DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	95A-01-87	1988	17	36

WATER NOTES

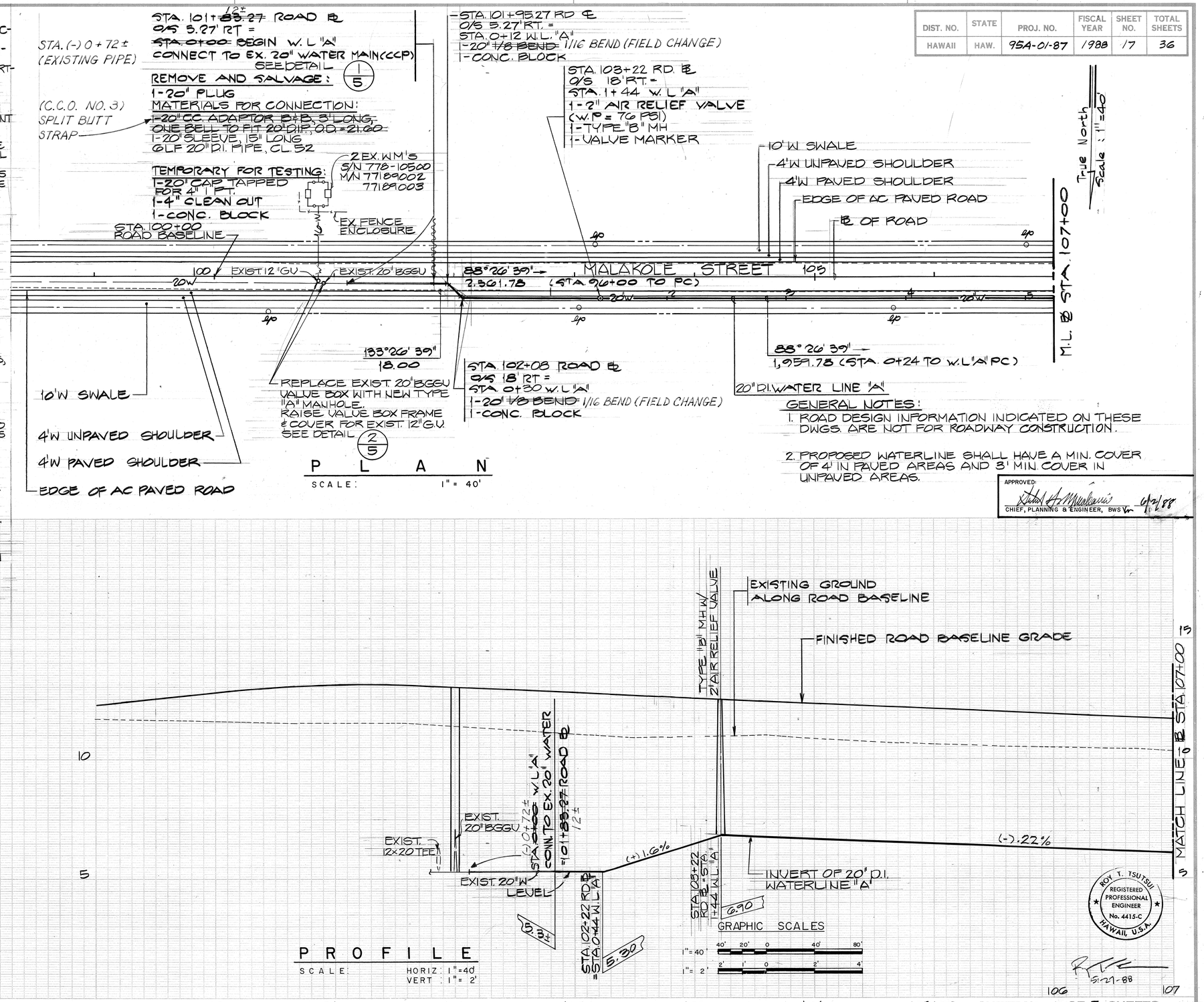
1. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER SYSTEM FACILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 1985, AS AMENDED, OF THE HAWAII HIGHWAYS DIVISION, DEPARTMENT OF TRANSPORTATION AND THE CITY AND COUNTY OF HONOLULU BOARD OF WATER SUPPLY'S "WATER SYSTEM STANDARDS" VOLUME 1, DATED 1985, AND THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION," VOLUME 2, DATED 1985, AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS.
2. ALL PLANS APPROVED BY THE BOARD OF WATER SUPPLY ARE BASED SOLELY ON THE ADEQUACY OF THE WATER SUPPLY. ALL OTHER FEATURES OF THE WATER SYSTEM, SUCH AS LINES, GRADES, FITTINGS ETC., AND DRAINAGE AND OTHER FEATURES OF IMPROVEMENTS SHALL NOT BE THE RESPONSIBILITY OF THE BOARD OF WATER SUPPLY.
3. TEST PRESSURE SHALL BE 150 PSI.
4. THE CONTRACTOR SHALL NOTIFY THE BOARD OF WATER SUPPLY IN WRITING ONE WEEK PRIOR TO COMMENCING WORK ON THE WATER SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL ADDITIONAL FITTINGS IF NECESSARY TO MEET FIELD CONDITIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATER LINE TEES AND BENDS WHENEVER THERE IS A POSSIBILITY OF WATER LINE MOVEMENT DUE TO REMOVAL OF THE SUPPORTING EARTH BEYOND THE EXISTING REACTION BLOCKS. THE CONTRACTOR SHALL TAKE WHATEVER MEASURE HE DEEMS NECESSARY TO PROTECT THE WATER LINES, SUCH AS CONSTRUCTING SPECIAL REACTION BLOCKS (WITH BWS APPROVAL) AND/OR MODIFYING HIS CONSTRUCTION METHODS.
7. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN ON THE PLANS ARE FROM THE LASTEST AVAILABLE DATA BUT IS NOT GUARANTEED AS TO THE ACCURACY OR THE ENCOUNTERING OF OTHER OBSTACLES DURING THE COURES OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO EXISTING UTILITIES.
8. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY BOARD OF WATER SUPPLY, THE MANUFACTURER'S CERTIFICATION THAT ALL CAST IRON (GRAY OR DUCTILE) FITTINGS FOR THE PROJECT CONFORM IN ALL RESPECTS TO THE WATER SYSTEM STANDARDS, DATED 1985.
9. POLYGON SHAPE FOR MECHANICAL JOINT GLAND AS DESCRIBED IN AWWA STANDARD C111 SHALL BE "STRAIGHT-SIDED" AND SHALL BE APPLICABLE TO BOTH CAST IRON AND DUCTILE IRON GLANDS.

CHEVRON U.S.A. COMPANY NOTES:

1. ALL WORK IN VICINITY OF CHEVRON U.S.A. PIPELINES SHALL BE IN ACCORDANCE WITH CHEVRON U.S.A. INC. GUIDELINES FOR WORK NEAR CHEVRON U.S.A. PIPELINES (FORM H-603).

LEGEND

- 20"W — NEW 20" WATERLINE
- NEW AIR RELIEF VALVE
- NEW WATER VALVE (TYPE AS INDICATED)
- NEW TEMPORARY 4" CLEAN OUT (C.O.)
- 20" WATER LINE (BY OTHERS)



GENERAL NOTES:

1. ROAD DESIGN INFORMATION INDICATED ON THESE DWGS. ARE NOT FOR ROADWAY CONSTRUCTION.
2. PROPOSED WATERLINE SHALL HAVE A MIN. COVER OF 4' IN PAVED AREAS AND 3' MIN COVER IN UNPAVED AREAS.

APPROVED:
Keith A. Mukai
CHIEF, PLANNING & ENGINEER, BWS
6/21/88

ROY T. TSUTSUI
REGISTERED PROFESSIONAL ENGINEER
No. 4415-C
HAWAII, U.S.A.
5-27-88

SURVEY PLOTTED BY ____ DATE
DRAWN BY ____
TRACED BY ____
DESIGNED BY ____
QUANTITIES BY ____
CHECKED BY ____
ORIGINAL PLANS
NOTE BOOK
No. ____

SHEET No. 1 OF 5 SHEETS

AS-BUILT

17

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	95A-01-87	1988	18	36

NOTE: CORRECTION, O/S 18'

STA. 108+00 RD ℄
O/S 18' RT. =
STA. 6+22 W.L. "A"
1-20" BFV, F.E. 150#
2-20" D.I. ADAPTOR, F&B, 3' LONG
1-TYPE "A" MH
1-VALVE MARKER

10'W SWALE
4'W UNPAVED SHOULDER
4'W PAVED SHOULDER
EDGE OF AC PAVED ROAD
℄ OF ROAD

STAS. 11+61± TO 11+93± W.L. "A" AND
STAS. 15+43± TO 15+61± W.L. "A"
INSTALLED REINFORCED CONCRETE JACKETS IN LIEU OF CONCRETE BLOCKS PER B.W.S.

STA. 117+70 RD. ℄
O/S 18' RT. =
STA. 15+92 W.L. "A"
1-20" BFV, F.E. 150#
2 20" D.I. ADAPTOR, F&B, 3' LONG
1-TYPE "A" MH
1-VALVE MARKER

True North
Scale: 1" = 40'

EXIST. EASEMENT 286 (15' WIDE) TEXACO REFINING

STA. 11+62 W.L. "A"
1-20" 1/16 BEND (TU)
1-CONC. BLOCK

STA. 11+92 W.L. "A"
1-20" 1/16 BEND (TU)
1-CONC. BLOCK

STA. 15+60 W.L. "A"
1-20" 1/8 BEND (TU)
1-CONC. BLOCK

STA. 15+44 W.L. "A"
1-20" 1/8 BEND (TU)
1-CONC. BLOCK

EXIST. 18" RCP

STATE R/W

88° 26' 30"
2,561.78 (STA. 96+00 TO P.C.)

MALAKOLE STREET

STATE R/W

M.L. ℄ STA. 107+00

M.L. ℄ STA. 118+00

STA. 11+67 W.L. "A"
1-20" 1/16 BEND (BU)
1-CONC. BLOCK

STA. 11+87 W.L. "A"
1-20" 1/16 BEND (BU)
1-CONC. BLOCK

88° 26' 30"
1,959.78 (STA. 0+24 TO W.L. "A" P.C.)

STA. 116+95 RD. ℄
O/S 18' RT. =
STA. 15+17 W.L. "A"
1-2" AIR RELIEF VALVE (W.P. = 77 PSI)
1-TYPE "B" MH
1-VALVE MARKER

STA. 15+57 W.L. "A"
1-20" 1/8 BEND (BV)
1-CONC. BLOCK

STA. 15+47 W.L. "A"
1-20" 1/8 BEND (BV)
1-CONC. BLOCK

20" D.I. WATER LINE "A"

10'W SWALE
4'W UNPAVED SHOULDER
4'W PAVED SHOULDER
EDGE OF AC PAVED ROAD

P L A N

SCALE: 1" = 40'

APPROVED:
CHIEF, PLANNING & ENGINEER, BWS — DATE 4/2/88

P R O F I L E

SCALE: HORIZ: 1"=40'
VERT: 1"= 2'

MATCH LINE ℄ STA. 107+00

TYPE "A" MH W/BFV

STA. 108+00 RD ℄
STA. 6+22 W.L. "A"

5.07

EXISTING GROUND ALONG ROAD BASELINE

FINISHED ROAD BASELINE GRADE

(-) .22%

INVERT OF 20" D.I. WATER LINE "A"

STA. 113+40 RD ℄ =
STA. 11+62 W.L. "A"

STA. 113+45 RD ℄ =
STA. 11+67 W.L. "A"

STA. 113+65 RD. ℄ =
STA. 11+87 W.L. "A"

STA. 113+70 RD ℄ =
STA. 11+92 W.L. "A"

R.C. JACKET IN LIEU OF CONC. BLOCKS

20" 1/16 BEND (TU) #CONC. BLOCK 4.7

20" 1/16 BEND (BU) #CONC. BLOCK 2.7

20" 1/16 BEND (TU) #CONC. BLOCK 4.7

20" 1/16 BEND (BV) #CONC. BLOCK 2.7

EXIST. 18" RCP

LEVEL

(+) .31 %

TYPE "B" MH W/2" ARV
STA. 116+95 RD ℄ =
STA. 15+17 W.L. "A"

STA. 117+25 RD ℄ =
STA. 15+47 W.L. "A"

STA. 117+35 RD ℄ =
STA. 15+57 W.L. "A"

STA. 117+70 RD ℄ =
STA. 15+92 W.L. "A"
TYPE "A" MH W/BFV

5.7

R.C. JACKET IN LIEU OF CONC. BLOCKS

STA. 117+22 RD ℄ = STA. 15+44 W.L. "A"

20" 1/8 BEND (TU) #CONC. BLOCK 5.7

20" 1/8 BEND (BV) #CONC. BLOCK 2.7

20" 1/8 BEND (TU) #CONC. BLOCK 5.7

20" 1/8 BEND (BV) #CONC. BLOCK 2.7

LEVEL

MATCH LINE ℄ STA. 118+00

GRAPHIC SCALES
1"=40' 40' 20' 0 40' 80'
1"= 2' 2' 1' 0 2' 4'

ROY T. TSUTSUI
REGISTERED PROFESSIONAL ENGINEER
No. 4415-C
HAWAII, U.S.A.

5/27/88

107 108 109 110+00 111 112 113 114 115+00 116 117 118

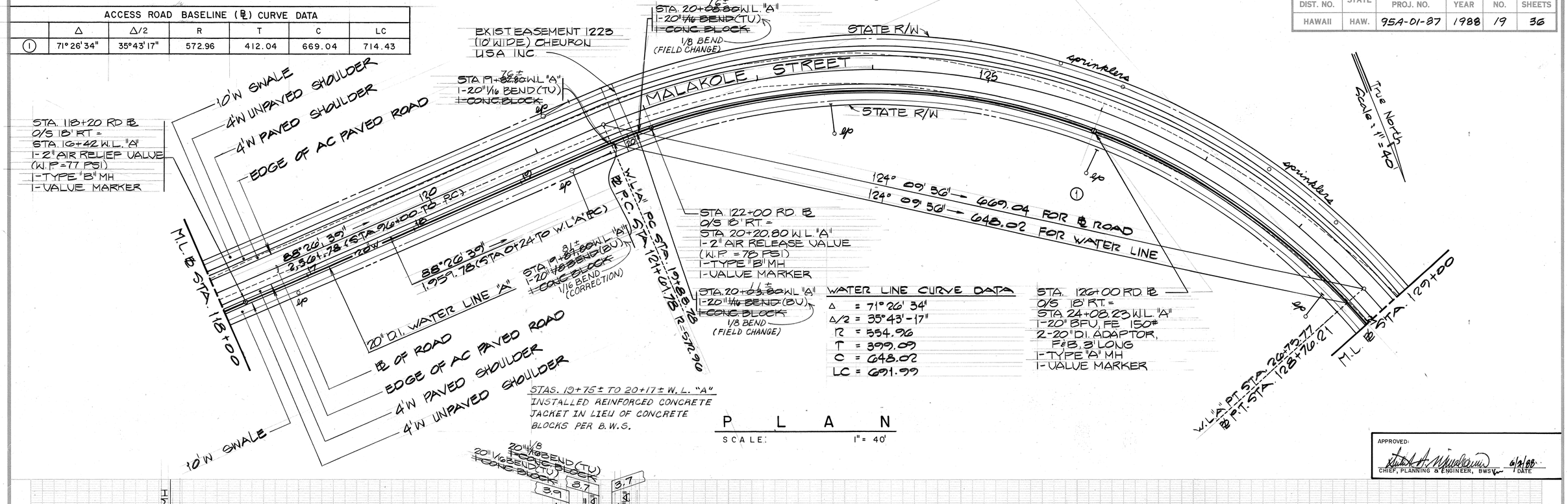
15 10 5

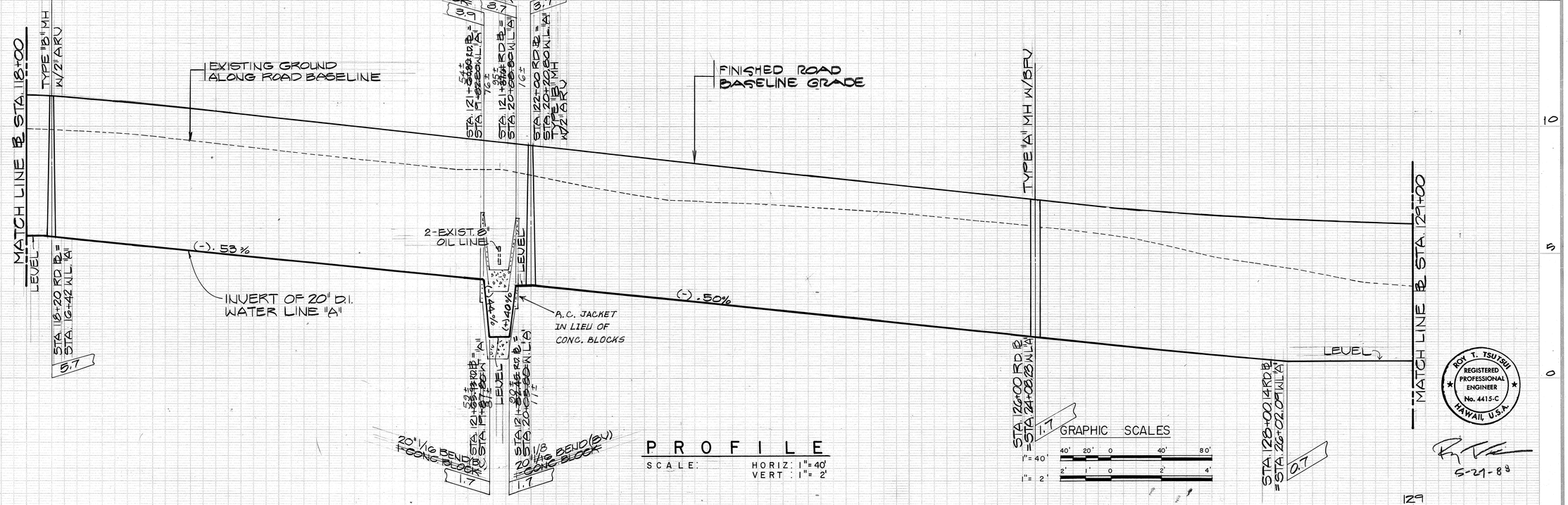
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTE BOOK	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

AS-BUILT

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	95A-01-87	1988	19	36

ACCESS ROAD BASELINE (℄) CURVE DATA						
	Δ	Δ/2	R	T	C	LC
①	71° 26' 34"	35° 43' 17"	572.96	412.04	669.04	714.43





APPROVED:

CHIEF, PLANNING & ENGINEER, BWS — DATE 6/2/88

ROY T. TSUTSUI REGISTERED PROFESSIONAL ENGINEER No. 4415-C HAWAII, U.S.A.

5-27-88

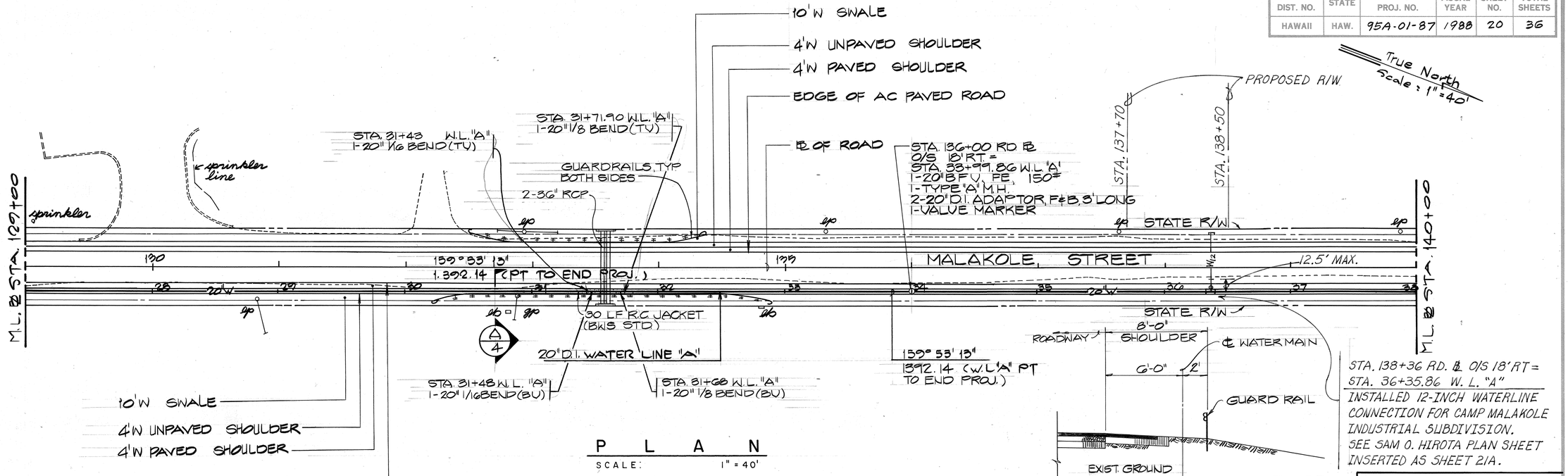
ORIGINAL PLANS	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

SHEET No. 3 OF 5 SHEETS

AS-BUILT

19

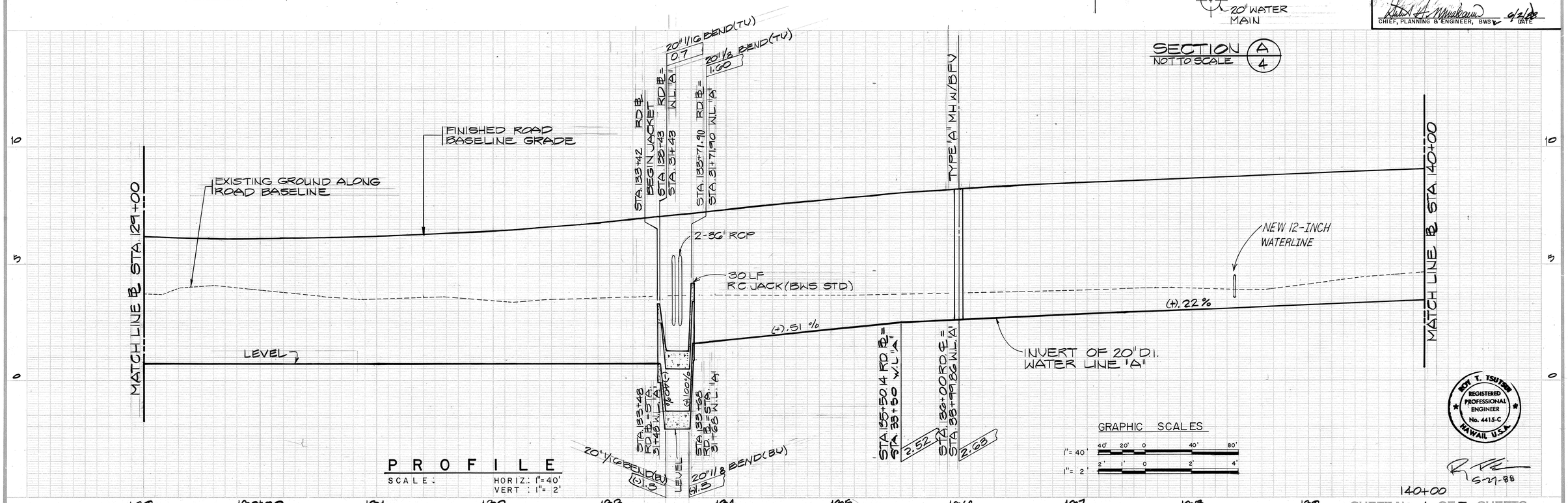
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	95A-01-87	1988	20	36



P L A N
SCALE: 1" = 40'

STA. 138+36 RD. ℄ O/S 18'RT = STA. 36+35.86 W. L. "A"
INSTALLED 12-INCH WATERLINE CONNECTION FOR CAMP MALAKOLE INDUSTRIAL SUBDIVISION.
SEE SAM O. HIROTA PLAN SHEET INSERTED AS SHEET 2/A.

APPROVED:
CHIEF, PLANNING & ENGINEER, BWS — DATE 6/2/88



P R O F I L E
SCALE: HORIZ: 1"=40'
VERT: 1"= 2'

GRAPHIC SCALES
1"= 40' 40' 20' 0 40' 80'
1"= 2' 2' 1' 0 2' 4'

ROY T. TSUTSUI
REGISTERED PROFESSIONAL ENGINEER
No. 4415-C
HAWAII, U.S.A.
5-27-88

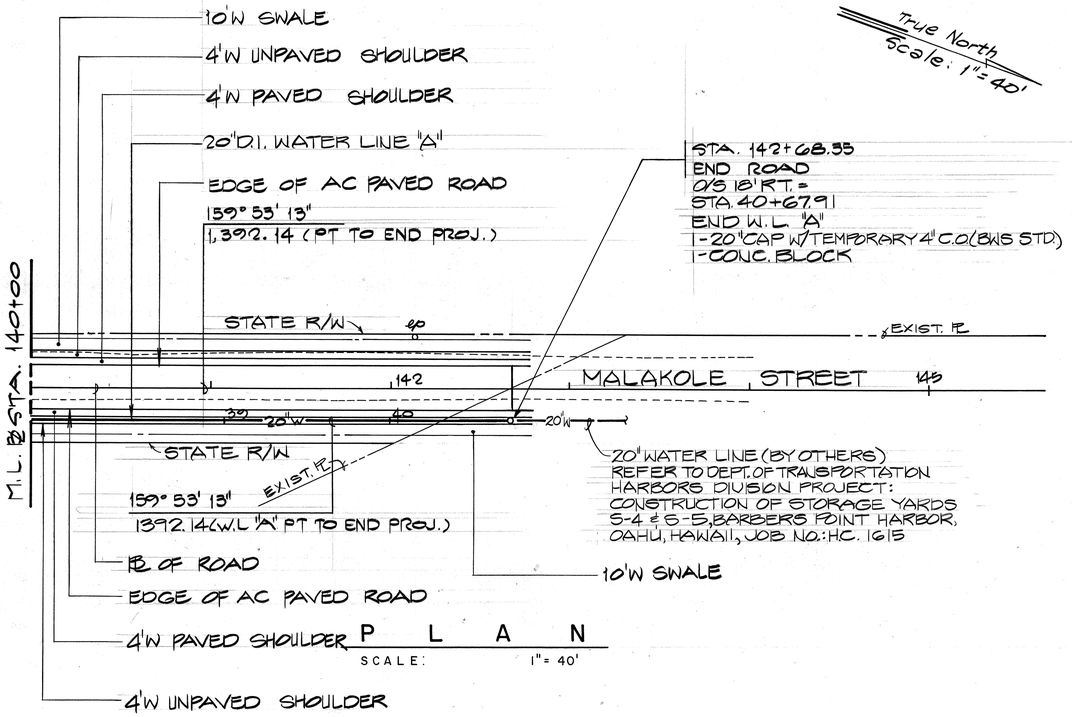
ORIGINAL PLANS	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

SHEET No. 4 OF 5 SHEETS

AS-BUILT

20

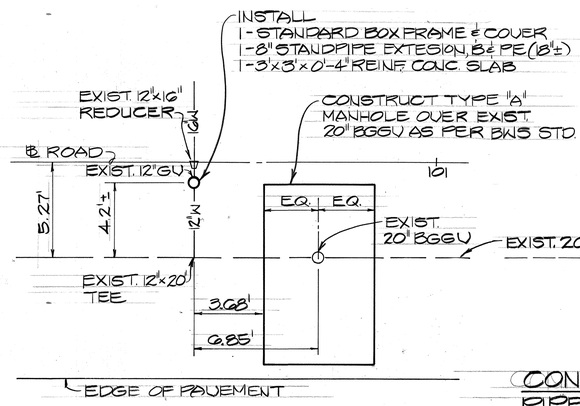
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	95A-01-87	1988	21	36



PLAN

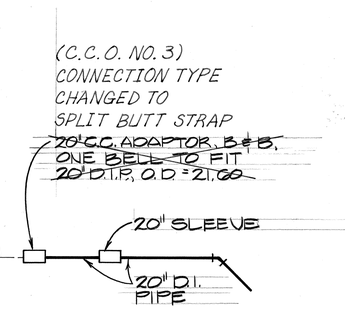
SCALE: 1" = 40'

True North
Scale: 1" = 40'



DETAIL 2 / C-5

SCALE: 1" = 4'

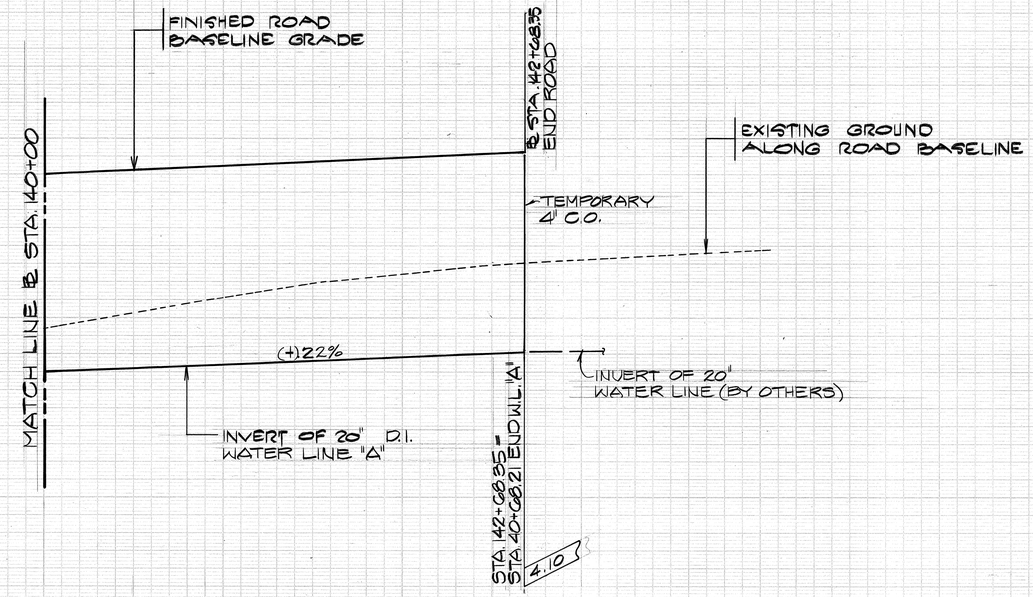


CONNECTION TO EX. 20" C.C. PIPE AT 101+~~83.27~~ W.L. "A" — 1 / C-5

NOT TO SCALE 12±

APPROVED:

CHIEF, PLANNING & ENGINEER, BWS — DATE 6/2/88



PROFILE

SCALE: HORIZ: 1" = 40'
VERT: 1" = 2'

GRAPHIC SCALES

1" = 40' — 40' 20' 0 40' 80'

1" = 2' — 2' 1' 0 2' 4'

1" = 4' — 4' 0 4' 8'

ROY T. TSUTSUMI
REGISTERED PROFESSIONAL ENGINEER
No. 4415-C
HAWAII, U.S.A.

5-27-88

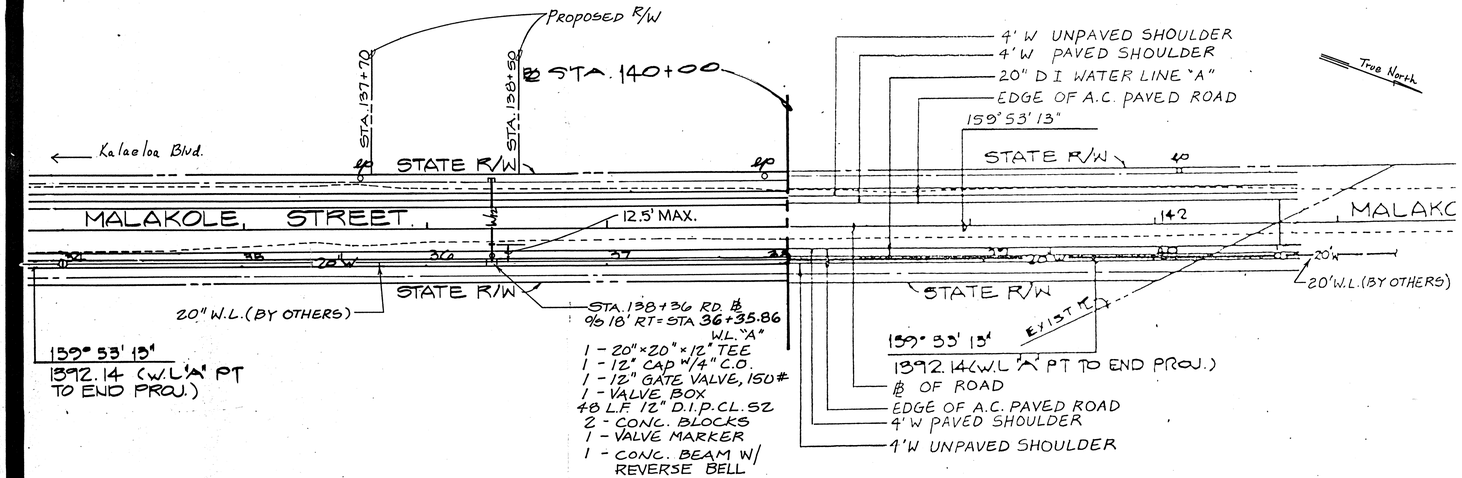
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTE BOOK	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

SHEET No. 5 OF 5 SHEETS

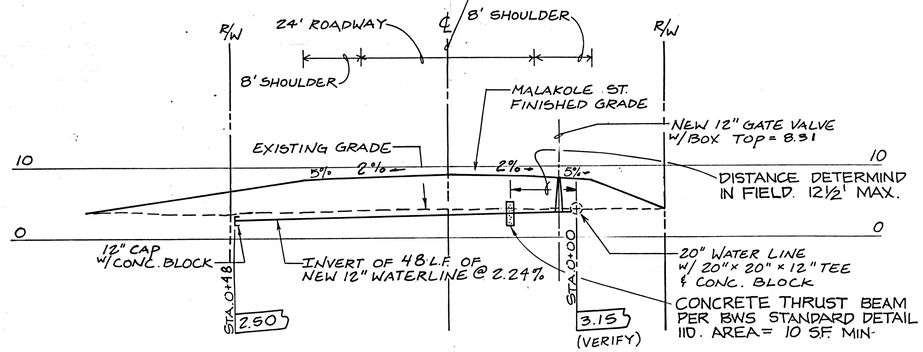
AS-BUILT

21

WATERLINE CONNECTION FOR CAMP MALAKOLE INDUSTRIAL SUBDIVISION INSTALLED UNDER MALAKOLE STREET IMPROVEMENT HAWAII, DEPARTMENT OF TRANSPORTATION PROJECT NO. 95A-01-87

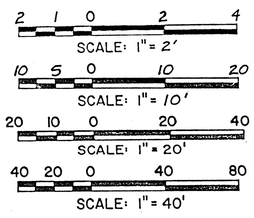


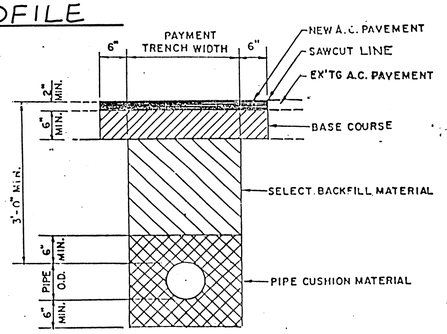
PLAN
SCALE: 1"=40'



NEW 12" WATERLINE PROFILE
SCALE: HORIZ.: 1" = 10'
VERT. : 1" = 10'

GRAPHIC SCALE

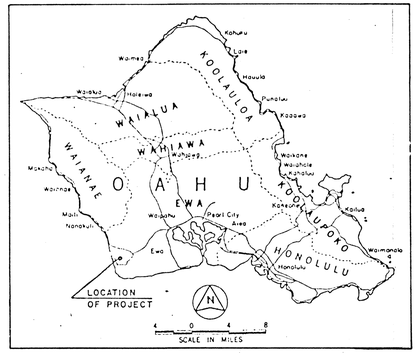




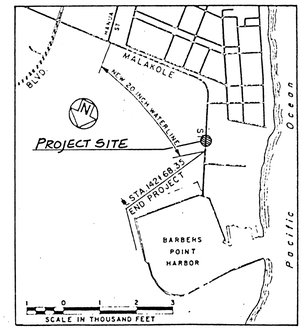
PAVEMENT RESTORATION DETAIL
NOT TO SCALE

NOTE:
THICKNESS OF NEW A.C. PAVEMENT AND BASE COURSE SHALL BE EQUAL TO THAT OF THE EXISTING PAVEMENT AND BASE COURSE BUT NOT LESS THAN THE MINIMUM INDICATED BELOW.

REFERENCE DRAWINGS:
DOT PROJECT NO. 95A-01-87
SHEET NOS. 5,14,15,20 & 21



PROJECT LOCATION MAP
SCALE : AS SHOWN



PROJECT SITE MAP
SCALE : AS SHOWN

LEGEND

—20"W— NEW 20" WATERLINE (BY OTHERS)
—o— NEW AIR RELIEF VALVE (BY OTHERS)
—o— NEW WATER VALVE (TYPE AS INDICATED) (BY OTHERS)
—o NEW TEMPORARY 4" CLEAN OUT (C.O.) (BY OTHERS)
— — — 20" WATERLINE (BY OTHERS)
—Wz— NEW WATERLINE
—o— NEW GATE VALVE WITH BOX

INDEX TO DRAWINGS

NOTES FOR CONSTRUCTION

1. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT FROM THE STATE'S HIGHWAY DISTRICT ENGINEER AT 227 KAKOI STREET PRIOR TO COMMENCEMENT OF WORK WITHIN STATE HIGHWAY RIGHT-OF-WAY.
2. CONSTRUCTION AND RESTORATION OF ALL EXISTING HIGHWAY FACILITIES WITHIN STATE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 1976, AND THE SPECIFICATION FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS" DATED MAY 1, 1984 OF THE STATE HIGHWAYS DIVISION.
3. ALL LANES SHALL BE OPENED TO TRAFFIC DURING THE MORNING PEAK HOURS FROM 6 A.M. TO 8:30 A.M. AND DURING THE AFTERNOON PEAK HOURS FROM 3 P.M. TO 6 P.M. AND DURING OFF-WORK HOURS. ONLY ONE LANE OF TRAFFIC SHALL BE CLOSED AT ANY OTHER TIME.
4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKINGS, 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 "RULES AND REGULATIONS GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS" ADOPTED BY THE HIGHWAY SAFETY COORDINATOR, AND 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", DATED 1978. 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.
5. NO MATERIAL AND OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN HIGHWAY RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE DISTRICT ENGINEER.
6. 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.
7. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADEQUATE, SAFE, NON-SKID BRIDGING MATERIAL OVER THE TRENCH, INCLUDING SHORING, WHEN TRENCHING IN PAVEMENT AREAS TO HANDLE ALL TYPES OF VEHICULAR TRAFFIC.
8. NO TRENCH SHALL BE OPENED MORE THAN 10 FEET IN ADVANCE OF THE INSTALLATION AND TESTED PIPE AND/OR DUCTLINE.
9. LONGITUDINAL DRAINAGE ALONG THE HIGHWAY SHALL BE MAINTAINED.
10. 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 THE DIVISION'S REVIEW AND APPROVAL.
11. ALL REGULATORY, GUIDE AND CONSTRUCTION SIGNS AND BARRICADES SHALL BE OF HIGH INTENSITY REFLECTIVE SHEETING.
12. COMPACTION TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE "SPECIFICATIONS FOR THE INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS", DATED MAY 1, 1984 AS FOLLOWS:
    1. SUBBASE:1 COMPACTION TEST.
    2. BASE COURSE:1 COMPACTION TEST.
    3. ONE COMPACTION TEST FOR EACH 100 LINEAR FEET OF TRENCH.

    SUBMIT RESULTS TO THE OAHU DISTRICT ENGINEER.

WATER NOTES

1. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER SYSTEM FACILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CITY AND COUNTY OF HONOLULU BOARD OF WATER SUPPLY'S "WATER SYSTEM STANDARDS", VOLUME 1, DATED 1985, AND THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION", VOLUME 2, DATED 1985, AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS.
2. ALL PLANS APPROVED BY THE BOARD OF WATER SUPPLY ARE BASED SOLELY ON THE ADEQUACY OF THE WATER SUPPLY. ALL OTHER FEATURES OF THE WATER SYSTEM, SUCH AS LINES, GRADES, FITTINGS, ETC., AND DRAINAGE AND OTHER FEATURES OF IMPROVEMENTS SHALL NOT BE THE RESPONSIBILITY OF THE BOARD OF WATER SUPPLY.
3. TEST PRESSURE SHALL BE 150 PSI.
4. THE CONTRACTOR SHALL NOTIFY THE BOARD OF WATER SUPPLY IN WRITING ONE WEEK PRIOR TO COMMENCING WORK ON THE WATER SYSTEM.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATER LINE TEES AND BENDS WHEREVER THERE IS A POSSIBILITY OF WATER LINE MOVEMENT DUE TO REMOVAL OF THE SUPPORTING EARTH BEYOND THE EXISTING REACTION BLOCKS. THE CONTRACTOR SHALL TAKE WHATEVER MEASURE HE DEEMS NECESSARY TO PROTECT THE WATER LINES, SUCH AS CONSTRUCTING SPECIAL REACTION BLOCKS (WITH BWS APPROVAL) AND/OR MODIFYING HIS CONSTRUCTION METHODS.
6. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT IS NOT GUARANTEED AS TO THE ACCURACY OR THE ENCOUNTERING OF OTHER OBSTACLES DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO EXISTING UTILITIES.
7. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY BOARD OF WATER SUPPLY, THE MANUFACTURER'S CERTIFICATION THAT ALL CAST IRON (GRAY OR DUCTILE) FITTINGS FOR THE PROJECT CONFORM IN ALL RESPECTS TO THE WATER SYSTEM STANDARDS, DATED 1985.
8. POLYGON SHAPE FOR MECHANICAL JOINT GLANDS AS DESCRIBED IN AWWA STANDARD C111 SHALL BE "STRAIGHT-SIDED" AND SHALL BE APPLICABLE TO BOTH CAST IRON AND DUCTILE IRON GLANDS.
9. BOARD OF WATER SUPPLY APPROVAL OF THESE PLANS DOES NOT CONSTITUTE A WATER COMMITMENT. AVAILABILITY OF WATER WILL BE DETERMINED WHEN BUILDING PERMIT IS PRESENTED TO THE DEPARTMENT. WATER COMMITMENT WILL DEPEND UPON THE STATUS OF THE WATER SYSTEM AT THAT TIME. SHOULD WATER SERVICE BE MADE AVAILABLE, THE WATER COMMITMENT WILL BE EFFECTIVE WHEN THE PROJECT RECEIVES AN APPROVED BUILDING PERMIT FROM THE BUILDING DEPARTMENT. ALL WATER COMMITMENTS WILL BE CANCELED IN THE EVENT THE BUILDING PERMIT IS CANCELED.

APPROVED:

R Nagato 11-16-88

for CHIEF, PLANNING AND ENGINEERING, B.W.S. DATE

CITY AND COUNTY OF HONOLULU

SAM O. HIROTA, INC.
ENGINEERS AND SURVEYORS
864 S. BERETANIA STREET
HONOLULU, HAWAII 96813

TITLE SHEET, EXISTING TOPOGRAPHY & PLAN & PROFILE

CHERYL M. PALESH REGISTERED PROFESSIONAL ENGINEER No. 9932-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Cheryl M. Palesh

NO.	DATE	REVISIONS	BY	CK

DESIGNED BY CP
DRAWN BY CC
CHECKED BY CP

SCALE As Shown
T.M.K. 9-1-14: Por. 4 & Por. 5

DATE 11/14/88
JOB NO. 880750
F.B. NO. N/A

SHT. 1 OF 1 SHTS.

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