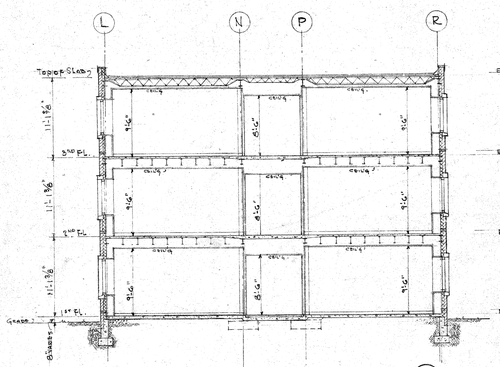
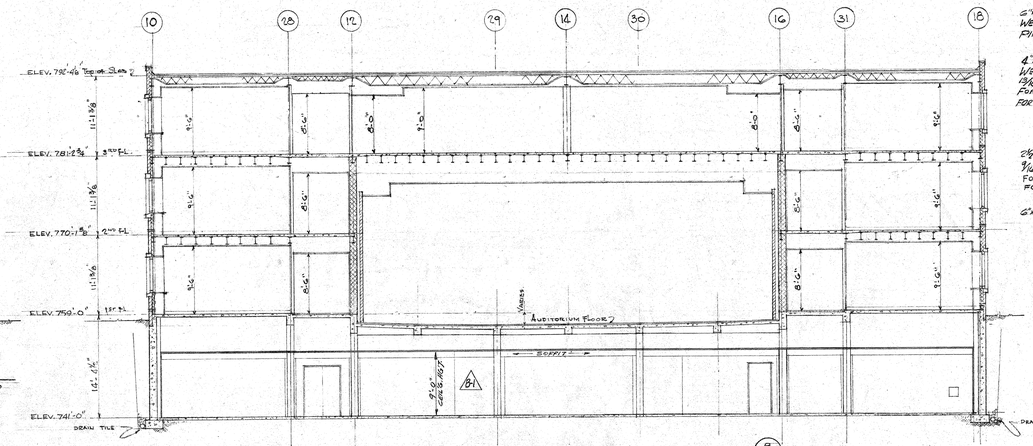
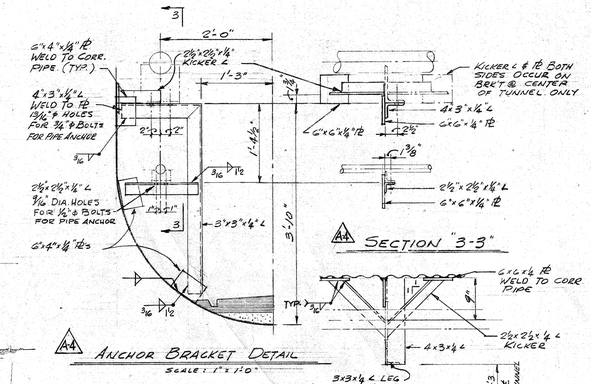


TYPICAL SECTION THRU WINGS (C / CF 0116)
SCALE 1/8" = 1'-0"



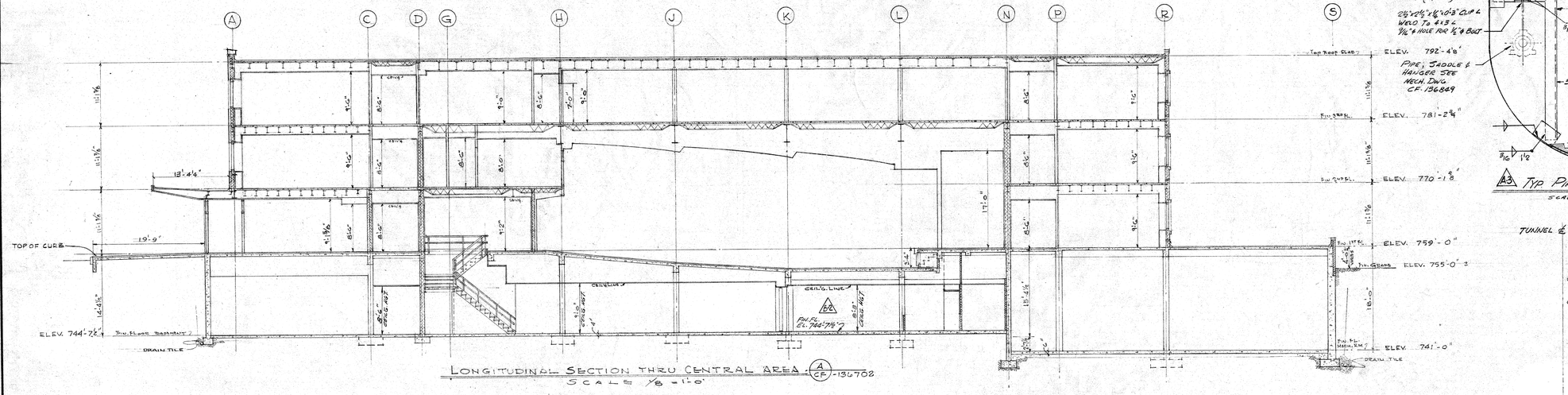
SECTION THRU CENTRAL AREA (B / CF-136702)
SCALE 1/8" = 1'-0"



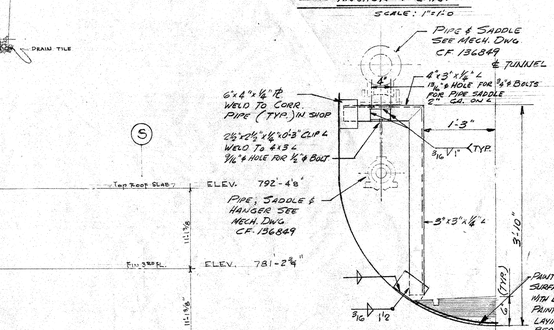
A4 SECTION "3-3"

A4 ANCHOR BRACKET DETAIL
SCALE: 1" = 1'-0"

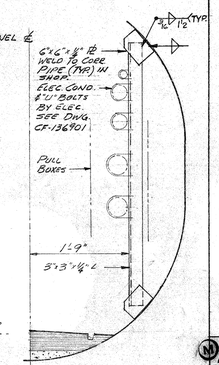
A4 ANCHOR PLAN.
SCALE: 1" = 1'-0"



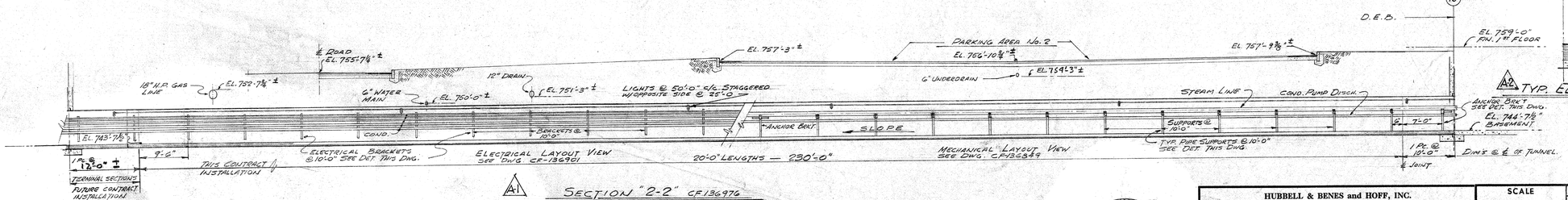
LONGITUDINAL SECTION THRU CENTRAL AREA (A / CF-136702)
SCALE 1/8" = 1'-0"



A3 TYP. PIPE SUPPORT
SCALE: 1" = 1'-0"



A2 TYP. ELECTRICAL BRACKET
SCALE: 1" = 1'-0"



A1 SECTION "2-2" CF136976
SERVICE TUNNEL
SCALE: 1/8" = 1'-0"

A5 GENERAL NOTES:

(1.) SUFFICIENT NOTICE SHALL BE GIVEN THE EAST OHIO GAS CO. - MR. F. J. MERRIMAN - IN ADVANCE OF ANY CONSTRUCTION WORK ON THE TUNNEL IN THE VICINITY OF THE E.O.G. Co. 18" H.P. GAS MAIN IN ORDER THAT THE E.O.G. Co. MAY ASSIGN AN INSPECTOR TO THE LOCATION DURING THE CONSTRUCTION PERIOD.

(a.) THE WIDTH OF THE TRENCH OPENED FOR THE TUNNEL SHALL BE HELD TO A MINIMUM AND CONTROLED IN ORDER THAT THE LENGTH OF THE E.O.G. Co. 18" H.P. GAS MAIN EXPOSED SHALL BE THE ABSOLUTE MINIMUM.

(b.) ANY DAMAGE TO THE PIPE, PIPE COATING OR CATHODIC PROTECTION ON THE 18" H.P. GAS MAIN SHALL BE REPAIRED TO THE ENTIRE SATISFACTION OF THE E.O.G. Co. AND AT THE EXPENSE OF THIS CONTRACTOR.

(2.) 72" CORRUGATED PIPE TUNNEL

(a.) THIS CONTRACTOR SHALL FURNISH ALL THE 72" CORRUGATED PIPE COMPLETE WITH EXTERIOR SEAL BANDS, WATER STOPS AT BOTH END, ALL CONDUIT AND PIPE SUPPORTS AND BRACKETS, AND SUCH ADDITIONAL MISCELLANEOUS APPURTENANCES AS MAY BE REQUIRED FOR THE COMPLETE INSTALLATION FROM BLDG. To BLDG.

(1.) THE STRETCH SECTION AT THE D.E.B. END AND THE TERMINATION SECTION AT THE FUTURE BUILDING (WESTERLY) END OF THE TUNNEL SHALL BE CUT FROM ONE (1) STANDARD LENGTH OF PIPE.

(2.) THE TERMINAL (WESTERLY) SECTION OF THE TUNNEL SHALL BE FABRICATED COMPLETE BY THE CONTRACTOR AND FURNISHED TO U.C.E.S.T. FOR LATER INSTALLATION BY OTHERS.

(b.) THE TUNNEL SHALL BE FABRICATED OF 72" DIAMETER, 10% ELONGATED, 8 GAUGE CORRUGATED STEEL PIPE GALVANIZED INSIDE AND OUTSIDE INCLUDING ALL FLANGES AND WATER-STOPS WELDED TO THE PIPE INTERIOR WALLS AND EXTERIOR AT ENDS. THE VARIOUS SECTIONS OF PIPE SHALL BE JOINED WITH TWENTY-FOUR (24") INCH WIDE 8 GAUGE GALVANIZED BANDS.

(1.) THE ENTIRE EXTERIOR SHALL BE COATED AND WATERPROOFED WITH A STANDARD BITUMINOUS COATING BY THE FABRICATOR. ALL JOINTS SHALL BE WATERTIGHT.

(2.) ALL WELDING OF MATERIALS TO THE INSIDE OF THE PIPE AS SHOWN ON DWG. CF-136721 AND FOR CF-136976 AND OF THE WATERSTOPS ON THE EAST AND WEST END SECTIONS SHALL BE DONE IN THE SHOP PRIOR TO APPLYING THE EXTERIOR BITUMINOUS COATING.

(3.) ALL GALVANIZED AREAS AFFECTED BY WELDING SHALL BE THOROUGHLY CLEANED AND TOUCHED UP WITH A ZINC COATING.

(4.) THE EAST AND WEST END SECTIONS SHALL BE BEVEL-CUT IN THE SHOP TO THE ANGLE SHOWN WITH THE 8 GAUGE BY THREE ANGLE (3") WATERSTOP CONTINUOUSLY WELDED TO THE PIPE AT FIVE INCHES (5") FROM THE BEVEL CUT.

CHANGE NO.	REVISION	DATE	CK. APP.
2.	ADDED CEILG. HGT. IN BSMT. & CHANGED FIN. FLR. EL. BETWEEN COL'S K TO N AND EL. 745'-7½" - ADDED CANTERED WALLS	11/1/63	
1.	ADDED CEILG. HGT. IN BSMT. & ALSO ADDED ELEVATION OF WALL @ COL. K		
5.	GENERAL NOTES ADDED	3-13-63	
4.	PIPE SUPPORT ANCHOR DETAILS		
3.	PIPE SUPPORT & DETAILS		
2.	ELECTRICAL CONDUIT SUPPORT BRACKET DETAIL		
1	LONGITUDINAL SECTION THRU TUNNEL		

HUBBELL & BENES and HOFF, INC.
ARCHITECTS & ENGINEERS
1922 E. 107th St. CLEVELAND 6, OHIO

	APPROVED	
REV. A. 3/4/63	J.H.K.	3/13/63
REV. B 10/31/63	J.H.K.	10/31/63

DESIGNED BY — DATE 7-30-62 | CHECKED BY — J.W.M. | APPROVED BY — J.H.K. | JOB NO. 62303 | SHEET ACCOUNT NO. 0119

SCALE 1/8" = 1'-0"
UNLESS OTHERWISE SPECIFIED
.X DIM. MAY VARY ±
.XX DIM. MAY VARY ±
.XXX DIM. MAY VARY ±
ANGULAR DIM. MAY VARY ±
DIM. MAY VARY ±
BREAK SHARP EDGES

SAFETY APPROVAL BY DATE
AREA SAFETY COMM.

REFERENCES	INITIAL	DATE
J011806	DR.	
C-3470	CK.	
	O. ENG.	
	R. ENG.	
	P. ENG.	
	U.S. HD.	
	R. SHTD.	
	D.D.CH.	8-7-63
	R.D.CH.	8-7-63

DEVELOPMENT ENGINEERING BUILDING, PROJECT STRUCTURES - ROADS - UTILITIES
ARCHITECTURAL
DEVELOPMENT ENGINEERING BUILDING
TYPICAL GRID SECTIONS

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LEWIS RESEARCH CENTER
CLEVELAND, OHIO

DWG. NO. CF-136721