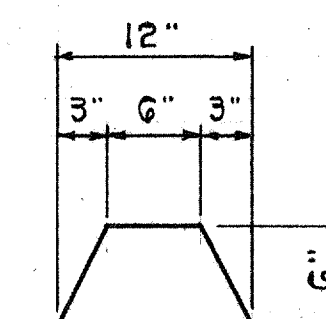


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.		1969	2	104

PROJ. NO. 900 B-02-68 - Unit 2

INDEX OF ABBREVIATIONS

AC	Asphaltic Concrete
BWS	Board of Water Supply
CB	Catch Basin
CIP	Cast Iron Pipe
CM	Signal Corps Cable Marker
D16	Storm Drain Pipe, 16-inch Diameter
EP	Electric Pole
FH	Fire Hydrant
GP	Guy Pole
HE	Hawaiian Electric Company
HT	Hawaiian Telephone Company
LP	Light Pole
MB	Mail Box
MJCIP	Mechanical Joint Cast Iron Pipe
PCC	Portland Cement Concrete
R/W	Right-of-Way
Sc	Signal Corps Cable
SCB	Signal Corps Pullbox
SDMH	Storm Drain Manhole
TP	Telephone Pole
TW	Top of Wall
W12	Water Line, 12-inch Diameter
WM	Water Meter
WMH	Water Manhole
WMS	Water Meters
WV	Water Valve
WVMH	Water Valve Manhole



TYPICAL SECTION A.C. CURB

WATER NOTE:

1. The proposed swale along the makai side of the highway from sta. 113+20 to sta. 145+00 shall be deleted at all fire hydrants and meter boxes.

NOTES:

- 4" A.C. pavement shall consist of:
1 1/2" A.C. pav't. Mix No. V surface course.
2 1/2" A.C. pav't. 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.
Signature: *George K. Houghtaling*

Approved:

A. Kawakami 5/23/69
Chief, Engineering Div., BWS Date

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL ROAD SECTIONS

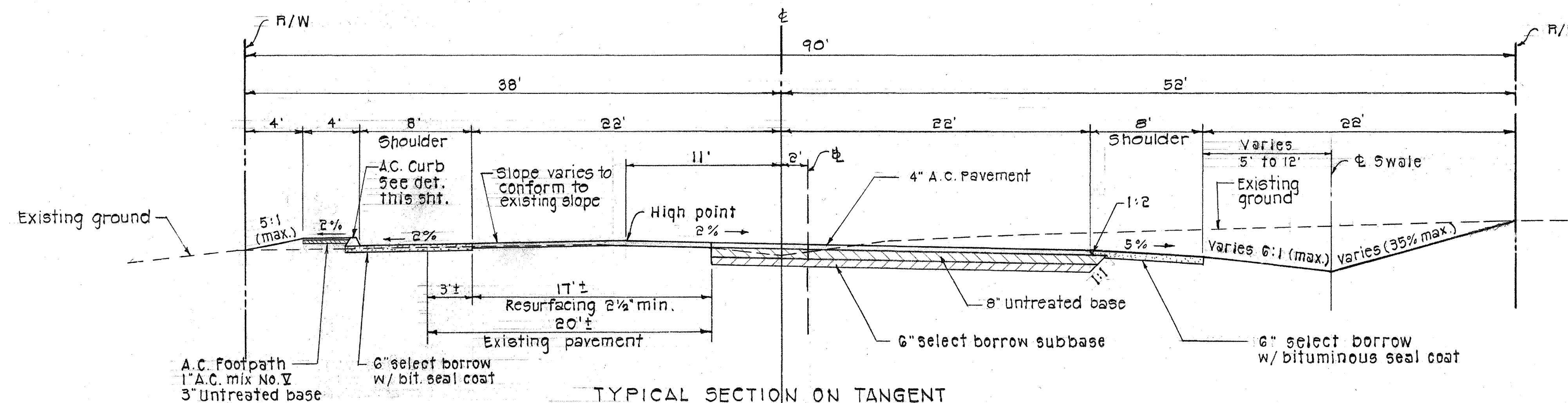
FARRINGTON HIGHWAY WIDENING

PROJECT 900B-02-68

UNIT 2

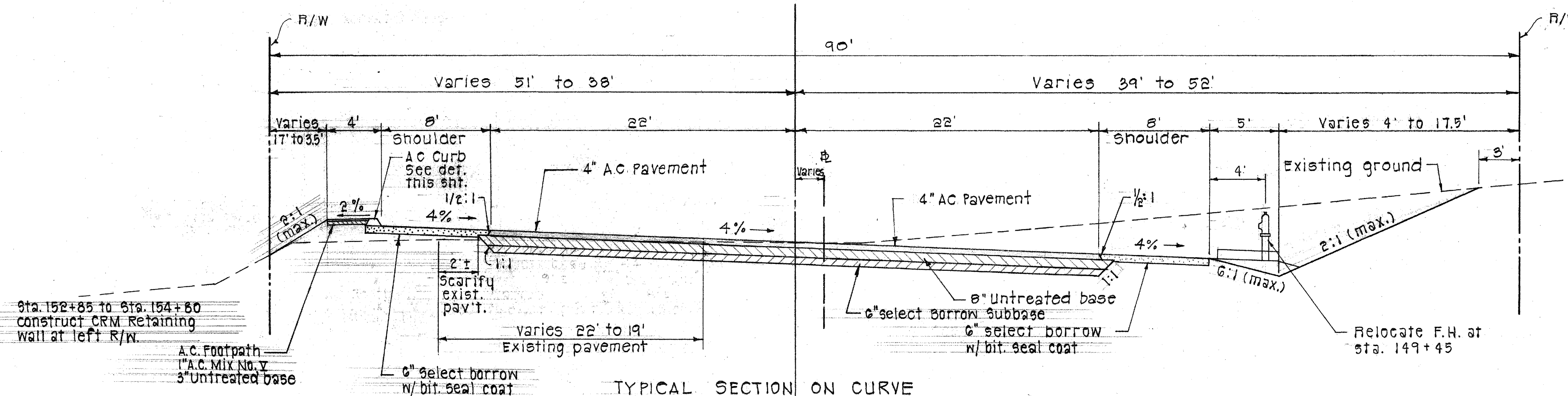
SCALE: 3/16" = 1'-0"

SHEET No. 1 OF 4 SHEETS



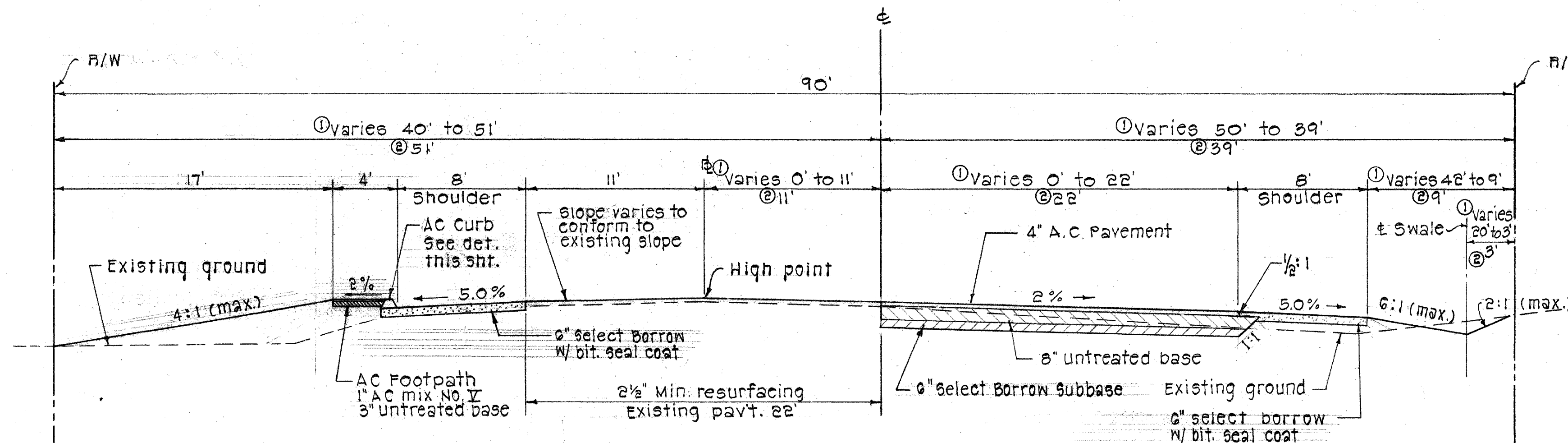
TYPICAL SECTION ON TANGENT

STA. 156+50 TO 166+50



TYPICAL SECTION ON CURVE

STA. 146+50 TO 156+50 Q.B. LANES (RESURFACE)



TYPICAL SECTION ON TANGENT

① STA. 100+00 TO 111+00 (RT. E.P. TRANSITION)
② STA. 111+00 TO 146+50

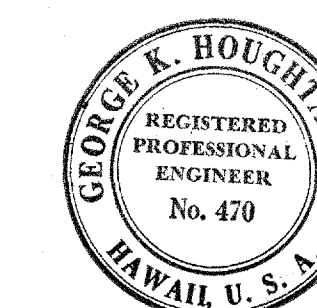
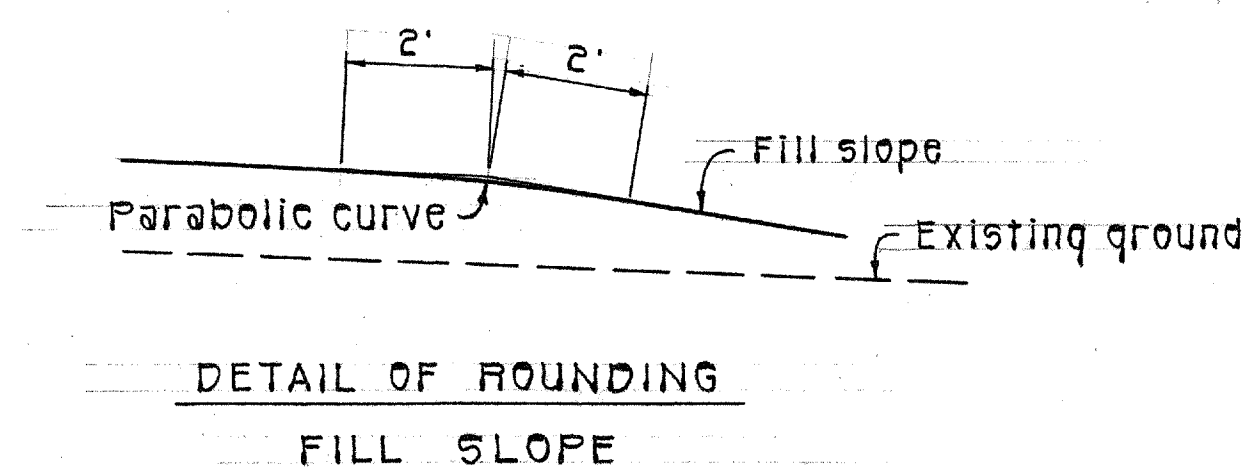
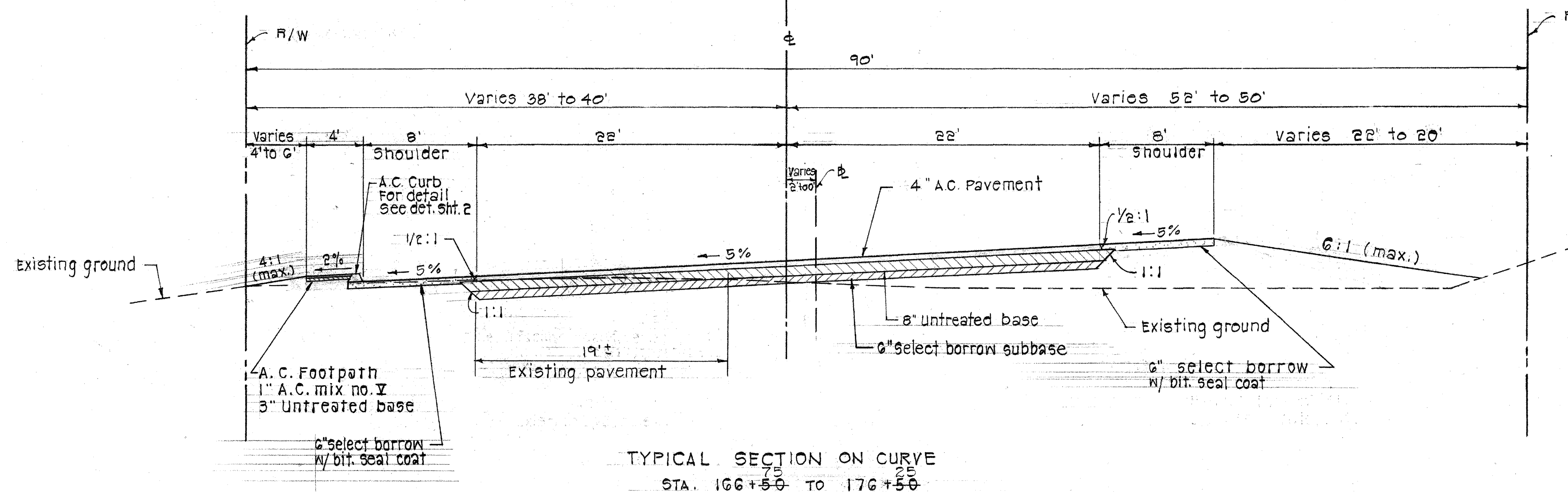
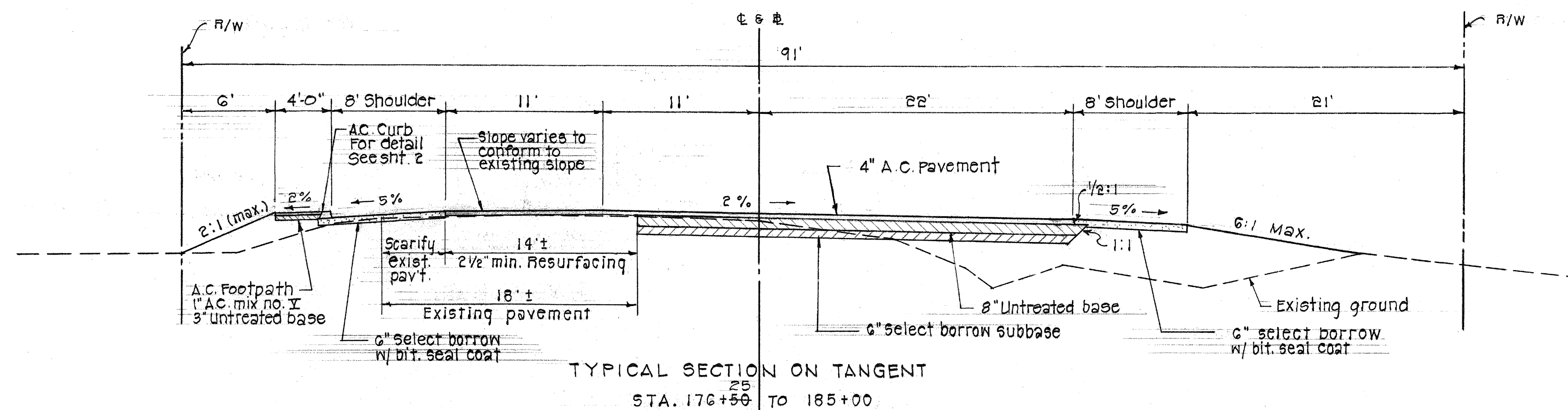
NOTE:

- From sta. 100+00 to sta. 102+00
- Omit AC Curb & footpath
- Shoulder slopes to conform to existing ground slope
- Omit swale at makai side

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
NO.	_____

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.		1969	3	104

PROJ. NO. 900 B-02-68 - Unit 2



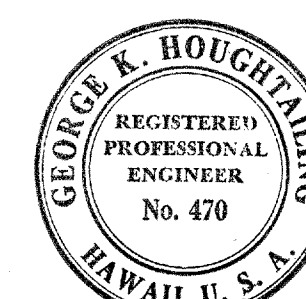
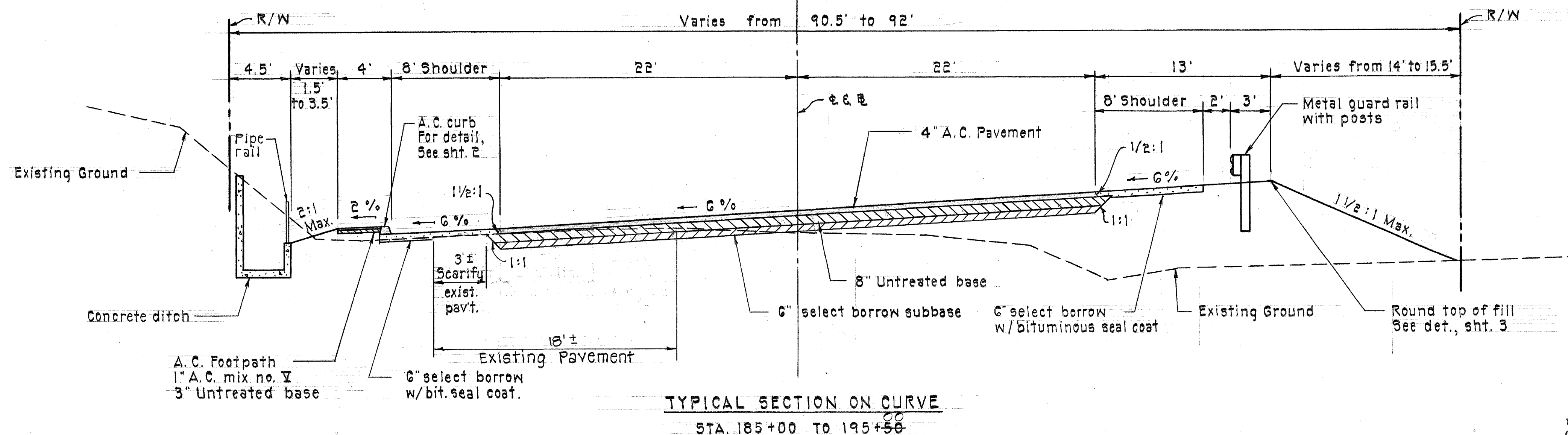
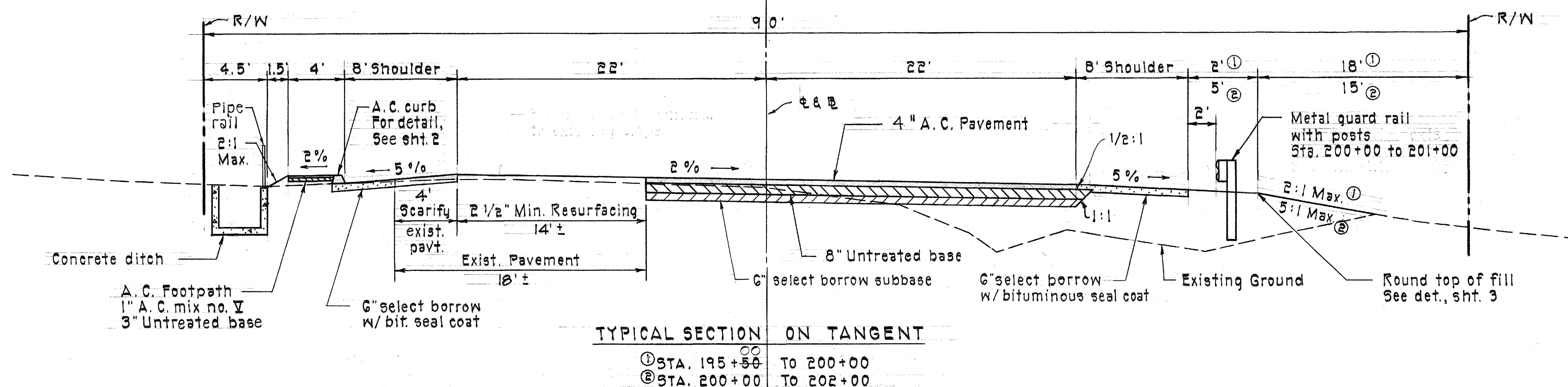
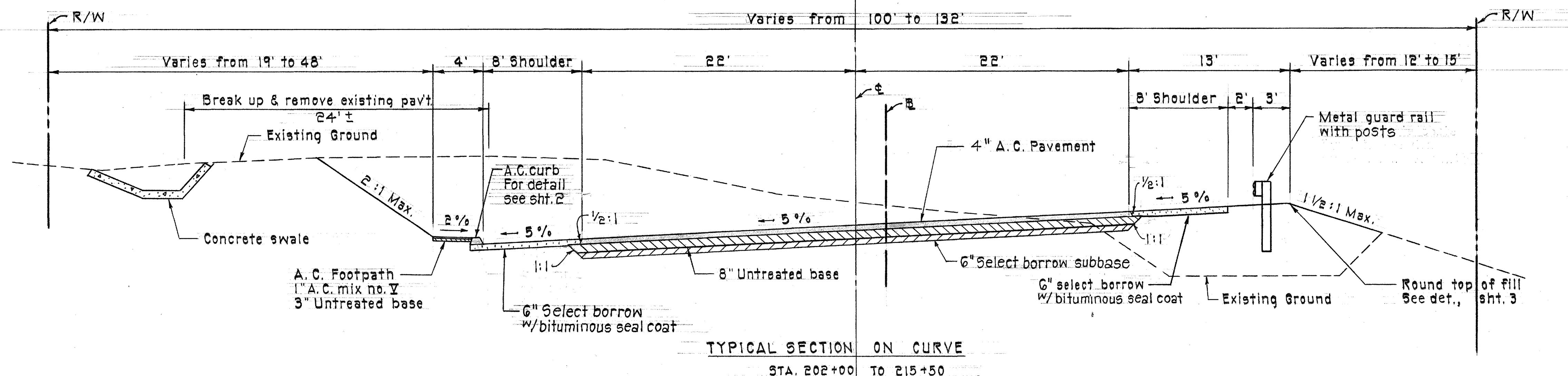
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
George K. Houghtaling
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TYPICAL ROAD SECTIONS
FARRINGTON HIGHWAY WIDENING
PROJECT 900B-02-68
UNIT 2
SCALE: 3/16" = 1'-0"
SHEET No. 2 OF 4 SHEETS

DATE	
SURVEYED BY	
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	4	104

PROJECT NO. 900 B-02-68 UNIT 2



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

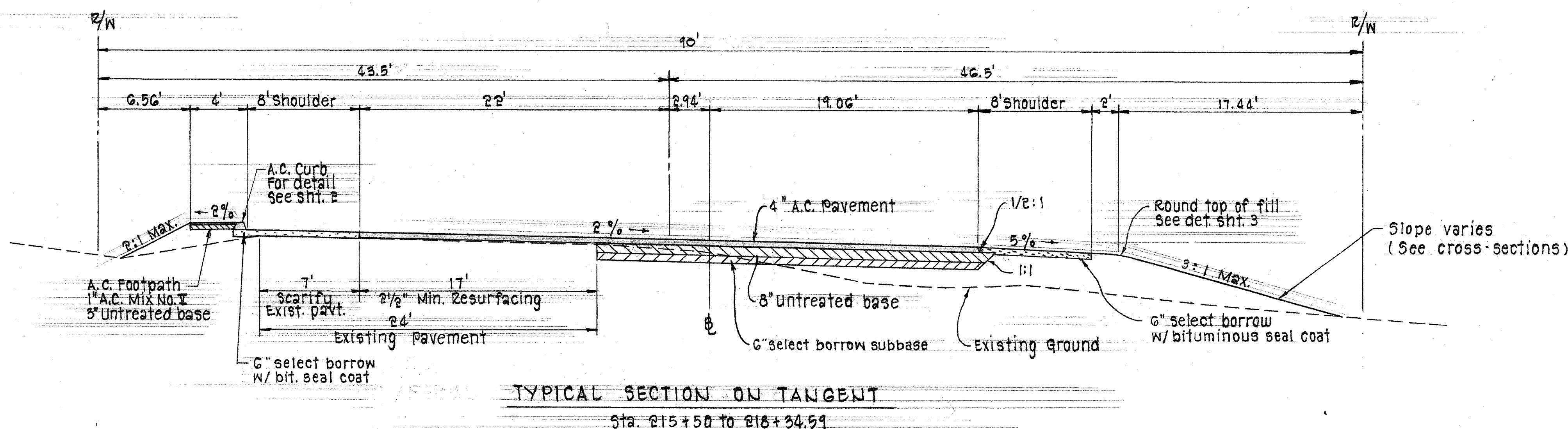
FARRINGTON HIGHWAY WIDENING
PROJECT 900B-02-68
UNIT 2

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

SHEET No. 3 OF 4 SHEETS

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

1. 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.
2. 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.
3. 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.
4. Existing monument castings and M.H. frames and covers to be adjusted to new road grade.
5. Utility poles shall be relocated as shown on the utilities plans.
6. Provide smooth riding connections to existing pavement at all driveways and streets.
7. Demolishing of existing facilities shall not be paid for separately but shall be considered incidental to structure excavation, except demolishing a portion of Maipaloa Bridge.
8. 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.
9. Excavation for swales will be measured and paid for under roadway excavation.
10. For location of Base Line points, the Contractor shall contact Community Planning Inc., Civil Engineers & Surveyors.
11. Install A.C. curb at left edge of roadway as shown on Typical Road Sections. See schedule on drawings for location.
12. Any grading work done over existing Signal Corp cables shall be coordinated with H.T. Co.
13. The Contractor shall use extreme care to prevent damage to the buried cables.
14. Decision to lower the existing cables if it becomes exposed will be determined out in the field.
15. The Contractor shall have the option of furnishing and installing either reinforced concrete culvert pipe or asbestos cement culvert pipe. See Section 58B of the Amendments to Standard Specifications.



1. The locations of existing water mains and appurtenances shown on the plans are approximate only and the Contractor shall verify the exact locations.
2. Whenever existing 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.
3. 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.
4. Any excavation work around existing water mains and appurtenances shall be by hand only.
5. The Contractor shall notify the Board of Water Supply in writing one week prior to commencing work on the water system.
6. The Contractor shall relocate existing water valve markers as directed by the Engineer at his own expense.
7. (*) 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.
8. All water mains will be kept under working pressure during the compaction of the base course.
9. Items indicated as "relocate" on plans shall be removed, cleaned, painted and reinstalled at the new location by the Contractor unless otherwise specified.
10. Class C-1 concrete for plugging open ends of abandoned pipes shall be incidental to pipeline work.
11. Adjust existing valve box and manhole frame and cover to new road grade, as ordered by the Engineer.
12. 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.

S. Kawakami 5/23/69
Chief, Engineering Div. BWS ^{FW} Date



THIS WORK WAS PREPARED BY M
OR UNDER MY SUPERVISION.

George K. Houghlaide
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL ROAD
SECTIONS

FARRINGTON HIGHWAY WIDENING
PROJECT 900 B-02-68

UNIT 2

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

SHEET NO. 4 OF 4 SHEETS