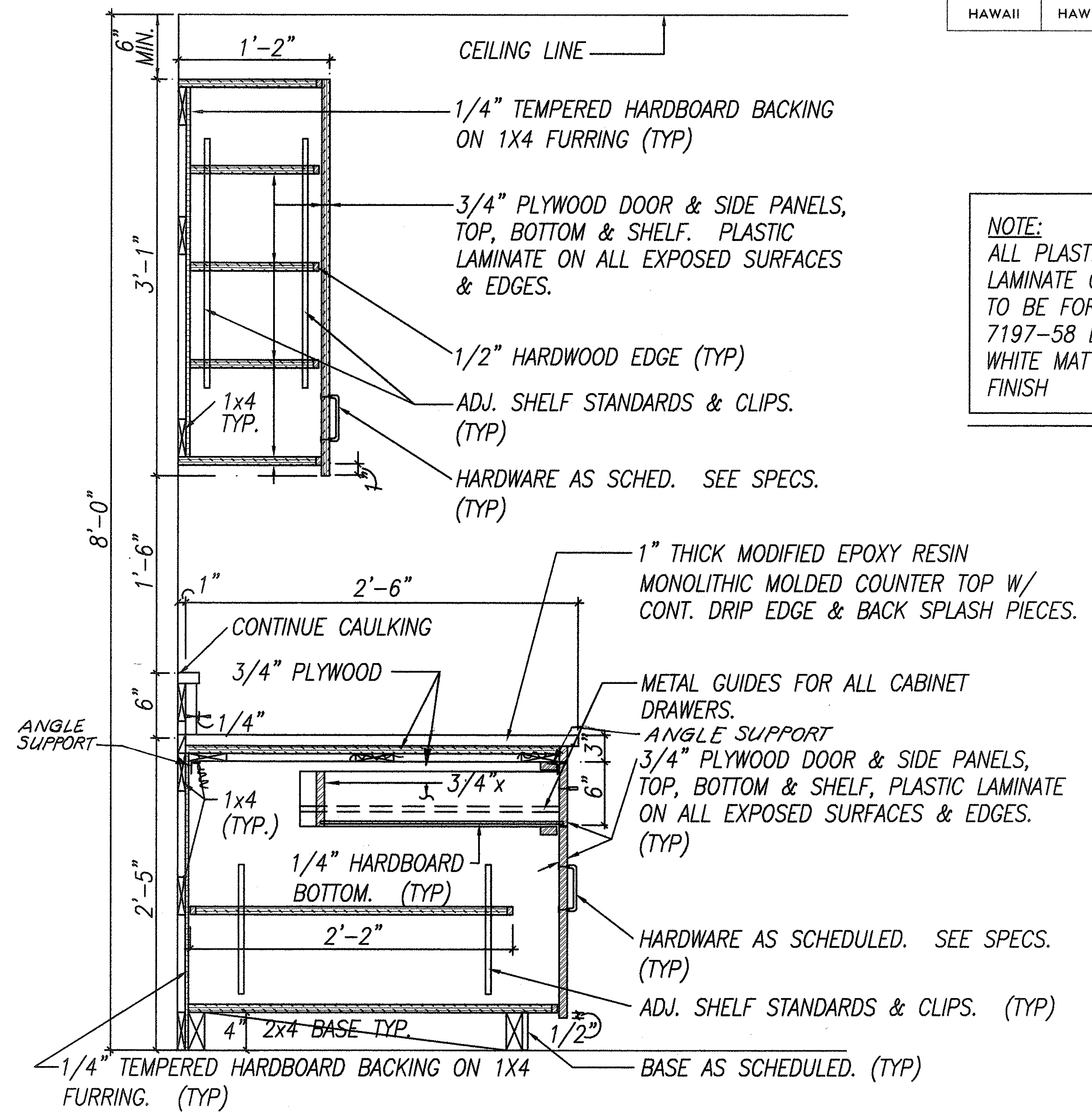
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-02-98M	1998	10	14



A TYP. SECTION @ ACC. COUNTER FOR
MAT. TEST. LAB. (DESK 2, 3, AND 4)
SCALE 1 1/2" = 1'-0"

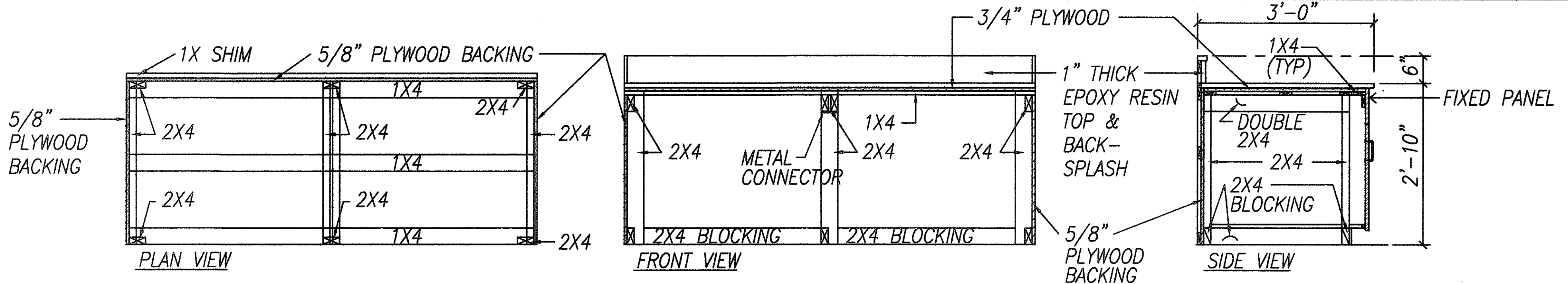


B TYP. SECTION AT ACC. WALL CABINET
FOR MAT. TEST. LAB. (DESK 4)
SCALE 1 1/2" = 1'-0"



C TYP. CABINET AND UPPER
CABINET DETAILS (DESK 2 AND 3)
SCALE 1 1/2" = 1'-0"

NOTE:
ALL PLASTIC
LAMINATE COLOR
TO BE FORMICA
7197-58 DOVER
WHITE MATTE
FINISH



D FRAMING PLAN, SIDE, AND FRONT
MAT. TEST. LAB. CABINET-DESK #1
SCALE: 3/4" = 1'-0"

ORIGINAL
PLAN
NO.

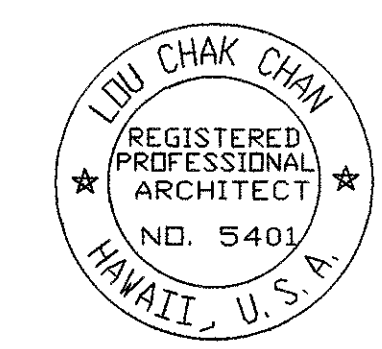
SURVEY PLOTTED BY
DATE

DESIGNED BY
DATE

TRACED BY
DATE

QUANTITIES BY
DATE

CHECKED BY
DATE



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

**A-9 MATERIALS TESTING LABORATORY
CABINET DETAILS**

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS

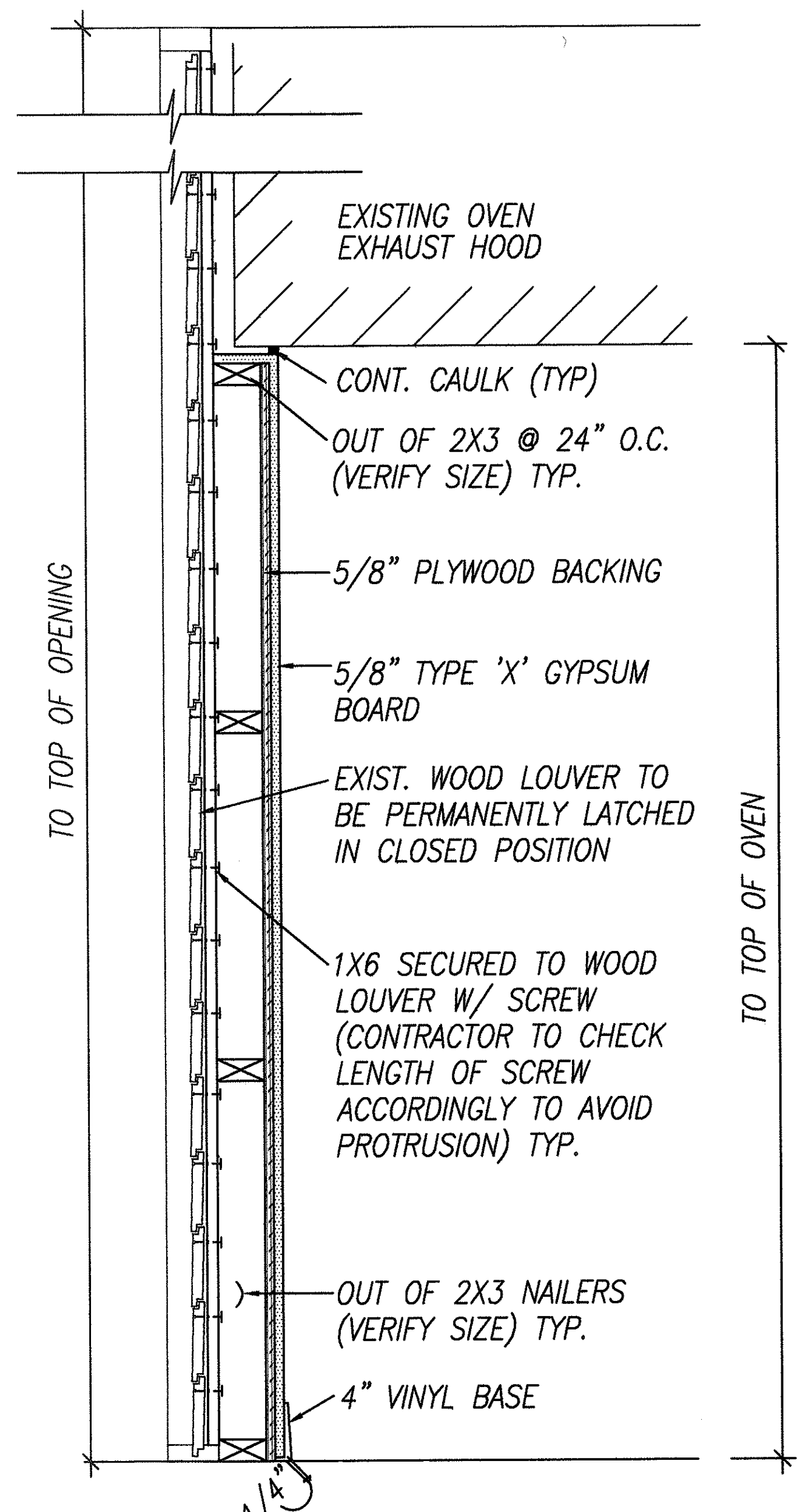
**MATERIALS TESTING LAB
FACILITY IMPROVEMENTS**

Project No. HWY-0-02-98M

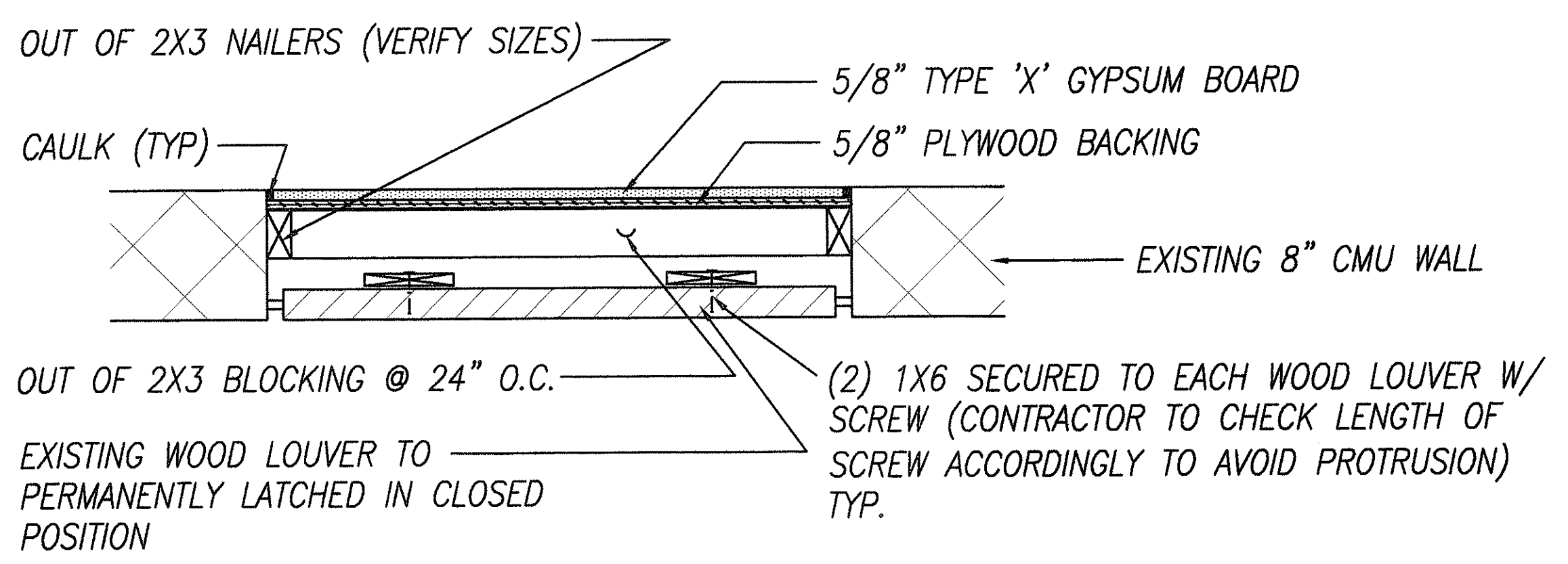
Scale: AS SHOWN Date: MAY, 1998

SHEET No. 10 OF 14 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-02-98M	1998	11	14

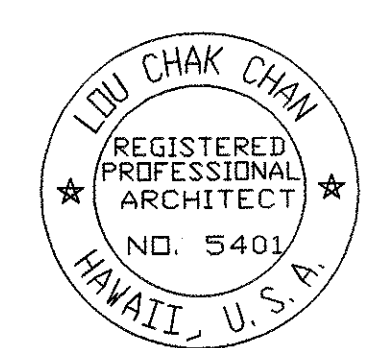


A
WALL DETAIL @ OVEN
HOOD - SECTION VIEW
SCALE 1 1/2" = 1'-0"



B
WALL DETAIL - PLAN VIEW
SCALE: 1 1/2" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	5/23/98
	DESIGNED BY	"
	CHECKED BY	"
	QUANTITIES BY	"
	CHECKED BY	"
No. _____		



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Lou Chak Chan

A-10 MATERIALS TESTING LABORATORY
WALL DETAILS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS

MATERIALS TESTING LAB
FACILITY IMPROVEMENTS
Project No. HWY-0-02-98M

Scale: AS SHOWN Date: MAY, 1998

SHEET No. 11 OF 14 SHEETS