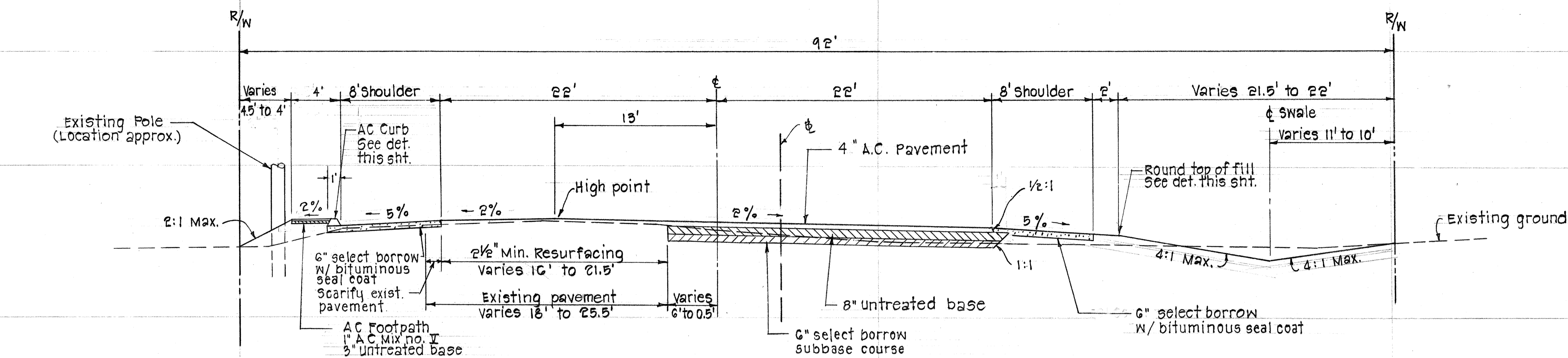
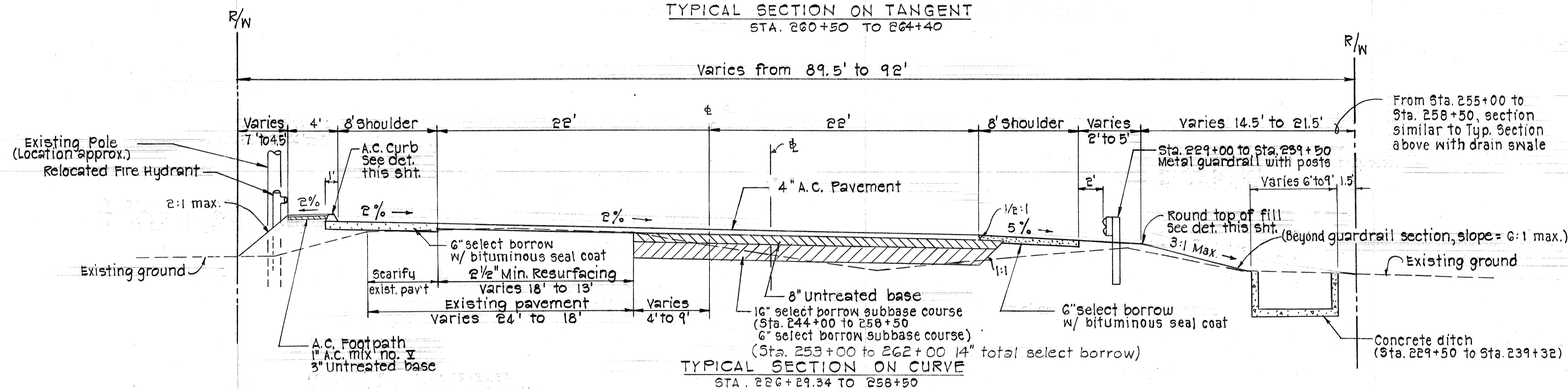


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.		1969	2	73

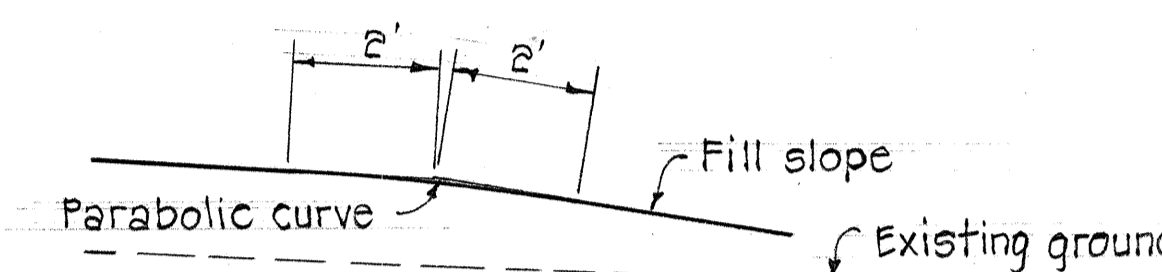
PROJECT NO. 900 B-02-68 UNIT 1



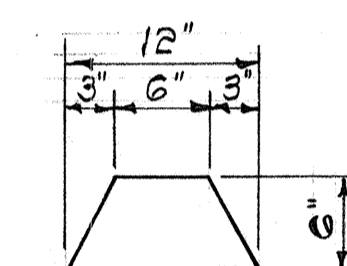
TYPICAL SECTION ON TANGENT  
STA. 220+50 TO 224+40



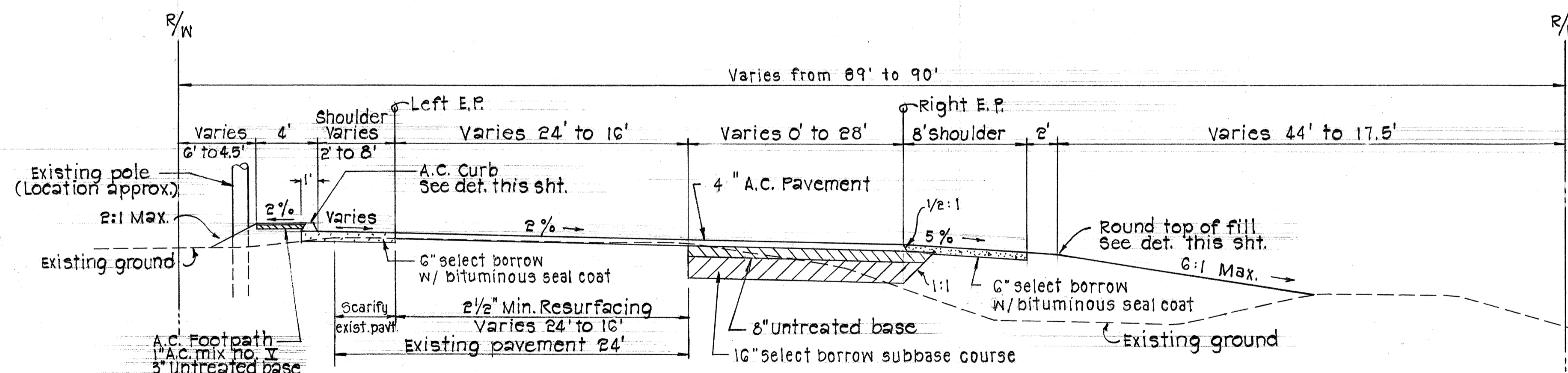
TYPICAL SECTION ON CURVE  
STA. 226+29.34 TO 258+50



DETAIL OF ROUNDING  
FILL SLOPE



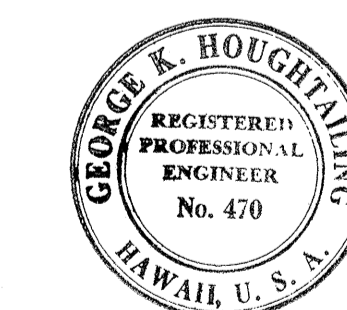
TYPICAL SECTION  
A.C. CURB



TYPICAL SECTION ON TRANSITION  
STA. 218+34.59 TO 226+29.34

NOTES:

- 4" A.C. pavement shall consist of:  
1 1/2" asphaltic concrete pavement Mix No. V surface course  
2 1/2" asphaltic concrete pavement Mix No. III leveling course
- A.C. resurfacing shall consist of:  
1" A.C. pav't. Mix No. V surface course  
1 1/2" (min.) A.C. pav't. Mix No. III leveling course



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.  
*George K. Houghtaling*  
Signature

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

TYPICAL ROAD  
SECTIONS

FARRINGTON HIGHWAY WIDENING

PROJECT 900B-02-68

UNIT 1

SCALE: 3/16" = 1'-0"

SHEET No. 1 OF 2 SHEETS

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.		1969	3	73

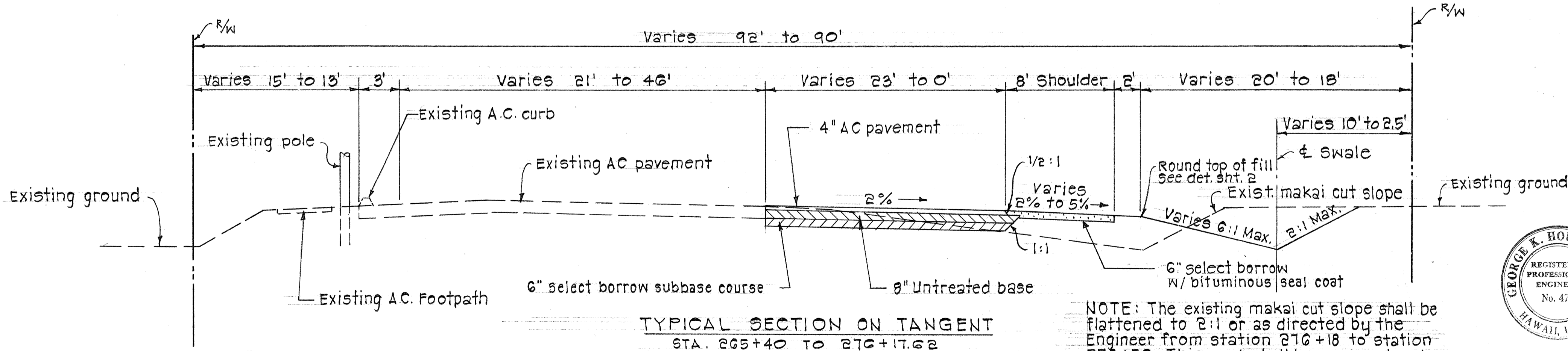
PROJECT NO. 900 B - 02 - 68 UNIT 1

## GENERAL NOTES

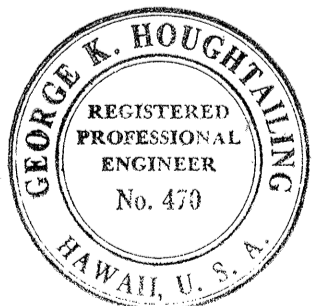
- All existing utility lines shown on these plans are located from the best sources available. The Contractor shall check and verify the exact location and depth of same.
- All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor during construction and any damage to existing utilities shall be repaired and paid for by the Contractor unless specified on the plans to be abandoned.
- Where connections are made to existing facilities, mortar shall be used to seal around the culvert at the connection. Payment for making this connection shall be considered incidental to structure excavation. Other existing facilities that are damaged by the Contractor shall be repaired at his expense.
- Existing monument castings and M. H. frames and covers to be adjusted to new road grade.
- Utility poles on makai side shall be relocated as shown on the utilities plans.
- Provide smooth riding connections to existing pavement at all driveways and streets.
- Demolishing of existing facilities shall not be paid for separately but shall be considered incidental to structure excavation, except the Ulehawa Stream Bridge at Sta. 165+00 and all Type "C" water manholes.
- The ends of abandoned pipe culverts shall be plugged with brick and mortar. This work shall not be paid for separately but shall be considered incidental to structure excavation.
- Excavation for swales will be measured and paid for under roadway excavation.
- For location of Base Line points, the Contractor shall contact Community Planning, Inc. - Civil Engineers & Surveyors.
- Install A. C. curb at left edge of roadway as shown on Typical Road Sections. See schedule on drawings for location.
- Any grading work done over existing Signal Corp cables shall be coordinated with H. T. Co.
- The Contractor shall use extreme care to prevent damage to the buried cables.
- Decision to lower the existing cables if it becomes exposed will be determined out in the field.

## WATER NOTES

- The locations of existing water mains and appurtenances shown on the plans are approximate only and the Contractor shall verify the exact locations.
- Whenever existing water mains are to be in the new pavement areas, or under the proposed shoulder areas and the Cross Sections show the existing ground over the water mains are to be excavated for the sub-base, or where the cover over existing water main is less than 2'-0" from the crown of the water main, no power or other heavy equipment shall be permitted over the water main. Only hand-operated mechanical equipment shall be utilized to compact materials over and adjacent to water main until a minimum cover of 2'-0" is constructed. Any damage to the existing water mains shall be the responsibility of the Contractor.
- Existing water mains shall be exposed prior to start of trench excavation at new drain and culvert crossings whenever there is a possibility that these drains and culverts may affect the existing water mains.
- Any excavation work around existing water mains and appurtenances shall be by hand only.
- The Contractor shall notify the Board of Water Supply in writing one week prior to commencing work on the water system.
- The Contractor shall relocate existing water valve markers as directed by the Engineer at his own expense.
- (\*) Asterisk denotes work to be done by the Board of Water Supply and unless otherwise noted, materials to be furnished by the Contractor. Contractor to excavate and backfill.
- All water mains will be kept under working pressure during the compaction of the base course.
- Items indicated as "relocate" on plans shall be removed, cleaned, painted and reinstalled at the new location by the Contractor unless otherwise specified.
- All 24" concrete cylinder pipes shall be Class 150 and manufactured in accordance with the requirement of the Special Provisions and the Manufacturer's Detail Drawings, all to be approved by the Board of Water Supply.
- The Contractor shall submit to BWS the Manufacturer's Layout Schedule for the installation of the 24" concrete cylinder pipes and appurtenances with reference to the stationing and grade line as shown on the plans.
- Class C-1 concrete for plugging open ends of abandoned pipes shall be incidental to pipeline work.
- Adjust existing valve box and manhole frame and cover to new road grade, as ordered by the Engineer.
- Existing 24" main is of Southern Pipe Co. (formerly) manufacture. The Contractor shall be held responsible to furnish all necessary materials, including adaptors if required to facilitate connections into existing mains. Cost of adaptors shall be incidental to pipeline work.
- Degree of concrete cylinder bends, or lengths of adjacent pipes required at point of connections to existing mains shall be verified after exposure of existing mains prior to start of construction work. Any resulting revisions required shall be done by the Contractor at his own cost. Degree of concrete cylinder bends specified on the plan at connection points are for bidding purpose only.
- Extension of service laterals, adjustment of meters and meter boxes, relocation of meters to footpath area and cutting and plugging of service laterals shall be done by B.W.S. The Contractor shall perform all necessary excavation and backfill.



NOTE: The existing makai cut slope shall be flattened to 2:1 or as directed by the Engineer from station 276+18 to station 278+50. This work shall be measured and paid for under roadway excavation.



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.  
*George A. Houghtaling*  
Signature

APPROVED  
*J. Kawakami* 3/14/69  
Chief, Engineering Div. B.W.S. Date

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

## TYPICAL ROAD SECTIONS

FARRINGTON HIGHWAY WIDENING

PROJECT 900B-02-68

UNIT 1

SCALE: 3/16" = 1'-0"

SHEET No. 2 OF 2 SHEETS

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