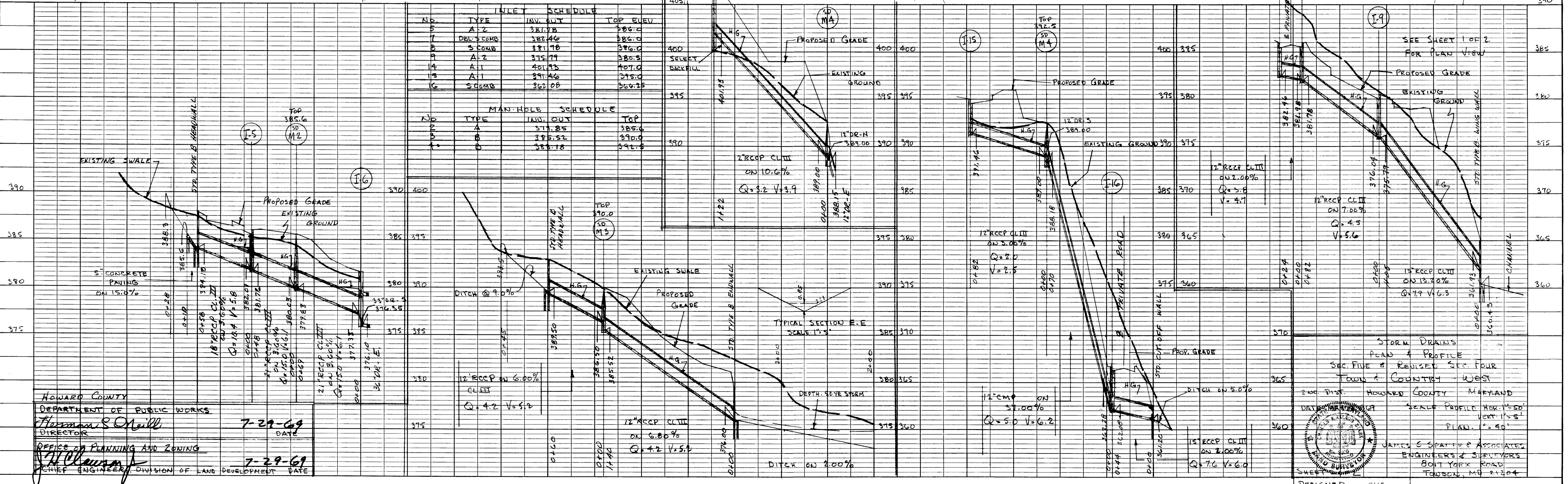
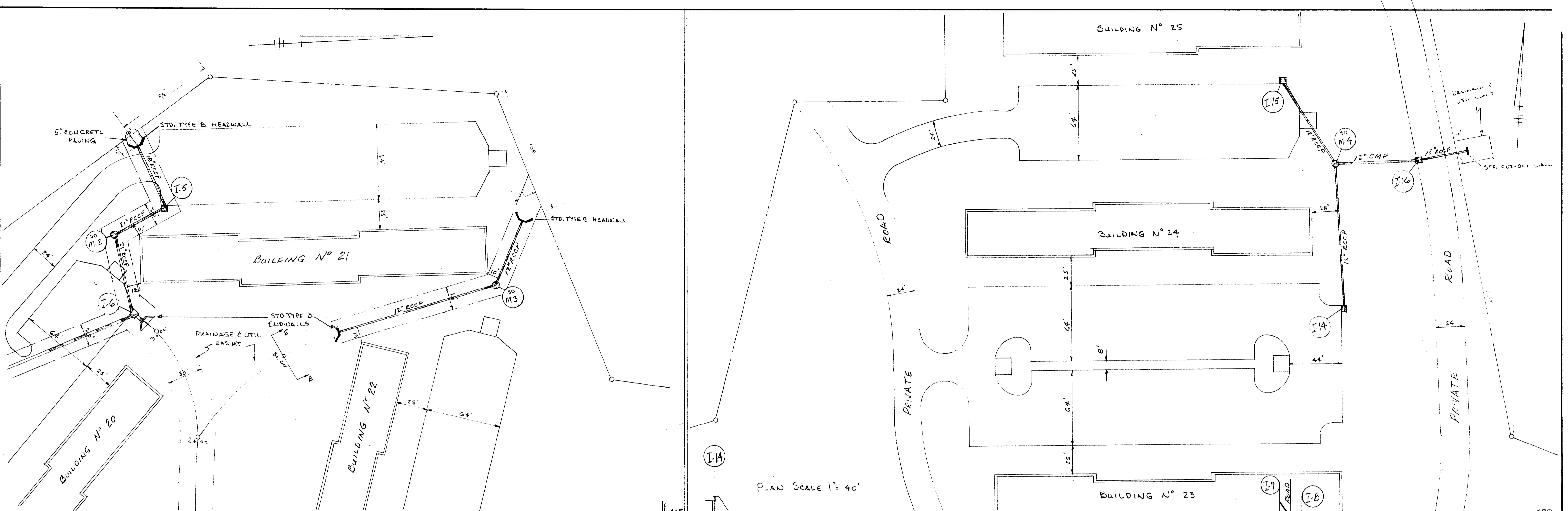


DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED, PLOTTED, CHECKED, ALIGNED, CHECKED, NOTE BOOK, NO. OF INCH CHECKED, NO.

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED, PLOTTED, CHECKED, ALIGNED, CHECKED, NOTE BOOK, NO. OF INCH CHECKED, NO.

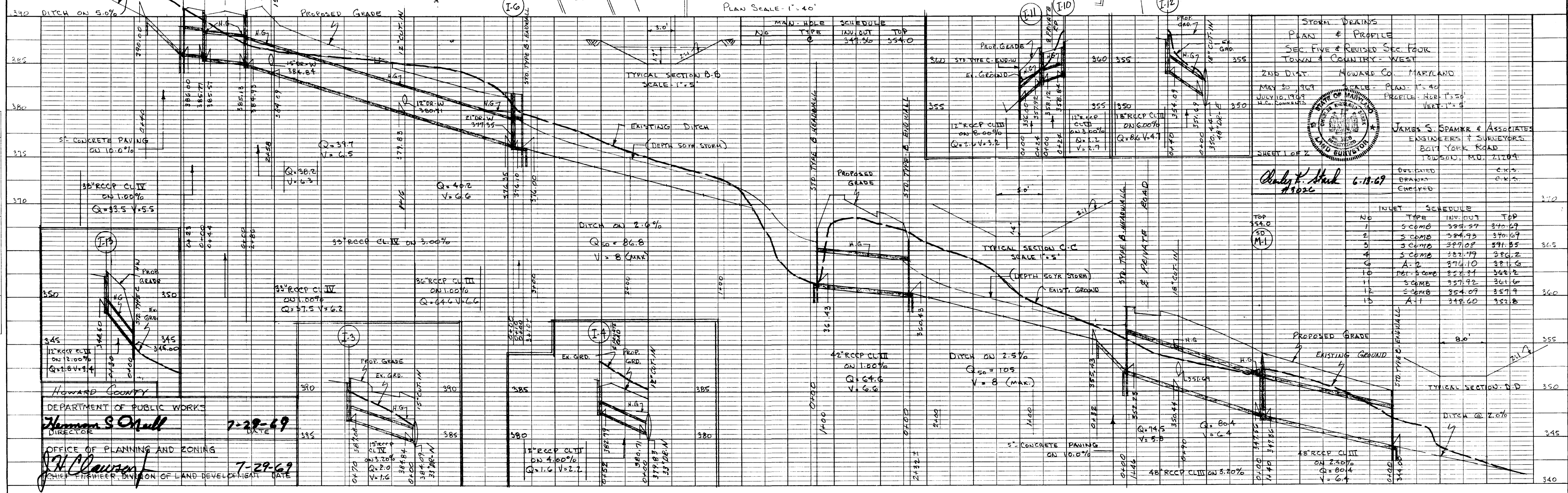
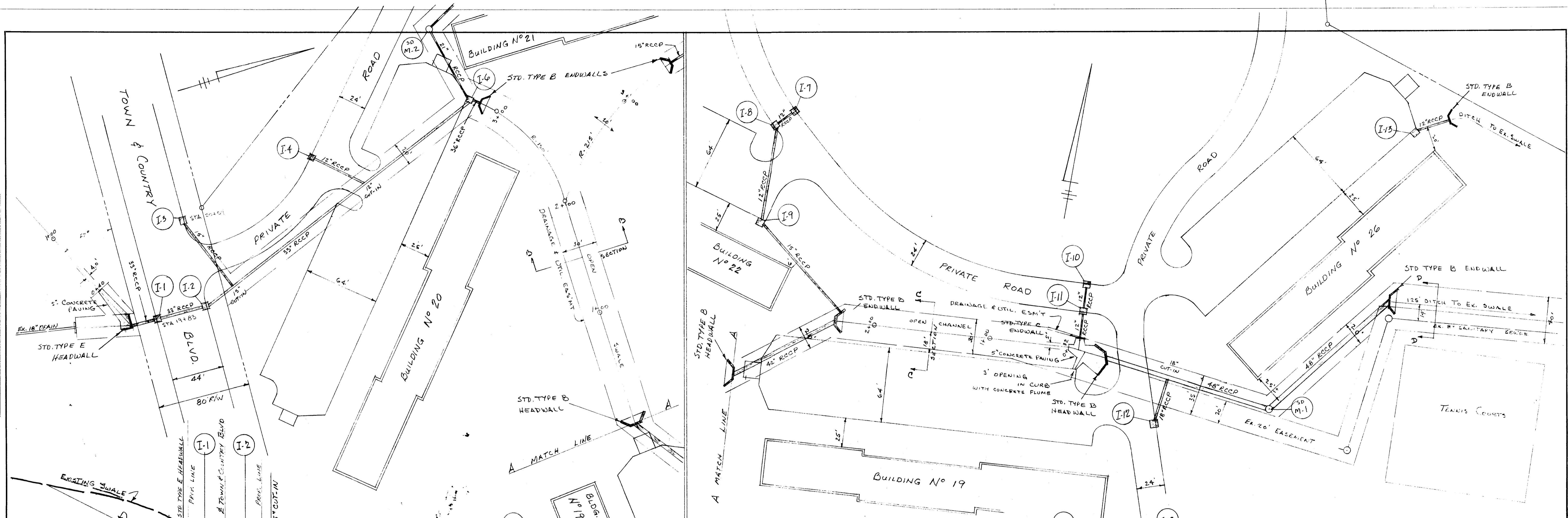


HOWARD COUNTY  
 DEPARTMENT OF PUBLIC WORKS  
 Director: *Thomas S. O'Neill*  
 Office of Planning and Zoning  
 Chief Engineer: *James S. Spatnik*  
 DATE: 7-29-69

STORM DRAIN PLAN & PROFILE  
 SEC. FIVE & REVISED SEC. FOUR  
 TOWN & COUNTY WEST  
 2000 DIST. HOWARD COUNTY MARYLAND  
 SCALE: PROFILE HORIZ. 1" = 50'  
 VERT. 1" = 5'  
 PLAN: 1" = 40'  
 JAMES S. SPATNIK & ASSOCIATES  
 ENGINEERS & SURVEYORS  
 8014 YORK ROAD  
 TOWSON, MD 21284

PLAN  
 SHEET NO. 1  
 DATE 7-29-69  
 NOTE BOOK NO. 104  
 ALIGNMENT CHECKED  
 BY J.H. CLAWSON

PROFILE  
 SHEET NO. 1  
 DATE 7-29-69  
 NOTE BOOK NO. 104  
 GRADES CHECKED  
 BY J.H. CLAWSON  
 STRUCTURE NOTATIONS CHECKED



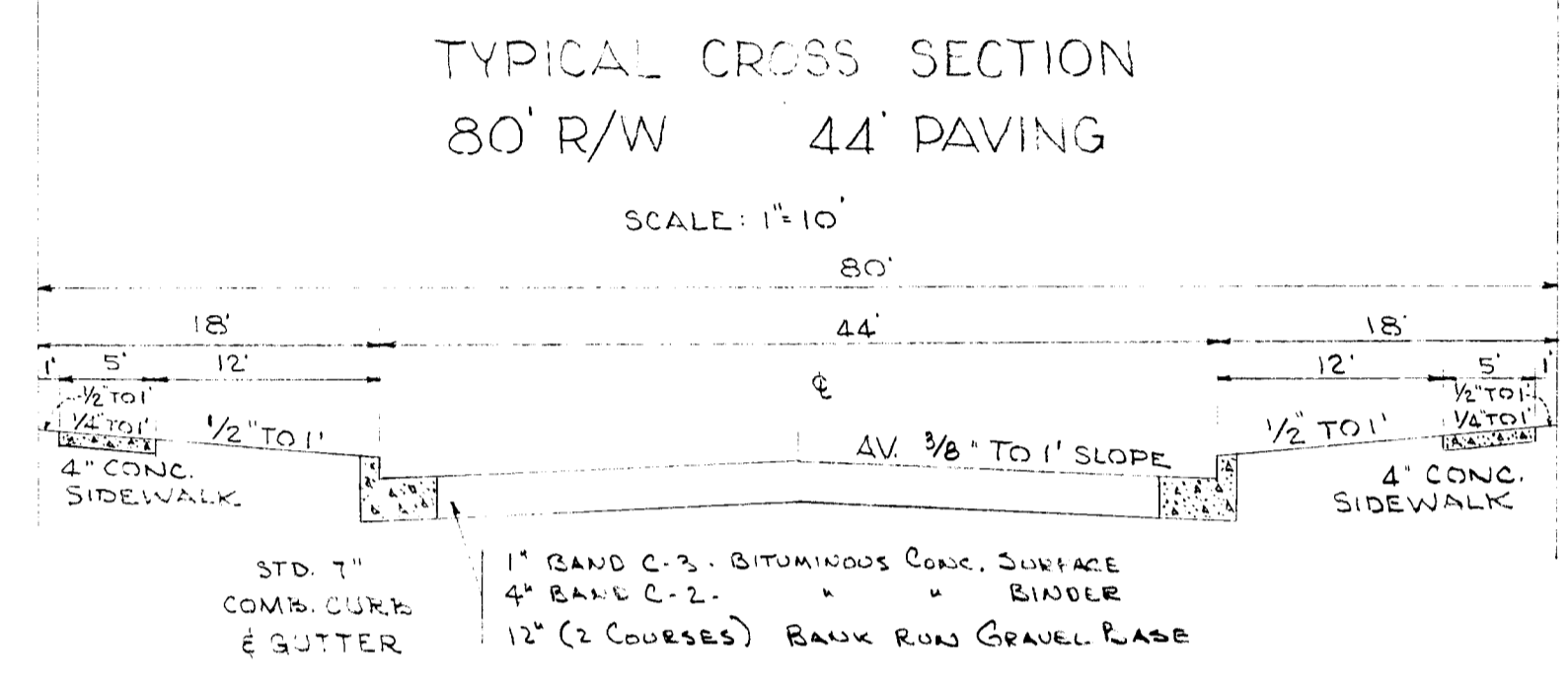
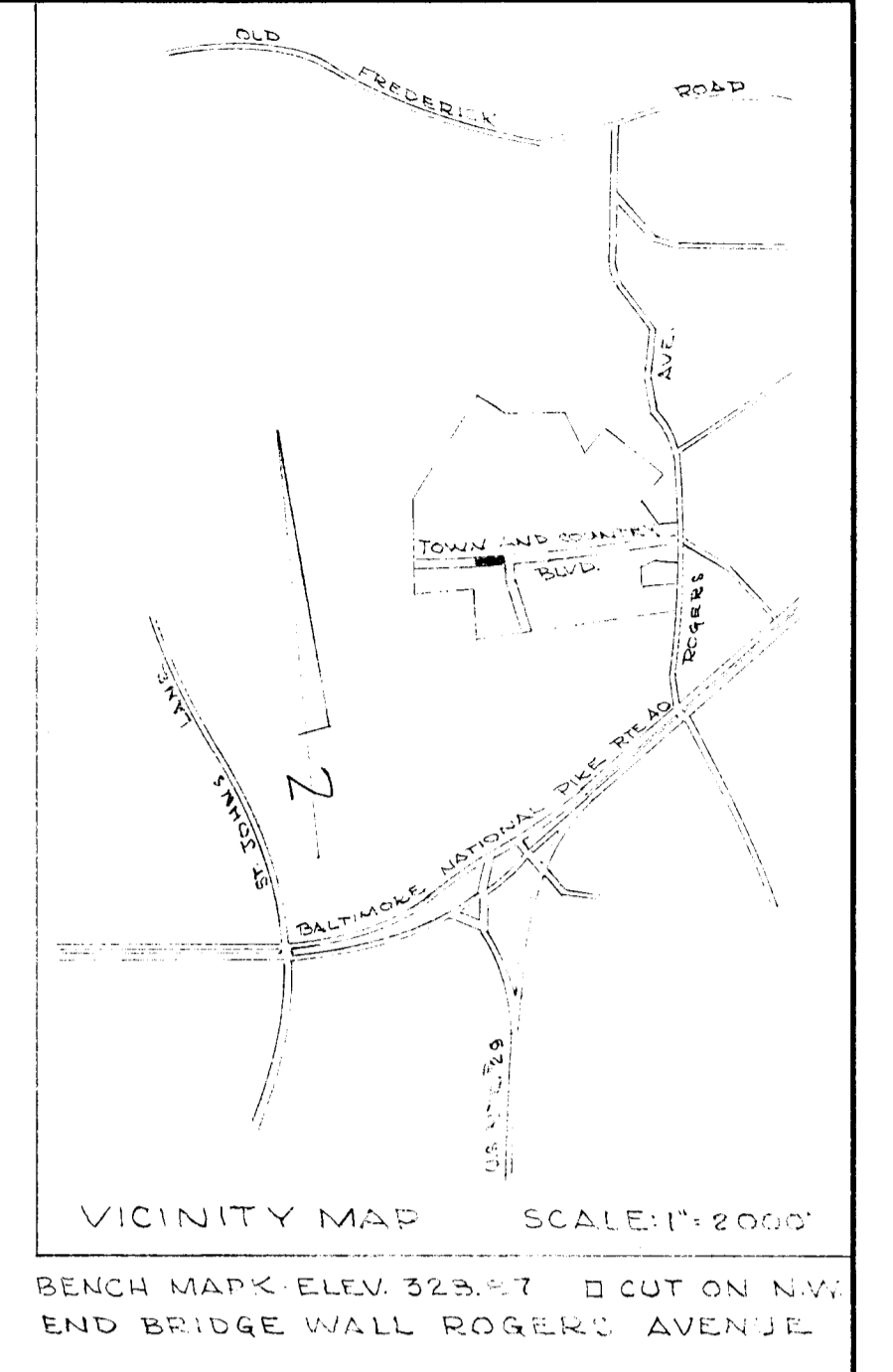
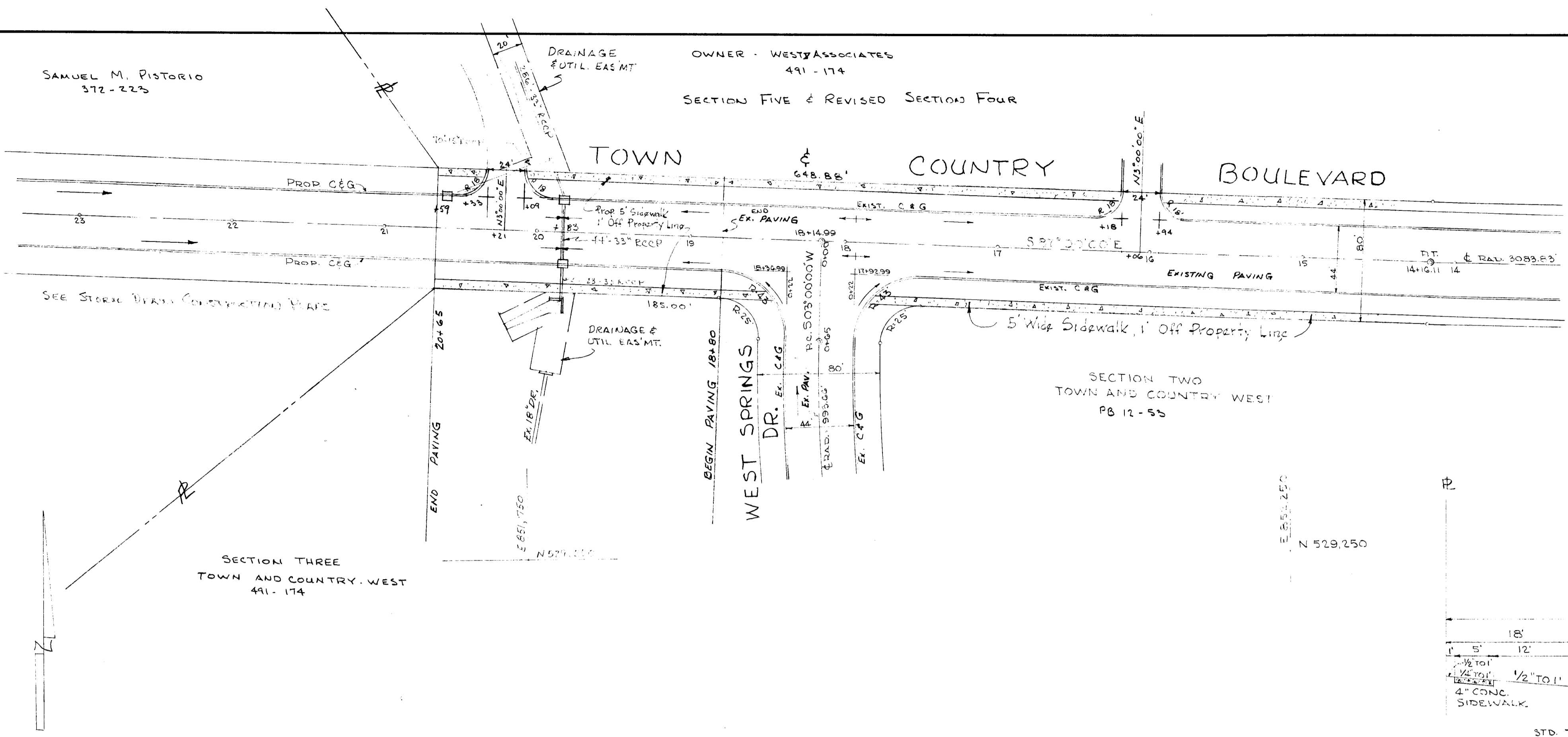
#8

DATE \_\_\_\_\_ BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 ALLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_  
 PLAN

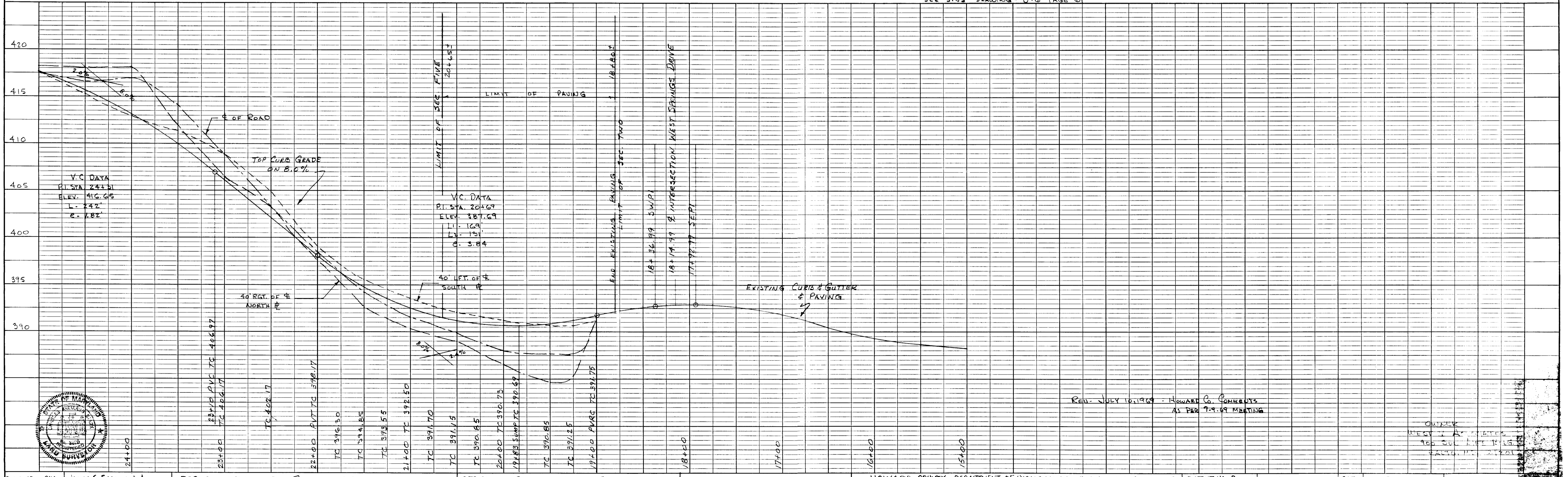
DATE \_\_\_\_\_ BY \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 ALLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 NO. \_\_\_\_\_  
 PROFILE

SAMUEL M. PISTORIO  
 372-223

OWNER - WEST ASSOCIATES  
 491-174  
 SECTION FIVE & REVISED SECTION FOUR



TYPICAL CROSS SECTION  
 SEE STDS - DRAWING # D-19 PAGE 74 (MODIFIED SIDEWALK)  
 PAVEMENT TYPE  
 SEE STDS - DRAWING # D-6 PAGE 61



REV. JULY 10, 1969 - HOWARD A. COMMENTS  
 AS PER 7-9-69 MEETING

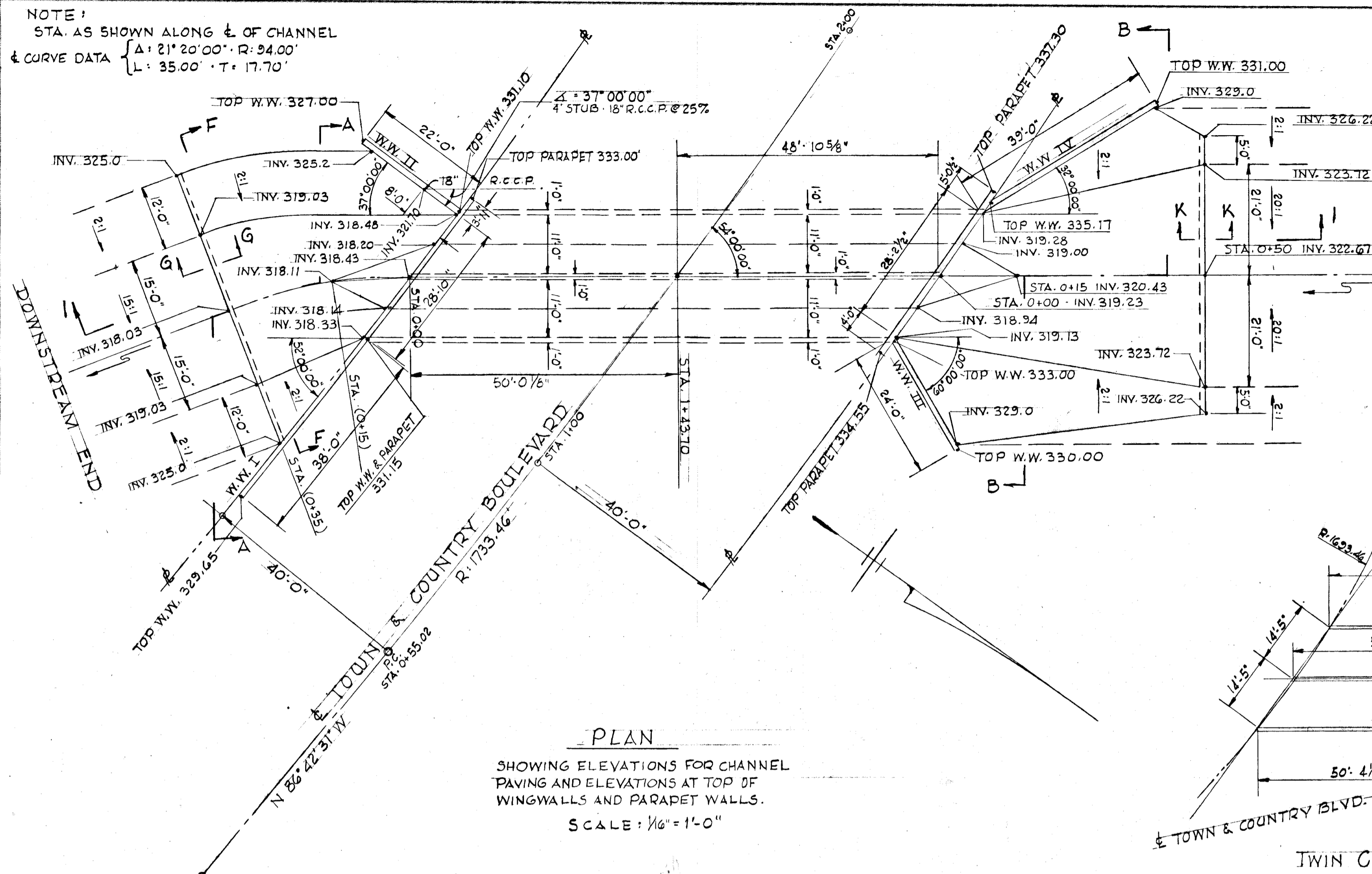
OWNER  
 WEST ASSOCIATES  
 900 SULLY AVE. #115  
 BALTIMORE, MD 21201

DESIGNED	CKS	JAMES S. SPANER & Assoc.	DEPARTMENT OF PUBLIC WORKS	OFFICE OF PLANNING AND ZONING	HOWARD COUNTY, DEPARTMENT OF PUBLIC WORKS - BUREAU OF ENGINEERING	DISTRICT NO. 2	SCALE	DATE	REVISION	SHEET 1 OF 1
DRAWN	CKS	SIGN. <i>Chris V. Stark</i>	<i>Hermann S. O'Neill</i>	<i>H. Clausen</i>	TOWN AND COUNTRY BOULEVARD	SECTION 5 & REVISED SECTION FOUR	1"=50'	6-13-69		FILE NO.
CHECKED		DATE 6-13-69	LIC. NO. 3026	DATE 7-29-69						

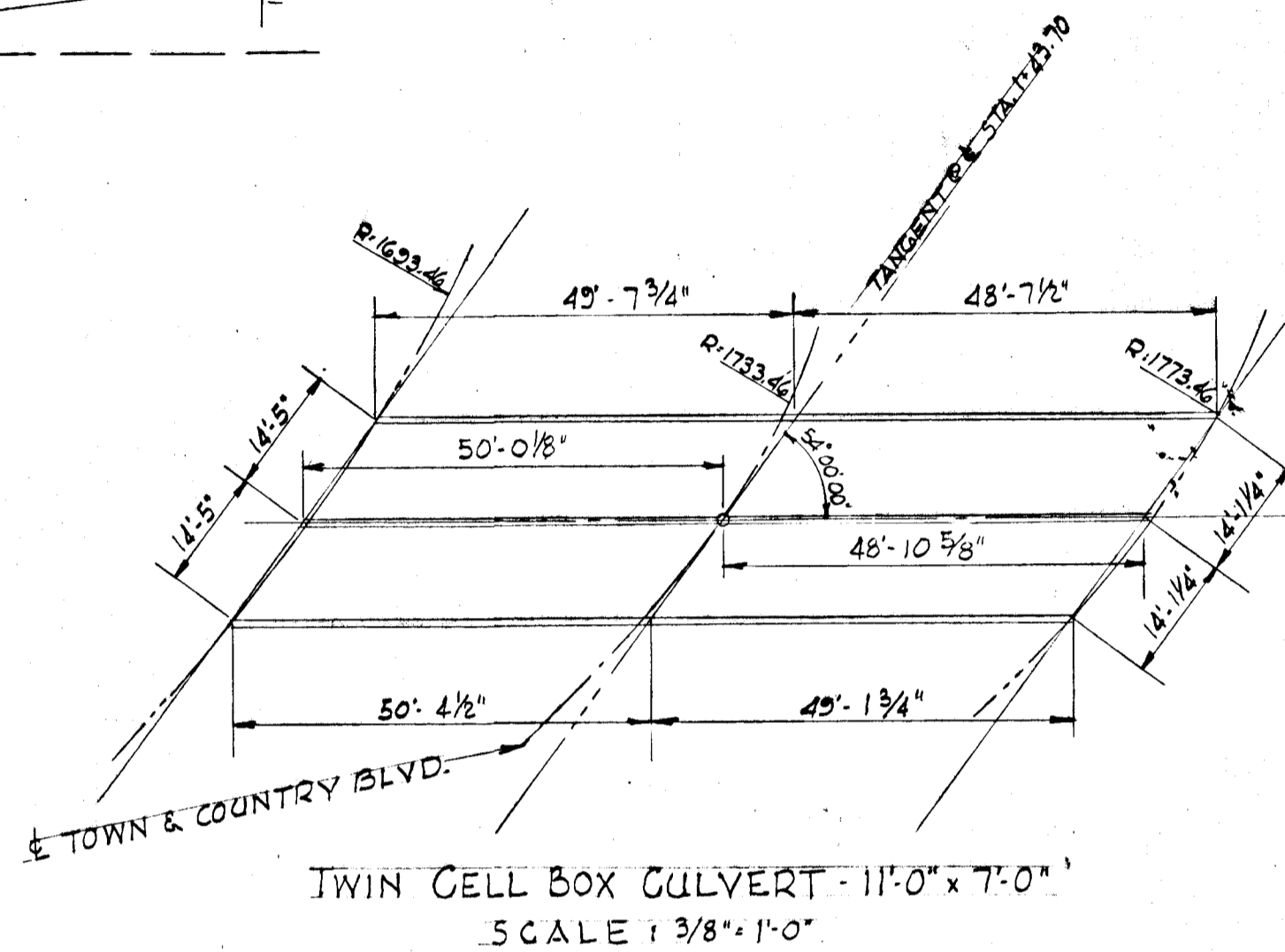
#3

F62-38

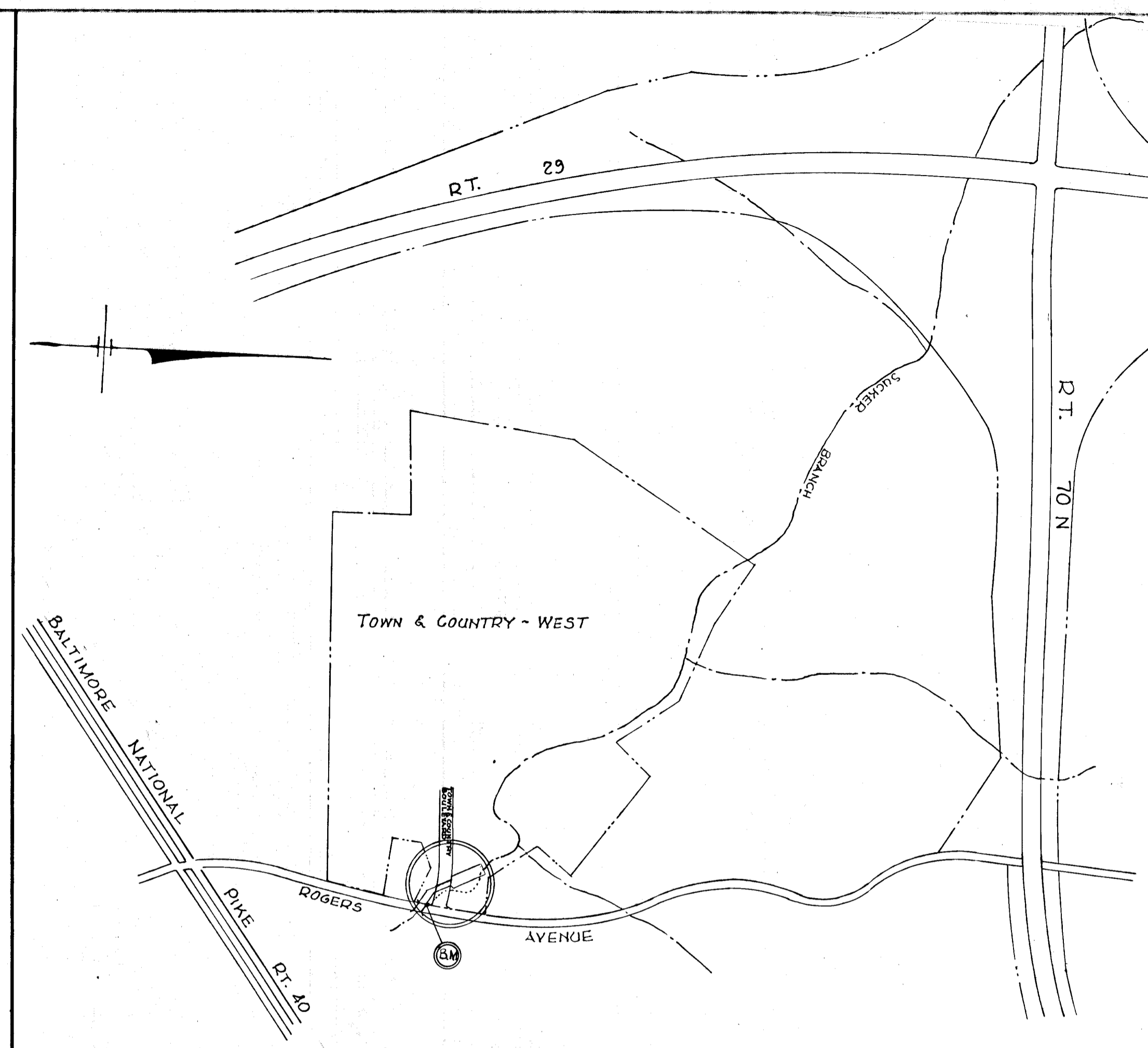
NOTE:  
STA. AS SHOWN ALONG & OF CHANNEL  
& CURVE DATA  $\Delta: 21^{\circ}20'00''$ ,  $R: 94.00'$   
 $L: 35.00'$ ,  $T: 17.70'$



PLAN  
SHOWING ELEVATIONS FOR CHANNEL  
PAVING AND ELEVATIONS AT TOP OF  
WINGWALLS AND PARAPET WALLS.  
SCALE:  $1/16" = 1'-0"$



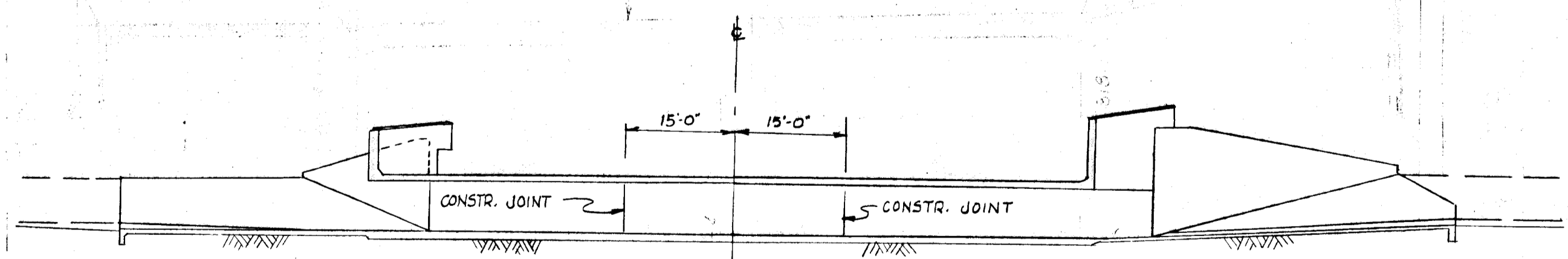
TWIN CELL BOX CULVERT - 11'-0" x 7'-0"  
SCALE:  $3/8" = 1'-0"$



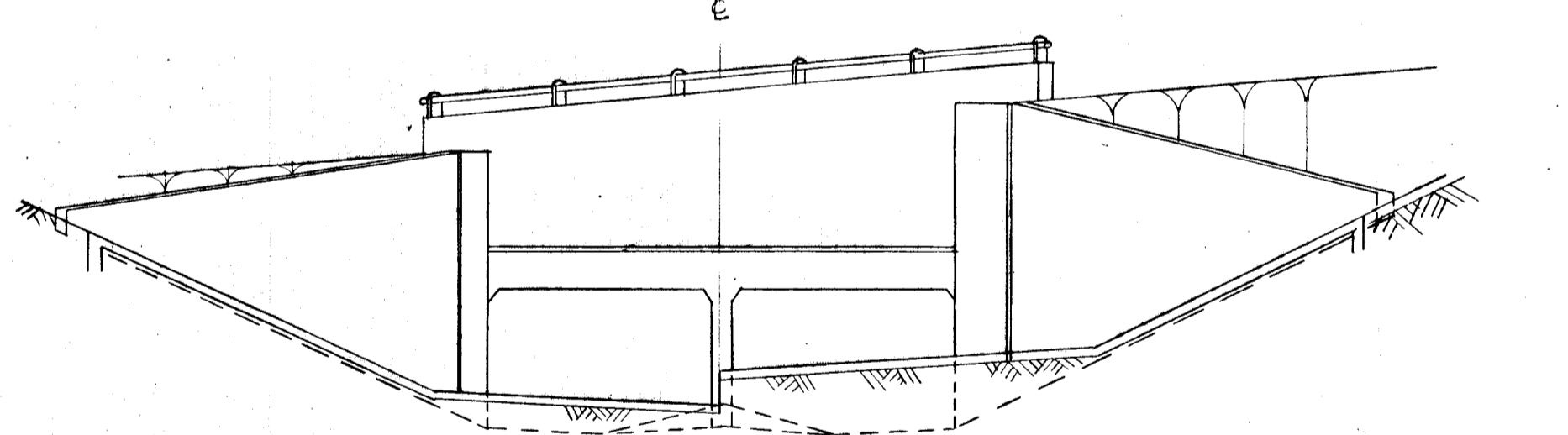
LOCATION PLAN  
SCALE:  $1" = 600'$   
BENCH MARK:  $\square$ -CUT IN NORTH END WEST BRIDGE WALL ON ROGERS AVENUE.  
ELEVATION: 328.87  
DESIGN ON BASIS OF 50 YEAR STORM.

GENERAL NOTES

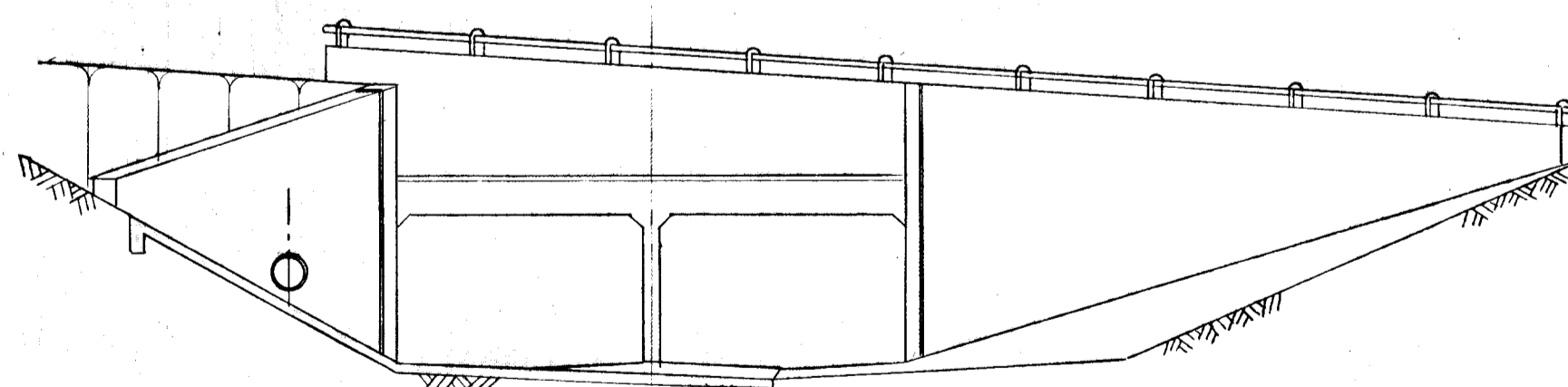
- SPECIFICATIONS: HOWARD COUNTY STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.  
A. S. H. O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DATED 1961.
- LOADING: H20-S16-44
- REINFORCEMENT: Reinforcement shall be intermediate grade deformed bars of billet steel, conforming to A. S. T. M. Specifications A-15 and A-305.
- CONCRETE: All concrete shall be Class "A", 3500 p.s.i., 28 day strength. Concrete shall conform to A. S. T. M. Specifications C-53-57 and C-175. All exposed surfaces shall receive a rubbed finish. Other surfaces shall have an ordinary surface finish.
- CHAMFER: All exposed corners shall be chamfered  $3/4" \times 3/4"$ .
- RAILING: ALCOA' No. 1003 OR EQUIVALENT APPROVED TYPE.



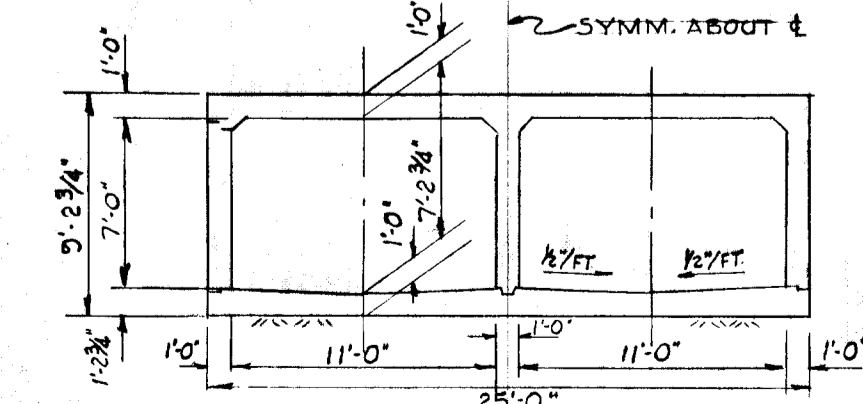
ELEVATION  
(SECTION 1-1)  
RAILING AND ROADWAY ARE NOT SHOWN  
SCALE:  $1/16" = 1'-0"$



NORTH ELEVATION  
SECTION B-B  
SCALE:  $1/8" = 1'-0"$

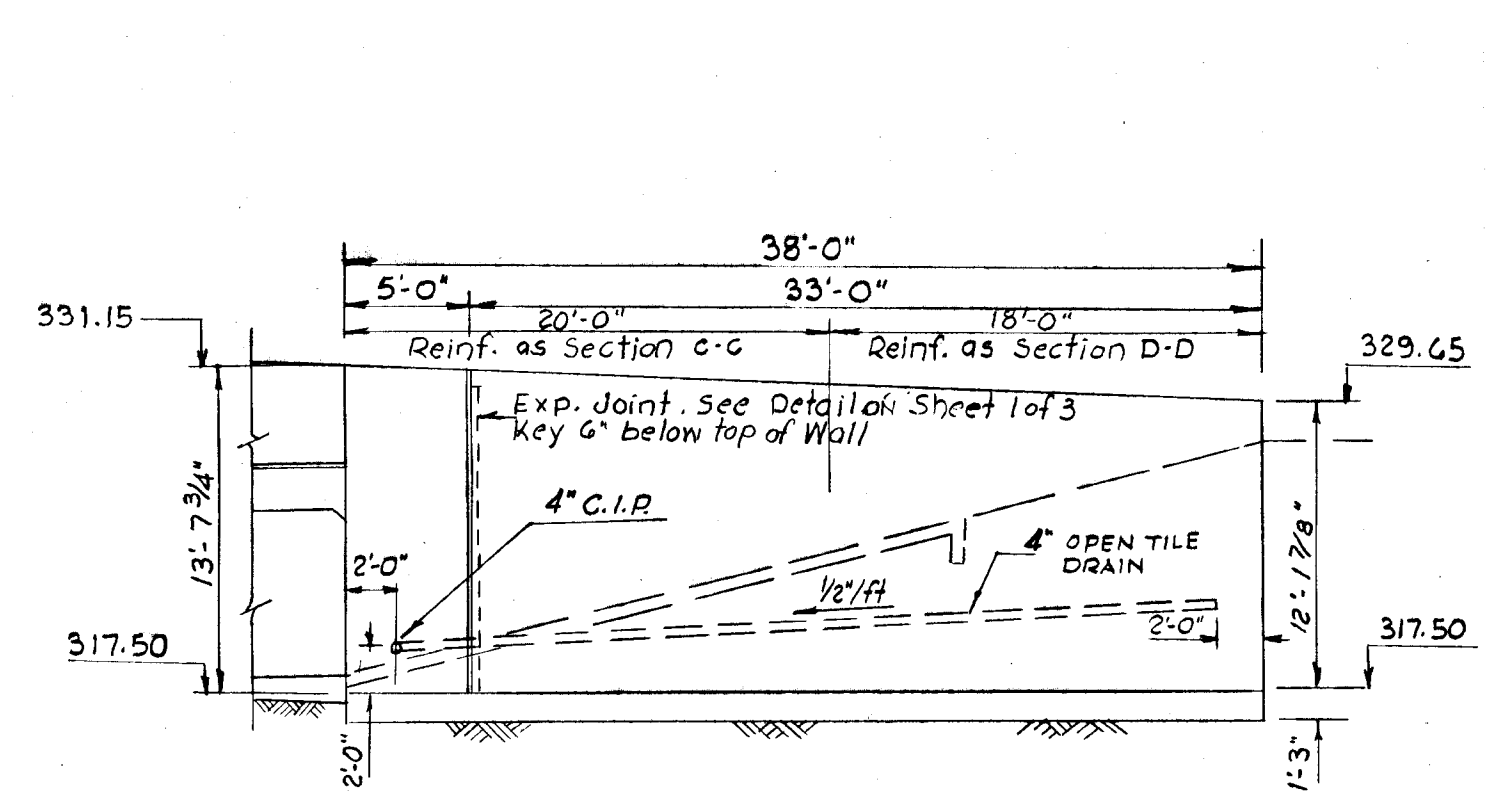


SOUTH ELEVATION  
SECTION A-A  
SCALE:  $1/8" = 1'-0"$

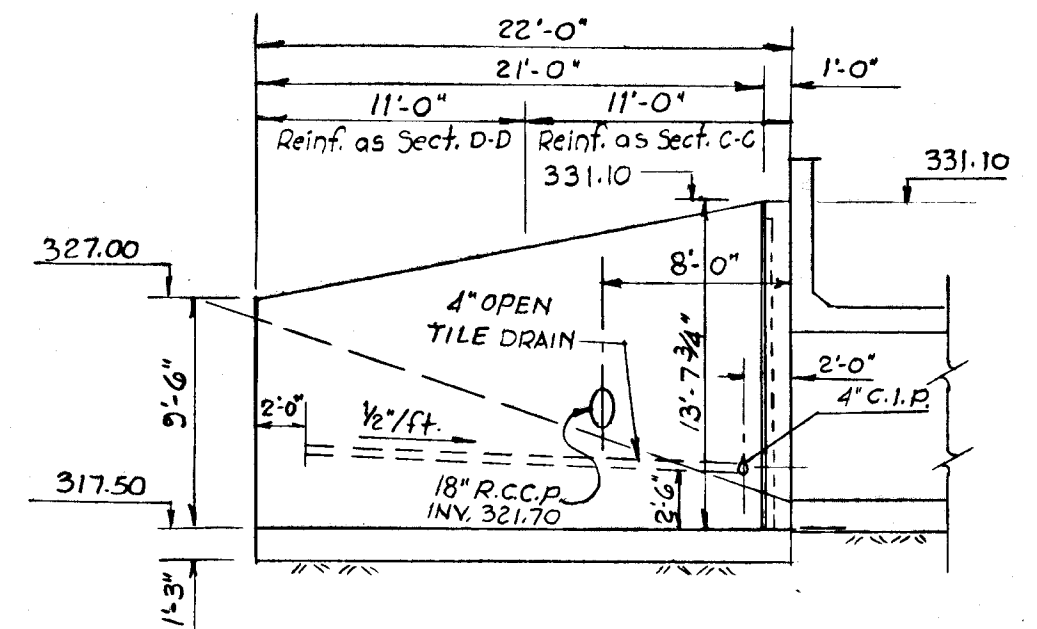


TYPICAL SECTION  
SCALE:  $1/8" = 1'-0"$

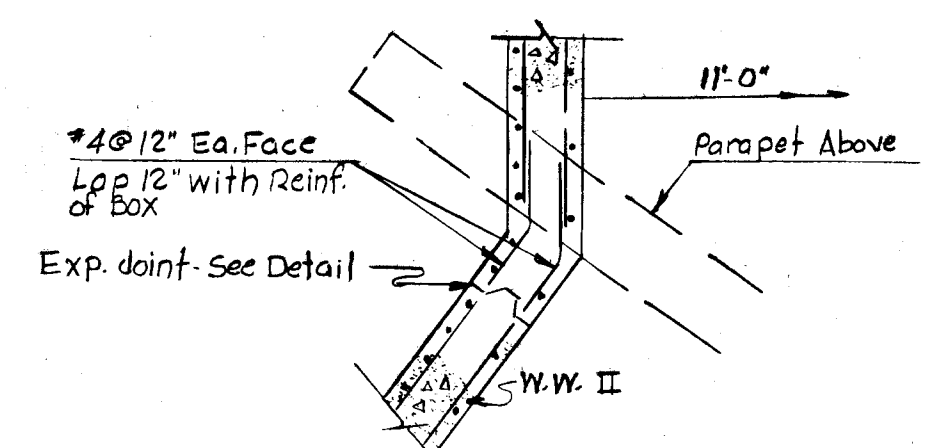
DESIGNED: J.R.	DIVISION OF ENGINEERING	HIGHWAYS	STRUCTURES	STORM DRAINS	WATER	SEWER	CHIEF ENGINEER	PLANNING COMMISSION	ROADS DEPARTMENT	METROPOLITAN COMMISSION	DISTRICT NO. 2	SCALE AS SHOWN	DATE	REVISION	BY	SHEET 1 OF 3
DRAWN: G.Y.	ENGINEER: <i>Charles D. Brown</i>							APPROVED: <i>J.H. Clawson</i>	APPROVED: <i>Thomas Schell</i>	APPROVED: <i>W.O. Lebeck</i>	TOWN & COUNTRY WEST	PLAN				
CHECKED:	DATE: 5-18-66							DATE: 8-30-66	DATE: 8-30-66	DATE: 9-26-66	TOWN & COUNTRY WEST	PROFILE				



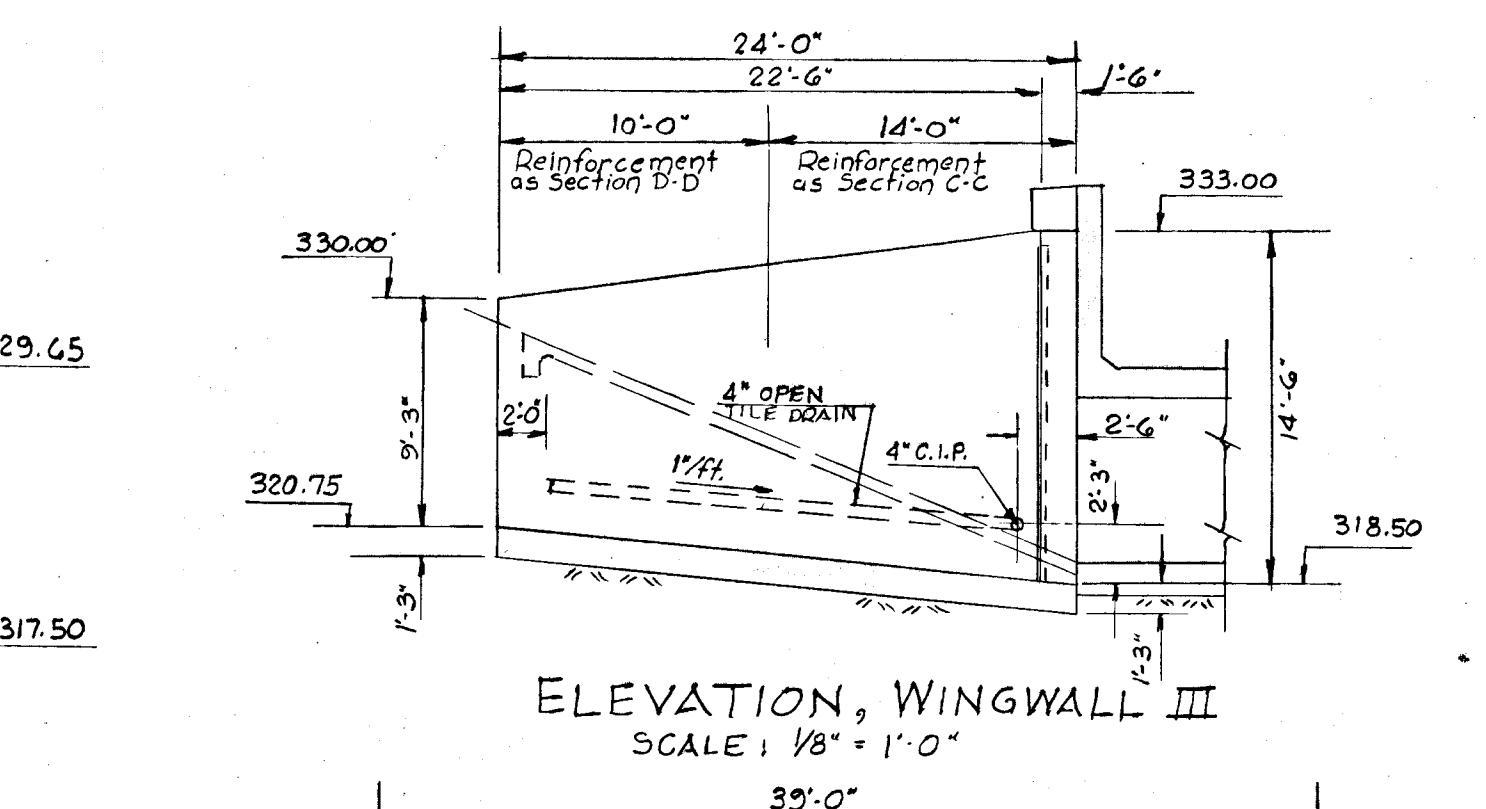
ELEVATION WINGWALL I  
SCALE: 1/8" = 1'-0"  
(RAILING NOT SHOWN)



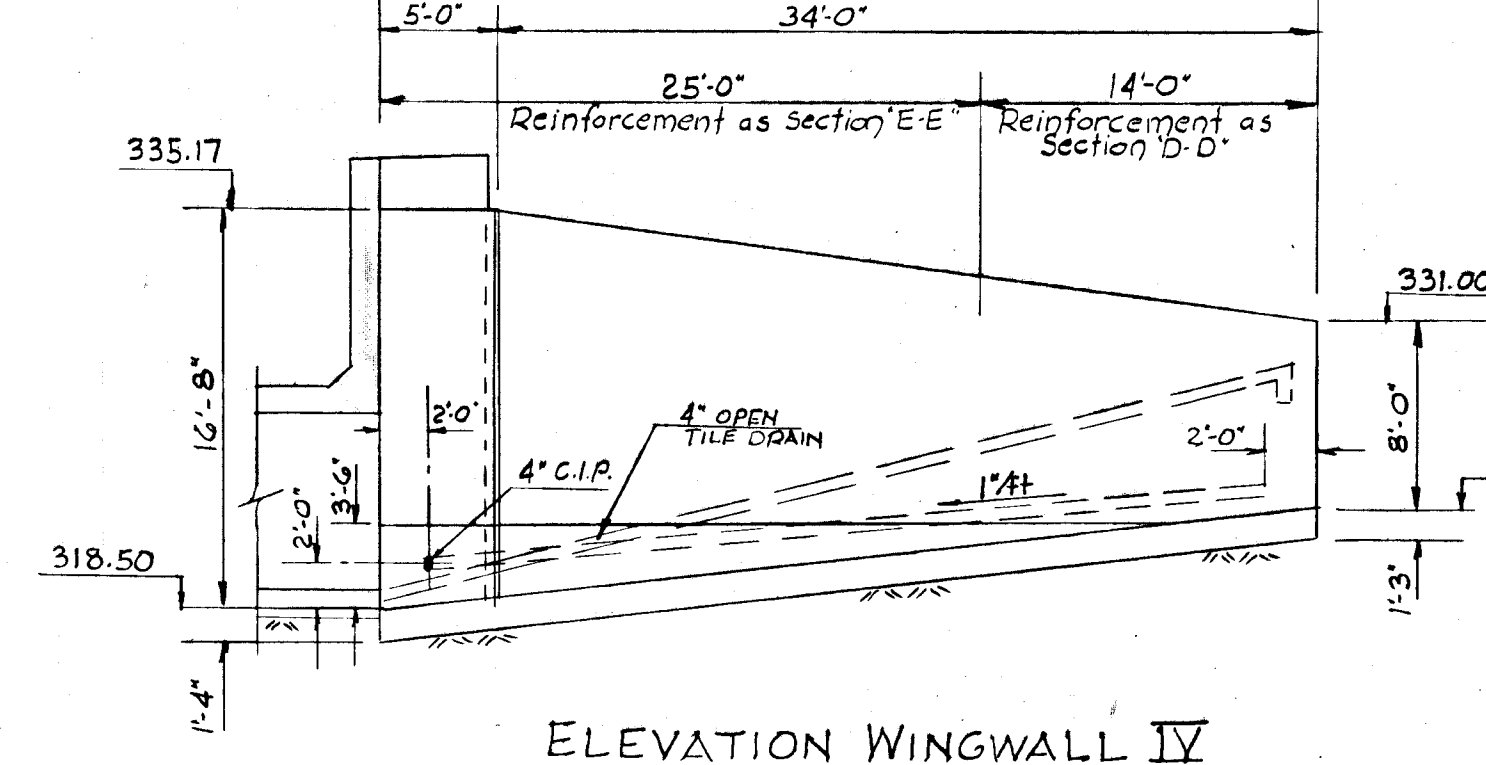
ELEVATION WINGWALL II  
SCALE: 1/8" = 1'-0"



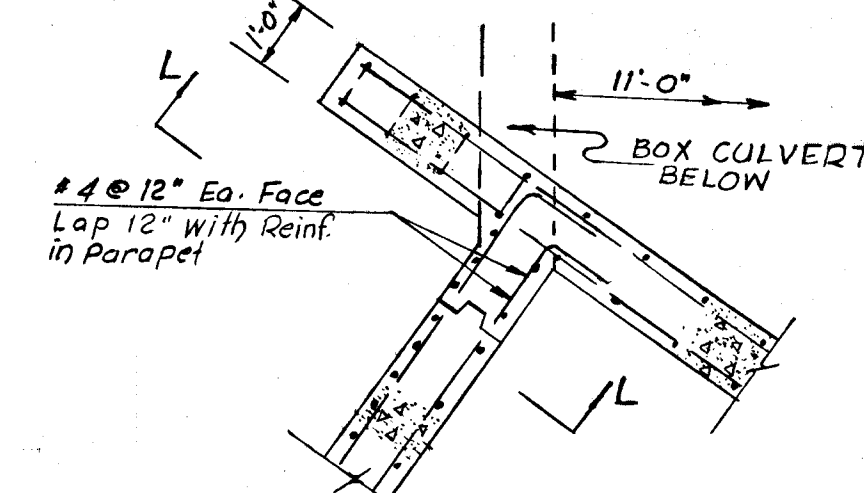
PART PLAN OF W.W. II BELOW TOP SLAB  
SIMILAR REINF. OF W.W. I, III & IV  
SCALE: 3/8" = 1'-0"



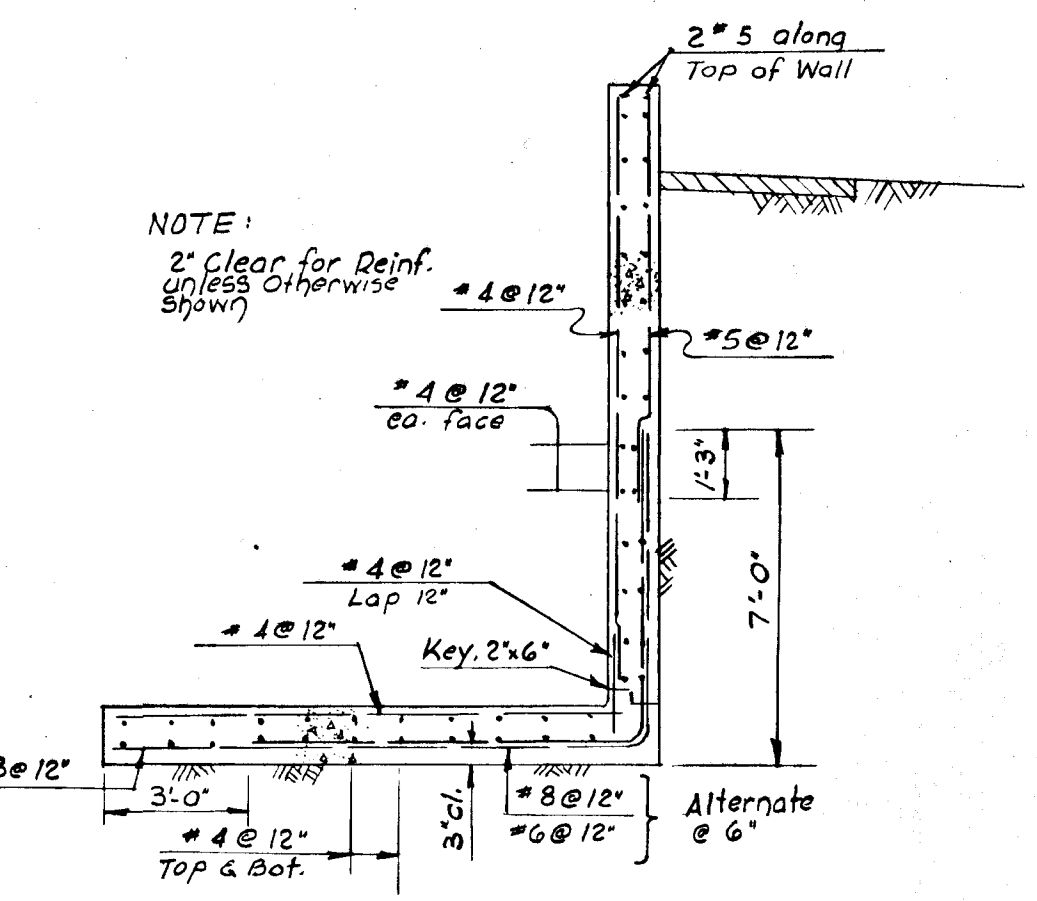
ELEVATION WINGWALL III  
SCALE: 1/8" = 1'-0"



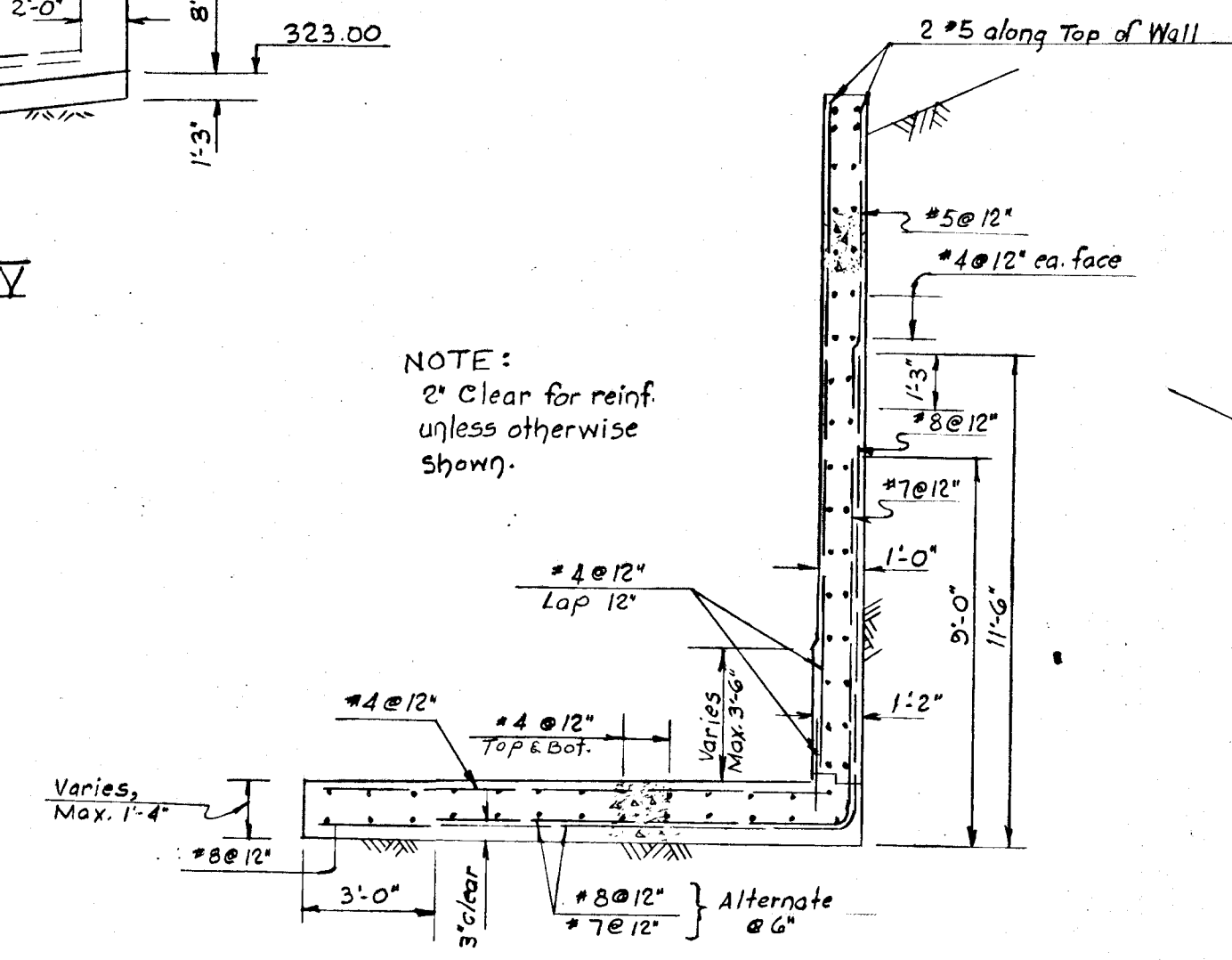
ELEVATION WINGWALL IV  
SCALE: 1/8" = 1'-0"



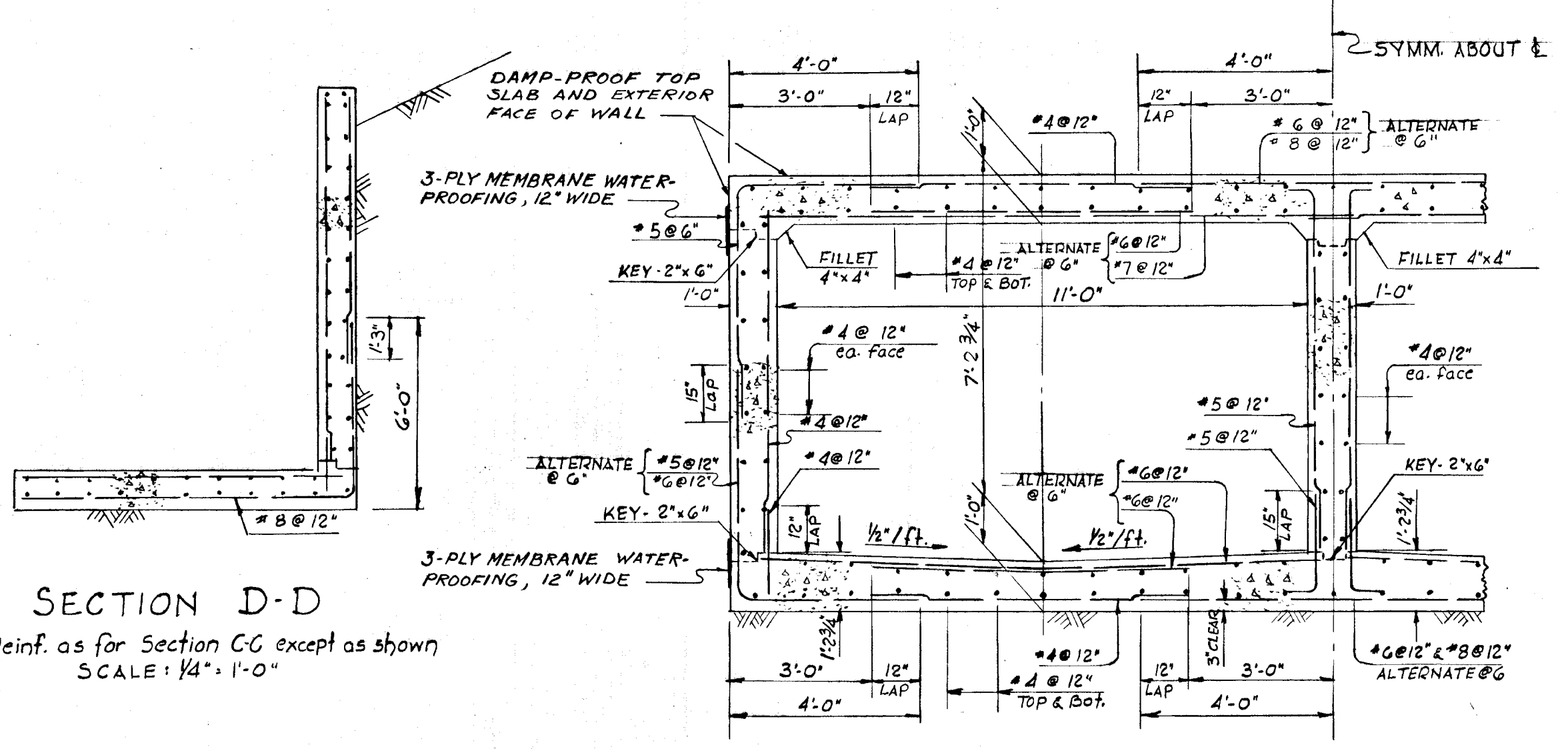
PART PLAN OF W.W. II AT PARAPET  
SIMILAR REINF. AT W.W. III & IV  
SCALE: 3/8" = 1'-0"



SECTION C-C  
SCALE: 1/4" = 1'-0"

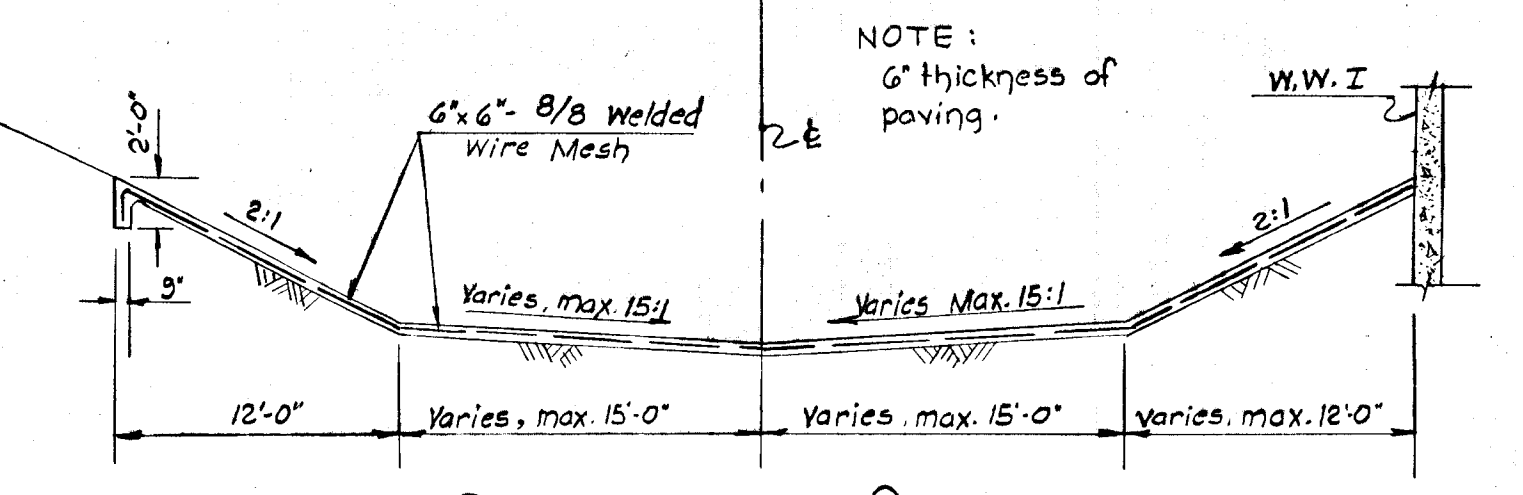


SECTION E-E  
SCALE: 1/4" = 1'-0"

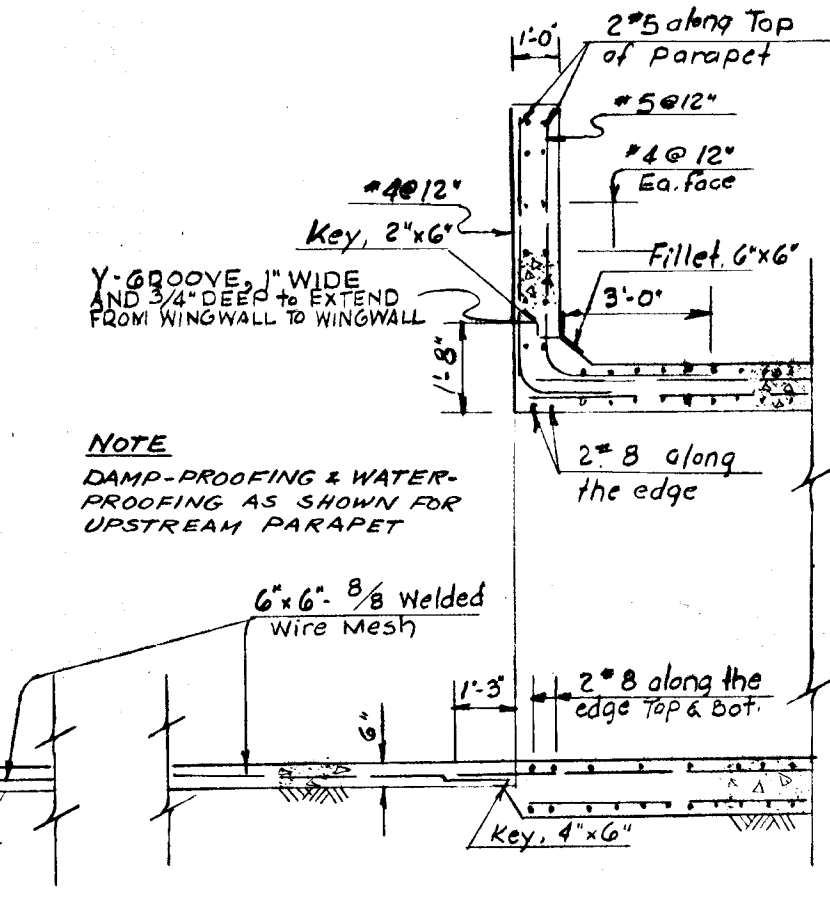


SECTION D-D  
Reinf. as for Section C-C except as shown  
SCALE: 1/4" = 1'-0"

REINFORCEMENT OF BOX  
2" CLEAR UNLESS OTHERWISE SHOWN  
SCALE: 3/8" = 1'-0"

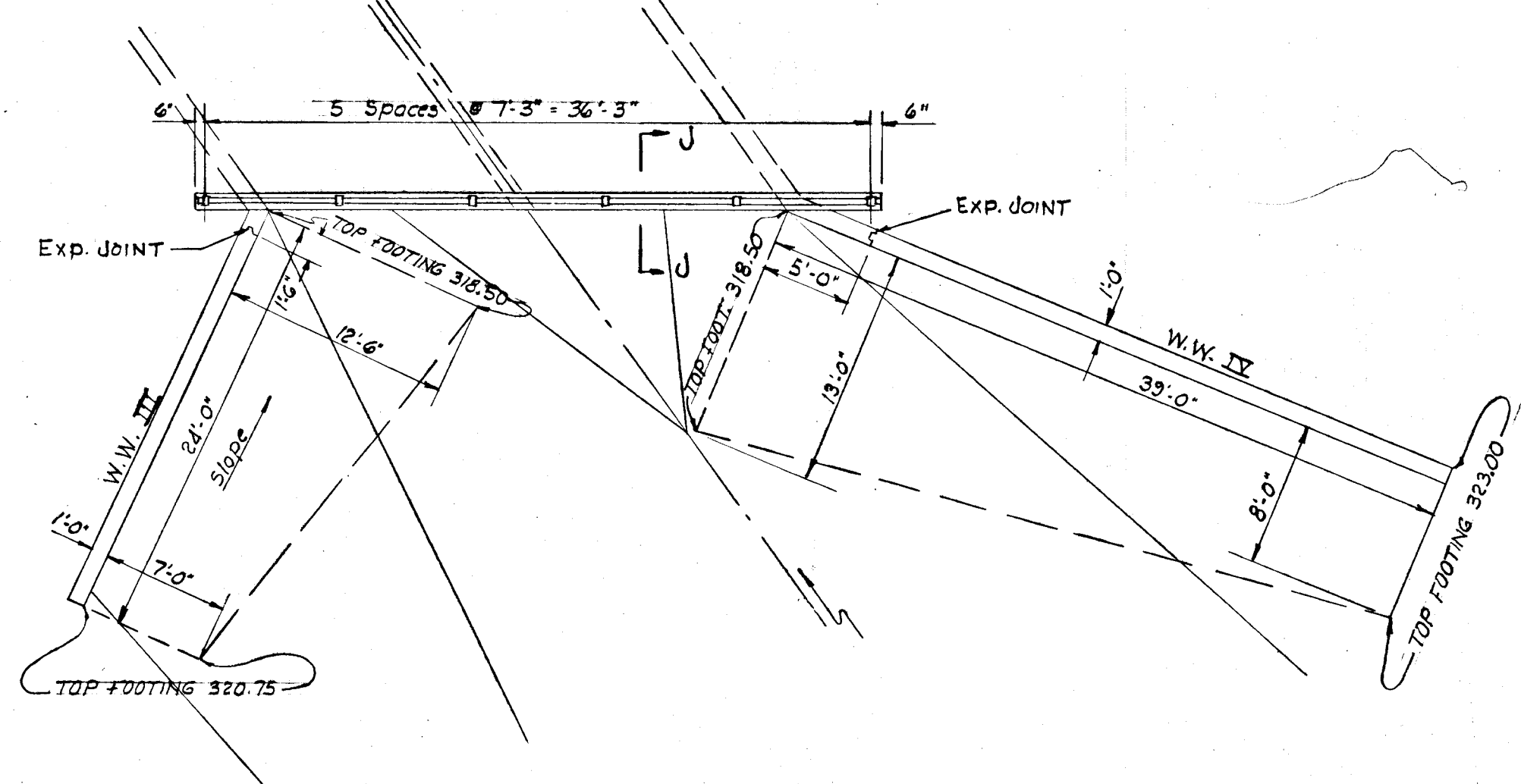


DOWNSTREAM PAVING  
SECTION F-F  
Use same thickness and reinforcement for  
upstream paving  
SCALE: 1/8" = 1'-0"

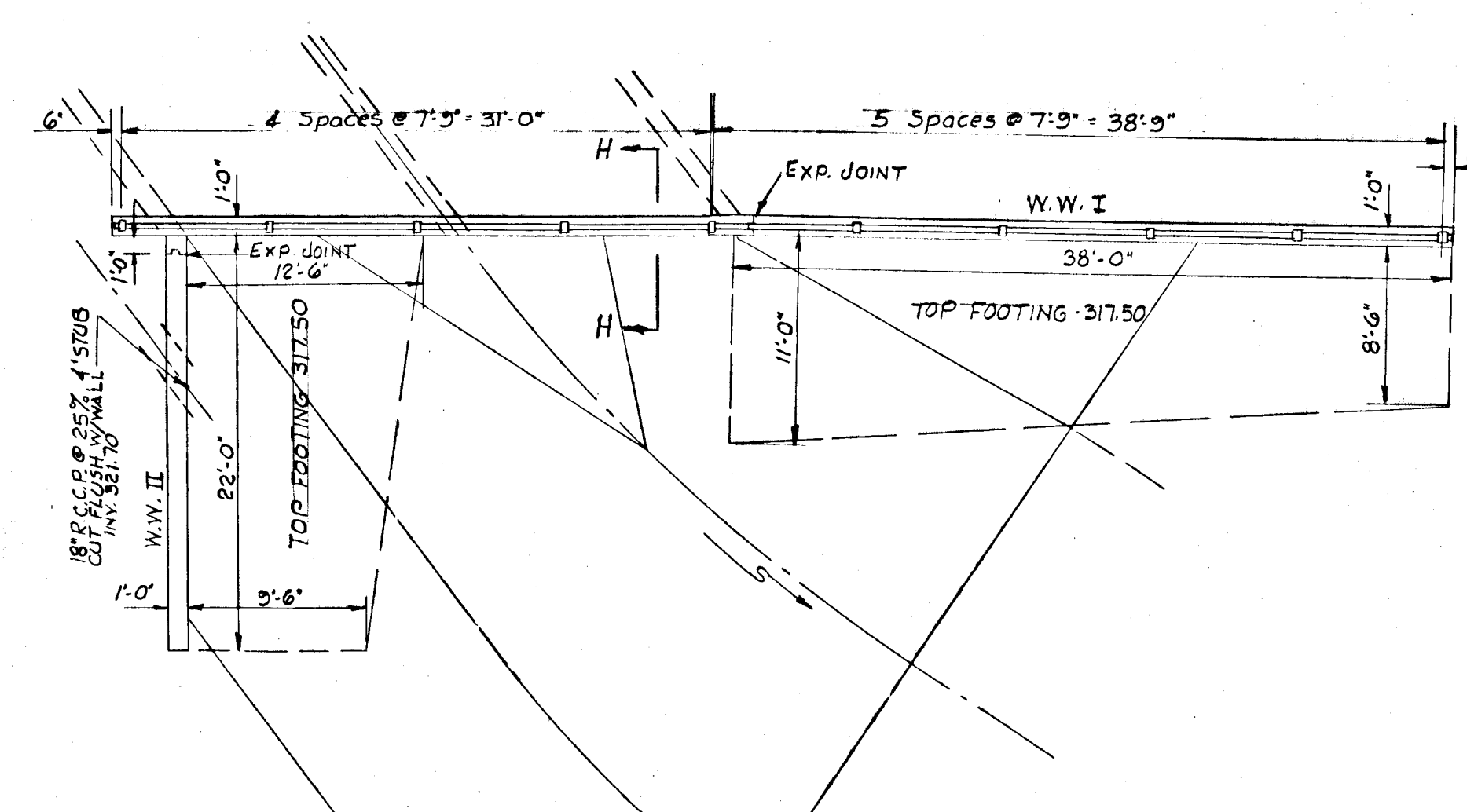


TOE AT DOWNSTREAM END  
SECTION G-G  
SCALE: 1/4" = 1'-0"

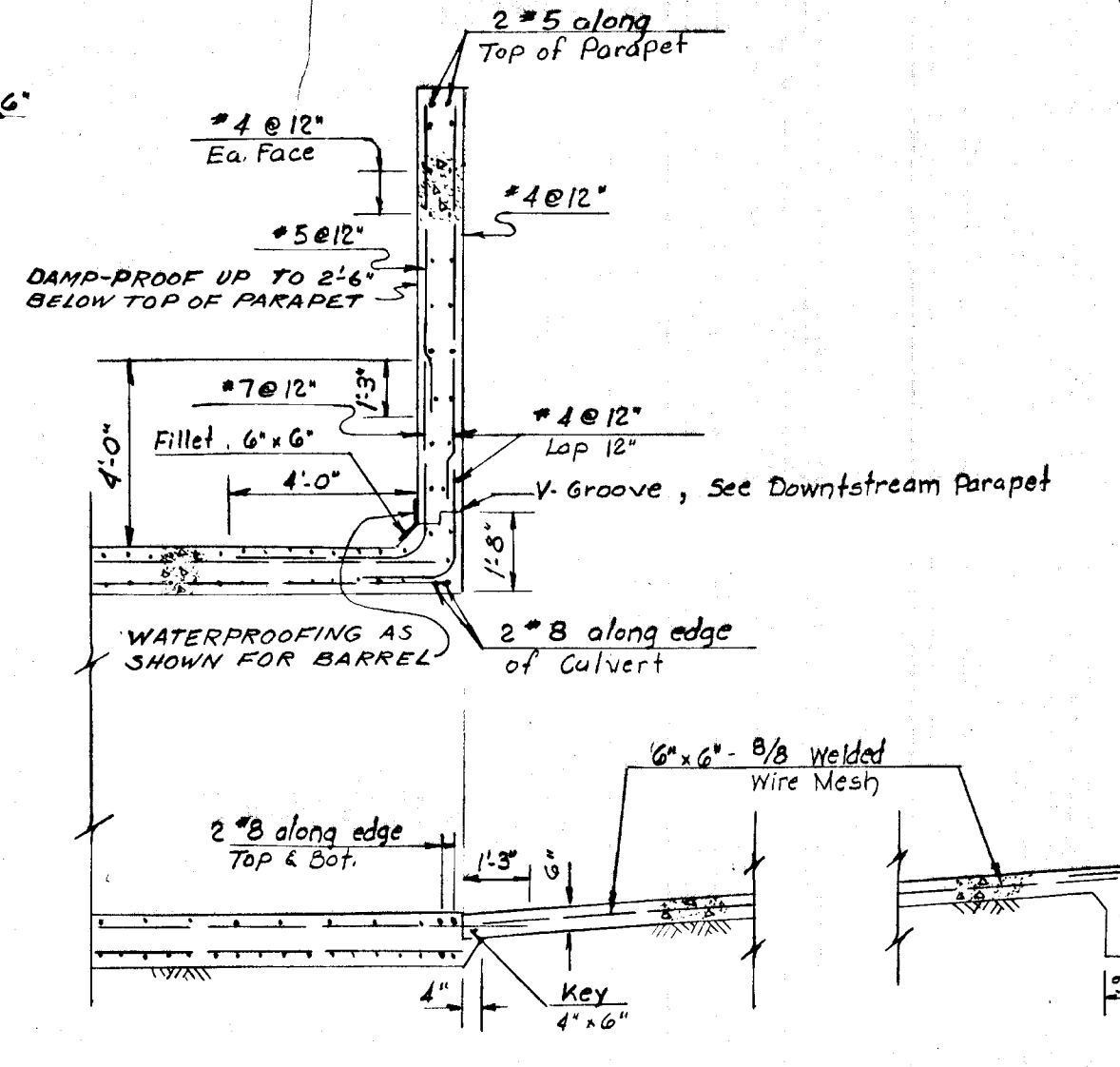
DOWNSTREAM PARAPET  
AND END OF BOX CULVERT  
SECTION H-H  
SCALE: 1/4" = 1'-0"



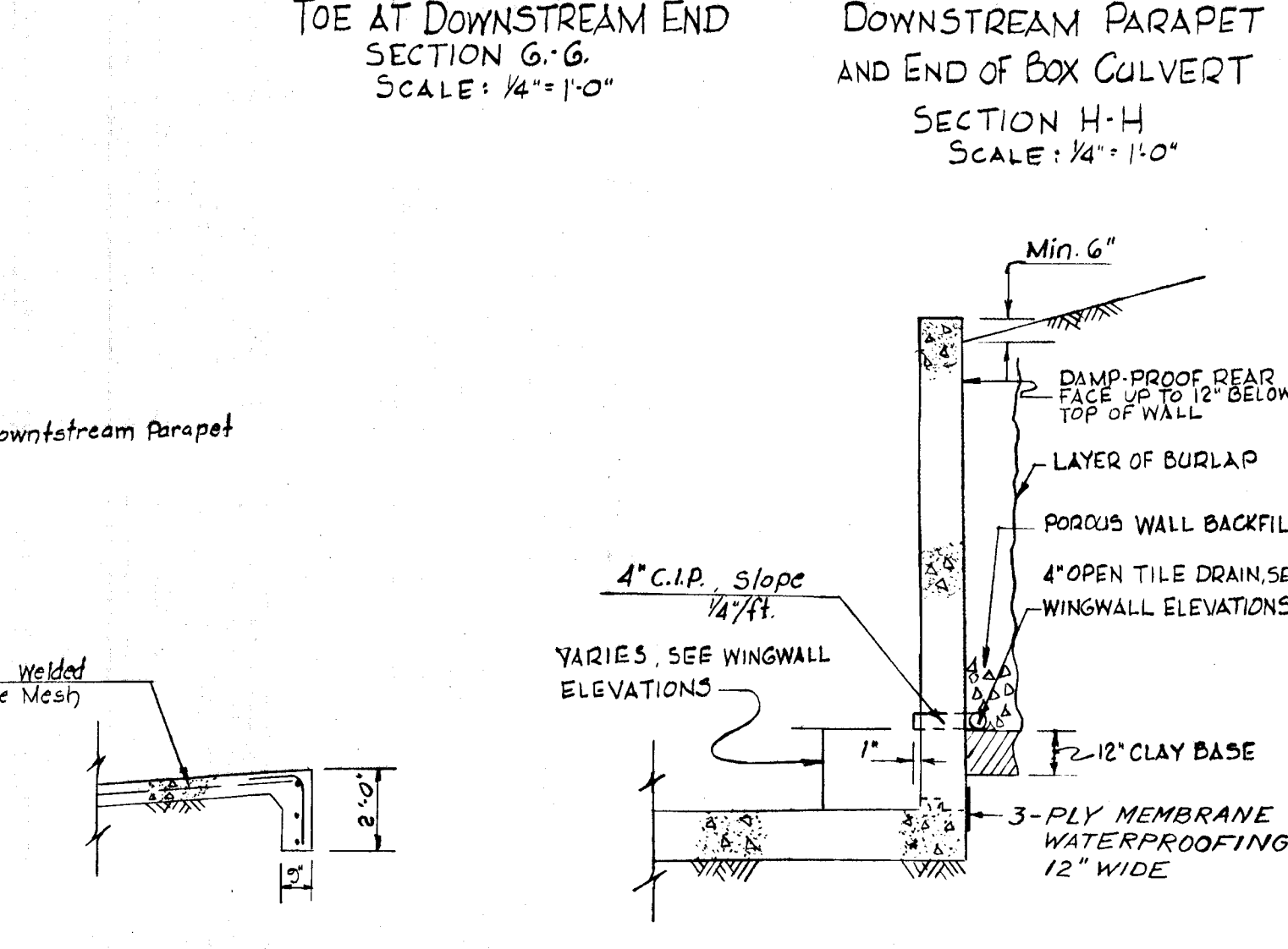
PLAN UPSTREAM END  
SHOWING DIMENSIONS AND ELEVATIONS OF WINGWALL  
FOOTINGS, SPACING OF POSTS FOR PARAPET RAILING.  
SCALE: 1/8" = 1'-0"



PLAN DOWNSTREAM END  
SHOWING DIMENSIONS AND ELEVATIONS OF WINGWALL  
FOOTINGS, SPACING OF POSTS FOR PARAPET RAILING.  
SCALE: 1/8" = 1'-0"

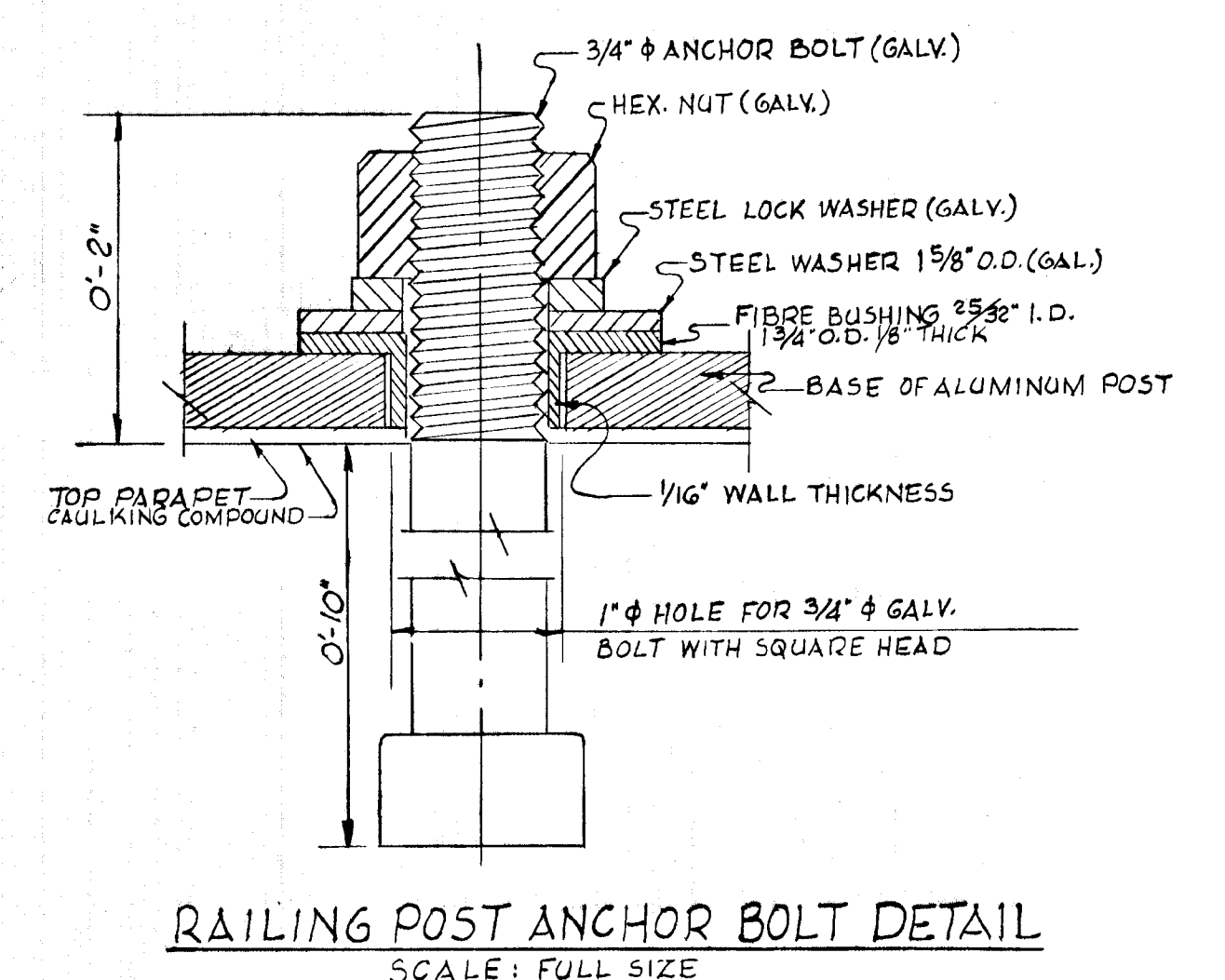
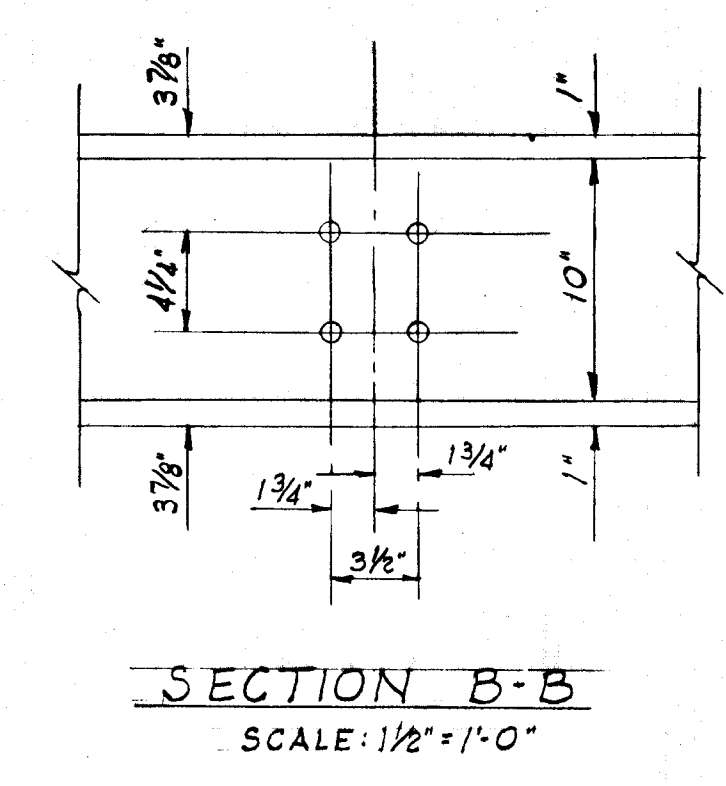
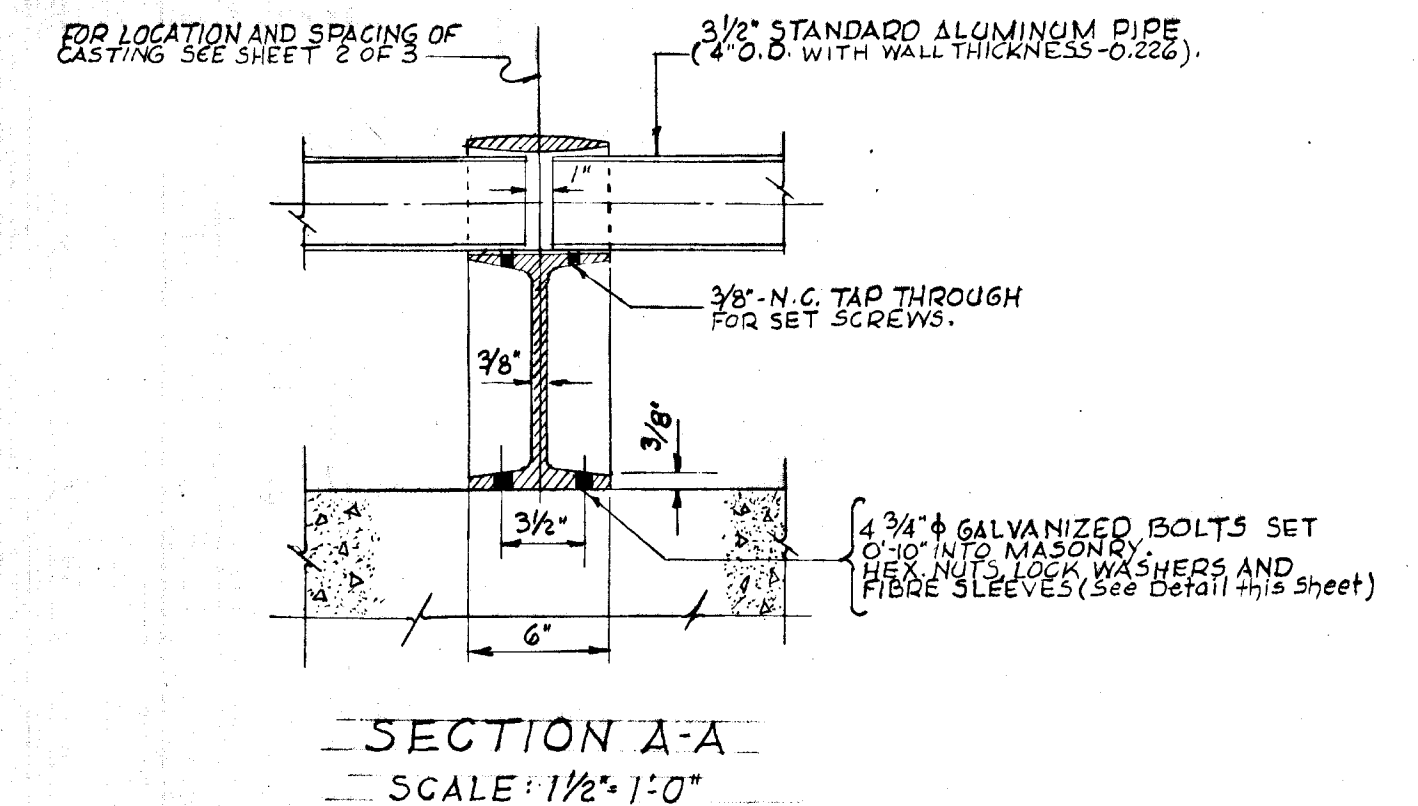
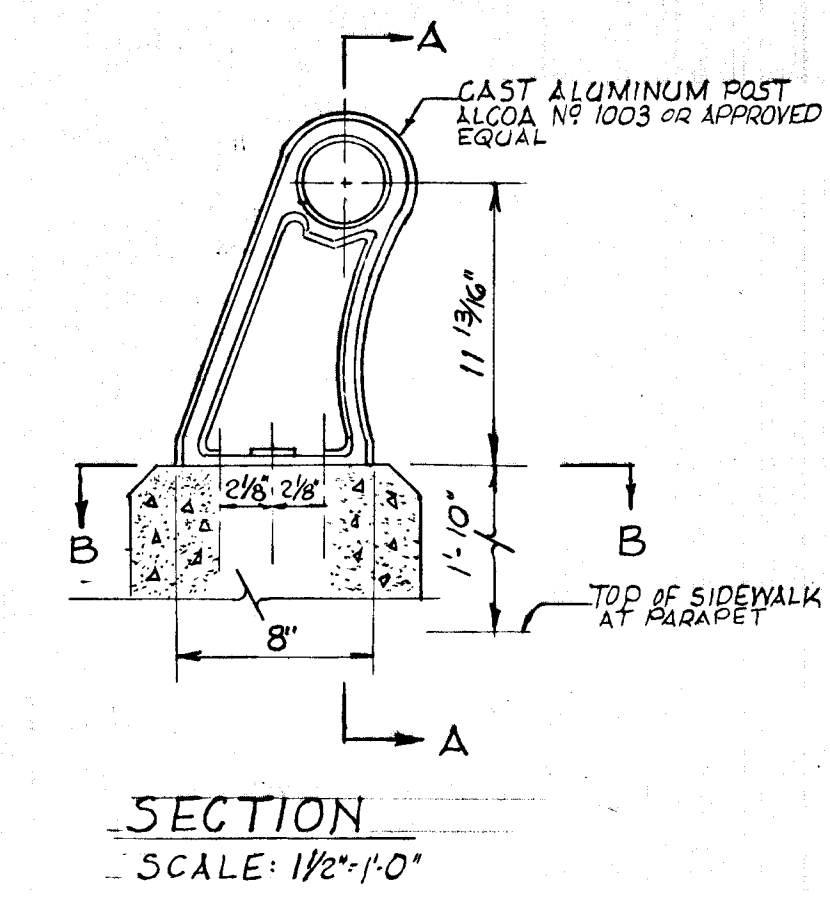
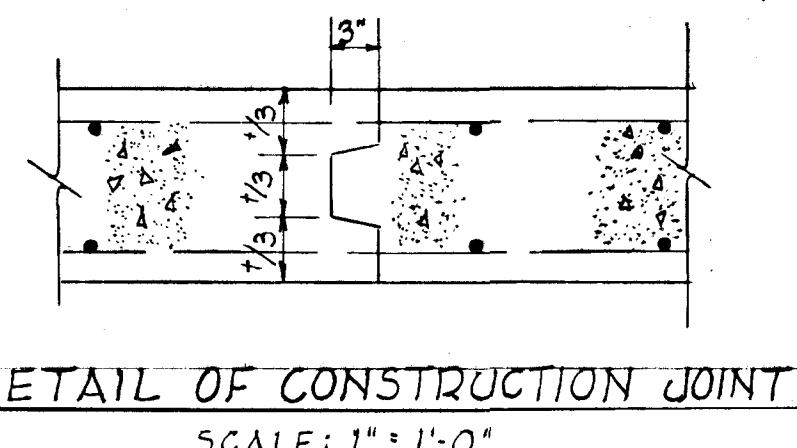
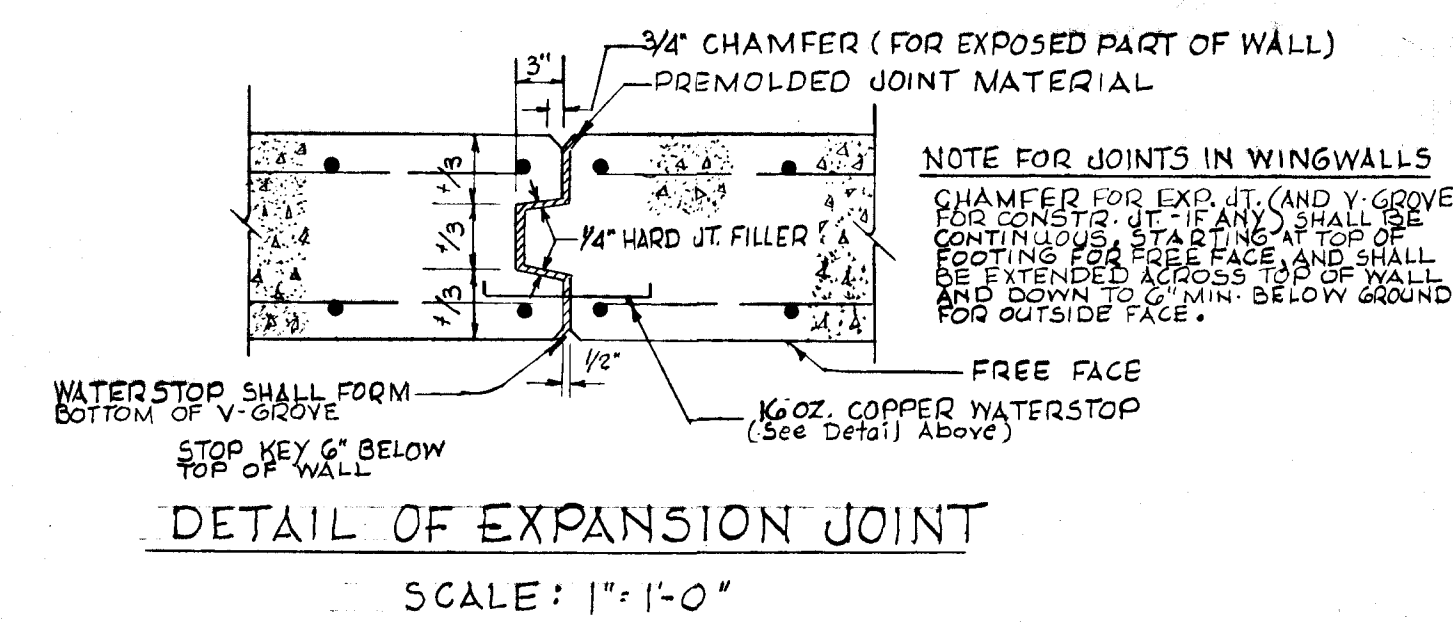
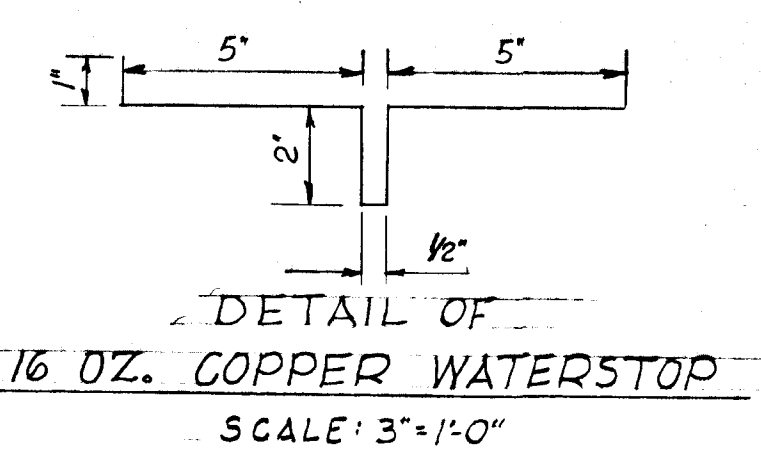
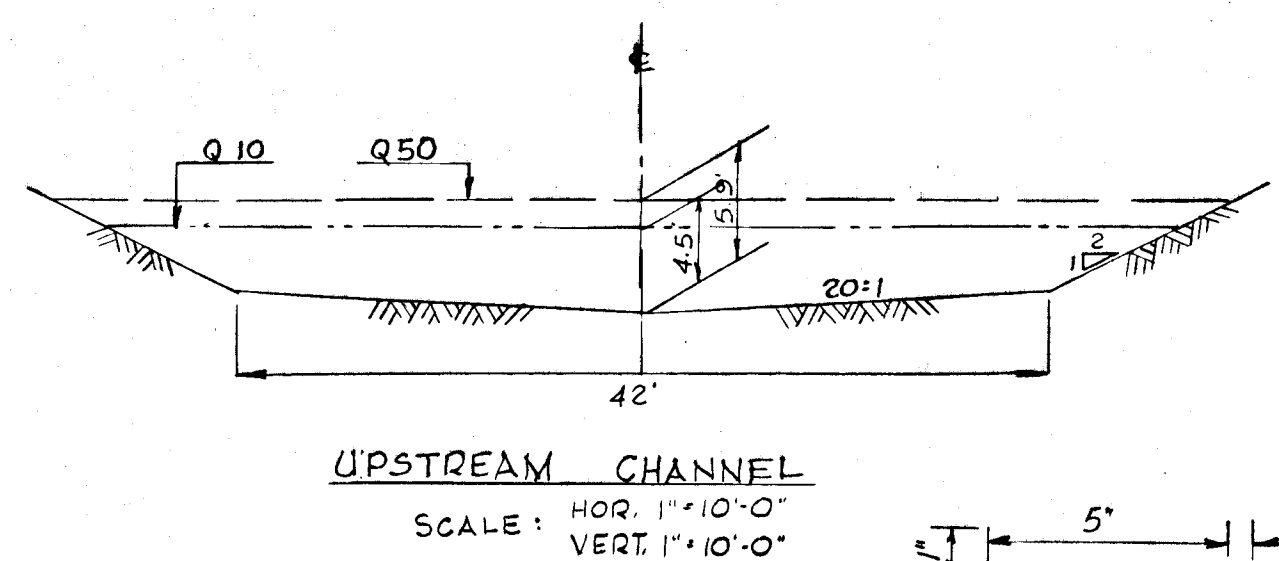
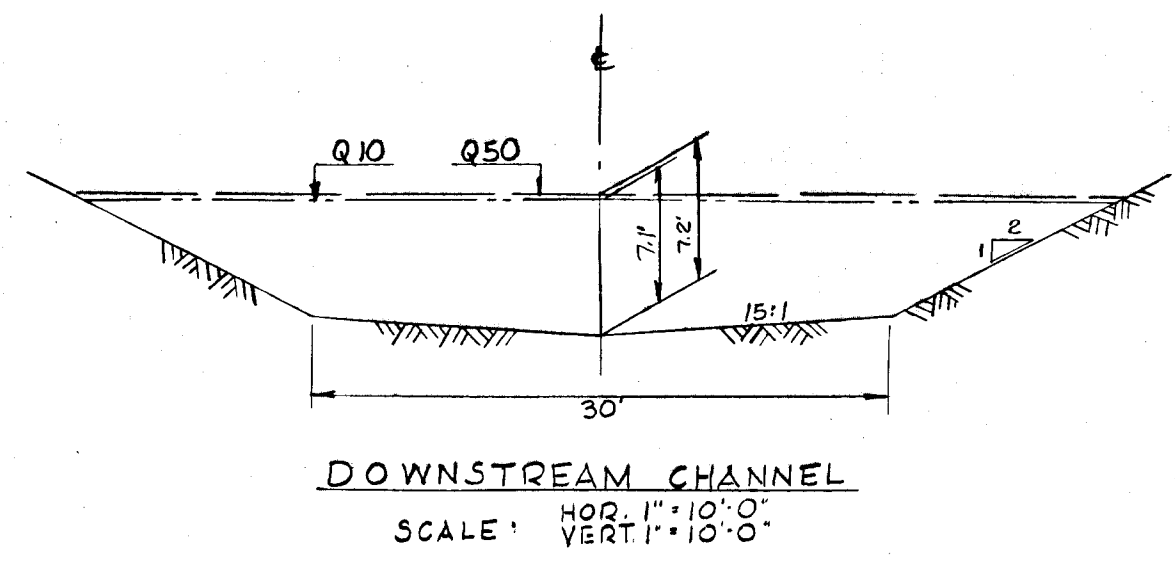
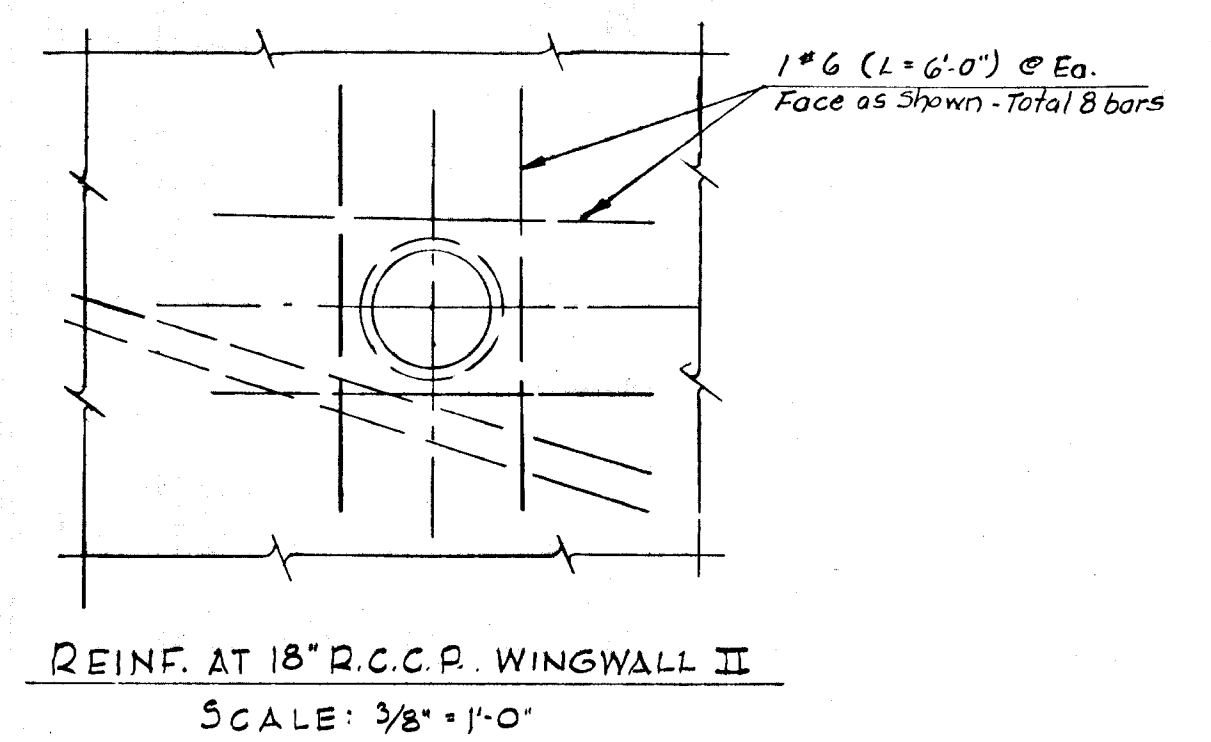
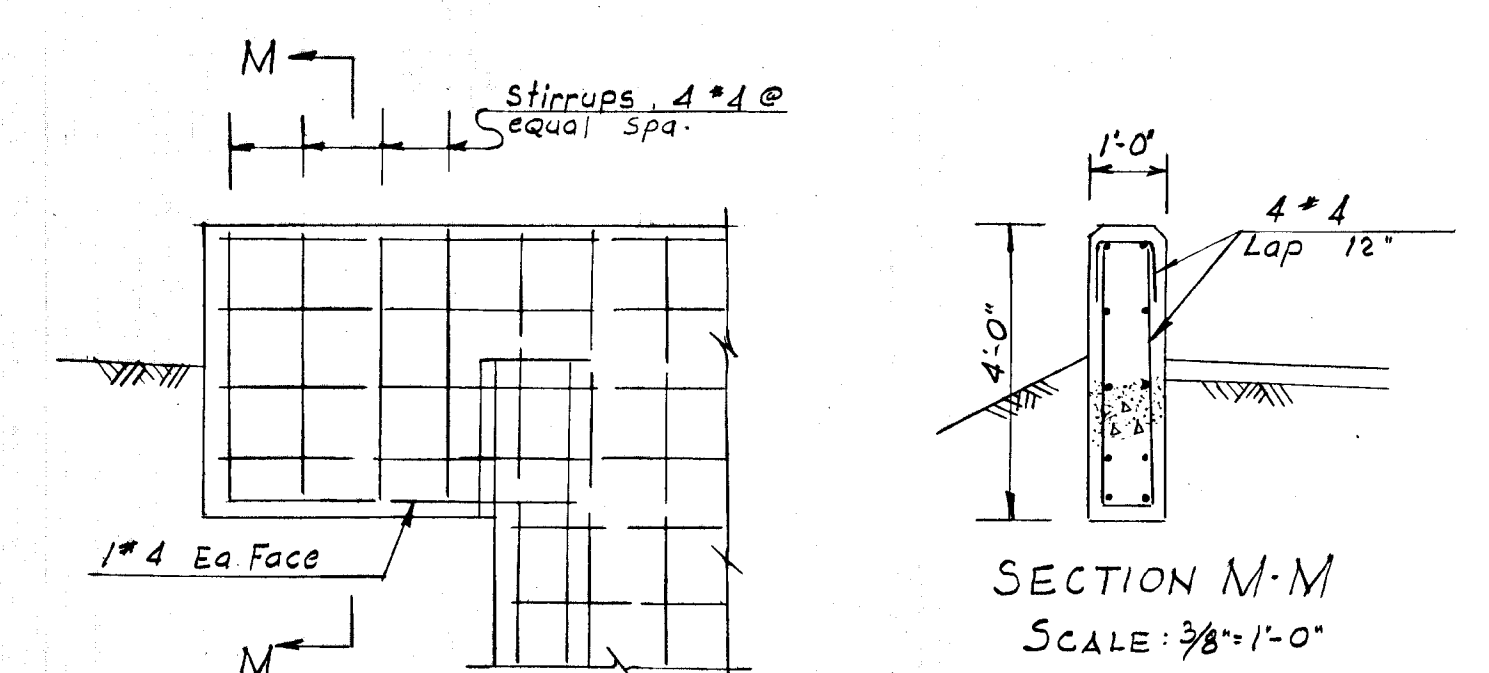
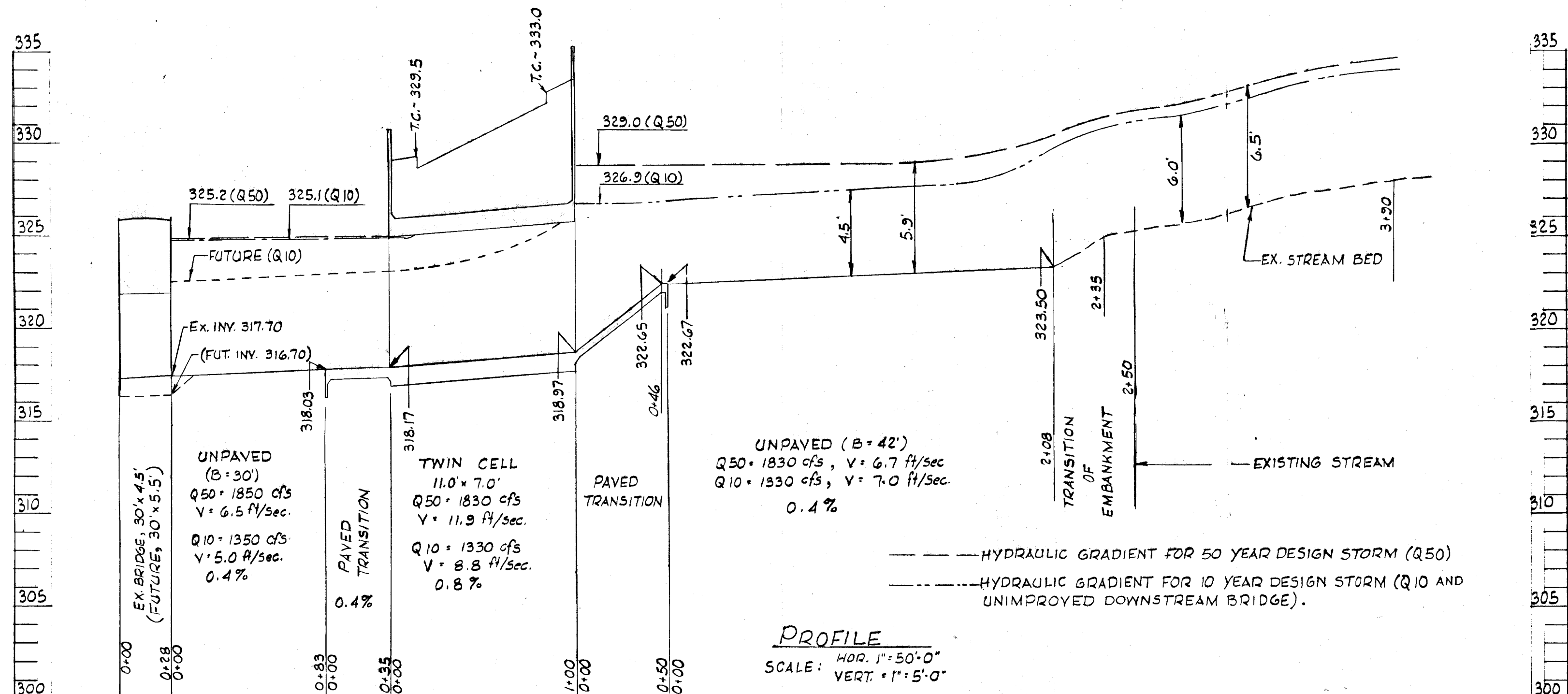


UPSTREAM PARAPET AND  
END OF BOX CULVERT  
SECTION J-J  
SCALE: 1/4" = 1'-0"



TYPICAL WINGWALL SECTION  
SCALE: 1/4" = 1'-0"

DESIGNED: J.R.	CHECKED: G.Y.	ENGINEER: [Signature]	DATE: 5-18-66	DIVISION OF: HIGHWAYS	STRUCTURES	STORM DRAINS	WATER	SEWER	CHIEF ENGINEER	PLANNING COMMISSION	ROADS DEPARTMENT	METROPOLITAN COMMISSION	DISTRICT NO. 2	SCALE: AS SHOWN	DATE	REVISION	BY	SHEET 2 OF 3
APPROVED: J.H. Clawson	DATE: 8-30-66	APPROVED: [Signature]	DATE: 8-30-66	APPROVED: [Signature]	DATE: 9-26-66	TOWN & COUNTRY BLVD. TWIN CULVERT 2ND ELECTION DIST. HOWARD CO., MD.			TOWN & COUNTRY WEST			PROFILE						



DESIGNED: J.R.	DIVISION OF ENGINEERING	HIGHWAYS	STRUCTURES	STORM DRAINS	WATER	SEWER	CHIEF ENGINEER	PLANNING COMMISSION	ROADS DEPARTMENT	METROPOLITAN COMMISSION	DISTRICT NO. 2	SCALE	DATE	REVISION	BY	SHEET 3 OF 3
DRAWN: G.Y.	ENGINEER: <i>Charles H. Gray</i>	REVIEWED:						APPROVED: <i>J. N. Clawson, Jr.</i>	APPROVED: <i>Harmon S. O'Neill</i>	APPROVED: <i>W. O. Silbert</i>	TOWN & COUNTRY BLDG. TWIN CULVERT	PLAN AS SHOWN				FILE NO.
CHECKED:	DATE: 5-18-66	DATE:						DATE: 8-30-66	DATE: 8-30-66	DATE: 9-26-66	2ND ELECTION DIST., HOWARD CO., MD.	PROFILE				