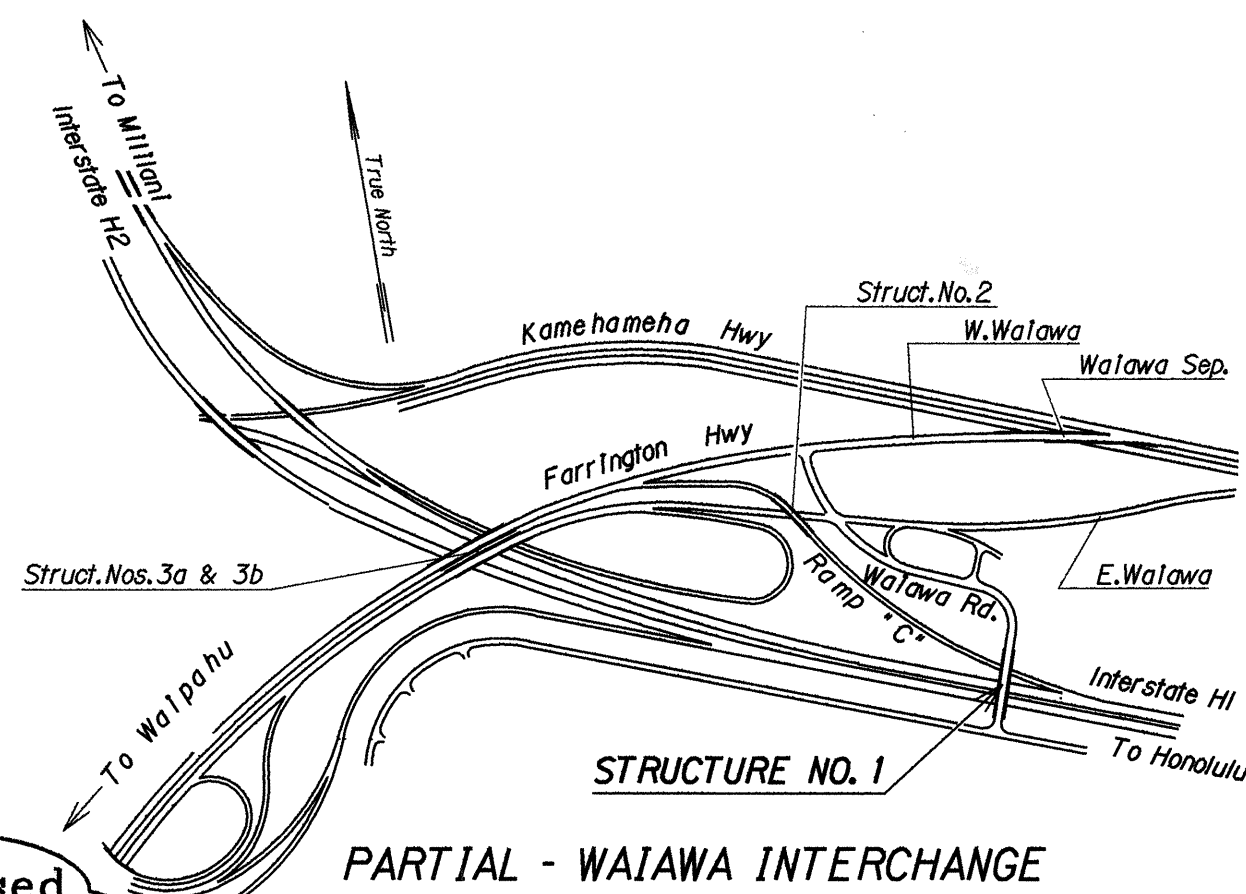
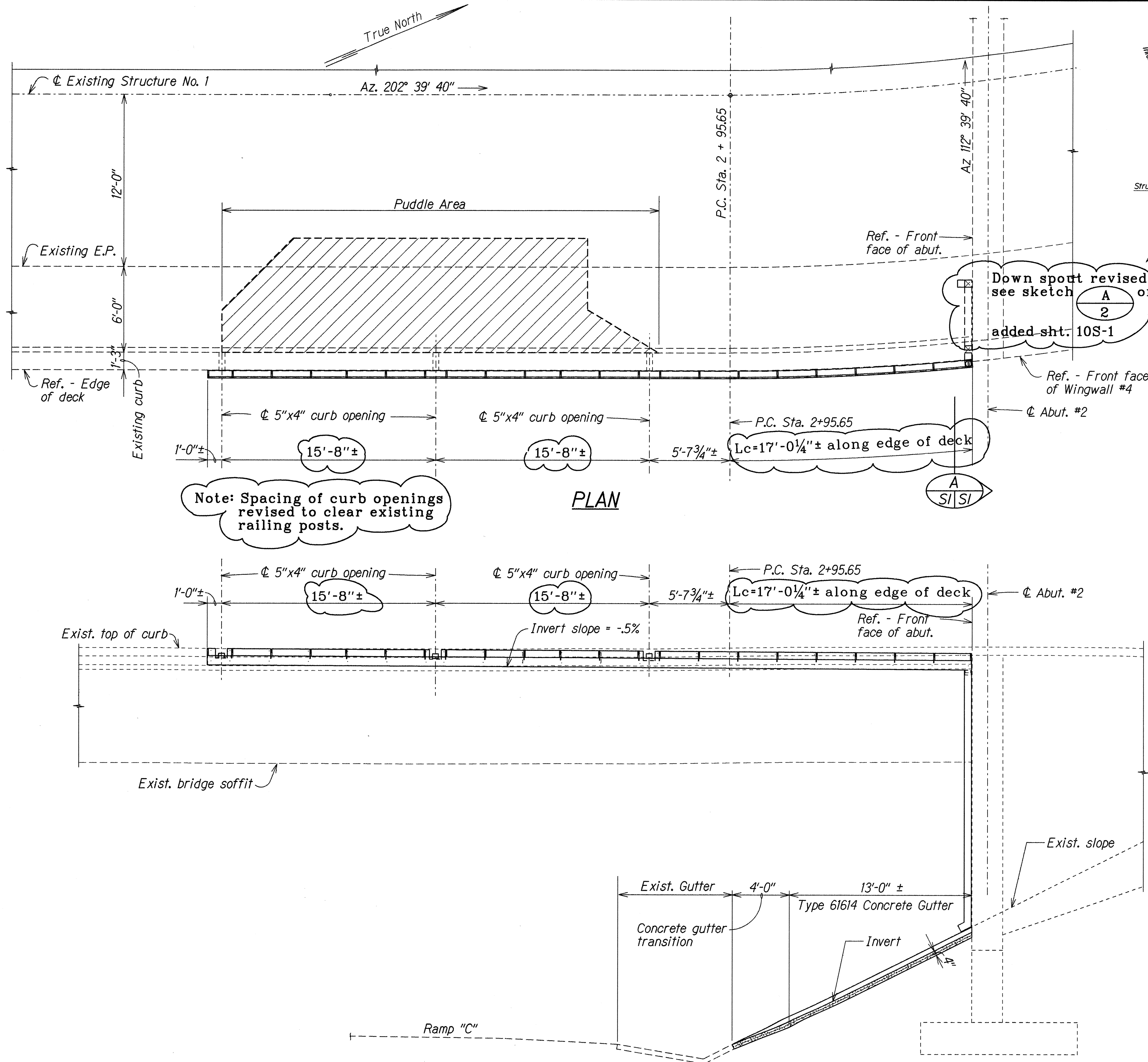
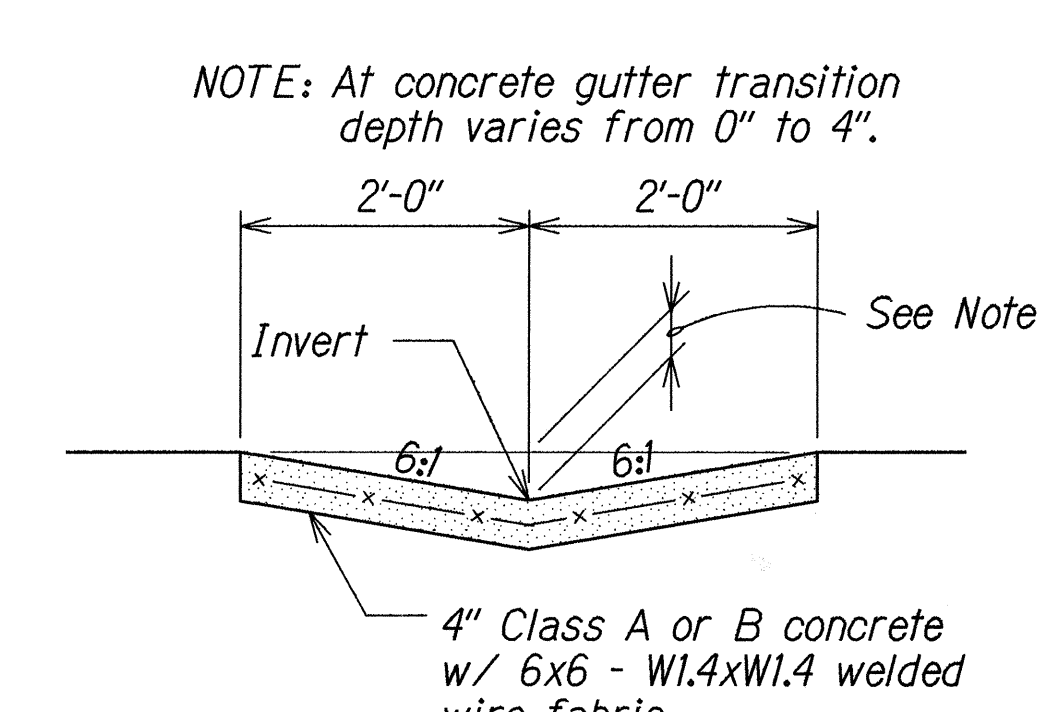


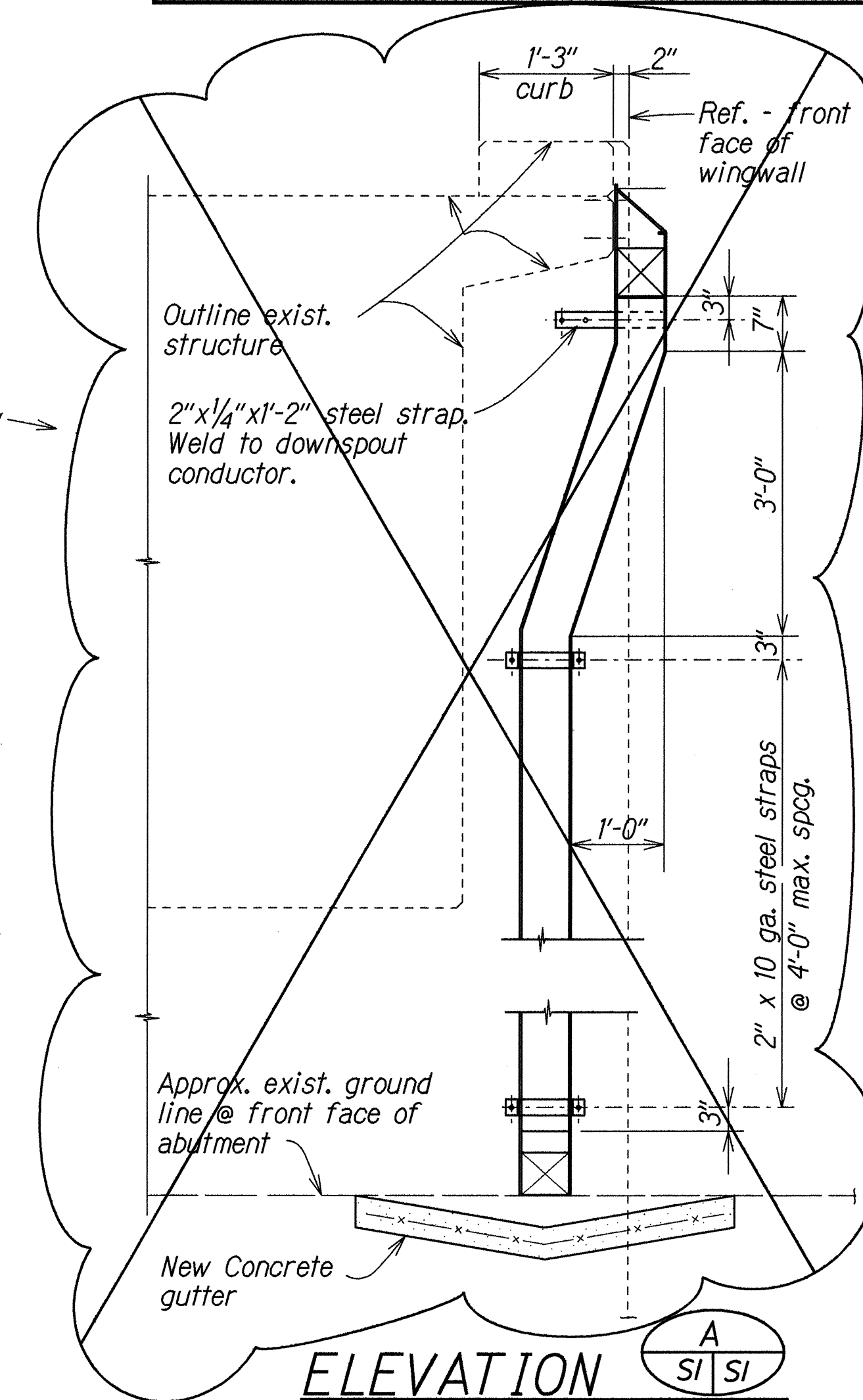
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-89	1990	10	17



LOCATION PLAN
Not to Scale



DETAIL OF TYPE 61614 CONCRETE GUTTER
Scale: 3/4"=1'-0"



ELEVATION
Scale: 3/4"=1'-0"
See revised elevation on sketch on added sht. 10S-1

ESTIMATED QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
674.0010	10 Gage Sheet Metal Gutter	L.F.	54 L.F.
674.0011	10 Gage Sheet Metal Downspout Conductor	L.Y.	19 L.F.
674.0012	Type 61614 Concrete Gutter	C.Y.	1 C.Y.

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

5'X4' DECK DRAIN AT STRUCTURE NO.1

PARTIAL PLAN, ELEVATION & CONC. GUTTER

FARRINGTON HIGHWAY INTERSECTION
IMPROVEMENTS AT WAIAWA REALIGNMENT ROAD
Project No. 99D-01-89
Scale: As Noted
MAY 1990

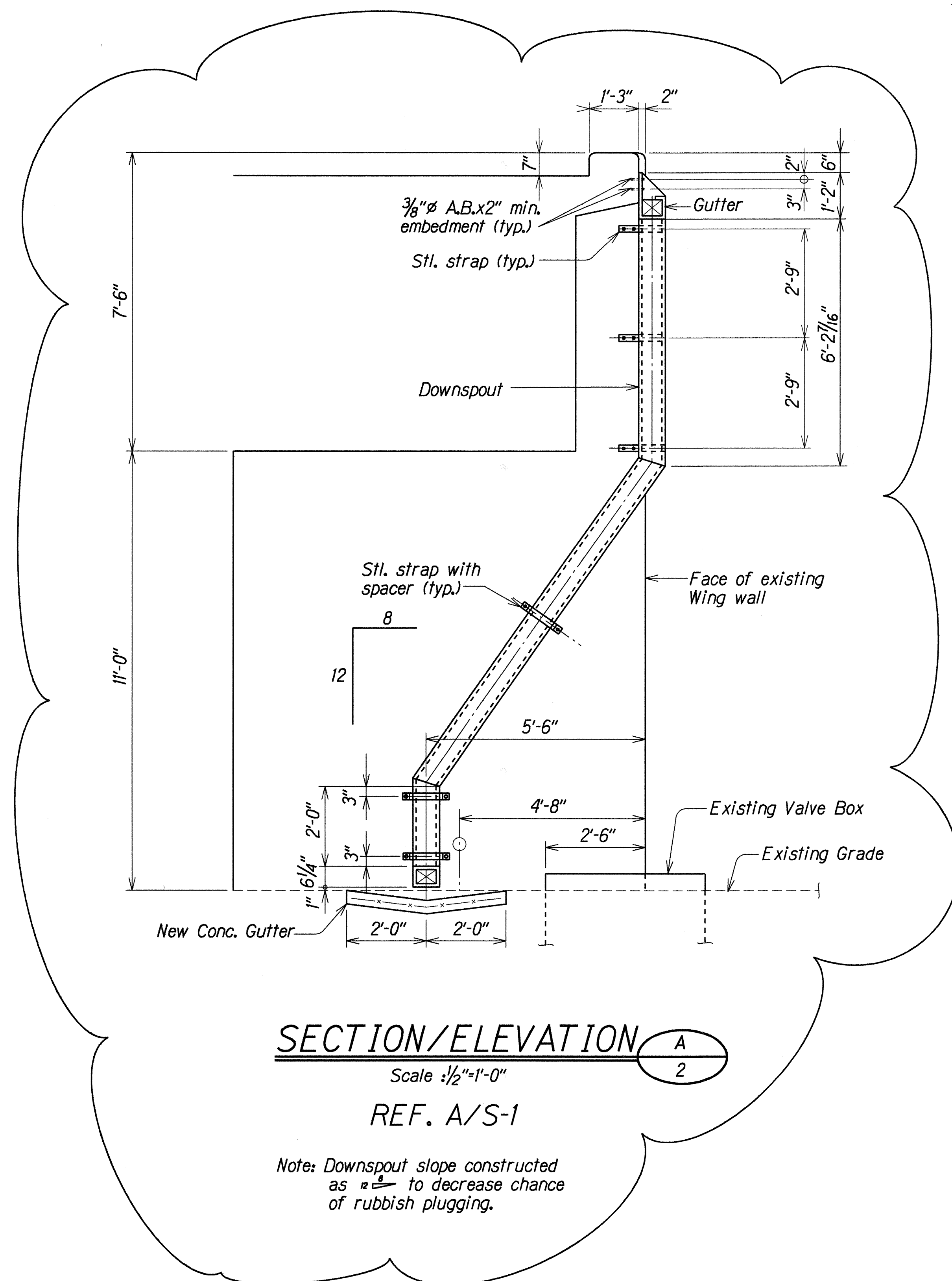
DECK DRAIN AT STRUCTURE NO. 1
Scale: 1/4"=1'-0"

Note: This tracing prepared during "As-Built" posting.

"AS-BUILT"

DESIGNED BY	DATE
TRACED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-89	1996	S-1A	17



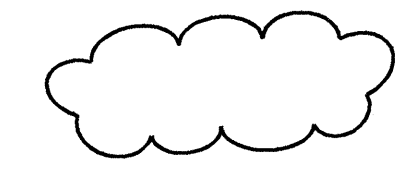
SECTION/ELEVATION A
Scale : 1/2"=1'-0"

REF. A/S-1

Note: Downspout slope constructed as 1/2"=1'-0" to decrease chance of rubbish plugging.

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

Note: This tracing prepared during "As-Built" posting.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

5"x4"DECK DRAIN AT STRUCTURE NO.1
ELEVATION & CONC. GUTTER

FARRINGTON HIGHWAY INTERSECTION
IMPROVEMENTS AT WAIAWA REALIGNMENT ROAD
Project No. 99D-01-89

Scale: As Noted
Date: MAR, 1997

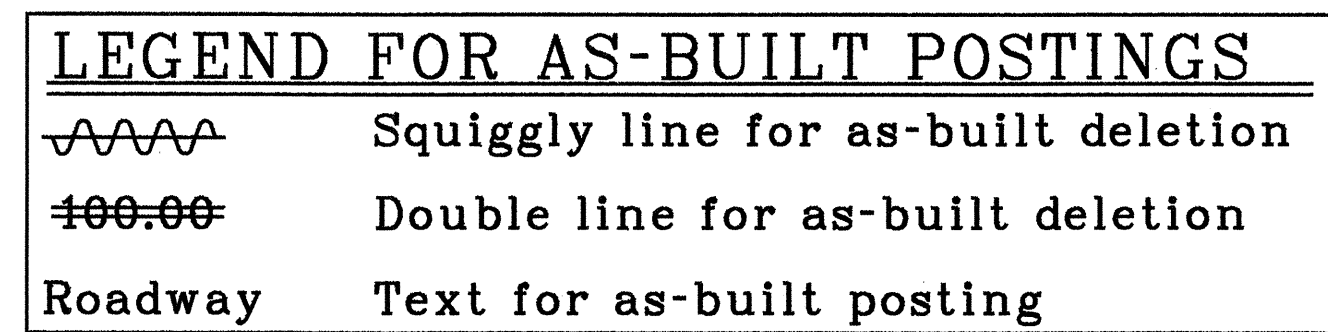
SHEET No. S-1A OF 4 SHEETS

ORIGINAL PLAN	DATE
NOTE BOOK	10/1/1997
DESIGNED BY	
CHECKED BY	
QUANTITIES BY	
NO. MOVED	

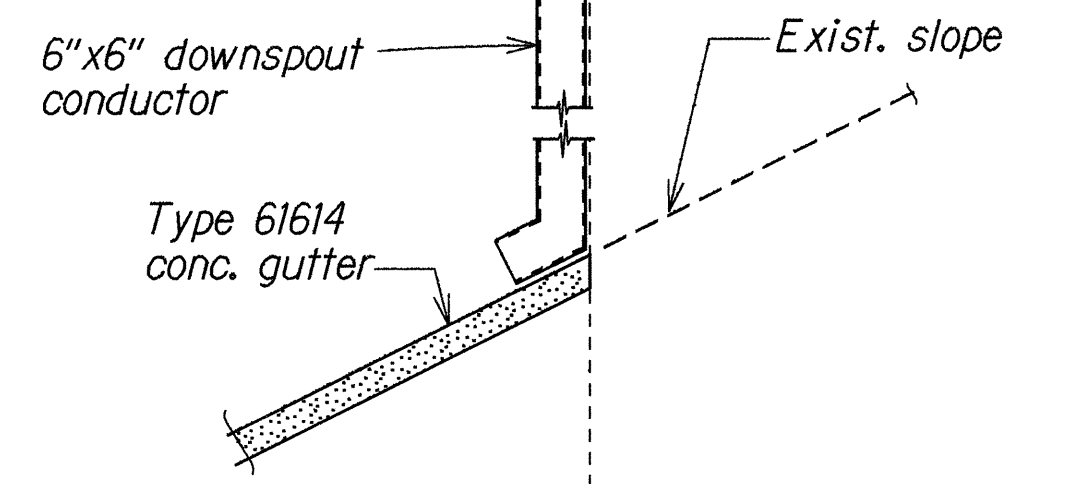
Ref. - front face abut.

ridge R=150.00
Sta. 3+10.75

Note: Down spout revised see sketch on

[illegible]

ELEVATION
Scale: $\frac{1}{2}" = 1'-0"$

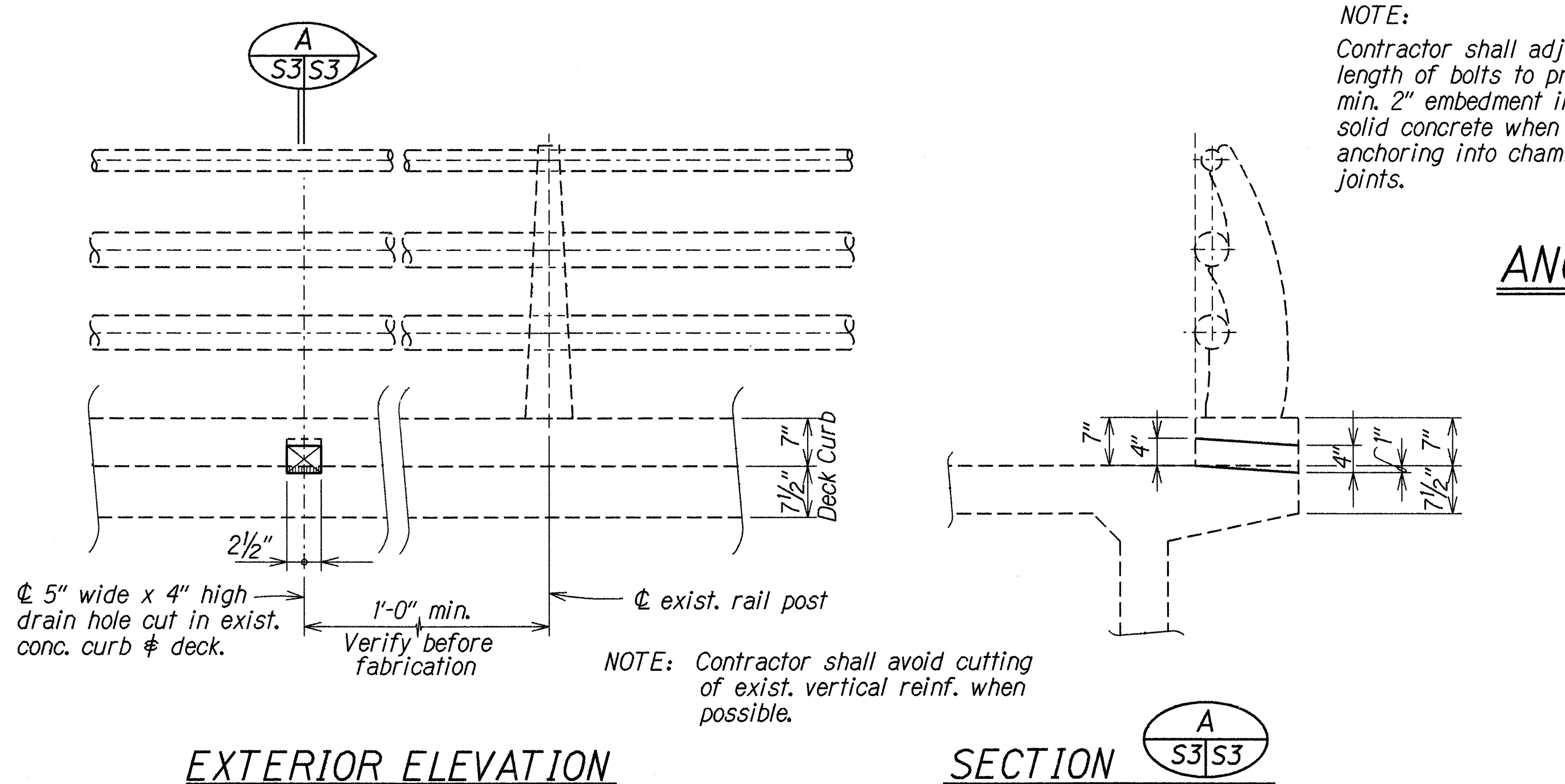


"AS-BUILT"

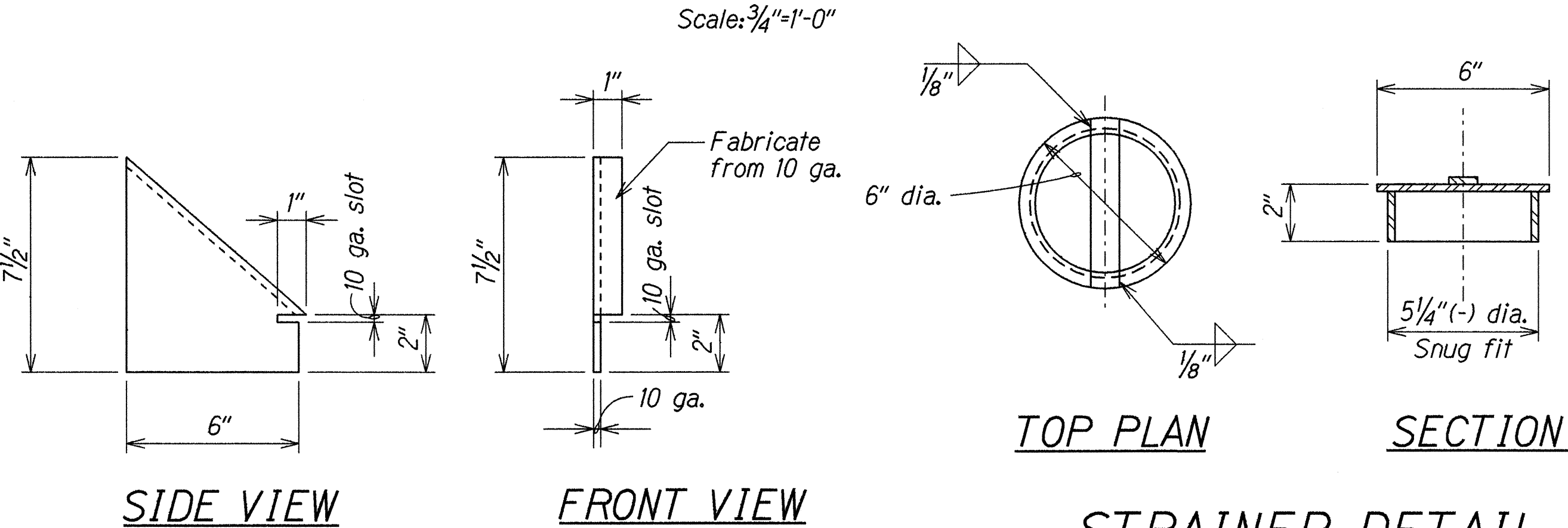
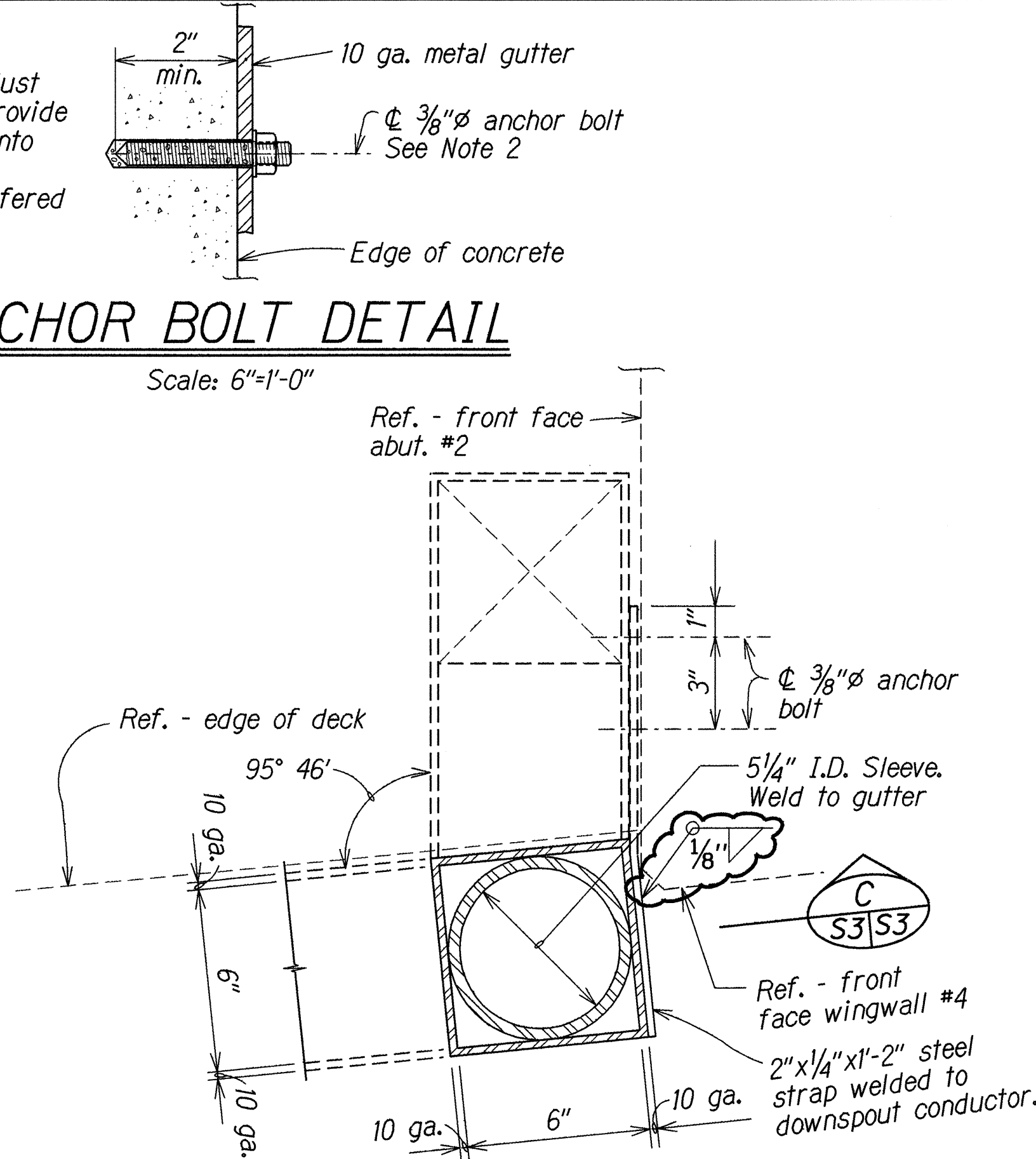
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-89	1990	12	17

NOTES:

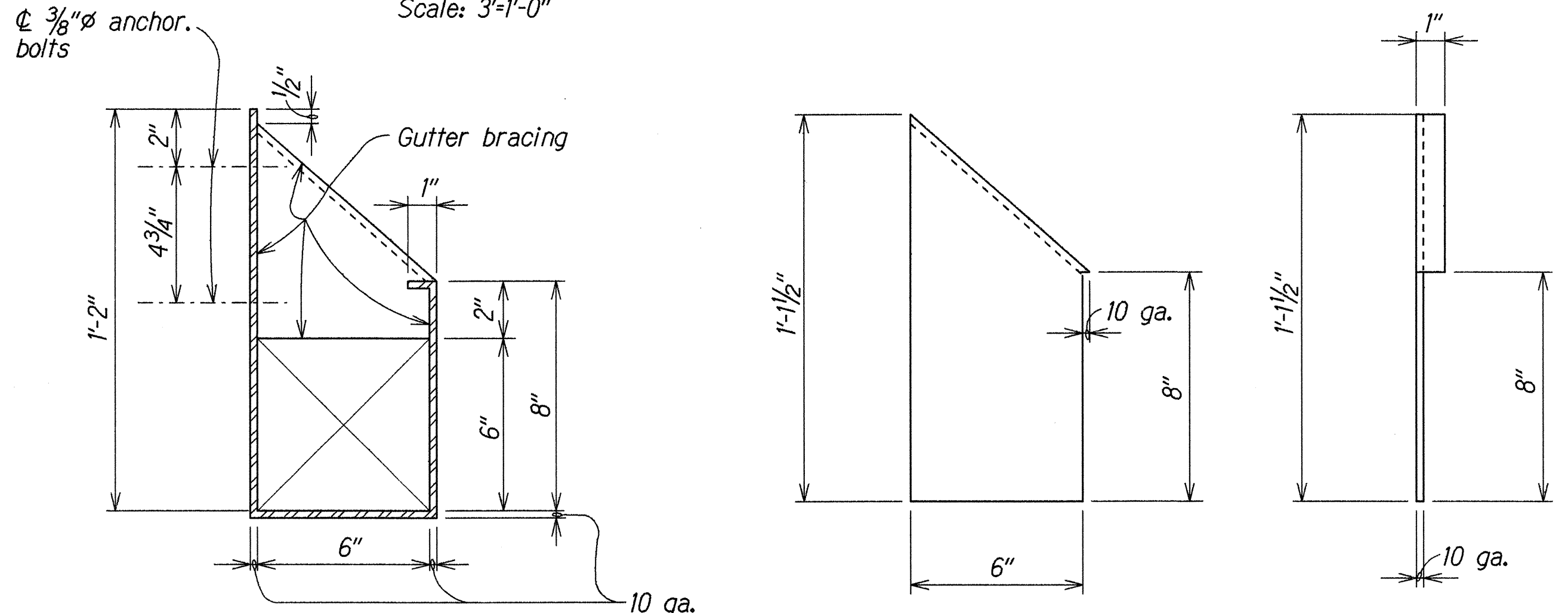
1. Refer to Hawaii Standard Specifications for Road and Bridge Construction 1985 and Special Provisions.
2. The Contractor shall verify all grades and dimensions before commencing with any work.
3. Concrete designated for removal shall be removed in such a manner as to preclude any damage to the existing structure. Large impacting or vibratory types of equipment will not be permitted in the removal operation nor in drilling holes. Small vibratory tools, approved by the Engineer, will be permitted.
4. Full weld all seams and connections.
5. 10 ga. steel sheet metal shall conform to ASTM-A569.
6. Gutter, downspout conductor and accessories shall be galvanized after fabrication in accordance with subsection 712.10 of the Specifications
7. Repair of damaged galvanized coatings, preparation of galvanized surfaces for painting, and painting shall be according to Section 501 of the Specification except as otherwise noted.
8. Gutter, downspout conductor and accessories shall be painted with two shop coats of white and tinted ready mix paint, AASHTO M70., conforming to section 708. Color of the final shop coat shall resemble color of concrete and be approved by the Engineer.
9. The Contractor shall provide shop drawings for gutter, downspout conductor and accessories.
11. Anchor bolt shall be 3/8"Ø HiHi HVA or Molly Parabond adhesive stud anchor or equivalent with 2" min. embedment.
12. Anchor bolt length shall be such that snug fit of the element and full thread engagement plus 1/4" (max.) is attained.



ANCHOR BOLT DETAIL

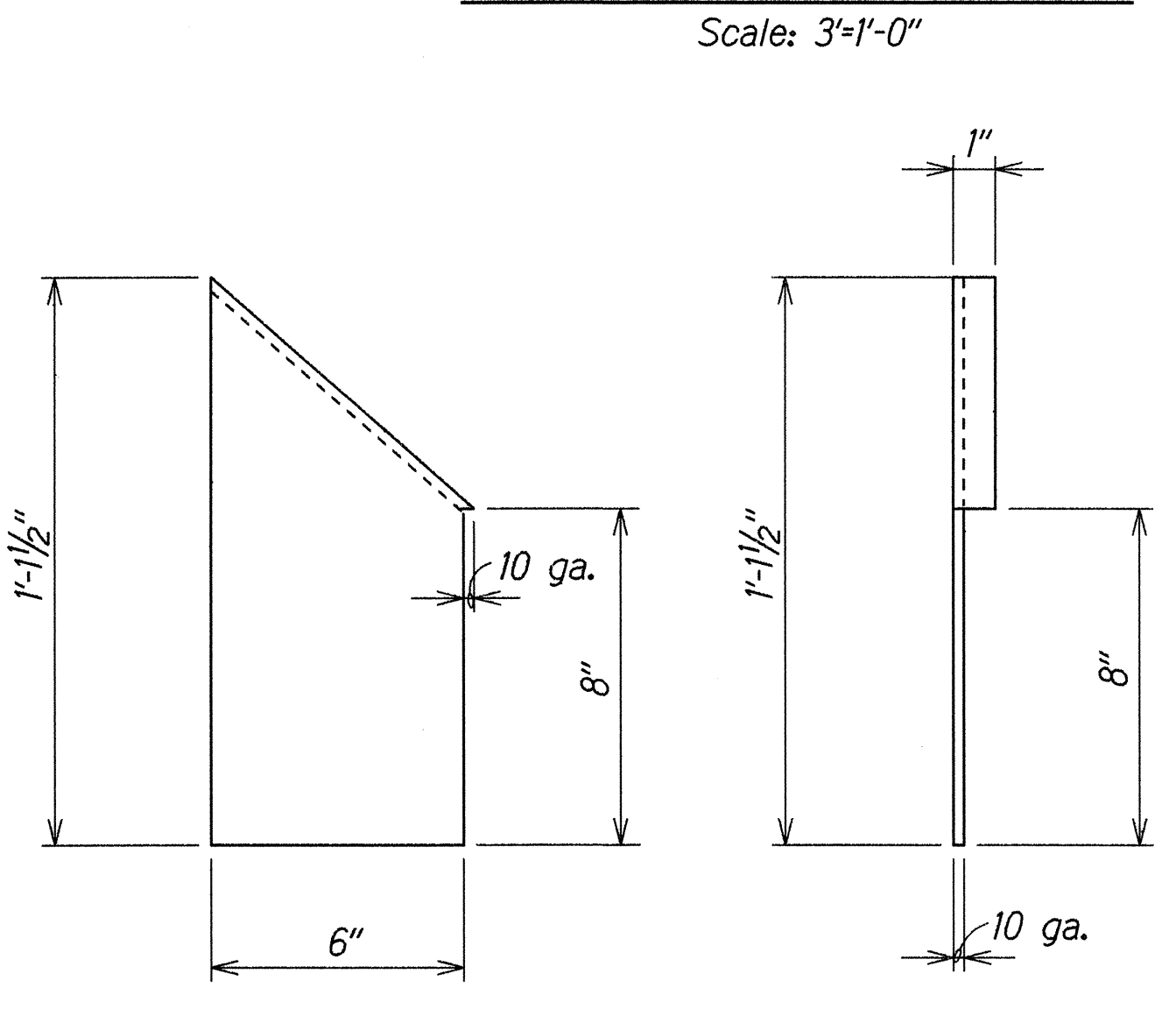


GUTTER BRACING



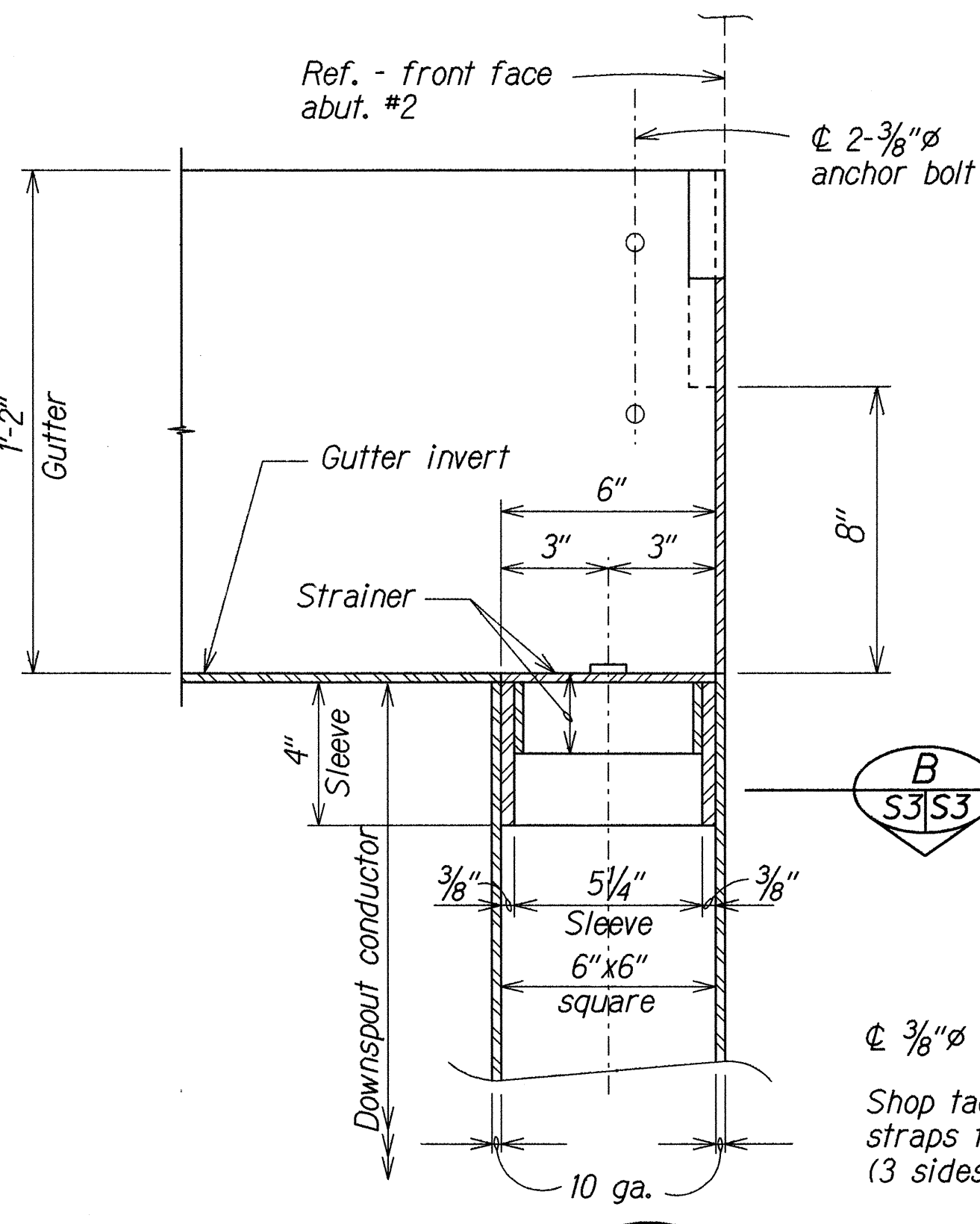
METAL GUTTER DETAIL

STRAINER DETAIL



GUTTER END CAP

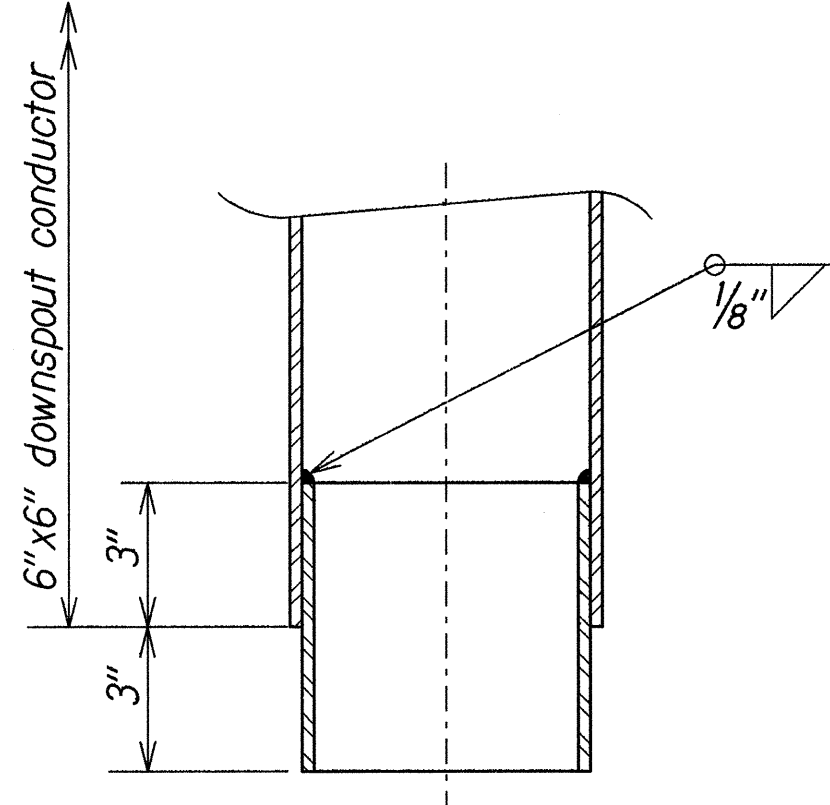
SECTION B



SECTION C

DOWN SPOUT INLET

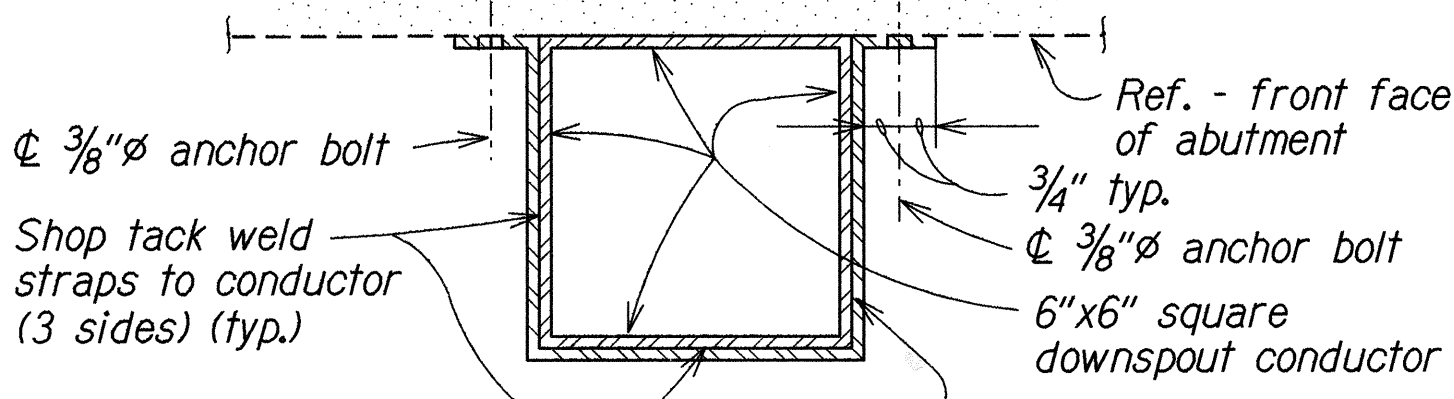
TYPICAL DOWNSPOUT CONDUCTOR SLEEVE CONNECTOR DETAIL



Note: This tracing prepared during "As-Built" posting.

LEGEND FOR AS-BUILT POSTINGS

- ~~~~~ Squiggly line for as-built deletion
- ==== Double line for as-built deletion
- Roadway Text for as-built posting



PLAN - TYPICAL CONDUCTOR STRAP DETAIL

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
5"x4" DECK DRAIN AT STRUCTURE NO.1
DRAINAGE & MISCELLANEOUS DETAILS
FARRINGTON HIGHWAY INTERSECTION
IMPROVEMENTS AT WAIKANA REALIGNMENT ROAD
Project No. 99D-01-89
Scale: As Noted
SHEET No. 54 OF 4 SHEETS
May 1990