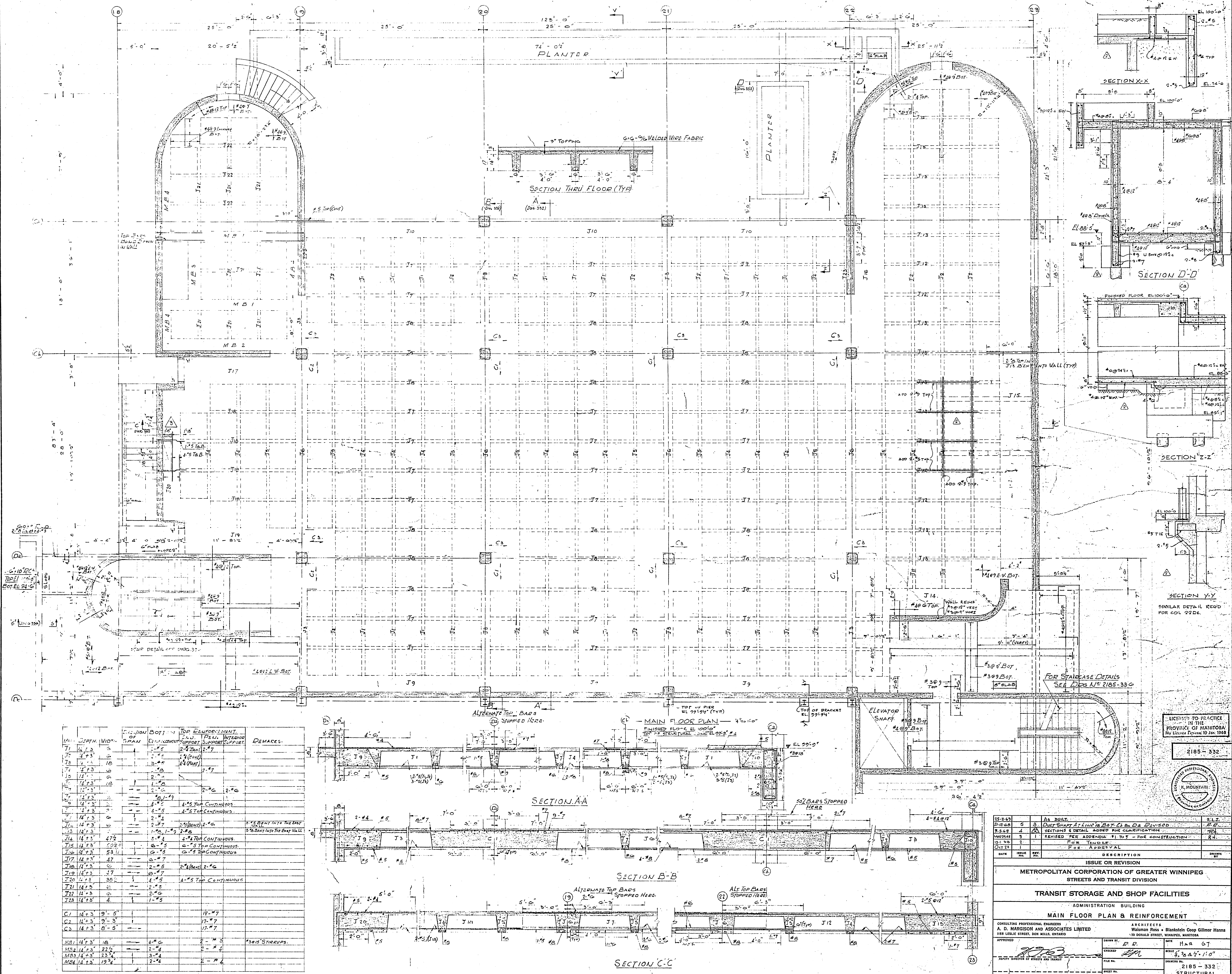
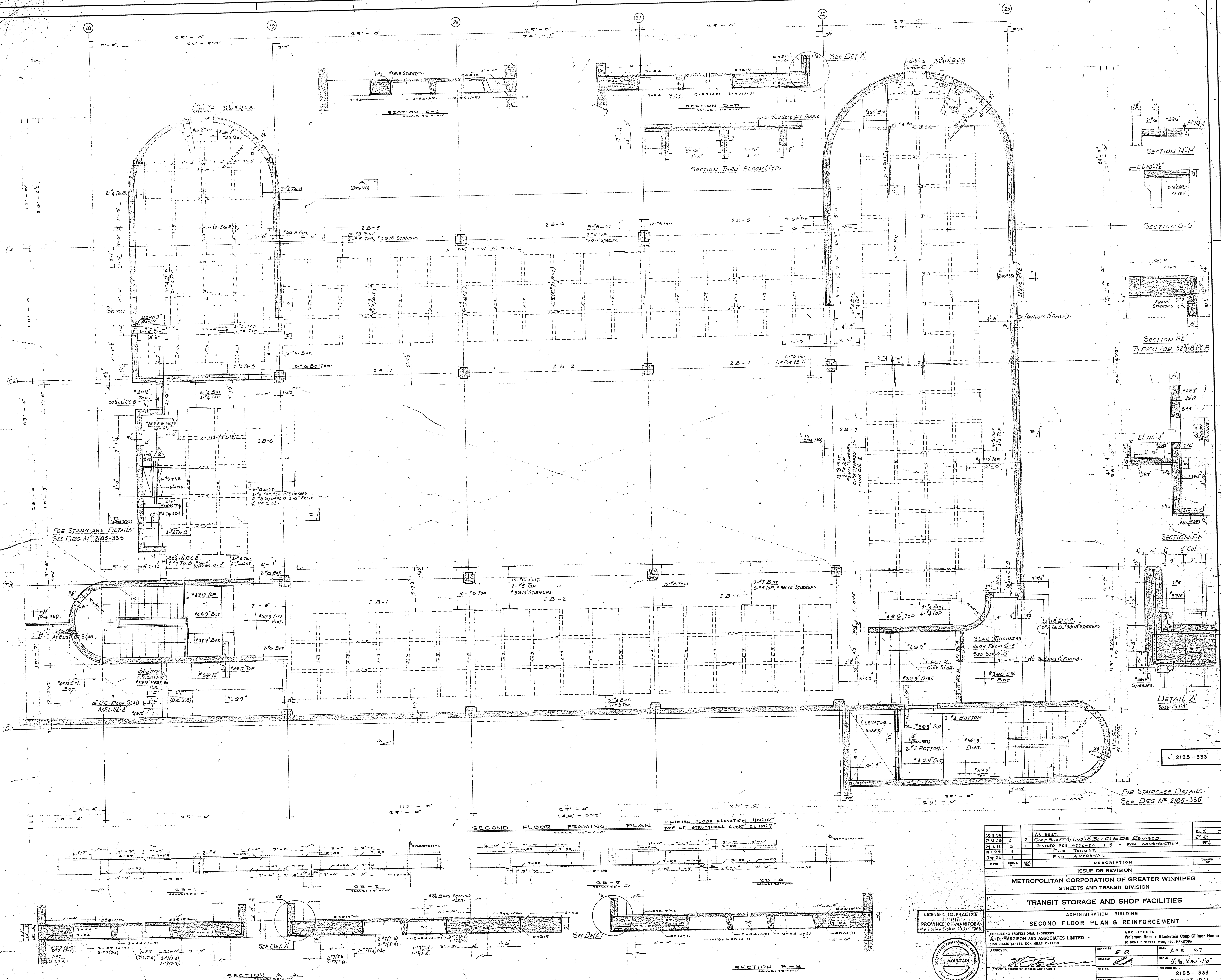


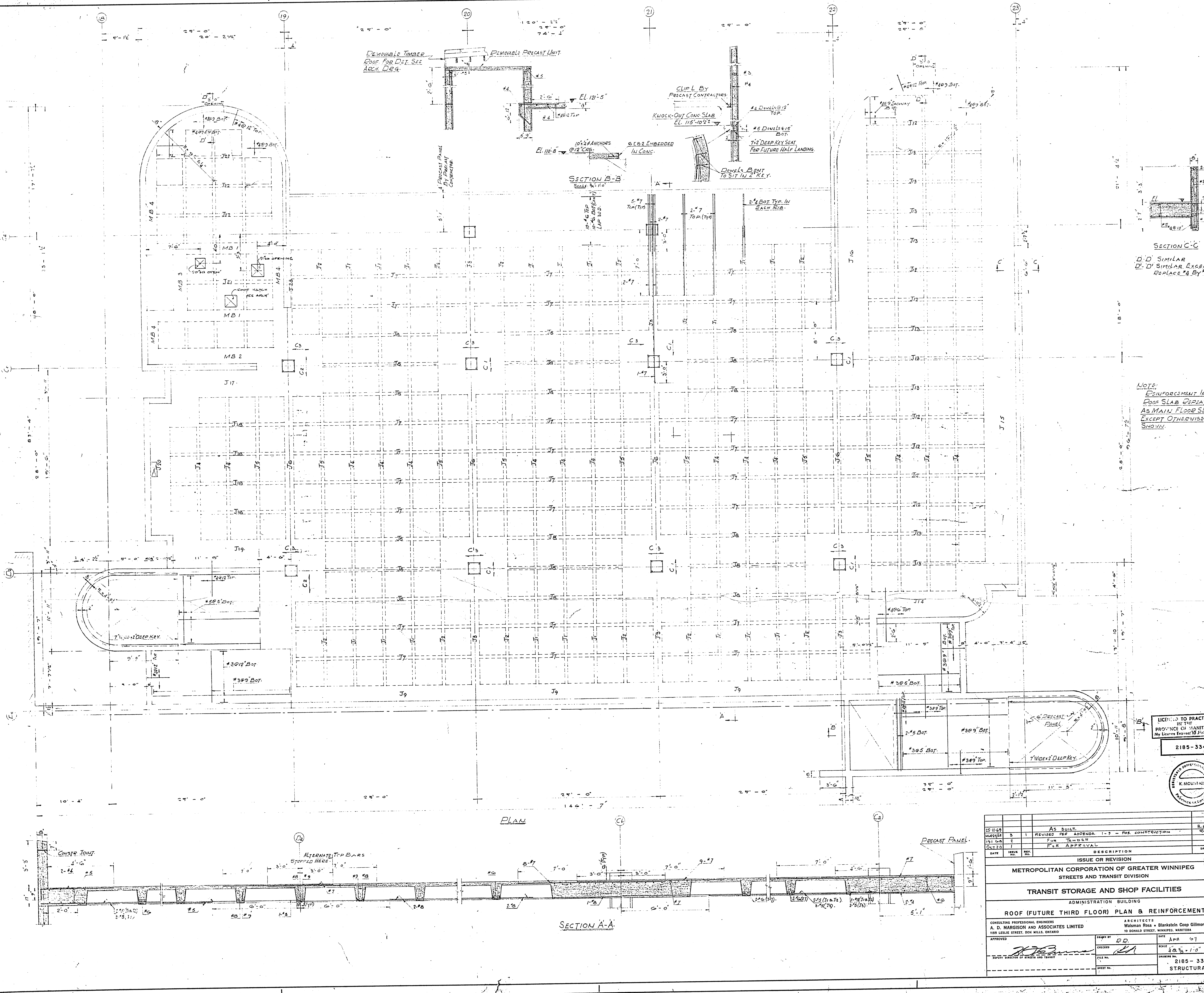
- NOTE:
1. UNLESS OTHERWISE INDICATED ALL BEAMS ARE DESIGNATED BY DEPTH FIRST E.G. 24" X 10" R.C. BEAM HAS A DEPTH OF 24" & A WIDTH OF 10"
 2. ALL PILES SHOWN ARE TO BE PRECAST DRIVEN TYPE UNLESS NOTED OTHERWISE.
 3. BASEMENT FLOOR IS A STRUCTURAL SLAB WITH 6" VOID BENEATH.
 4. UNLESS OTHERWISE NOTED ALL PILE CAPS ON THIS DRAWING TO BE AT EL OF FINISHED CONC. FLOOR LEVEL (88'-5") OR FINISHED DEPRESSSED SLAB (88'-3").

DATE	REV.	DESCRIPTION	ISSUE OR REVISION
15-11-69	AS BUILT		
15-11-69	4	TUNNEL FOUNDATIONS	REVISED
MAR/70	5	SECTION 4 DETAILS	REVISED
JAN/70	2	REVISED PER ADDENDUM 1 TO 5 - FOR CONSTRUCTION	
OCT/69	1	FOR TENDER	
		FOR APPROVAL	
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION			
TRANSIT STORAGE AND SHOP FACILITIES			
ADMINISTRATION BUILDING			
BASEMENT PLAN, FOUNDATIONS & REINFORCEMENT			
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 10 DONALD STREET, DON MILLS, ONTARIO		ARCHITECTS Walsman Ross & Blankstein Coop Gillmer Hanna 10 DONALD STREET, WINNIPEG, MANITOBA	
APPROVED	DR	DATE	MAR '67
DEPUTY DIRECTOR OF STREETS AND TRANSIT	RA	SCALE	1/8" = 1'-0"
		FILE NO.	2185-331
		SHEET NO.	STRUCTURAL





35-120	AS BUILT.	2	2
21-120	2 DXT SHAPES 18 B3C1A & B3C1D	2	2
21-121	REVISED PER ADDENDA 1-7 - FOR CONSTRUCTION	1	1
21-122	FOR APPROVAL	1	1
DATE	ISSUED	REV.	BY
ISSUE OR REVISION			
METROPOLITAN CORPORATION OF GREATER WINNIPEG			
STREETS AND TRANSIT DIVISION			
TRANSIT STORAGE AND SHOP FACILITIES			
ADMINISTRATION BUILDING			
SECOND FLOOR PLAN & REINFORCEMENT			
CONSULTING PROFESSIONAL ENGINEERS		ARCHITECTS	
A. D. MARGISON AND ASSOCIATES LIMITED		Walsman Ross + Blankstein Coop Gillmor Hanna	
1155 LESLIE STREET, DON MILLS, ONTARIO		10 DONALD STREET, WINNIPEG, MANITOBA	
APPROVED	DATE	CHECKED	DATE
FILE NO.	4/36/2/10/10	DRAWING NO.	2185-333
PAGE NO.			STRUCTURAL

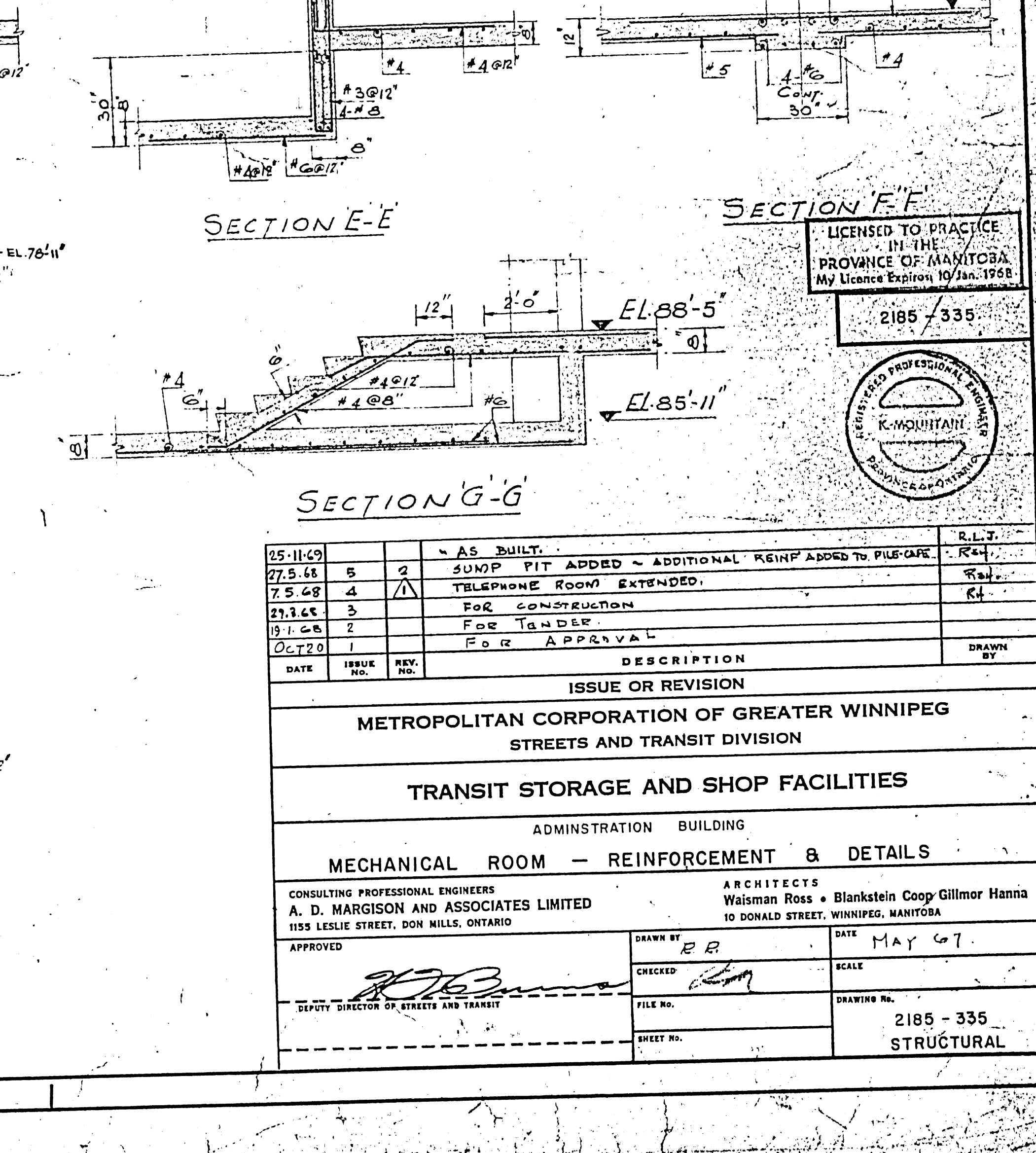
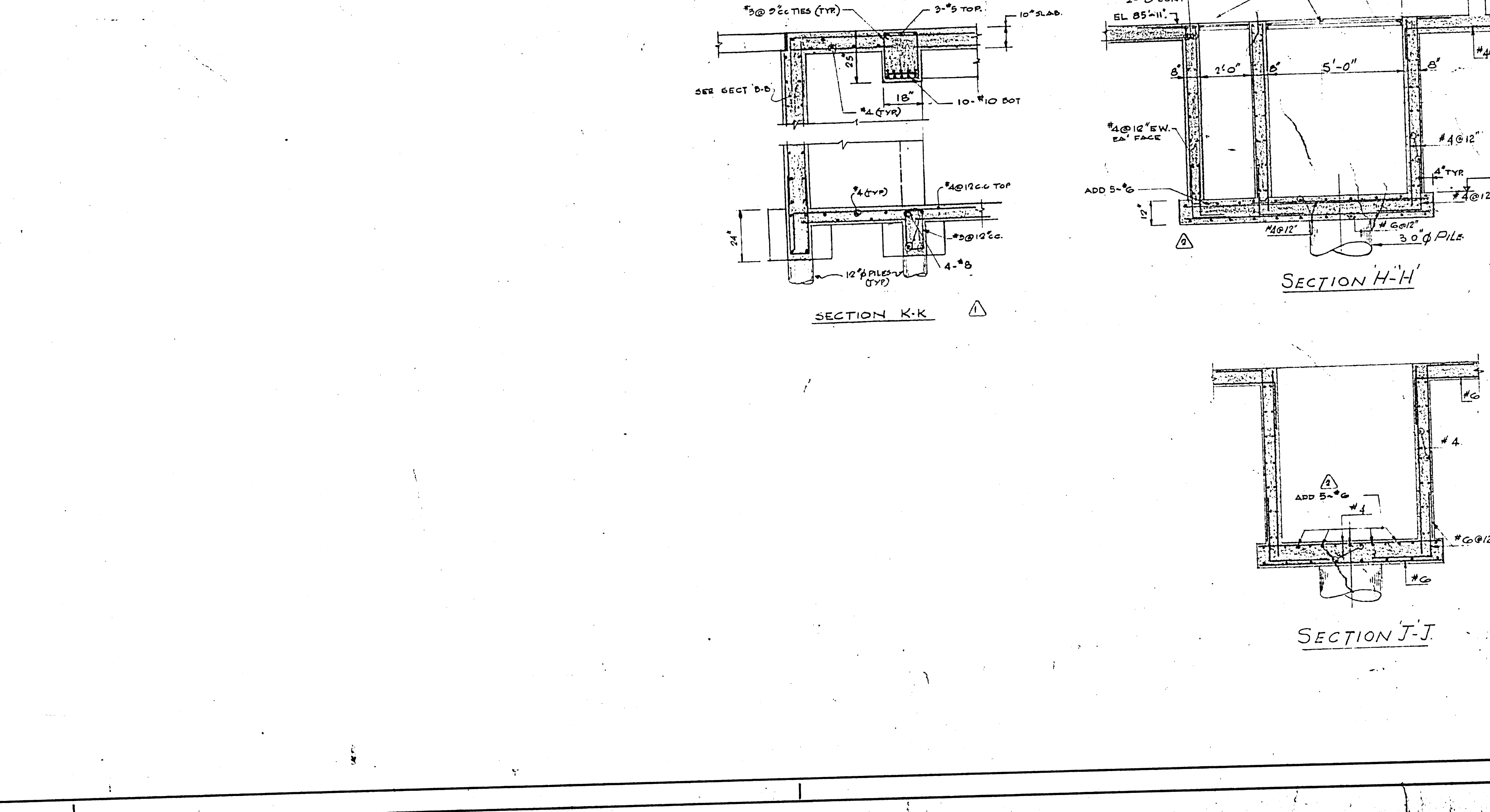
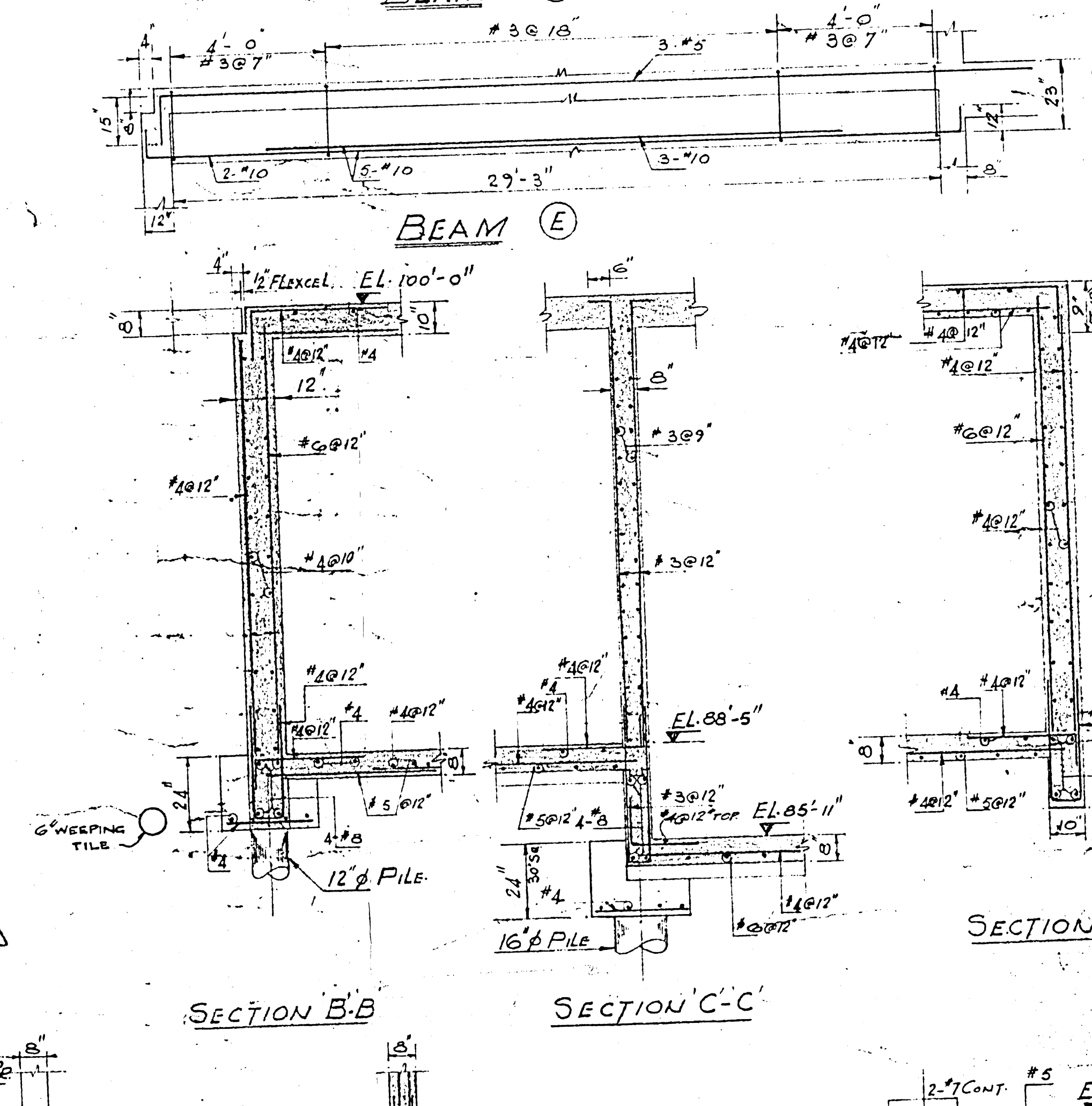
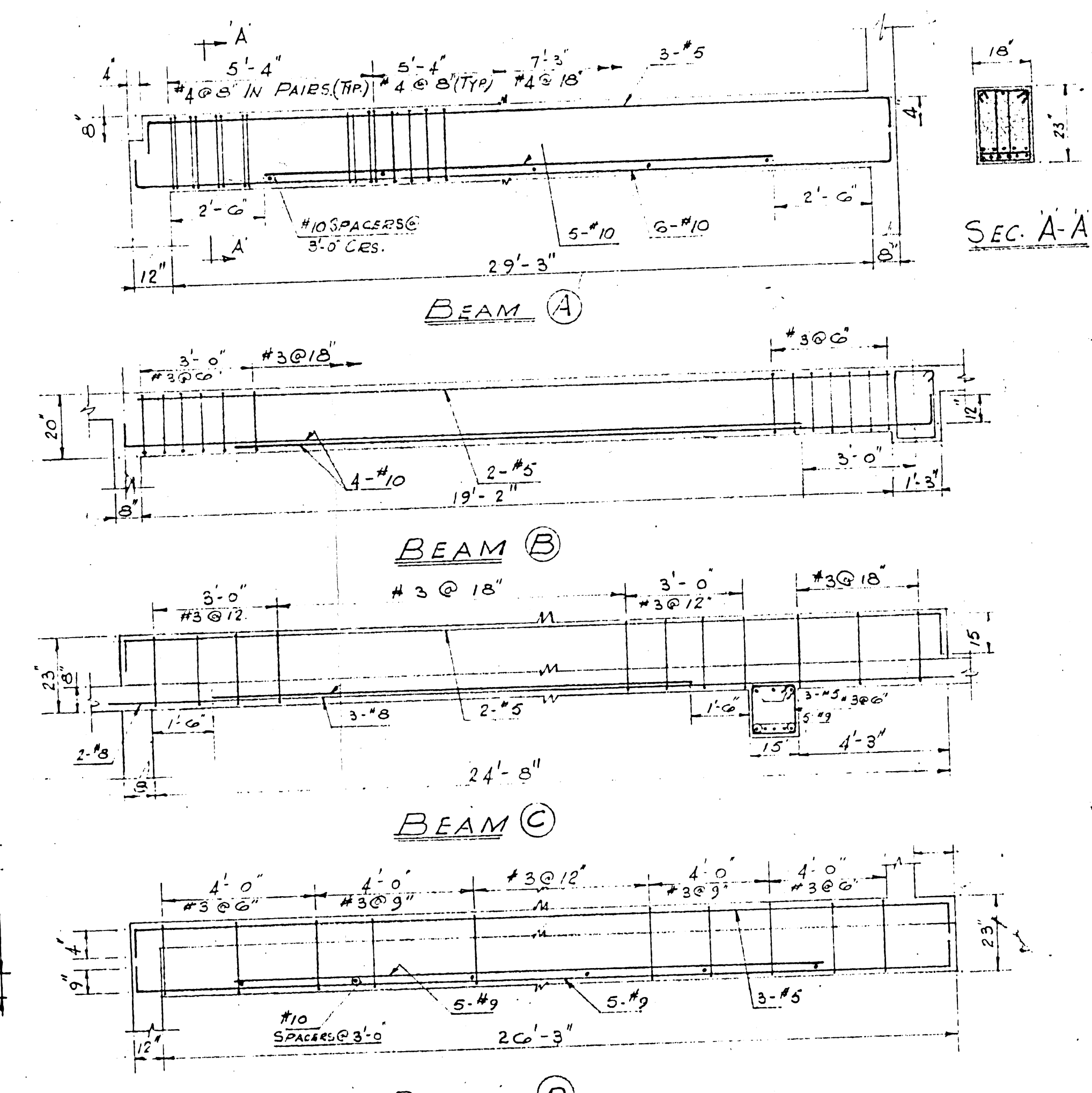


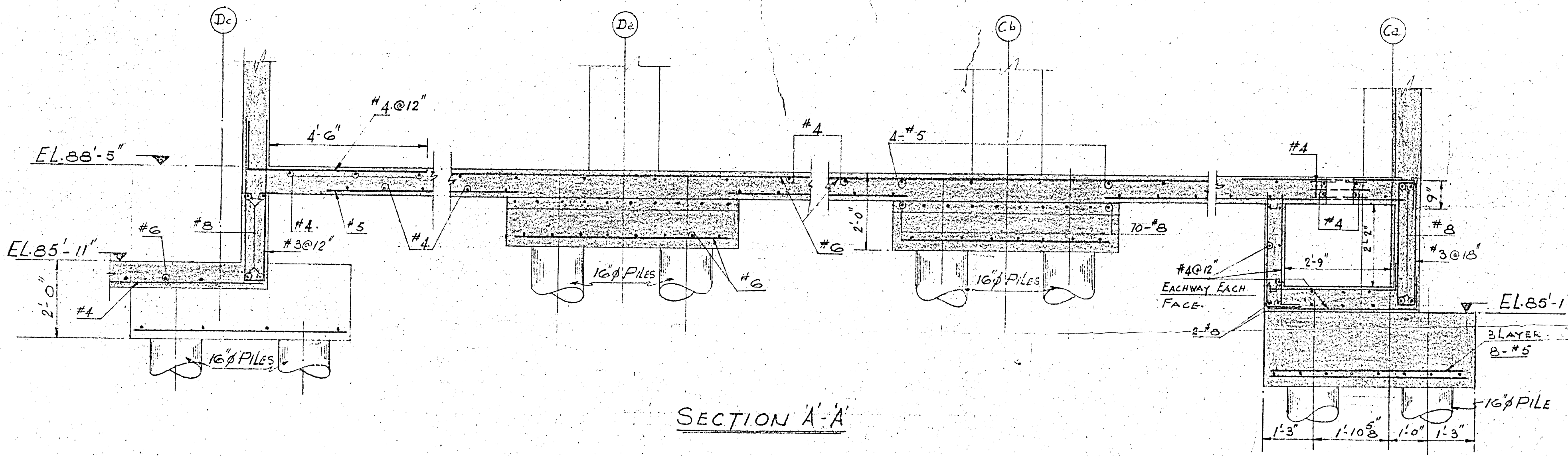
LICENSÉ TO PRACTICE
IN THE
PROVINCE OF MANITOBA
My Licence Expires 10/1/1993

2185-334

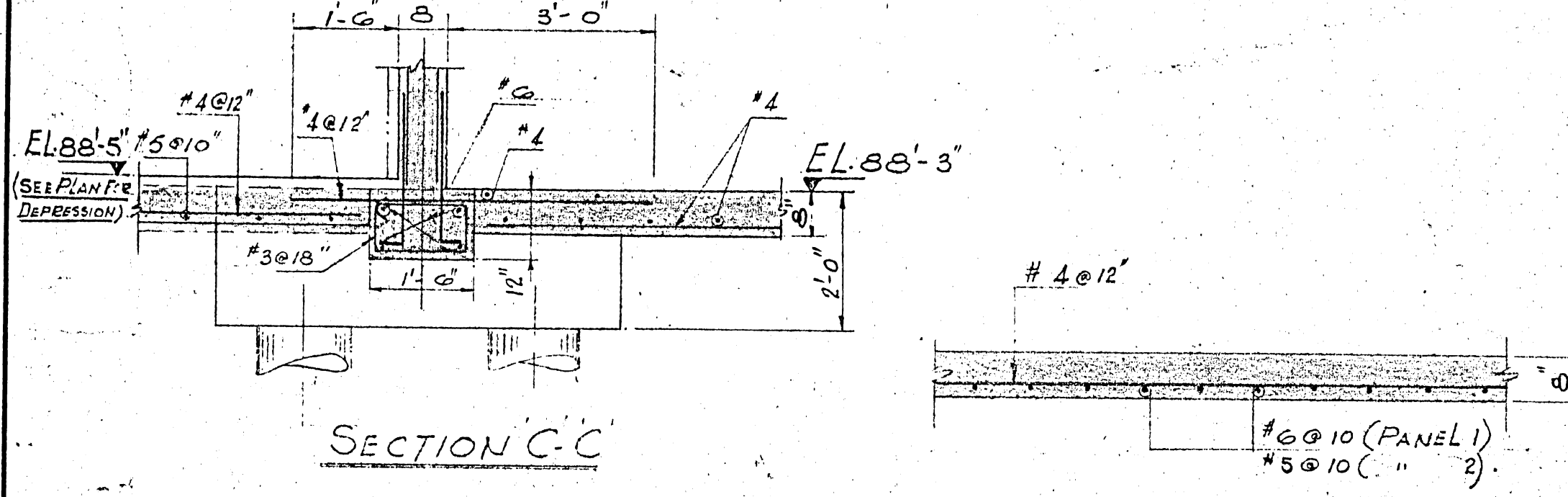


DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY
15/11/69	1		AS BUILT.	R.L.J.
19/1/69	2		REVISED PER ADDENDA 1-3 - FOR CONSTRUCTION	R.L.J.
10/1/70	1		FOR APPROVAL	
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG				
STREETS AND TRANSIT DIVISION				
TRANSIT STORAGE AND SHOP FACILITIES				
ADMINISTRATION BUILDING				
ROOF (FUTURE THIRD FLOOR) PLAN & REINFORCEMENT				
CONSULTING PROFESSIONAL ENGINEER			ARCHITECTS	
A. D. MARRISON AND ASSOCIATES LIMITED			Walterman Ross & Blankstein Coop Gillmor Hanna	
1155 LESLIE STREET, DON MILLS, ONTARIO			10 DONALD STREET, WINNIPEG, MANITOBA	
APPROVED	CHECKED	DATE	SCALE	DRAWING NO.
		APR 97	1/8" = 1'-0"	2185-334
DEPUTY DIRECTOR OF STREETS AND TRANSIT	FILE NO.			STRUCTURAL





SECTION A-A

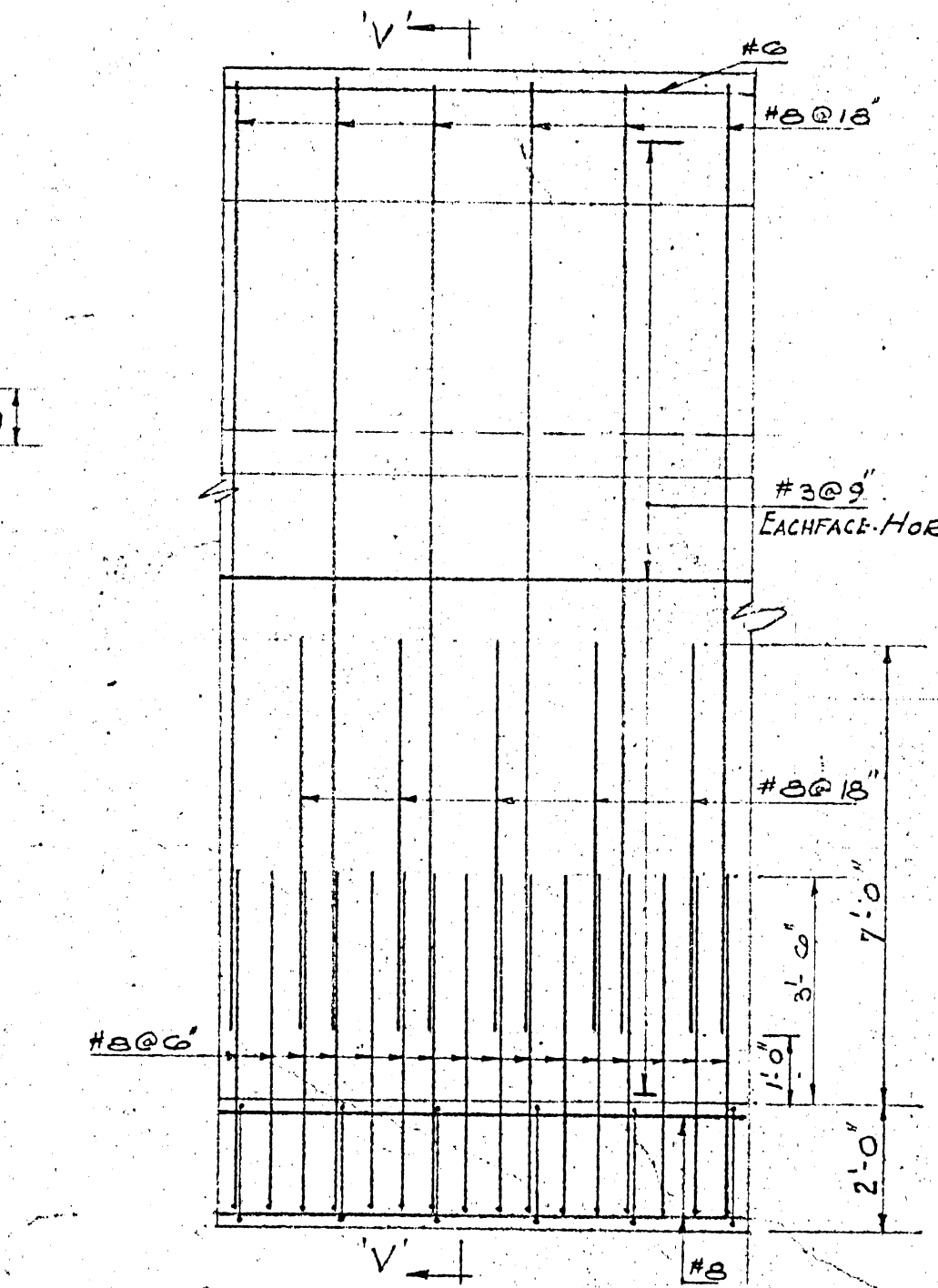


SECTION C-C

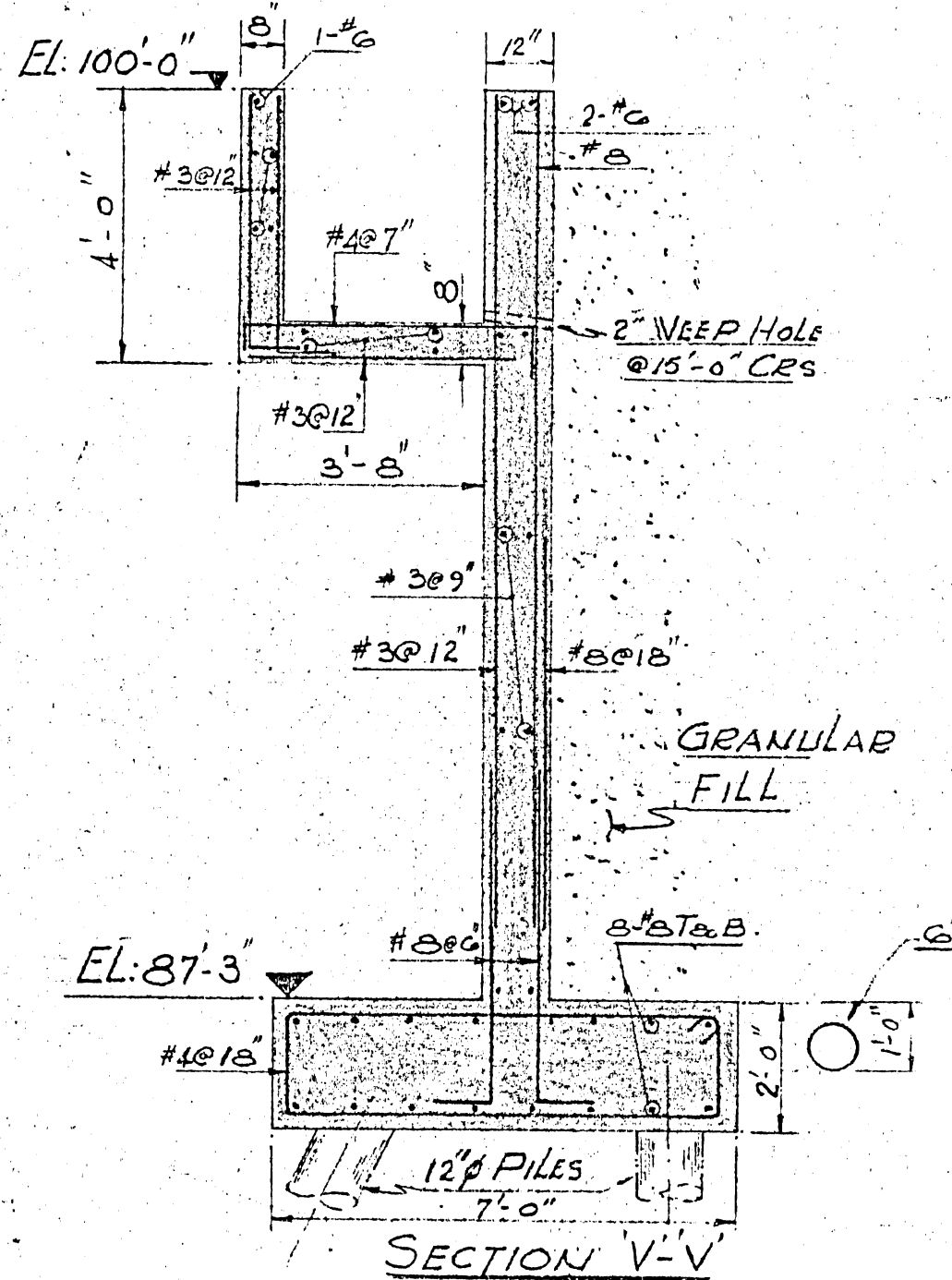
TYPICAL SECTION THRU FLOOR SLAB (BASEMENT)

COLUMN	BASEMENT TO MAIN FLOOR	MAIN FLOOR TO 2ND FLOOR	2ND FLOOR TO ROOF
C1 20	8'-9"	8'-8"	8'-6"
C1 21	8'-9"	18' x 18"	18' x 18"
C6 19	8'-7"	8'-6"	8'-6"
C6 22	8'-7"	18' x 18"	18' x 18"
C6 20	8'-7"	8'-6"	8'-6"
C6 21	22' x 22"	18' x 18"	18' x 18"
D6 20	8'-9"	18' x 18"	18' x 18"
D6 21	8'-9"	18' x 18"	18' x 18"
C2 22	8'-9"	22' x 22"	22' x 22"
D2 18	8'-9"	22' x 22"	22' x 22"
D2 19	8'-9"	22' x 22"	22' x 22"
D2 20	8'-9"	22' x 22"	22' x 22"
D2 21	8'-9"	22' x 22"	22' x 22"
D2 22	8'-9"	22' x 22"	22' x 22"

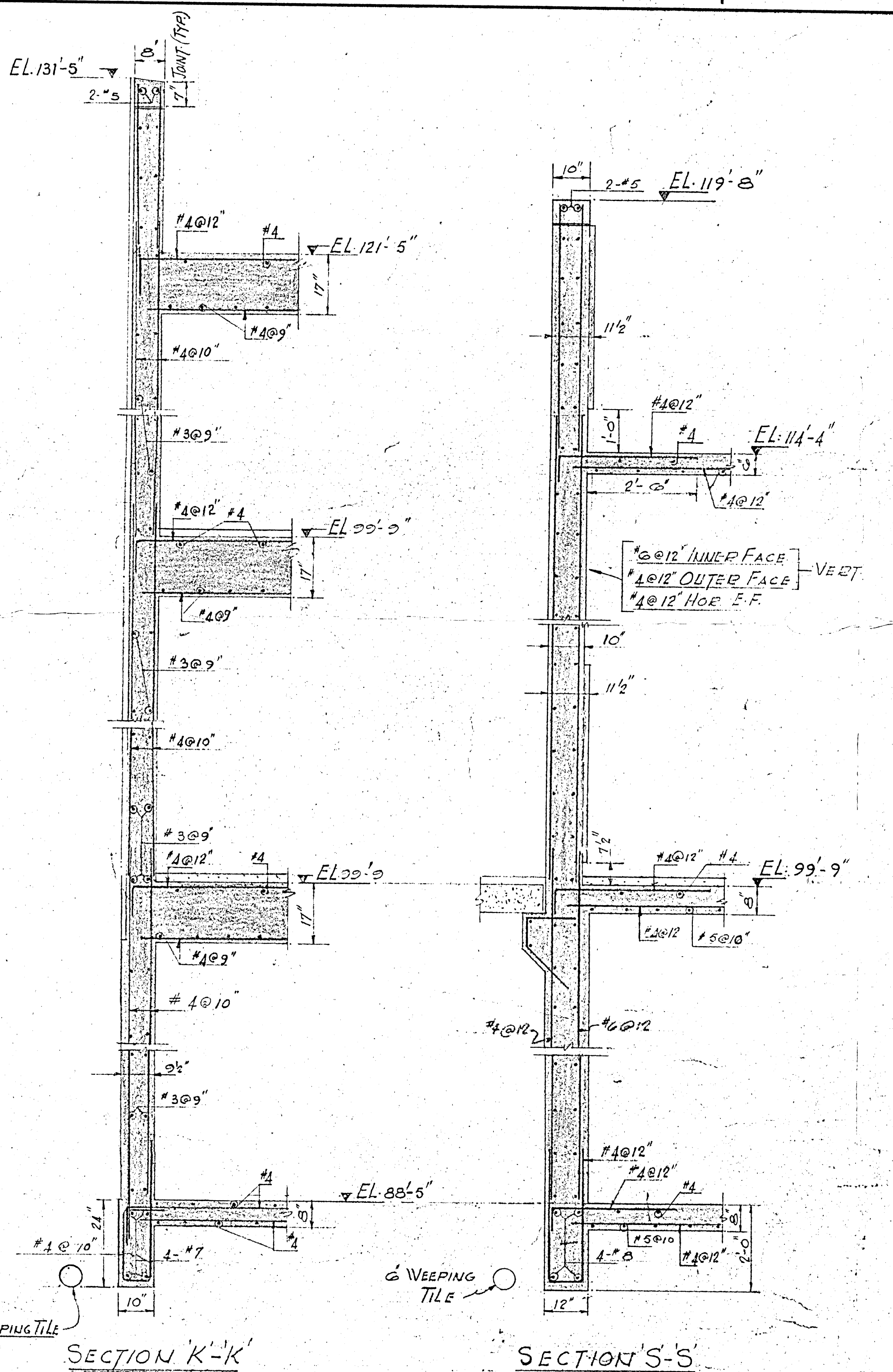
STAIRS: #5 @ 12" O.C.
BARS TO BE LAPPED 20D.



PART ELEV. OF RETAINING WALL

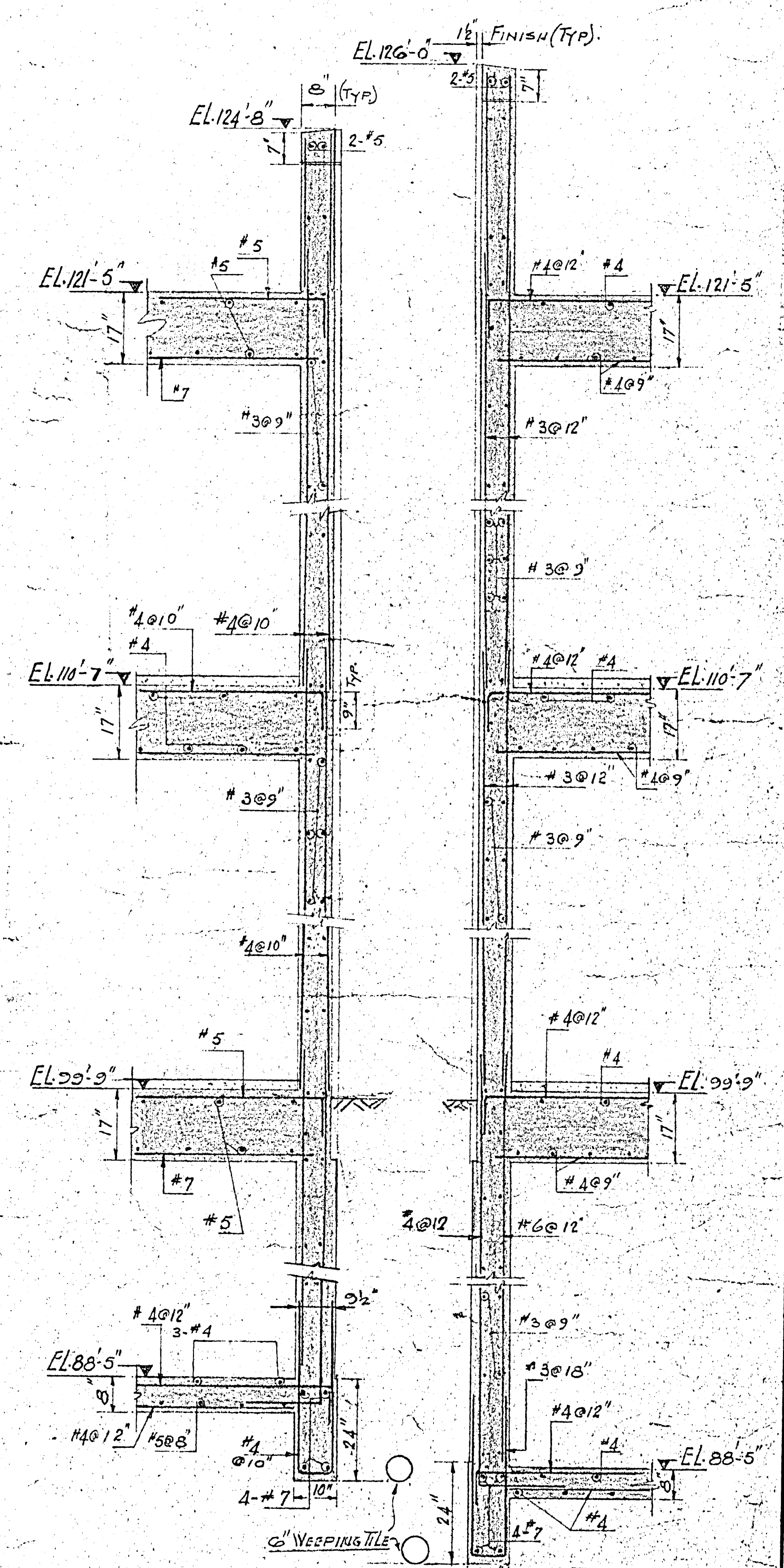


SECTION V-V



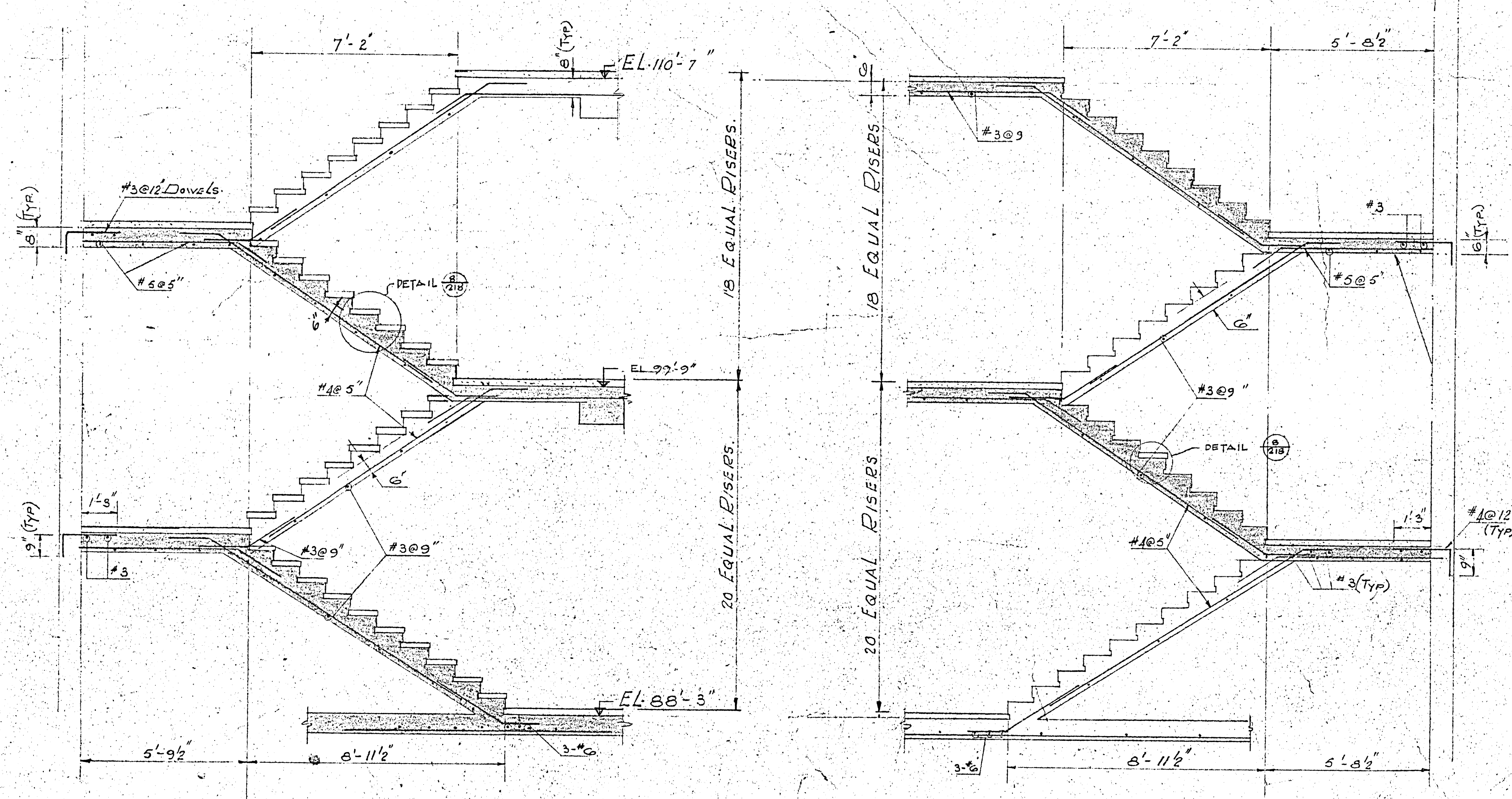
SECTION K-K

SECTION S-S

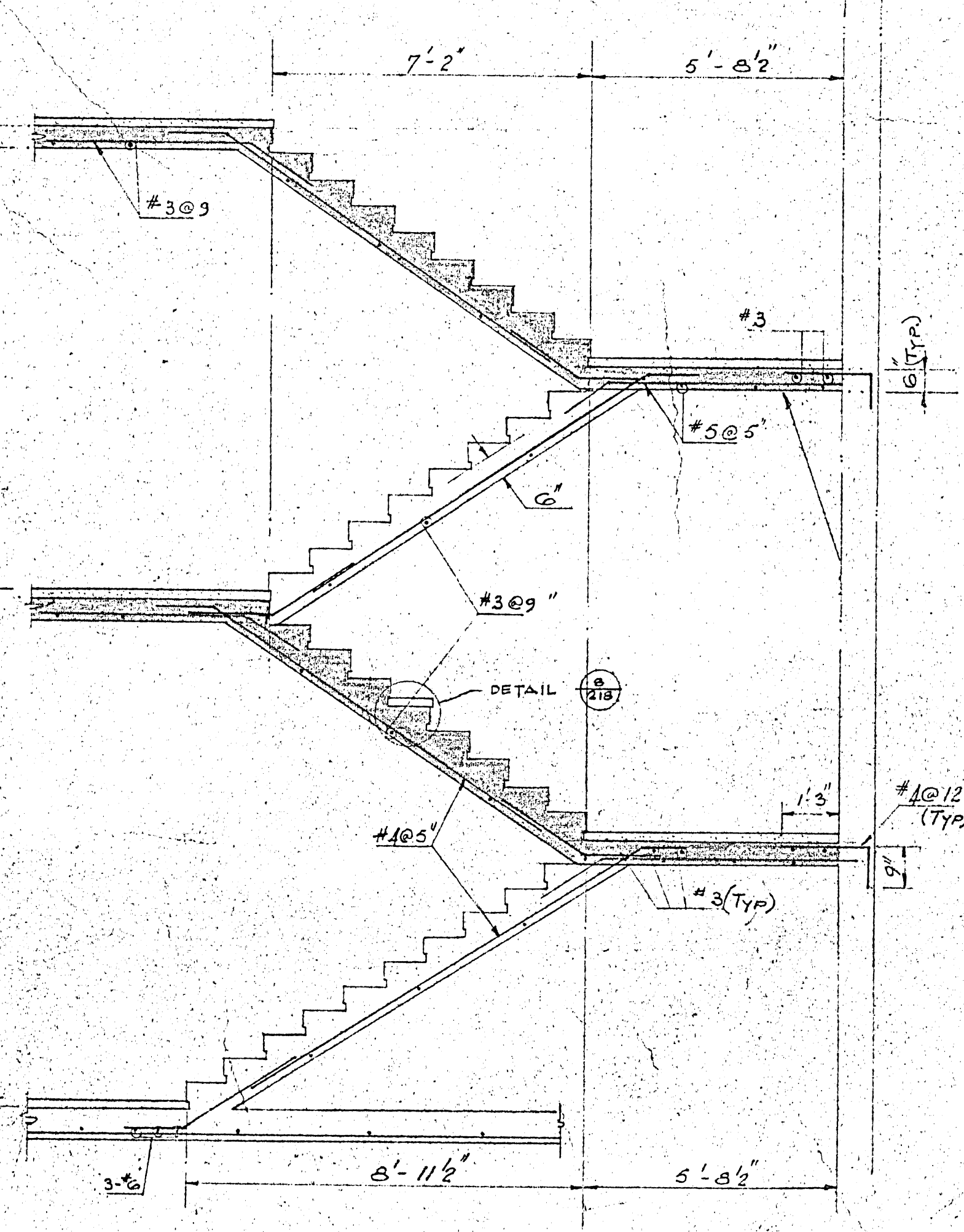


SECTION H-H

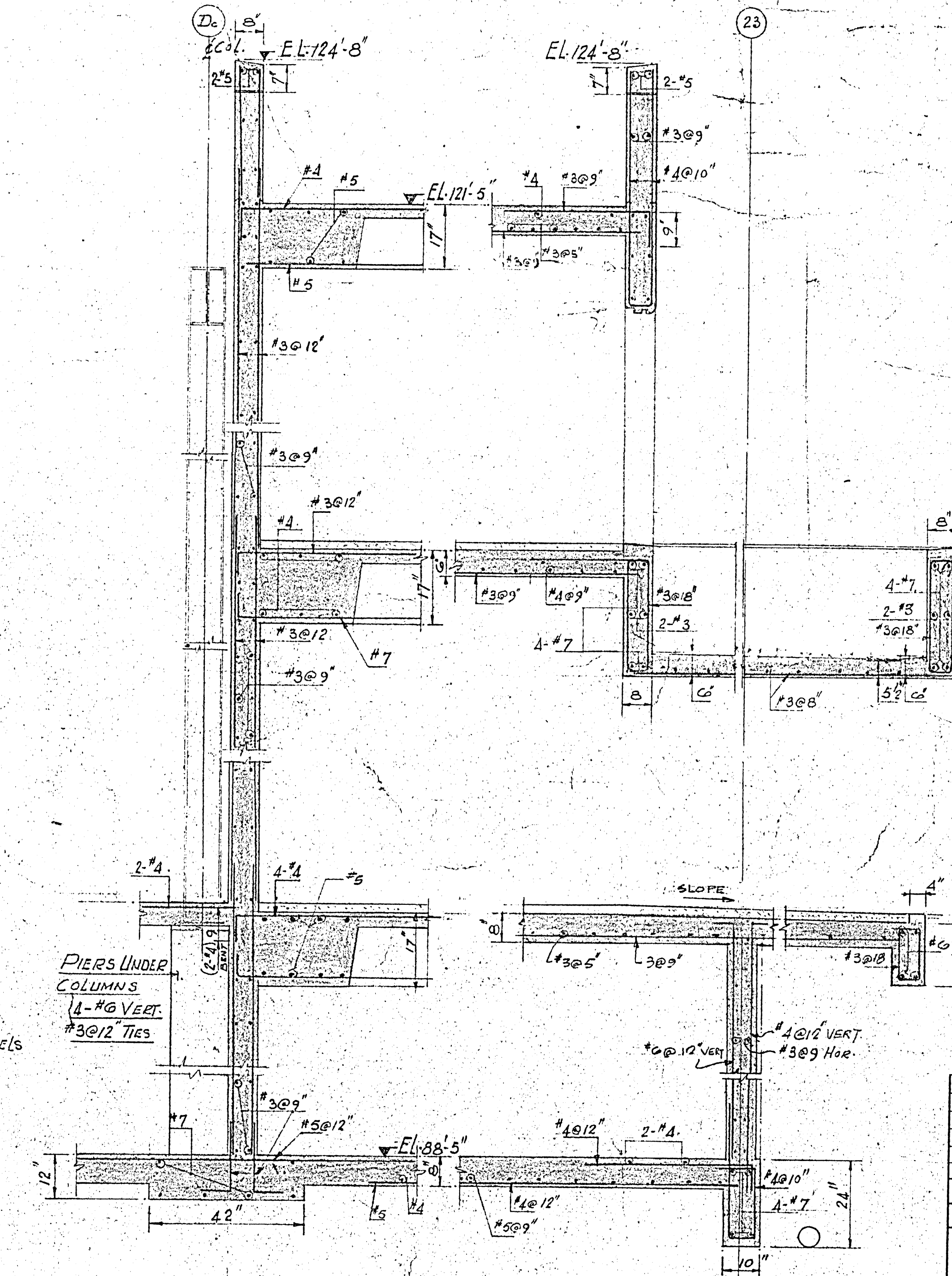
SECTION J-J



ELEVATION STAIR HALL



ELEVATION STAIR HALL

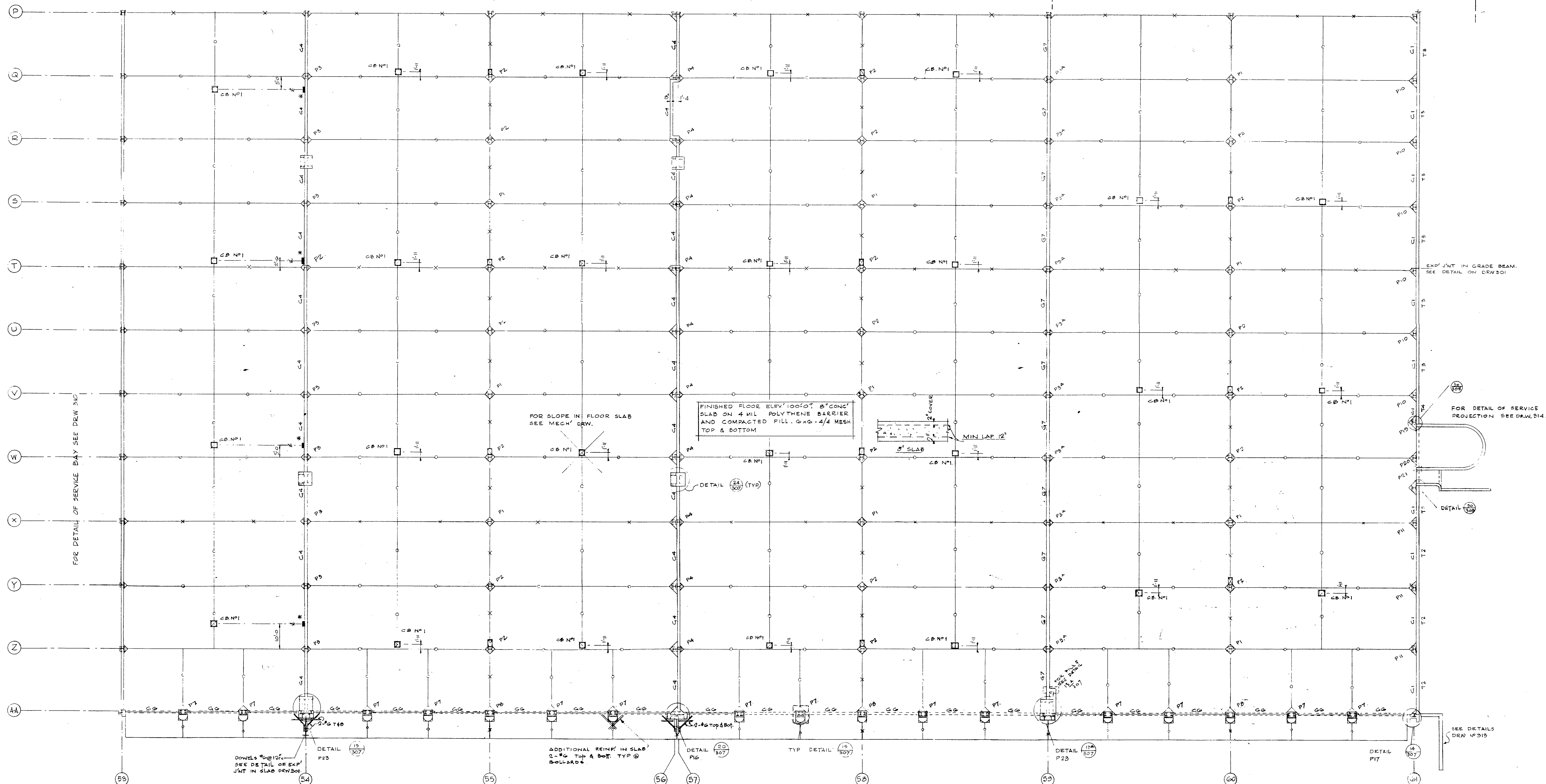


SECTION F-F

SECTION G-G

25-1-69	AS BUILT	R.L.S.
10-1-68	REVISED AS PER APPENDIX 1-5 - FOR CONSTRUCTION	R.L.S.
04-1-68	FOR TENDER	R.L.S.
DATE	FOR APPROVAL	DATE
ISSUE OR REVISION		
METROPOLITAN CORPORATION OF GREATER WINNIPEG		
STREETS AND TRANSIT DIVISION		
TRANSIT STORAGE AND SHOP FACILITIES		
ADMINISTRATION BUILDING		
SECTIONS		
CONSULTING PROFESSIONAL ENGINEERS		
A. D. MARGISON AND ASSOCIATES LIMITED		
1155 LESLIE STREET, DON MILLS, ONTARIO		
ARCHITECTS		
WATKIN ROSS & BLANKSTEIN COOP GILLMOR HANNA		
10 DONALD STREET, WINNIPEG, MANITOBA		
APPROVED	DRAWN BY	DATE
DEPUTY DIRECTOR OF STREETS AND TRANSIT	RR	MAY 67
CHECKED	FILE NO.	SCALE
2185-336	2185-336	1/8" = 1'-0"
STRUCTURAL		

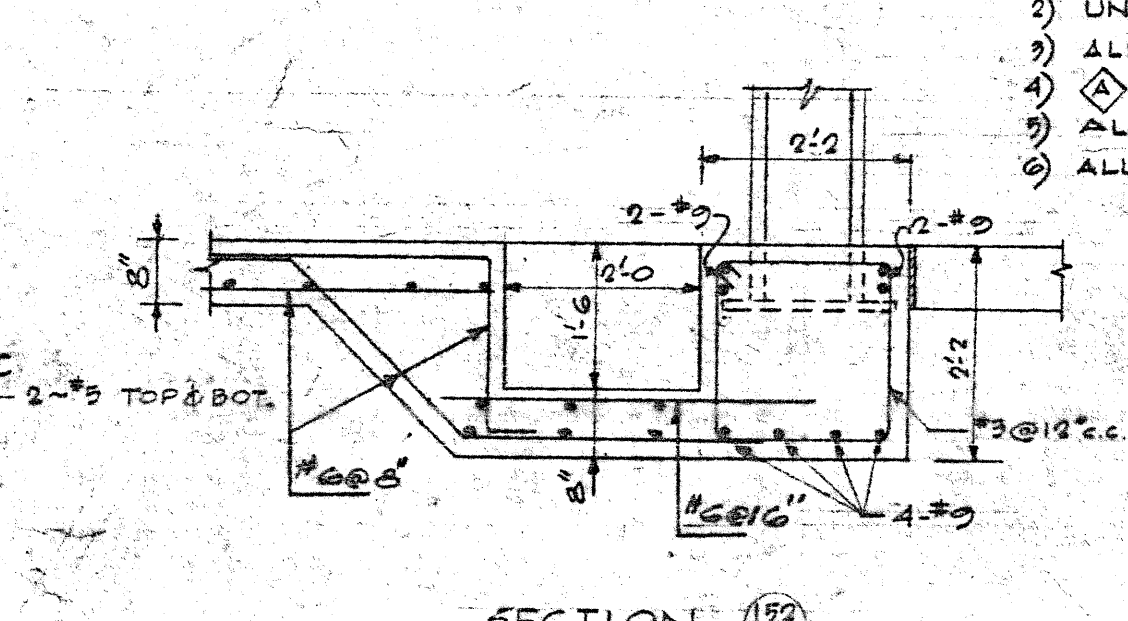
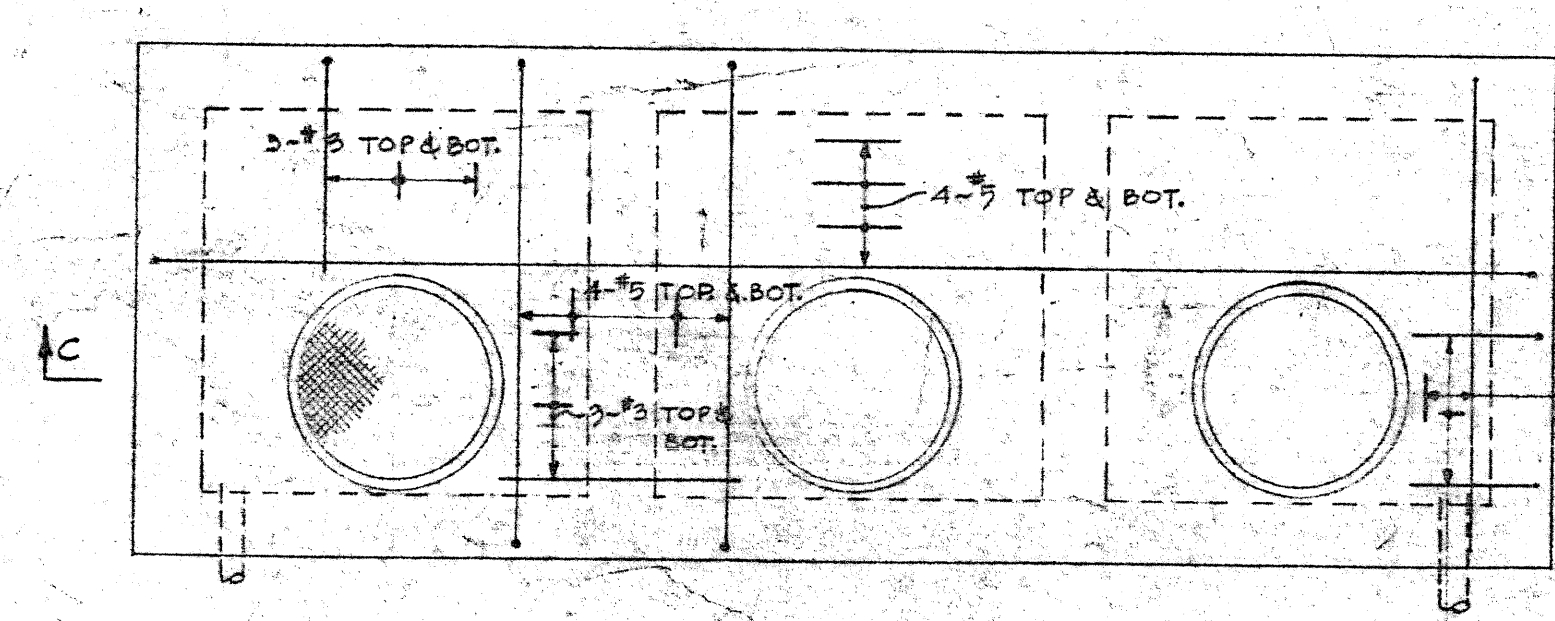
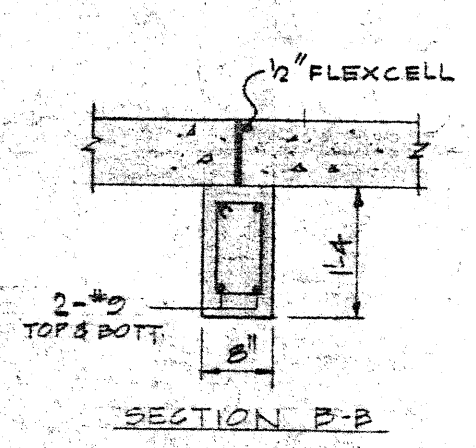
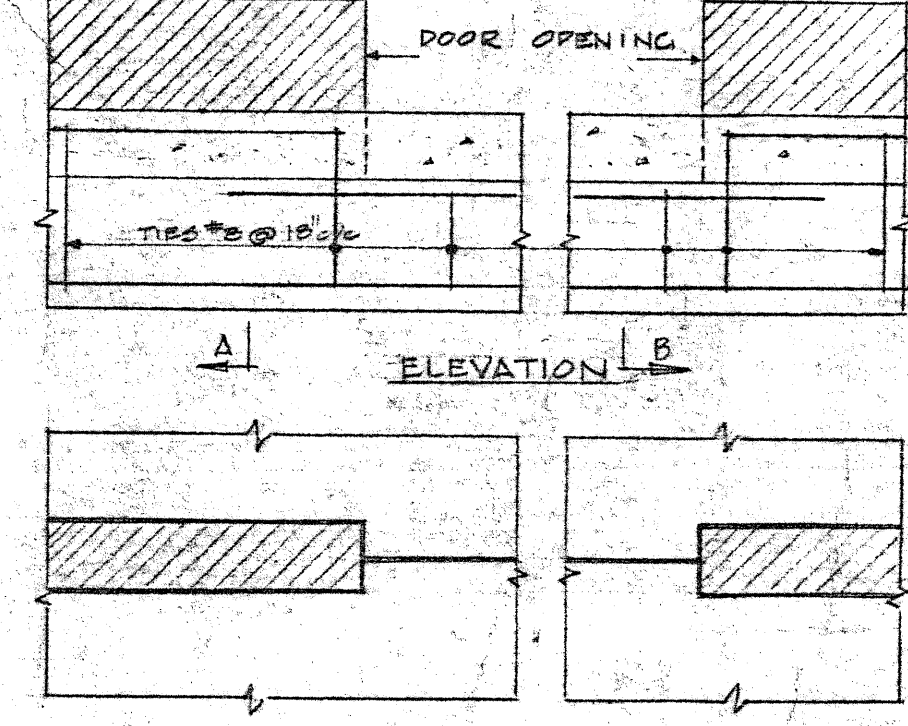
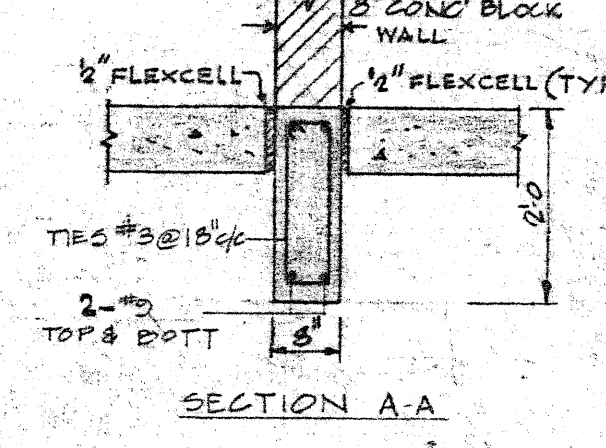
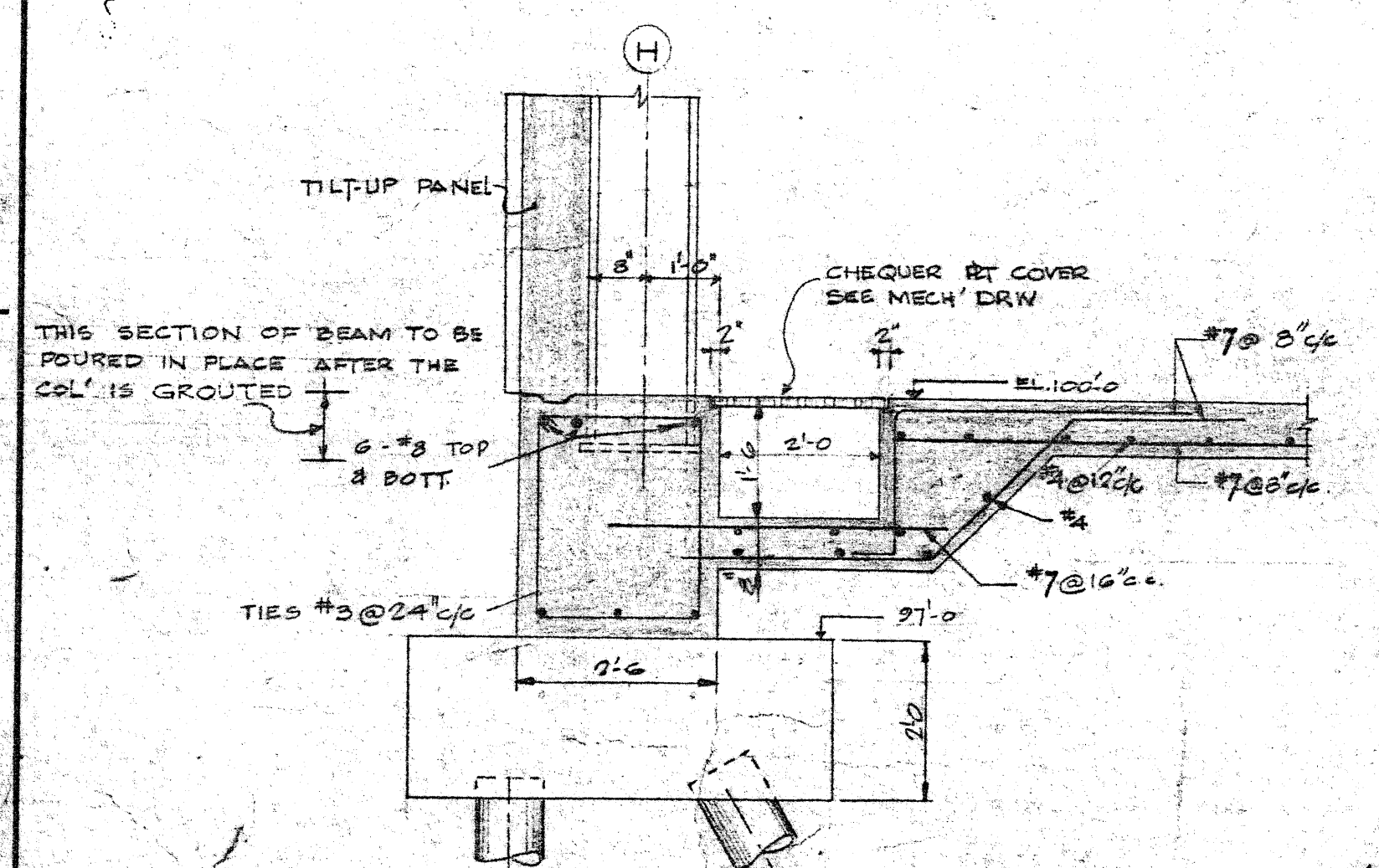
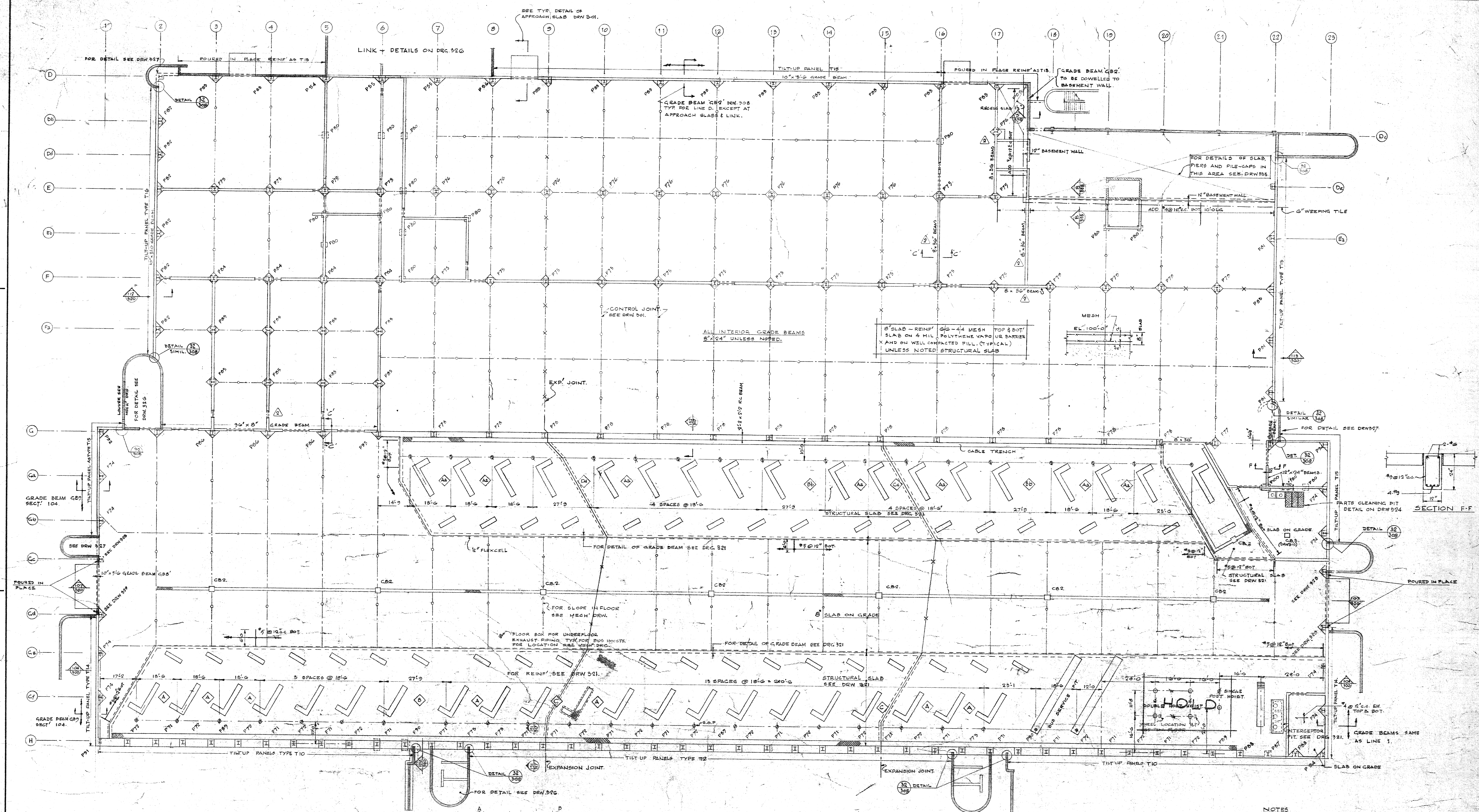
NOT IN CONTRACT
SEE SPECIFICATION



FOOTINGS ON LINES 60 & 61 NOT TO BE INCLUDED IN THIS CONTRACT.

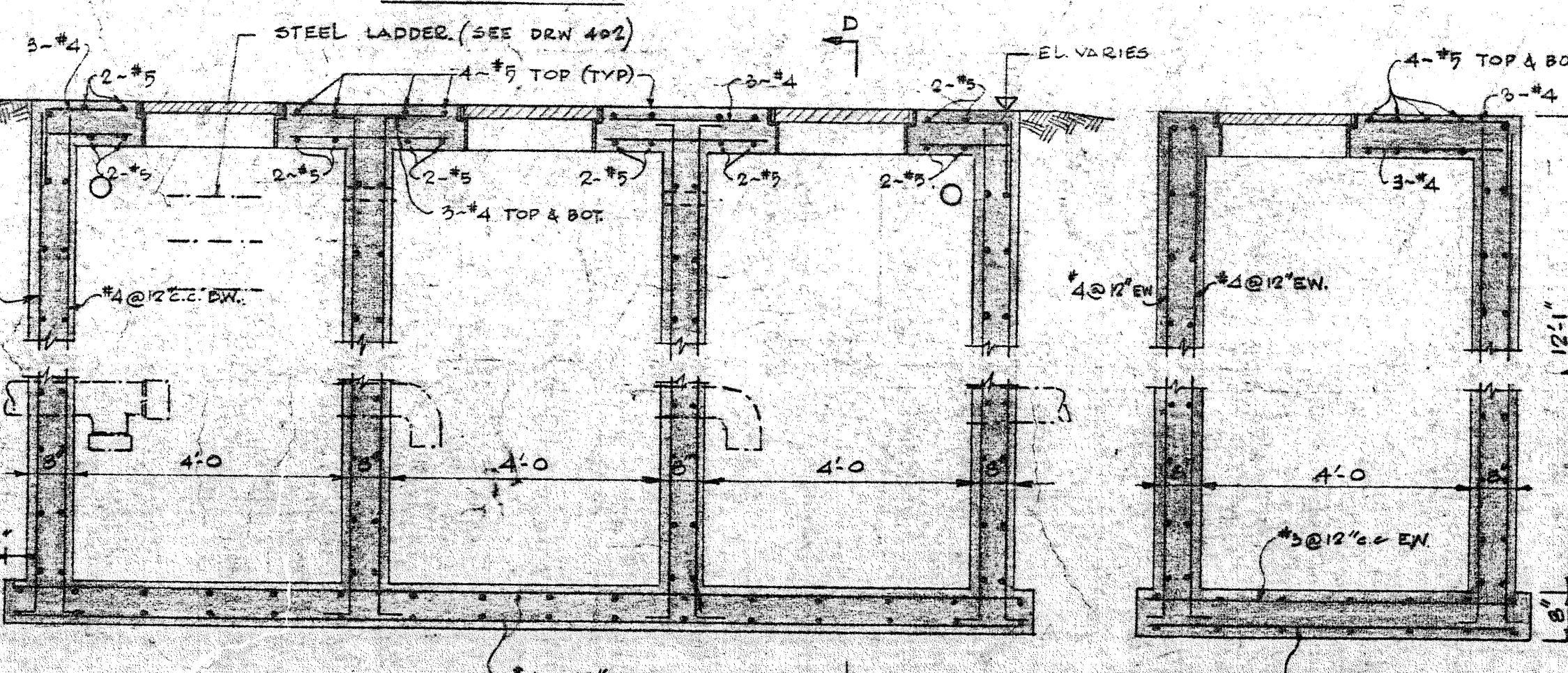
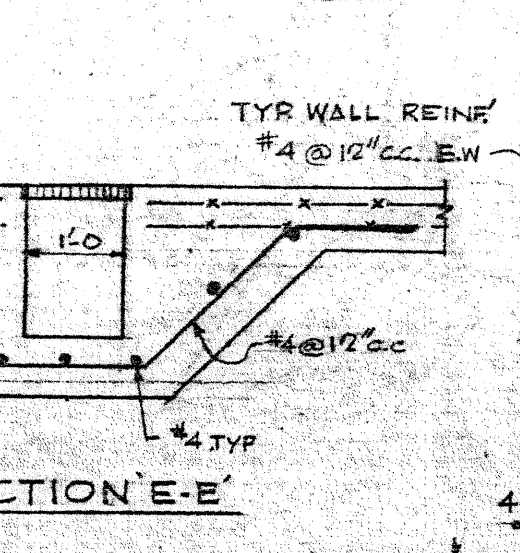
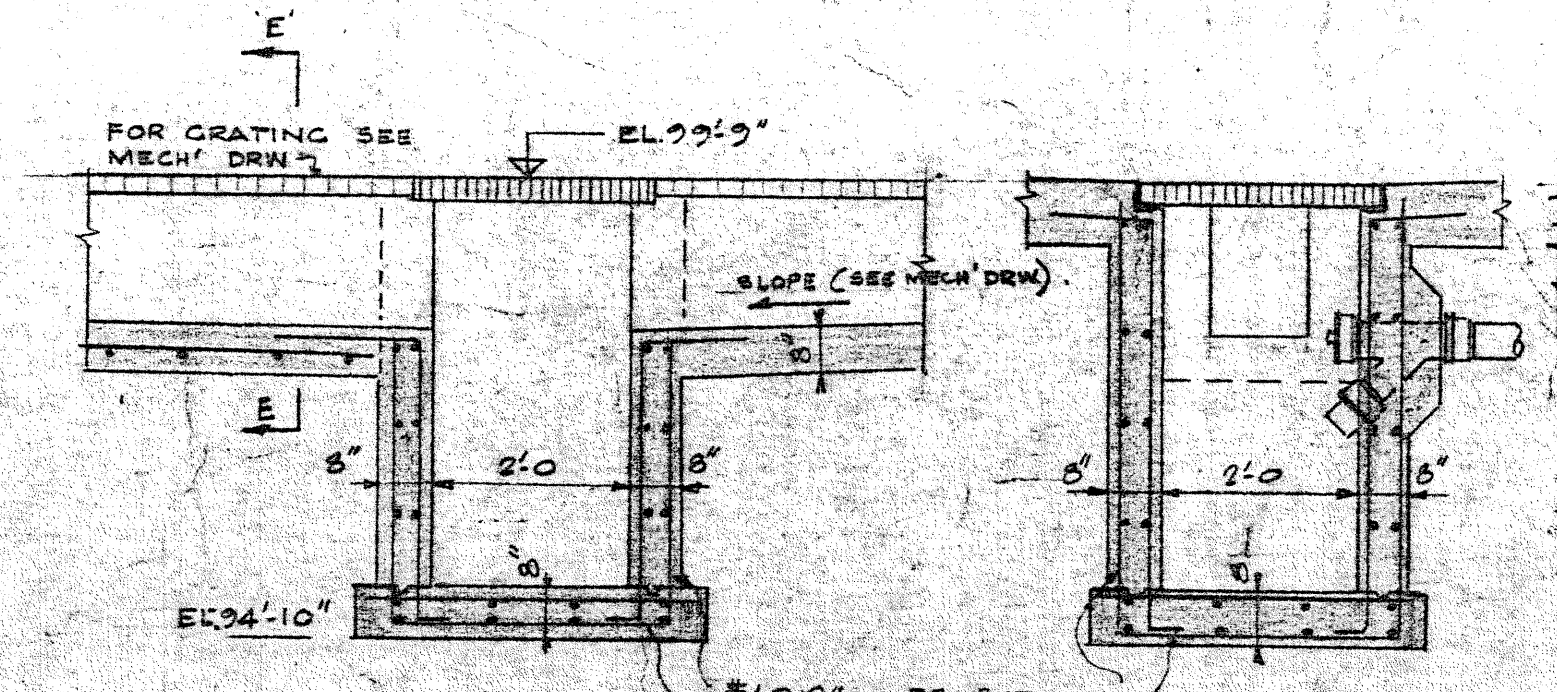
PIER AND PILE-CAP SCHEDULE: - FOR SPECIAL PILE-CAP DETAILS SEE DRG. 305

MARK	50-57 HUKM NPR25UVW XYZ	58-65 V 60NQT	66-73 G 60DEHKD	74-81 DL 60L	82-89 LWRP TUVW 54W.	90-97 H 60GJ 55J	98-105 T 57L 57T	106-113 X	114-121 G 60BCXYZ	122-129 H 60PQRST UV.M	130-137 G 60DEFHIK	138-145 A 55A 55B 55C 55D 55E 55F 55G 55H 55I 55J 55K 55L 55M 55N 55O 55P 55Q 55R 55S 55T 55U 55V 55W 55X 55Y 55Z	146-153 X 55XYZ	154-161 Y 55Y	162-169 Z	170-177 M 55MPTU 54V.R	178-185 Y 55Y	186-193 Z	194-201 M 55MPTU 54V.R	202-209 Y 55Y	210-217 Z	218-225 M 55MPTU 54V.R	226-233 Y 55Y	234-241 M 55MPTU 54V.R	242-249 Y 55Y	250-257 Z	258-265 M 55MPTU 54V.R	266-273 Y 55Y	274-281 Z	282-289 M 55MPTU 54V.R	290-297 Y 55Y	298-305 Z	306-313 M 55MPTU 54V.R	314-321 Y 55Y	322-329 Z	330-337 M 55MPTU 54V.R	338-345 Y 55Y	346-353 Z	354-361 M 55MPTU 54V.R	362-369 Y 55Y	370-377 Z	378-385 M 55MPTU 54V.R	386-393 Y 55Y	394-401 Z	402-409 M 55MPTU 54V.R	410-417 Y 55Y	418-425 Z	426-433 M 55MPTU 54V.R	434-441 Y 55Y	442-449 Z	450-457 M 55MPTU 54V.R	458-465 Y 55Y	466-473 Z	474-481 M 55MPTU 54V.R	482-489 Y 55Y	490-497 Z	498-505 M 55MPTU 54V.R	506-513 Y 55Y	514-521 Z	522-529 M 55MPTU 54V.R	530-537 Y 55Y	538-545 Z	546-553 M 55MPTU 54V.R	554-561 Y 55Y	562-569 Z	570-577 M 55MPTU 54V.R	578-585 Y 55Y	586-593 Z	594-601 M 55MPTU 54V.R	602-609 Y 55Y	610-617 Z	618-625 M 55MPTU 54V.R	626-633 Y 55Y	634-641 Z	642-649 M 55MPTU 54V.R	650-657 Y 55Y	658-665 Z	666-673 M 55MPTU 54V.R	674-681 Y 55Y	682-689 Z	690-697 M 55MPTU 54V.R	698-705 Y 55Y	706-713 Z	714-721 M 55MPTU 54V.R	722-729 Y 55Y	730-737 Z	738-745 M 55MPTU 54V.R	746-753 Y 55Y	754-761 Z	762-769 M 55MPTU 54V.R	770-777 Y 55Y	778-785 Z	786-793 M 55MPTU 54V.R	794-801 Y 55Y	802-809 Z	810-817 M 55MPTU 54V.R	818-825 Y 55Y	826-833 Z	834-841 M 55MPTU 54V.R	842-849 Y 55Y	850-857 Z	858-865 M 55MPTU 54V.R	866-873 Y 55Y	874-881 Z	882-889 M 55MPTU 54V.R	890-897 Y 55Y	898-905 Z	906-913 M 55MPTU 54V.R	914-921 Y 55Y	922-929 Z	930-937 M 55MPTU 54V.R	938-945 Y 55Y	946-953 Z	954-961 M 55MPTU 54V.R	962-969 Y 55Y	970-977 Z	978-985 M 55MPTU 54V.R	986-993 Y 55Y	994-1001 Z	1002-1009 M 55MPTU 54V.R	1010-1017 Y 55Y	1018-1025 Z	1026-1033 M 55MPTU 54V.R	1034-1041 Y 55Y	1042-1049 Z	1050-1057 M 55MPTU 54V.R	1058-1065 Y 55Y	1066-1073 Z	1074-1081 M 55MPTU 54V.R	1082-1089 Y 55Y	1090-1097 Z	1098-1105 M 55MPTU 54V.R	1106-1113 Y 55Y	1114-1121 Z	1122-1129 M 55MPTU 54V.R	1130-1137 Y 55Y	1138-1145 Z	1146-1153 M 55MPTU 54V.R	1154-1161 Y 55Y	1162-1169 Z	1170-1177 M 55MPTU 54V.R	1178-1185 Y 55Y	1186-1193 Z	1194-1201 M 55MPTU 54V.R	1202-1209 Y 55Y	1210-1217 Z	1218-1225 M 55MPTU 54V.R	1226-1233 Y 55Y	1234-1241 Z	1242-1249 M 55MPTU 54V.R	1250-1257 Y 55Y	1258-1265 Z	1266-1273 M 55MPTU 54V.R	1274-1281 Y 55Y	1282-1289 Z	1290-1297 M 55MPTU 54V.R	1298-1305 Y 55Y	1306-1313 Z	1314-1321 M 55MPTU 54V.R	1322-1329 Y 55Y	1330-1337 Z	1338-1345 M 55MPTU 54V.R	1346-1353 Y 55Y	1354-1361 Z	1362-1369 M 55MPTU 54V.R	1370-1377 Y 55Y	1378-1385 Z	1386-1393 M 55MPTU 54V.R	1394-1401 Y 55Y	1402-1409 Z	1410-1417 M 55MPTU 54V.R	1418-1425 Y 55Y	1426-1433 Z	1434-1441 M 55MPTU 54V.R	1442-1449 Y 55Y	1450-1457 Z	1458-1465 M 55MPTU 54V.R	1466-1473 Y 55Y	1474-1481 Z	1482-1489 M 55MPTU 54V.R	1490-1497 Y 55Y	1498-1505 Z	1506-1513 M 55MPTU 54V.R	1514-1521 Y 55Y	1522-1529 Z	1530-1537 M 55MPTU 54V.R	1538-1545 Y 55Y	1546-1553 Z	1554-1561 M 55MPTU 54V.R	1562-1569 Y 55Y	1570-1577 Z	1578-1585 M 55MPTU 54V.R	1586-1593 Y 55Y	1594-1601 Z	1602-1609 M 55MPTU 54V.R	1610-1617 Y 55Y	1618-1625 Z	1626-1633 M 55MPTU 54V.R	1634-1641 Y 55Y	1642-1649 Z	1650-1657 M 55MPTU 54V.R	1658-1665 Y 55Y	1666-1673 Z	1674-1681 M 55MPTU 54V.R	1682-1689 Y 55Y	1690-1697 Z	1698-1705 M 55MPTU 54V.R	1706-1713 Y 55Y	1714-1721 Z	1722-1729 M 55MPTU 54V.R	1730-1737 Y 55Y	1738-1745 Z	1746-1753 M 55MPTU 54V.R	1754-1761 Y 55Y	1762-1769 Z	1770-1777 M 55MPTU 54V.R	1778-1785 Y 55Y	1786-1793 Z	1794-1801 M 55MPTU 54V.R	1802-1809 Y 55Y	1810-1817 Z	1818-1825 M 55MPTU 54V.R	1826-1833 Y 55Y	1834-1841 Z	1842-1849 M 55MPTU 54V.R	1850-1857 Y 55Y	1858-1865 Z	1866-1873 M 55MPTU 54V.R	1874-1881 Y 55Y	1882-1889 Z	1890-1897 M 55MPTU 54V.R	1898-1905 Y 55Y	1906-1913 Z	1914-1921 M 55MPTU 54V.R	1922-1929 Y 55Y	1930-1937 Z	1938-1945 M 55MPTU 54V.R	1946-1953 Y 55Y	1954-1961 Z	1962-1969 M 55MPTU 54V.R	1970-1977 Y 55Y	1978-1985 Z	1986-1993 M 55MPTU 54V.R	1994-2001 Y 55Y	2002-2009 Z	2010-2017 M 55MPTU 54V.R	2018-2025 Y 55Y	2026-2033 Z	2034-2041 M 55MPTU 54V.R	2042-2049 Y 55Y	2050-2057 Z	2058-2065 M 55MPTU 54V.R	2066-2073 Y 55Y	2074-2081 Z	2082-2089 M 55MPTU 54V.R	2090-2097 Y 55Y	2098-2105 Z	2106-2113 M 55MPTU 54V.R	2114-2121 Y 55Y	2122-2129 Z	2130-2137 M 55MPTU 54V.R	2138-2145 Y 55Y	2146-2153 Z	2154-2161 M 55MPTU 54V.R	2162-2169 Y 55Y	2170-2177 Z	2178-2185 M 55MPTU 54V.R	2186-2193 Y 55Y	2194-2201 Z	2202-2209 M 55MPTU 54V.R	2210-2217 Y 55Y	2218-2225 Z	2226-2233 M 55MPTU 54V.R	2234-2241 Y 55Y	2242-2249 Z	2250-2257 M 55MPTU 54V.R	2258-2265 Y 55Y	2266-2273 Z	2274-2281 M 55MPTU 54V.R	2282-2289 Y 55Y	2290-2297 Z	2298-2305 M 55MPTU 54V.R	2306-2313 Y 55Y	2314-2321 Z	2322-2329 M 55MPTU 54V.R	2330-2337 Y 55Y	2338-2345 Z	2346-2353 M 55MPTU 54V.R	2354-2361 Y 55Y	2362-2369 Z	2370-2377 M 55MPTU 54V.R	2378-2385 Y 55Y	2386-2393 Z	2394-2401 M 55MPTU 54V.R	2402-2409 Y 55Y	2410-2417 Z	2418-2425 M 55MPTU 54V.R	2426-2433 Y 55Y	2434-2441 Z	2442-2449 M 55MPTU 54V.R	2450-2457 Y 55Y	2458-2465 Z	2466-2473 M 55MPTU 54V.R	2474-2481 Y 55Y	2482-2489 Z	2490-2497 M 55MPTU 54V.R	2498-2505 Y 55Y	2506-2513 Z	2514-2521 M 55MPTU 54V.R	2522-2529 Y 55Y	2530-2537 Z	2538-2545 M 55MPTU 54V.R	2546-2553 Y 55Y	2554-2561 Z	2562-2569 M 55MPTU 54V.R	2570-2577 Y 55Y	2578-2585 Z	2586-2593 M 55MPTU 54V.R	2594-2601 Y 55Y	2602-2609 Z	2610-2617 M 55MPTU 54V.R	2618-2625 Y 55Y	2626-2633 Z	2634-2641 M 55MPTU 54V.R	2642-2649 Y 55Y	2650-2657 Z	2658-2665 M 55MPTU 54V.R	2666-2673 Y 55Y	2674-2681 Z	2682-2689 M 55MPTU 54V.R	2690-2697 Y 55Y	2698-2705 Z	2706-2713 M 55MPTU 54V.R	2714-2721 Y 55Y	2722-2729 Z	2730-2737 M 55MPTU 54V.R	2738-2745 Y 55Y	2746-2753 Z	2754-2761 M 55MPTU 54V.R	2762-2769 Y 55Y	2770-2777 Z	2778-2785 M 55MPTU 54V.R	2786-2793 Y 55Y	2794-2801 Z	2802-2809 M 55MPTU 54V.R	2810-2817 Y 55Y	2818-2825 Z	2826-2833 M 55MPTU 54V.R	2834-2841 Y 55Y	2842-2849 Z	2850-2857 M 55MPTU 54V.R	2858-2865 Y 55Y	2866-2873 Z	2874-2881 M 55MPTU 54V.R	2882-2889 Y 55Y	2890-2897 Z	2898-2905 M 55MPTU 54V.R	2906-2913 Y 55Y	2914-2921 Z	2922-2929 M 55MPTU 54V.R	2930-2937 Y 55Y	2938-2945 Z	2946-2953 M 55MPTU 54V.R	2954-2961 Y 55Y	2962-2969 Z	2970-2977 M 55MPTU 54V.R	2978-2985 Y 55Y	2986-2993 Z	2994-3001 M 55MPTU 54V.R	3002-3009 Y 55Y	3010-3017 Z	3018-3025 M 55MPTU 54V.R	3026-3033 Y 55Y	3034-3041 Z	3042-3049 M 55MPTU 54V.R	3050-3057 Y 55Y	3058-3065 Z	3066-3073 M 55MPTU 54V.R	3074-3081 Y 55Y	3082-3089 Z	3090-3097 M 55MPTU 54V.R	3098-3105 Y 55Y	3106-3113 Z	3114-3121 M 55MPTU 54V.R	3122-3129 Y 55Y	3130-3137 Z	3138-3145 M 55MPTU 54V.R	3146-3153 Y 55Y	3154-3161 Z	3162-3169 M 55MPTU 54V.R	3170-3177 Y 55Y	3178-3185 Z	3186-3193 M 55MPTU 54V.R	3194-3201 Y 55Y	3202-3209 Z	3210-3217 M 55MPTU 54V.R	3218-3225 Y 55Y	3226-3233 Z	3234-3241 M 55MPTU 54V.R	3242-3249 Y 55Y	3250-3257 Z	3258-3265 M 55MPTU 54V.R	3266-3273 Y 55Y	3274-3281 Z	3282-3289 M 55MPTU 54V.R	3290-3297 Y 55Y	3298-3305 Z	3306-3313 M 55MPTU 54V.R	3314-3321 Y 55Y	3322-3329 Z	3330-3337 M 55MPTU 54V.R	3338-3345 Y 55Y	3346-3353 Z	3354-3361 M 55MPTU 54V.R	3362-3369 Y 55Y	3370-3377 Z	3378-3385 M 55MPTU 54V.R	3386-3393 Y 55Y	3394-3401 Z	3402-3409 M 55MPTU 54V.R	3410-3417 Y 55Y	3418-3425 Z	3426-3433 M 55MPTU 54V.R	3434-3441 Y 55Y	3442-3449 Z	3450-3457 M 55MPTU 54V.R	3458-3465 Y 55Y	3466-3473 Z	3474-3481 M 55MPTU 54V.R	3482-3489 Y 55Y	3490-3497 Z	3498-3505 M 55MPTU 54V.R	3506-3513 Y 55Y	3514-3521 Z	3522-3529 M 55MPTU 54V.R	3530-3537 Y 55Y	3538-3545 Z	3546-3553 M 55MPTU 54V.R	3554-3561 Y 55Y	3562-3569 Z	3570-3577 M 55MPTU 54V.R	3578-3585 Y 55Y	3586-3593 Z	3594-3601 M 55MPTU 54V.R	3602-3609 Y 55Y	3610-3617 Z	3618-3625 M 55MPTU 54V.R	3626-3633 Y 55Y	3634-3641 Z	3642-3649 M 55MPTU 54V.R	3650-3657 Y 55Y	3658-3665 Z	3666-3673 M 55MPTU 54V.R	3674-3681 Y 55Y	3682-3689 Z	3690-3697 M 55MPTU 54V.R	3698-3705 Y 55Y	3706-3713 Z	3714-3721 M 55MPTU 54V.R	3722-3729 Y 55Y	3730-3737 Z	3738-3745 M 55MPTU 54V.R	3746-3753 Y 55Y	3754-3761 Z	3762-3769 M 55MPTU 54V.R	3770-3777 Y 55Y	3778-3785 Z	3786-3793 M 55MPTU 54V.R	3794-3801 Y 55Y	3802-3809 Z	3810-3817 M 55MPTU 54V.R	3818-3825 Y 55Y	3826-3833 Z	3834-3841 M 55MPTU 54V.R	3842-3849 Y 55Y	3850-3857 Z	3858-3865 M 55MPTU 54V.R	3866-3873 Y 55Y	3874-3881 Z	3882-3889 M 55MPTU 54V.R	3890-3897 Y 55Y	3898-3905 Z	3906-3913 M 55MPTU 54V.R	3914-3921 Y 55Y	3922-3929 Z	3930-3937 M 55MPTU 54V.R	3938-3945 Y 55Y	3946-3953 Z	3954-3961 M 55MPTU 54V.R	3962-3969 Y 55Y	3970-3977 Z	3978-3985 M 55MPTU 54V.R	3986-3993 Y 55Y	3994-4001 Z	4002-4009 M 55MPTU 54V.R	4010-4017 Y 55Y	4018-4025 Z	4026-4033 M 55MPTU 54V.R	4034-4041 Y 55Y	4042-4049 Z	4050-4057 M 55MPTU 54V.R	4058-4065 Y 55Y	4066-4073 Z	4074-4081 M 55MPTU 54V.R	4082-4089 Y 55Y	4090-4097 Z	4098-4105 M 55MPTU 54V.R	4106-4113 Y 55Y	4114-4121 Z	4122-4129 M 55MPTU 54V.R	4130-4137 Y 55Y	4138-4145 Z	4146-4153 M 55MPTU 54V.R	4154-4161 Y 55Y	4162-4169 Z	4170-4177 M 55MPTU 54V.R	4178-4185 Y 55Y	4186-4193 Z	4194-4201 M 55MPTU 54V.R	4202-4209 Y 55Y	4210-4217 Z	4218-4225 M 55MPTU 54V.R	4226-4233 Y 55Y	4234-4241 Z	4242-4249 M 55MPTU 54V.R	4250-4257 Y 55Y	4258-4265 Z	4266-4273 M 55MPTU 54V.R	4274-4281 Y 55Y	4282-4289 Z	4290-4297 M 55MPTU 54V.R	4298-4305 Y 55Y	4306-4313 Z	4314-4321 M 55MPTU 54V.R	4322-4329 Y 55Y	4330-4337 Z	4338-4345 M 55MPTU 54V.R	4346-4353 Y 55Y	4354-4361 Z	4362-4369 M 55MPTU 54V.R	4370-4377 Y 55Y	4378-4385 Z	4386-4393 M 55MPTU 54V.R	4394-4401 Y 55Y	4402-4409 Z	4410-4417 M 55MPTU 54V.R	4418-4425 Y 55Y	4426-4433 Z	4434-4441 M 55MPTU 54V.R	4442-4449 Y 55Y	4450-4457 Z	4458-4465 M 55MPTU 54V.R	4466-4473 Y 55Y	4474-4481 Z	4482-4489 M 55MPTU 54V.R	4490-4497 Y 55Y	4498-4505 Z	4506-4513 M 55MPTU 54V.R	4514-4521 Y 55Y	4522-4529 Z	4530-4537 M 55MPTU 54V.R	4538-4545 Y 55Y	4546-4553 Z	4554-4561 M 55MPTU 54V.R	4562-4569 Y 55Y	4570-4577 Z	4578-4585 M 55MPTU 54V.R	4586-4593 Y 55Y	4594-4601 Z	4602-4609 M 55MPTU 54V.R	4610-4617 Y 55Y	4618-4625 Z	4626-4633 M 55MPTU 54V.R	4634-4641 Y 55Y	4642-4649 Z	4650-4657 M 55MPTU 54V.R	4658-4665 Y 55Y	4666-4673 Z	4674-4681 M 55MPTU 54V.R	4682-4689 Y 55Y	4690-4697 Z	4698-4705 M 55MPTU 54V.R	4706-4713 Y 55Y	4714-4721 Z	4722-4729 M 55MPTU 54V.R	4730-4737 Y 55Y	4738-4745 Z	4746-4753 M 55MPTU 54V.R	4754-4761 Y 55Y	4762-4769 Z	4770-4777 M 55MPTU 54V.R	4778-4785 Y 55Y	4786-4793 Z	4794-4801 M 55MPTU 54V.R	4802-4809 Y 55Y	4810
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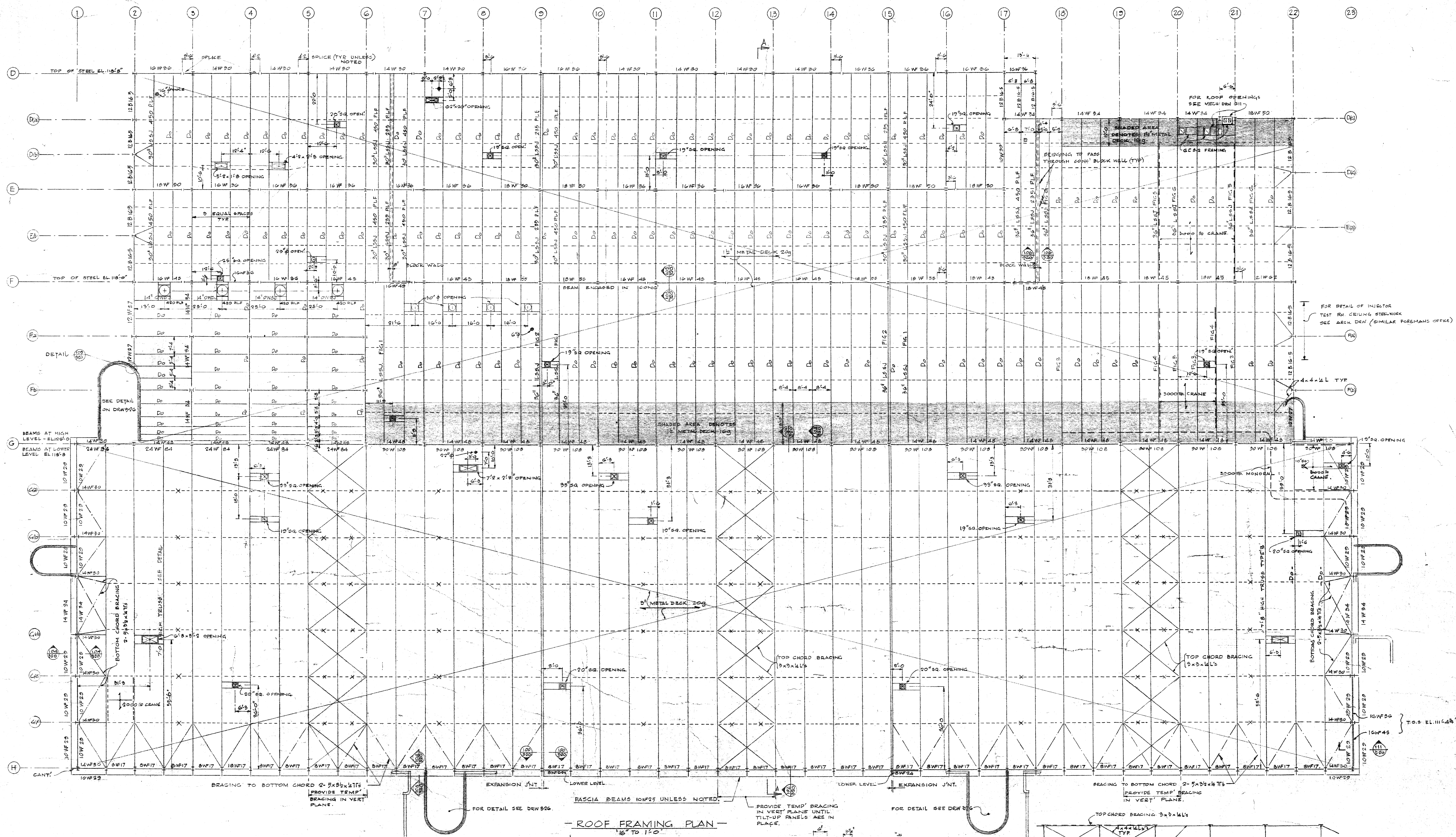


- NOTES
- 1) TYPE OF TILT-UP PANEL SEE DRW 325.
 - 2) UNDER STRUCTURAL SLAB PROVIDE 6" VOID SEE SPEC.
 - 3) ALL PIT DIMENSIONS TO BE VERIFIED.
 - 4) TYPE OF SLAB REINFORCEMENT SEE DRW 321.
 - 5) ALL FLEXCELL JOINTS SHALL BE SEALED WITH JOINT SEALANT.
 - 6) ALL CATCH BASINS TO BE WATER-PROOFED WITH METALLIC WATER-PROOFING.

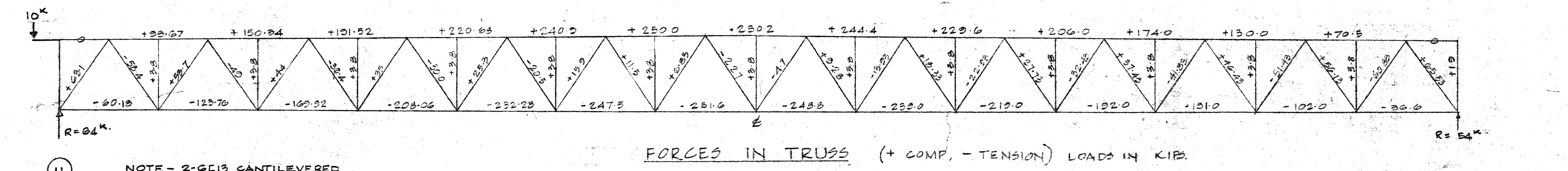
LICENSED TO PRACTICE
IN THE
PROVINCE OF MANITOBA
1974-1975
2185-317



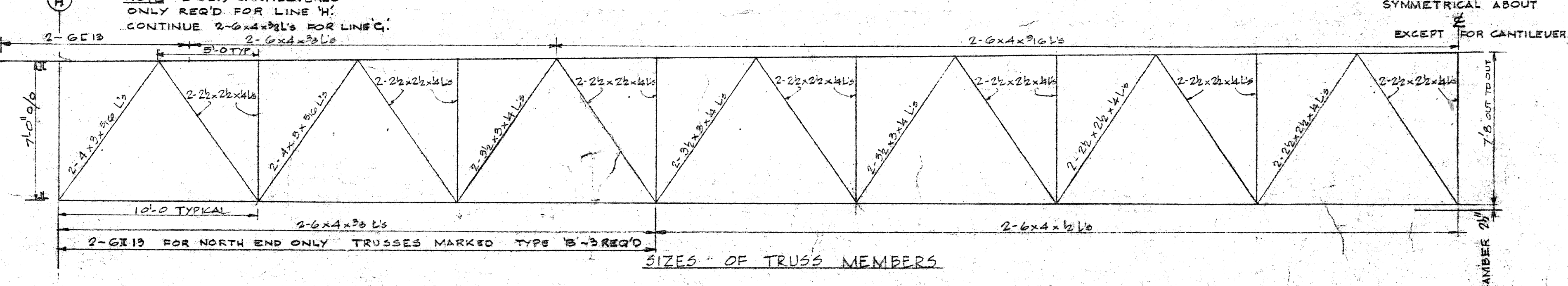
REVISIONS				DATE		BY	
1	AS BUILT	7/1/68	5	7/1/68	5	7/1/68	5
2	REINFORCEMENT IN FLOOR (CHANGED) SEE SAG. 181	7/1/68	4	7/1/68	4	7/1/68	4
3	BEAM SIZE REVISED & DOOR OPENINGS ADDED	7/1/68	3	7/1/68	3	7/1/68	3
4	REVISED PER ADDENDUM 1103 - FOR CONSTRUCTION	7/1/68	2	7/1/68	2	7/1/68	2
5	FOR TENDERS FOR APPROVAL	7/1/68	1	7/1/68	1	7/1/68	1
DESCRIPTION				DATE		BY	
ISSUE OR REVISION				DATE		BY	
METROPOLITAN CORPORATION OF GREATER WINNIPEG				DATE		BY	
STREETS AND TRANSIT DIVISION				DATE		BY	
TRANSIT STORAGE AND SHOP FACILITIES				DATE		BY	
OVERHAUL & REPAIR SHOP				DATE		BY	
FOUNDATION PLAN				DATE		BY	
CONSULTING PROFESSIONAL ENGINEERS				DATE		BY	
A. D. MARGISON AND ASSOCIATES LIMITED				DATE		BY	
1185 LEBLANC STREET, DON MILLS, ONTARIO				DATE		BY	
ARCHITECTS				DATE		BY	
Wesman Ross & Blankenship, Coop Gillmor Hanna				DATE		BY	
1185 LEBLANC STREET, DON MILLS, ONTARIO				DATE		BY	
APPROVED				DATE		BY	
CHECKED				DATE		BY	
DESIGNED				DATE		BY	
DRAWN				DATE		BY	
SCALE 1/4" = 1'-0"				DATE		BY	
UNLESS OTHERWISE NOTED				DATE		BY	
2185-317				DATE		BY	
STRUCTURAL				DATE		BY	



ROOF FRAMING PLAN
1/8" TO 1/4"

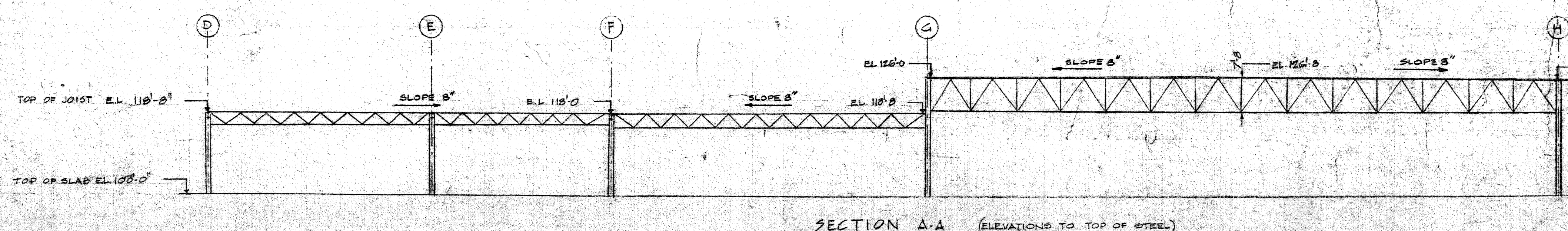


FORCES IN TRUSS (+ COMP. - TENSION) LOADS IN KIPS

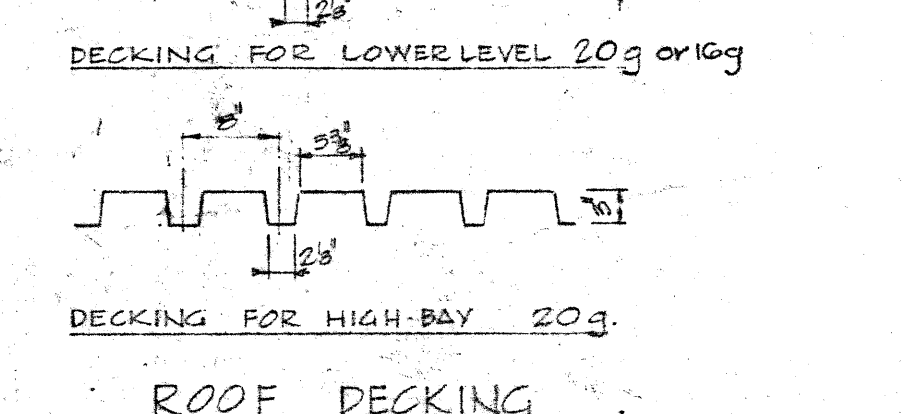


SIZES OF TRUSS MEMBERS

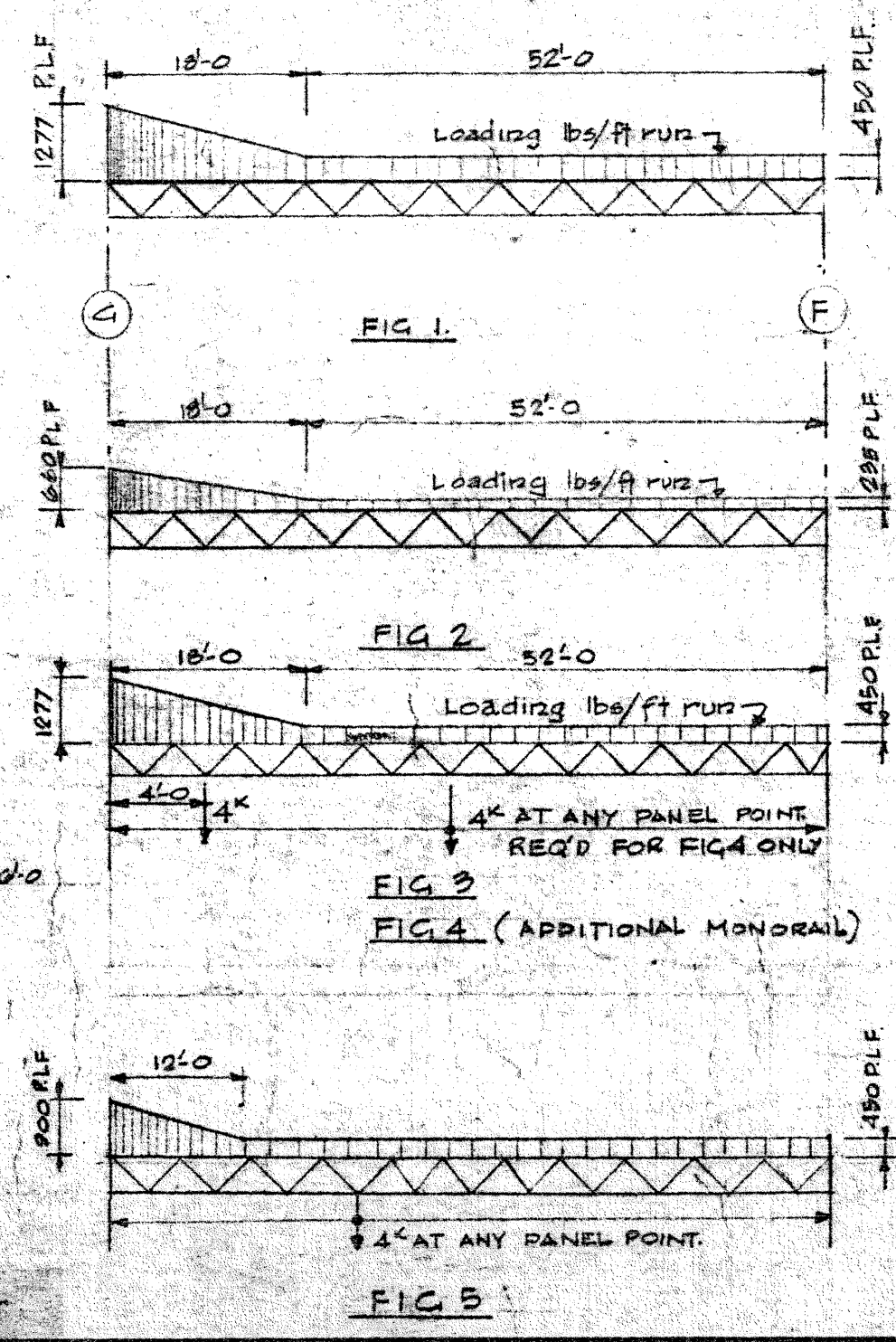
DETAIL OF TRUSS - SHOWING SIZES & FORCES
NOTE: ALL TRUSS STEEL TO BE A40-12



SECTION A-A (ELEVATIONS TO TOP OF STEEL)

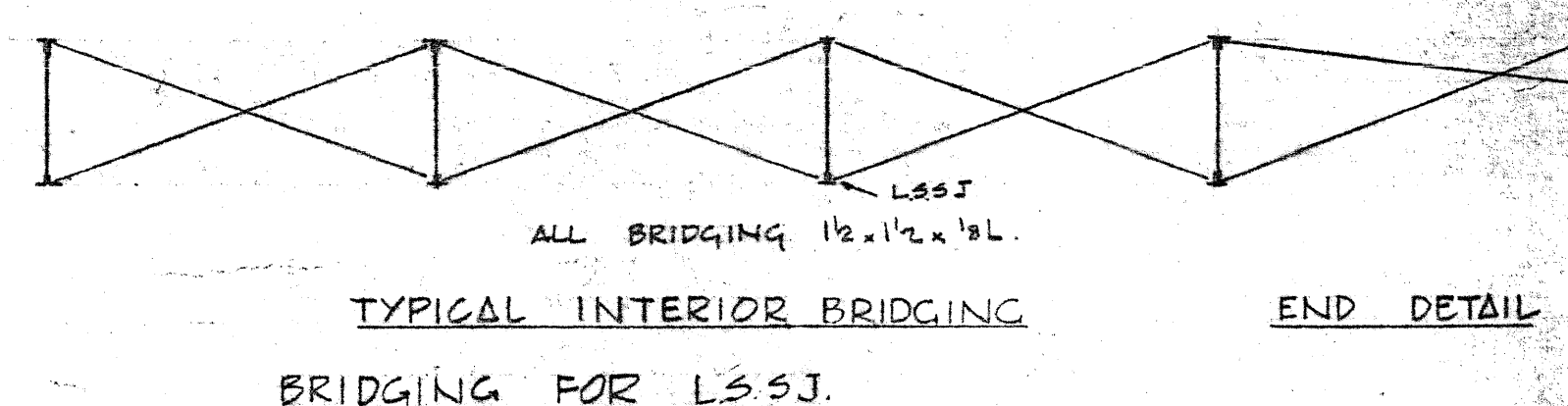


ROOF DECKING



ROOF OPENINGS
THE LOCATION AND SIZE OF ROOF OPENINGS SHALL BE VERIFIED BY THE CONTRACTOR WITH THE SUB-TRADE CONCERNED FOR DETAILS OF ROOF FRAMING SEE DRW 300.

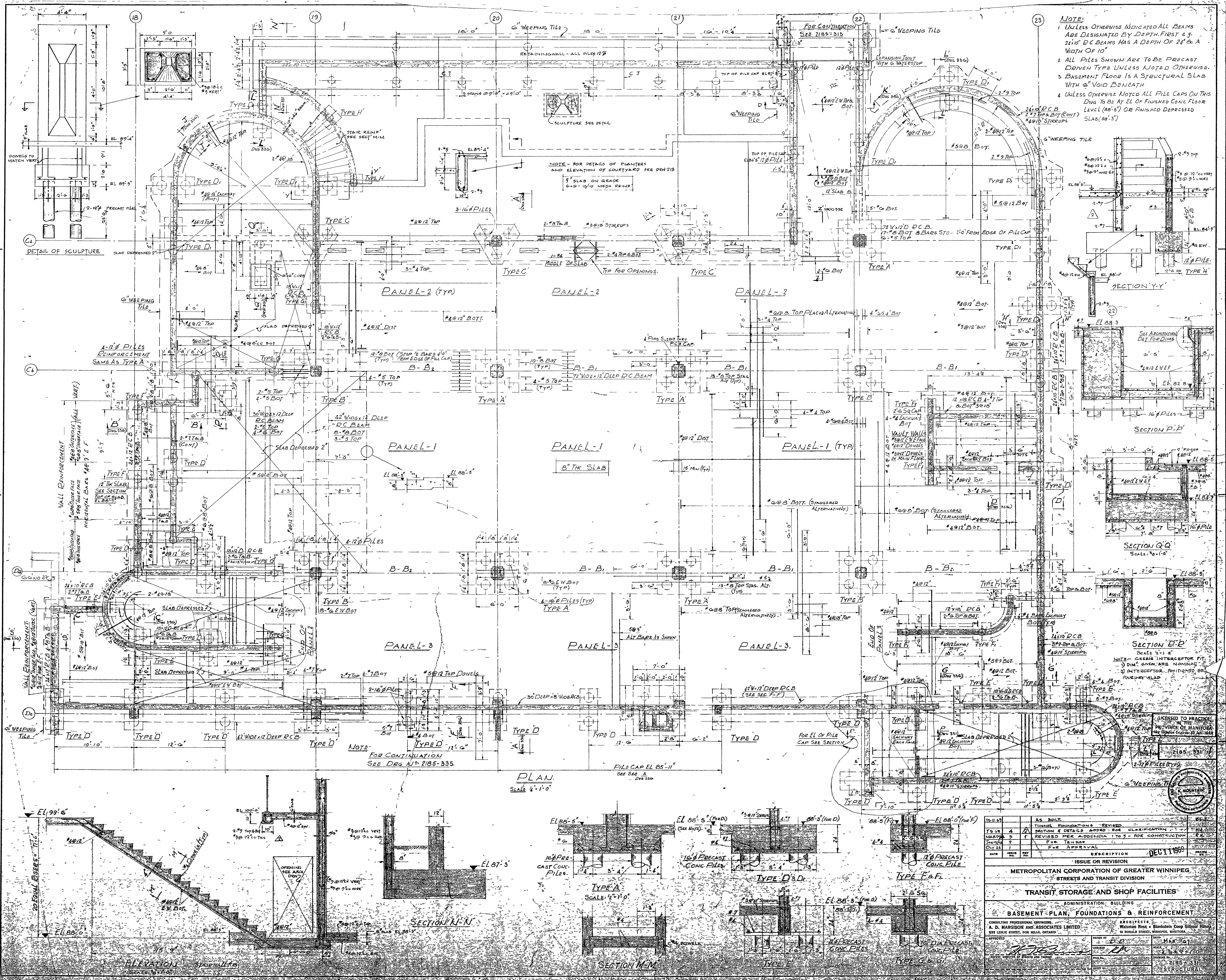
BRIDGING FOR TRUSSES ONLY

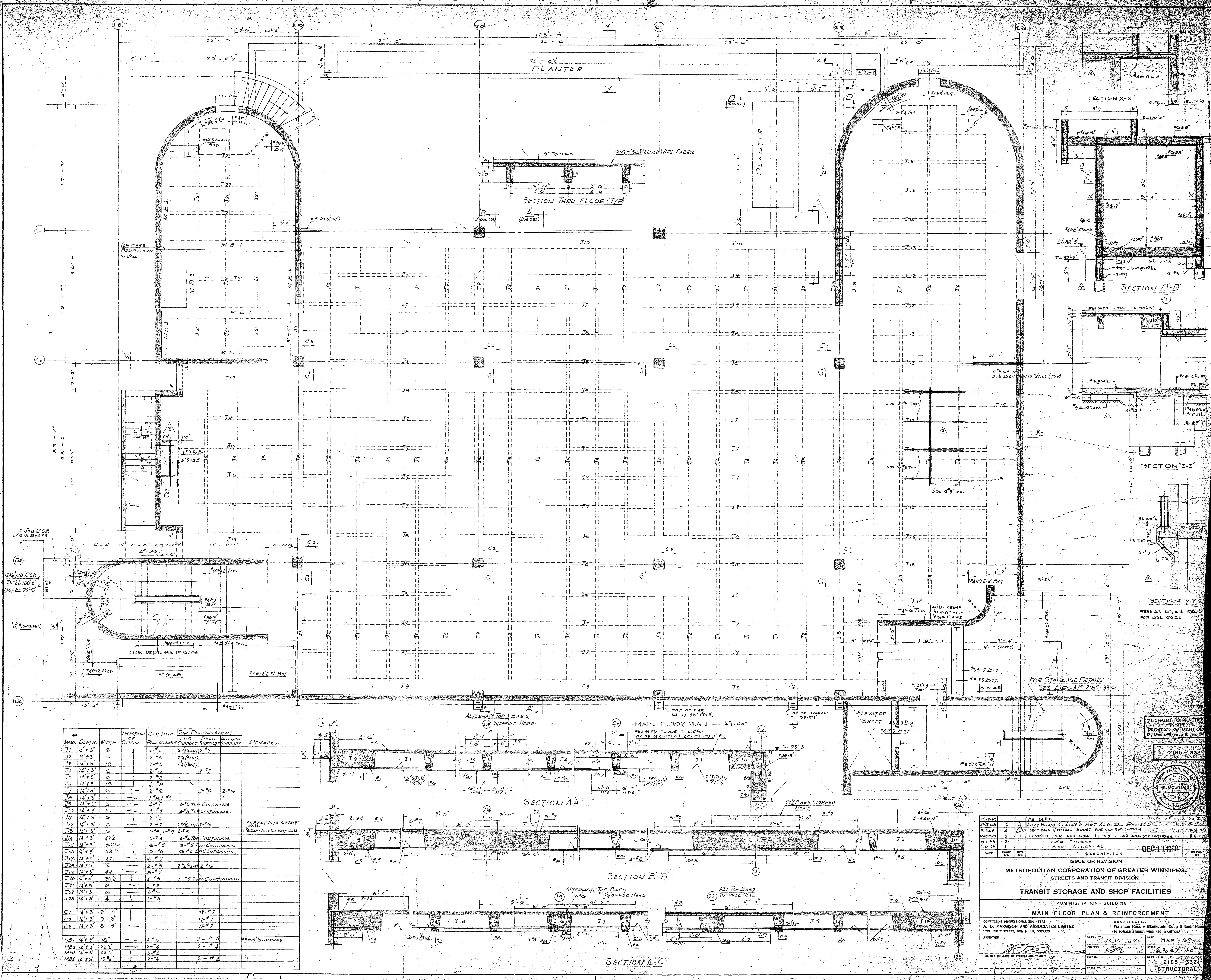


15.11.69		AS BUILT		BUILT	
15.11.69	8	1	REVISED PER ADDENDUM 1-8 - FOR CONSTRUCTION	8	8
15.11.69	8	1	FOR TENDER		
15.11.69	8	1	FOR APPROVAL		
DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY	CHECKED BY
ISSUE OR REVISION					
METROPOLITAN CORPORATION OF GREATER WINNIPEG					
STREETS AND TRANSIT DIVISION					
TRANSIT STORAGE AND SHOP FACILITIES					
OVERHAUL & REPAIR SHOP					
ROOF FRAMING PLAN					
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LITTLE STREET, DON MILLS, ONTARIO			ARCHITECTS Walsman Ross & Blankstein Coop Olfert Hanns 10 DONALD STREET, WINNIPEG, MANITOBA		
APPROVED	DESIGNED BY	CHECKED	DATE	SCALE	SHEET NO.
			SEPT 67	1/8" TO 1/4"	2185-318
					STRUCTURAL

LICENSED TO PRACTICE
IN THE
PROVINCE OF MANITOBA
My License Expiry 10 Jan. 1968
12 B 165
2185-318





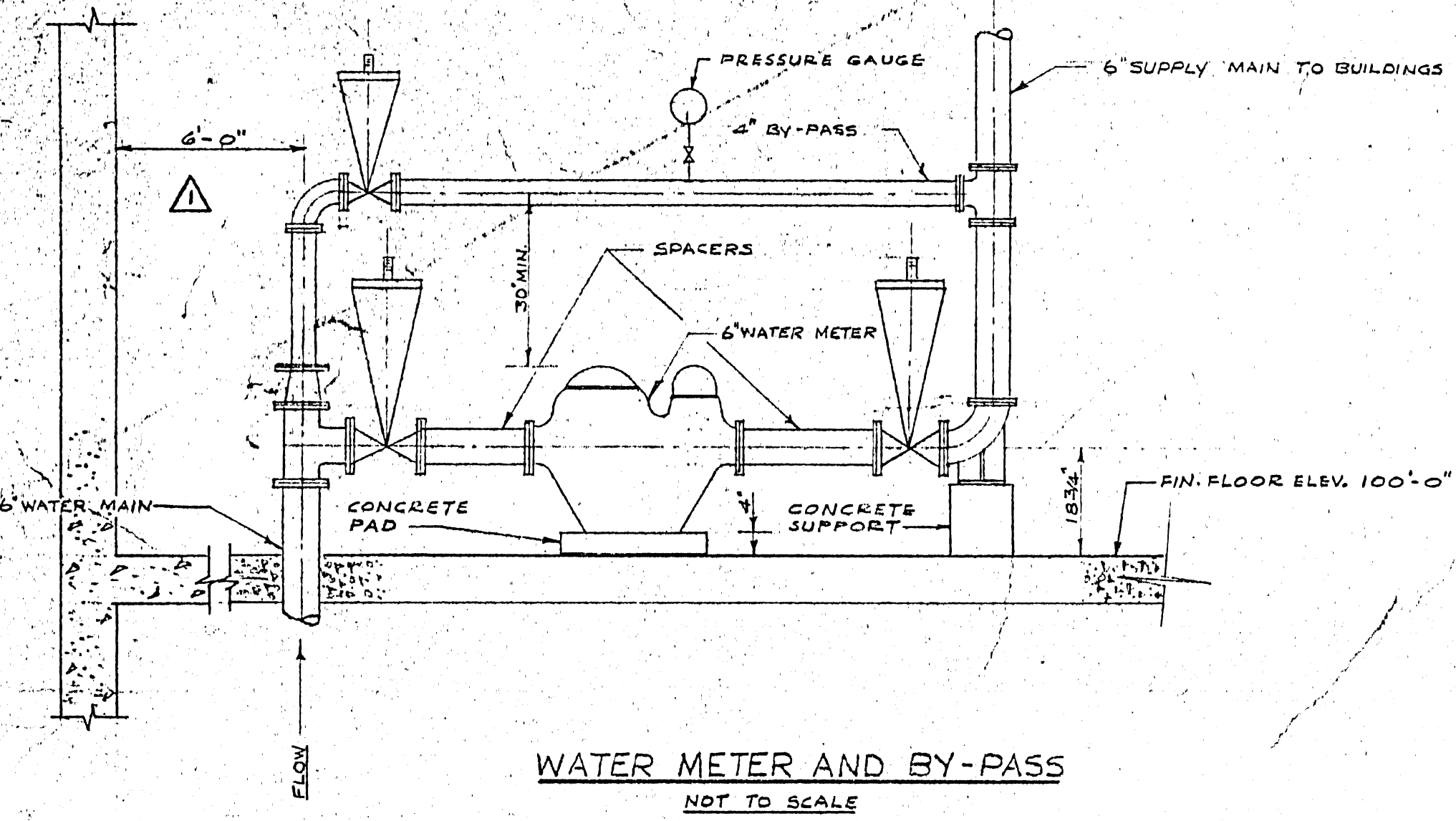


LICENSED TO PRACTICE
IN THE PROVINCE OF MANITOBA
BY LICENSING BOARD 30 JAN 1960
2185-332



15-163	5	5	AS BUILT.	DATE	11-11-60
21-163	5	5	DATE SHEET AT LINE 16 BOT. CL. DE. REVISED	DATE	11-11-60
25-163	4	4	SECTIONS & DETAIL ADDED FOR CLARIFICATION	DATE	11-11-60
26-163	3	3	REVISED PER ADDENDUM #1 TO 5 - FOR CONSTRUCTION	DATE	11-11-60
27-163	2	2	FOR TENDER	DATE	11-11-60
28-163	1	1	FOR APPROVAL	DATE	11-11-60
DESCRIPTION					
ISSUE OR REVISION					
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION					
TRANSIT STORAGE AND SHOP FACILITIES					
ADMINISTRATION BUILDING					
MAIN FLOOR PLAN & REINFORCEMENT					
CONSULTING PROFESSIONAL ENGINEER A. D. MARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO					
ARCHITECTS Walsman Ross & Blankenship 10 DONALD STREET, WINNIPEG, MANITOBA					
APPROVED	DATE	11-11-60	DRAWN BY	DATE	11-11-60
CHECKED	DATE	11-11-60	SCALE	DATE	11-11-60
FILE NO.	2185-332		PROJECT NO.	2185-332	
STRUCTURAL					

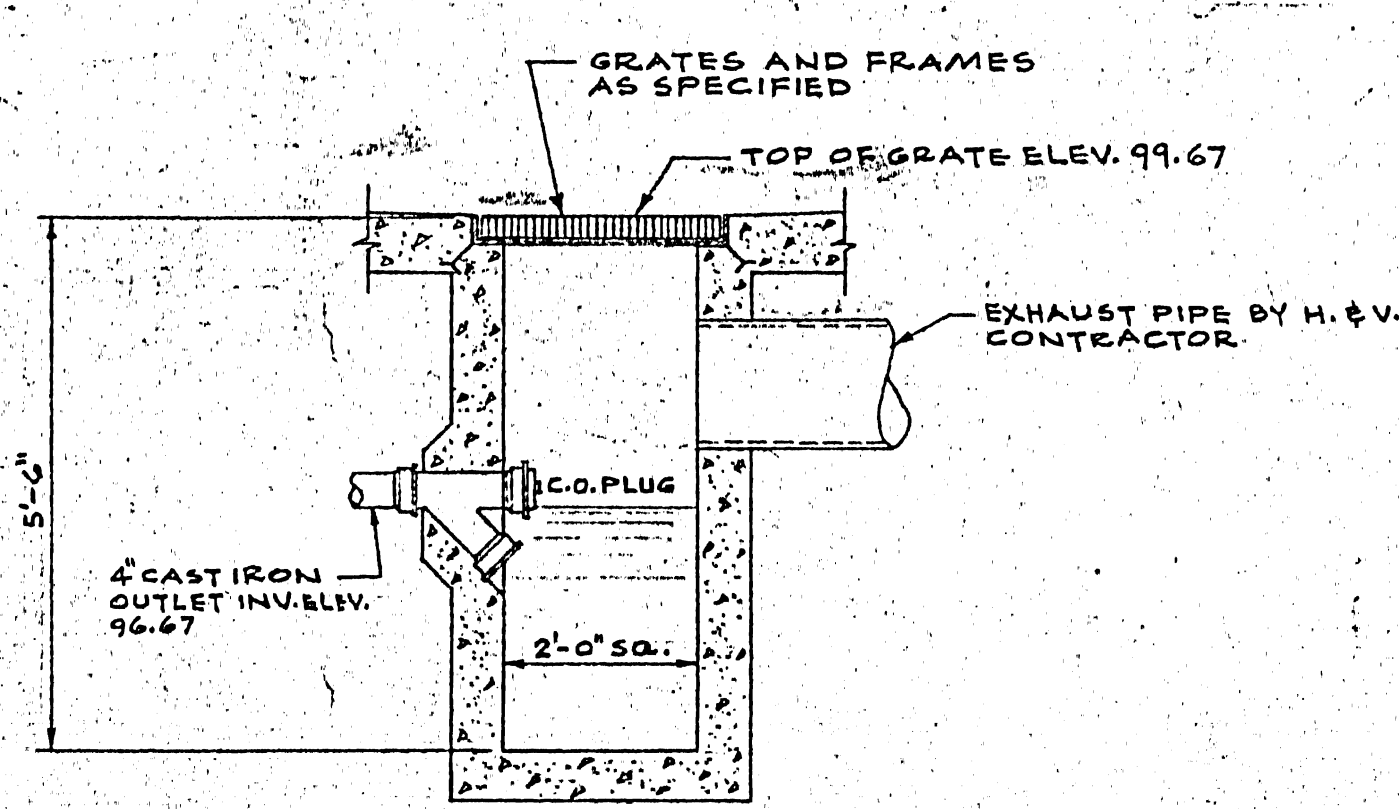
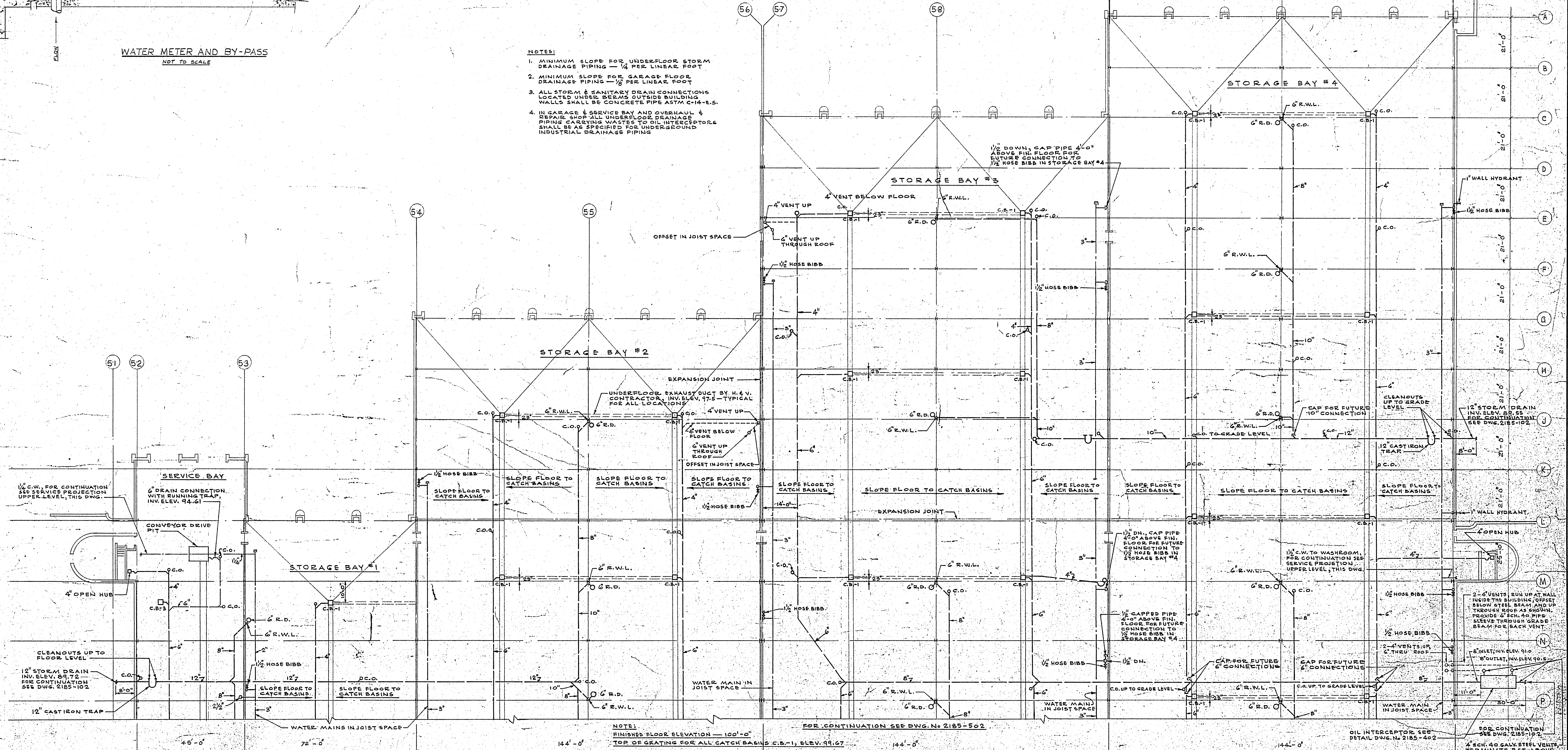
421 OSBORNE ST.
ST. JAMES, MANITOBA
2185-401



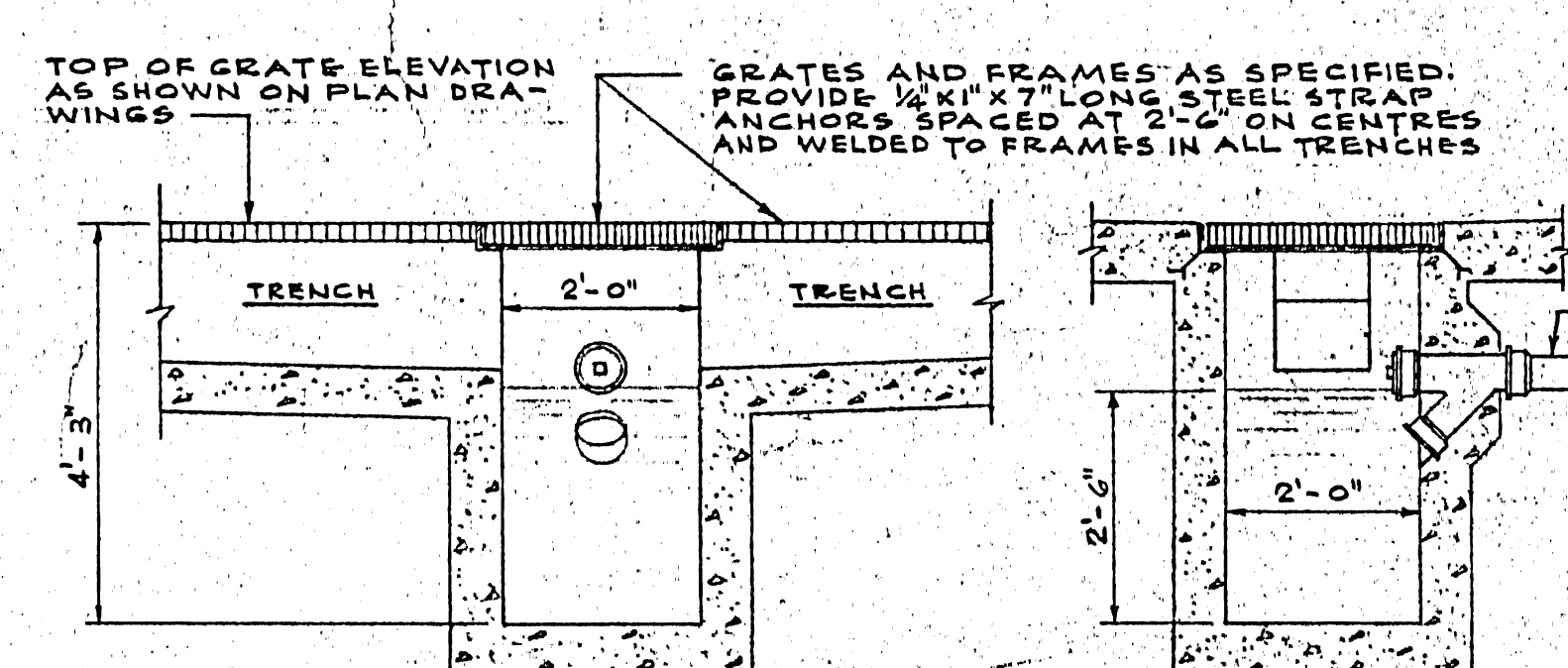
WATER METER AND BY-PASS
NOT TO SCALE

- LEGEND
- SOIL, WASTE OR LEADER ABOVE GRADE
 - SOIL, WASTE OR LEADER BELOW GRADE
 - COLD WATER
 - HOT WATER
 - HOT WATER RECIRCULATING
 - VENT
 - GAS
 - GATE VALVE
 - CHECK VALVE

- NOTES:
1. MINIMUM SLOPE FOR UNDERFLOOR STORM DRAINAGE PIPING — 1/4 PER LINEAR FOOT
 2. MINIMUM SLOPE FOR GARAGE FLOOR DRAINAGE PIPING — 1/8 PER LINEAR FOOT
 3. ALL STORM & SANITARY DRAIN CONNECTIONS LOCATED UNDER BERMS OUTSIDE BUILDING WALLS SHALL BE CONCRETE PIPE ASTM C-141-R-5.
 4. IN GARAGE & SERVICE BAY AND OVERHAUL & REPAIR SHOP ALL UNDERFLOOR DRAINAGE PIPING CARRYING WASTES TO OIL INTERCEPTOR SHALL BE AS SPECIFIED FOR UNDERGROUND INDUSTRIAL DRAINAGE PIPING

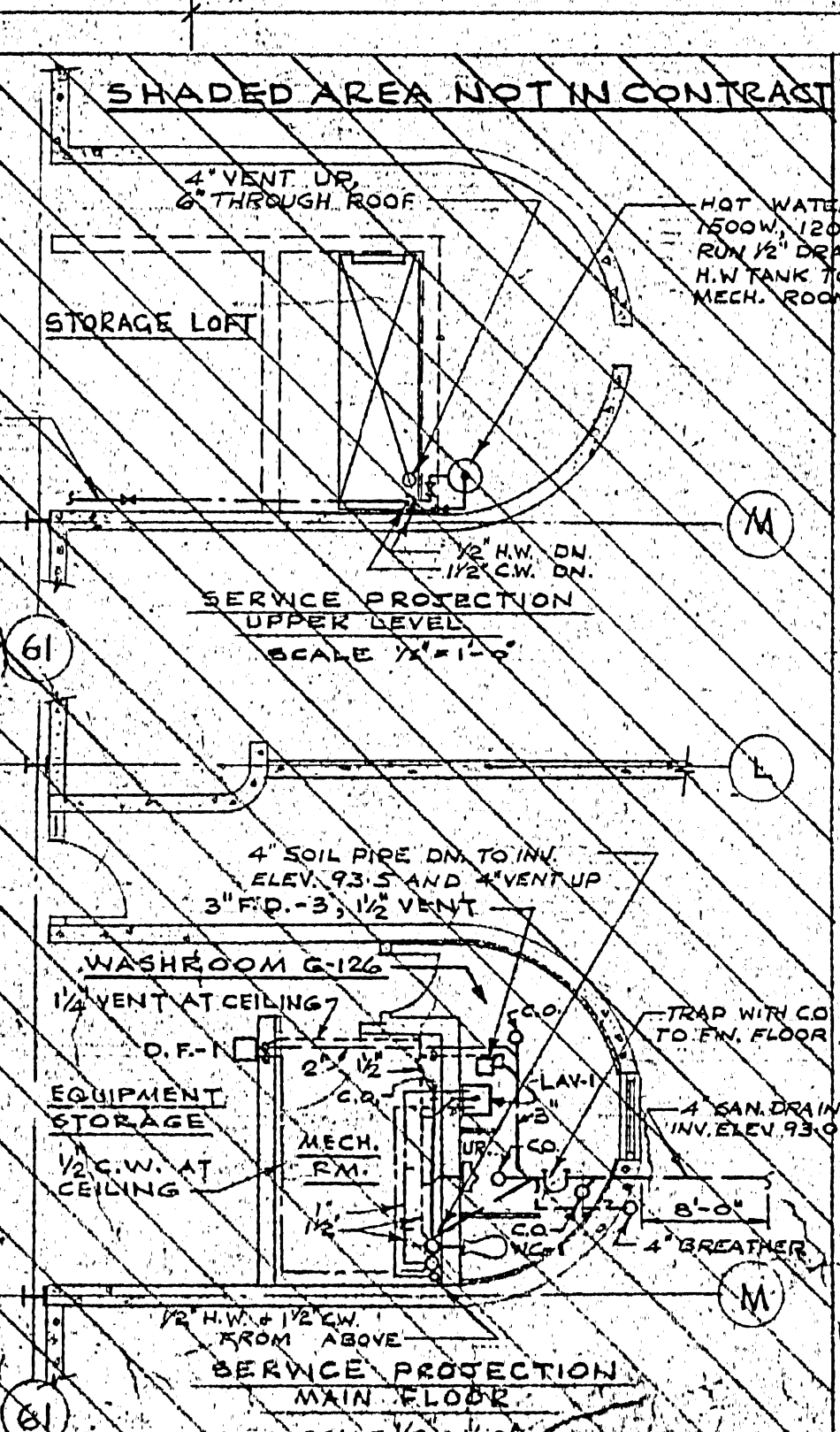
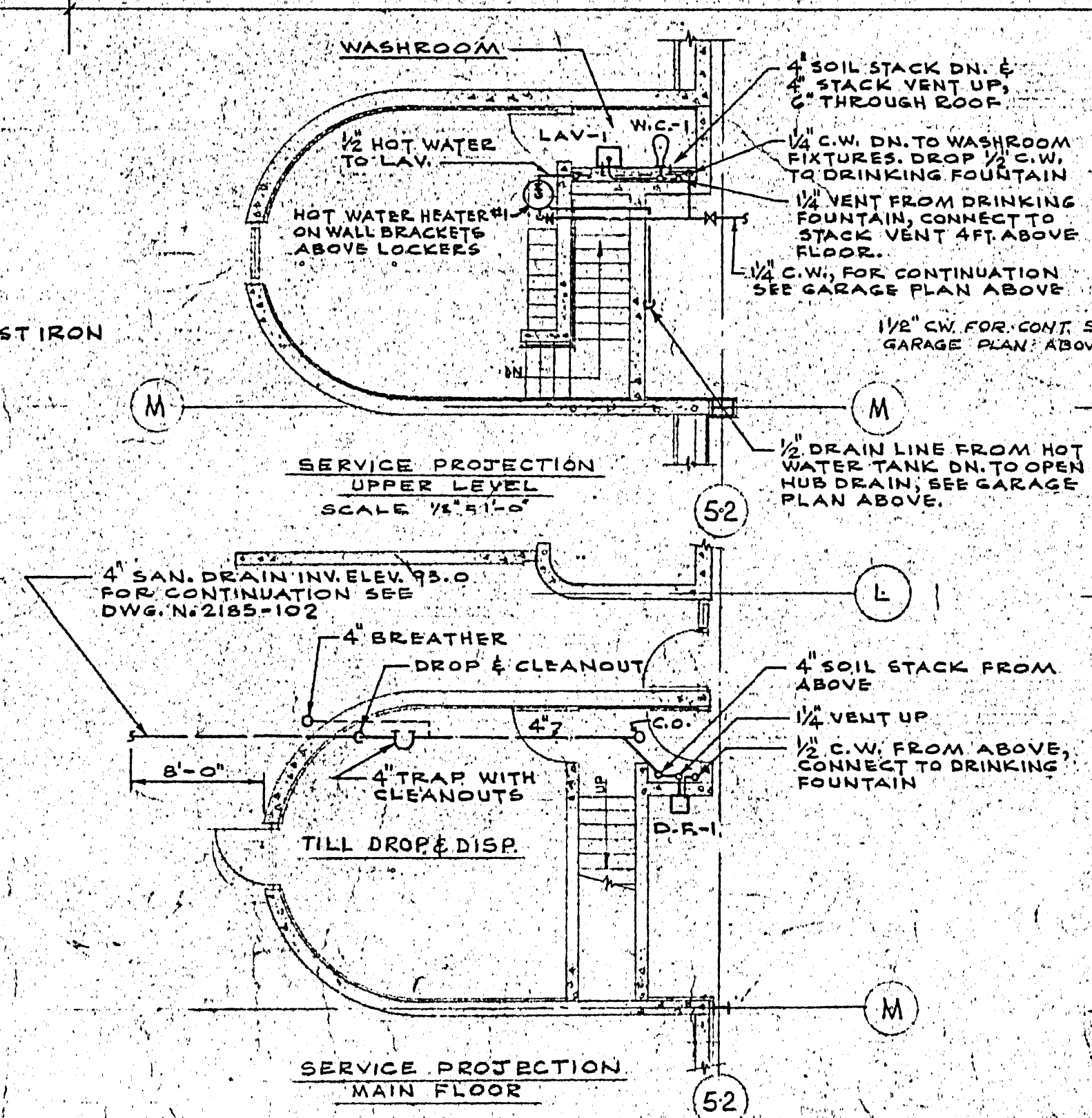


TYPICAL SECTION FOR CATCH BASIN C.B.-1
SCALE 1/2"=1'-0"



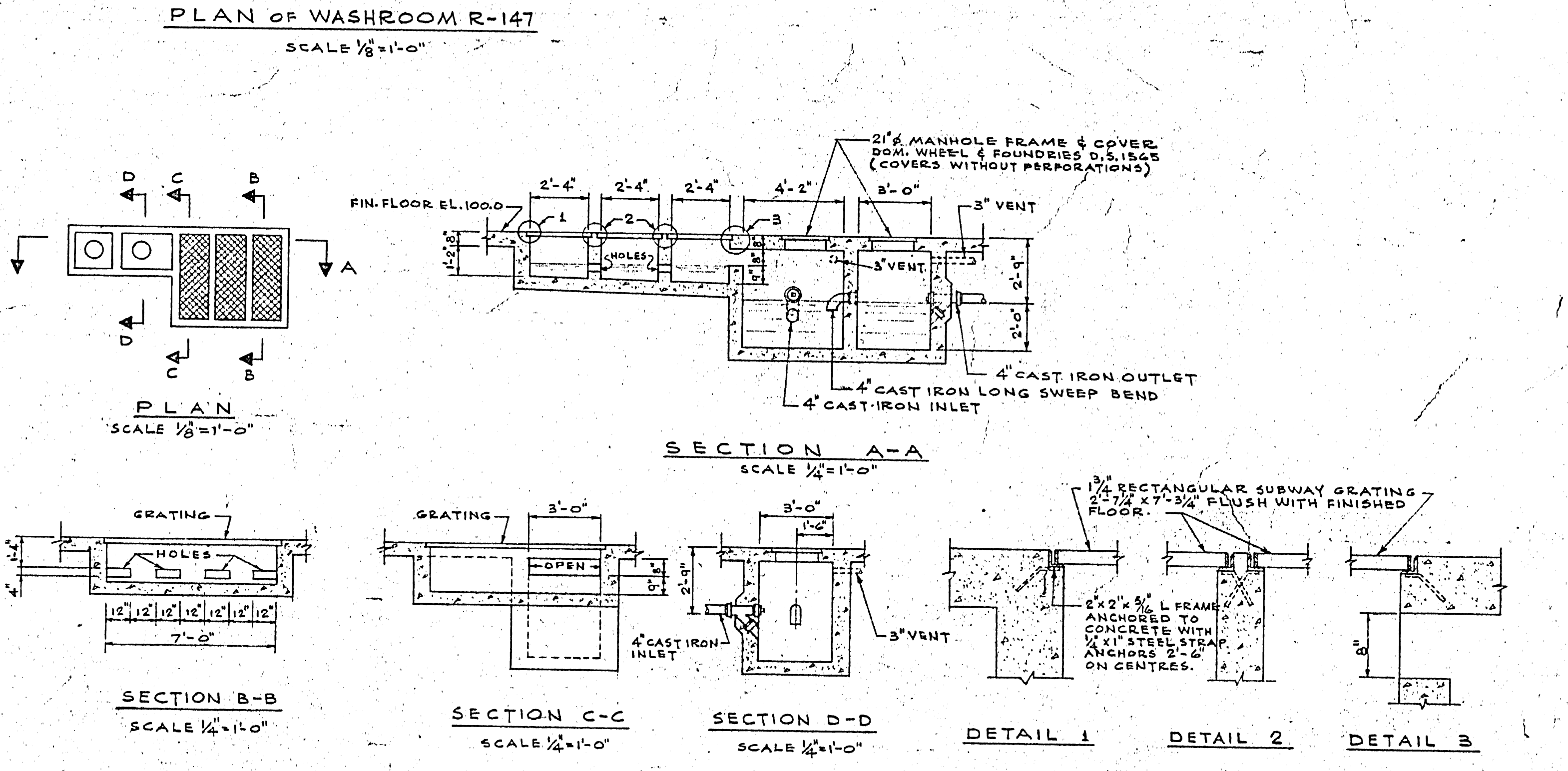
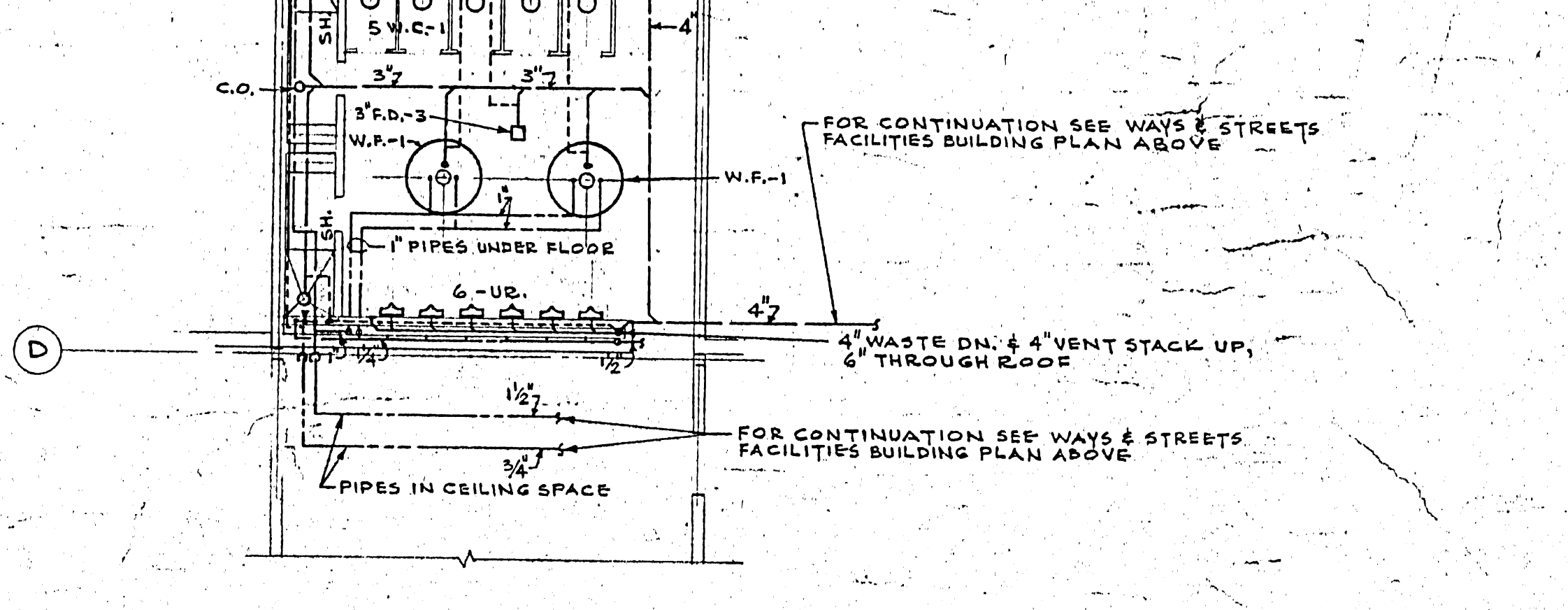
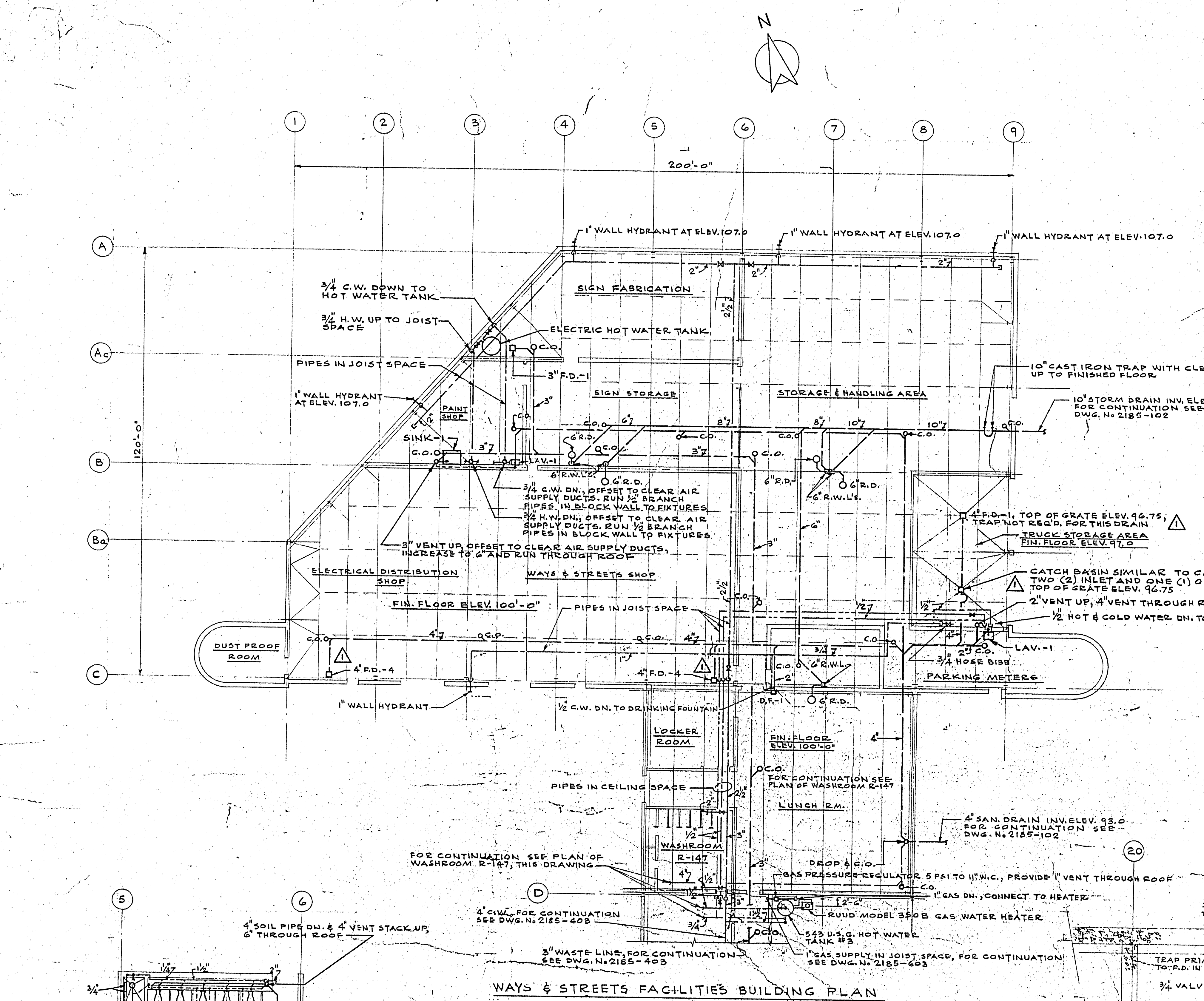
TYPICAL SECTIONS FOR CATCH BASIN C.B.-2
SCALE 1/2"=1'-0"

NOTE:
CATCH BASIN C.B.-3 IS SIMILAR BUT WITHOUT TRENCH CONNECTION



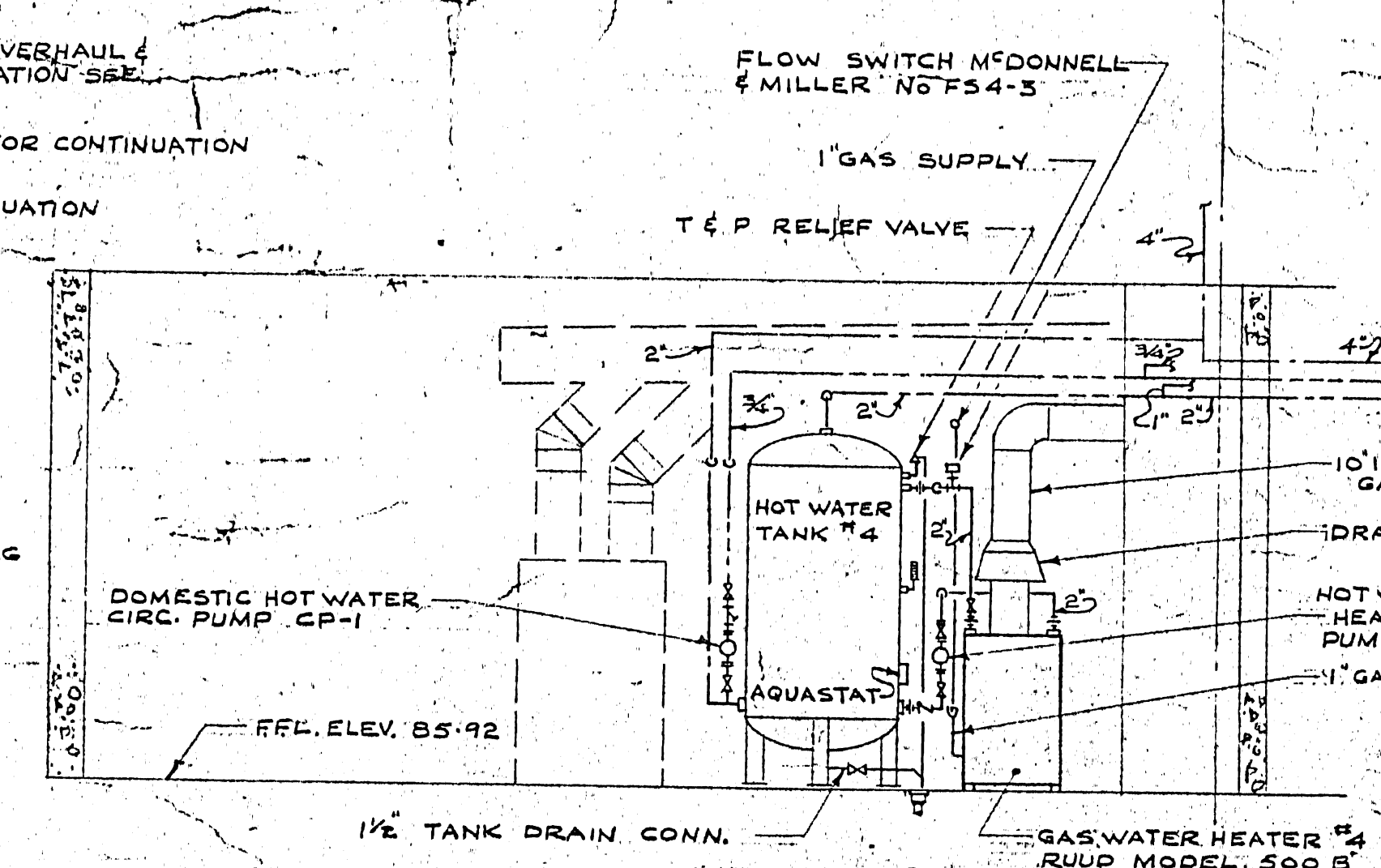
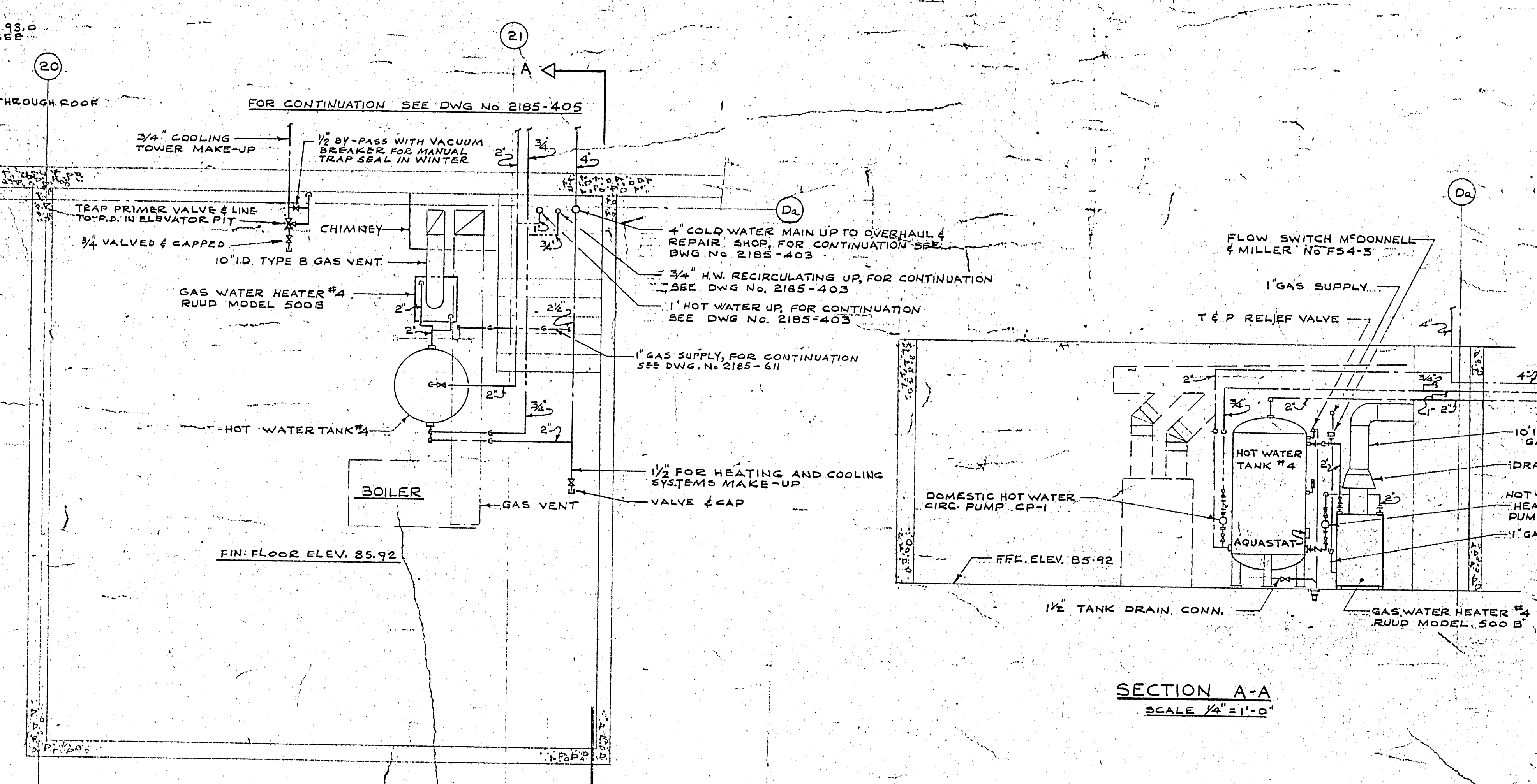
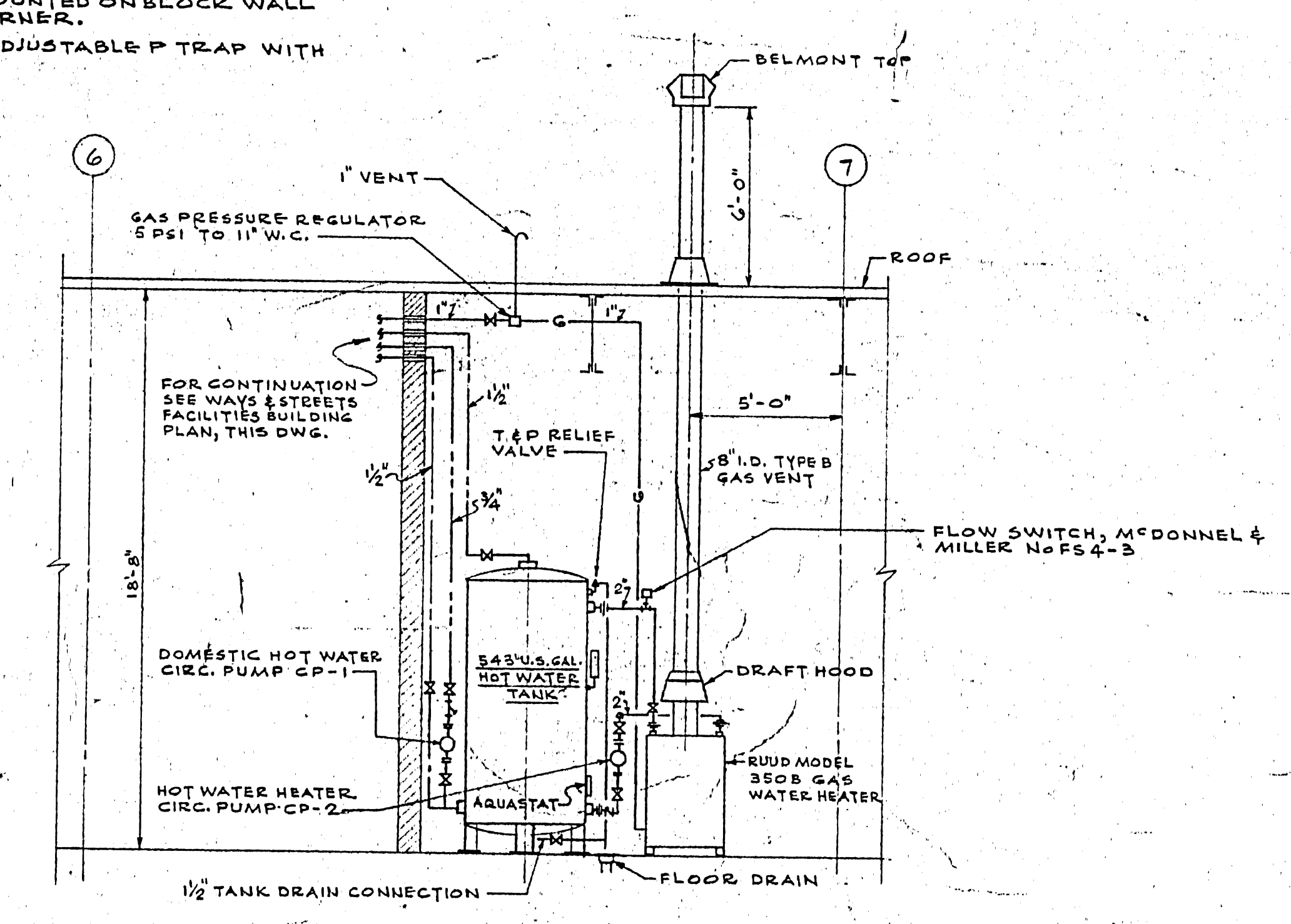
2185-401	
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My License Expires 10 Jan. 1985	
DATE	7/2/68
REVISED	7/2/68
FOR CONSTRUCTION	19/1/68
FOR TENDER	2/2/68
FOR APPROVAL	2/2/68
ISSUE OR REVISION	
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION	
TRANSIT STORAGE AND SHOP FACILITIES	
GARAGE & SERVICE BAY	
PLUMBING & DRAINAGE — PLAN & DETAILS	
CONSULTING PROFESSIONAL ENGINEERS ARCHITECTS A. D. MARGISON AND ASSOCIATES LIMITED 105 LEUE STREET, DON MILLS, ONTARIO	
APPROVED	DATE
DATE	19/1/68
FILE NO.	2185-401
MECHANICAL	

1471 OBERINE ST.
TRANSIT STORAGE & SHOP FACILITIES
2185-404
J. T. THORPE
PLUMBING & DRAINAGE - PLAN & DETAILS



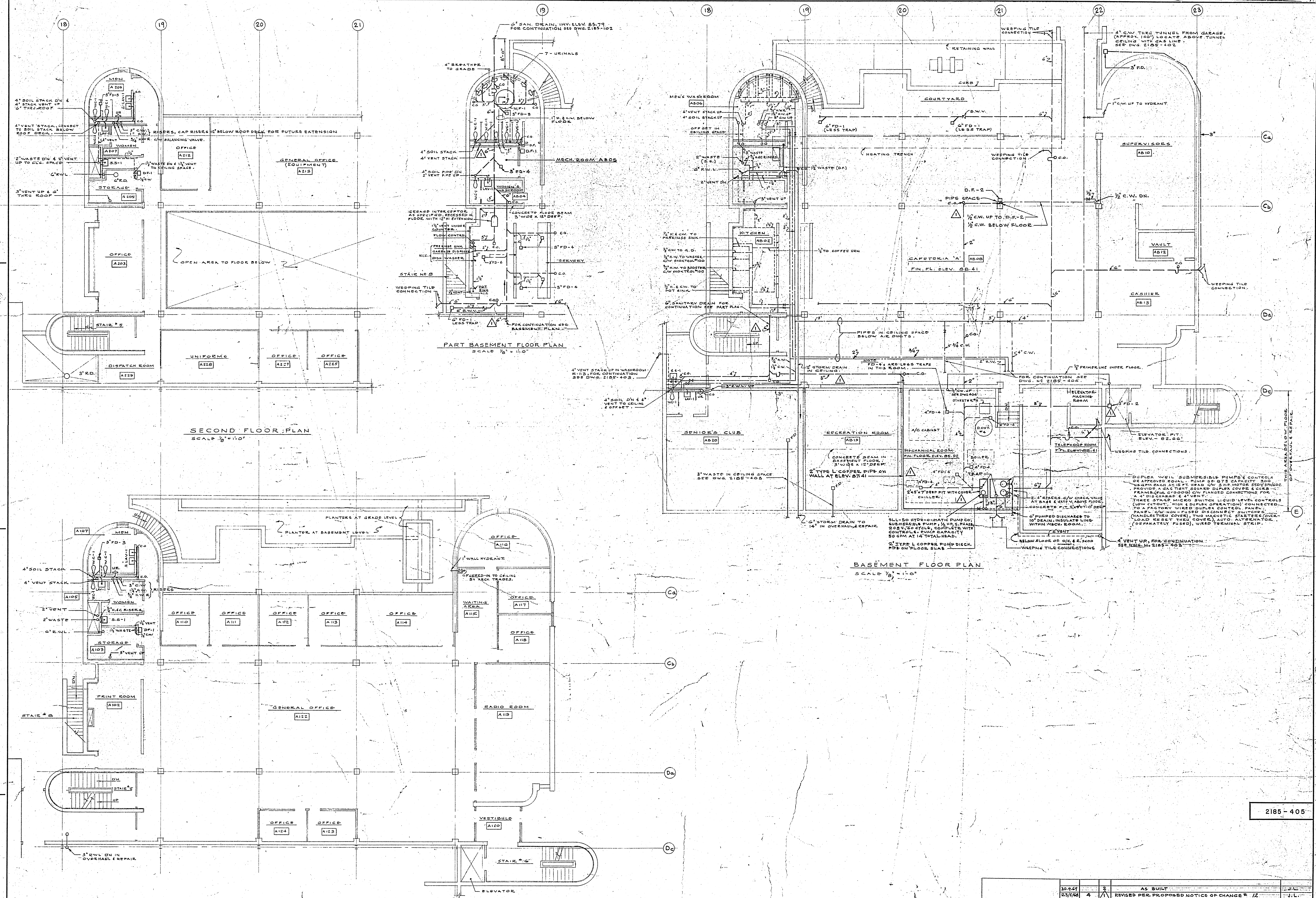
ELECTRIC HOT WATER TANK
SUPPLY AND INSTALL FACTORY INSULATED COPPER ELECTRIC HOT WATER TANK, RUID MODEL C652, 40 IMP. GAL. CAPACITY, COMPLETE WITH TWO (2) 3000 WATTS, 208 VOLT, SINGLE PHASE ELEMENTS, CONTROL THERMOSTATS AND TEMPERATURE & PRESSURE RELIEF VALVE, PROVIDE DRAIN LINE FROM RELIEF VALVE, TERMINATE 2" ABOVE FIN. FLOOR.

SINK - 1
SUPPLY AND INSTALL STAINLESS STEEL SINK, SIZE 60" LONG X 48" WIDE X 35" HIGH, SINK TUB - 12" DEEP, MATERIAL - STAINLESS STEEL TYPE 316, 14 GAUGE. SINK CONSTRUCTION - ALL WELDED, TO CONFORM TO CSA SPECIFICATIONS, ALL CORNERS ROUNDED. TOP EDGES - ROLLED ON 3/4" RADIUS. TOP CORNERS - RADIUS. SADDLES - 12 GAUGE GALVANIZED IRON, ENDS CUT BACK. LEGS & BRACES - 1 1/2" O.D. STAINLESS STEEL TUBING - 5/8" REQUIRED. FEET - STEELING OR HARALSON WITH BEVELLED TURNING AND STAINLESS STEEL STUD SLEEVE. DRAIN - 1 1/2" SIZE, COMPLETE WITH STAINLESS STEEL TAILPIECE, STANDING OVERFLOW AND 1/4" GAUGE PERFORATED STRAINER. SINK BOTTOM SHALL SLOPE TO DRAIN - NO HOT/COLD, AND DRAIN SHALL BE LOCATED IN CORNER AT LOWEST POINT OF BOTTOM. SINK SUPPLIER - HOSPITAL & KITCHEN EQUIPMENT COMPANY, TORONTO. SUPPLY FITTING - CRANE CH-8554 MOUNTED ON BLOCK WALL ABOVE SINK, 1" FROM RIGHT HAND CORNER. TRAP - CRANE C-5103 CAST BRASS ADJUSTABLE P TRAP WITH CLEANOUT.



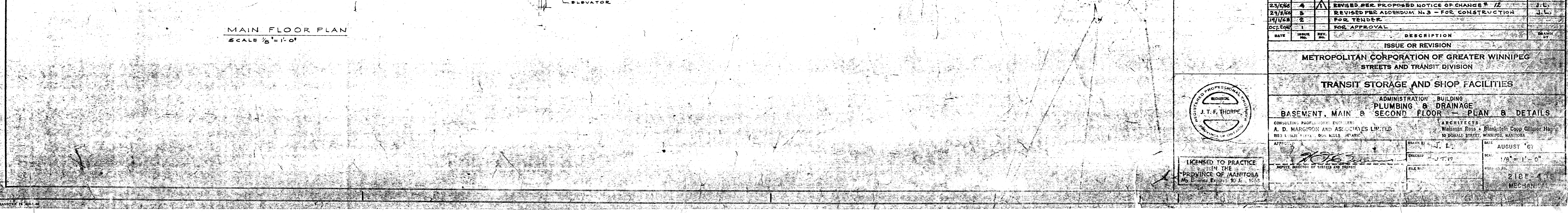
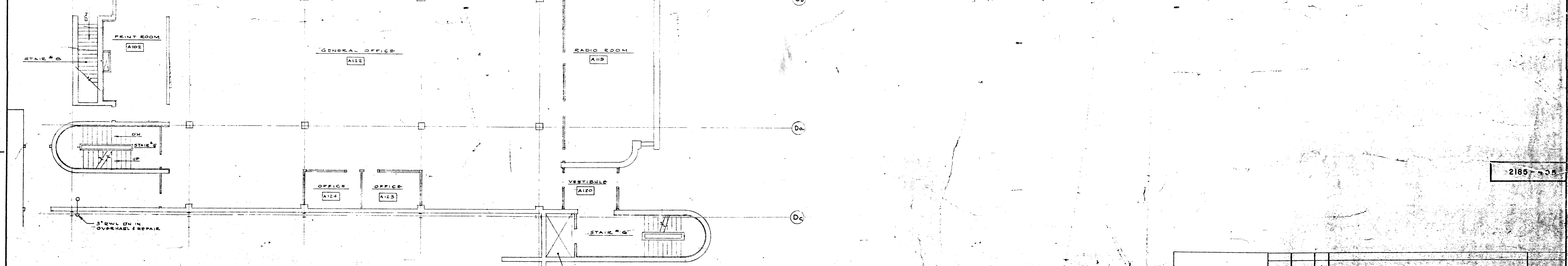
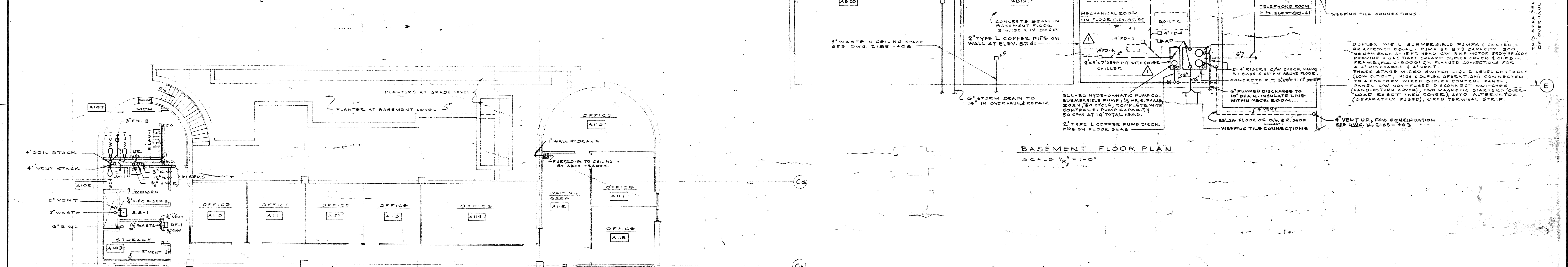
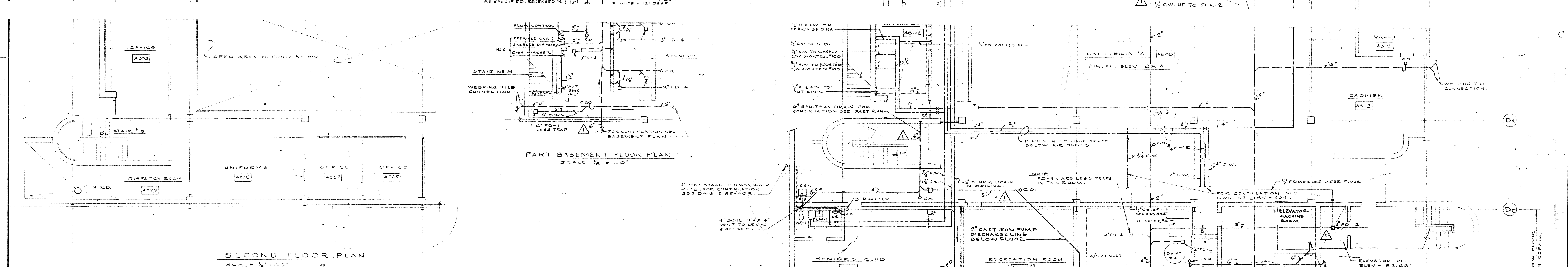
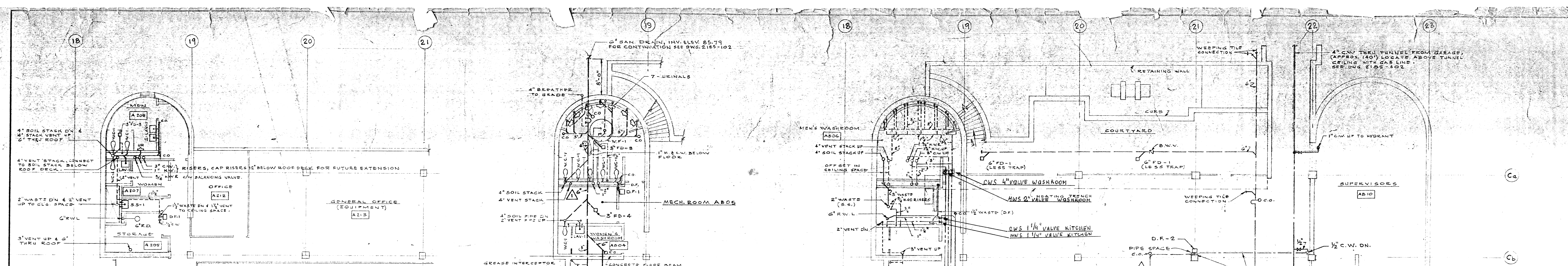
20.9.67	3	AS BUILT	J.L.
7/12/68	5	REVISED PER PROPOSED NOTICE OF CHANGE # 17	J.L.
2/5/68	4	REVISED PER PROPOSED NOTICE OF CHANGE # 12	J.L.
2/13/68	3	REVISED PER APPENDIX NO. 2 FOR CONSTRUCTION	J.L.
1/1/68	2	FOR TENDER	J.L.
10/20/67	1	FOR APPROVAL	J.L.
DATE	ISSUE NO.	REV. NO.	DESCRIPTION
ISSUE OR REVISION			
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION			
TRANSIT STORAGE AND SHOP FACILITIES			
WAYS & STREETS FACILITIES BUILDING			
PLUMBING & DRAINAGE - PLAN & DETAILS			
CONSULTING PROFESSIONAL ENGINEER A. D. MARGISON AND ASSOCIATES LIMITED 1051 LESLIE STREET, DON MILLS, ONTARIO			
ARCHITECTS: Walsman Ross & Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA			
APPROVED J. T. THORPE DEPUTY DIRECTOR OF STREETS AND TRANSIT			
DRAWN BY J. T. THORPE			
CHECKED J. T. THORPE			
DATE AUGUST '67			
SCALE AS SHOWN			
PROJECT NO. 2185-404			
MECHANICAL			

TRANSIT STORAGE & SHOP FACILITIES
PLUMBING & DRAINAGE
BASEMENT, MAIN & SECOND FLOOR - PLAN
2185-405
J.T.F. THORPE
AUGUST 1967

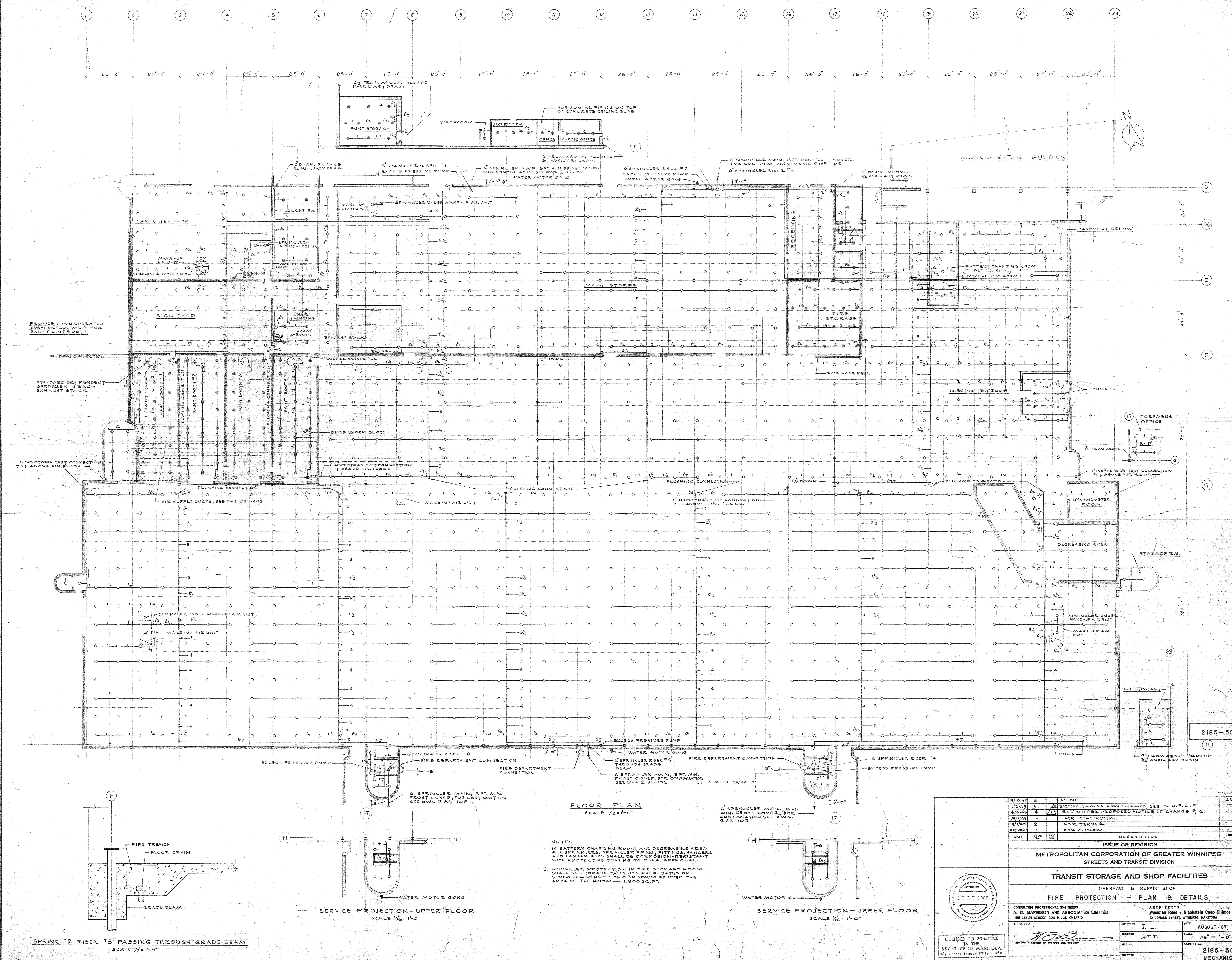


2185-405

DATE	REVISION	DESCRIPTION	BY	CHKD.
30.9.67	1	AS BUILT	J.T.F.	J.L.
23.9.67	2	REVISED PER PROPOSED NOTICE OF CHANGE # 1/2	J.T.F.	J.L.
27.9.67	3	REVISED PER ADDENDUM N.3 - FOR CONSTRUCTION	J.T.F.	J.L.
10.10.67	4	FOR TENDER	J.T.F.	J.L.
OCT. 20.67	5	FOR APPROVAL	J.T.F.	J.L.
DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION				
TRANSIT STORAGE AND SHOP FACILITIES				
ADMINISTRATION BUILDING PLUMBING & DRAINAGE BASEMENT, MAIN & SECOND FLOOR - PLAN & DETAILS				
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED				
ARCHITECTS Walsman Ross & Blankstein Corp. Gilmor Hanna 115 LECHE STREET, DON MILLS, ONTARIO				
APPROVED	2185-405	DRAWN BY	J. L.	DATE
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My Licence Expires 10 Jan. 1968	2185-405	DATE	AUGUST '67	
		SCALE	1/8" = 1'-0"	
		FILE NO.		
		SHEET NO.		
				2185-405 MECHANICAL



23/6/61	4	REVISED PER PROPOSED NOTICE OF CHANGE # 12	J.T.T.
29/8/61	5	REVISED PER ADDENDUM N.3 - FOR CONSTRUCTION	J.L.
14/1/62	2	FOR TENDER	J.L.
10/1/62	1	FOR APPROVAL	J.L.
DATE	ISSUED	DESCRIPTION	BY
		ISSUE OR REVISION	
		METROPOLITAN CORPORATION OF GREATER WINNIPEG	
		STREETS AND TRANSIT DIVISION	
		TRANSIT STORAGE AND SHOP FACILITIES	
		ADMINISTRATIVE BUILDING	
		PLUMBING & DRAINAGE	
		BASEMENT, MAIN & SECOND FLOOR - PLAN & DETAILS	
		CONSULTING PROFESSIONAL ENGINEER	
		A. D. MARCHION AND ASSOCIATES LIMITED	
		1000 BROADVIEW AVE. WINNIPEG, MANITOBA	
		ARCHITECTS	
		WILLIAM ROSS & BANGS	
		1000 BROADVIEW AVE. WINNIPEG, MANITOBA	
		APPROVED	
		J.T.T.	
		DATE	
		AUGUST '61	
		SCALE	
		1/8" = 1' - 0"	
		2185-4	
		MECHANICAL	



FLOOR PLAN
SCALE 1/8" = 1'-0"

- NOTES:
1. IN BATTERY CHARGING ROOM AND DEGREASING AREA ALL SPRINKLES, SPRINKLER PIPING, FITTINGS, HANGERS AND HANGERS ROSS SHALL BE CORROSION-RESISTANT WITH PROTECTIVE COATING TO C.U.A. APPROVAL.
 2. SPRINKLER PROTECTION IN TIRE STORAGE ROOM SHALL BE HYDRAULICALLY DESIGNED, BASED ON SPRINKLER DENSITY OF 0.30 GPM/FT. OVER THE AREA OF THE ROOM - 1,800 SQ. FT.

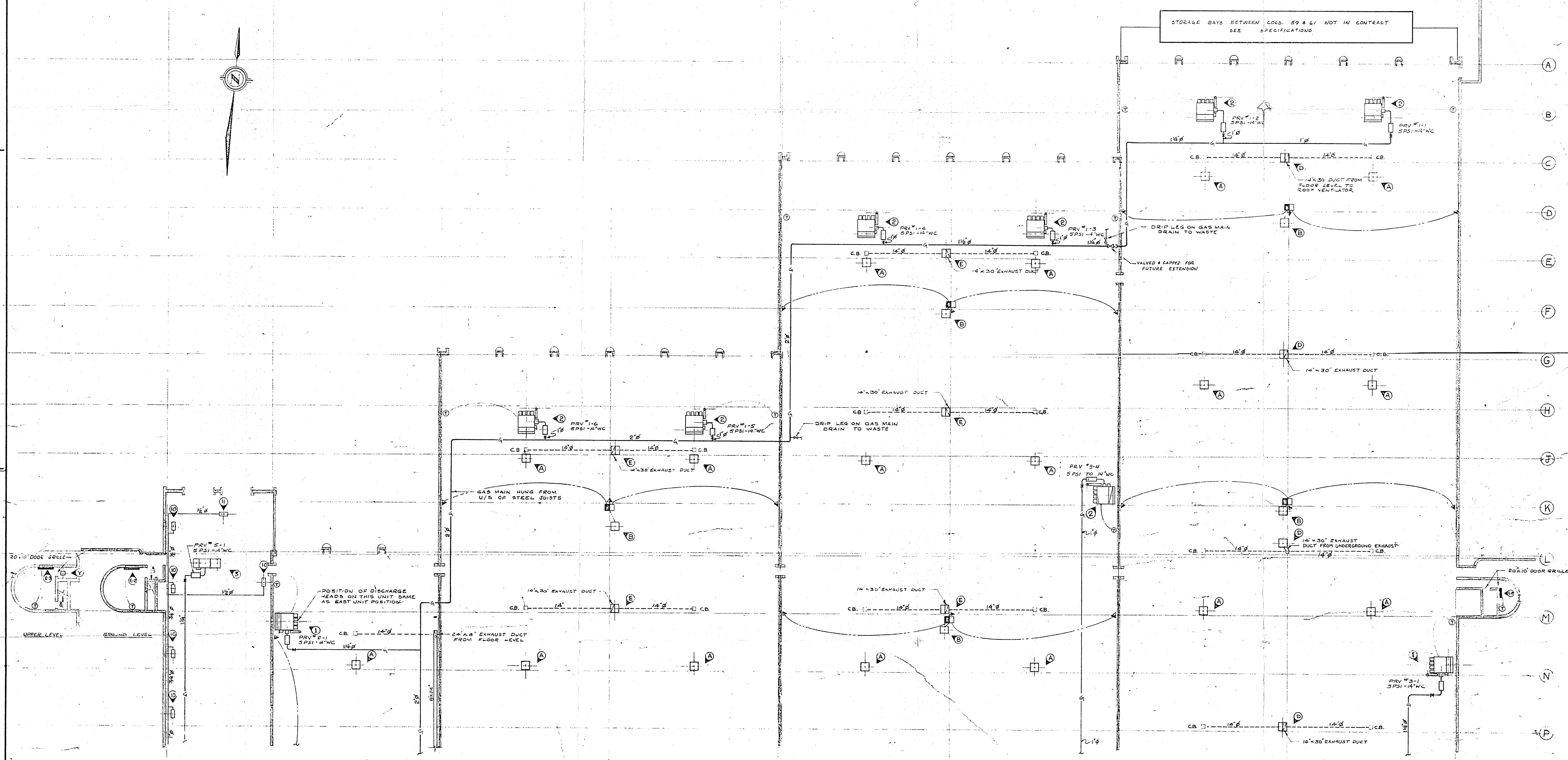
SERVICE PROJECTION-UPPER FLOOR
SCALE 1/8" = 1'-0"

SERVICE PROJECTION-UPPER FLOOR
SCALE 1/8" = 1'-0"

SPRINKLER RISER #5 PASSING THROUGH GRADE BEAM
SCALE 1/2" = 1'-0"

9/10/64	6	AS BUILT	J.L.
4/2/69	5	BATTERY CHARGING ROOM ENLARGED; SEE N.O.P.C. #	1PE
4/7/68	4	REVISED PER PROPOSED NOTICE OF CHANGE # 21	J.L.
2/3/68	3	FOR CONSTRUCTION	
1/4/68	2	FOR TENDER	
9/20/67	1	FOR APPROVAL	
DATE	REVISION	DESCRIPTION	DRAWN BY
ISSUE OR REVISION			
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION			
TRANSIT STORAGE AND SHOP FACILITIES			
OVERHAUL & REPAIR SHOP			
FIRE PROTECTION - PLAN & DETAILS			
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 101 LEBLANC STREET, WINNIPEG, MANITOBA			
ARCHITECTS Wesman Ross & Blankstein Corp. Gilmor Hanna 10 RONALD STREET, WINNIPEG, MANITOBA			
APPROVED	DATE	DRAWN BY	DATE
J.T.T.	AUGUST '67	J.L.	
CHIEF ENGINEER	SCALE	1/8" = 1'-0"	
FILE NO.	DRAWING NO.	2185-503	
SHEET NO.		MECHANICAL	

2185-503



FOR CONTINUATION SEE DWG 2185-601

**GARAGE BUILDING
PART PLAN
SCALE 1/16"=1'-0"**

- NOTES:**
1. GAS DISTRIBUTION PIPING MUST BE SLEEVED & PACKED WITH ASBESTOS ROPE WHEN PASSING THRU FIRE WALLS AT COLUMN LINES 52 TO 59 INCLUSIVE.
 2. FOR SCHEDULES OF HEATING AND VENTILATING UNITS SEE DWG 2185-601
 3. FOR DETAILS OF MAKE-UP AIR UNITS, INFRA-RED HEATERS, VENTILATING AND EXHAUST SYSTEMS SEE DWG 2185-605
 4. FOR DETAILS OF DISCHARGE HEADS FOR MAKE-UP AIR UNITS SEE DWG 2185-601
 5. ALL 14" X 30" EXHAUST DUCTS RISE FROM CONCRETE PLENUM IN FLOOR TO ROOF VENTILATOR FOR DETAILS SEE DWG 2185-605

**B-14
FILE**

RETURN TO CHIEF
FACILITIES BUILDING
INVENTORY.

2 91 1

2185-602

DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY
20/10/66	4	0	AS BUILT	R.M.C.
20/10/66	3	0	FOR CONSTRUCTION	
19/10/66	2	0	FOR TENDER	
20/10/66	1	0	FOR APPROVAL	

ISSUE OR REVISION

**METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION**

TRANSIT STORAGE AND SHOP FACILITIES

GARAGE & SERVICE BAY

HEATING & VENTILATING — PLAN

CONSULTING PROFESSIONAL ENGINEERS
A. D. MARGISON AND ASSOCIATES LIMITED
118 LEVIE STREET, BOX 1111, WINNIPEG, MANITOBA

ARCHITECTS
Walsman Ross & Blankstein Coop Gilmor Hanns
30 DONALD STREET, WINNIPEG, MANITOBA

APPROVED: *[Signature]* DATE: AUGUST '67

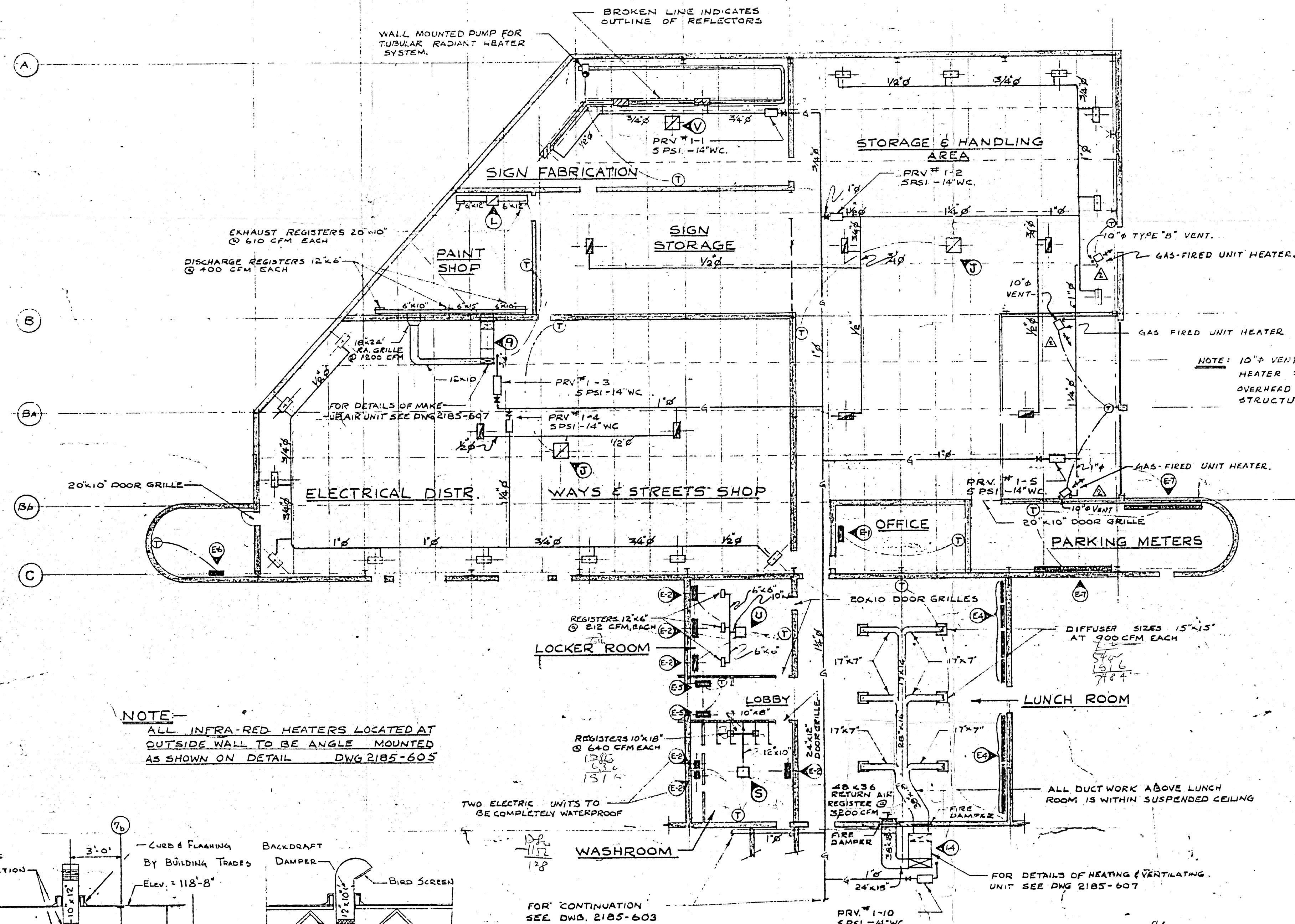
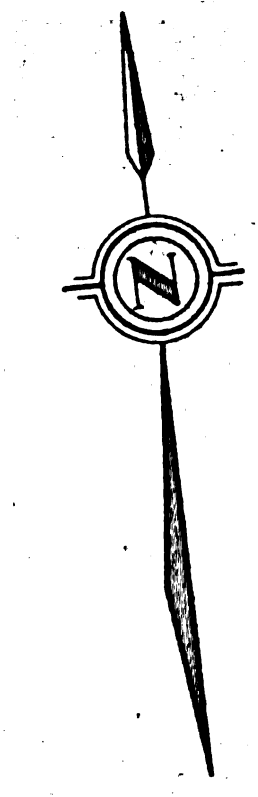
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CHECKED: *[Signature]* FILE NO.: 2185-602

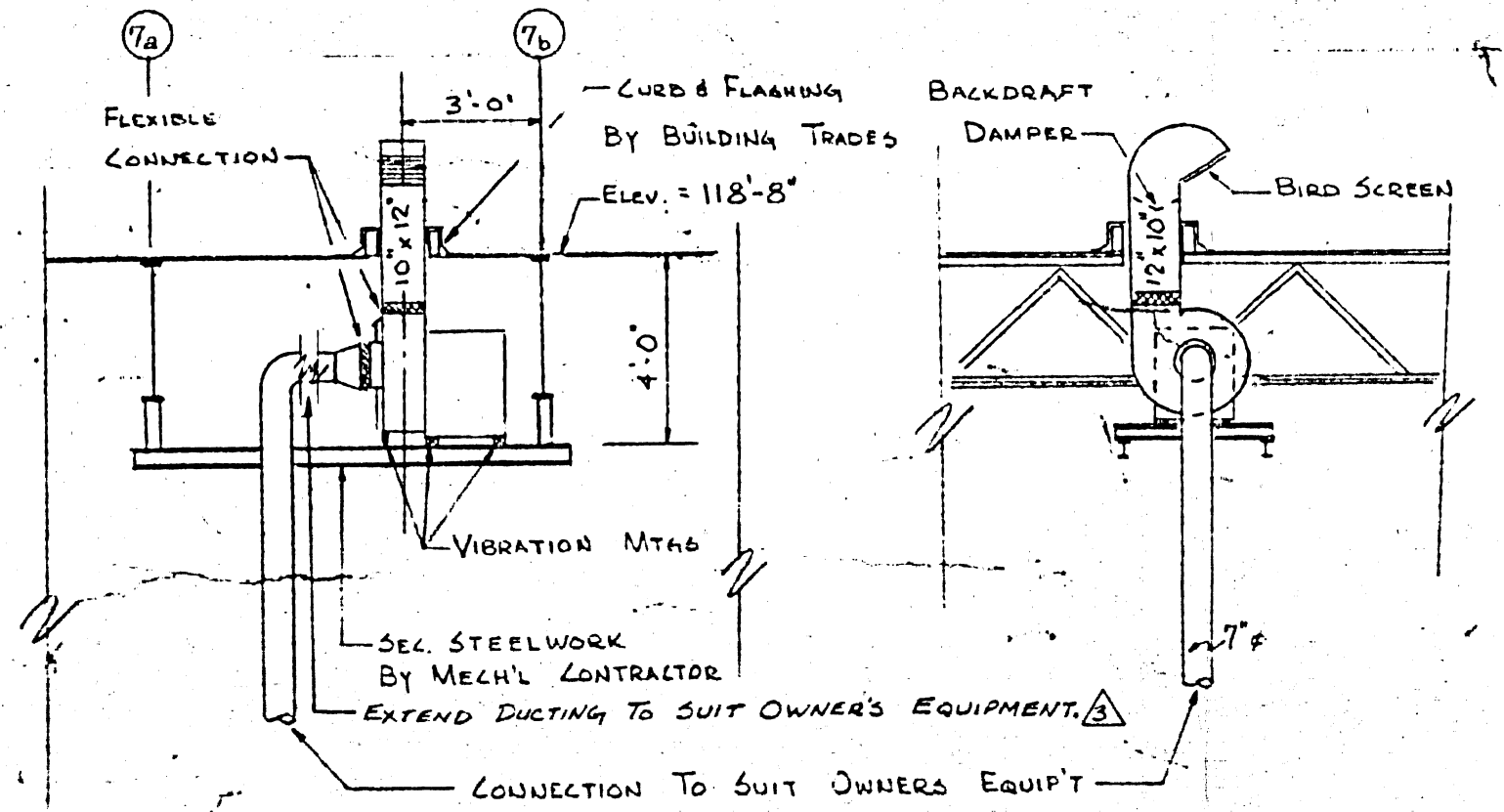
DESIGNED: *[Signature]* SHEET NO.: MECHANICAL

LICENSED TO PRACTICE
IN THE
PROVINCE OF MANITOBA
My License Expires: 12 Jan. 1973

1 2 3 4 5 6 7 8 9

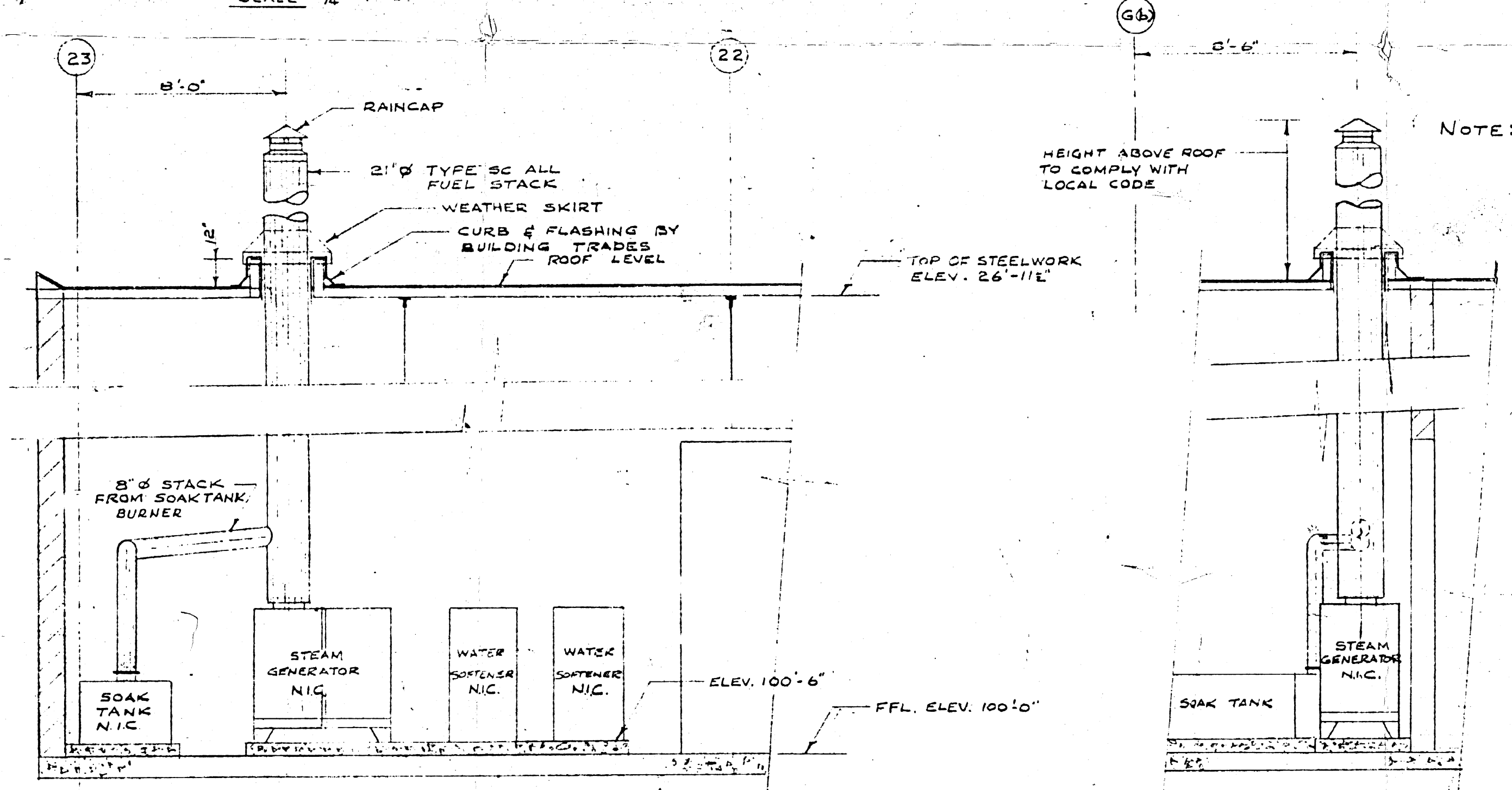


NOTE: INFRA-RED HEATERS LOCATED AT OUTSIDE WALL TO BE ANGLE MOUNTED AS SHOWN ON DETAIL DWG 2185-603



ABRASIVE SAW VENTILATION OVERHAUL & REPAIR BUILDING
SCALE: 1/4" = 1'-0"

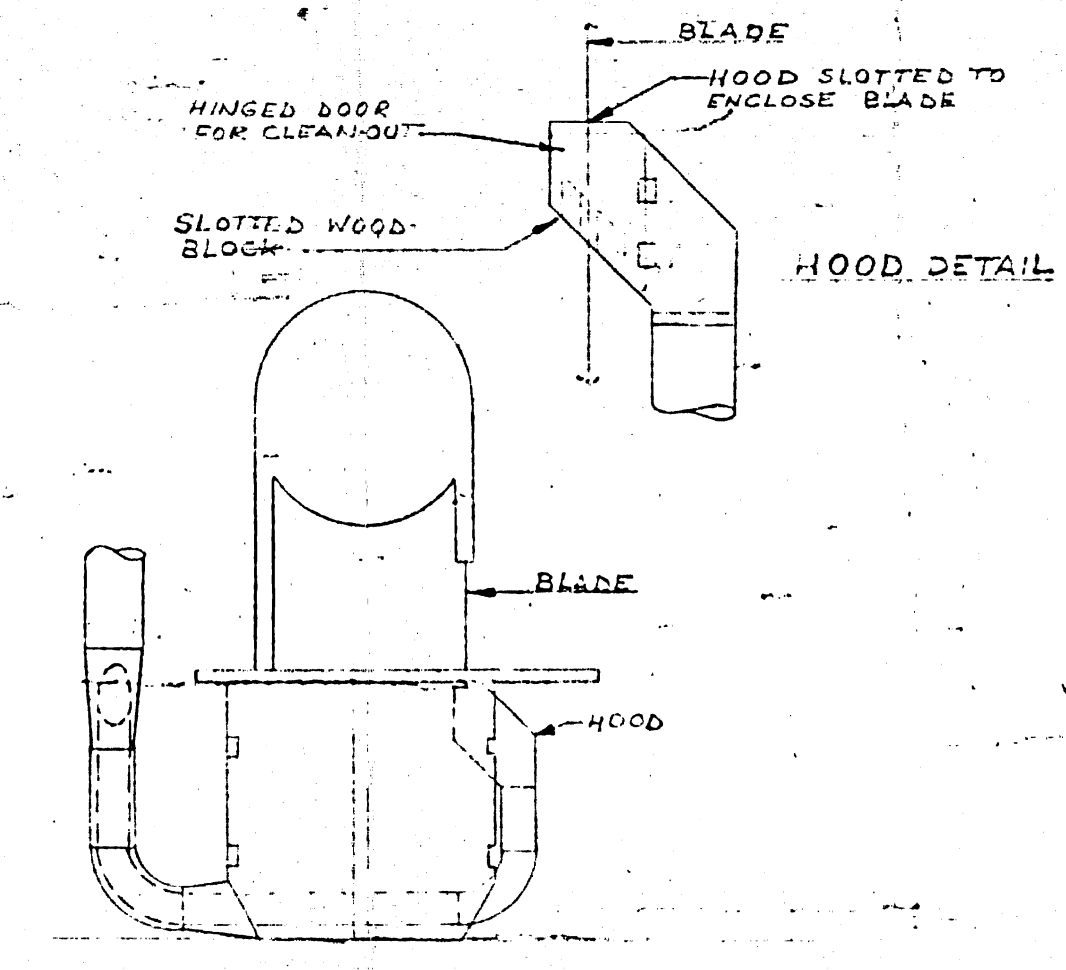
PLAN
WAYS & STREETS BUILDING
SCALE: 1/8" = 1'-0"



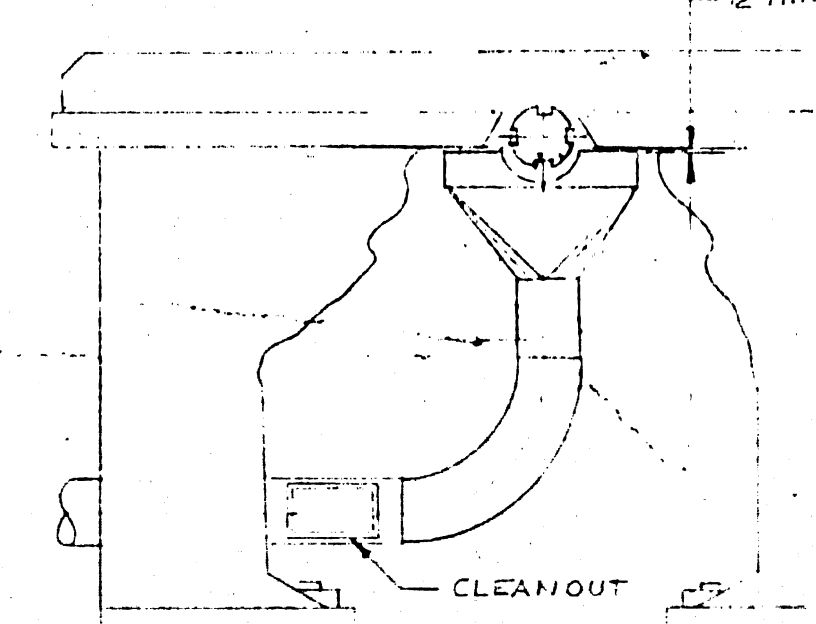
EQUIPMENT IN DEGREASING ROOM
OVERHAUL & REPAIR BUILDING
SCALE: 1/4" = 1'-0"

NOTE: FOR DETAILS OF STACK THROUGH ROOF SEE DWG No 2185-607

$\frac{48}{26} = \frac{5700}{2700} = 2\frac{1}{3}$



BAND SAW EXHAUST DUCT
N.T.S.



TYPICAL PLANNER EXHAUST DUCT
N.T.S.

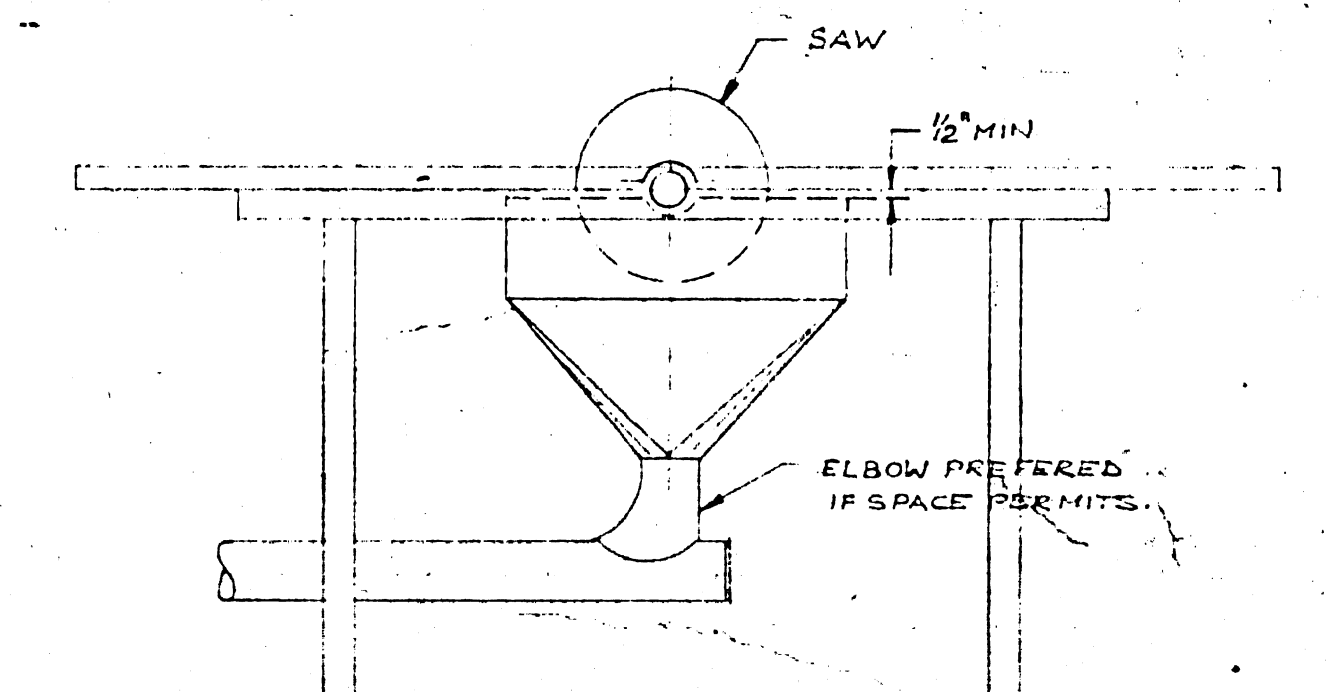
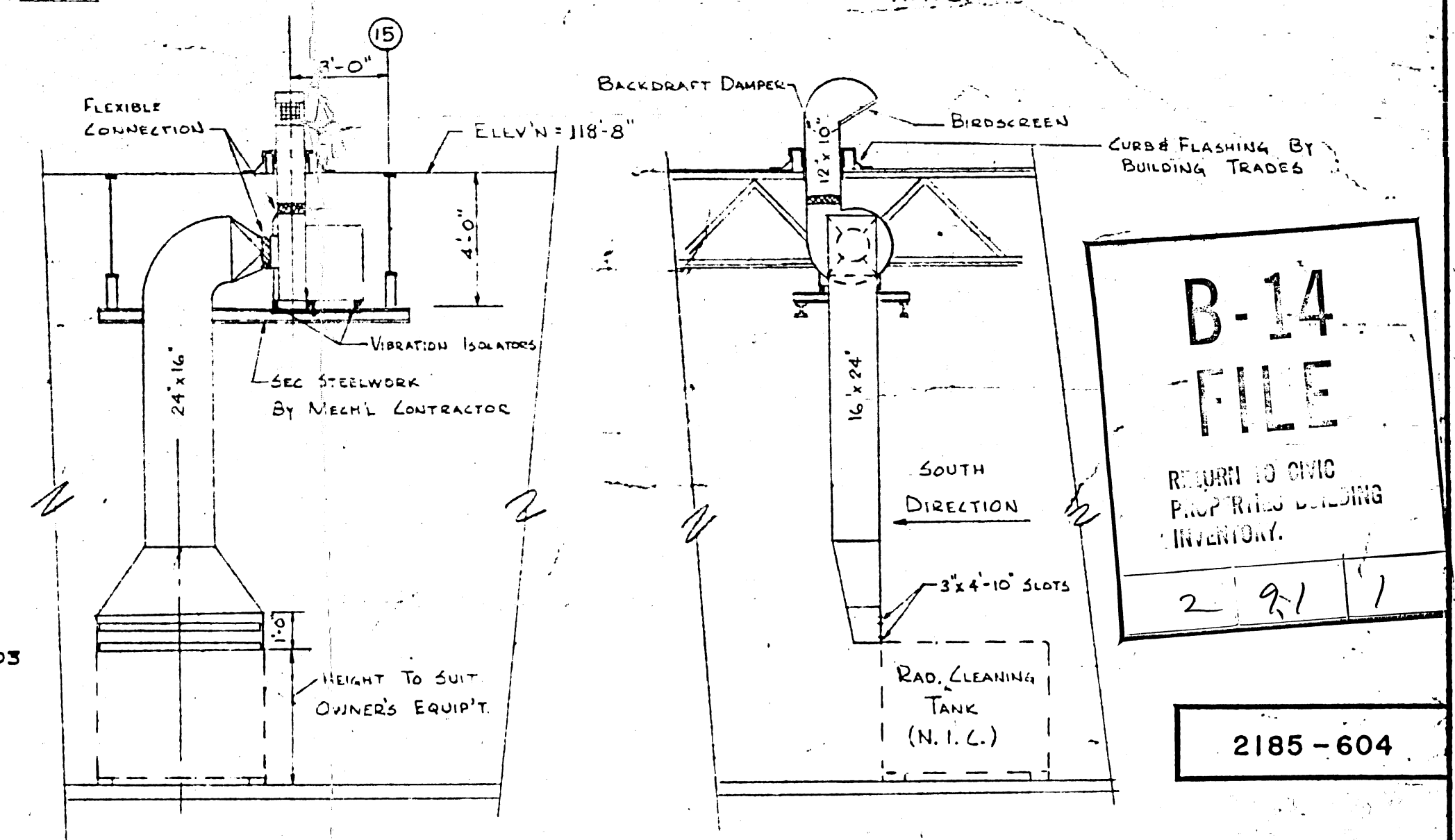
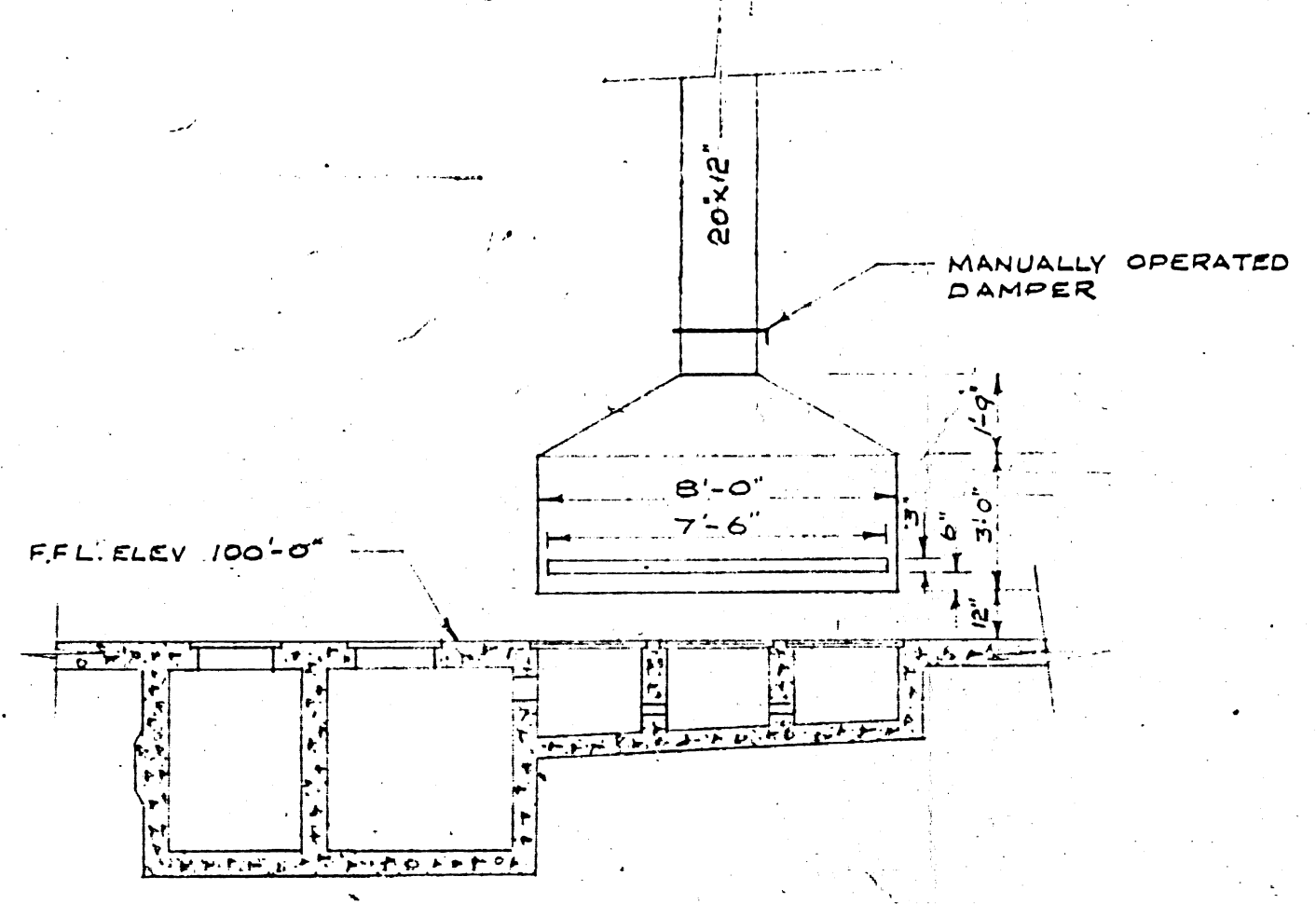


TABLE SAW EXHAUST DUCT
N.T.S.



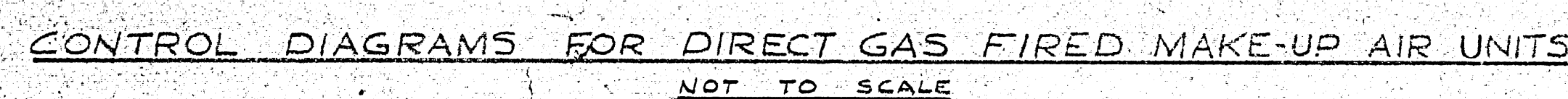
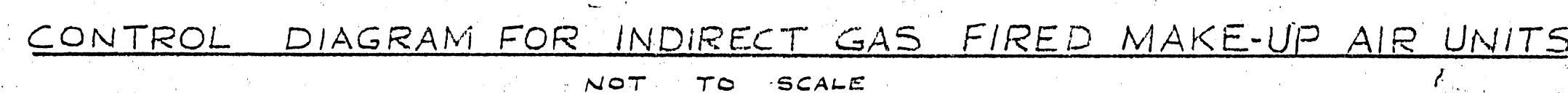
RADIATOR CLEANING TANK VENTILATION SYSTEM
OVERHAUL & REPAIR BUILDING
SCALE: 1/4" = 1'-0"



LAYOUT OF FUME HOOD IN DEGREASING AREA
OVERHAUL & REPAIR BUILDING
SCALE: 1/4" = 1'-0"

21-7-60	1	AS BUILT	R.M.C.
21-7-60	2	REVISED TO SUIT OWNER'S EQUIPMENT AND REQUIREMENTS	17E
21-7-60	3	REVISED AS PER NOTICE OF PROPOSED CHANGES	17E
21-7-60	4	REVISED AS PER APPENDIX 1 TO S.F. FOR CONSTRUCTION	17E
21-7-60	5	FOR TENDER	17E
21-7-60	6	FOR APPROVAL	17E
DATE	ISSUE NO.	REV. NO.	DESCRIPTION
ISSUE OR REVISION			
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION			
TRANSIT STORAGE AND SHOP FACILITIES			
WAYS & STREETS FACILITIES BUILDING			
HEATING & VENTILATING - PLAN & DETAILS			
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO			
ARCHITECTS Walsman Ross & Blankstein 10 DONALD STREET, WINNIPEG, MANITOBA			
APPROVED	DRAWN BY	DATE	
	W.F. Hume	AUGUST '67	
CHECKED	HTT	SCALE	AS SHOWN
FILE NO.		DRAWING NO.	2185-604
SHEET NO.			MECHANICAL

LICENSE TO PRACTICE
IN THE
PROVINCE OF MANITOBA
My License Expires 10-31-70



— — — — — DENOTES WIRING BY OTHERS
 ○ — — — — — DENOTES TERMINALS IN REMOTE CONTROL STATION
 □ — — — — — DENOTES TERMINALS IN MAIN PANEL

* SHORT BETWEEN TERM 14 & 15 WHEN NOT REQUIRED

Diagram illustrating the wiring for a remote control system for a furnace. The central unit is labeled with components: R.A. DAMPERS, O.A. DAMPERS, FILTER BOX, MIXING BOX, and LOW LIMIT DUCTSTAT. The system includes a MAIN CONTROL CABINET, a REMOTE CONTROL CENTRE, and a REMOTE CONTROL PANEL.

Remote Control Centre Components:

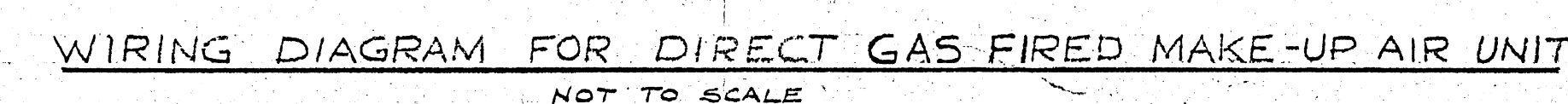
- CIRCUIT BREAKER
- HEAT/VENT SWITCH
- MANUAL POTENTIOMETER

Remote Control Panel Components:

- SAFETY LOCKOUT
- BURNER ON
- MAIN FAN ON
- ROOM THERMOSTAT
- SUMMER/OFF/WINTER SWITCH

The diagram shows the electrical connections between these components and the furnace unit.

WIRING DIAGRAM FOR INDIRECT GAS FIRED MAKE-UP AIR UNIT
NOT TO SCALE



B-14
FILE

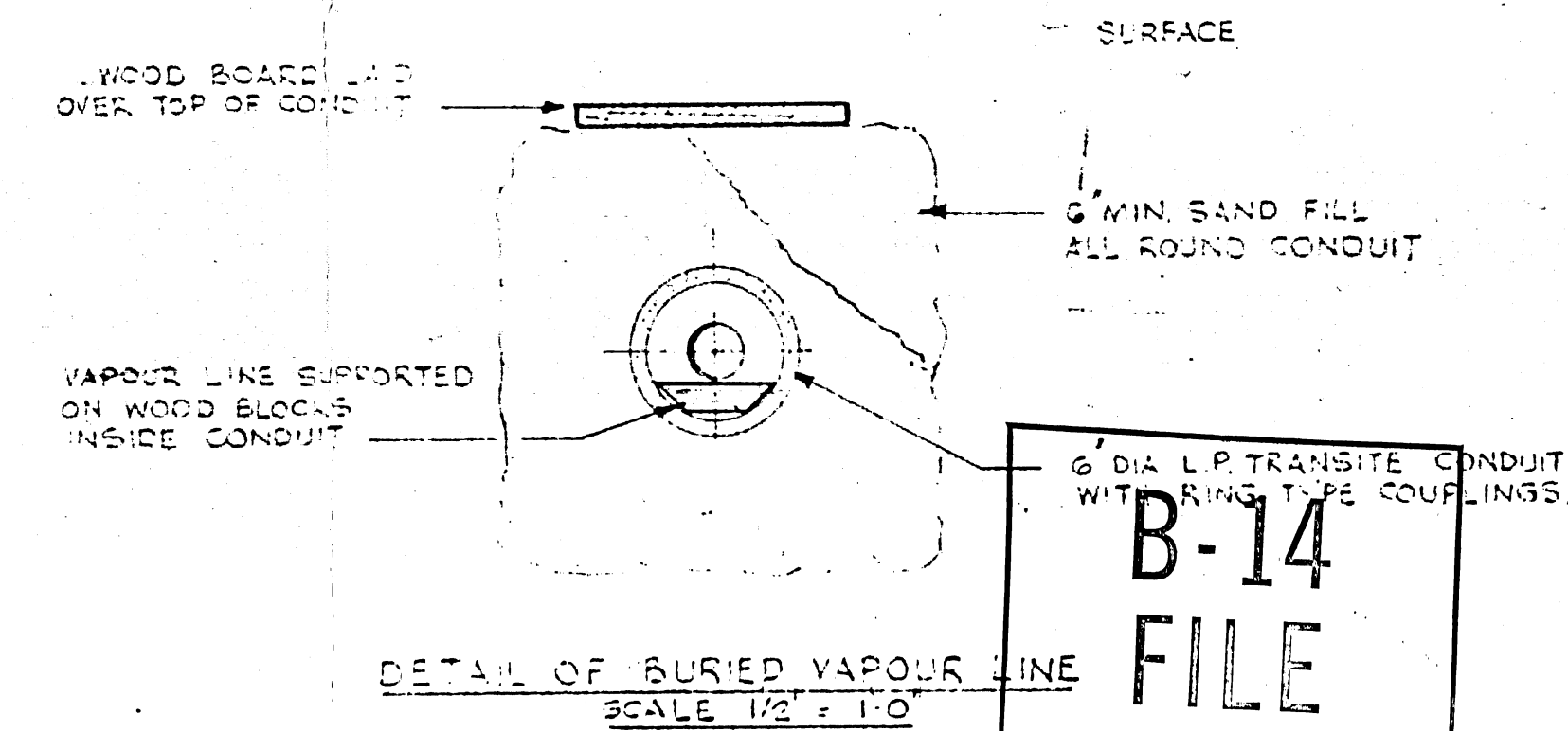
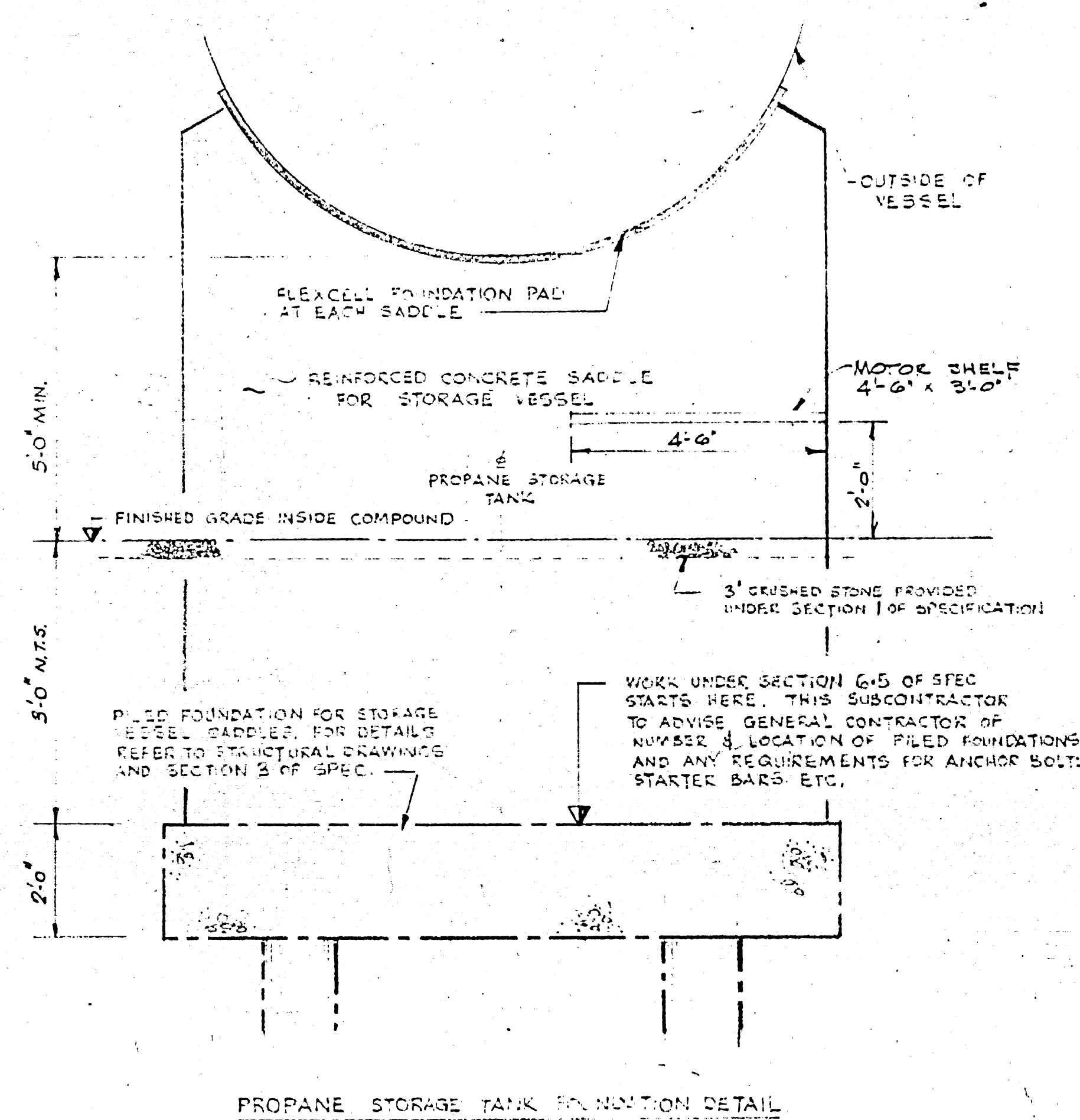
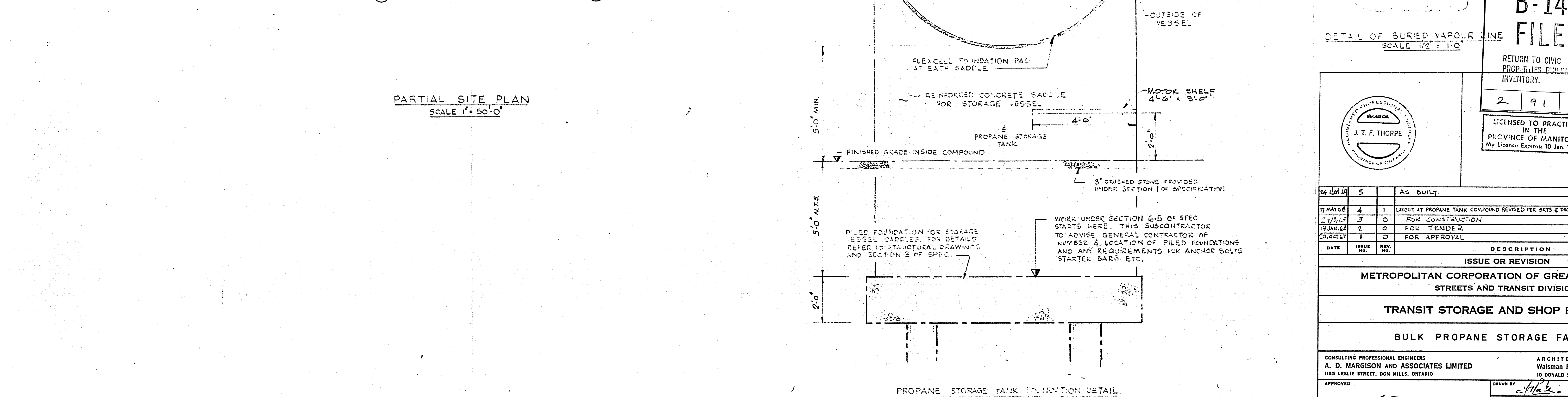
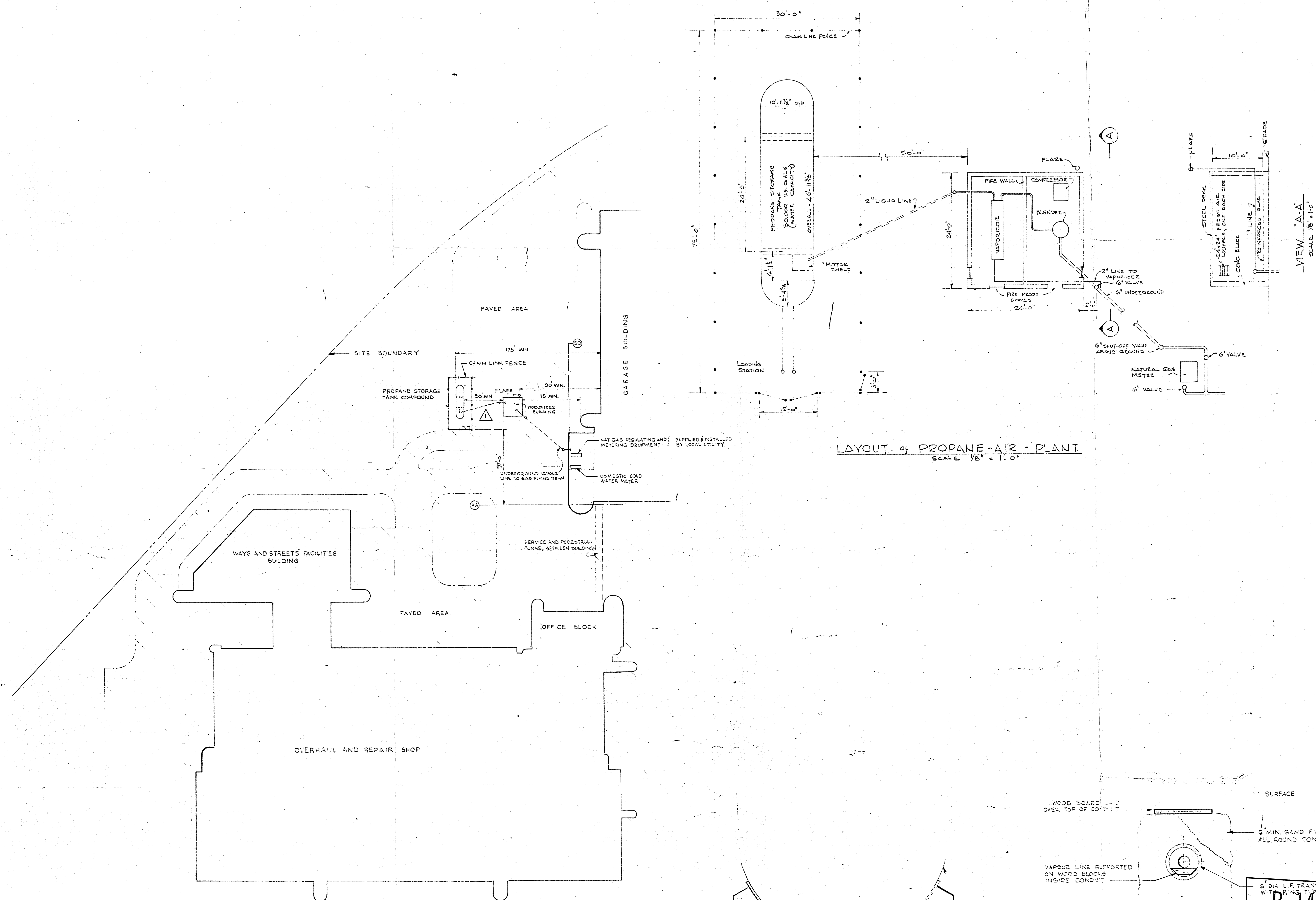
RETURN TO CIVIC
PROPERTIES BUILDING
INVENTORY.

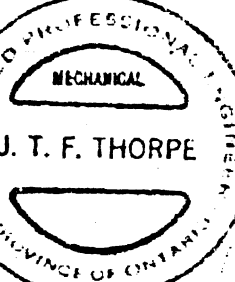
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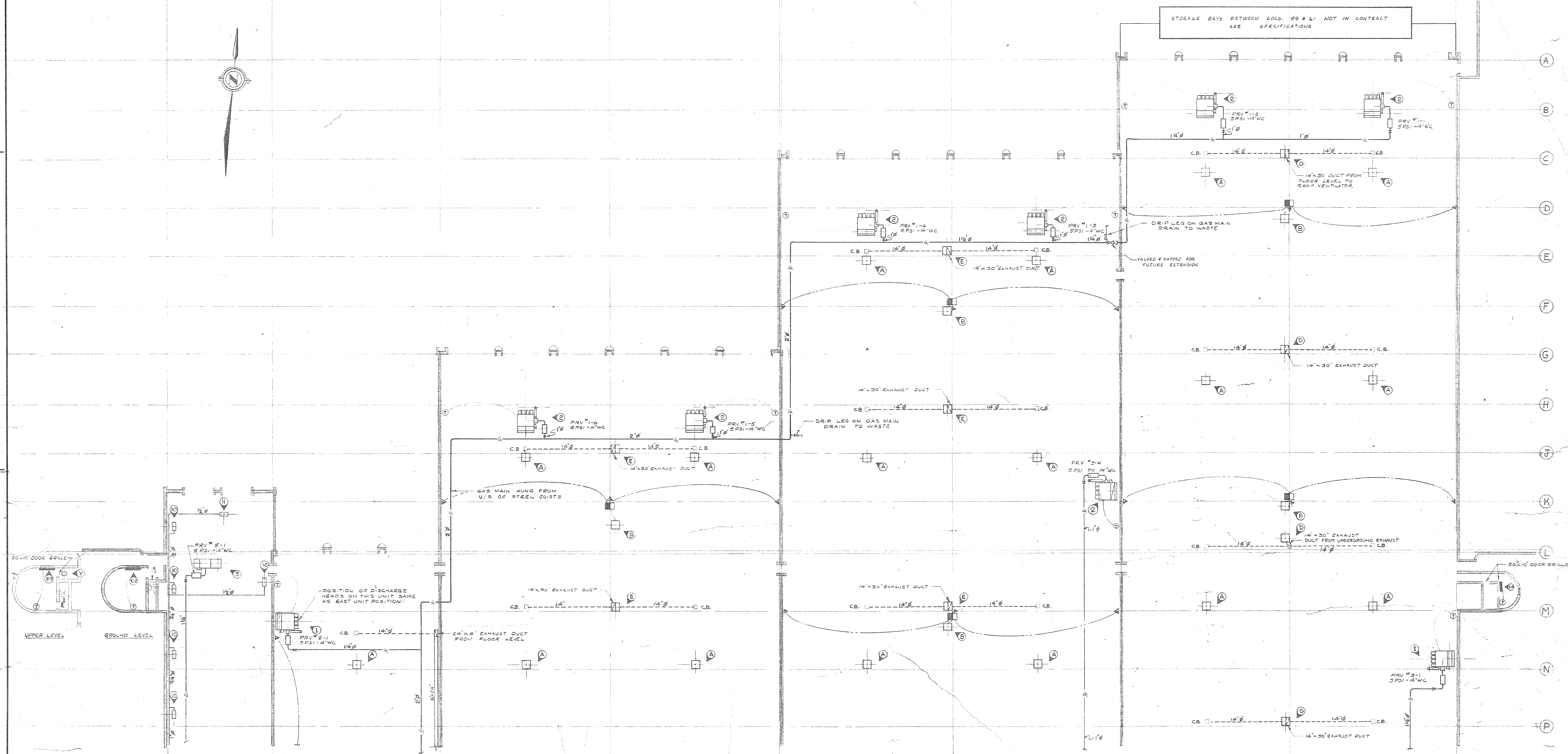
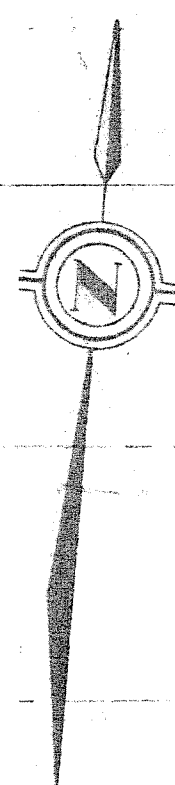
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2185 - 614

<i>7/10/69</i>	<i>A.</i>	<i>C</i>	<i>AS BUILT</i>		<i>R.M.C.</i>
	<i>B.</i>	<i>O</i>	<i>FOR CONSTRUCTION</i>		
<i>19/1/68</i>	<i>C</i>	<i>O</i>	<i>FOR TENDER</i>		
<i>20/10/67</i>	<i>D</i>	<i>O</i>	<i>FOR APPROVAL</i>		
DATE	MAKE NO.	PAY. REV.	DESCRIPTION		DRAWN BY
ISSUE OR REVISION					
METROPOLITAN CORPORATION OF GREATER WINNIPEG					
STREETS AND TRANSIT DIVISION					
TRANSIT STORAGE AND SHOP FACILITIES					
HEATING & VENTILATING - CONTROL DIAGRAMS					
CONSULTING PROFESSIONAL ENGINEERS A. D. MARIGSON AND ASSOCIATES LIMITED 1155 LESLIE STREET, TORONTO, ONTARIO			ARCHITECTS Weisman Ross & Blankensett Corp Gilmour Hanna 10 DONALD STREET, WINNIPEG, MANITOBA		
APPROVED _____ <i>K-263</i>	DRAWN BY <i>J.R. Kouture</i>		DATE	AUGUST '67	
CITY DIRECTOR OF STREETS AND TRANSPORT	CHECKED _____ <i>J.T.S.</i>	FILE NO.	SCALE	NOT TO SCALE	
	SHEET NO.		DRAWING NO.	2185-614 WFGHANGAI	



		<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 150px;"> <p style="margin: 0;">6 DIAL L.P. TRANSITE CONDUT WITH RING JOINT COUPLINGS.</p> <p style="font-size: 2em; margin: 0;">B-14</p> <p style="font-size: 3em; margin: 0;">FILE</p> </div>		<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 150px;"> <p style="margin: 0;">RETURN TO CIVIC PROPERTIES BUILDING INVENTORY.</p> </div>		<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 150px;"> <p style="margin: 0;">2 9 1 1</p> </div>		<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 150px;"> <p style="margin: 0;">LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My Licence Expires 10 Jan. 1958</p> </div>		<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 150px;"> <p style="margin: 0;">2185-651</p> </div>	
		<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 150px;"> <p style="margin: 0;">DETAIL OF BURIED VAPOUR LINE SCALE 1/2" = 1'-0"</p> </div>									
<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 80%; font-weight: bold;"> <p>ISSUE OR REVISION</p> </div>											
<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 80%; font-weight: bold;"> <p>METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION</p> </div>											
<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 80%; font-weight: bold;"> <p>TRANSIT STORAGE AND SHOP FACILITIES</p> </div>											
<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 80%; font-weight: bold;"> <p>BULK PROPANE STORAGE FACILITIES</p> </div>											
<p>CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 155 LESLIE STREET, DON MILLS, ONTARIO</p>						<p>ARCHITECTS Weisman Ross & Blankstein Coop Gilmour Hanna 10 DONALD STREET, WINNIPEG, MANITOBA</p>					
<p>APPROVED</p>						<p>DATE</p>		<p>SCALE</p>		<p>DRAWING NO.</p>	
<p>DEPUTY DIRECTOR OF STREETS AND TRANSIT</p>						<p>FILE NO.</p>		<p>AS SHOWN</p>		<p>2185-651</p>	
<p>2185-651</p>						<p>MECHANICAL</p>		<p>MECHANICAL</p>		<p>MECHANICAL</p>	



FOR CONTINUATION SEE DWG. 2185-601

**GARAGE BUILDING
PART PLAN
SCALE 1/4"=1'-0"**

- NOTES:**
1. GAS DISTRIBUTION PIPING MUST BE SLEEVED & PACKED WITH ASBESTOS ROPE WHEN PASSING THRU FIRE WALLS AT COLUMN LINE 52 TO 59 INCLUSIVE.
 2. FOR SCHEDULES OF HEATING AND VENTILATING UNITS SEE DWG. 2185-601.
 3. FOR DETAILS OF MAKE-UP AIR UNITS INFRARED SEATERS VENTILATING AND EXHAUST SYSTEMS SEE DWG. 2185-605.
 4. FOR DETAILS OF DISCHARGE HEADS FOR MKI & MAKE-UP AIR UNITS SEE DWG. 2185-601.
 5. ALL 14" X 30" EXHAUST DUCTS RISE FROM CONCRETE PLENUM IN FLOOR TO ROOF VENTILATOR FOR DETAILS SEE DWG. 2185-605.

2185-602

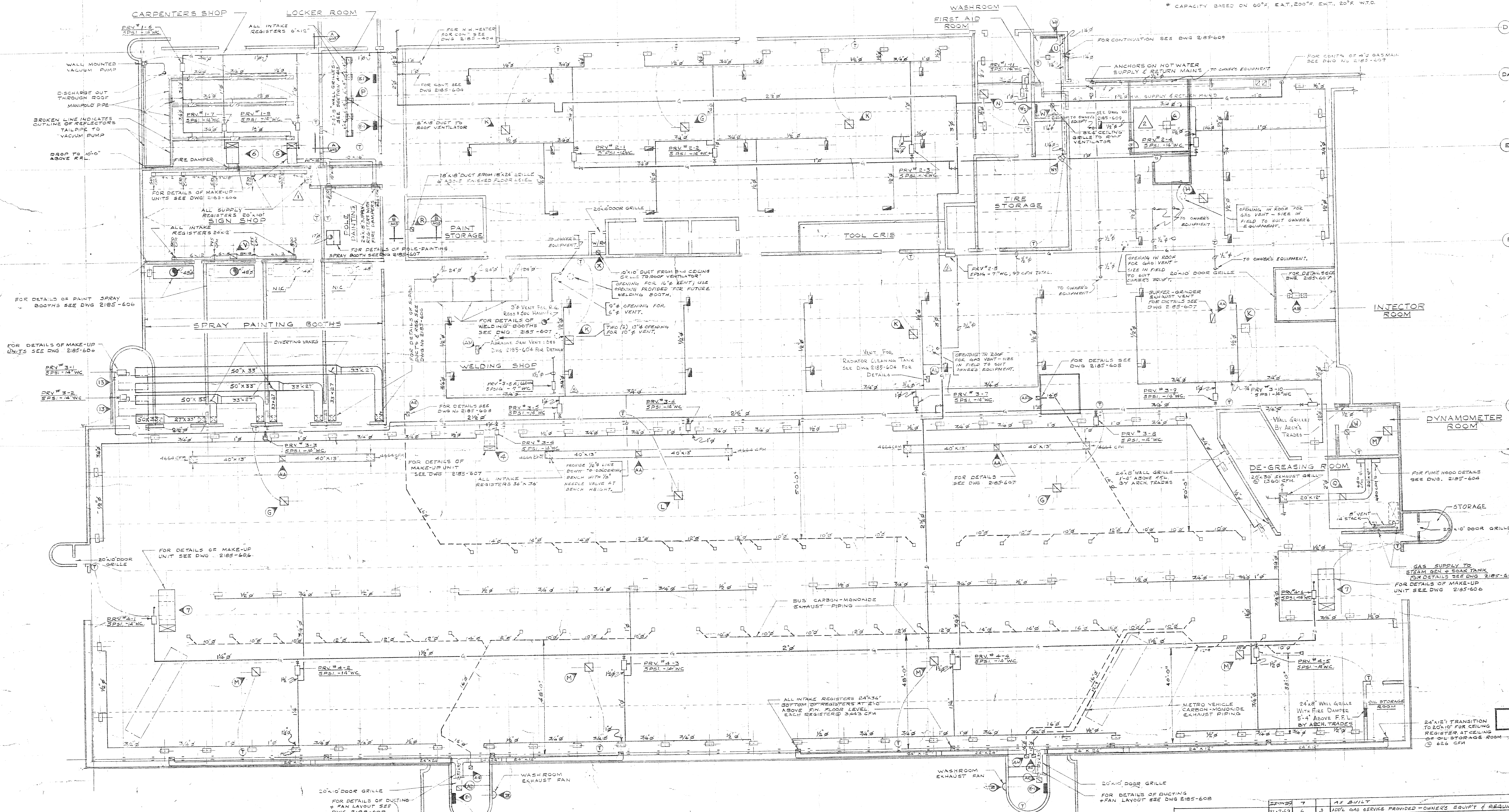
DATE	21/3/66	ISSUE	3	REV.	0	DESCRIPTION	FOR CONSTRUCTION	DRAWN BY	R.M.C.
DATE	20/6/67	ISSUE	1	REV.	0	DESCRIPTION	FOR TENDER	DRAWN BY	
DATE	20/6/67	ISSUE	1	REV.	0	DESCRIPTION	FOR APPROVAL	DRAWN BY	
ISSUE OR REVISION									
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION									
TRANSIT STORAGE AND SHQP FACILITIES									
GARAGE & SERVICE BAY HEATING & VENTILATING - PLAN									
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 115 LEBLANC STREET, WINNIPEG, MANITOBA					ARCHITECTS Walsman Ross & Blankstein Coop Gillmor Hannes 30 DUNDAS STREET, WINNIPEG, MANITOBA				
APPROVED J. F. THORPE LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My Licence Expires 30 Jun. 1968					DATE AUGUST '67 SCALE 1/16"=1'-0" DRAWING NO. 2185-602 MECHANICAL				

NOTE: ALL MECHANICAL EQUIPMENT & MOTORS IN CARPENTERS SHOP MUST BE DUST TIGHT

FOR CONTINUATION SEE DWG 2185-604

HOT WATER HEATER SCHEDULE						
W/H	SIZE	MANUFACTURER	CAPACITY	CFM	FAN HP	U.S. GPM
W1	250	250	42,600	500	1/2	6.0
W2	250	250	42,600	500	1/2	6.0
W3	76 H	250	42,600	500	1/2	6.0

* CAPACITY BASED ON 60°F. EAT, 200°F. EWT, 20°F. W.T.O.

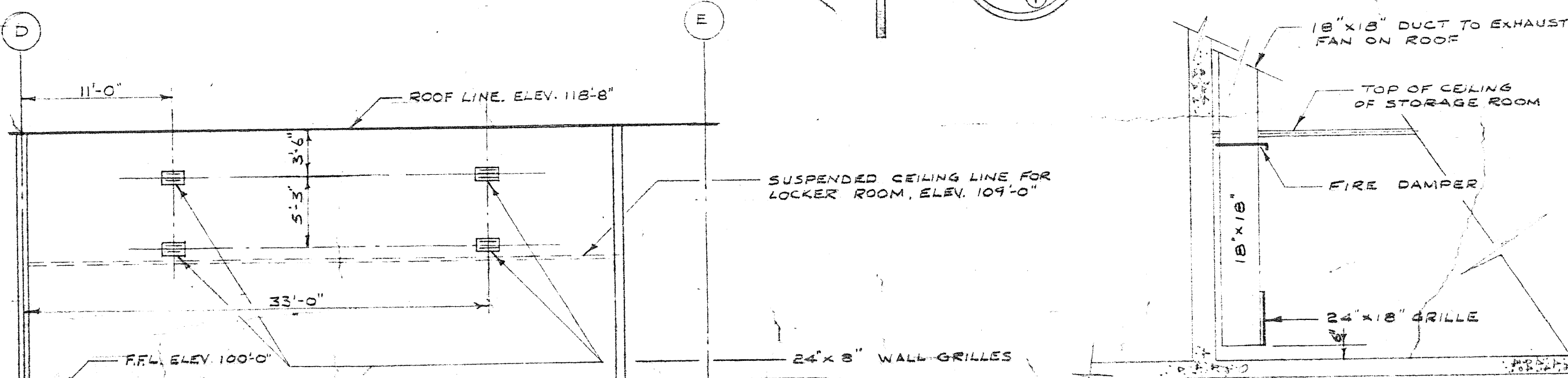


OVERHAUL & REPAIR BUILDING

PLAN
1/8" = 1'-0"

- LEGEND
- INFRA-RED HEATER INSTALLED WITH REFLECTOR ASSEMBLY
 - INFRA-RED HEATER INSTALLED WITHOUT REFLECTOR ASSEMBLY
 - BURNER ASSEMBLY FOR CO-RAY-VAC HEATING SYSTEM
 - THERMOSTAT
 - ELECTRIC HEATER UNIT

- NOTE:
- ALL INFRA-RED UNITS LOCATED AT OUTSIDE WALLS TO BE ANGLE MOUNTED AS SHOWN ON DWG 2185-605
 - FOR DETAILS OF VENT-STACKS & CURBS SEE DWG 2185-605
 - FOR HEATING & VENTILATING SCHEDULES SEE DWG 2185-601



SECTION A-A
SCALE 1/8" = 1'-0"

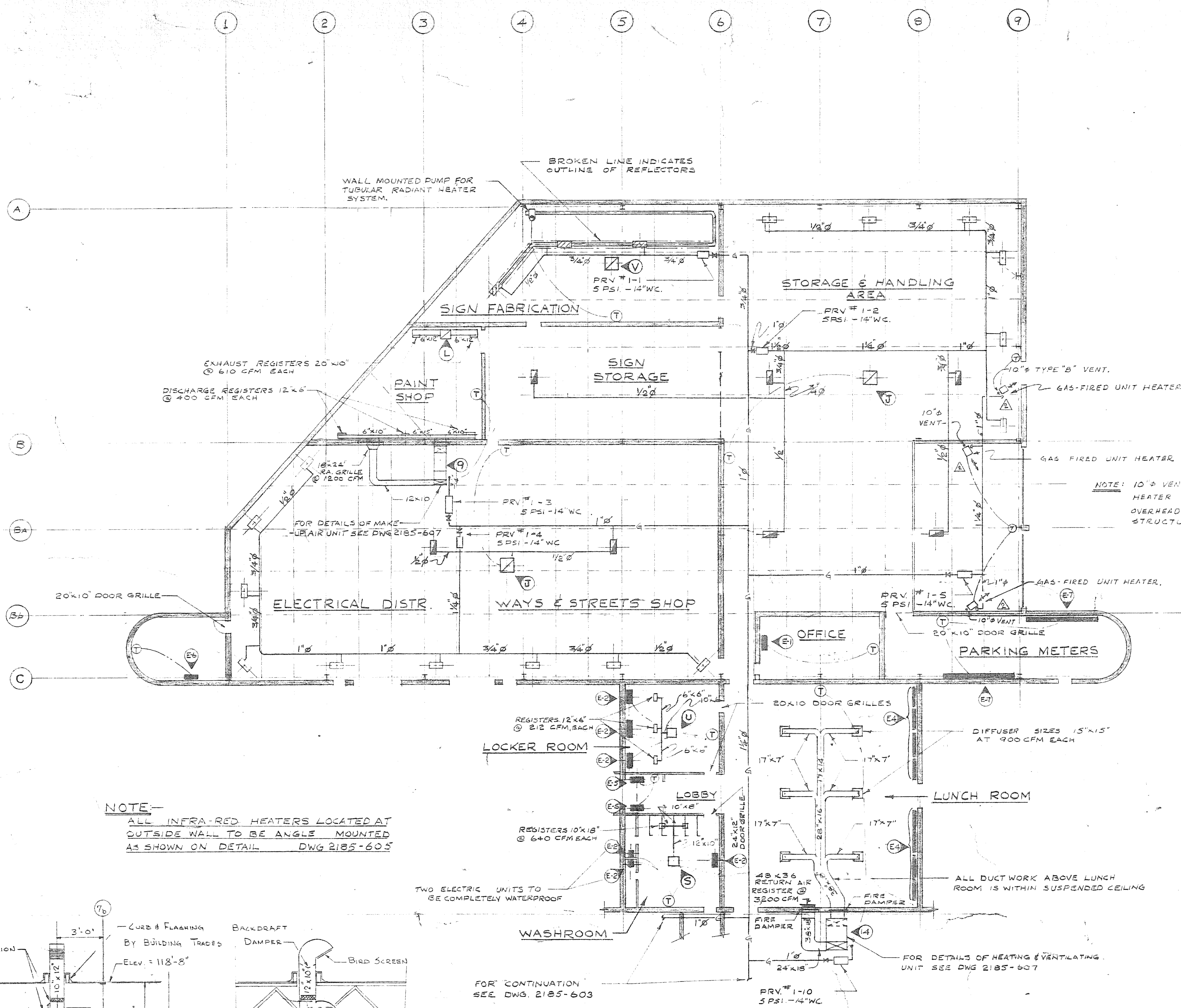
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NOT TO SCALE

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1	11/1/67	J.T.T.	ISSUE FOR APPROVAL	
2	11/1/67	J.T.T.	ISSUE FOR APPROVAL	
3	11/1/67	J.T.T.	ISSUE FOR APPROVAL	
4	11/1/67	J.T.T.	ISSUE FOR APPROVAL	
5	11/1/67	J.T.T.	ISSUE FOR APPROVAL	
6	11/1/67	J.T.T.	ISSUE FOR APPROVAL	
7	11/1/67	J.T.T.	ISSUE FOR APPROVAL	
8	11/1/67	J.T.T.	ISSUE FOR APPROVAL	
9	11/1/67	J.T.T.	ISSUE FOR APPROVAL	
10	11/1/67	J.T.T.	ISSUE FOR APPROVAL	

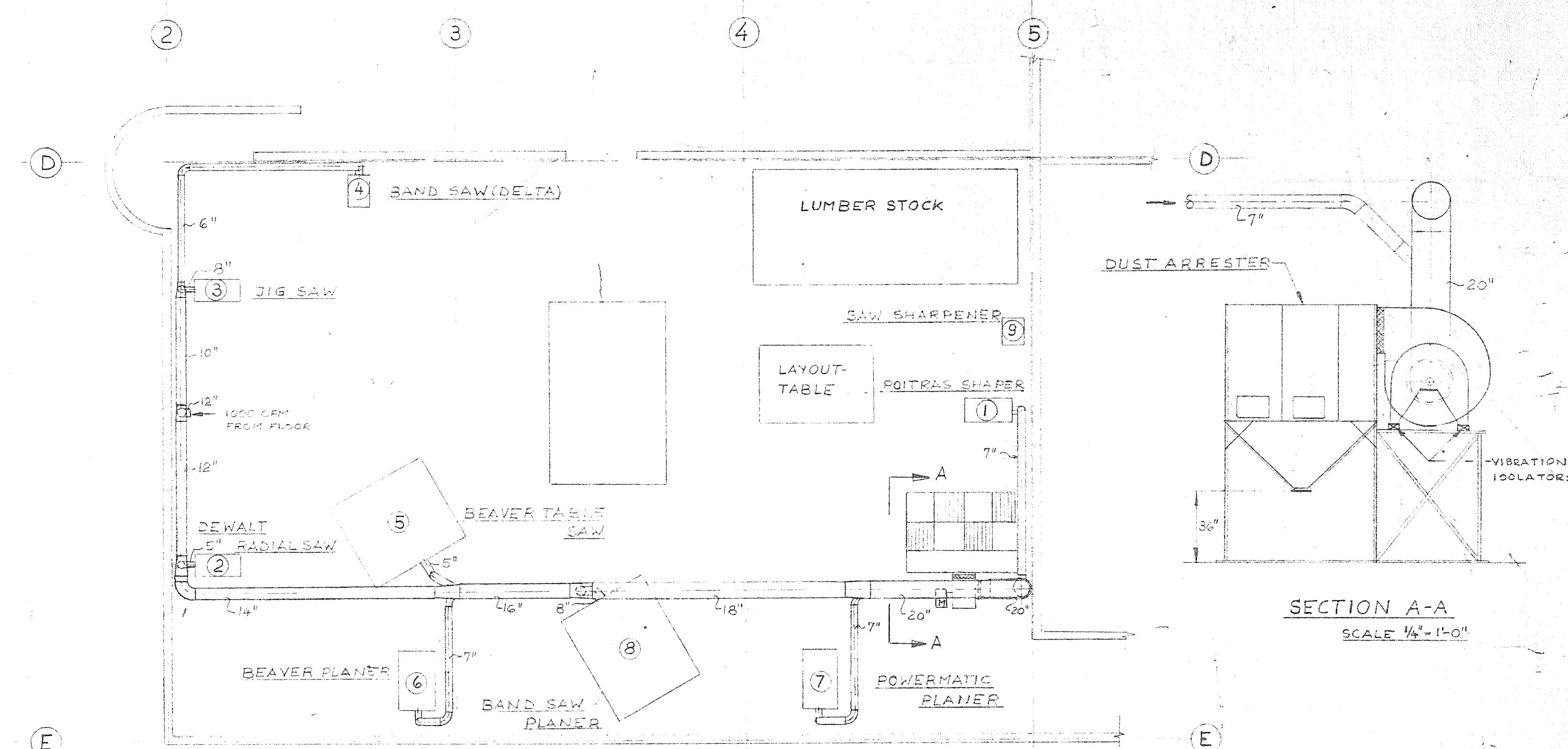


APPROVED: *[Signature]*
DATE: 11/1/67
BY: J.T.T.
FOR: J.T.T.
FILE NO.:
REVISION:

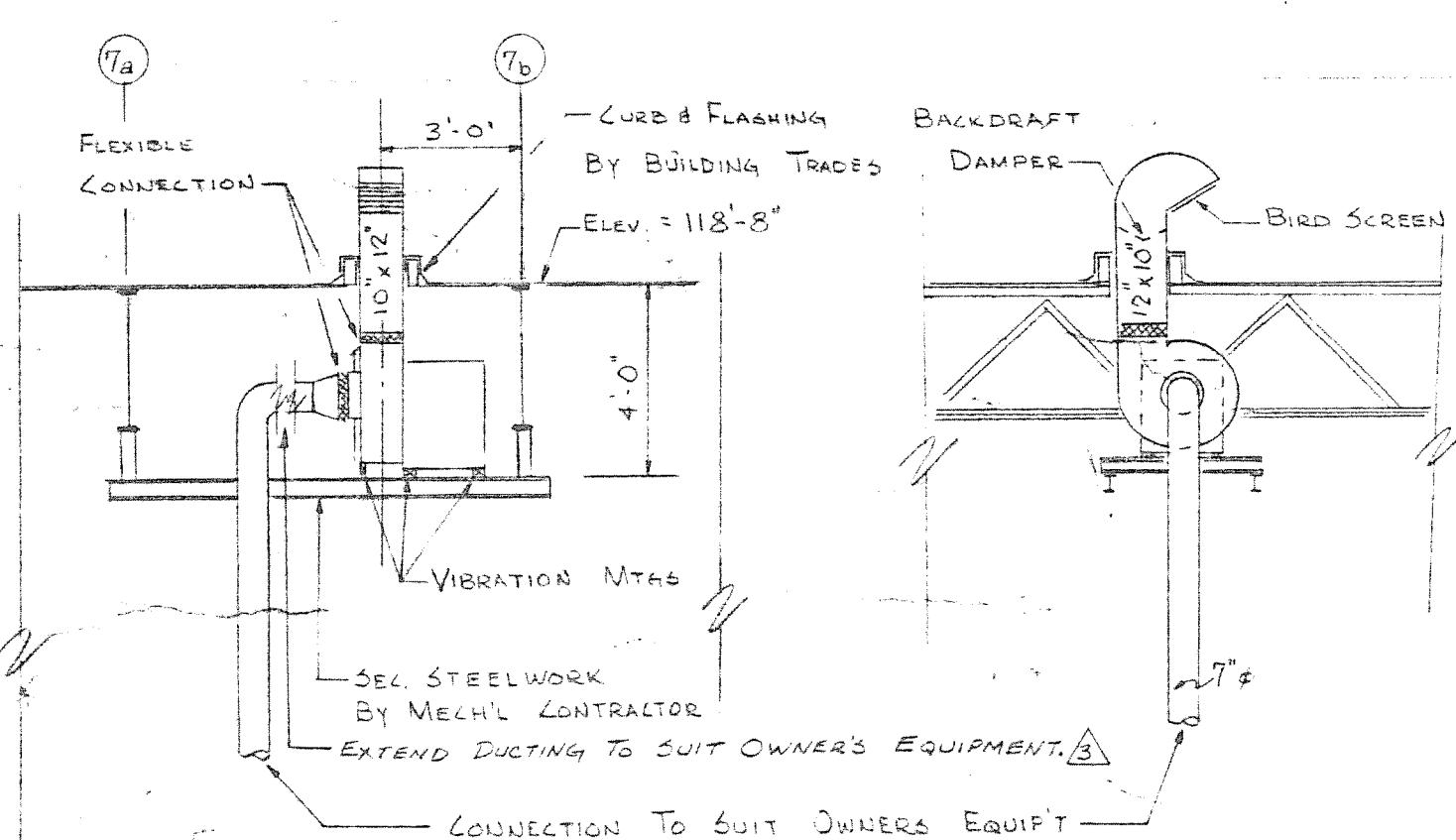
2185-603
MECHANICAL



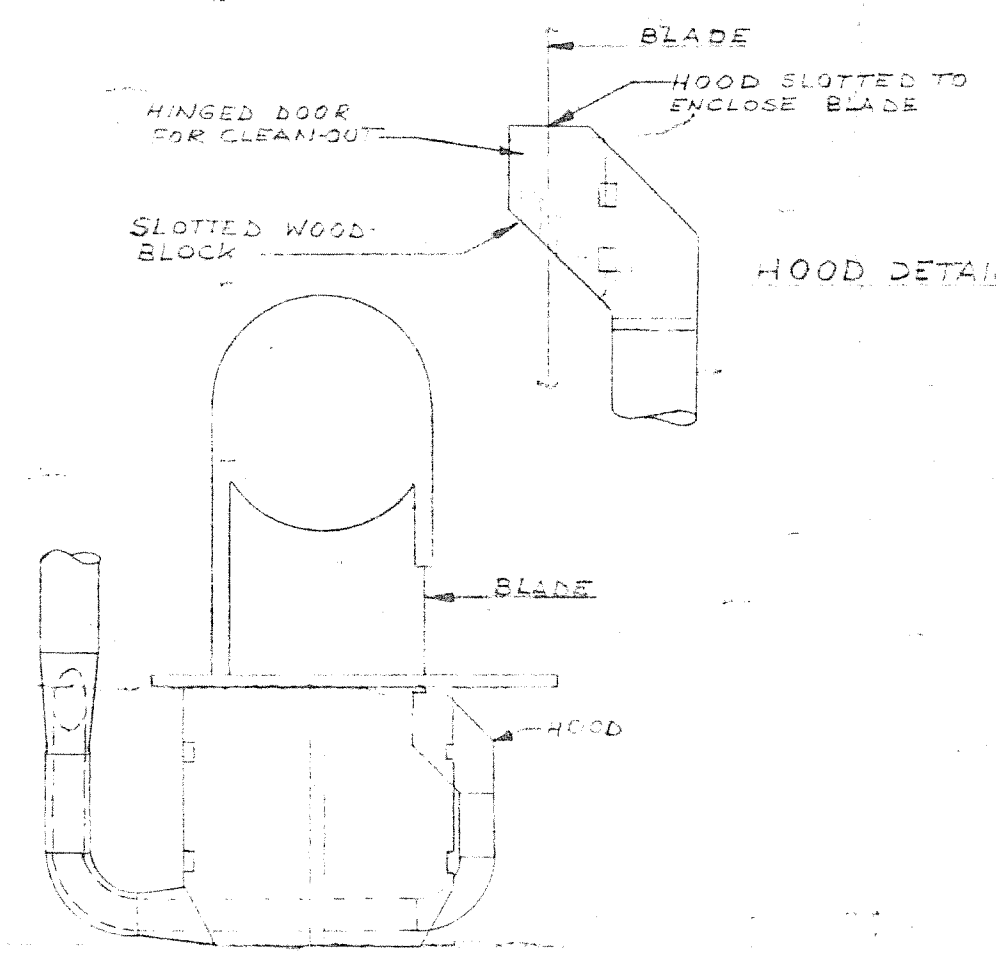
PLAN
WAYS & STREETS BUILDING
SCALE 1/4" = 1'-0"



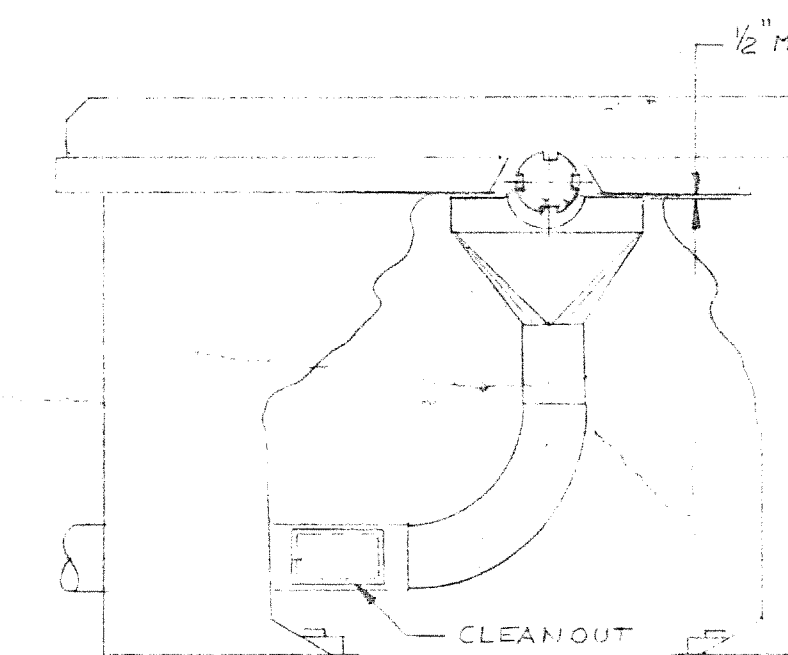
DUST COLLECTION CARPENTER'S SHOP
SCALE 1/4" = 1'-0"



ABRASIVE SAW VENTILATION
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"



BAND SAW EXHAUST DUCT
N.T.S.



TYPICAL PLANER EXHAUST DUCT
N.T.S.

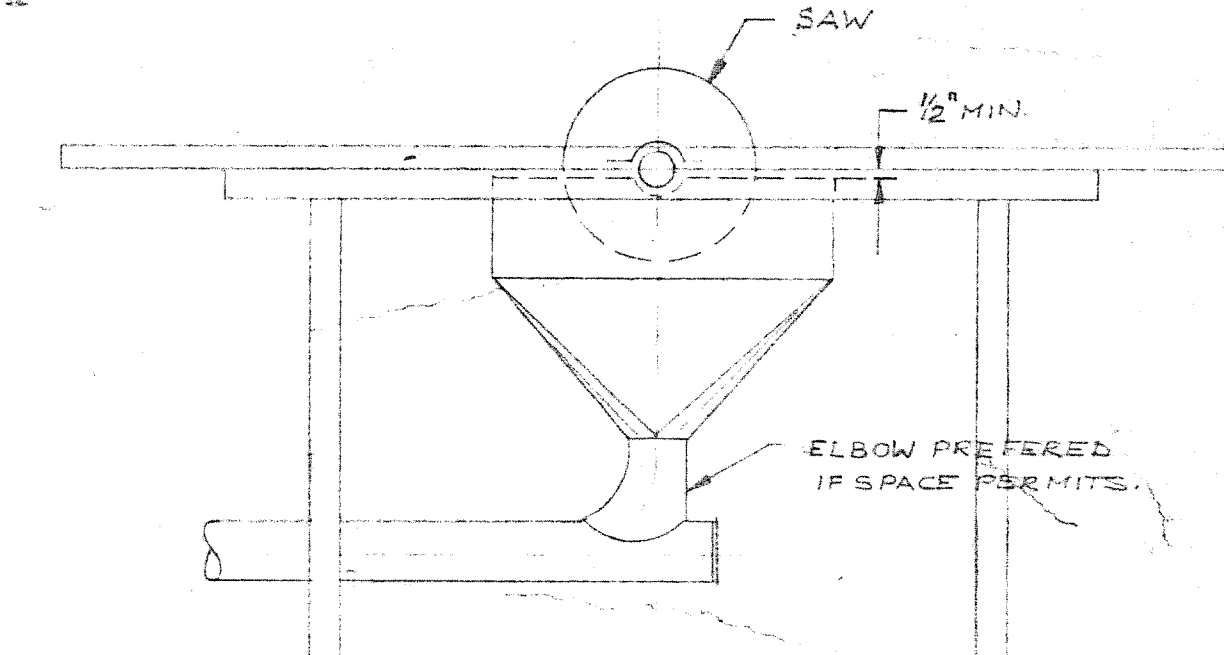
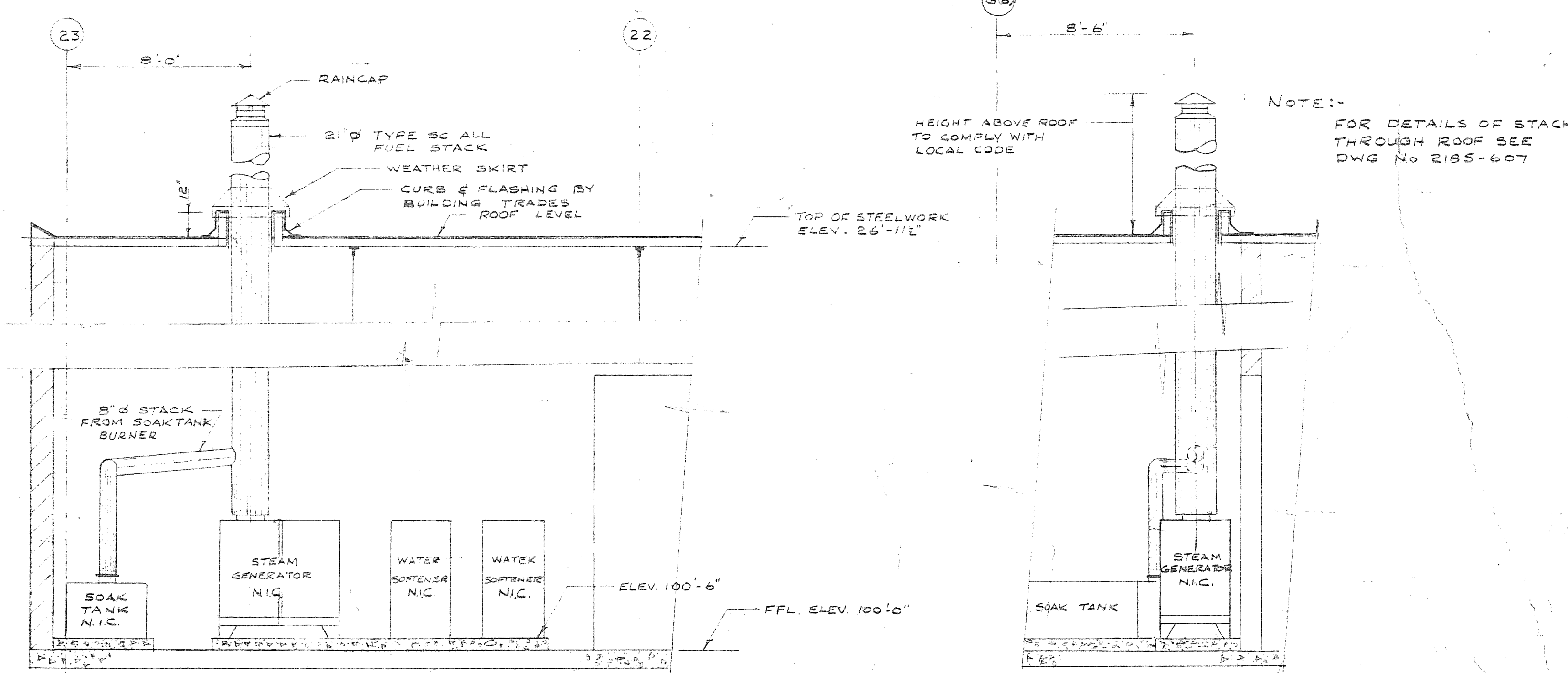
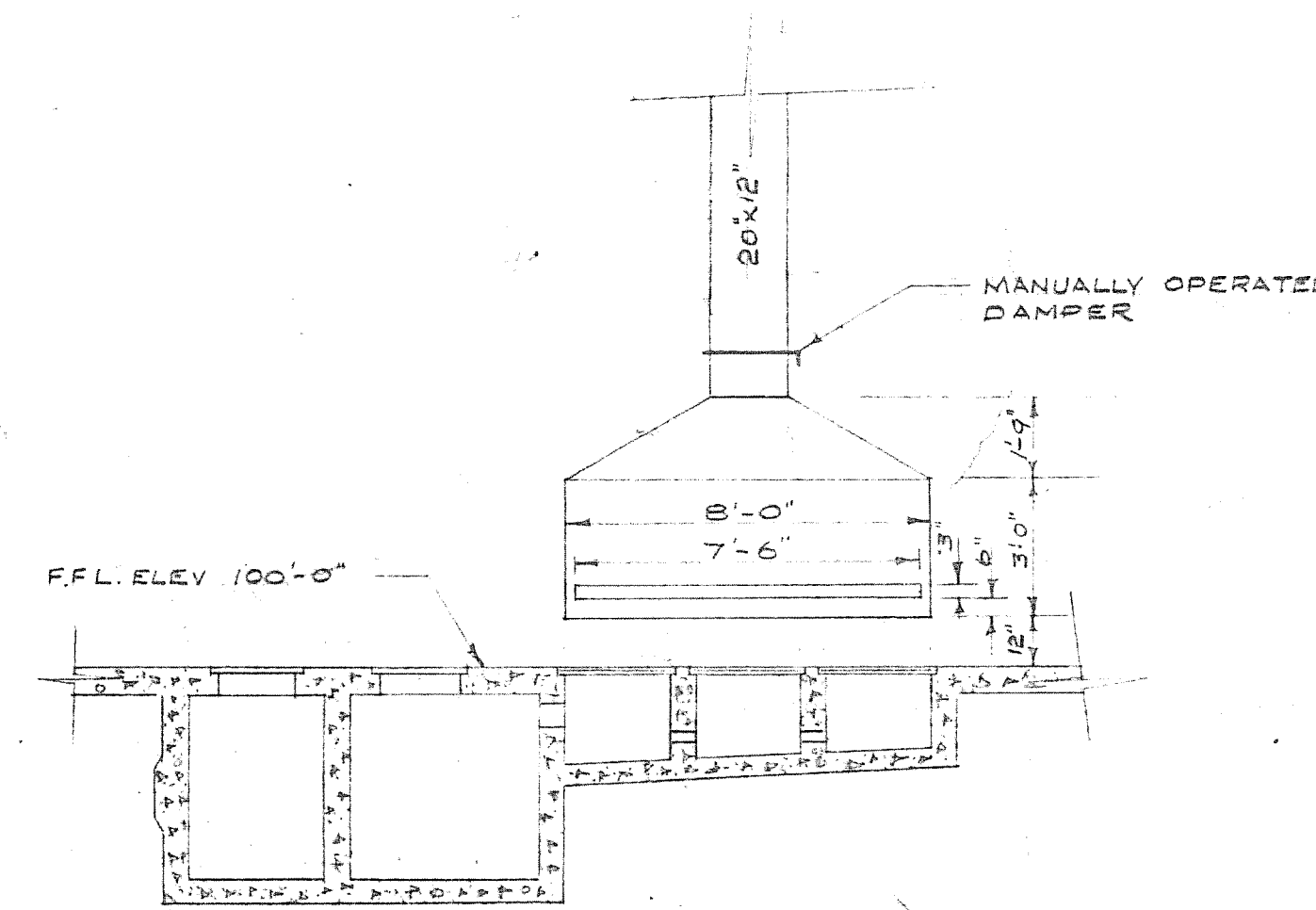


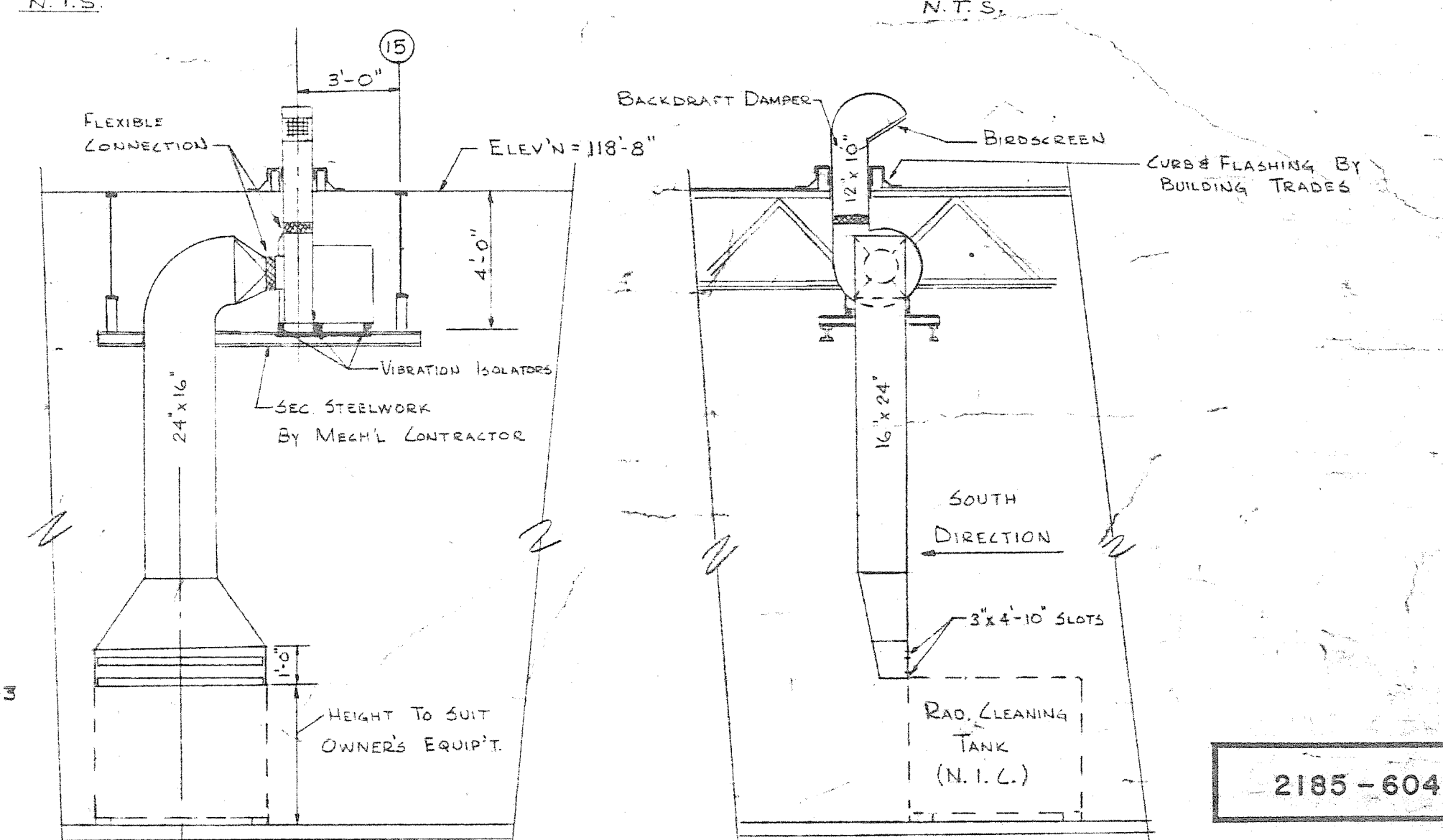
TABLE SAW EXHAUST DUCT
N.T.S.



EQUIPMENT IN DEGREASING ROOM
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"



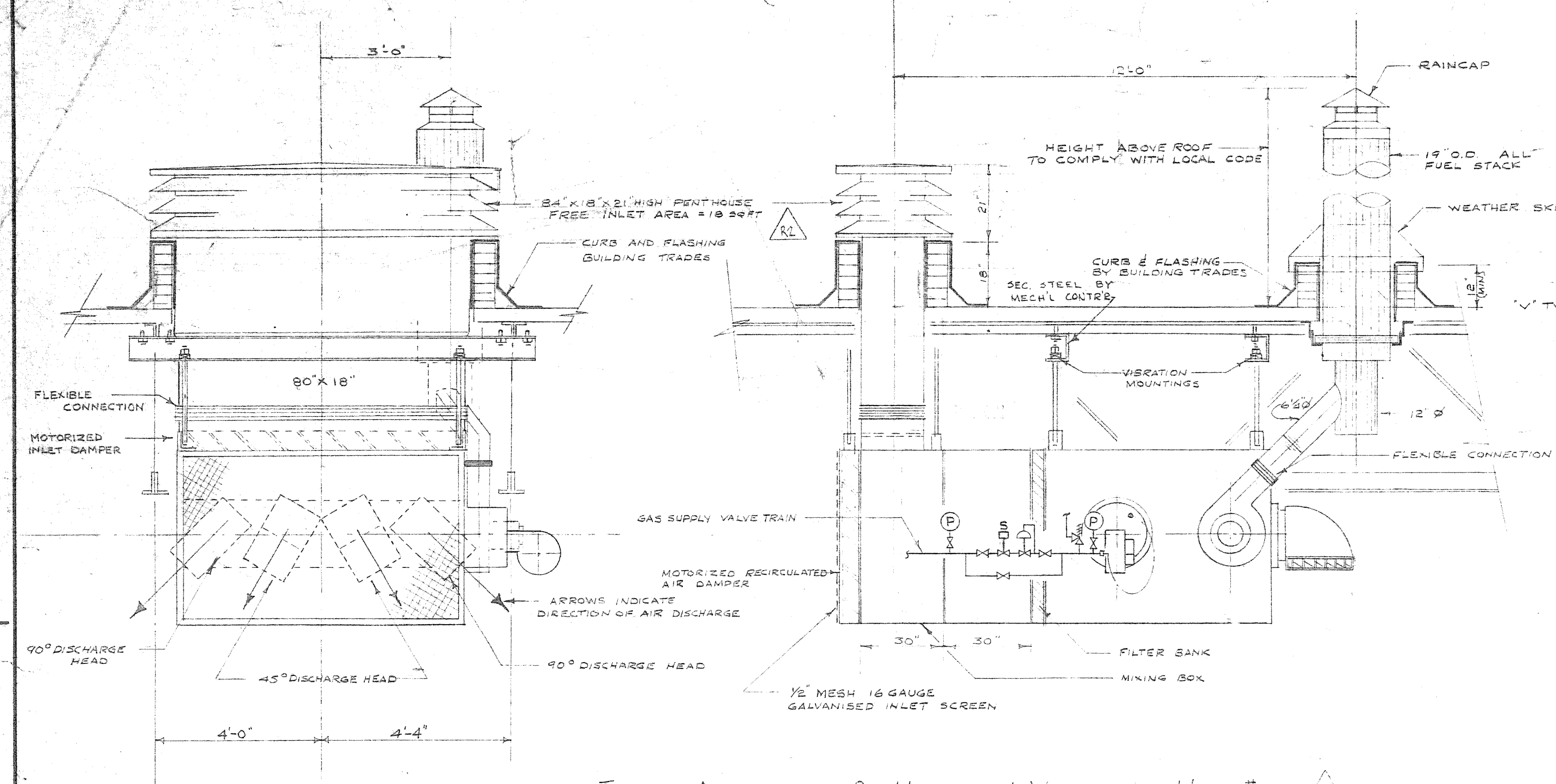
LAYOUT OF FUME HOOD IN DE-GREASING AREA
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"



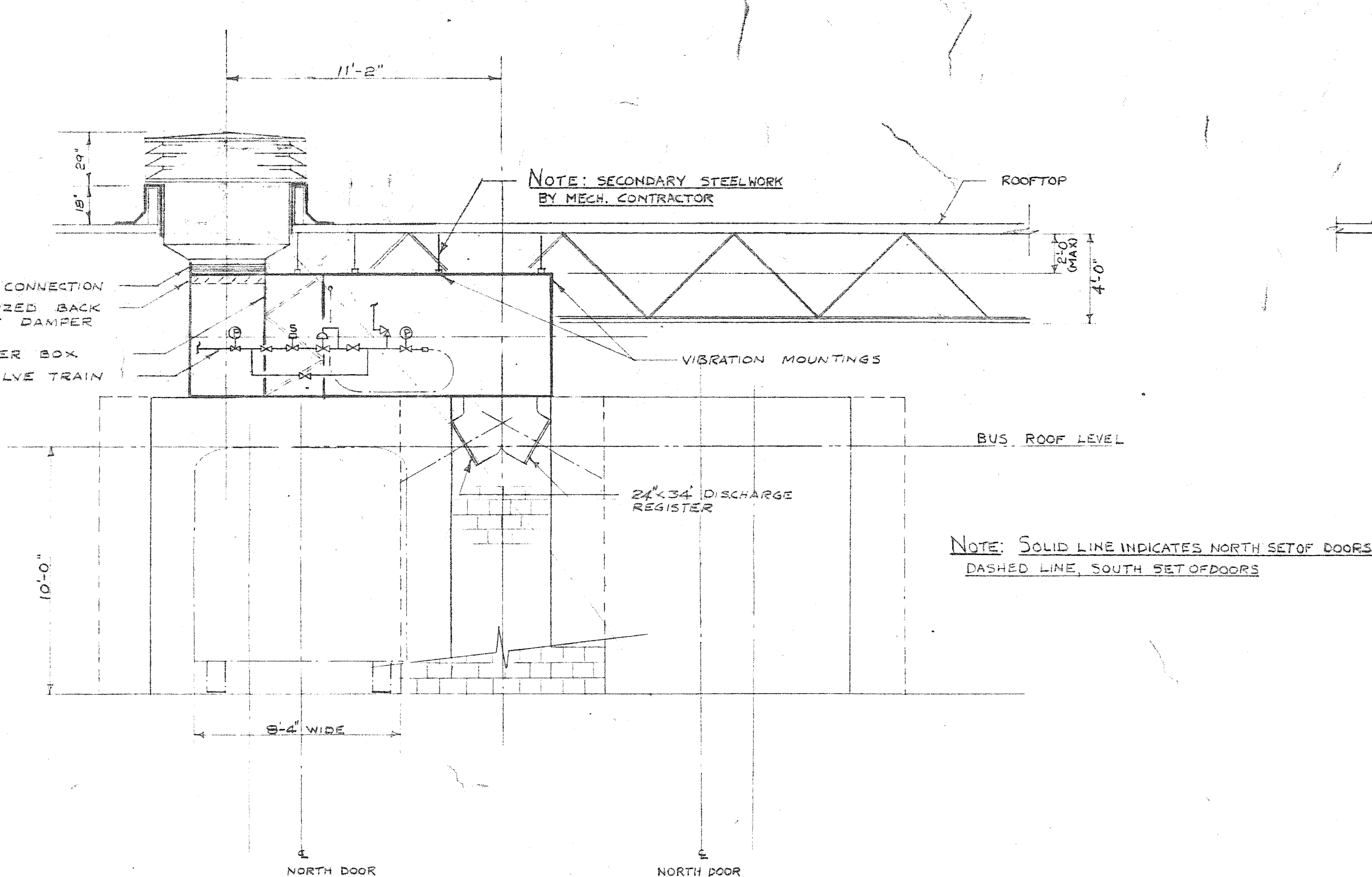
RADIATOR CLEANING TANK VENTILATION SYSTEM
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"

DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY
01-7-60	1	A	AS BUILT	W. J. H.
01-7-60	2	A	REVISED TO SUIT OWNER'S EQUIPMENT AND REQUIREMENTS	W. J. H.
01-7-60	3	A	REVISED AS PER NOTICE OF PROPOSED CHANGE NO. 38	W. J. H.
01-7-60	4	A	REVISED AS PER APPENDIX 1 (TOST) FOR CONSTRUCTION	W. J. H.
01-7-60	5	A	FOR TENDER	W. J. H.
01-7-60	6	A	FOR APPROVAL	W. J. H.
01-7-60	7	A	ISSUE OR REVISION	W. J. H.
01-7-60	8	A	METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION	W. J. H.
01-7-60	9	A	TRANSIT STORAGE AND SHOP FACILITIES	W. J. H.
01-7-60	10	A	WAYS & STREETS FACILITIES BUILDING HEATING & VENTILATING - PLAN & DETAILS	W. J. H.
01-7-60	11	A	CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1100 LOUISE STREET, 2ND FLOOR, WINNIPEG, MANITOBA	W. J. H.
01-7-60	12	A	ARCHITECTS W. J. H. & ASSOCIATES 1100 LOUISE STREET, 2ND FLOOR, WINNIPEG, MANITOBA	W. J. H.
01-7-60	13	A	APPROVED J. T. H.	W. J. H.
01-7-60	14	A	DATE AUGUST '67	W. J. H.
01-7-60	15	A	SCALE AS SHOWN	W. J. H.
01-7-60	16	A	DRAWING NO. 2185-604	W. J. H.
01-7-60	17	A	SHEET NO. MECHANICAL	W. J. H.

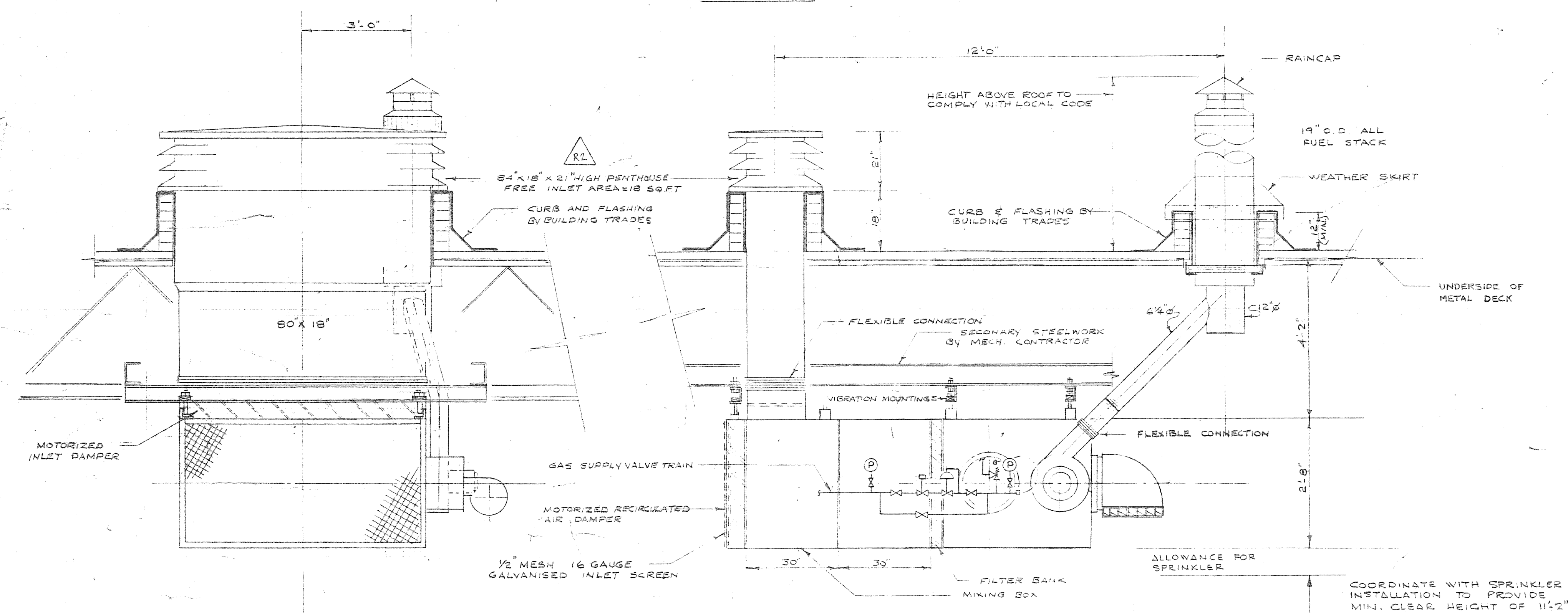
2185-604



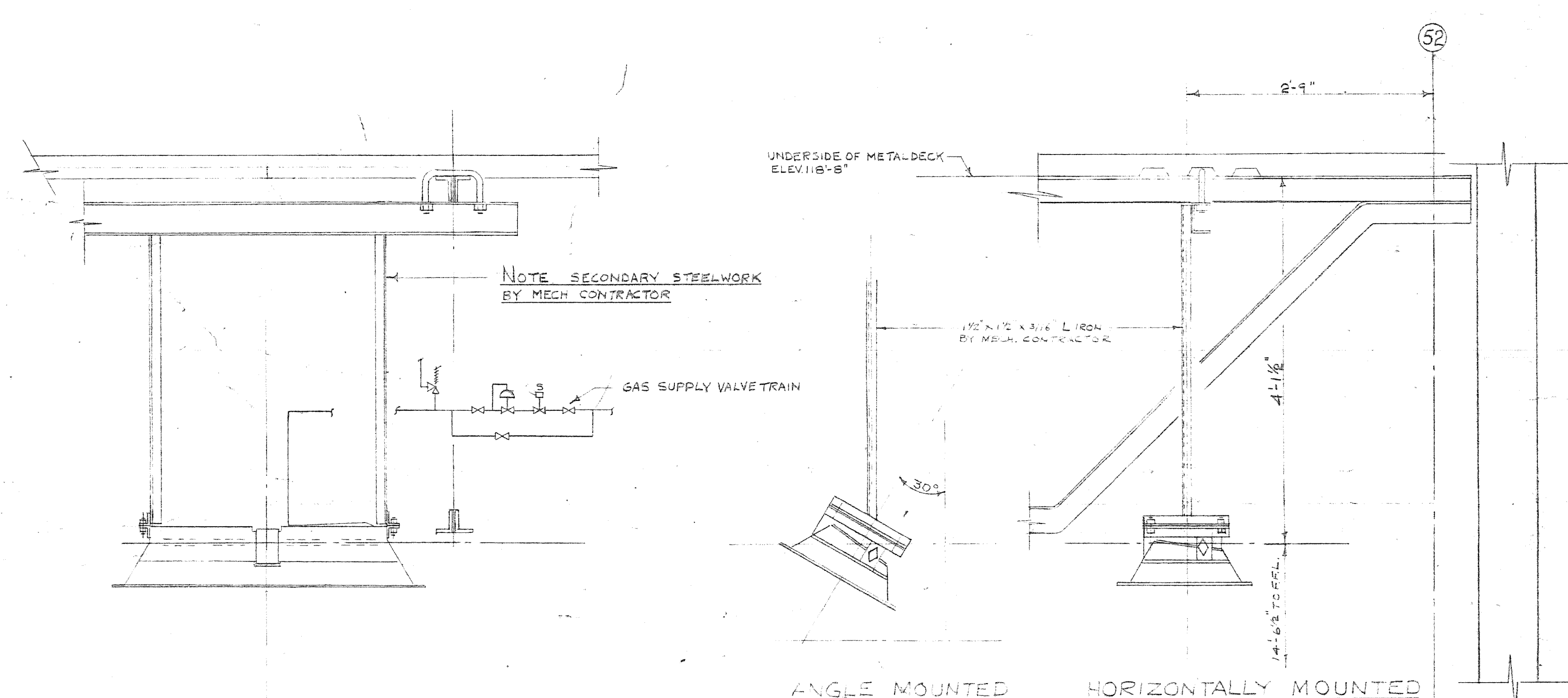
TYPICAL ARRANGEMENT OF HEATING & VENTILATING UNIT #1
GARAGE BUILDING
SCALE 1/2\"/>



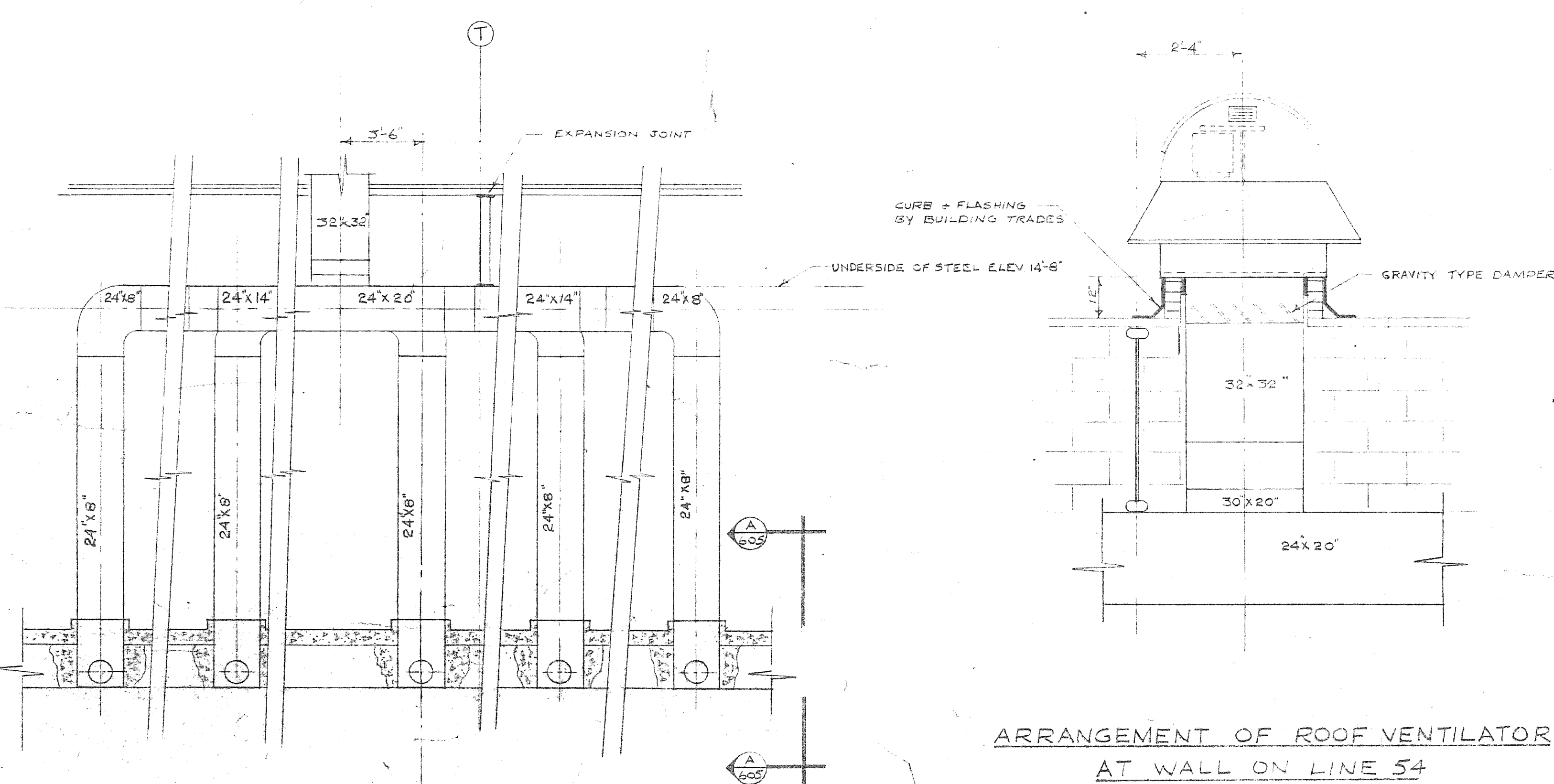
TYPICAL ARRANGEMENT OF SERVICE BAY DIRECT GAS FIRED MAKE-UP AIR UNIT
SCALE 1/2\"/>



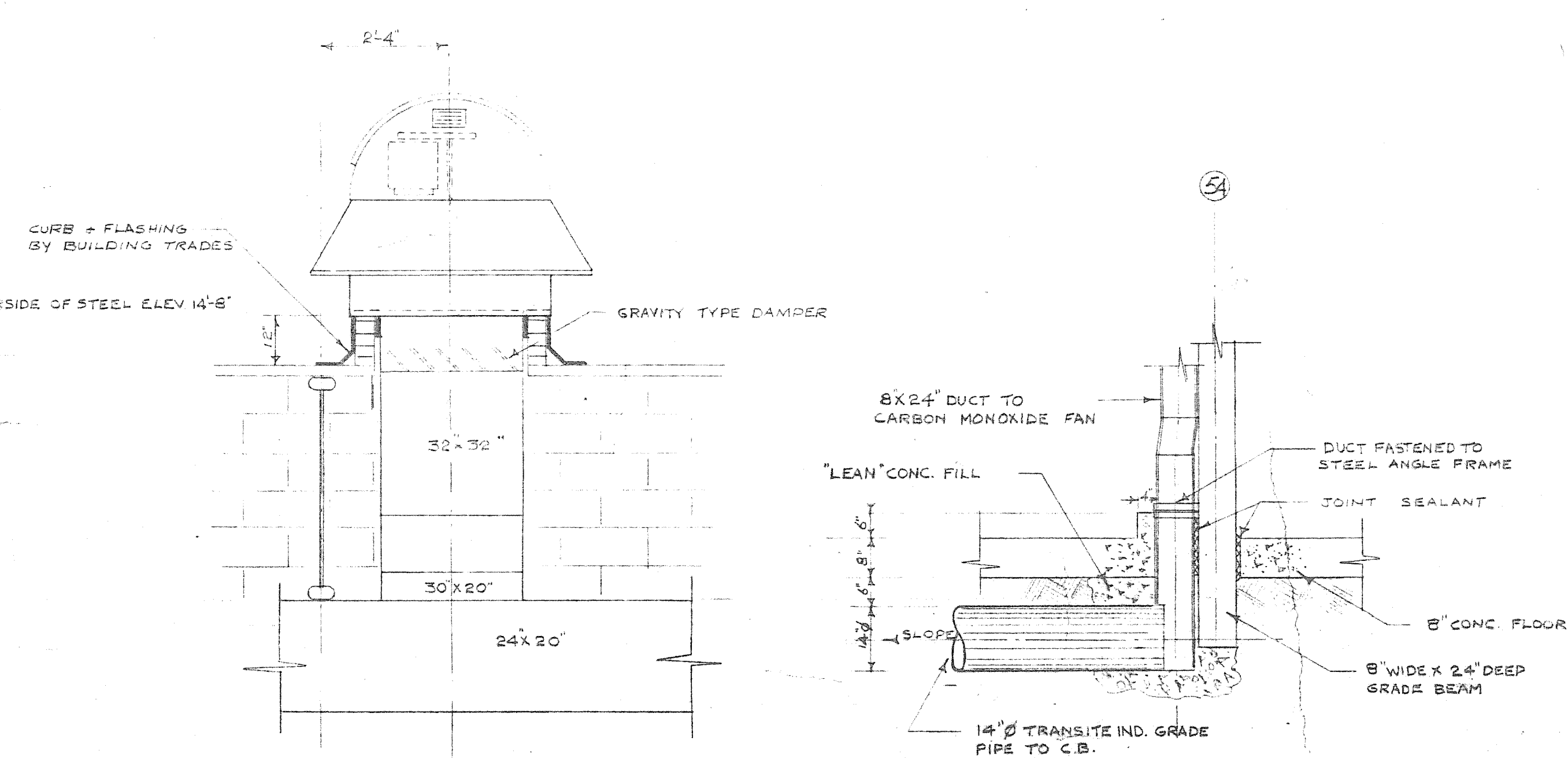
TYPICAL ARRANGEMENT OF HEATING & VENTILATING UNIT #2
GARAGE BUILDING
SCALE 1/2\"/>



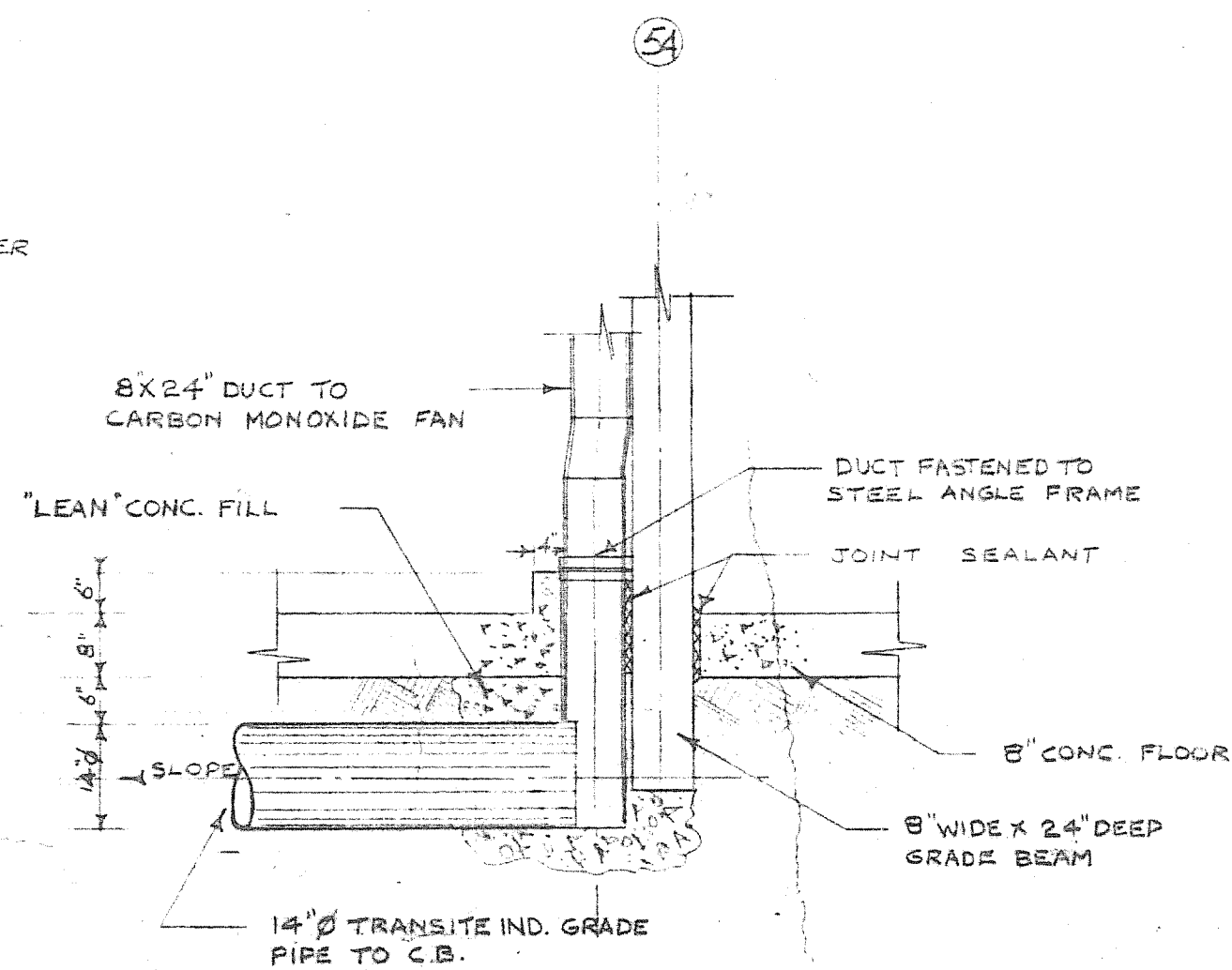
TYPICAL ARRANGEMENT OF INFRA-RED GAS HEATER
SCALE 1\"/>



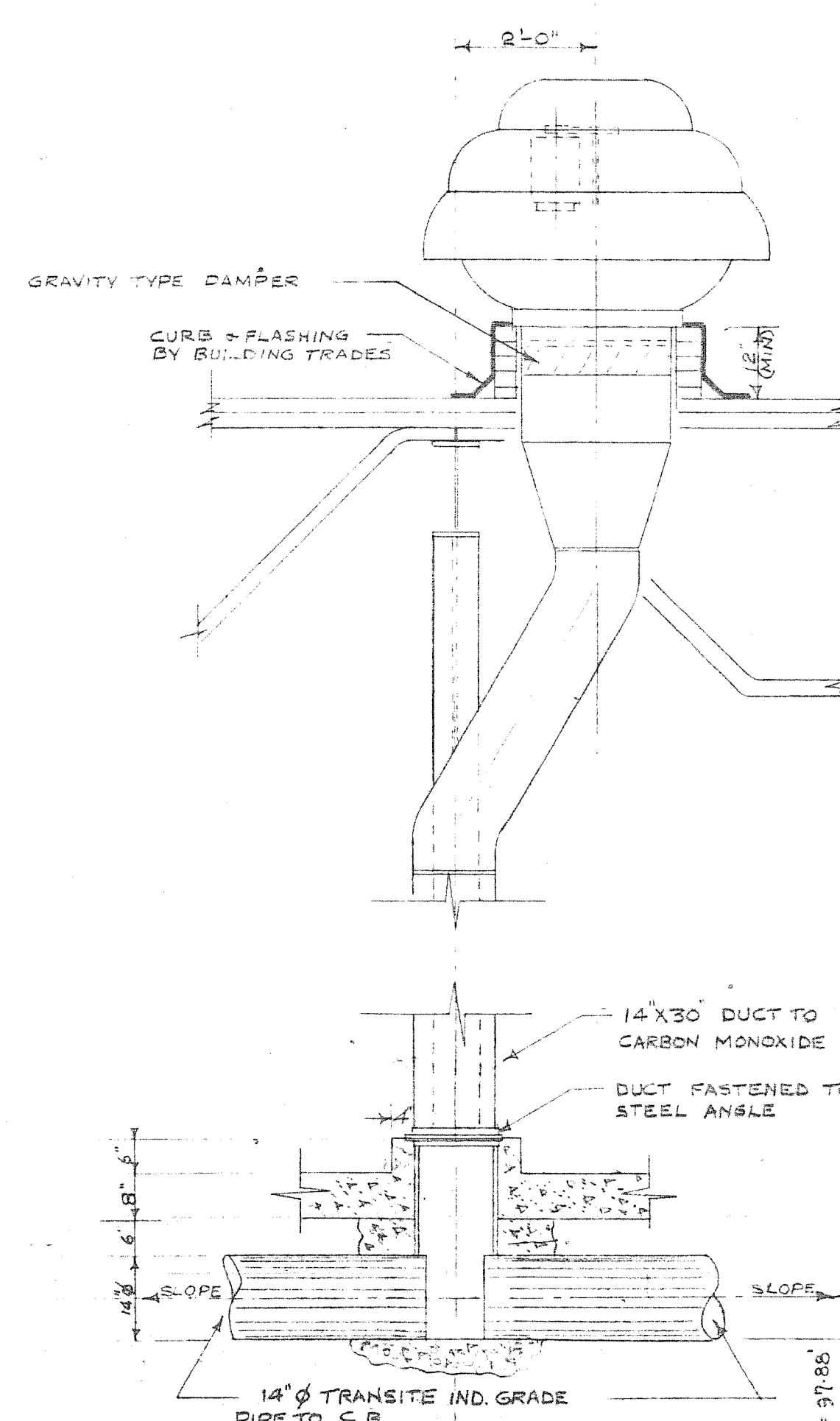
ELEVATION OF UNDERGROUND EXHAUST
DUCTS AT WALL ON LINE 54
GARAGE BUILDING
SCALE 1/2\"/>



ARRANGEMENT OF ROOF VENTILATOR
AT WALL ON LINE 54
GARAGE BUILDING
SCALE 1/2\"/>



SECTION A-A
SCALE 1/2\"/>



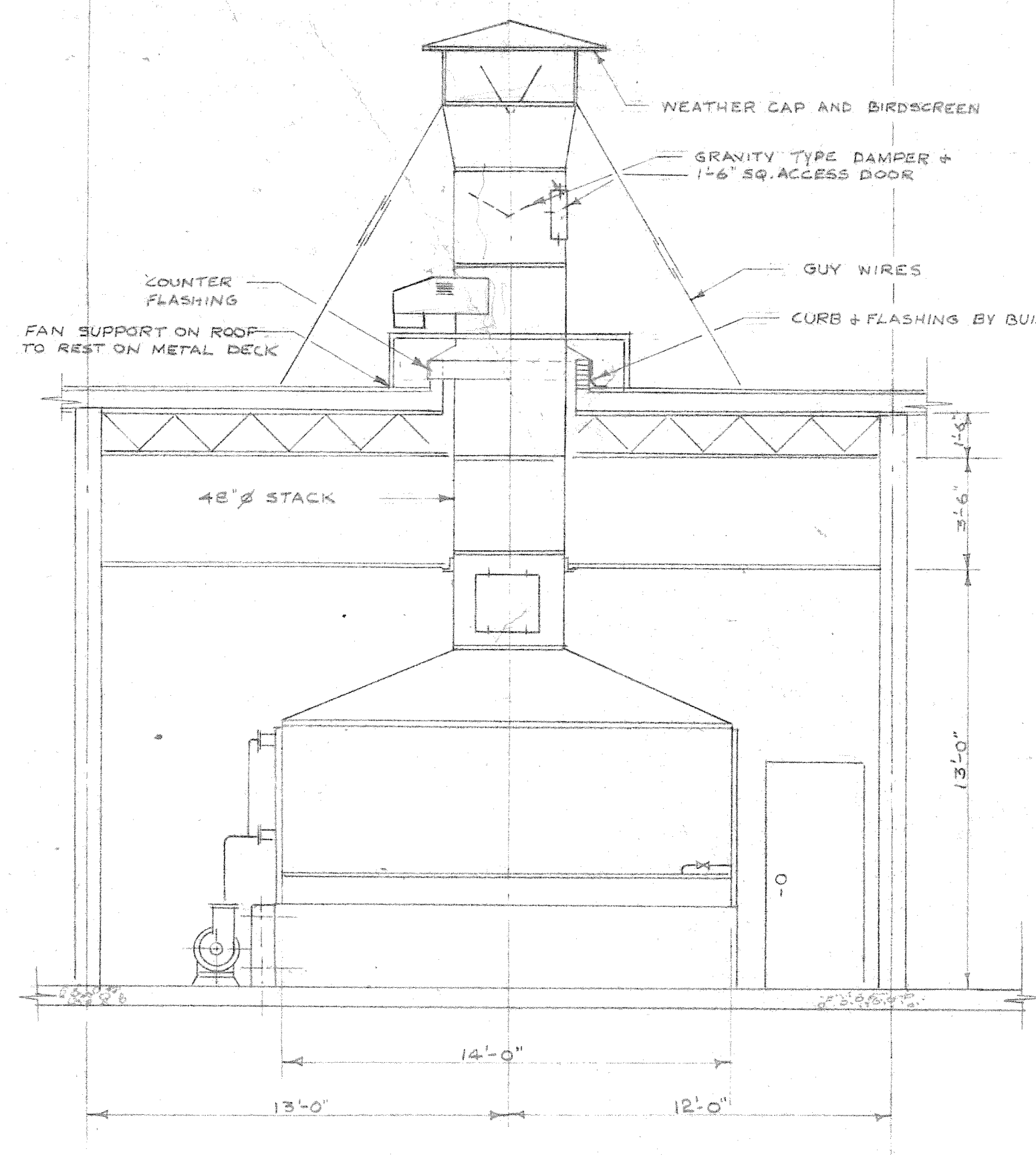
TYPICAL ARRANGEMENTS OF UNDERGROUND DUCT &
VENTILATOR AT COLUMNS
GARAGE BUILDING
SCALE 1/2\"/>

- NOTE:-
1. NO WELDING OR DRILLING TO BUILDING STRUCTURE WILL BE PERMITTED
 2. FOR TYPICAL CONTROL DIAGRAMS SEE DWG. 2185-614 & 615
 3. ALL SECONDARY STEELWORK BY MECHANICAL CONTRACTOR

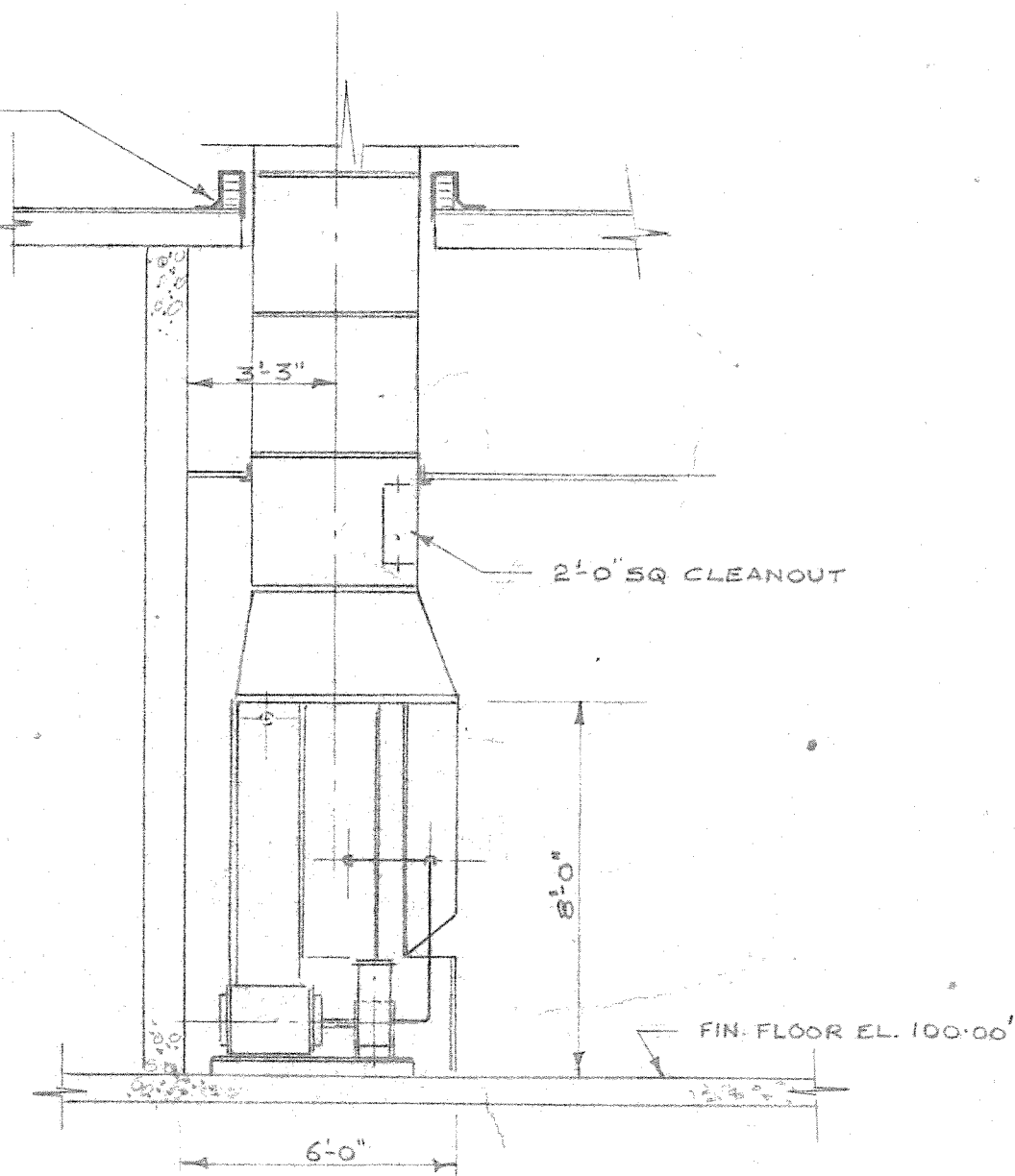
2185-605

A.D. MARGISON ASSOCIATES LTD. CONSULTING PROFESSIONAL ENGINEERS SUITE 205-1500 YONGE STREET TORONTO, ONTARIO M4T 1Y2		NUMBER TEN ARCHITECTURAL GROUP ARCHITECTS & PLANNERS 10 DONALD STREET, WINNIPEG, MANITOBA		APPROVED
1.11.79 9.5.77 24/1/74 19/7/68 20/6/67	6 5 4 3 2 1	2 1 AS BUILT FOR CONSTRUCTION FOR TENDER FOR APPROVAL	DESCRIPTION AS BUILT - SEE H.V. & V.P. SHOP DRAWINGS GARAGE ADDITION - FOR TENDER FOR CONSTRUCTION FOR TENDER FOR APPROVAL	DRAWN BY J.T.T. CHECKED BY J.T.T. DATE AUGUST '87
ISSUE OR REVISION METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION TRANSIT STORAGE AND SHOP FACILITIES HEATING & VENTILATING - DETAILS				
CONSULTING PROFESSIONAL ENGINEERS A.D. MARGISON AND ASSOCIATES LIMITED 1555 LESLIE STREET, DON MILLS, ONTARIO 10 DONALD STREET, WINNIPEG, MANITOBA				
APPROVED 				
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My Licence Expires 10 Jan. 1988				
2185-605 MECHANICAL				

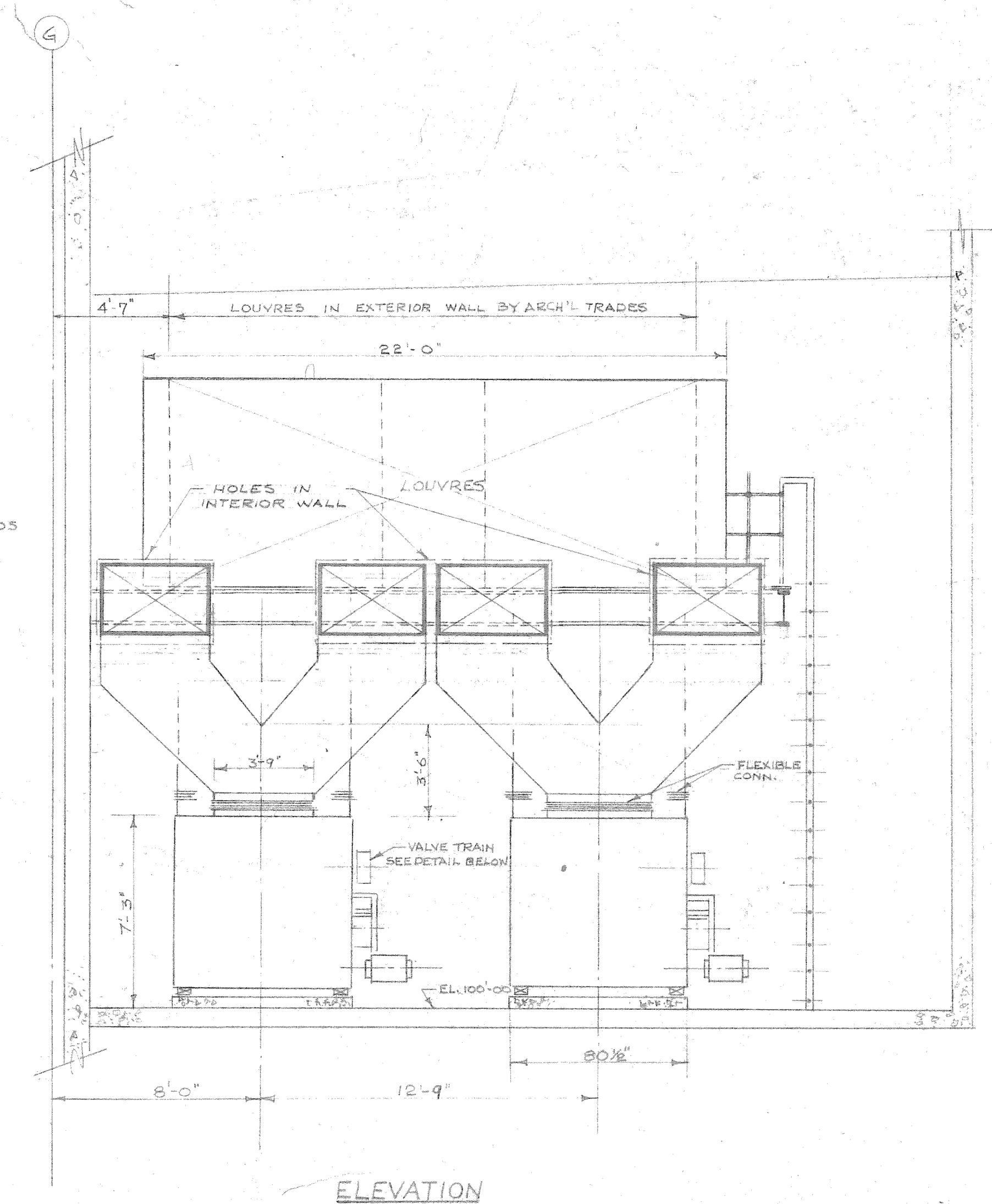
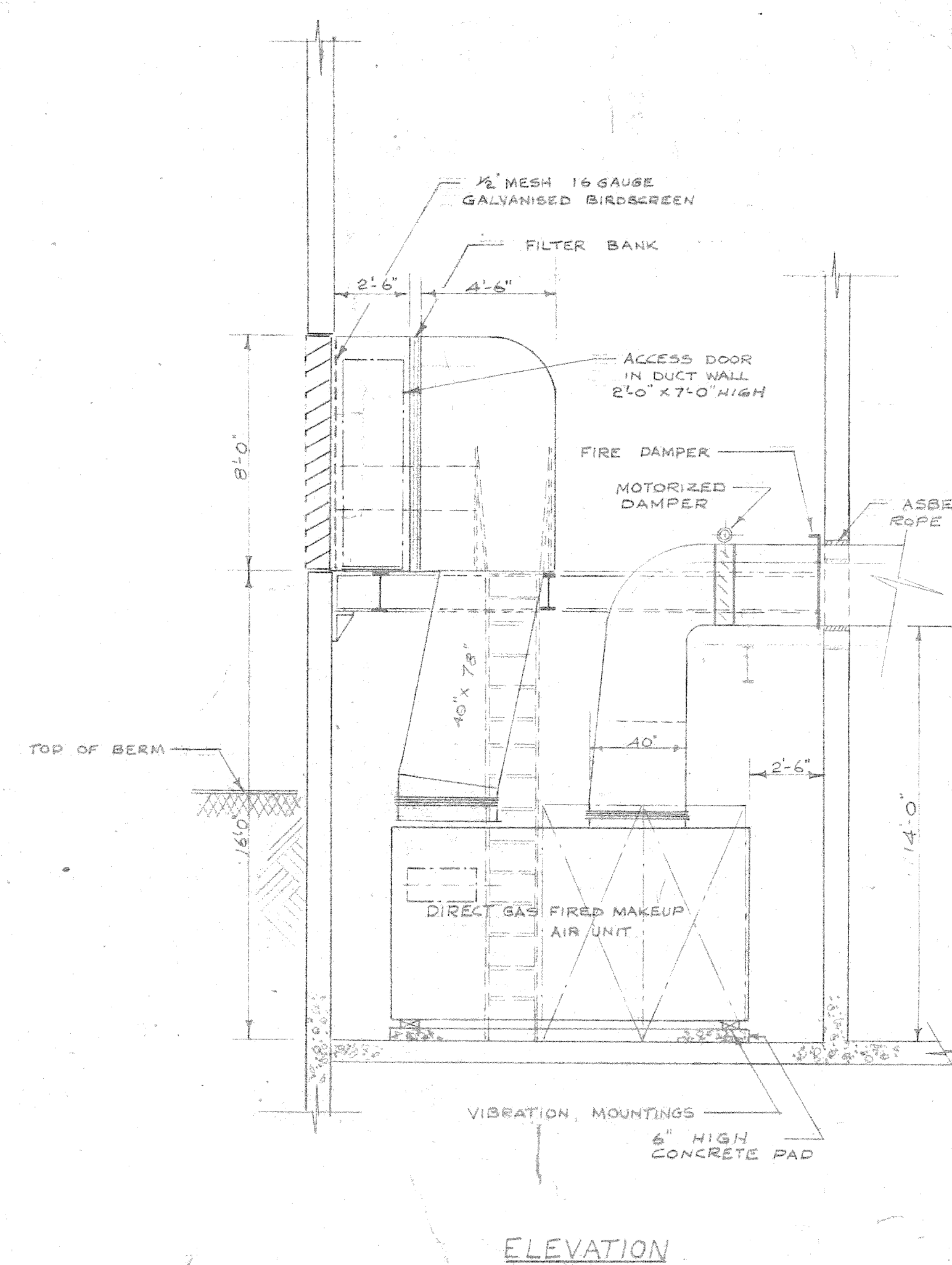
COLUMNS 2,3,4,5



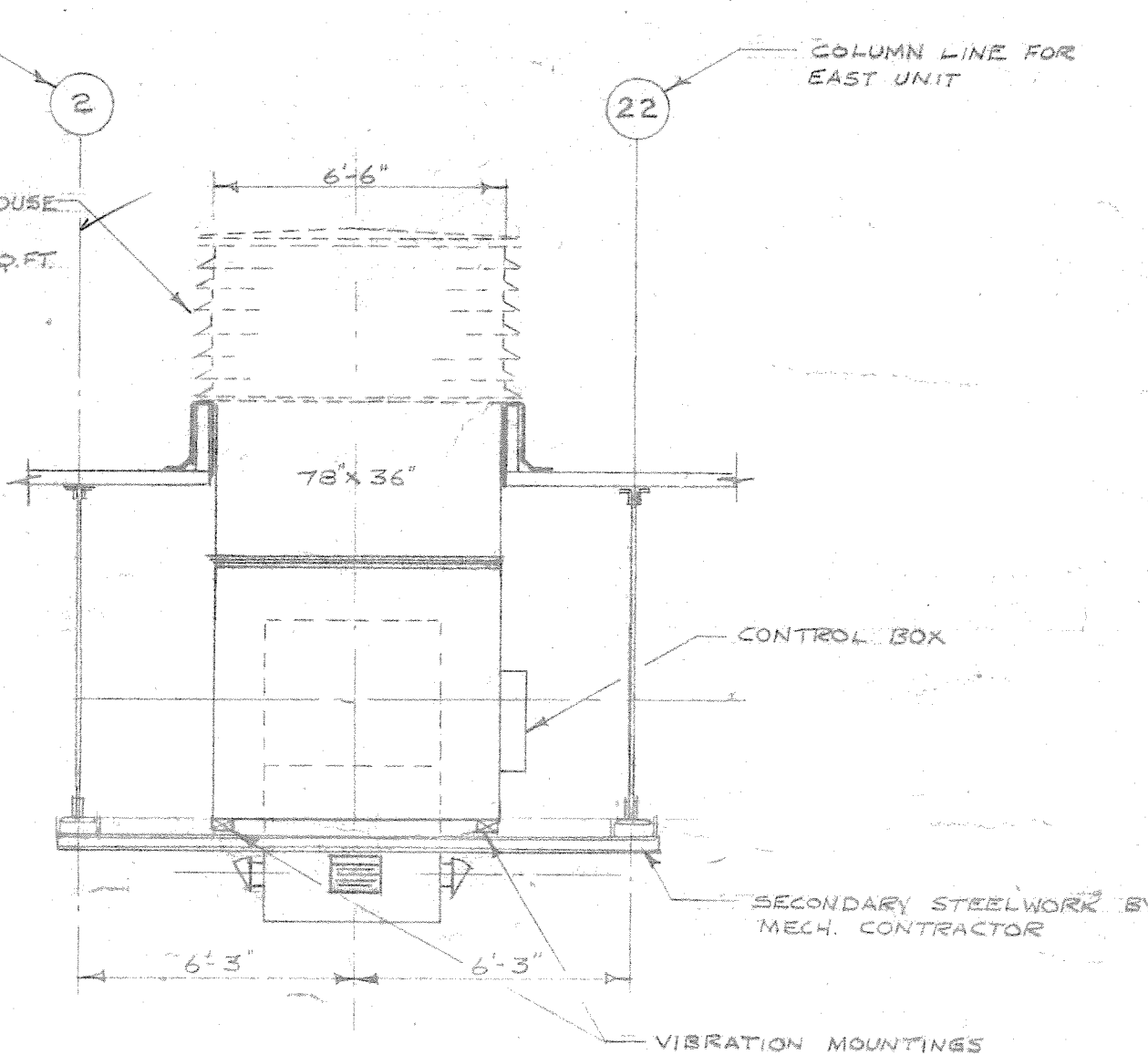
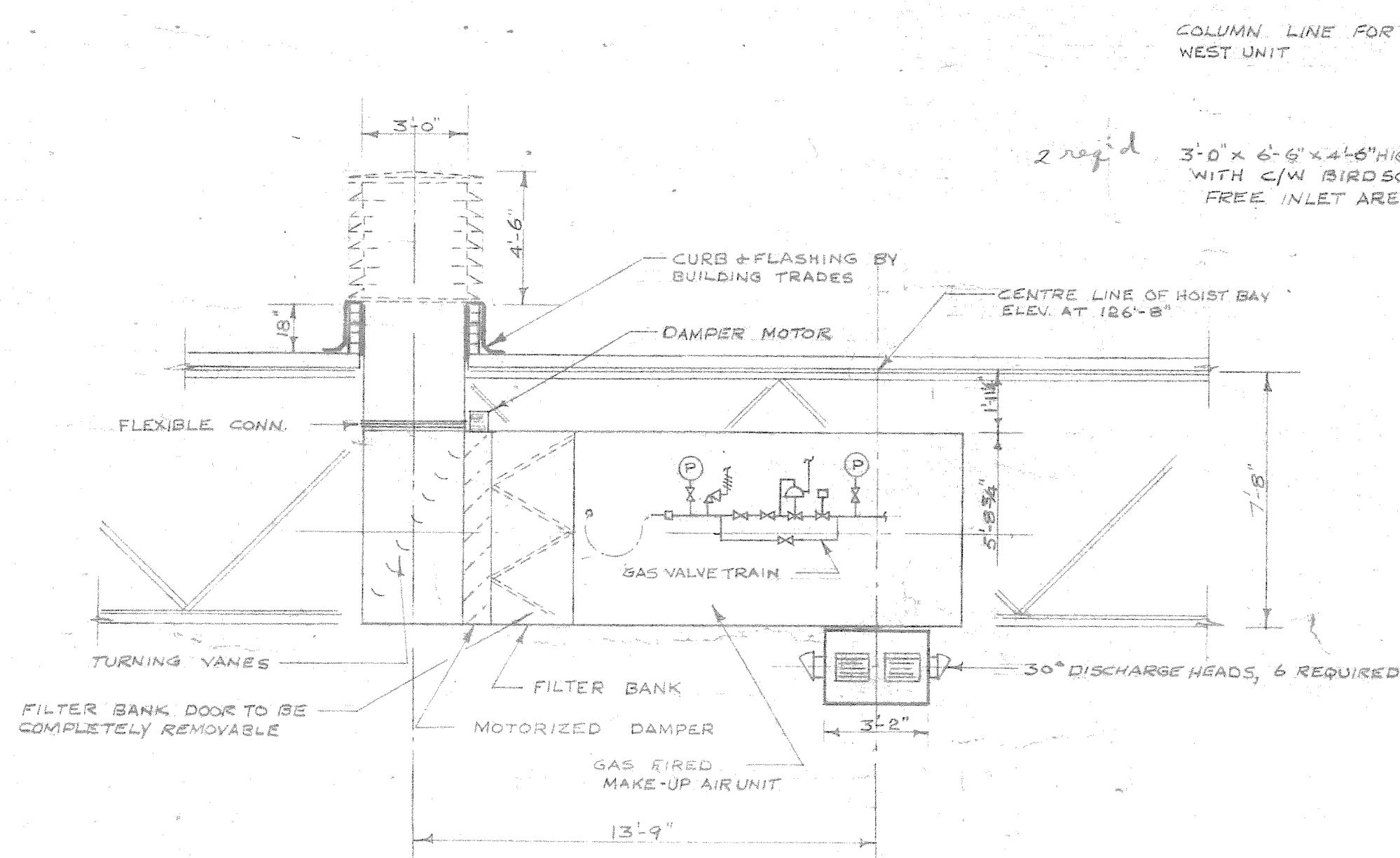
COLUMNS 3,4,5,6



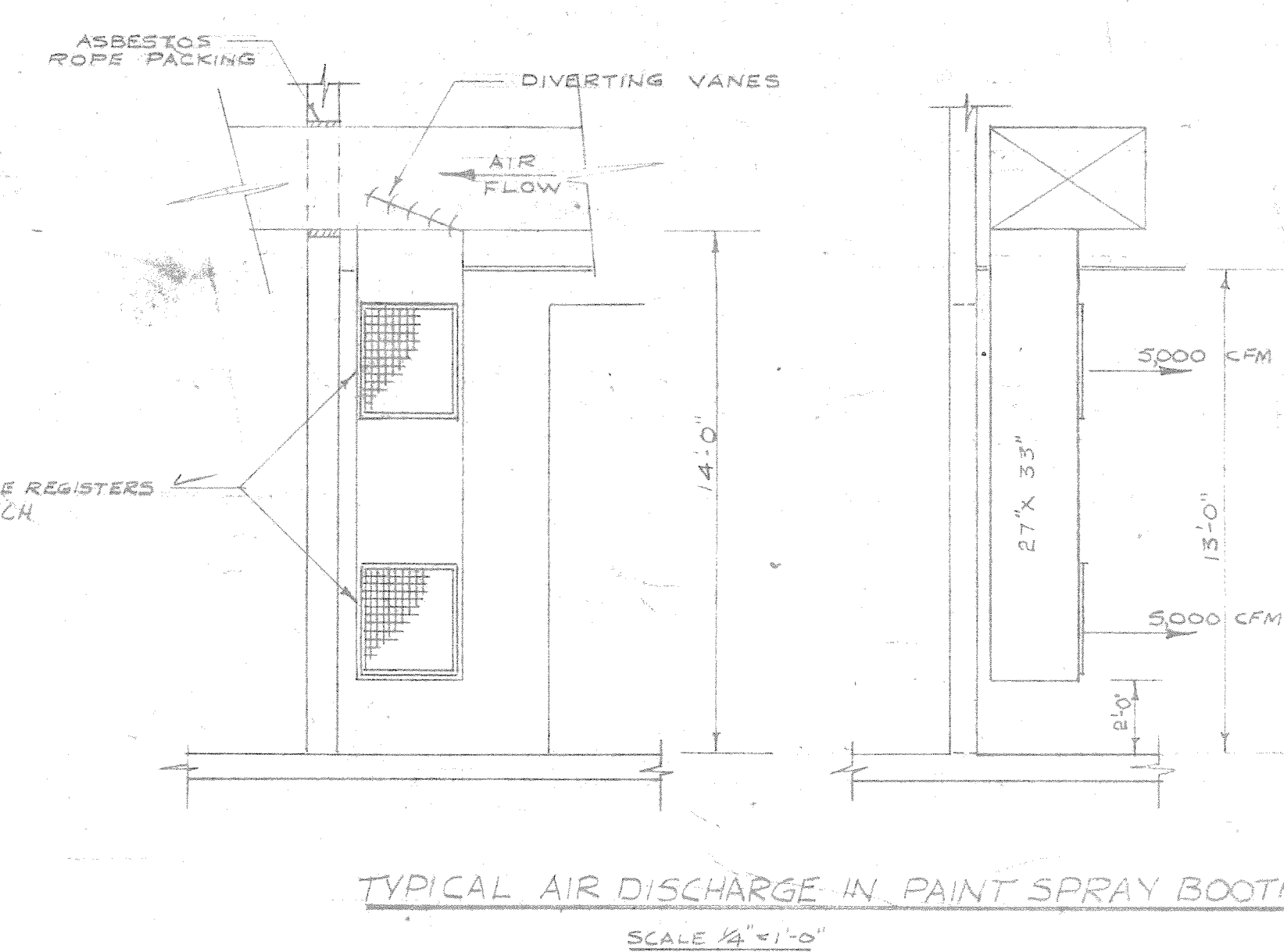
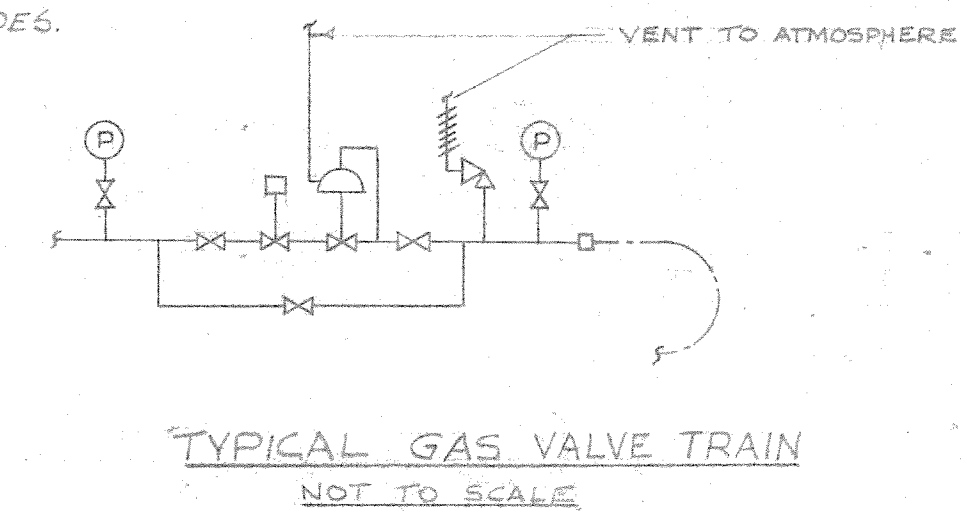
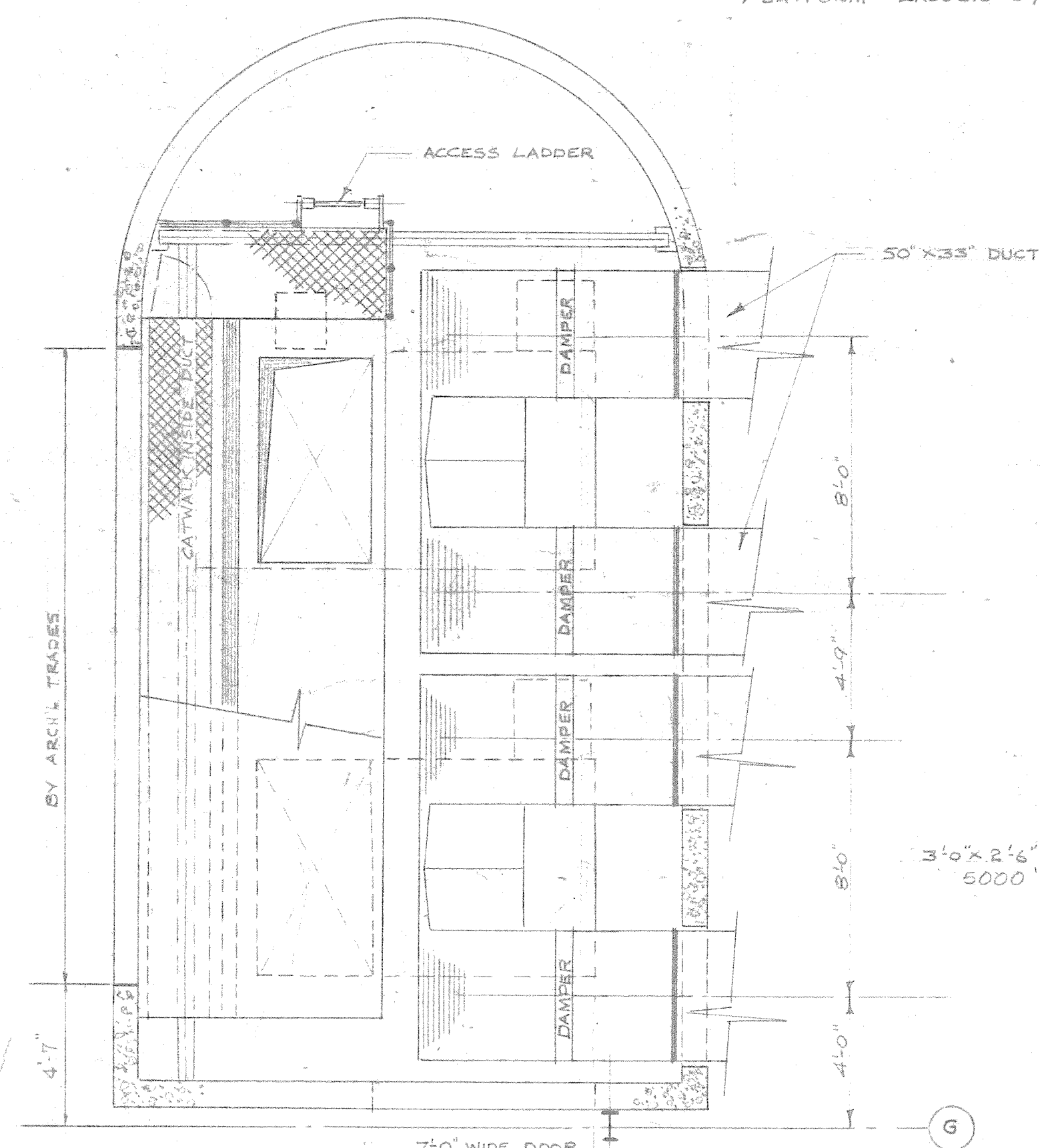
WATER WASH PAINT SPRAY BOOTH ARRANGEMENT
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"



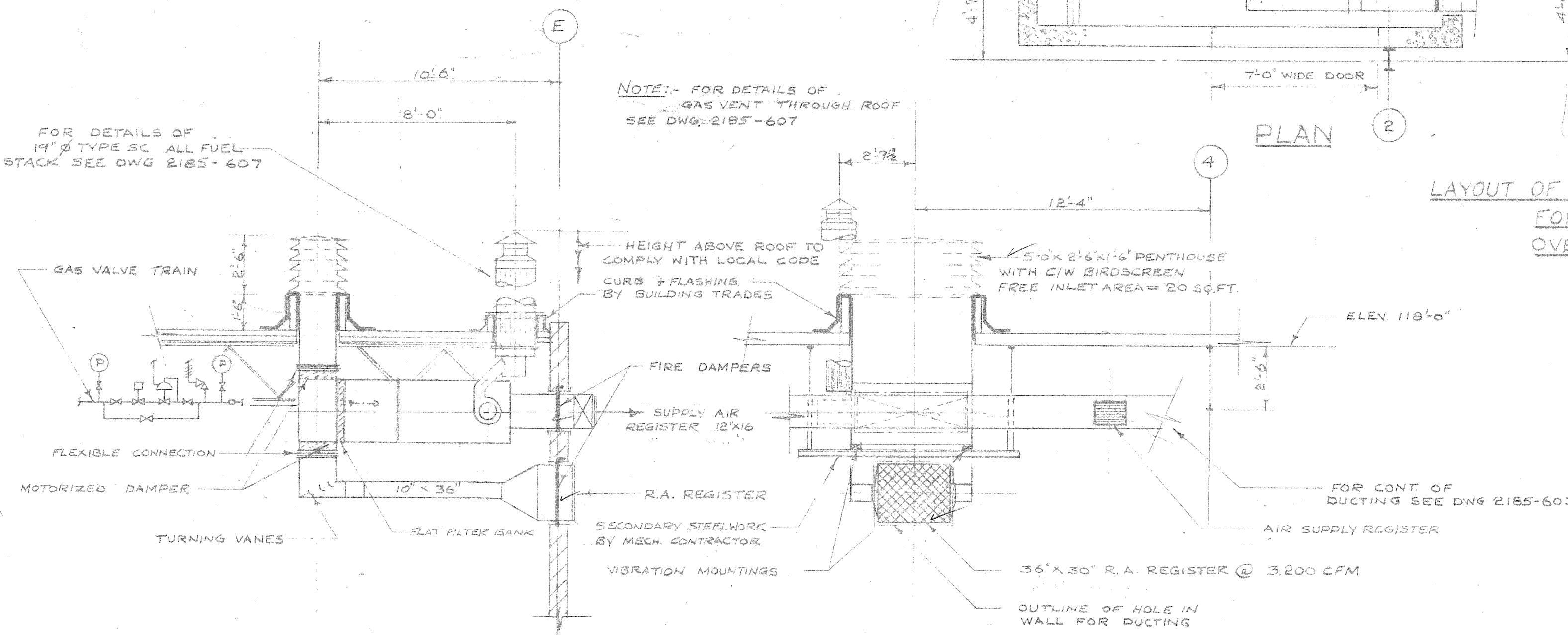
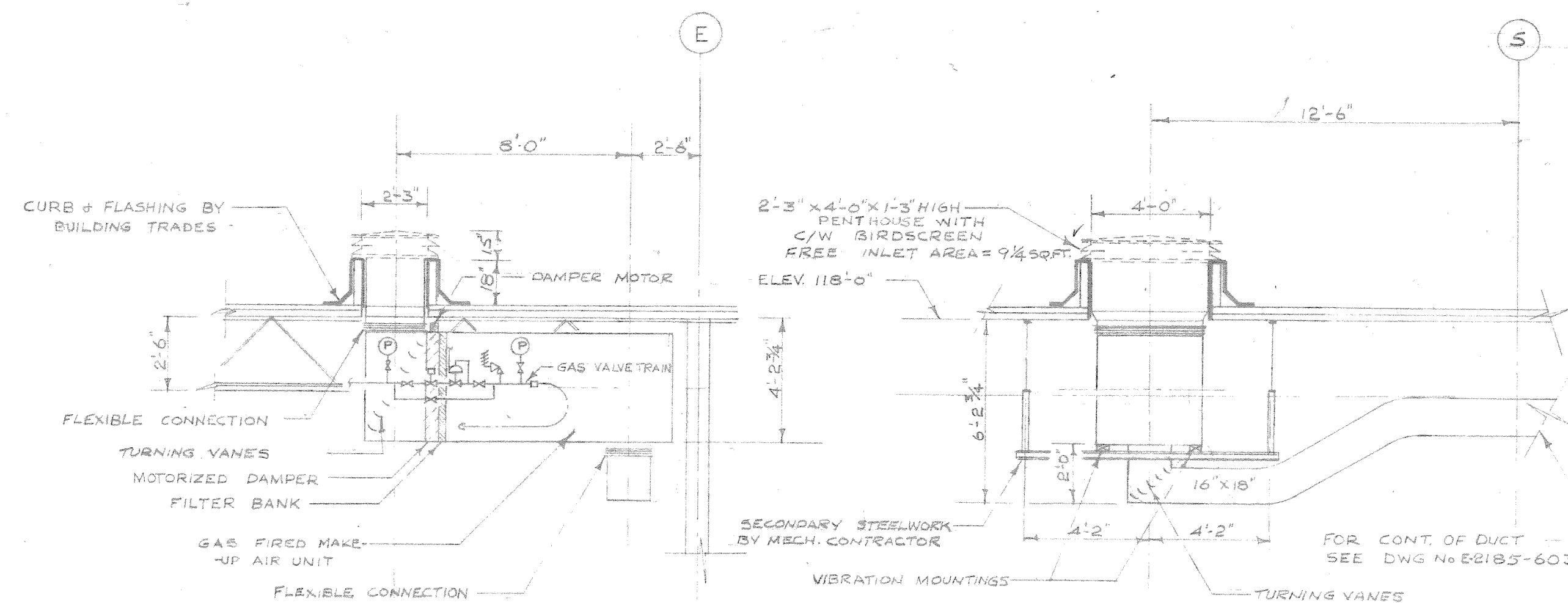
NOTE: MAIN STEEL BY STRUCTURAL TRADES;
PLATFORM LADDER BY ARCHITECTURAL TRADES.



LAYOUT OF MAKE-UP AIR UNIT
IN HOIST BAY
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"



LAYOUT OF MAKE-UP AIR UNITS & DUCTING
FOR PAINT SPRAY BOOTHS
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"



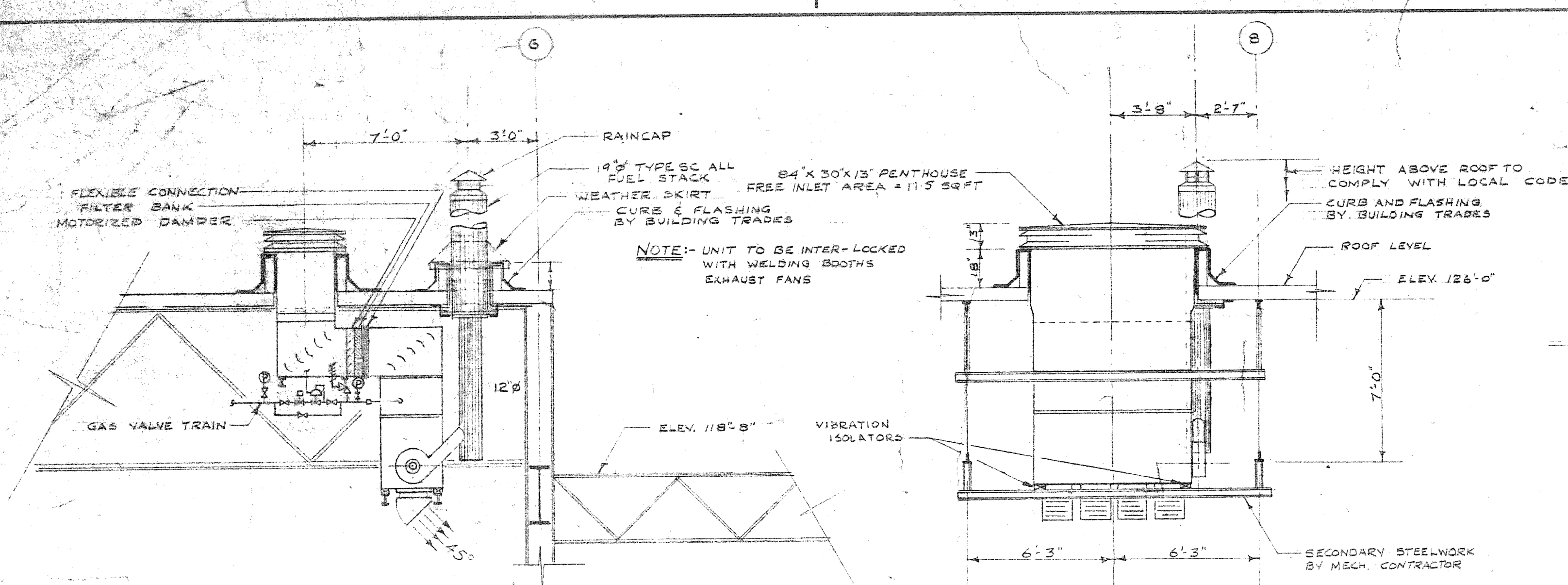
LAYOUT OF HEATING & VENTILATING & DUCTWORK
OF SIGN SHOP
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"

NOTE: NO WELDING OR DRILLING TO BUILDING
STEEL WILL BE PERMITTED

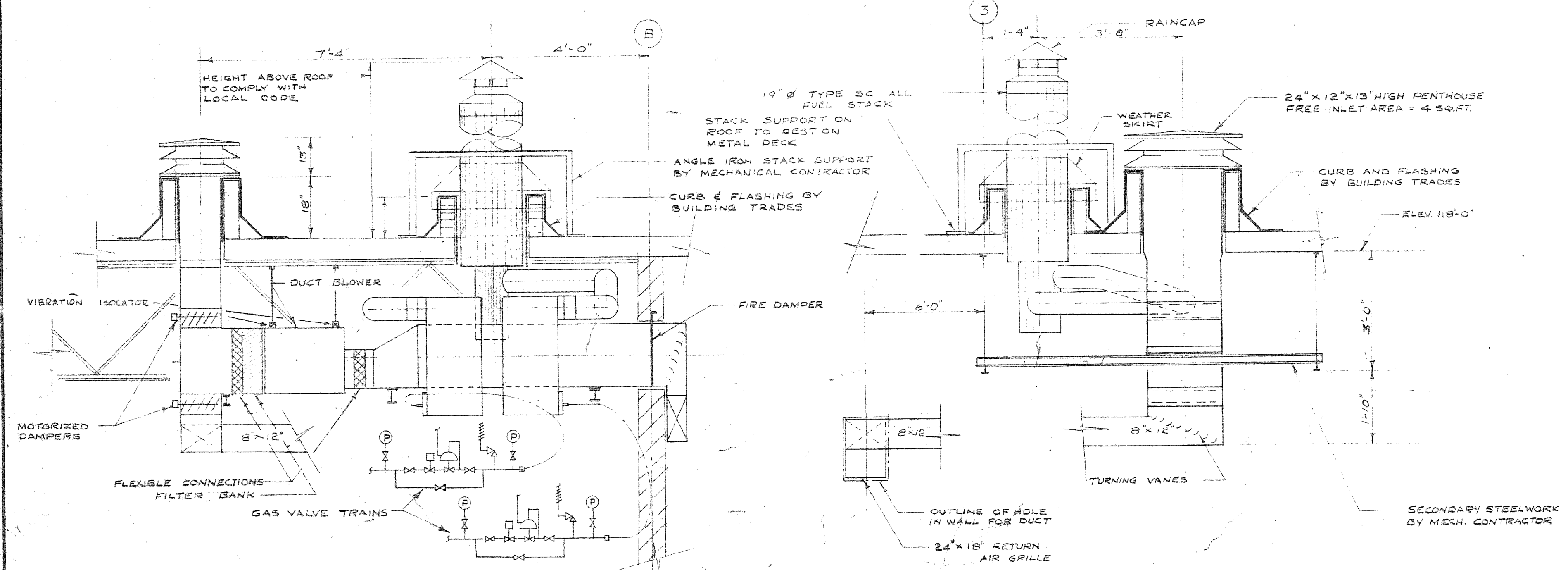
LAYOUT OF MAKE-UP AIR UNIT AND DUCTING
FOR POLE PAINTING AREA
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"

2185 - 606

19/11/83		2	0	FOR TENDER	
25/02/83		1	0	FOR APPROVAL	
DATE	ISSUE NO.	REV. NO.	DESCRIPTION		DRAWN BY
ISSUE OR REVISION					
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION					
TRANSIT STORAGE AND SHOP FACILITIES					
HEATING & VENTILATING - DETAILS					
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1153 LESLIE STREET, DON MILLS, ONTARIO			ARCHITECTS Walsman Russ + Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA		
APPROVED	DRAWN BY		DATE		
	J.T.T.		AUGUST '87		
DEPUTY DIRECTOR OF STREETS AND TRANSIT	FILE NO.		SCALE		AS SHOWN
	SHEET NO.		DRAWING NO.		2185-606 MECHANICAL

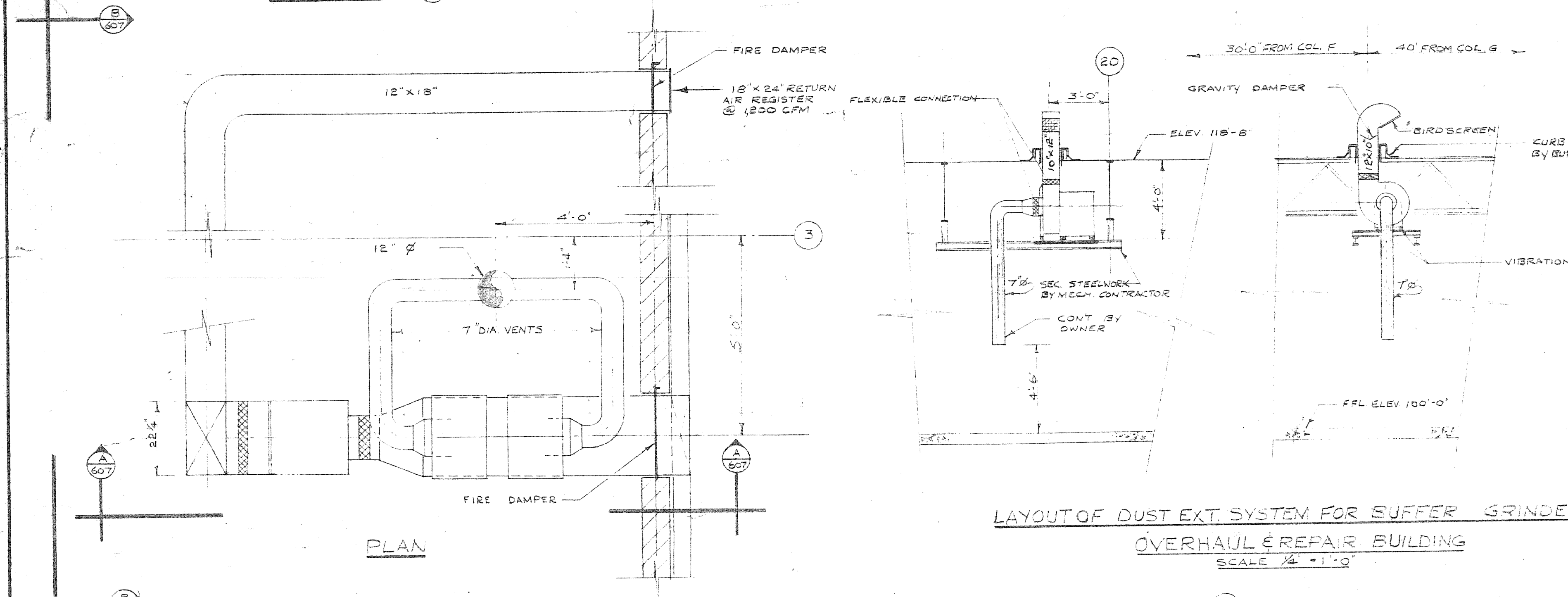


LAYOUT OF MAKE-UP AIR UNIT FOR WELDING BOOTHS
OVERHAUL & REPAIR BUILDING
SCALE 1/2\"/>

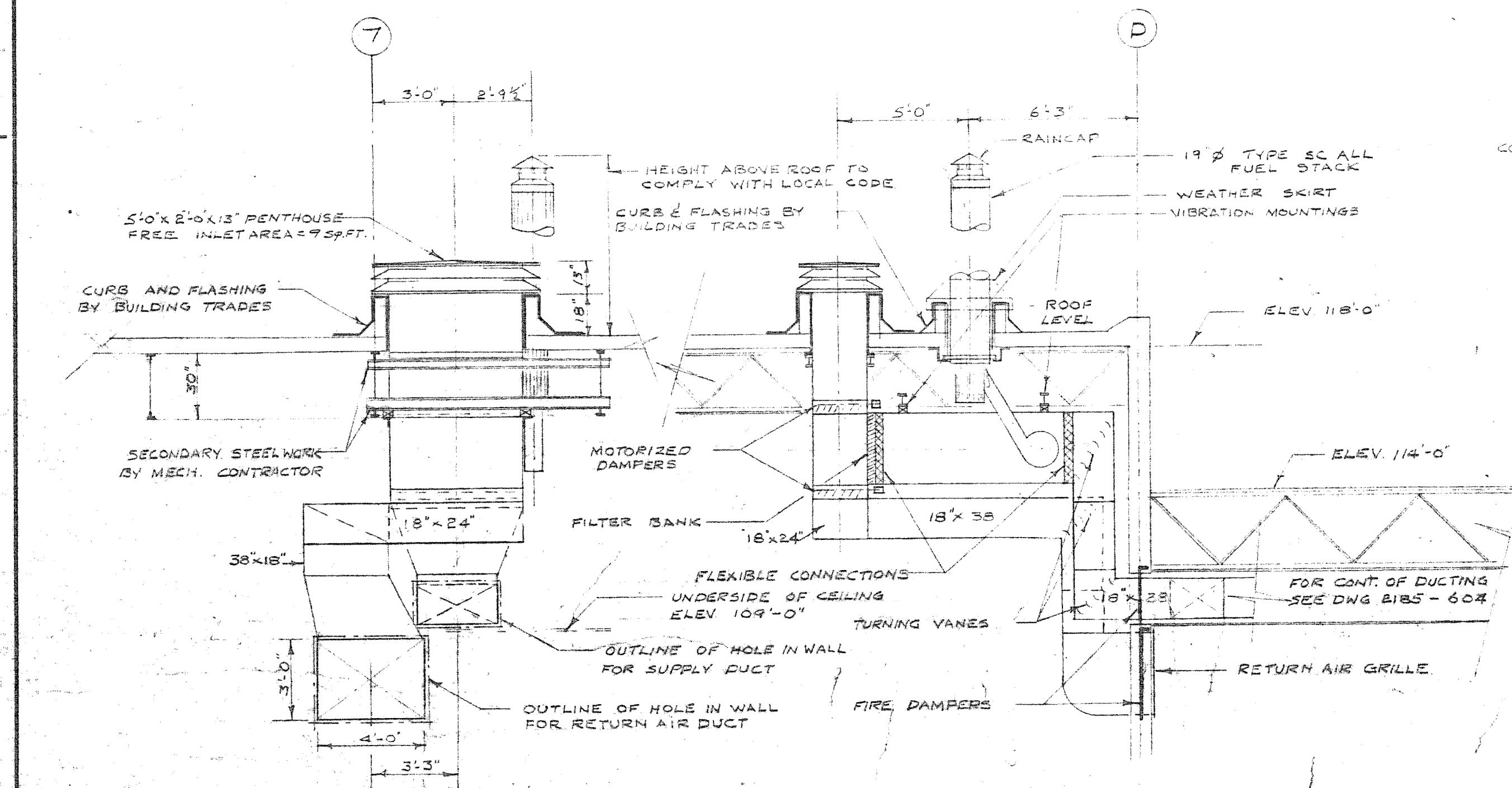


SECTION A-A

SECTION B-B

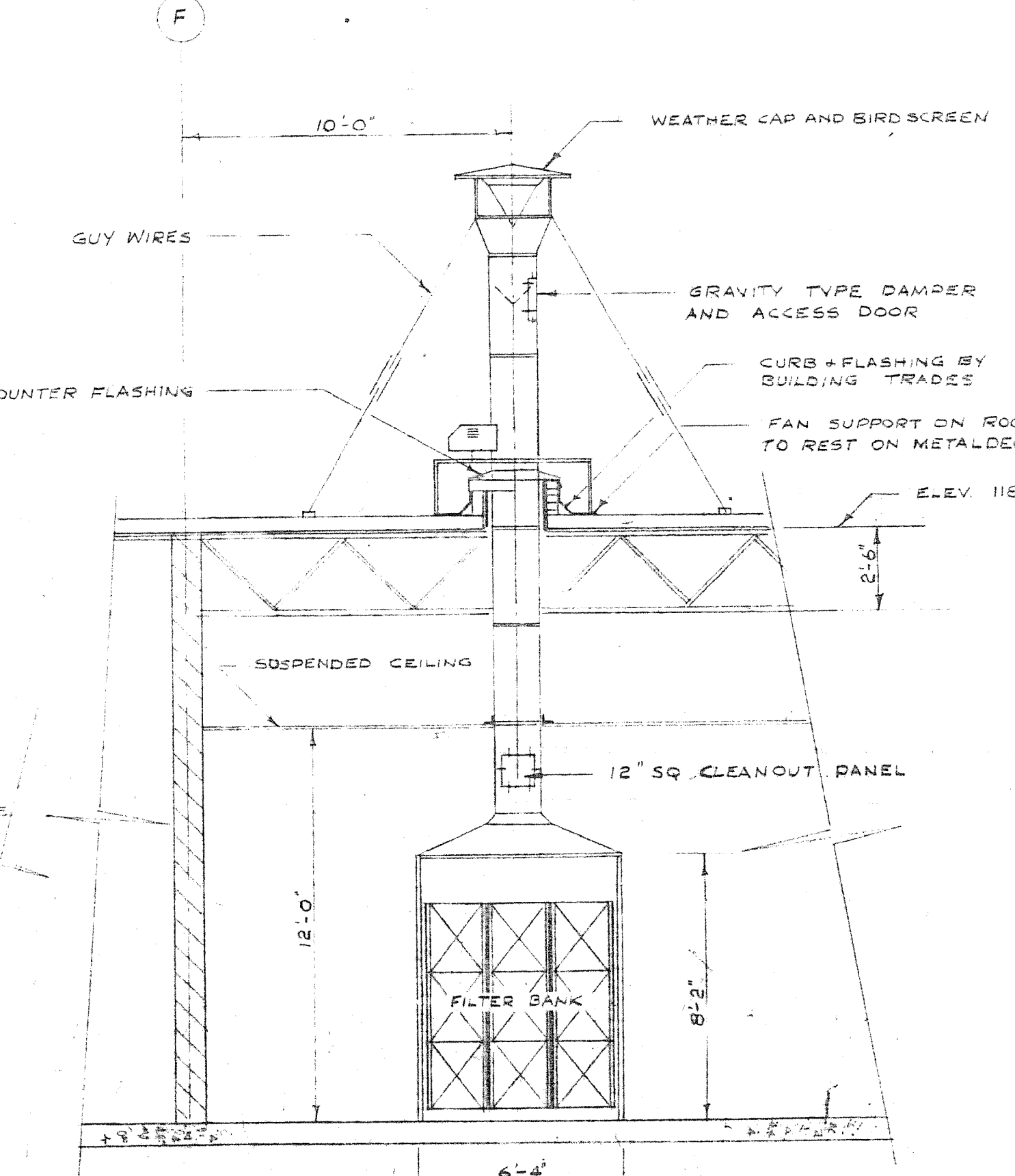


LAYOUT OF MAKE-UP AIR UNIT FOR PAINT SHOP (WAYS AND SERVICES BUILDING)
SCALE 1/2\"/>



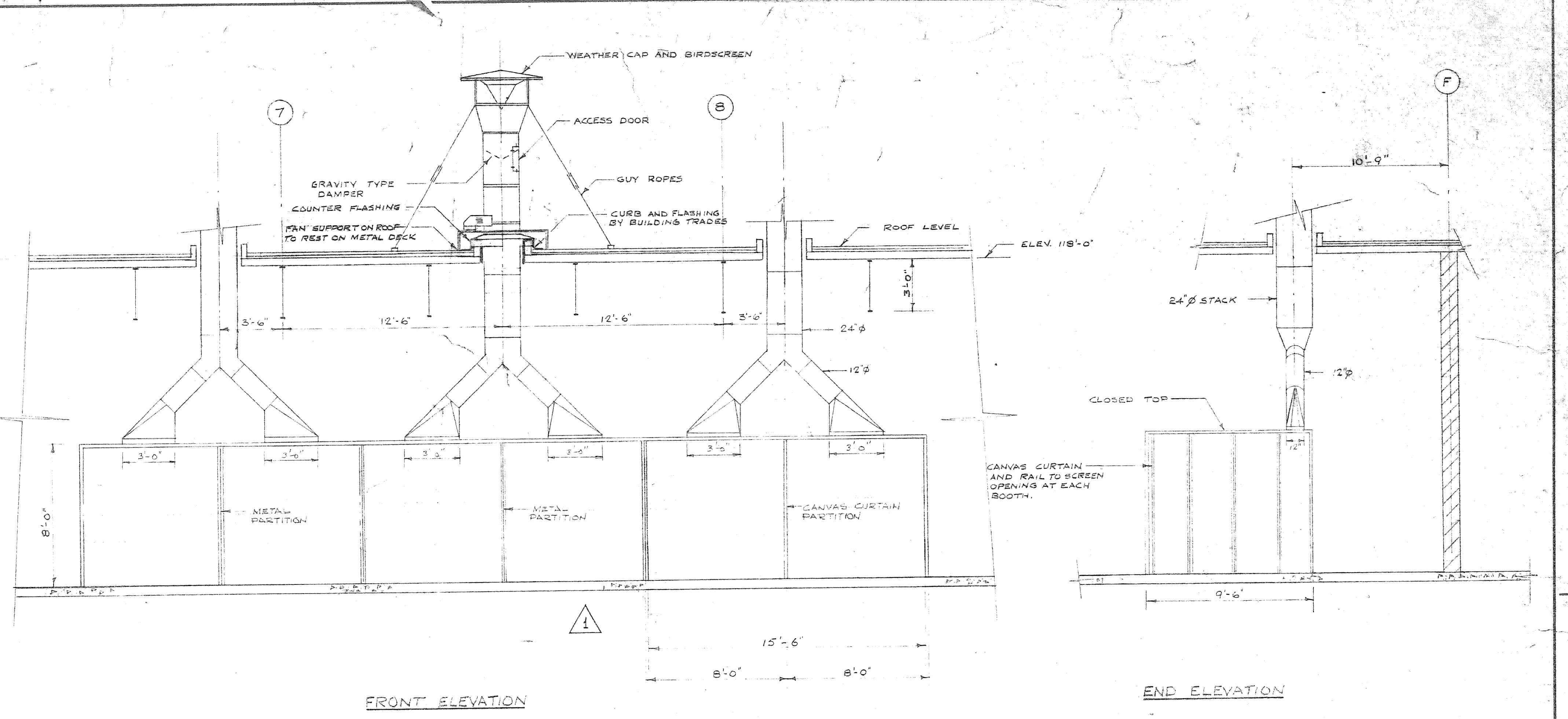
LAYOUT OF MAKE-UP AIR UNIT FOR LUNCH ROOM
WAYS & SERVICES BUILDING
SCALE 1/2\"/>

LAYOUT OF DUST EXT. SYSTEM FOR SUFFER GRINDER
OVERHAUL & REPAIR BUILDING
SCALE 1/2\"/>

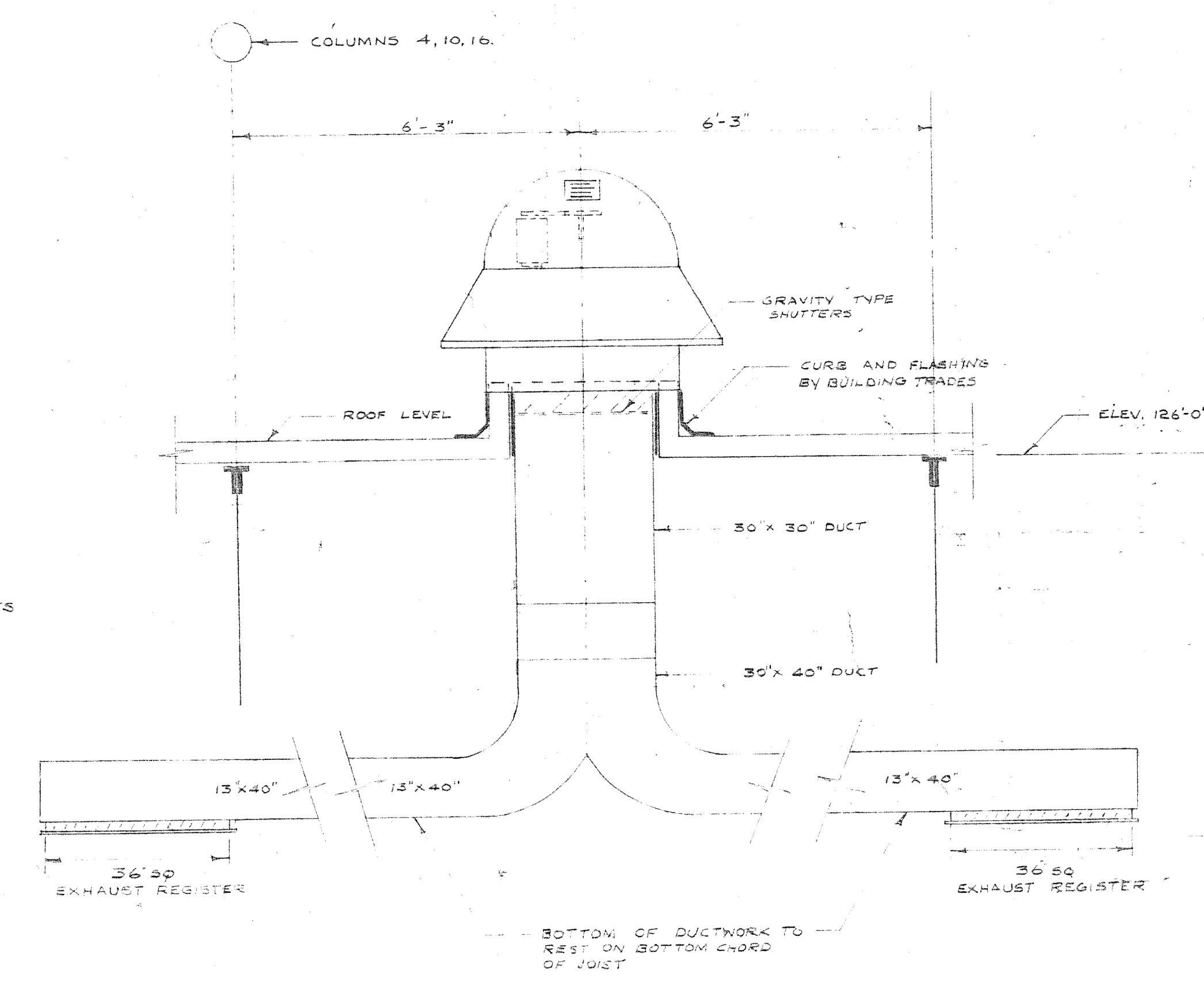


ELEVATION

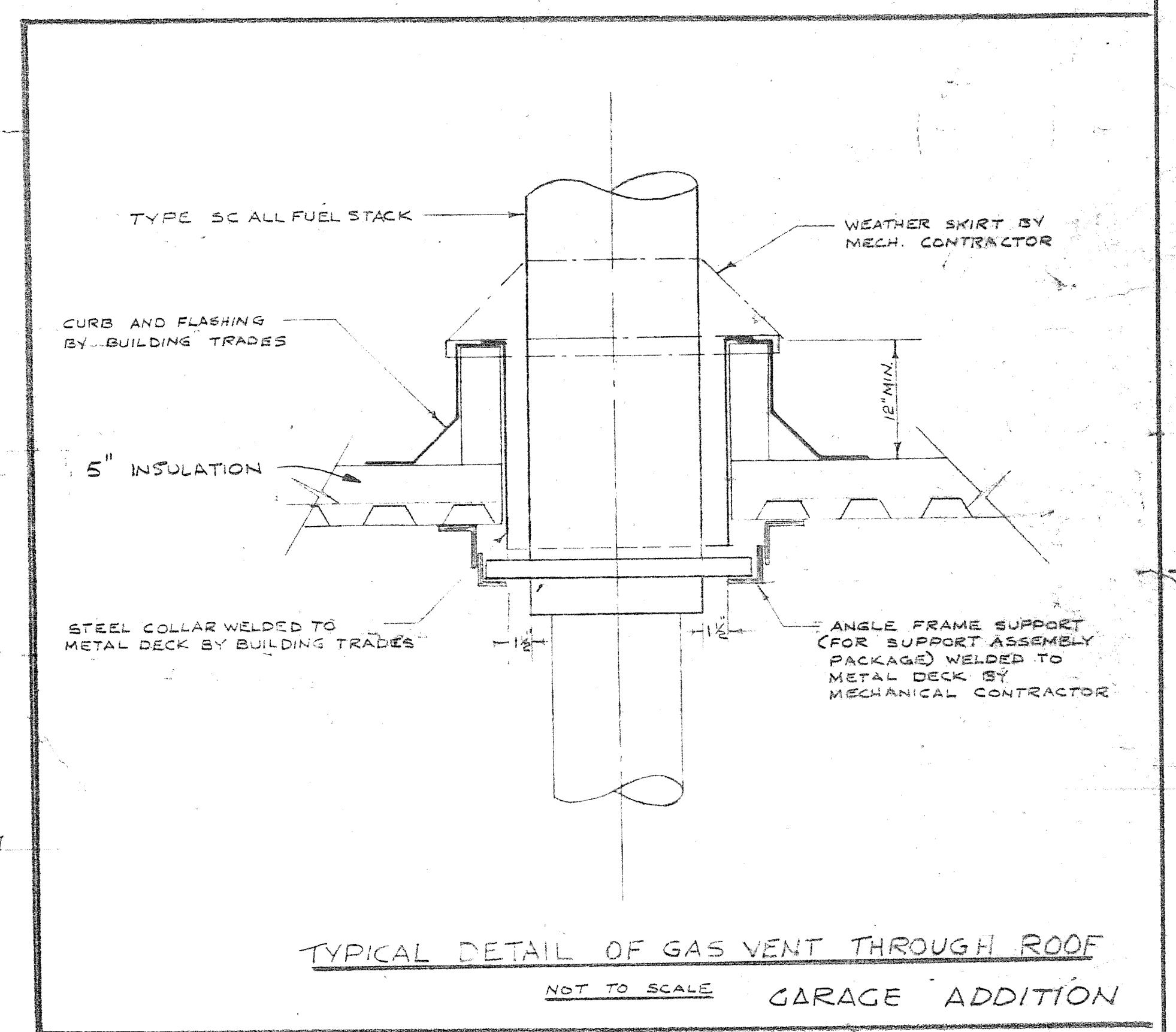
LAYOUT OF POLE PAINTING SPRAY BOOTH
OVERHAUL & REPAIR BUILDING
SCALE 1/2\"/>



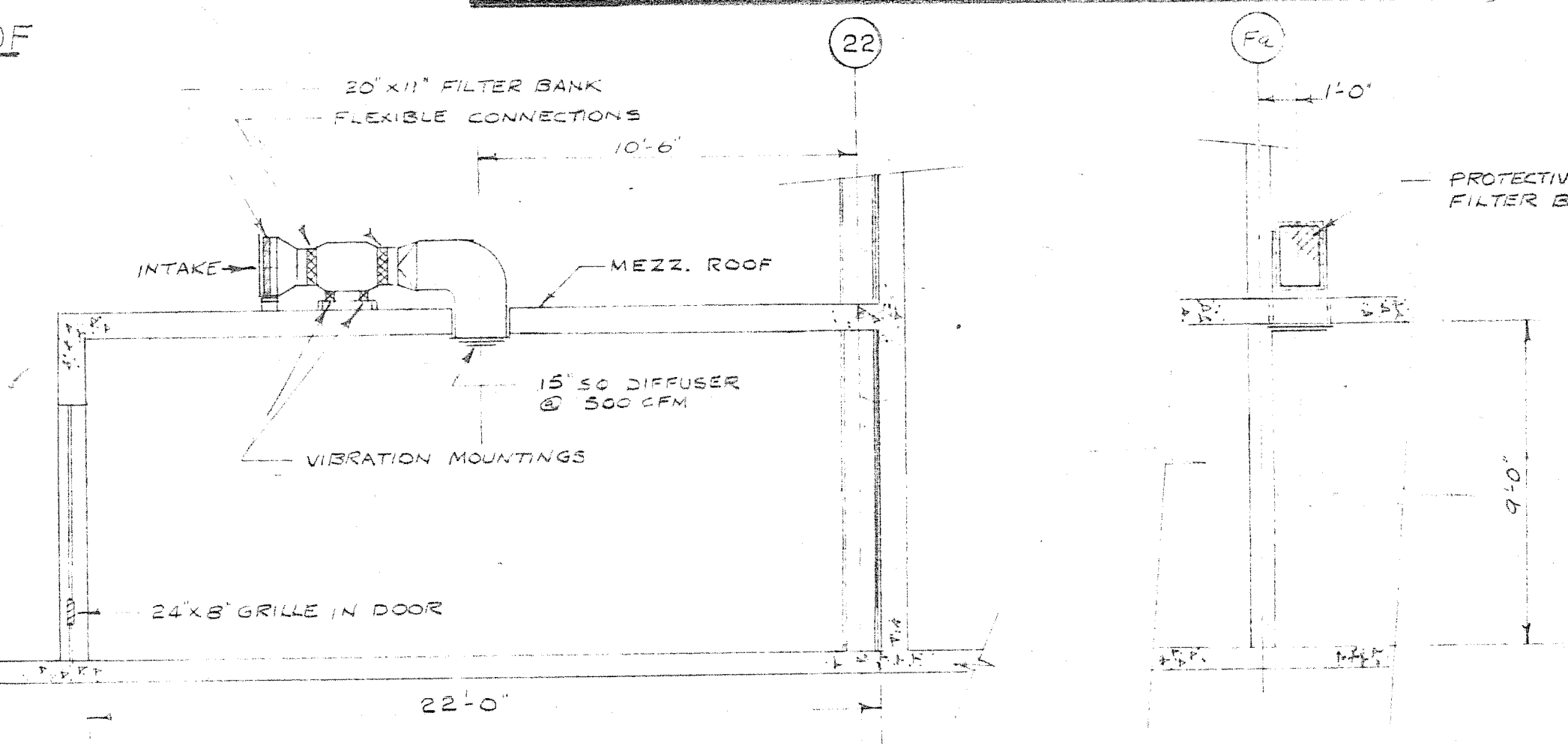
WELDING BOOTHS VENTILATION ARRANGEMENT
OVERHAUL & REPAIR BUILDING
SCALE 1/4\"/>



LAYOUT OF ROOF VENTILATORS AND DUCTING OF NORTH SIDE OF HIGH BAY
OVERHAUL & REPAIR BUILDING
SCALE 1/2\"/>



TYPICAL DETAIL OF GAS VENT THROUGH ROOF
NOT TO SCALE GARAGE ADDITION



LAYOUT OF VENTILATION FOR INSPECTOR ROOM
OVERHAUL & REPAIR BUILDING
SCALE 1/4\"/>

MAY 1977

A. D. MARGISON ASSOCIATES LTD.
CONSULTING PROFESSIONAL ENGINEERS
SUITE 308-1300 YONGE STREET
TORONTO, ONTARIO MAT 112

NUMBER TEN ARCHITECTURAL GROUP
ARCHITECTS & PLANNERS (INCORPORATED) LIMITED
10 DONALD STREET, WINNIPEG, MANITOBA

APPROVED: [Signature]

DATE	REVISION NO.	DESCRIPTION	DRAWN BY
24/1/67	1	AS BUILT	R.M.S.C.
14/1/68	4	WELDING BOOTH REVISED	W.O.R.
24/3/68	3	FOR CONSTRUCTION	
19/11/68	2	FOR TENDER	
20/1/69	1	FOR APPROVAL	

ISSUE OR REVISION

METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

TRANSIT STORAGE AND SHOP FACILITIES

HEATING & VENTILATING - DETAILS

CONSULTING PROFESSIONAL ENGINEERS
A. D. MARGISON AND ASSOCIATES LIMITED
1155 LESLIE STREET, DON MILLS, ONTARIO

ARCHITECTS
Waisman Ross & Blankstein Coop Gillmor Hanna
10 DONALD STREET, WINNIPEG, MANITOBA

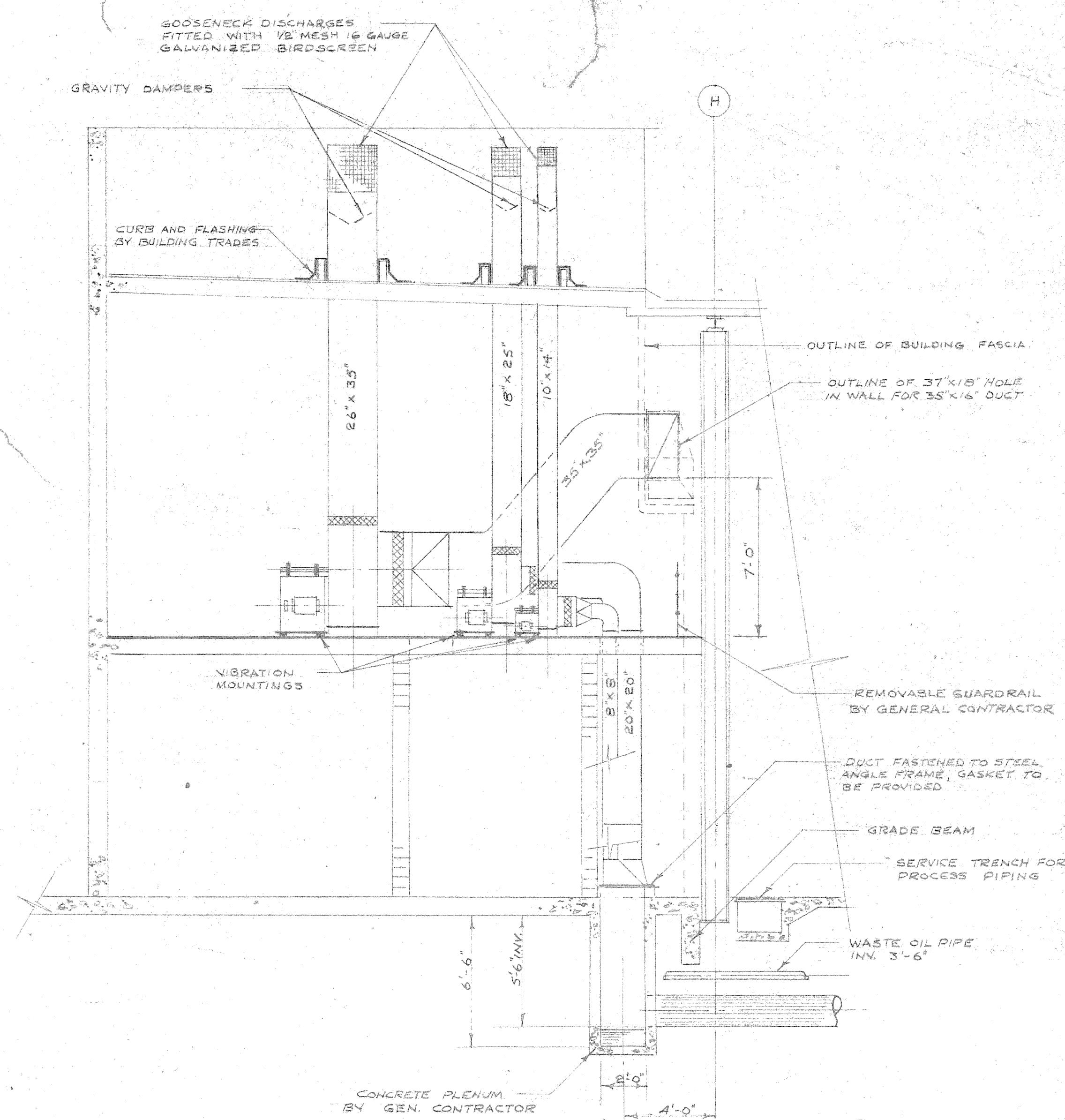
APPROVED: [Signature]

DATE: AUGUST '67

SCALE: AS SHOWN

DRAWING NO.: 2185-607

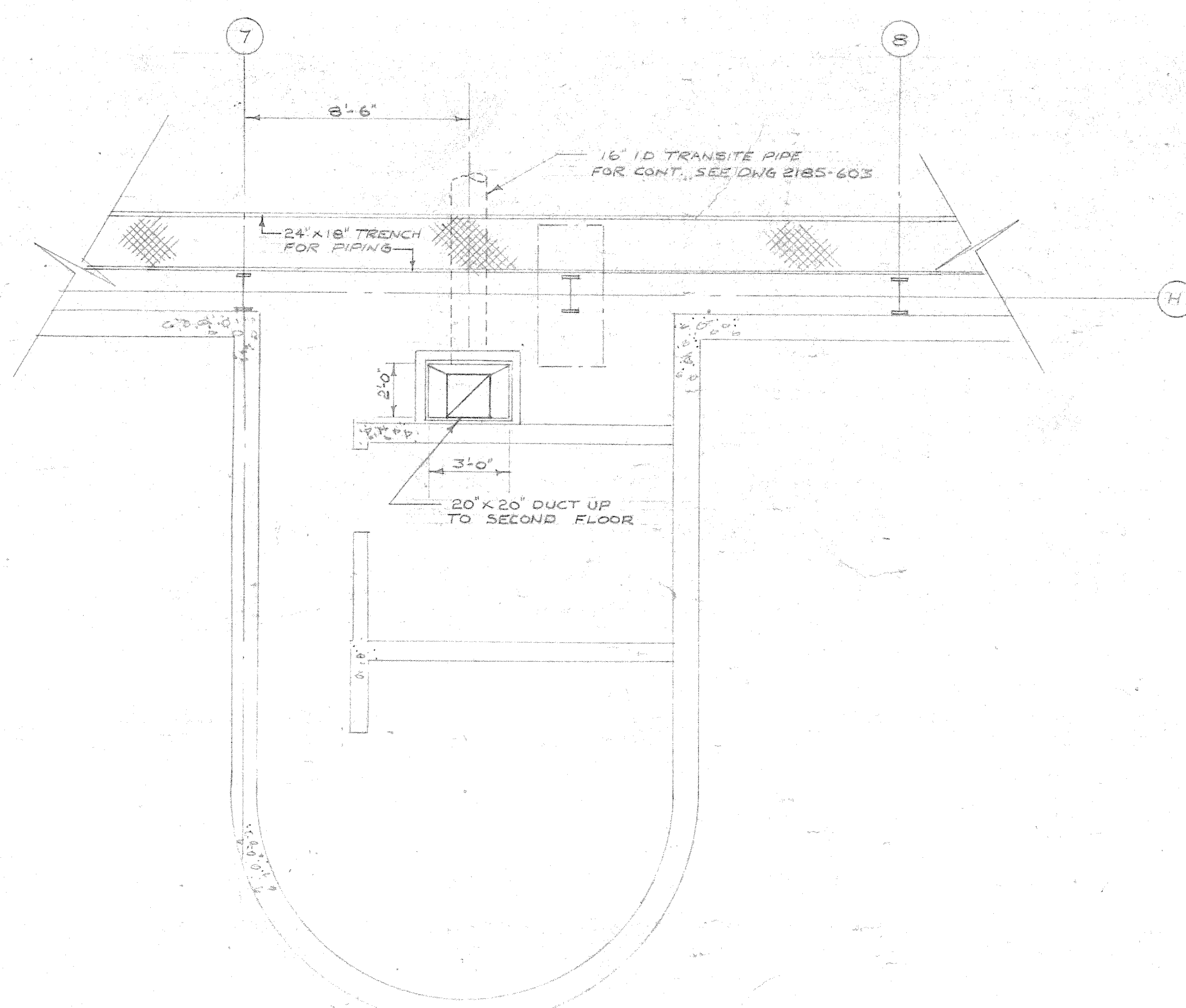
Mechanical



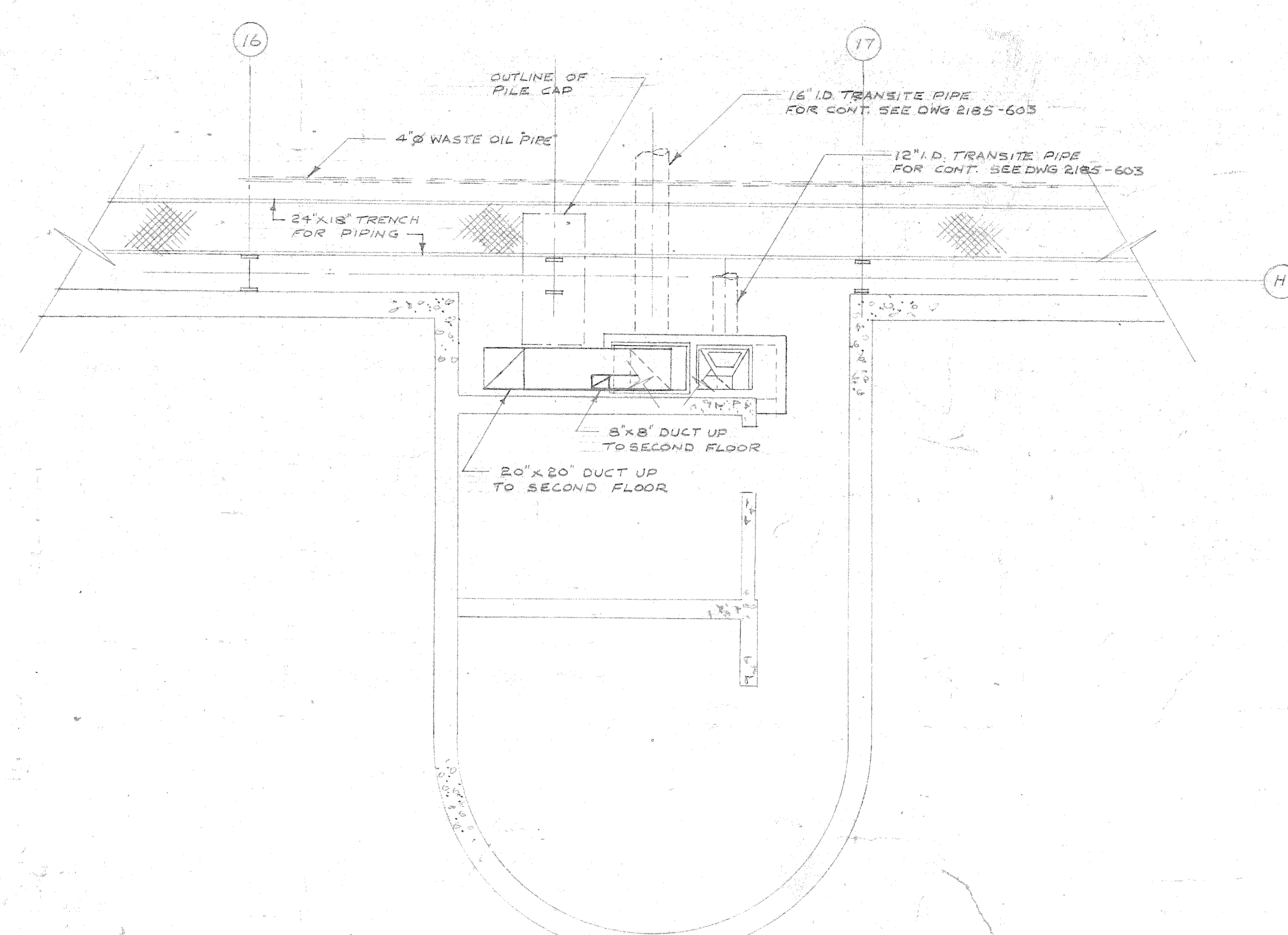
SECOND FLOOR PLAN OF WEST SERVICE PROJECTION
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"

SECOND FLOOR PLAN OF EAST SERVICE PROJECTION
OVERHAUL & REPAIR BUILDING
SCALE $\frac{1}{4}'' = 1'-0''$

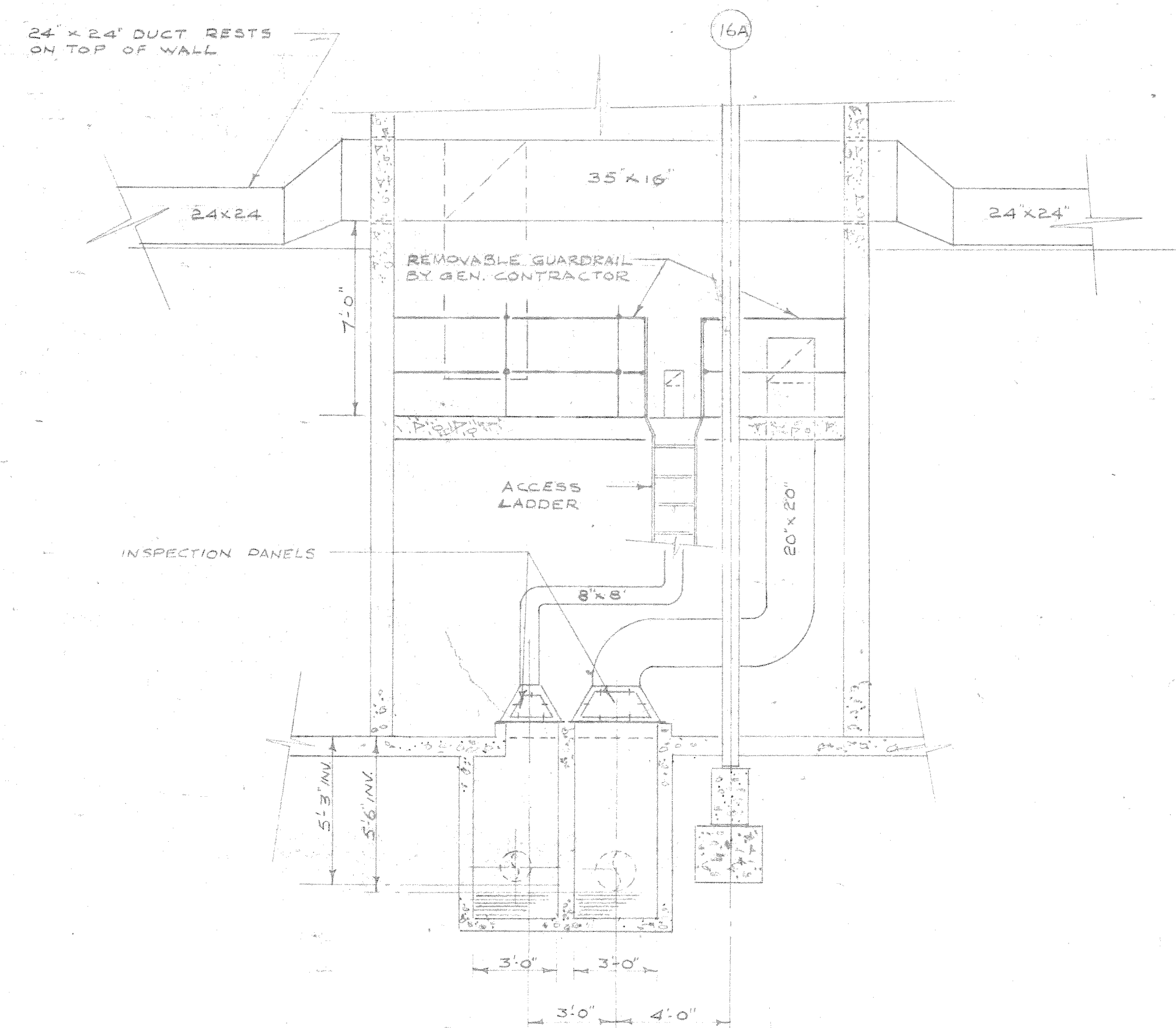
SECTION (6)
SCALE $\frac{1}{4}" = 1'-0"$



FIRST FLOOR PLAN OF WEST SERVICE PROJECTION
OVERHAUL & REPAIR BUILDING
SCALE 1/4" = 1'-0"



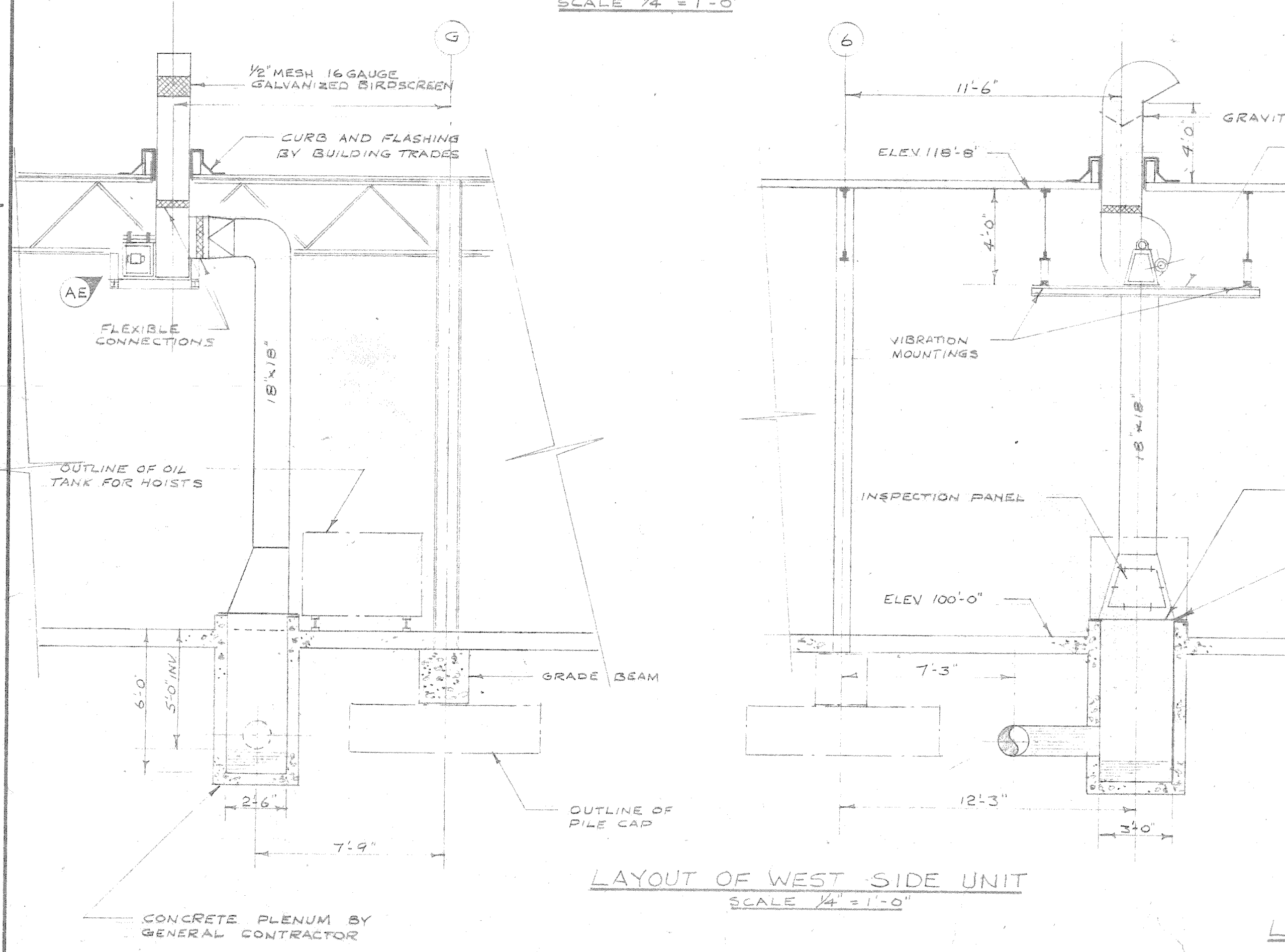
FIRST FLOOR PLAN OF EAST SERVICE PROJECTION
OVERHAUL & REPAIR BUILDING



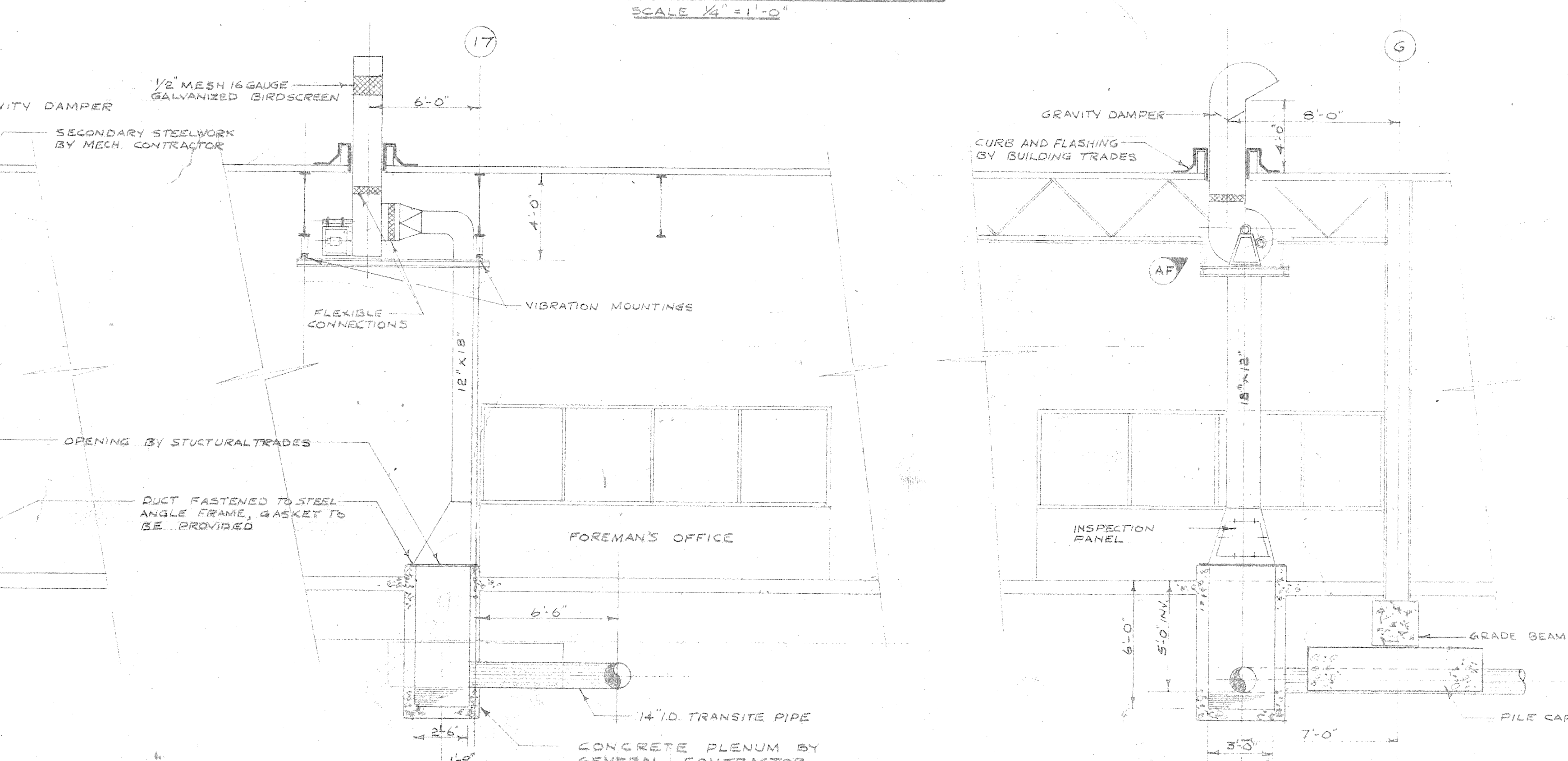
SECTION
SCALE 1/4" = 1'-0"

NOTE —
ALL EXHAUST VENTS ARE FITTED
WITH BIRDSCREEN AND GRAVITY DAMPER
ALL EXHAUST FANS TO BE MOUNTED
ON VIBRATION ISOLATORS

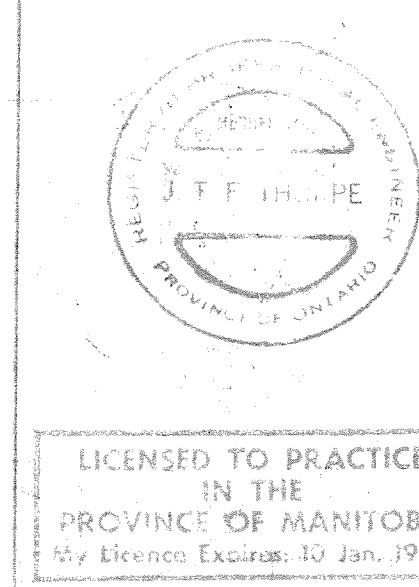
2185-608

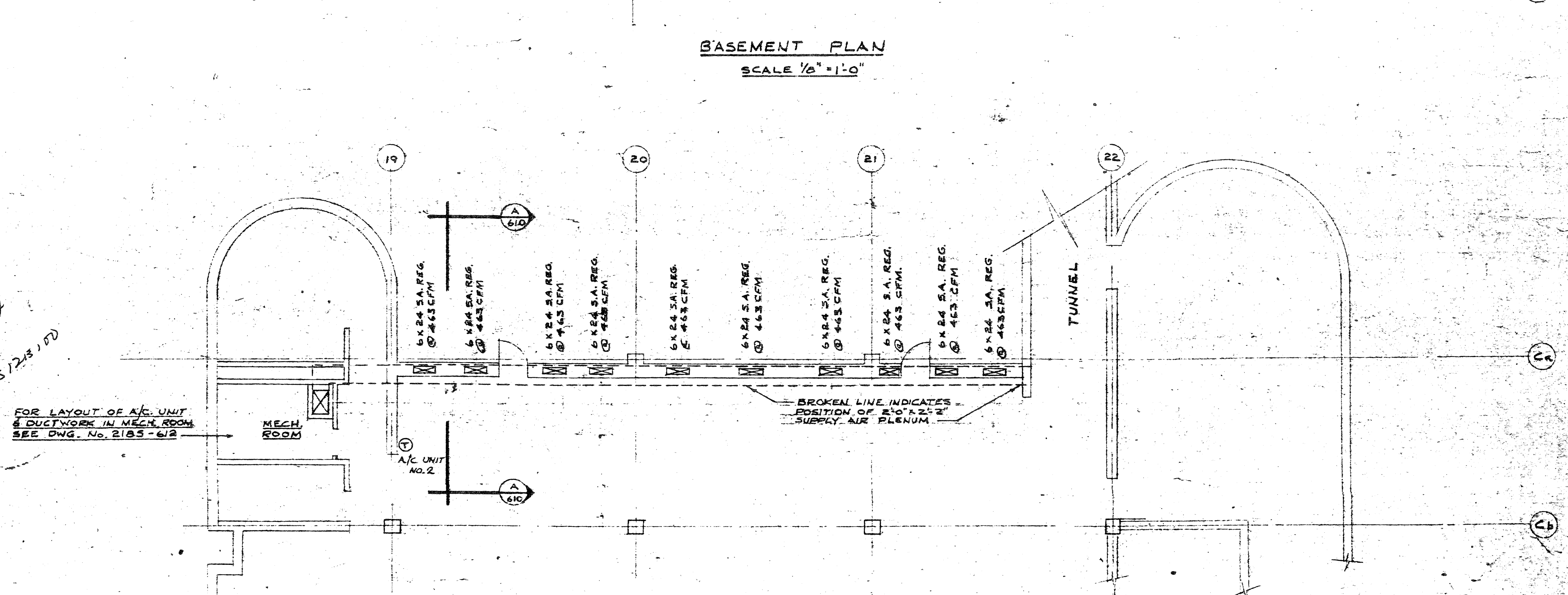
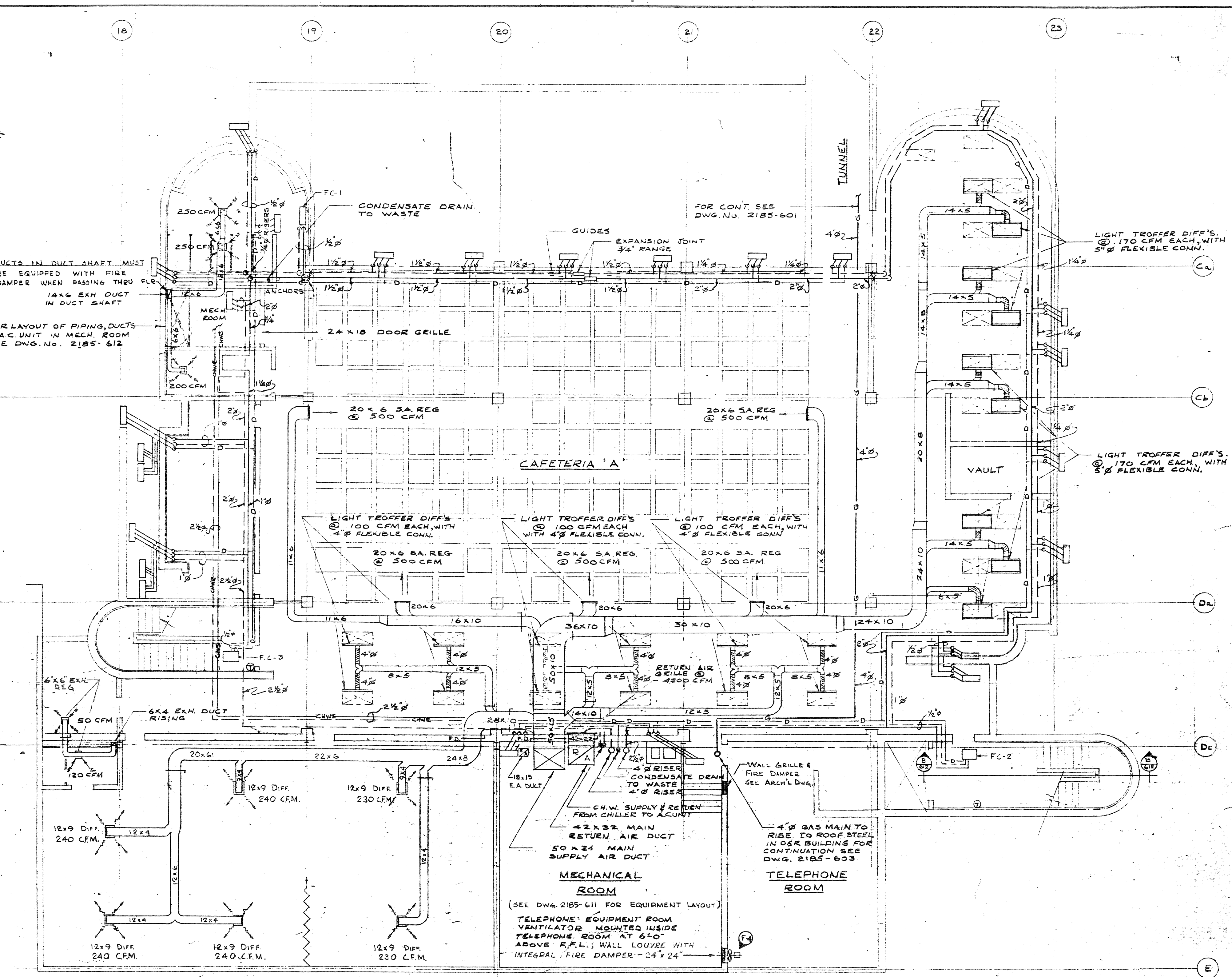
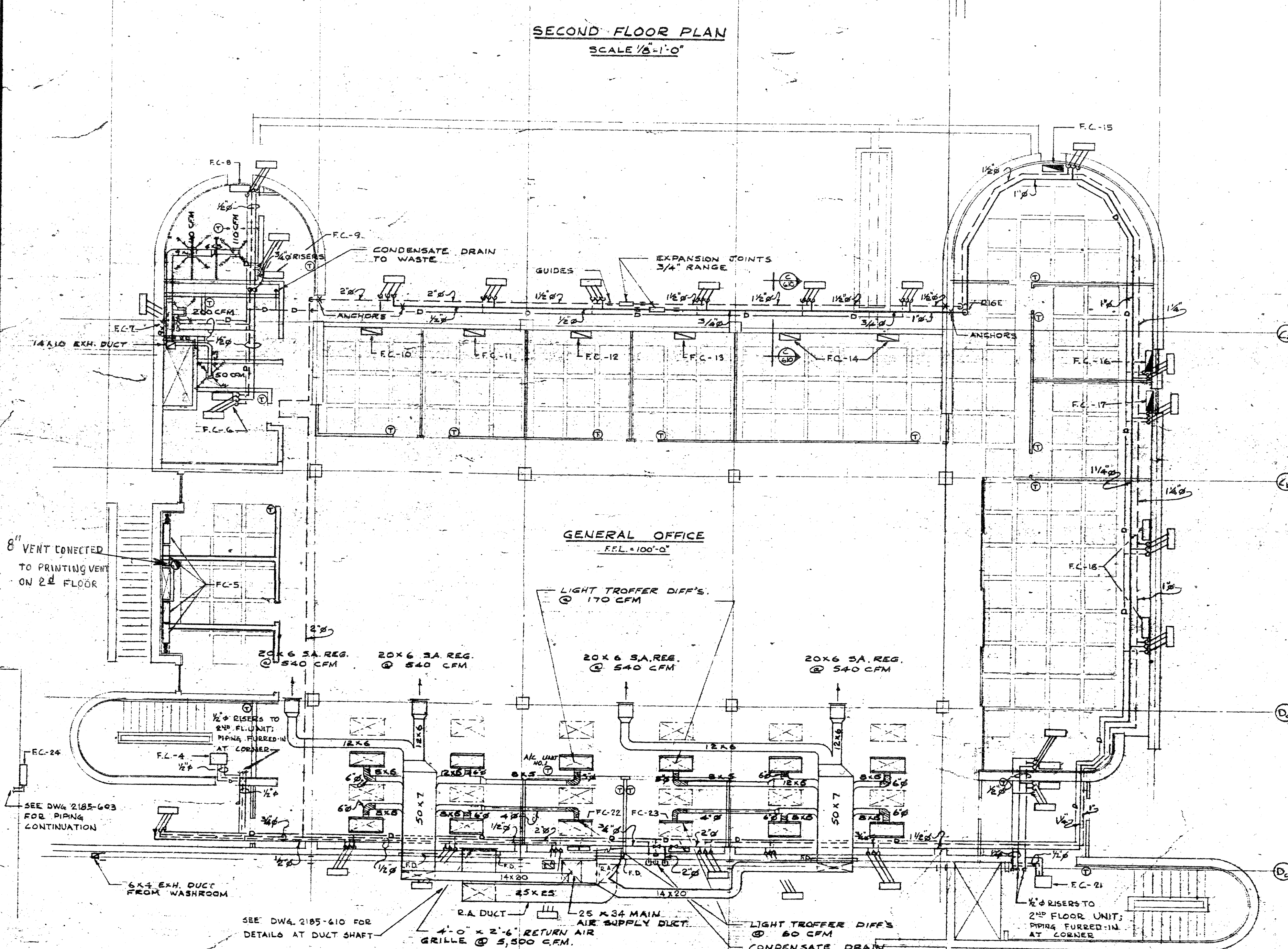
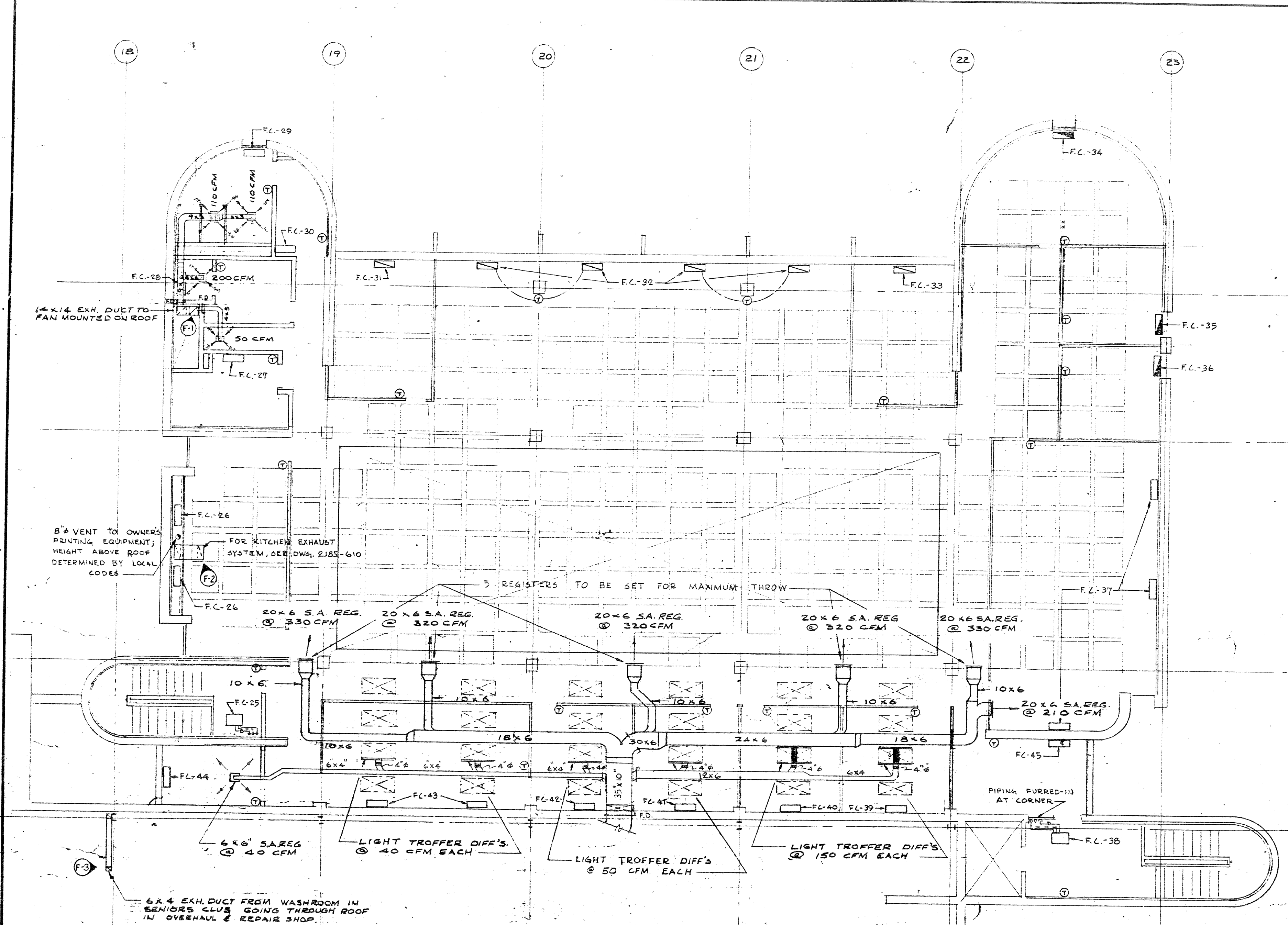


LAYOUT OF WEST SIDE UNIT
SCALE 1/4" = 1'-0"



LAYOUT OF EAST SIDE UNIT
SCALE 1/4" = 1'-0"

[illegible]



SYMBOL	ROOM	MODEL	NO. OF COILS	COIL TYPE	COIL SIZE	COIL RATIO	COIL SPEED	COIL TYPE	COIL SIZE	COIL RATIO	COIL SPEED	REMARKS
FC-1	A-100	FC-100-1	1	FC-100-1	100"	1.0	1.0	FC-100-1	100"	1.0	1.0	FREE STANDING
FC-2	A-101	FC-101-1	1	FC-101-1	101"	1.0	1.0	FC-101-1	101"	1.0	1.0	FREE STANDING
FC-3	A-102	FC-102-1	1	FC-102-1	102"	1.0	1.0	FC-102-1	102"	1.0	1.0	FREE STANDING
FC-4	A-103	FC-103-1	1	FC-103-1	103"	1.0	1.0	FC-103-1	103"	1.0	1.0	FREE STANDING
FC-5	A-104	FC-104-1	1	FC-104-1	104"	1.0	1.0	FC-104-1	104"	1.0	1.0	FREE STANDING
FC-6	A-105	FC-105-1	1	FC-105-1	105"	1.0	1.0	FC-105-1	105"	1.0	1.0	FREE STANDING
FC-7	A-106	FC-106-1	1	FC-106-1	106"	1.0	1.0	FC-106-1	106"	1.0	1.0	FREE STANDING
FC-8	A-107	FC-107-1	1	FC-107-1	107"	1.0	1.0	FC-107-1	107"	1.0	1.0	FREE STANDING
FC-9	A-108	FC-108-1	1	FC-108-1	108"	1.0	1.0	FC-108-1	108"	1.0	1.0	FREE STANDING
FC-10	A-109	FC-109-1	1	FC-109-1	109"	1.0	1.0	FC-109-1	109"	1.0	1.0	FREE STANDING
FC-11	A-110	FC-110-1	1	FC-110-1	110"	1.0	1.0	FC-110-1	110"	1.0	1.0	FREE STANDING
FC-12	A-111	FC-111-1	1	FC-111-1	111"	1.0	1.0	FC-111-1	111"	1.0	1.0	FREE STANDING
FC-13	A-112	FC-112-1	1	FC-112-1	112"	1.0	1.0	FC-112-1	112"	1.0	1.0	FREE STANDING
FC-14	A-113	FC-113-1	1	FC-113-1	113"	1.0	1.0	FC-113-1	113"	1.0	1.0	FREE STANDING
FC-15	A-114	FC-114-1	1	FC-114-1	114"	1.0	1.0	FC-114-1	114"	1.0	1.0	FREE STANDING
FC-16	A-115	FC-115-1	1	FC-115-1	115"	1.0	1.0	FC-115-1	115"	1.0	1.0	FREE STANDING
FC-17	A-116	FC-116-1	1	FC-116-1	116"	1.0	1.0	FC-116-1	116"	1.0	1.0	FREE STANDING
FC-18	A-117	FC-117-1	1	FC-117-1	117"	1.0	1.0	FC-117-1	117"	1.0	1.0	FREE STANDING
FC-19	A-118	FC-118-1	1	FC-118-1	118"	1.0	1.0	FC-118-1	118"	1.0	1.0	FREE STANDING
FC-20	A-119	FC-119-1	1	FC-119-1	119"	1.0	1.0	FC-119-1	119"	1.0	1.0	FREE STANDING
FC-21	A-120	FC-120-1	1	FC-120-1	120"	1.0	1.0	FC-120-1	120"	1.0	1.0	FREE STANDING
FC-22	A-121	FC-121-1	1	FC-121-1	121"	1.0	1.0	FC-121-1	121"	1.0	1.0	FREE STANDING
FC-23	A-122	FC-122-1	1	FC-122-1	122"	1.0	1.0	FC-122-1	122"	1.0	1.0	FREE STANDING
FC-24	A-123	FC-123-1	1	FC-123-1	123"	1.0	1.0	FC-123-1	123"	1.0	1.0	FREE STANDING
FC-25	A-124	FC-124-1	1	FC-124-1	124"	1.0	1.0	FC-124-1	124"	1.0	1.0	FREE STANDING
FC-26	A-125	FC-125-1	1	FC-125-1	125"	1.0	1.0	FC-125-1	125"	1.0	1.0	FREE STANDING
FC-27	A-126	FC-126-1	1	FC-126-1	126"	1.0	1.0	FC-126-1	126"	1.0	1.0	FREE STANDING
FC-28	A-127	FC-127-1	1	FC-127-1	127"	1.0	1.0	FC-127-1	127"	1.0	1.0	FREE STANDING
FC-29	A-128	FC-128-1	1	FC-128-1	128"	1.0	1.0	FC-128-1	128"	1.0	1.0	FREE STANDING
FC-30	A-129	FC-129-1	1	FC-129-1	129"	1.0	1.0	FC-129-1	129"	1.0	1.0	FREE STANDING
FC-31	A-130	FC-130-1	1	FC-130-1	130"	1.0	1.0	FC-130-1	130"	1.0	1.0	FREE STANDING
FC-32	A-131	FC-131-1	1	FC-131-1	131"	1.0	1.0	FC-131-1	131"	1.0	1.0	FREE STANDING
FC-33	A-132	FC-132-1	1	FC-132-1	132"	1.0	1.0	FC-132-1	132"	1.0	1.0	FREE STANDING
FC-34	A-133	FC-133-1	1	FC-133-1	133"	1.0	1.0	FC-133-1	133"	1.0	1.0	FREE STANDING
FC-35	A-134	FC-134-1	1	FC-134-1	134"	1.0	1.0	FC-134-1	134"	1.0	1.0	FREE STANDING
FC-36	A-135	FC-135-1	1	FC-135-1	135"	1.0	1.0	FC-135-1	135"	1.0	1.0	FREE STANDING
FC-37	A-136	FC-136-1	1	FC-136-1	136"	1.0	1.0	FC-136-1	136"	1.0	1.0	FREE STANDING
FC-38	A-137	FC-137-1	1	FC-137-1	137"	1.0	1.0	FC-137-1	137"	1.0	1.0	FREE STANDING
FC-39	A-138	FC-138-1	1	FC-138-1	138"	1.0	1.0	FC-138-1	138"	1.0	1.0	FREE STANDING
FC-40	A-139	FC-139-1	1	FC-139-1	139"	1.0	1.0	FC-139-1	139"	1.0	1.0	FREE STANDING
FC-41	A-140	FC-140-1	1	FC-140-1	140"	1.0	1.0	FC-140-1	140"	1.0	1.0	FREE STANDING
FC-42	A-141	FC-141-1	1	FC-141-1	141"	1.0	1.0	FC-141-1	141"	1.0	1.0	FREE STANDING
FC-43	A-142	FC-142-1	1	FC-142-1	142"	1.0	1.0	FC-142-1	142"	1.0	1.0	FREE STANDING
FC-44	A-143	FC-143-1	1	FC-143-1	143"	1.0	1.0	FC-143-1	143"	1.0	1.0	FREE STANDING
FC-45	A-144	FC-144-1	1	FC-144-1	144"	1.0	1.0	FC-144-1	144"	1.0	1.0	FREE STANDING

2185-609

NOTE: ALL CONDENSATE DRAIN PIPING TO BE 1/2" PLASTIC PIPE.

19/1/68 2 0 FOR TENDER
22/1/68 1 0 FOR APPROVAL

DATE ISSUE REV. NO.

DESCRIPTION

ISSUE OR REVISION

METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

TRANSIT STORAGE AND SHOP FACILITIES

ADMINISTRATION BUILDING

HEATING, VENTILATING & AIR CONDITIONING - PLAN

CONSULTING PROFESSIONAL ENGINEERS
A. D. MARGISON AND ASSOCIATES LIMITED
1155 LESLIE STREET, DON MILLS, ONTARIO

ARCHITECTS
Walsman Ross & Blankstein
1155 LESLIE STREET, DON MILLS, ONTARIO

APPROVED

DESIGNED BY

CHECKED

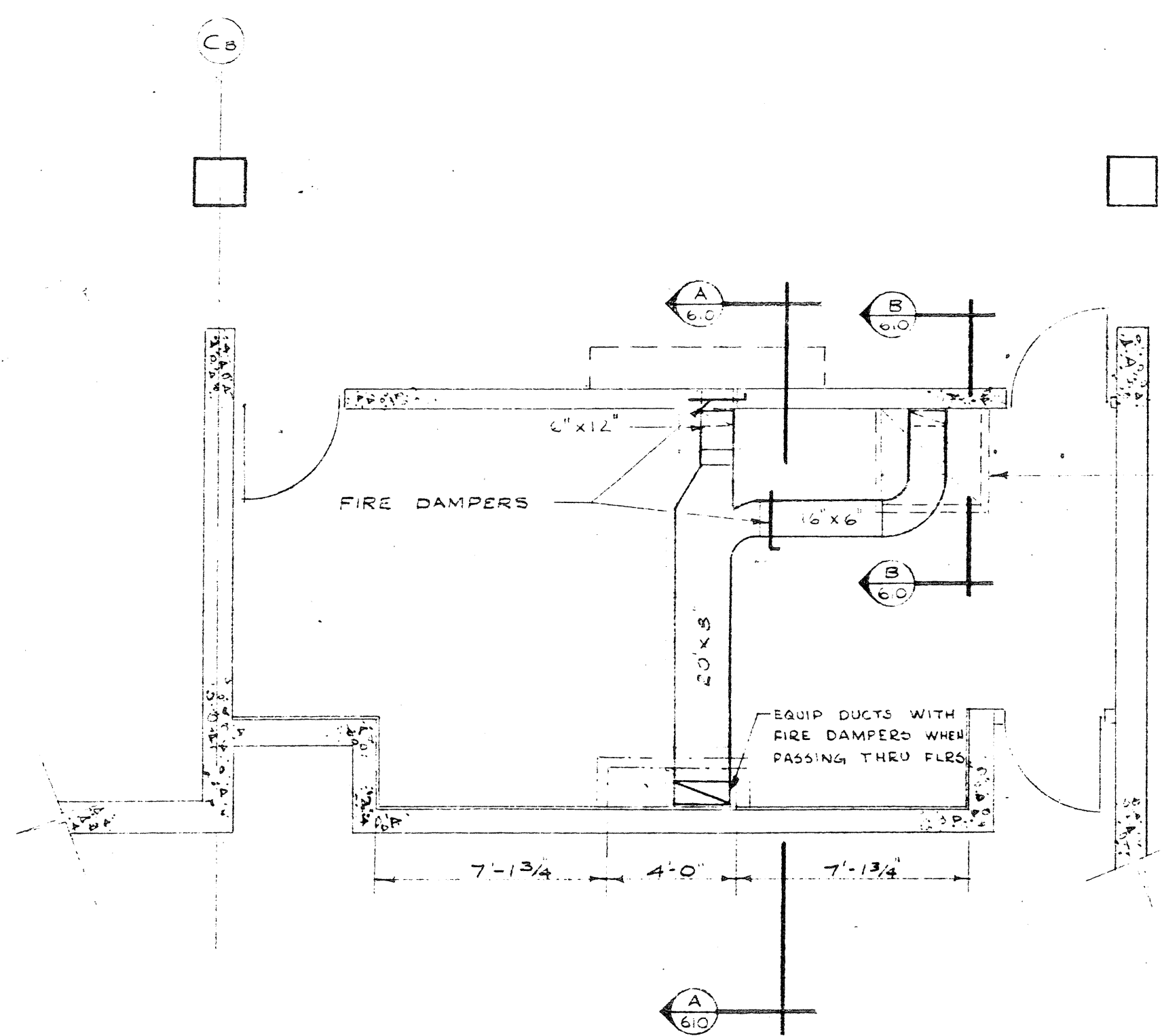
FILE NO.

DATE

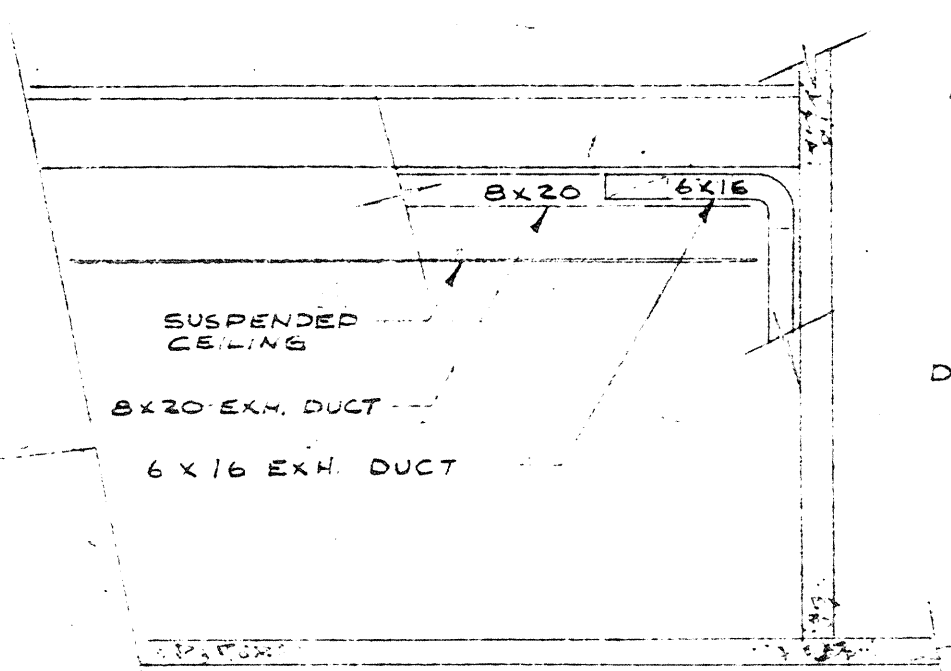
SCALE

AS SHOWN

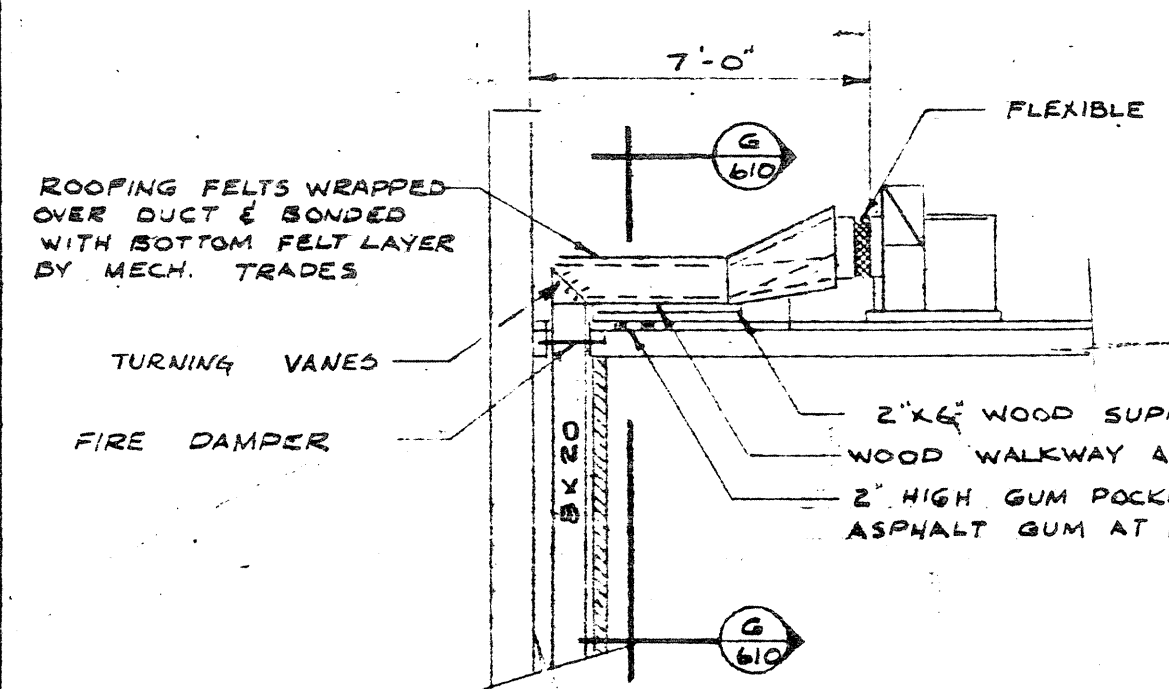
2185-609
MECHANICAL



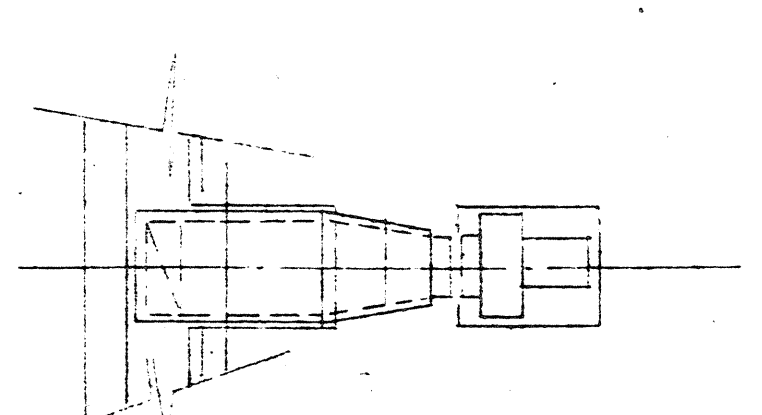
PLAN OF KITCHEN IN OFFICE BUILDING
SCALE 1/4" = 1'-0"



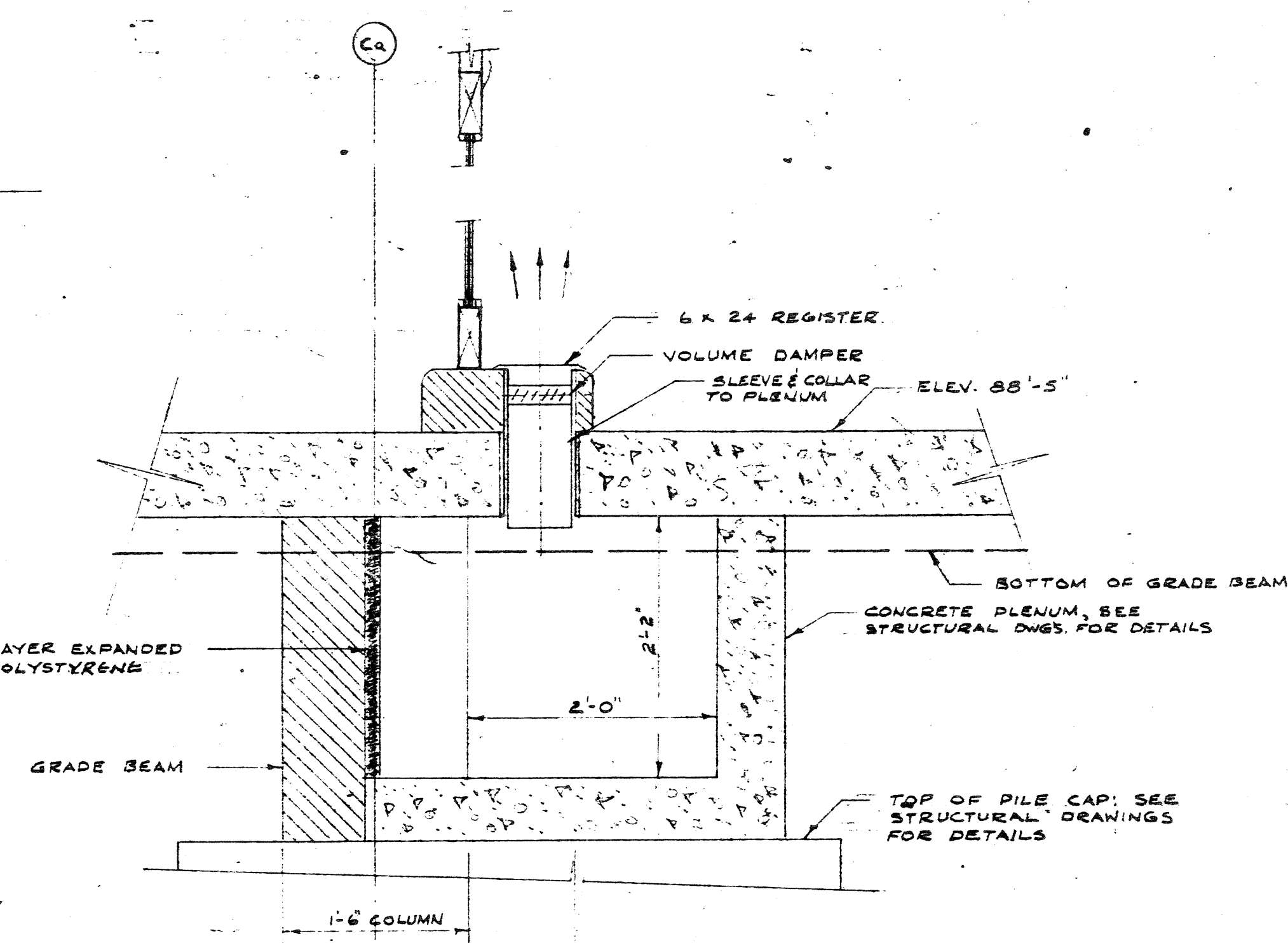
SECTION A-A
SCALE 1/4" = 1'-0"



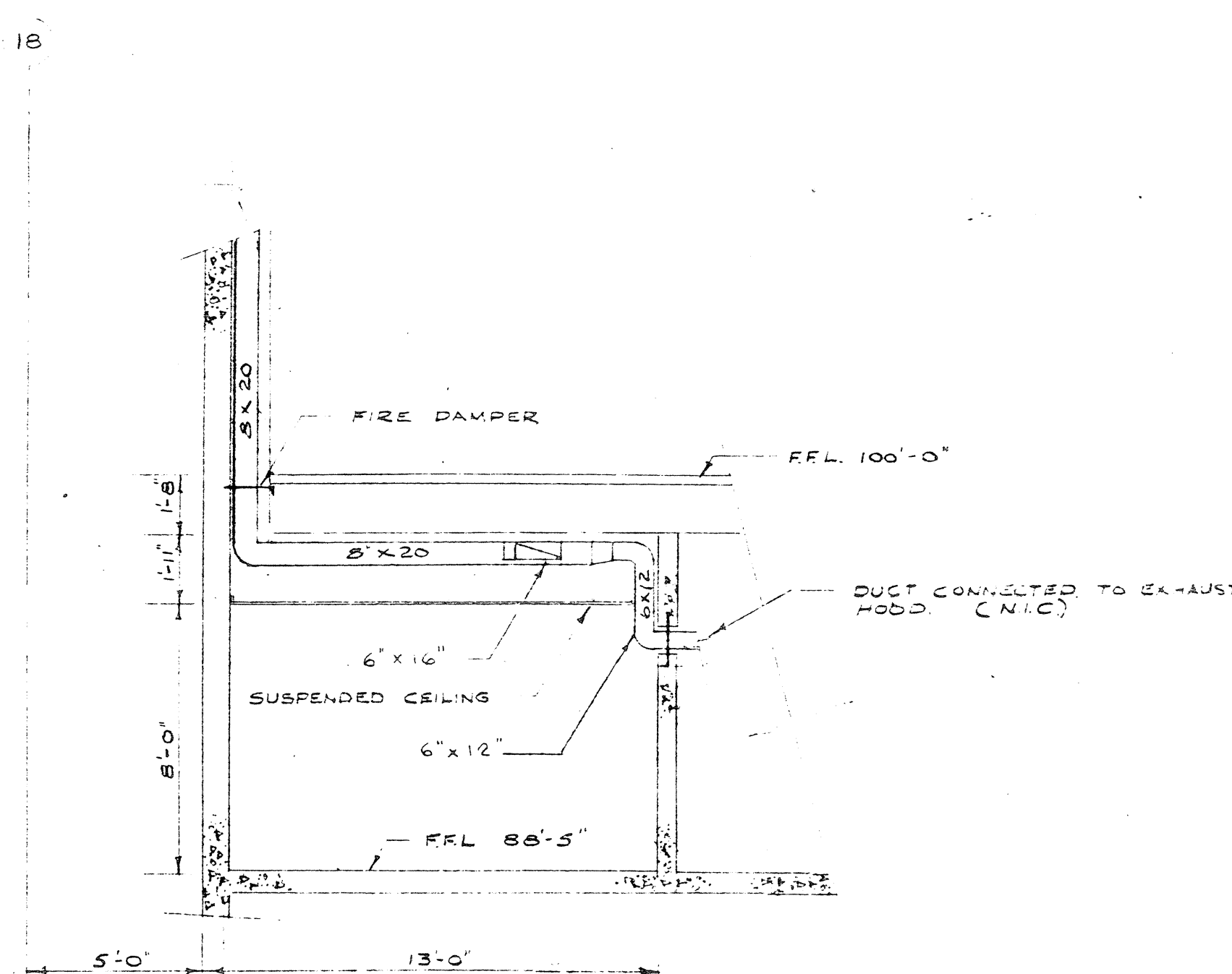
ELEVATION OF KITCHEN EXHAUST FAN ON ROOF
SCALE 1/4" = 1'-0"



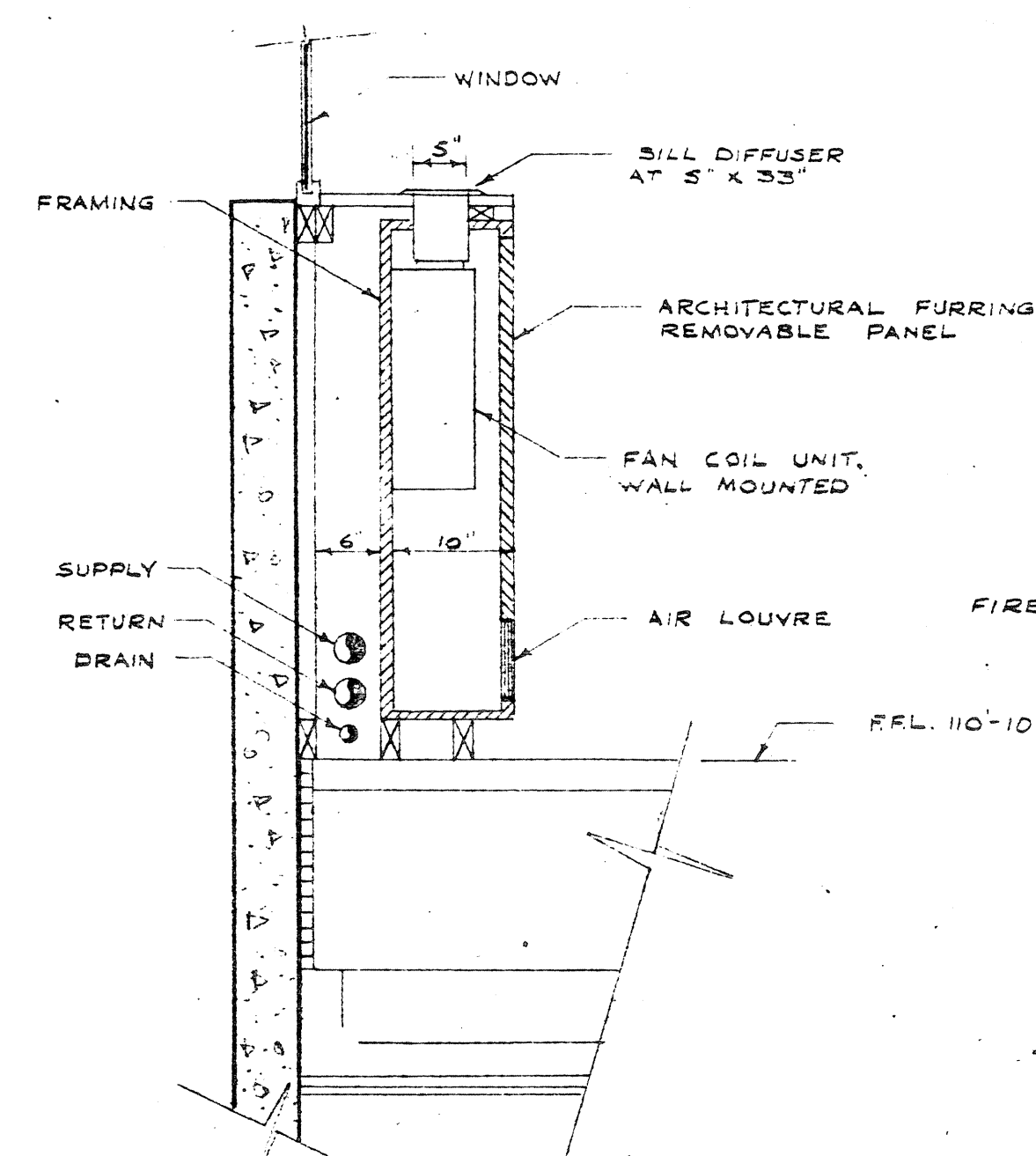
PLAN
SCALE 1/4" = 1'-0"



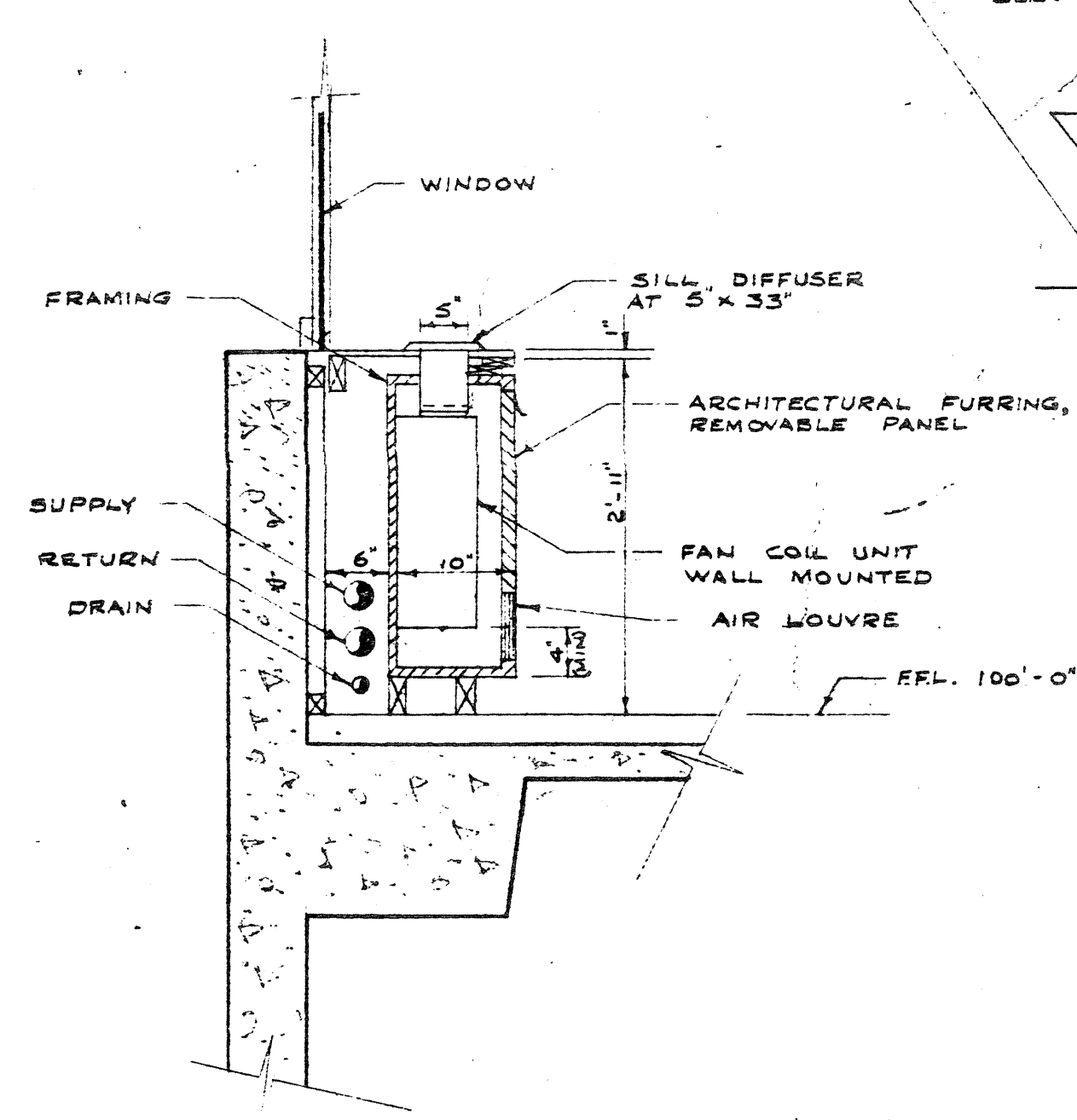
SECTION A-A
SCALE 1" = 1'-0"



SECTION A-A
SCALE 1/4" = 1'-0"

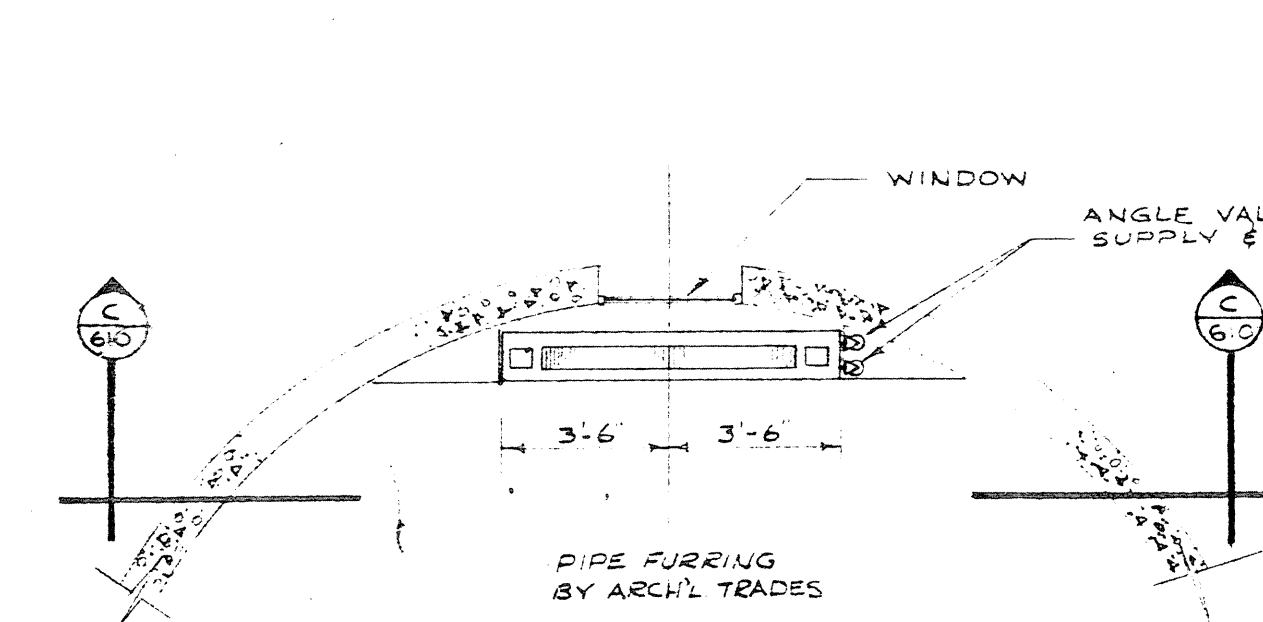


2ND FLOOR
SCALE 3/4" = 1'-0"

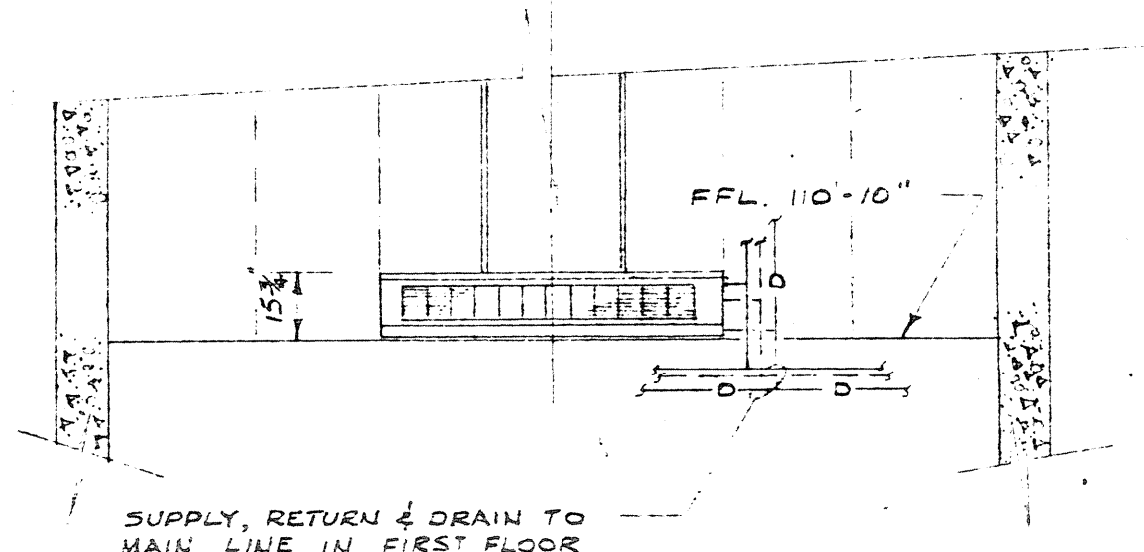


1ST FLOOR
SCALE 3/4" = 1'-0"

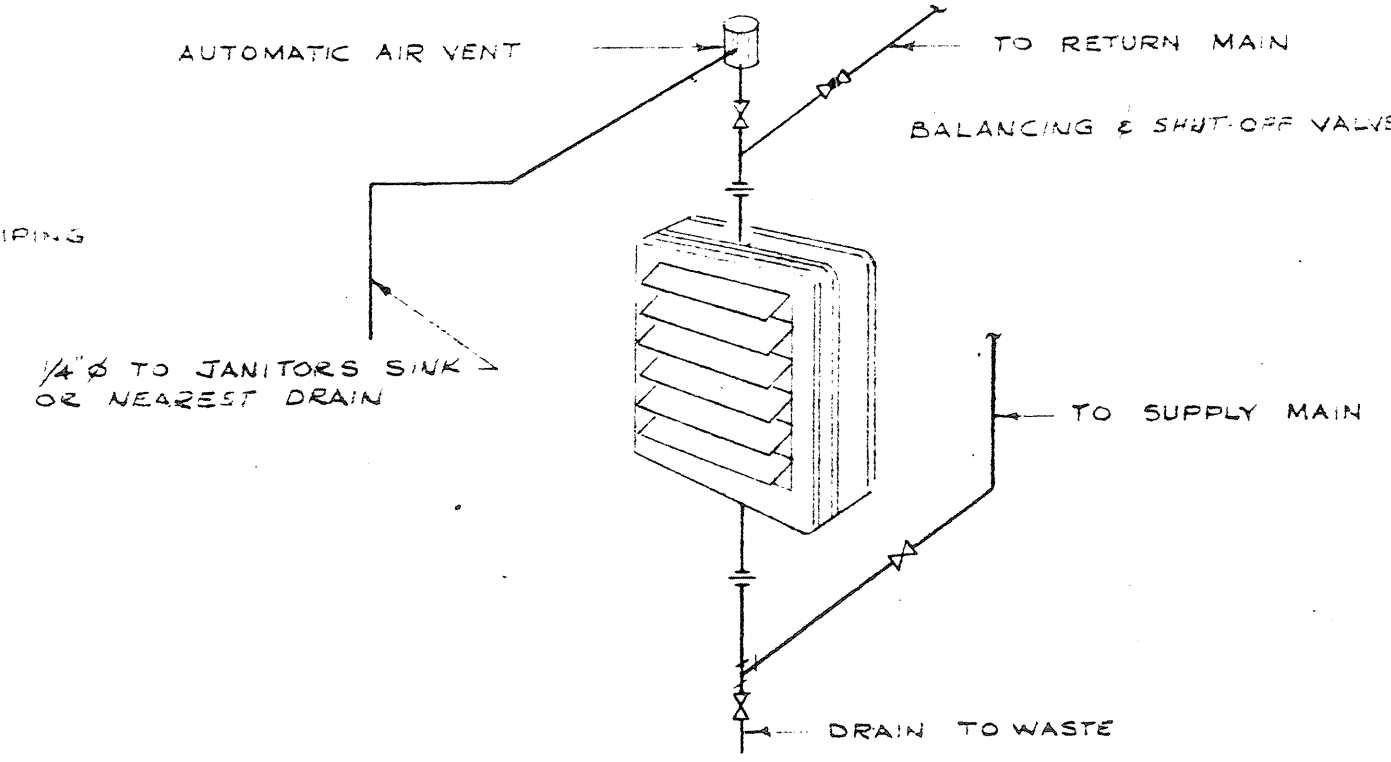
SECTION A-A
FURRED FAN COIL DETAILS
NORTH WINDOWS OFFICE BUILDING



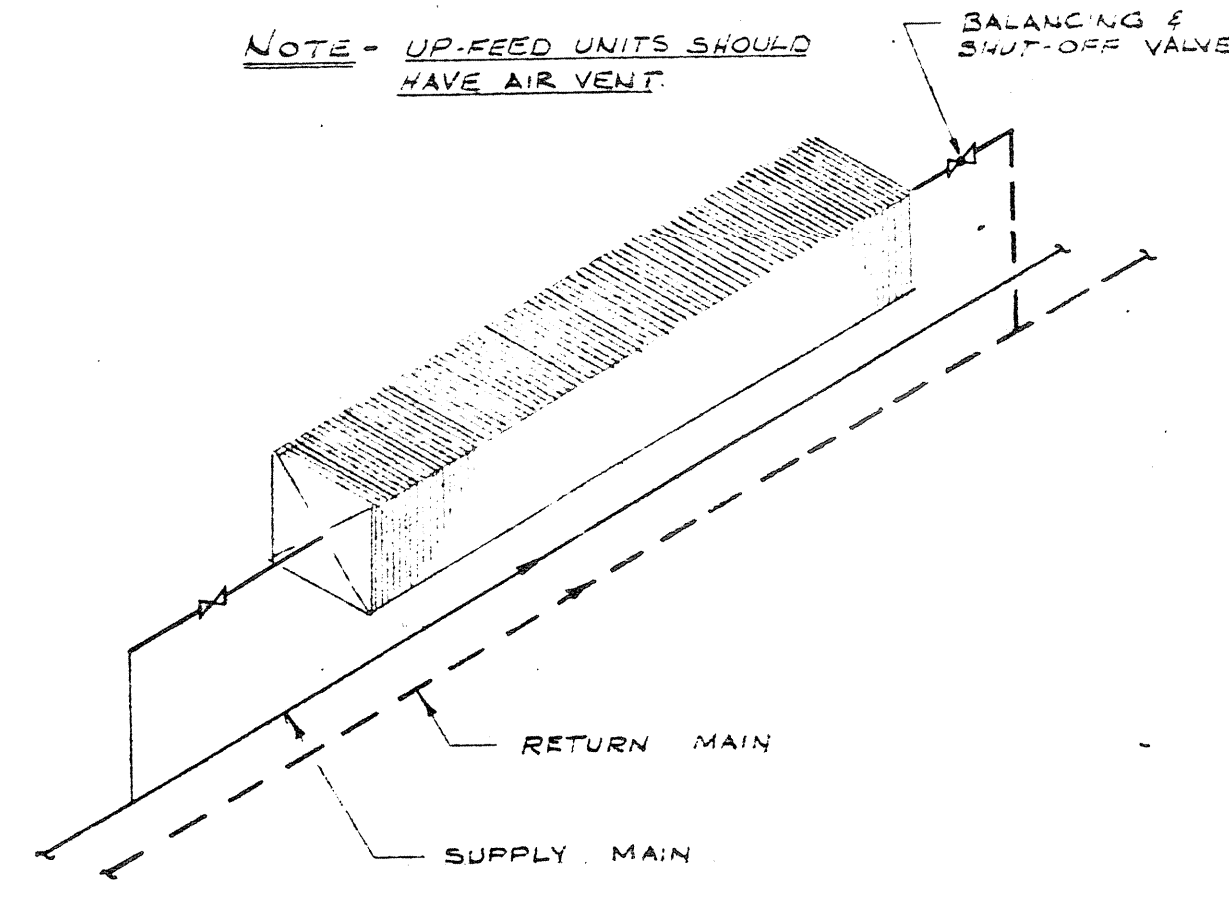
LAYOUT OF HOT WATER HEATER IN ROOM A-116
SCALE 1/4" = 1'-0"



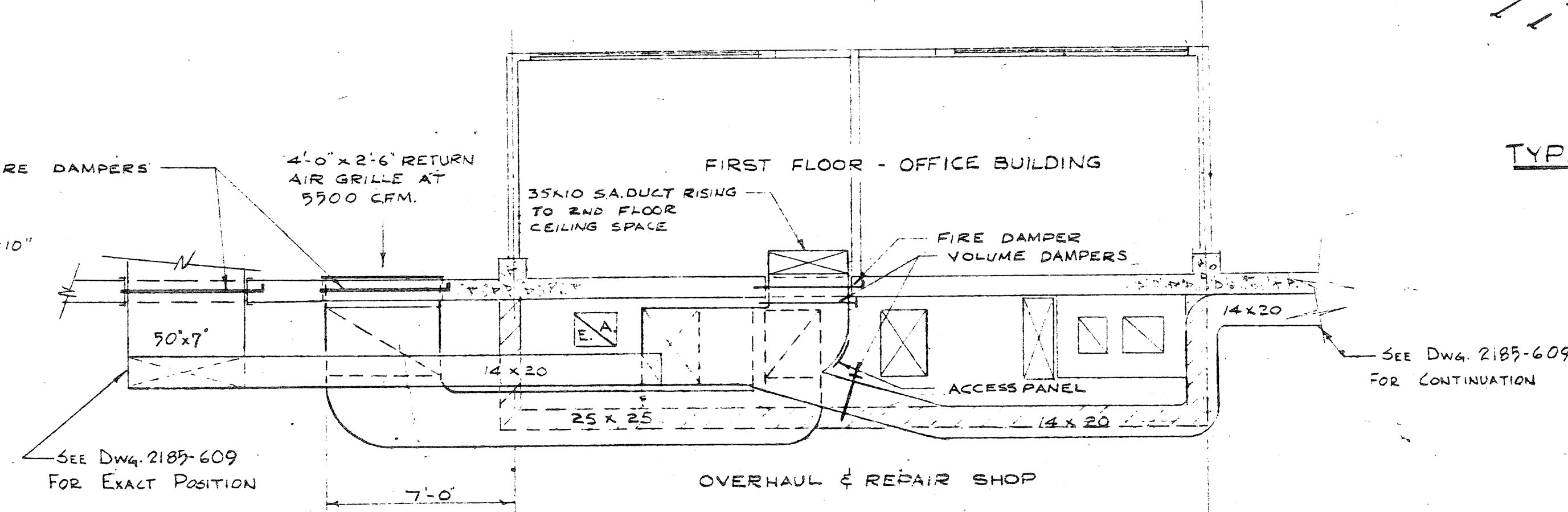
SECTION A-A
SCALE 1/4" = 1'-0"



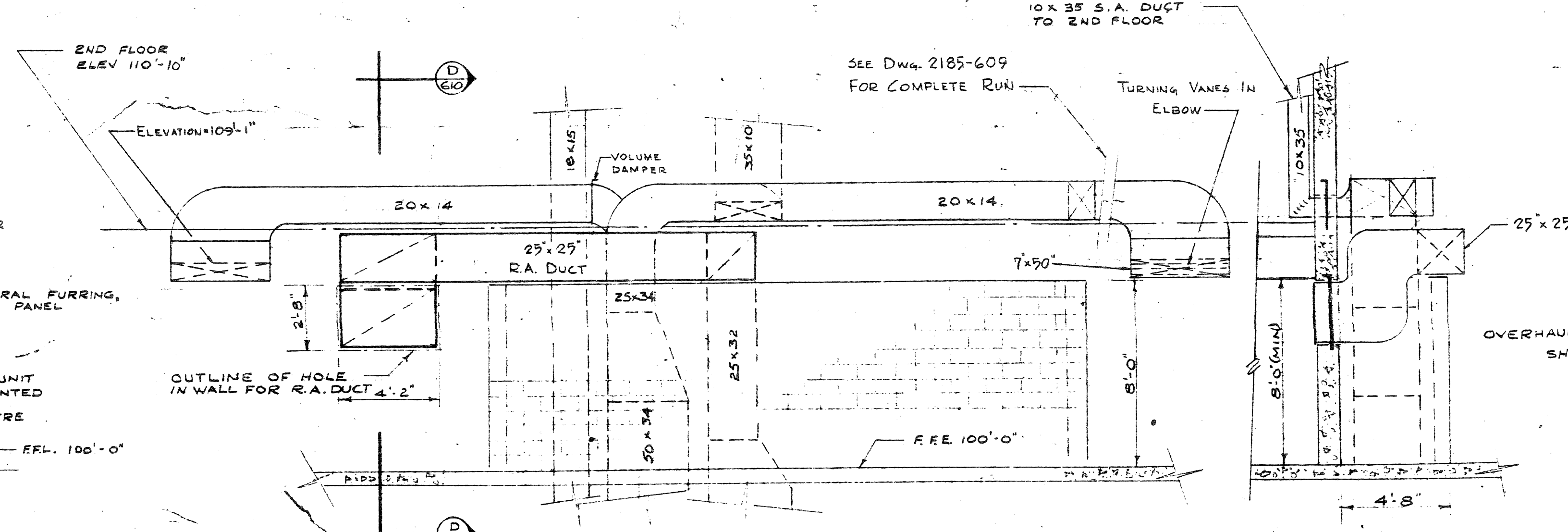
TYPICAL PIPING OF HOT WATER UNIT HEATER
NOT TO SCALE



TYPICAL PIPING OF HOT WATER CONVECTOR
NOT TO SCALE



PLAN
SCALE 1/4" = 1'-0"



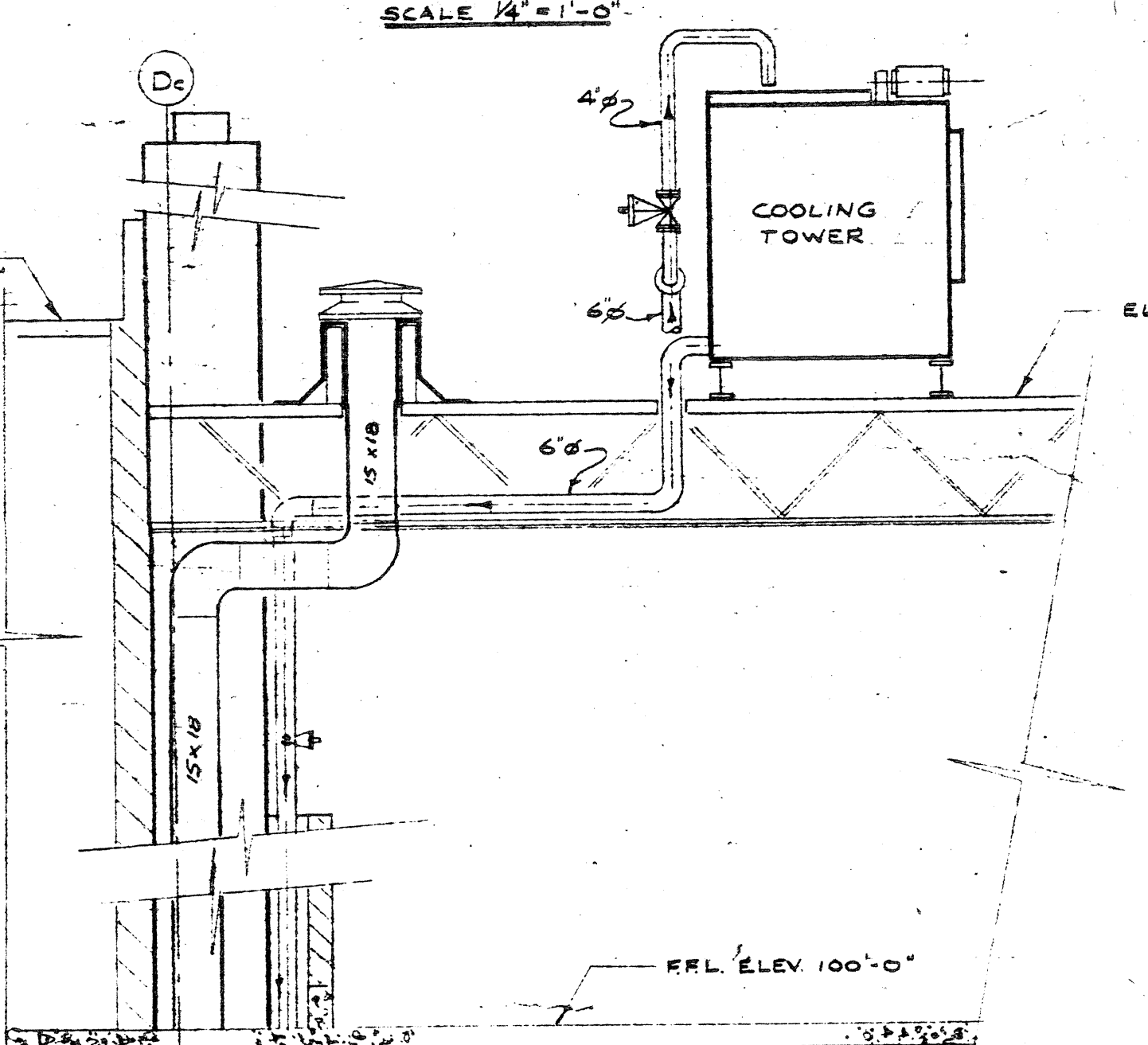
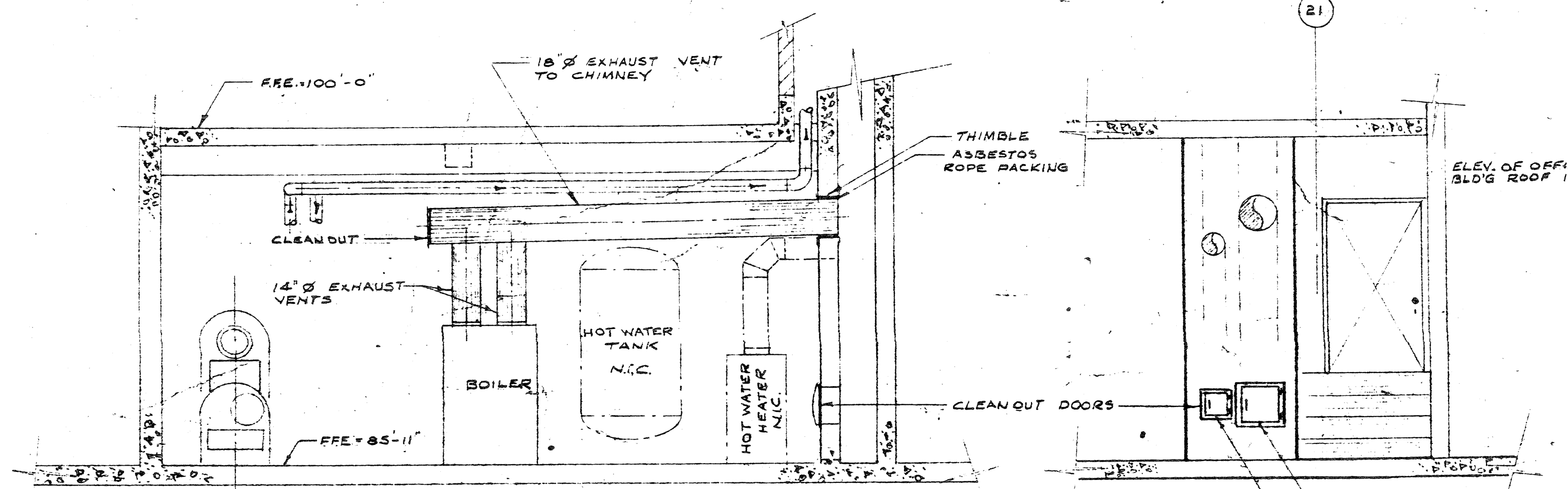
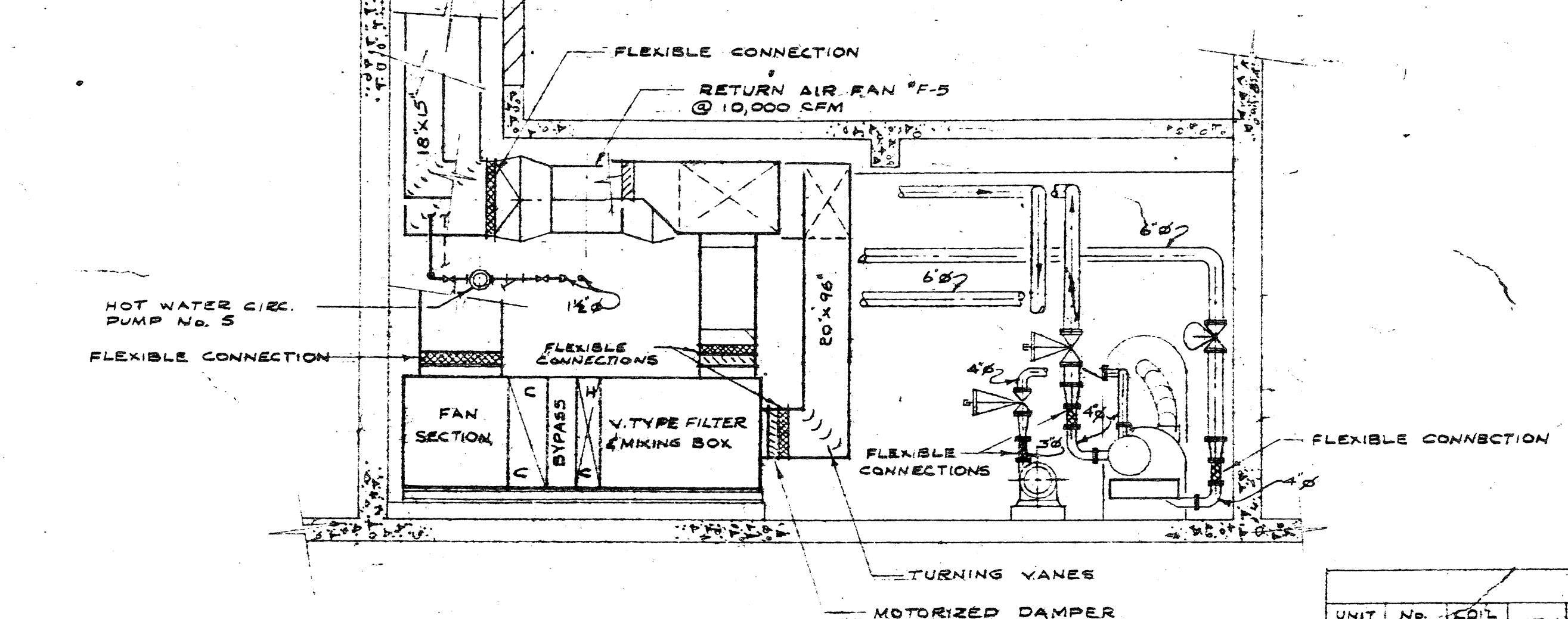
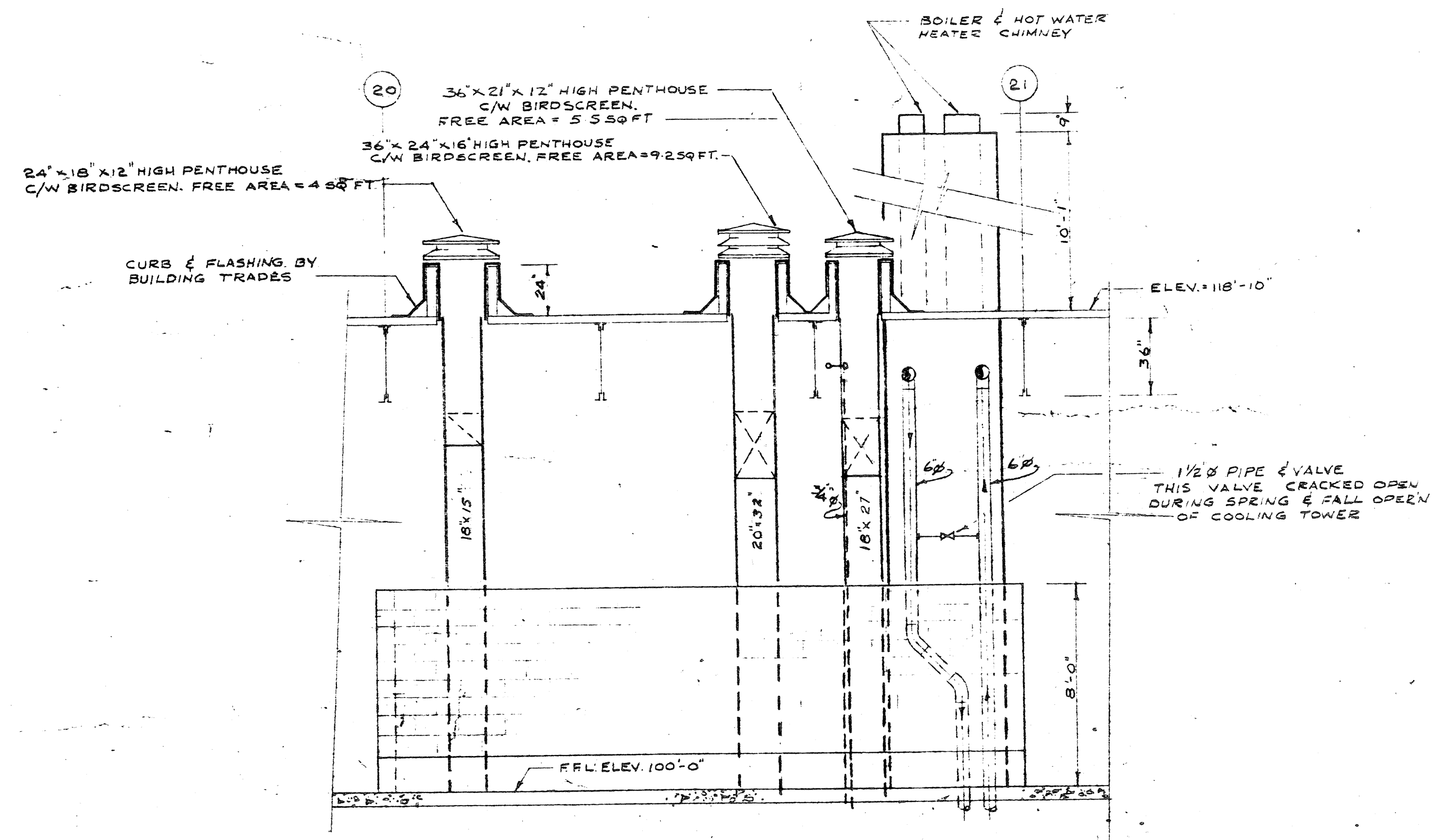
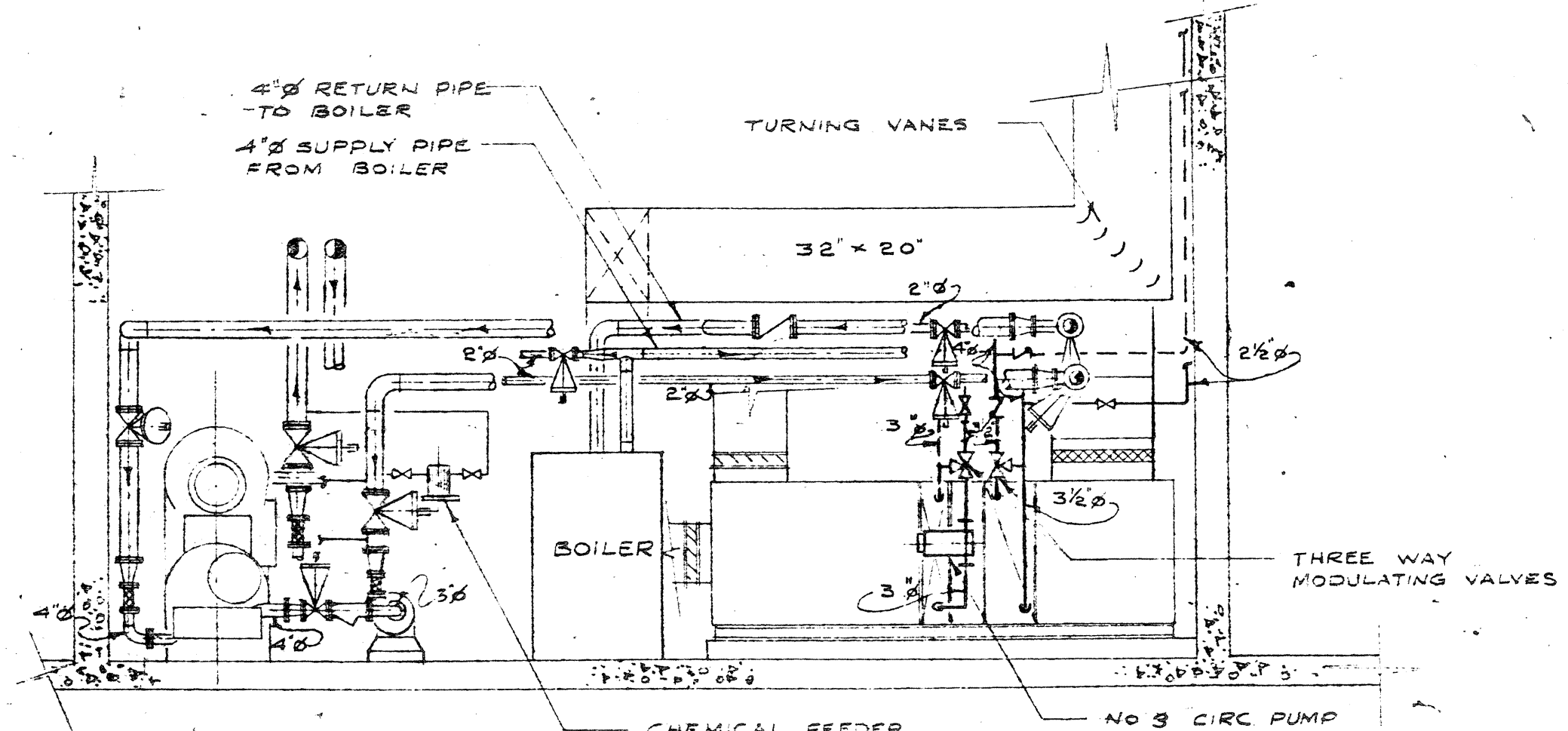
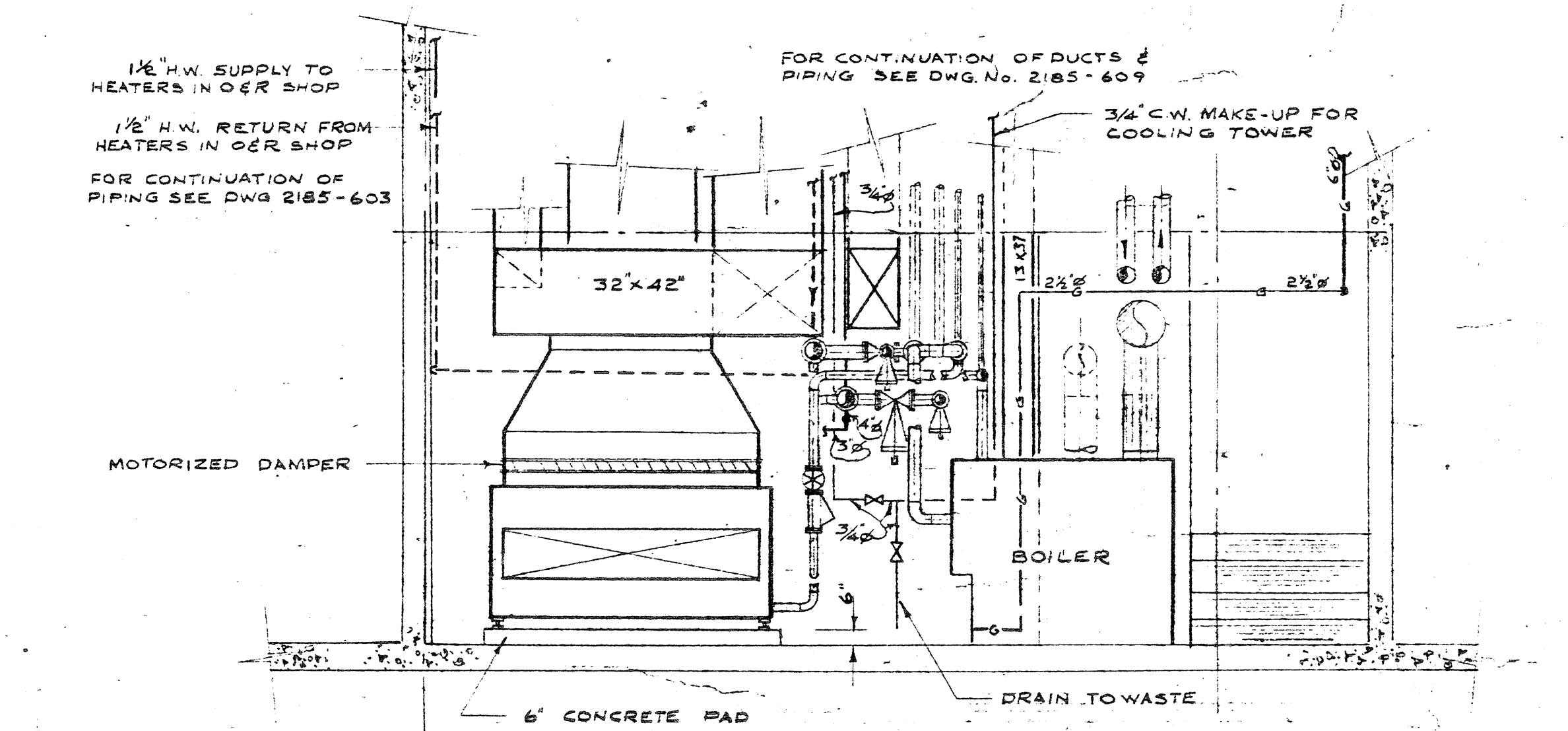
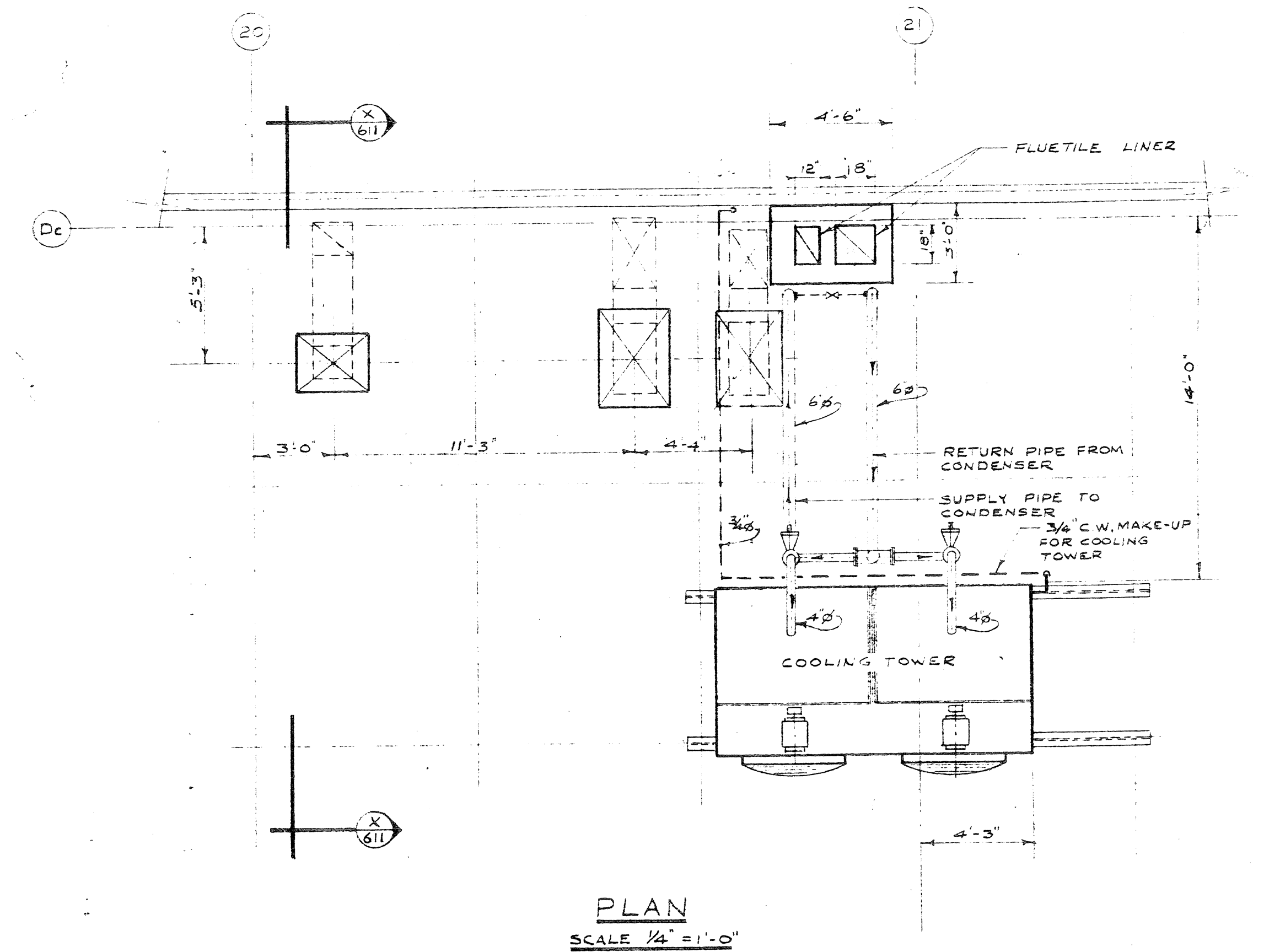
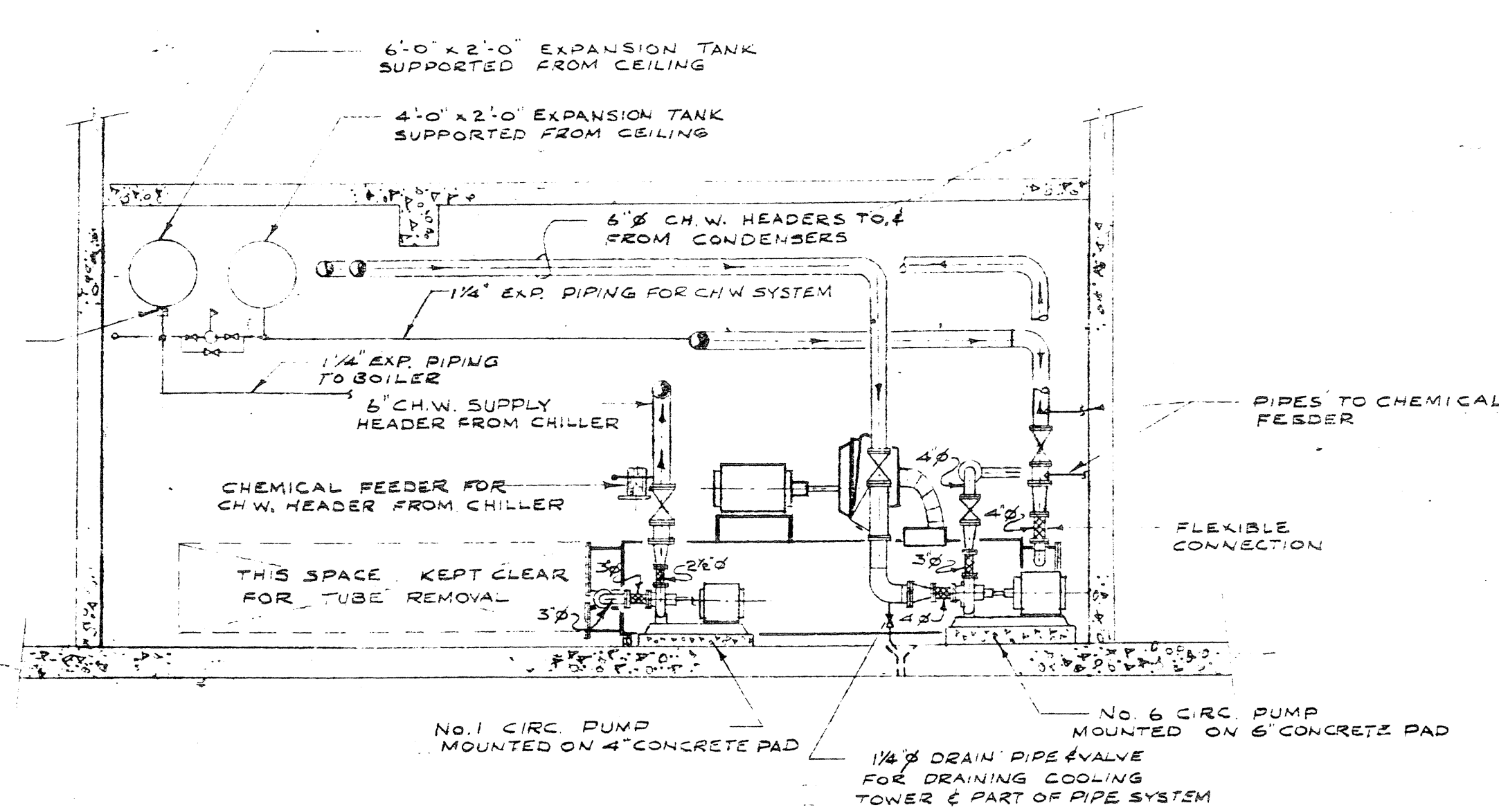
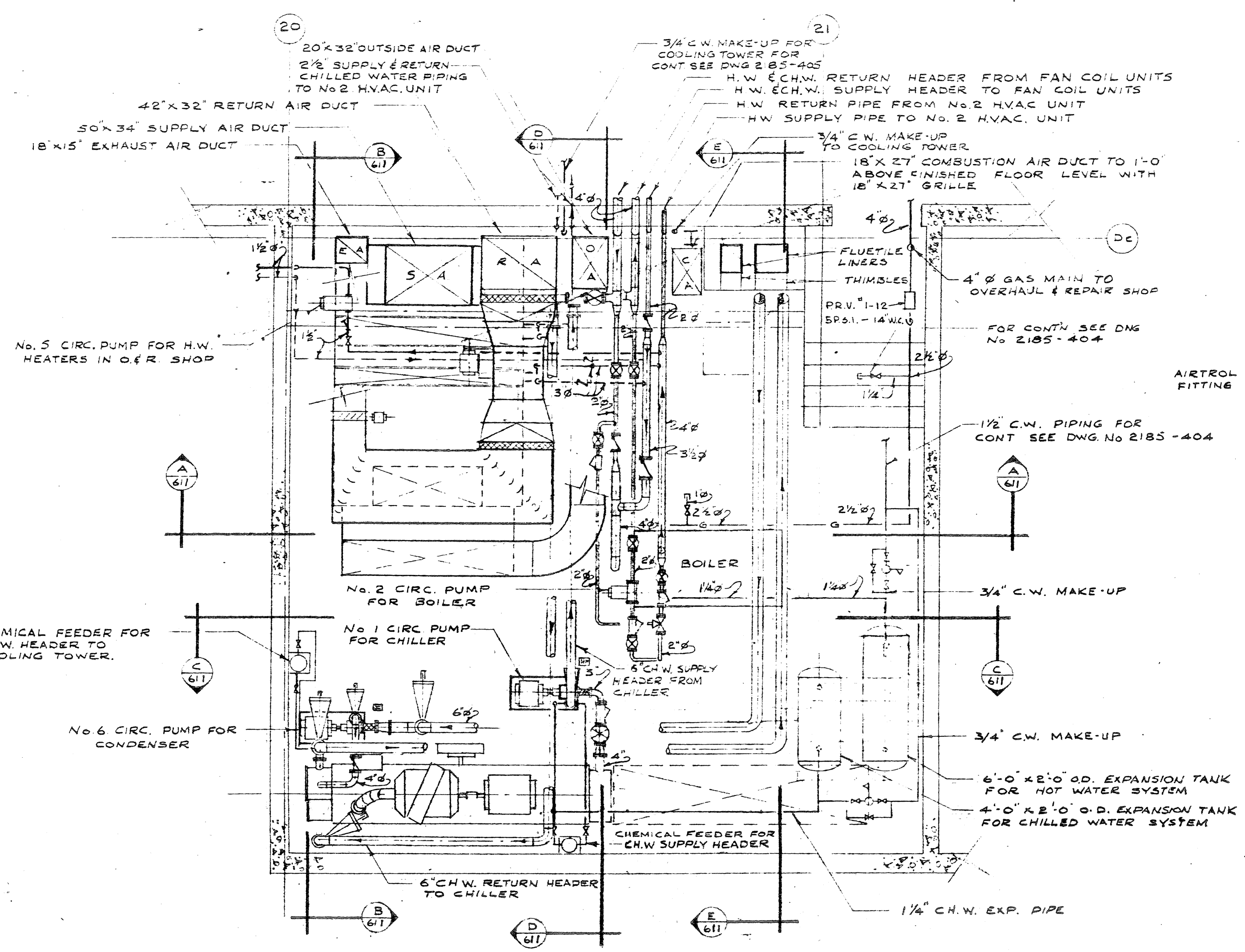
ELEVATION
SCALE 1/4" = 1'-0"

SECTION A-A
SCALE 1/4" = 1'-0"

LAYOUT OF AIR SYSTEMS
FIRST FLOOR - OFFICE BUILDING
SCALE 1/4" = 1'-0"

2185-610

19/1/68	2	0	FOR TENDER		
20/1/68	1	0	FOR APPROVAL		
DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY	
ISSUE OR REVISION					
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION					
TRANSIT STORAGE AND SHOP FACILITIES					
ADMINISTRATION BUILDING					
HEATING, VENTILATING & AIR CONDITIONING - DETAILS					
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 155 LESLIE STREET, 2ND FLOOR, WINNIPEG, MANITOBA			ARCHITECTS Wismann Ross & Blankstein Corp. Gilmour Hanna 10 RONALD STREET, WINNIPEG, MANITOBA		
APPROVED	DATE	SCALE	AS SHOWN	DRAWING NO.	
2185-610	AUGUST '67	AS SHOWN		2185-610	
DEPUTY DIRECTOR OF STREETS AND TRANSIT			MECHANICAL		



COOLING COIL SCHEDULE											
UNIT NO.	COIL TYPE	CFM	TOTAL LOAD BTU/HR	ENTERING AIR DB	LEAVING WATER DB	WATER FLOW GPM	NO. OF ROWS	NO. OF COILS	NO. OF TUBES	REMARKS	
1	DW	13,400	688,000	82.0	46.0	20.7	13	4	10	DOUBLE	
2	DW	14,220	331,000	19.0	84.0	34.0	49	4	10	SINGLE	

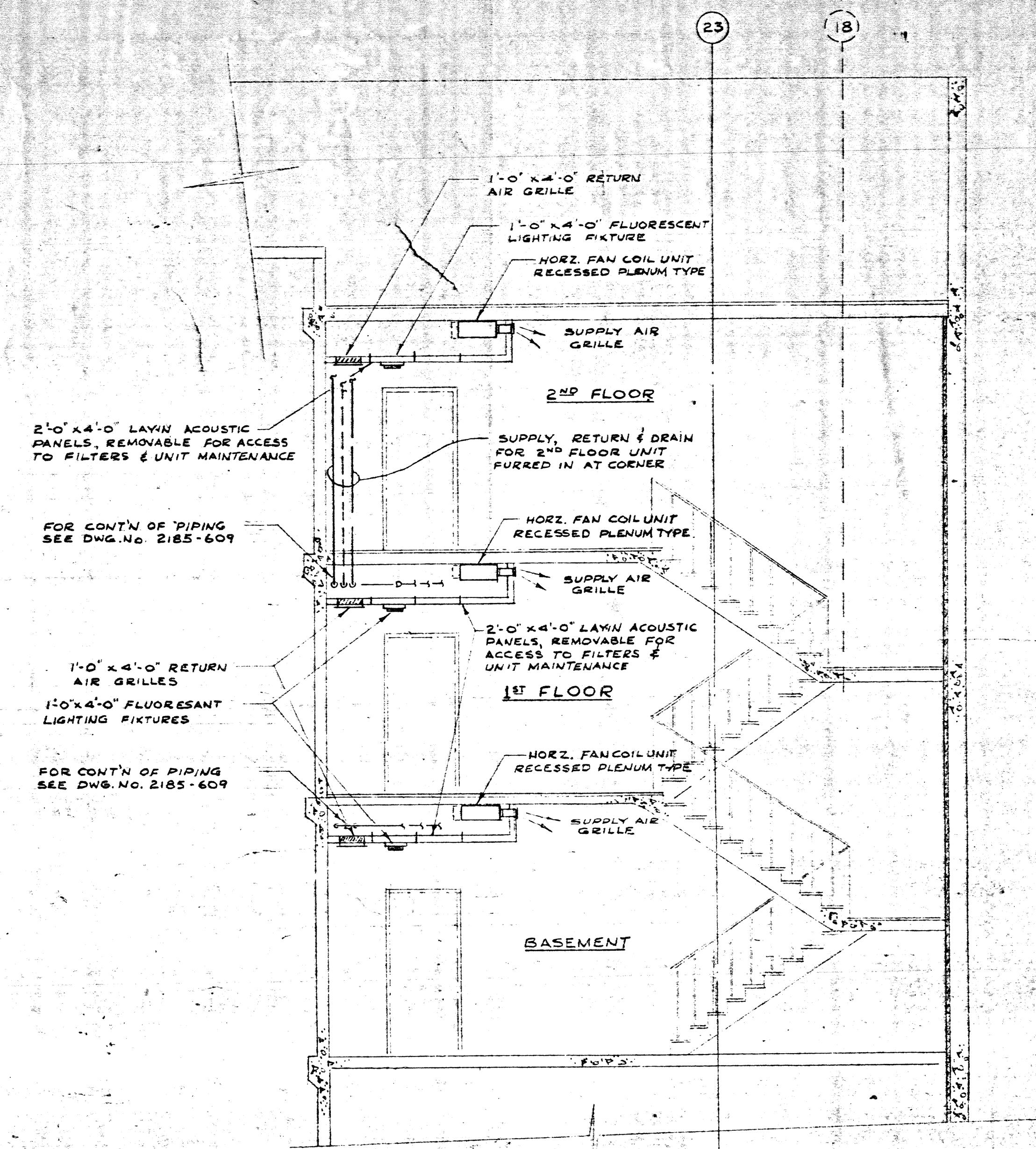
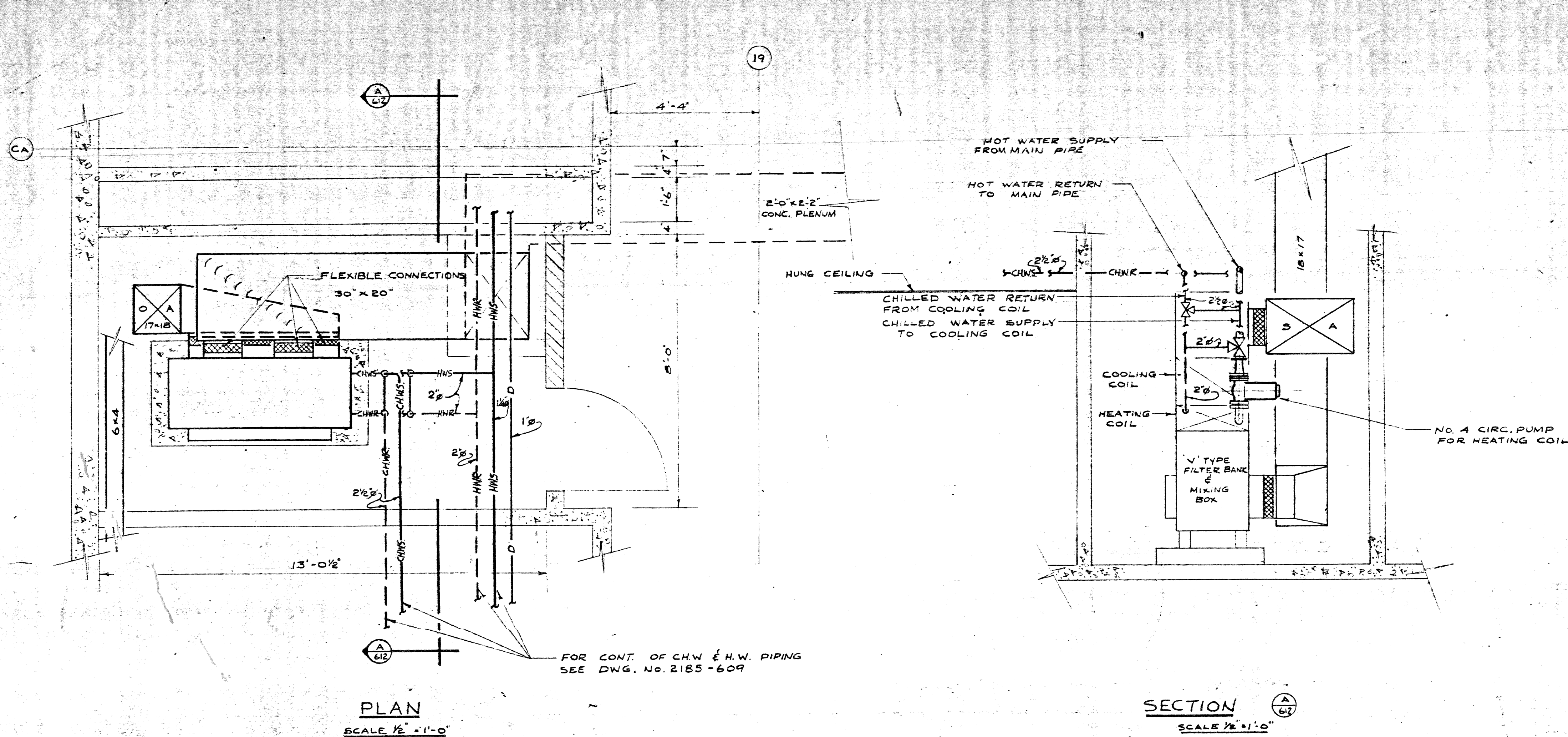
HEATING COIL SCHEDULE											
UNIT NO.	COIL TYPE	CFM	TOTAL LOAD BTU/HR	ENTERING AIR DB	LEAVING WATER DB	WATER FLOW GPM	NO. OF ROWS	NO. OF COILS	NO. OF TUBES	REMARKS	
1	DW	13,400	871,000	16.0	78.0	86.0	300	2	8	SINGLE	
2	DW	14,220	331,000	17.0	84.0	34.0	300	2	8	SINGLE	

FILTER SCHEDULE											
UNIT	FILTER TYPE	SIZE IN	REQ'D	MAX. VEL.	REMARKS						
1	THROW AWAY	20 X 25	2	520 FPM	318 FPM VEL THROUGH FILTER MEDIA AREA						
2	THROW AWAY	18 X 25	2	520 FPM	329 FPM VEL THROUGH FILTER MEDIA AREA						

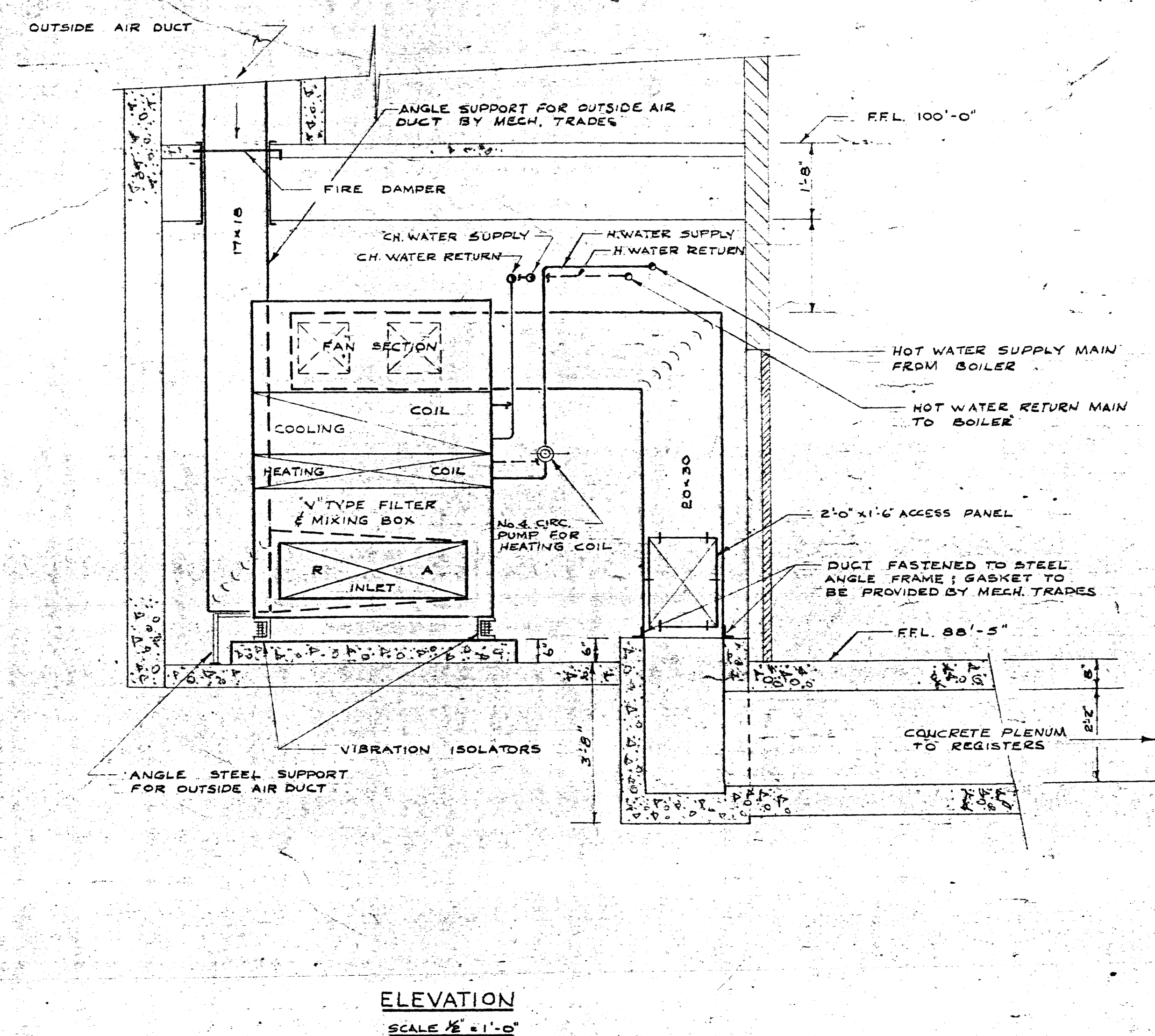
PUMP SCHEDULE											
SYMBOL	SERVICE	MODEL NO.	CAPACITY GPM	HEAD FT.	RPM	H.P.	ELECTRICAL	LOCATION	REMARKS		
CP-1	CHILLED WATER (ALL)	SERIES 210 SIZE 2 1/2	27	40	1750	1 1/2	550/3/60	BOILER ROOM	SIZED FOR FUTURE EXTENSION		
CP-2	HOT WATER FAN COIL	STD. CIRCL. SIZE 2 1/2	24	14 1/2	1750	1/4	115/1/60	BOILER ROOM			
CP-3	HOT WATER A.C. #1	STD. CIRCL. SIZE 2 1/2	29	17	1750	3/4	550/3/60	BOILER ROOM			
CP-4	HOT WATER A.C. #2	STD. CIRCL. SIZE 2 1/2	34	18 1/2	1750	1 1/2	550/3/60	AT UNIT			
CP-5	HOT WATER OVERHAUL/REPAIR	STD. CIRCL. SIZE 2 1/2	13	9	1750	1/4	115/1/60	BOILER ROOM			
CP-6	CONDENSER WATER	SERIES 120 SIZE 3 1/2	430	4 1/2	1750	7 1/2	550/3/60	BOILER ROOM			

AIR SUPPLY - FAN & DRIVE SCHEDULE											
UNIT NO.	NO. REQ'D	MODEL	TYPE	CFM	MAX. VEL.	TOTAL	FAN H.P.	DRIVE H.P.	REMARKS		
1	1	A-25	HORIZONTAL	13,400	1795 FPM	2 1/2	10		FAN TO BE TOP DISCHARGE; DRIVE ASSEMBLY MOUNTED ON TOP OF UNIT		
2	1	A-7 1/2	VERTICAL	4,628	1850 FPM	2	3		DRIVE ASSEMBLY MOUNTED ON BACK SIDE OF FAN DISCHARGE		

10/1/68	2	0	FOR TENDER		
10/1/68	1	0	FOR APPROVAL		
DATE	REV.	NO.	DESCRIPTION	DRAWN BY	
ISSUE OR REVISION					
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION					
TRANSIT STORAGE AND SHOP FACILITIES					
ADMINISTRATION BUILDING					
MECHANICAL EQUIPMENT - LAYOUT, DETAILS & SCHEDULES					
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1115 LESLIE STREET, DON MILLS, ONTARIO			ARCHITECTS WELSMAN ROSS & BLANKENHORN 10 DONALD STREET, WINNIPEG, MANITOBA		
APPROVED	DATE	DRAWN BY	SCALE	DATE	
<i>[Signature]</i>	AUGUST '67	J.T.F.	AS SHOWN	2185-611	
DIRECTOR OF STREETS AND TRAFFIC			FILE NO.	MECHANICAL	



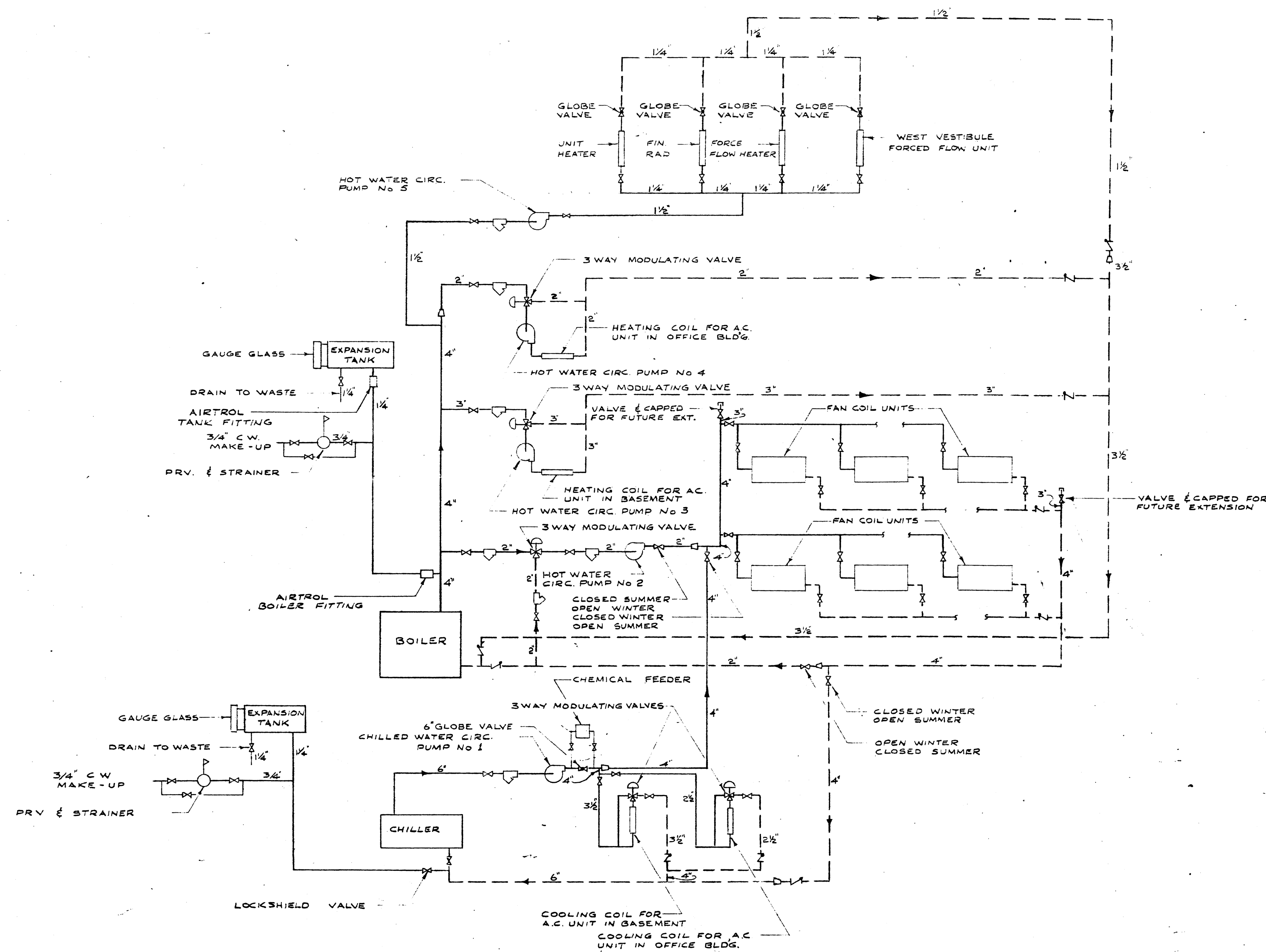
NOTE: APPLICABLE TO STAIRHALL #5
IN REVERSE LAYOUT



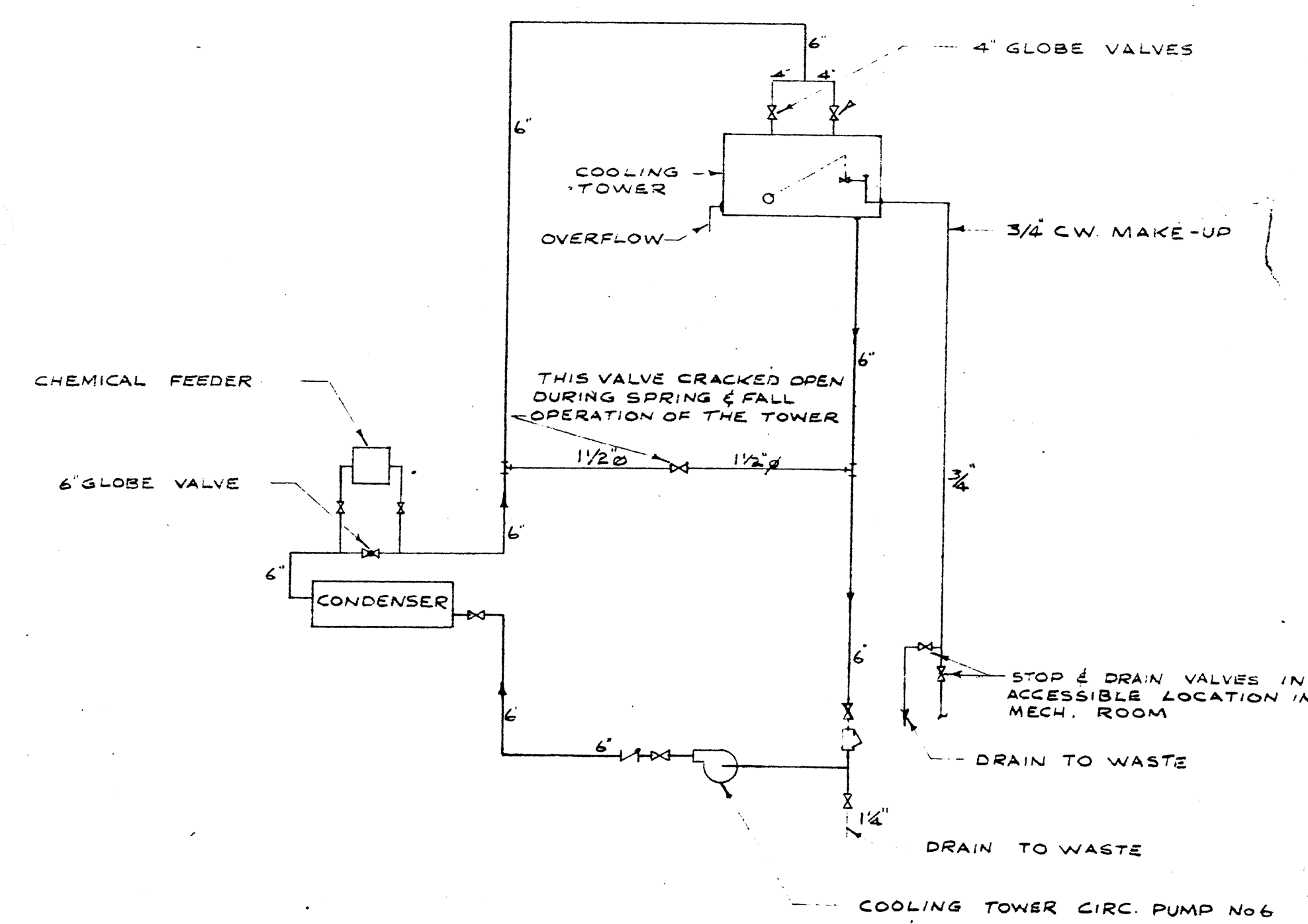
LAYOUT OF MECHANICAL ROOM IN THE
BASEMENT OF OFFICE BUILDING

2185-612

19/1/68		2	0	FOR TENDER	
29/10/67		1	0	FOR APPROVAL	
DATE	ISSUE NO.	REV.	NO.	DESCRIPTION	DRAWN BY
ISSUE OR REVISION					
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION					
TRANSIT STORAGE AND SHOP FACILITIES					
ADMINISTRATION BUILDING					
MECHANICAL EQUIPMENT - LAYOUT & DETAILS					
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO			ARCHITECTS Walsman Ross + Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA		
APPROVED	DRAWN BY		DATE	AUGUST '67	
J. T. THORPE		J. T. THORPE		SCALE AS SHOWN	
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My Licence Expires 10 Jan 1968		FILE NO.		DRAWING NO.	
		2185-612		MECHANICAL	



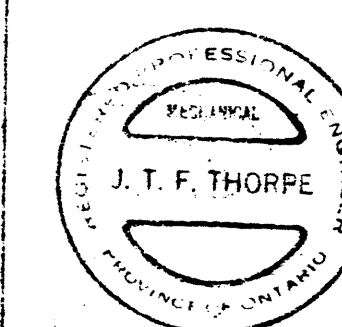
SCHEMATIC HOT & CHILLED WATER PIPING DIAGRAM
NOT TO SCALE



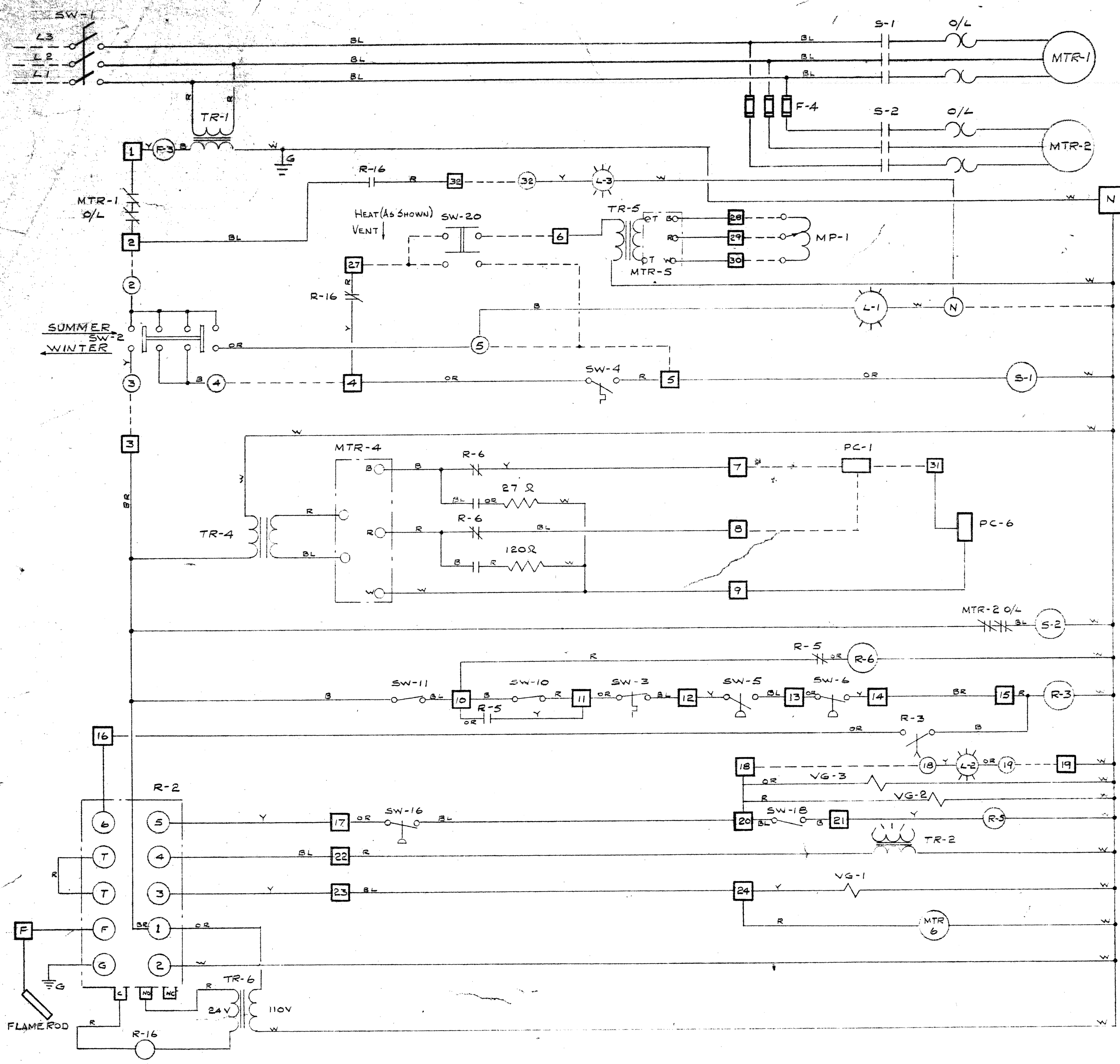
SCHEMATIC COOLING TOWER PIPING DIAGRAM
NOT TO SCALE

2185-613

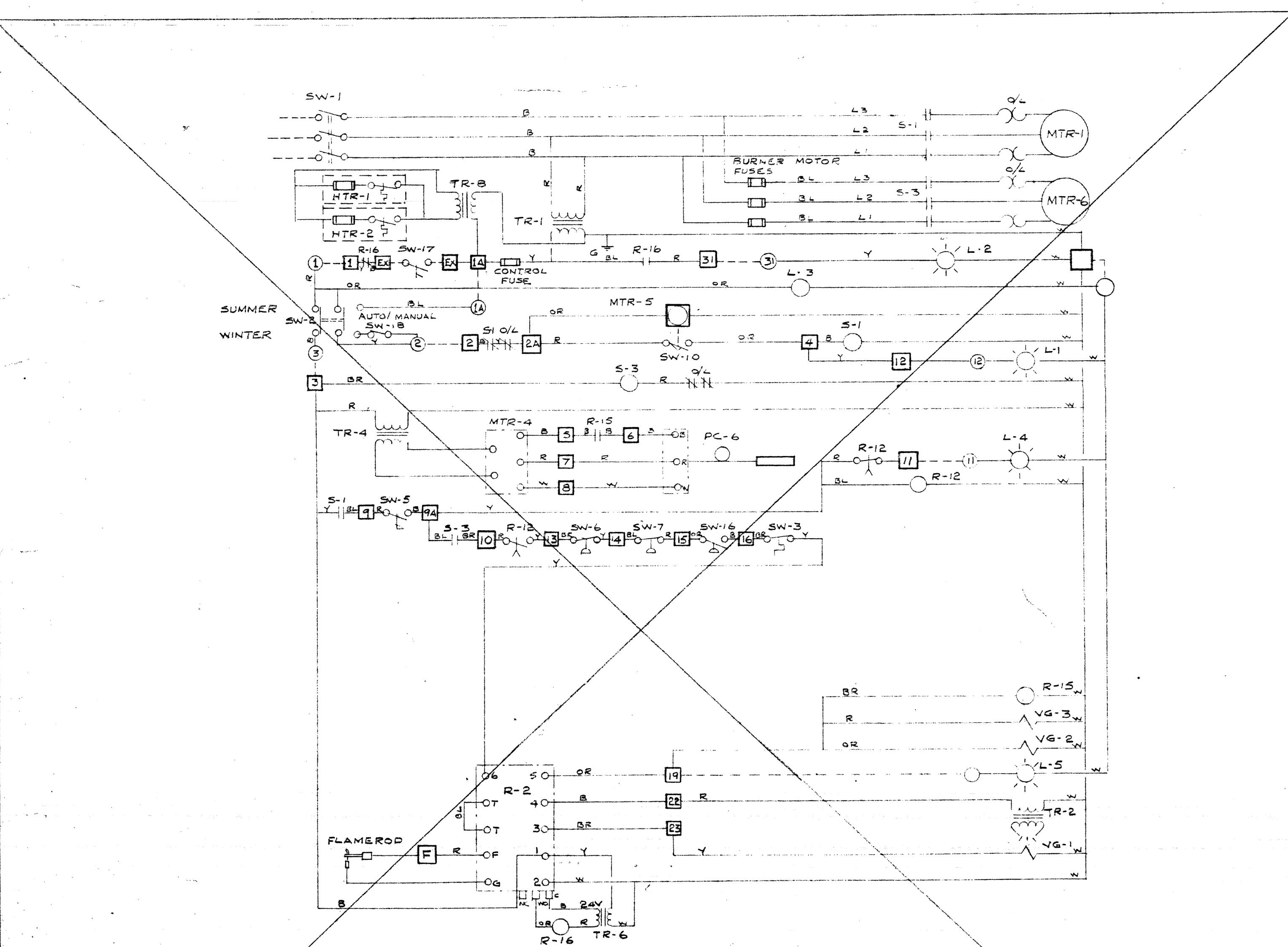
19/1/68		2	0	FOR TENDER
20/2/67		1	0	FOR APPROVAL
DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION				
TRANSIT STORAGE AND SHOP FACILITIES				
ADMINISTRATION BUILDING HEATING & AIR CONDITIONING SCHEMATIC HOT & CHILLED WATER PIPING DIAGRAM				
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LINDSEY STREET, DON MILLS, ONTARIO		ARCHITECTS Walsman Ross + Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA		
APPROVED <i>[Signature]</i> DEPUTY DIRECTOR OF STREETS AND TRANSIT		DATE BY AUGUST '67	SCALE NOT TO SCALE	DRAWN BY 2185-613 MECHANICAL



LICENSED TO PRACTICE
IN THE
PROVINCE OF MANITOBA
My License Expires: 19 Jun 1965



CONTROL DIAGRAM FOR INDIRECT GAS FIRED MAKE-UP AIR UNITS
NOT TO SCALE



CONTROL DIAGRAMS FOR DIRECT GAS FIRED MAKE-UP AIR UNITS
NOT TO SCALE

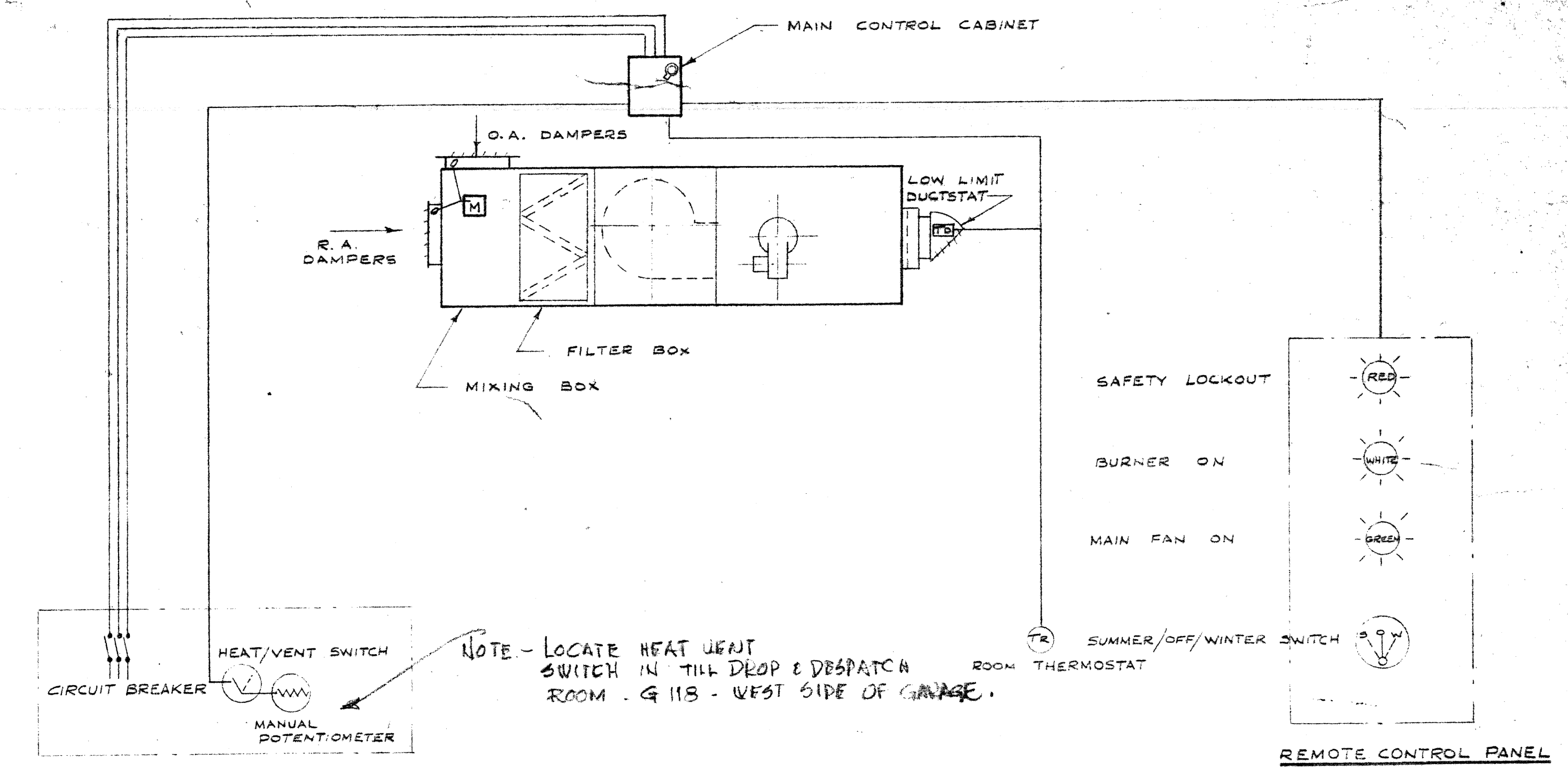
SYMBOL	COMPONENT
F-3	CONTROL FUSE
F-4	INDUCED DRAFT FUSE
MTR-1	MAIN SUPPLY FAN MOTOR
MTR-2	INDUCED DRAFT FAN MOTOR
MTR-4	MODUTROL MOTOR
MTR-5	DAMPER MOTOR
MTR-6	BURNER MOTOR
S-1	MAIN FAN MOTOR STARTER
S-2	ID FAN MOTOR STARTER
R-1	BURNER RELAY
R-3	PRE-PURGE RELAY
R-5	LOW FIRE RELAY
R-6	LOW FIRE HOLD RELAY
R-16	ALARM CIRCUIT RELAY
PC-1	ROOM THERMOSTAT
PC-6	DUCTSTAT
TR-1	CONTROL TRANSFORMER
TR-2	GAS IGNITION TRANSFORMER
TR-4	MODUTROL MOTOR TRANSFORMER
TR-5	DAMPER MOTOR TRANSFORMER
TR-6	ALARM CIRCUIT TRANSFORMER
SW-1	MAIN DISCONNECT SWITCH
SW-2	FAN SELECTOR SWITCH
SW-3	HIGH LIMIT SWITCH
SW-4	FAN SWITCH
SW-5	DRAFT PROVING SWITCH
SW-6	LO-GAS CUTOFF SWITCH
SW-10	AUXILIARY END SWITCH No 1
SW-11	AUXILIARY END SWITCH No 2
SW-16	DIFFERENTIAL SWITCH
SW-18	LOW FIRE TEST SWITCH
SW-20	HEAT VENT SWITCH (LOCATE IN RK 6104)
VG-1	PILOT GAS VALVE
VG-2	MAIN GAS VALVE
VG-3	AUXILIARY MAIN GAS VALVE
L-1	FAN ON LIGHT (GREEN)
L-2	BURNER ON LIGHT (WHITE)
L-3	ALARM LIGHT (RED)
MP-1	DAMPER MOTOR POTENTIOMETER

--- DENOTES WIRING BY OTHERS
 DENOTES TERMINALS IN REMOTE CONTROL STATION
 DENOTES TERMINALS IN MAIN PANEL
 B - BLACK BR - BROWN Y - YELLOW OR - ORANGE
 BL - BLUE W - WHITE R - RED

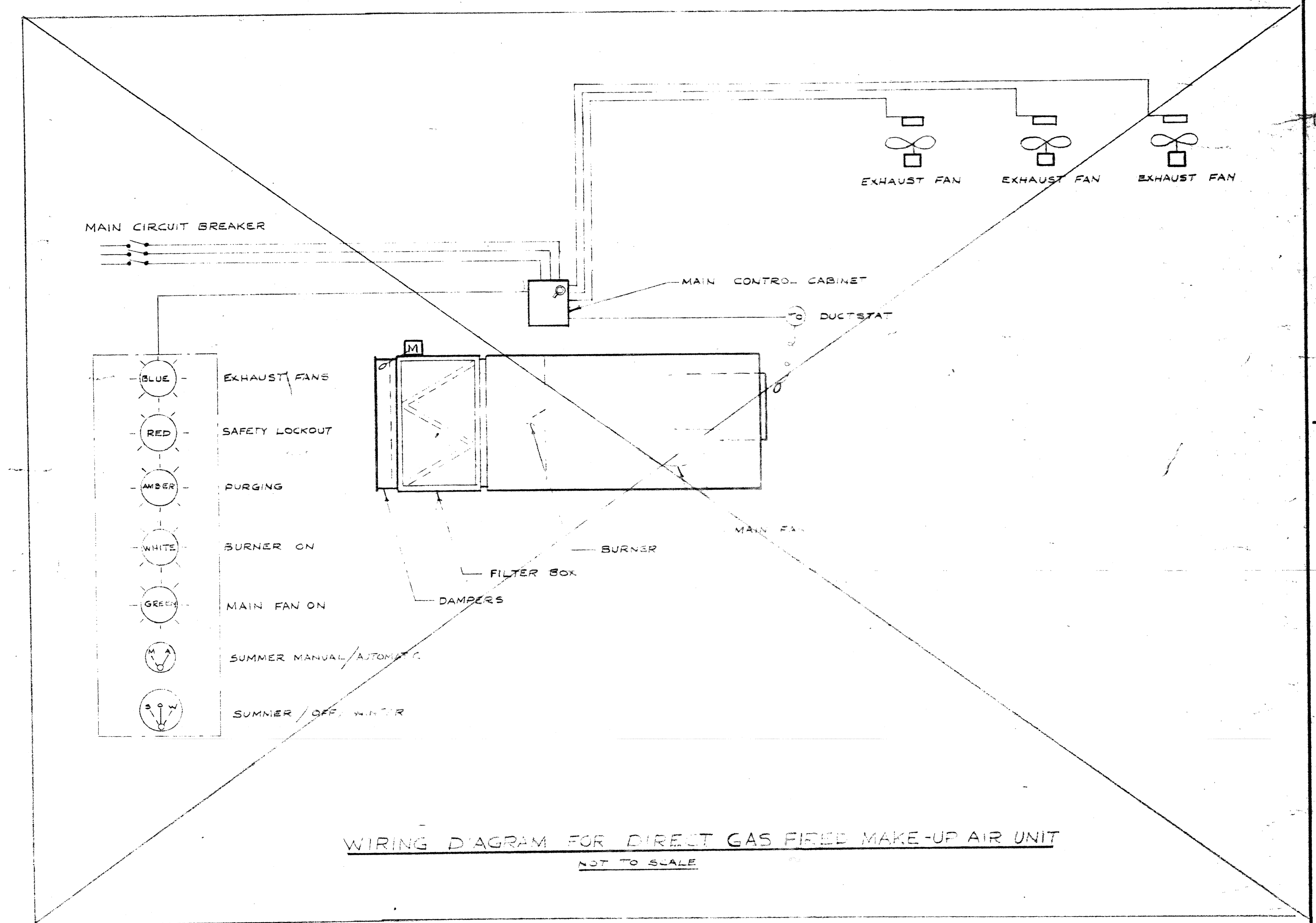
SYMBOL	COMPONENT
MTR-1	MAIN SUPPLY FAN MOTOR
MTR-2	MODUTROL MOTOR
MTR-4	DAMPER MOTOR
MTR-6	PREMIA BURNER MOTOR
S-1	MAIN FAN MOTOR STARTER
S-2	BURNER MOTOR STARTER
R-2	BURNER RELAY
R-12	PURGING TIMING RELAY
R-5	LOW FIRE HOLD RELAY
R-6	ALARM CIRCUIT RELAY
PC-6	AIR DISCHARGE THERMOSTAT
VG-1	PILOT GAS VALVE
VG-2	MAIN GAS VALVE
VG-3	AUXILIARY MAIN GAS VALVE
TR-1	CONTROL VOLTAGE TRANSFORMER
TR-2	GAS IGNITION TRANSFORMER
TR-4	MODUTROL MOTOR TRANSFORMER
TR-6	ALARM CIRCUIT TRANSFORMER
TR-8	HEATER TRANSFORMER
SW-1	MAIN DISCONNECT SWITCH
SW-3	HIGH LIMIT SWITCH
SW-5	MAIN FAN PROVING SWITCH
SW-6	LOW-GAS CUTOFF SWITCH
SW-7	HIGH-GAS CUTOFF SWITCH
SW-10	DAMPER MOTOR END SWITCH
SW-16	MIXER DIFFERENTIAL SWITCH
SW-17	EXHAUST FAN PROVING SWITCH
SW-18	SUMMER MANUAL/AUTOMATIC SWITCH
HT-1	HEATERS FOR MOTOR 4 & MOTOR 5

* SHORT BETWEEN TERM 14 & 15 WHEN NOT REQUIRED.

SYMBOL	COMPONENT
SW-2	SUMMER - OFF - WINTER SWITCH
L-1	GREEN LIGHT - MAIN FAN
L-2	RED LIGHT - ALARM
L-3	BLUE LIGHT - EXHAUST FAN
L-4	AMBER LIGHT - PURGING
L-5	WHITE LIGHT - MAIN FLAME



WIRING DIAGRAM FOR INDIRECT GAS FIRED MAKE-UP AIR UNIT
NOT TO SCALE

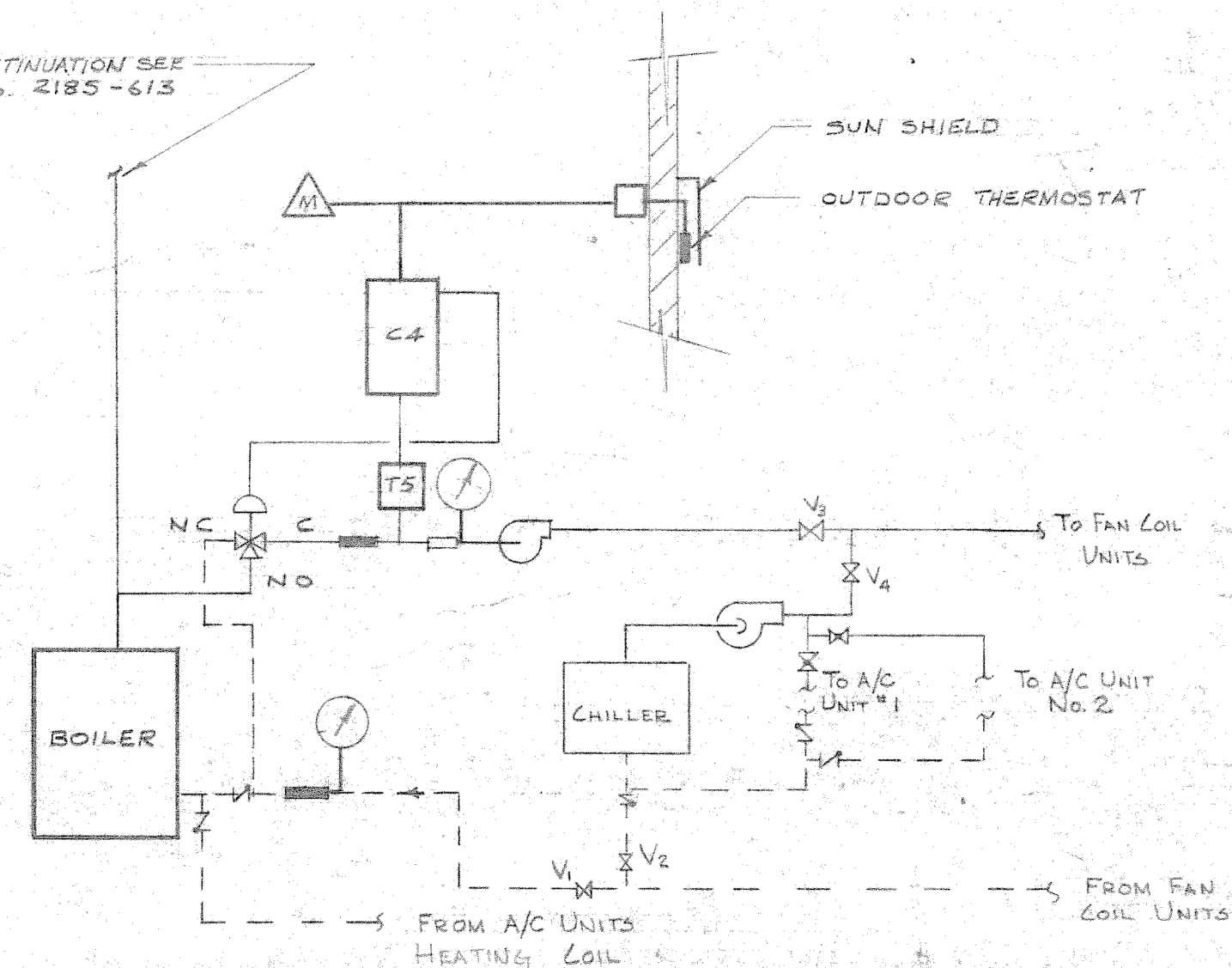


WIRING DIAGRAM FOR DIRECT GAS FIRED MAKE-UP AIR UNIT
NOT TO SCALE

2185 - 614

A. D. MARGISON ASSOCIATES LTD. CONSULTING PROFESSIONAL ENGINEERS SUITE 302-1320 YONGE STREET TORONTO, ONTARIO M4T 1Y1		NUMBER TEN ARCHITECTURAL GROUP ARCHITECTS 1155 LESLIE STREET, DON MILLS, ONTARIO		APPROVED
DATE	ISSUE No.	REV. No.	DESCRIPTION	DRAWN BY
1.11.73	6	2	AS BUILT - SEE EQUIP. SHOP DWS WIRING DIAGRAM	J.M.V.
24/1/79	4	1	GARAGE ADDITION - FOR TENDER	R.M.S.C.
24/3/80	3	0	AS BUILT	
19/1/88	2	0	FOR CONSTRUCTION	
20/10/87	1	0	FOR TENDER	
			FOR APPROVAL	
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION TRANSIT STORAGE AND SHOP FACILITIES HEATING & VENTILATING - CONTROL DIAGRAMS				
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO		ARCHITECTS Walsburn Ross • Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA		
APPROVED	DATE	CHECKED	SCALE	DRAWING No.
	AUGUST '87	J.T.T.	NOT TO SCALE	2185-614
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My Licence Expires 10 Jan 1988		MECHANICAL		

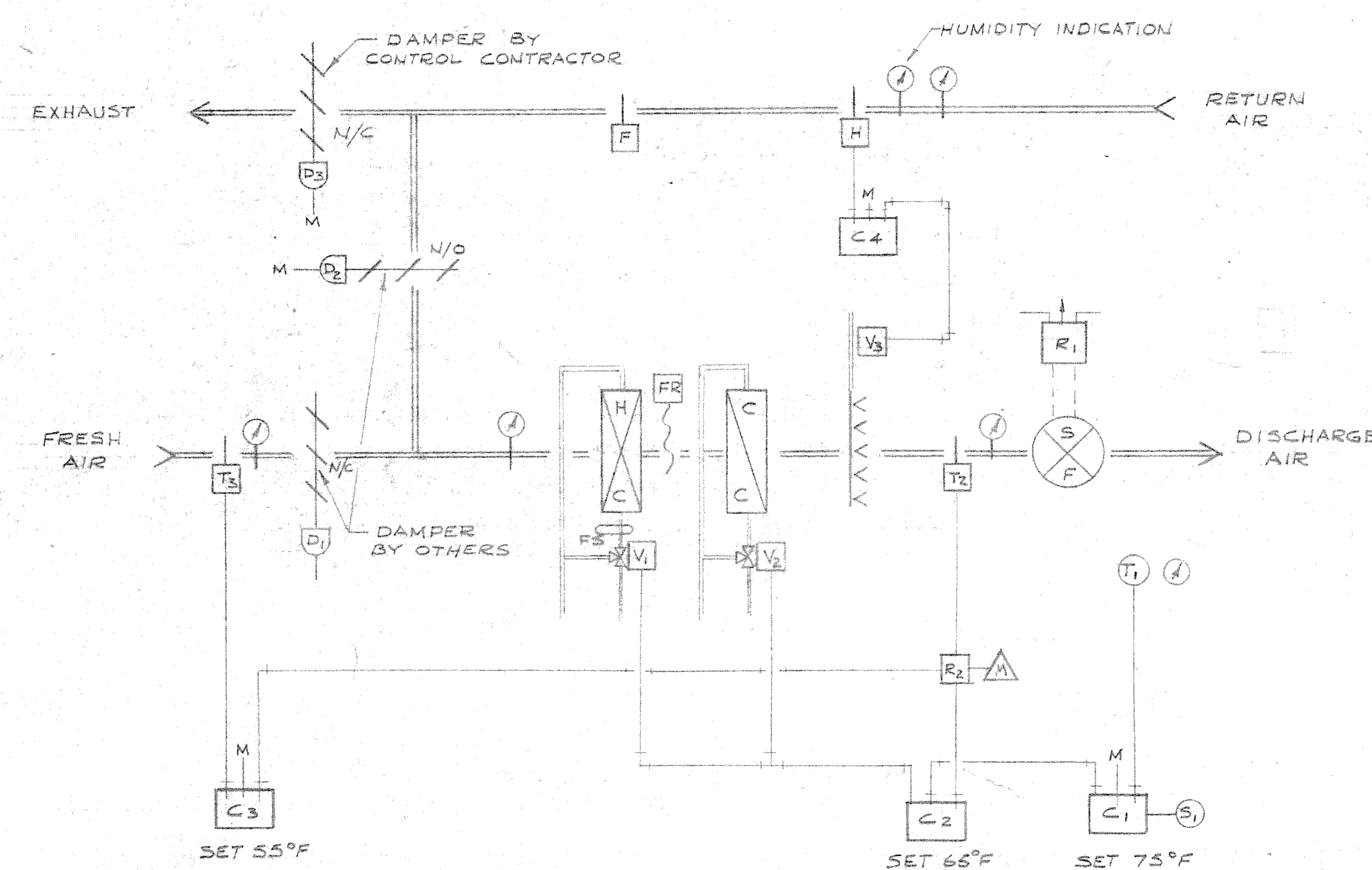
FOR CONTINUATION SEE
DWG. NO. 2185-615



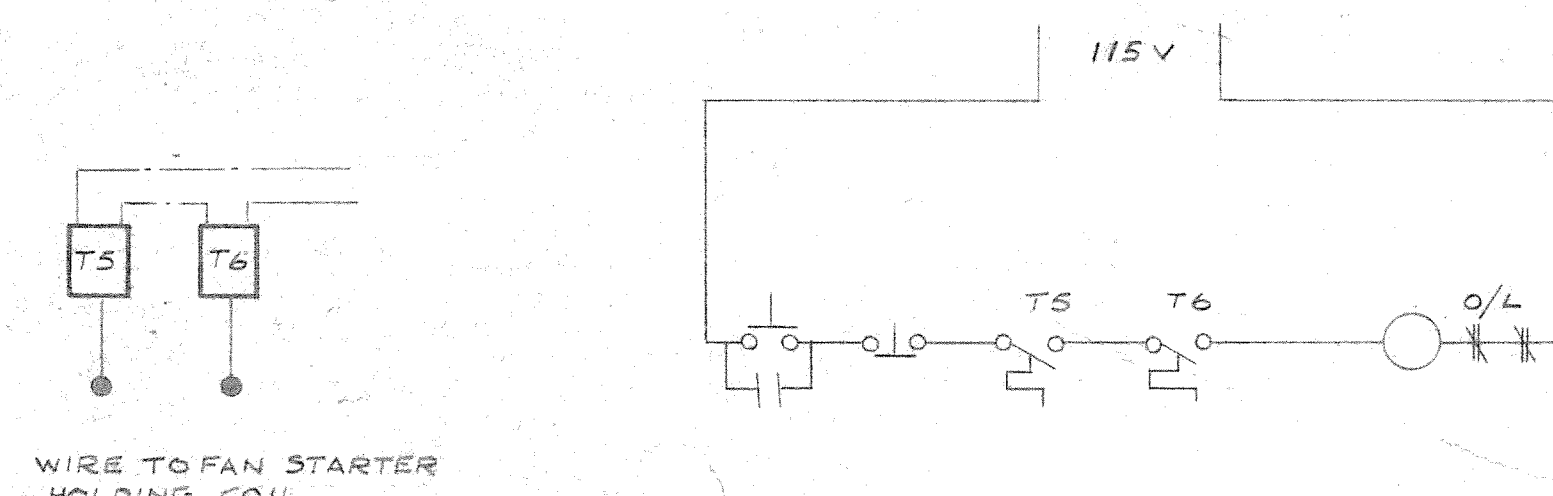
SCHEMATIC CONTROL DIAGRAM
HOT & CHILLED WATER CIRCUITS
NOT TO SCALE
(AUTOMATIC RESET OF HOT WATER TEMPERATURE
TO FAN-COIL UNITS FROM OUTDOOR TEMPERATURE)

OUTDOOR	WATER
-30°	200
65°	110

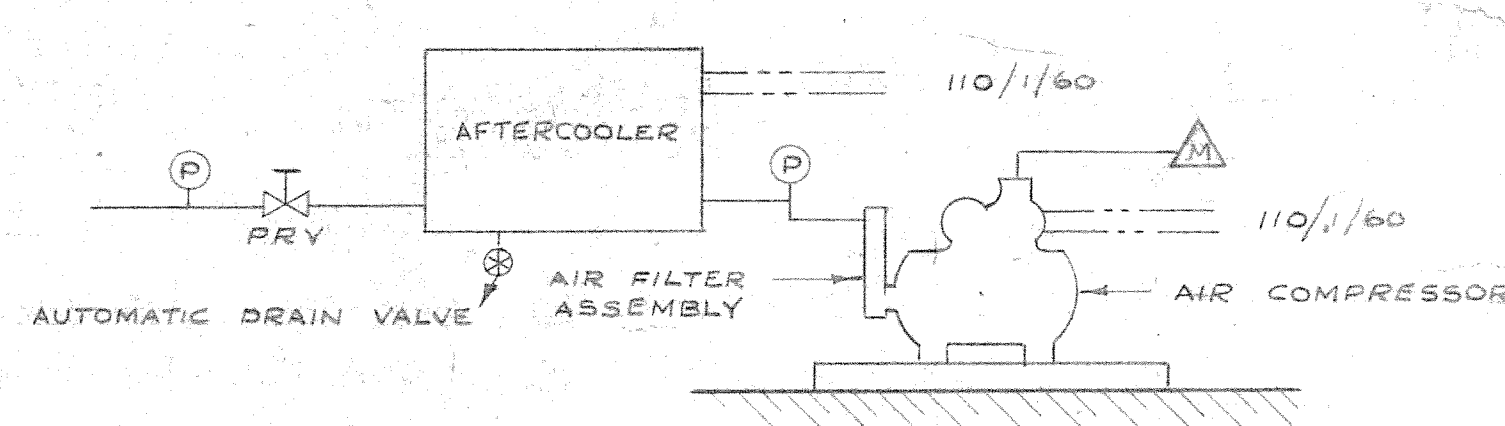
SYMBOL	SUMMER	WINTER
V ₁	CLOSED	OPENED
V ₂	OPENED	CLOSED
V ₃	CLOSED	OPENED
V ₄	OPENED	CLOSED



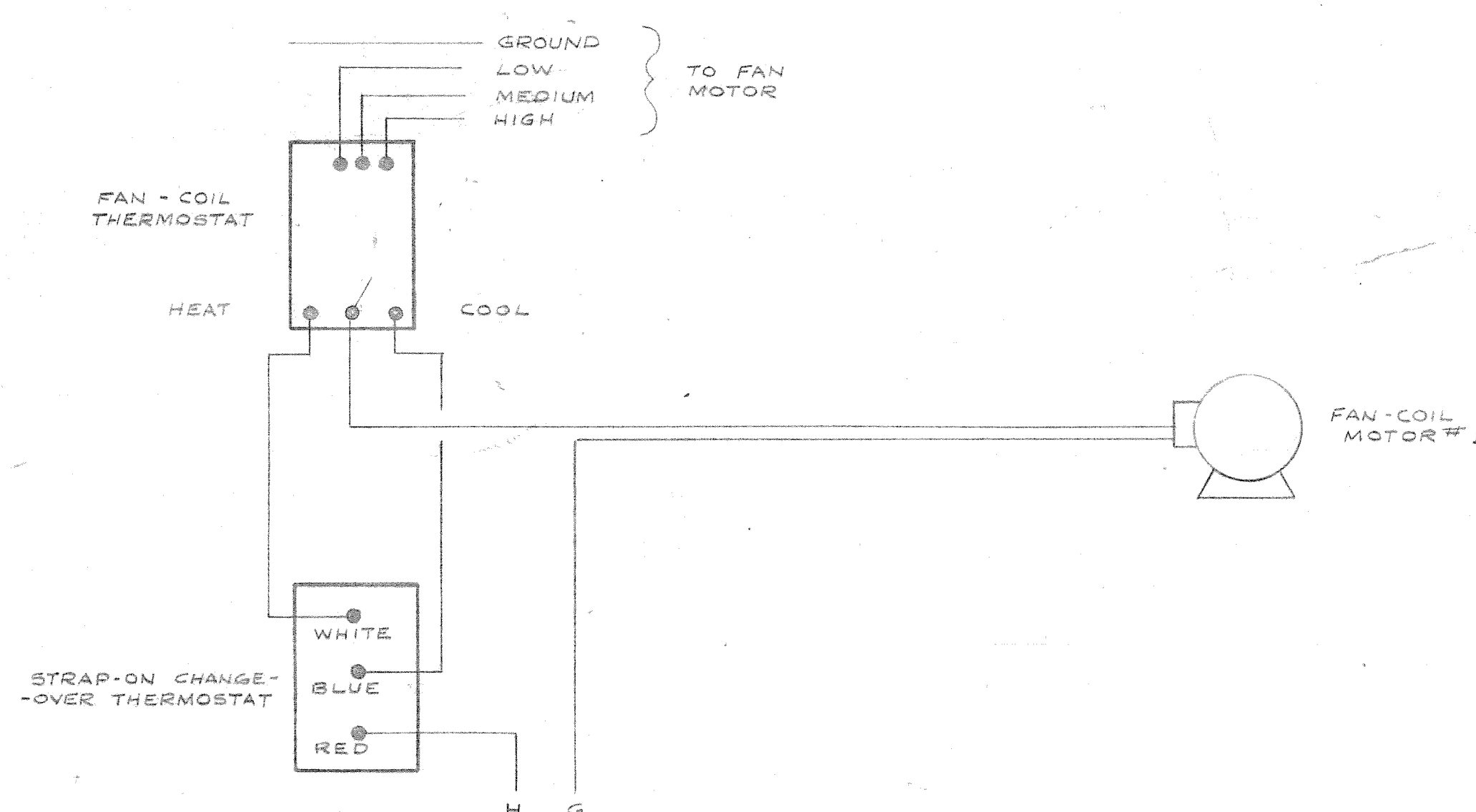
AIR CONDITIONING SYSTEM
NOT TO SCALE
(TWO SYSTEMS REQUIRED)



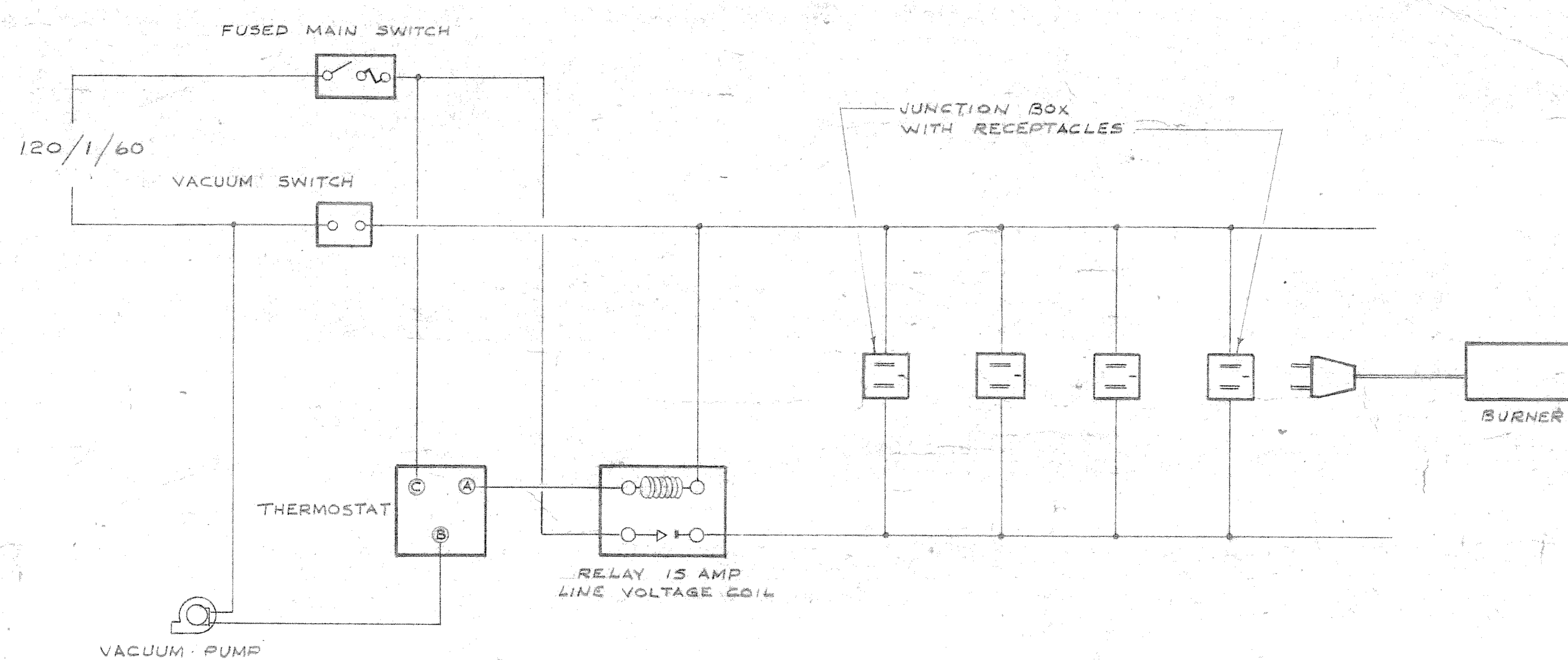
WIRING DIAGRAM FOR A/C SAFETY CONTROLS
NOT TO SCALE



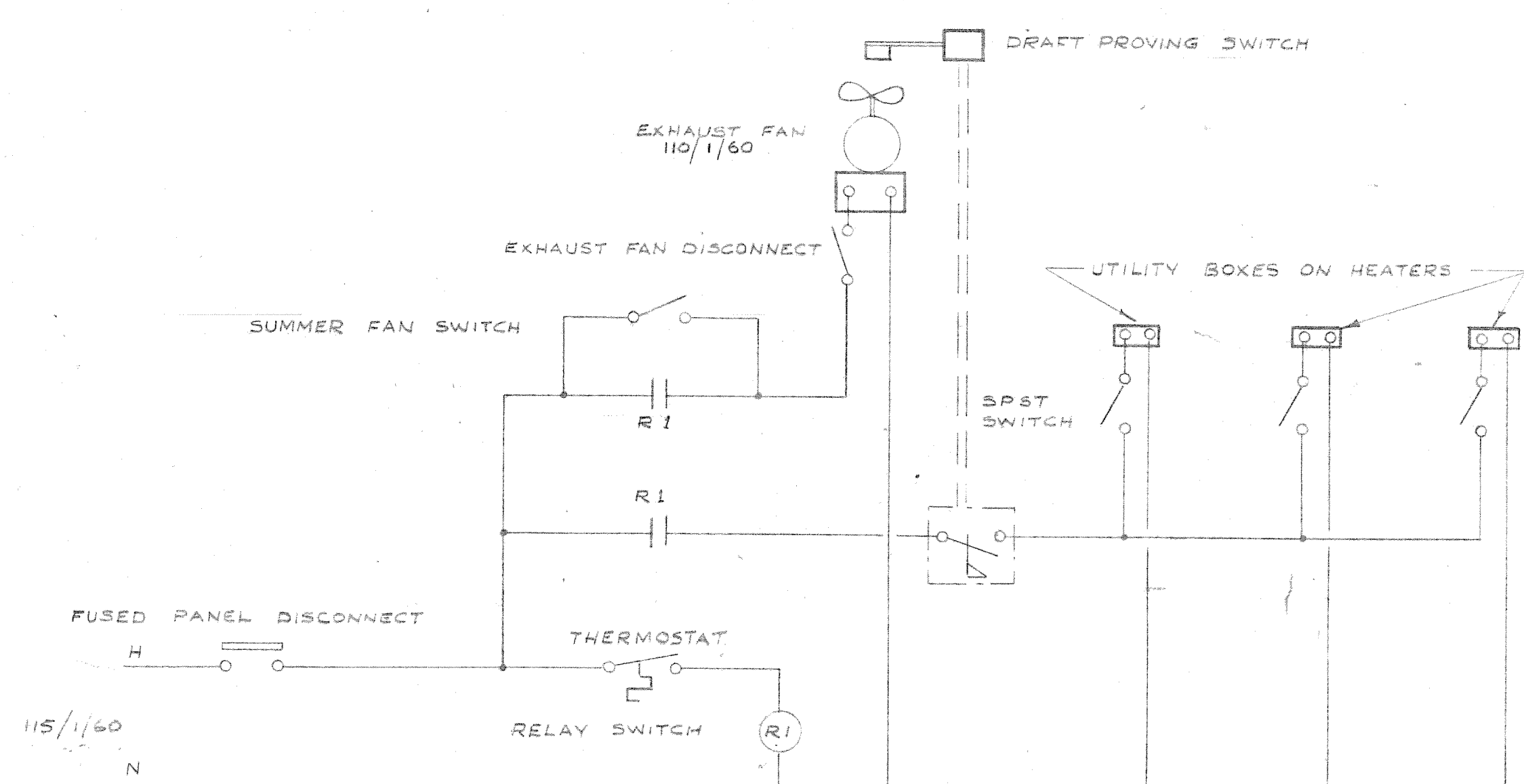
COMPRESSED AIR SUPPLY
NOT TO SCALE



CONTROLS OF FAN-COIL UNITS
NOT TO SCALE



FIELD WIRING FOR TUBULAR INFRA-RED HEATING SYSTEM
SHOWING RELAY CARRYING BURNER LOAD
NOT TO SCALE

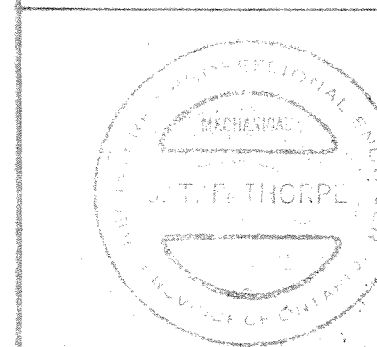


WIRING DIAGRAM FOR DIRECT IGNITION INFRA-RED HEATERS
NOT TO SCALE

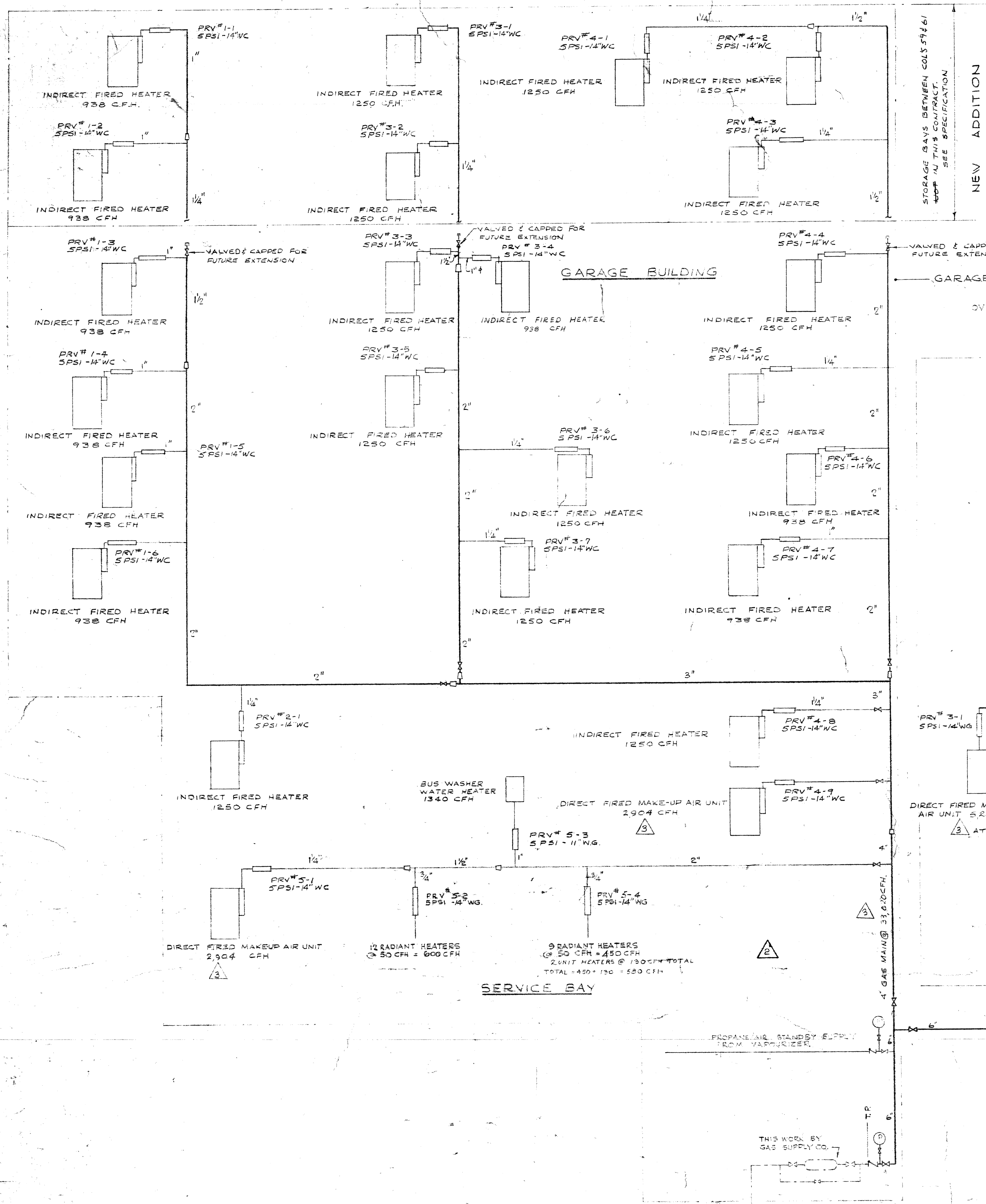
SYMBOL	COMPONENT
R1	EP RELAY
D, D ₁ , D ₂	DAMPER MOTOR
T ₁ , T ₂ , T ₃	SENSOR
C ₁ , C ₂ , C ₃ , C ₄	CONTROLLER
S ₁	CONTROL POINT ADJ.
R ₂	RELAY
FR	FREEZESTAT
F	FIRESTAT
FS	FLWSWITCH
H	HUMIDITY SENSOR
V ₁ , V ₂	DIVERTING VALVES
V ₃	TWO-WAY VALVE
Ⓢ	TEMPERATURE OR HUMIDITY INDICATOR

2185-615

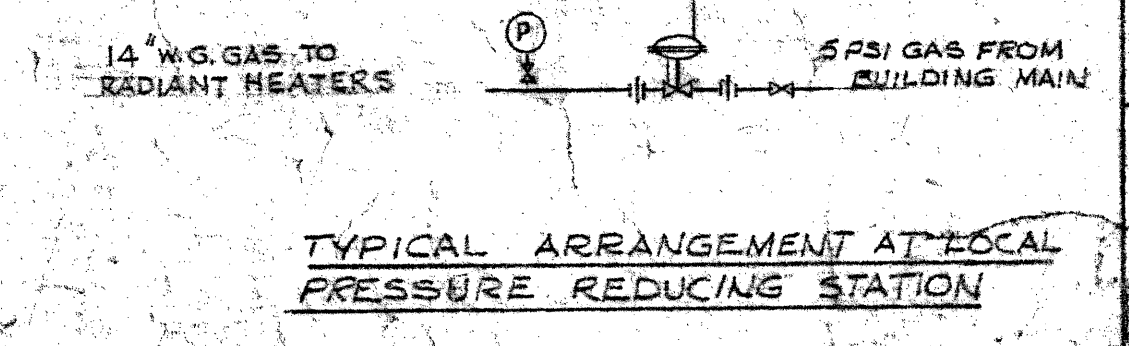
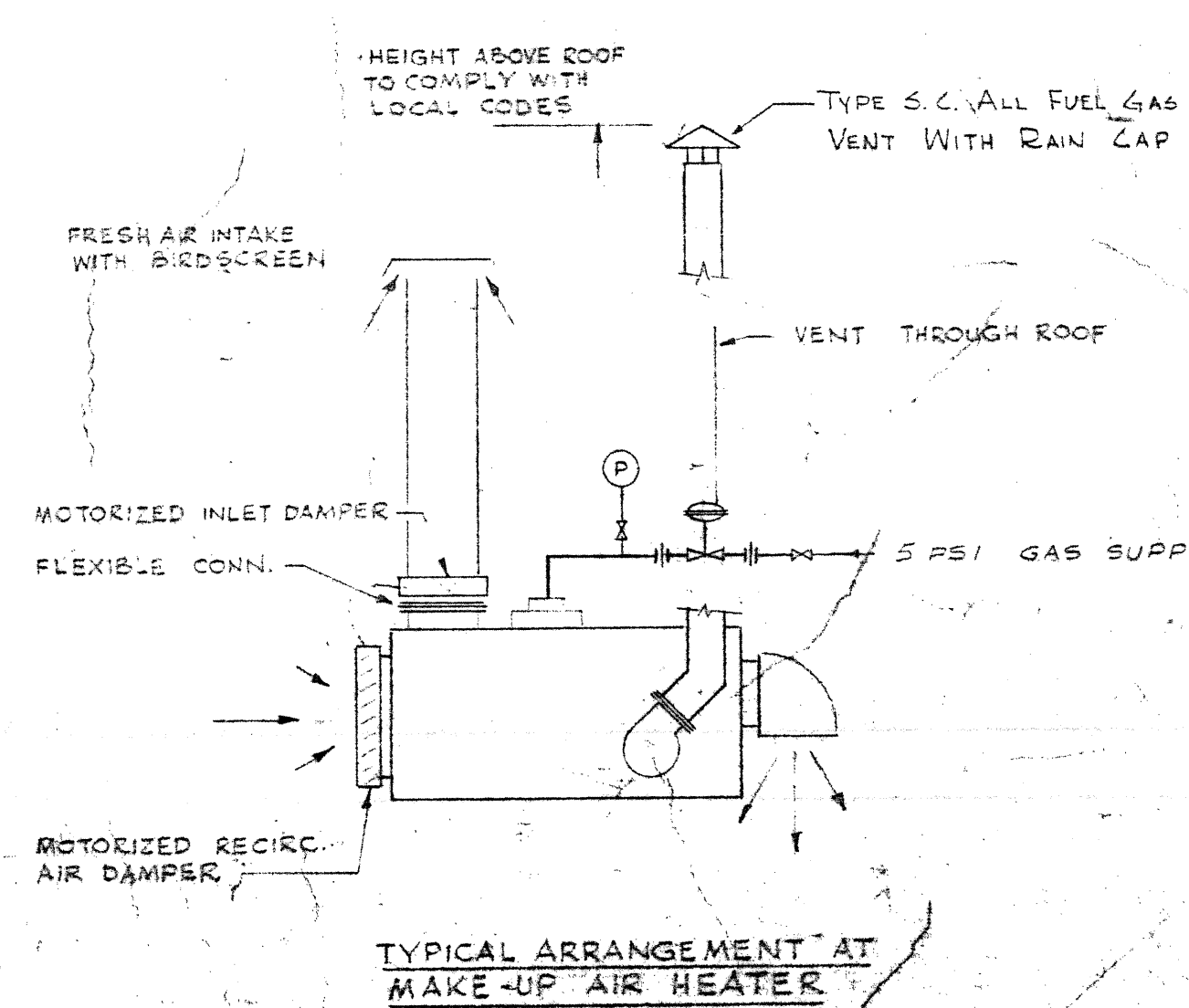
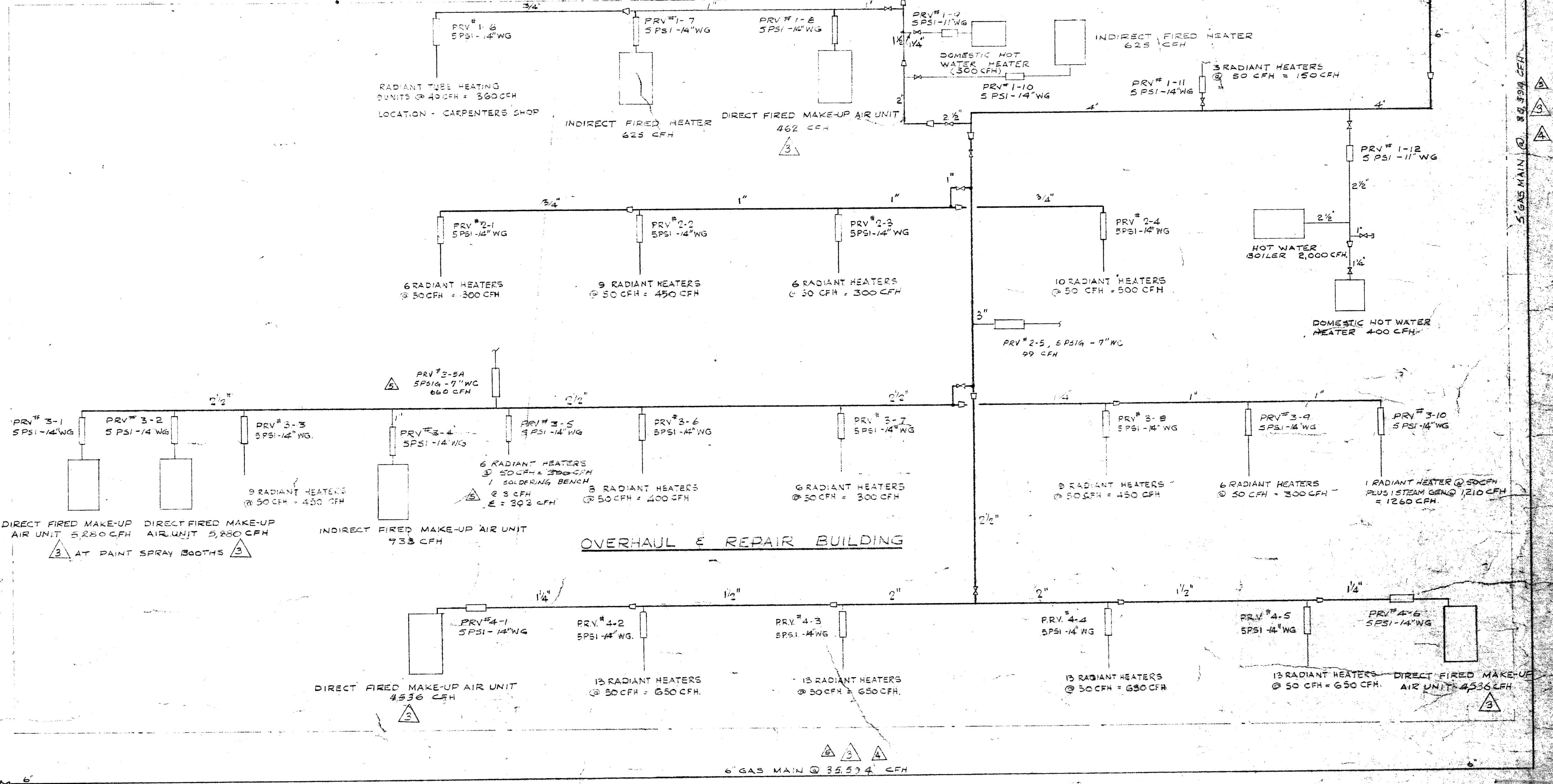
DATE		19/1/67	2	0	FOR TENDER
DATE		20/6/67	1	0	FOR APPROVAL
ISSUE OR REVISION					
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION					
TRANSIT STORAGE AND SHOP FACILITIES					
HEATING, VENTILATING & AIR CONDITIONING CONTROL DIAGRAMS					
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO			ARCHITECTS Walsman Ross + Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA		
APPROVED		DRAWN BY		DATE	
[Signature]		[Signature]		AUGUST '67	
CHECKED		FILE NO.		SCALE	
[Signature]		[Signature]		NOT TO SCALE	
DIRECTOR OF STREETS AND TRANSIT		SHEET NO.		DRAWING NO.	
[Signature]		[Signature]		2185-615 MECHANICAL	



LICENSED TO PRACTICE
IN THE
PROVINCE OF MANITOBA
My License Expires 12 Jan. 1968



WAY AND STREETS BUILDING →
OVERHAUL AND REPAIR BUILDING →



2185-616

MAY 1977

A. D. MARGISON ASSOCIATES LTD.
CONSULTING PROFESSIONAL ENGINEERS
SUITE 300-1250 YONGE STREET
TORONTO, ONTARIO M4T 1A2

REGISTERED ENGINEER
A. D. MARGISON
MAY 1977

REGISTERED ENGINEER
J. T. F. THORPE
MAY 1977

DESIGNED TO PRACTICE IN THE PROVINCE OF MANITOBA
My License Expires 10 Jan. 1980

NUMBER TEN ARCHITECTURAL GROUP

DATE	REVISION	DESCRIPTION
11/1/77	1	AS BUILT
9.5.77	2	GARAGE ADDITION - FOR TENDER
12-11-77	3	AS BUILT
5/1/78	4	TOTAL CONSUMPTION REVISED - OWNER'S EQUIP. & RESULTS
18/9/78	5	REVISED AS PER NOTICE OF PROPOSED CHANGE NO. 3
2/10/78	6	DIRECT FIRED UNITS CONSUMPTION REVISED AS PER SHOP DRAWING
10/1/78	7	REVISED AS PER CHANGE ORDER #13
21/5/78	8	REVISED AS PER APPENDIX 1 TO 5 FOR CONSTRUCTION
20/6/77	9	FOR TENDER
20/6/77	10	FOR APPROVAL

ISSUE OR REVISION

METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

TRANSIT STORAGE AND SHOP FACILITIES

HEATING & VENTILATING
SCHEMATIC GAS PIPING

CONSULTING PROFESSIONAL ENGINEERS
A. D. MARGISON AND ASSOCIATES LIMITED
7088 LESLIE STREET, DON MILLS, ONTARIO

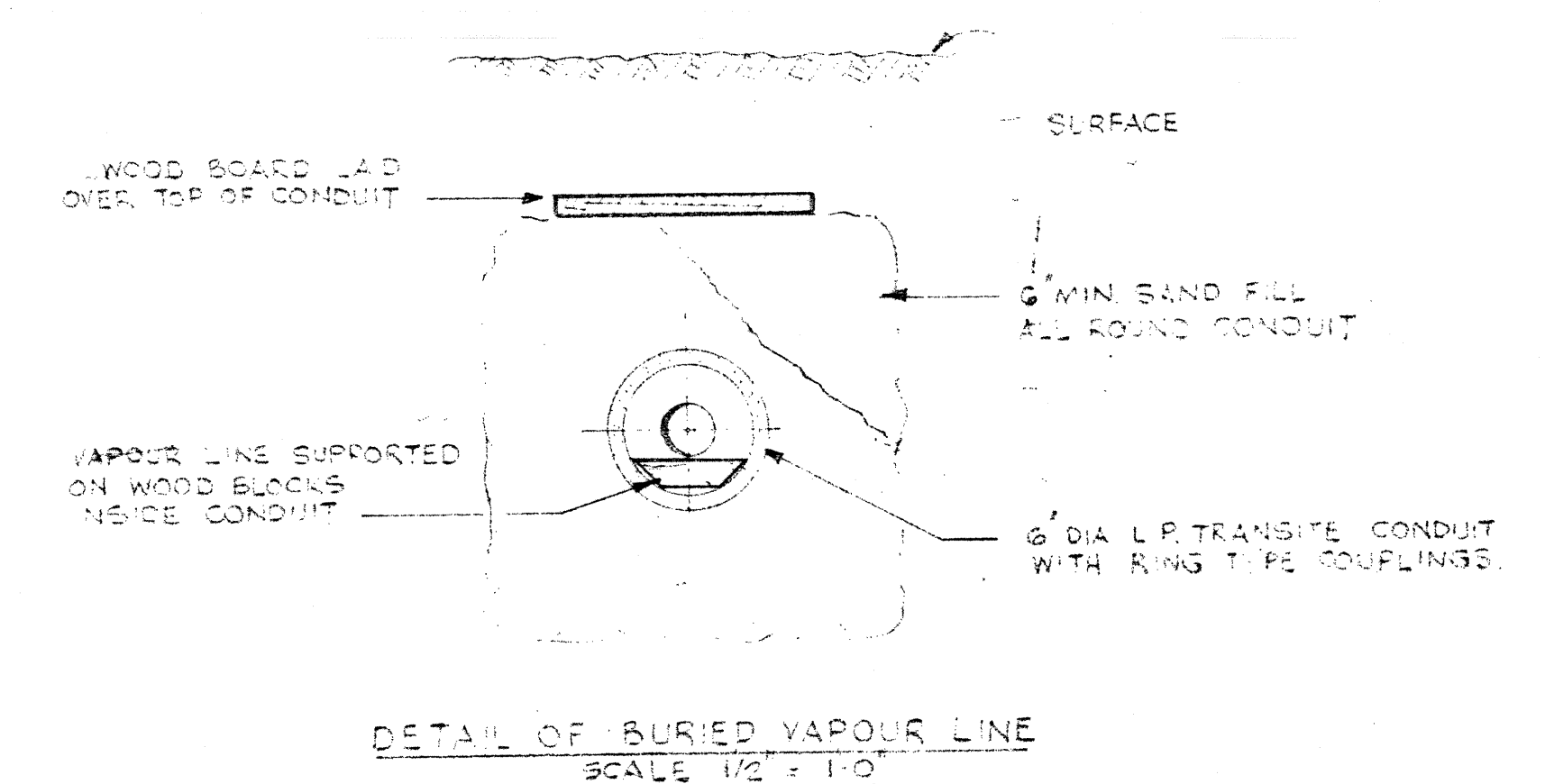
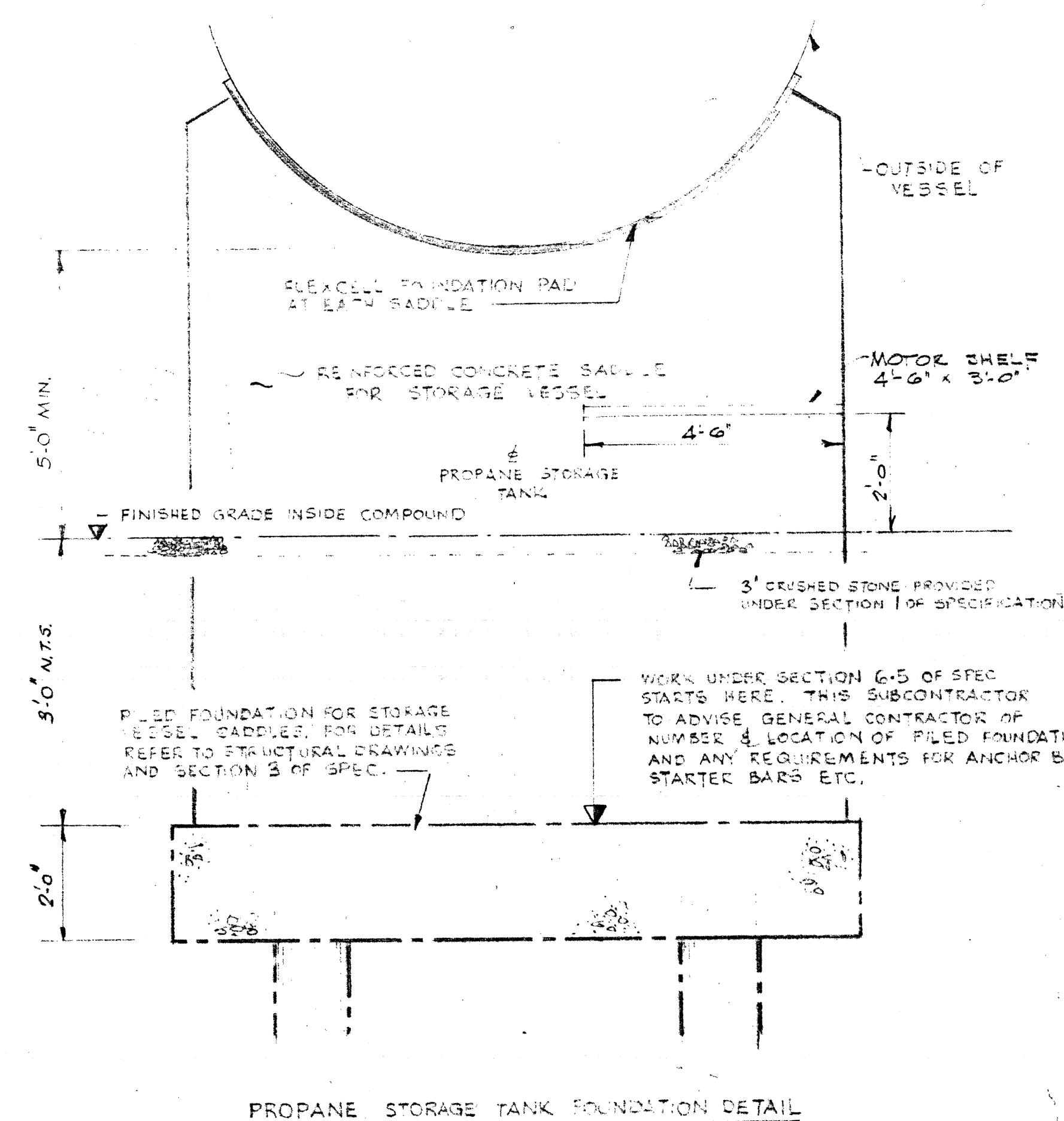
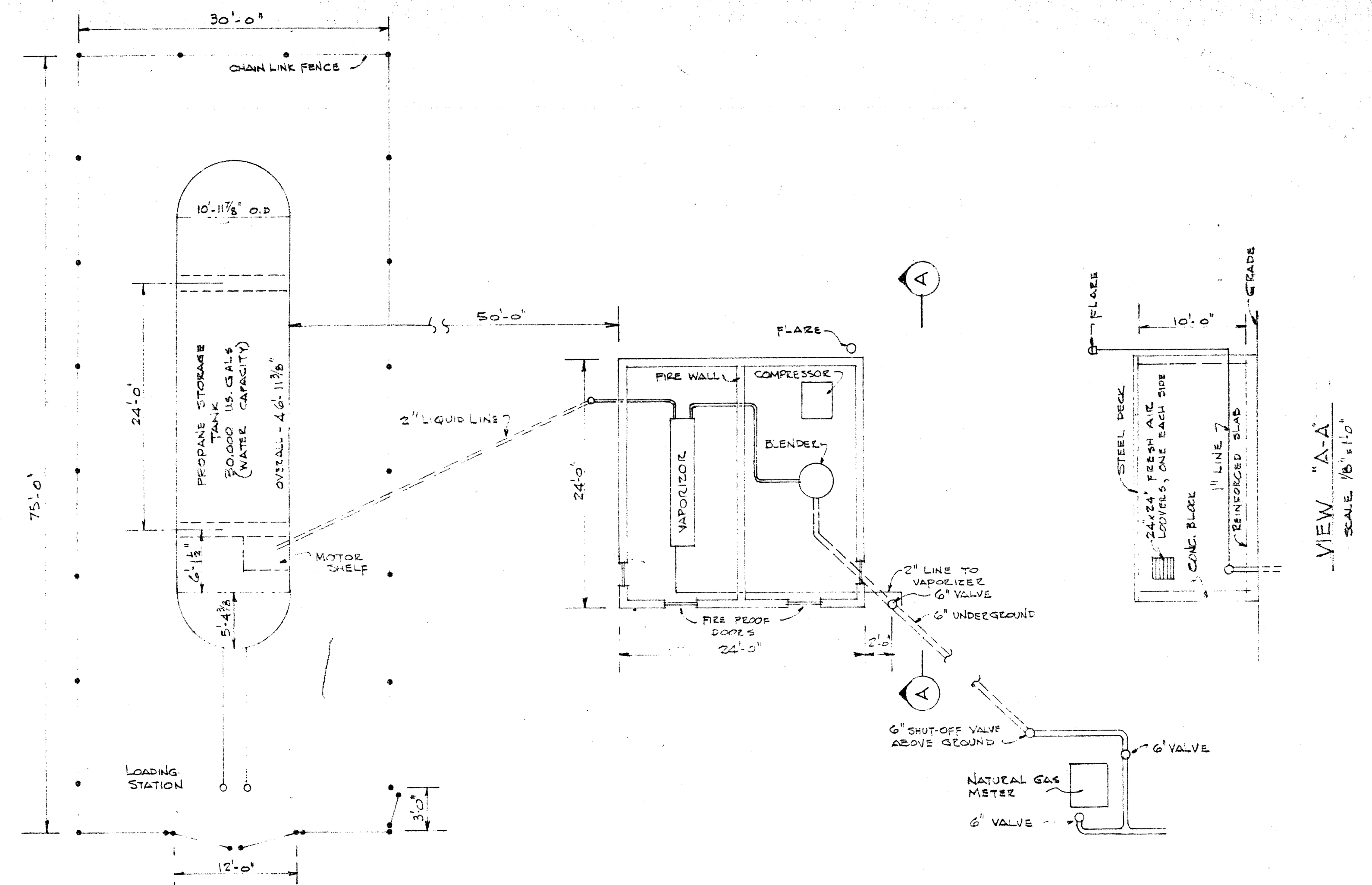
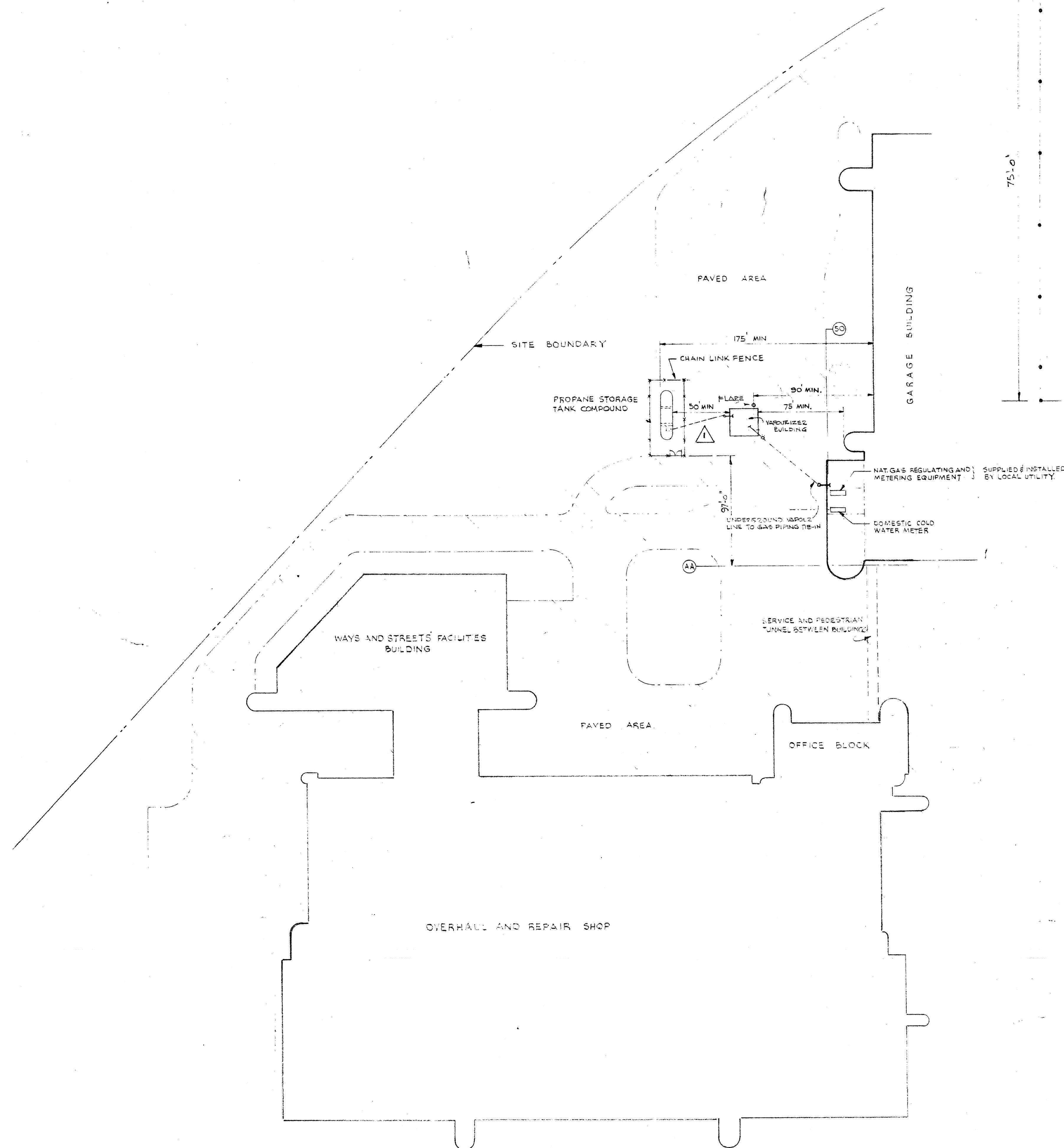
ARCHITECTS
Walsman Ross & Blackstein Coopers Gilman Hume
10 DONALD STREET, WINNIPEG, MANITOBA

APPROVED: [Signature] DATE: AUGUST '87

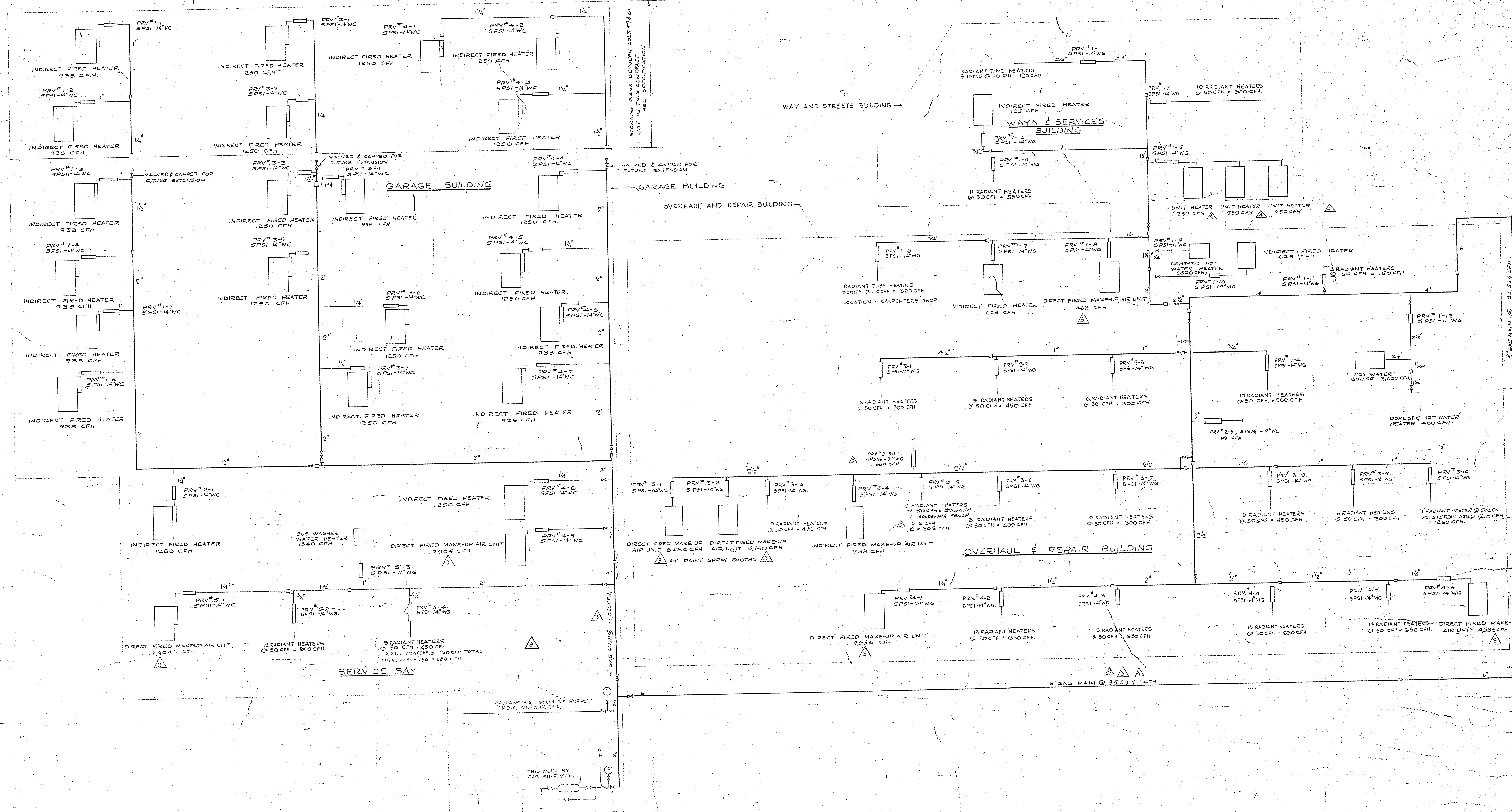
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DRAWN: [Signature] DATE: 2185-616

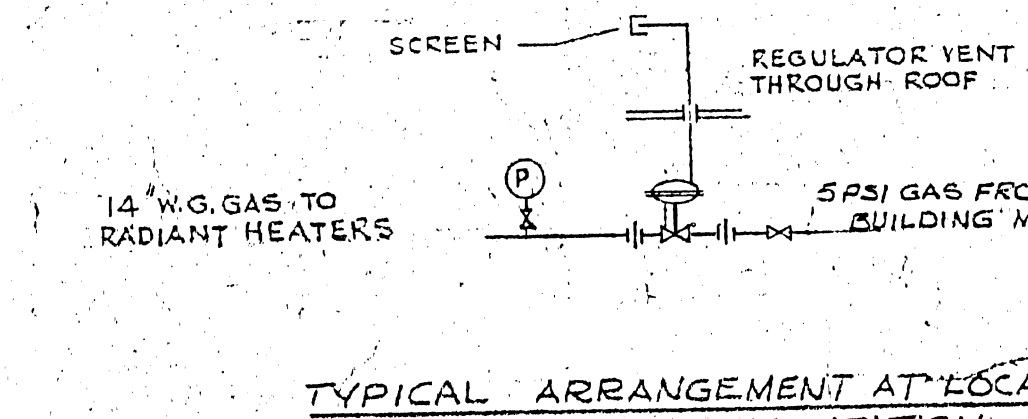
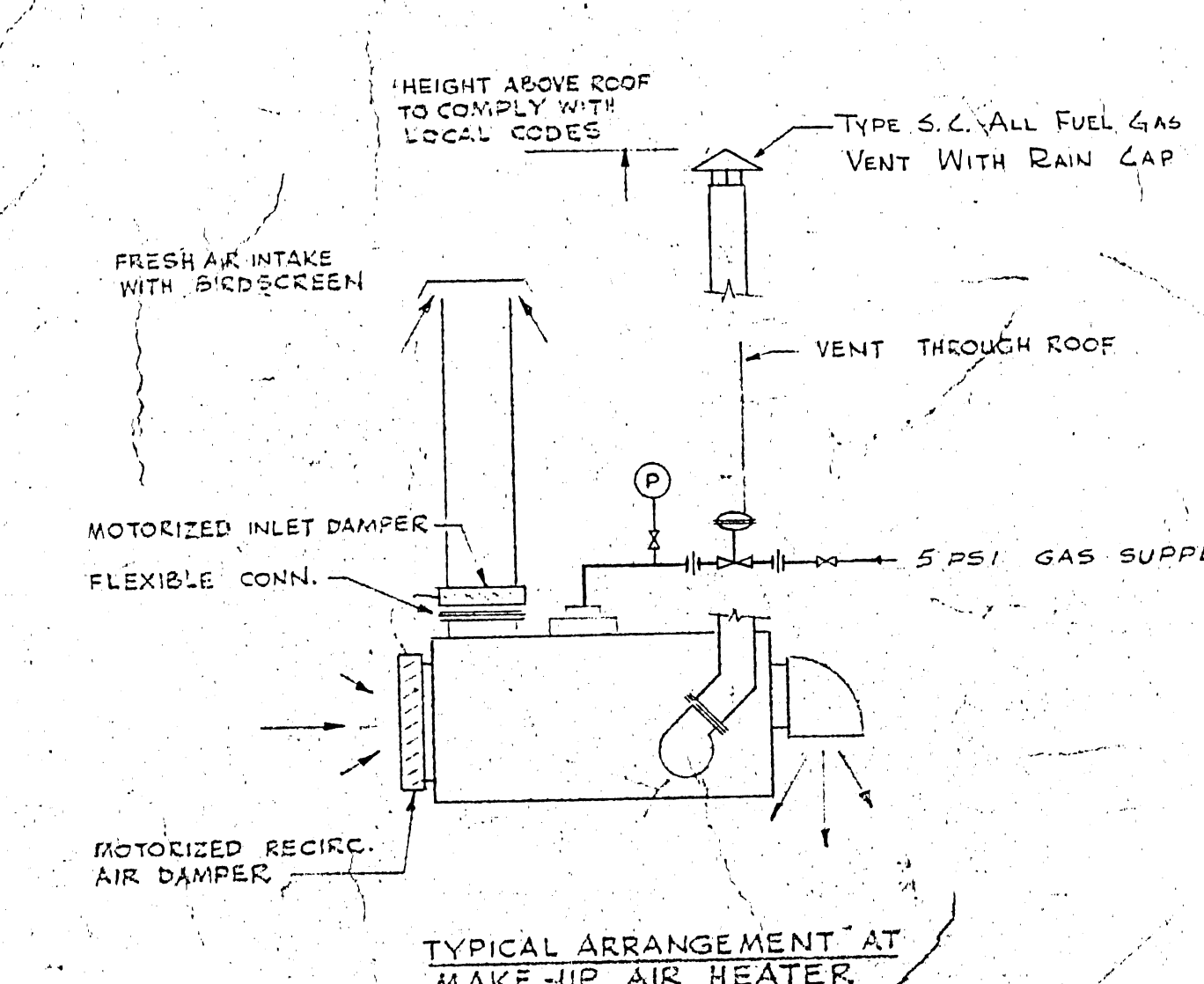
MECHANICAL



2185-651	
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My Licence Expires 10 Jan. 1968	
17 MAY 68 27 JUL 68 19 JAN 69 1 OCT 69	5 1 0 0 1 0 0 0
AS BUILT LIMIT AT PROPANE TANK COMPOUND REVISOR PER SAYS & PROV. DEPT. OF LABOUR APPROVAL FOR CONSTRUCTION FOR TENDER FOR APPROVAL	
DATE ISSUE REV. BY	
DESCRIPTION ISSUE OR REVISION METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION TRANSIT STORAGE AND SHOP FACILITIES BULK PROPANE STORAGE FACILITIES	
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO	
ARCHITECTS Waisman Ross & Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA	
APPROVED T. F. THORPE DEPUTY DIRECTOR OF STREETS AND TRANSIT	DRAWN BY J. T. T. FILE NO. SHEET NO.
DATE AUGUST '67 SCALE AS SHOWN DRAWING NO. 2185-651 MECHANICAL	



3 NATURAL GAS SUPPLY FROM STREET MAIN 65,614 CFH NAT. GAS (THIS IS FULL LOAD)



B-14 FILE
RETURN TO CHD PROPERTIES BUILDING INVENTORY.
2 91 1

2185-616

DATE	ISSUE NO.	REV.	DESCRIPTION	ISSUE OR REVISION	DATE	BY
14-11-69	8	2	AS BUILT			
31-7-69	7	2	TOTAL CONSUMPTION REVISED - OWNER'S EQUIP. & REQUIREMENTS			
18-9-68	6	4	REVISED AS PER NOTICE OF PROPOSED CHANGE NO. 33			
21/6/68	5	3	DIRECT FIRED UNITS CONSUMPTION REVISED AS PER SHOP DRAWING			
10/5/68	4	2	REVISED AS PER CHANGE ORDER NO. 13			
24/5/68	3	1	REVISED AS PER ADDENDUM 1 TO S.I. FOR CONSTRUCTION			
10/1/68	2	0	FOR TENDER			
20/6/67	1	0	FOR APPROVAL			
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION						
TRANSIT STORAGE AND SHOP FACILITIES						
HEATING & VENTILATING SCHEMATIC GAS PIPING						
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1050 LESLIE STREET, DON MILLS, ONTARIO			ARCHITECTS Wainman Ross & Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA			
APPROVED BY	DESIGNED BY	CHECKED BY	FILE NO.	DATE	SCALE	
				AUGUST '67	NOT TO SCALE	
PROVINCE OF MANITOBA My License Expires 10 Jan 1970			DRAWING NO. 2185-616 MECHANICAL			

400V TYPE 'A' MERC. FLOODLIGHT
CROUSE-HINDS #BAL-4-H-CV-2

BRACKET-CROUSE
HINDS #ML-3323

NOTE: FLOODLIGHTS TO BE
ADJUSTED AT SITE TO
GIVE THE MOST EVEN
ILLUMINATION TO THE
PARKING AREAS AND
DRIVEWAYS

HANDHOLE

FINISHED GRADE

ANCHOR BOLTS

CONCRETE BASE

1" RIGID GALV.
CONDUITS

2" DUCT IN CONCRETE
ENCLOSURE

DETAIL 'A'

N.T.S.

DETAIL 'B'

N.T.S.

DETAIL 'C'

N.T.S.

DETAIL 'D'

N.T.S.

PLAN

SECTION 'X-X'

DETAIL SHOWING CONDUITS CROSSING TUNNEL

N.T.S.

TYPICAL CONCRETE DUCT BANK DETAILS

N.T.S.

PLANKS
WOOD POST
RECEPTACLES

PLAN

6"x6" CEDAR POST

FINISHED GRADE

CONC. CURB

DUPLEX RECEPTACLE WITH BREAK-OFF
TERMINAL LINK REMOVED FOR SPIT
FEED CIRCUITING - 5 # 5 1/2-1194
MOUNTED IN 1/2" TYPE BOX, W/ P COVER
5 # 5 1/2-1194-1 WITH GASKET AND
TWIN SPRING CLOSED DOORS

RIGID GALVANIZED CONDUIT
CLAMPED TO WOOD PLANKS
SIZE OF CONDUIT AND "T" FITTING TO SUIT
NUMBER OF WIRES INSTALLED

1/4" NIPPLE WITH 2" O.D.
WIRES AND TYPE "T" FITTING

RIGID GALVANIZED CONDUIT CLAMPED
TO WOOD PLANKS USE OF CONDUIT AND
FITTING TO SUIT NUMBER OF WIRES
INSTALLED

2"x10" CONTINUOUS WOOD PLANKS

6"x6" CEDAR POST

PRECAST CONC. CURB

FINISHED GRADE

1/4" NIPPLE WITH 2" O.D.
WIRES AND TYPE "T" FITTING

STEEL BEAM GUIDE RAIL
BOLTED TO WOOD POST

ASPHALT TOPPING
CONCRETE PAVING
REINFORCED CONCRETE
RIGID GALVANIZED CONDUITS
TUNNEL CEILING

10"

10"

10"

10"

10"

10"

10"

10"

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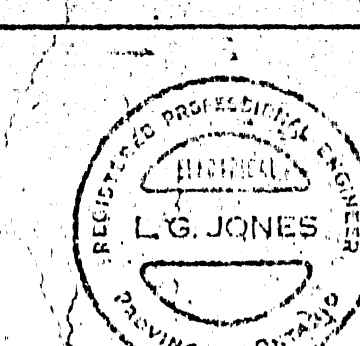
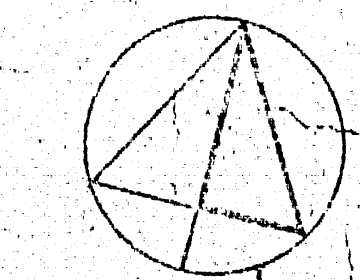
10"

LEGEND

- FLUORESCENT LIGHTING FIXTURE, CEILING MOUNTED, TYPE 'A'
- FLUORESCENT LIGHTING FIXTURE, PANEL MOUNTED, TYPE 'A'
- FLUORESCENT LIGHTING FIXTURE, USED AS NIGHT LIGHT
- FLUORESCENT LIGHTING FIXTURE, BRACKET TYPE
- OUTLET BOX
- INCANDESCENT OR MERCURY VAPOUR LIGHTING FIXTURE
- INCANDESCENT OR MERCURY VAPOUR LIGHTING FIXTURE, BRACKET TYPE
- EXIT LIGHT
- 3-WAY SWITCH
- SWITCH WITH PILOT LIGHT
- SINGLE POLE SWITCH
- DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP
- DUPLEX RECEPTACLE, EXPL. PROOF, 20 A, 125 V, CROUSE HINDS #CPS152-212
- WELDING RECEPTACLE 100A, 3PH, 4W, 208V TO MATCH EQUIP.
- DUPLEX RECEPTACLE, 208V, 15 A, HUBBELL #5662
- MASTER CLOCK MOUNTED 12" ABOVE FINISHED FLOOR IN OFFICE
- UNDER FLOOR DUCT
- FLOOR RECEPTACLE, HUBBELL #5221 IN NEPCO 800 BOX
- SHAVING OUTLET, MOUNTED 3' ABOVE FINISHED FLOOR
- TELEPHONE WALL MOUNTED OUTLET
- P.A. MICROPHONE
- P.A. HORN SINGLE PROJECTION MOUNTED APPROX. 12' ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED
- P.A. SPEAKER CEILING MOUNTED
- P.A. HORN DOUBLE PROJECTION MOUNTED APPROX. 12' ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED
- FIRE ALARM MANUAL STATION
- FIRE ALARM BELL 10" DIA. OR AS NOTED
- FIRE ALARM HORN DOUBLE PROJECTION
- 150W COMBINATION TYPE F.A. DETECTOR
- 150W FIXED TYPE F.A. DETECTOR
- DISCONNECT SWITCH
- MANUAL STARTER
- MAGNETIC STARTER
- COMBINATION MAGNETIC STARTER
- SINGLE PHASE MOTOR
- 3 PHASE MOTOR
- REMOTE PUSHBUTTON
- THERMOSTAT
- EMERGENCY LIGHTING UNIT MOUNTED 7'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED
- POWER PANEL
- UNDER FLOOR DUCT
- CONDUIT STUB-UP
- SPRINKLER SYSTEM FLOW SWITCH
- SPRINKLER SYSTEM GATE VALVE SUPERVISORY SWITCH
- WEATHER PROOF RECEPTACLE FOR CAR BLOCK HEATERS
- ELECTRIC HEATER 208V, 1PH, SUPPLIED AND INSTALLED BY OTHERS
- ELECTRIC HEATER 208V, 3PH, SUPPLIED AND INSTALLED BY OTHERS
- WEATHER PROOF
- EXPLOSION PROOF
- 30" HIGH STANDARD WITH ONE 400W TYPE 'Q' MERCURY VAPOR FLOODLIGHT
- INTERCOM SYSTEM MICROPHONE
- INTERCOM SYSTEM SPEAKER TALK-BACK STATION (MHS-6) & ASSOCIATED TRUMPET (M.H. 15-0)
- OUTLET BOX FOR GAS-FIRED INFRARED HEATER MOUNTED ADJACENT TO HEATER'S WIRING & CONNECTION TO HEATER'S BY OTHERS
- OUTLET BOX FOR 208V CONNECTION TO CARBON MONOXIDE ANALYZER, MTD. 6'-0" ABOVE FINISHED FLOOR
- OUTLET BOX FOR 100V CONNECTION TO CARBON MONOXIDE MONITOR, MTD. 6'-0" ABOVE FINISHED FLOOR
- PAN COIL UNIT COMPLETE WITH TERMINAL JUNCTION BOX, SUPPLIED & INSTALLED BY OTHERS. ELECTRICAL CONTRACTOR SHALL TERMINATE & CONNECT WIRING IN JUNCTION BOX
- TERMINATE WIRES IN CONDUIT EXPOSED IN UNFINISHED AREAS. DEWIRING SPACE ABOVE FINISHED AREAS. ARROW HEAD DENOTES HOME RUN TO RESP. PANEL. UNMARKED RUNS INDICATE 2 WIRES IN CONDUIT
- TERMINATE CONDUIT RUN IN SLAB
- FIRE ALARM TRIP STATION

NOTES:

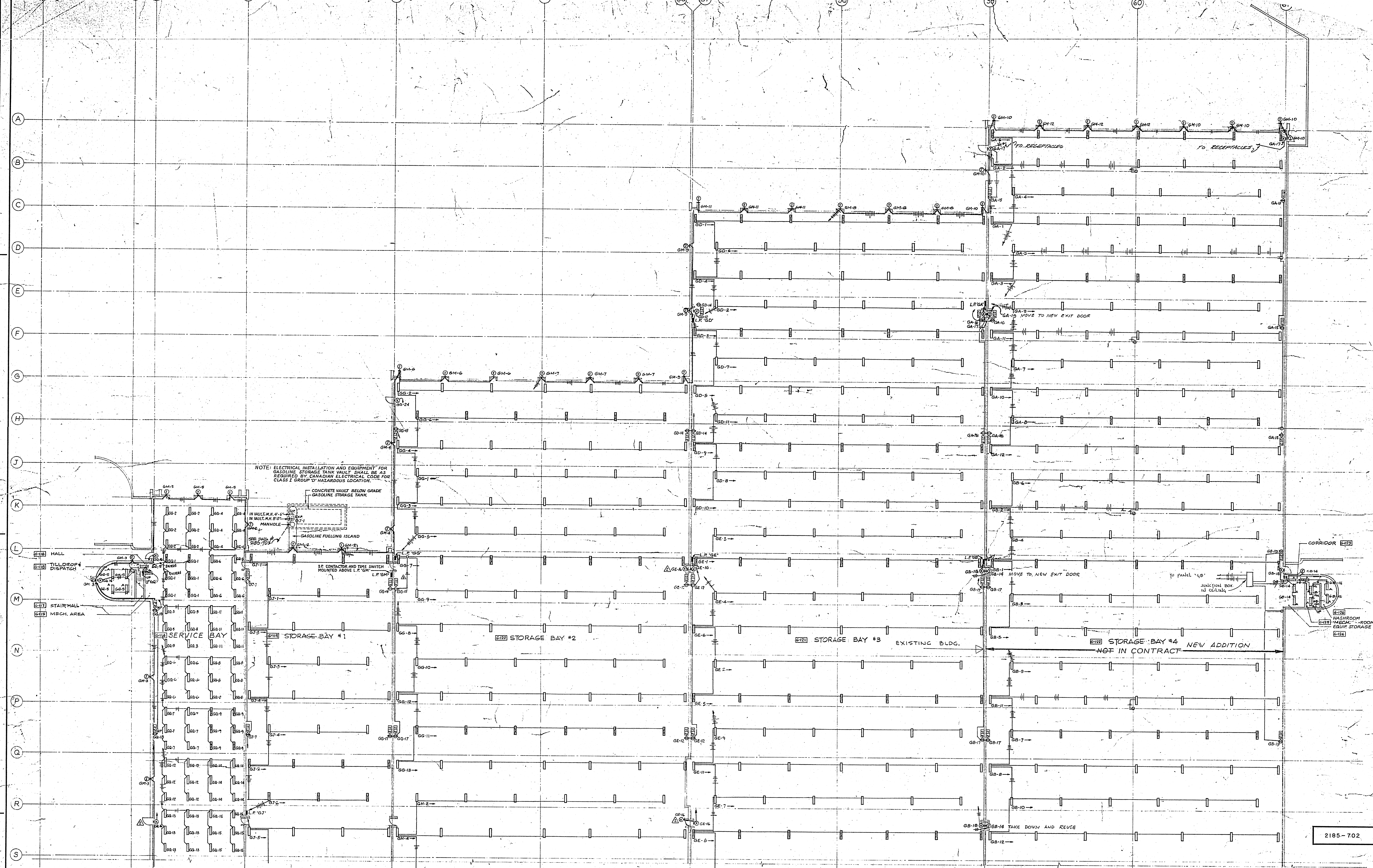
- INSTALL 2" 5' CONDUITS THROUGH FOUNDATION WALL FOR FUTURE CAR BLOCK HEATER RECEPTACLES. CONDUITS TO BE TERMINATED 18" ABOVE FINISHED FLOOR AND OUTSIDE 12" FROM FOUNDATION WALL, BURIED 3'-0" BELOW FINISHED PAVEMENT. CAP CONDUITS ON BOTH ENDS.
- ALL WIRING FOR OUTSIDE LIGHTING CIRCUITS SHALL BE "RWU" TYPE, SIZE #8, IN 2" CONCRETE ENCLOSED FIBRE DUCTS.
- ALL WIRING FOR CAR HEATER RECEPTACLE CIRCUITS SHALL BE "RWU" TYPE, SIZE #10, IN CONCRETE ENCLOSED FIBRE DUCTS AS SHOWN.



NO.	DATE	DESCRIPTION	BY	CHKD.
1	NOV. 29, 68	AS BUILT		
2	NOV. 29, 68	ADDED "EMPTY CONDUIT" FROM 1" HOLE TO VAPORIZER BUILDING		
3	NOV. 29, 68	SECTION "X-X" REVISION		
4	NOV. 29, 68	FIBRE DUCTS FOR OUTSIDE LIGHTING CHANGED TO ST		
5	NOV. 29, 68	ISSUED FOR CONSTRUCTION		
6	NOV. 29, 68	GENERAL REVISIONS		
7	NOV. 29, 68	FOR TENDER		
8	NOV. 29, 68	FOR APPROVAL		

ISSUE OR REVISION		DATE
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION		
TRANSIT STORAGE AND SHOP FACILITIES		
SITE PLAN & DETAILS		
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LEVY STREET, 2ND FLOOR, WINNIPEG, MANITOBA	ARCHITECTS Waltman Ross & Blankenship Co. P. Gillmer Hann 10 DONALD STREET, WINNIPEG, MANITOBA	DATE 21 JULY 1967
APPROVED	DRAWN BY PT	CHECKED L.S.J.
DEPUTY DIRECTOR OF STREETS AND TRANSIT	FILE NO.	DRAWN NO. 2185-701
		ELECTRICAL

421 Osborne St. Shop Facilities
SCANNED 2185-702
PART FLOOR PLAN - GARAGE
NORTH - LIGHTING



FOR CONTINUATION SEE DRAWING NO. 2185-704

2185-702

NOTE: FOR NOTES, & TYPICAL MOUNTING DETAIL OF FLUORESCENT LIGHTING FIXTURES IN GARAGES SEE DRAWING NO. 2185-704.

DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY
APR. 11/77	1		AS BUILT, EXISTING FIXTURES - BAY #4	
MAY 7/77	2		REVISE WIRING IN BAY #4	
MAY 9/77	3		GARAGE ADDITION - FOR TENDER	
MAY 16/77	4		AS BUILT	
MAY 19/77	5		DOOR & EXIT LIGHT ADDED ON WEST WALL BETWEEN COL. LINES R & S, EXIT LIGHTS ADDED.	
MAY 23/77	6		ISSUED FOR CONSTRUCTION	
11/2/78	7		GENERAL REVISIONS	
JAN. 15/79	8		FOR TENDER	
SEP. 17/77	9		FOR APPROVAL	

ISSUE OR REVISION
METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

TRANSIT STORAGE AND SHOP FACILITIES

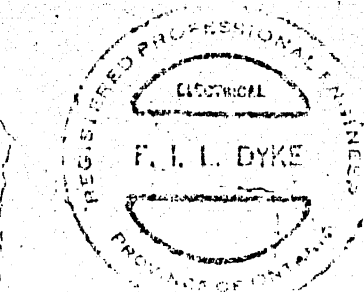
PART FLOOR PLAN - GARAGE NORTH - LIGHTING

CONSULTING PROFESSIONAL ENGINEERS
A. D. MARGISON AND ASSOCIATES LTD.
1155 LESLIE STREET, DON MILLS, ONTARIO

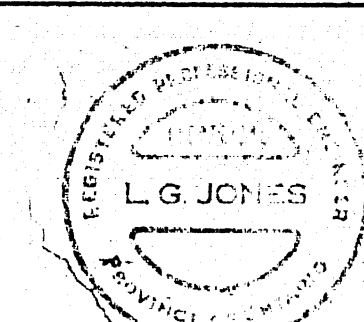
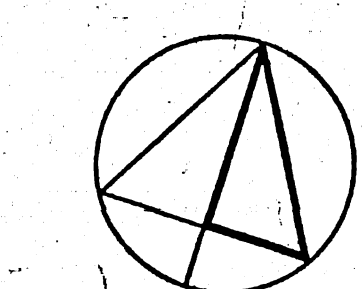
ARCHITECTS
Walsman Ross + Blankstein Coop Gillmor Hanna
10 SONGER STREET, WINNIPEG, MANITOBA

APPROVED
MAY 1977

A. D. MARGISON ASSOCIATES LTD.
CONSULTING PROFESSIONAL ENGINEERS
SUITE 202 - 1330 YONGE STREET
TORONTO, ONTARIO M4T 1X2



NUMBER TEN ARCHITECTURAL GROUP
ARCHITECTS/PLANNERS/DESIGNERS/INTERIORS/EXTERIORS



APPROVED
JULY 1977

DATE
21 JULY 1977
SCALE
1/16" = 1'-0"

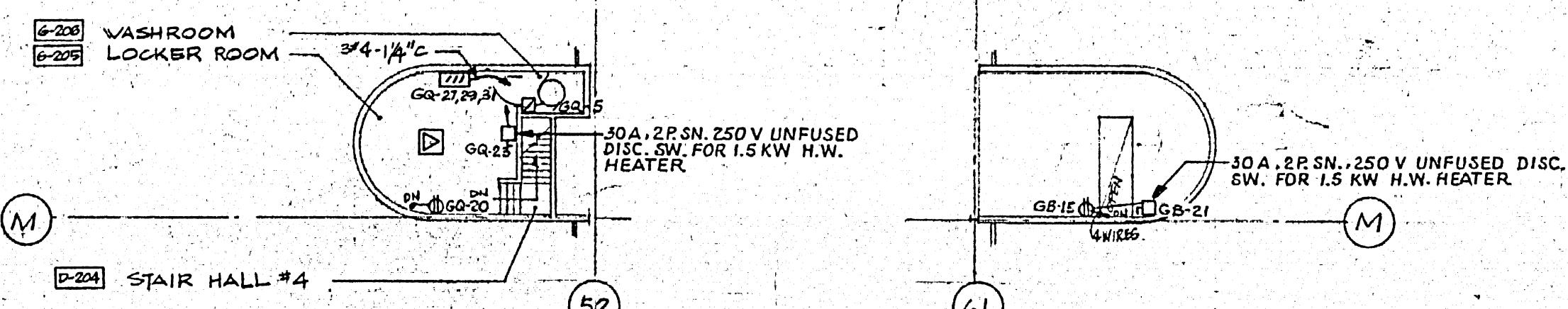
2185-702
ELECTRICAL


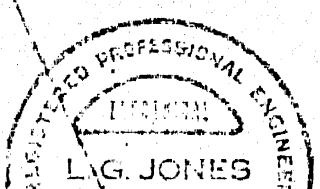
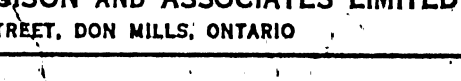
UPPER LEVEL OF SERVICE PROTECTION
SCALE 1/16" = 1'-0"

WASHROOM
LOCKER ROOM
STAIR HALL #4

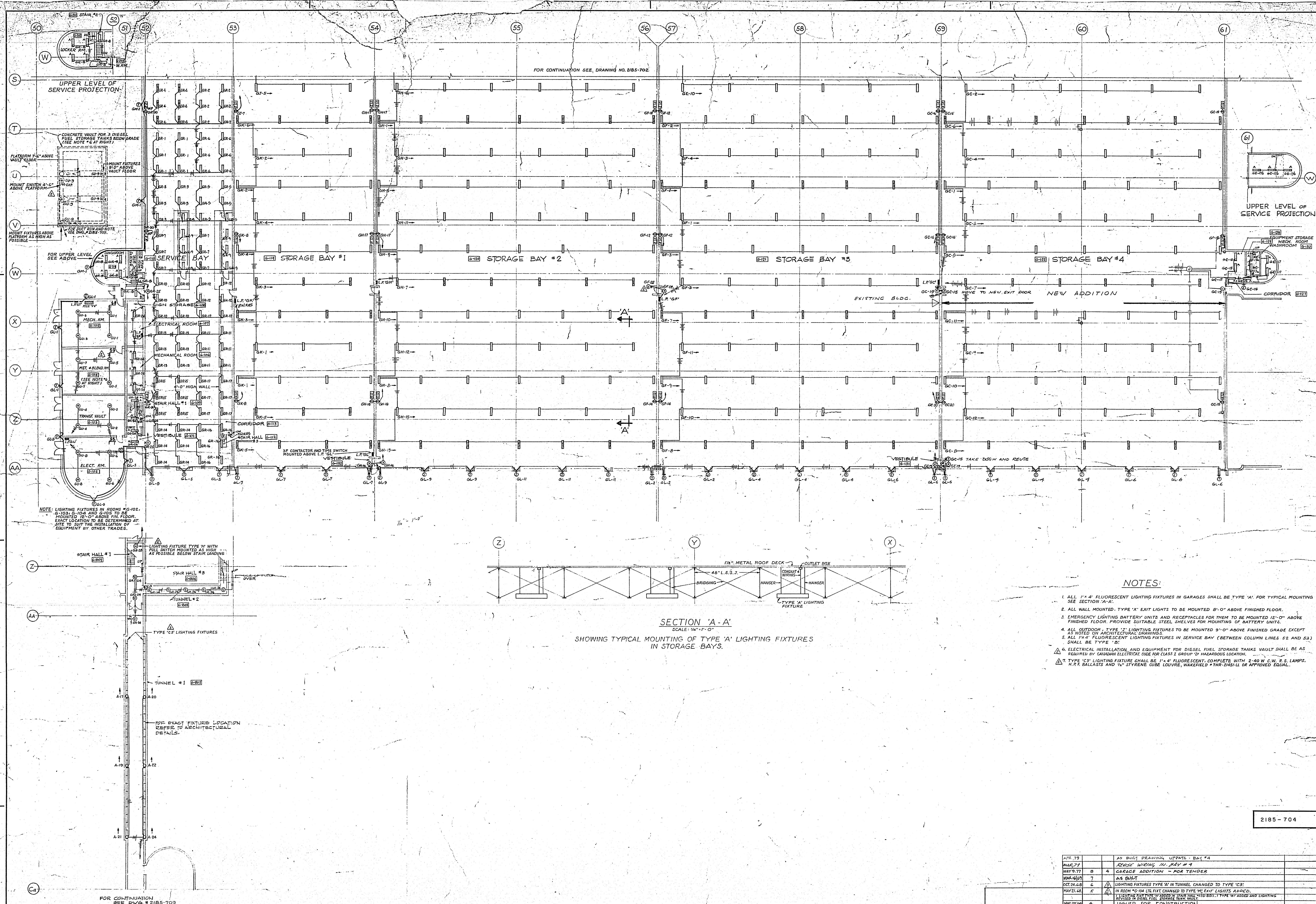
STAIR HALL #4
MECH. AREA

STAIR HALL #4
MECH. AREA



	MAR.10/4	7	AS BUILT					
	NOV.14.61	6	CIRCUIT "KK-20 REVISED					
	MAY.14.61	5	BOOK & L.A. STATION ADDED ON WEST WALL BETWEEN LINES R & S.					
	NOV.20.61	4	ISSUED FOR CONSTRUCTION					
	MAY.68	3	GENERAL REVISIONS					
	JUN.14.68	2	FOR TENDER.					
	DATE	1	0	FOR APPROVAL.				
		DATE	ISSUE NO.	REV. NO.	DESCRIPTION			DRAWN BY
					ISSUE OR REVISION			
					METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION			
					TRANSIT STORAGE AND SHOP FACILITIES			
					PART FLOOR PLAN - GARAGE NORTH - POWER			
	CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON & ASSOCIATES LIMITED 1935 LESLIE STREET, DON MILLS, ONTARIO				ARCHITECTS Walman Ross & Blankstein Coop Gilmour Hanna 10 DONALD STREET, WINNIPEG, MANITOBA			
	APPROVED				DRAWN BY R.M.	DATE 21 July 1967		
	DEPUTY DIRECTOR OF STREETS AND TRANSIT			CHECKED S.W.	SCALE 1" = 10'-0"			
				FILE NO.	DRAWING NO.			
				SHEET NO.	2185-703 ELECTRICAL			

421 DORRANCE ST.
TRANSIT STORAGE
SHEET NO. 2185-704
PART FLOOR PLAN - GARAGE SOUTH -
LIGHTING



NOTES:

1. ALL 1" x 4" FLUORESCENT LIGHTING FIXTURES IN GARAGES SHALL BE TYPE 'A' FOR TYPICAL MOUNTING SEE SECTION 'A-A'.
2. ALL WALL MOUNTED, TYPE 'X' EXIT LIGHTS TO BE MOUNTED 8'-0" ABOVE FINISHED FLOOR.
3. EMERGENCY LIGHTING BATTERY UNITS AND RECEPTACLES FOR THEM TO BE MOUNTED 12'-0" ABOVE FINISHED FLOOR. PROVIDE SUITABLE STEEL SHELVEYS FOR MOUNTING OF BATTERY UNITS.
4. ALL OUTDOOR, TYPE 'T' LIGHTING FIXTURES TO BE MOUNTED 9'-0" ABOVE FINISHED GRADE EXCEPT AS NOTED ON ARCHITECTURAL DRAWINGS.
5. ALL 1" x 4" FLUORESCENT LIGHTING FIXTURES IN SERVICE BAY (BETWEEN COLUMN LINES 52 AND 53) SHALL BE TYPE 'B'.
6. ELECTRICAL INSTALLATION AND EQUIPMENT FOR DIESEL FUEL STORAGE TANKS VAULT SHALL BE AS REQUIRED BY CANADIAN ELECTRICAL CODE FOR CLASS I GROUP 'D' HAZARDOUS LOCATION.
7. TYPE 'C' LIGHTING FIXTURE SHALL BE 1" x 4" FLUORESCENT, COMPLETE WITH 2-40 W. C.W. R. S. LAMPS, N.P.E. BALLASTS AND 1/4" STYRENE GUM LOUVER, WAKEFIELD *TRIP-DROP OR APPROVED EQUIV.

SECTION 'A-A'

SCALE: 1/4" = 1'-0"
SHOWING TYPICAL MOUNTING OF TYPE 'A' LIGHTING FIXTURES
IN STORAGE BAYS.

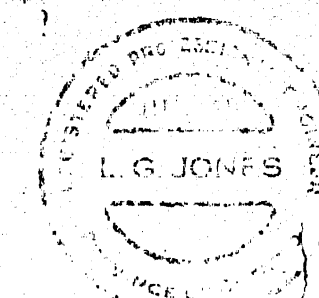
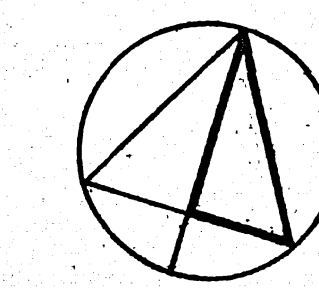
PLAN OF TUNNEL

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

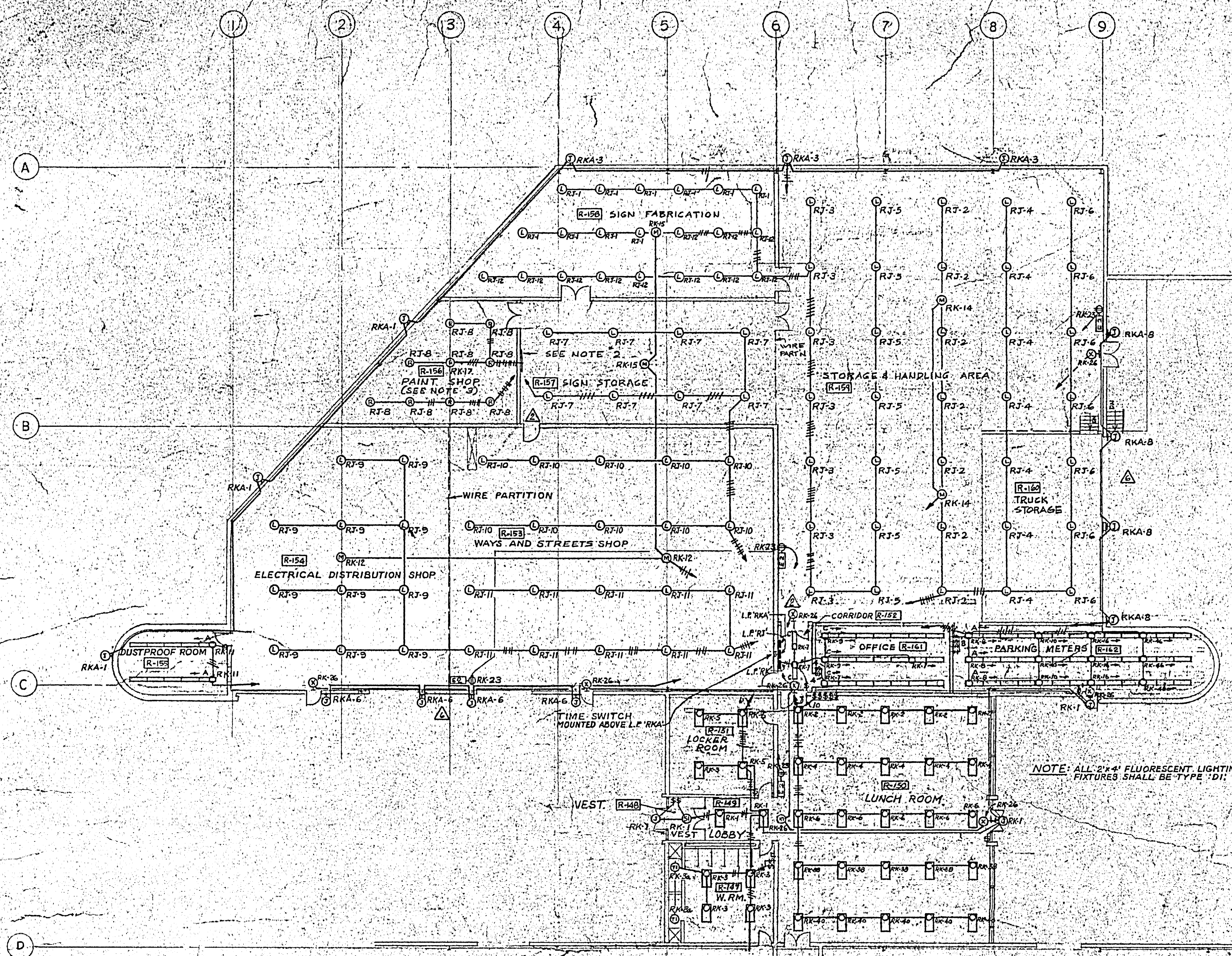
APPROVED
MAY 1977

A. D. MARGISON ASSOCIATES LTD.
CONSULTING PROFESSIONAL ENGINEERS
SUITE 300-1500 YONGE STREET
TORONTO, ONTARIO M4T 1X7

MANITOBA ENGINEERING
NUMBER TEN ARCHITECTURAL GROUP
ARCHITECTS PLANNERS (INCORPORATED) MANITOBA LIMITED

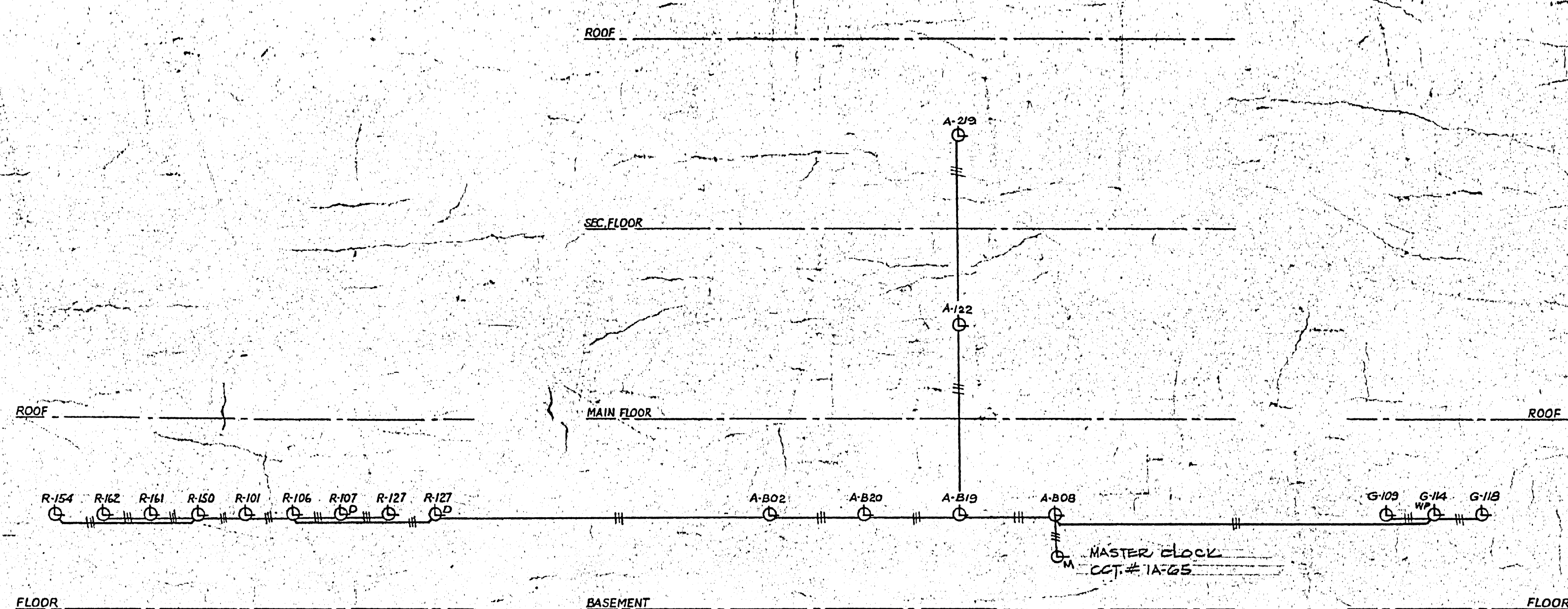


DATE	ISSUE	REV.	DESCRIPTION	DRAWN BY
APR 77	1		AS BUILT DRAWING, UPPER - BAY #4	
MAY 77	2		REVISED WORK IN BAY #4	
MAY 77	3		CHARGE ADDITION - FOR TENDER	
MAY 77	4		AS BUILT	
OCT 77	5		LIGHTING FIXTURES TYPE 'X' IN TUNNEL CHANGED TO TYPE 'C'	
MAY 78	6		IN ROOM #104 (1st FLOOR) CHANGED TO TYPE 'M' EXIT LIGHTS AS SHOWN	
MAY 78	7		1500 WATT FLOOD LIGHTS IN SERVICE BAY #1 CHANGED TO TYPE 'B' AS SHOWN	
MAY 78	8		GENERAL REVISIONS	
MAY 78	9		FOR TENDER	
MAY 78	10		FOR APPROVAL	
DATE	ISSUE	REV.	DESCRIPTION	DRAWN BY
			ISSUE OR REVISION	
			METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION	
			TRANSIT STORAGE AND SHOP FACILITIES	
			PART FLOOR PLAN - GARAGE SOUTH - LIGHTING	
			CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 105 LITTLE STREET, DON MILLS, ONTARIO	
			ARCHITECTS William Ross & Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA	
			DATE: 21 JULY 1977	
			SCALE: AS SHOWN	
			DRAWING NO.: 2185-704	
			ELECTRICAL	



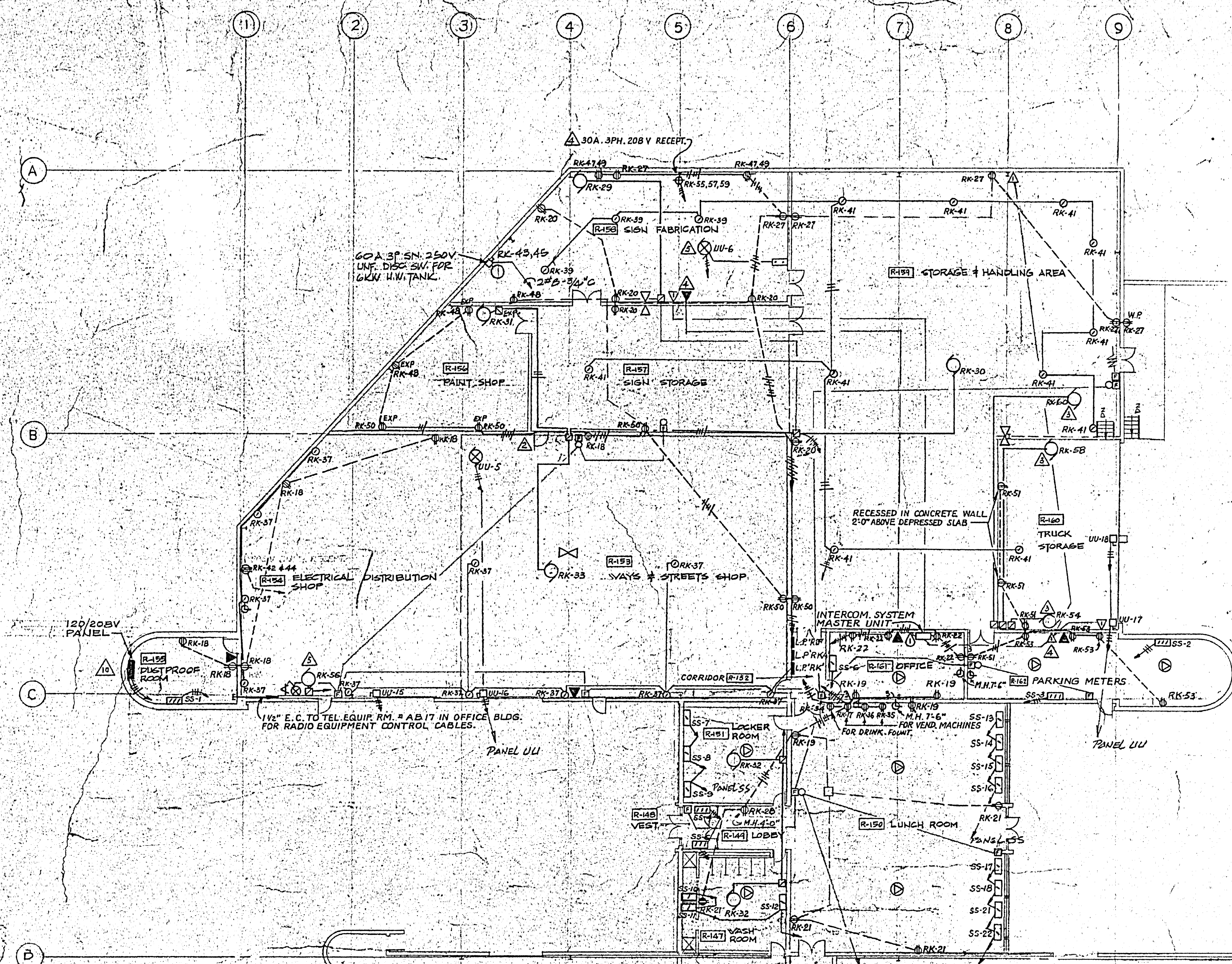
FOR CONTINUATION SEE DRAWING # 2185-706

LIGHTING SCALE 1/16" = 1'-0"



OVERHAUL & REPAIR BUILDING OFFICE BUILDING GARAGE BUILDING

CLOCK SYSTEM RISER DIAGRAM
(N.T.S.)



FOR CONTINUATION SEE DRAWING # 2185-707

POWER SCALE 1/16" = 1'-0"

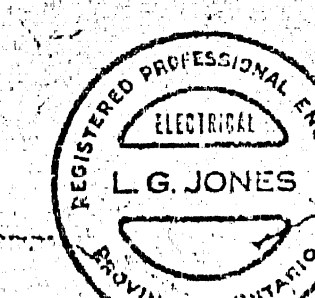
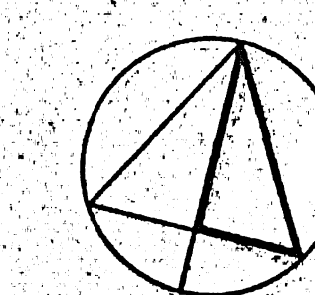
INTERCOM SYST RISER DIAGRAM
IN WAYS & STREETS FACIL. BLDG.
(N.T.S.)

NOTES:

1. MOUNT BOTTOM OF LIGHTING FIXTURES TYPE 'L' AND 'M' FLUSH WITH THE BOTTOM FLANGE OF BEAM.
2. 1/4" THICK STEEL PLATE (SIZE TO SUIT) MOUNTED 8'-0" ABOVE FINISHED FLOOR FOR MOUNTING OF 4 400 W MERCURY VAPOUR 2-LAMP BALLASTS & SINGLE LAMP BALLAST.
3. MOUNT TYPE 'R' LIGHTING FIXTURES IN PAINT SHOP ON OUTLET BOXES ON SUSPENDED CEILING.

2185-708

NO.	DATE	DESCRIPTION	BY	CHK
1	NOV. 6, 66	AS BUILT		
2	JUL. 10, 69	ADDED PANEL AS PER FIELD INSTRUCTION U-159.		
3	APR. 7, 69	CIRCUIT NUMBERS CHANGED: *RKA-10 TO *RKA-6 AND *RKA-24 TO *RKA-8, WIRING DELETED.		
4	FEB. 23, 69	ADDED DESS PRESS. PUMP IN RM 154 AND EXH. FAN IN RM 154 WITH CONTROL EQUIPMENT.		
5	MAY 1, 68	SSA RECEIPT ADDED, TEL. UNIT, REL. TO RM 154, TALKBACK STATION ADDED IN RM 154.		
6	SEPT. 10, 68	WAC UP AIR UNIT IN CTR. HALL, 174 IS DELETED, UNIT HOOKS ADDED ON CTR. HALL, 54, 176.		
7	JUNE 14, 68	IN RM 154, TYPE 'X' FUTURE DOOR TO CORRIDOR *RKA-24 DELETED, TYPE 'C' DOOR ADDED AS PER ARCHITECTURAL CHANGES.		
8	MAY 29, 68	ISSUED FOR CONSTRUCTION		
9	MAY 29, 68	ISSUED FOR CONSTRUCTION		
10	MAY 29, 68	FOR TENDER		
11	MAY 29, 68	FOR APPROVAL		
12	MAY 29, 68	FOR APPROVAL		



ISSUE OR REVISION

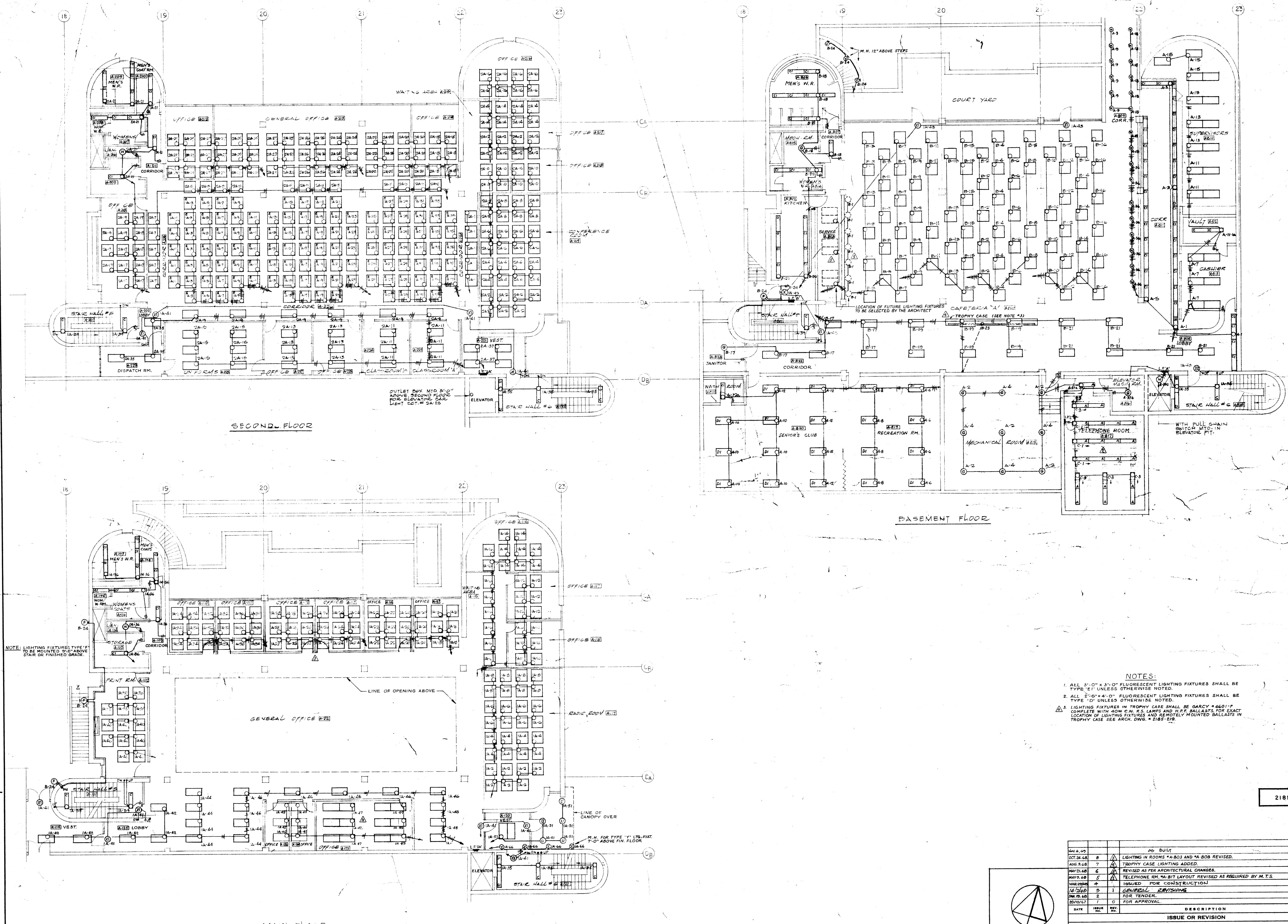
METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

TRANSIT STORAGE AND SHOP FACILITIES
WAYS & STREETS FACILITIES BUILDING -
LIGHTING & POWER

CONSULTING PROFESSIONAL ENGINEERS
A. D. MARGISON AND ASSOCIATES LIMITED
189 LESLIE STREET, DON MILLS, ONTARIO

ARCHITECTS
Walman Ross & Blankstein Coop Gilmor Hanna
10 DONALD STREET, WINNIPEG, MANITOBA

APPROVED: *[Signature]* DATE: 21 JULY 1967
SCALE: AS SHOWN
DRAWN BY: *[Signature]*
CHECKED BY: *[Signature]*
FILE NO.: 2185-708
SHEET NO.: ELECTRICAL



- NOTES:
1. ALL 2'-0" x 3'-0" FLUORESCENT LIGHTING FIXTURES SHALL BE TYPE "E" UNLESS OTHERWISE NOTED.
 2. ALL 2'-0" x 4'-0" FLUORESCENT LIGHTING FIXTURES SHALL BE TYPE "D" UNLESS OTHERWISE NOTED.
 3. LIGHTING FIXTURES IN TROPHY CASE SHALL BE GARY #4601-P COMPLETE WITH 40W C.W. S.S. LAMP AND H.P.F. BALLASTS FOR EXACT LOCATION OF LIGHTING FIXTURES AND REMOTELY MOUNTED BALLASTS IN TROPHY CASE SEE ARCH. DWG. # 2185-508

DATE	NO.	REV.	DESCRIPTION	DRAWN BY
10/10/67	1		FOR TENDER	
11/10/67	2		FOR APPROVAL	
12/10/67	3		GENERAL REVISIONS	
1/10/68	4		ISSUED FOR CONSTRUCTION	
2/10/68	5		REVISED AS PER ARCHITECTURAL CHANGES	
3/10/68	6		TROPHY CASE LIGHTING ADDED	
4/10/68	7		LIGHTING IN ROOMS "A-303 AND "A-308 REVISED	
5/10/68	8		AS BUILT	

ISSUE OR REVISION

METROPOLITAN CORPORATION OF GREATER WINNIPEG
 STREETS AND TRANSIT DIVISION

TRANSIT STORAGE AND SHOP FACILITIES

OFFICE BUILDING PLANS - LIGHTING

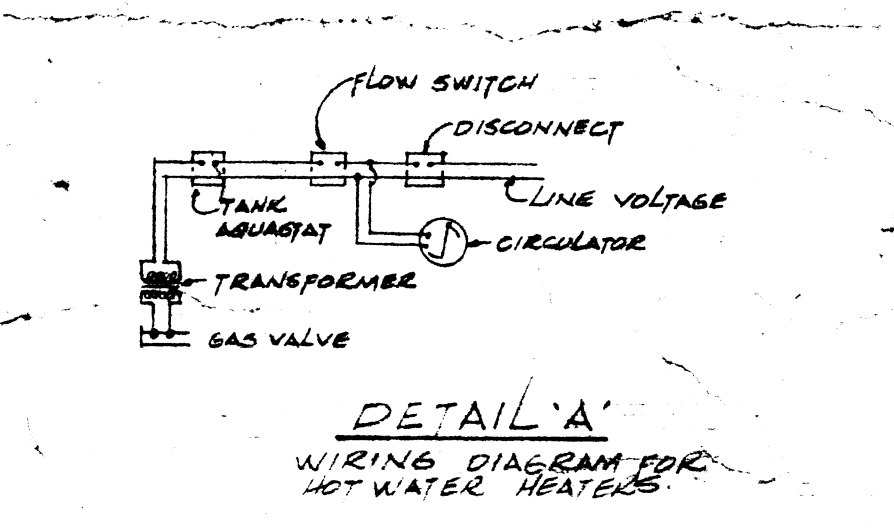
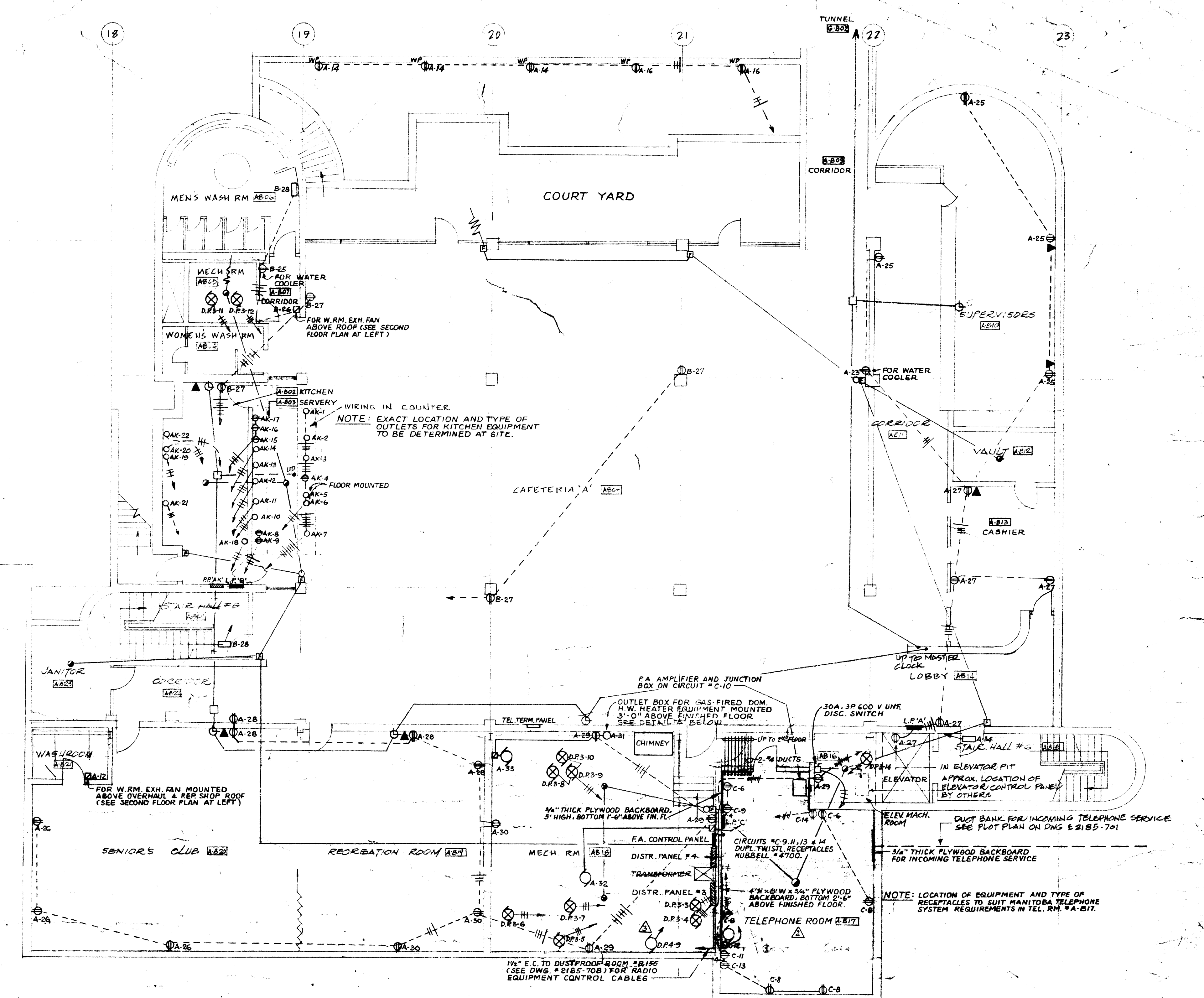
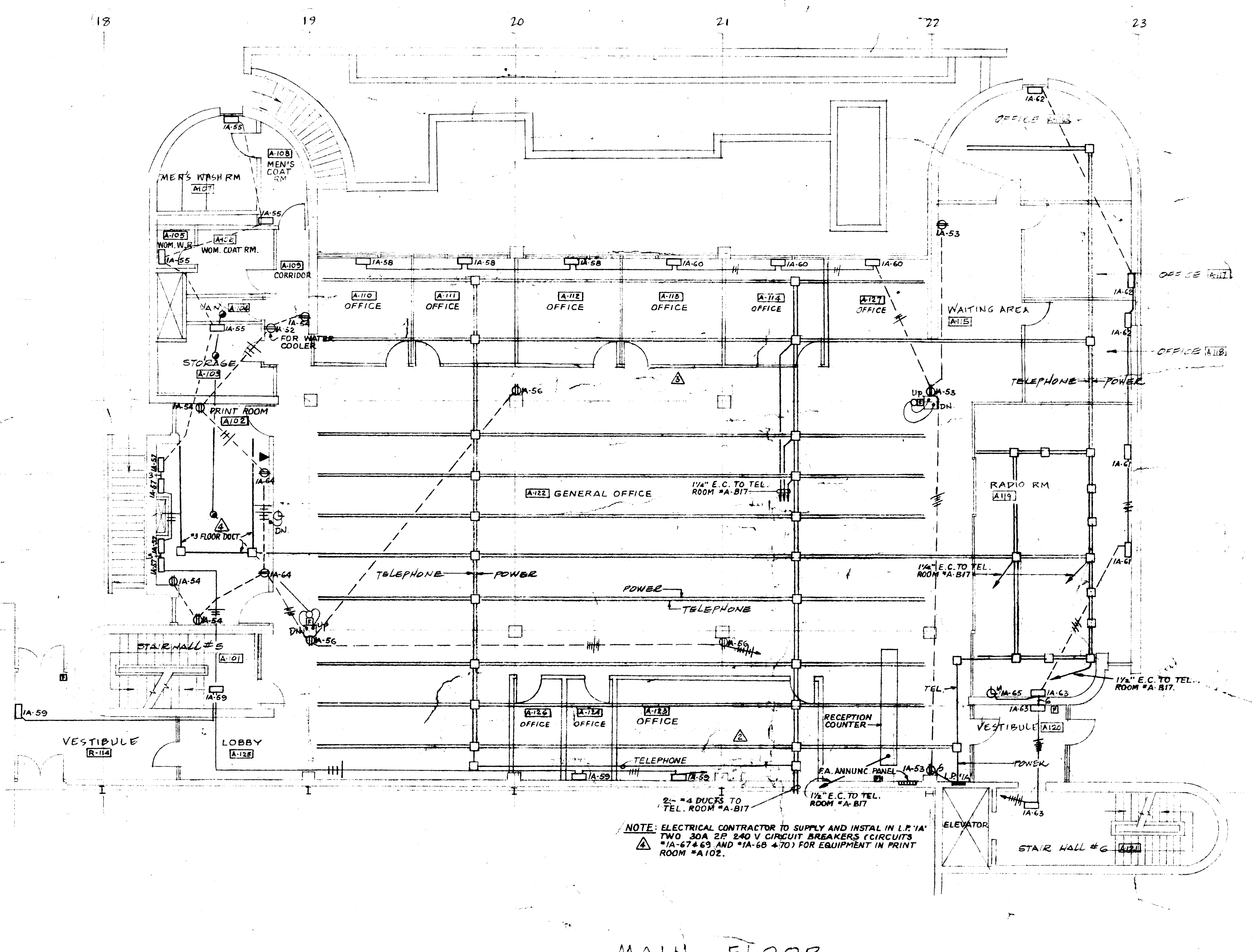
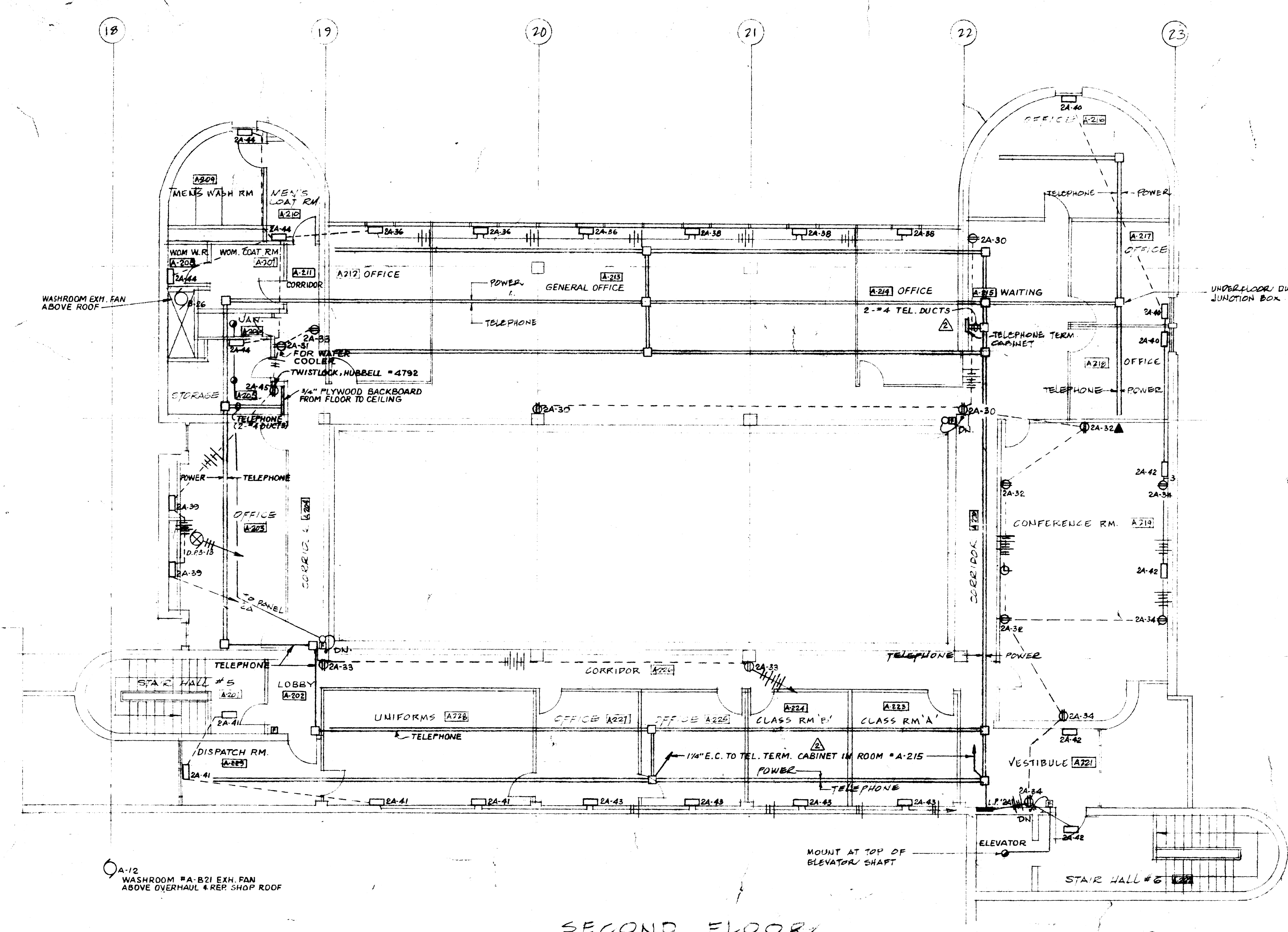
CONSULTING PROFESSIONAL ENGINEERS
 A. D. MARGISON AND ASSOCIATES LIMITED
 1155 LESLIE STREET, DON MILLS, ONTARIO

ARCHITECTS
 Blankinship Coop Gilmer Hanna
 10 DONALD STREET, WINNIPEG, MANITOBA

APPROVED: *[Signature]* DATE: 21 JULY 1967
 CHECKED: *[Signature]* SCALE: 1/8" = 1'-0"
 FILE NO.: 2185-709
 SHEET NO.: ELECTRICAL

LICENSED TO PRACTICE
 IN THE
 PROVINCE OF MANITOBA
 My Licence Expires: 30 Jan. 1968

421 OSBORNE ST. SHOP FACILITIES
2185-710
OFFICE BUILDING PLANS -
POWER & SYSTEMS



NOTES:
1. ALL UNDERFLOOR DUCTS SHALL BE #4 UNLESS OTHERWISE NOTED.
UNDERFLOOR DUCT JUNCTION BOXES TO SUIT DUCT REQUIREMENTS.

DATE	REV.	DESCRIPTION	DRAWN BY
NOV 6 69	1	25 BUILT	
APR 7 69	7	#3 UNDERFLOOR DUCTS AND JUNCTION BOXES ADDED IN RM. #A102.	
MAY 1 68	6	REVISED AS PER ARCHITECTURAL CHANGES, SUMP PUMP ADDED IN RM. #A-B-8.	
MAY 1 68	5	TELEPHONE SYSTEM REROUTING AND TEL. RM. #A-BIT REVISED AS REQUIRED BY M.T.S.	
MAY 1 68	4	ISSUED FOR CONSTRUCTION	
MAY 1 68	3	GENERAL REVISIONS	
MAY 1 68	2	FOR TENDER	
NOV 1 67	1	FOR APPROVAL	

ISSUE OR REVISION

METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

TRANSIT STORAGE AND SHOP FACILITIES

OFFICE BUILDING PLANS - POWER & SYSTEMS

CONSULTING PROFESSIONAL ENGINEERS
A. D. MARGISON AND ASSOCIATES LIMITED
1155 LEXIE STREET, DON MILLS, ONTARIO

ARCHITECTS
Winkler Ross + Blankstein
10 DONALD STREET, WINNIPEG, MANITOBA

APPROVED: *[Signature]* DATE: 21 JULY 1967
CHECKED: LOU SCALE: 1/8" = 1'-0"
FILE NO.: 2185-710
SHEET NO.: ELECTRICAL

LICENSED TO PRACTICE
IN THE
PROVINCE OF MANITOBA
My Licence Expires 10 Jan. 1968

PP 'AA' (IN CARPENTERS SHOP)
120/208V, 3PH, 4W.

1	20A 3P 'EA'	SPACE
2	30A 3P 'EA'	SHAPER
3	40A 3P 'EA'	SHIP PLANER
4	50A 3P 'EA'	DEWALT SAW
5	60A 3P 'EA'	HOT WATER HEATER
6	70A 3P 'EA'	JOINTER
7	80A 3P 'EA'	TABLE SAW
8	90A 3P 'EA'	PLUG
9	100A 3P 'EA'	JIG SAW
10	110A 3P 'EA'	SPACE
11	120A 3P 'EA'	BAND SAW
12	130A 3P 'EA'	COQ-A-VAC SAW
13	3P 'EA'	SPACE
14	3P 'EA'	SPACE

PP 'BB' (IN WELDING SHOP)
120/208V, 3PH, 4W.

1	100A 3P 'EA'	SPACE
2	20A 3P 'EA'	SPACE
3	30A 3P 'EA'	SPACE
4	40A 3P 'EA'	SPACE
5	50A 3P 'EA'	SPACE
6	60A 3P 'EA'	SPACE
7	70A 3P 'EA'	SPACE
8	80A 3P 'EA'	SPACE
9	90A 3P 'EA'	SPACE
10	100A 3P 'EA'	SPACE
11	110A 3P 'EA'	SPACE
12	120A 3P 'EA'	SPACE
13	130A 3P 'EA'	SPACE
14	140A 3P 'EA'	SPACE
15	150A 3P 'EA'	SPACE
16	160A 3P 'EA'	SPACE

PP 'CC' (IN SHEET METAL SHOP)
120/208V, 3PH, 4W.

1	15A 3P 'EA'	GRINDER
2	20A 3P 'EA'	SPOT WELDER
3	30A 3P 'EA'	VONSTER
4	40A 3P 'EA'	WATER HEATER
5	50A 3P 'EA'	SPACE
6	60A 3P 'EA'	SPACE
7	70A 3P 'EA'	1/4 HP METAL ROLLER
8	80A 3P 'EA'	DEAD MACHINE
9	90A 3P 'EA'	SPACE
10	100A 3P 'EA'	SPACE
11	110A 3P 'EA'	GRINDER
12	120A 3P 'EA'	SPACE
13	130A 3P 'EA'	GRINDER
14	140A 3P 'EA'	GRINDER
15	150A 3P 'EA'	SPOT WELDER
16	160A 3P 'EA'	SPACE

PP 'DD' (IN STORAGE BAY #1)
550V, 3PH, 3W.

1	15A 3P 'FA'	30A 3PH, 600V UNF. DISC. SWITCHES
2	15A 3P 'FA'	1/2 HP O/H DOOR MOTOR
3	15A 3P 'FA'	"
4	15A 3P 'FA'	"
5	15A 3P 'FA'	"
6	15A 3P 'FA'	"
7	15A 3P 'FA'	"
8	15A 3P 'FA'	"
9	15A 3P 'FA'	"
10	15A 3P 'FA'	"
11	15A 3P 'FA'	"
12	15A 3P 'FA'	"
13	15A 3P 'FA'	"
14	15A 3P 'FA'	"
15	15A 3P 'FA'	"
16	15A 3P 'FA'	"
17	15A 3P 'FA'	"
18	15A 3P 'FA'	"
19	15A 3P 'FA'	"
20	15A 3P 'FA'	"
21	15A 3P 'FA'	"
22	15A 3P 'FA'	"
23	15A 3P 'FA'	"

PP 'EE' (IN AISLE OPPOSITE RADIATOR ROOM)
120/208V, 3PH, 4W.

1	90A 3P 'EA'	MICRODIPING MACHINE
2	15A 1P 'EA'	PLUG
3	2 1/2 12-1/2" C	
4	20A 1P 'EA'	PLUG
5	15A 1P 'EA'	PLUG
6	2 1/2 12-1/2" C	
7	20A 1P 'EA'	PLUG
8	12 1/2 12-1/2" C	
9	5A 1P 'EA'	PLUG
10	2 1/2 12-1/2" C	
11	20A 1P 'EA'	SEWING MACHINE
12	15A 1P 'EA'	SEWING MACHINE
13	2 1/2 12-1/2" C	
14	20A 1P 'EA'	BAND SAW
15	12 1/2 12-1/2" C	
16	20A 2P 'EA'	TIRE CHANGER
17	2 1/2 12-1/2" C	
18	10A 1P 'EA'	SEWING MACHINE
19	2 1/2 12-1/2" C	
20	1P 'EA'	SPACE
21	15A 1P 'EA'	SEWING MACHINE
22		
23	2P 'EA'	SPACE
24		
25	15A 1P 'EA'	JIG SAW
26	1P 'EA'	SPACE
27		
28	30A 2P 'EA'	SAVY FILE

550V, 3PH, 3W, (IN STORAGE BAY #3)

GARAGE ADDITION.

550V, 3 PH, 3 ~~W~~ (IN OVERHAUL & REPAIR SHOP)

MOTOR CONTROL CENTRE 'VV'

PP 'UU'
550V 3PH, 3W. (IN OVERHAUL & REPAIR SHOP)

GARAGE ADDITION
IN CONTRACT

550V, 3PH, 3W. (IN ELECTRICAL ROOM "B-129")

DISTRIBUTION PANEL #2 (IN MAIN 600V SWITCHBOARD)
550V 3PH 3W (IN ELECTRICAL ROOM #G-102)

_____ / _____

550 V. 3 PH., 3 W. (IN MECH. RM. *A-B18)

DISTRIBUTION PANEL #4
120/208 V. 3PH. 4 W. C/N MECH. RM. #4-BIB

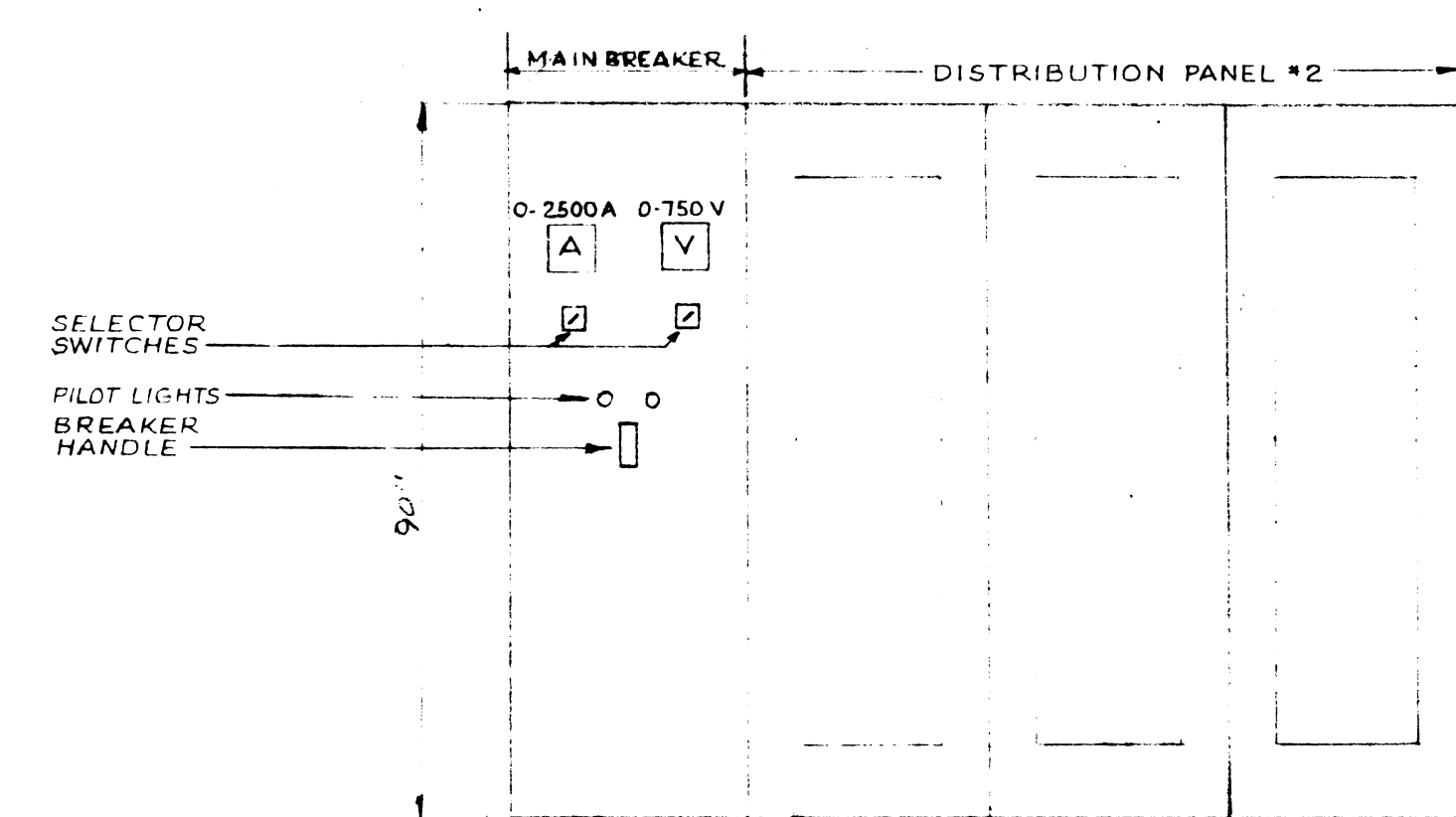
120/208 V, 3 PH., 4 W. (IN KITCHEN "A-B02")

1	15A	1P	'EA'	CASH REGISTER
2	15A	1P	'EA'	1/8HP DRINK DISPENSER
3	20A	1P	'EA'	1.5KW OFFICE WARMER
4	20A	1P	'EA'	1.6KW CUP LOWERATOR
5	24A	1P	'EA'	2KW HOT FOOD UNIT
6	24A	1P	'EA'	2KW " " " "
7	15A	1P	'EA'	1/2HP COOL PAINT COMP
8	15A	1P	'EA'	1/8HP SALAD " " " "
9	15A	1P	'EA'	1/6HP " " " " BLOWER
10	15A	3P	'EA'	2.5 KW TOASTER
11	20A	3P	'EA'	K KW GRIDDLE
12	40A	3P	'EA'	12 KW FRYER
13	30A	3P	'EA'	5.2KW HOT PLATE
14	30A	3P	'EA'	6 KW COFFEE MAKER
15	15A	1P	'EA'	1/4HP MILK MIXER
16	15A	1P	'EA'	1/6HP MILK DISPENSER
17	15A	1P	'EA'	1/4HP ICE CREAM
18	20A	3P	'EA'	21.5 KW RANGE
19	30A	3P	'EA'	1HP DISHWASHER
20	15A	1P	'EA'	5KN WETTER
21	30A	3P	'EA'	9KW BOOSTER
22	15A	3P	'EA'	1/2HP WASTE DISPOSER
23-30	30A	3P	'EA'	WASTE

FRONT ELEVATION
MOTOR CONTROL CENTRE 'MIM'
(N. T. S.)

FRONT ELEVATION
M.C.C. 'TT'
(N. T. S.)

FRONT ELEV.
M.C.C.'VV'
(N.T.S.)



NUMBER TEN ARCHITECTURAL GROUP

ARCHITECTS & ENGINEERS 1000 SHEPPARD AVENUE EAST, SUITE 200, TORONTO, ONTARIO M2X 1K7

APPROVED

A. D. MORGISON ASSOCIATES LTD.
CONSULTING PROFESSIONAL ENGINEERS
SUITE 808 - 1850 YONGE STREET
TORONTO, ONTARIO M4T 1M6

09/1/77	12	8	CALCULATE ADDITION - FOR TENDER
09/2/78	11	AS BUILT	
07/6/79	10	△	CIRCUIT *DP3-13 MOTOR HP REVISID
MARCH/85	9	△	CIRCUITS *U1-20 AND *U1-28 REVISED
1/8/3/85	8	7	1/4 HP EXHAUST FAN ADDED ON CIRCUIT *UU-6
12/1/86	7	△	CIRCUIT * UU-28 ADDED.
MAY/86	6	△	MAKE-UP AIR UNITS ON CIRCUITS *UU-6,7 & 8 DELETED
5	5	△	MOTOR CONTROL CENTRE *VU REVISED, CIRCUIT *DP6-9 ADDED
4	4	△	ISSUED FOR CONSTRUCTION
B	1	△	GENERAL REVISIONS
2	2	△	FOR TENDER.
1	1	0	FOR APPROVAL

DATE	ISSUE NO.	REV NO.	DESCRIPTION
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ISSUE OR REVISION

METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION

TRANSIT STORAGE AND SHOP FACILITIES

PANEL SCHEDULES II

CONSULTING PROFESSIONAL ENGINEERS

A. D. MORGISON AND ASSOCIATES LIMITED

105 KILBY STREET - DON MILLS, ONTARIO

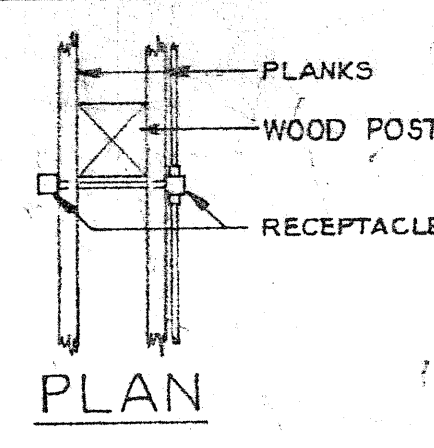
APPROVED

ARCHITECTS

Waisman Ross & Blankstein Coop. Gilman

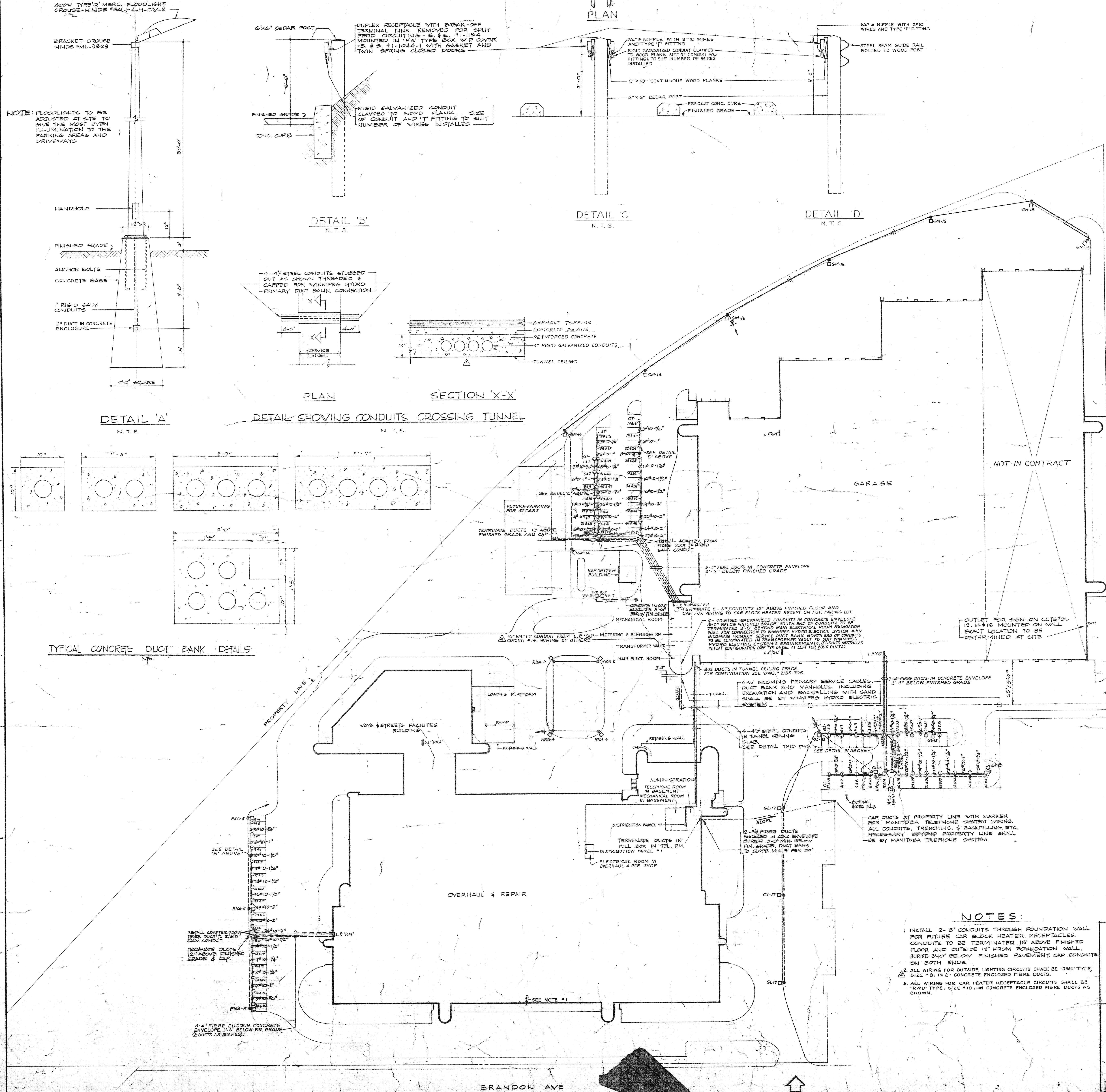
35 DONALD STREET, WINNIPEG, MANITOBA

SHEET 2 - MOTOR OF STREETS AND TRANSIT	NO. OF PAGES	1	DATE	21 JULY 1987
	CHECKED	L. G. W.	SCALE	N.T.S.
	FILE NO.		DRAWING NO.	2185-713
	POST NO.			



LEGEND

- FLUORESCENT LIGHTING FIXTURE, CEILING MOUNTED, TYPE 'A' CONNECTED TO LIGHTING PANEL 'RS', CIRCUIT #7
- FLUORESCENT LIGHTING FIXTURE, USED AS NIGHT LIGHT
- FLUORESCENT LIGHTING FIXTURE, BRACKET TYPE
- OUTLET BOX
- INCANDESCENT OR MERCURY VAPOUR LIGHTING FIXTURE, BRACKET TYPE
- EXIT LIGHT
- SWAY SWITCH
- SWITCH WITH PILOT LIGHT
- SINGLE POLE SWITCH
- DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP
- DUPLEX RECEPTACLE, EXPL. PROOF, 20 A., 125 V., CROUSE HINDS *CPS182-212
- WELDING RECEPTACLE 100A., 5PH. 4W., 208V TO MATCH EQUIP.
- DUPLEX RECEPTACLE, 208 V., 15 A. HUBBELL *5662
- CLOCK MOUNTED 12" ABOVE FINISHED FLOOR IN GARAGE, OVERHAUL & REPAIR SHOP AND TQ IN OFFICE BUILDING UNLESS OTHERWISE NOTED
- FLOOR RECEPTACLE, HUBBELL *5261 IN NEPCO 800 BOX
- SHAVING OUTLET, MOUNTED 3'-6" ABOVE FINISHED FLOOR
- TELEPHONE WALL MOUNTED OUTLET
- PA MICROPHONE
- PA HORN SINGLE PROTECTION MOUNTED APPROX. 15'-0" ABOVE FINISHED FLOOR
- PA SPEAKER CEILING MOUNTED
- PA HORN DOUBLE PROTECTION MOUNTED APPROX. 15'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED
- FIRE ALARM MANUAL STATION
- FIRE ALARM BELL 10" DIA. OR AS NOTED
- FIRE ALARM HORN DOUBLE PROTECTION 130°F COMBINATION TYPE FA DETECTOR 180°F FIBER TYPE FA DETECTOR
- DISCONNECT SWITCH
- MANUAL STARTER
- MAGNETIC STARTER
- COMBINATION MAGNETIC STARTER
- SINGLE PHASE MOTOR
- 3 PHASE MOTOR
- REMOTE PUSHBUTTON
- THERMOSTAT
- EMERGENCY LIGHTING UNIT MOUNTED 7'-6" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED
- LIGHTING PANEL
- POWER PANEL
- UNDER FLOOR DUCT
- CONDUIT STUB-UP
- SPRINKLER SYSTEM FLOW SWITCH SUPPLIED BY OTHERS
- SPRINKLER SYSTEM GATE VALVE SUPERVISORY SWITCH SUPPLIED BY OTHERS
- WEATHER PROOF RECEPTABLE FOR CAR BLOCK HEATERS
- ELECTRIC HEATER 208V 1PH. SUPPLIED AND INSTALLED BY OTHERS
- ELECTRIC HEATER 208V 3PH. SUPPLIED AND INSTALLED BY OTHERS
- EXPLOSION PROOF
- EXPLOSION PROOF
- 30" HIGH STANDARD WITH ONE 400W. TYPE 'QL' MERCURY VAPOR LAMP
- INTERCOM. SYSTEM MICROPHONE
- INTERCOM. SYSTEM SPEAKER TALK-BACK STATION (MHS-6) & ASSOCIATED TRUNKING (MHS-6)
- OUTLET BOX FOR GAS-FIRED INFRARED HEATER MOUNTED ADJACENT TO HEATER, WIRING & CONNECTION TO HEATERS BY OTHERS
- OUTLET BOX FOR 208V CONNECTION TO CARBON MONOXIDE ANALYZER MTD. 6'-0" ABOVE FINISHED FLOOR
- OUTLET BOX FOR 120V CONNECTION TO CARBON MONOXIDE MONITOR MTD. 6'-0" ABOVE FINISHED FLOOR
- FAN COIL UNIT COMPLETE WITH TERMINAL JUNCTION BOX SUPPLIED & INSTALLED BY OTHERS ELECTRICAL CONTRACTOR SHALL TERMINATE & CONNECT WIRING IN JUNCTION BOX
- TERMINATE NUMBER OF WIRES IN CONDUIT, EXPOSED IN UNFINISHED AREAS, OR CONCEALED IN WALL OR CEILING SPACE ABOVE IN FINISHED AREAS, HEADS AND ARROWS INDICATE LONG RUN TO RESP. PANEL, UNMARKED RUNS INDICATE 2 WIRES IN CONDUIT
- TERMINATE CONDUIT RUN IN SLAB
- FIRE ALARM TRUBLE STATION



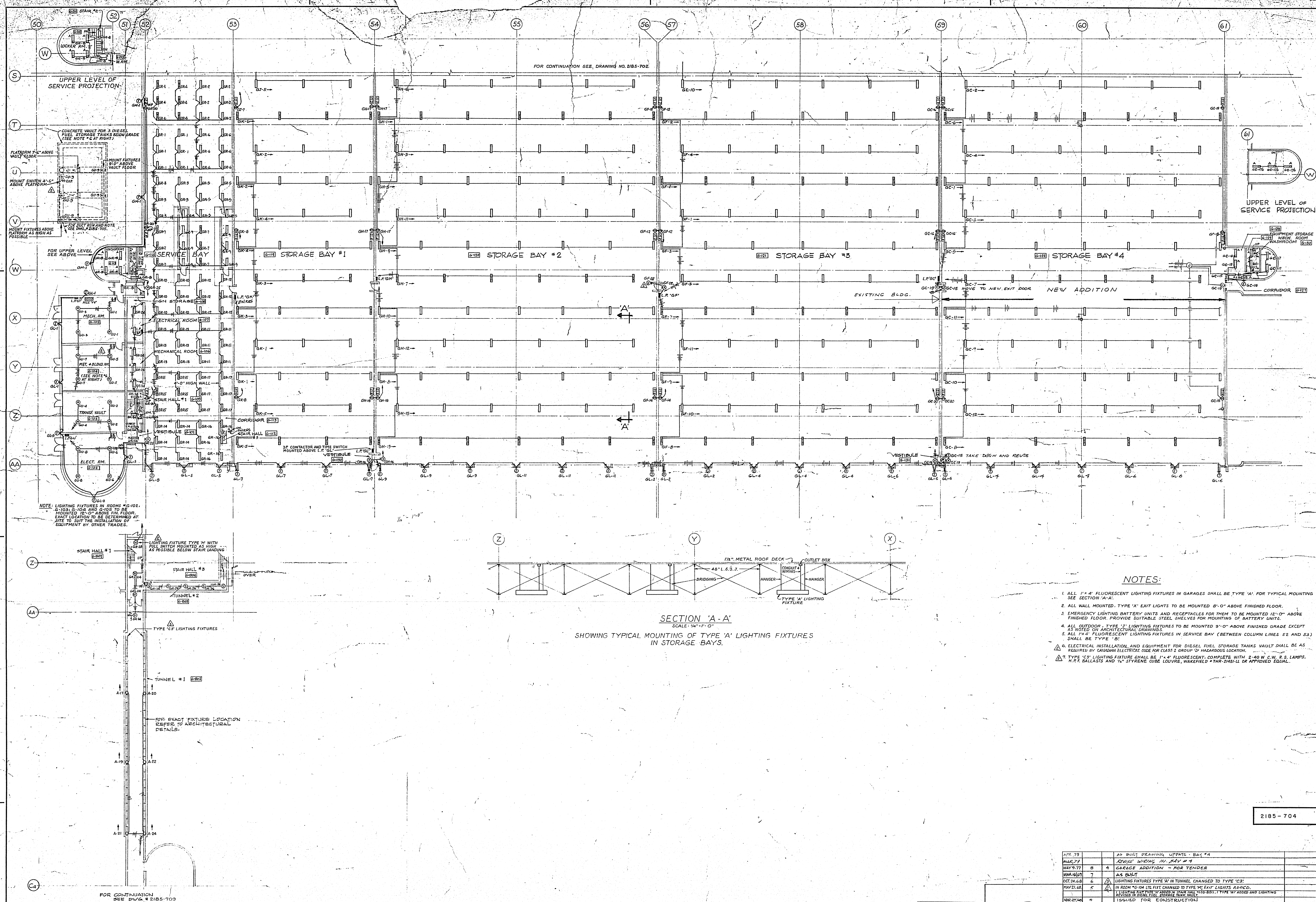
- ## NOTES:
- INSTALL 2" - 3" CONDUITS THROUGH FOUNDATION WALL FOR FUTURE CAR BLOCK HEATER RECEPTABLES. CONDUITS TO BE TERMINATED 18" ABOVE FINISHED FLOOR AND OUTSIDE 12" FROM FOUNDATION WALL, BURIED 3'-0" BELOW FINISHED PAVEMENT. CAP CONDUITS ON BOTH ENDS.
 - ALL WIRING FOR OUTSIDE LIGHTING CIRCUITS SHALL BE 'RWU' TYPE, SIZE #10, IN 2" CONCRETE ENCLOSED FIBRE DUCTS.
 - ALL WIRING FOR CAR HEATER RECEPTABLE CIRCUITS SHALL BE 'RWU' TYPE, SIZE #10, IN 2" CONCRETE ENCLOSED FIBRE DUCTS AS SHOWN.

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	NOV. 25, 68	AS BUILT	
2	NOV. 25, 68	ADDED 4" EMPTY CONDUIT FROM L.P. TO VAPORIZER BUILDING.	
3	NOV. 27, 68	SECTION 11-12 REVISED	
4	NOV. 27, 68	FIBRE DUCTS FOR OUTSIDE LIGHTING CHANGED TO 2"	
5	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
6	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
7	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
8	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
9	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
10	NOV. 27, 68	ISSUED FOR CONSTRUCTION	

ISSUE OR REVISION			
NO.	DATE	DESCRIPTION	BY
1	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
2	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
3	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
4	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
5	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
6	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
7	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
8	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
9	NOV. 27, 68	ISSUED FOR CONSTRUCTION	
10	NOV. 27, 68	ISSUED FOR CONSTRUCTION	

METROPOLITAN CORPORATION OF GREATER WINNIPEG			
STREETS AND TRANSIT DIVISION			
TRANSIT STORAGE AND SHOP FACILITIES			
SITE PLAN & DETAILS			
CONSULTING PROFESSIONAL ENGINEERS		ARCHITECTS	
A. D. HARRISON AND ASSOCIATES LIMITED		W. J. HARRISON & ASSOCIATES	
1155 LESLIE STREET, DON MILLS, ONTARIO		10 DONALD STREET, WINNIPEG, MANITOBA	
APPROVED	DATE	BY	DATE
	NOV. 27, 68		NOV. 27, 68
DESIGNED	DATE	BY	DATE
	NOV. 27, 68		NOV. 27, 68
CHECKED	DATE	BY	DATE
	NOV. 27, 68		NOV. 27, 68
FILED	DATE	BY	DATE
	NOV. 27, 68		NOV. 27, 68
2185-701		ELECTRICAL	

421 DORRANCE ST.
TRANSIT STORAGE
SHEET NO. 2185-704
PART FLOOR PLAN - GARAGE SOUTH -
LIGHTING



PLAN OF TUNNEL
SCALE 1/4" = 1'-0"

SECTION 'A-A'
SCALE 1/4" = 1'-0"
SHOWING TYPICAL MOUNTING OF TYPE 'A' LIGHTING FIXTURES
IN STORAGE BAYS.

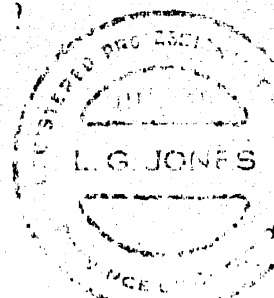
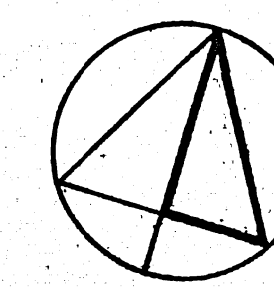
NOTES:

1. ALL 1" x 4" FLUORESCENT LIGHTING FIXTURES IN GARAGES SHALL BE TYPE 'A' FOR TYPICAL MOUNTING SEE SECTION 'A-A'.
2. ALL WALL MOUNTED, TYPE 'X' EXIT LIGHTS TO BE MOUNTED 8'-0" ABOVE FINISHED FLOOR.
3. EMERGENCY LIGHTING BATTERY UNITS AND RECEPTACLES FOR THEM TO BE MOUNTED 12'-0" ABOVE FINISHED FLOOR. PROVIDE SUITABLE STEEL SHELVEYS FOR MOUNTING OF BATTERY UNITS.
4. ALL OUTDOOR, TYPE 'T' LIGHTING FIXTURES TO BE MOUNTED 9'-0" ABOVE FINISHED GRADE EXCEPT AS NOTED ON ARCHITECTURAL DRAWINGS.
5. ALL 1" x 4" FLUORESCENT LIGHTING FIXTURES IN SERVICE BAY (BETWEEN COLUMN LINES 52 AND 53) SHALL BE TYPE 'B'.
6. ELECTRICAL INSTALLATION AND EQUIPMENT FOR DIESEL FUEL STORAGE TANKS VAULT SHALL BE AS REQUIRED BY CANADIAN ELECTRICAL CODE FOR CLASS I GROUP 'D' HAZARDOUS LOCATION.
7. TYPE 'C' LIGHTING FIXTURE SHALL BE 1" x 4" FLUORESCENT, COMPLETE WITH 2-40 W. C.W. R. S. LAMPS, N.P.E. BALLASTS AND 1/4" STYRENE GUM LOUVER, WAKEFIELD #TR-204-11 OR APPROVED EQUIV.

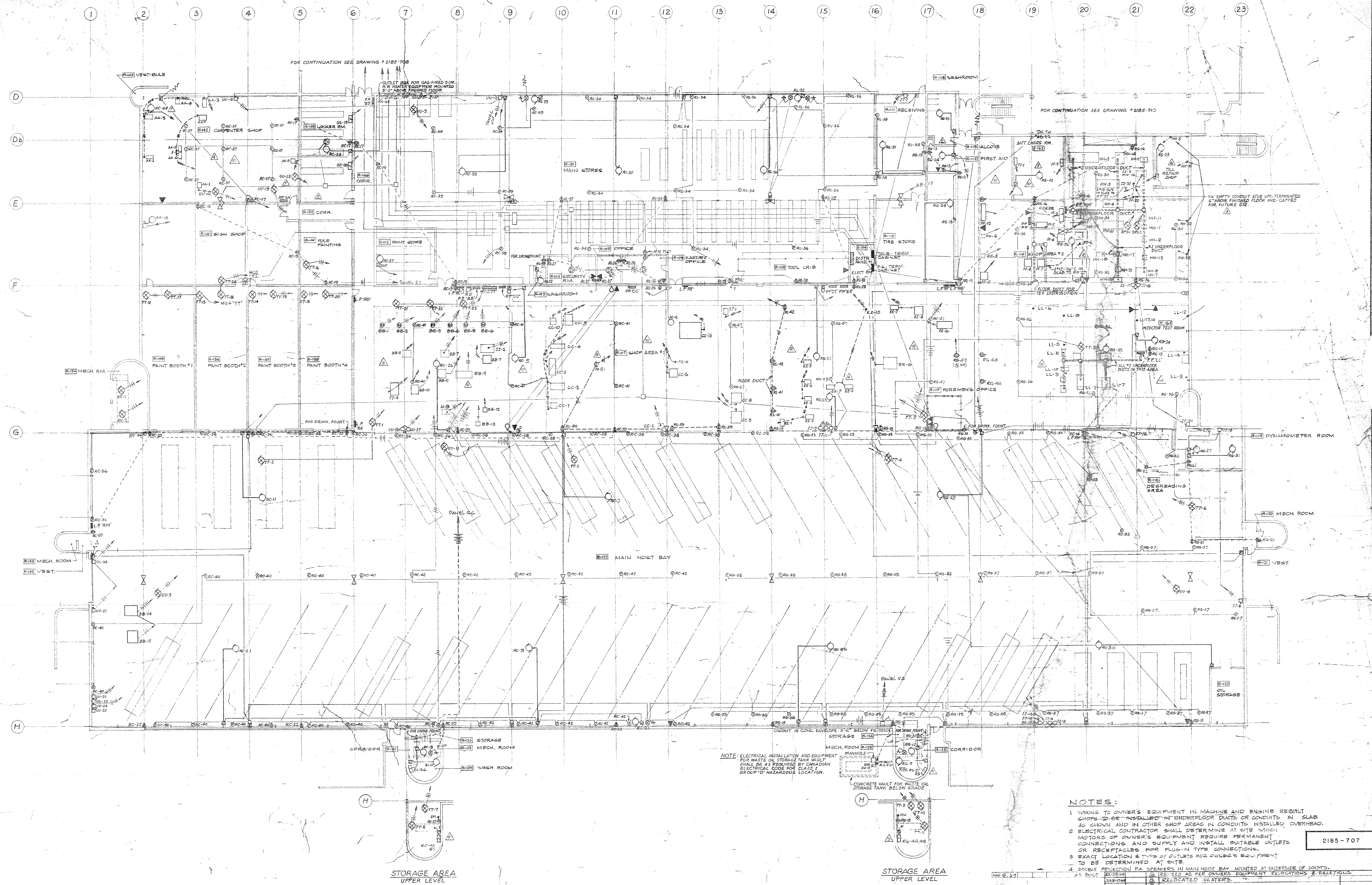
APPROVED
MAY 1977

A. D. MARGISON ASSOCIATES LTD.
CONSULTING PROFESSIONAL ENGINEERS
SUITE 300-1500 YONGE STREET
TORONTO, ONTARIO M4T 1X2

MANITOBA ENGINEERING
NUMBER TEN ARCHITECTURAL GROUP
ARCHITECTS PLANNERS (INCORPORATED) MANITOBA LIMITED



DATE	ISSUE	REV.	DESCRIPTION	DRAWN BY
APR 77	1		AS BUILT DRAWING, UPGRADE - BAY #4	
MAY 77	2		REVISED WORK IN BAY #4	
MAY 77	3		CHARGE ADDITION - FOR TENDER	
MAY 77	4		AS BUILT	
OCT 76	5		LIGHTING FIXTURES TYPE 'X' IN TUNNEL CHANGED TO TYPE 'C'	
MAY 77	6		IN ROOM #104 U/L FRT CHANGED TO TYPE 'M' EXIT LIGHTS AS SHOWN	
MAY 77	7		1-15' HALL FOR CONSTRUCTION	
MAY 77	8		GENERAL REVISIONS	
MAY 77	9		FOR TENDER	
MAY 77	10		FOR APPROVAL	
DATE	ISSUE	REV.	DESCRIPTION	DRAWN BY
			ISSUE OR REVISION	
			METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION	
			TRANSIT STORAGE AND SHOP FACILITIES	
			PART FLOOR PLAN - GARAGE SOUTH - LIGHTING	
			CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 105 LITTLE STREET, DON MILLS, ONTARIO	
			ARCHITECTS William Ross & Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA	
			APPROVED L.S. JONES	
			DATE 21 JULY 1977	
			SCALE AS SHOWN	
			DRAWING NO. 2185-704	
			ELECTRICAL	

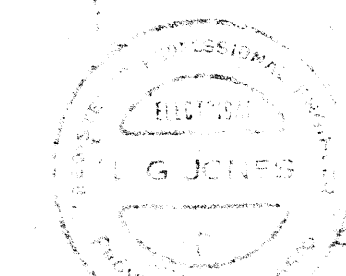
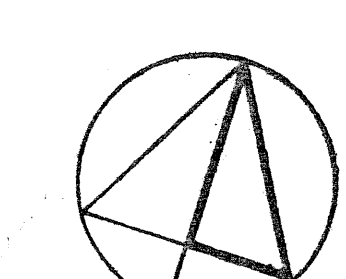


OVERHAUL AND REPAIR SHOP FLOOR PLAN SCALE 1/8" = 1'-0"

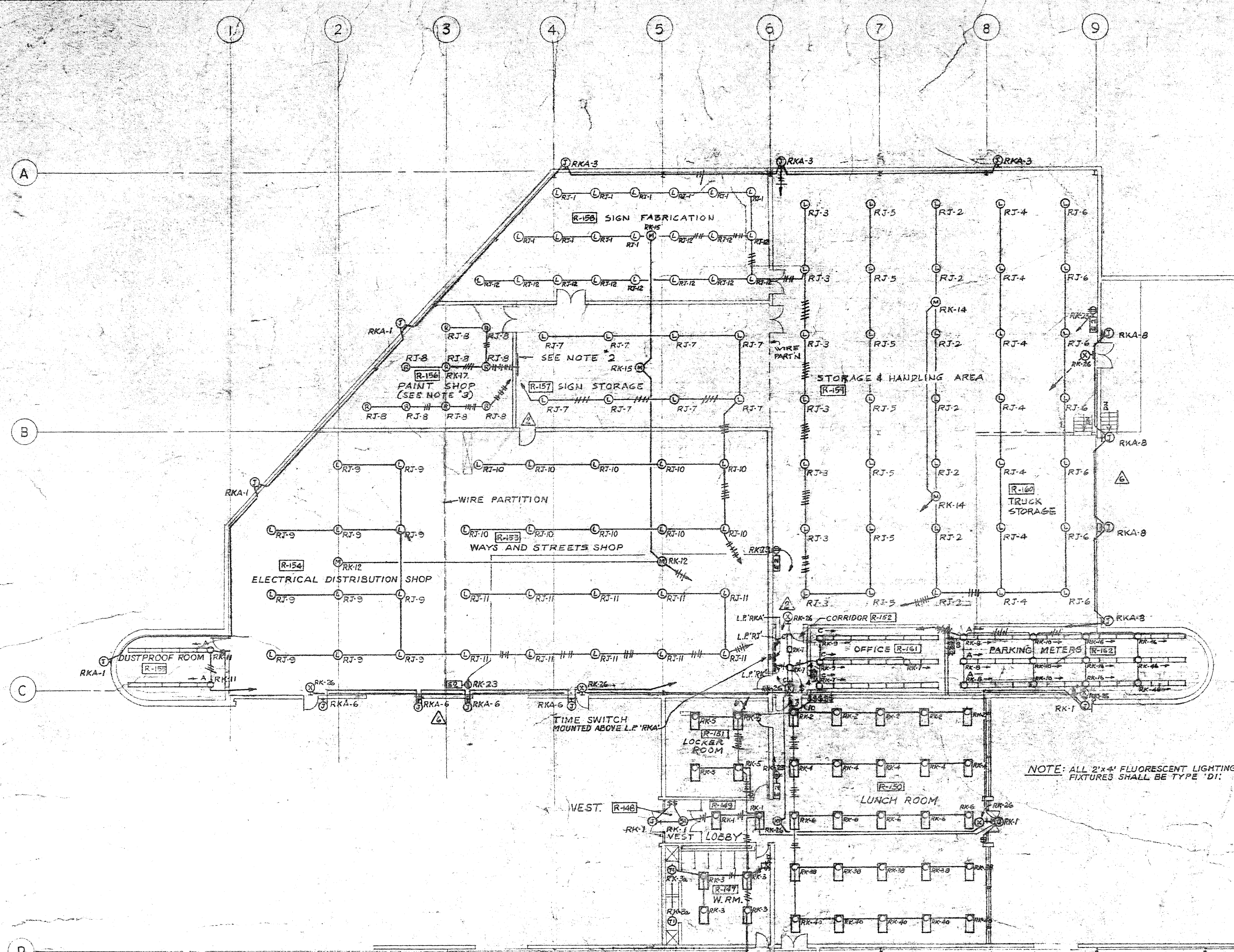
NOTES:

1. WIRING TO OWNER'S EQUIPMENT IN MACHINE AND ENGINE ROOMS SHALL BE "IN-SLAB" IN UNDERFLOOR DUCTS OR CONDUITS IN SLAB AS SHOWN AND IN OTHER SHOP AREAS IN CONDUITS INSTALLED OVERHEAD.
2. ELECTRICAL CONTRACTOR SHALL DETERMINE AT SITE WHICH MOTORS OR OWNER'S EQUIPMENT REQUIRE PERMANENT CONNECTIONS AND SUPPLY AND INSTALL SUITABLE OUTLETS OR RECEPTACLES FOR PLUG-IN TYPE CONNECTIONS.
3. EXACT LOCATION & TYPE OF OUTLETS FOR OWNER'S EQUIPMENT TO BE DETERMINED AT SITE.
4. DOUBLE PROTECTIVE RA. SPEAKERS IN MAIN HOIST BAY MOUNTED AT UNDERSIDE OF JOISTS.
5. BUILT IN RELOCATED HEATERS.

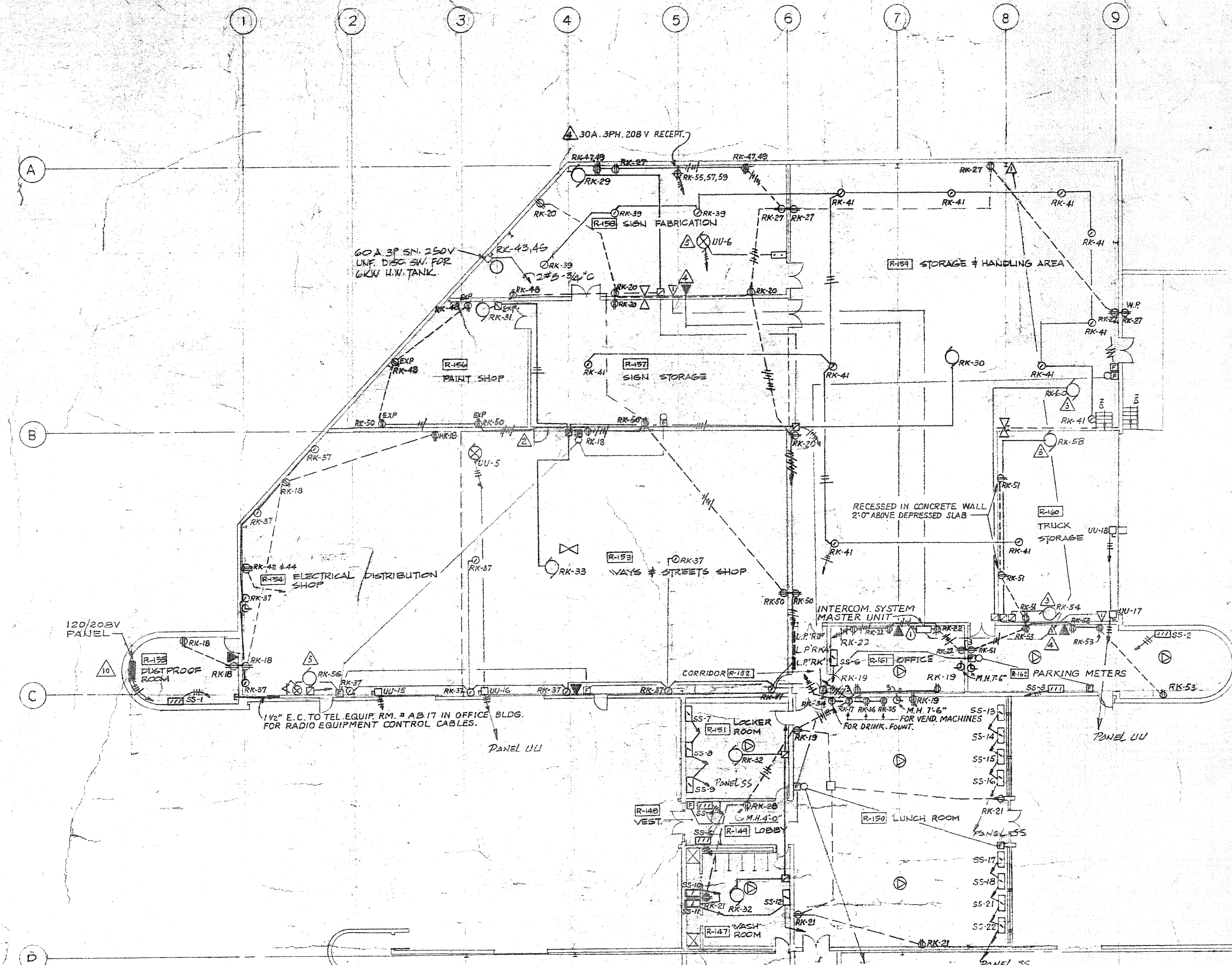
DATE	ISSUE NO.	REV.	DESCRIPTION	BY
10/10/67	1	0	FOR APPROVAL	
10/10/67	2	1	FOR TENDER	
10/10/67	3	1	GENERAL REVISIONS	
10/10/67	4	1	ISSUED FOR CONSTRUCTION	
10/10/67	5	1	REVISED AS PER ARCHITECTURAL CHANGES	
10/10/67	6	1	EMPTY CONDUIT STUBS ADDED IN RM. 4-B	
10/10/67	7	1	BATTERY CHARGING UNIT VENT DUCT ADDED	
10/10/67	8	1	LOCATION OF OWNER'S EQUIPMENT IN SHOPS REVISED	
10/10/67	9	1	RELOCATED HEATERS	
10/10/67	10	1	CIRCUITS 200-26 REVISED, CIRCUIT 200-44 ADDED	
10/10/67	11	1	TILL REP SHOP UNIT HEATER ADDED 2 INCH HEATER OUTLET ON KIT 200-45 OLEATED	
10/10/67	12	1	RELOCATED HEATERS	
10/10/67	13	1	RELOCATED HEATERS	



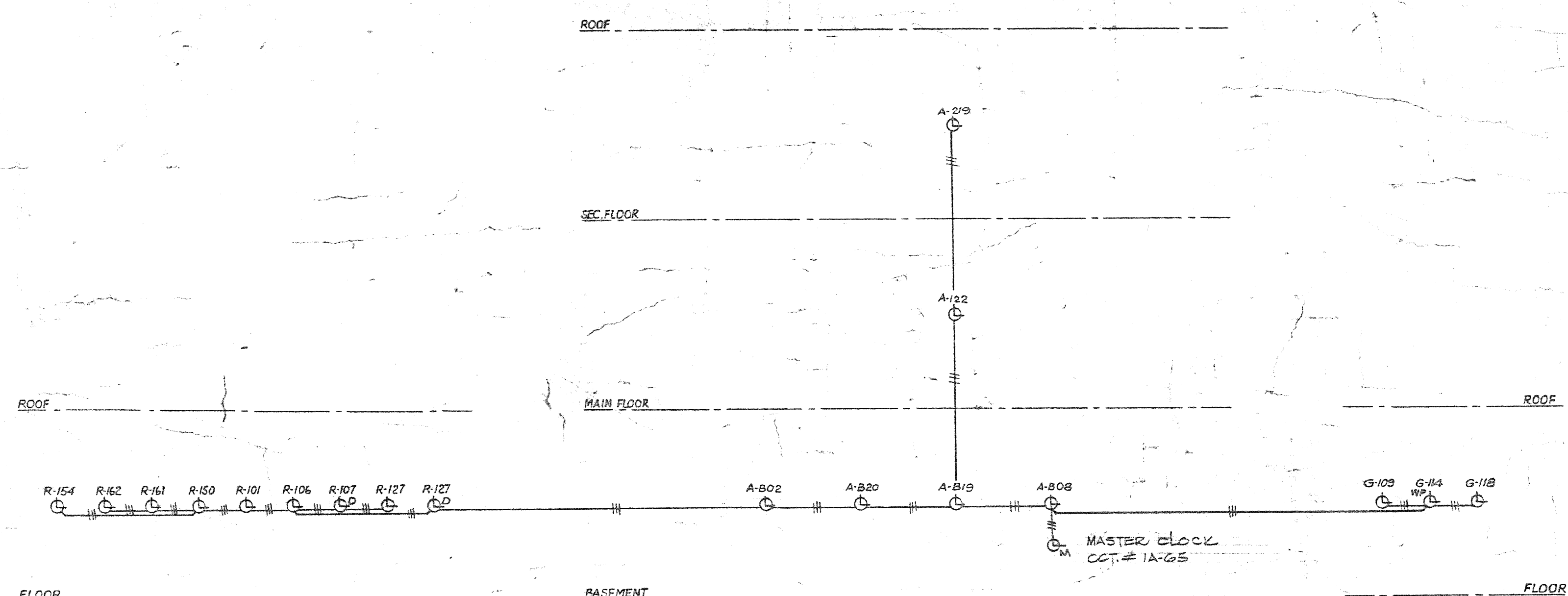
ISSUE OR REVISION			
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION			
TRANSIT STORAGE AND SHOP FACILITIES			
OVERHAUL & REPAIR SHOP FLOOR PLAN - POWER			
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 100 DUNDAS STREET, WEST, TORONTO, ONTARIO		ARCHITECTS Waisman Ross + Blankstein Corp. Giller/Hanna 100 DUNDAS STREET, WEST, TORONTO, ONTARIO	
APPROVED	DATE	ISSUED	DATE
<i>[Signature]</i>	10/10/67	<i>[Signature]</i>	10/10/67
DEPUTY DIRECTOR OF STREETS AND TRANSIT		DEPUTY DIRECTOR OF STREETS AND TRANSIT	
DRAWING NO. 2185-707		ELECTRICAL	



LIGHTING SCALE 1/16"=1'-0"



POWER SCALE 1/16"=1'-0"



OVERHAUL & REPAIR BUILDING

OFFICE BUILDING

GARAGE BUILDING

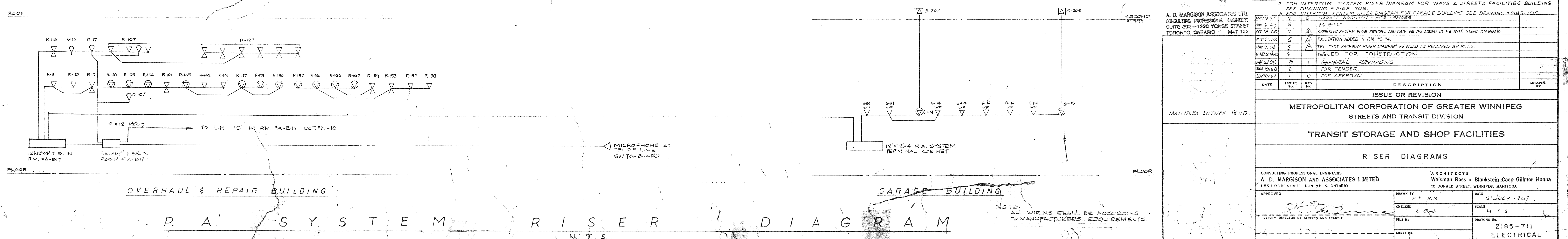
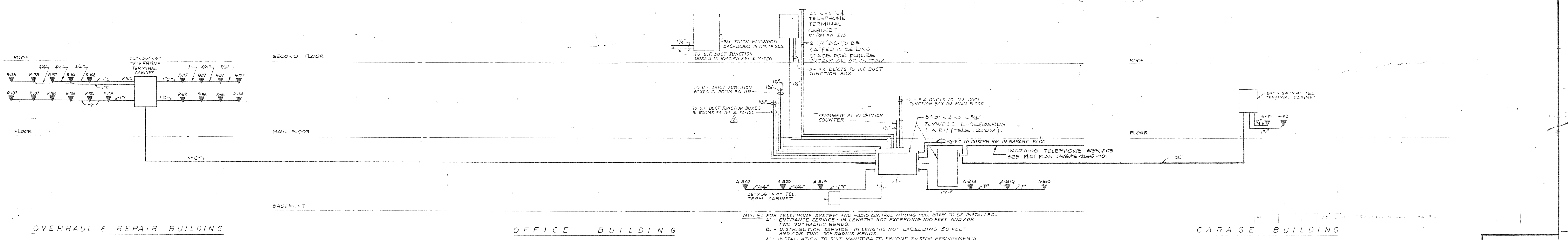
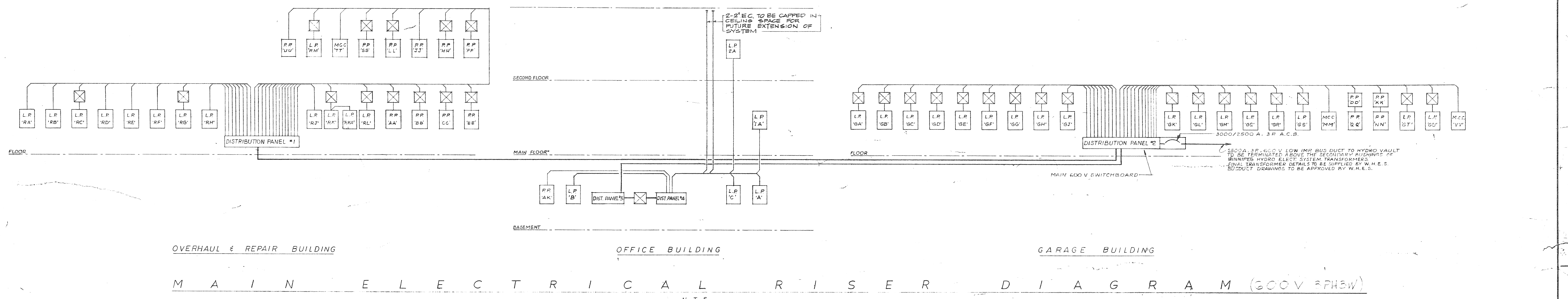
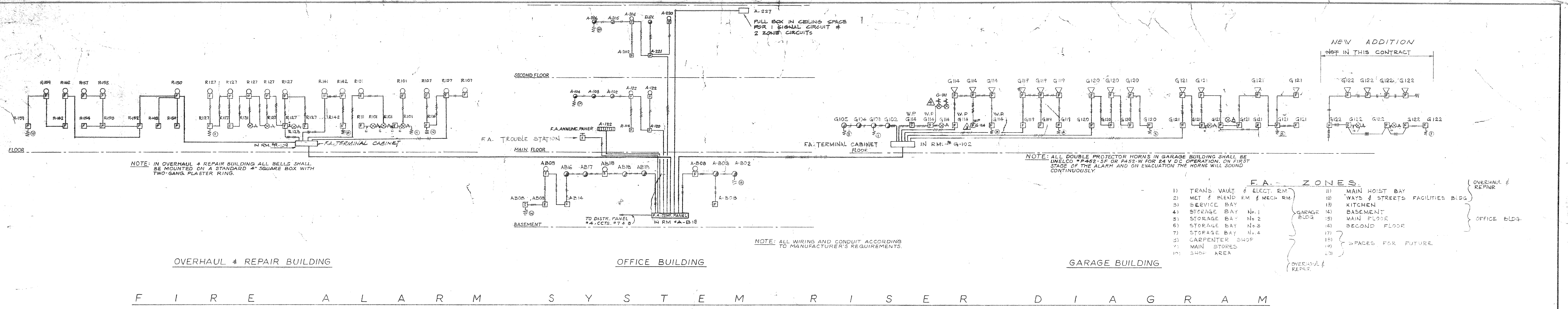
CLOCK SYSTEM RISER DIAGRAM (N.T.S.)

INTERCOM SYST. RISER DIAGRAM IN WAYS & STREETS FACIL. BLDG. (N.T.S.)

- NOTES:
1. MOUNT BOTTOM OF LIGHTING FIXTURES TYPE 'L' AND 'M' FLUSH WITH THE BOTTOM FLANGE OF BEAM.
 2. 1/8" THICK STEEL PLATE (SIZE TO SUIT) MOUNTED 8'-0" ABOVE FINISHED FLOOR FOR MOUNTING OF 4' 400 W. MERCURY VAPOR.
 3. LAMP BALLASTS 4' SINGLE LAMP BALLAST
 4. MOUNT TYPE 'R' LIGHTING FIXTURES IN PAINT SHOP ON OUTLET BOXES OR SUSPENDED CEILING.

2185-708

DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY
NOV. 6, 67	1	AS BUILT		
JUL. 10, 68	2	ADDED PANEL AS PER FIELD INSTRUCTION No. 153.		
APR. 7, 69	3	CIRCUIT NUMBERS CHANGED: *RKA-13 TO *RKA-14 AND *RKA-24 TO *RKA-25, UNDES. DELETED.		
FEB. 26, 69	4	ADDED DISCS PRESS. PUMP IN RM 1154 AND EXH. FAN IN RM 1155 WITH CONTROL EQUIPMENT.		
NOV. 2, 68	5	30A RECEPT. PANEL, TEL. UNIT, RELOC. TO RM 1155, TALK. BACK STATION ADDED IN RM 1156.		
NOV. 2, 68	6	MAINT. AIR UNIT ON CTD. TUB. 67 AS DELETED. UNIT MAINT. ADDED ON CTD. *RKA-55, 54 & 56.		
JUNE 10, 68	7	IN ROOM 1155 TYPE 'X' FIXTURE ADDED IN CORRIDOR 1155 TYPE 'L' FIXTURE DELETED. 2' 10" OF TYPE 'L' WIRE, CIRCUIT 1155 AND 1156 AS DELETED.		
NOV. 12, 67	8	DOOR ADDED AS PER ARCHITECTURAL CHANGES.		
MAR. 20, 68	9	ISSUED FOR CONSTRUCTION.		
MAY 16, 68	10	GENERAL REV'S CUS.		
NOV. 10, 67	11	FOR TENDER.		
NOV. 10, 67	12	FOR APPROVAL.		
DATE	ISSUE NO.	REV.	DESCRIPTION	DRAWN BY
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG				
STREETS AND TRANSIT DIVISION				
TRANSIT STORAGE AND SHOP FACILITIES				
WAYS & STREETS FACILITIES BUILDING - LIGHTING & POWER				
CONSULTING PROFESSIONAL ENGINEERS			ARCHITECTS	
A. D. MARGISON AND ASSOCIATES LIMITED			Waisman Ross & Blankstein Coop Gillmor Hanna	
1159 LESLIE STREET, DON MILLS, ONTARIO			1159 LESLIE STREET, WINNIPEG, MANITOBA	
APPROVED	DATE	BY	DRAWN BY	DATE
			RJA	2/2/67
			LSA	AS SHOWN
DEPUTY DIRECTOR OF STREETS AND TRANSIT	FILE NO.		DRAWING NO.	2185-708
				ELECTRICAL



2185-711

APPROVED

NUMBER TEN ARCHITECTURAL GROUP

ARCHITECTS PLANNERS OF COMMERCIAL AND RESIDENTIAL BUILDINGS

NOTES: 1. FOR CLOCK SYSTEM RISER DIAGRAM SEE DRAWING #2185-708.
2. FOR INTERCOM. SYSTEM RISER DIAGRAM FOR WAYS & STREETS FACILITIES BUILDING SEE DRAWING #2185-704.
3. FOR INTERCOM. SYSTEM RISER DIAGRAM FOR GARAGE BUILDING SEE DRAWING #2185-705.

A. D. MARGISON ASSOCIATES LTD.
CONSULTING PROFESSIONAL ENGINEERS
SUITE 205 - 1200 YONGE STREET
TORONTO, ONTARIO M4T 1X2

DATE	ISSUE NO.	REV. NO.	DESCRIPTION	DRAWN BY
1967	1	0	FOR TENDER	
			FOR APPROVAL	

MANITOBA LINTAS P&ID

METROPOLITAN CORPORATION OF GREATER WINNIPEG
STREETS AND TRANSIT DIVISION

TRANSIT STORAGE AND SHOP FACILITIES

RISER DIAGRAMS

CONSULTING PROFESSIONAL ENGINEERS
A. D. MARGISON AND ASSOCIATES LIMITED
1155 LESLIE STREET, DON MILLS, ONTARIO

ARCHITECTS
Wainman Ross & Blankstein Coop Gilmor Hanna
10 DONALD STREET, WINNIPEG, MANITOBA

APPROVED

DESIGNED BY

CHECKED

DATE

SCALE

DRAWING NO.

SHEET NO.

2185-711
ELECTRICAL

550V, 3PH, 3W. (IN STORAGE BAY #3)

1	15A	3P	FA'	1/2 HP	ROOF VENT	
2	15A	3P	FA'	1/2 HP	"	"
3	15A	3P	FA'	1 HP	"	"
4	15A	3P	FA'	2 HP	"	"
5	15A	3P	FA'	1 HP	"	"
6	15A	3P	FA'	1/2 HP	"	"
7	15A	3P	FA'	1 HP	"	"
8	15A	3P	FA'	2 HP	"	"
9	15A	3P	FA'	1 HP	"	"
10	15A	3P	FA'	1/2 HP	"	"
11	15A	3P	FA'	1/2 HP	"	"
12	15A	3P	FA'	1 HP	"	"
13	15A	3P	FA'	2 HP	"	"
14	15A	3P	FA'	1/2 HP	"	"
15	15A	3P	FA'	1/2 HP	"	"
16	15A	3P	FA'	1 HP	"	"
17	15A	3P	FA'	1/2 HP	"	"
18	15A	3P	FA'	2 HP	"	"
19	15A	3P	FA'	1 HP	"	"
20	15A	3P	FA'	2 HP	"	"
21	15A	3P	FA'	1/2 HP	"	"
22	15A	3P	FA'	1 HP	"	"
23	15A	3P	FA'	1/2 HP	"	"
24	15A	3P	FA'	1 HP	"	"
25	15A	3P	FA'	1/2 HP	"	"
26	15A	3P	FA'	1/2 HP	"	"
27	15A	3P	FA'	1 HP	"	"
28	15A	3P	FA'	1 HP	"	"
29	15A	3P	FA'	1/2 HP	"	"
30	15A	3P	FA'	2 HP	"	"
31	15A	3P	FA'	1 HP	"	"
32	15A	3P	FA'	1/2 HP	"	"
33	15A	3P	FA'	1/2 HP	"	"
34	15A	3P	FA'	1 HP	"	"
35	15A	3P	FA'	1/2 HP	"	"
36	15A	3P	FA'	2 HP	"	"
37	15A	3P	FA'	1/2 HP	"	"
38	15A	3P	FA'	1/2 HP	"	"
39	15A	3P	FA'	1 HP	"	"
40	15A	3P	FA'	1/2 HP	"	"
41	15A	3P	FA'	2 HP	"	"
42	15A	3P	FA'	1 HP	"	"
43	15A	3P	FA'	1/2 HP	"	"
44	15A	3P	FA'	1/2 HP	"	"
45	15A	3P	FA'	1 HP	"	"
46	15A	3P	FA'	2 HP	"	"
47	15A	3P	FA'	1/2 HP	"	"
48	15A	3P	FA'	1/2 HP	"	"
49	15A	3P	FA'	1 HP	"	"
50	15A	3P	FA'	1/2 HP	"	"
51	15A	3P	FA'	1/2 HP	"	"
52	15A	3P	FA'	1 HP	"	"
53	15A	3P	FA'	1/2 HP	"	"
54	15A	3P	FA'	1/2 HP	"	"
55	15A	3P	FA'	2 HP	"	"
56	15A	3P	FA'	1/2 HP	"	"
57	15A	3P	FA'	1 HP	"	"
58	15A	3P	FA'	1/2 HP	"	"
59	15A	3P	FA'	2 HP	"	"
60	15A	3P	FA'	1 HP	"	"
61	15A	3P	FA'	1/2 HP	"	"
62	15A	3P	FA'	1/2 HP	"	"
63	15A	3P	FA'	1 HP	"	"
64	15A	3P	FA'	1/2 HP	"	"
65	15A	3P	FA'	1/2 HP	"	"
66	15A	3P	FA'	2 HP	"	"
67	15A	3P	FA'	1 HP	"	"
68	15A	3P	FA'	3 HP	"	"
69	15A	3P	FA'	1/2 HP	"	"
70	15A	3P	FA'	1 HP	"	"
71	15A	3P	FA'	1/2 HP	"	"
72	15A	3P	FA'	1 HP	"	"
73	15A	3P	FA'	SPACES	"	"

Garage Addition

Garage Addition in Contract

550V. 3 PH. 3W. (IN OVERHAUL & REPAIR SHOP)

1	15A	3P FA	3 HP	ROOF VENT
2	15A	3P FA	2 HP	" "
3	15A	3P FA	2 HP	" "
4	15A	3P FA	2 HP	" "
5	15A	3P FA	3 HP	" "
6	15A	3P FA	3 1/2 HP	" "
7	15A	3P FA	5 HP	" "
8	15A	3P FA	5 HP	" "
9	15A	3P FA	5 HP	" "
10	15A	3P FA	1 HP	" "
11	15A	3P FA	5 HP	" "
12	30A	3P FA	7 1/2 HP	WATER PUMP
13	30A	3P FA	7 1/2 HP	" "
14	30A	3P FA	7 1/2 HP	" "
15	30A	3P FA	7 1/2 HP	" "
16	15A	3P FA	1/2 HP	ROOF VENT
17	30A	3P FA	7 1/2 HP	" "
18	15A	3P FA	7 1/2 HP	" "
19	30A	3P FA	7 1/2 HP	" "
20	15A	3P FA	7 1/2 HP	" "
21	30A	3P FA	1/2 HP	" "
22	15A	3P FA	1/2 HP	" "
23	15A	3P FA	2 1/2 HP	" "
24	15A	3P FA	1/2 HP	" "
25	15A	3P FA	1 HP	" "
26	3P FA		S PAGES	

550V 2 PH. 3W (IN MECHANICAL RM. # G-105)

[illegible]

550V 3PH, 3W. (IN OVERHAUL & REPAIR SHOP)

1	30A	3P	FA	3/4 HP	MAKE-UP AIR UNIT
2	30A	3P	FA	3/4 HP	"
3	30A	3P	FA	3/4 HP	"
4	30A	3P	FA	3/4 HP	"
5	30A	3P	FA	3/4 HP	"
6	30A	3P	FA	3/4 HP	"
7	30A	3P	FA	3/4 HP	"
8	30A	3P	FA	3/4 HP	"
9	30A	3P	FA	3/4 HP	"
10	30A	3P	FA	3/4 HP	"
11	30A	3P	FA	3/4 HP	"
12	30A	3P	FA	3/4 HP	"
13	30A	3P	FA	3/4 HP	"
14	30A	3P	FA	3/4 HP	"
15	30A	3P	FA	3/4 HP	"
16	30A	3P	FA	3/4 HP	"
17	30A	3P	FA	3/4 HP	"
18	30A	3P	FA	3/4 HP	"
19	30A	3P	FA	3/4 HP	"
20	30A	3P	FA	3/4 HP	"
21	30A	3P	FA	3/4 HP	"
22	30A	3P	FA	3/4 HP	"
23	30A	3P	FA	3/4 HP	"
24	30A	3P	FA	3/4 HP	"
25	30A	3P	FA	3/4 HP	"
26	30A	3P	FA	3/4 HP	"
27	30A	3P	FA	3/4 HP	"
28	30A	3P	FA	3/4 HP	"
29-34	3P	FA		EDGE	

550V. 3PH. 3W. (IN ELECTRICAL ROOM #R-109)

100A 3P 3 # 2-1/4" FA	3PH 600-120/200V TRANSFORMERS MOUNTED ABOVE REPT LIGHTING PANELS		LP 'A'
100A 3P 3 # 2-1/4" FA	45	4 # 1/0 -2°C	LP 'B'
70A 3P 3 # 4-1/4" FA			LP 'RC'
40A 3P 3 # 8-3/4" FA			LP 'RD'
100A 3P 3 # 2-1/4" FA			LP 'RE'
70A 3P 3 # 4-1/4" FA			LP 'RF'
70A 3P 3 # 4-1/4" FA	45	4 # 1/0 -2°C	LP 'RG'
100A 3P 3 # 2-1/4" FA			LP 'RH'
70A 3P 3 # 4-1/4" FA			LP 'RJ'
70A 3P 3 # 4-1/4" FA	45	4 # 1/0 -2°C	LP 'RK'
70A 3P 3 # 4-1/4" FA	45	4 # 1/0 -2°C	LP 'RKA'
70A 3P 3 # 4-1/4" FA	45	4 # 1/0 -2°C	LP 'RL'
40A 3P 3 # 8-3/4" FA	30	4 # 2 - 2' C	PP 'AA'
150A 3P 3 # 1/0 -2°C	112 1/2	2 x (4#2/0 -2 1/2°C)	PP 'BB'
150A 3P 3 # 1/0 -2°C	112 1/2	2 x (4#2/0 -2 1/2°C)	PP 'CC'
40A 3P 3 # 8-3/4" FA	30	4 # 2 - 2' C	PP 'EE'
70A 3P 3 # 4-1/4" FA	45	4 # 1/0 -2°C	PP 'FF'
70A 3P 3 # 4-1/4" FA	45	4 # 1/0 -2°C	PP 'HH'
150A 3P 3 # 4/0 -2°C			PP 'JJ'
30A 3P 3 # 10-3/4" FA	15	4 # 4 - 1 1/2" C	PP 'LL'
200A 3P 3 # 3/0 -2°C	150	2 x (4#4/0 -3°C)	PP 'SS'
105A 3P 3 # 1 - 1/2" FA			MOTOR COIL
70A 3P 3 # 4-1/4" FA	49	4 # 1/0 -2°C	LP 'RM'
125A 3P 3 # 3/0 -2 1/2°C			PP 'UU'
8 - 3P 'JA'			

550V, 3PH, 3W, (IN ELECTRICAL ROOM "G-102")

40A 3P FA		3P 200-120/240V TRANSFORMERS MOUNTED ABOVE REFLIGHT PANELS.		LP 'GA'	
3 # 3-5/8" C	30	4 # 2-2" C			
40A 3P FA	30	4 # 2-2" C			LP 'GB'
3 # 3-5/8" C					
40A 3P FA	15	4 # 1/2-2" C			LP 'GC'
3 # 4-1/4" C					
40A 3P FA	30	4 # 2-2" C			LP 'GD'
3 # 3-5/8" C					
40A 3P FA	30	4 # 2-2" C			LP 'GE'
3 # 3-5/8" C					
40A 3P FA	30	4 # 2-2" C			LP 'GF'
3 # 3-5/8" C					
40A 3P FA	30	4 # 2-2" C			LP 'GG'
3 # 3-5/8" C					
40A 3P FA	30	4 # 2-2" C			LP 'GH'
3 # 3-5/8" C					
40A 3P FA	15	4 # 1/2-1 1/4" C			LP 'GI'
3 # 10-3/4" C					
40A 3P FA	15	4 # 1/2-1 1/4" C			LP 'GJ'
3 # 10-3/4" C					
40A 3P FA	30	4 # 2-2" C			LP 'GK'
3 # 3-5/8" C					
40A 3P FA	30	4 # 2-2" C			LP 'GL'
3 # 3-5/8" C					
40A 3P FA	30	4 # 2-2" C			LP 'GM'
3 # 3-5/8" C					
40A 3P FA	45	4 # 1/2-2" C			LP 'GN'
3 # 4-1/4" C					
40A 3P FA	45	4 # 1/2-2" C			LP 'GO'
3 # 4-1/4" C					
15A 3P FA	10A 3P FA				
3 # 1-1/2" C	3 # 1-1/2" C				PP 'Q'
PP 'DD'					
10A 3P FA	10A 3P FA				
3 # 1/2-2" C	3 # 1/2-2" C				PP 'NN'
PP 'KK'					
90A 3P FA					
3 # 2-1/4" C					MOTOR C
70A 3P FA	45	4 # 1/2-2" C			LP 'GS'
3 # 4-1/4" C					
100A 3P FA	75	4 # 250 MCM	-3" C		LP 'GT'
3 # 2-1/4" C					
40A 3P FA					
3 # 15-3/4" C					LP 'GU'
300A 3P FA					
3 # 360 MCM	-3" C				MOTOR
1600/1600A 3P ACB					
MANUALLY OPERATED					DISTRIB
600A 3P FA					
600A 3P 600V LOW IMP. BUS DUCT					DISTRIB

550 V. 3 PH., 3 W. (IN MECH. RM. #A-B18)

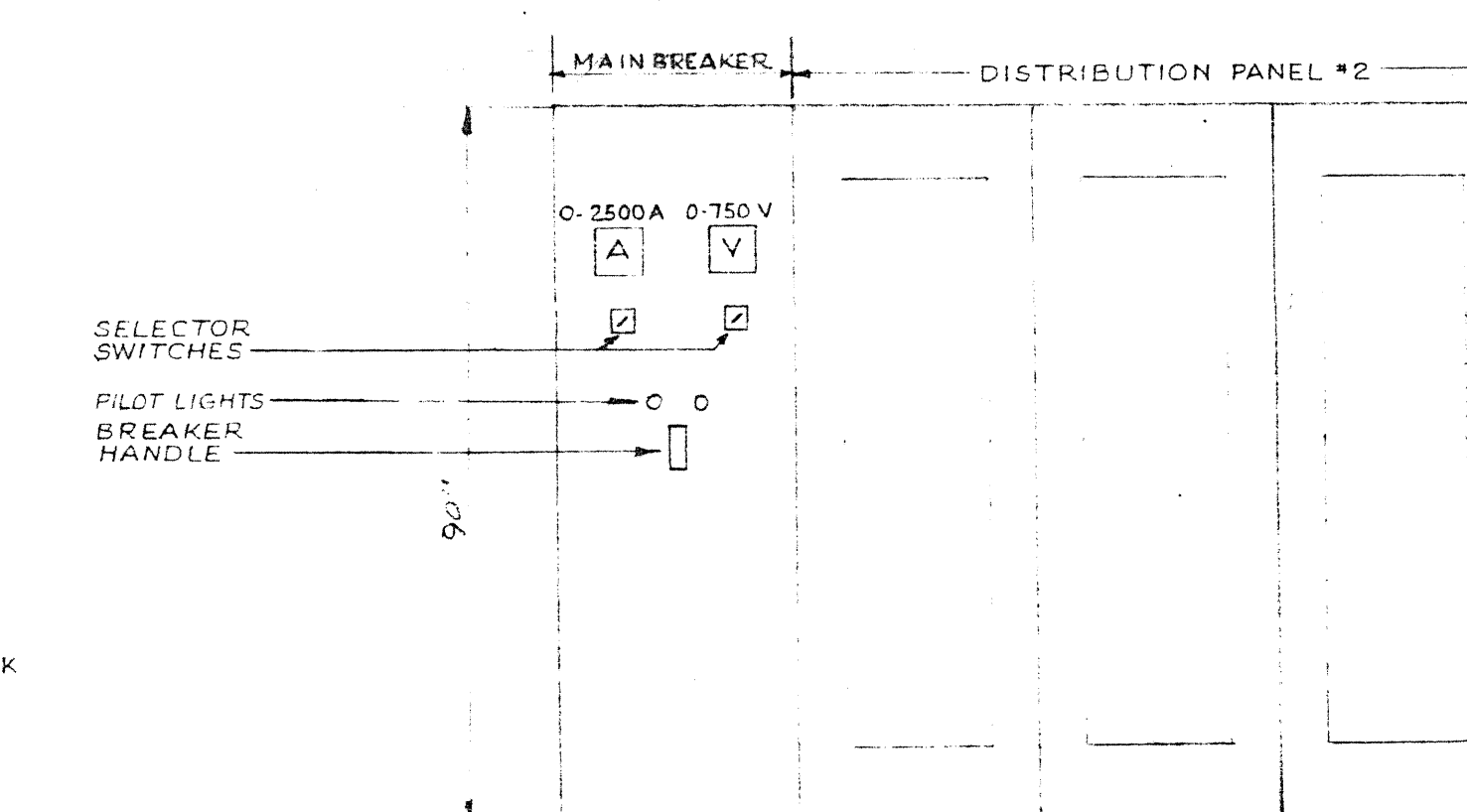
1	15A	3P	'FA'	1 1/2 HP COOLING TOWER FAN
	3 * 12 - 1/2" C			
2	15A	3P	'FA'	1 1/2 HP " " "
	3 * 12 - 1/2" C			
3	15A	3P	'FA'	2-2 HP SUMP PUMP
	3 * 12 - 1/2" C			
4	15A	3P	'FA'	5 PAK.F.
5	225A	3P	'TA'	150HP CHILLER
	3 * 40 - 2" C			
6	30A	3P	'FA'	7 1/2 HP CIRC. PUMP
	3 * 12 - 1/2" C			
7	30A	3P	'FA'	7 1/2 HP " "
	3 * 12 - 1/2" C			
8	30A	3P	'FA'	10 HP A/C UNIT
	3 * 12 - 1/2" C			
9	15A	3P	'FA'	2 HP RETURN AIR FAN
	3 * 12 - 1/2" C			
10	15A	3P	'FA'	1/2 HP CIRC. PUMP
	3 * 12 - 1/2" C			
11	15A	3P	'FA'	3 HP A/C UNIT
	3 * 12 - 1/2" C			
12	15A	3P	'FA'	1/2 HP CIRC. PUMP
	3 * 12 - 1/2" C			
13	15A	3P	'FA'	2 HP KITCHEN EXH. FAN
	3 * 12 - 1/2" C			
14	30A	3P	'FA'	10 HP ELEVATOR
	3 * 12 - 1/2" C			
15	60A	3P	'LA'	2 * (4 * 300MM * 3" C) D.F. #4
	2 * (3 * 60 - 2" C)	300		1600V 15.750ZKV 3PH. 4W. TRANSFORMER
16-24	3P	'TA'		SPACES

120/208 V, 3 PH, 4 W (IN MECH. RM. #A-B1B)

1	$\frac{150 \text{ A}}{4 \times 10^3}$	$\frac{3 \text{ P}}{2 \text{ C}}$	'2A'	L.R. '2A'
2	$\frac{17 \text{ A}}{2 \times 1}$	$\frac{2 \text{ P}}{2 \text{ C}}$	'2A'	L.R. '18'
3	$\frac{70 \text{ A}}{4 \times 4}$	$\frac{3 \text{ P}}{10 \text{ C}}$	'2A'	L.P. 'C'
4	$\frac{250 \text{ A}}{4 \times 10^3}$	$\frac{3 \text{ P}}{2 \text{ C}}$	'2A'	L.R. '1A'
5	$\frac{200 \text{ A}}{4 \times 10^3}$	$\frac{3 \text{ P}}{2 \text{ C}}$	'2A'	L.R. '2A'
6	$\frac{50 \text{ A}}{6 \times 10^3}$	$\frac{3 \text{ P}}{2 \text{ C}}$	'2A'	P.P. 'ΔK'
7	$\frac{3 \text{ A}}{2 \times 12}$	$\frac{1 \text{ P}}{1 \text{ C}}$	'EA'	} F.A. SYSTEM
8	$\frac{3 \text{ A}}{2 \times 12}$	$\frac{1 \text{ P}}{1 \text{ C}}$	'EA'	
9	$\frac{15 \text{ A}}{2 \times 12}$	$\frac{2 \text{ P}}{1 \text{ C}}$	'EA'	14HP SUMP RUN
10-16		$\frac{3 \text{ P}}{2 \text{ C}}$	'2A'	'SPACES'

120/208 V, 3 PH., 4 W. (IN KITCHEN "A-B02")

1	15A	1P	'EA'	CASH REGISTER
2	1/2" - 1/2" C		'EA'	1/2 HP DRINK DISPENSER
3	1/2" - 1/2" C		'EA'	1.6 KW COFFEE WARMER
4	20A	1P	'EA'	1.6 KW CUP LOWEARTER
5	20A	1P	'EA'	2KW HOT FOOD UNIT
6	2 1/2" - 1/2" C		'EA'	2 KW " " " "
7	15A	1P	'EA'	1/2 HP COLD PAN UNIT COMPRESSOR
8	1/2" - 1/2" C		'EA'	1/4HP SALAD = "
9	15A	1P	'EA'	1/6HP " " = BLOWER
10	1 1/2" - 1/2" C		'EA'	2.5 KW TOASTER
11	3 1/2" - 1/2" C		'EA'	1/2 KW GRIDDLE
12	40A	3P	'EA'	12 KW FRYER
13	20A	3P	'EA'	5.2 KW HOT PLATE
14	20A	3P	'EA'	6 KW COFFEE MAKER
15	1 1/2" - 1/2" C		'EA'	1/4HP MULTI-MIXER
16	2 1/2" - 1/2" C		'EA'	1/6HP MILK DISPENSER
17	15A	1P	'EA'	1/4HP ICE CREAM
18	1/2" - 1/2" C		'EA'	21.5 KW RANGE
19	3 1/2" - 1/2" C		'EA'	1HP DISHWASHER
20	3 1/2" - 1/2" C		'EA'	5 KW HEATER
21	30A	1P	'EA'	9 KW BOOSTER
22	15A	3P	'EA'	1/2 HP WASTE DISPOSER
23-30	1/2" - 1/2" C		'EA'	SPACES



MAIN 600 V SWITCHBOARD

NUMBER TEN ARCHITECTURAL GROUP
ARCHITECTS & PLANNERS 2105 17TH AVE. E. #200, CANADA, AB T2C 1P9

APPROVED

A. D. MARGISON ASSOCIATES LTD.
CONSULTING PROFESSIONAL ENGINEER
SUITE 302-1320 YONGE STREET
TORONTO, ONTARIO M4T 1R4

1822

RAKHITARA LICEUM POND

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100-443887-100

NOV-9-77	12	B	GRACE ADDITION - FOR TENDER
NOV-9-78	11		AS BUILT
NOV-14-79	10	A	CIRCUIT #DPS-13 MOTOR HP REVISED
MAR-1-81	9	A	CIRCUITS #U-10 AND #U-11-28 REVISED
MAY-1-81	8	A	V-V-H CIRCUIT WAS ADDED ON CIRCUIT #U-6-B
FEB-10-82	7	A	CIRCUIT #U-12B ADDED
SEP-18-86	6	B	MAKE UP AIR LINES ON CIRCUITS #U-6, 7, 8 & DELETED
	5	A	MOTOR CONTROL CENTER 'V-V' REVISED, CIRCUIT #DPS-9 ADDED
MAR-29-88	4		ISSUED FOR CONSTRUCTION
APR-1-88	B	A	GENERAL REVISIONS
ON 1-88	3		FOR TENDER
2/20/17	1	C	FOR APPROVAL

DATE	ISSUE No.	REV. No.	DESCRIPTION	DRAWN BY
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG				
STREETS AND TRANSIT DIVISION				

TRANSIT STORAGE AND SHOP FACILITIES	
PANEL SCHEDULES II	

CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1159 LESLIE STREET, DON MILLS, ONTARIO		ARCHITECTS Waisman Ross • Blankstein Coop Gilmor Hann 10 DONALD STREET, WINNIPEG, MANITOBA	
APPROVED	DRAWN BY P.T.	DATE 21 JULY 1967	

DESIGNED <i>L.G.U.</i> SCALE <i>N.T.S.</i>	SHEET NO.
	DRAWING NO. 2185-713 ELECTRICAL

DEPT. OF PUBLIC WORKS
 DIVISION OF STREETS AND HIGHWAYS
 PROJECT NO. _____
 SHEET NO. _____

[illegible]

FRONT ELEVATION
MOTOR CONTROL CENTRE 'M/M'
(N. T. S.)

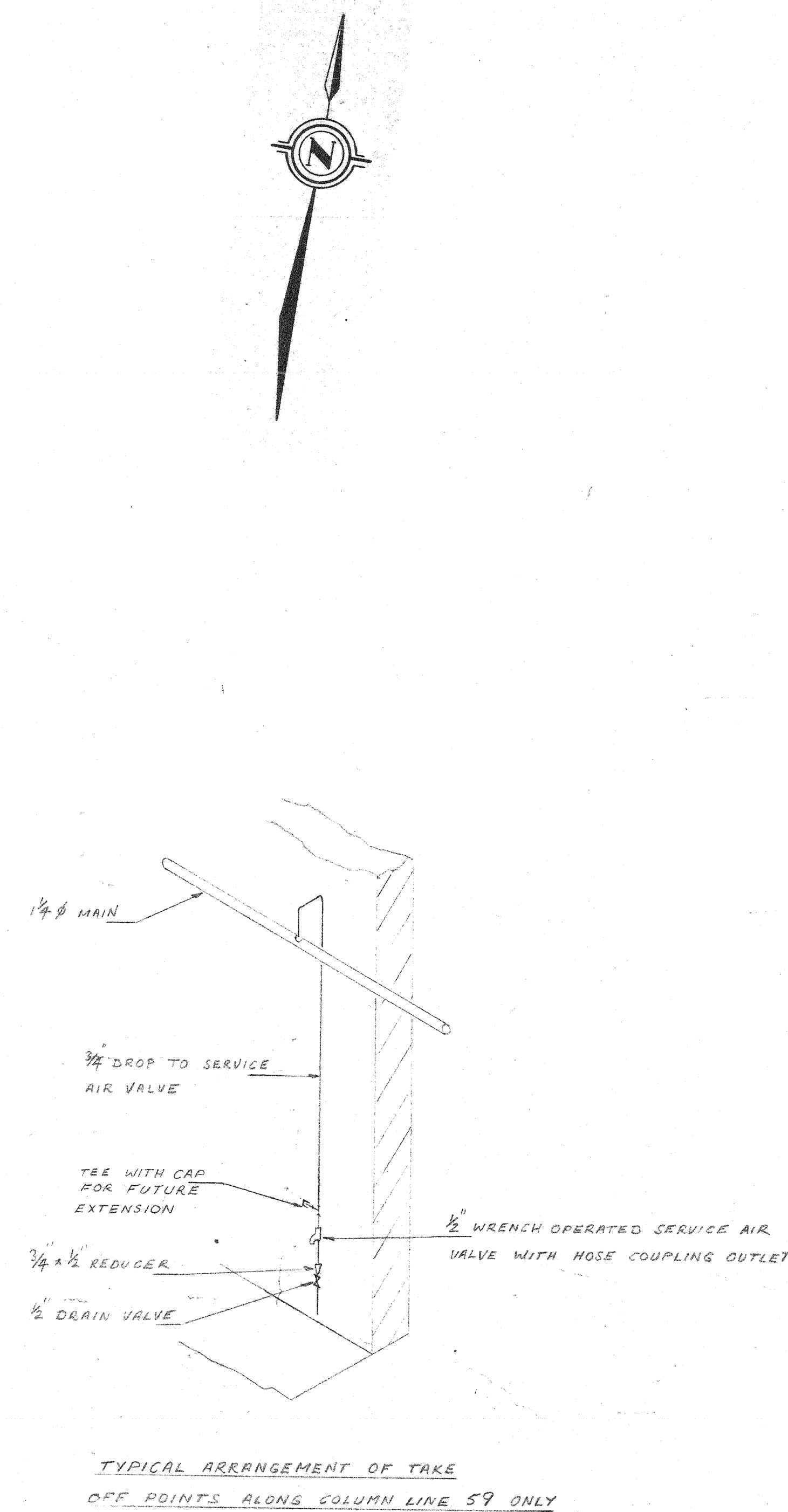
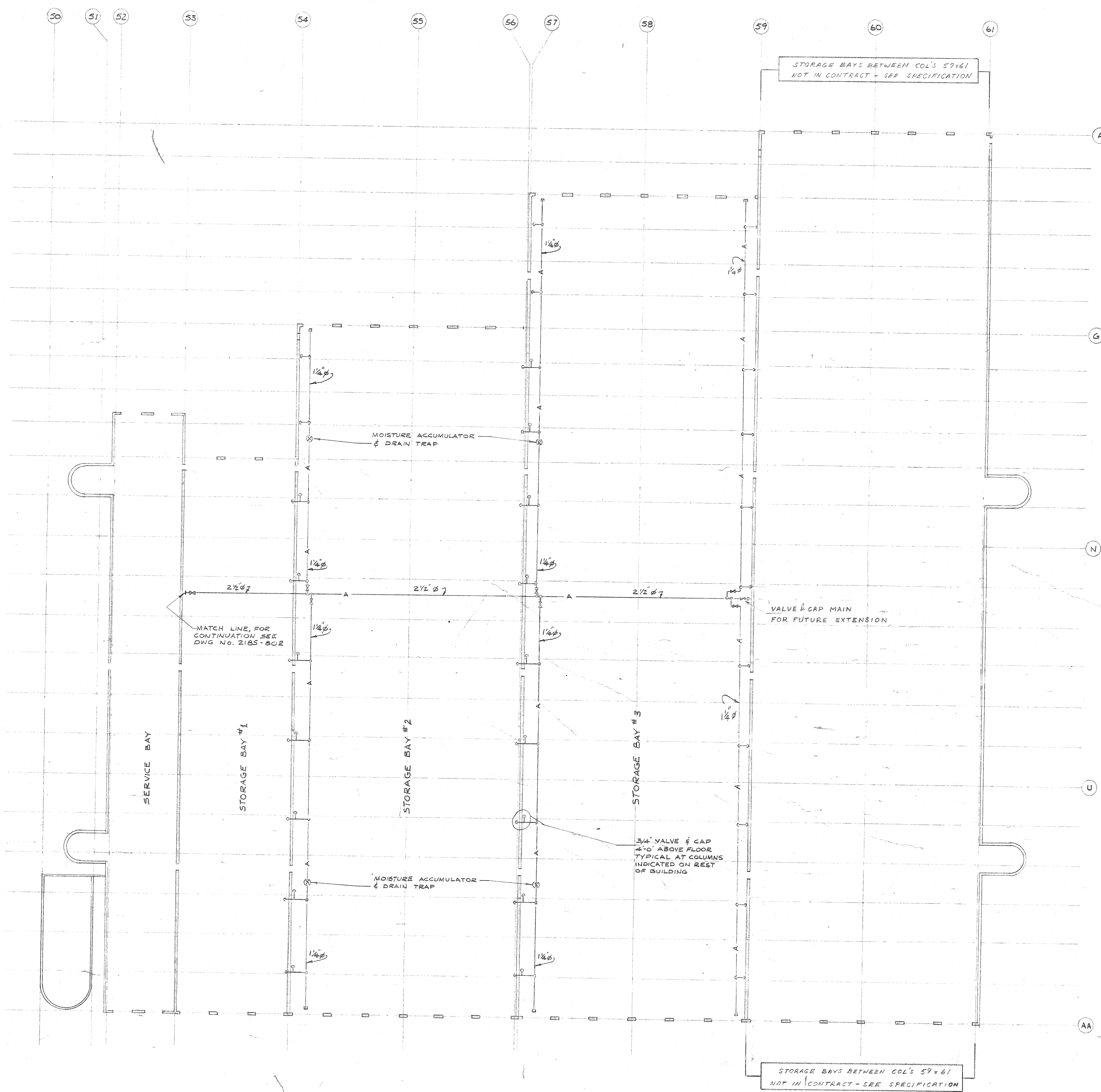
			25
1	9	17	SPACE
2	10	18	
3	11	19	
4	12	20	
5	13	21	
6	14	22	
7	15	23	
8	16	24	

FRONT ELEVATION
M.C.C. 'TT'
(N. T. S.)

1	8
	9
2	SPACE
3	
4	
5	
6	
7	

FRONT ELEV
M.C.C.'VV
(N.T.S.)

421 BROADWAY ST. 5TH FLOOR
2185-801
GARAGE BUILDING - PROCESS EQUIP -
VENT - SERVICES - PLAN



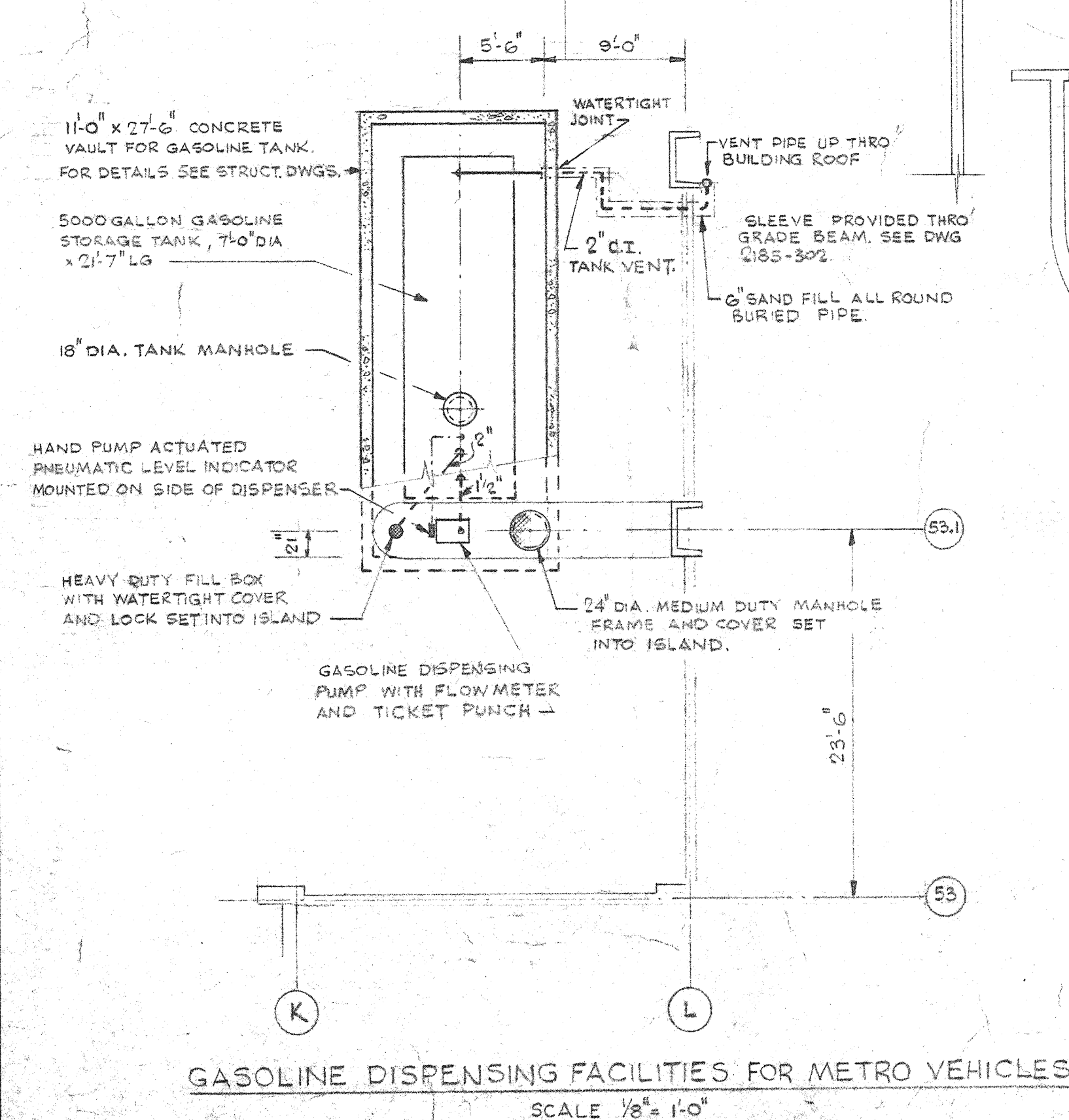
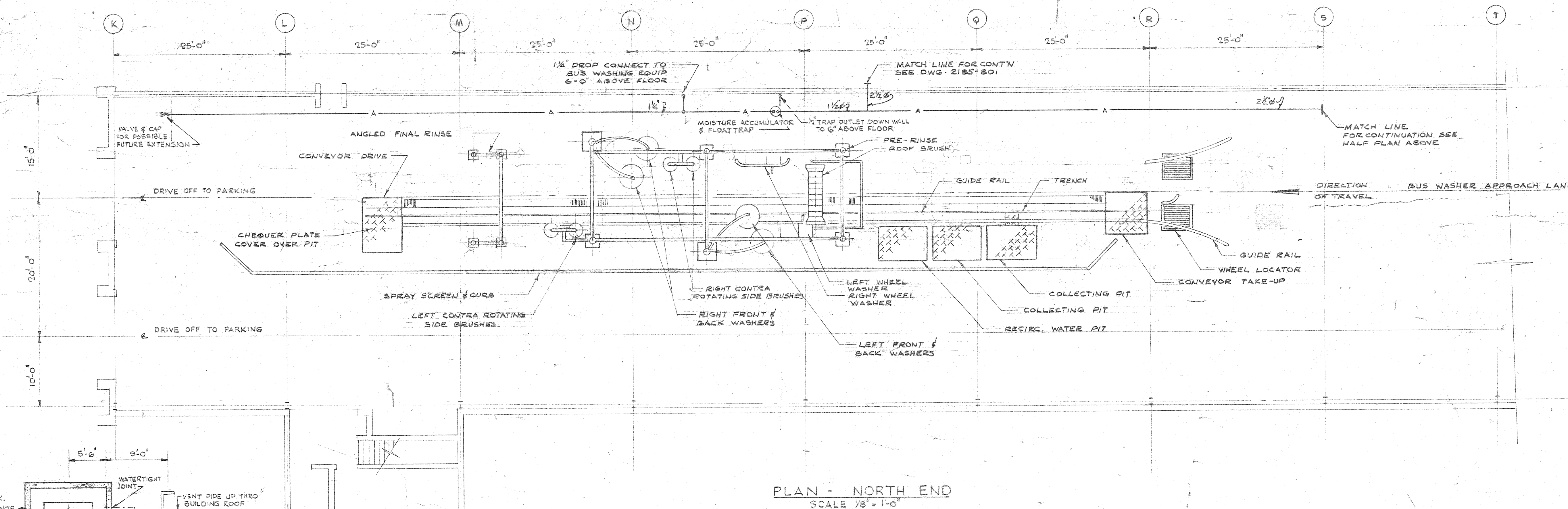
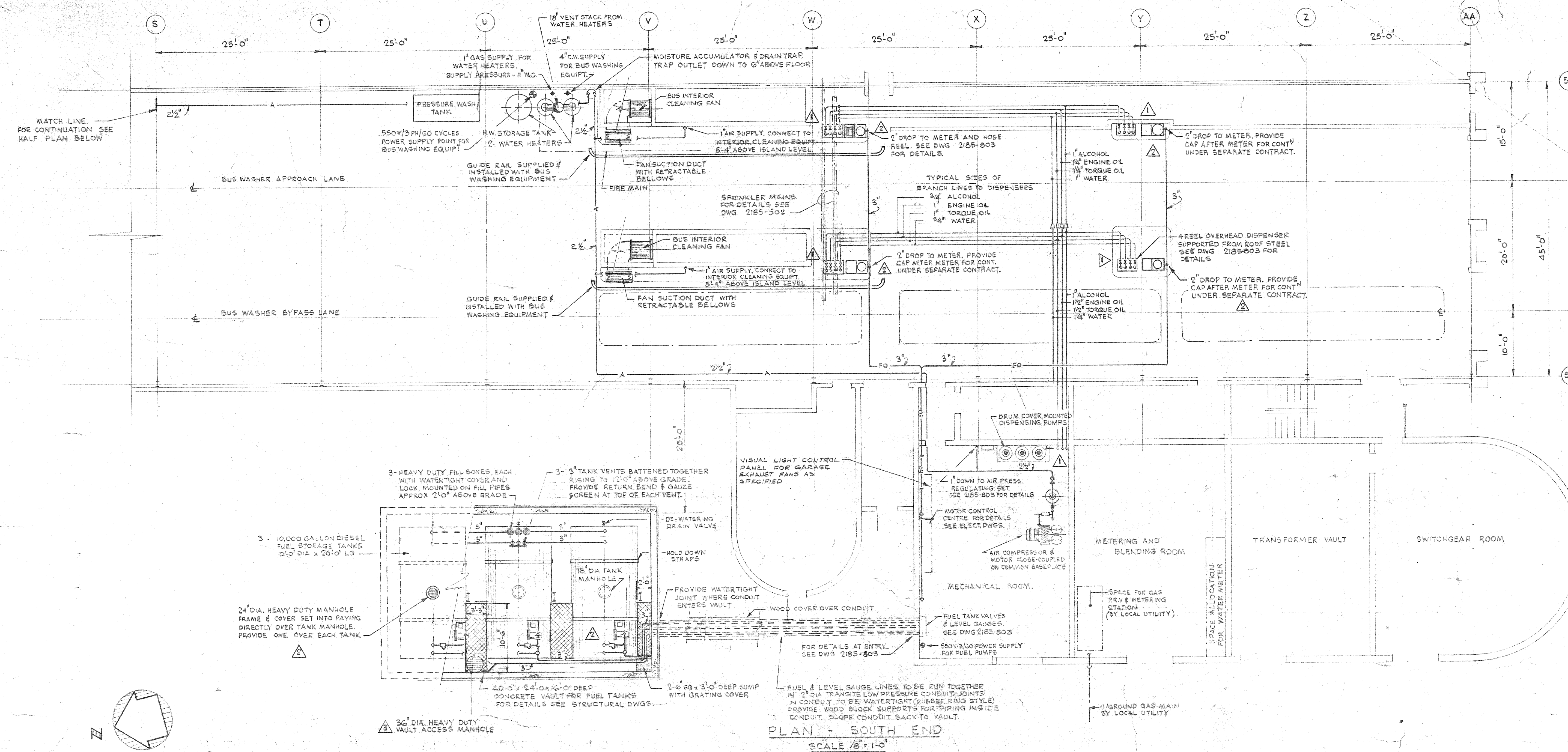
NOTE:-
FOR TYPICAL COMPRESSED AIR SERVICE POINTS
SEE DWG. No. 2185-806.
FOR TYPICAL MOISTURE ACCUMULATOR & DRAIN TRAP
SEE DWG. No. 2185-806.
ALL PIPING THROUGH FIREWALLS SHALL BE IN
PIPE SLEEVES PACKED WITH ASBESTOS PACKING.
ALL PIPING TO BE HUNG IN JOIST SPACE.

GARAGE BUILDING - PLAN
SCALE 1/32" = 1'-0"

2185-801

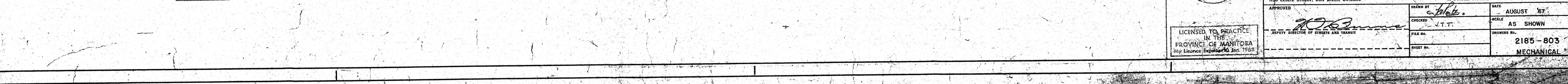
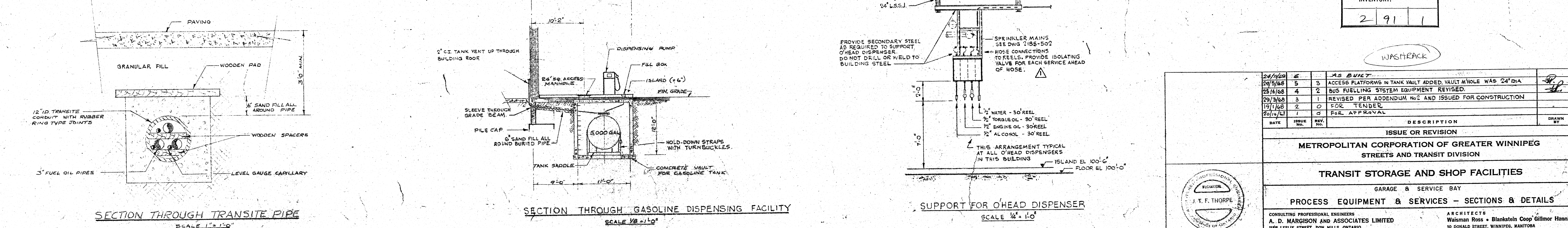
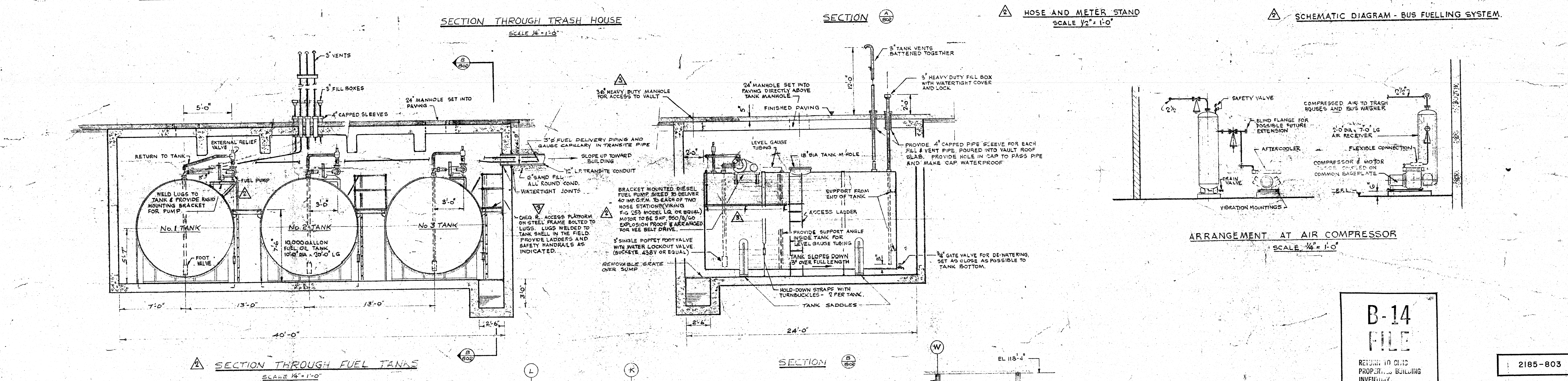
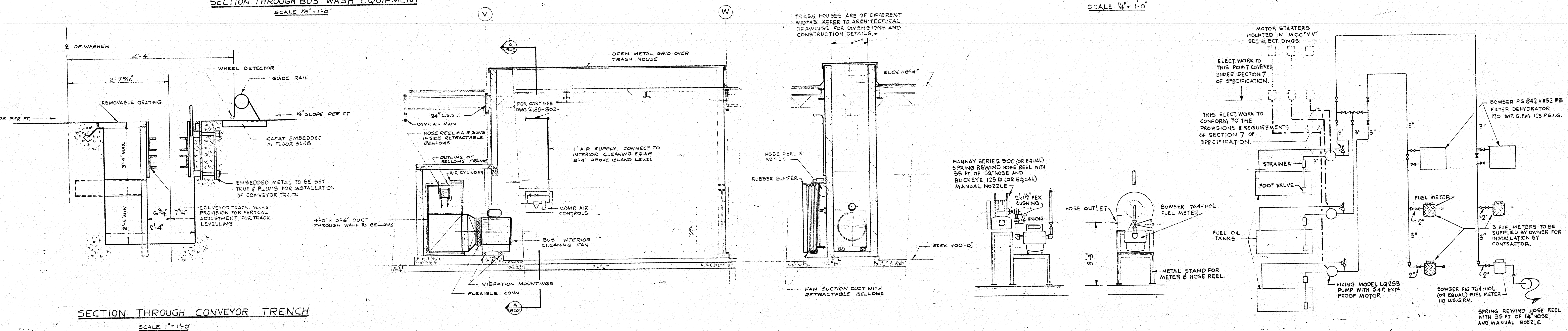
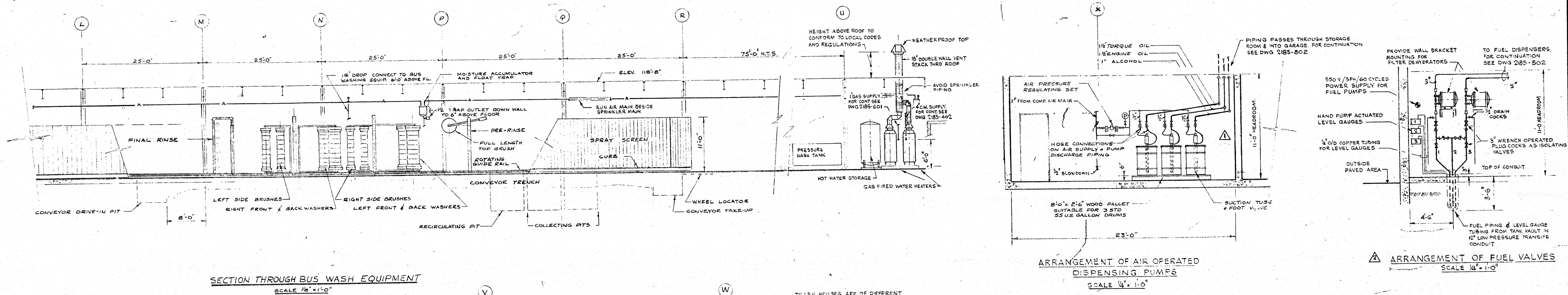
DATE	ISSUE NO.	REV. NO.	DESCRIPTION	DRAWN BY
24/1/69	4		AS BUILT	
20/3/68	3	0	ISSUED FOR CONSTRUCTION	
19/1/68	2	0	FOR TENDER	
24/1/67	1	0	FOR APPROVAL	
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION				
TRANSIT STORAGE AND SHOP FACILITIES				
GARAGE BUILDING PROCESS EQUIPMENT & SERVICES - PLAN				
CONSULTING PROFESSIONAL ENGINEERS A. D. HARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO			ARCHITECTS Wideman Ross & Blankstein 10 DONALD STREET, WINNIPEG, MANITOBA	
APPROVED <i>[Signature]</i> DEPUTY DIRECTOR OF STREETS AND TRANSIT	DRAWN BY <i>[Signature]</i>	CHECKED J.F.T.	DATE AUGUST '67	SCALE 1/32" = 1'-0"
FILE NO.			DRAWING NO. 2185-801	MECHANICAL

1011 OSBORNE ST.
WINNIPEG, MANITOBA
GARAGE & SERVICE BAY - PROCESS
EQUIPMENT & SERVICES - PLAN & DETAILS

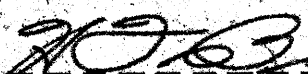


2185 - 802

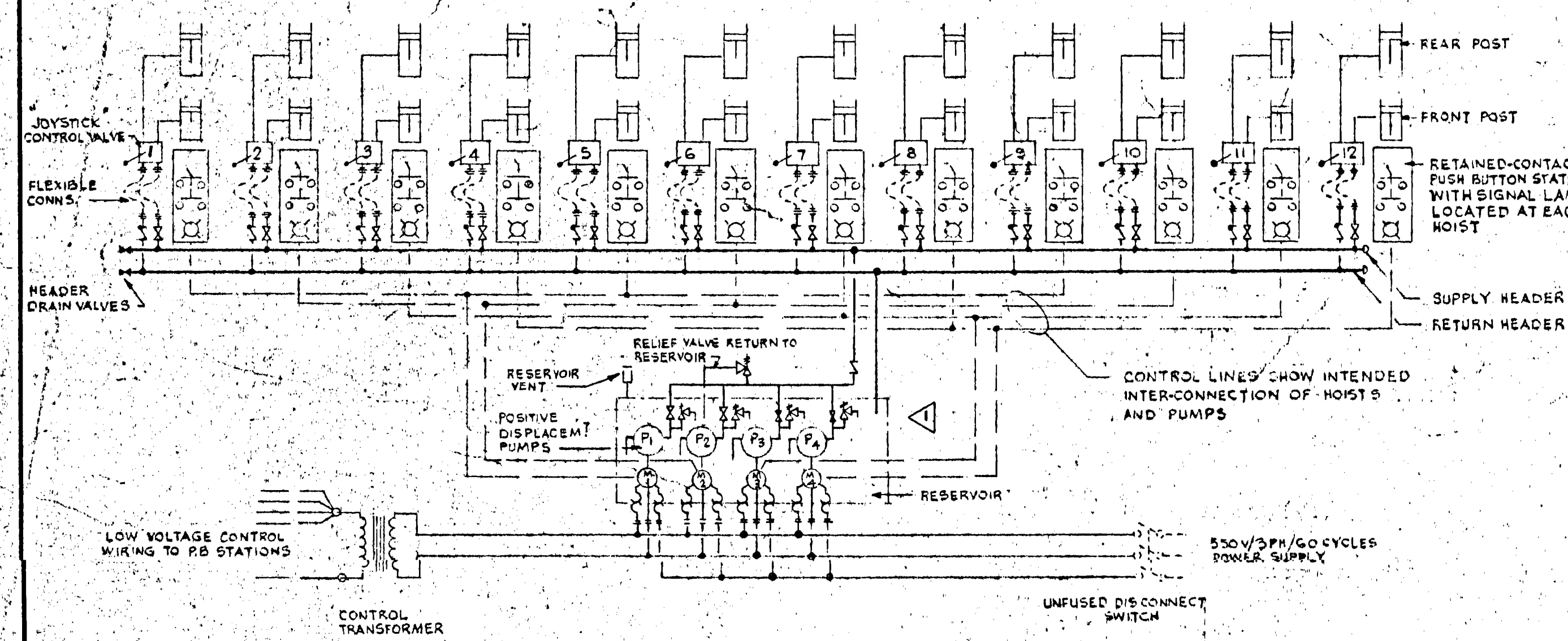
24/1/67	2	AS BUILT		
25/5/68	5	ACCESS PLATFORMS IN TANK VAULT ADDED. UNIT HOLE WAS 24\" DIA		
26/4/68	4	BUS FUELLING SYSTEM EQUIPMENT REVISED		
29/5/68	3	REVISED PER ADDENDUM NO. 2 AND ISSUED FOR CONSTRUCTION		
19/1/69	2	FOR TENDER		
24/10/67	1	FOR APPROVAL		
DATE	ISSUE NO.	REV. NO.	DESCRIPTION	DRAWN BY
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG				
STREETS AND TRANSIT DIVISION				
TRANSIT STORAGE AND SHOP FACILITIES				
GARAGE & SERVICE BAY				
PROCESS EQUIPMENT & SERVICES - PLAN & DETAILS				
CONSULTING PROFESSIONAL ENGINEERS			ARCHITECTS	
A. D. MARGISON AND ASSOCIATES LIMITED			Weisman Ross + Blankstein Coop Gilmor Hanna	
155 LESLIE STREET, DON MILLS, ONTARIO			10 DONALD STREET, WINNIPEG, MANITOBA	
APPROVED	DATE	24/1/67	24/1/67	24/1/67
DEPUTY DIRECTOR OF STREETS AND TRANSIT	DATE	24/1/67	24/1/67	24/1/67
LICENSE TO PRACTICE	DATE	24/1/67	24/1/67	24/1/67
IN THE	DATE	24/1/67	24/1/67	24/1/67
PROVINCE OF MANITOBA	DATE	24/1/67	24/1/67	24/1/67
My Licence Expires 10 Jan, 1968	DATE	24/1/67	24/1/67	24/1/67
FILE NO.	2185-802	2185-802	2185-802	2185-802
SHEET NO.	MECHANICAL	MECHANICAL	MECHANICAL	MECHANICAL



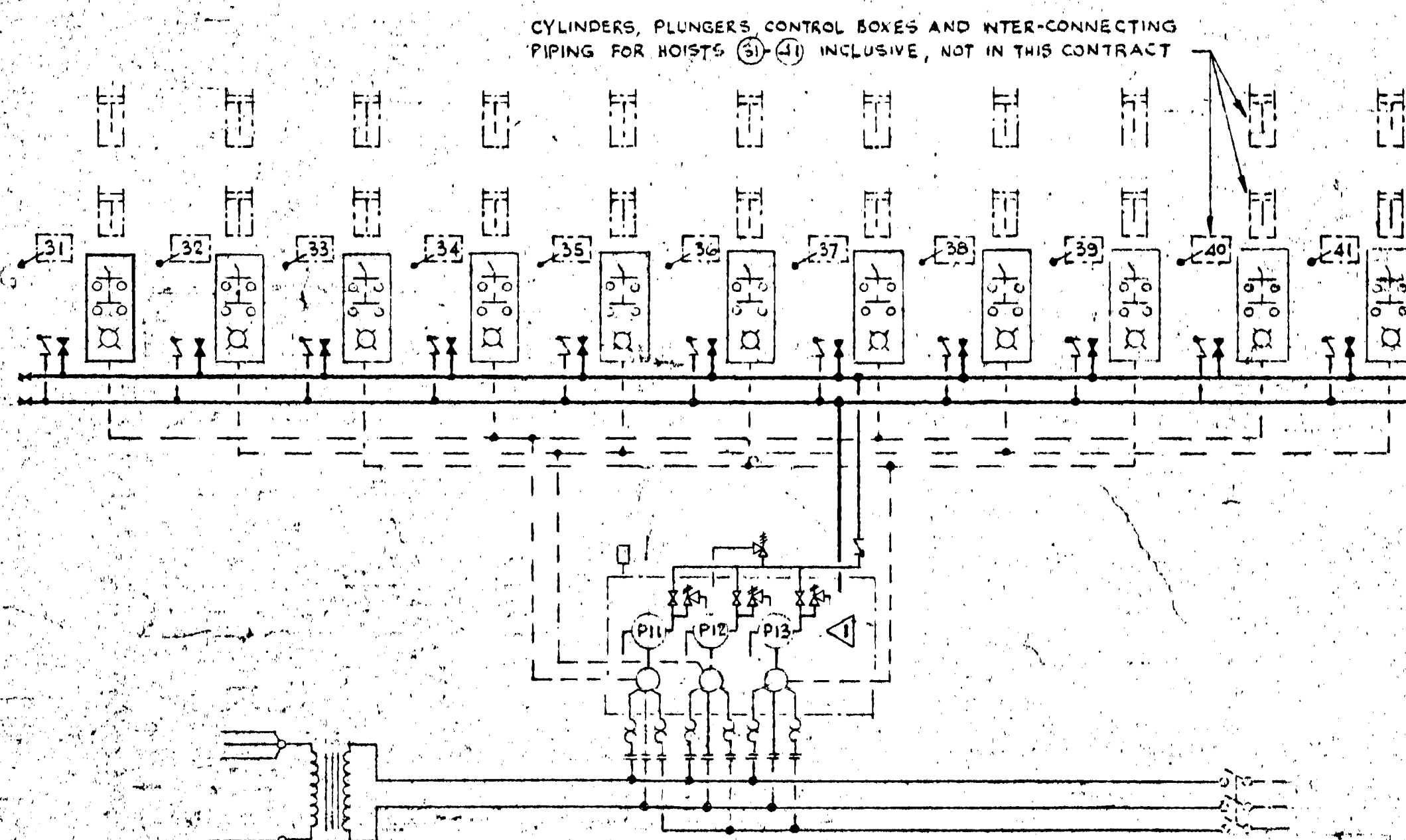
B-14
FILE
RETURN TO CINC
PROPERTIES BUILDING
INVENTORY.

24/3/68	5	1	A.S. @ 0.012 T.				
25/3/68	5	3	ACCESS PLATFORMS IN TANK VAULT ADDED, VAULT WHOLE WAS 24" DIA.				
25/3/68	4	2	BUS FUELLING SYSTEM EQUIPMENT REWISED.				
29/3/68	3	1	REVISED PER APPENDUM NO.2 AND ISSUED FOR CONSTRUCTION				
19/1/68	2	0	FOR TENDER				
26/1/70	1	2	FOR APPROVAL				
DATE	ISSUE NO.	REV. NO.	DESCRIPTION				DRAWN BY
ISSUE OR REVISION							
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION							
TRANSIT STORAGE AND SHOP FACILITIES							
GARAGE & SERVICE BAY							
PROCESS EQUIPMENT & SERVICES - SECTIONS & DETAILS							
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 719 LESLIE STREET, DON MILLS, ONTARIO				ARCHITECTS WALKER ROSS & BLANKETON Corp. Gillingham House 90 DONARD STREET, WINNIPEG, MANITOBA			
APPROVED			DRAWN BY <i>Black.</i>			DATE	
 DEPUTY DIRECTOR OF STREETS AND TRANSIT			CHECKED BY <i>J.T.T.</i>			SCALE	
			FILE NO.			AS SHOWN	
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My Licence Expires <i>16</i> Jan. 1969			SHEET NO.			2185-803 MECHANICAL	

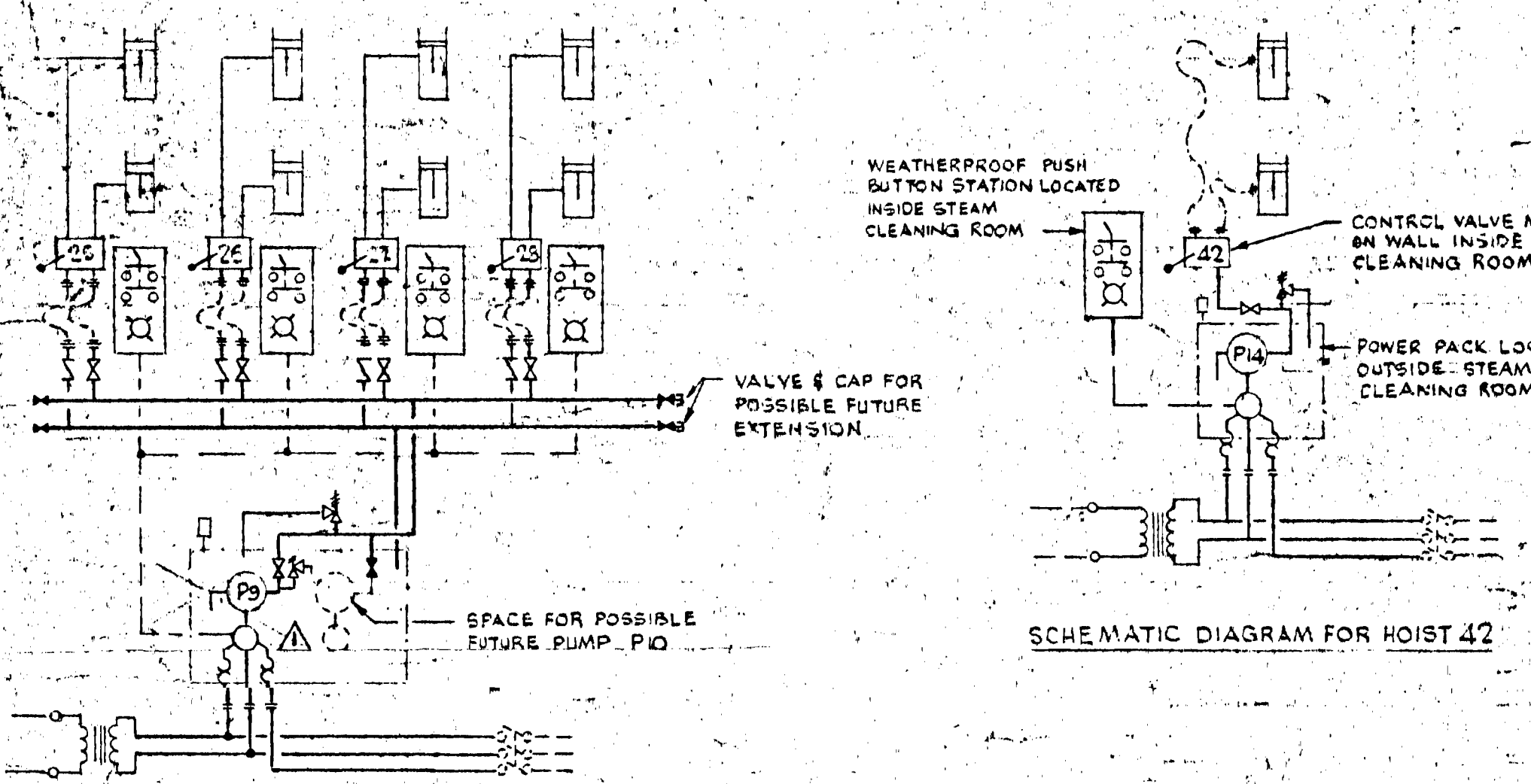
421 Osborne Street
Process Equip & Services
Sections & Details
Drawing Title
Transit Storage & Shop
& Shop Facilities
Project



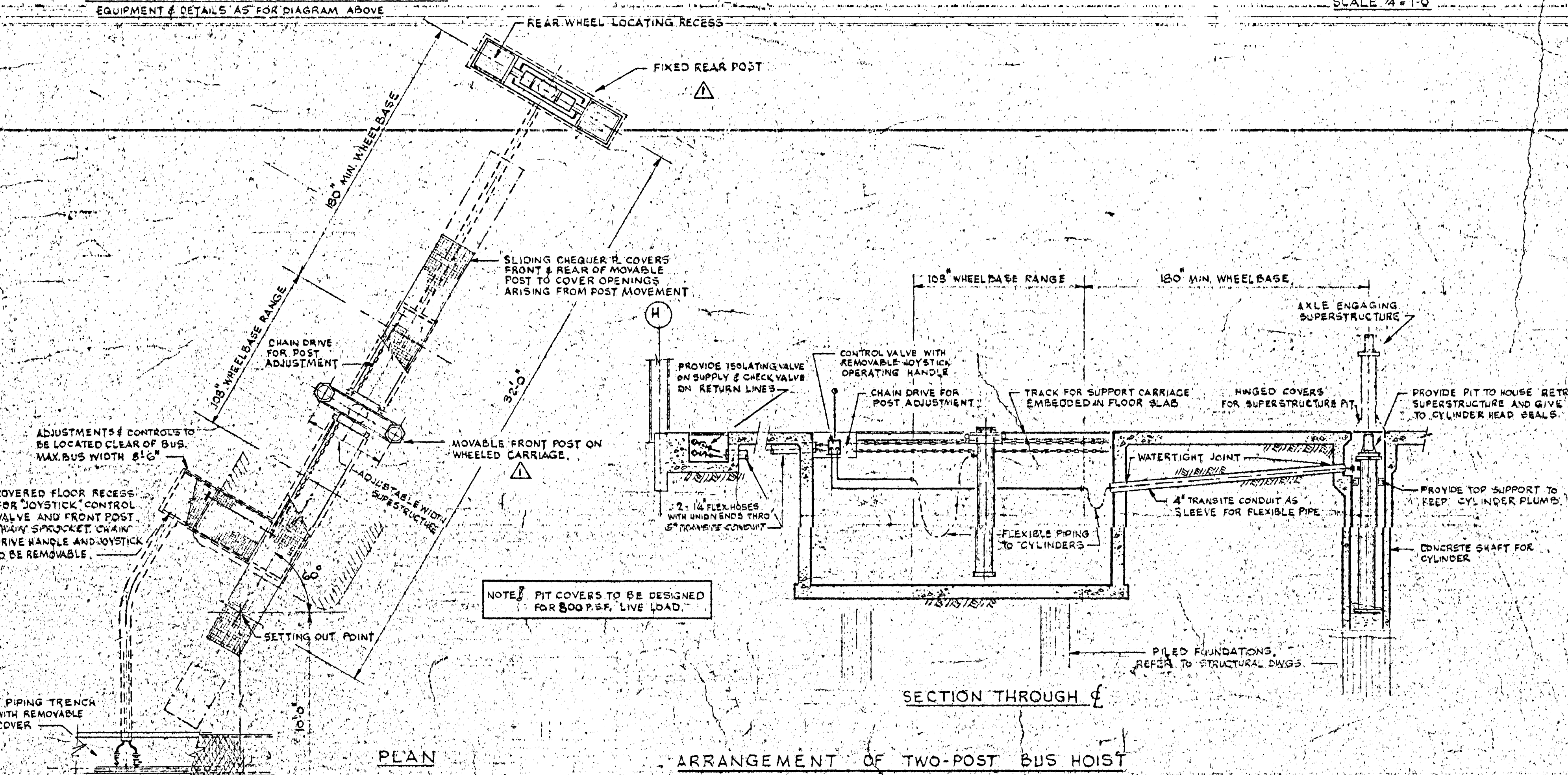
SCHEMATIC PIPING & CONTROL DIAGRAM FOR HOISTS 1-12 INCL.
NOTE: HOISTS 13-24 INCLUSIVE TO BE ARRANGED IN A SIMILAR FASHION EXCEPT THAT HOIST NO. 24 SHALL BE SINGLE POST PATTERN. PUMPS TO BE NUMBERED P5, P6, P7, P8.



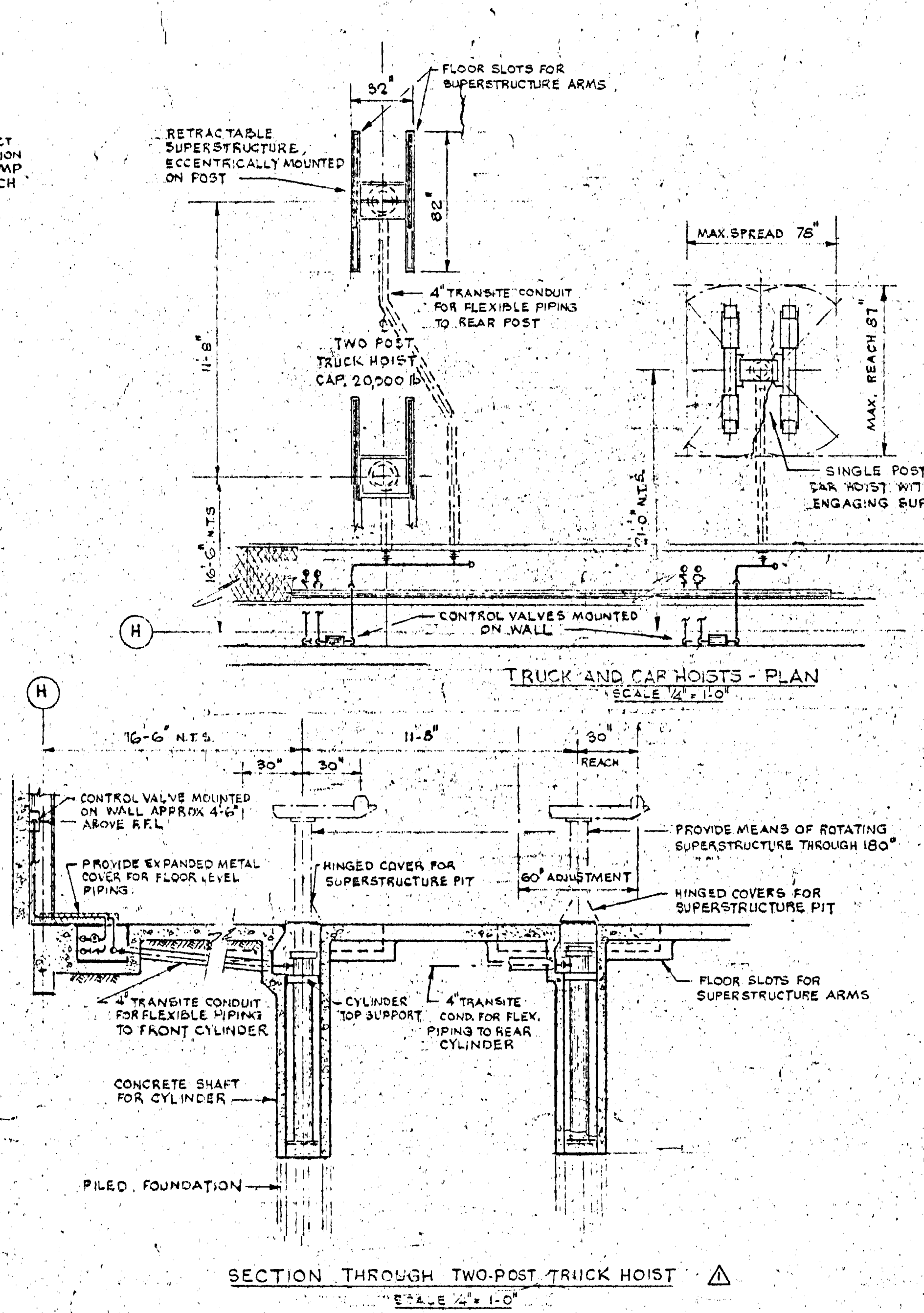
SCHEMATIC PIPING & CONTROL DIAGRAM FOR HOISTS 31-41 INCL.
EQUIPMENT & DETAILS AS FOR DIAGRAM ABOVE



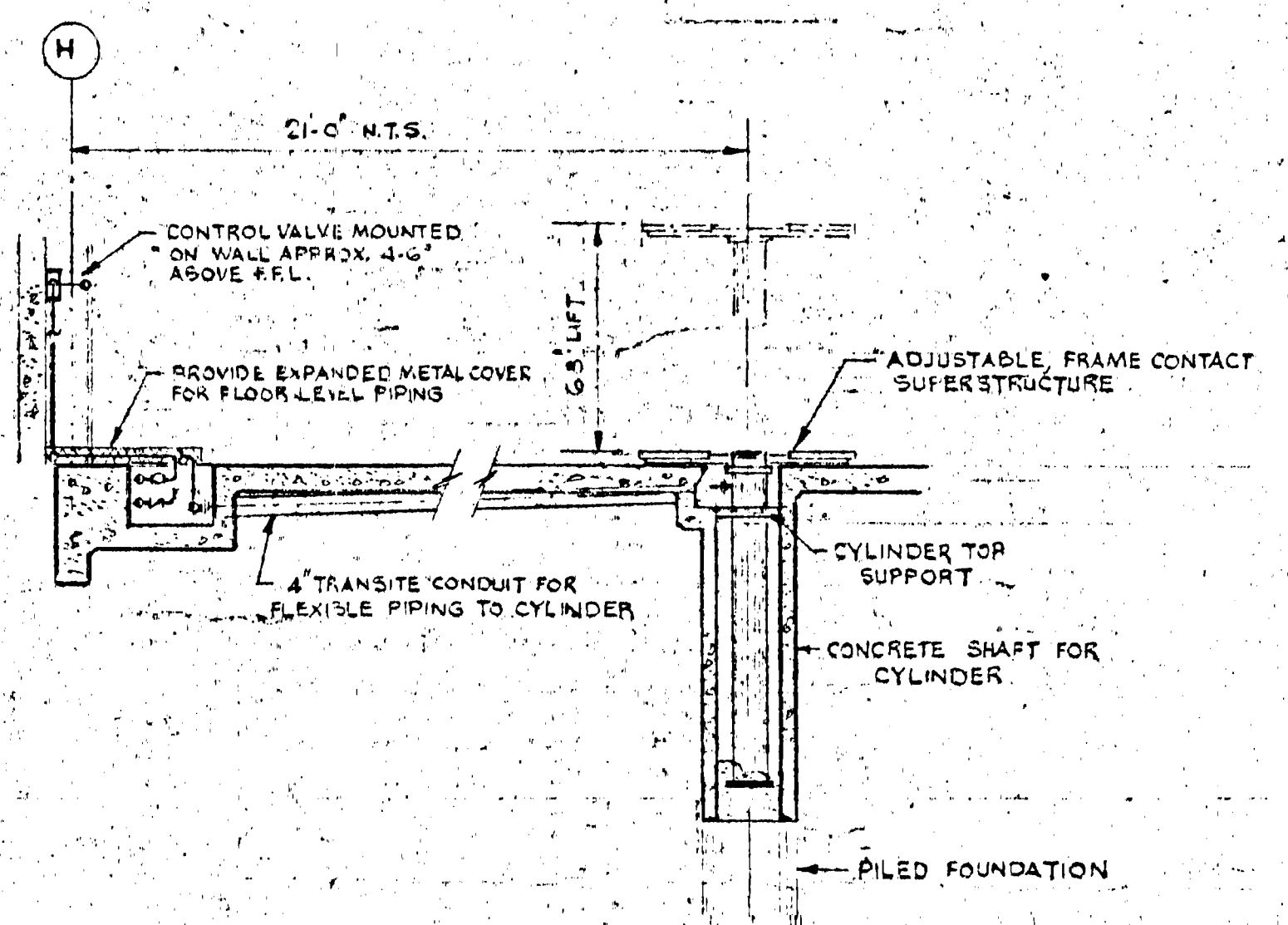
SCHEMATIC DIAGRAM FOR HOISTS 25-28 INCL.
EQUIPMENT & DETAILS AS FOR DIAGRAM ABOVE



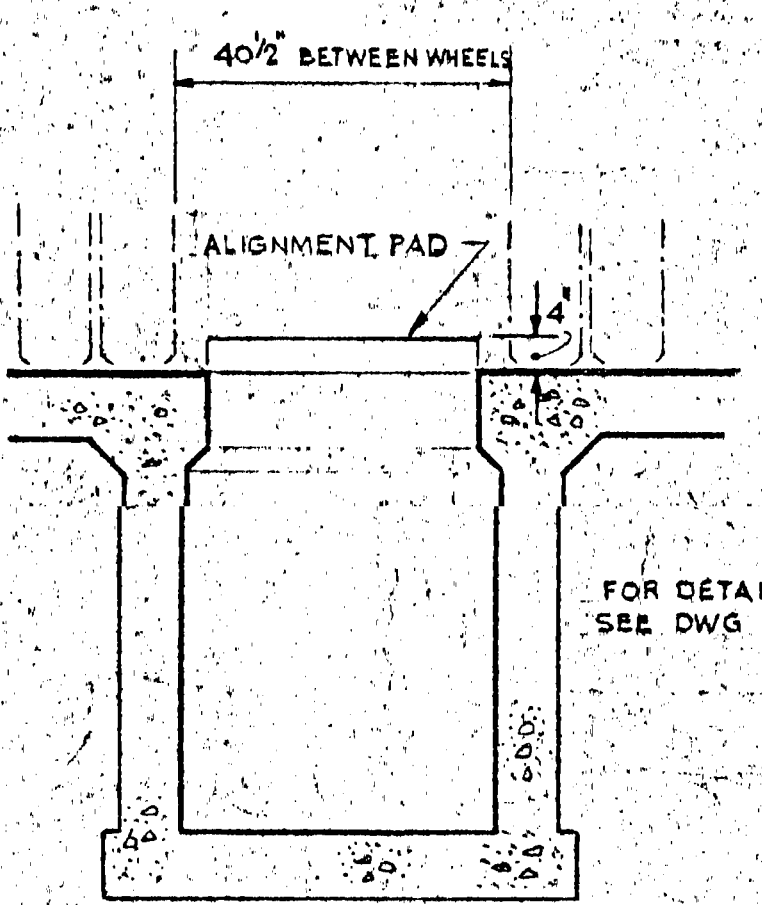
SECTION THROUGH
ARRANGEMENT OF TWO-POST BUS HOIST



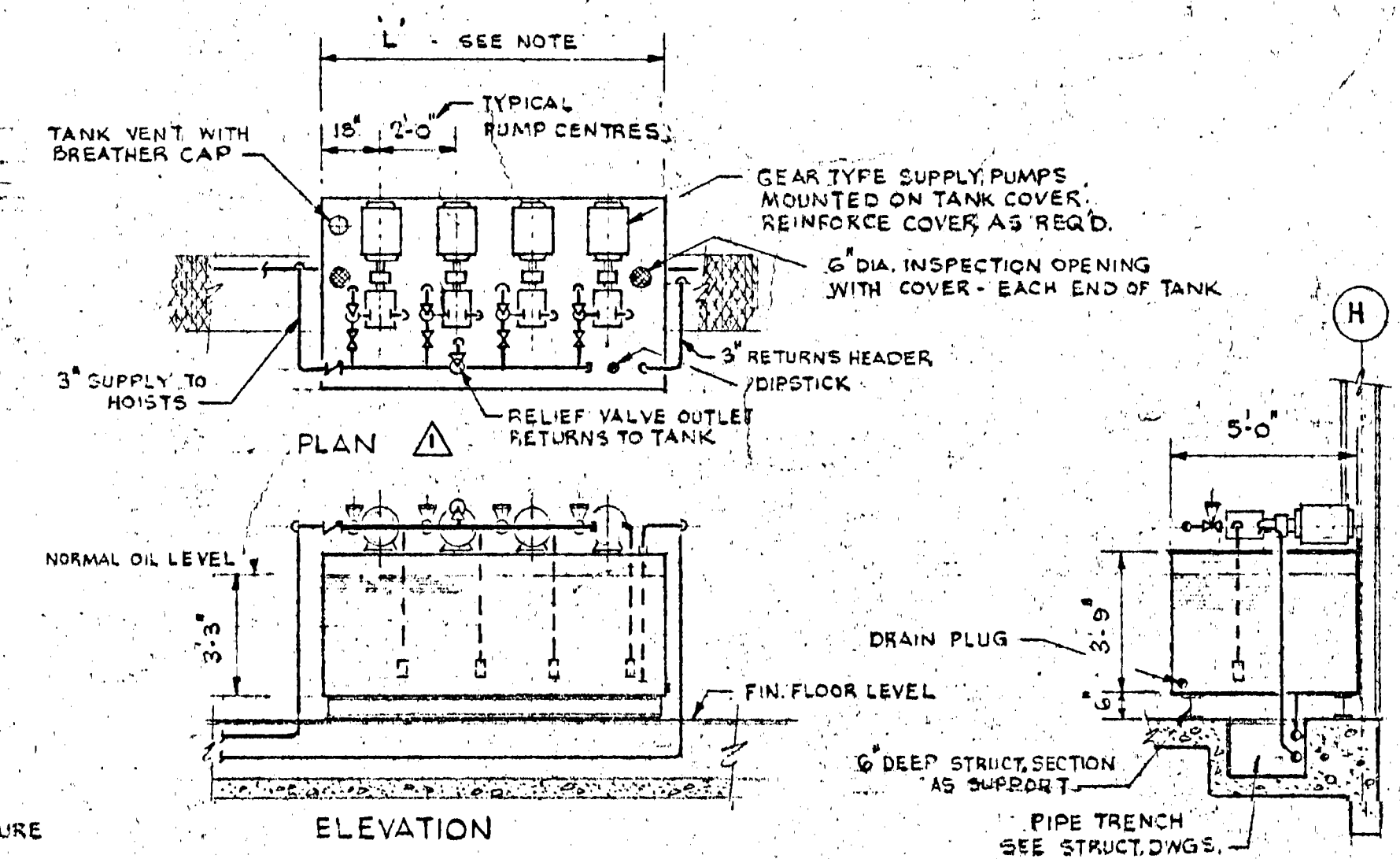
SECTION THROUGH TWO-POST TRUCK HOIST
SCALE 1/4" = 1'-0"



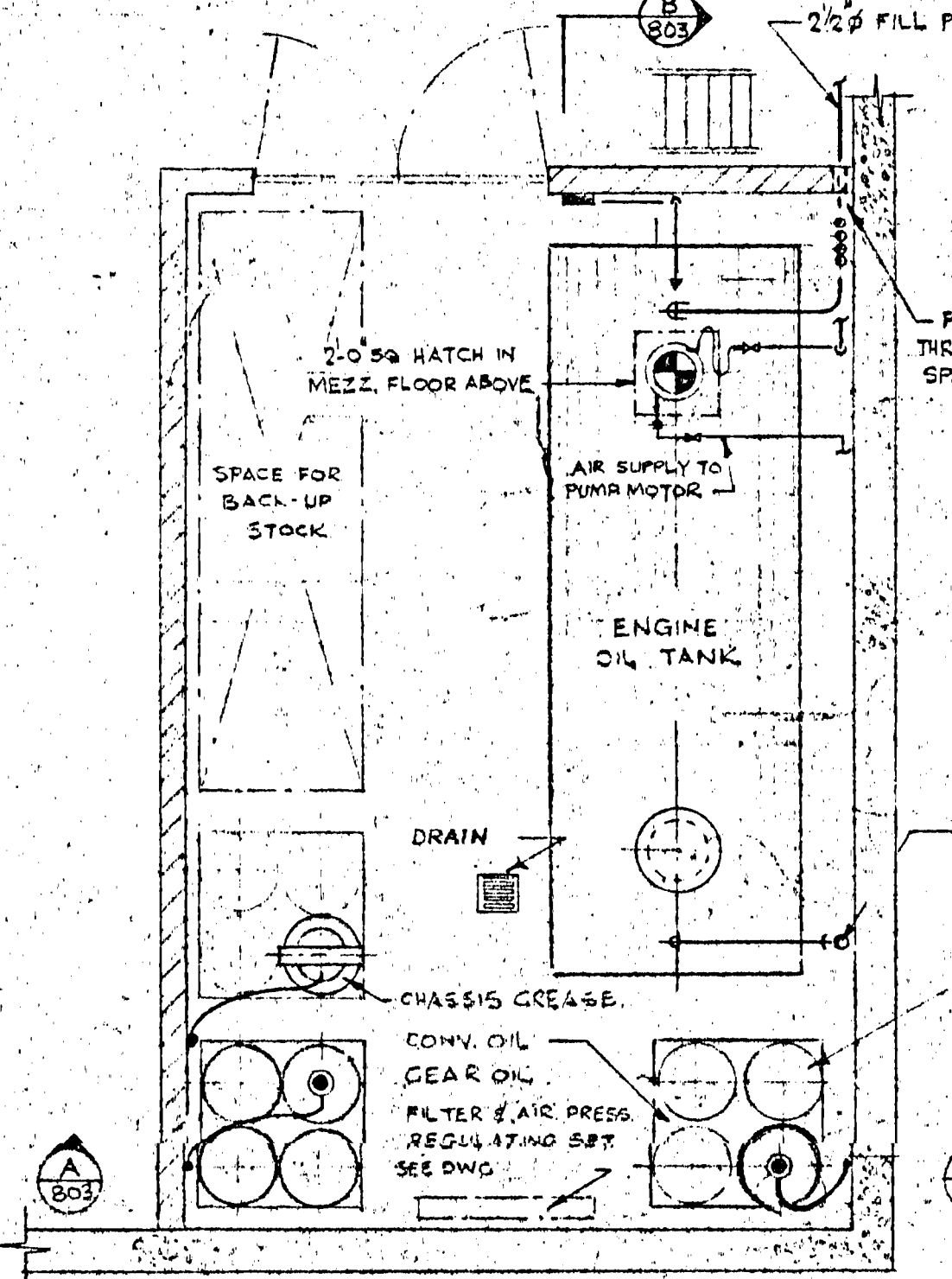
SECTION THROUGH SINGLE POST CAR HOIST
SCALE 1/4" = 1'-0"



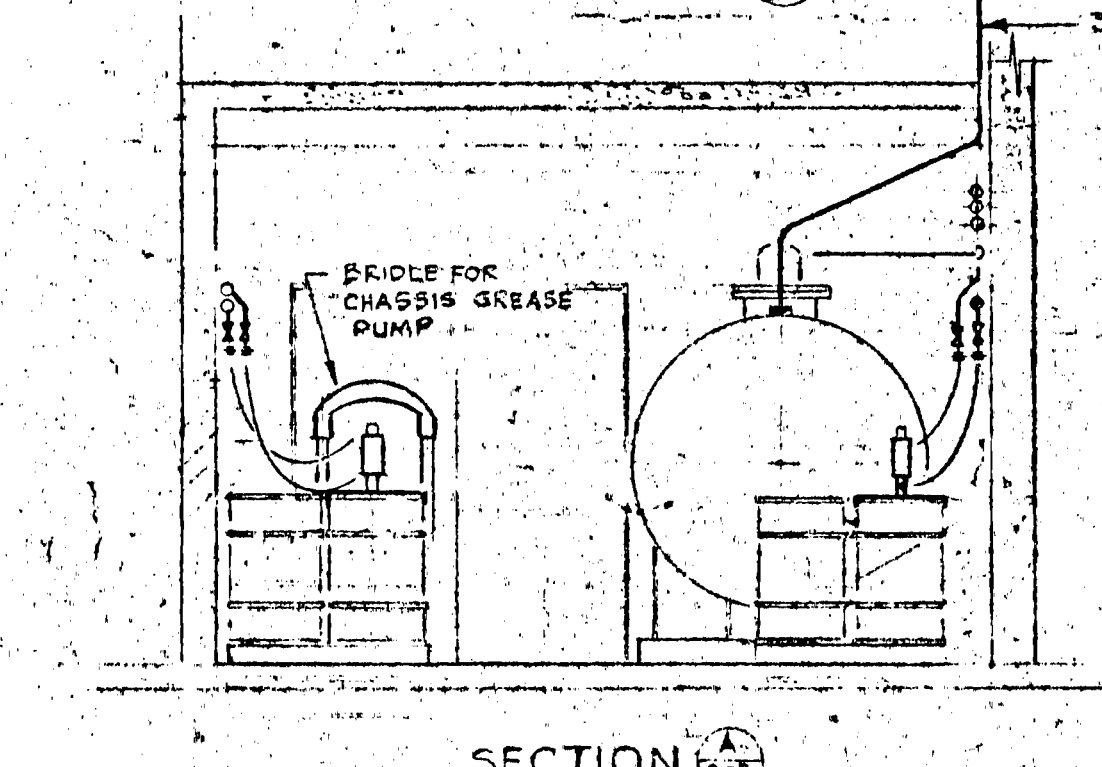
SECTION THROUGH BUS SERVICE PIT
SCALE 1/2" = 1'-0"



DETAILS OF HOIST POWER PACK
SCALE 1/4" = 1'-0"

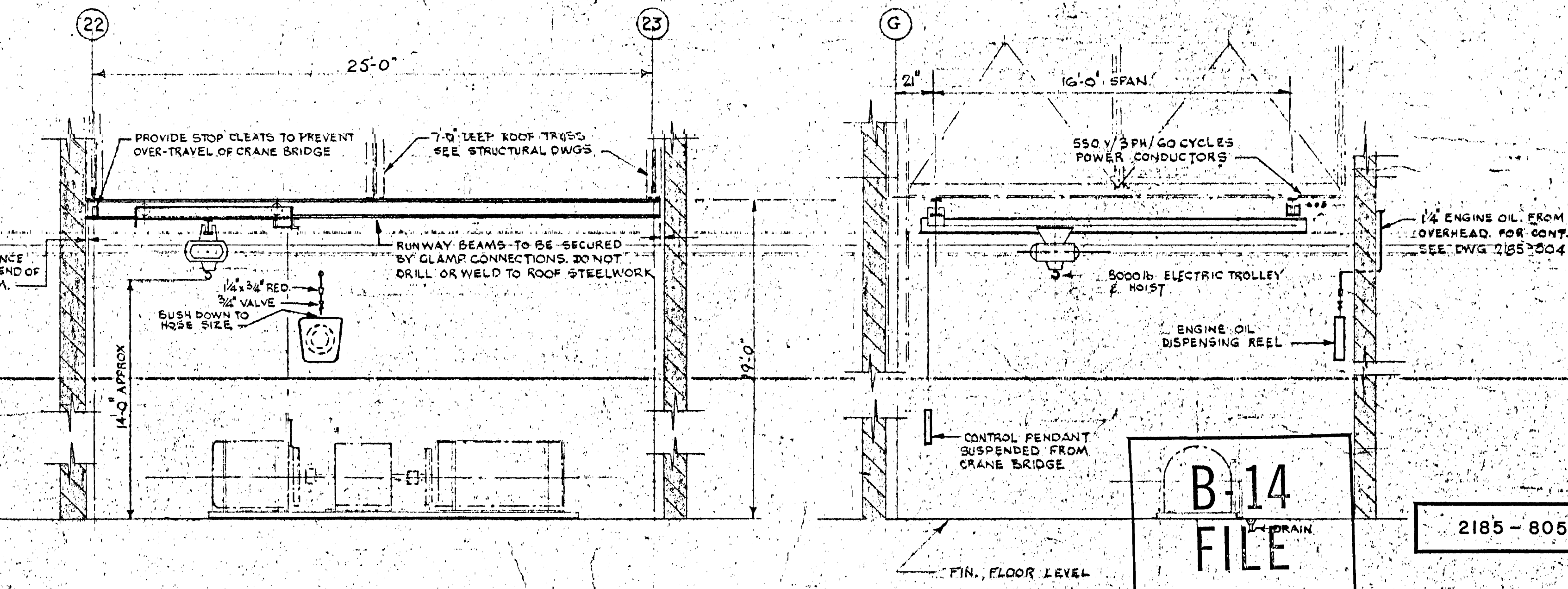


PLAN



SECTION

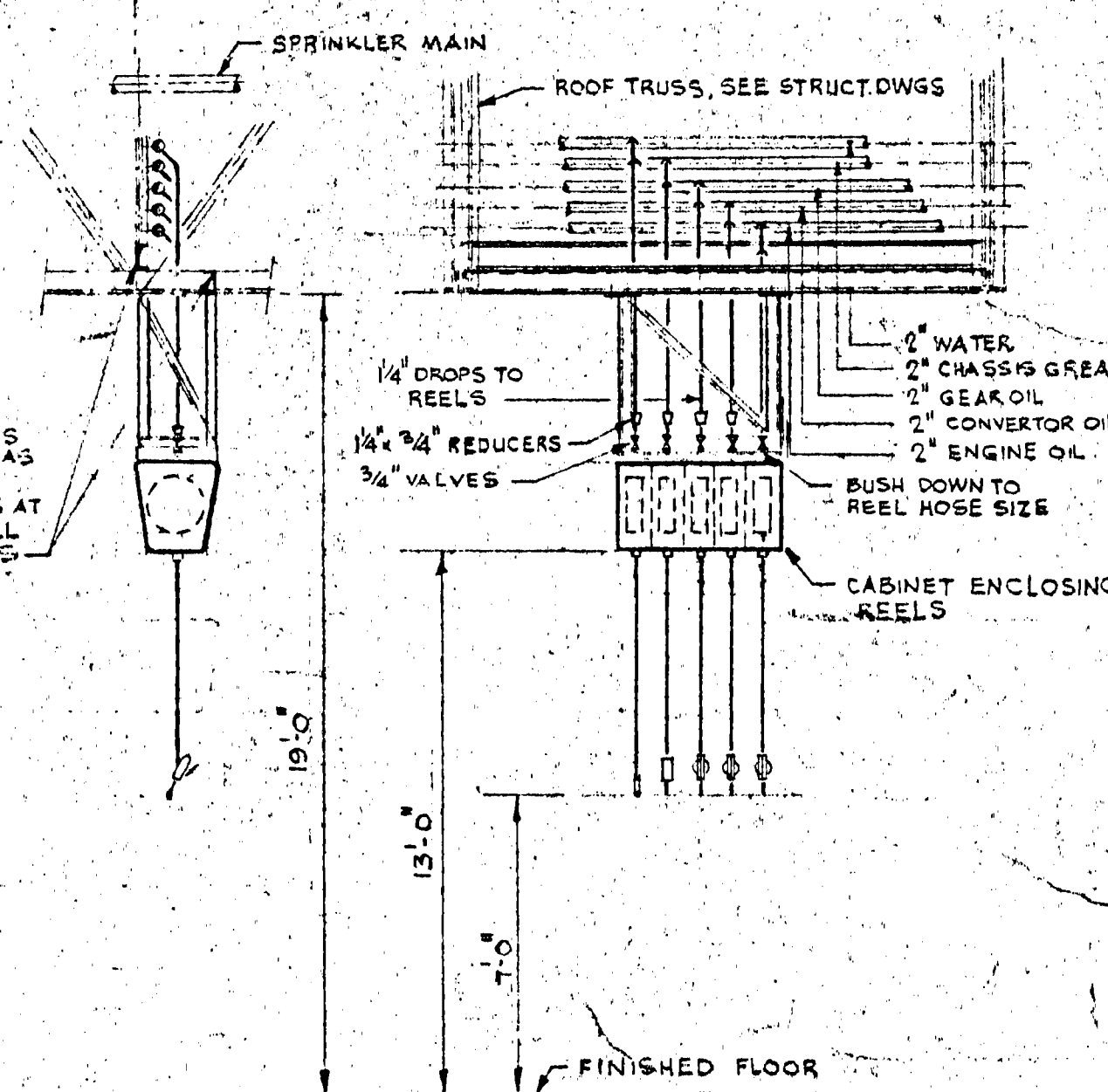
LUBE OIL STORAGE LAYOUT
SCALE 1/4" = 1'-0"



ARRANGEMENT OF DYNAMOMETER ROOM CRANE
SCALE 1/4" = 1'-0"

NOTES
FOR HOISTS 1-12 INCL. 4 PUMPS REQ'D. L = 9'-0" CAPY.
13-24 INCL. 4 PUMPS REQ'D. L = 9'-0" CAPY.
25-28 INCL. 1 PUMP REQ'D.
SPACE FOR FUTURE PUMP L = 5'-0" CAPY.
31-41 INCL. 3 PUMPS REQ'D. L = 7'-0" CAPY.
42 1 PUMP REQ'D. L = 3'-0" CAPY.

ARRANGEMENT SHOWN IS FOR UNIT AT COL. 119.
ARRANGE OTHER UNITS TO SUIT. INDIVIDUAL LOCATIONS AS INDICATED ON DWG. 2185-804.



LUBE REEL SUPPORT DETAIL
SCALE 1/2" = 1'-0"

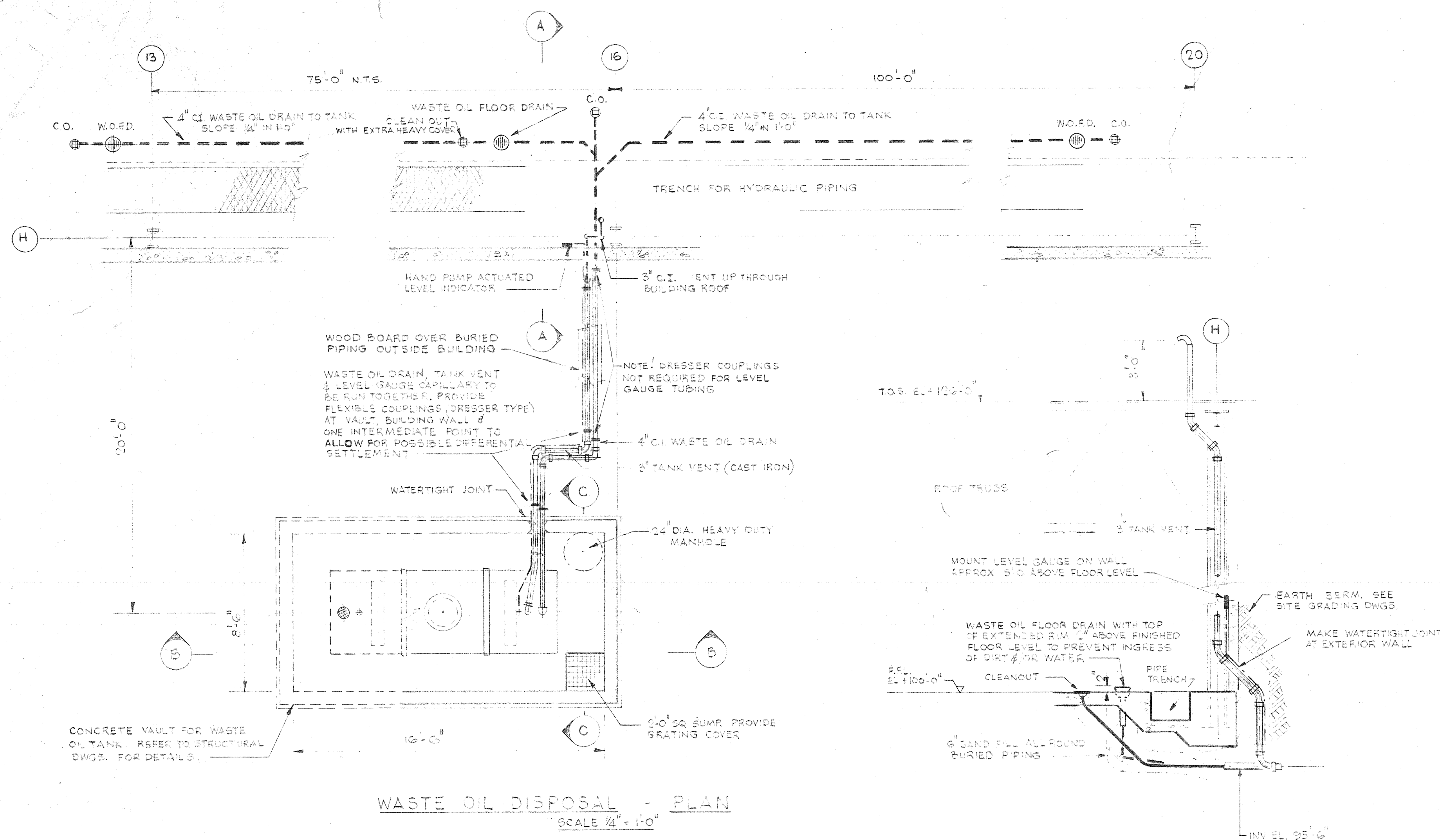
USE 30.0 WT. CARBON STEEL PIPE FOR GEAR, CONVERTER & ENGINE OIL PIPING
USE XMS CARBON STEEL PIPE FOR CHASSIS GREASE
2" CHASSIS GREASE
2" GEAR OIL
2" CONV. OIL
2" ENGINE OIL

B-14
FILE
RETURN TO CIVIC
PROPERTIES BUILDING
INVENTORY.
2 9 1 1

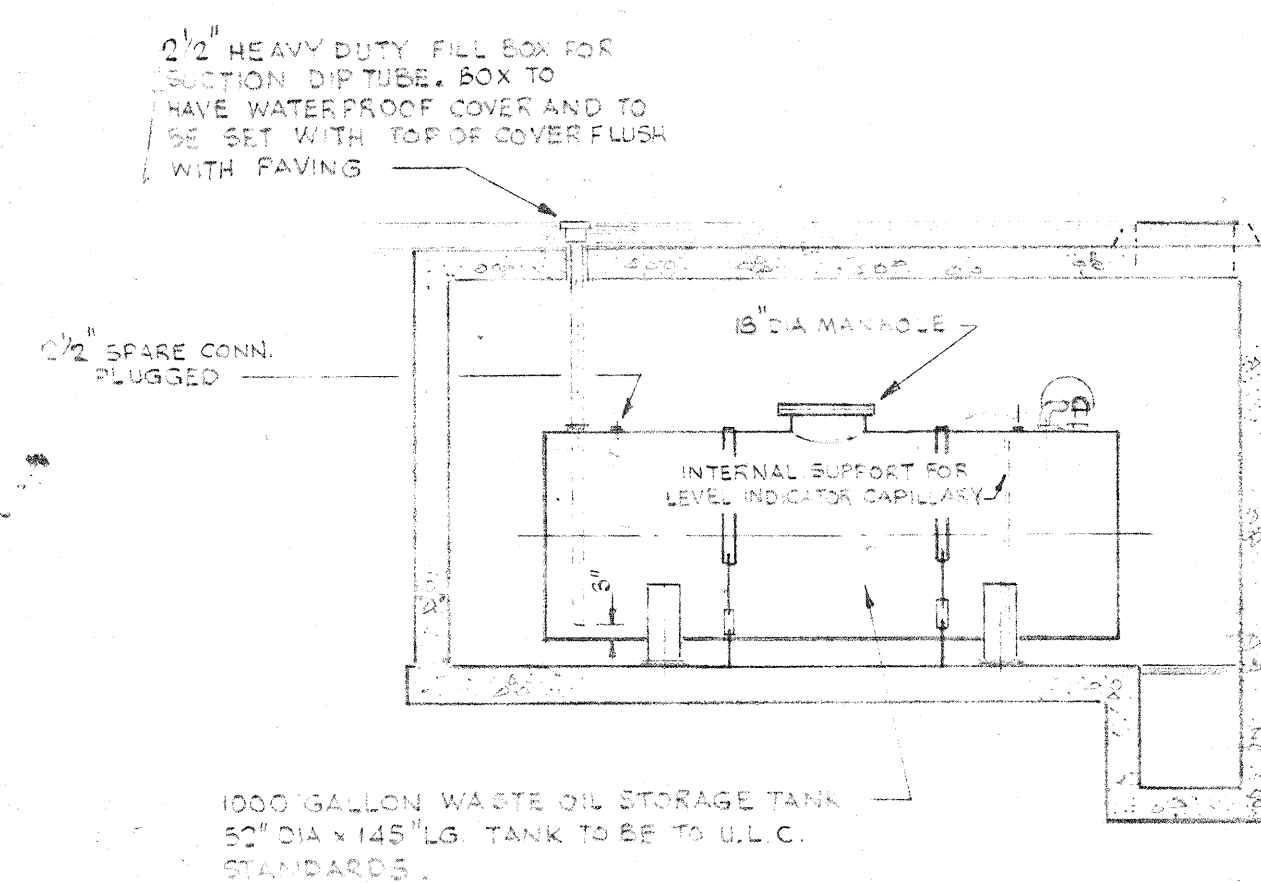
2185-805

DATE	ISSUE	REVISION	DESCRIPTION	DRAWN
24/1/0	4		AS BUILT	
29/3/0	3	1	REVISED PER ADDENDUM #2 AND ISSUED FOR CONSTRUCTION	
19/11/0	2	0	FOR TENDER	
16/10/0	1	0	FOR APPROVAL	
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION				
TRANSIT STORAGE, AND SHOP FACILITIES				
OVERHAUL & REPAIR SHOP				
PROCESS EQUIPMENT & SERVICES - DETAILS (SHEET 1)				
CONSULTING PROFESSIONAL ENGINEERS A. D. HARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO			ARCHITECTS: Wishman Ross + Blankstein Coop Gillmor Hanna 10 DONALD STREET, WINNIPEG, MANITOBA	
APPROVED	DATE	SCALE	DRAWN	DATE
<i>[Signature]</i>	19/11/0	AS SHOWN	<i>[Signature]</i>	AUGUST '67
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA 12/10/02 & 15/01/03			FILE NO.	2185-805 MECHANICAL

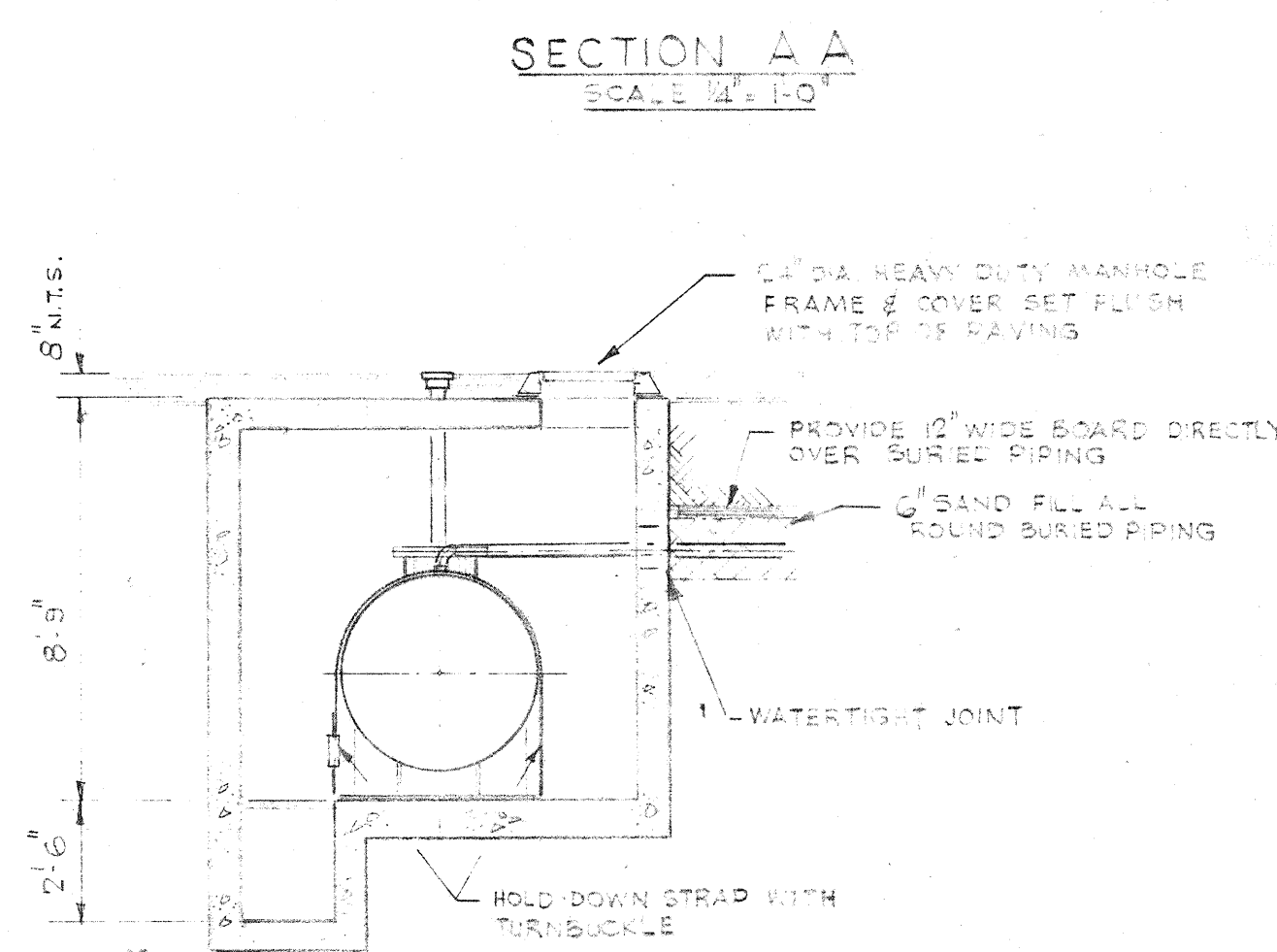
TRANSIT STORAGE
SHOP FACILITIES
2185-806
OVERHAUL & REPAIR SHOP - TRUCKS
EQUIPMENT & SERVICES - DETAILS (SHEET 2)



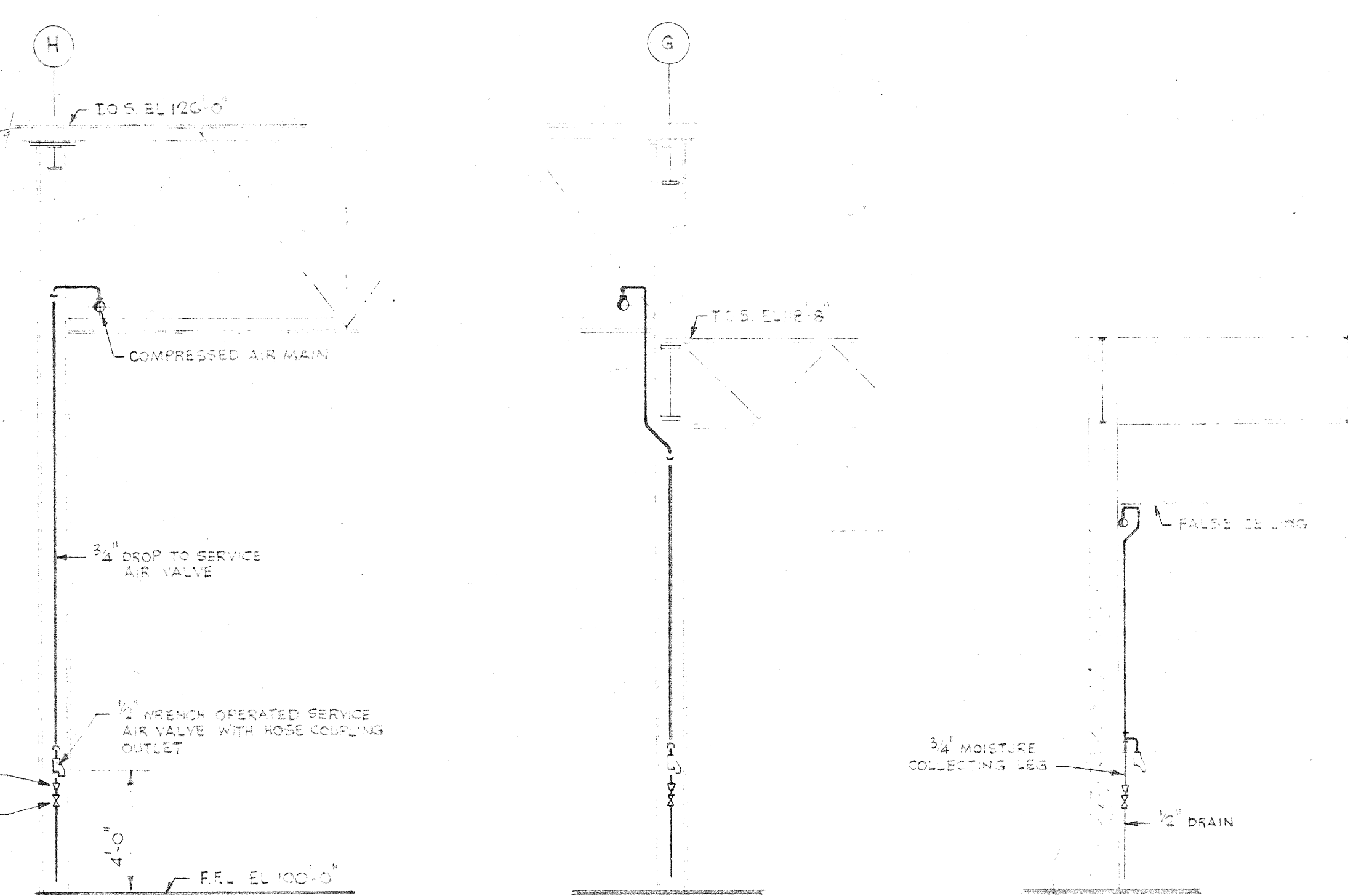
WASTE OIL DISPOSAL - PLAN
SCALE 1/4" = 1'-0"



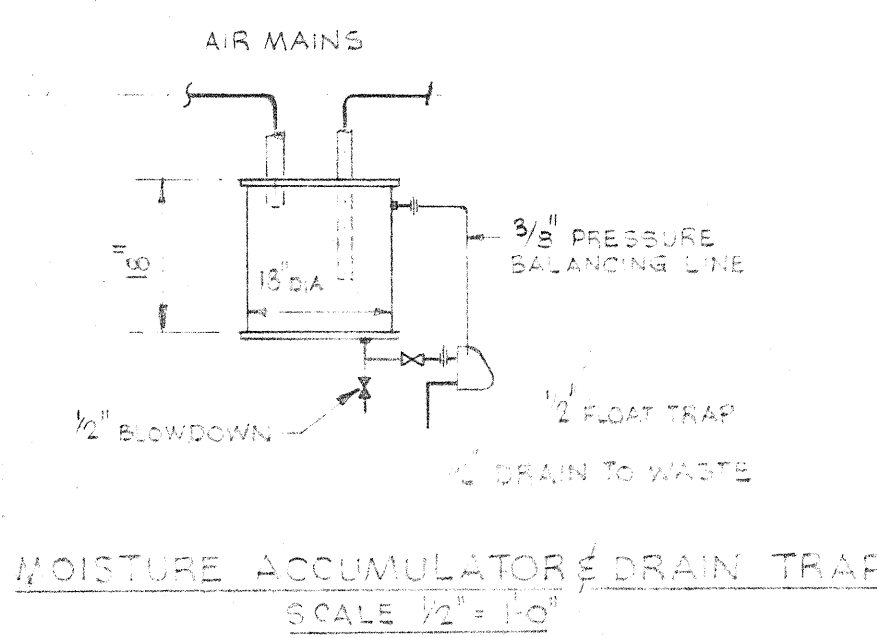
SECTION A-A
SCALE 1/4" = 1'-0"



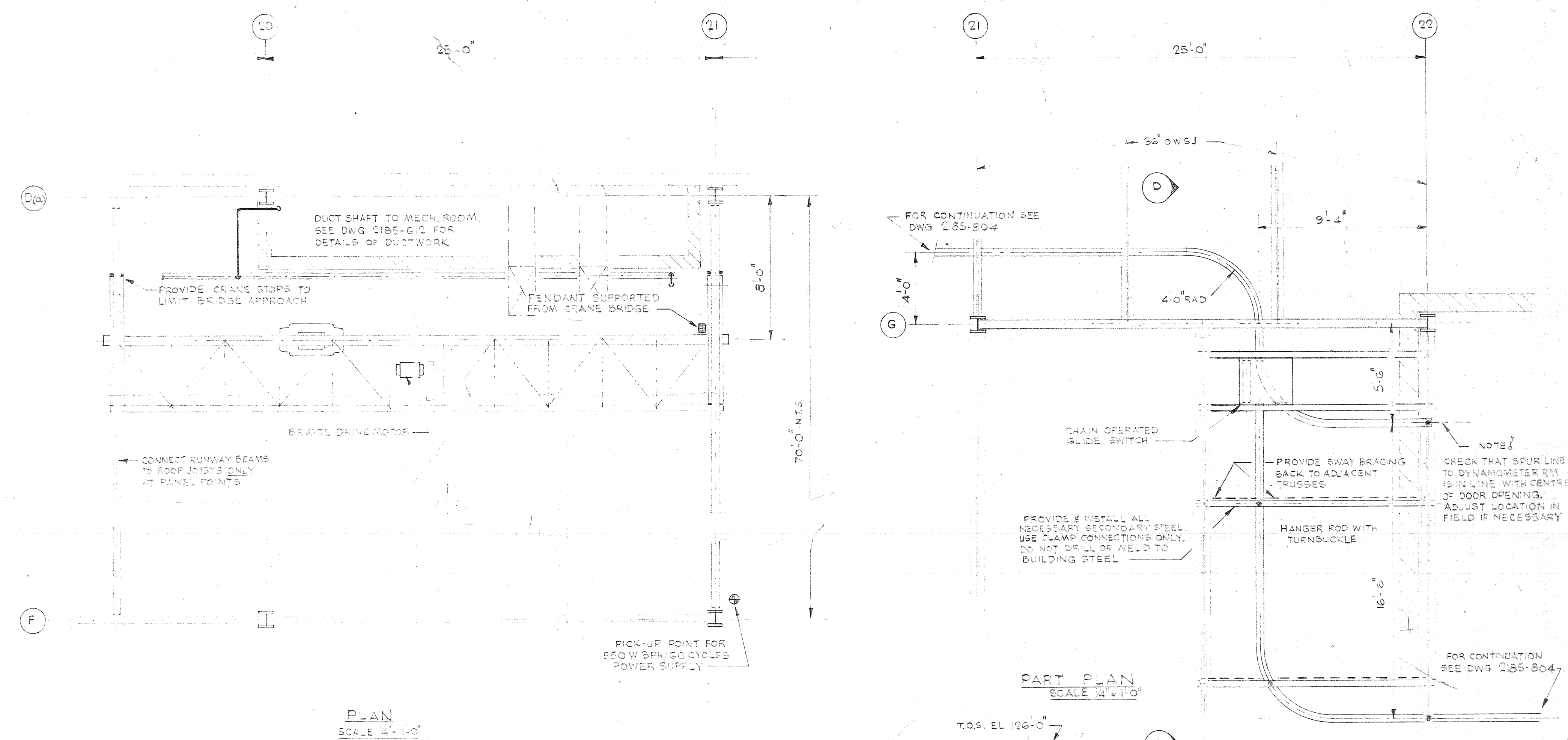
SECTION B-B
SCALE 1/4" = 1'-0"



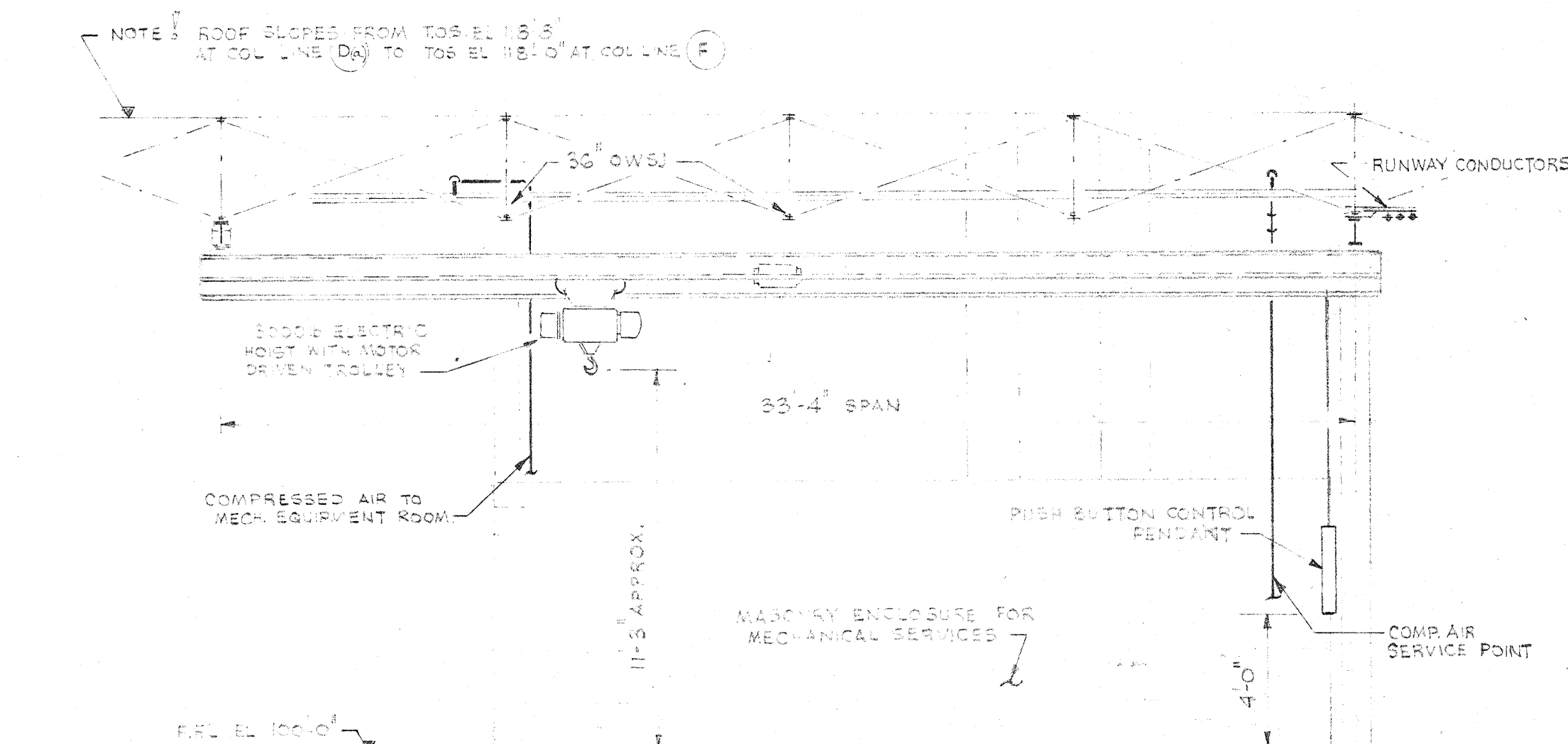
TYPICAL COMPRESSED AIR SERVICE POINTS



MOISTURE ACCUMULATOR DRAIN TRAP
SCALE 1/2" = 1'-0"

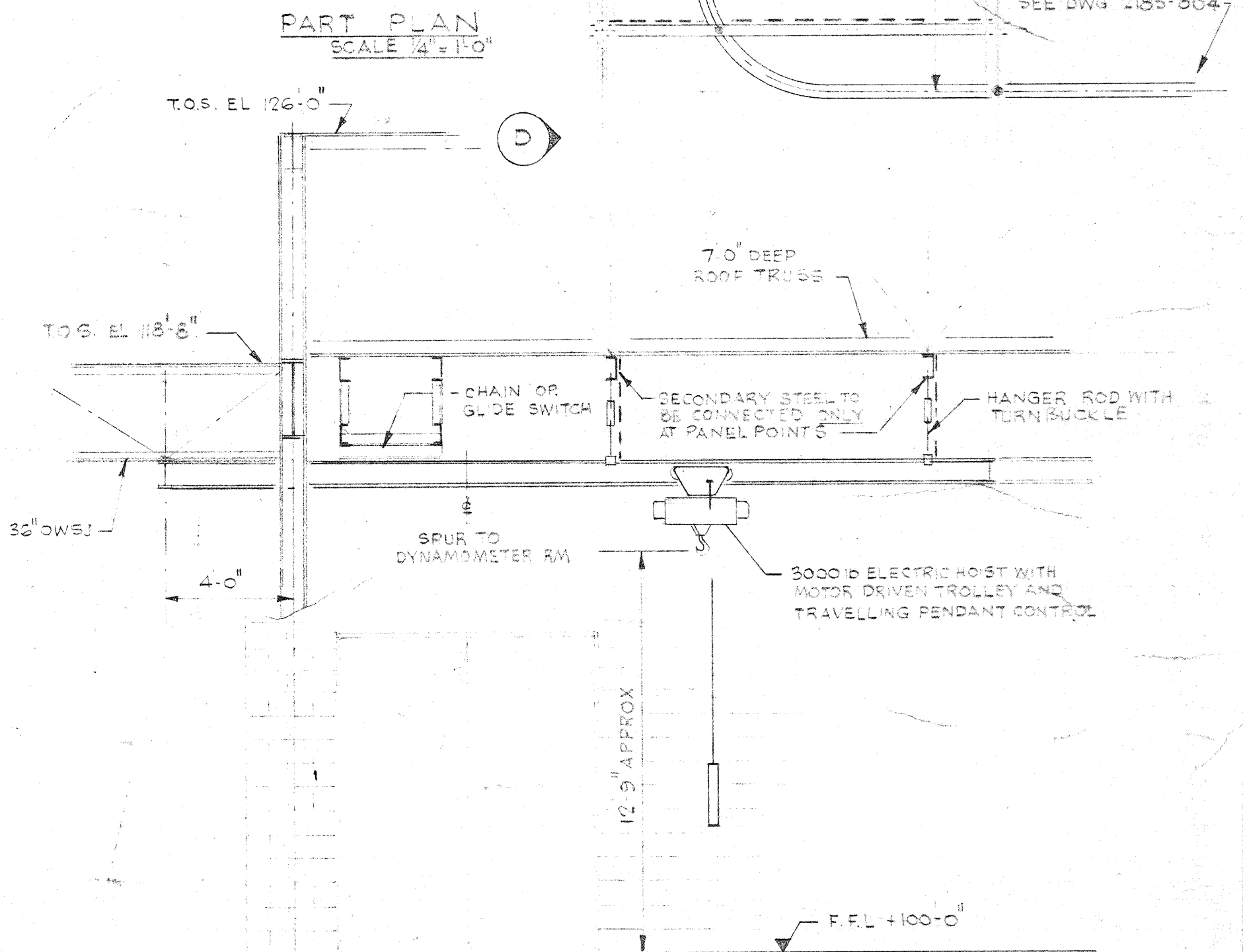


PLAN
SCALE 1/4" = 1'-0"



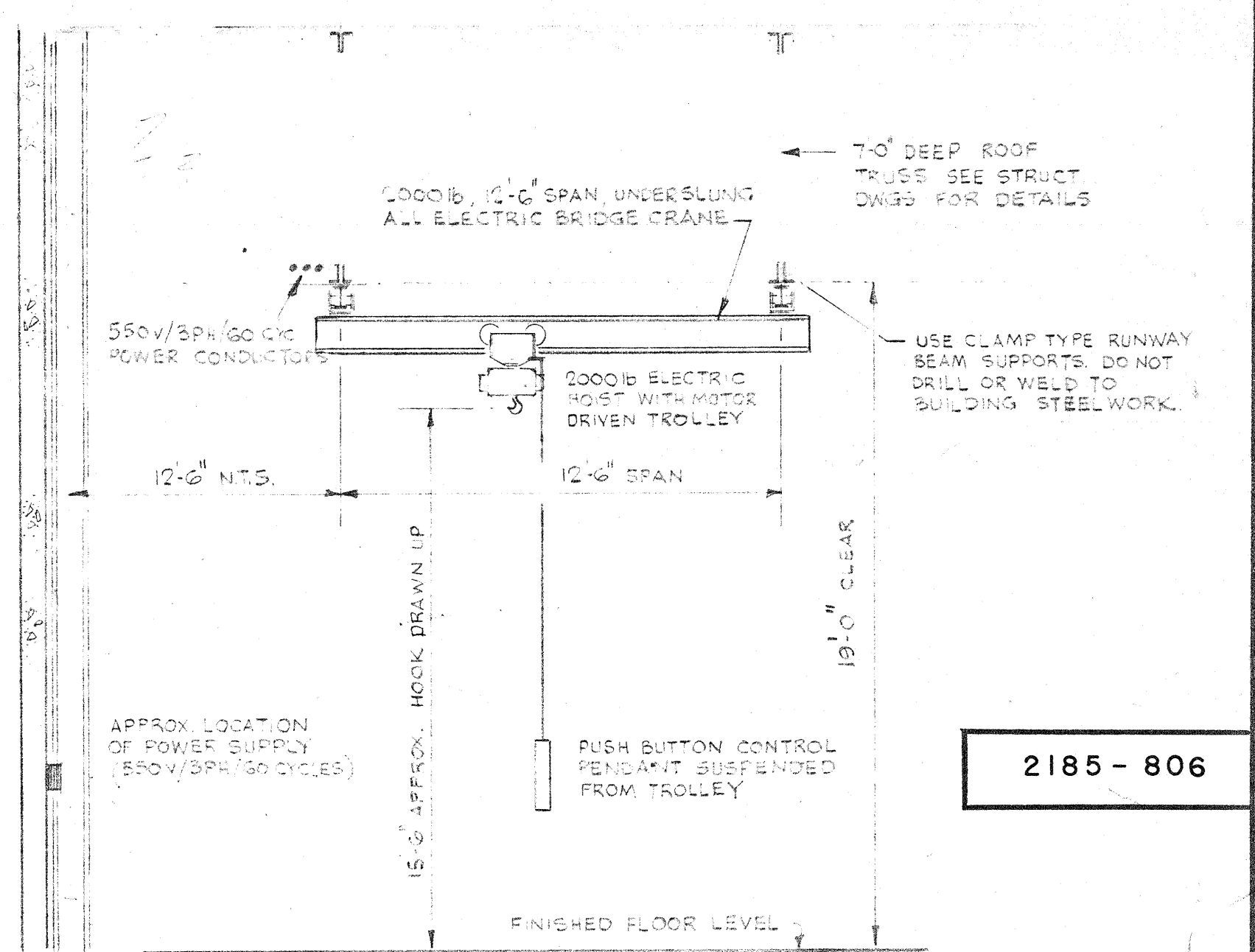
ELEVATION
SCALE 1/4" = 1'-0"

MACHINE SHOP CRANE - ELEVATION
ENDING REBUILD SHIP CRANE. GENERALLY SIMILAR
EXCEPT THAT SPAN SHALL BE 20'-0" REFER TO
DWG 2185-804 FOR ADDITIONAL DETAILS



SECTION D-D
SCALE 1/4" = 1'-0"

DETAILS OF MONORAIL
FOR FULL EXTENT OF LAYOUT SEE
DWG 2185-804



BRAKE TURNING LATHE CRANE
SCALE 1/4" = 1'-0"

NUMBER TEN ARCHITECTURAL GROUP
ARCHITECTS & ENGINEERS
1000-1000 YONGE STREET
TORONTO, ONTARIO M4W 1G2

A. D. MARGISON ASSOCIATES LTD.
CONSULTING PROFESSIONAL ENGINEERS
1000-1000 YONGE STREET
TORONTO, ONTARIO M4W 1G2

APPROVED
DATE: 8/1/67
BY: J.T.T.

LICENSED TO PRACTICE
IN THE
PROVINCE OF MANITOBA
My License Expires 31 Jan. 1968

DATE: 8/1/67
BY: J.T.T.

DATE: 8/1/67
BY: J.T.T.

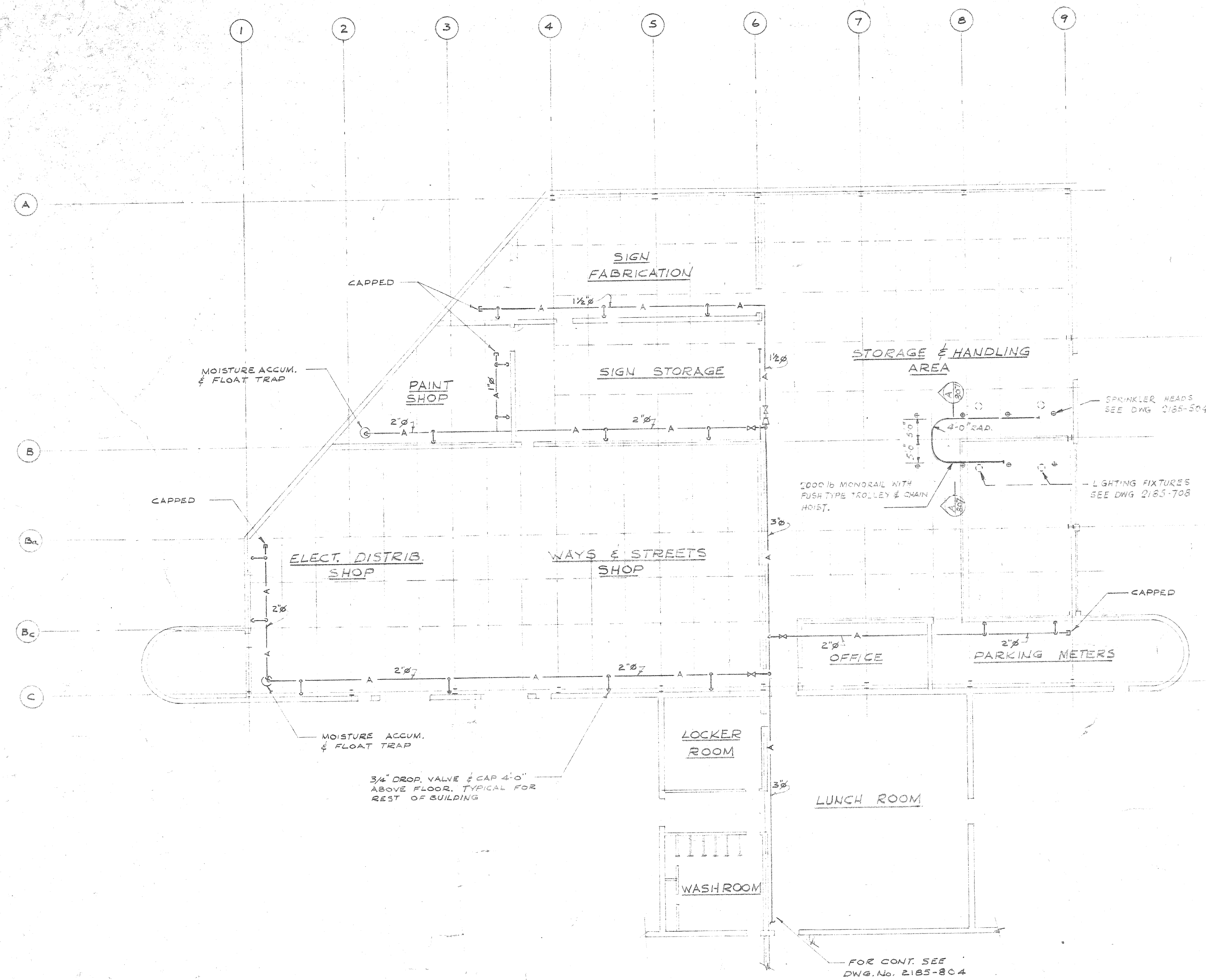
DATE: 8/1/67
BY: J.T.T.

DATE: 8/1/67
BY: J.T.T.

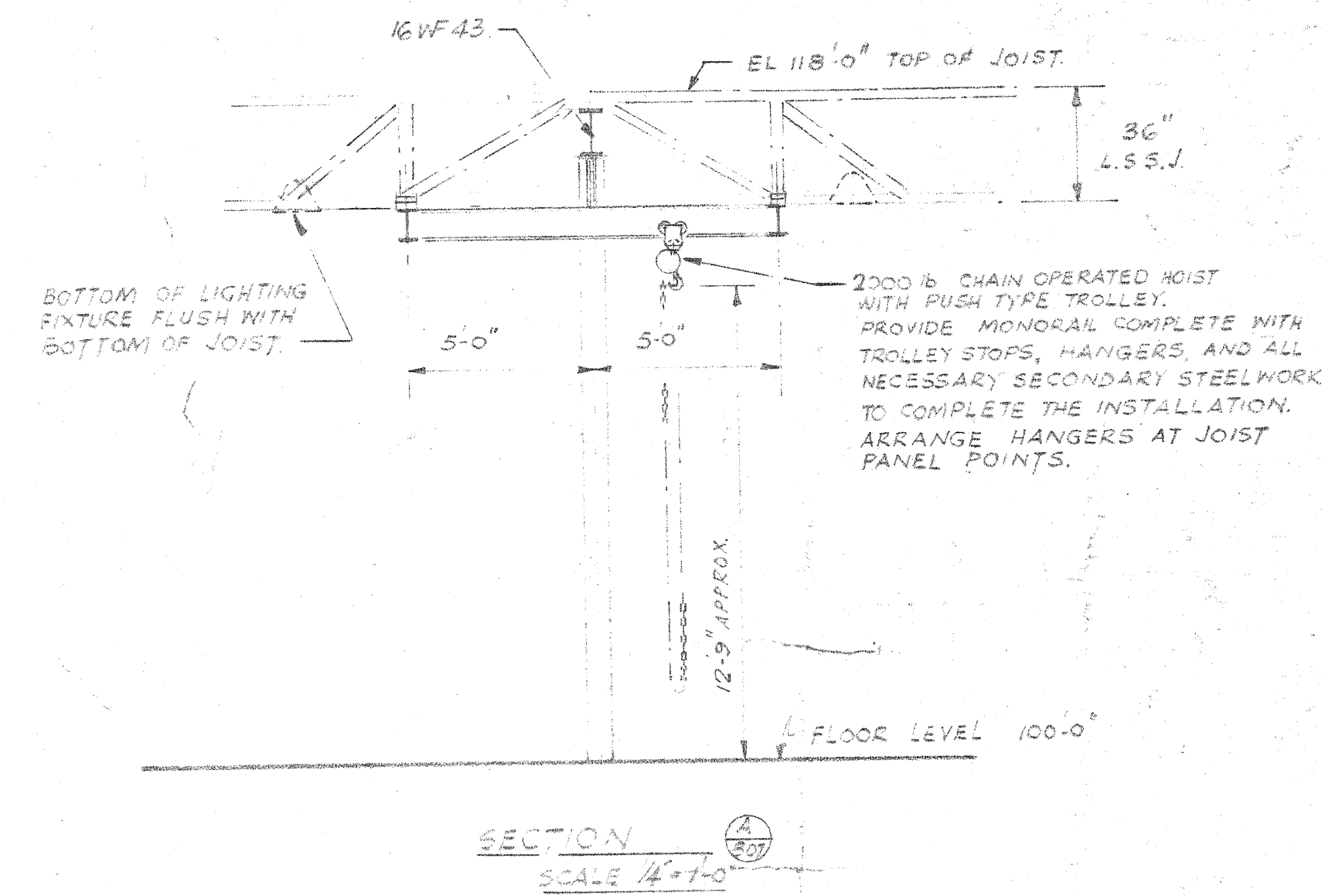
DATE: 8/1/67
BY: J.T.T.

DATE: 8/1/67
BY: J.T.T.

DATE	ISSUE	REV.	DESCRIPTION	DRAWN
9.5.77	5	1	GARAGE ADDITION - FOR TENDER	
24/2/68	4	1	AS BUILT	
29/5/68	3	0	15'-0" FOR CONSTRUCTION	
19/1/68	2	0	FOR TENDER	
2/10/72	1	0	FILE APPROVAL	
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION				
TRANSIT STORAGE AND SHOP FACILITIES				
OVERHAUL & REPAIR SHOP				
PROCESS EQUIPMENT & SERVICES - DETAILS (SHEET 2)				
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1000-1000 YONGE STREET, TORONTO, ONTARIO			ARCHITECTS Waisman Ross & Blankstein Coop Gillmor Hanna 1000-1000 YONGE STREET, WINNIPEG, MANITOBA	
APPROVED	DRAWN BY	DATE	SCALE	
	J.T.T.	8/1/67	AS SHOWN	
DEPUTY DIRECTOR OF STREETS AND TRANSIT	CHECKED	FILE NO.	DRAWING NO.	
				2185-806 MECHANICAL



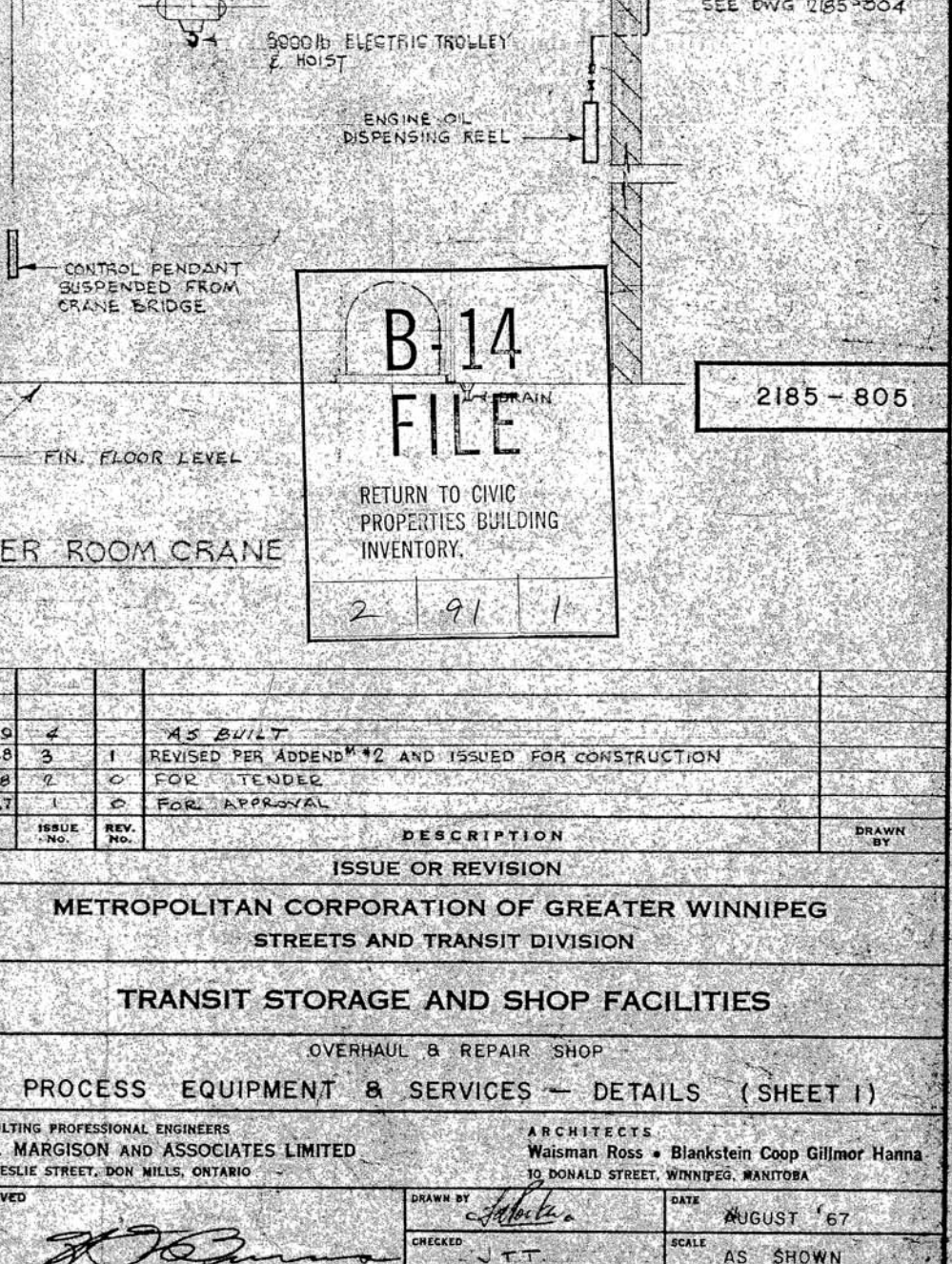
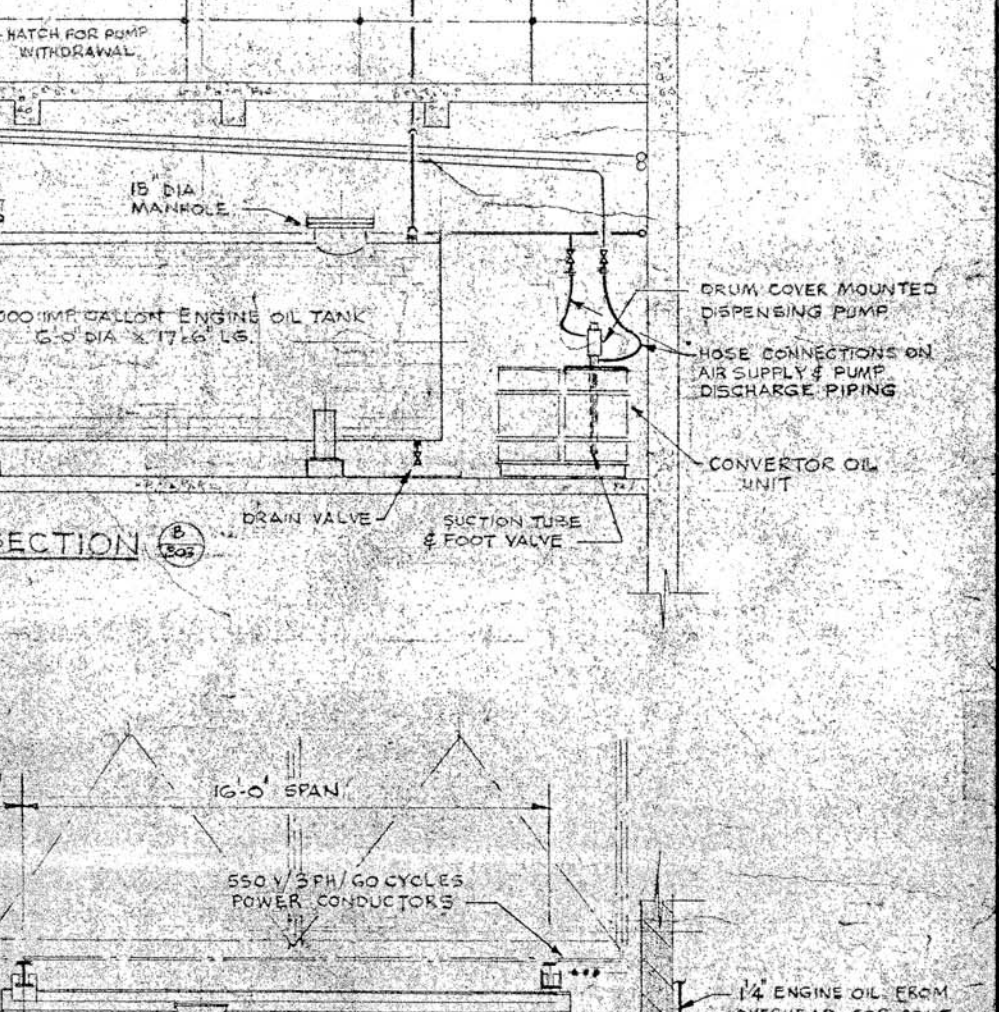
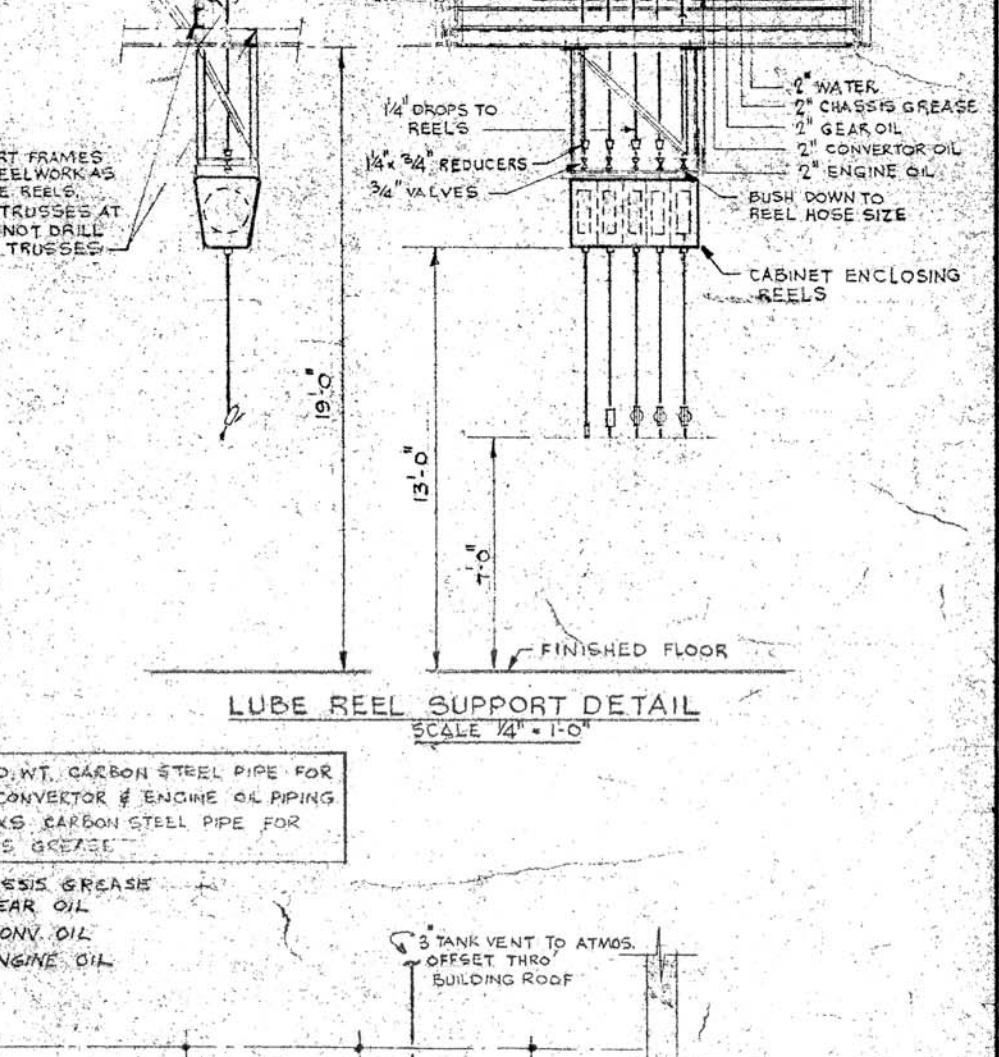
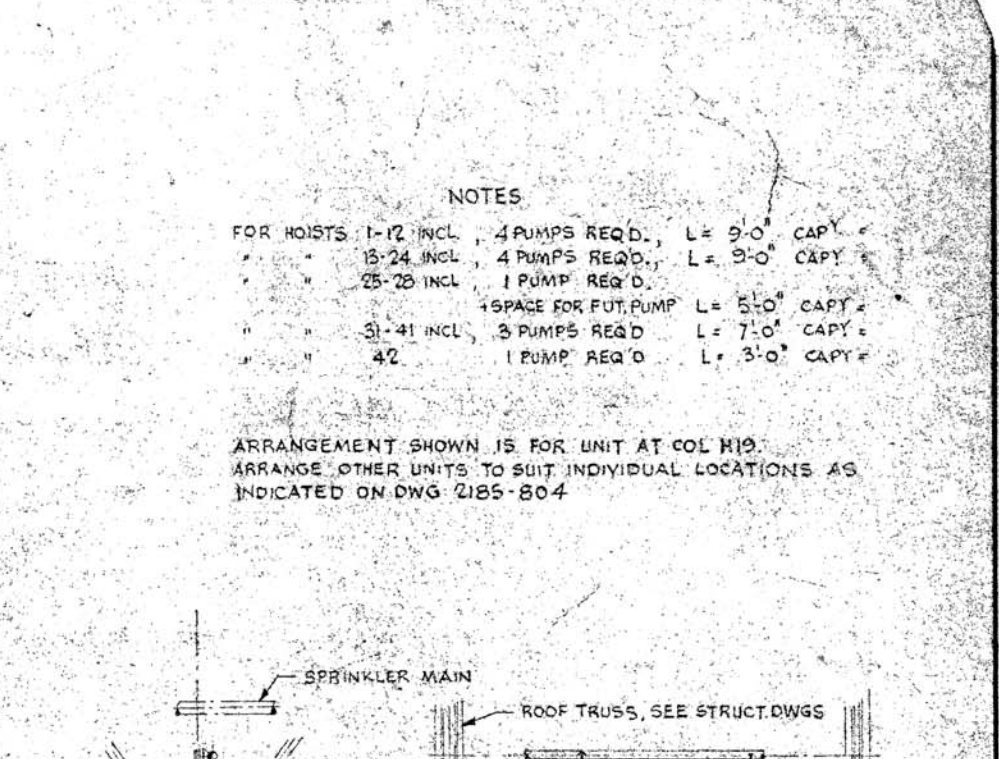
WAYS & STREETS FACILITIES BUILDING - PLAN
SCALE 1/16" = 1'-0"



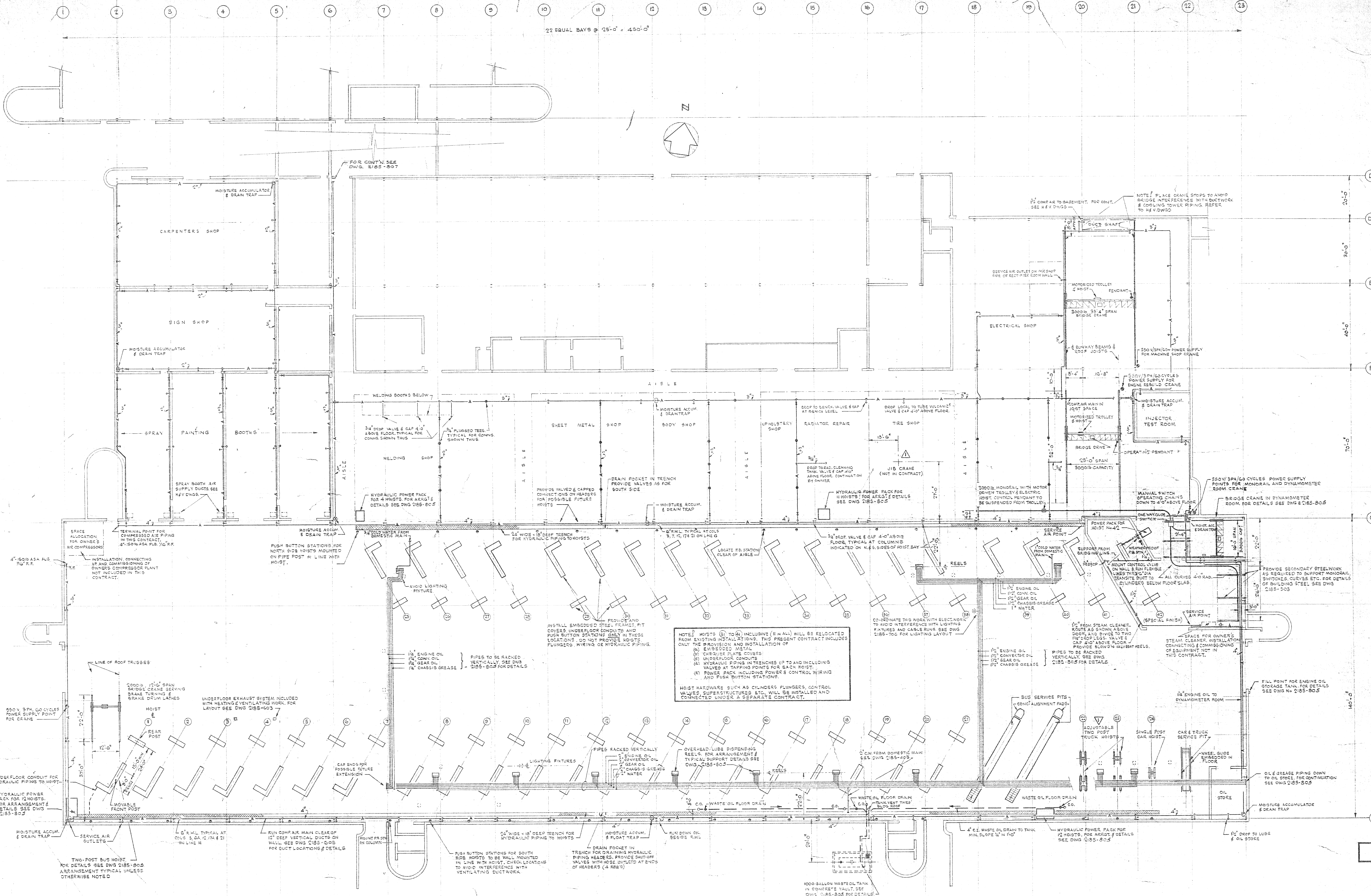
2185 - 807

DATE		ISSUE NO.	REV. NO.	DESCRIPTION	DRAWN BY
ISSUE OR REVISION METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION TRANSIT STORAGE AND SHOP FACILITIES WAYS & SERVICES PROCESS EQUIPMENT & SERVICES — PLAN					
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1150 LESLIE STREET, DON MILLS, ONTARIO		ARCHITECTS Walsman Ross + Blankstein Coop Gilmor Hanna 10 ROYAL STREET, WINNIPEG, MANITOBA			
APPROVED DEPUTY DIRECTOR OF STREETS AND TRANSIT		CHECKED J.T.T.		DATE AUGUST '67 SCALE 1/16" = 1'-0"	
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA (Lic. Expiry Expires 10 Jan. 1968)		SHEET NO. 2185 - 807 MECHANICAL			

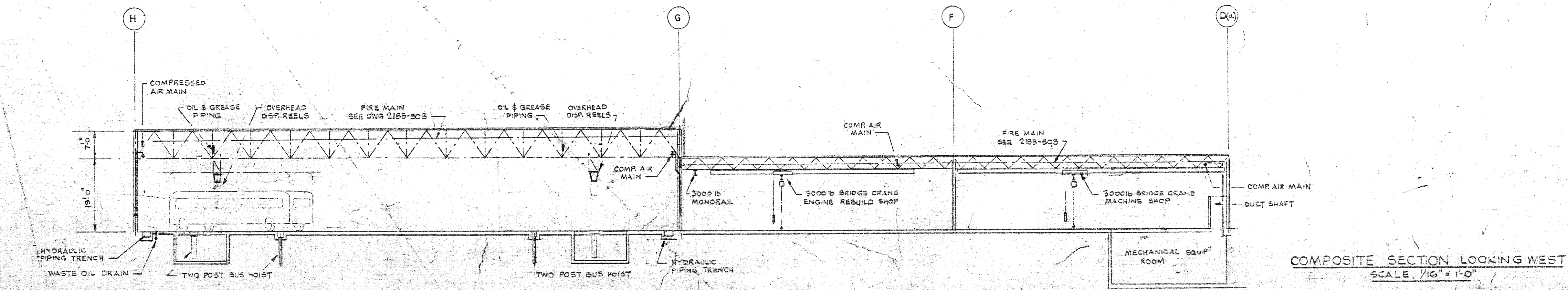
TRANSIT STORAGE
SHOP FACILITIES
2185 - 807
WAYS & SERVICES - PROCESS EQUIP.
MENT & SERVICES - PLAN



EQUIPMENT & SERVICES - PLAN & DETAILS



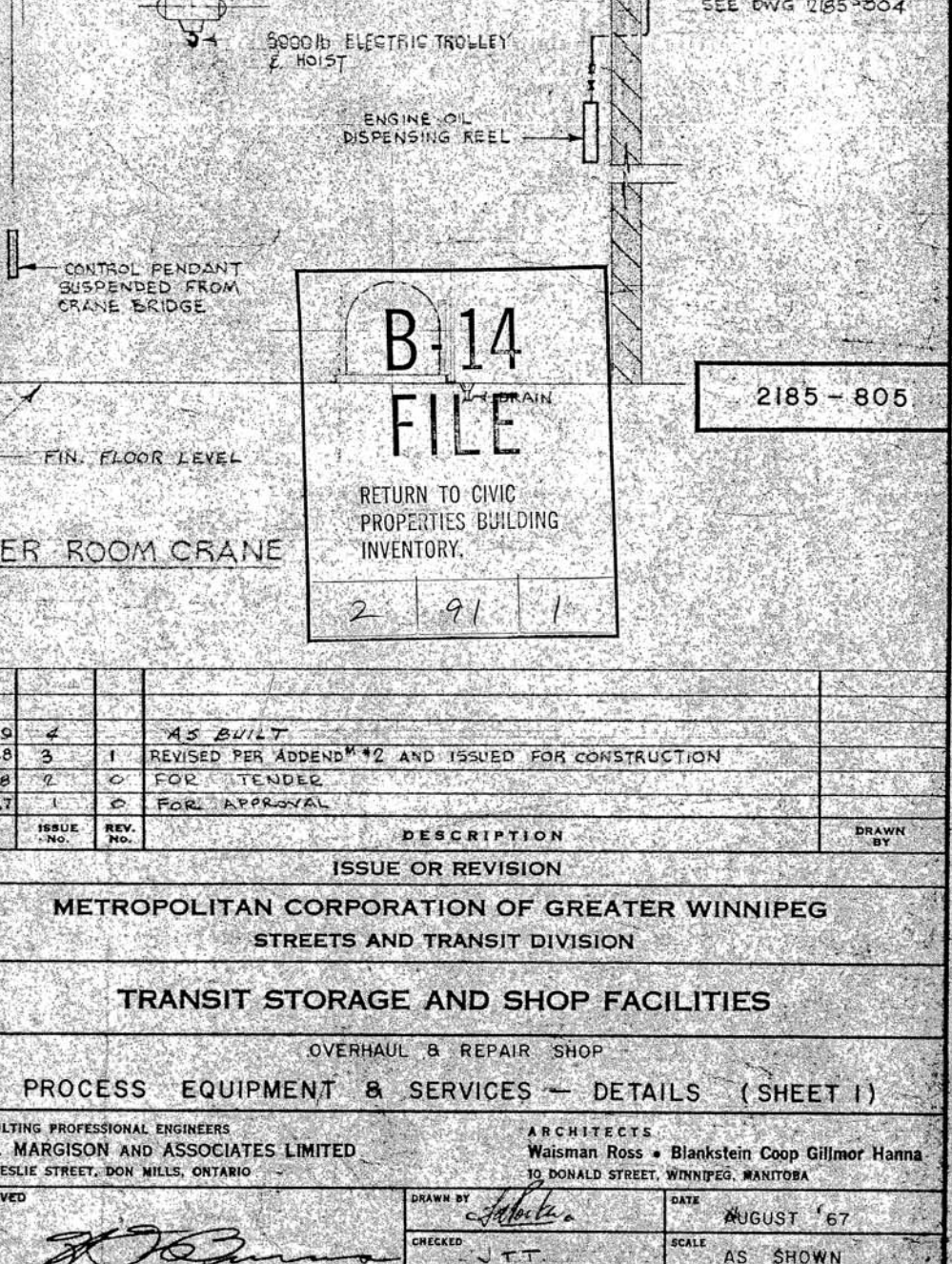
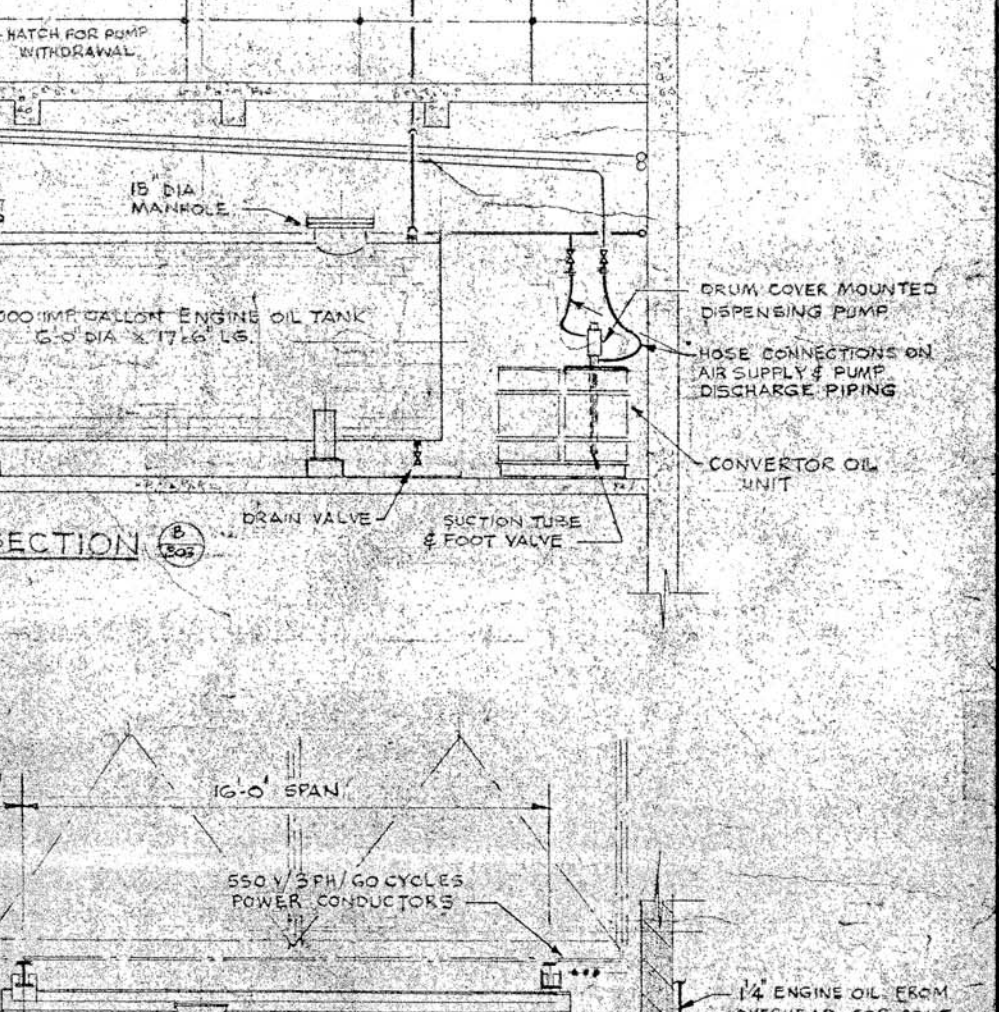
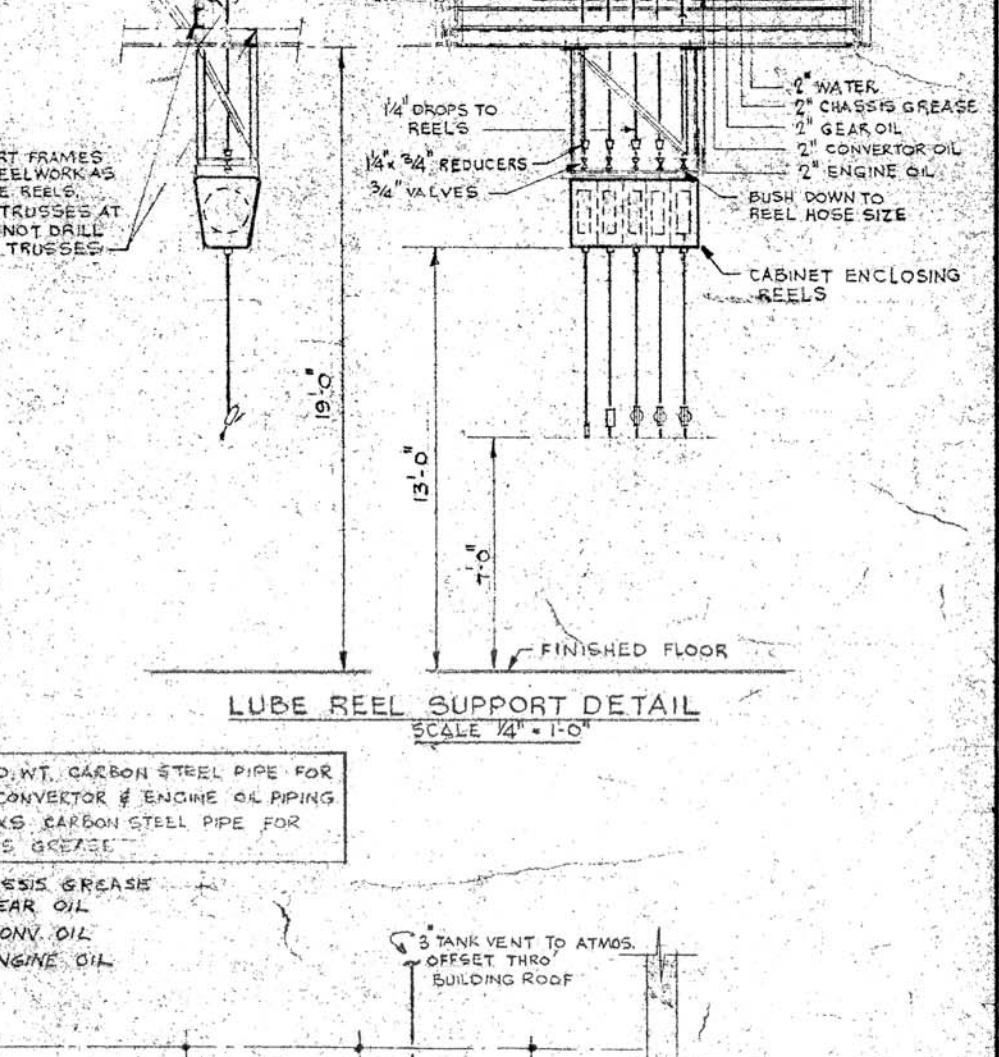
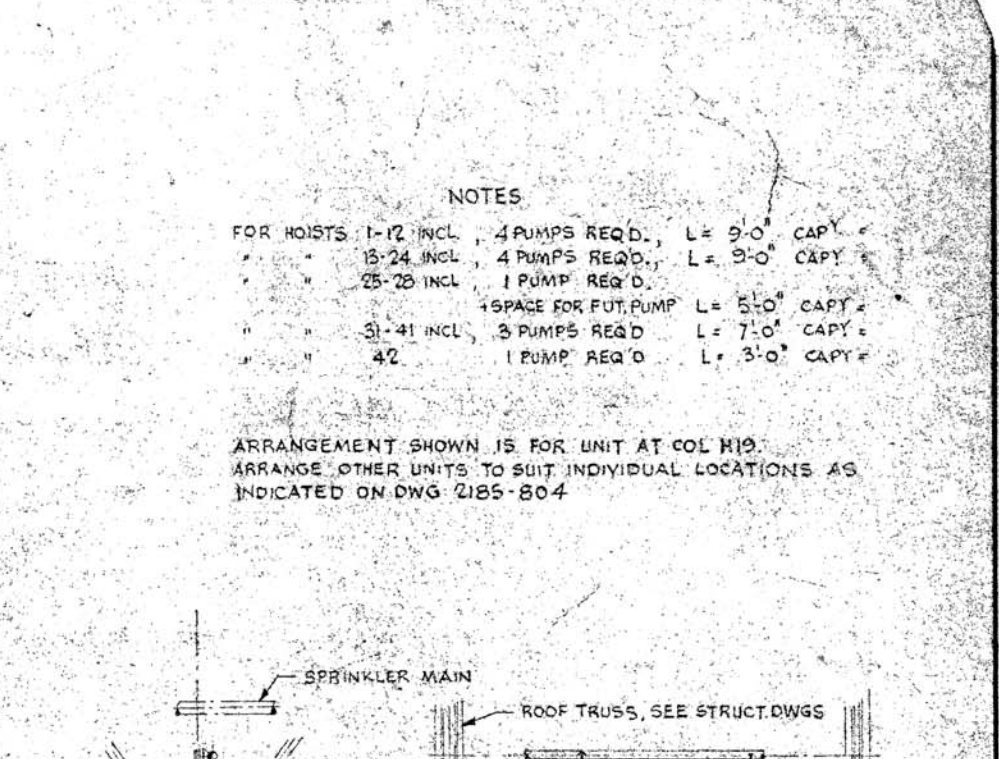
PROCESS EQUIPMENT - PLAN
SCALE 1/8" = 1'-0"



COMPOSITE SECTION LOOKING WEST
SCALE 1/8" = 1'-0"

2185-804

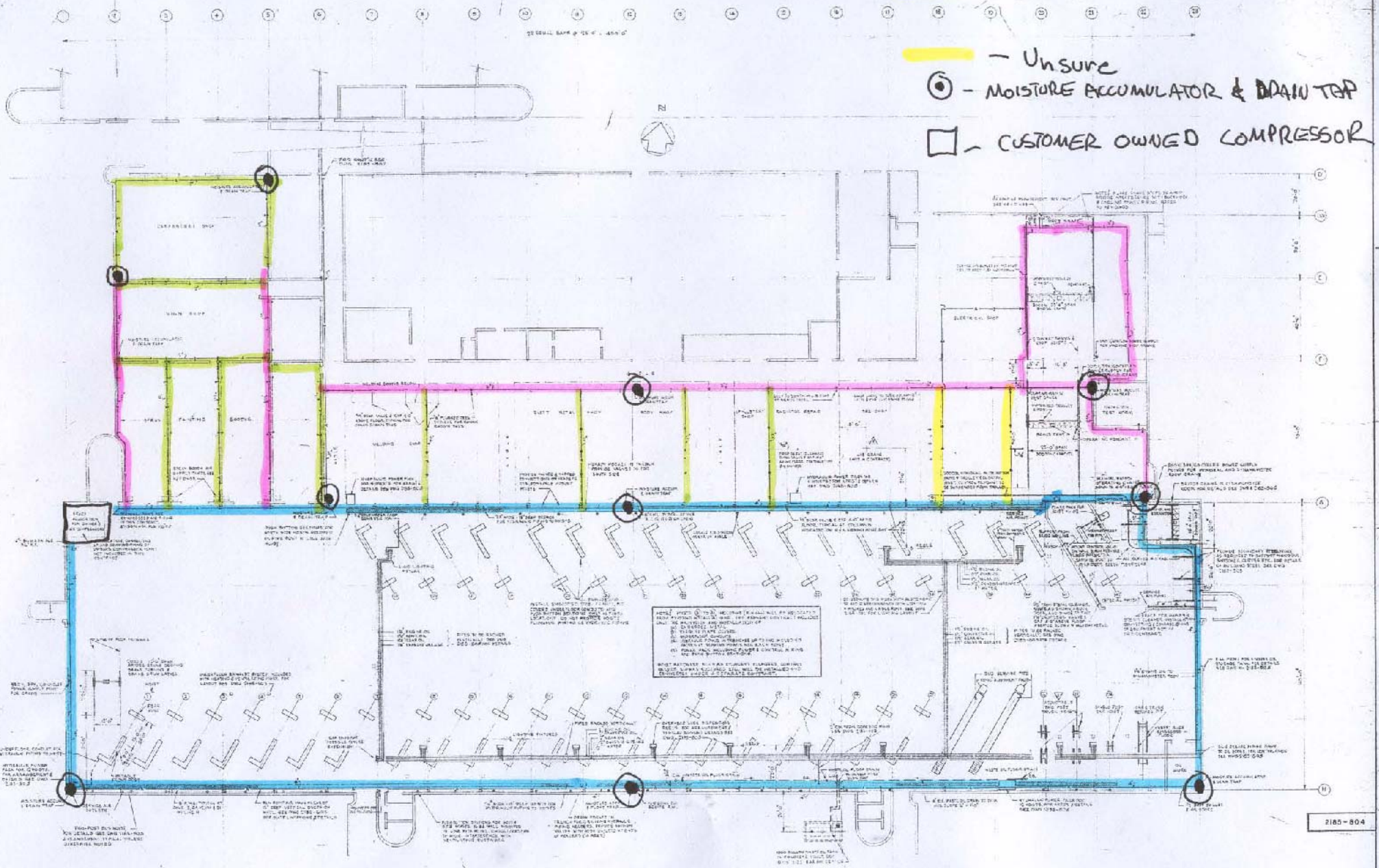
24/1/67	4	AS BUILT		
28/3/68	3	REVISED PER ADDENDUM NO. 1 AND ISSUED FOR CONSTRUCTION		
19/1/68	2	FOR TENDER		
22/1/67	1	FOR APPROVAL		
DATE	ISSUE NO.	REV. NO.	DESCRIPTION	DRAWN BY
ISSUE OR REVISION				
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION				
TRANSIT STORAGE AND SHOP FACILITIES				
OVERHAUL & REPAIR SHOP				
PROCESS EQUIPMENT & SERVICES - PLAN & DETAILS				
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO			ARCHITECTS Waisman Ross + Blankstein Coop Gilmer Hanna 20 SPADINA STREET, WINNIPEG, MANITOBA	
APPROVED	DATE	SCALE	DRAWING NO.	
J.T.T.	AUGUST '67	1/16" = 1'-0"	2185-804	
LICENSED TO PRACTICE IN THE PROVINCE OF MANITOBA My Licence Expires 10-31-1968			MECHANICAL	



COMPRESSED AIR SCHEMATIC

— - 4"
— - 3"
— - 2"

— - Unsure
 (O) - MOISTURE ACCUMULATOR & DRAIN TAP
 □ - CUSTOMER OWNED COMPRESSOR

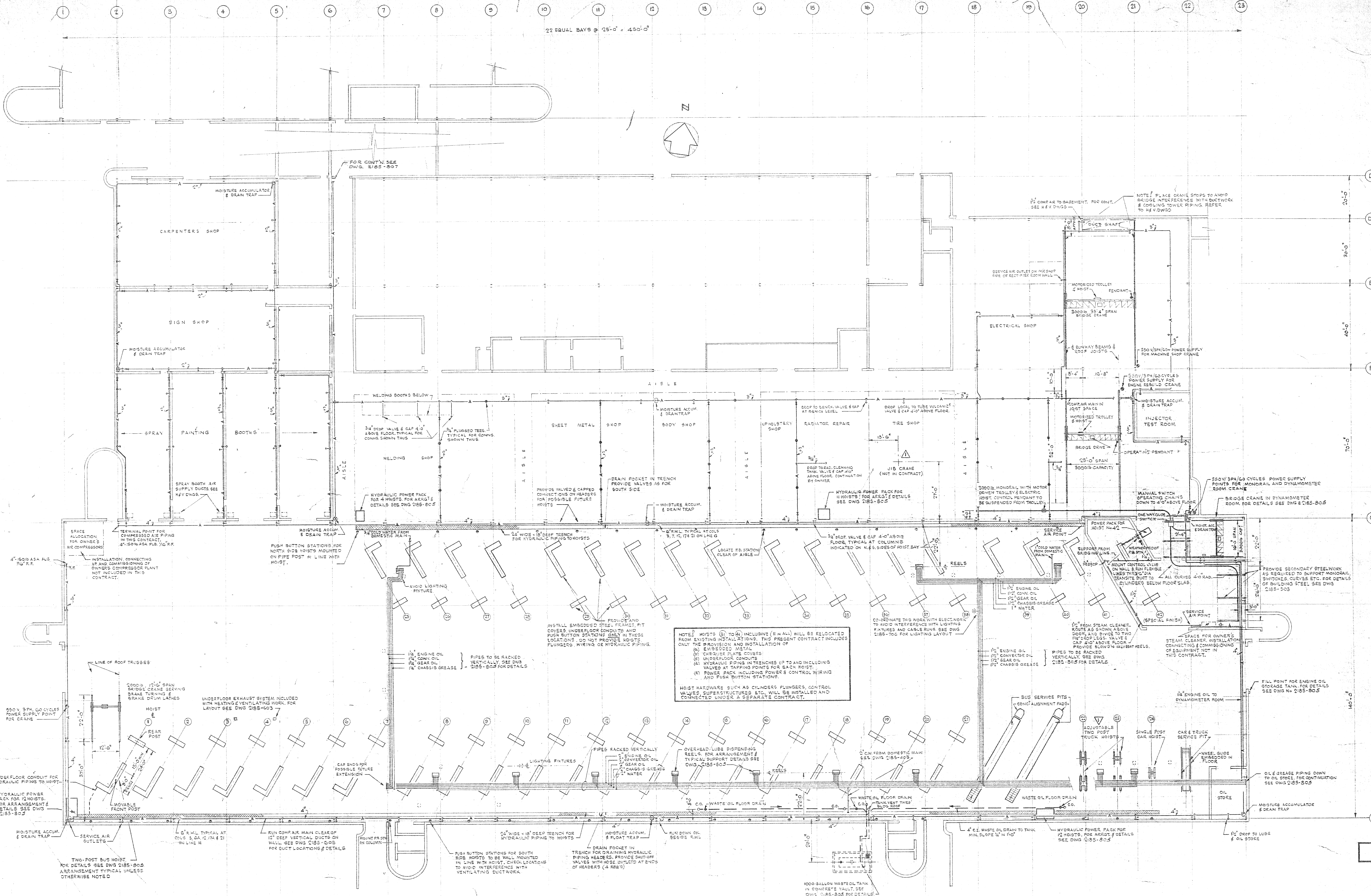


PROCESS EQUIPMENT PLAN
SCALE: 1/8" = 1'-0"

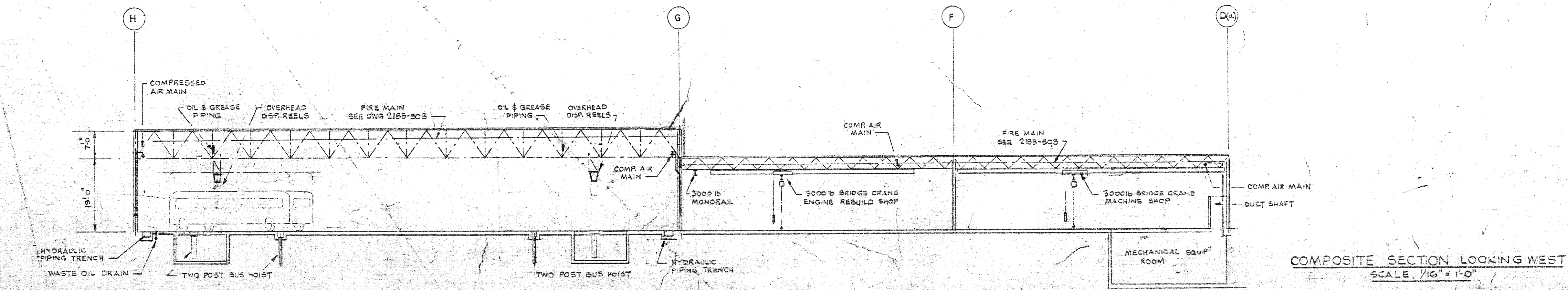
2185-804

NO.	DATE	BY	CHKD.	APP.	DESCRIPTION
1	11/11/83	J. J. J.	J. J. J.	J. J. J.	REVISED PER DISCUSSION WITH MR. J. J. J. FOR CONSTRUCTION.

EQUIPMENT & SERVICES - PLAN & DETAILS



PROCESS EQUIPMENT - PLAN
SCALE 1/8" = 1'-0"



COMPOSITE SECTION LOOKING WEST
SCALE 1/8" = 1'-0"

2185-804

24/1/69	4	AS BUILT	
28/3/68	3	REVISED PER ADDENDUM NO. 1 AND ISSUED FOR CONSTRUCTION	
19/1/68	2	FOR TENDER	
22/1/67	1	FOR APPROVAL	
DATE	ISSUE NO.	REV. NO.	DESCRIPTION
ISSUE OR REVISION			
METROPOLITAN CORPORATION OF GREATER WINNIPEG STREETS AND TRANSIT DIVISION			
TRANSIT STORAGE AND SHOP FACILITIES			
OVERHAUL & REPAIR SHOP			
PROCESS EQUIPMENT & SERVICES - PLAN & DETAILS			
CONSULTING PROFESSIONAL ENGINEERS A. D. MARGISON AND ASSOCIATES LIMITED 1155 LESLIE STREET, DON MILLS, ONTARIO		ARCHITECTS Waisman Ross • Blankstein Coop Gilmer Hanna 20 SPADINA STREET, WINNIPEG, MANITOBA	
APPROVED	DATE	SCALE	1/16" = 1'-0"
24/1/69	AUGUST '67		
DRAWN BY	CHECKED	FILE NO.	2185-804
J.T.T.	J.T.T.		
SHEET NO.			MECHANICAL

Generic input/output for Metasys Control.

1. Controls must be able to interface to MSEA technology on the field device network using either the N2Open or BACnet Protocols. See note 2.
2. No LON protocols are to be accepted.
3. Controls contractor to provide commissioning sheets for all points on field devices as well as head end equipment.
4. Controls contractor to communicate with equipment provider to ensure proper field point integration as well as controllability of the equipment, if not package controls.
5. If not a Metasys product installed, the controls contractor must show seamless integration into the exiting Metasys Extended Architecture Operator Interface that is acceptable to City Staff prior to the award of the contract. See note 2.
6. Controls contractor to supply all drawings/graphics/sequence of operations in both a hard and soft copy. Drawings and graphics to be able to be read and modified by City of Winnipeg Staff. User interface graphics to be completed using *Graphic Generation Tool* software. Graphics must use City of Winnipeg graphic templates. Contractor to supply As-Built drawings in an editable format, able to be easily edited by City of Winnipeg Staff.
7. The use of either N2Open or BACnet to be determined based on type of building where the work is being performed. If the construction is a brand new facility, then BACnet can be used. The term BACnet should then be defined properly in it's use, see note 1 below. If the work is an addition to and the new work is to be tied into the existing controls, then the contractor should contact City of Winnipeg technical staff to determine the best protocol to use based on existing equipment.
8. If Other vendor (non-JCI) controls are to be used then a seamless integration must be proven before approval will be given.
9. Design Engineer must detail a complete sequence of operations for each controlled device. This is so the marriage of controls and mechanical equipment meets the design intent of the mechanical engineer.
10. A complete list of setpoints for all controlled equipment must be provided.
11. A points list is to be provided for all controlled objects.
12. The controls spec must be complete so that there is no interpretation required on behalf of the controls contractor so that the control system is built to meet the specific needs of the complete mechanical plan and design.
13. Alarm Messages. All objects that must be alarmed will have in the alarm message text the following information as per the included example.
Alarm Message: Building Address, What is in alarm, see graphic for Instruction
Example: 251 Donald SF-1 VFD Common Alarm, see graphic for Instruction

Rooftop Units, Make-Up Air / Air Handling Unit (MUA/AHU):

1. Where possible, the manufacturer of the equipment should be contacted to see if an N2Open or BACnet protocol equipped package controller is available from the factory.

2. If no interface from the factory is available then we would as a minimum expect the following points to monitor:
 - a. Start/Stop
 - b. Fan Status
 - c. Economizer Status, command in on/off or % open
 - d. Cooling Mode
 - e. Heating Mode
 - f. Supply Air Temperature
 - g. Room Temperature for Single Zone Unit
 - h. Return Air Temperature for Multizone Unit
 - i. Supply Air Low Limit Status (Freeze Stat)

Exhaust Fans:

1. Exhaust fans will have start/stop/status points.

Boilers:

1. Boilers to come with own package controls and outdoor air temperature for reset control.
2. A Metasys Interface for the controls to be part of the package for direct connection on either the N2Bus or BACnet.
3. If no interface package exists, the following points are required as a minimum:
 - a. Hot Water Supply Temperature
 - b. Hot Water Return Temperature
 - c. Boiler Status
 - d. Boiler Alarm, this is to be a generic alarm for all mechanical safeties or other related devices, which would cause the boiler to be shut down.

Chillers:

1. Chillers to come with own package controls and outdoor air temperature for reset control.
2. A Metasys Interface for the controls to be part of the package for direct connection on either the N2Bus or BACnet.
3. If no interface package exists, the following points are required as a minimum:
 - a. Chilled Water Supply Temperature
 - b. Chilled Water Return Temperature
 - c. Chiller Status
 - d. Chiller Alarm, this is to be a generic alarm for all mechanical safeties or other related devices, which would cause the chiller to be shut down.
 - e. Condenser Water Supply Temperature
 - f. Condenser Water Return Temperature
 - g. Water Tower fans/pumps Status

Pumps:

1. Pumps will have a start/stop/status as a minimum.

Variable Speed/Frequency drives:

1. All VFD/VSD to have N2/BACnet interface built into the device. If the manufacturer is not able to provide this, get another manufacturer. ABB would be the acceptable standard here.

Lighting Controls:

1. No LON lighting controls are to be accepted. No exceptions.

VAV boxes:

1. VAV boxes to have digital controller mounted directly to the VAV box actuator. This is to have a digital room thermostat and proportional control on the damper. This controller to use either N2Open or BACnet.

Sump Pits:

1. Sump pits to have high alarm status installed.
2. If lead/stby pumps are present, then sensing of the lead pump is required.

Generic Inputs from the Facility:

1. Room temperatures in corner office/rooms on each floor, especially if there are windows present

Notes:

1. The term BACnet refers to an industry standard protocol that basically states that all devices using the BACnet technology will be able to communicate to each other. This is not necessarily the case. The BACnet protocol is comprised of several layers of interoperability and intercommunications. The controls contractor performing the supervisory controller installation should confirm that all devices specified are able to communicate to the proposed devices using the BACnet PIC statement and then supply documentation such that all devices supplied will communicate to each other as required for proper operation of the system. This includes integration into the ADX server.
2. If Metasys Network Automation Engines (NAE/NIE/NCE) are to be installed on the project then the version of these devices and their software must be such that the City of Winnipeg does not be required to update/upgrade the existing ADX server in order for all user views, alarms, and point monitoring to occur. The contractor must co-ordinate with City staff to determine the correct version to be installed. All user views and graphics must not be installed in the local supervisory controller (NAE/NIE/NCE). All such items must be programmed into the existing ADX server. User views and graphics must be approved for use by City staff before implementation of such items.
3. All monitored points that have alarms must have operating instructions and alarm messages. These will be co-ordinated with the tech shop and operations supervisor.

Phuzion™

LED High Bay



DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org to confirm which versions are qualified.

Catalog Number	
Notes	Type

Description

The Phuzion LED luminaire takes high-bay lighting to new levels of lumen output and temperature tolerance. By marrying the latest in LED technology with the legendary illuminating dynamics of HoloPhane's prismatic glass, the Phuzion high bay brings to the industrial environment LED lighting of unparalleled performance and reliability.

Optics

- Prismatic borosilicate glass maintains highest levels of luminosity over time.
- Glass doesn't fade, discolor or otherwise degrade in harsh environments.
- Three distributions (narrow, medium and wide) available to maximize versatility.
- Highly engineered LED system ensures superior uniformity and maximizes spacing.
- IP65 rated optics.

Mechanical

- Robust cast aluminum housing with low copper content (0.6% CU content) withstands hot and dirty environments.
- Pendant mount standard.
- Achieves up to 149°F (65°C) ambient rating.

Electrical

- 0-10V dimming driver is standard (must specify the D option to enable dimming), 2kV/1kA level of surge protection provided by driver.
- An added 6kV/3kA level of surge protection is an option on 120-277 and is a standard option on 347/480V.

- An added 20kA in-line surge protection is also an option on 120-277.
- CRI > 70 (nominal) is standard.
- 3000K, 4000K or 5000K CCT available.
- Fault-tolerant LED light engine continues to provide light even in the failure of one LED.
- Aluminum core printed circuit board.
- For AS (120-277V), dimming source current = 300 micro amps (18L, 24L, 27L) and 150 micro amps (12L).
- For AH (347/480V), dimming source current = 2000 micro amps (18L, 24L, 27L) and 1000 micro amps (12L).

Listings

- CSA Certified for use in damp locations, 65°C ambient environments.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org to confirm which versions are qualified.

Warranty

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_Conditions.aspx

Actual performance may differ as a result of end-user environment and application.

Actual wattage may differ by +12%/-12% when operating between 120-480V +/- 10%.

NOTE: Specifications subject to change without notice.

Typical Applications

- Heavy industrial
- Light manufacturing
- Warehousing
- Large indoor

Dimensions: Inches (millimeters) unless otherwise noted.

Diameter: 21.22 (538.99)
Height: 19.02-23.46 (483.11-595.88)
Weight: 33-38 lbs. (15.0-17.2 kg)

ORDERING INFORMATION

Example: PHZ 18L 4K AS P G W

Series	Lumens	Color temperature ¹	Voltage	Mounting	Finish	Optics
PHZ	12L 12,000 nominal lumens	3K 3000K CCT	AS Auto sensing (120-277)	P Pendant	W White	N Narrow
	18L 18,000 nominal lumens	4K 4000K CCT	AH Auto sensing (347/480) ²	Q Quick disconnect	G Gray	M Medium
	24L 24,000 nominal lumens	5K 5000K CCT	12 120V	N Non-disconnect thru-wiring	K Black paint	W Wide
	27L 27,000 nominal lumens		20 208V	QR Quick disconnect retrofit	L Satin nickel paint	
			24 240V	NR Non-disconnect thru-wiring retrofit	TDC Tiger Drylac paint	

Options					
MSE6NDL	360° motion sensor embedded, high bay 15-45 ft., on/off. ³	CDP-L5-15-X	120V cord and plug ^{8,9}	C6	6 ft. Safety chain
MSE62L3VDL	360° motion sensor embedded, high bay 15-45 ft., on/off with second time-out period, goes to a dimmed state before turning off max./ 3volt min. dim setting. ^{3,4}	CDP-L6-15-X	208V/240V cord and plug ^{8,9}	CX	X ft. Safety chain ⁹
MSE6NDL DSCNDL	Photocell with two selectable modes of operation. Defaults to on/off mode. Photocell has full control during periods of occupancy. ³	CDP-L7-15-X	277V cord and plug ^{8,9}	SPAS	Surge protector, 120V-277V, added 6kV/3kA level of surge protection
		CDP-L24-20-X	347V cord and plug ^{8,9}	SPAH	Surge protector, 347V-480V, added 6kV/3kA level of surge protection, STANDARD OPTION
		CDP-L8-20-X	480V cord and plug ^{8,9}	SPAS20K	Surge protector, 120V-277V, added 20kA in-line surge protection
AXA10	XPoint Wireless enabled ^{4,5}	CDP-S-15-X	Straight blade 120V plug and cord ^{8,9}	D	Dimming terminal ¹⁰
MSE6XADL DSCXA	XPoint Wireless enabled with photocell sensor & occupancy sensor ^{4,5}	PF-129	Anti-rotational hook, 3/4" male	PHCB	Powerhook cord for 120V-277V, 347V ^{11,12}
		PF-105	Loop, 3/4" male	PHCB-L8-480	Powerhook cord for 480V ¹²
		PF-121-A	Safety hook, 3/4" male	WG	Wire guard installed
F1	Single fusing ⁶	CD-3	3 ft. cord ⁸	FR	Frosted glass
F2	Double fusing ⁷	CD-6	6 ft. cord ⁸	80CRI	80 CRI CCT
		CD-X	X ft. cord ^{8,9}	BSL722	Remote emergency battery pack, standard version ^{13,14}
		C3	3 ft. Safety chain	BSL722C	Remote emergency battery pack, cold version ^{13,14}

For accessories and footnotes, see page 2.

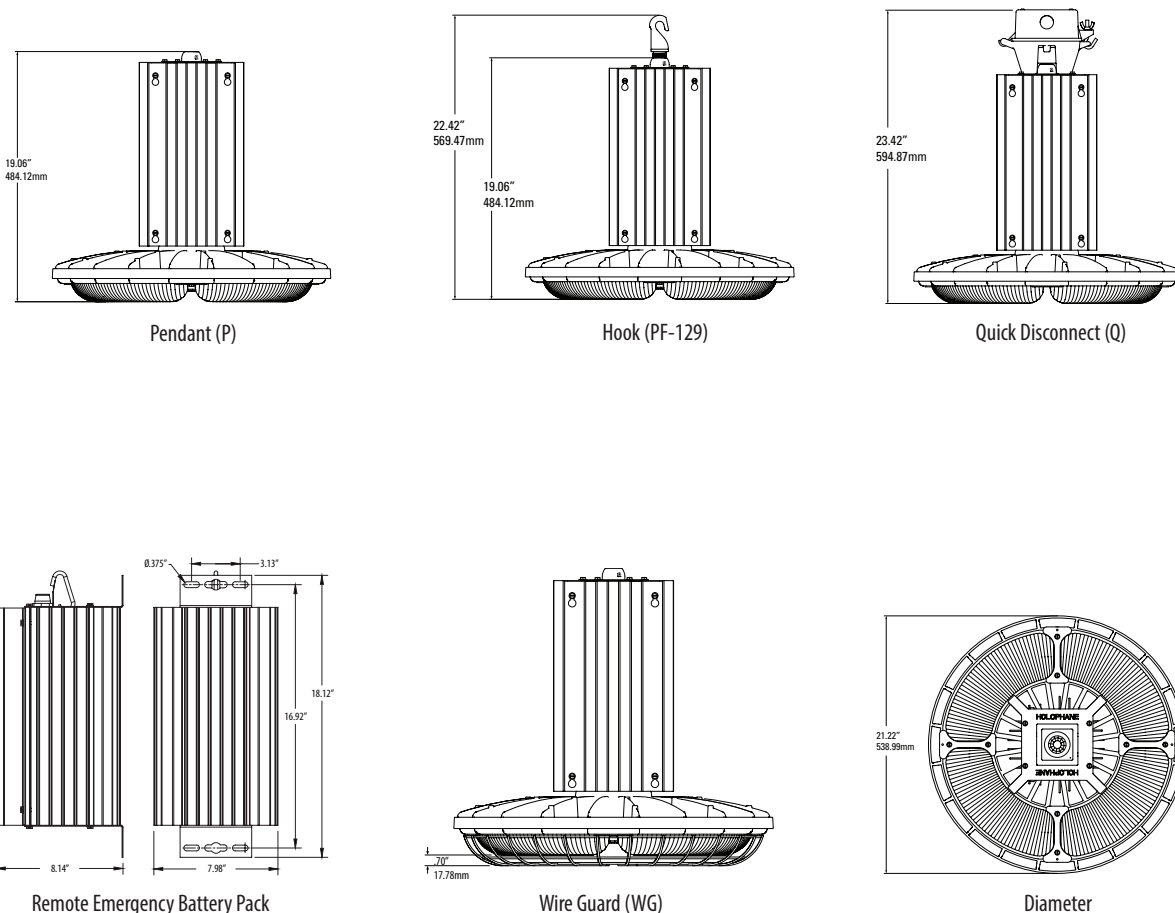
ORDERING INFORMATION (cont'd.)

Accessories: Order as separate catalog number.					
PHZCHAIN3	3 ft. safety chain	UPH-35-L8-480-WH	Thru-way powerhook for 480V	PF-122-A	Safety hook, 3/4" female
PHZCHAIN6	6 ft. safety chain	UPH-36-***-WH	Powerhook for 120V, 208V, 240V, 277V and 347V ¹²	PF-129-A	Anti-rotational hook, 3/4" male
PHZCHAINX	X ft. safety chain ⁹	UPH-36-L8-480-WH	Pendant powerhook for 480V	PF-105-B	Loop, 3/4" male
UPH-35-***-WH	Thru-way powerhook for 120V, 208V, 240V, 277V and 347V ¹²	PF-116-A	Loop, 3/4" female	PF-121-A	Safety hook, 3/4" male
				WGLED	Wire guard

Notes

- 1 70 CRI standard.
- 2 60° C max. ambient.
- 3 Not available with XPoint, 50° C max. ambient.
- 4 Not available with D option.
- 5 AS voltage not available; 120V 50° C rated; 208, 240 and 277V 60° C rated only.
- 6 For 120V, 240V, 277V and 347V units; factory installed.
- 7 For 208V, 240V and 480V units; factory installed.
- 8 Order PF also; 3ft to 6ft standard cord length.
- 9 X = length of cord/chain in feet; 6 feet is standard.
- 10 Not available with MSE62L3VDL, AXA10, MSE6XADL DSCXA.
- 11 Order UPH also, PF-105 installed.
- 12 *** = voltage.
- 13 P mount only, 120-277V only, not available with F2 fusing. Not available with CDP options. Battery pack ships separate. Max 50° C listed.
- 14 Un-switched supply power must be provided. To switch emergency fixture, controls must be used (sensor, X-point, etc.). Remote emergency battery pack provided with 20-ft flex conduit.

DIMENSIONAL DATA



OPERATIONAL DATA**Ambient Temperature Ratings**

Mounting	Thru-wire	Fuse, Surge	Occupancy Sensor	QDH or Non-disconnect	Voltage	Ambient C° 18L, 24L, 27L ^{1,2}	Ambient C° 12L ^{3,4}	Ambient C° 12L, 18L, 24L, 27L with Emergency option	Supply Wire Temperature
Ceiling	Yes	Yes	Yes	Yes	120-277 347/480	50	60	NA	194°F (90°C)
Ceiling	Yes	Yes	No	Yes	120-277 347/480	55	55	NA	194°F (90°C)
Ceiling	Yes	Yes	No	Yes	120-277	65	65	NA	221°F (105°C)
Ceiling	Yes	Yes	No	Yes	347/480	60	60	NA	221°F (105°C)
Ceiling	No	Yes	No	Yes	120-277	65	65	NA	194°F (90°C)
Ceiling	No	Yes	No	Yes	347/480	60	60	NA	194°F (90°C)
Pendant	No	Yes	Yes	No	120-277 347/480	50	60	50	194°F (90°C)
Pendant	No	Yes	No	No	120-277	65	65	50	194°F (90°C)
Pendant	No	Yes	No	No	347/480	60	60	50	194°F (90°C)

Notes

1 For Xpoint option with 18L, 24L, 27L no sensor = 50C (120V only), 60C (208V, 240V, 277V only). Above ambient values over-ride this ambient if lower, -20°C.

2 For Xpoint option with 18L, 24L, 27L with sensor = 50C (120-277V only), -20°C.

3 For Xpoint option with 12L, no sensor = 65C (120-277V only). Above ambient values over-ride this ambient if lower, -20°C.

4 For Xpoint option with 12L with sensor = 60C (120-277V only), -20°C.

Operating Characteristics

Lumen Package	Ambient Rating (120V-277V)	Ambient Rating (347V-480V)	Distribution	Delivered Lumens, 3000K CCT, 70 CRI @25°C ¹	Delivered Lumens, 4000K CCT, 70 CRI @25°C ¹	Delivered Lumens, 5000K CCT, 70 CRI @25°C ¹	Delivered Lumens, 3000K CCT, 80 CRI @25°C ¹	Delivered Lumens, 4000K CCT, 80 CRI @25°C ¹	Delivered Lumens, 5000K CCT, 80 CRI @25°C ¹	Frosted Lens Multiplier
12L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)	N	11129	12310	12278	10314	11409	11380	0.92
18L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)		16918	18713	18665	15680	17344	17299	0.92
24L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)		22143	24493	24430	20523	22701	22642	0.92
27L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)		23331	25808	25741	21624	23919	23858	0.92
12L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)	M	11136	12318	12286	10321	11416	11387	0.92
18L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)		16928	18725	18676	15689	17355	17310	0.92
24L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)		22157	24508	24445	20535	22715	22656	0.92
27L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)		23346	25824	25757	21638	23934	23872	0.92
12L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)	W	11151	12334	12302	10335	11432	11402	0.91
18L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)		16951	18750	18702	15711	17378	17333	0.91
24L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)		22187	24542	24478	20563	22746	22687	0.91
27L	-40°F to 149°F (-40°C-65°C)	-40°F to 140°F (-40°C-60°C)		23377	25859	25792	21667	23967	23905	0.91

Notes

1 Absolute photometry calculated in accordance with IESNA LM-79-08

OPERATIONAL DATA CONTINUED

Emergency Lumens

Package	Narrow	Medium	Wide	Frosted Lens Multiplier
PHZ 12L, 18L, 24L, 27L	1666 Lumens	1706 Lumens	1691 Lumens	.92

Projected Lumen Maintenance (TM-21)¹

Package	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
PHZ 12L, 18L, 24L, 27L @ 25C	1.00	0.99	0.98	0.98	0.97	0.96
PHZ 12L, 18L, 24L, 27L @ 40C	1.00	0.98	0.97	0.96	0.96	0.94
PHZ 12L, 18L, 24L, 27L @ 55C	1.00	0.98	0.96	0.95	0.94	0.91
PHZ 12L, 18L, 24L, 27L @ 65C	1.00	0.96	0.94	0.93	0.91	0.88

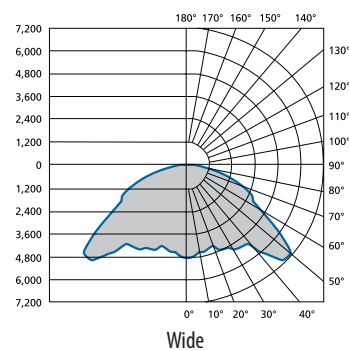
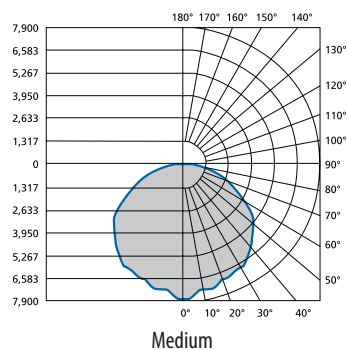
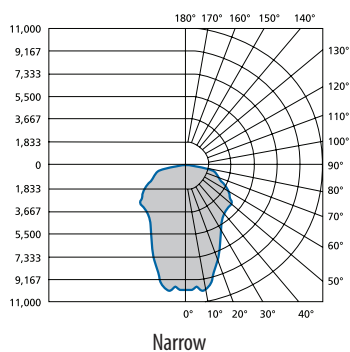
Notes

¹ Calculated using data collected according to LM-80 and represents lumen maintenance of the LED package.

Wattage

Lumen Package	120V	277V	347V	480V	Comparable Light Source
12L	120	118.8	121.0	120.3	4-lamp T8, 250W HID
18L	185	183.1	186.6	185.4	4-lamp T5HO, 6-lamp T8
24L	238	235.6	240.1	238.5	6-lamp T5HO, 8-lamp T8, 400W HID
27L	255	252.4	257.2	255.6	8-lamp T5HO, 8-lamp T8

DISTRIBUTION DATA

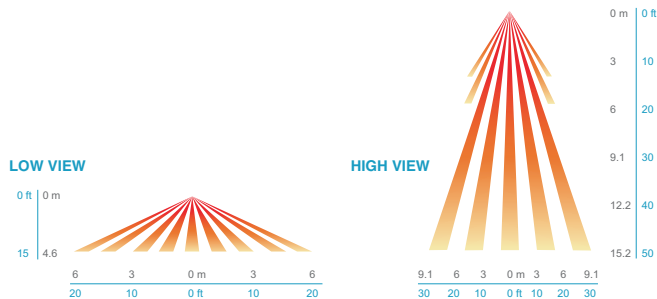


CONTROLS



MSE6NDL, MSE62L3VDL, MSE6NDL DSCNDL, AXA10, MSE6XADL DSCXA; Sensor Coverage Data

- Best choice for 15 to 45 ft. (4.57 to 13.72 m) mounting heights
- 15 to 20 ft. (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Large motion (e.g., walking) detection up to a 35-ft. (10.76 m) mounting height
- Extra large motion (e.g., forklifts) detection up to a 45-ft. (13.72 m) mounting height

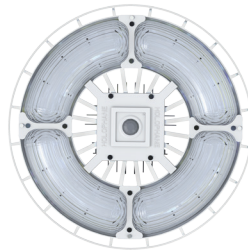


COMPONENTS & OPTIONS DATA



XPoint wireless

Integrated wireless control technology connecting fixtures, sensors, and other modules together.



Sensors

Occupancy-only mode that controls on/off and dimming of the fixture. Photocell option reads daylight levels to dim lights or prevent start-up.



Dimming drivers

Drivers use 0-10V protocol with dimming down to 10% power / 30% lumen output.



Surge protection

Phuzion drivers provide 2kV of surge protection as standard. The optional (SPAS or SPAH) provides 10kV of protection while the SPAS20 provides 20kV of protection.



Fusing

Integrated internal fast-blow fusing is available for all configurations.



Optics

Standard prismatic, borosilicate glass that doesn't fade or degrade. Optional frosted optics provide even greater visual comfort.



Wireguard

Steel wireguard available to further protect fixture from impact.



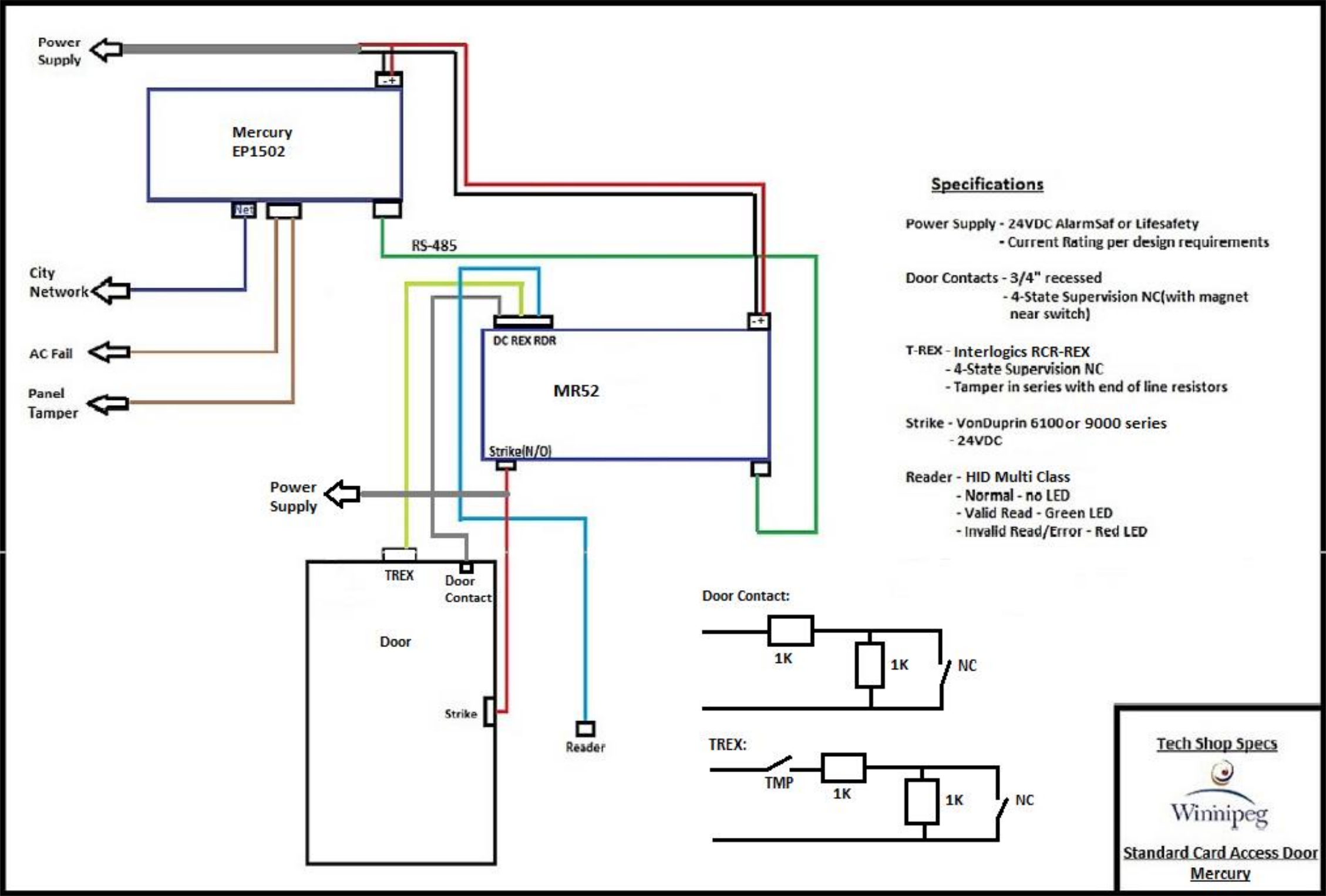
Hook and cord

3/4" hub standard. Multiple hooks and other mountings available. Cord sets can be specified with or without plug.

Exterior: A valid card read energizes the strike. When the exterior PBS is pushed, the 24VDC relay latches. ADO I/P is triggered.



Winnipeg
ADO Wiring Diagram



January 2016

DATE

NO.

Card Access
Mercury 1502

PROJECT NUMBER:

D Miousse

DRAWING TITLE:

Card Access Mercury 1502

DRAWING No.

CA01

B Series Quick Reference Guide

Intrusion – Small Commercial/Retail/Banking

Miscellaneous



RADION Wireless Devices

RFRP-A/B810 SDI2 Wireless Repeater/Receiver



RFGB-A Glass Break Detector



RFDW-RM-A Recessed Door/Window Contact



RFDW-SM-A Surface Mount Door/Window Contact



RFUN Wireless Universal Transmitter w/ Door/Window Contact



RFPD-C12-A Curtain PIR, Pet Immune 40 x 5 ft.



RFDL-11-A PIR Microwave TriTech 35 x 25 ft.



RFPD-12-A PIR, Pet Immune 40 ft.



RFSM-A Wireless Smoke Detector



RFBT-A Wireless Billtrap Transmitter



RFPB-SB/TB-A 1 & 2 Button Panic Devices



RFKF-TB/FB-A 2 & 4 Button Keyfobs



Blue Line 2

ISC-BDL2-WP12G/WP6G/W12G TriTech 40 X 40 ft./20 x 20 ft./40 x 40 ft.



ISC-BPR2-W12/WP12 PIR 40 x 40 ft.



ISC-BPQ2-W12 Quad PIR 40 x 40 ft.



Enclosures



B10 Medium Enclosure



B11 Small Enclosure



ICP-EZTS Universal Tamper



D8103

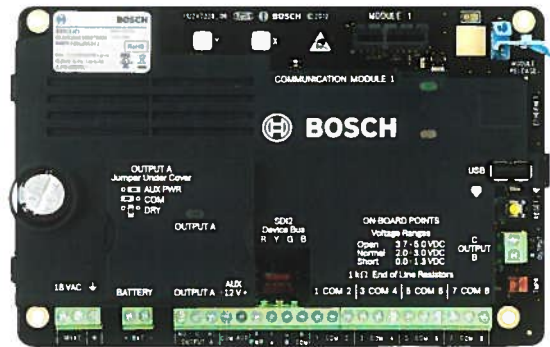


D8108A



B12 Bracket for D8103/D8108A Enclosure

B3512/B4512/B5512



Plug-in Modules



B440/441 Cellular Module



B430 Phone Plug-in Module



B201 Smoke Module



D166 Phone Jack

SDI2 Devices



B930 ATM Style Keypad



B920 2-Line Keypad



B208 Octo-Input Module



B308 Octo-Output Module

Inovonics Wireless Devices

EN1247 Wireless Glass Break



EN1265 Wireless 360 PIR



EN1249 Wireless Billtrap Transmitter



EN1261HT Wireless PIR



EN1260 Wireless PIR



EN1262 Wireless PIR



EN1210/W Wireless Transmitter



EN1242 Wireless Smoke Detector



EN1224-ON Multiple Condition Pendant



EN1223D/S Water Resistant Wireless Pendant



EN1235S/D Belt Clip Wireless Pendant



EN1233S/D Necklace Wireless Pendant



B820 SDI2 Wireless Interface

EN4200 Serial Receiver

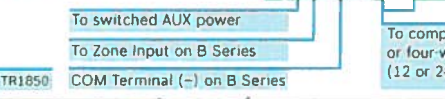
Conventional Devices



D132A Reversing Relay



D125B Dual Class B Initiating Module



B520 Power Supply



D130 AUX Relay



D192G Bell Card



D133/D134 Relay



F220/F220-B6R Smoke Detector plus Base

Ceiling Mount Motions

DS938Z 360 PIR 50 ft.



DS9370/DS9360/DS9371 (black) 360 TriTech 50 ft./70 ft.



DS936 Low-profile 360 PIR



Credentials

RFID Tags for B942 Kepads



ACA-ATR13



ACD-ATR11ISO



ACD-ATR14CS

RPS



D5500CU RPS Upgrade



D5500CU-LITE RPS Lite



B99 USB Cable

Generic input/output for Metasys Control.

1. Controls must be able to interface to MSEA technology on the field device network using either the N2Open or BACnet Protocols. See note 2.
2. No LON protocols are to be accepted.
3. Controls contractor to provide commissioning sheets for all points on field devices as well as head end equipment.
4. Controls contractor to communicate with equipment provider to ensure proper field point integration as well as controllability of the equipment, if not package controls.
5. If not a Metasys product installed, the controls contractor must show seamless integration into the exiting Metasys Extended Architecture Operator Interface that is acceptable to City Staff prior to the award of the contract. See note 2.
6. Controls contractor to supply all drawings/graphics/sequence of operations in both a hard and soft copy. Drawings and graphics to be able to be read and modified by City of Winnipeg Staff. User interface graphics to be completed using *Graphic Generation Tool* software. Graphics must use City of Winnipeg graphic templates. Contractor to supply As-Built drawings in an editable format, able to be easily edited by City of Winnipeg Staff.
7. The use of either N2Open or BACnet to be determined based on type of building where the work is being performed. If the construction is a brand new facility, then BACnet can be used. The term BACnet should then be defined properly in it's use, see note 1 below. If the work is an addition to and the new work is to be tied into the existing controls, then the contractor should contact City of Winnipeg technical staff to determine the best protocol to use based on existing equipment.
8. If Other vendor (non-JCI) controls are to be used then a seamless integration must be proven before approval will be given.
9. Design Engineer must detail a complete sequence of operations for each controlled device. This is so the marriage of controls and mechanical equipment meets the design intent of the mechanical engineer.
10. A complete list of setpoints for all controlled equipment must be provided.
11. A points list is to be provided for all controlled objects.
12. The controls spec must be complete so that there is no interpretation required on behalf of the controls contractor so that the control system is built to meet the specific needs of the complete mechanical plan and design.
13. Alarm Messages. All objects that must be alarmed will have in the alarm message text the following information as per the included example.
Alarm Message: Building Address, What is in alarm, see graphic for Instruction
Example: 251 Donald SF-1 VFD Common Alarm, see graphic for Instruction

Rooftop Units, Make-Up Air / Air Handling Unit (MUA/AHU):

1. Where possible, the manufacturer of the equipment should be contacted to see if an N2Open or BACnet protocol equipped package controller is available from the factory.

2. If no interface from the factory is available then we would as a minimum expect the following points to monitor:
 - a. Start/Stop
 - b. Fan Status
 - c. Economizer Status, command in on/off or % open
 - d. Cooling Mode
 - e. Heating Mode
 - f. Supply Air Temperature
 - g. Room Temperature for Single Zone Unit
 - h. Return Air Temperature for Multizone Unit
 - i. Supply Air Low Limit Status (Freeze Stat)

Exhaust Fans:

1. Exhaust fans will have start/stop/status points.

Boilers:

1. Boilers to come with own package controls and outdoor air temperature for reset control.
2. A Metasys Interface for the controls to be part of the package for direct connection on either the N2Bus or BACnet.
3. If no interface package exists, the following points are required as a minimum:
 - a. Hot Water Supply Temperature
 - b. Hot Water Return Temperature
 - c. Boiler Status
 - d. Boiler Alarm, this is to be a generic alarm for all mechanical safeties or other related devices, which would cause the boiler to be shut down.

Chillers:

1. Chillers to come with own package controls and outdoor air temperature for reset control.
2. A Metasys Interface for the controls to be part of the package for direct connection on either the N2Bus or BACnet.
3. If no interface package exists, the following points are required as a minimum:
 - a. Chilled Water Supply Temperature
 - b. Chilled Water Return Temperature
 - c. Chiller Status
 - d. Chiller Alarm, this is to be a generic alarm for all mechanical safeties or other related devices, which would cause the chiller to be shut down.
 - e. Condenser Water Supply Temperature
 - f. Condenser Water Return Temperature
 - g. Water Tower fans/pumps Status

Pumps:

1. Pumps will have a start/stop/status as a minimum.

Variable Speed/Frequency drives:

1. All VFD/VSD to have N2/BACnet interface built into the device. If the manufacturer is not able to provide this, get another manufacturer. ABB would be the acceptable standard here.

Lighting Controls:

1. No LON lighting controls are to be accepted. No exceptions.

VAV boxes:

1. VAV boxes to have digital controller mounted directly to the VAV box actuator. This is to have a digital room thermostat and proportional control on the damper. This controller to use either N2Open or BACnet.

Sump Pits:

1. Sump pits to have high alarm status installed.
2. If lead/stby pumps are present, then sensing of the lead pump is required.

Generic Inputs from the Facility:

1. Room temperatures in corner office/rooms on each floor, especially if there are windows present

Notes:

1. The term BACnet refers to an industry standard protocol that basically states that all devices using the BACnet technology will be able to communicate to each other. This is not necessarily the case. The BACnet protocol is comprised of several layers of interoperability and intercommunications. The controls contractor performing the supervisory controller installation should confirm that all devices specified are able to communicate to the proposed devices using the BACnet PIC statement and then supply documentation such that all devices supplied will communicate to each other as required for proper operation of the system. This includes integration into the ADX server.
2. If Metasys Network Automation Engines (NAE/NIE/NCE) are to be installed on the project then the version of these devices and their software must be such that the City of Winnipeg does not be required to update/upgrade the existing ADX server in order for all user views, alarms, and point monitoring to occur. The contractor must co-ordinate with City staff to determine the correct version to be installed. All user views and graphics must not be installed in the local supervisory controller (NAE/NIE/NCE). All such items must be programmed into the existing ADX server. User views and graphics must be approved for use by City staff before implementation of such items.
3. All monitored points that have alarms must have operating instructions and alarm messages. These will be co-ordinated with the tech shop and operations supervisor.

ASBESTOS INVENTORY CONTROL



Planning, Property and Development Department
Municipal Accommodations Division
4th Floor - 185 King Street • Winnipeg, MB • R3B 1J1

Building Name:	Building A, Maintenance Shop	Inspection Date:	July 8, 2015
Building Code:	TR01	Inspected By:	Elias Occupational Hygiene Consulting
Building Address:	421 Osborne Street	Construction Date:	

Material Location	Material Description	Drawing Label	Material Condition	Testing Status	Date M/Y	Test %	Est. %
	Stucco Column Cladding Throughout Building Should Be Tested Before Any Work Is Performed						
	Various Areas Have Been Tested See Inventory for Details						
Basement							
Cafeteria Storage	12x12 Ceiling Tile	C12	Good	Tested	May'09	0	
Cafeteria	Mastic - Pipe - Above Ceiling	MA	Good	Tested	May'10	25-50	
	Pipe Fitting Insulation - Above Ceiling	PF	Good	Tested	May'10	0.1-1	
Furnace Room	Pipe Fitting Insulation	PF	Good				
Kitchen Hallway	Mastic - Pipe - Above Ceiling	MA	Good	Tested	May'10	25-50	
	Pipe Fitting Insulation - Above Ceiling	PF	Good	Tested	May'10	0.1-1	
Dispatch Area	Pipe Insulation - Above Ceiling	PI	Good				25-50
	Pipe Fitting Insulation - Above Ceiling	PF	Good				25-50
Dispatch Supervisor Office	Pipe Insulation - Above Ceiling	PI	Good				25-50
	Pipe Fitting Insulation - Above Ceiling	PF	Good				25-50
Tunnel	Pipe Insulation - Above Ceiling	PI	Good				25-50
	Pipe Fitting Insulation - Above Ceiling	PF	Good				25-50
Boiler Room	Pipe Fitting Insulation	PF	Removed				
Stairwells	Stucco - Walls	ST	Needs Repair	Tested	May'09	0	
Admin Area- Main Floor							
Foyer (Inside Heater)	Mastic - Pipe	MA	Good				10
	Stucco - Ceiling	ST	Good				0
Foyer	Mastic - Pipe - Above Ceiling	MA	Good				10
	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
	Stucco - Ceiling	ST	Good	Tested	Apr/'11	0	
Front Reception	Mastic - Pipe - Above Ceiling	MA	Good				10
	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
North Offices (Inside Heater Cabinets)	Pipe Fitting Insulation	PF	Good				5-10
	Mastic - Pipe	MA	Good				10
South Offices (Inside Heaters)	Mastic - Pipe	MA	Good				10
South Offices	Pipe Fitting Insulation - Above Ceiling	PF	Needs Repair	Tested	Feb/ 11	5-10	
	Mastic - Pipe - Above Ceiling	MA	Good	Tested		10	
Control Office (Inside Heater)	Mastic - Pipe	MA	Good				10

Material Location	Material Description	Drawing Label	Material Condition	Testing Status	Date M/Y	Test %	Est. %
Control Office	Mastic - Pipe - Above Ceiling	MA	Good				10
	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
	Stucco - Walls	ST	Good	Tested	Nov/ 12	0	
East Offices (Inside Heaters)	Mastic - Pipe	MA	Good				10
East Offices	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
	Mastic - Pipe - Above Ceiling	MA	Good				10
West Offices (Inside Heaters)	Mastic - Pipe	MA	Good				10
West Offices	Pipe Fitting Insulation	PF	Good				5-10
	Mastic - Pipe	MA	Good				10
West Corridor	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
	Mastic - Pipe - Above Ceiling	MA	Good				10
Men's Washroom	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
	Mastic - Pipe - Above Ceiling	MA	Good				10
	12x12 Floor Tile	F12	Good				
Women's Washroom	Pipe Fitting Insulation - Above Ceiling	PF	Needs Repair				5-10
	Mastic - Pipe - Above Ceiling	MA	Good				10
	12x12 Floor Tile	F12	Good				
Janitor's Room	Mastic - Pipe	MA	Good				10
	12x12 Floor Tile	F12	Good				
Photocopy Room	Pipe Fitting Insulation	PF	Good				5-10
	Mastic - Pipe	MA	Good				10
	12x12 Floor Tile	F12	Good				
Hallway By Bathrooms	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
	Mastic - Pipe - Above Ceiling	MA	Good				10
Admin Area- 2nd Floor							
Offices (All Heaters and Heater Cabinets)	Pipe Fitting Insulation	PF	Needs Repair				5-10
	Mastic - Pipe	MA	Good				10
2 North Offices (inside cabinets) (Site: Confirm offices)	Pipe Fitting Insulation	PF	Removed 01/13				5-10
	Mastic - Pipe	MA	Good				10
Men's Washroom	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
	Mastic - Pipe - Above Ceiling	MA	Good				10
	12x12 Floor Tile	F12	Good				
Women's Washroom	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
	Mastic - Pipe - Above Ceiling	MA	Good				10
	Duct Insulation - Above Ceiling	DI	Good	Tested	Nov/ 10	10	
	12x12 Floor Tile	F12	Good				
Janitor's Room	Roof Drain	RD	Good				
	12x12 Floor Tile	F12	Good	Tested	Nov/ 10	3	
Photocopy Room	Roof Drain	RD	Good				

Material Location	Material Description	Drawing Label	Material Condition	Testing Status	Date M/Y	Test %	Est. %
Hallway By Bathrooms	12x12 Floor Tile	F12	Good				
	Pipe Fitting Insulation - Above Ceiling	PF	Good				5-10
	Mastic - Pipe - Above Ceiling	MA	Good				10
	Roof Drain	RD	Good				
Stores Area (102)							
Stores Area (102)	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Good				
	Roof Drain	RD	Good				
Uniform Stores Mezzanine	12x12 Floor Tile	F12	Good	Tested	Nov/ 10	0	
Tire Storage	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Good				
	Plaster - Columns	PL	Needs Repair	Tested	Jan/ 12	0	
Receiving Bay	Spray On Insulation - Steel Beam	SO	Needs Repair	Tested		40-60	
	Pipe Insulation	PI	Good				
	Pipe Fitting Insulation	PF	Good				
Northwest Corner	Tank Insulation	TI	Good	Tested		POS	
	Pipe Fitting Insulation	PF	Good	Tested		POS	
	Pipe Insulation	PI	Good	Tested		NEG	
	Asbestos Fabric - Isolation Gasket	AF	Needs Repair				
Above Washroom	Pipe Fitting Insulation	PF	Removed 2011	Tested	Jan/ 12	5	
	Pipe Insulation	PI	Removed 2011				
Offices Beside Washroom	12x12 Floor Tile	F12	Removed'13	Tested	Nov/ 10	3	
	Sheet Flooring	SF	Removed'13				
Electrical & Engine Repair Area (103)							
Electrical & Engine Repair Area (103)	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Good				
Washroom	24x48 Ceiling Tile	C48	Removed	Tested	May/09	0	
	Pipe Fitting Insulation - Above Ceiling	PF	Good				
Battery Room	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Good				
Unit Rebuild Area (104)							
Unit Rebuild Area (104)	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Good				
North Area	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Good				
	Duct Insulation	DI	Good	Tested	Nov/ 10	0	

Material Location	Material Description	Drawing Label	Material Condition	Testing Status	Date M/Y	Test %	Est. %
Money Meter Room	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Good				
Engine Room	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Good				
Inspection Area (105)							
Inspection Area (105)	Wall Plaster- Top of Wall	PL	Good				1-2
	Stucco - On Ledge	ST	Good	Tested		1-2	
	Pipe Fitting Insulation	PF	Good				POS
	Pipe Insulation	PI	Good				NEG
	Drywall Compound - Top Of Wall	DC	Good				
	Roof Drain	RD	Good				
Sprinkler Room	Pipe Fitting Insulation	PF	Removed'14				
	Pipe Insulation	PI	Removed'14				
Sprinkler Room Mezzanine	Pipe Fitting Insulation	PF	Good	Tested	Jul/ 10	60	
	Pipe Insulation	PI	Good	Tested	Jul/ 11	0	
	Asbestos Fabric - Isolation Gasket	AF	Good				
Body Repair Area (106)							
Body Repair Area (106)	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Needs Repair				
	Plaster - Columns	PL	Good	Tested	May/09	0	
	Roof Drain	RD	Good	Tested	Aug/11	85	
Foreman's Office	Sheet Flooring	SF	Good	Tested	Jan/12	0	
Body Repair Area (106A)							
Body Repair Area (106A Weldig Shop)	Wall Plaster- Top of Wall	PL	Good	Tested		1-2	
	Roof Drain	RD	Good				
Aisleway East of Paint Booth #4	Spray On Insulation - Steel Beam	SO	Removed 2011	Tested		1-2	
	Plaster - Columns	PL	Needs Repair	Tested	Sep/12	0	
	Plaster - Columns	PL	Good	Tested	Sep/14	<1	
Locker Area & Washroom	24x48 Ceiling Tile	C48	Needs Repair	Tested		0	
	Pipe Fitting Insulation - Above Ceiling	PF	Good				
	Pipe Insulation - Above Ceiling	PI	Good				
	12x12 Floor Tile	F12	Removed 2011	Tested	Nov/10	2	
Carpenter Shop	Pipe Fitting Insulation	PF	Good				
	Duct Insulation	DI	Good				
	Asbestos Fabric - Isolation Gasket	AF	Needs Repair	Tested	Sep/'14	60	
Paint Shop- Main Area	Pipe Fitting Insulation	PF	Good	Tested		15	
	Pipe Insulation	PI	Good	Tested	Aug/10	0	

Material Location	Material Description	Drawing Label	Material Condition	Testing Status	Date M/Y	Test %	Est. %
Paint Boths #1-3	roof drain	RD	Good				
	Spray On Insulation - Steel Beam	SO	Removed 2001	Tested	Sep/12	0	
	Drywall Compound - Ceiling	DC	Good				3
	Duct Insulation	DI	Needs Repair				75
	Duct Insulation - Above Ceiling	DI	Good				75
	Plaster - Columns	PL	Needs Repair	Tested	Sep/12	1	
Paint Booth #4	Spray On Insulation - Steel Beam - Above Ceiling	SO	Removed 2001				0
	Drywall Compound - Ceiling	DC	Removed 2012	Tested	Oct/11	3	
	Spray On Insulation - Steel Beam - Above Ceiling	SO	Removed 2012				
	Duct Insulation	DI	Removed 2012	Tested	Jul/12	75	
	Duct Insulation - Above Ceiling	DI	Removed 2012				75
	Plaster - Columns	PL	Removed 2012	Tested	Sep/12	2	
Paint Booth Fan Room	Duct Insulation	DI	Good	Tested	May/09	0	
	Spray On Insulation - Steel Beam - Above Ceiling	SO	Good				85
Brake Shop Area (107)							
Brake Shop Area (107)	Wall Plaster- Top of Wall	PL	Good				1-2
	Roof Drain	RD	Good				
	Stucco - On Ledge	ST	Good				1-2
	Pipe Fitting Insulation	PF	Good				
General Repair Area (108)							
General Repair Area (108)	Wall Plaster- Top of Wall	PL	Good	Tested	Mar/11	1-2	
	Stucco - On Ledge	ST	Good				1-2
	Pipe Fitting Insulation	PF	Good	Tested		POS	
	Pipe Insulation	PI	Good	Tested		NEG	
	Roof Drain	RD	Good				
Sprinkler Room	Pipe Fitting Insulation	PF	Removed'14				
	Pipe Insulation	PI	Removed'14				
Sprinkler Room Mezzanine	Pipe Fitting Insulation	PF	Good	Tested		60	
	Pipe Insulation	PI	Good	Tested		0	
	Asbestos Fabric - Isolation Gasket	AF	Good				
Washroom	Plaster - Walls	PL	Needs Repair	Tested	May/14	0	
Instruction Area (9)							
Hallway	12x12 Floor Tile	F12	Good	Tested	May/09	2-5	
	Mastic - Floor Tile	MA	Good	Tested	May/09	2-5	
Traffic Services Area (112)							
Traffic Services Area (112)	Drywall Compound - Top Of Wall	DC	Good				1-2
	Pipe Insulation	PI	Good				0
	Pipe Fitting Insulation	PF	Good				15

Material Location	Material Description	Drawing Label	Material Condition	Testing Status	Date M/Y	Test %	Est. %
Sign Shop	Roof Drain	RD	Good	Tested	Aug/11	60	1-2
	Drywall Compound - Top Of Wall	DC	Good				
	Drywall Compound - Ceiling	DC	Good	Tested	Mar/11	2-3	
	Pipe Insulation	PI	Good	Tested		0	
	Pipe Fitting Insulation	PF	Good	Tested		15	
	Roof Drain	RD	Removed				
	Asbestos Fabric - Lined Safe	AF	Good				
	Spray On Insulation - Behind Steel Beam	SO	Good	Tested		5-30	
Offices	12x12 Floor Tile - Under Carpet	F12	Removed 2014				1-2
Parking Meter Repair Room	12x12 Floor Tile	F12	Needs Repair				1-2
	Sheet Flooring on Workbench	FS	Removed 2011	Tested	Nov/ 10	0	
	Asbestos Fabric - Lined Safe	AF	Removed				
	Sheet Flooring on Workdesk	FS	Removed 2011	Tested	Feb/11	4-15	
	Asbestos Fabric - Fireproof Cabinet	AF	Removed				
Communications Area (113)							
Garage Area	Pipe Fitting Insulation	PF	Good				
	Pipe Insulation	PI	Good				
Mezzanine	Roof Drain	RD	Good				
Office Hallway	12x12 Floor Tile	F12	Removed 2014	Tested	Nov/10	2	
Storage Area	Pipe Insulation	PI	Good				
	Pipe Fitting Insulation	PF	Good				

NOTES:

2. There may be asbestos containing materials present that were not located during asbestos inspections.
2. There may be asbestos containing materials present that were not located during asbestos inspections.
3. Floor tile and sheet flooring installed before 1990 may contain asbestos and must be treated as an asbestos containing material.
4. Vermiculite insulation may contain pockets of asbestos. All vermiculite insulation must be treated as an asbestos containing material.
5. For asbestos related inquiries, call Central Control at 204-986-2382

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