STATE OF VERMONT

CITIES OF BARRE & MONTPELIER

BERLIN, VERMONT

CONSTRUCTION PLANS

FOR

BARRE - MONTPELIER AIRPORT

GRADING, DRAINAGE, LIGHTING AND PAVING

10 JUNE 1950

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	QUANTITIES
P-152	UNCLASSIFIED EXCAVATION	20,000 C.Y.
P-152	SCARIFYING, reSHAPE & COMPACT	21,700 C.Y.
P-214	PENETRATION MACADAM BASE COURSE	21,700 S.Y.
P-403	KEYSTONE AGGREGATE SURFACE TREATMENT	4,650 TON
P-401	BITUMINOUS MATERIAL	46,900 GALS.
P-602	BITUMINOUS PRIME COAT	13,400 GALS
P-604	BITUMINOUS SEAL COAT (COVER AGG)	1,500 TON.
P-604	BITUMINOUS SEAL COAT	45,000 GAL.
D-706	8" STANDARD STRENGTH CLAY PIPE	225 L.F.
D-701B	REMOVE AND RELAY UNDER-DRAIN	800 L.F.
D-702	15" STANDARD STRENGTH REIN. CONC. CUL.	325 L.F.
D-705	POROUS BACKFILL NO. 2.	400 C.Y.
D-751	DROP INLET	9 EA.
D-751A	LOWER OR RAISE EXISTING C.B. GRATES	3 EA.
D-751B	REMOVE EXISTING CATCH BASIN	3 EA.
T-901	SEEDING - PREPARING SURFACE	5.8 ACRES
T-901	SEEDING - FERTILIZING	5.8 ACRES
T-901	SEEDING - SOWING SEED	5.8 ACRES
T-905	TOPSOILING	2,900 C.Y.
L-108	AIRPORT CABLE TRENCH	8,000 L.F.
L-108	AIRPORT UNDERGROUND CABLE	6,000 L.F.
L-109A	TESTING RUNWAY ELEC. INSTALLATION AND REPAIRING THRESHOLD LIGHTS	LUMP SUM
L-114	INSTALLATION OF AIRPORT LIGHTS	72 EA.

INDEX TO DRAWINGS

TITLE	SHEET NO.
TITLE & APPROVAL SHEET - QUANTITIES & INDEX	1
LOCATION MAP & PROPERTY PLAN	2 & 2A
LOG OF BORINGS & TYPICAL SECTIONS	3
GRADING & DRAINAGE PLAN	4
LAYOUT PLAN	5
PLAN & PROFILE NW-SE RUNWAY	6
PLAN AT INTERSECTION	7
LIGHTING PLAN & MASTER PLAN	8 & 8A
CROSS SECTIONS NW-SE RUNWAY	9-18 INC.

CIVIL AERONAUTICS ADMINISTRATION

APPROVED _____ DIRECTOR
DATE _____ AIRPORT ENGINEERING SERVICE

APPROVED _____ SUPERINTENDENT
DATE _____ AIRPORTS BRANCH

APPROVED _____ DISTRICT AIRPORT ENG'R.
DATE _____

VERMONT AERONAUTICS COMMISSION

APPROVED [signature] CHAIRMAN
DATE July 7, 1950

APPROVED [signature] DIRECTOR
DATE June 28, 1950

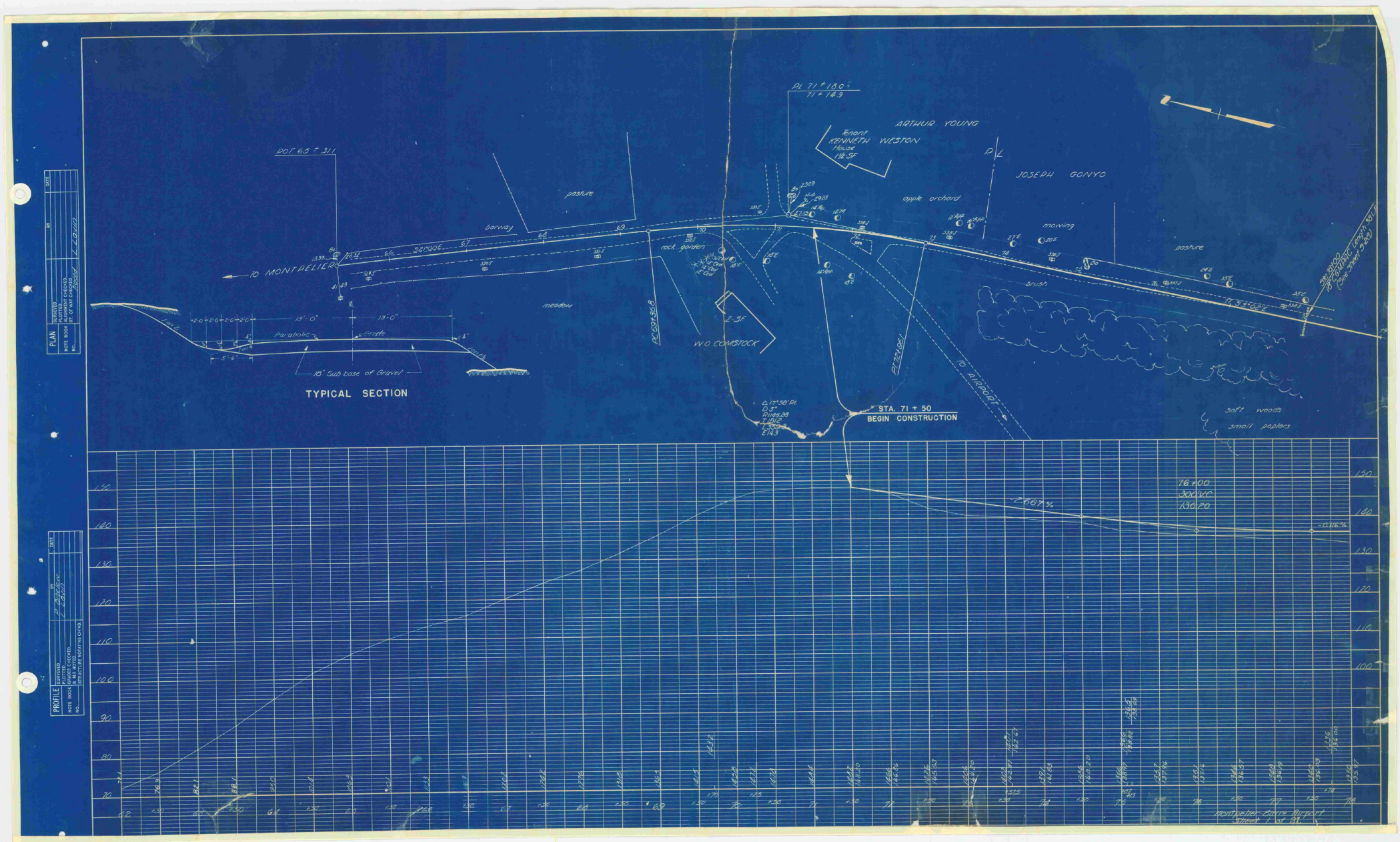
CITIES OF BARRE & MONTPELIER

APPROVED Anson F. Barber Mayor City
DATE 28 June 1950 [signature] Mayor City

PREPARED BY

JOHN D. COOK, ENGINEER — BARRE, VERMONT

DATE 28 June 1950 — John D. Cook, Reg. Engineer


POT 63 + 31.1
S21°00'E
barway
pasture
rock garden
meadow
TO MONTPELIER
PI 71 + 18.0 =
71 + 14.9
ARTHUR YOUNG
Tenant
KENNETH WESTON
House
112.5F
P/L
JOSEPH GONYO
apple orchard
mowing
pasture
brush
soft woods
small poplars
W.O. COMSTOCK
2-5F
TO AIRPORT
STA. 71 + 50
BEGIN CONSTRUCTION
Parabolic
Grade
18" Sub base of Gravel
TYPICAL SECTION
76+00
300 V.C.
136.20
-0.067%
-0.116%
PLAN
PROFILE
Montpelier Barre Airport
Sheet 1 of 2

State of Vermont — Department of Highways

MONTPELIER-BARRE AIRPORT — F. A. P. No.

FORM ENG. 1A — EARTHWORK SHEET NO. 1 of 4 — 1941

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

V.C.	% Grade	STATION	PROFILE Elevation On Grades	PROFILE Elevation On V Curves	PROFILE Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock Area	Total Excavation Earth and Rock Cu. Yds.	Balance and Rock Excavation Area	Balance and Rock Excavation Cu. Yds.	Embankment Area	Embankment Cu. Yds.	Shaping Course of Gravel Area	Shaping Course of Gravel Cu. Yds.
		62+0												
		+50												
		63												
		+50												
		64												
		+50												
		65												
		+50												
		66												
		+50												
		67												
		+50												
		68												
		+50												
		69												
		+50												
		+70												
		70												
		+25												
		+50												
		+75												
		71												
		+50	148.20				23				16			
						50		109				32		
		72	146.86				37				38			
						50		69				104		
		+50	145.53				6				89			
						50		6				166	0	186
		73	144.20				0				99		32	0
						50						145	0	498
		+50	142.87										Rec.	112
						25					62			
		+57.5	142.67									15		
						42.5					49			
		74	141.53				0				26	73		
						50		6						
		+50	140.20		0		0				0	26		
						50		7						
		75	138.86	138.97	+0.11		32		0		220	48		
						7		5		1		5		
		+07	138.68	138.82	+0.14		10		10		17			
						6		1		1		5		
		+13	138.52	138.69	+0.17		0		0		26			
						37						55		
		+50	137.53	137.96	+0.43		0				102			
						50		5				65		
		76	136.20	137.16	+0.96		5				16			

300' V.C. — -2.667 %

CARRIED FORWARD

COLUMN FOOTINGS

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

V.C.	% Grade	STATION	PROFILE Elevation On Grades	PROFILE Elevation On V Curves	PROFILE Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock Area	Total Excavation Earth and Rock Cu. Yds.	Balance and Rock Excavation Area	Balance and Rock Excavation Cu. Yds.	Embankment Area	Embankment Cu. Yds.	Shaping Course of Gravel Area	Shaping Course of Gravel Cu. Yds.
		76+0	136.20	137.16	+0.96		5				16			
						50		6				39		
		+50	136.14	136.57	+0.43		21				15			
						50		7		1		28		
		77	136.08	136.19	+0.11		6				6		0	407
						50		6				40	21	49
		+50	136.03		0		0		0		24		0	356
						24		9		9		44	Rec.	112
		+74	136.00				21		21		19			
						26		18		18		33		
		78	135.97				0		0		47			
						50		1				49		
		+50	135.91				1				25			
						50		14				31		
		79	135.85				12				8			
						50		50				11		
		+50	135.79				32		0		4			
						19		32		11		3		
		+69	135.77				23		26		2			
						31		37		17		10		
		80	135.74				28		0		16			
						50		63				51		
		+50	135.68				40				10			
						50		37				15		
		81	135.62				38				9			
						50		74				45		
		+50	135.56				45				18			
						50		123				34		
		82	135.50				58		0		19		0	465
						50		146		46		53	0	496
		+50	135.45				70		34		24		0	598
						50		140		46		81	Rec.	112
		83	135.39				21		0		8			
						50		133				40		
		+50	135.33				63				14			
						50		98				20		
		84	135.27				34				31			
						50		46				89		
		+50	135.21				16				68			
						50		15				140		
		85	135.16				0				148			
		+25	135.12		0							319		
		+50	135.10	135.13	+0.03						247			
						50						410		
		86	135.04	135.28	+0.24						242			
						50						483		
		+50	134.98	135.65	+0.67						234			
		+75	134.95	135.91	+0.96	50						272	0	18
		87	135.57	136.24	+0.67						247		0	0
						50						348	Rec.	112
		+50	136.80	137.04	+0.24						348			
						50						465		
		88	138.03	138.06	+0.03						251			
		+25	138.17		0							432		
		+50	139.26								215			
						50						390		
		89	140.49				0				152			
						50		6				194		
		+50	141.72				7				87			
						50		7				132		
		90	142.95				1				62			
						50		1				146		
		+50	144.18				18				21			
						50						92		
		91	145.41								40			
						50						68		
		+50	146.64								23			

300' V.C. — -0.116 % — +2.460 %

CARRIED FORWARD

COLUMN FOOTINGS

State of Vermont — Department of Highways

Montpelier - Barre Airport — F. A. P. No.

FORM ENG. 1A — EARTHWORK SHEET NO. 2 of 4 — 1941

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

V.C.	% Grade	STATION	Profile Elevation On Grades	Profile Elevation On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock Area	Total Excavation Earth and Rock Cu. Yds.	Balance and Rock Excavation Area	Balance and Rock Excavation Cu. Yds.	Embankment Area	Embankment Cu. Yds.	Shaping Course of Gravel Area	Shaping Course of Gravel Cu. Yds.
		91+50	146.64			50					22			
	+2.40%	92	147.87			✓					45	74		
		+50	149.10		0	✓					57	91		
		93	150.33	150.29	-0.04	✓					58	34	0	1
		+50	157.56	151.40	-0.16	✓					67	81	0 / F	0 / 849
	300' V.C.	94	152.79	152.42	-0.37	✓					36	70	Fac. 1.12	
		+50	153.62	153.46	-0.16	✓					46	76		
		95	154.45	154.41	-0.04	✓					74	111		
		+50	155.78		0	✓					115	173		
		96	156.11			✓					135	204		
		+50	156.94			✓					128	216		
		+76	157.37			50					111	180		
		97	157.77			50					148	128	0 / 0	0 / 0
		+50	158.60			✓					145	211	F 2576	
		98	159.43			✓					152	246	Fac. 1.12	
		+50	160.26			✓					150	236		
		99	161.09			✓					163	245		
		+50	161.92			✓					166	314		
		100	162.75			✓					173	297		
	+1.66%	+50	163.58			✓					148	276		
		101	164.41			✓					146	270		
		+50	165.24			✓					146	270		
		102	166.07			✓					140	259	0 / 0	0 / 0
		+50	166.90			✓					154	269	F 2445	
		103	167.73			✓					190	348	Fac. 1.12	
		+50	168.56			✓					193	360		
		104	169.39			✓					95	182		
		+50	170.22			✓					101	177		
	300' V.C.	105	171.05		0	✓					90	158		
		+50	171.88	172.01	+0.13	✓					102	176		
		106	172.71	173.25	+0.54	✓					140	224		
		+50	173.54	174.75	+1.21	✓					111	184		
	+4.89%	107	175.98	176.52	+0.54	✓					85	133		
		+50	178.43	178.56	+0.13						57			
					CARRIED FORWARD									
					COLUMN FOOTINGS									

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

V.C.	% Grade	STATION	Profile Elevation On Grades	Profile Elevation On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock Area	Total Excavation Earth and Rock Cu. Yds.	Balance and Rock Excavation Area	Balance and Rock Excavation Cu. Yds.	Embankment Area	Embankment Cu. Yds.	Shaping Course of Gravel Area	Shaping Course of Gravel Cu. Yds.
		107+50	178.43	178.56	+0.13	50					59			
		108	180.88		0	✓					72	84		
		+50	183.32			✓					28	65	0	30
		+73	184.44			23					0	16	0 / F	0 / 1254
		109	185.86		0	27					0		Fac. 1.12	
		+07	186.11		-0.00	7	0	13			10			
		+50	188.21	188.10	-0.11	43	32	26			0	24		
	+4.89%	110	190.66	190.22	-0.44	50	0				27	57		
		+50	193.10	192.11	-0.99	✓					56	92		
		+91	195.10	193.50	-1.60	41	0	28			8	6		
	400' V.C.	111	195.54	193.79	-1.75	9	37	6			0			
		+50	196.23	195.24	-0.99	50	0	4						
		112	196.96	196.52	-0.44	✓	2	13					0	657
		+50	197.61	197.50	-0.11	✓	12	67			1		0 / 14	0 / 63
		113	198.30		0	✓	60	110			1	41	Fac. 1.12	
		+50	198.99			✓	57	110			10	10		
	+1.379%	114	199.68			✓	60	114			10	11		
		+50	200.37			✓	61	114			2	4		
		+699	200.64			✓	37	104			0			
		115	201.06			65	65	104			1	1		
		Eq. +401 = 114+99.2	201.72			65.9		104				3		
		115	202.01			50	52	70			1	6		
		+50	202.70			✓	32	61			3	8		
		116	203.39			✓	24	55			4	6		
		+50	204.07			✓	31	56			3	8	0	657
		117	204.76		0	✓	30	61			6	29	0 / F	0 / 254
		+50	205.45	205.44	-0.01	✓	36	72			28	21	Fac. 1.12	
	300' V.C.	118	206.14	206.10	-0.04	✓	42	45			8	18		
		+50	206.83	206.74	-0.09	✓	7	24			8	32		
		119	207.41	207.37	-0.04	✓	19	42			16	52		
		+50	207.98	207.97	-0.01	✓	26	49			40	74		
	+1.50%	120	208.56		0	✓	21	32			40	40		
		+50	209.13			✓	1	1			3	55		
		121	209.71			✓	0				54	109		
		+50	210.28			✓					65	125		
		122	210.86								69			
					CARRIED FORWARD									
					COLUMN FOOTINGS									

State of Vermont — Department of Highways

Montpelier-Barre Airport — F. A. P. No.

FORM ENG. 1A — EARTHWORK SHEET NO. 3 of 4 — 1941

REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

V.C.	% Grade	STATION	Profile Elevation On Grades	Profile Elevation On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		122	210.86								49			
						50						119		
		+50	211.43								59		C 21	
						54						13	R 0	
		Eq = -1010	+559 = 123+56.9 211.50								61		F 214	
						43.1						190	Fac. 1.12	
		124	212.00								67			
						50						126		
		+50	212.57								77			
												136		
		125	213.15								64			
												155		
		+50	213.72								82			
												164		
		126	214.30								85			
												171		
		+50	214.87								90			
												168		
		127	215.45								91			
												179	C 6	
		+50	216.02								93		R 0	
												173	F 237	
		128	216.60								94		Fac. 1.12	
												164		
		+50	217.17								93			
												148		
		129	217.75								73			
												137		
		+50	218.32				8				70			
								4				115		
		130	218.90				6				38			
								6				75		
		+50	219.47				0				48			
								1				99		
		131	220.05				1				44			
								4				62		
		+50	220.62				2				28			
								4				41		
		132	221.20				1				16		C 24	
								4				21	R 0	
		+50	221.77				3				7		F 242	
								4				21	Fac. 1.12	
		133	222.35				1				16			
								1				45		
		+50	222.92			0	8				30			
												55		
		134	223.50	223.46	-0.04						29			
												57		
		+50	224.07	223.91	-0.16						27			
												52		
		135	224.65	224.29	-0.36						24			
												48		
		+50	224.75	224.59	-0.16						26			
												37		
		136	224.85	224.81	-0.04						14			
												36		
		+50	224.95		0						23			
												64		
		137	225.05								44			
												96	C 8	
		+50	225.15								60		R 0	
												134	F 176	
		138	225.25								90		Fac. 1.12	
												157		
		+50	225.35								90			
												149		
		139	225.45								87			
		CARRIED FORWARD												
		COLUMN FOOTINGS												

V.C.	% Grade	STATION	Profile Elevation On Grades	Profile Elevation On V Curves	Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		139	225.45								81			
						50						135		
		+50	225.55								65			
												107		
		140	225.65								51			
												81		
		+50	225.75								36			
												59		
		141	225.85								28			
												34		
		+50	225.95								9			
												49		
		142	226.05								44		C 0	
												81	R 0	
		+50	226.15								48		F 589	
		+75	226.20		0							71	Fac. 1.12	
	+0.200%	143	226.25	226.30	+0.05						34			
												56		
		+50	226.35	226.80	+0.45						27			
												42		
		144	226.45	227.70	+1.25						18			
												37		
		+25	226.50	228.30	+1.80									
		+50	227.75	229.00	+1.25						17			
												34		
		145	230.24	230.69	+0.45						20			
							0					26		
		+50	232.73	232.78	+0.05		35	32			8			
		+75	233.98		0			66				30		
		146	235.23				38				24			
								54				31		
		+50	237.72		0		30				9			
								27				23		
		147	240.21	240.03	-0.18		7				16			
								30				24	C 258	
		+50	242.71	241.98	-0.73		13				10		R 0	
								17				14	F 302	
		148	245.20	243.56	-1.64		5				5		Fac. 1.12	
								5				8		
		+50	245.51	244.78	-0.73		0				4			
												6		
		149	245.81	245.63	-0.18		0				3			
								6				10		
		+50	246.12		0		6				8			
								6				34		
		150	246.42				1				24			
								5				55		
		+50	246.73				2				33			
												78		
		151	247.03								51			
												128		
		+50	247.34								27			
		+75	247.49		0							155		
	+0.610%	152	247.64	247.70	+0.06						20			
												143		
		+50	247.95	248.49	+0.54						14			
												172	C 52	
		153	248.25	249.75	+1.50								R 38	
											65		F 1238	
		+25	248.40	250.57	+2.17							129	Fac. 1.12	
		+50	249.99	251.49	+1.50	45	0	15	0	12	54			
												35		
		+75	251.59	251.56	+0.97		33		25		21			
						25		18		13		29		
		154	253.19	253.73	+0.54		5		4		41			
						25		8		6		59		
		+25	254.79	255.03	+0.24		12		10		75			
						25		7		6		76		
		+50	256.38	256.44	+0.06		3		3		89			
		CARRIED FORWARD												
		COLUMN FOOTINGS												

State of Vermont — Department of Highways

Montpelier-Barre Airport — F. A. P. No.

FORM ENG. 1A — EARTHWORK SHEET NO. 4 of 4 — 1941

V.C.	% Grade	STATION	PROFILE Elevation On Grades	PROFILE Elevation On V Curves	PROFILE Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		154+50	256.38	256.44	+0.06		3		3		89	95		
		+75	257.98		0	25	0	1	0	1	116	84		
		155	259.58			25					66			
						50	0	6				61		
		+50	262.77				2				0			
						✓		4				9	0	39
		156	265.96		0		0				9		2	8
						✓						34	F	139
		+50	269.16	268.40	-0.76						28		Fac.	1.62
						✓						31		
		157	272.35	269.32	-3.03		0				5			
						✓		17				6		
		+50	269.48	268.72	-0.76		18				0			
		+95	266.89	266.88	-0.01									
		158	266.60		0									
		+50												
		159												
		+50												
		160												
		+50												
		161												
		+50												
		162												
						CARRIED FORWARD								
						COLUMN FOOTINGS								

REVISIONS — By

VOLUMES — Computed by 4/41 — Checked by 4/41

VERTICAL CURVES — Computed by LWB — Checked by EAS

GRADES — Computed by 4/41 — Checked by 4/41

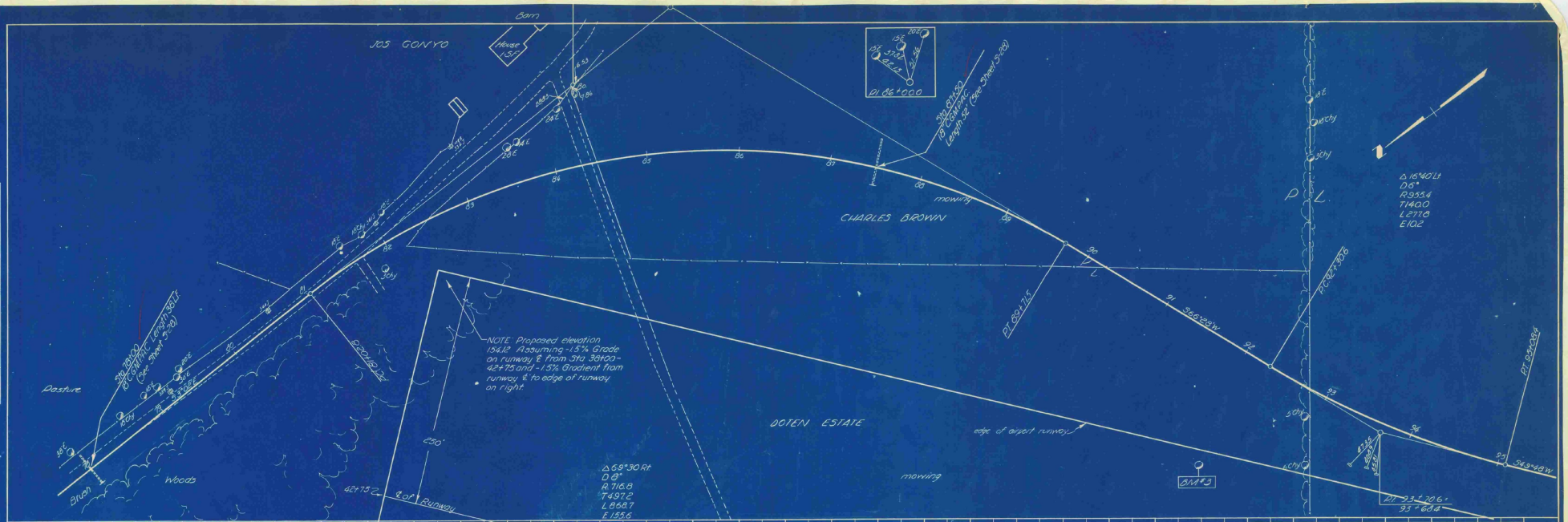
V.C.	% Grade	STATION	PROFILE Elevation On Grades	PROFILE Elevation On V Curves	PROFILE Correction for Vertical Curve	DIST.	Total Excavation Earth and Rock AREA	Total Excavation Earth and Rock CU. YDS.	Balance and Rock Excavation AREA	Balance and Rock Excavation CU. YDS.	Embankment AREA	Embankment CU. YDS.	Shaping Course of Gravel AREA	Shaping Course of Gravel CU. YDS.
		Spur Line												
	+6.387%	155	259.58											
		+50	262.77		0		0				0			
400 VC								1				2		
	+3.594%	156	265.96	266.24	+0.28	50	1				2		5	25
		+50	270.26		0			8			4	0	0	0
						50	8						0	0
		157	274.55		0			16				1	F	
							9				1		Fac.	1.62
		+50	278.85	277.37	-1.48									
150 VC		+75	281.00	277.68	-3.32									
		158	278.72	277.24	-1.48									
		+50	274.16		0									
	-9.120%	159	269.60											
		314+50	754.0					196		49		220		
		75	760					181		22		200		
		00	765					226				549		
		25	770					15				3810		
		50	775					2				1441		
		75	780									2576		
		100	785									1445		
		125	790					30				1304		
		150	795					657				62		
		175	800					657				2254		
		200	805					24				710		
		225	810					6				1527		
		250	815					29				1224		
		275	820									276		
		300	825									273		
		325	830					599				1176		
		350	835					22		22		1515		
		375	840					28				139		
		400	845					35				9		
								3075		171		16709		
		Earth Fac.	3075 - 171 = 2904											
		Rock Fac.	16709 x 1.10 = 2012 = 17,891											
						CARRIED FORWARD								
						COLUMN FOOTINGS								

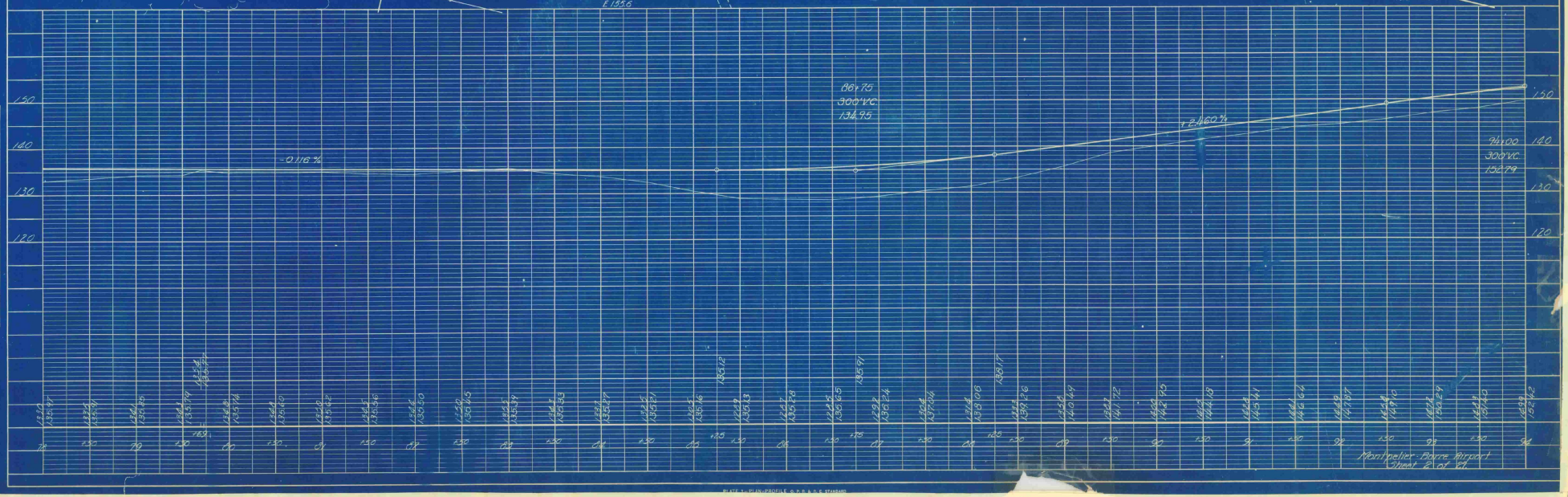
REVISIONS — By

VOLUMES — Computed by — Checked by

VERTICAL CURVES — Computed by — Checked by

GRADES — Computed by — Checked by

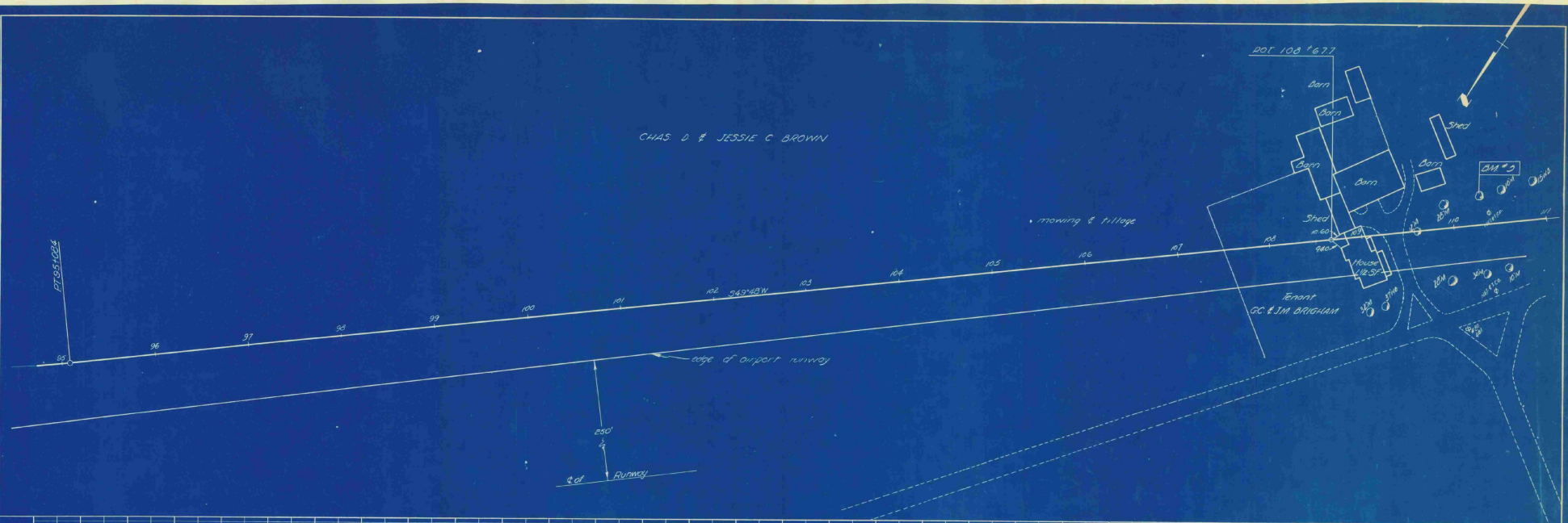


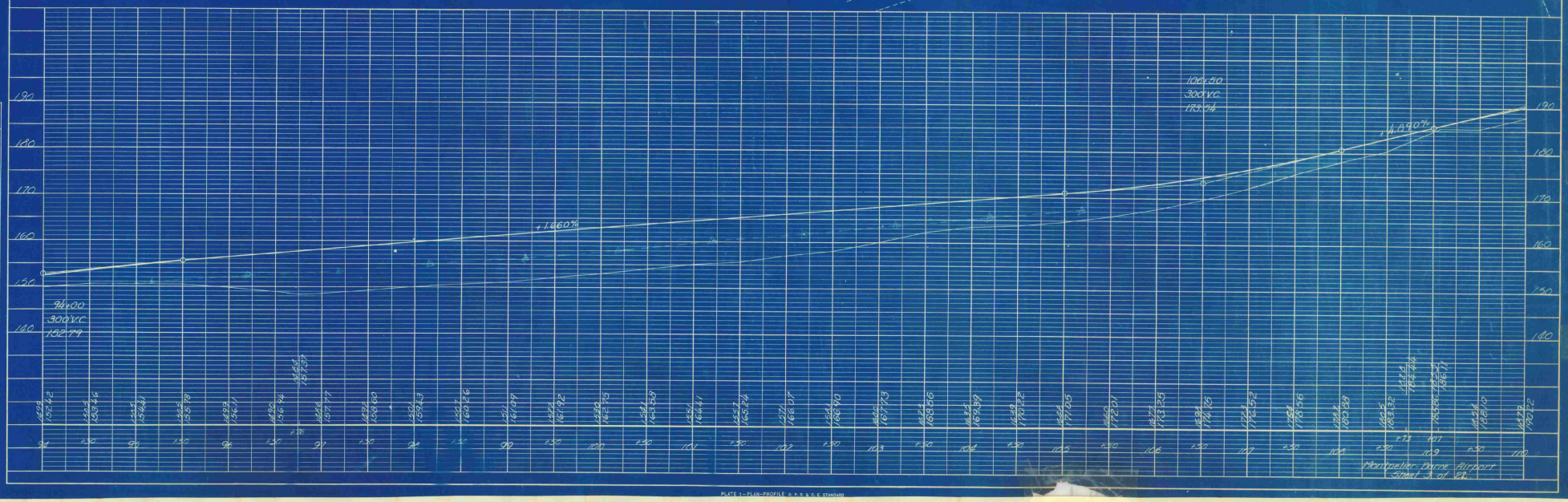


PLAN
SURVEYED
PLOTTED
NOTE BOOK CONTOURS CHECKED
NO. PT. OF INV. CHECKED
DATE
BY
Pl. 2 of 4

PROFILE
SURVEYED
PLOTTED
NOTE BOOK CONTOURS CHECKED
NO. STRUCTURE NOTE IS CHKD.
DATE
BY
Pl. 2 of 4

PLATE 1 - PLAN-PROFILE O.P.R.& D.E. STANDARD

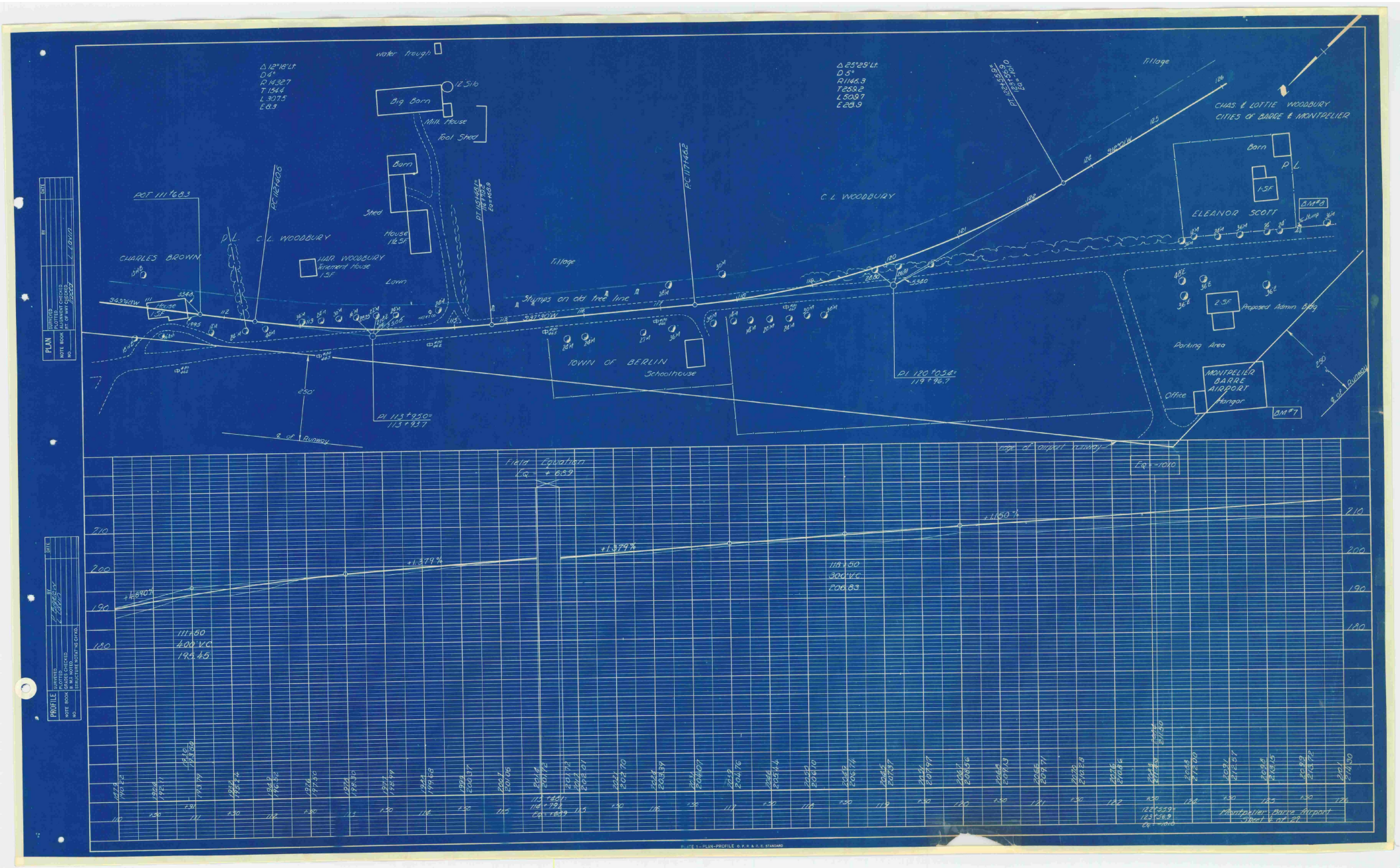


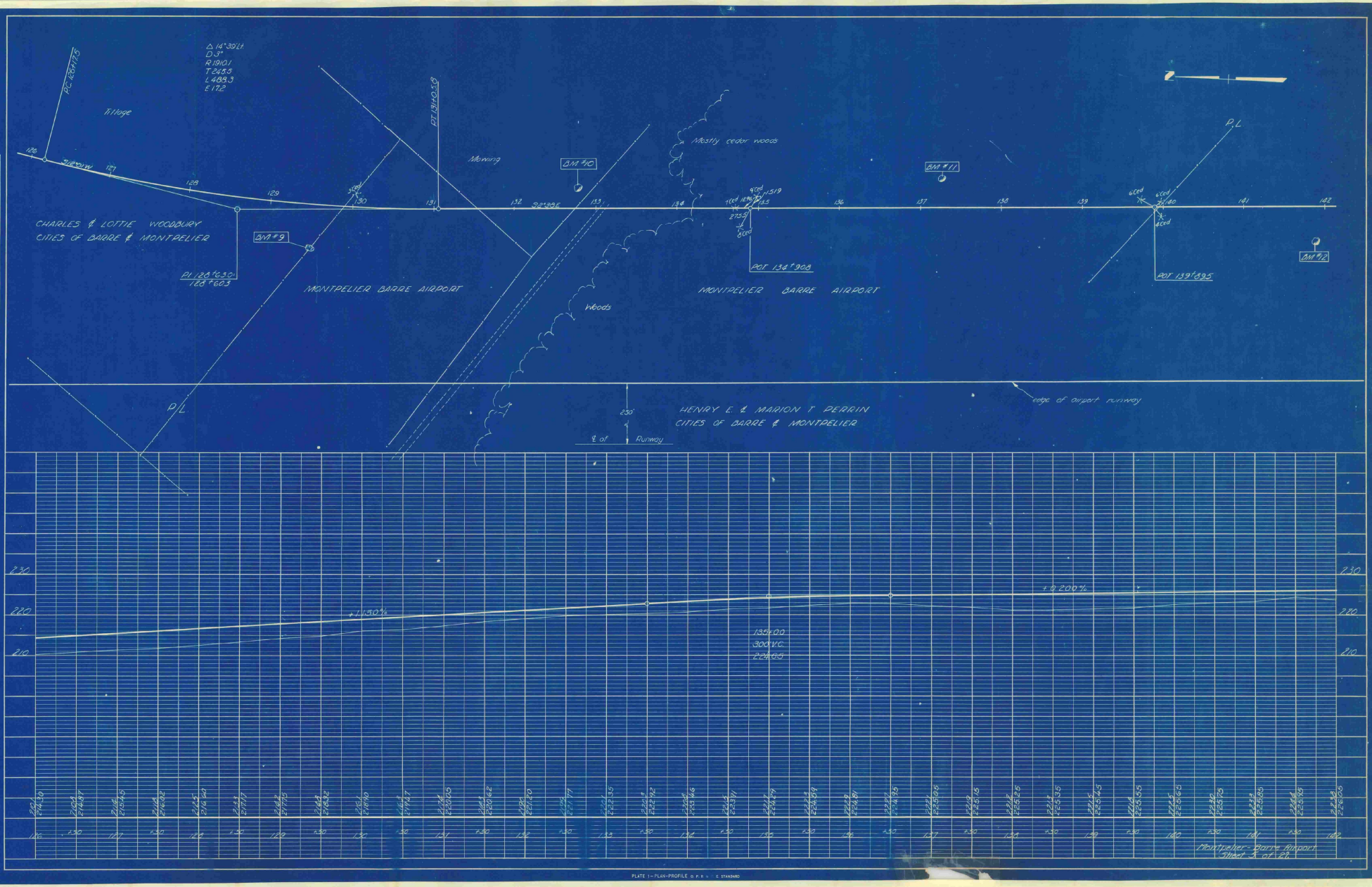


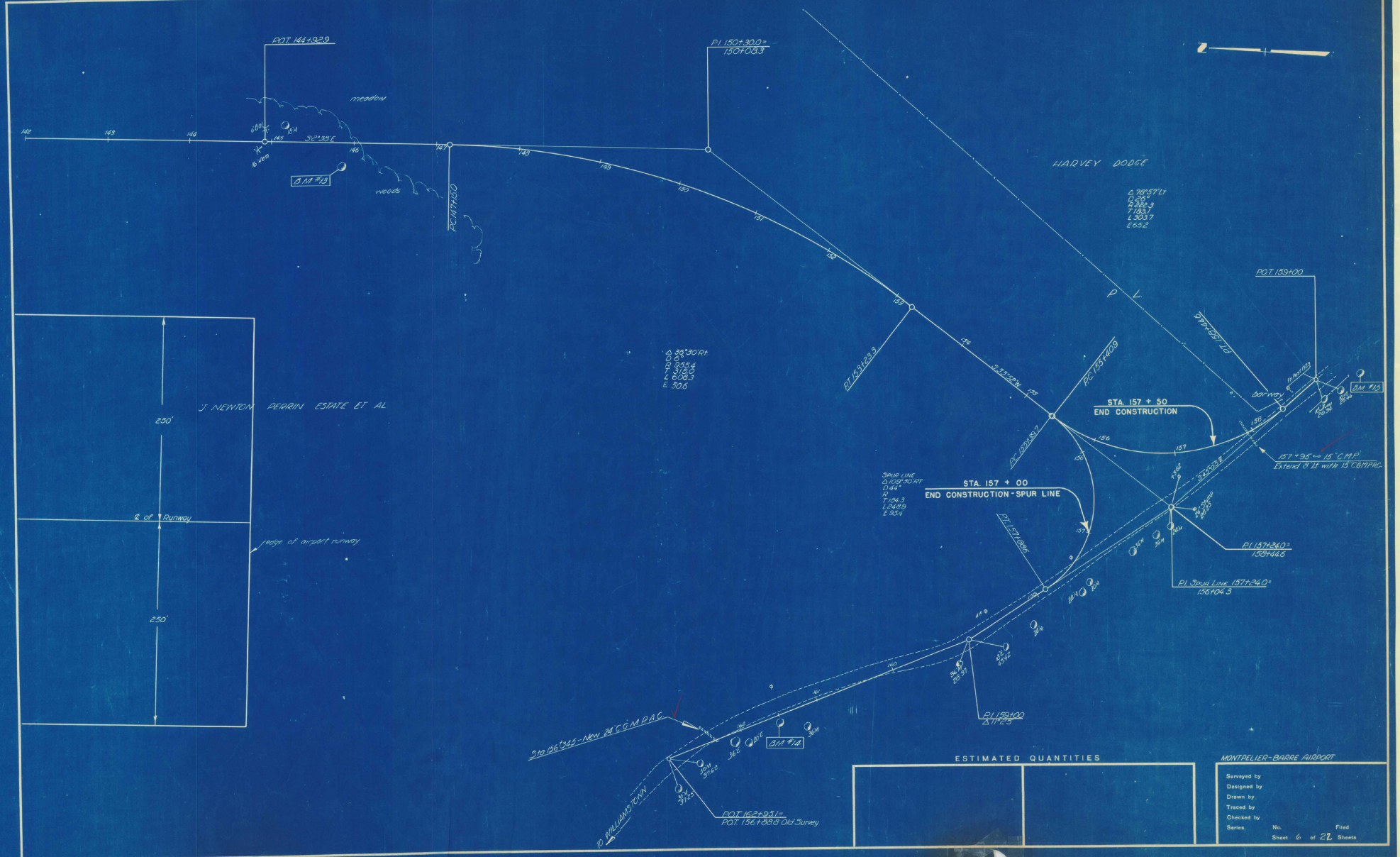
PLAN		BY	DATE
SURVEYED			
PLOTTED			
NOTE BOOK	CHECKED		
NO.	PT. OF WAY CHECKED		
		L.L. Davis	

PROFILE		BY	DATE
SURVEYED			
PLOTTED			
NOTE BOOK	CHECKED		
NO.	STRUCTURE NOTES CHKD.		
		L.L. Davis	

PLATE 1 – PLAN–PROFILE O. P. R. & D. E. STANDARD


Montpelier-Barre Airport
Sheet 4 of 21
PLAN
PROFILE
CHARLES BROWN
C. L. WOODBURY
WM. WOODBURY
Retirement House
Big Barn
Milk House
Tool Shed
Barn
Shed
House
Lawn
water trough
Skyrips on old tree line
TOWN OF BERLIN
Schoolhouse
CHAS. & LOTTIE WOODBURY
CITIES OF BARRE & MONTPELIER
ELEANOR SCOTT
Proposed Admin Bldg
Parking Area
MONTPELIER BARRE AIRPORT
Hangar
Office
Field Equation
Edge of Airport Runway
℄ of Runway
PI 113+950=
113+93.7
PI 120+054=
119+96.7
111+50
400' VC
195.45
118+50
300' VC
206.83
+1.379%
+1.150%
+4.890%

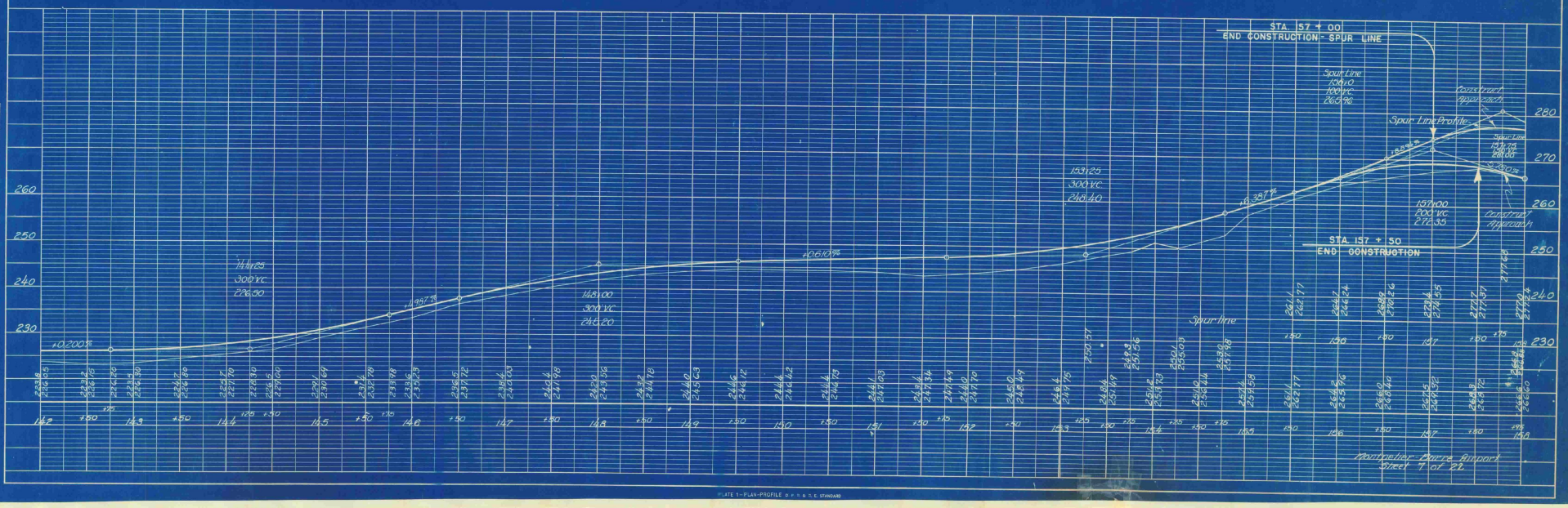

Δ 14°39' Lt
D 3°
R 1910.1
T 245.5
L 488.3
E 17.2
PC 126+17.5
PT 131+10.9
Tillage
Mowing
Mostly cedar woods
Woods
BM #10
BM #11
BM #9
BM #12
CHARLES & LOTTIE WOODBURY
CITIES OF BARRE & MONTPELIER
PI 128+63.0
128+60.3
MONTPELIER BARRE AIRPORT
POT 134+90.8
POT 139+89.5
HENRY E. & MARION T. PERRIN
CITIES OF BARRE & MONTPELIER
edge of airport runway
250'
℄ of Runway
P.L
+1.50%
+0.200%
135+00.0
300' V.C.
226.05
Montpelier-Barre Airport
Sheet 3 of 3
PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
DATE
BY
PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B.M. & CULVERTS
STRUCTURE NOTAT. NO. CH. NO.
PLATE 1—PLAN-PROFILE O. P. R. — E STANDARD

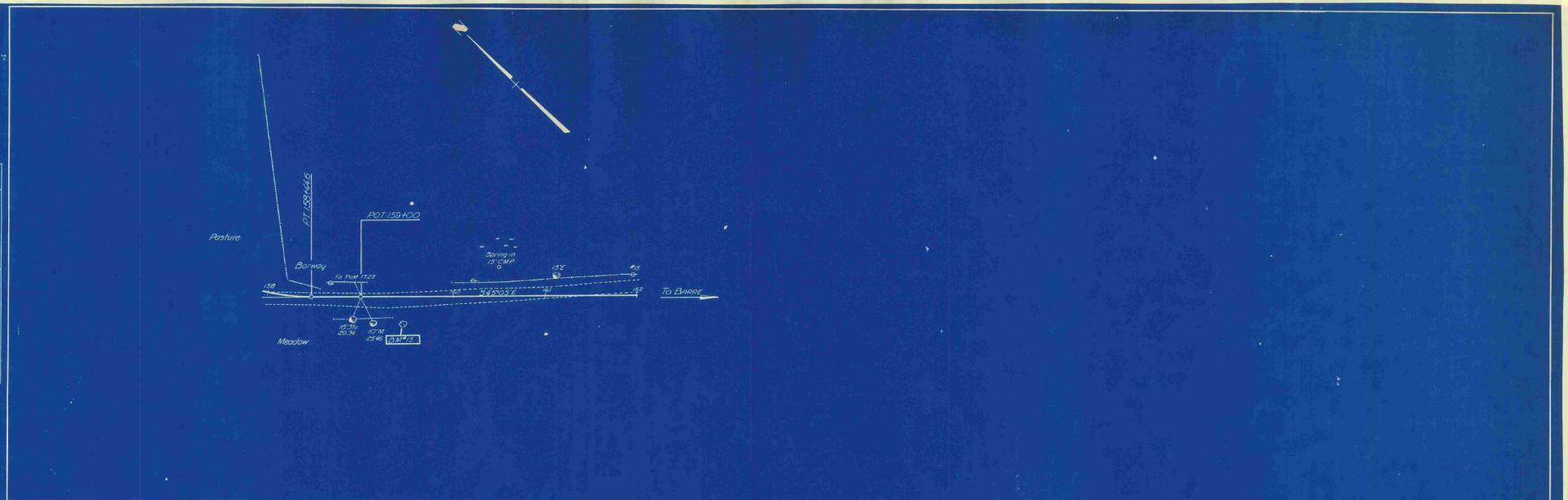


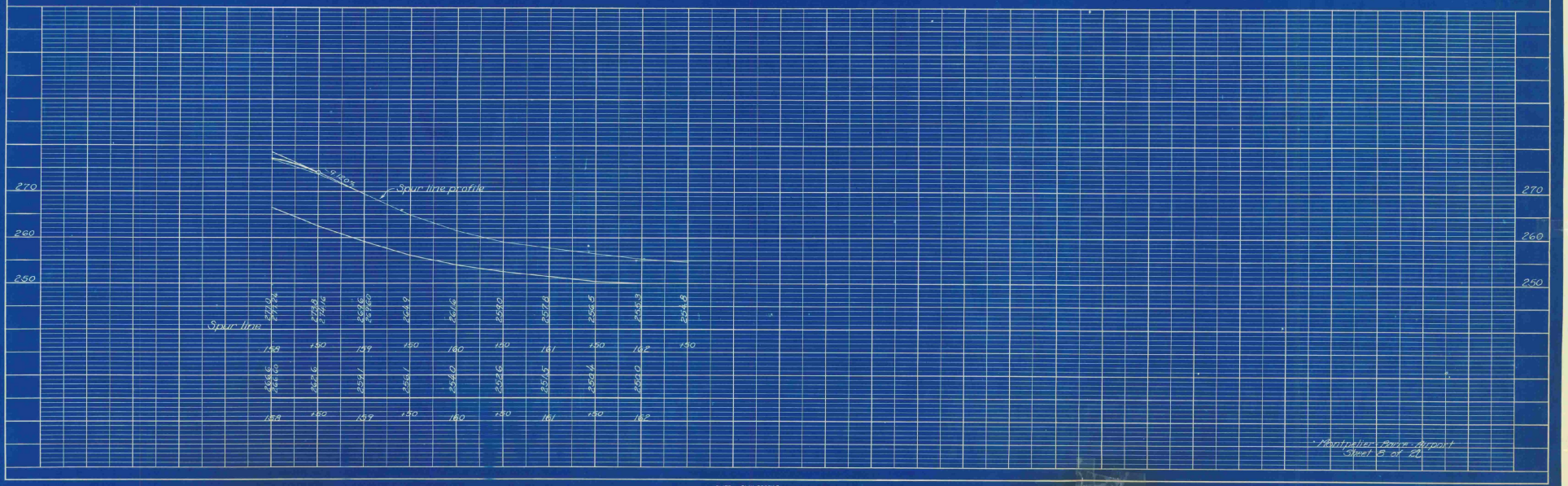
ESTIMATED QUANTITIES

MONTPELIER-BARRE AIRPORT

Surveyed by
Designed by
Drawn by
Traced by
Checked by
Series No. Filed
Sheet 6 of 22 Sheets


STA. 57 + 00
END CONSTRUCTION - SPUR LINE
Spur Line
106+10
1100 VC
265.96
Construct Approach
Spur Line Profile
Spur Line
157+78
280.00
Construct Approach
+6.387%
+6.387%
+6.387%
+0.200%
+0.610%
141+25
300 VC
226.30
147+78
148+00
300 VC
245.20
153+25
300 VC
248.40
157+00
200 VC
272.35
STA 157 + 50
END CONSTRUCTION
Spur-line
Manchester-Perry Airport
Sheet 7 of 22
PLAN
PROFILE
LINE
Broadway
PLATE 1 - PLAN-PROFILE R.P.R.&R.E. STANDARD





PLAN

NOTE BOOK NO.

SURVEYED BY
PLOTTED BY
ALIGNMENT CHECKED BY
RT. OF WAY CHECKED BY

DATE
4-8-41
4-8-41

PROFILE

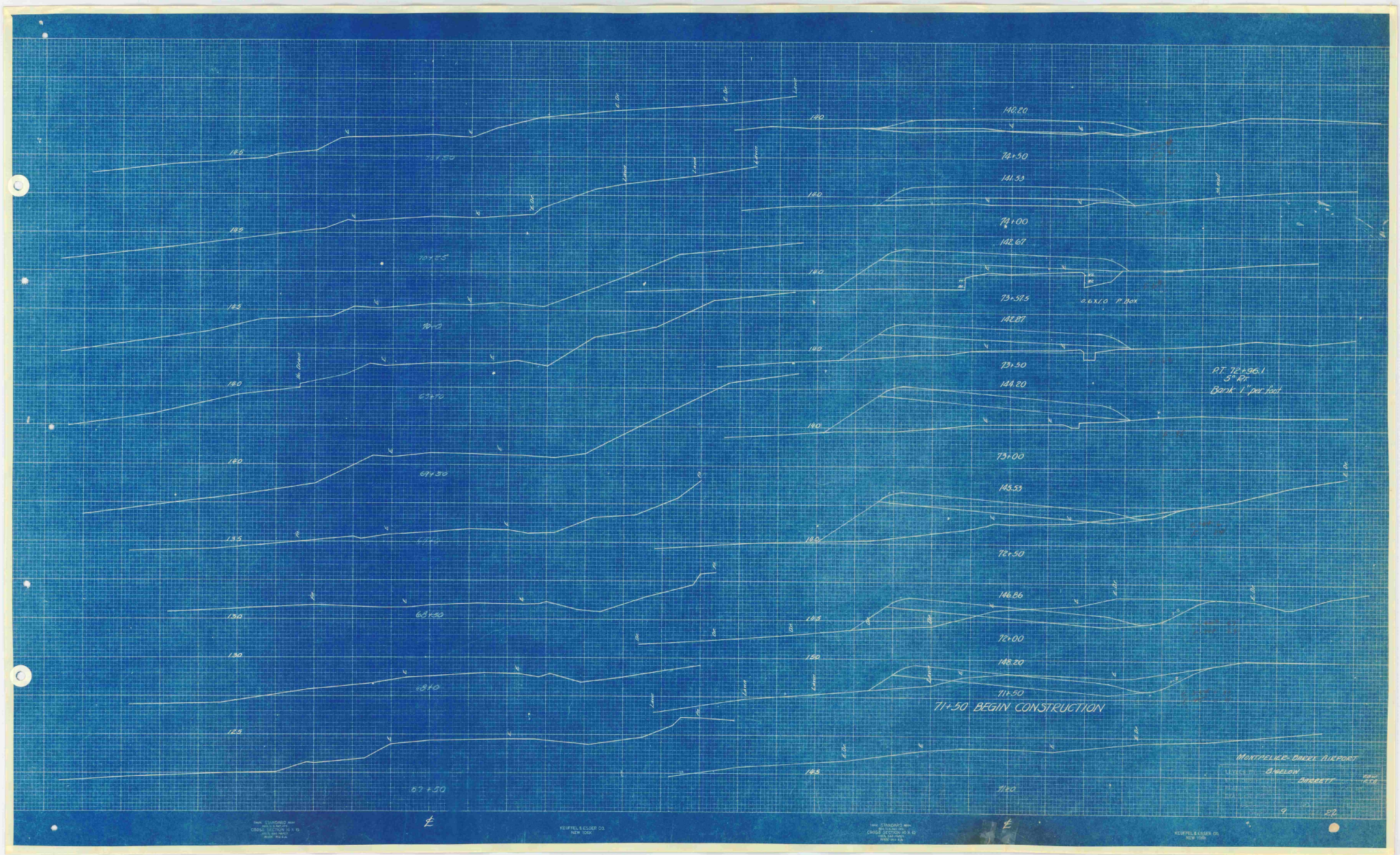
NOTE BOOK NO.

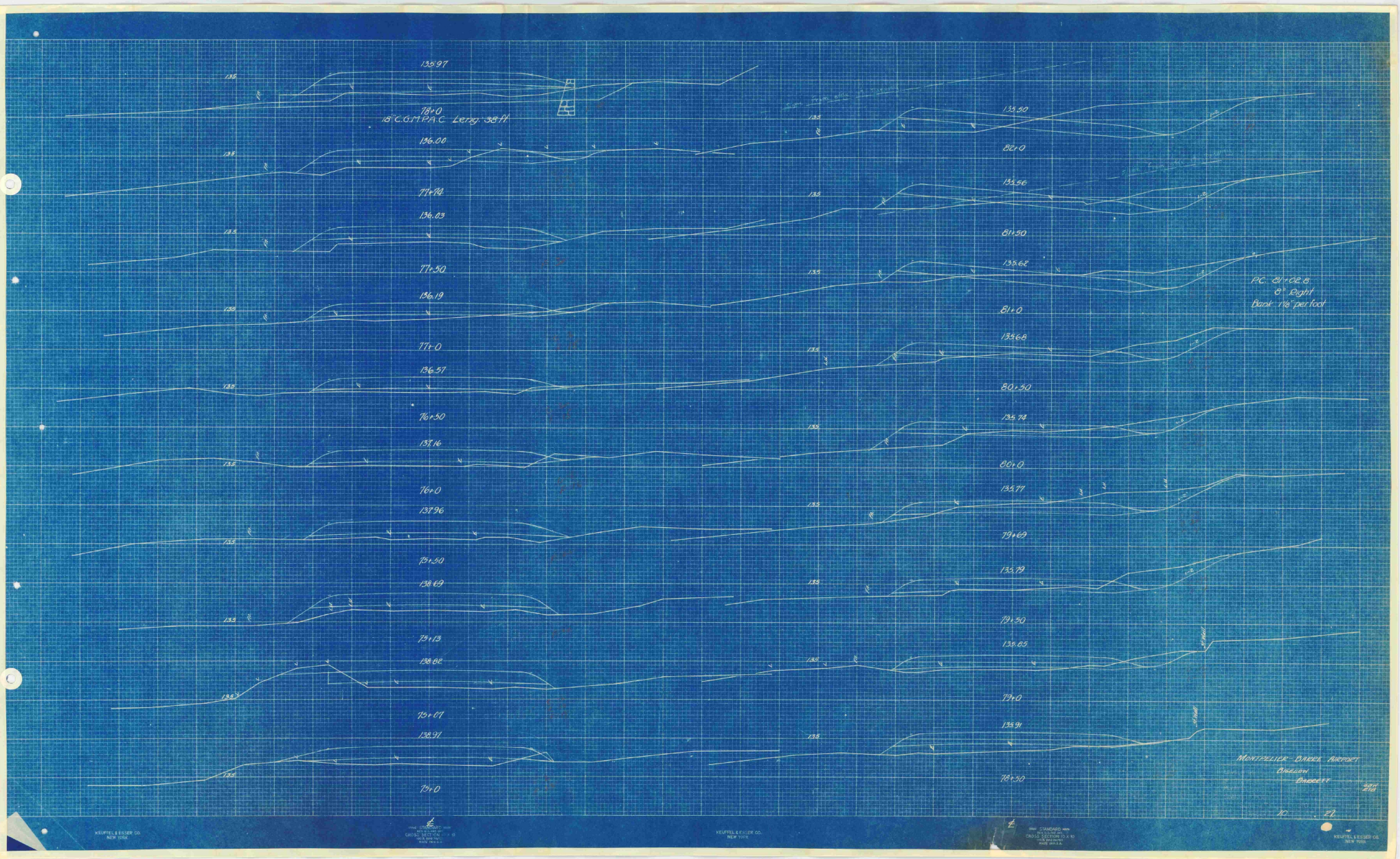
SURVEYED BY
PLOTTED BY
GRADES CHECKED BY
STRUCTURE NOTES CHECKED BY

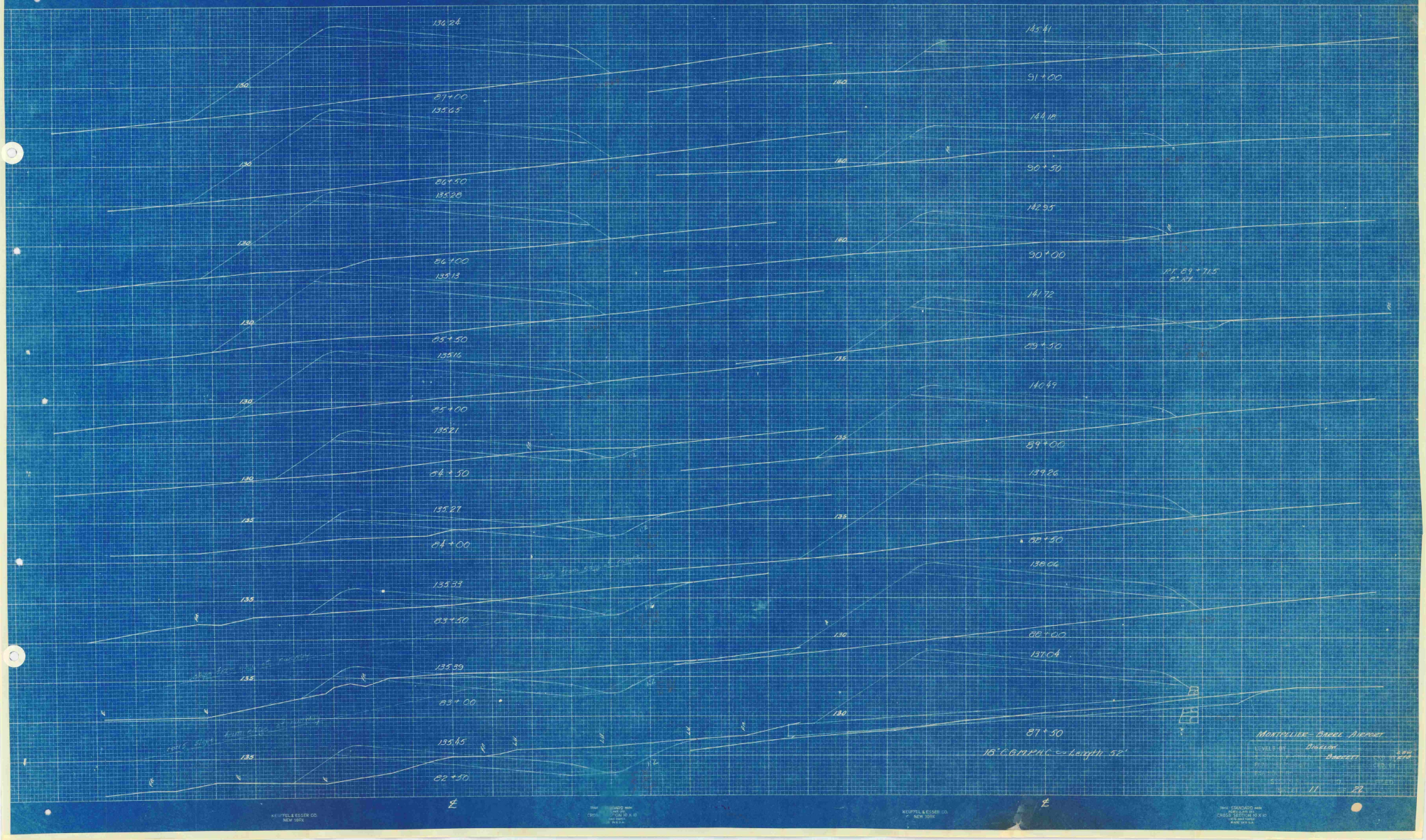
DATE

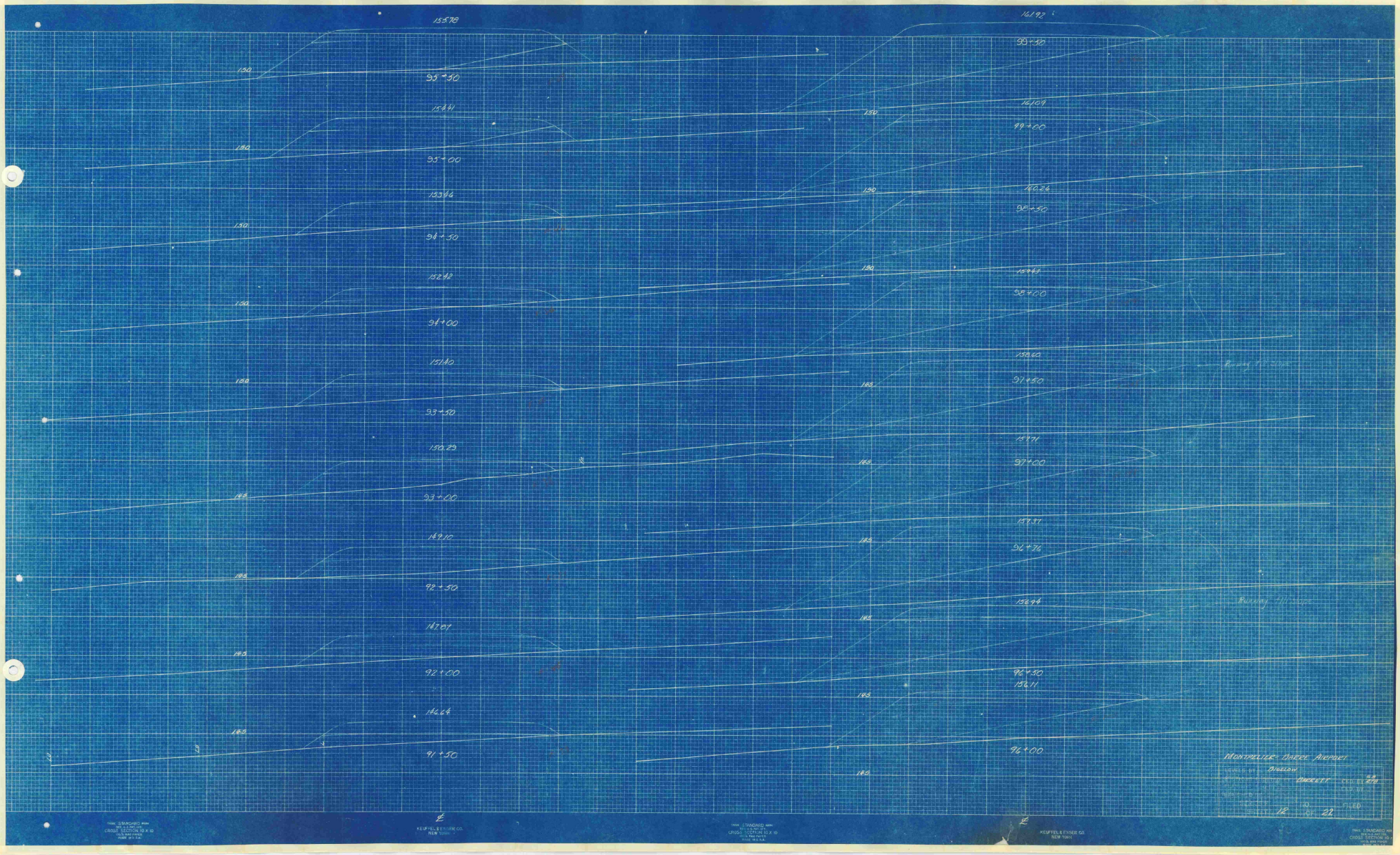
Montpelier-Barre Airport
Sheet 3 of 12

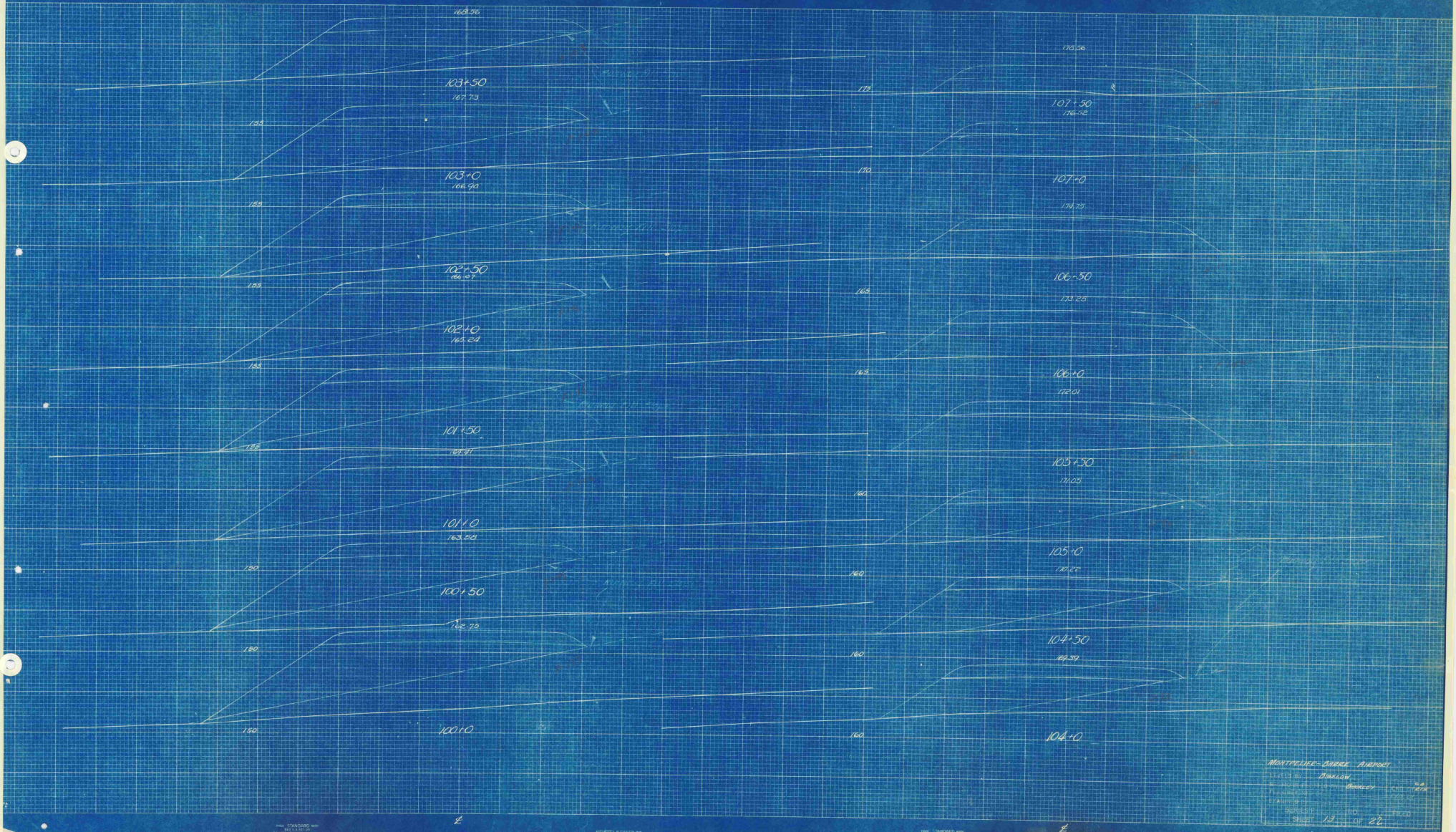
PLATE 1—PLAN-PROFILE © P. H. & D. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

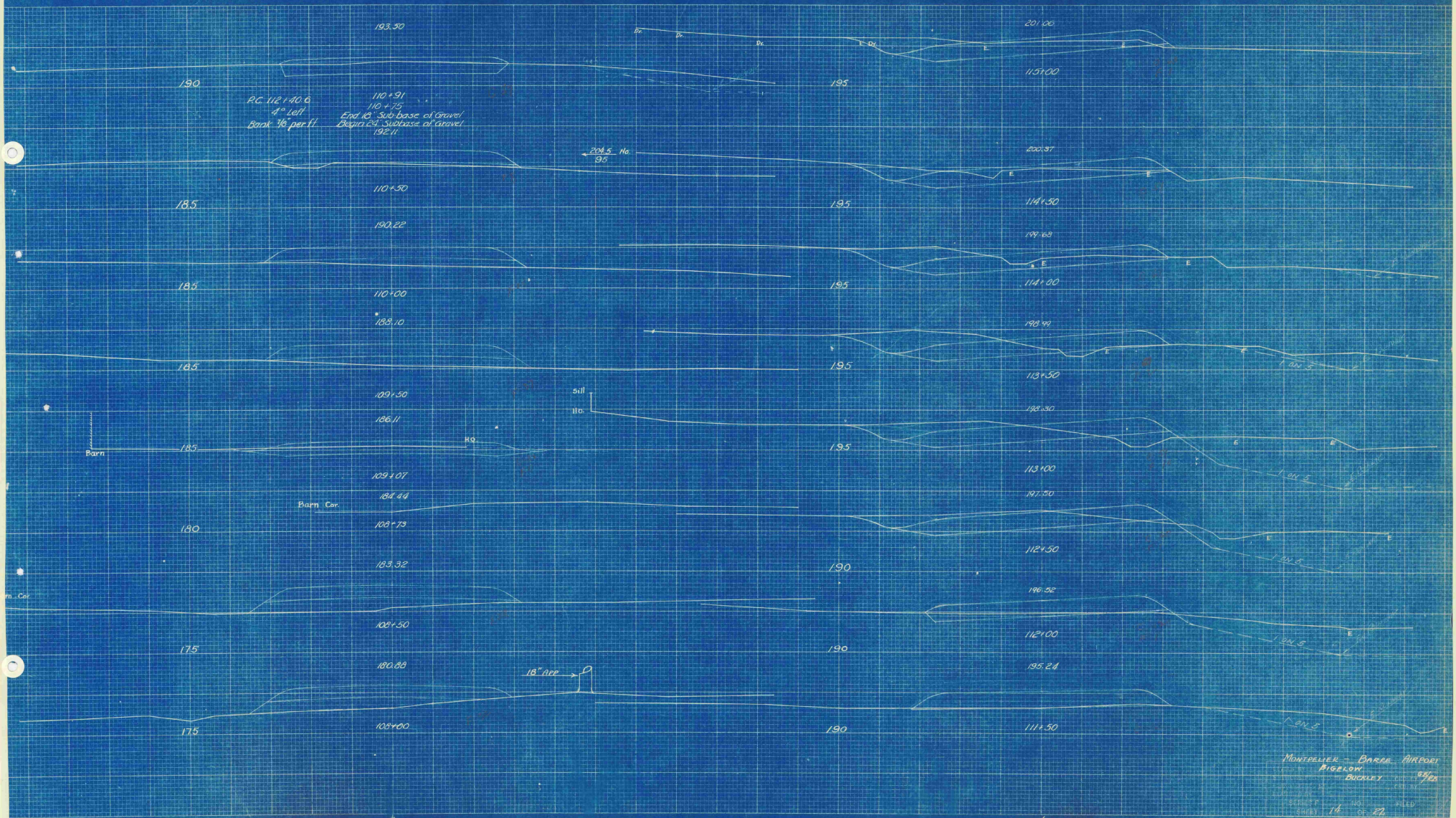

140.20
74+50
141.53
74+00
142.67
73+575
4.6X1.0 P. Box
142.87
73+50
144.20
P.T. 72+96.1
5° RT
Bank 1" per foot
73+00
145.53
72+50
146.86
72+00
148.20
71+50
71+50 BEGIN CONSTRUCTION
70+50
70+25
70+0
69+50
69+00
68+50
68+0
67+50
MONTPELIER-BARRE AIRPORT
BARLOW
BARRETT
KEUFFEL & ESSER CO.
NEW YORK

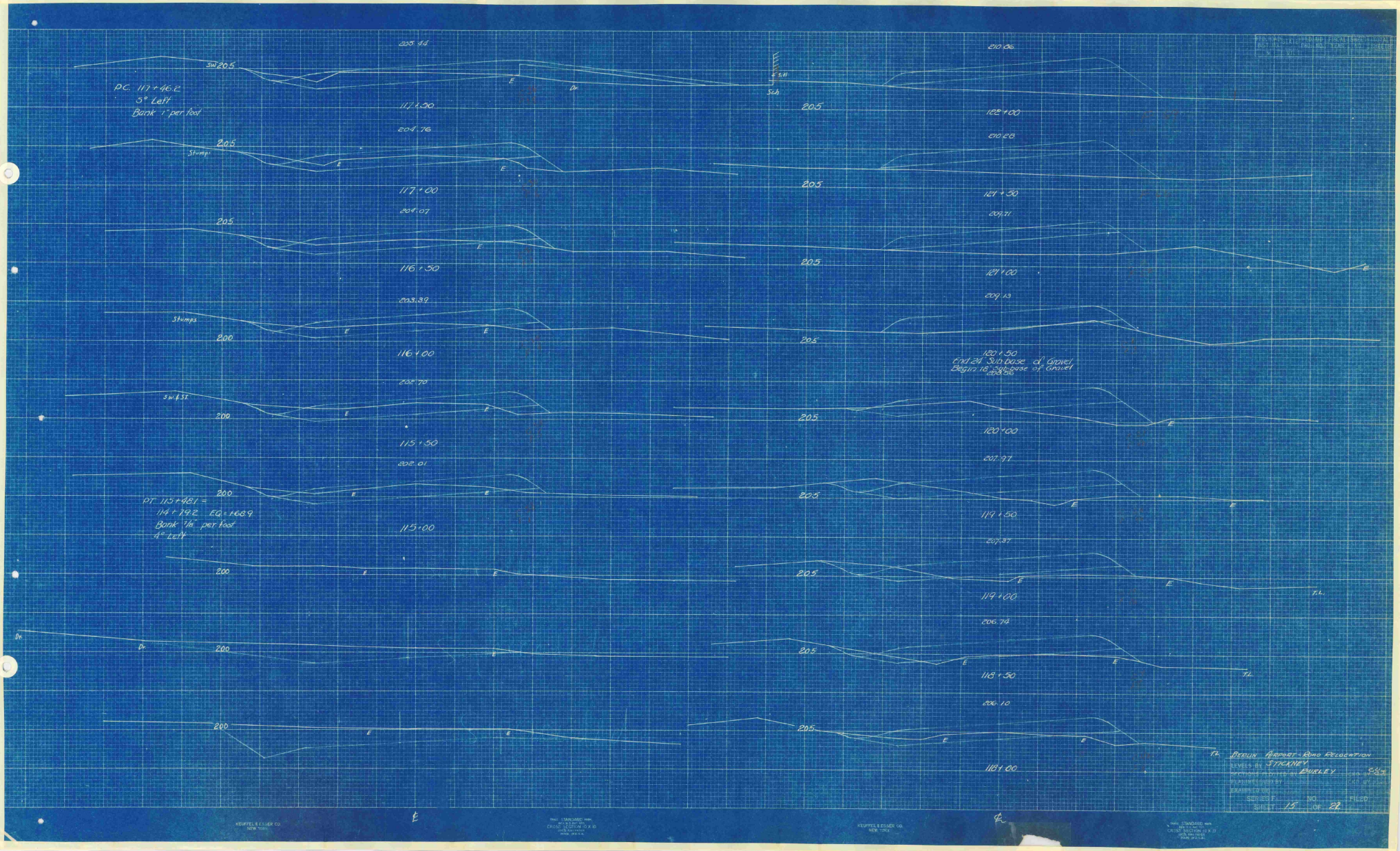

135.97
78+0
18" C.G.M.P.A.C. Leng: 38 ft.
136.00
77+14
136.03
77+50
136.19
77+0
136.57
76+50
137.16
76+0
137.96
75+50
138.69
75+13
138.82
75+07
138.91
75+0
135.50
80+0
135.56
81+50
135.62
P.C. 21+02.8
8° Right
Bank 1.18' per foot
81+0
135.68
80+50
135.74
80+0
135.77
79+69
135.79
79+50
138.85
79+0
135.91
78+50
MONTPELIER BARRE AIRPORT
OVERLOW
BARRETT
KEUFFEL & ESSER CO.
NEW YORK

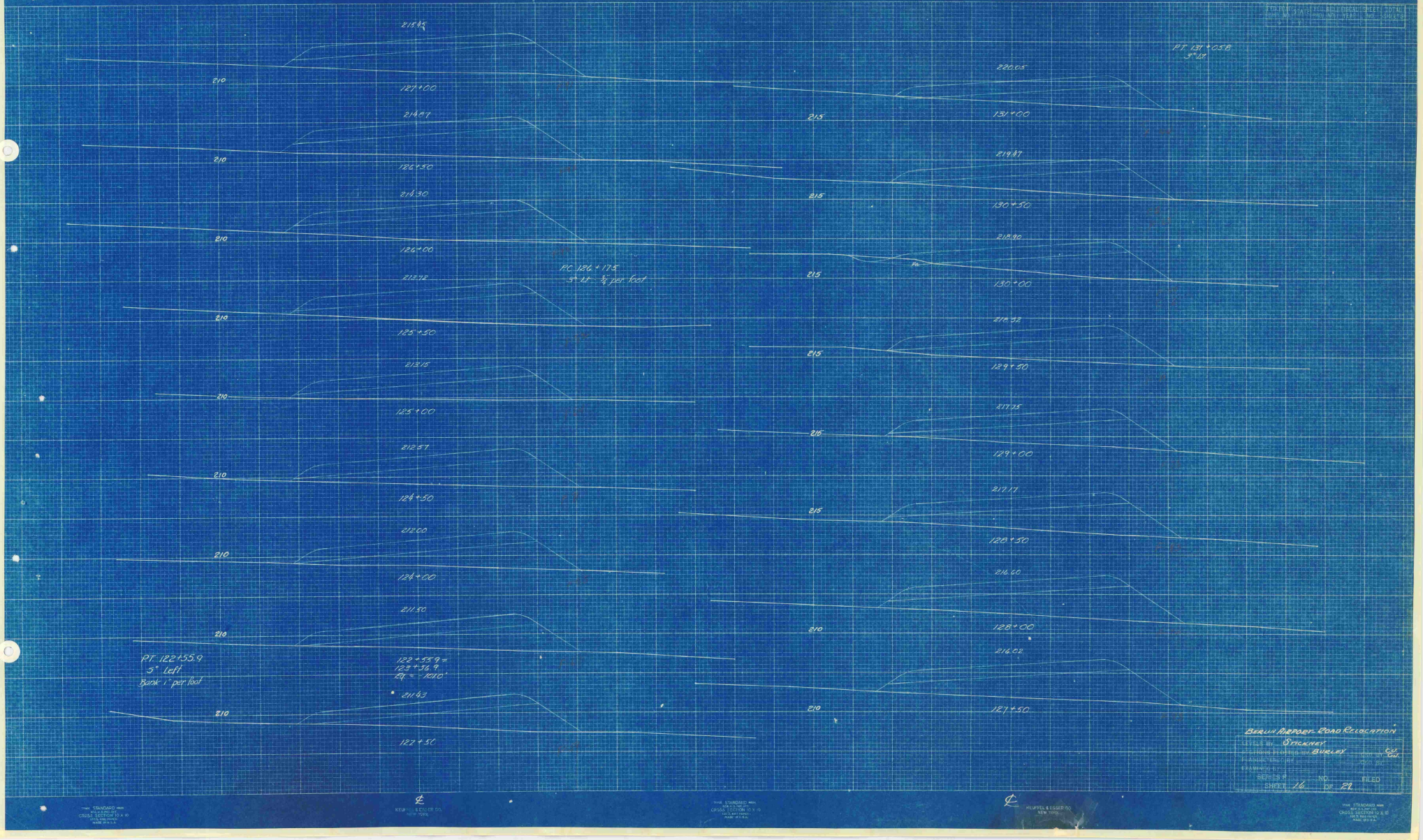

136.24
87+00
135.65
86+50
135.28
86+00
135.13
85+50
135.16
85+00
135.21
84+50
135.27
84+00
135.33
83+50
135.39
83+00
135.45
82+50
145.41
91+00
144.18
90+50
142.95
90+00
141.72
89+50
140.49
89+00
139.26
88+50
138.06
88+00
137.04
87+50
18" C.G.M.P.A.C. — Length 52'
Montpelier - Barre Avenue
Bisquit
Bascom
Z
Z
KEUFFEL & ESSER CO.
NEW YORK


15578
95+50
15441
95+00
13346
94+50
15242
94+00
151.10
93+50
150.29
93+00
149.10
92+50
147.91
92+00
146.64
91+50
16192
99+50
16109
99+00
150.26
98+50
15943
98+00
158.60
97+50
157.71
97+00
157.37
96+76
156.94
96+50
156.11
96+00
Runway Alignment
Runway Alignment
MONTPELIER-BARRE AIRPORT
LEVELED BY: DUBLOW
COMPUTED BY: DUCKETT
CKD. BY
CKD. BY
DATE: 12 / 21 / 22
FILED
KEUFFEL & ESSER CO.
NEW YORK


168.56
103+50
167.73
103+0
166.90
102+50
166.07
102+0
165.24
101+50
164.41
101+0
163.58
100+50
162.75
100+0
170.56
107+50
176.52
107+0
174.29
106+50
173.26
106+0
172.01
105+50
171.03
105+0
170.22
104+50
169.39
104+0
185
180
175
170
165
160
150
℄
℄
MONTPELIER-BARRE AIRPORT
DRAWN BY DIRLAM
BURKLEY
SHEET 13 OF 22
KEUFFEL & ESSER CO.
NEW YORK


193.50
190
P.C. 112+40.6
4° Left
Bank .36 per ft
110+91
110+75
End 18" Sub-base of Gravel
Begin 24" Sub-base of Gravel
192.11
204.5 Ho.
9.5
110+50
18.5
190.22
110+00
188.10
109+50
186.11
Sill
Ho.
H.O.
Barn
109+07
184.44
Barn Cor.
108+73
183.32
108+50
180.88
18" APP
108+00
175
201.00
115+00
195
200.37
114+50
199.68
114+00
198.99
113+50
198.30
113+00
197.50
112+50
196.52
112+00
195.24
111+50
190
Dr.
E
1 on 2
MONTPELIER - BARRE AIRPORT
BIGELOW
BUCKLEY
SCALE 1" = 10'
SHEET 14 OF 22
KEUFFEL & ESSER CO.
NEW YORK
TRACE STANDARD WHITE
CROSS SECTION 10 X 10
KEUFFEL & ESSER CO.
NEW YORK
TRACE STANDARD WHITE
CROSS SECTION 10 X 10


P.C. 117+46.2
5° Left
Bank 1' per foot
Stumps
Stumps
PT 115+98.1 =
114+19.2 EQ = +68.9
Bank 1/16" per foot
4° Left
Dr.
Dr.
Sub
208.44
117+50
204.76
117+00
204.07
116+50
203.39
116+00
202.70
115+50
202.01
115+00
210.06
122+00
210.28
121+50
209.71
121+00
209.13
120+50
End 24" Sub base of Gravel
Begin 18" Sub base of Gravel
120+00
207.97
119+50
207.37
119+00
206.74
118+50
206.10
118+00
Berlin Airport - Road Relocation
Levels by Stickney
Cross Sections by Burley
Examined by
Sheet 15 of 22


PT. 122+55.9
5° Left.
Bank 1" per foot
122+55.9 =
123+36.9
Eq. = -1210'
PC 126+17.5
5° Lt. 3/4" per foot
PT 131+05.8
5° Rt
Berlin Airport Road Relocation
Levels by Stickney
Cross Sections by Burley
Checked by
Examined by
Series B
Sheet 16 of 22
Filed

STATE OF VERMONT — DEPARTMENT OF HIGHWAYS

Wilmington Village ..... NO. NRM 63-F

Form Eng. 3A — SUMMARY SHEET No. ..... 193..

APPROXIMATE SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS	ITEM NO.
	cu. yd.	Common Excavation	10
300	"	Solid Rock Excavation	10
	"	Borrow	11
3200	"	Common Excavation inc. Borrow	10-11
	cu. yd.	Sub-base of Field or Quarry Stone	12A
	"	Sub-base of Gravel	12B
500	"	Sub-base of Sand	12C
	"	Sub-base of Crushed Rock or Slag	12D
5	days	Patrol Maintenance	13
	cu. yd.	Channel Excavation	14
	"	Structure Excavation	15
	cu. yd.	Broken Stone Base Course	16
	cu. yd.	Gravel Surface Course	20A
	"	Gravel Surface Course (Crushed)	20B
900	"	Gravel Shoulders (Incl. 100 cy. Overrun)	21
	cu. yd.	Bitum. Macadam Surface Course (Asphalt or Tar)	22A
	" " " " " (Emulsified Asph.)		22B
	gal.	Oil Asphalt	22C
	"	Refined Tar	22D
	"	Emulsified Asphalt	22E
	"	Cut Back Asphalt	22F
1900	cu. yd.	One Course Cement Concrete Pavement	23
	cu. yd.	Gravel Mixed-in-Place Surface Course	24AA
	"	Crushed Stone Mixed-in-place Surface Course	24A
	"	Dragged Seal Coat for Bitum. Macad. Surface	24B
	gal.	Oil Asphalt	24C
	"	Refined Tar	24D
	"	Emulsified Asphalt	24E
	"	Cut Back Asphalt	24F
	sq. yd.	Single Bituminous Surface Treatment	25
	"	Double " " " (Incl. Overrun)	26
4200	"	Natural Rock Asphalt Surface Course	27
127	cu. yd.	Concrete Class A	33A
	"	" " B	33B
	"	" " C	33C
	"	" " D (cyclopean)	33D
10100	lb.	Reinforcing Steel	34
	sq. yd.	Waterproofing Membrane	35
	lb.	Structural Steel	36A
	lump sum	Steel Superstructure	36B
	lump sum	Plain Timber Floor System	37A
	"	Timber Floor System Treated in Field	37B
	"	Creosoted Timber Floor System	37C
165	cu. yd.	Cement Rubble Masonry	43
	"	Dry Rubble Masonry	44
	sq. yd.	Repointing Masonry	45
	lin. ft.	12" Corrugated Galvanized Metal Pipe (Bitum. Coated)	47A
	"	15" " " " " " "	47B
	"	18" " " " " " "	47C
	"	24" " " " " " "	47D
	"	30" " " " " " "	47E
	"	36" " " " " " "	47F

QUANTITIES	UNIT	ITEMS	ITEM NO.
	lin. ft.	12" Cast Iron Pipe	48A
	"	15" " " "	48B
	"	18" " " "	48C
	"	20" " " "	48D
	"	24" " " "	48E
	"	30" " " "	48F
	"	36" " " "	48G
1740	lin. ft.	12" Reinforced Concrete Pipe (Incl. 76 l.f. Overrun)	49A
416	"	15" " " "	49B
164	"	18" " " "	49C
	"	24" " " "	49D
	"	30" " " "	49E
	"	36" " " "	49F
	"	48" " " "	49G
	lin. ft.	6" Vitrified Clay Pipe	50A
	"	8" " " "	50B
	"	10" " " "	50C
	"	12" " " "	50D
	"	15" " " "	50E
	"	18" " " "	50F
	"	24" " " "	50G
200	lin. ft.	Relaying Pipe Culverts	51
	lump sum	Temporary Bridge	55
	lin. ft.	Timber Piling	56
	M. B. M.	Timber Cribbing	57
	cu. ft.	Concrete Cribbing	58
	cu. yd.	Stone Fill	60
	"	Plain Rip-Rap	61
	"	Rip-Rap for Bank Protection	62
	lin. ft.	Standard Underdrain with 6" Vitrified Clay Pipe	63A
	"	" " " 8" " (Incl. 16 l.f. Overrun)	63A
400	"	Standard Underdrain with 6" Perforated Corr.	63B
	"	Galvanized Metal Pipe—Bitum. Coated	63B
	"	Standard Underdrain with 8" Perforated Corr.	63B
		Galvanized Metal Pipe—Bitum. Coated	63B
	sq. yd.	Single Bituminous Surface Treatment	25
	"	Double " " " (Incl. Overrun)	26
	"	Natural Rock Asphalt Surface Course	27
24	lin. ft.	Wood Guard Rail	66
1456	"	Cable Guard Rail	67A
	"	" " " " Concrete Posts	[illegible]
4	each	Guide Posts	68
	"	" " " Concrete	68B
10	"	Anchors for Cable Rail	67B
	each	Erection of State or Federal Aid Markers	69
	cu. yd.	Plain Rubble Paving	70A
	"	Grouted Rubble Paving	70B
	sq. yd.	Plain Cement Concrete Gutter	73
	"	Plain Cobble Gutter	74A
100	"	Grouted Cobble Gutter	74B
	each	Leaching Basins	75
11	"	Catch Basins (Brick)	76A
	"	" " (Concrete)	76B
	"	Changing Elevations of Manholes & Catch Basins	77
23	"	Drop Inlet Grates	78
	lin. ft.	Snow Fence	79
	lin. ft.	Lip Curb	
	each	Special Drop Inlet (Metal)	
	lin. ft.	Balustrade Rail	
	lump sum	Lighting System	
	sq. yd.	One Course Cement Concrete Sidewalk	
	cu. yd.	High Early Strength Cement Concrete	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		Solid Rock Excavation
	cu. yd.	Excavation as per Sections
50	"	Culvert Excavation (incl. Factor) (Est)
250	"	Overrun
300	cu. yd.	TOTAL
		Common Excavation incl. Borrow
	cu. yd.	Earth Excavation
2871	"	Excavation as per Sections
	"	Borrow
1348	"	Culvert Excavation incl. Factor
237	"	Underdrain Excavation incl. Factor
744		Overrun
5200	cu. yd.	TOTAL
		Sub Base of Gravel
	cu. yd.	Sub-base
204	"	Shaping Course as per Sections
	"	Surfacing for Driveway
	"	Bleeders
296		Overrun
500	cu. yd.	TOTAL
		Grouted Cobble Gutter on other side
8	sq. yds.	As per Plans
92	" "	Overrun
100	" "	Total
		Village Participation
500	cu. yds.	Common Excav. Incl. Borrow
433		Concrete Class A
3300	lbs.	Reinforcing Steel

	Conc. A	Steel	G.R.M.
Dowelled Curb	5.5	285	
Conc. Curb & Gutter	122.7	2765	
Overrun			
Total	133.0	3300	

	CONCRETE "A" cu. yd.	CONCRETE "C" cu. yd.	STEEL lbs.	G.R.M. cu. yd.	GRATES each
Pipe Culverts	19.7		1345		
Box Culverts	42.9		4596		
Repairs					
Walls				150	
Curb and Gutter					
Dowelled Curb	13.2		790		
Overrun	19.2		963	15	
TOTAL	127.0		10100	165	

TYPE OF ROAD: One Course Cement Concrete Pavement

STATIONS From	STATIONS To	PAVEMENT WIDTHS 20'	21'	22'	EQUATIONS +	EQUATIONS −	
969+00.0	[illegible]						
	974+55.7		585.2			0.5	
	+47		-79.13				
974+55.7	982+[illegible]						
+47.0		42.3	895.3				
982+[illegible]	991+[illegible]		891.7				Bridge 79 ft.
21.3	998+00		578.7				
992+[illegible]	[illegible]		570.0				
998+00							
997+[illegible]	999+[illegible]		[illegible]				
	1001+07.5						
[illegible]	1001+[illegible]		307.5	178.5			
+07.5		1131.5					
1001+[illegible]	1012+39.0	[illegible]					
		2600.0	1484.5	175.0			

Bridge & Approaches
Sta 991+41.0 – 992+20.0

			Item No.
25	c.y.	Common Excav. Incl. Borrow	10-11
104	c.y.	Structure Excavation	15
25	"	One Course Cement Concrete Pavement	23
180	"	Concrete Class A	33A
38017	lbs.	Reinforcing Steel	34
		Removal of Present Superstructure	
1	L.S.	Maintaining Traffic	36A
147	L.F.	Balustrade Rail	
1	L.S.	Lighting System (Conduit only)	
20 c.y.		Solid Rock Excav.	10
14 c.y.		Concrete Class B	33B
75 c.y.		Concrete Class C	33C

LENGTH OF PROJECT

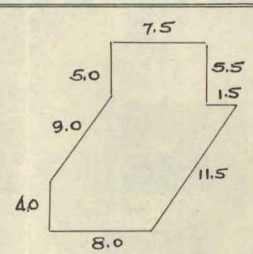
	STA. TO STA.		FEET	MILES
Roadway	969+00	1012+39	4259.5	0.806
Bridge	991+41.0	992+20.0	79.0	0.014
Length of Project			4338.5	0.821

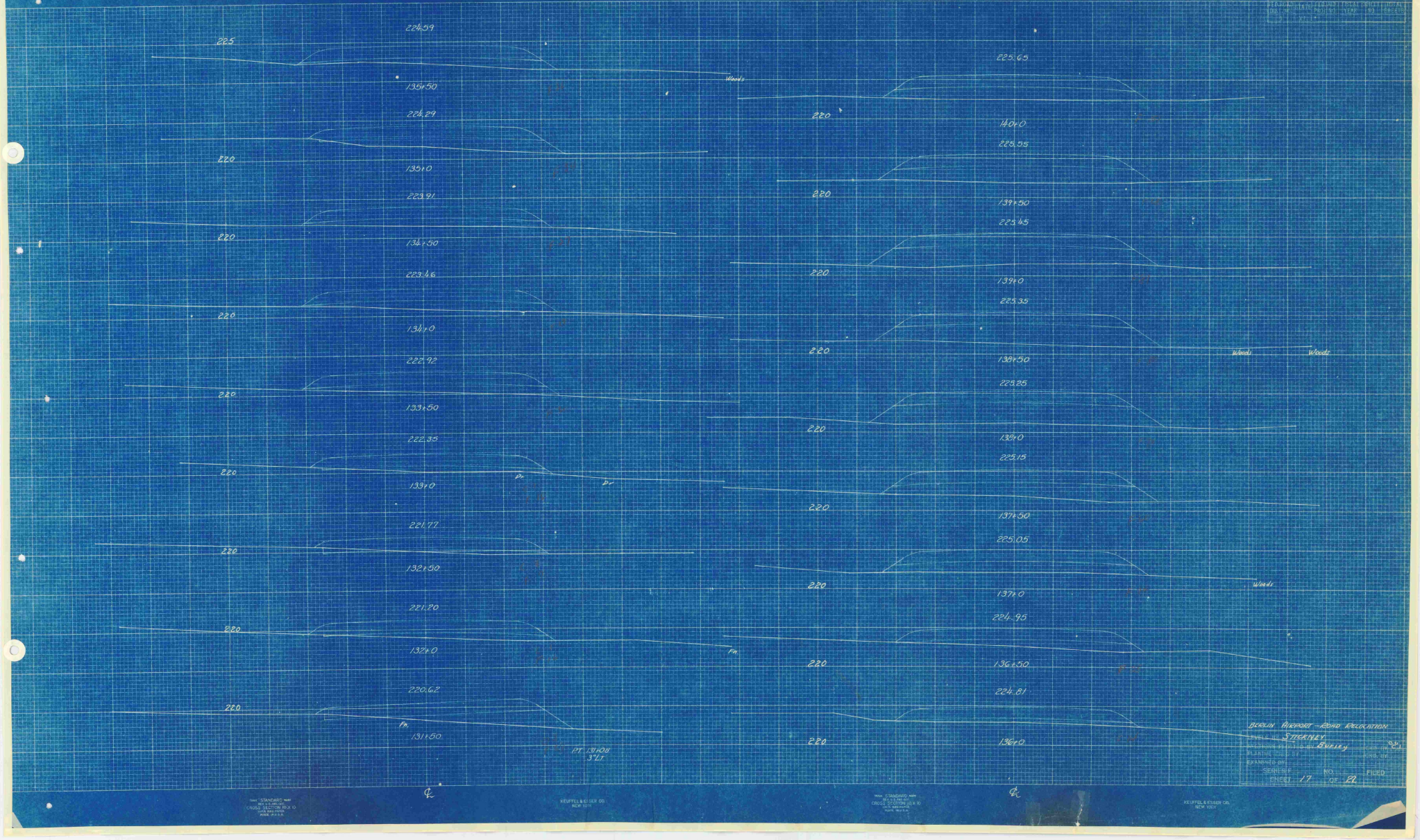
CURB DOWELLED TO PAVEMENT

LEFT			RIGHT		
STA.	STA.	H'GT.	STA.	STA.	H'GT.
982+88.7	983+92.3	7"	969+0	982+46.9	7"
992+11.3	992+56.3	8"	984+47	985+56	6"
993+07.6	993+92	7"	985+73	986+12	6"
994+08.5	994+87	7"	987+16.5	988+07	6"
995+03	996+14	7"	988+95	989+05	6"
996+27	997+70	7"	989+19	989+47	6"
997+89	998+89	7"	989+66	991+42.3	6"
999+08	1001+25.5	7"	992+95	993+65	7"
1001+42	1001+95	7"	993+74	994+40	7"
1002+11	1004+05	7"	994+50	994+89.5	7"
1004+20	1004+77	7"	994+98	995+16	7"
1004+94	1005+48	7"	1008+54	1008+94	7"
1005+52	1006+41	7"			
1006+58	1006+90	7"			
1007+13	1008+75	7"			
1008+87.5	1009+65	7"			
1009+82	1010+39	7"			
1010+51	1011+88	7"			

GROUTED COBBLE GUTTER

STA.		LENG.
970+32	RT.	22×6
972+48	"	17×6
974+77	"	19×5.5
975+88	"	15×6
1012+23	"	SEE SKETCH

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135+50
226.29
220
135+0
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220
134+50
223.46
220
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222.92
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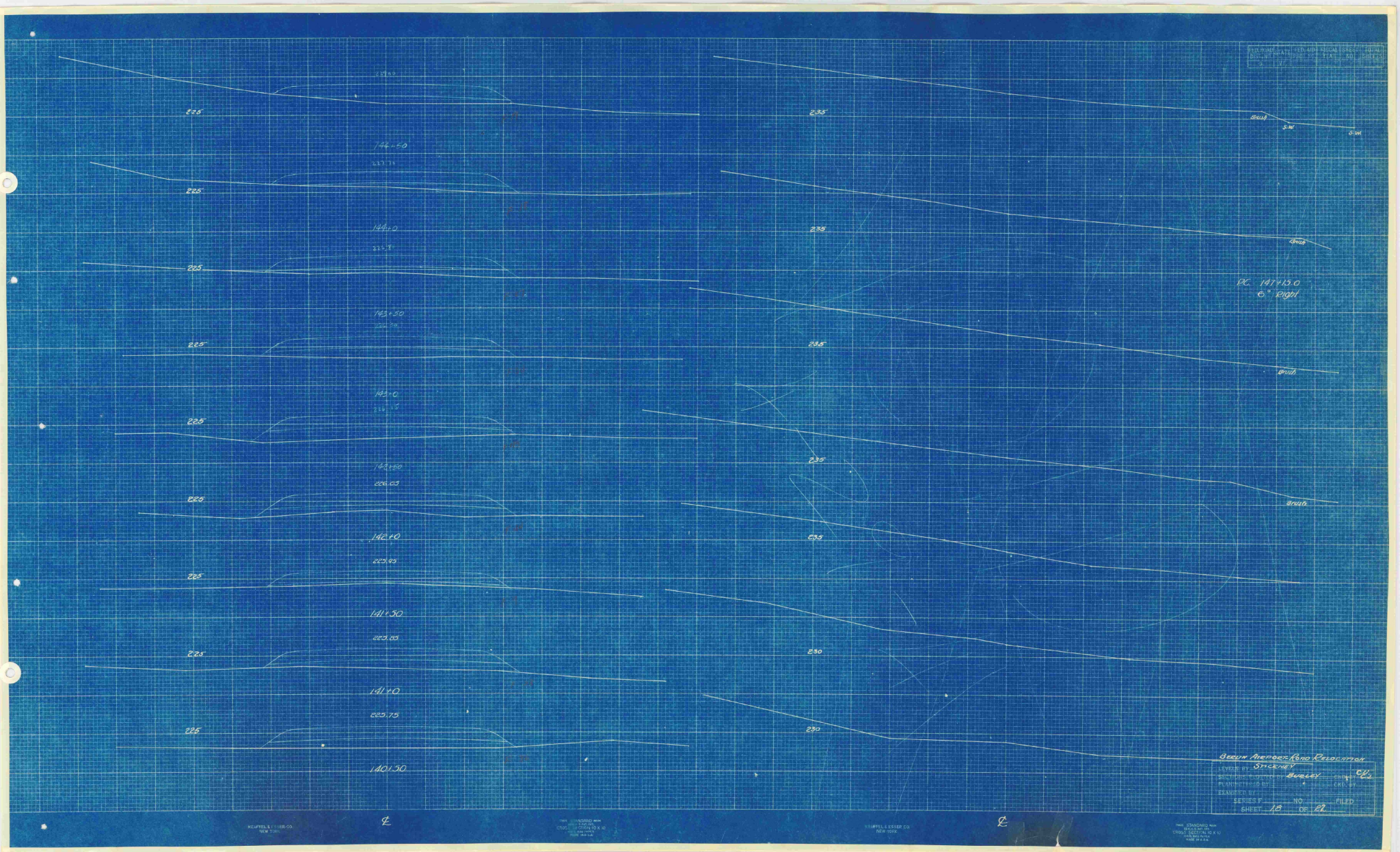
133+50
222.35
220
133+0
221.77
220
132+50
221.20
220
132+0
220.62
220
131+50
PT 131+08
37.7
Woods
225.65
220
140+0
225.55
220
139+50
225.45
220
139+0
225.35
220
138+50
225.25
220
138+0
225.15
220
137+50
225.05
220
137+0
224.95
220
136+50
224.81
220
136+0
Woods
Woods
Woods
BERLIN AIRPORT - ROAD RELOCATION
STICKNEY
BURKEY
EXAMINED BY
SERIES F
NO.
FILED
SHEET 17 OF 22
KEUFFEL & ESSER CO.
NEW YORK


225
146+50
225
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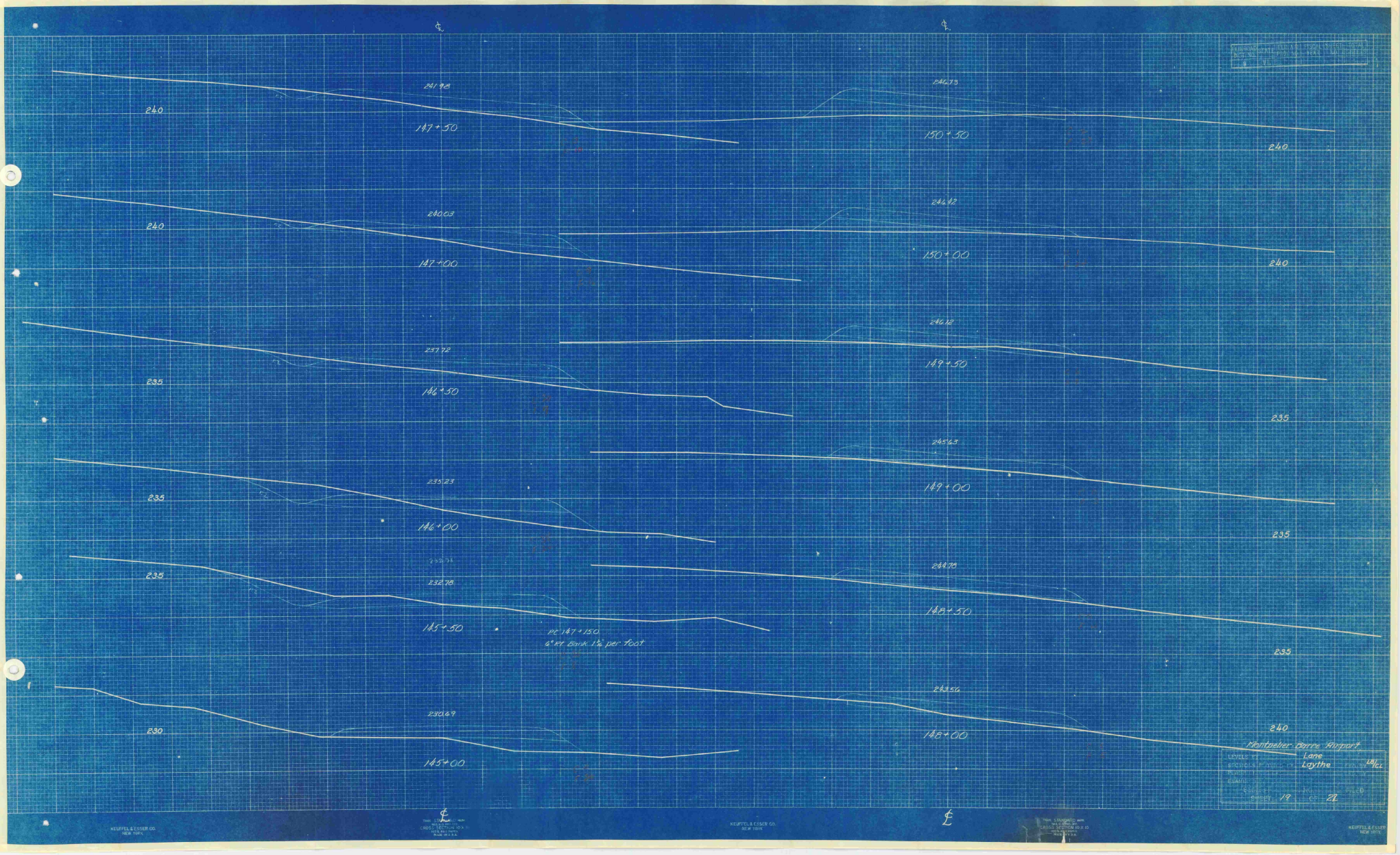
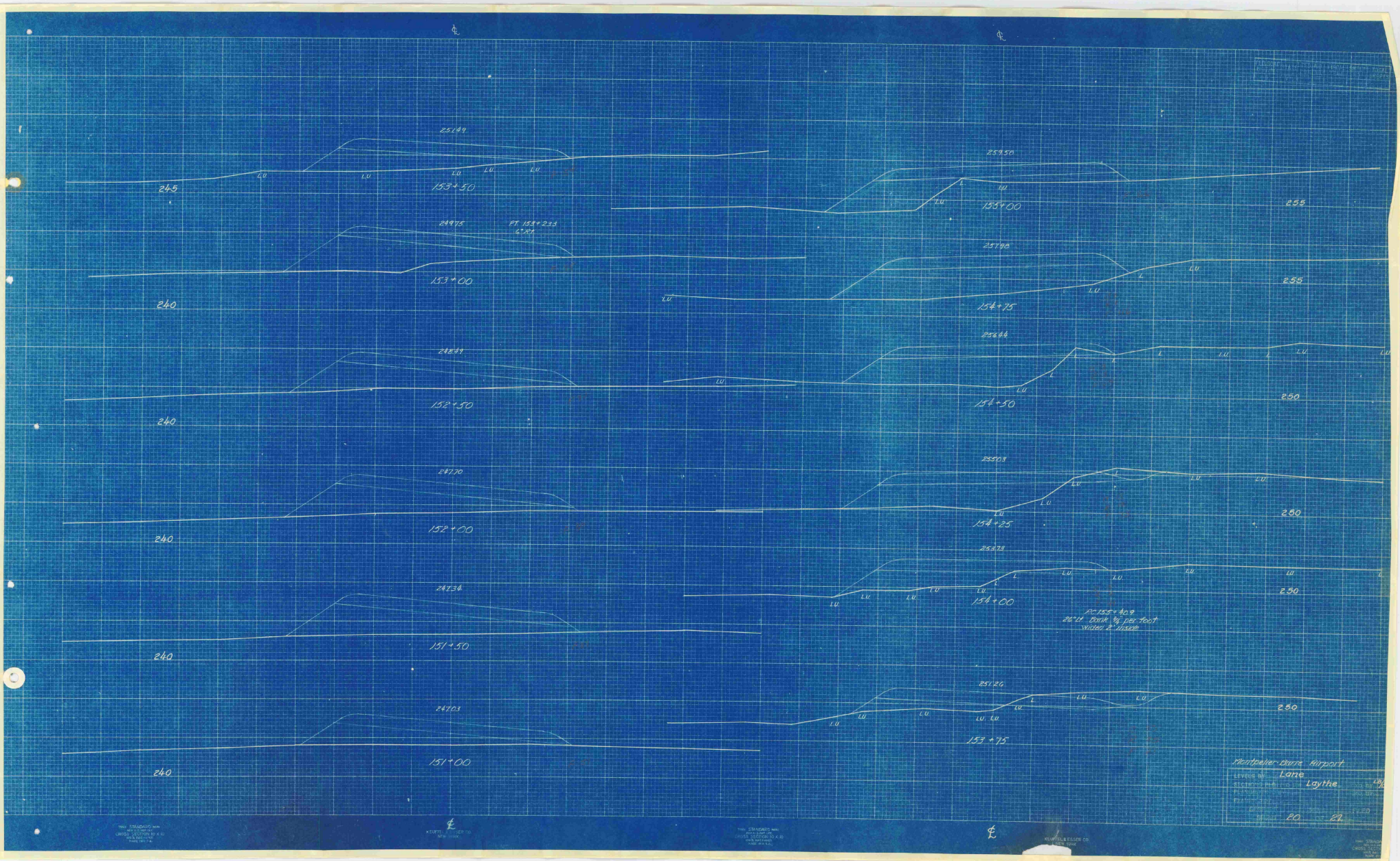
141+50
225.85
225
141+0
225.75
225
140+50
235
235
235
235
235
235
230
230
PC. 147+13.0
6" right
Berlin Aeroport-Road Relocation
LEVELED BY Stickney
SECTIONS PREPARED BY Bailey
PLANIMETERED BY
EXAMINED BY
SERIES F NO. FILED
SHEET 18 OF 21
KEUFFEL & ESSER CO.
NEW YORK
THE STANDARD RULE
CROSS SECTION 10 X 10


241.98
240
147+50
240.03
240
147+00
237.72
235
146+50
235.23
235
146+00
232.78
235
145+50
PC 147+150
6" rt bank 1% per foot
230.69
230
145+00
240.73
150+50
240
240.42
150+00
240
240.12
149+50
235
239.43
149+00
235
238.78
148+50
235
238.56
148+00
240
Montpelier Barre Airport
Lane
Laythe
19
22
KEUFFEL & ESSER CO.
NEW YORK


25149
245
153+50
24975
PT 153+233
47.21
153+00
240
24849
152+50
240
24770
152+00
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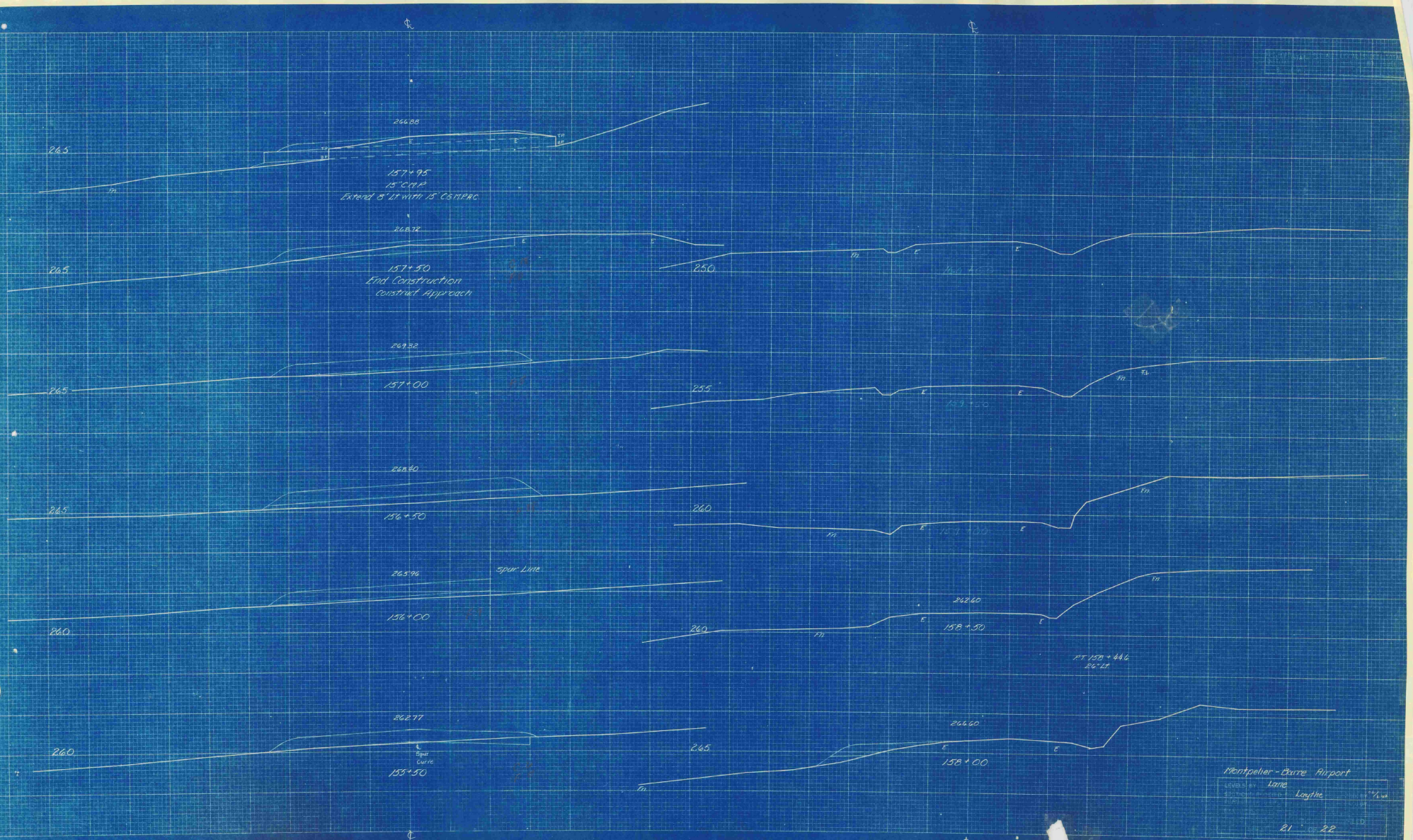
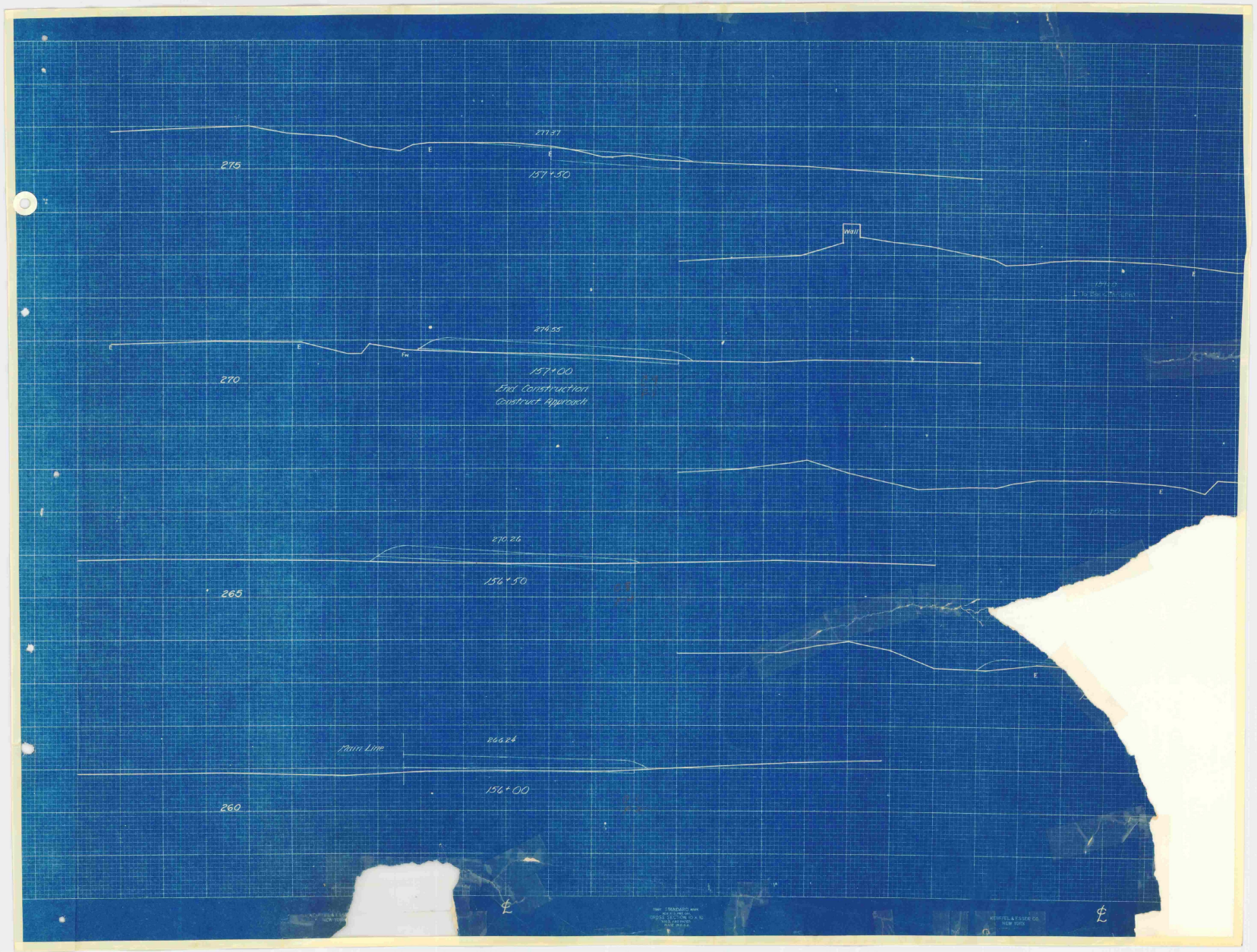
151+50
240
24703
151+00
240
25950
255
154+00
25790
255
154+75
25644
250
154+50
25503
250
154+25
25373
250
154+00
R=155+40.9
28°11' Back tg. per foot
Width 2' Hose
25126
250
153+75
Montpelier-Barre Airport
Levels by Lane
Lathe
20
21


266.88
265
157+95
15" CMP
Extend 8' Lt with 15" CSMPRC
268.72
265
157+50
End Construction
Construct Approach
269.32
265
157+00
268.40
265
156+50
265.96
Spur Line
260
156+00
262.77
260
Spur Curve
155+50
250
255
260
262.60
158+50
PT 158+46.6
26'-Lt
266.60
265
158+00
Montpelier-Barre Airport
Lane
Loythe
21
22


275
271.37
157+50
Wall
270
274.55
157+00
End Construction
Construct Approach
265
270.26
156+50
Main Line
266.26
156+00
260