

FOR ESTIMATING PURPOSES ONLY

DESCRIPTION OF WORK	ESTIMATE
New 4" DOMESTIC SERVICE	
New 3" Meter	\$1,234
Installation Charge	\$1,234.00
**WATER SYSTEM FACILITIES CHARGES	N/A
*CREDIT	N/A
S/N	
S/N	
N/A FIRE SERVICE	
Meter	N/A
Installation Charge	N/A
One-time Charge	N/A
TOTAL	\$1,234.00

P/ID: NEW M/N: NEW

FLOW REQUIREMENTS

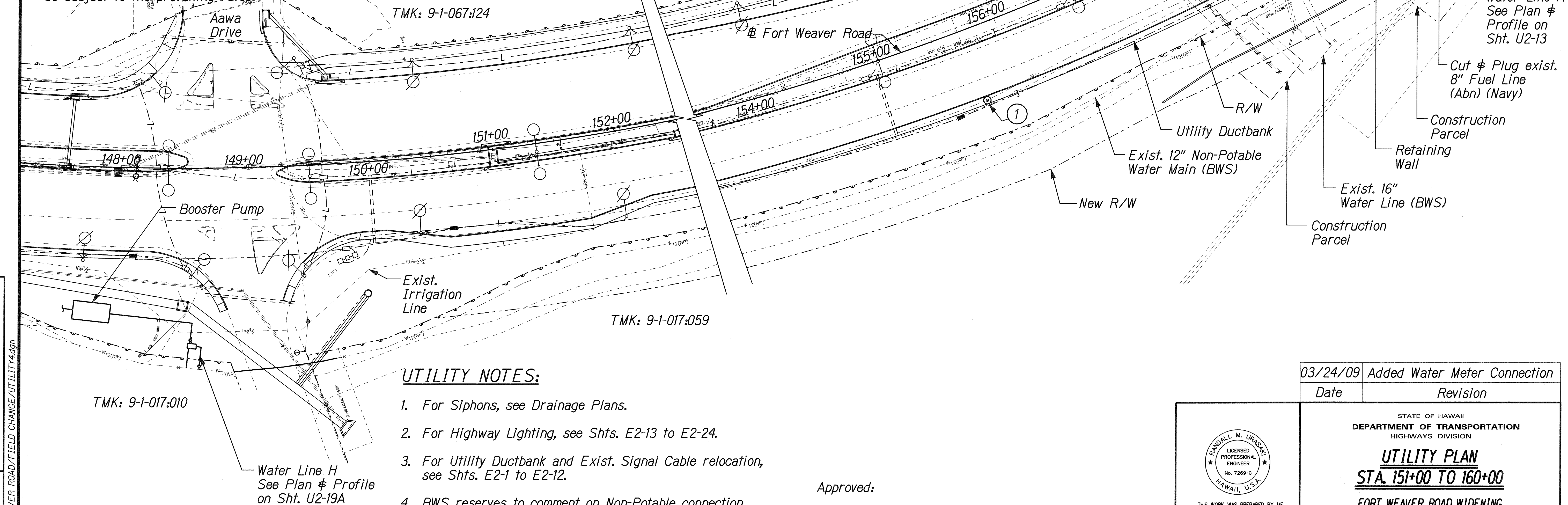
	Fixture Units (FU)	Gallons Per Minute (GPM)	Gallons Per Day (GPD)
Domestic	0	0	0
Irrigation	900	190	58,000
Total	900	190	58,000

① Adjust to Finish Grade

*Credits will be determined when the building permit application is submitted for BWS review and approval.

**To be determined by Memorandum of Agreement (MOA)

This estimate is subject to change. A formal written quotation may be obtained and all payments for the charges shown on the quotation made within 30 days after the construction plan is approved by BWS. If payments are not received within the 30 day period, the project will be subject to the prevailing rates.



UTILITY NOTES:

1. For Siphons, see Drainage Plans.
2. For Highway Lighting, see Shts. E2-13 to E2-24.
3. For Utility Ductbank and Exist. Signal Cable relocation, see Shts. E2-1 to E2-12.
4. BWS reserves to comment on Non-Potable connection for irrigation. Please contact the Water Resources Unit, Mike Matsuo @ 748-5951, for questions and coordination of the connection to the Non-Potable system.

Approved:

Dominic F. Jones
 & Chief, Capital Projects Division, BWS

3/27/09
 Date

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	174	371

03/24/09	Added Water Meter Connection
Date	Revision

RANDALL M. URASAK
 LICENSED PROFESSIONAL ENGINEER
 No. 7269-C
 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Ramiller

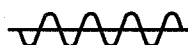
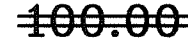
04/30/10
 EXPIRATION DATE OF THE LICENSE

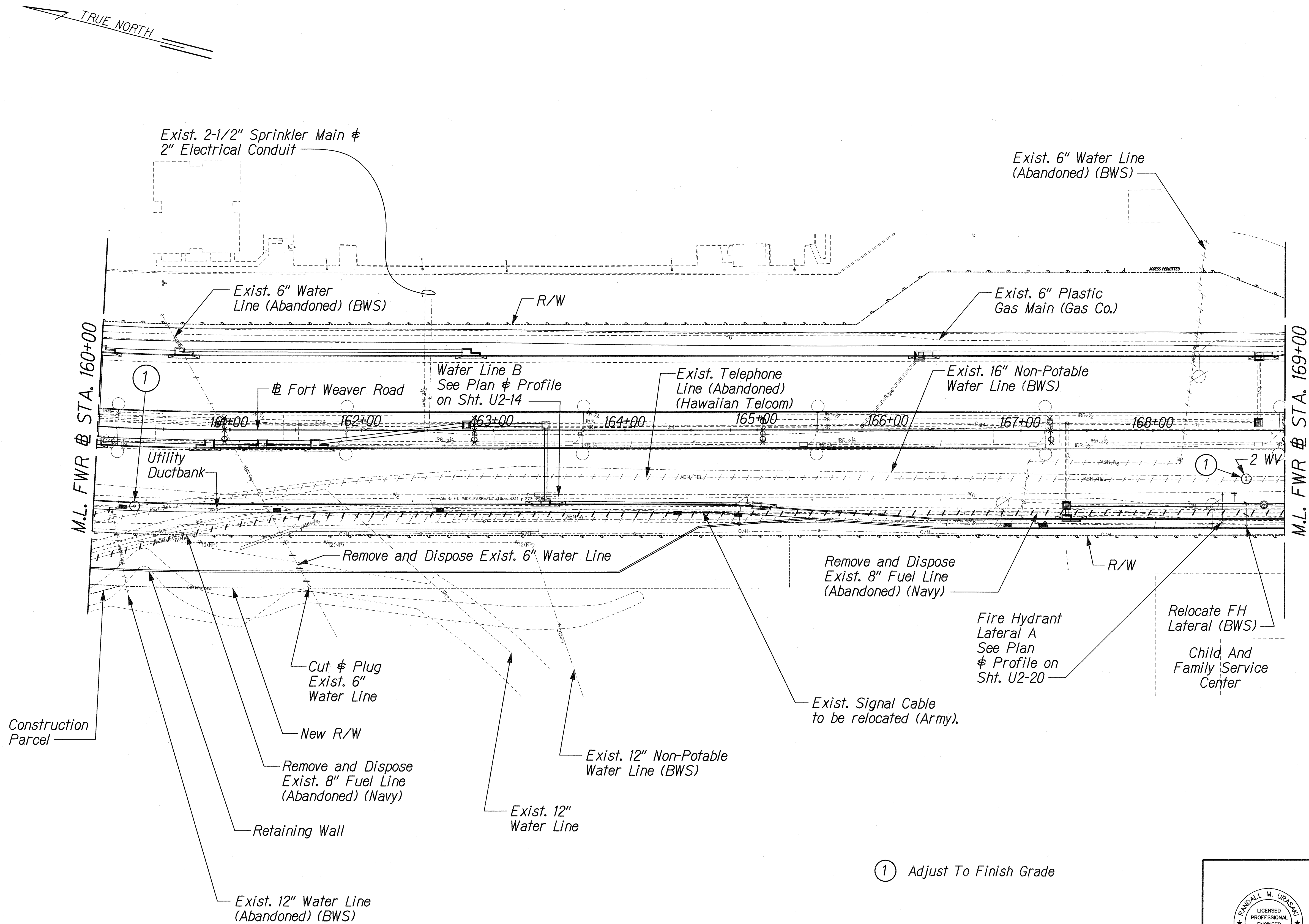
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

UTILITY PLAN
STA. 151+00 TO 160+00
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1" = 40' Date: Feb. 22, 2008

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	175	371

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

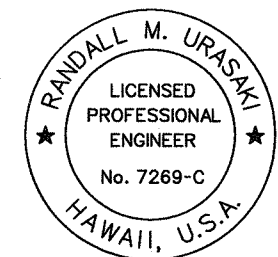


SURVEY PLOTTED BY	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

J:\FORT WEAVER ROAD\PACKAGE2\UTILITY\UTILITY5.dgn

① Adjust To Finish Grade

Approved: Robert Chun 2/25/08
 Chief, Capital Projects Division, BWS Date



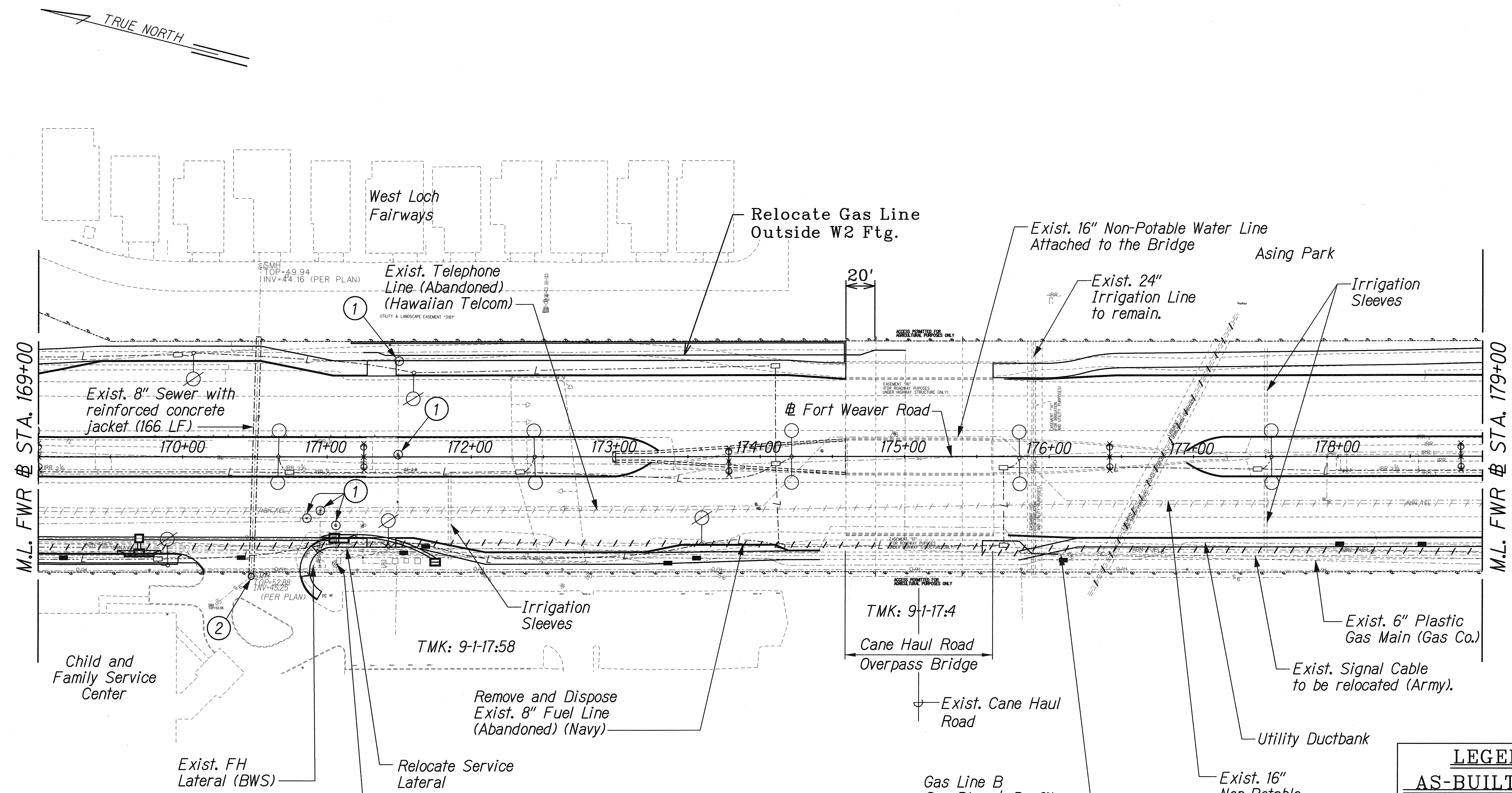
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 SIGNATURE: R. M. Uraski EXPIRATION DATE OF THE LICENSE: 04/30/10

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

UTILITY PLAN
STA. 160+00 TO 169+00
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1" = 40' Date: Feb. 22, 2008

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-119	2006	176	371



- ① Adjust to Finish Grade
- ② Adjust SMH (Private) to Finish Grade
- * See Service Connection Schedule
- ① See Note below.

SERVICE CONNECTION SCHEDULE		
No.	Premise ID Number	Meter Number
1	1029253	02701195

SERVICE CONNETION NOTE:
 Contractor to relocate exist. type E Lateral and reconnect to exist. 2" meter. Contractor to coordinate the relocation work with BWS inspector.

Approved:
Robert Chun 2/25/08
 Chief, Capital Projects Division, BWS Date
Dennis M. Nishimura 3/3/08
 Chief, Wastewater Branch, DPP Date

LEGEND FOR AS-BUILT POSTINGS

~~~~~ Squiggly line for as-built deletion

~~----~~ Double line for as-built deletion

Roadway Text for as-built posting

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
*Ramll M. Urakami*  
 SIGNATURE EXPIRATION DATE OF THE LICENSE 04/30/10

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**UTILITY PLAN**  
**STA. 169+00 TO 179+00**  
**FORT WEAVER ROAD WIDENING**  
**VICINITY OF AAWA DRIVE TO GEIGER ROAD**

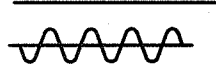
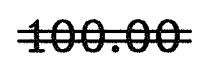
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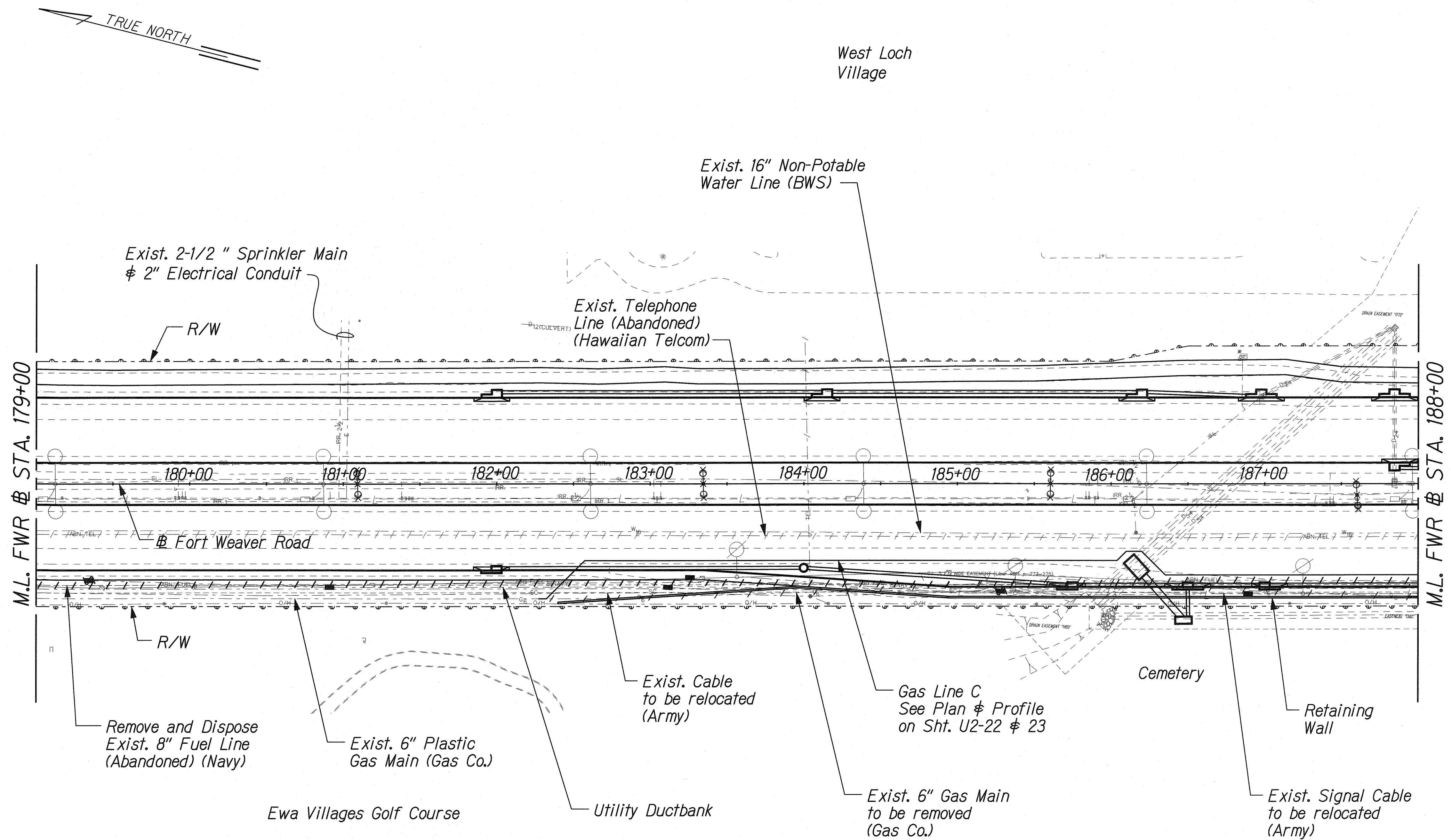
|                   |      |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DESIGNED BY       |      |
| TRACED BY         |      |
| QUANTITIES BY     |      |
| CHECKED BY        |      |
| ORIGINAL PLAN     |      |
| NOTE BOOK         |      |
| N.                |      |

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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | CMAQ-076-1(9)         | 2006        | 177       | 371          |

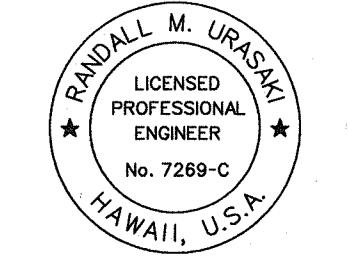
# LEGEND FOR AS-BUILT POSTINGS

|                                                                                     |                                     |
|-------------------------------------------------------------------------------------|-------------------------------------|
|  | Squiggly line for as-built deletion |
|  | Double line for as-built deletion   |
| Roadway                                                                             | Text for as-built posting           |



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| ORIGINAL PLAN | DATE |
| NOTE BOOK     |      |
| DESIGNED BY   |      |
| QUANTITIES BY |      |
| CHECKED BY    |      |

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THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *R. Uraski* EXPIRATION DATE OF THE LICENSE: 04/30/10

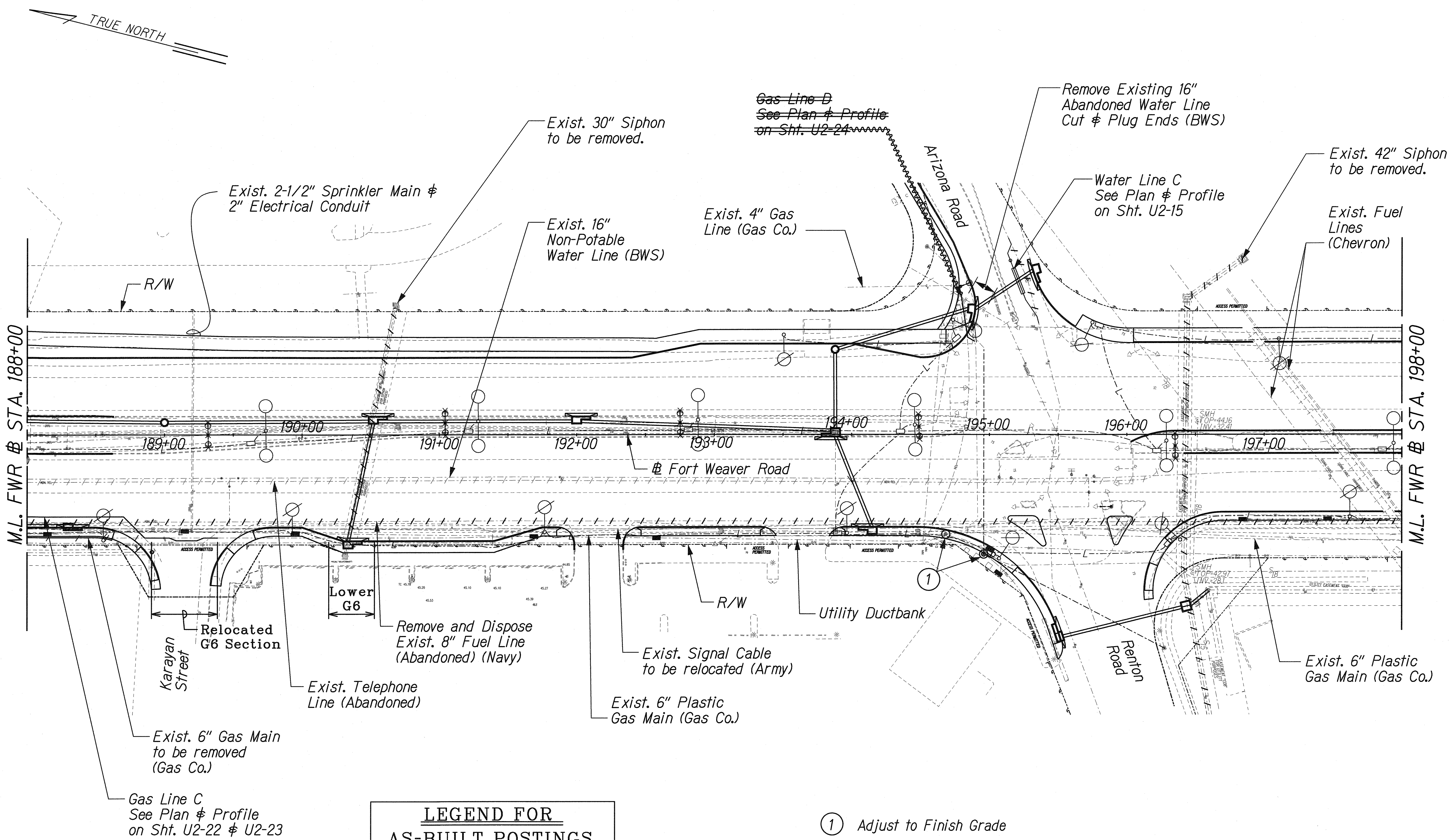
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**UTILITY PLAN**  
**STA. 179+00 TO 188+00**

FORT WEAVER ROAD WIDENING  
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1" = 40' Date: Feb. 22, 2008

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | CMAQ-076-1(9)         | 2006        | 178       | 371          |



**LEGEND FOR AS-BUILT POSTINGS**

~~~~~ Squiggly line for as-built deletion

==== Double line for as-built deletion

Roadway Text for as-built posting

Approved:

Dennis M. Nashimura 2/3/08
Chief, Wastewater Branch, DPP *W* Date

Robert Chua 2/25/08
Chief, Capital Projects Division, BWS *DC* Date

THIS WORK WAS PREPARED BY ME UNDER MY SUPERVISION.

SIGNATURE: *R. Uraski* EXPIRATION DATE OF THE LICENSE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY PLAN
STA. 188+00 TO 198+00

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

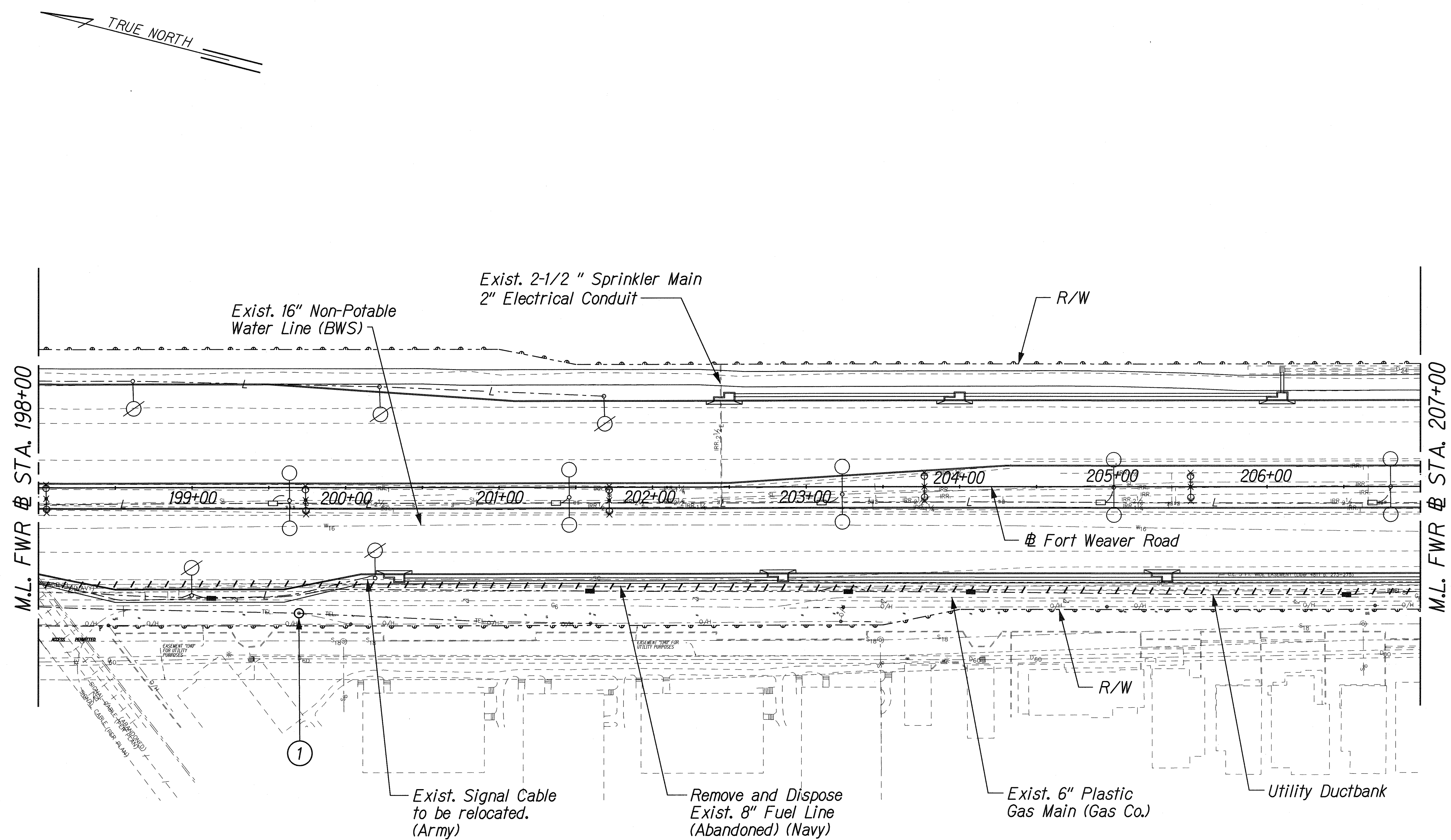
Scale: 1" = 40' Date: Feb. 22, 2008

SHEET No. U2-5 OF 33 SHEETS

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| SURVEY PLOTTED BY | DATE |
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| DESIGNED BY | |
| CHECKED BY | |
| ORIGINAL PLAN | |
| NOTE BOOK | |
| QUANTITIES BY | |
| CHECKED BY | |
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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
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| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 179 | 371 |



① Adjust to Finish Grade

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SIGNATURE: *[Signature]* 04/30/10
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY PLAN
STA. 198+00 TO 207+00

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

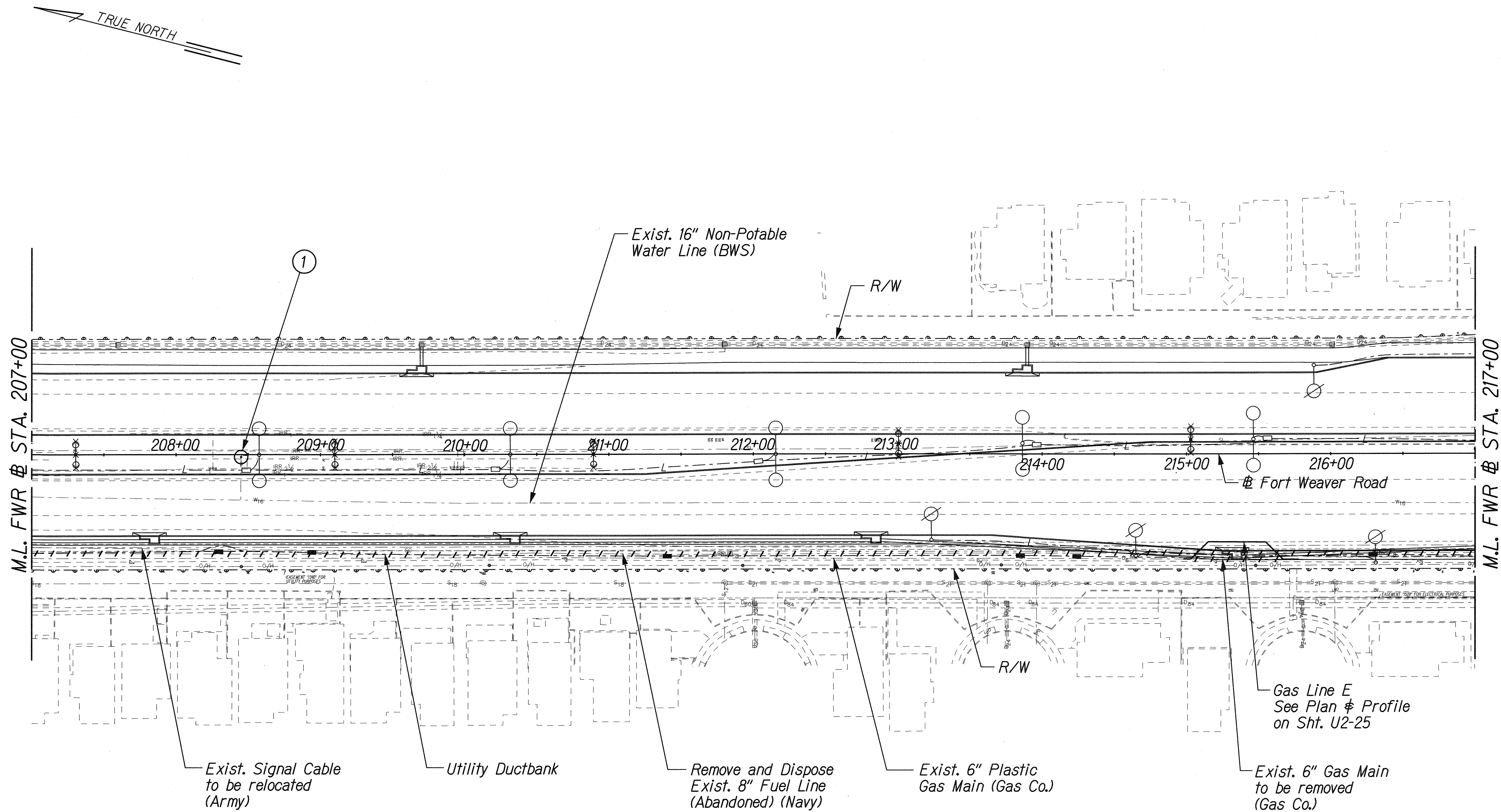
Scale: 1" = 40' Date: Feb. 22, 2008

SHEET No. U2-6 OF 33 SHEETS

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| DESIGNED BY | DATE |
| TRACED BY | |
| NOTE BOOK | |
| QUANTITIES BY | |
| CHECKED BY | |

\\FORT WEAVER ROAD\PACKAGE2\UTILITY\UTILITY9.dgn

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
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| HAWAII | HAW. | CMAQ-076-K9 | 2006 | 180 | 371 |

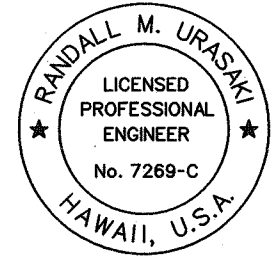


① Adjust to Finish Grade

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| ORIGINAL PLAN | SURVEY PLATTED BY | DATE |
| TRACED BY | DRAWN BY | |
| DESIGNED BY | CHECKED BY | |
| NOTED BY | | |

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Approved: Robert Chun 2/25/08
Chief, Capital Projects Division, BWS Date



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

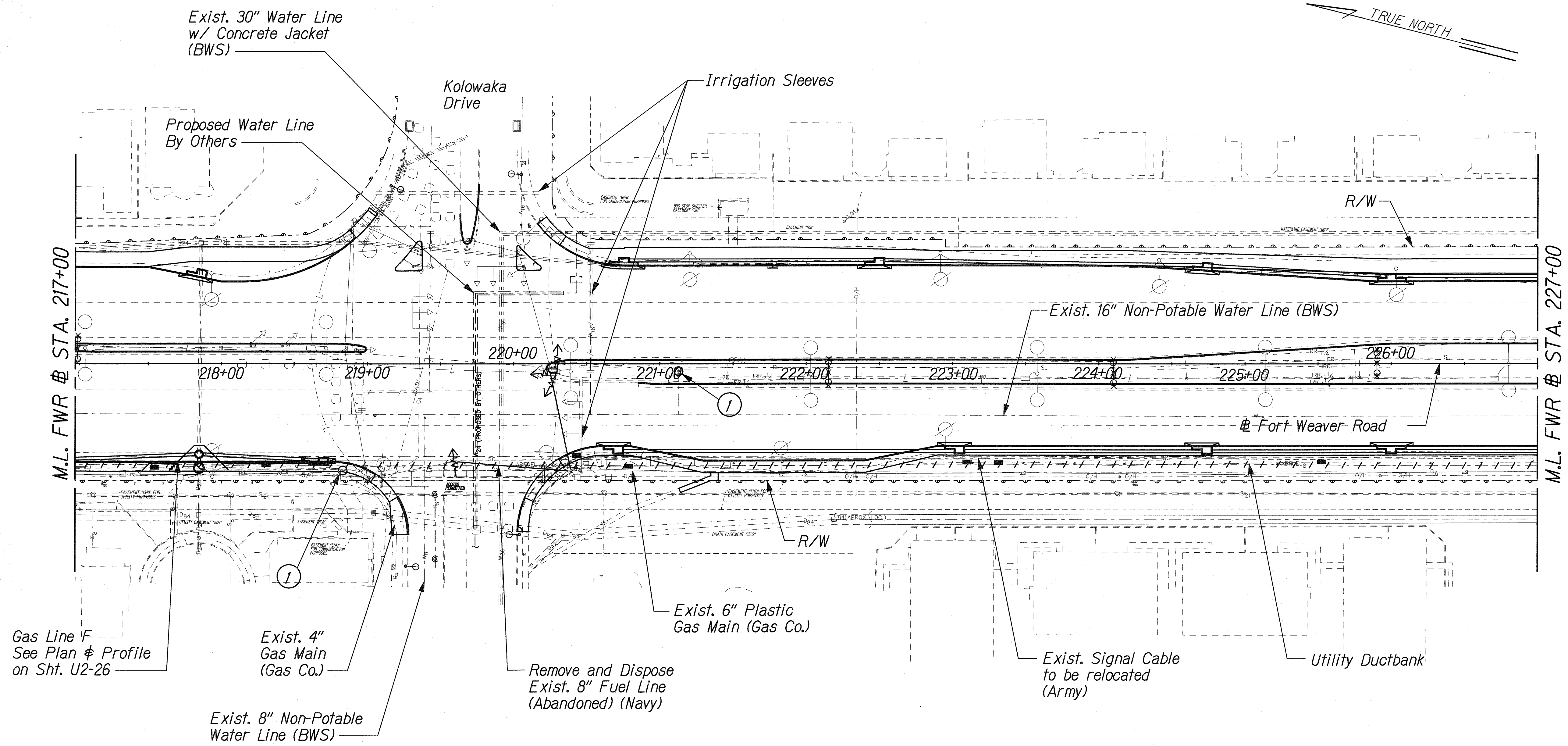
UTILITY PLAN
STA. 207+00 TO 217+00
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1" = 40' Date: Feb. 22, 2008

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: R. M. Urasaka EXPIRATION DATE OF THE LICENSE: 04/30/2010

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 181 | 371 |



| LEGEND FOR AS-BUILT POSTINGS | |
|------------------------------|-------------------------------------|
| | Squiggly line for as-built deletion |
| | Double line for as-built deletion |
| Roadway | Text for as-built posting |

① Adjust to Finish Grade

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

R. Urasky

SIGNATURE 04/30/10
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY PLAN
STA. 217+00 TO 227+00

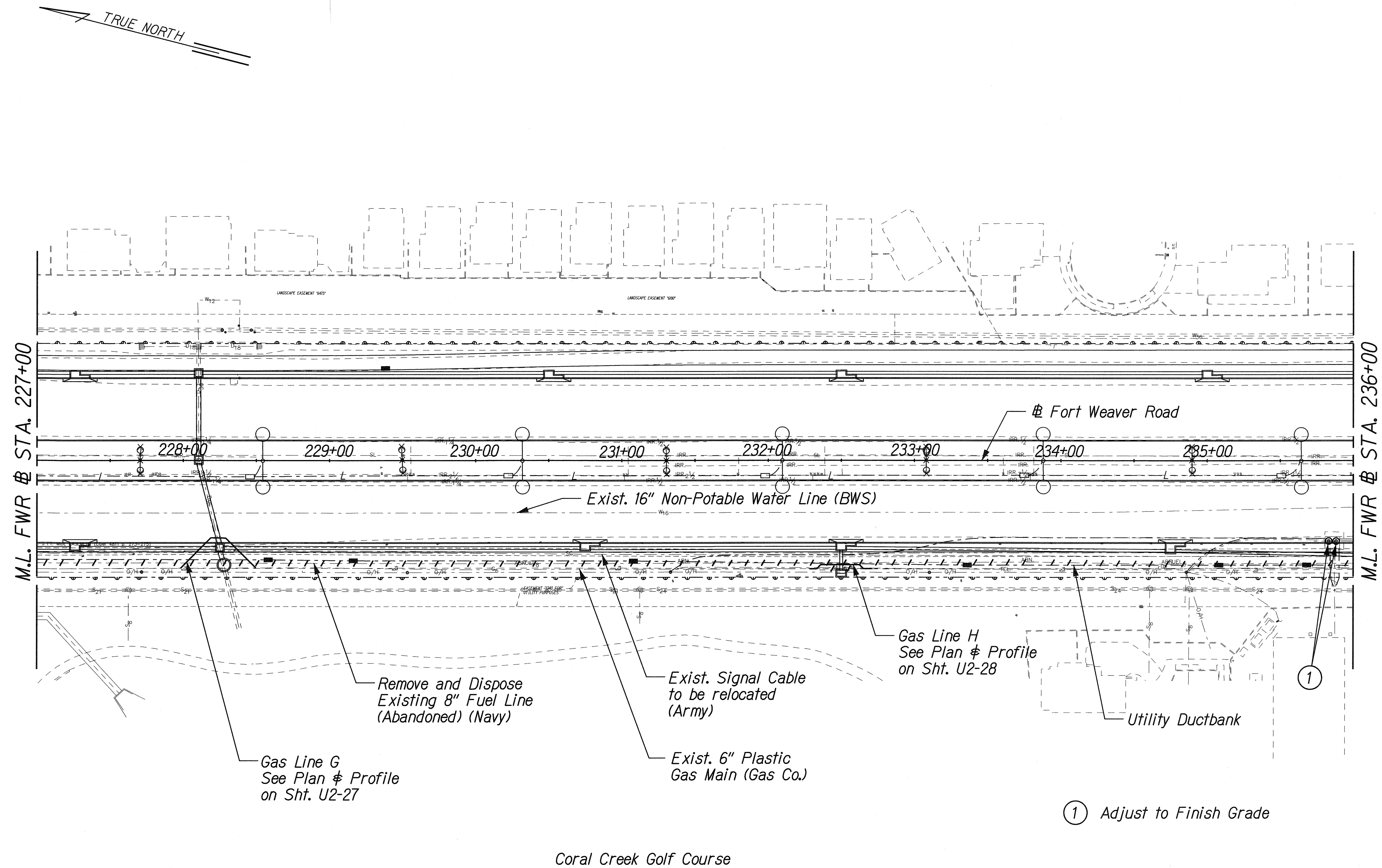
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1" = 40' Date: Feb. 22, 2008

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| SURVEY PLOTTED BY | DATE |
| DESIGNED BY | |
| TRACED BY | |
| NOTE BOOK | |
| QUANTITIES BY | |
| CHECKED BY | |

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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 182 | 371 |



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| DESIGNED BY | DATE |
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| CHECKED BY | |
| NOTED BY | |
| QUANTITIES BY | |
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THIS WORK WAS PREPARED BY ME
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SIGNATURE: *R. Urasky* EXPIRATION DATE: 04/30/10 OF THE LICENSE:

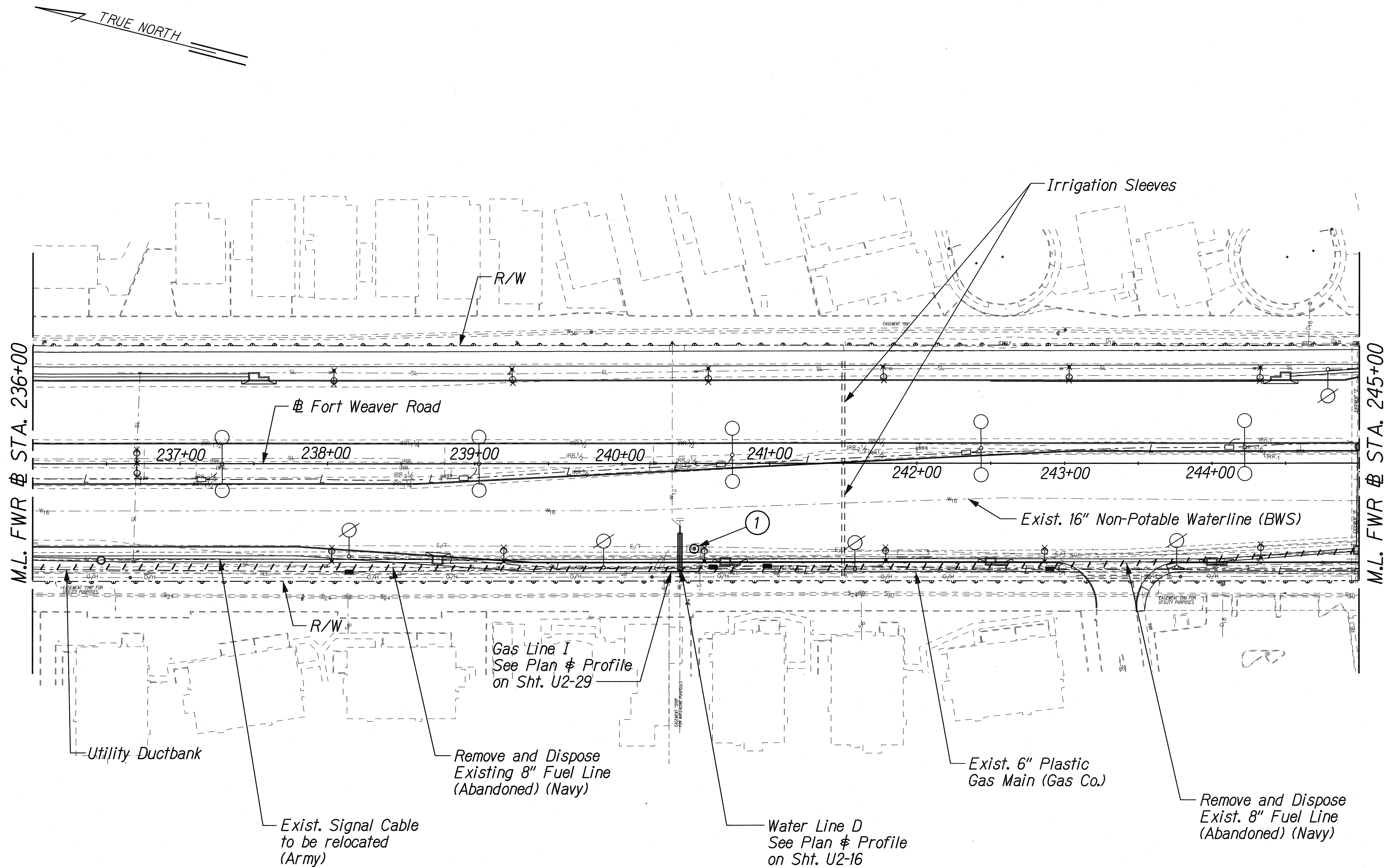
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY PLAN
STA. 227+00 TO 236+00

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1" = 40' Date: Feb. 22, 2008

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 183 | 371 |



① Adjust to Finish Grade

Approved:

Robert Chun 2/25/08
Chief, Capital Projects Division, BWS Date

RANDALL M. URASAKA
 LICENSED PROFESSIONAL ENGINEER
 No. 7269-C
 HAWAII, U.S.A.

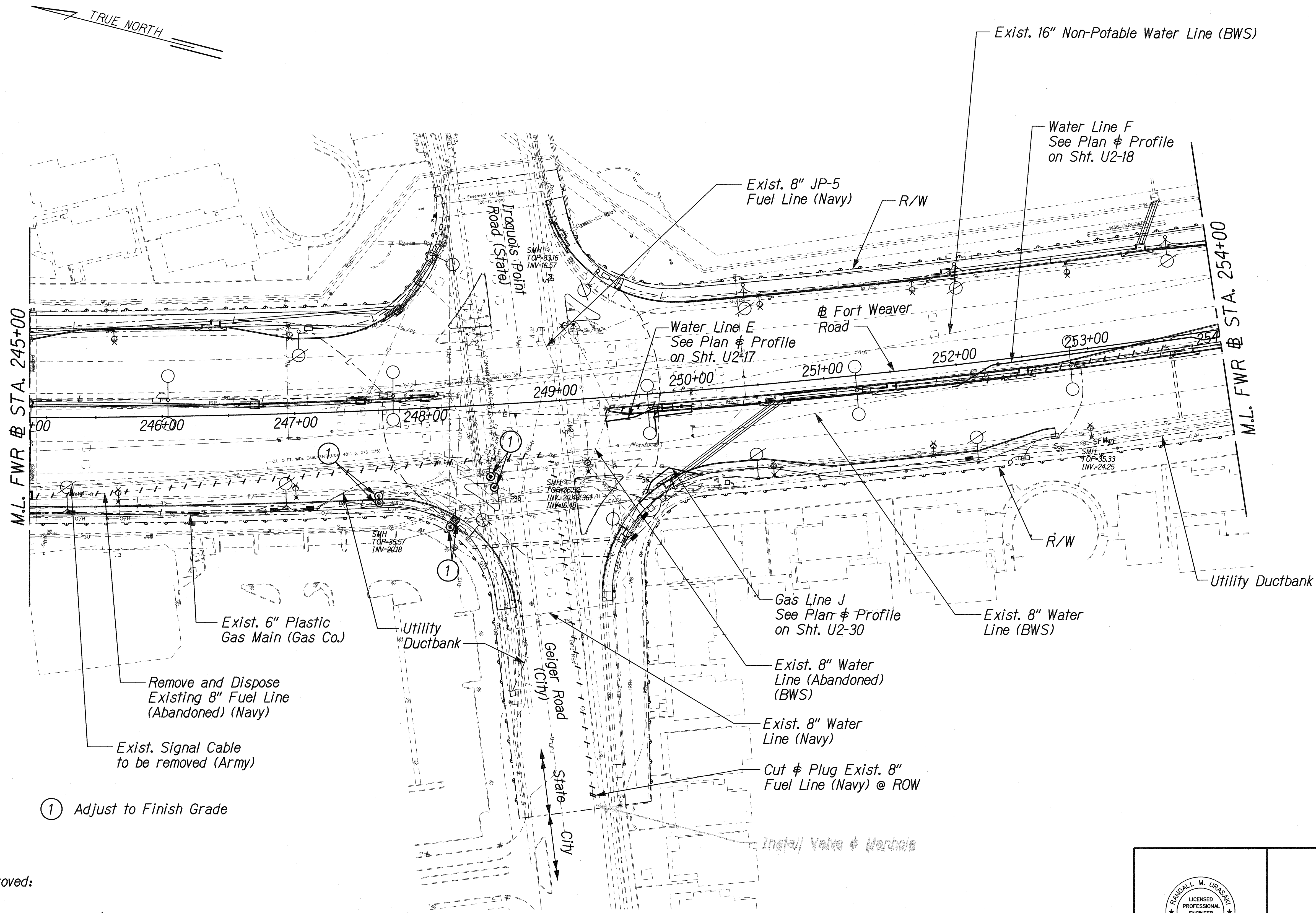
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
UTILITY PLAN
STA. 236+00 TO 245+00
 FORT WEAVER ROAD WIDENING
 VICINITY OF AAWA DRIVE TO GEIGER ROAD
 Scale: 1" = 40' Date: Feb. 22, 2008

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 SIGNATURE: *[Signature]* EXPIRATION DATE OF LICENSE: 04/30/2010

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| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| NOTE BOOK | DRAWN BY | |
| | DESIGNED BY | |
| | CHECKED BY | |

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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 184 | 371 |



Approved:

Dennis M. Nishimura 3/3/08
Chief, Wastewater Branch, DPP Date

Robert Crum 2/25/08
Chief, Capital Projects Division, BWS Date

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|---------------|-------------------|------|
| ORIGINAL PLAN | SURVEY PLATTED BY | DATE |
| TRACED BY | | |
| DESIGNED BY | | |
| CHECKED BY | | |
| DATE | | |

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SIGNATURE: *R. Urasaka* EXPIRATION DATE OF THE LICENSE: 04/30/2008

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

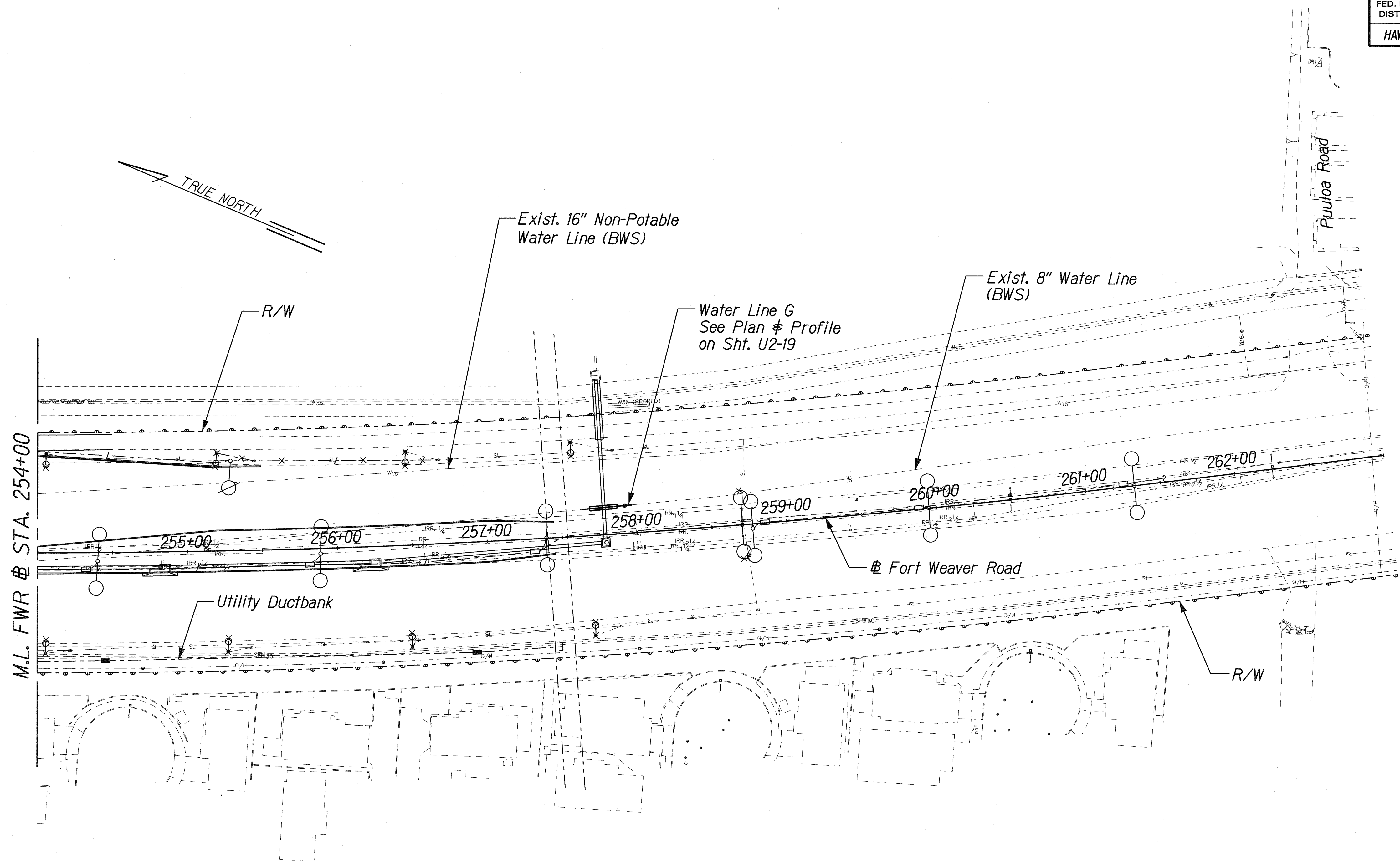
UTILITY PLAN
STA. 245+00 TO 254+00

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1" = 40' Date: Feb. 22, 2008

SHEET No. U2-11 OF 33 SHEETS

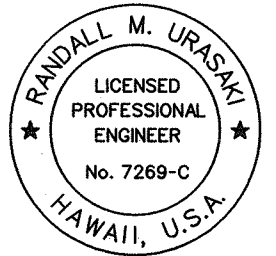
| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
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| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 185 | 371 |



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| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| TRACED BY | | |
| NOTED BY | | |
| CHECKED BY | | |
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J:\FORT WEAVER ROAD\PACKAGE2\UTILITY\UTILITY15.dgn

Approved: *Robert Chun* 2/25/08
 for Chief, Capital Projects Division, BWS Date



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R. M. Urasaki
 SIGNATURE EXPIRATION DATE OF THE LICENSE 04/30/2008

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

UTILITY PLAN
STA. 254+00 TO 263+00

FORT WEAVER ROAD WIDENING
 VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1" = 40' Date: Feb. 22, 2008

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 186 | 371 |

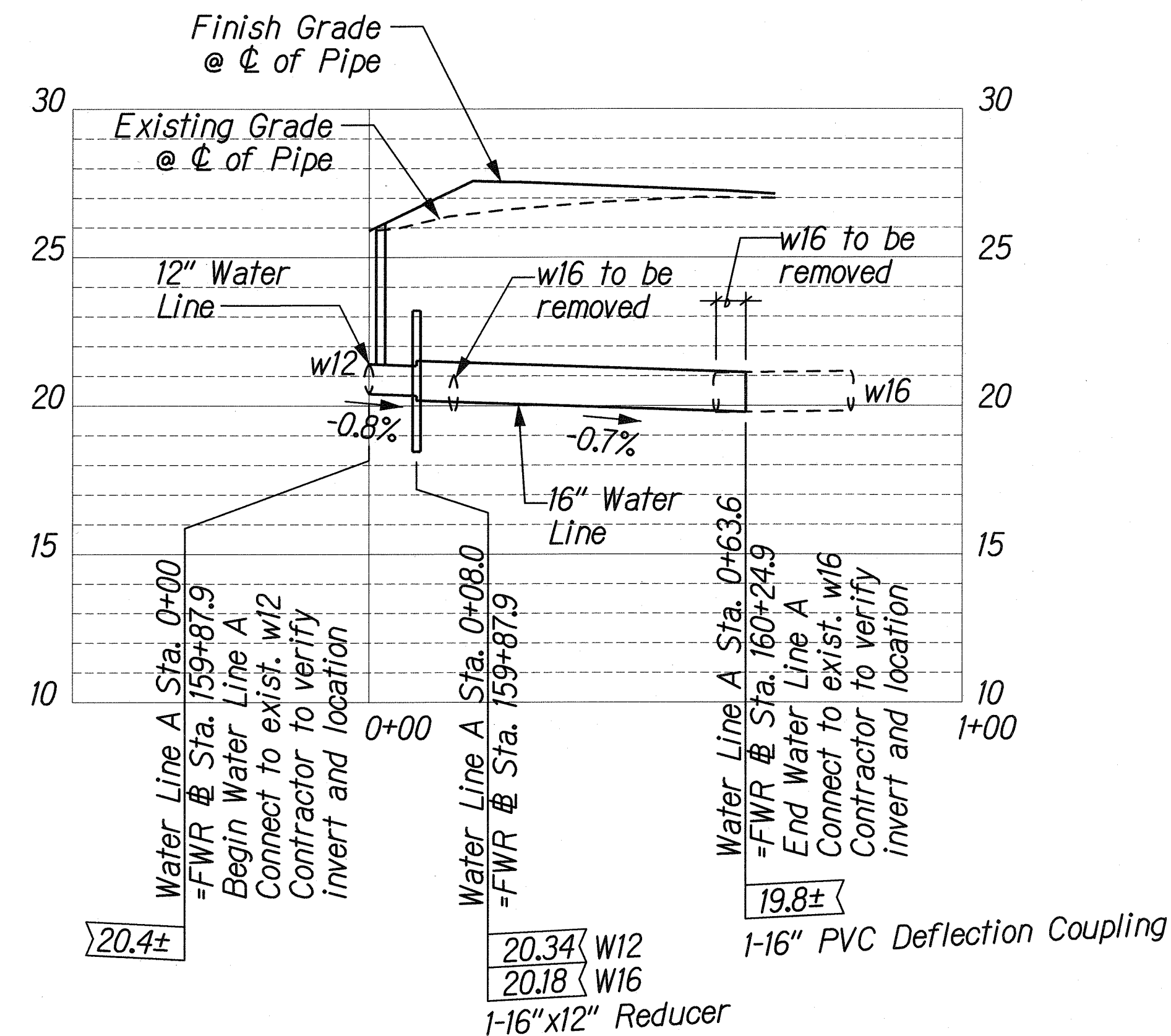
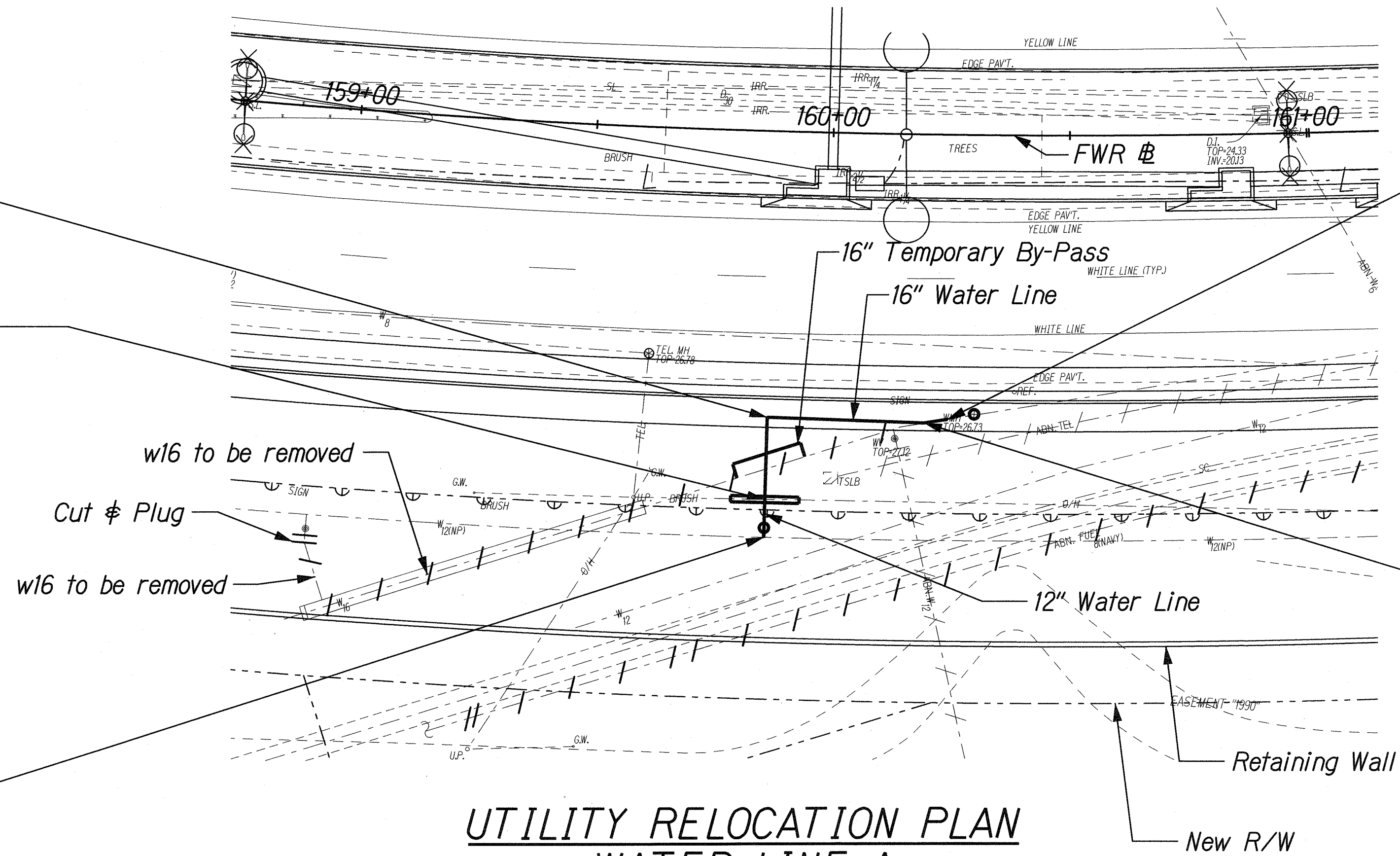
Water Line A Sta. 0+25.3
=FWR @ Sta. 159+87.9, o/s 60.47' Rt.
1-16" 1/4 Bend (H)
1-PVC Deflector Coupling
1-Conc. Block

Water Line A Sta. 0+08.0
=FWR @ Sta. 159+87.9, o/s 77.81' Rt.
1-12"x16" Reducer
1-Concrete Thrust Beam

Water Line A Sta. 0+00.0
=FWR @ Sta. 159+87.9, o/s 85.81' Rt.
Begin Water Line A
Connect to exist. w12
Contractor to verify invert and location
1-Conc. Block w/Structural Struts
1-Valve Box
MATERIALS FOR CONNECTION:
1-12"x12" Tapping Sleeve
1-12" Tapping Valve, (CL 150)
TEMPORARY FOR TESTING:
1-12" Cap Tapped for 4" IPT
1-4" Cleanout
1-Conc. Block
See Schematic Layout on Sht. U2-31.

Water Line A Sta. 0+63.6
=FWR @ Sta. 160+24.9, o/s 60.12' Rt.
End Water Line A
Connect to exist. w16
Contractor to verify invert and location
1-16" PVC Deflection Coupling
MATERIALS FOR CONNECTION:
1-16" Sleeve, 15" Long
10-LF, 16" PVC Pipe, CL 150
TEMPORARY FOR TESTING:
1-16" Cap Tapped for 4" IPT
1-4" Cleanout
1-Conc. Block
See Schematic Layout on Sht. U2-31.

Water Line A Sta. 0+58.6
=FWR @ Sta. 160+20.1, o/s 60.98' Rt.
1-16" 1/32 Bend (H)
1-Conc. Block w/Structural Struts

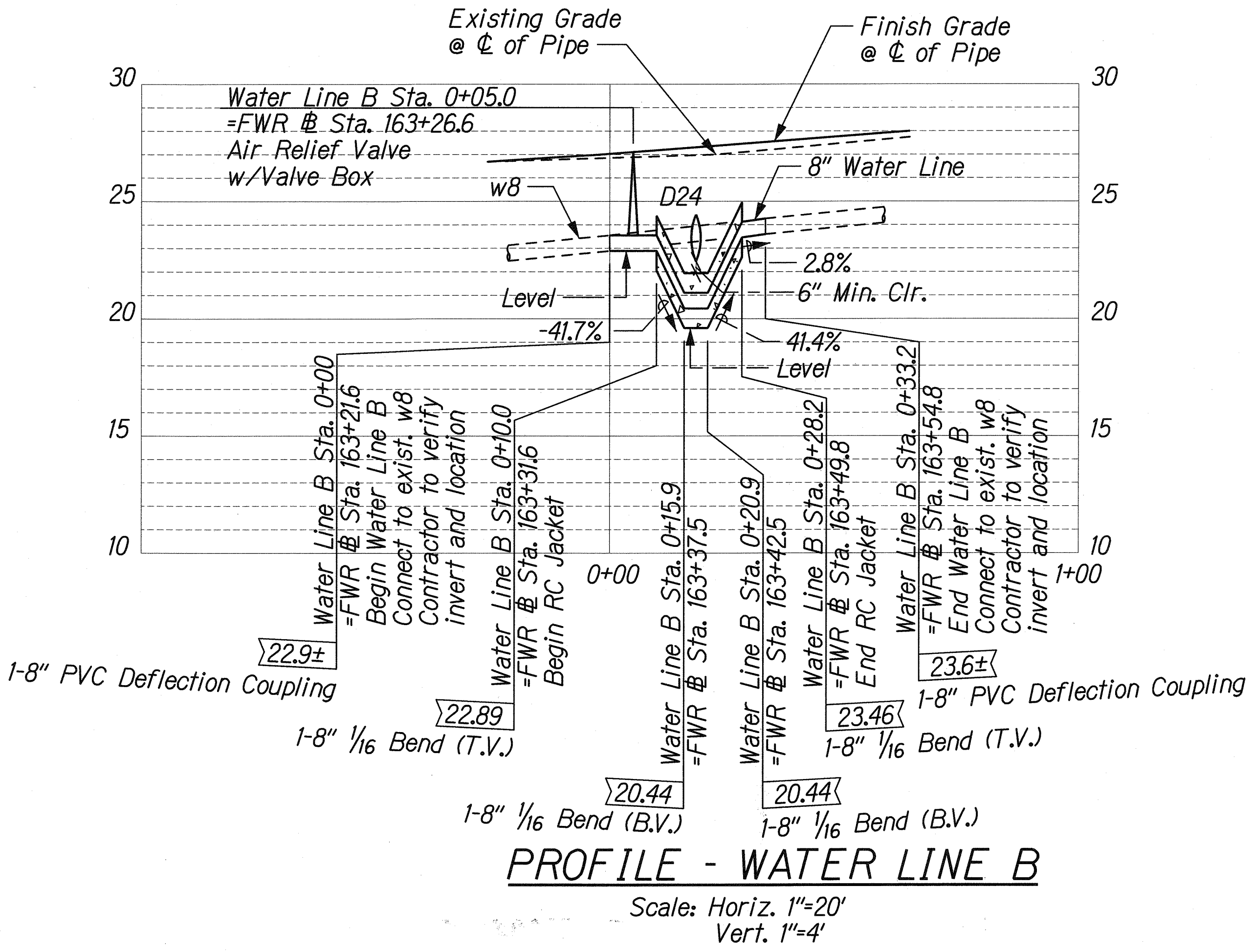
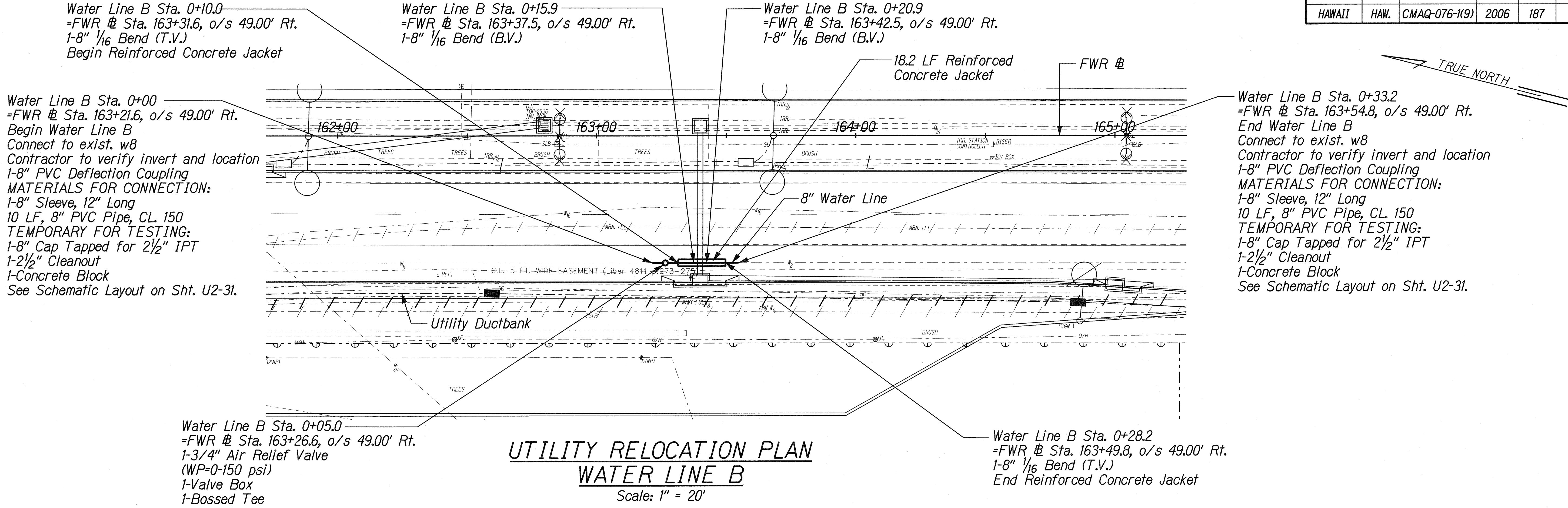


Approved:

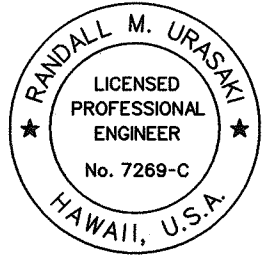
Robert Chun 2/25/08
Chief, Capital Projects Division, BWS Date

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|--|---|
| | STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION |
| | UTILITY RELOCATION PLAN
& PROFILE - WATER LINE A |
| | FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD |
| | Scale: 1"=20' Date: Feb. 22, 2008 |

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 187 | 371 |



Approved: *Robert Chun* 2/25/08
 Chief, Capital Projects Division, BWS Date



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 SIGNATURE: *[Signature]* EXPIRATION DATE OF THE LICENSE: 04/30/09

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
PROFILE - WATER LINE B

FORT WEAVER ROAD WIDENING
 VICINITY OF AAWA DRIVE TO GEIGER ROAD

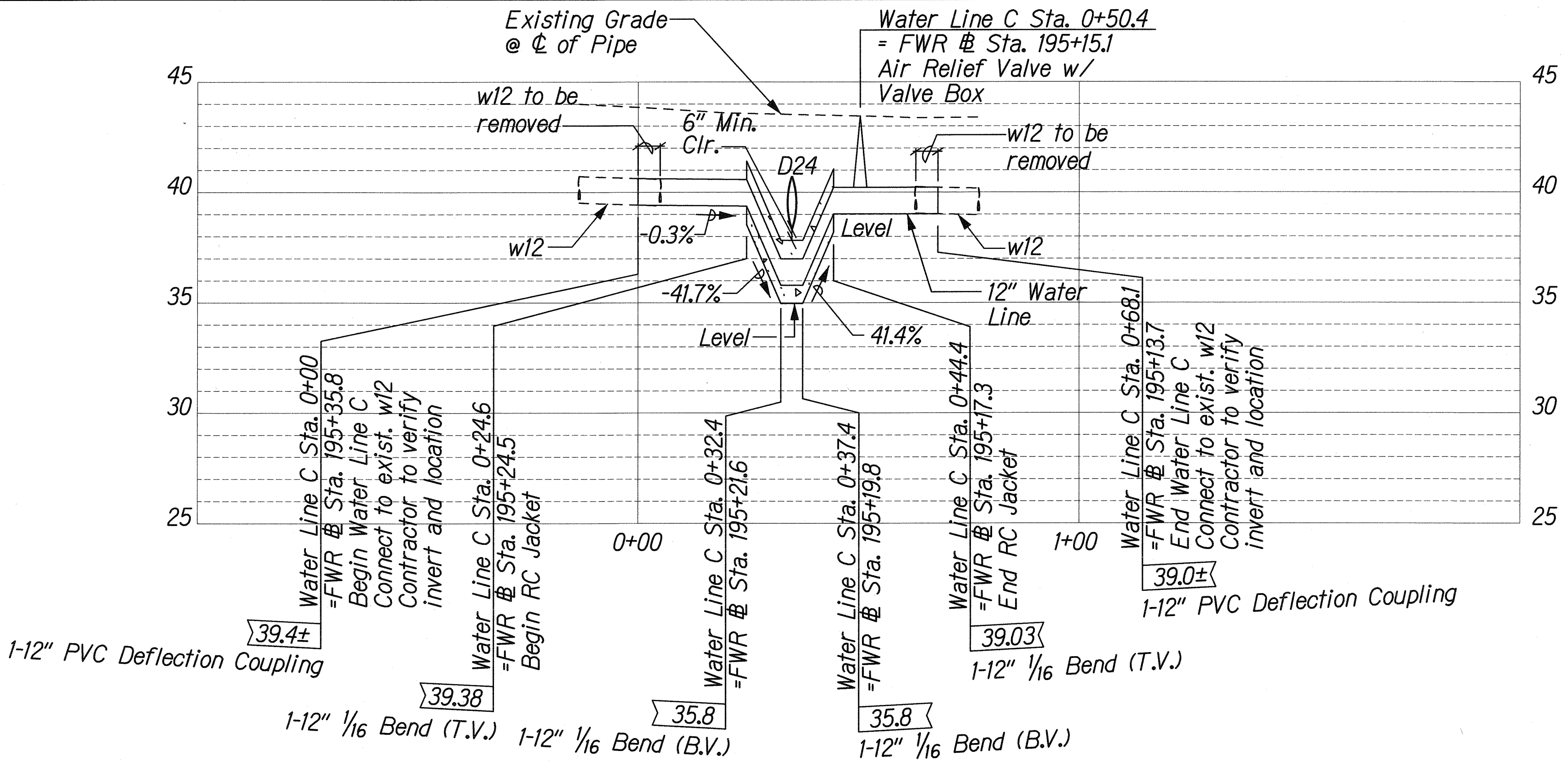
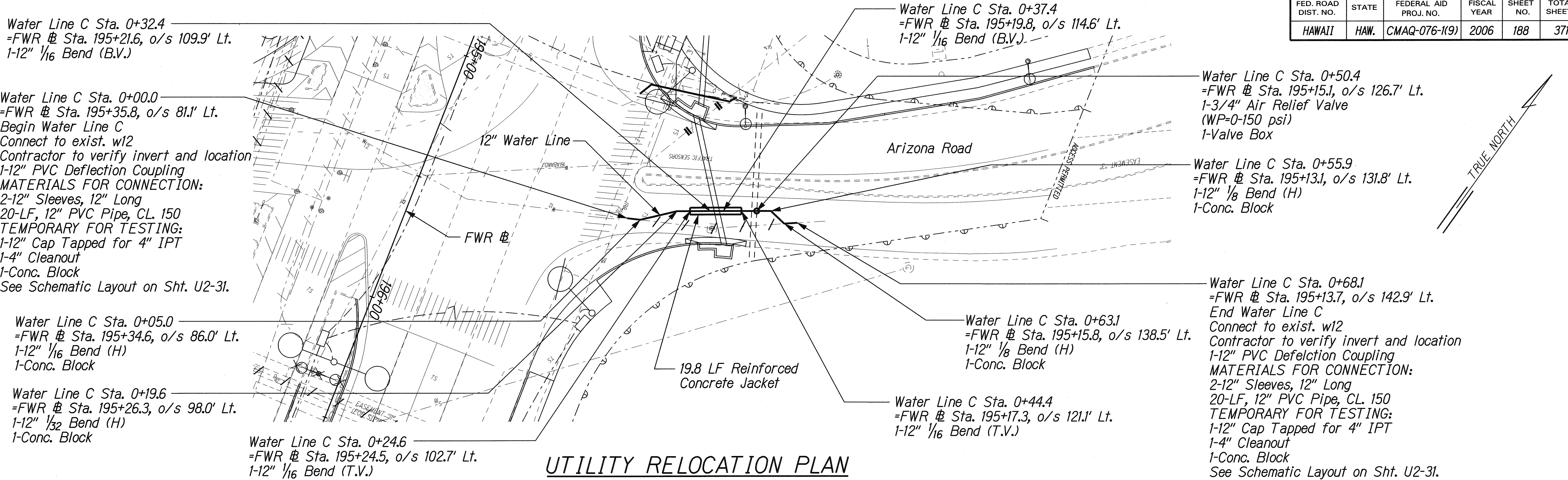
Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. U2-14 OF 33 SHEETS

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|---------------|-------------------|------|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| NOTE BOOK | DRAWN BY | |
| | DESIGNED BY | |
| | CHECKED BY | |

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-K9 | 2006 | 188 | 371 |



Approved: *Robert Chun* 2/25/08
Chief, Capital Projects Division, BWS_{DD} Date

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
SIGNATURE: *R. Urasaki* 04/30/08
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
PROFILE - WATER LINE C

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. U2-15 OF 33 SHEETS

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| SURVEY PLOTTED BY | DATE |
| DRAWN BY | |
| CHECKED BY | |
| NOTED BY | |
| ORIGINAL PLAN | |
| NOTE BOOK | |
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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 189 | 371 |

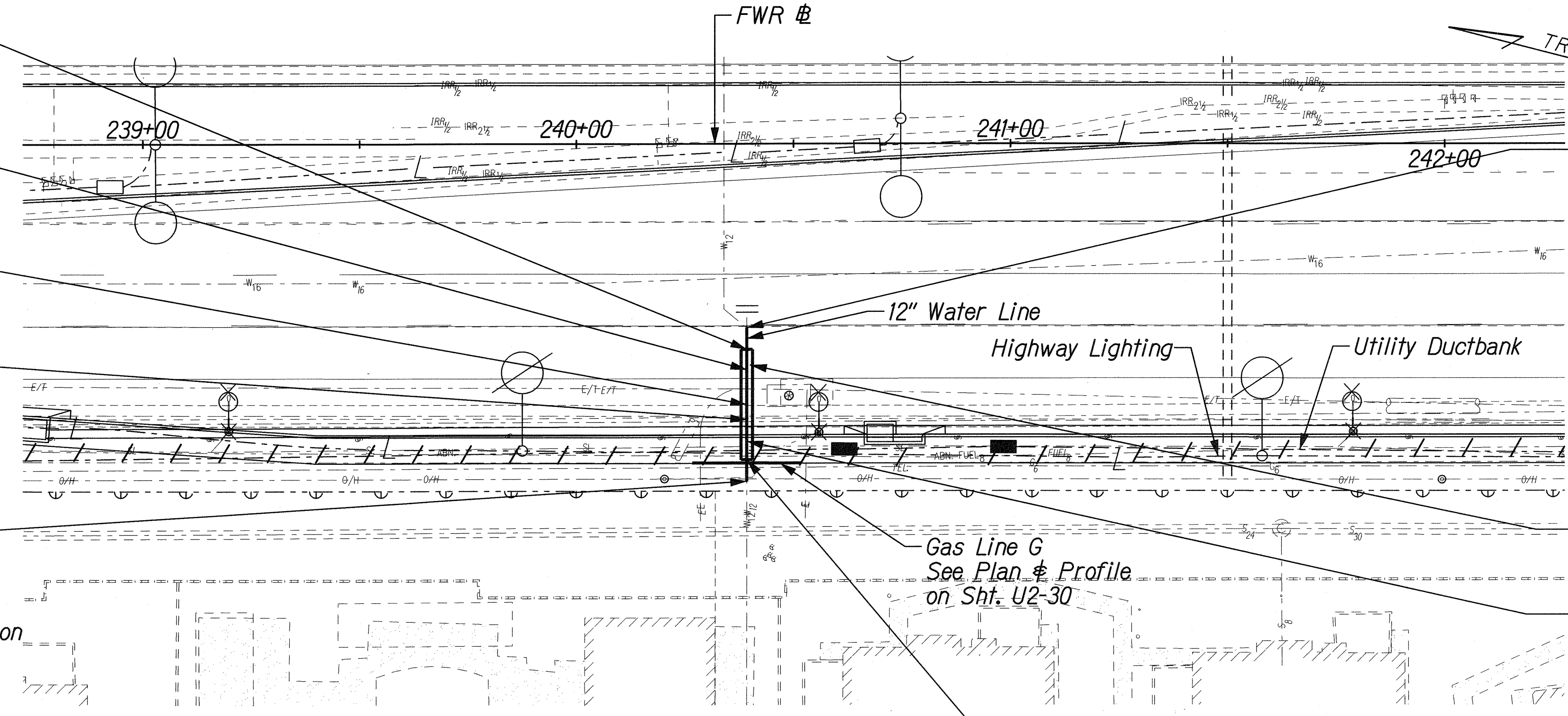
Water Line D Sta. 0+30.7
=FWR @ Sta. 240+39.3, o/s 47.0'
1-12" 1/8 Bend (T.V.)
End Reinforced Concrete Jacket

Water Line D Sta. 0+25.4
=FWR @ Sta. 240+39.3, o/s 52.3'
1-12" 1/8 Bend (B.V.)

Water Line D Sta. 0+19.2
=FWR @ Sta. 240+39.3, o/s 58.5'
1-12" 1/16 Bend (B.V.)

Water Line D Sta. 0+14.2
=FWR @ Sta. 240+39.3, o/s 63.5'
1-12" 1/16 Bend (T.V.)

Water Line D Sta. 0+00
=FWR @ Sta. 240+39.3, o/s 77.7'
Begin Water Line D
Connect to exist w12
Contractor to verify invert and location
1-12" PVC Deflection Coupling
MATERIALS FOR CONNECTION:
1-12" Sleeve, 12" Long
10 LF, 12" PVC Pipe, CL. 150
TEMPORARY FOR TESTING:
1-12" Cap Tapped for 4" IPT
1-4" Cleanout
1-Concrete Block
See Schematic layout on Sht. U2-31.



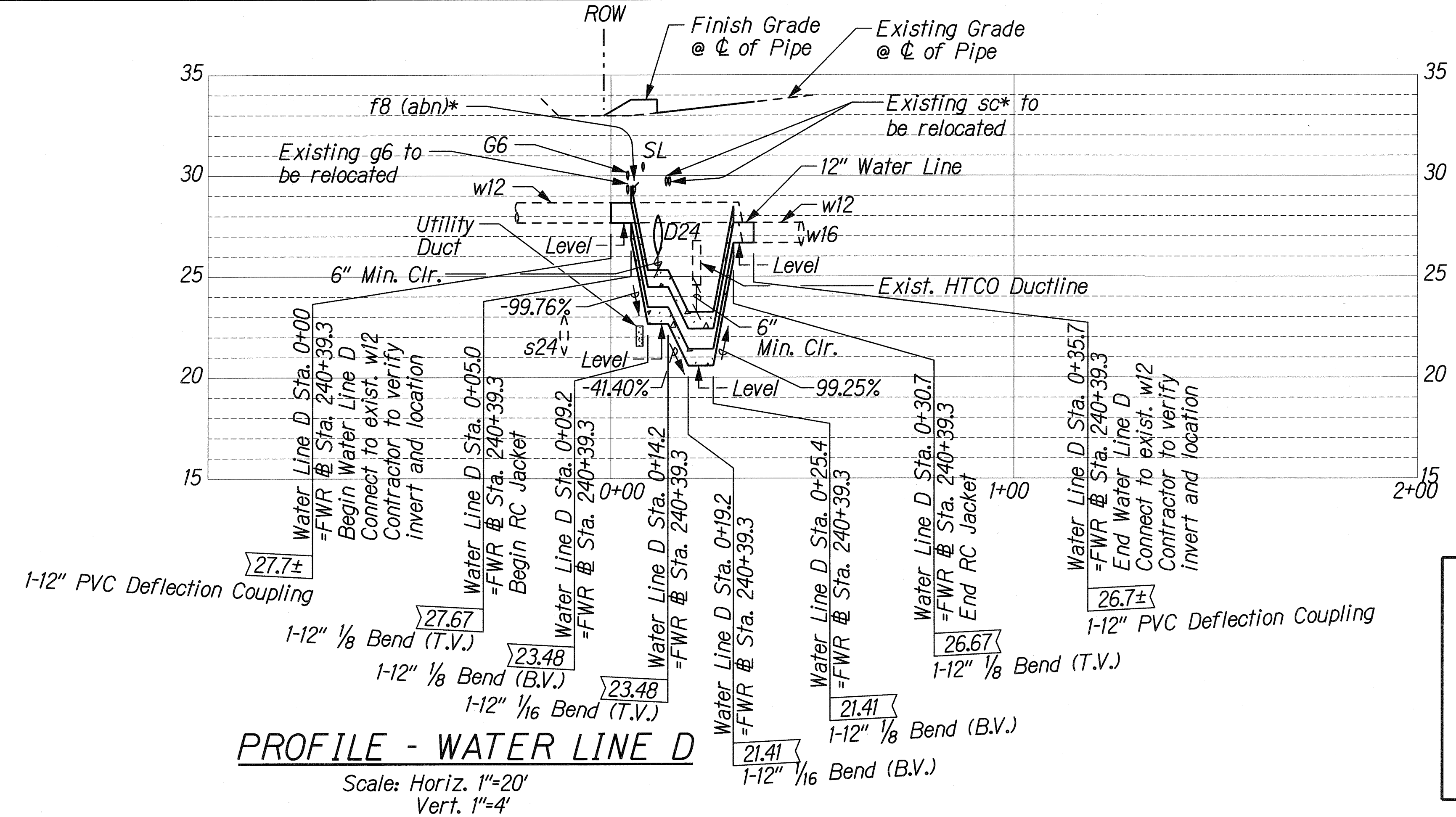
Water Line D Sta. 0+35.7
=FWR @ Sta. 240+39.3, o/s 42.0'
End Water Line D
Connect to exist w12
Contractor to verify invert and location
1-12" PVC Deflection Coupling
MATERIALS FOR CONNECTION:
1-12" Sleeve, 12" Long
10 LF, 12" PVC Pipe, CL. 150
TEMPORARY FOR TESTING:
1-12" Cap Tapped for 4" IPT
1-4" Cleanout
1-Concrete Block
See Schematic layout on Sht. U2-31

25.7 LF Reinforced Concrete Jacket

Water Line D Sta. 0+09.2
=FWR @ Sta. 240+39.3, o/s 68.5'
1-12" 1/8 Bend (B.V.)

Water Line D Sta. 0+05.0
=FWR @ Sta. 240+39.3, o/s 72.7'
1-12" 1/8 Bend (T.V.)
Begin Reinforced Concrete Jacket

UTILITY RELOCATION PLAN
WATER LINE D
Scale: 1" = 20'



PROFILE - WATER LINE D
Scale: Horiz. 1"=20'
Vert. 1"=4'

Approved:

Robert Chun 2/25/08
Chief, Capital Projects Division, BWS Date

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
SIGNATURE: *Randall M. Urasak*
EXPIRATION DATE OF THE LICENSE: 04/30/2008

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
& PROFILE - WATER LINE D

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

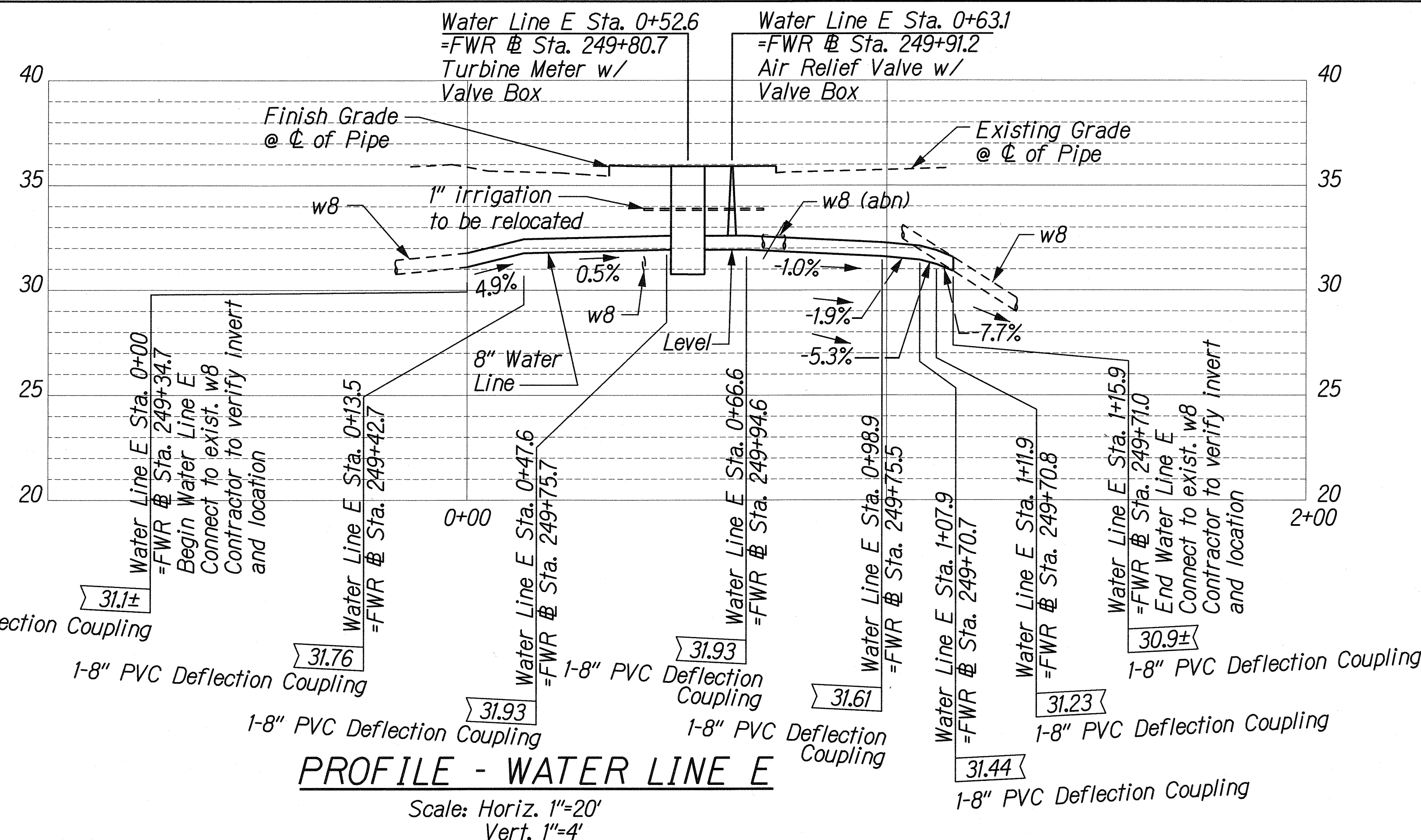
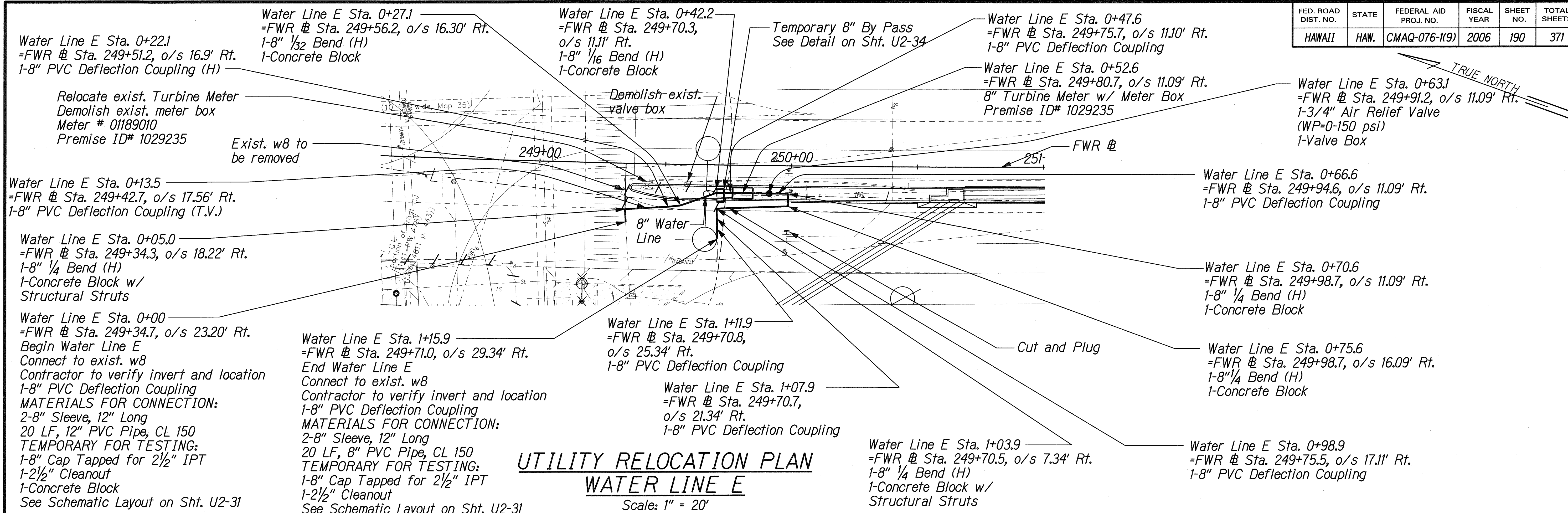
Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. U2-16 OF 33 SHEETS

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| SURVEY PLOTTED BY | DATE |
| DRAWN BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |
| ORIGINAL PLAN | |
| NOTE BOOK | |
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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 190 | 371 |



NOTE:

Contractor to relocate existing 8" lateral and install all necessary fittings to accommodate the relocation of the 8" Turbine Meter, Type V Meter Box and all appurtenances in accordance with BWS Standards. Contractor to relocate the existing meter and reconnect to the existing property piping. Contractor to coordinate the relocation work with BWS inspector.

Approved:

Robert Chun 2/25/08
Chief, Capital Projects Division, BWS Date

| | |
|--|--|
| | STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
UTILITY RELOCATION PLAN
& PROFILE - WATER LINE E
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD
Scale: 1"=20' Date: Feb. 22, 2008 |
| | SHEET No. U2-17 OF 33 SHEETS |

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DESIGNED BY: _____
CHECKED BY: _____
NOTES BOOK: _____
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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 192 | 371 |

Water Line G Sta. 0+00
=FWR @ Sta. 257+64.5, o/s 17.79' Lt.
Begin Water Line G
Connect to exist. w8
Contractor to verify invert and location
1-8" PVC Deflection Coupling
MATERIALS FOR CONNECTION:
1-8" Sleeve, 12" Long
10 LF, 8" PVC Pipe, CL 150
TEMPORARY FOR TESTING:
1-8" Cap Tapped for 2 1/2" IPT
1-2 1/2" Cleanout
1-Concrete Block
See Schematic Layout on Sht. U2-32.

Water Line G Sta. 0+33.4
=FWR @ Sta. 257+97.7, o/s 18.74' Lt.
End Water Line G
Connect to exist. w8
Contractor to verify invert and location
1-8" PVC Deflection Coupling
MATERIALS FOR CONNECTION:
1-8" Sleeve, 12" Long
10 LF, 8" PVC Pipe, CL 150
TEMPORARY FOR TESTING:
1-8" Cap Tapped for 2 1/2" IPT
1-2 1/2" Cleanout
1-Concrete Block
See Schematic Layout on Sht. U2-32

Water Line G Sta. 0+05.0
=FWR @ Sta. 257+69.4, o/s 17.95' Lt.
1-8" 1/32 Bend (T.V.)
Begin Reinforced Concrete Jacket

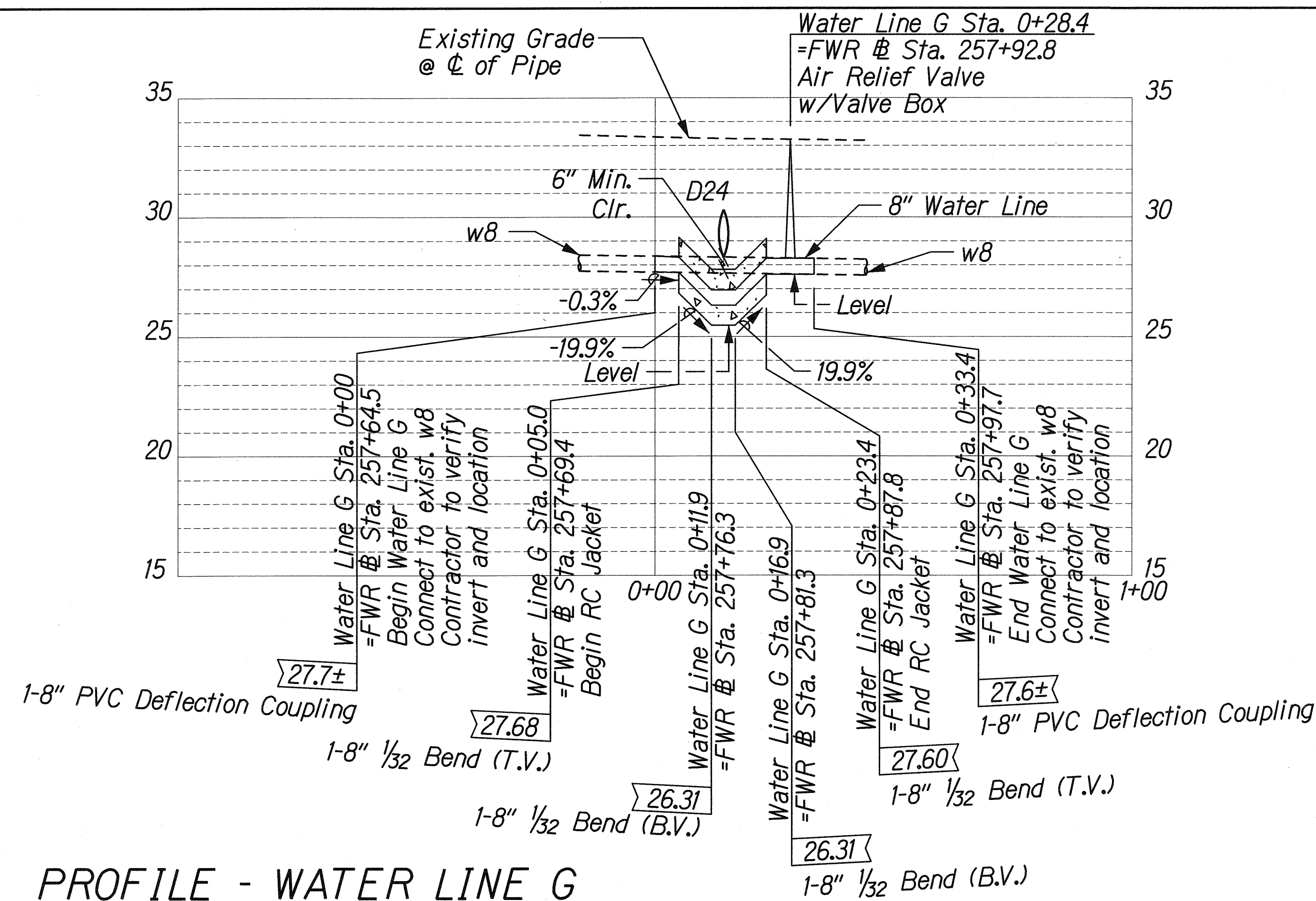
Water Line G Sta. 0+11.9
=FWR @ Sta. 257+76.3, o/s 18.15' Lt.
1-8" 1/32 Bend (B.V.)

UTILITY RELOCATION PLAN WATER LINE G

Scale: 1" = 20'

Water Line G Sta. 0+16.9
=FWR @ Sta. 257+81.3, o/s 18.30' Lt.
1-8" 1/32 Bend (B.V.)

Water Line G Sta. 0+23.4
=FWR @ Sta. 257+87.8, o/s 18.48' Lt.
1-8" 1/32 Bend (T.V.)
End Reinforced Concrete Jacket

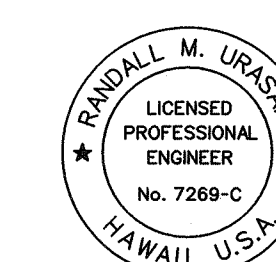


PROFILE - WATER LINE G

Scale: Horiz. 1"=20'
Vert. 1"=4'

Approved:

Robert Chun 2/25/08
Chief, Capital Projects Division, BWS Date



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OR UNDER MY SUPERVISION.
SIGNATURE DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

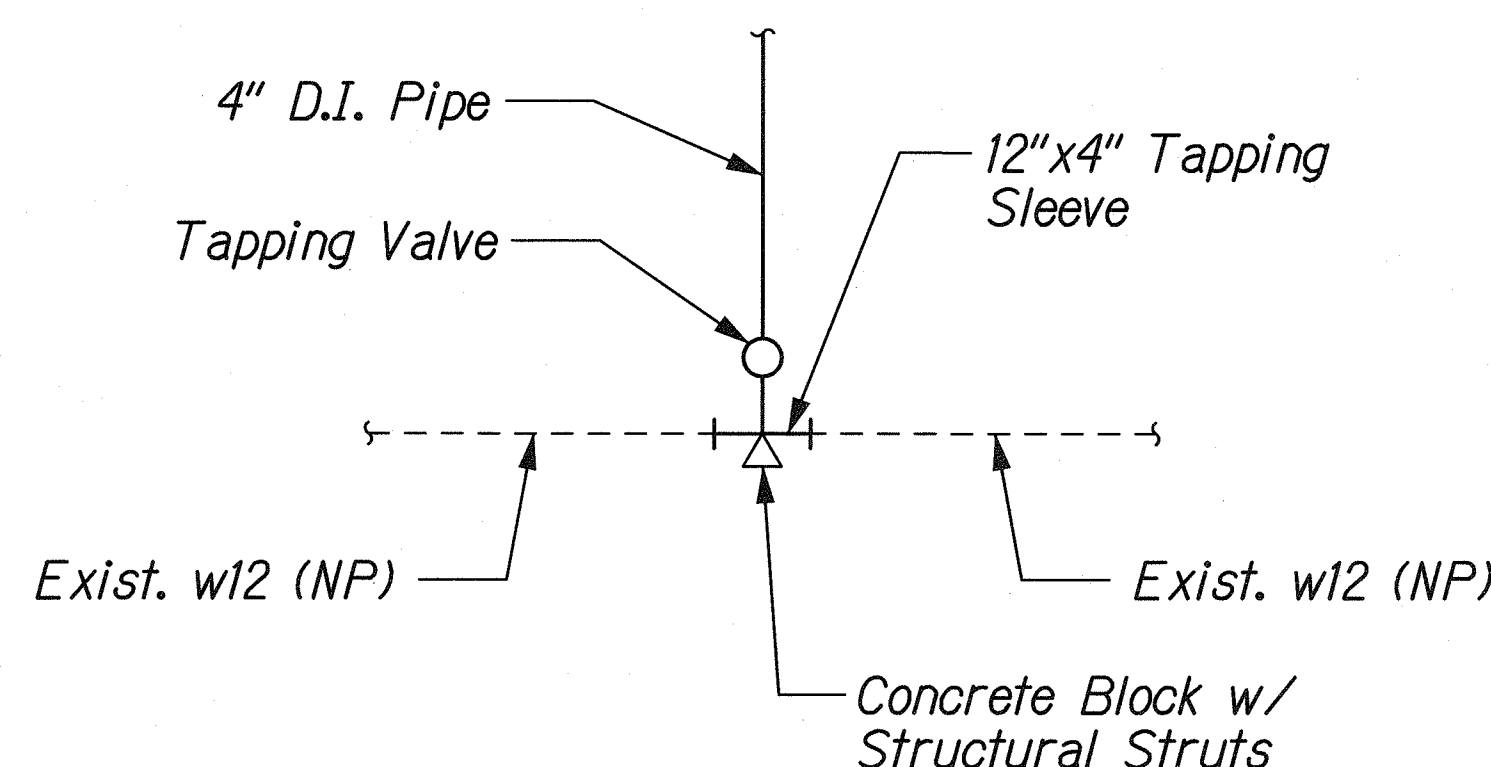
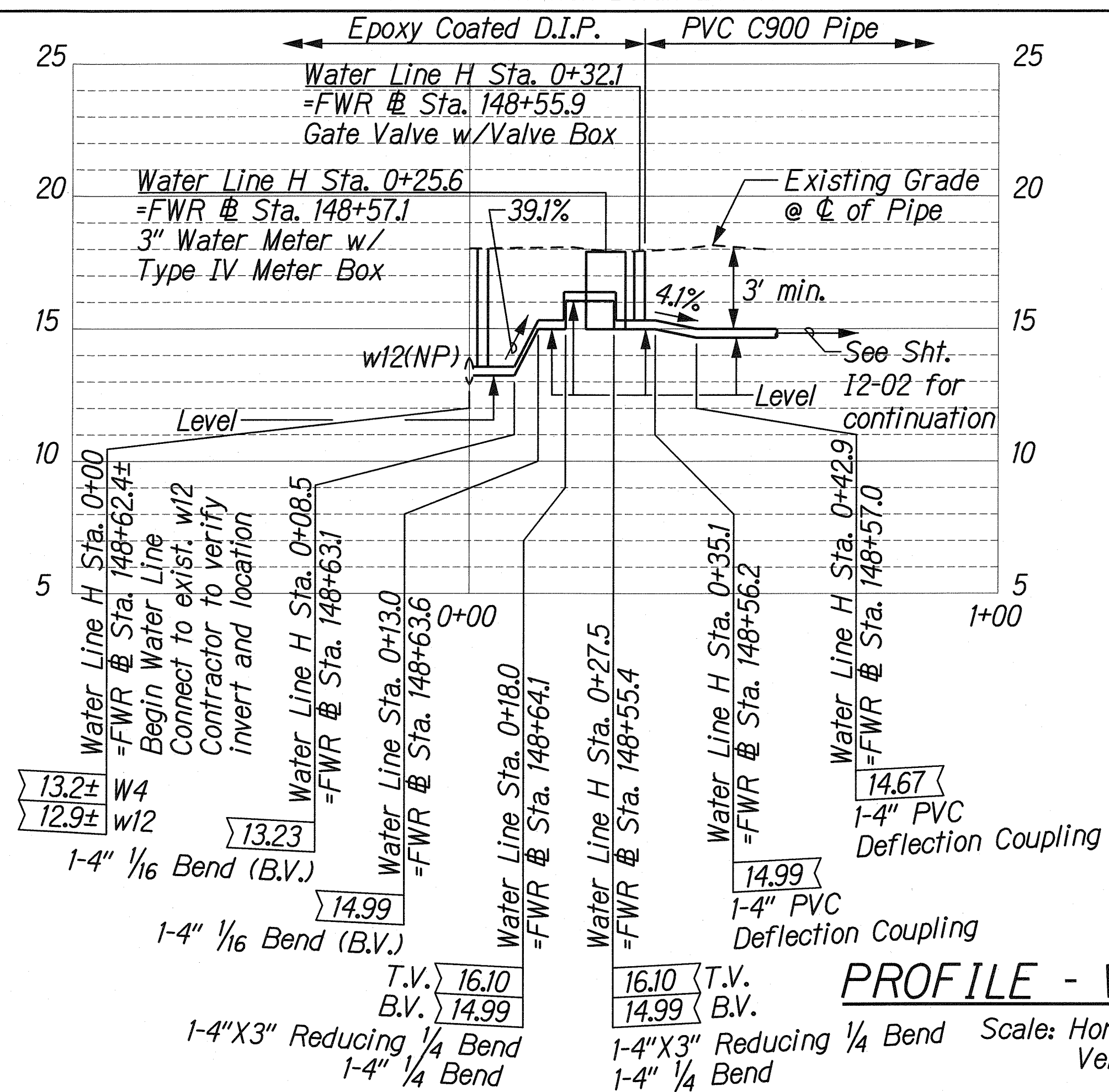
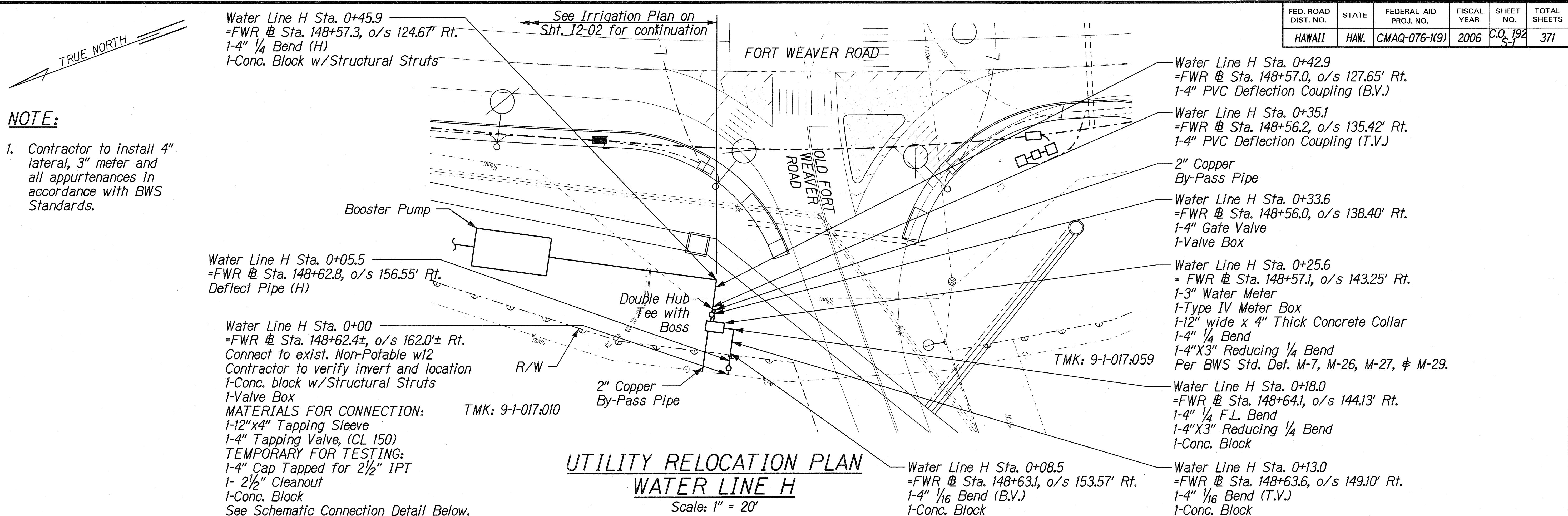
UTILITY RELOCATION PLAN * PROFILE - WATER LINE G

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. U2-19 OF 33 SHEETS

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|--------------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | C.O. 192 S-1 | 371 |



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| ORIGINAL PLAN | DATE |
| DRAWN BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |

1/4 FORT WEAVER ROAD/PACKAGE 2/FIELD CHANGE/UTIL-WATER-IRR-001

Approved: *Darwin K. Oiso* 8/3/09
 Chief, Capital Projects Division, BWS Date

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SIGNATURE: *R. Urakami* EXPIRATION DATE: 04/30/10 OF THE LICENSE

03/24/09 Added Sheet

| Date | Revision |
|------|----------|
| | |

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
& PROFILE - WATER LINE H

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. U2-19A OF 33 SHEETS

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 193 | 371 |

- FH Lateral A Sta. 0+00

FWR @ Sta. 168+52.9, o/s 46.90'Rt.

FH Connection

1-8" x 6" Tapping Sleeve

1-6" Tapping Valve, 150#

1-Anchor Block

1-Valve Box

1-FH (Ht.=4'-6")

1-FH Extension Piece

23 LF, 6" PVC Pipe, CL 150

2-Concrete Blocks

1-FH Marker

TEMPORARY FOR TESTING:

1-6" Cap Tapped for 2½" IPT

1-2½" Cleanout

1-Concrete Block

Remove and salvage exist. FH#L5768,

C.I. frame and cover. Cut and plug exist.

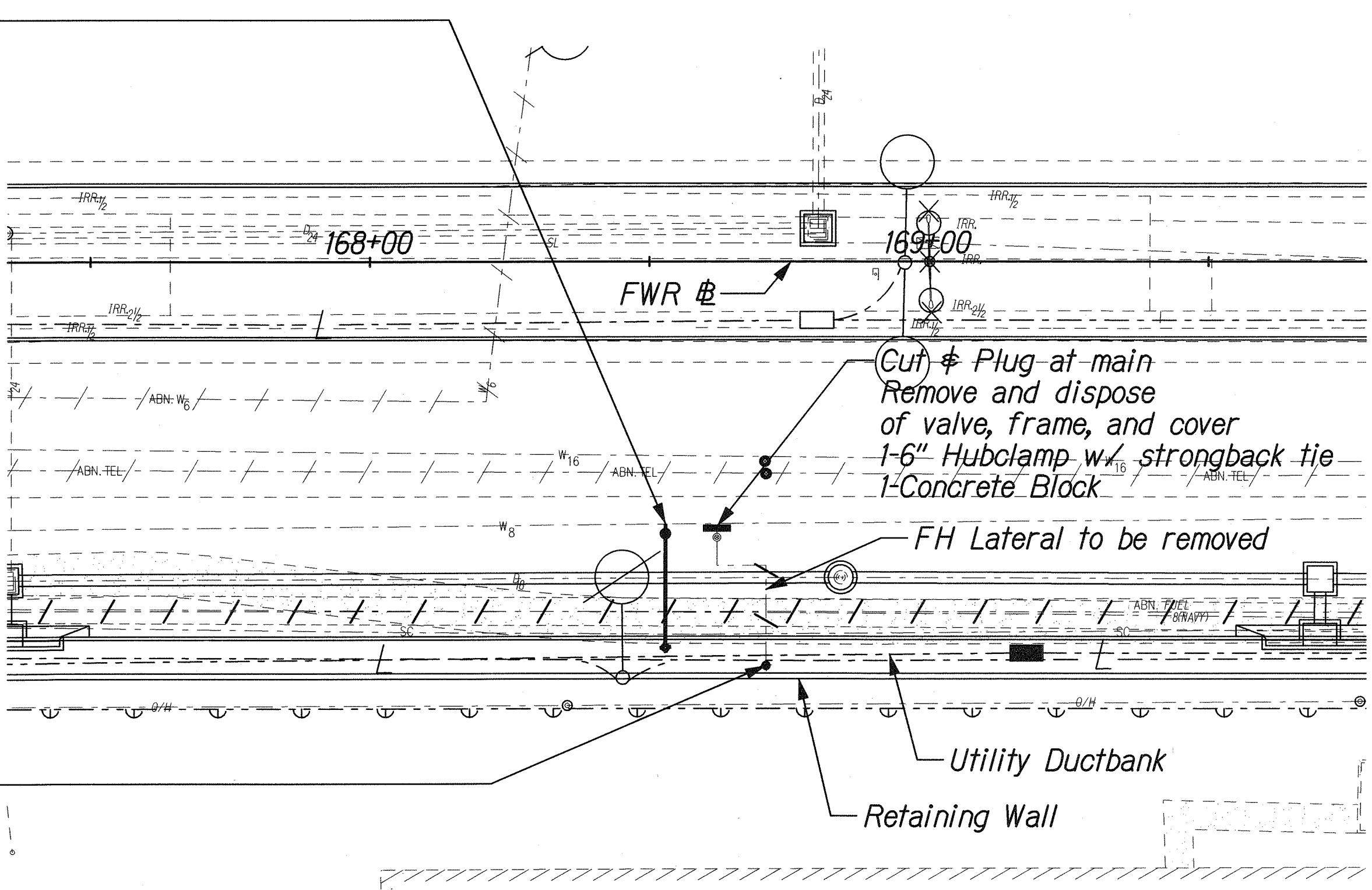
FH lateral at main. Remove exist. FH

marker.

1-6" Plug

1-Hubclamp with Strong Back

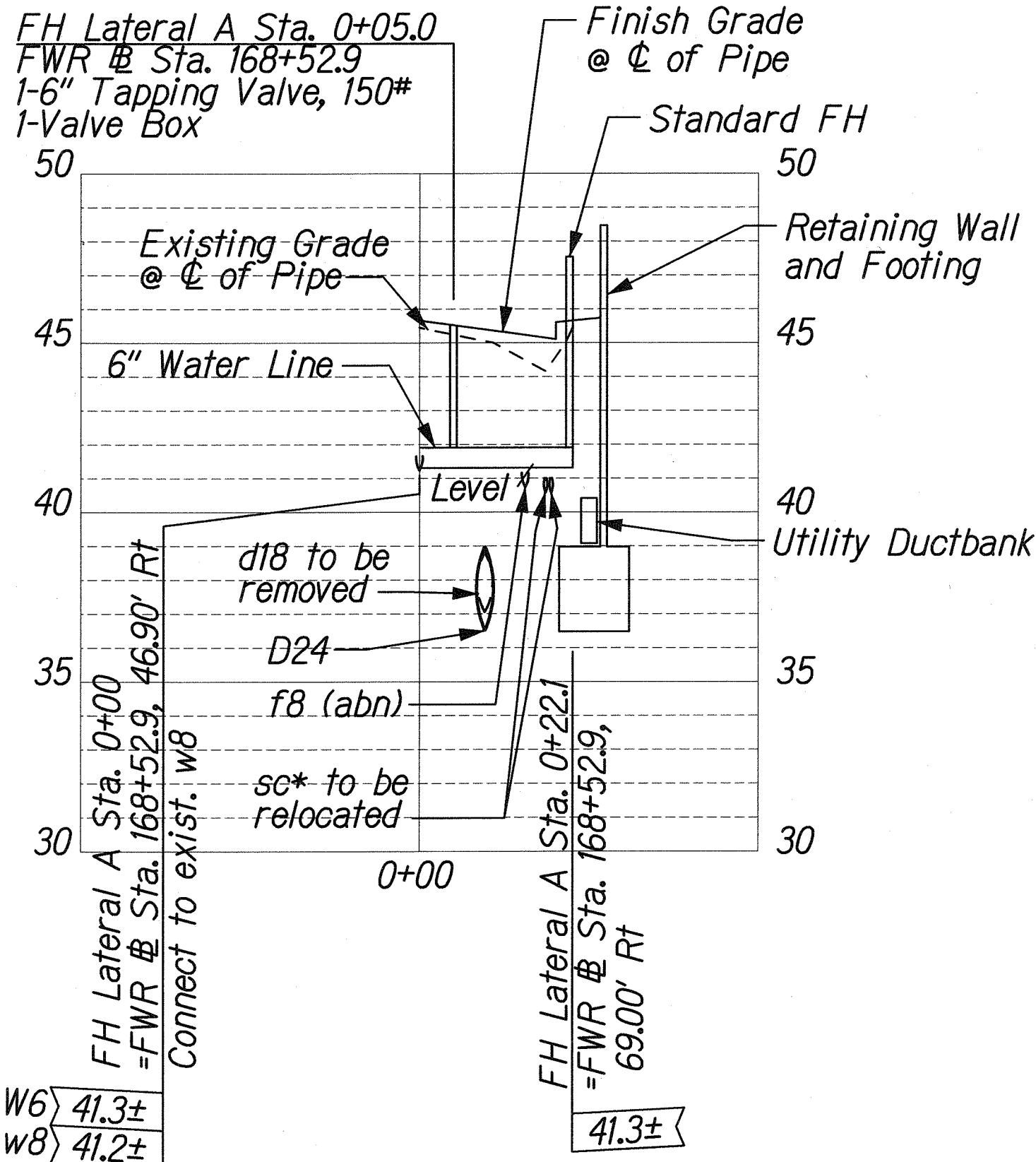
1-Concrete Block



FIRE HYDRANT NOTES:

- See Board of Water Supply's Water System Standards Sht. FH4 for fire hydrant connection detail.
- 3-ft minimum clear pathway should be maintained between the fire hydrant and retaining wall.

UTILITY RELOCATION PLAN
FIRE HYDRANT - LATERAL A
 Scale: 1" = 20'



PROFILE - FIRE HYDRANT - LATERAL A
 Scale: Horiz. 1"=20'
 Vert. 1"=4'

Approved:

Robert Chun 2/25/08
 Chief, Capital Projects Division, BWS Date

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 SIGNATURE: *R. Urasak* 04/30/08
 EXPIRATION DATE OF THE LICENSE

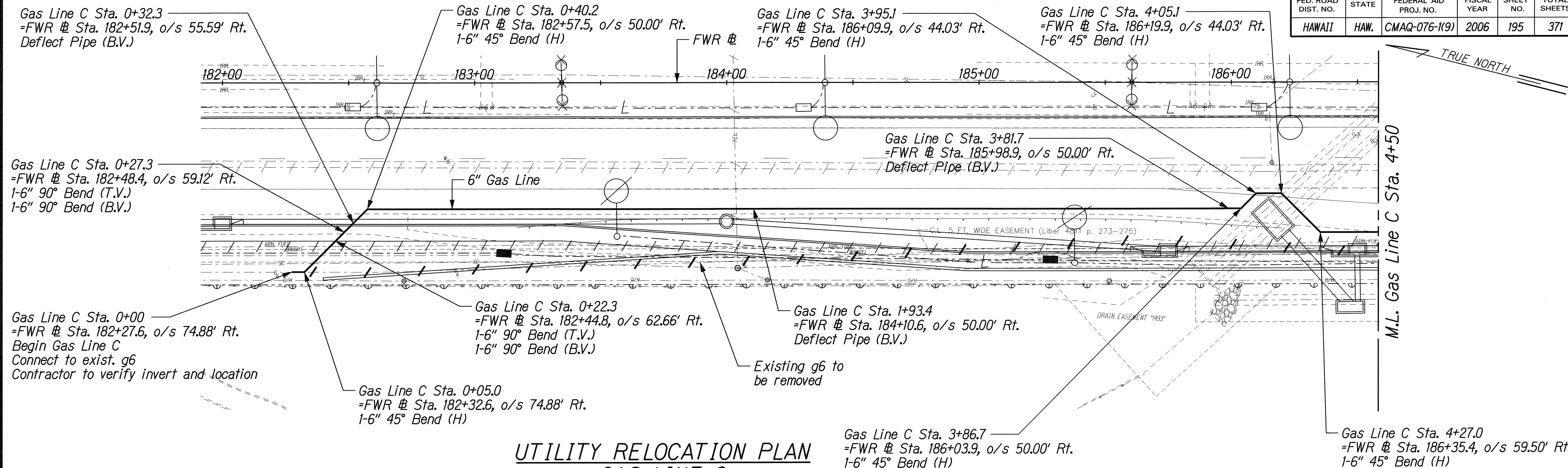
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
& PROFILE - FH LATERAL A

FORT WEAVER ROAD WIDENING
 VICINITY OF AAWA DRIVE TO GEIGER ROAD

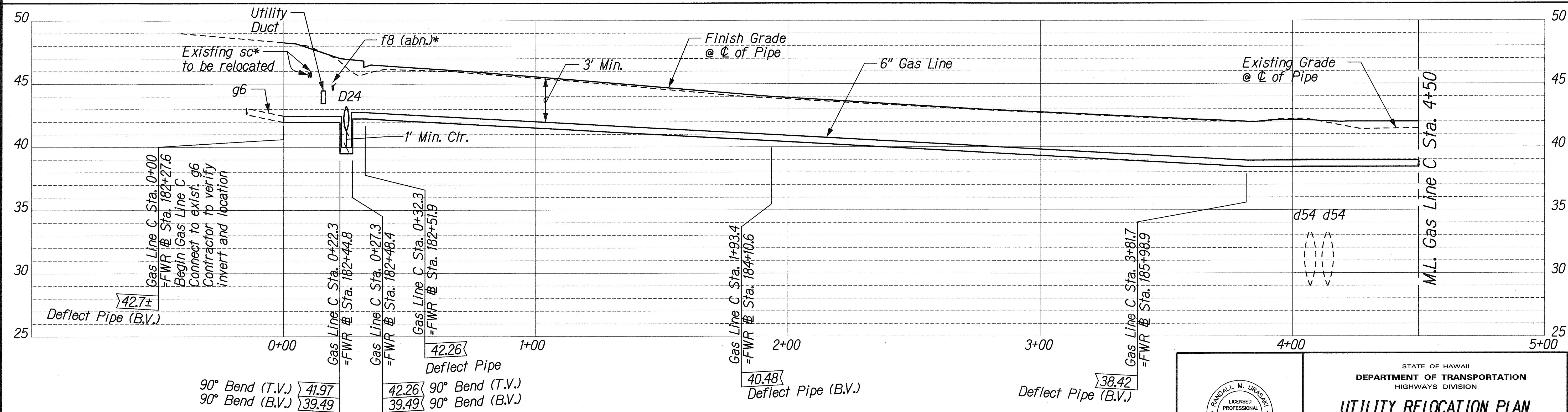
Scale: 1"=20' Date: Feb. 22, 2008

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 195 | 371 |



UTILITY RELOCATION PLAN GAS LINE C

Scale: 1" = 20'



PROFILE - GAS LINE C

Scale: Horiz. 1"=20'
Vert. 1"=4'

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SIGNATURE: *R. Urasaka* 04/30/10
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

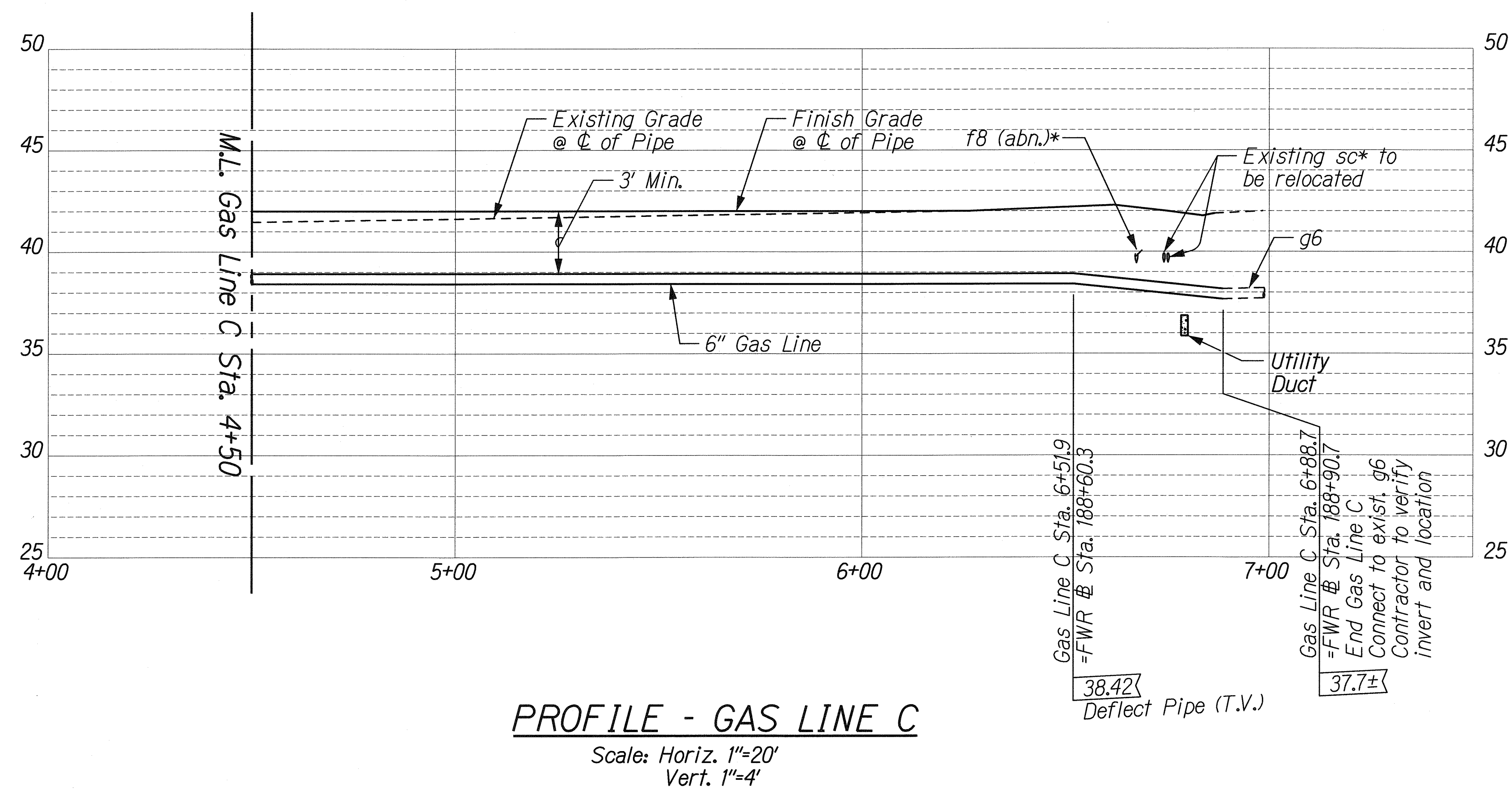
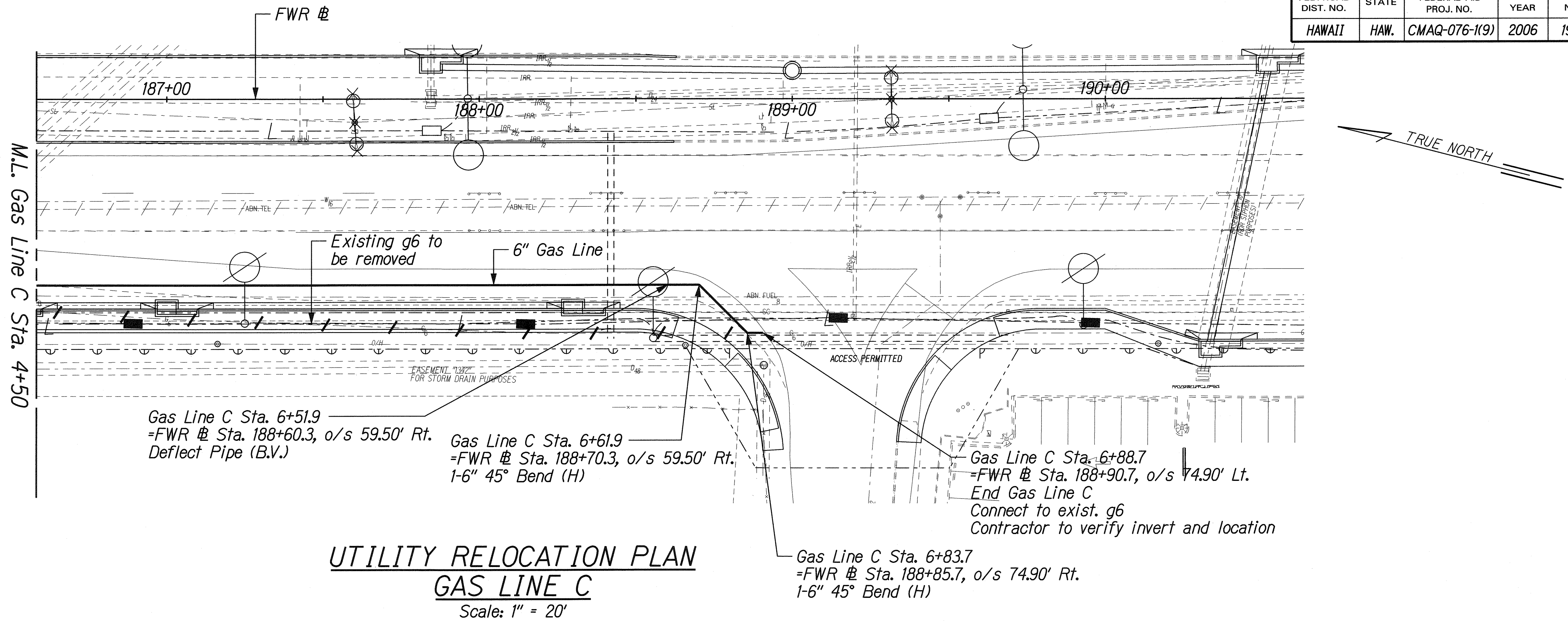
UTILITY RELOCATION PLAN
& PROFILE - GAS LINE C

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. U2-22 OF 33 SHEETS

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
& PROFILE - GAS LINE C

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

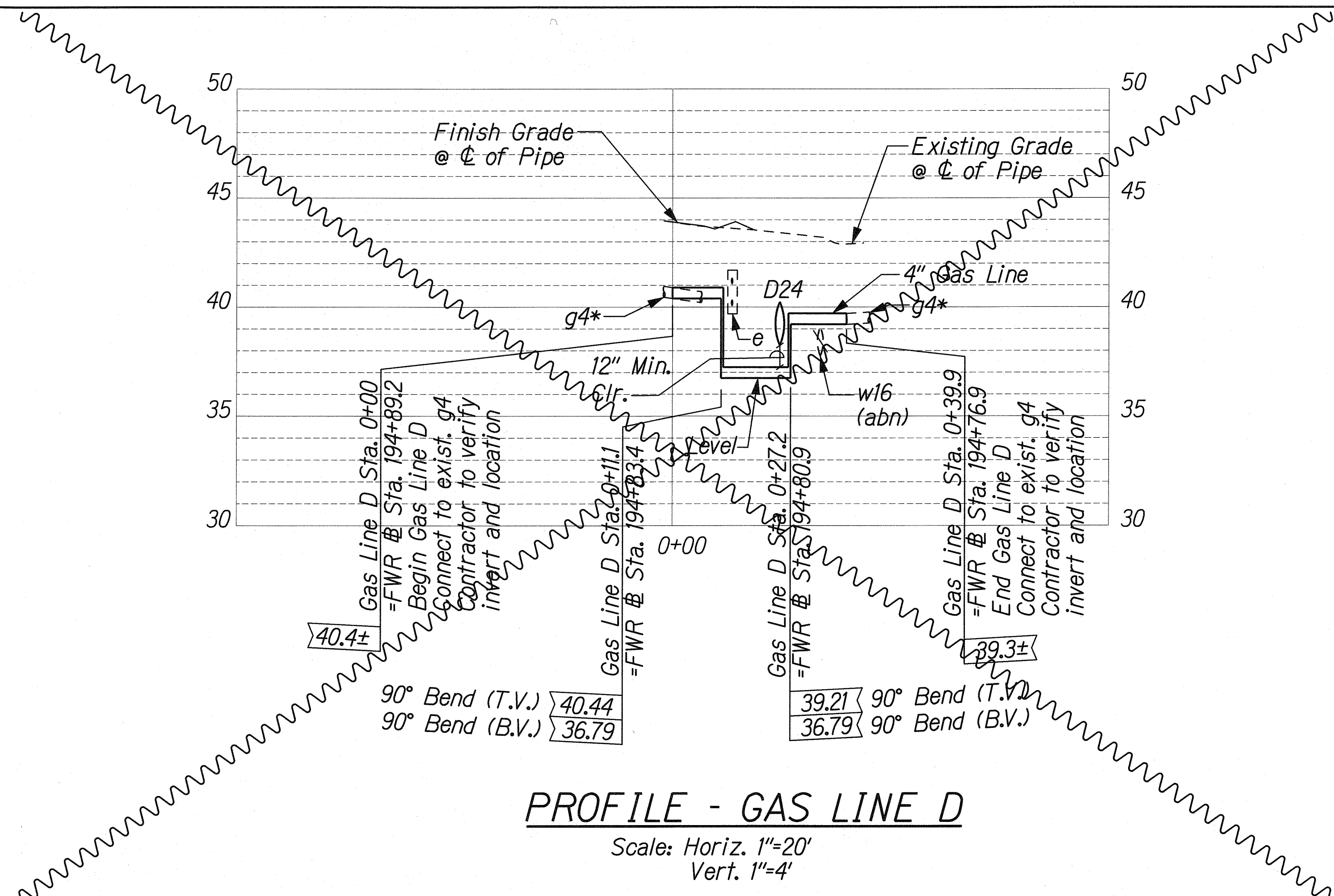
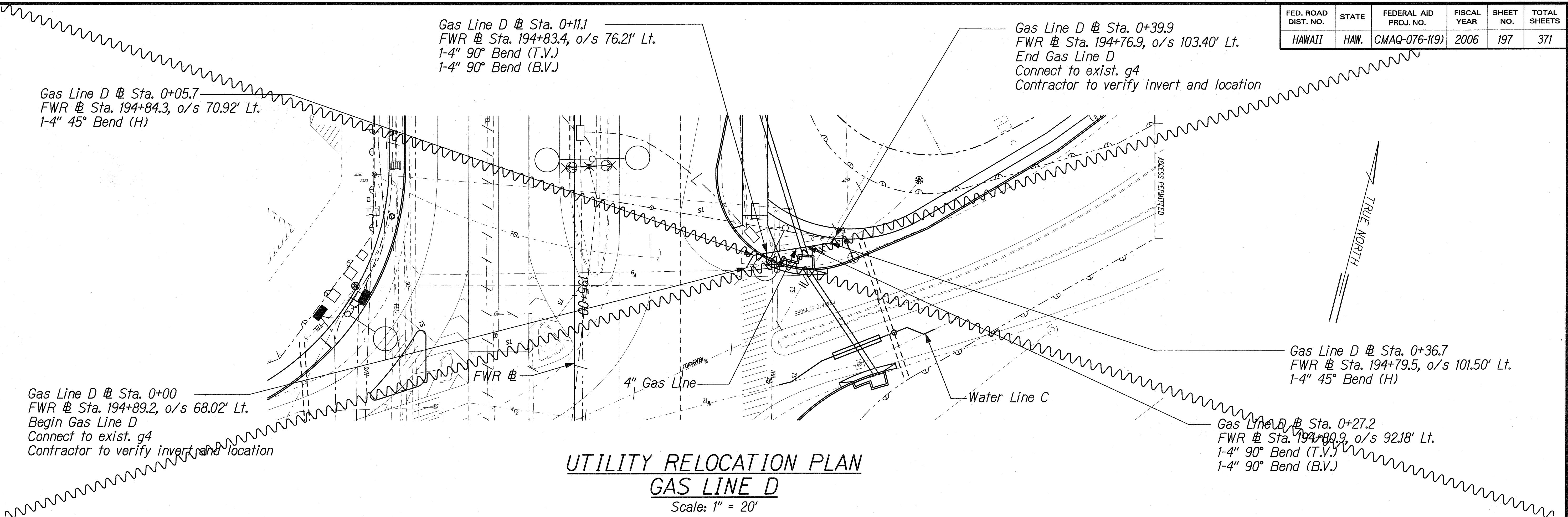
Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. U2-23 OF 33 SHEETS

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| ORIGINAL PLAN | DATE |
| DESIGNED BY | |
| TRACED BY | |
| NOTE BOOK | |
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| CHECKED BY | |

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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 197 | 371 |



| LEGEND FOR AS-BUILT POSTINGS | |
|------------------------------|-------------------------------------|
| | Squiggly line for as-built deletion |
| | Double line for as-built deletion |
| Roadway | Text for as-built posting |

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SIGNATURE: *R. Urasky* EXPIRATION DATE OF THE LICENSE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

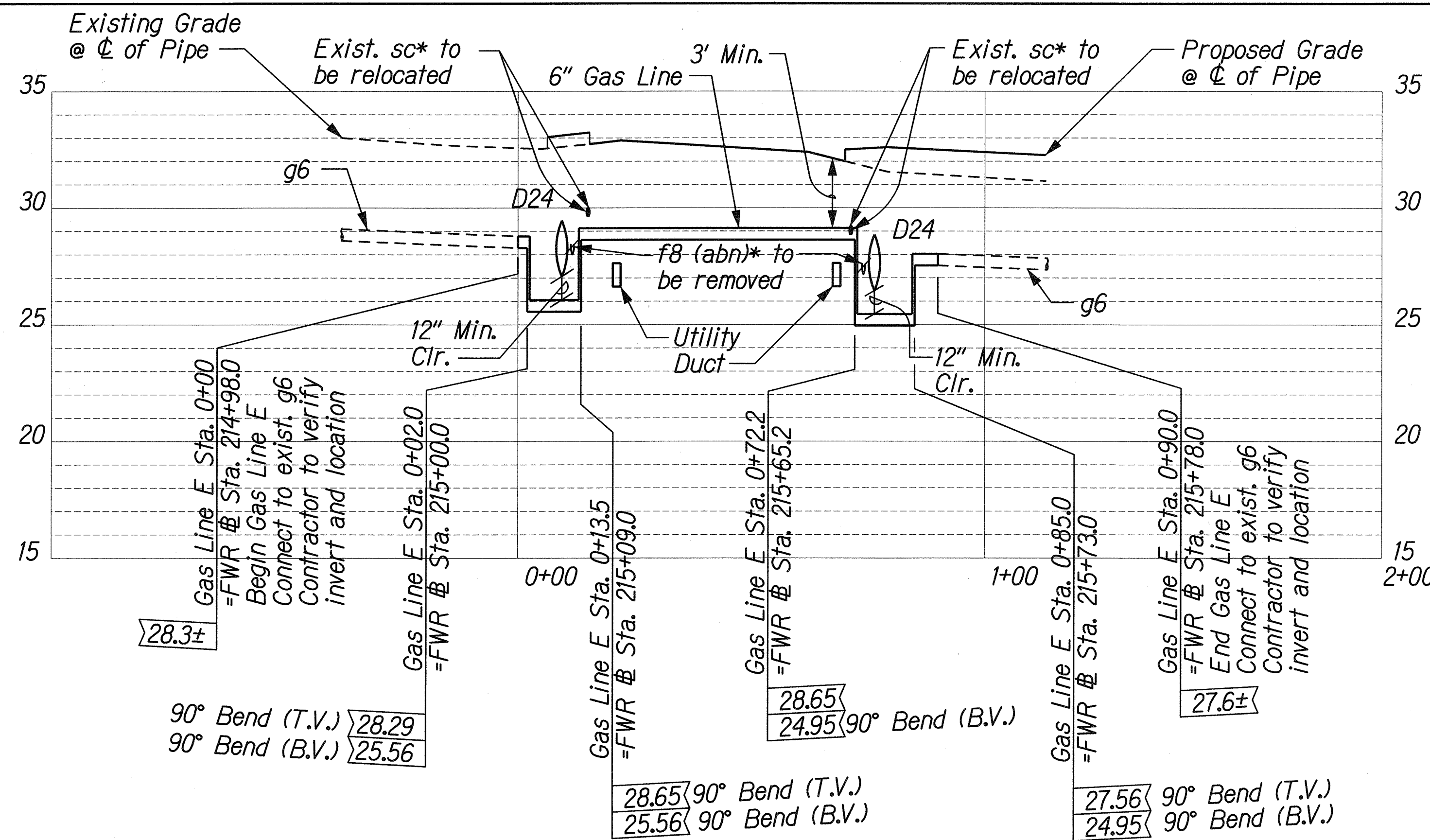
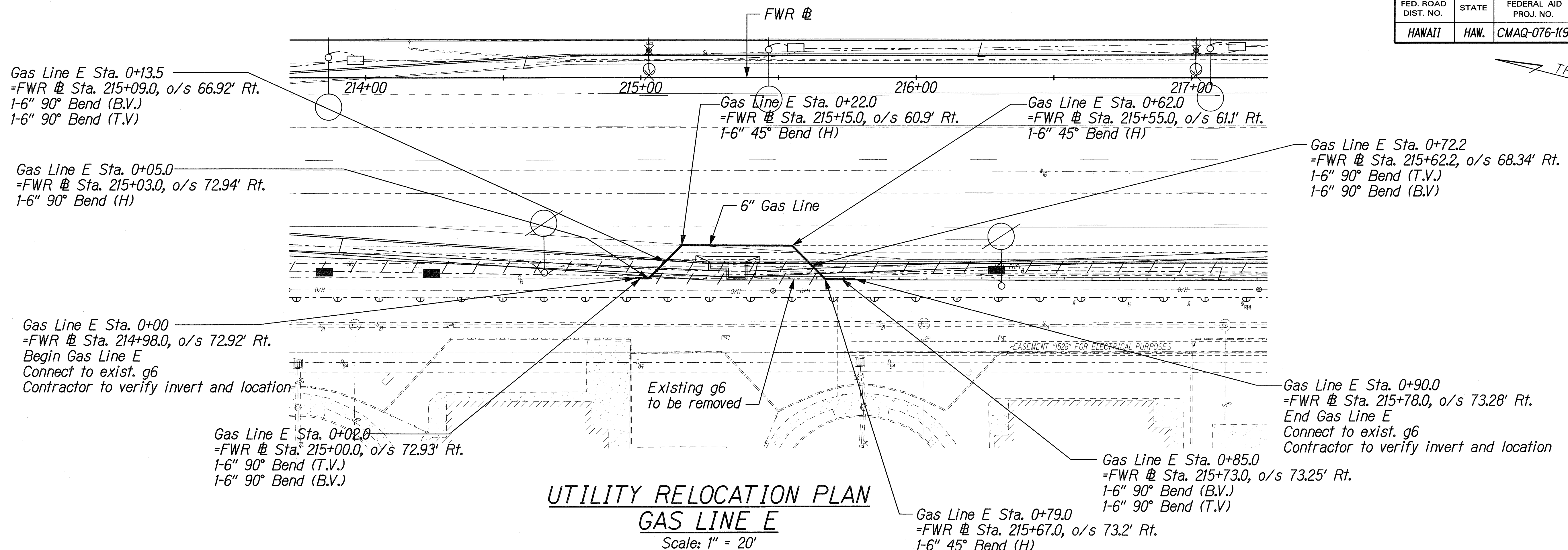
UTILITY RELOCATION PLAN
& PROFILE - GAS LINE D

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. U2-24 OF 33 SHEETS

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 198 | 371 |



PROFILE - GAS LINE E
Scale: Horiz. 1"=20'
Vert. 1"=4'

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EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
PROFILE - GAS LINE E

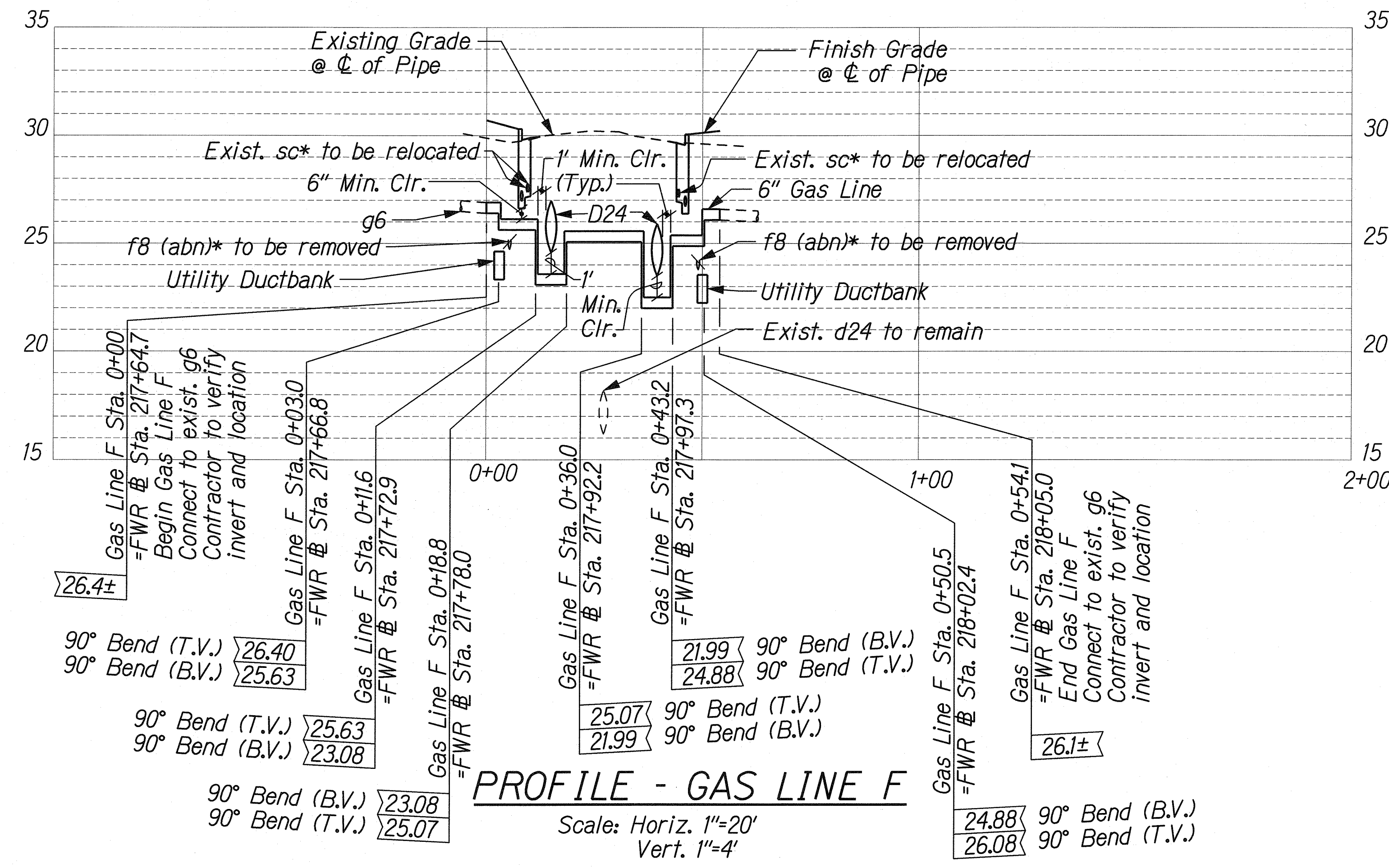
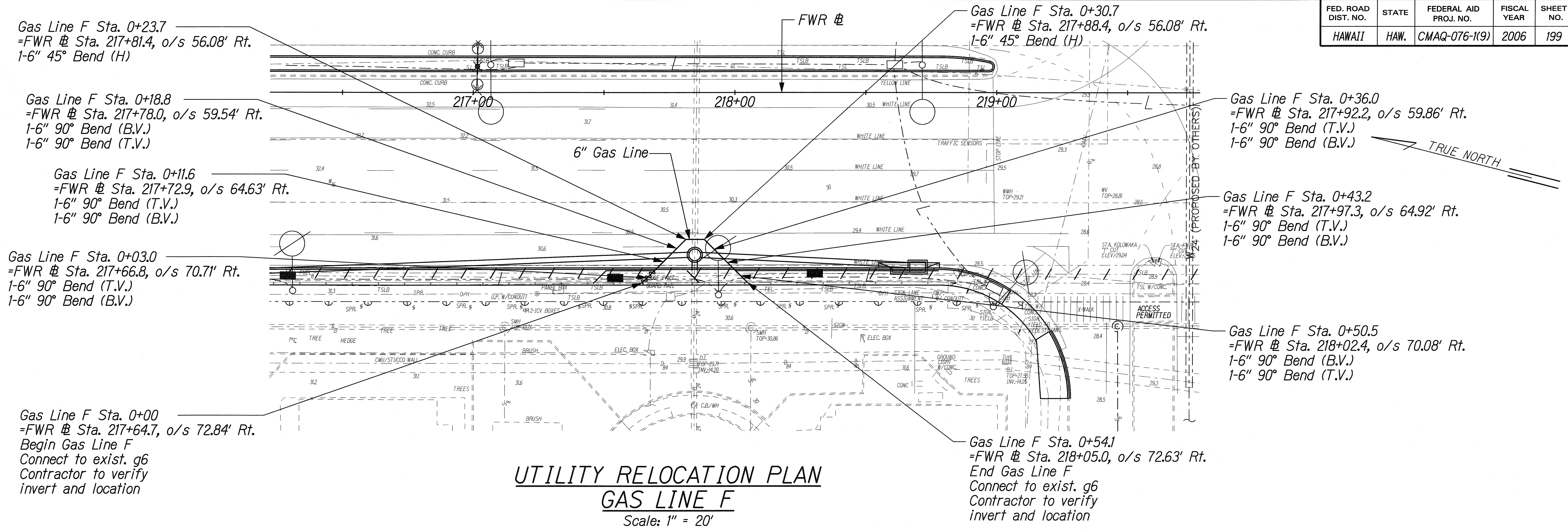
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

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| ORIGINAL PLAN | DATE |
| DRAWN BY | |
| DESIGNED BY | |
| QUANTITIES BY | |
| CHECKED BY | |

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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 199 | 371 |



| LEGEND FOR
AS-BUILT POSTINGS | |
|---------------------------------|-------------------------------------|
| | Squiggly line for as-built deletion |
| | Double line for as-built deletion |
| | Text for as-built posting |

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SIGNATURE: *R. Uraski* 04/30/10
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
PROFILE - GAS LINE F

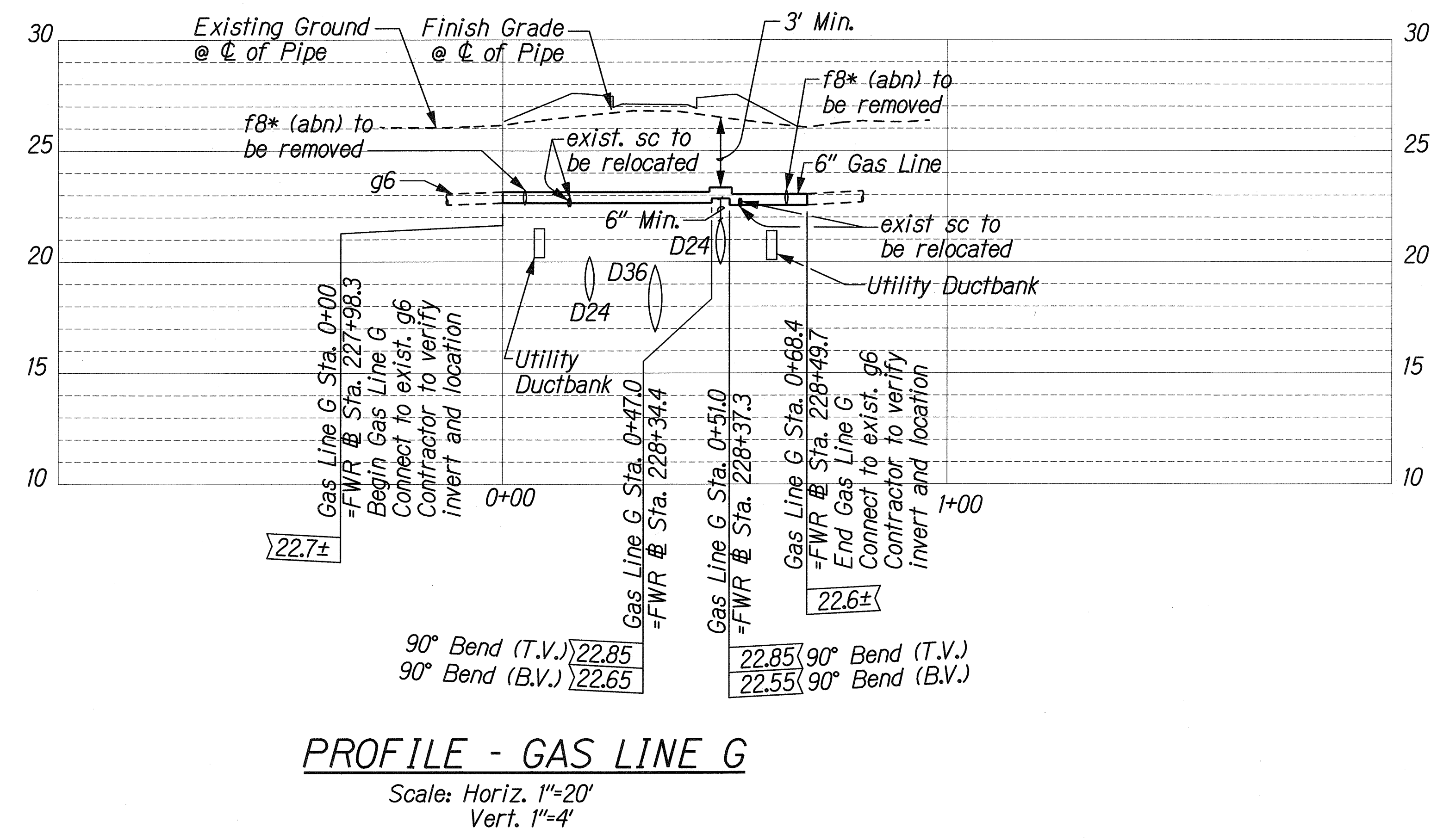
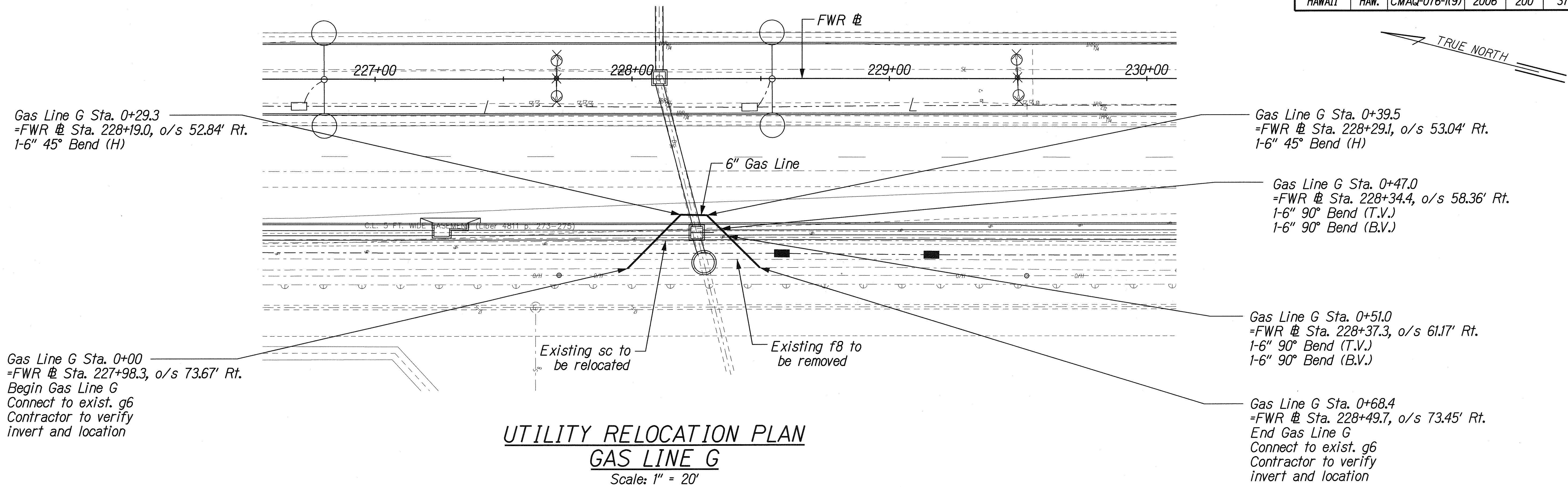
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

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| DATE | ____ |
| DESIGNED BY | ____ |
| TRACED BY | ____ |
| NOTE BOOK | ____ |
| QUANTITIES BY | ____ |
| CHECKED BY | ____ |

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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 200 | 371 |



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SIGNATURE: *R. Urasak* EXPIRATION DATE OF THE LICENSE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
& PROFILE - GAS LINE G

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

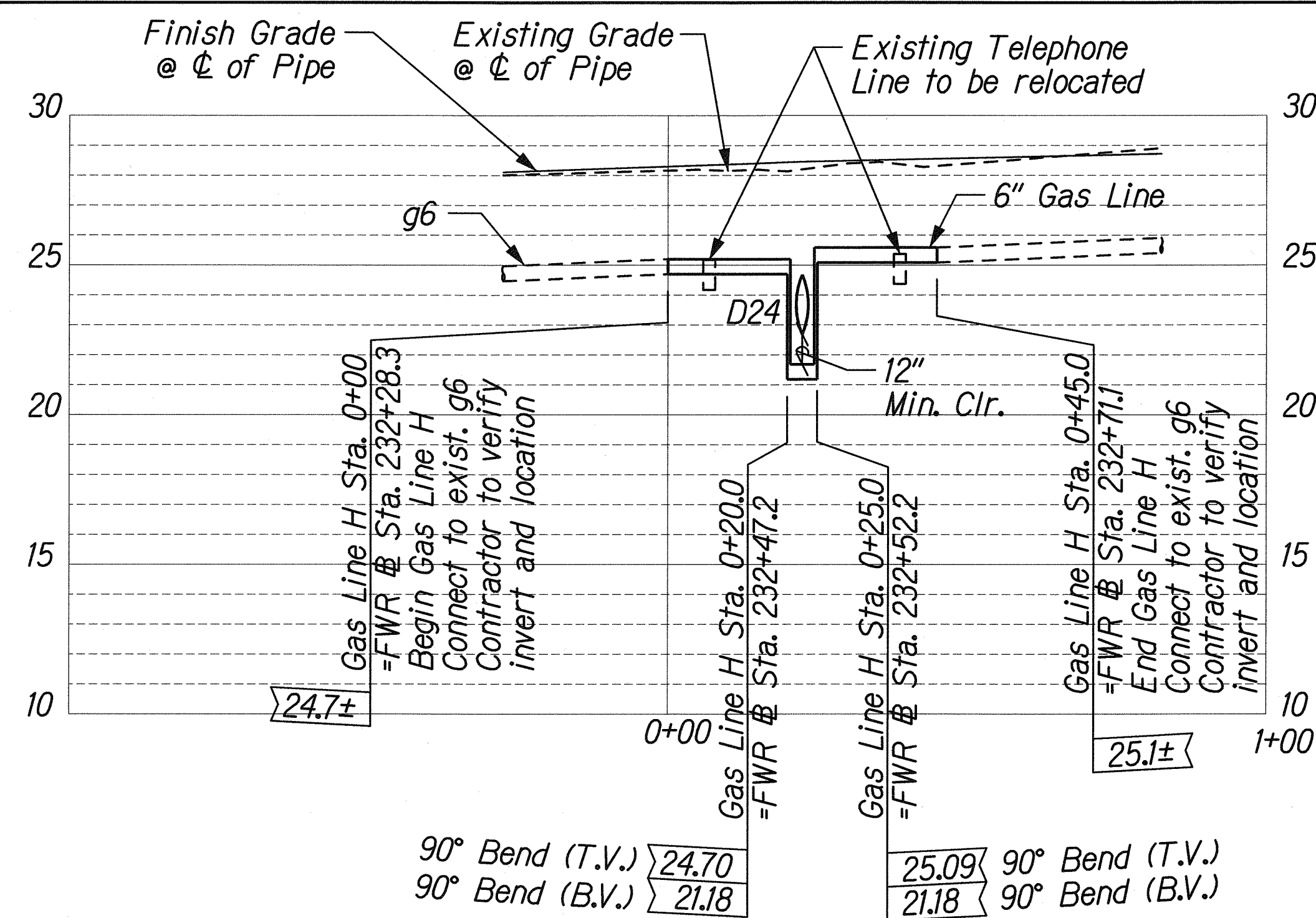
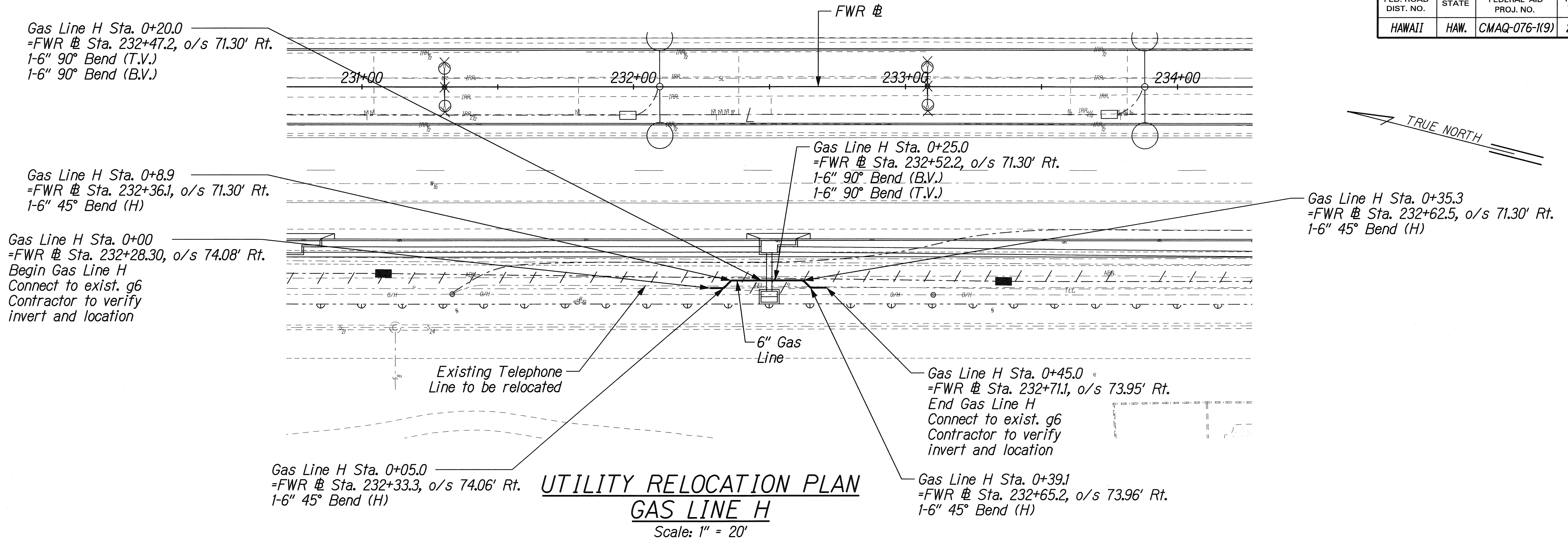
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SHEET No. U2-27 OF 33 SHEETS

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| DESIGNED BY | DATE |
| TRACED BY | |
| NOTED BY | |
| CHECKED BY | |
| IN CHARGE | |

\\FORT WEAVER ROAD\UTILITY\Util_gasG.dgn

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 201 | 371 |



PROFILE - GAS LINE H
Scale: Horiz. 1"=20'
Vert. 1"=4'

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
SIGNATURE: *[Signature]* 04/30/10
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

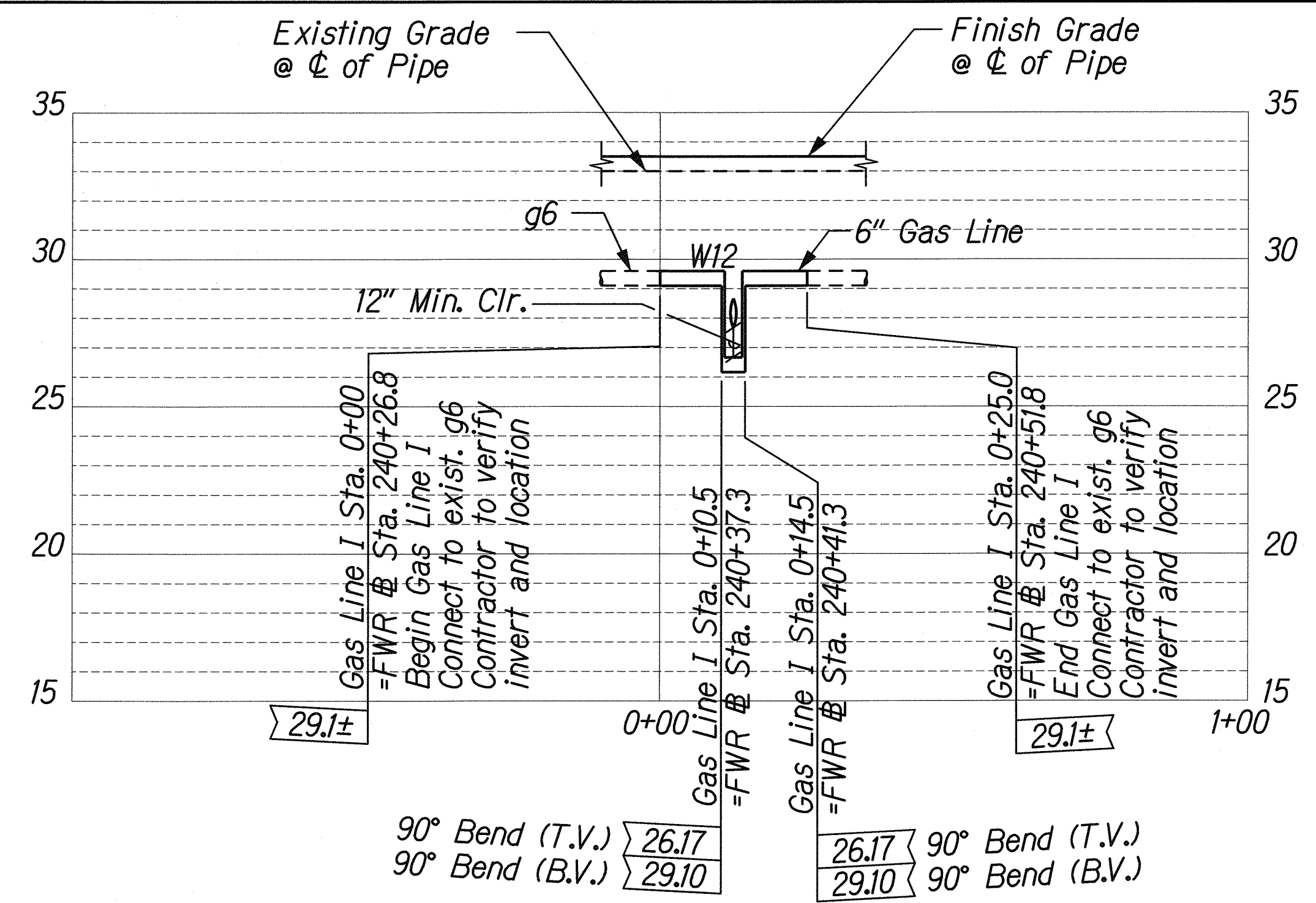
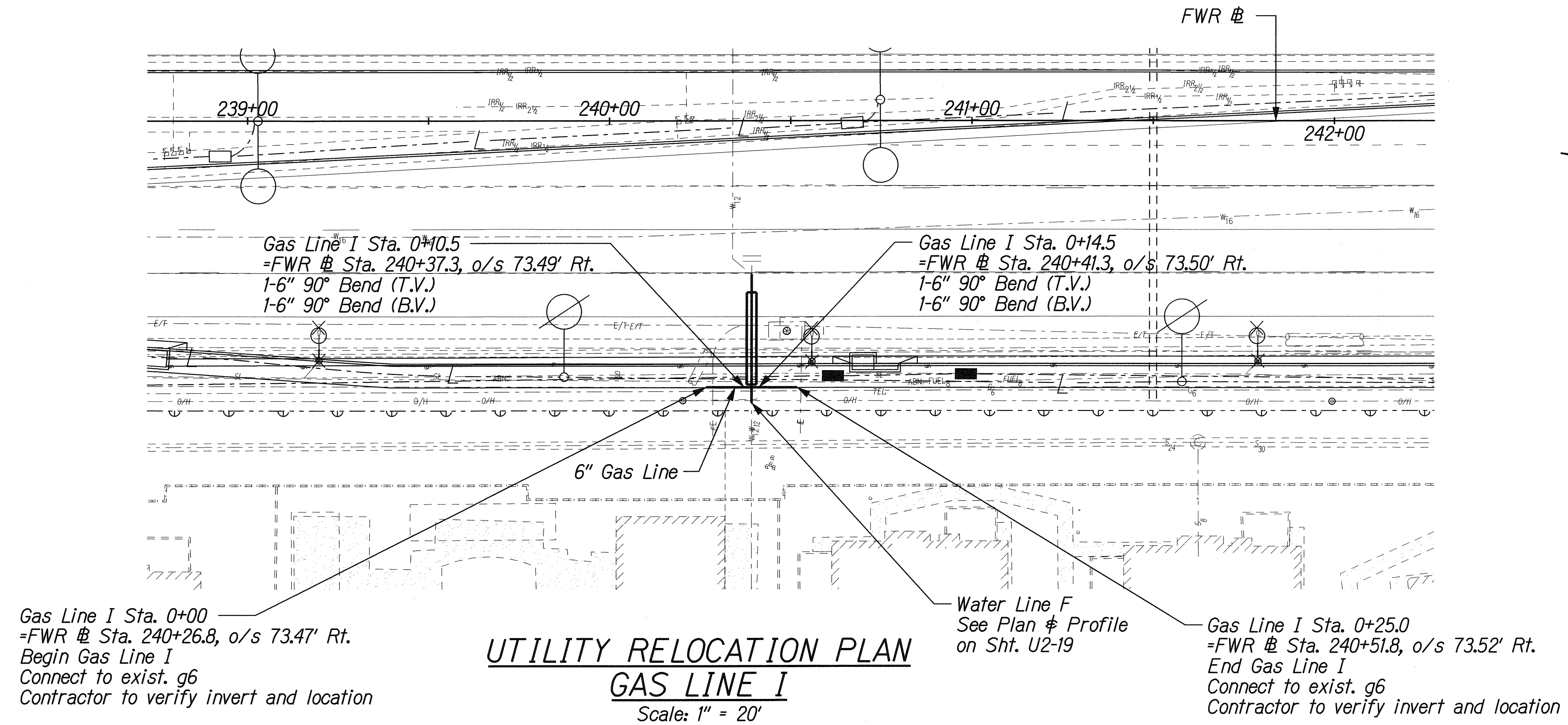
UTILITY RELOCATION PLAN
& PROFILE - GAS LINE H

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. U2-28 OF 33 SHEETS

| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 202 | 371 |



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
SIGNATURE: *R. M. Urasak* 04/30/10
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**UTILITY RELOCATION PLAN
& PROFILE - GAS LINE I**

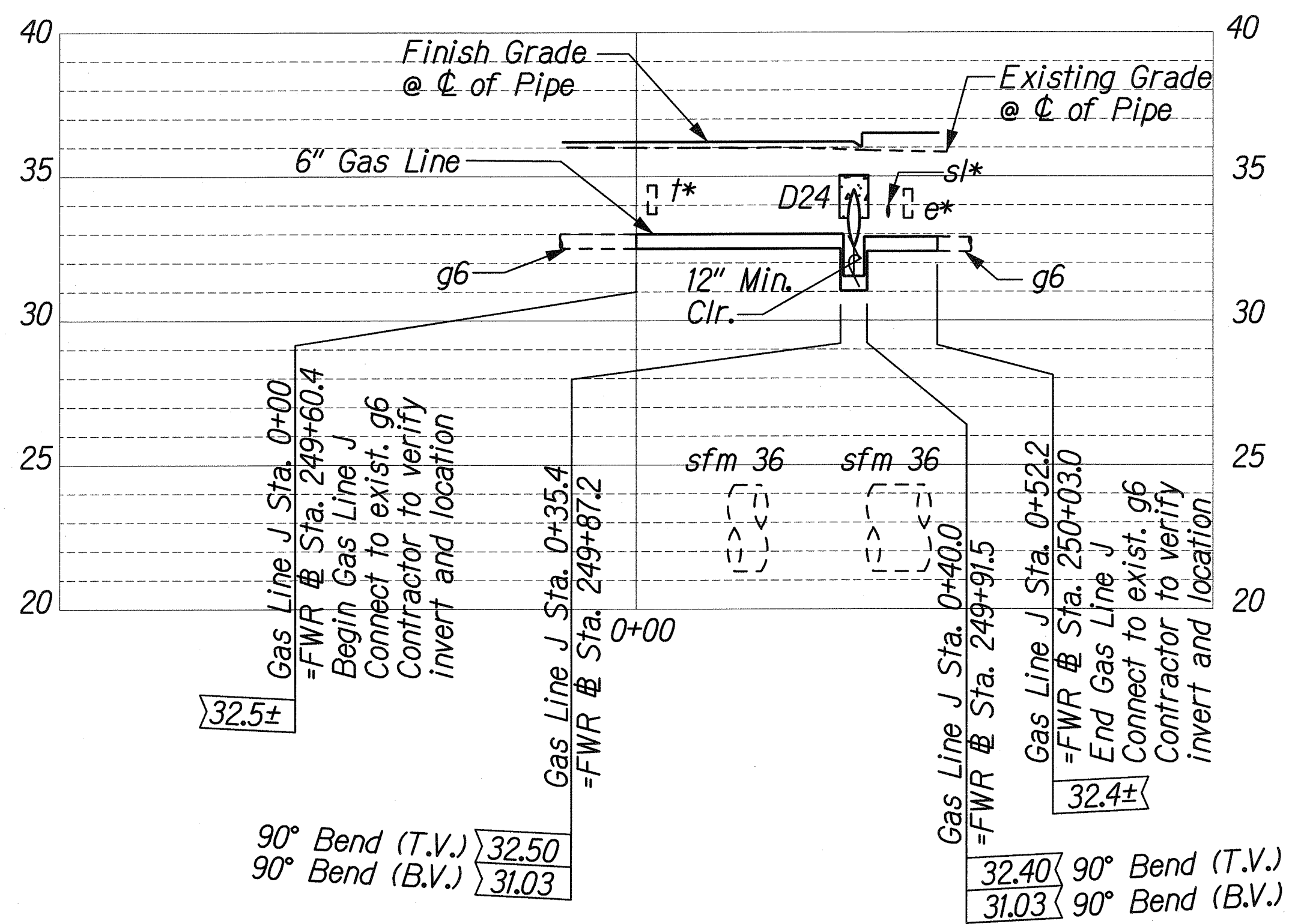
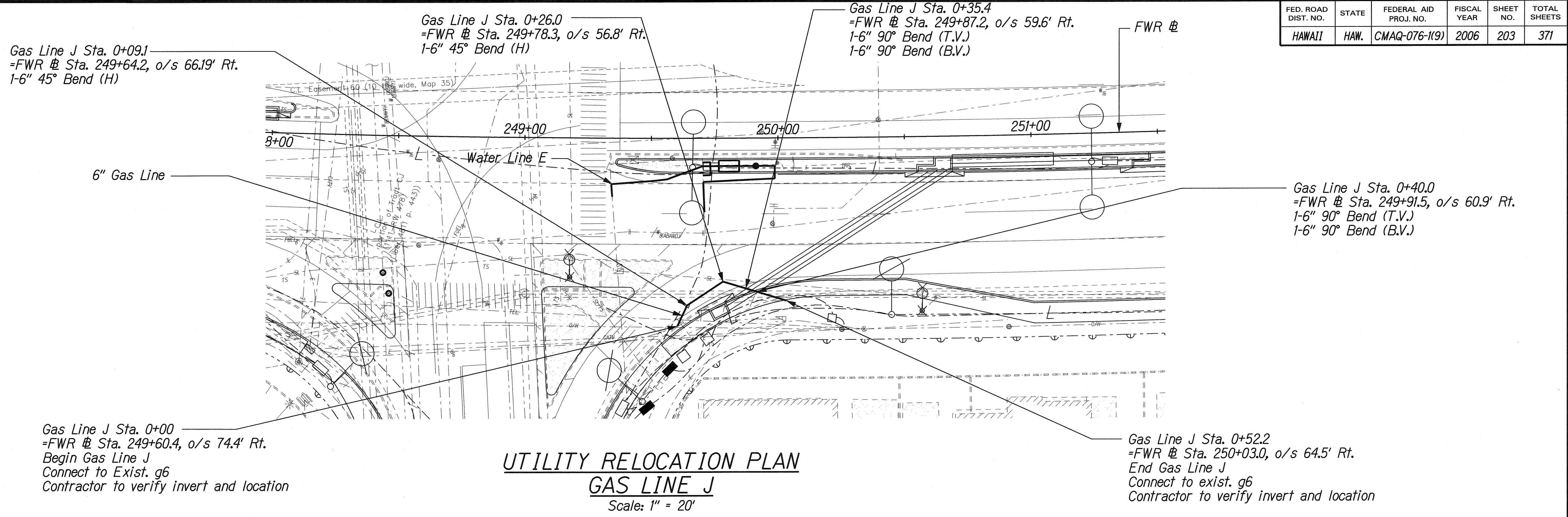
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

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| QUANTITIES BY | |
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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 203 | 371 |



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *Randall M. Urasak* Date: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION PLAN
& PROFILE - GAS LINE J

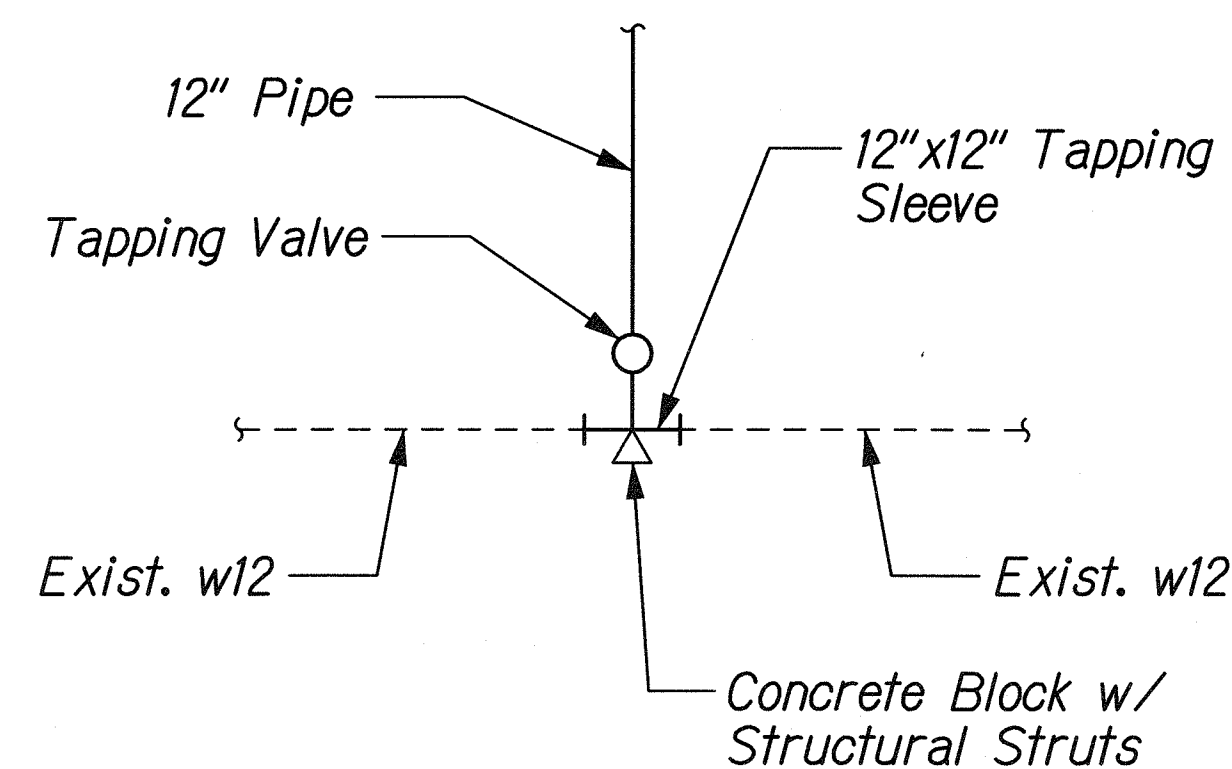
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VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

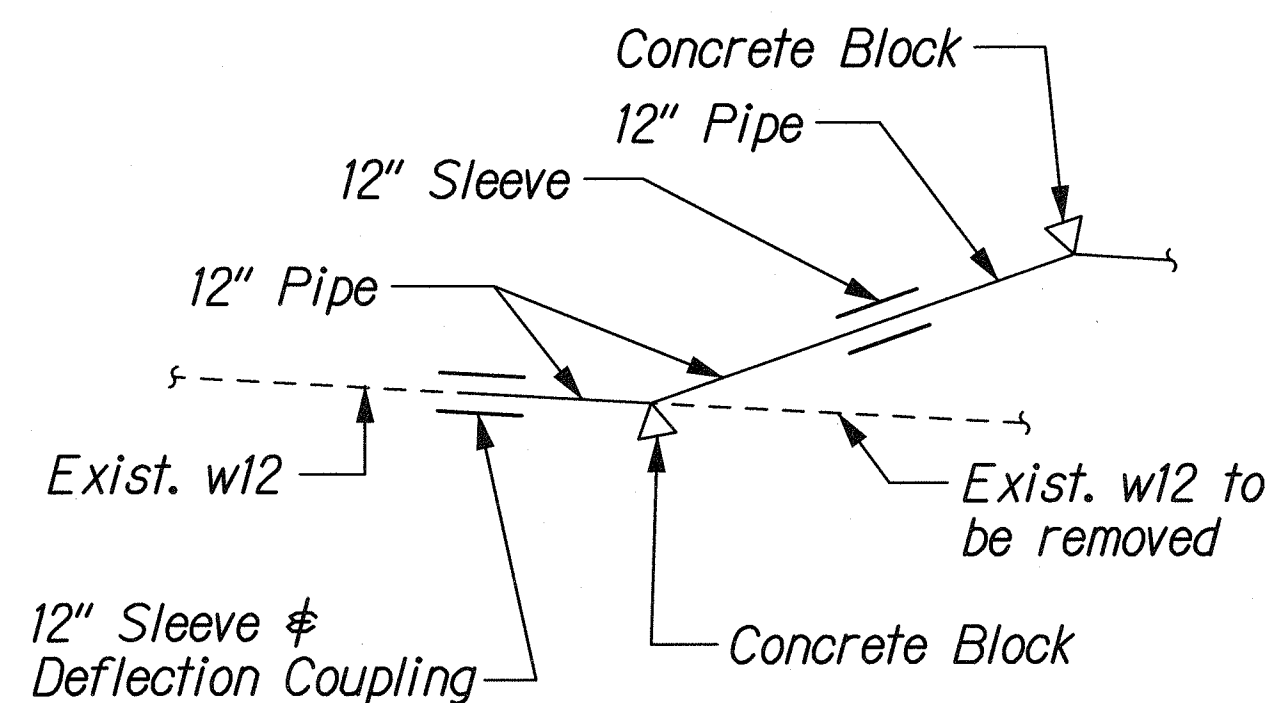
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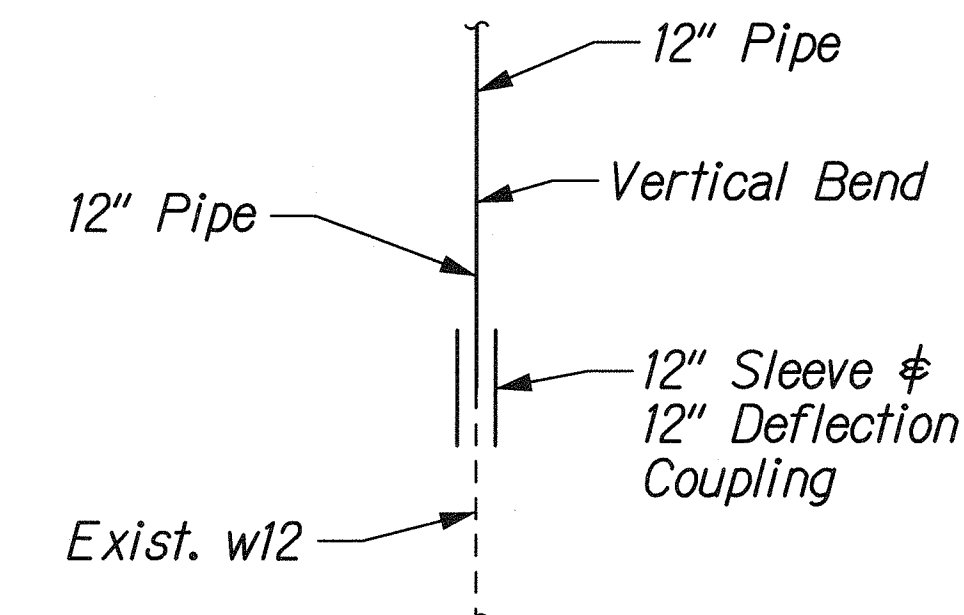
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| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 204 | 371 |



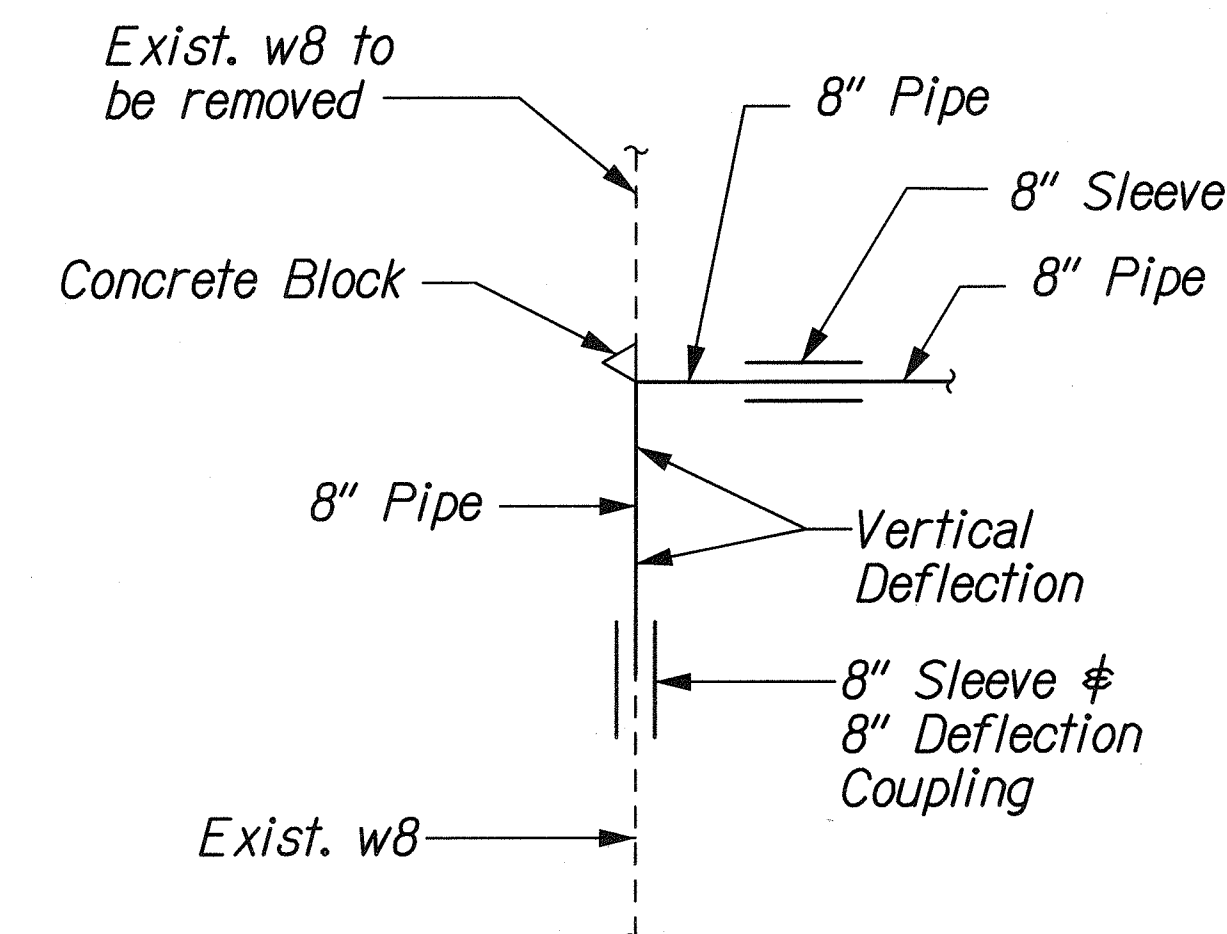
**SCHEMATIC CONNECTION DETAIL
@ WATER LINE A STA. 0+00**



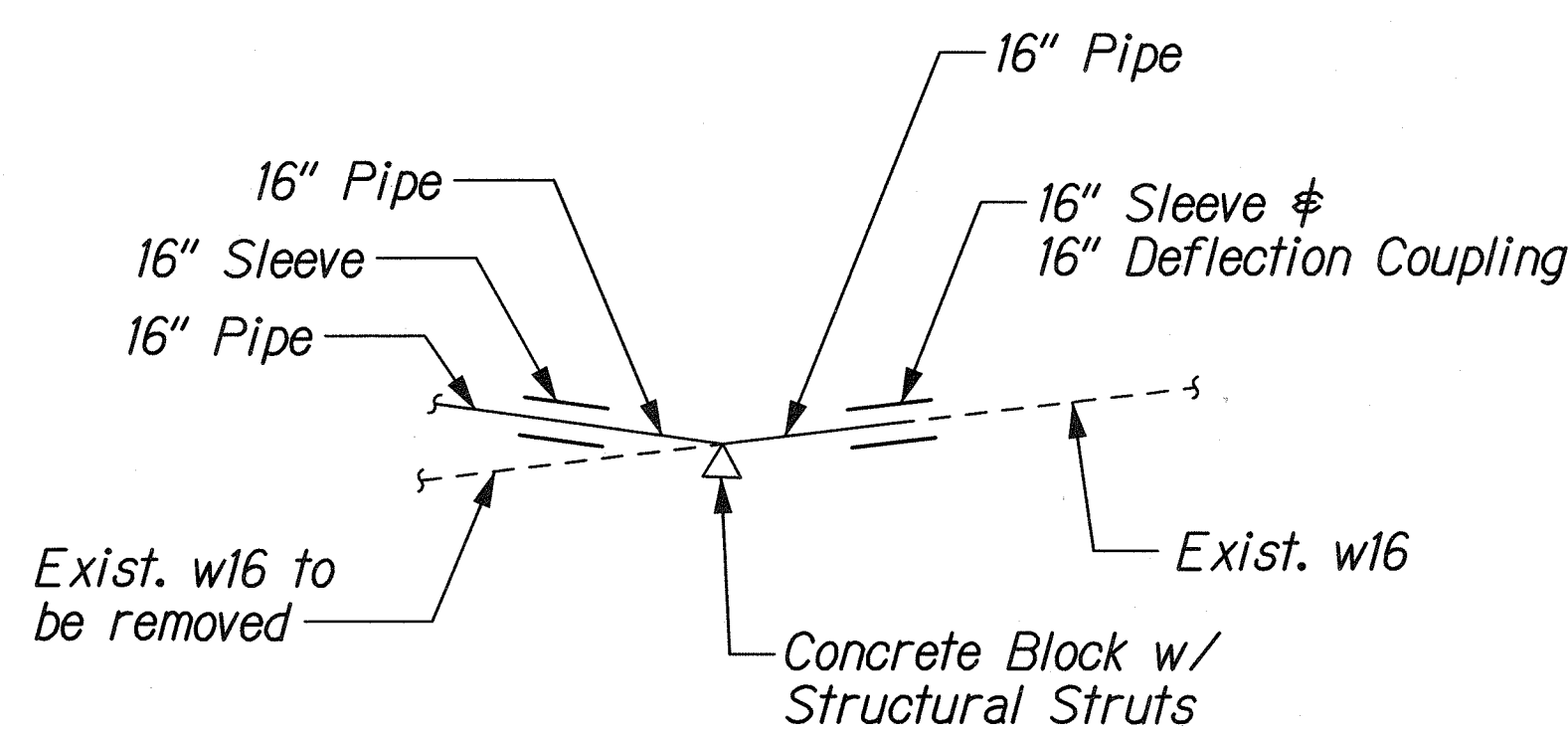
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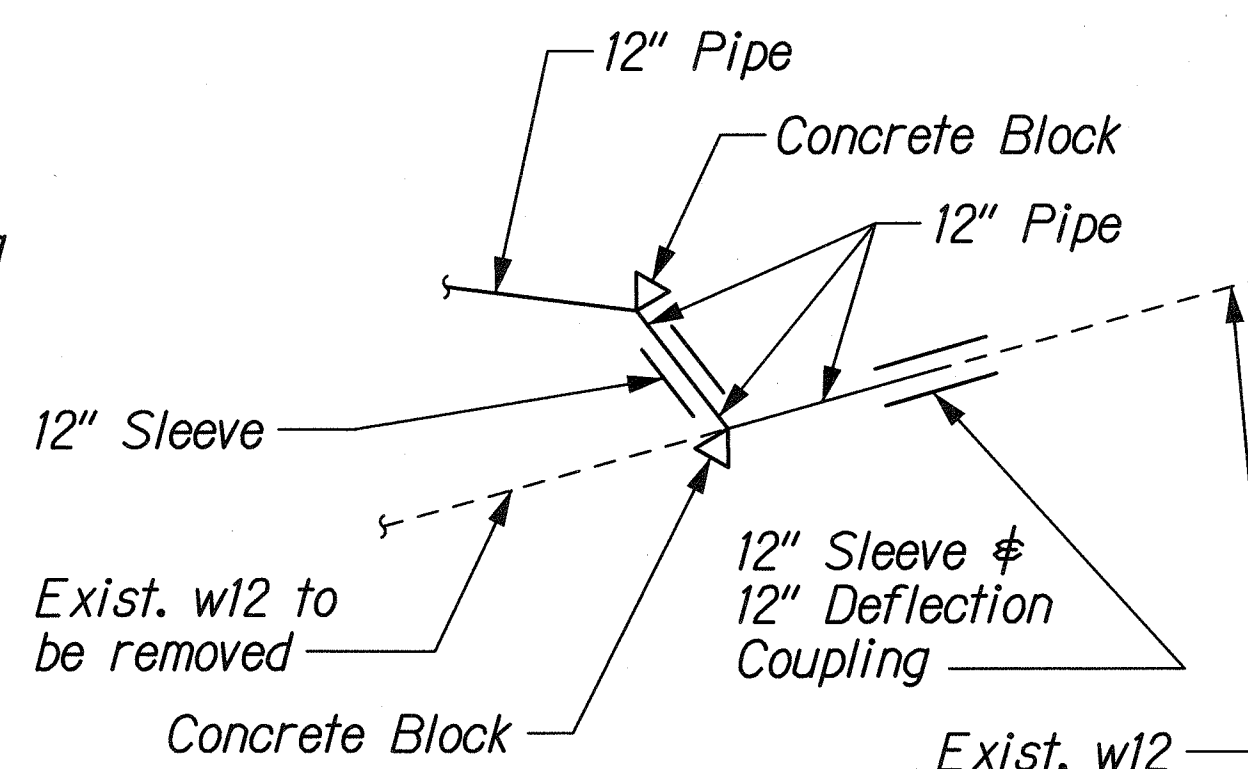
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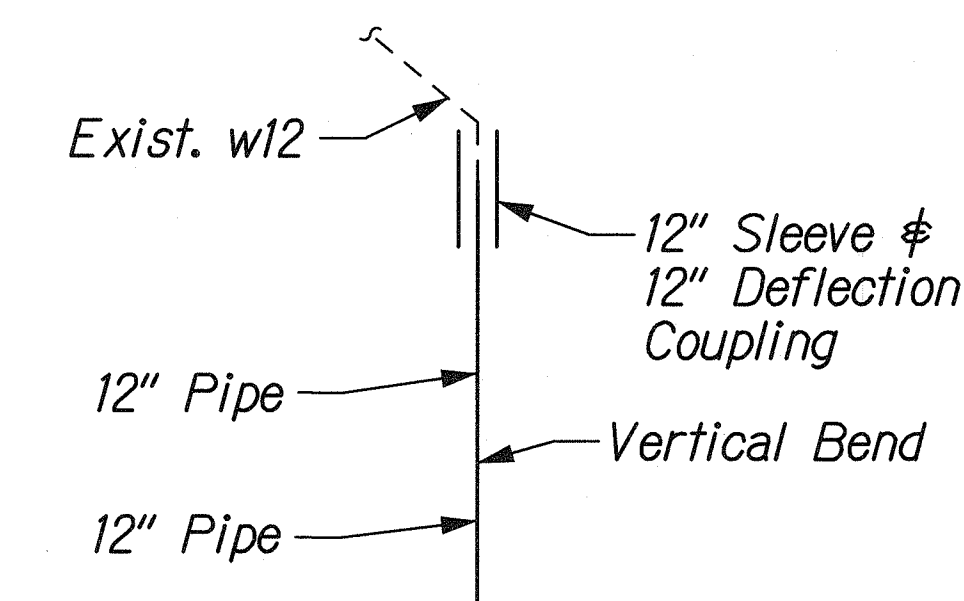
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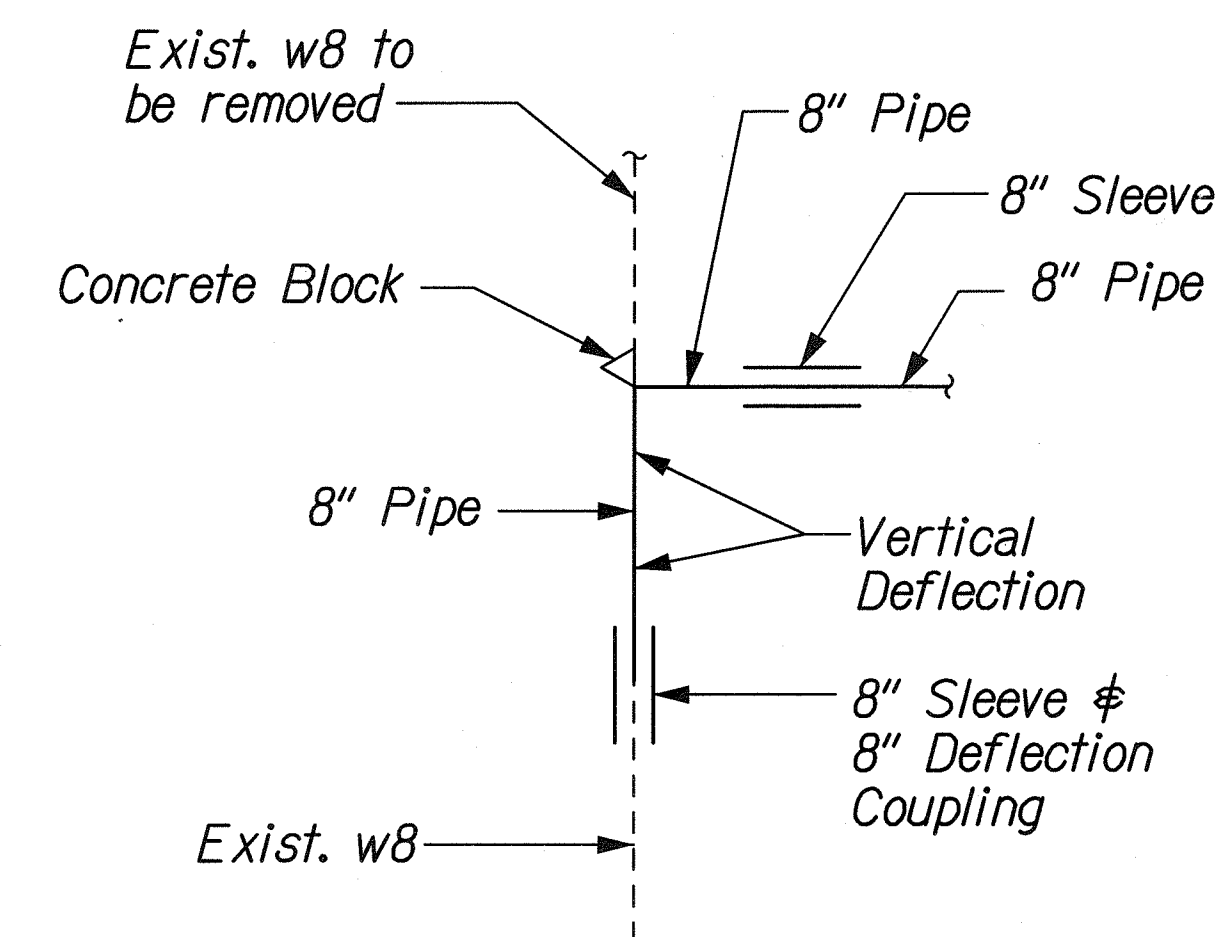
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@ WATER LINE A STA. 0+63.6**



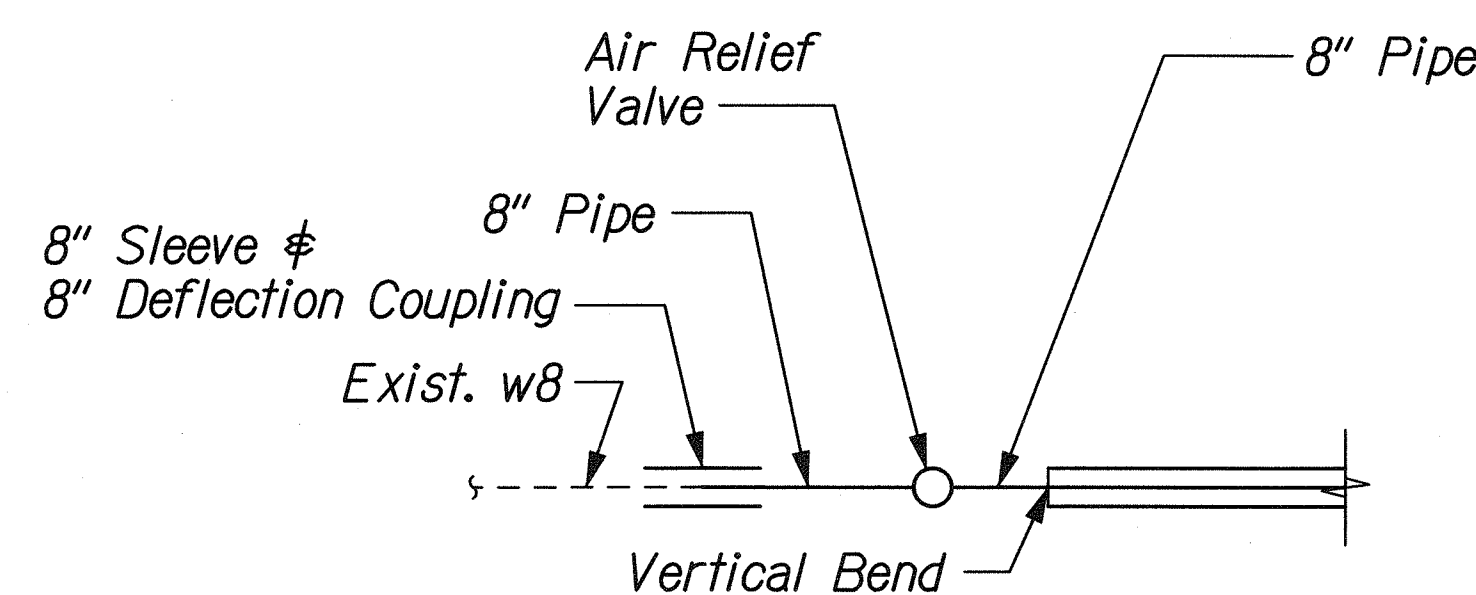
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@ WATER LINE C STA. 0+68.1**



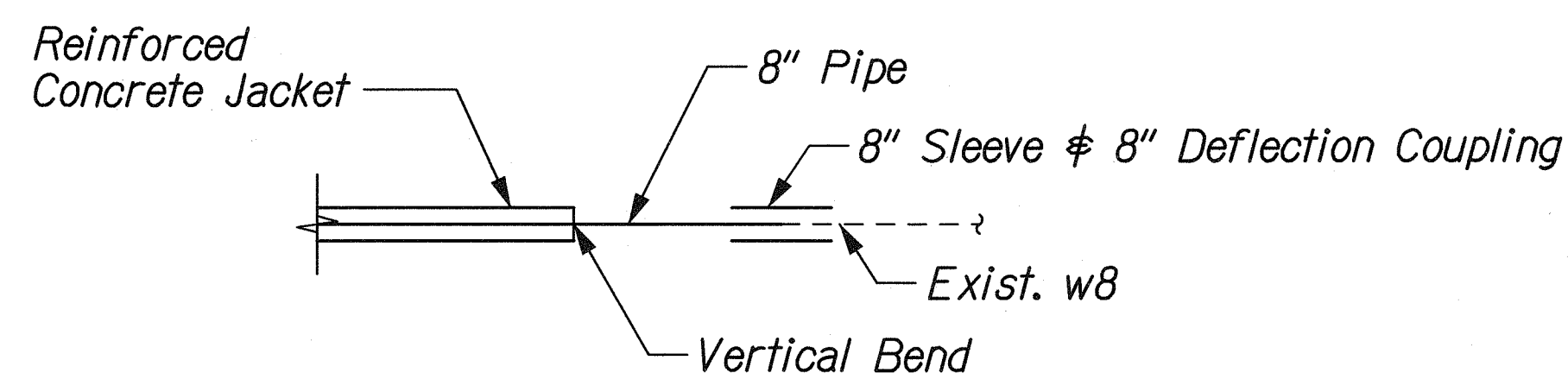
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@ WATER LINE D STA. 0+35.7**



**SCHEMATIC CONNECTION DETAIL
@ WATER LINE E STA. 1+15.9**



**SCHEMATIC CONNECTION DETAIL
@ WATER LINE B STA. 0+00**



**SCHEMATIC CONNECTION DETAIL
@ WATER LINE B STA. 0+33.2**

Approved:

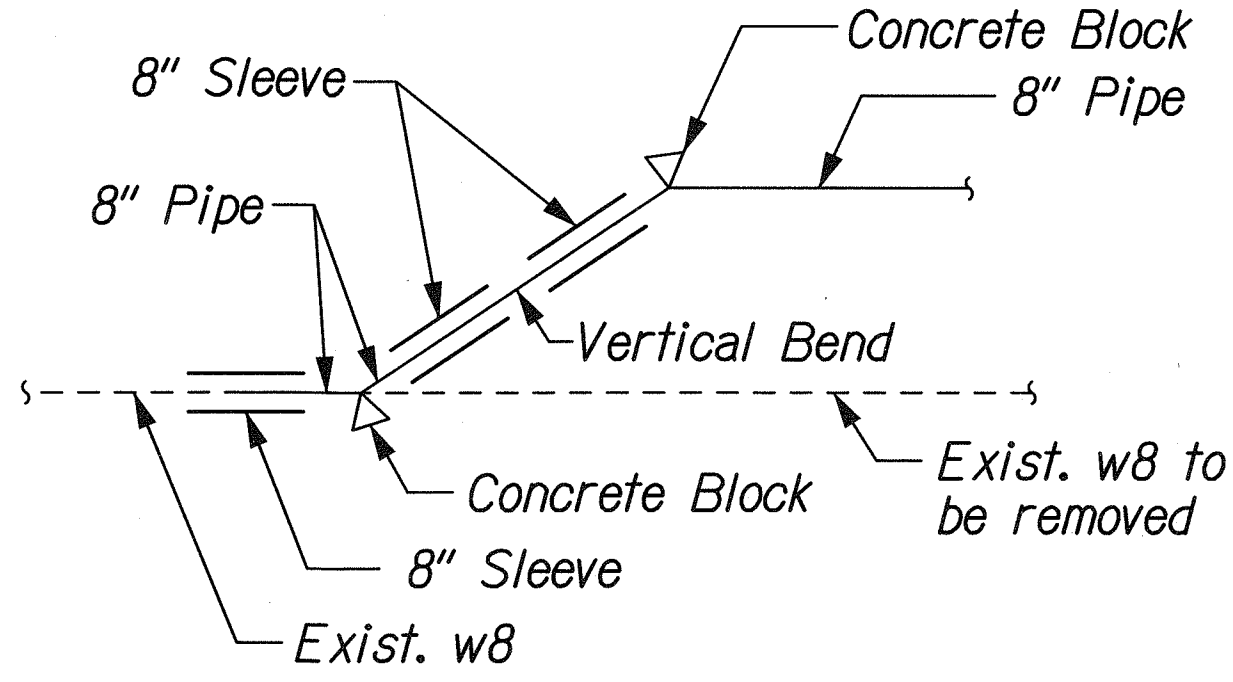
Robert Chun 2/25/08
Chief, Capital Projects Division, BWS Date

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| | STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
UTILITY RELOCATION
SCHEMATIC CONNECTIONS
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD |
| | Scale: None Date: Feb. 22, 2008
SHEET No. U2-31 OF 33 SHEETS |

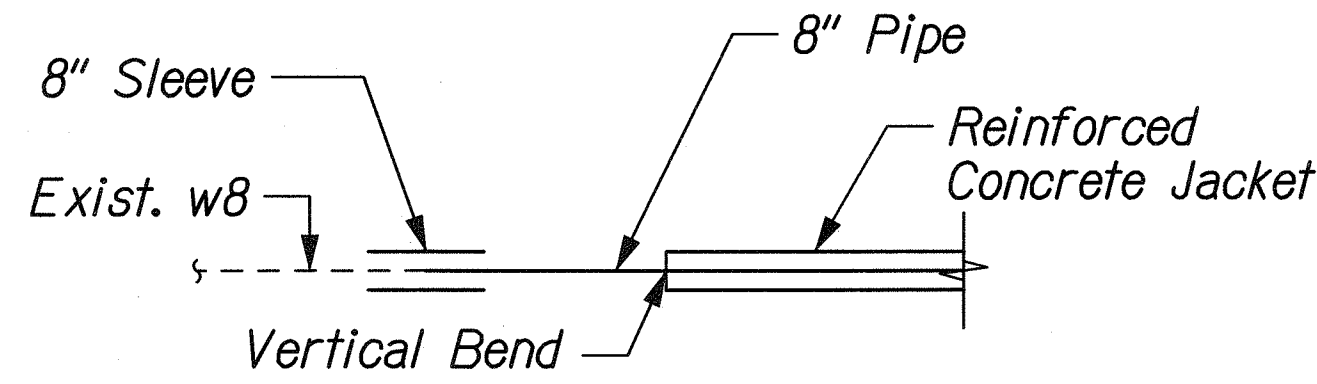
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| SURVEY PLOTTED BY
DESIGNED BY
CHECKED BY
DATE | ORIGINAL PLAN
NOTE BOOK
No. |
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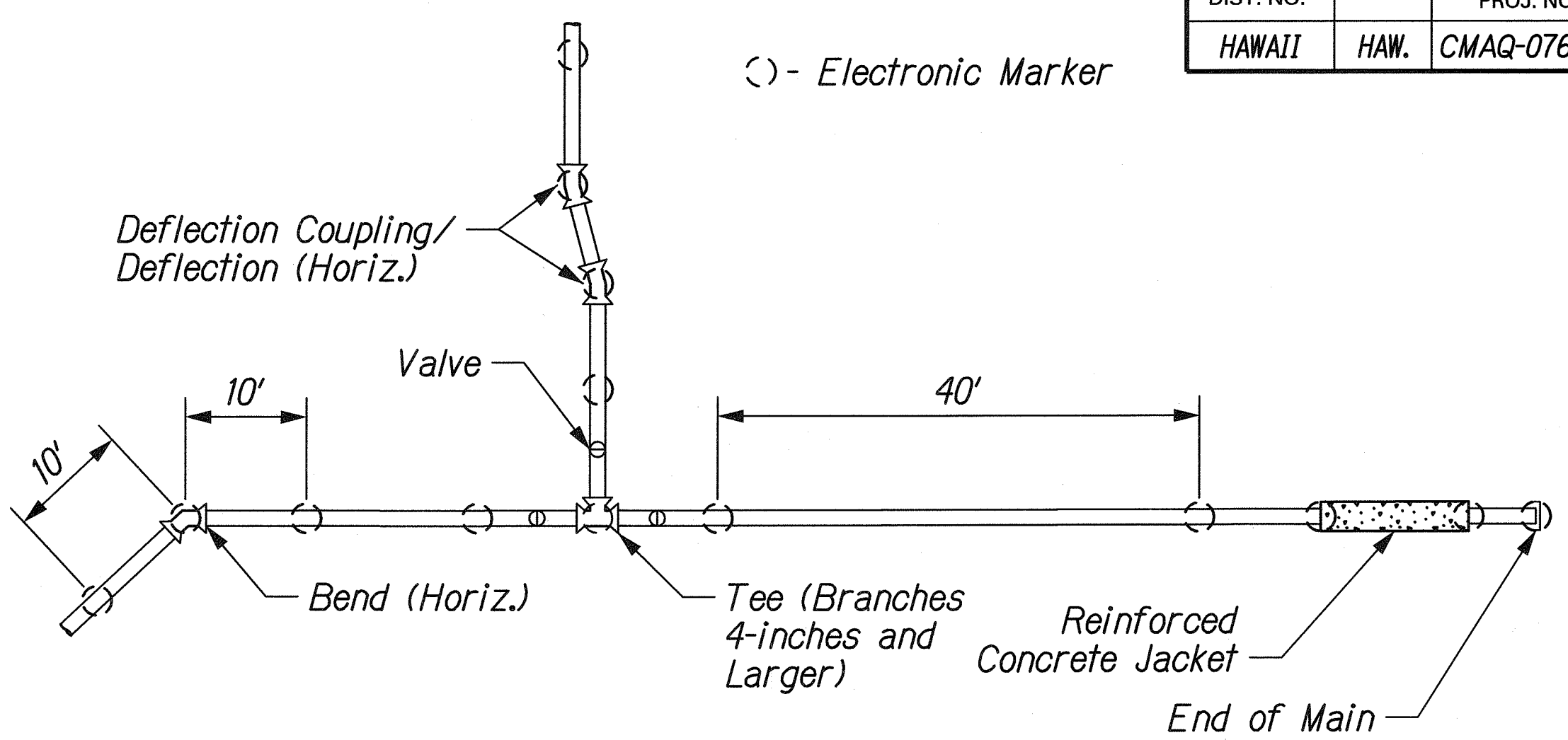
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|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 205 | 371 |



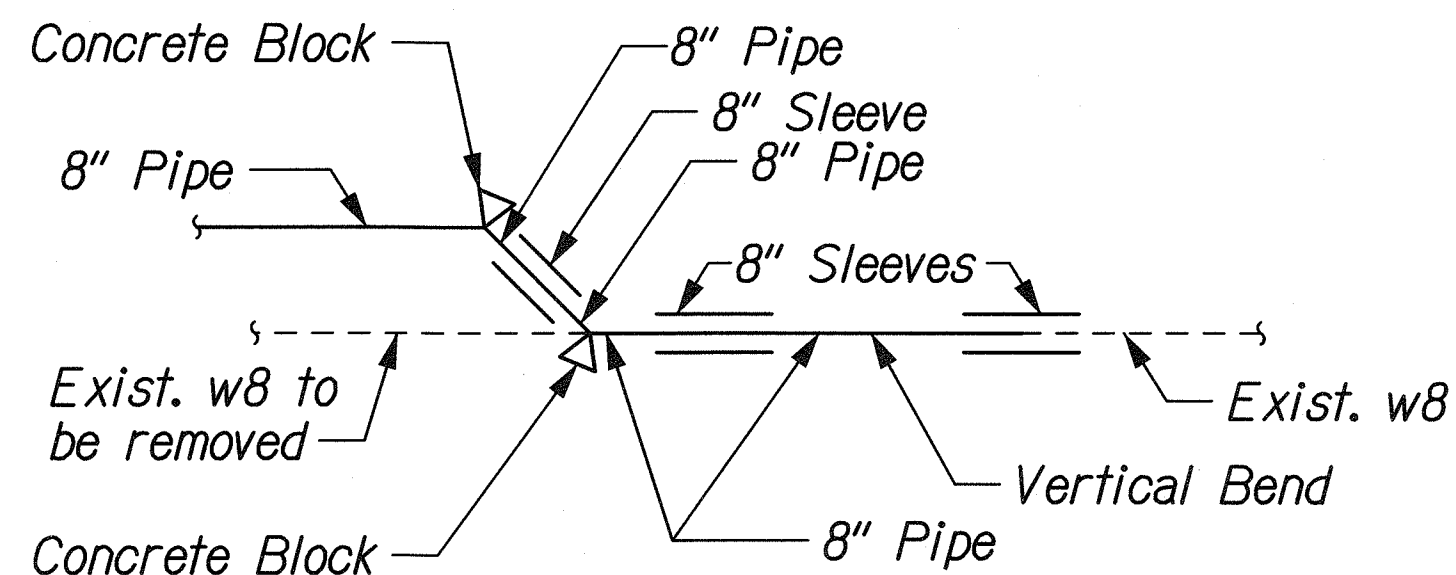
SCHEMATIC CONNECTION DETAIL
@ WATER LINE F STA. 0+00



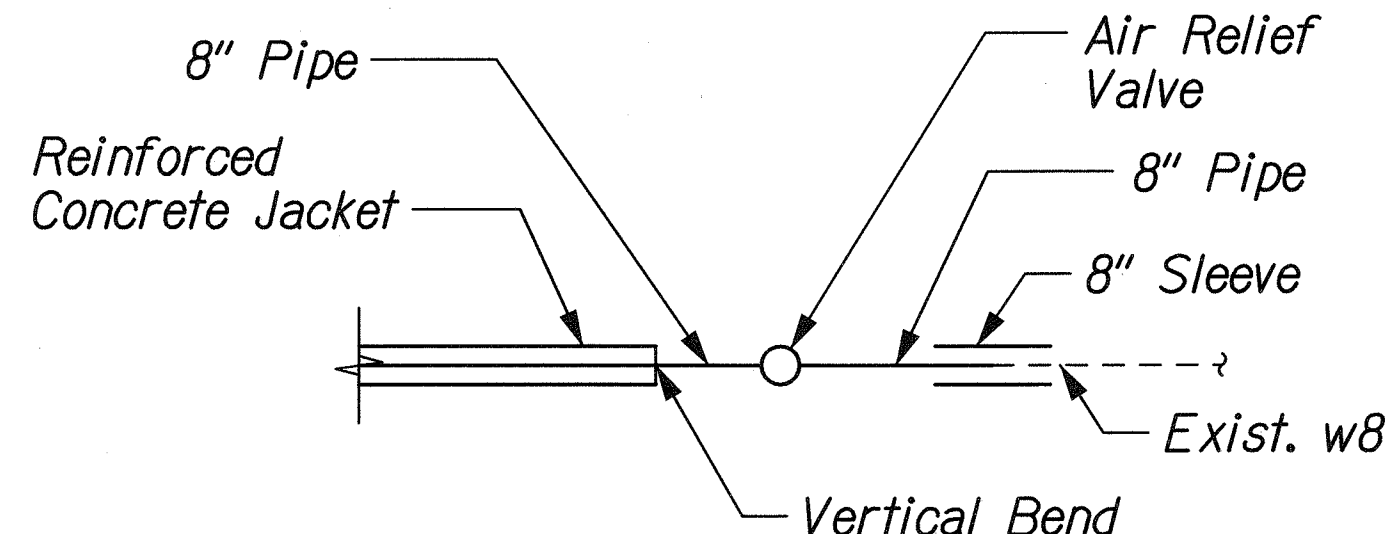
SCHEMATIC CONNECTION DETAIL
@ WATER LINE G STA. 0+00



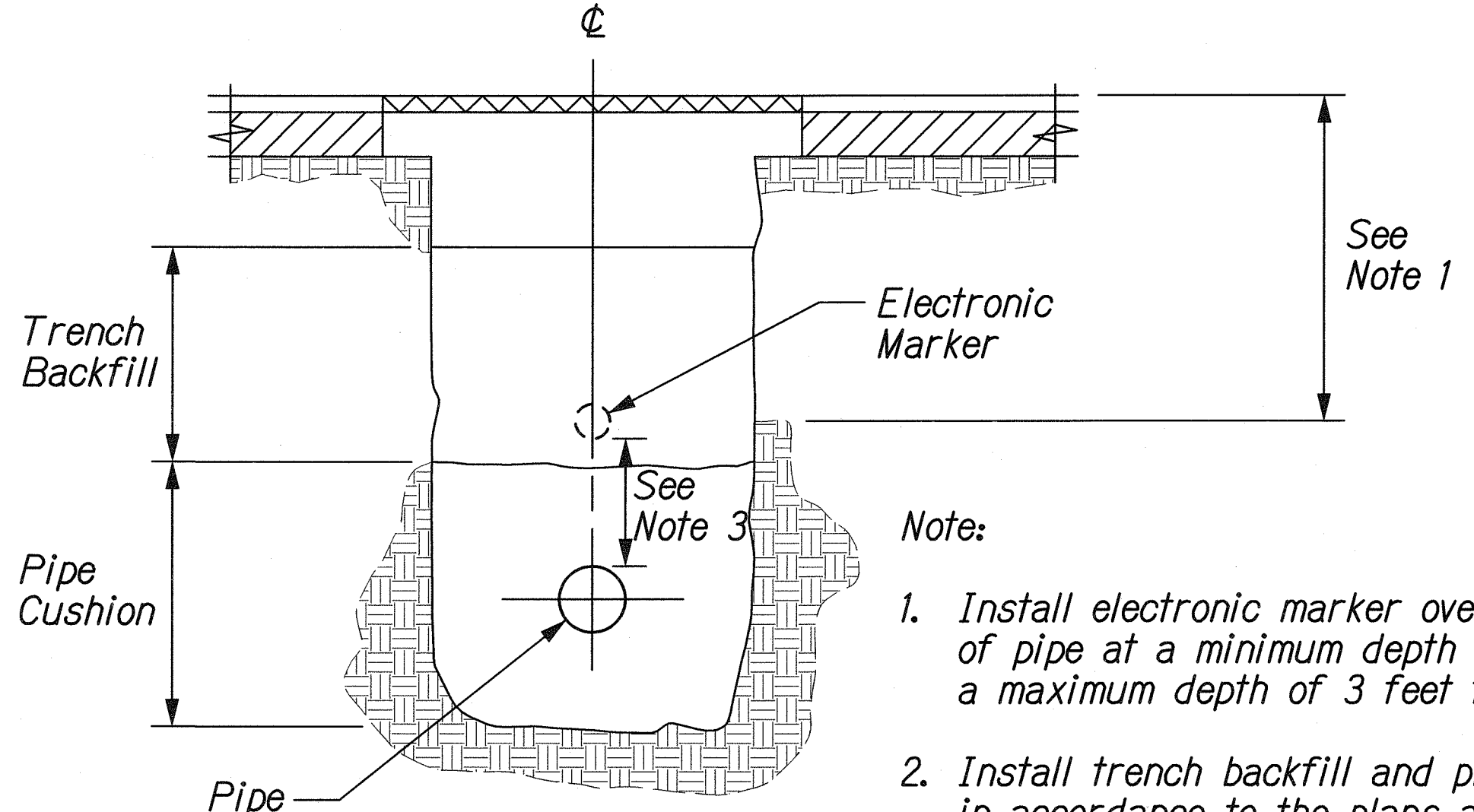
PLAN VIEW



SCHEMATIC CONNECTION DETAIL
@ WATER LINE F STA. 2+12.7



SCHEMATIC CONNECTION DETAIL
@ WATER LINE G STA. 0+33.1



- Note:
1. Install electronic marker over center line of pipe at a minimum depth of 2 feet and a maximum depth of 3 feet from finish grade.
 2. Install trench backfill and pipe cushion material in accordance to the plans and specifications.
 3. Install electronic marker at a minimum clearance of 6-inches above the pipe or concrete jacket.

SECTION VIEW

TYPICAL ELECTRONIC MARKER INSTALLATION

N.T.S.

Approved:

Robert Chun 2/25/08
Chief, Capital Projects Division, BWS Date

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
SIGNATURE: *[Signature]* EXPIRATION DATE OF THE LICENSE: 04/30/08

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**UTILITY RELOCATION
SCHEMATIC CONNECTIONS**

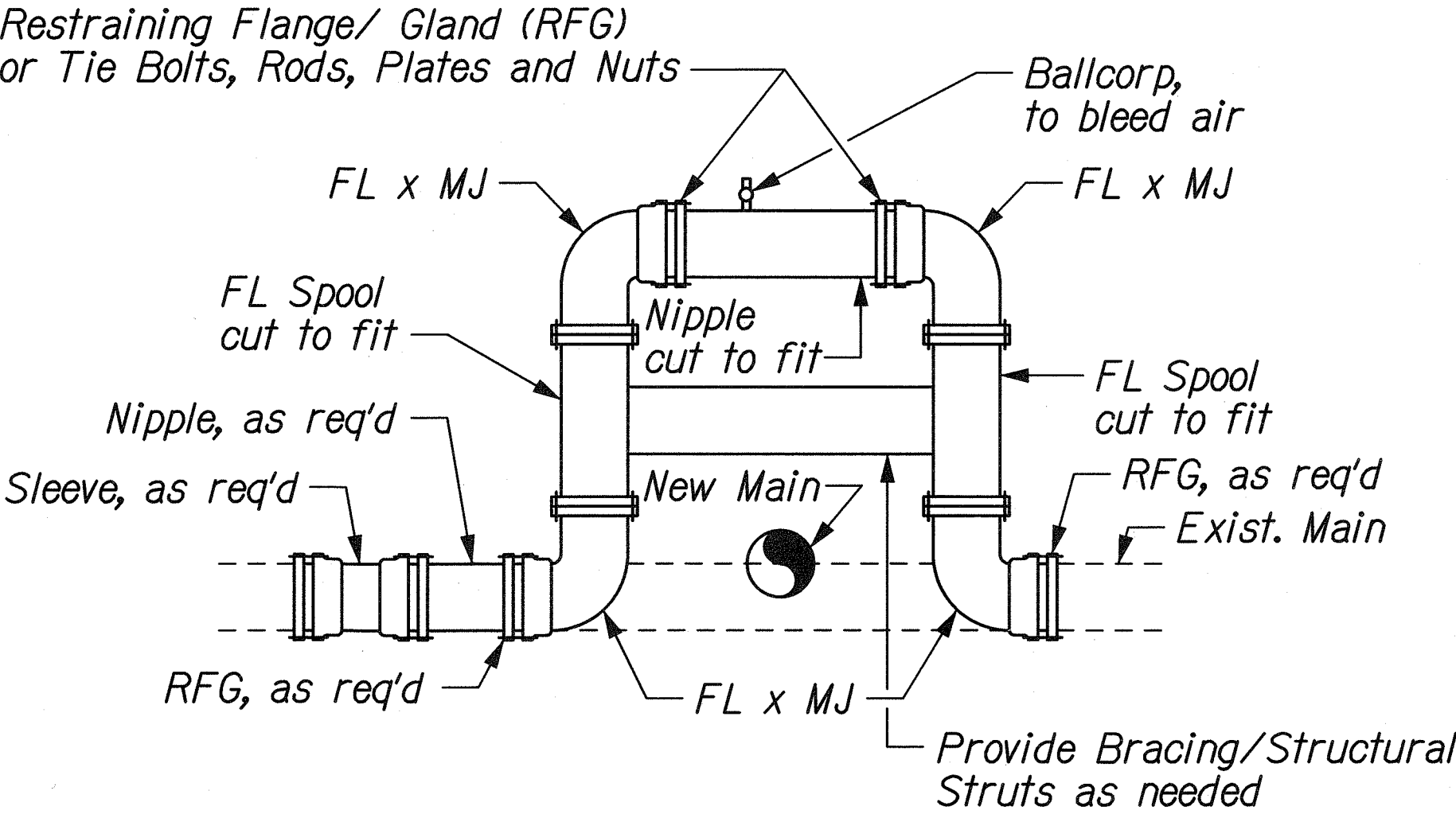
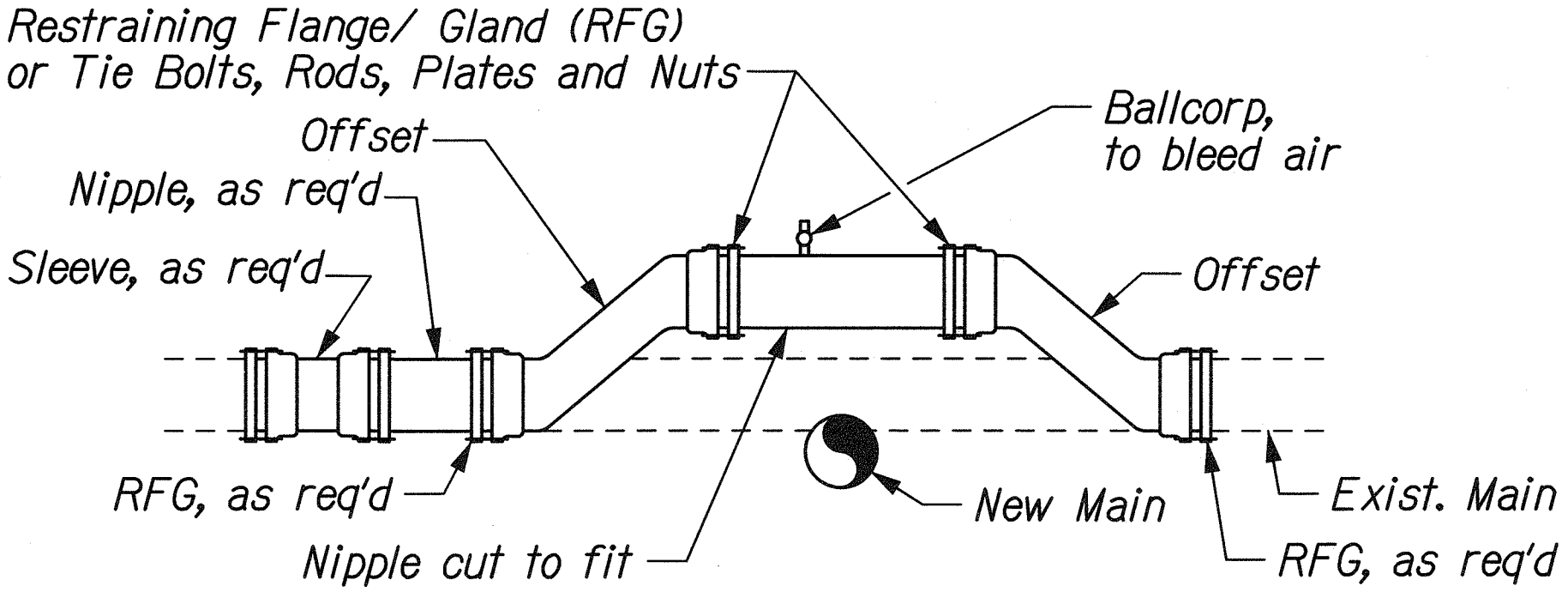
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: None Date: Feb. 22, 2008

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| DESIGNED BY | DATE |
| DRAWN BY | |
| CHECKED BY | |
| NOTED BY | |
| APPROVED BY | |

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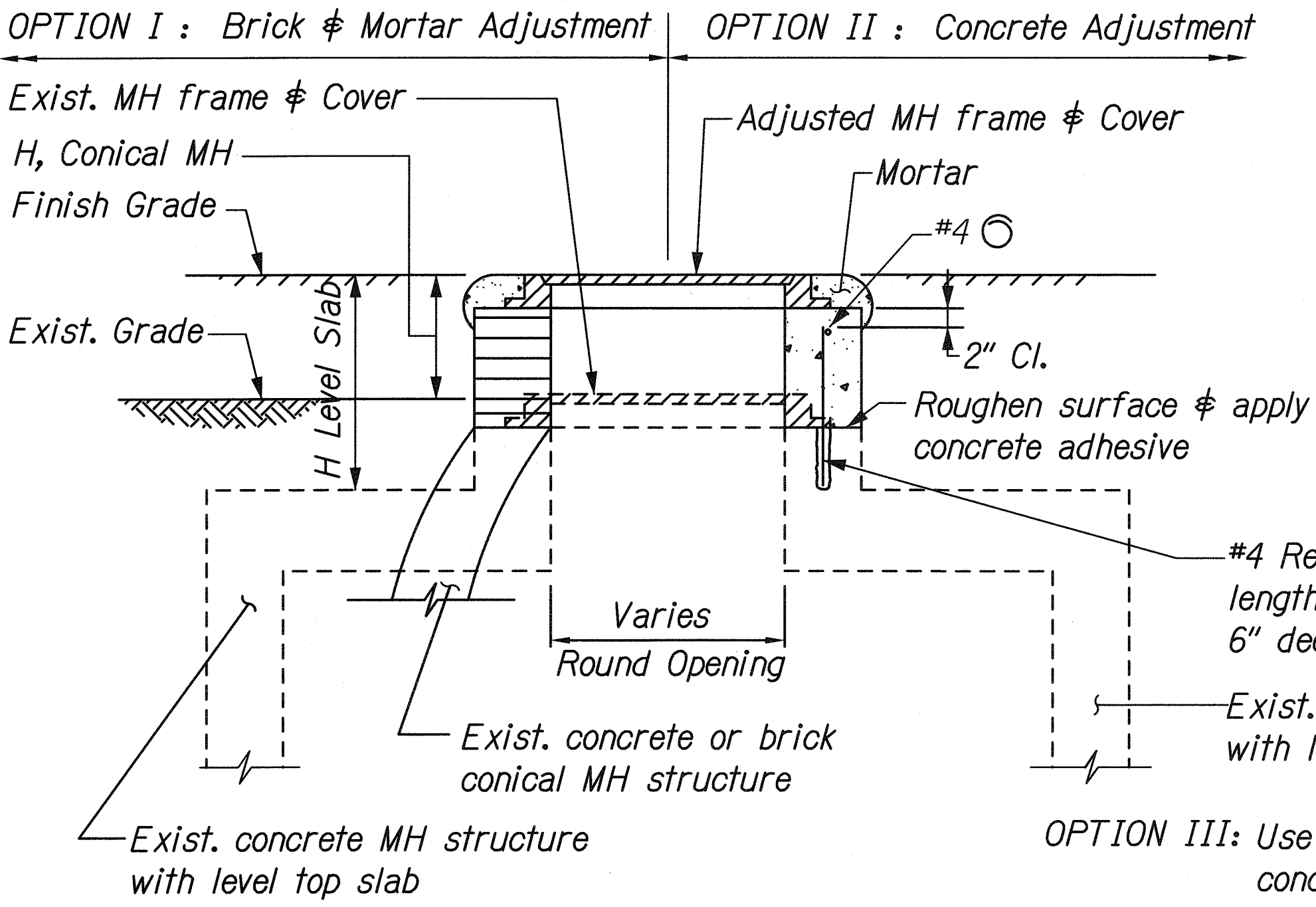
| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 206 | 371 |



TEMPORARY BY-PASS SCHEMATIC
Scale: Not to Scale

TEMPORARY BY-PASS NOTES:

- Contractor shall locate crossing and verify invert.
- If a conflict between the existing and new will occur, Contractor shall provide a Tempoprary By-Pass.
- Temporary By-Pass shall be removed after new main is in service and laterals have been transferred.
- Prior to excavating near or around the existing water system, the Contractor shall restrain all existing pipes, fittings, valves, blocks, etc. as required to ensure the existing system is not disturbed.
- All joints shall be tested to the prevailing line pressure. All joints shall be left exposed for 24 hours to check for leaks prior to backfill.
- The Contractor shall swab to chlorinate the entire inside surface of all new pipes and fittings with disinfection solution of 5 ounces of sodium hypochlorite mixed with 10 gallons of water.
- Contractor to provide transition couplings as required to meet field conditions.



ADJUSTING EXISTING MANHOLE COVER
(For Water & Telephone MH)
Scale: Not To Scale

For Level Top Slab MH Structure:
0" < H < 18", adjust with brick and mortar
18" < H < 36", adjust with concrete.

If exist. MH is already adjusted with brick and mortar and H > 18", the Contractor shall remove the exist. bricks and adjust with concrete.

For Conical MH Structure:
-3" < H < 3", adjust with brick and mortar
H < 3" or H > 3", see Reconstruction Detail.

| | |
|---------------|-------|
| DATE | _____ |
| DESIGNED BY | _____ |
| TRACED BY | _____ |
| NOTE BOOK | _____ |
| QUANTITIES BY | _____ |
| CHECKED BY | _____ |
| N. | _____ |

6/FORT WEAVER ROAD/UTILITY/misc-det.dwg

Approved: _____
for Robert Chun 2/25/08
Chief, Capital Projects Division, BWS Date

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
SIGNATURE: *R. Urasaki* 04/30/08
EXPIRATION DATE OF THE LICENSE

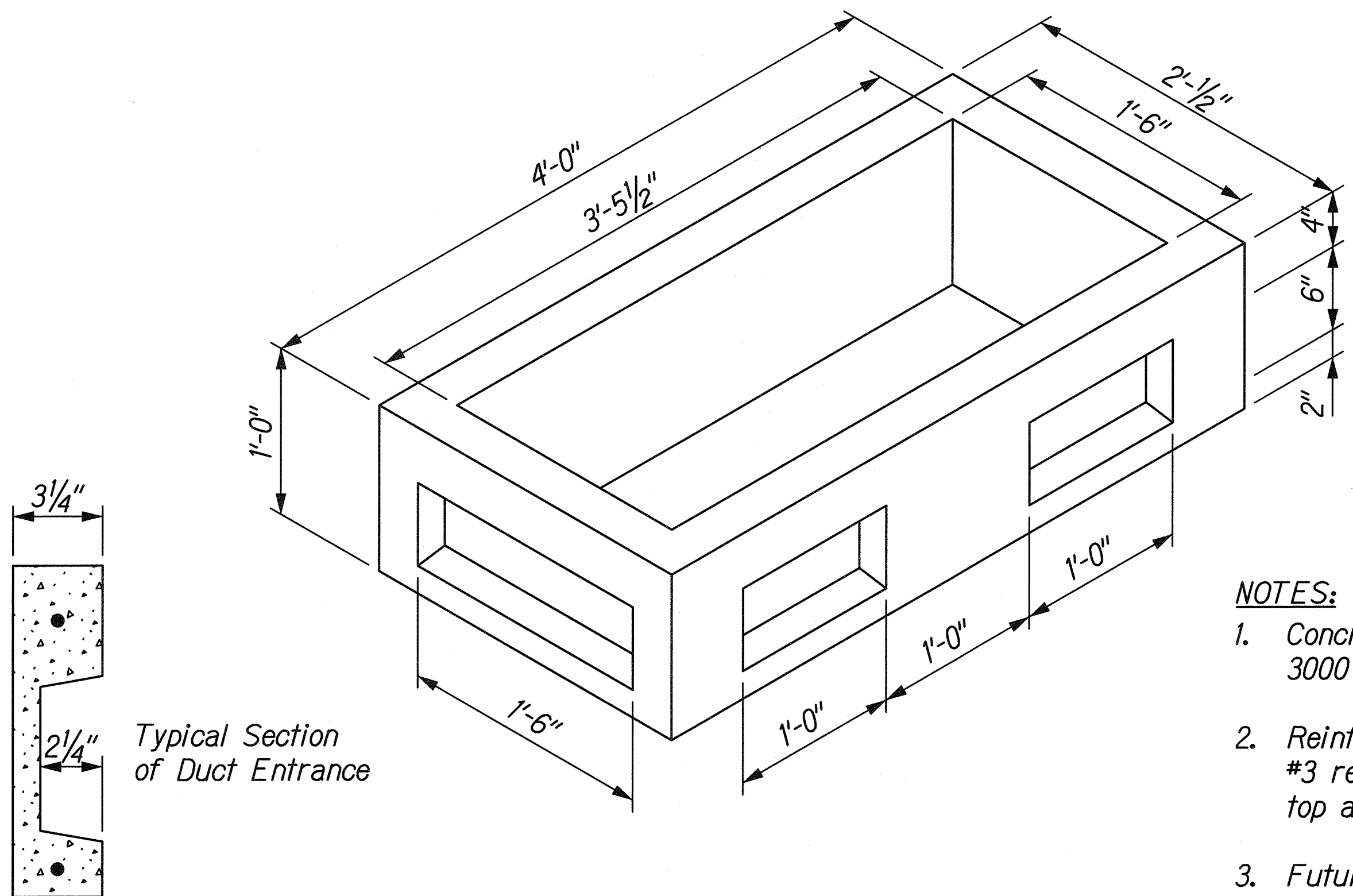
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION DETAILS

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

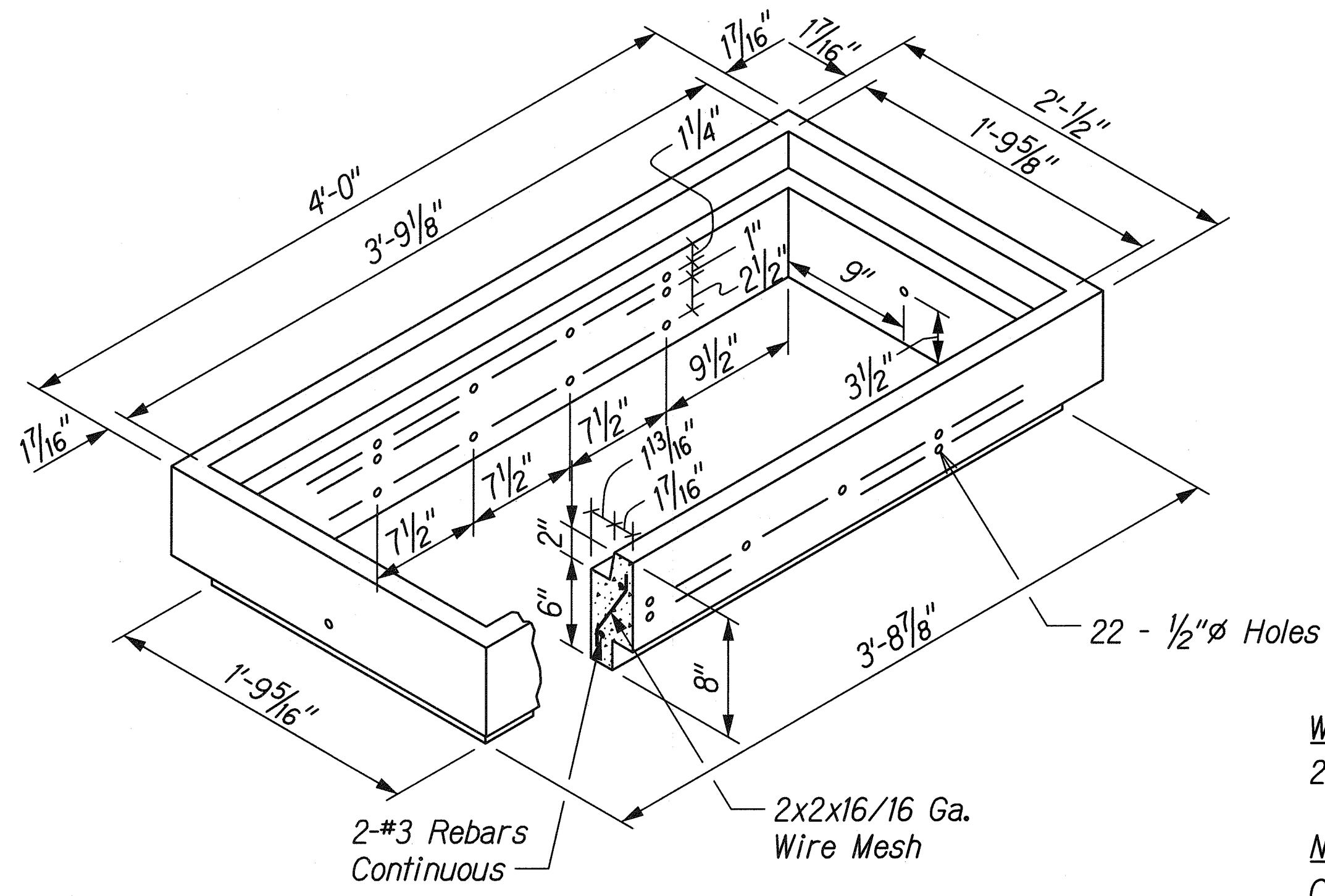
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| FED. ROAD DIST. NO. | STATE | FEDERAL AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------|-------------|-----------|--------------|
| HAWAII | HAW. | CMAQ-076-1(9) | 2006 | 206 S-1 | 371 |



- NOTES:**
- Concrete Strength 3000 psi @ 28 days.
 - Reinforced w/ 2 ea. #3 rebar continuous top and bottom.
 - Future duct entrances.

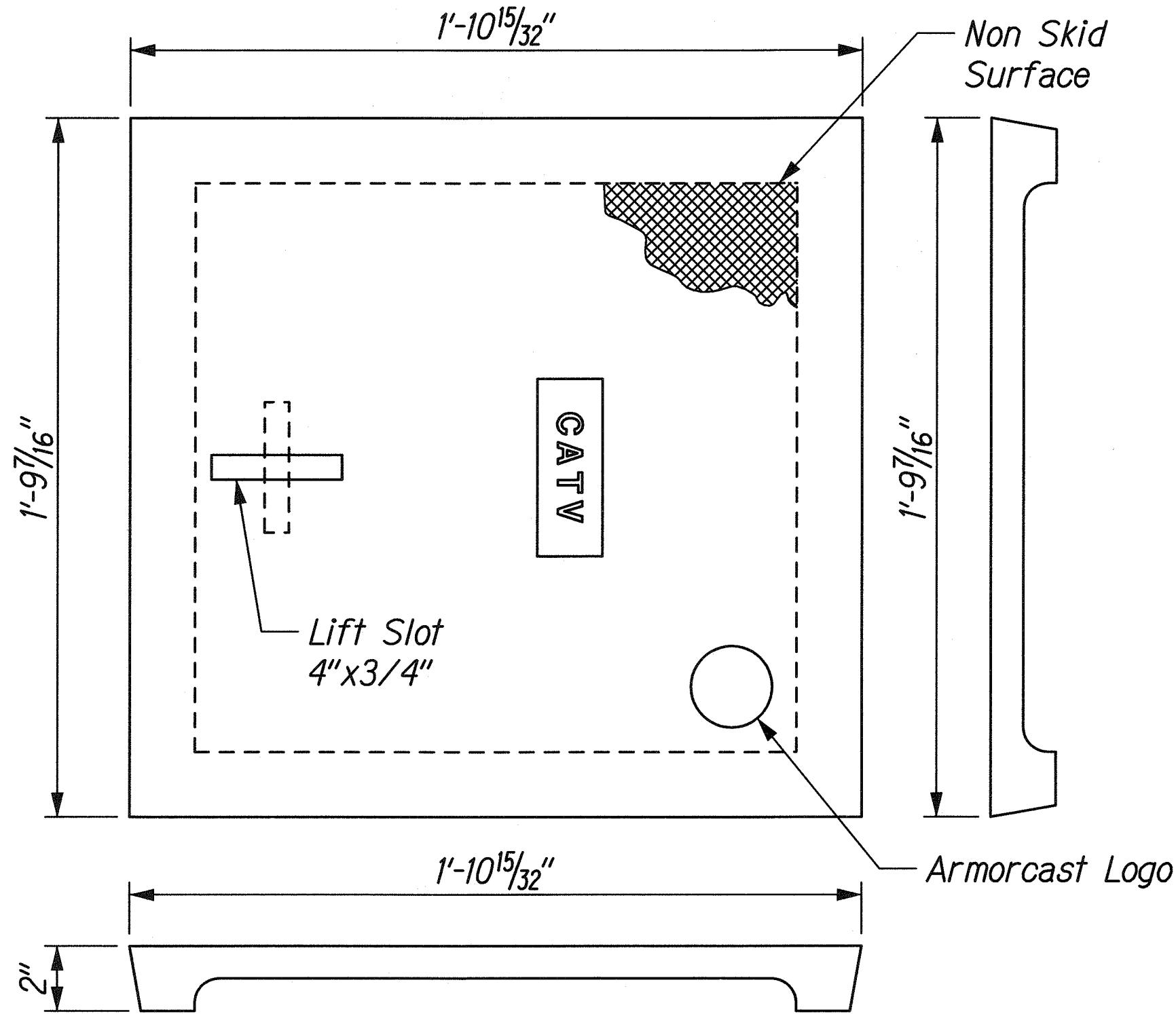
BASE RISER
FOR 435 TB PULLBOX
N.T.S



WT:
255 lbs.

NOTE:
Clear inside dimension
1'-6"x3'-5 1/2"

8" RISER
FOR 435 TB PULLBOX
N.T.S



2'x2' COVER
N.T.S.

| | |
|---------------|------|
| DESIGNED BY | DATE |
| DRAWN BY | |
| CHECKED BY | |
| NOTED BY | |
| QUANTITIES BY | |
| DATE | |

1/4" FT. WEAVER ROAD/SUB FOLDER/1/4" Jgn

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
SIGNATURE: *R. Urasak* EXPIRATION DATE OF LICENSE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY RELOCATION DETAILS
435 TB PULLBOX

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: As Shown Date: Feb. 22, 2008