

-1343-

1900
FIELD BOOK
774

2827
28 mil. light plane
1343

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.30	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.99	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.16	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.66	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	

Published by the A. LIETZ Co., San Francisco, Cal.

0 + 00 - 54.
12.7
24.7
669.6
265.6
2359.6
2113.7

149.4
3771.4
289.9
8045.7
332.5
162.8 = 13468
500.5 = 57-10

28.8 — 113.7 =
11.4 — 399.2
— 843.7
— 738.8

ENGINEERING DEPARTMENT,
CITY OF SAN DIEGO,
CALIFORNIA. 89

Sixth St. Extension

SECTION

Slopes + 1/2:1

- 1 1/2:1

Note - Top of Paving Grades

Used From 834.630 to 1194.935

From 14.4195 to 1431.841 Top Curb Grade Used

From 142.1031 to 154 or End 150 of Main

4-23-37

STA.	ELEVA.	GRADE	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS		
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.				
13+63.90	19718	9808	9808	+28.17 289.75	+151.00 150.75	-19	79.0	805.25	42.85	204.8	1960	1961	
13+82.01	19610	9640	9660	+38.13 307.75	+139.00 138.75	-16	118	298	29.8	208.7	1948	1953	
14+10.33	19472	9491	9515	+20.5 20.3	+152.00 150.75	-17	115	359.93	26.20	215.5	1934	1936	
14+33.16	19350	9341	9361	+33.2 31.6	+108 150	+101	02 35	375.8	18.77	214.0	1985	1917	
14+56.56	19176	9171	9211	+126 36.3	+127.00 150	+151	+122 25	714.0	6.75	218.7	2070	1907	
14+79.87	19027	9047	9067	+46.0 35.0	+127.00 150	+127	+124 110	819.3	-	215.5	2102	1964	
15+03.1	18899	8899	8919	+43.5 38.8	+116 150	+122	+120 20	1475.69	-	226.7	2122	2069	
15+26.3	18731	8751	8771	+124 38.7	+159 150	+125	+125 150	1870.0	-	229.6	2296		
15+49.6	18583	8603	8623	+119 310	+127 180	+122	+125 150	1336.0	-	221.7	2217		
15+72.72	18435	8455	8475	+128 311	+122 150	+122	+99 150	784.98	-	209.8			
								217.20	10.41	719.3	93.4	Page Total	

Survey
Paving
Markings
Morgan

Sixth St. Extension

SECTION

4-25-21

STA.	ELEVA.	GRADE	CUT OR FILL						AREAS		CUBIC YDS.		REMARKS	
			LEFT	C		RIGHT		EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.			
15+95.95	187.87	83.07	83.27	+16.6 82.3	+13.9 79.0	+8.0	0.0 70.0	-1.2 60.0	-9.2 70.0	217.20	10.41			
16+0				2.0								93.3	8.0	
16+19.16	181.39	81.59	81.79	4.0 76.5	0.0	0.0	0.0 78.0				8.25			
16+46.31	179.91	80.11	80.31	4.0 76.0	-6.2 73.0	-12.8	-16.0 71.0	-18.0 68.0	-24.0 65.0		728.30		316.7	
16+65.6	178.43	78.13	78.33	-13.0 65.3	-16.0 72.0	-19.5	-22.0 69.0	-26.0 66.0	-32.0 63.0		1272.03			
16+88.81	176.95	77.15	77.35	-20.0 64.0	-24.0 70.0	-26.6	-29.0 67.0	-30.0 64.0	-32.0 61.0		1898.41			152A
17+14	175.42	75.42	75.42	-12.0 63.0	-21.0 70.0	-23.9	-25.0 69.0	-28.0 66.0	-31.8 63.0		1596.64			
17+39.5	173.81	73.81	73.81	-4.8 72.2	-6.2 70.0	-8.4	-12.0 68.0	-16.0 66.0	-20.0 64.0		530.22			
17+59.5	172.68	72.68	72.68	-1.7 71.0	-1.8	-2.4	-2.0 69.0	-2.4 67.0	-1.0 65.0	135.0				
17+70				0.0 70.0										
17+77.5	171.59	71.59	71.59	+30.8 40.8	+18.9 52.9	0.0	-2.0 68.0	-2.0 66.0	-2.0 64.0	94.5	94.5	60.22		
17+99.5	170.57	70.57	70.57	+32.2 38.2	+18.9 50.9	0.0	-2.0 66.0	-2.0 64.0	-2.0 62.0	466.1		172.6	38.6	
17+99.5	170.57	70.57	70.57	+32.2 38.2	+18.9 50.9	0.0	-2.0 66.0	-2.0 64.0	-2.0 62.0	371.59	44.00			1936
										909.41	42.83	296.1 591.0	32.9 555.0	Page Total

Sixth St Extension

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS	
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.			
18+20	6956	6966	6956	+313 30.6	+207 15.0	+100	00 - 33 00 - 33	409.41	42.83	643.0	61.7	1665
18+65	6734	6744	6734	+284 27.0	+170 15.0	+84	00 - 33 00 - 33	362.45	31.22	660.0	25.1	
19+00	6561	6571	6511	+356 37.8	+264 19.0	+130	+74 13.0	8.5	655.41	444.2	2.4	TP 18017 "25400
19+15	6487	6497	6487	+416 38.1	+264 19.0	+110	+76 13.0		943.73	1406.0	-	TP 20681 "25400
19+50	6314	6324	6314	+476 39.8	+450 30.0	+300 9.0	+271 14.0		1225.70	1050.2	1.9	
19+76	6181	6196	6186	+321 31.6	+200 15.0	+128	+165 11.0		955.5	401.2	6.2	
19+90	6117	6127	6117	+309 30.5	+250 17.0	+130	+110 11.0		591.77	178.2	9.8	
20+00	6048	6078	6018	+325 31.3	+250 17.0	+125 4.0	+110 11.0		370.32	171.0	24.9	
20+18	5979	5989	5979	+119 21.0	+110 15.0	+50	+04 7.0		142.90	58.2	42.7	
20+40	5881	5891	5871	00 15.0	-25	-27 7.1			62.87	0.5	58.2	
								1.15	62.87	5012.5	233.5	

S = 0.000

25
35
35
15
35
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25

Small Extension

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL						AREAS		CUBIC YDS		REMARKS
			LEFT	C		RIGHT		EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
23+90	141.43	1153	1143	0.0 227	-37 130	-4.0				142.09		128.4	
24+30	139.95	4005	3995	+91 796	+40.0 7.0.25	-4.0	-46 30	-46 219	66.6	93.27	37.0	130.8	147.2
24+75											186.0	71.8	
24+15	138.71	3881	3871	+277 289	+22 150	+8.5	0.0 30	-45 70	335.16	61.77			156.6
24+90	137.11	3758	3748	+382 341	+255 170	+18.2	+91.0 50	-48 70	566.6	51.27			1617
24+95	131.85	3635	3625	+342 321	+246 170	+11.6	+108.0 30	-44 70	523.1	38.44			159.2 147.9 132.0
25+06	135.71	3581	3571	+322 311	+154 70	0.0	-21 70	-42 70	363.58	66.32			156.9
25+21.97	134.00	3478	3468	+284 273	+152 70	0.0	-31 70	-38 70	277.18	79.27			154.2
25+46.26	131.34	3353	3343	+351 326	+228 150	0.0	-34 70	-56 70	414.72	101.0			1743.7 6940.7
25+97.75	131.00	3128	3118	+415 383	+210 150	0.0	-38 70	-44 70	694.6 672.05	48.6			159.9 127.0
26+30	129.00	2859	2849	+50 108	+27 150	0.0	-26 70	-40 70	960.29	26.90			166.0 124.0
									781.27	42.35			

See page 49
 For Grade
 Change

2027.3 473.8 1743.7 6940.7

Sixth St Extension

SECTION

5-2-39
6

STA.	ELEVA.	GRADE	CUT OR FILL							
			LEFT	C		RIGHT				
26+65	12785	2795	2795	+459 380	+330 300	+311	30 55	35 80	15 113	
27+0	12612	2622	2612	+387 347	+228 200	+217 25	+154 20	0.0 20	-32 105	-40 210
27+30	12464	2474	2464	+323 347	+228 200	+176 25	+35	0.0 30	-30 70	-37 20.1
27+65	12291	2301	2291	+418 359	+312 260	+112 100	0.0 20	-22 20	-31 20	-36 20.1
27+99.5	12131	2141	2131	+301 301	+180 100	0.0 20	-29	-39 60	-34 20.1	
28+28	11985	1997	20.06	+175 239	+142 180	0.0 24	-49 25	-17 20.1	-37 20.1	
28+31	11970	1984	1990	0.0 15.0	-28 100	-48	-39 200	-14.1 20.1		
28+49.0	11854	1899	1914	-52 230	-43	-38 105	-161 20.5	-23 197		
28+71.34	11769	1784	1799	-15 218	-43 70	-70		-28 25.0	-32 198	
28+95.17	11553	1668	1683	-67 25.1	-118 15.0	-17.8	-217 20.0	-330 27.5		

AREAS		CUBIC YDS.		REMARKS
EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
781.27	4235	1577	123.8	
1907.48	78.55	912.0	50.9	
626.21	3620	152.1	141.6	122.5
1138.64	77.40	6324	43.0	
512.43	4120	1596	1282	121.2
1028.77	100.22	610.0	65.2	
516.34	59.42	150.6	119.4	
783.86	133.71	501.5	86.1	
267.52	7529	141.6	117.7	
317.89	204.25	167.7	107.8	301 156.11 22.12 110.56
50.37	128.96	124.8		
	279.15	2.8	15.5	
	150.19			
	459.38		153.2	
	309.19			114.6 L=27'86 P=1000 Chord=23.23
	348		366.5	11.25 0'40'06" 103.2
	539.59			
	1469.00		634.5	104.9
	929.49			1'80'12" 96.2
	1952.22		843.0	
	1022.73	2823.6	2365.7	

Grade Change

Sixth Extension

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL						
			LEFT		C	RIGHT			
27+19	115.38	15.53	15.68	②	-1.0 3.5	-1.53 15.0	-17.9	-2.0 30.0	-2.7 47.6
27+23	112.73	14.38	14.52	③	-1.6 3.7	-1.53 15.0	-18.0	-2.1 30.0	-2.0 47.0
27+25.66	113.08	13.22	13.38	③	-1.2 3.3	-1.53 15.0	-18.2	-2.5 37.0	-2.7 47.6
27+29.0	111.92	12.07	12.22	④	-1.4 3.7	-1.53 15.0	-16.4	-1.9 31.0	-2.9 47.1
27+37	107.77	10.82	11.07	⑤	-1.5 3.3	-1.53 15.0	-16.8	-1.9 31.0	-2.9 47.1
27+35.66	109.12	9.77	9.92	⑤	-1.2 3.1	-1.53 15.0	-14.5	-1.8 30.0	-2.5 47.0
27+50.0	118.47	8.65	8.77	⑥	-1.4 3.1	-1.53 15.0	-11.4	-1.5 30.0	-2.5 47.0
27+32.33	107.21	7.46	7.61	⑥	-1.5 3.7	-1.53 15.0	-8.2	-1.8 30.0	-2.7 47.6
27+37.6	106.46	6.31	6.46	⑥	-1.0 3.0	-1.53 15.0	-6.5	-1.9 30.0	-2.7 47.6
27+39.0	105.01	5.16	5.31	⑦	-1.2 3.3	-1.53 15.0	-5.1	-1.9 30.0	-2.9 47.1

AREAS		CUBIC YDS.		REMARKS
EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
	1022.73			Def
	2033 39		877.0	3' 0" 15' 18' 20' 22' 24' 26' 28' 30' 32' 34' 36' 38' 40' 42' 44' 46' 48' 50' 52' 54' 56' 58' 60' 62' 64' 66' 68' 70' 72' 74' 76' 78' 80' 82' 84' 86' 88' 90' 92' 94' 96' 98' 100'
	1010.66		878.	7' 4" 84' 94'
	1026.77		844.5	3' 2" 30' 93.6
	928.37		762.5	19' 9" 110' 111' 112' 113' 114' 115' 116' 117' 118' 119' 120' 121' 122' 123' 124' 125' 126' 127' 128' 129' 130' 131' 132' 133' 134' 135' 136' 137' 138' 139' 140' 141' 142' 143' 144' 145' 146' 147' 148' 149' 150' 151' 152' 153' 154' 155' 156' 157' 158' 159' 160' 161' 162' 163' 164' 165' 166' 167' 168' 169' 170' 171' 172' 173' 174' 175' 176' 177' 178' 179' 180' 181' 182' 183' 184' 185' 186' 187' 188' 189' 190' 191' 192' 193' 194' 195' 196' 197' 198' 199' 200' 201' 202' 203' 204' 205' 206' 207' 208' 209' 210' 211' 212' 213' 214' 215' 216' 217' 218' 219' 220' 221' 222' 223' 224' 225' 226' 227' 228' 229' 230' 231' 232' 233' 234' 235' 236' 237' 238' 239' 240' 241' 242' 243' 244' 245' 246' 247' 248' 249' 250' 251' 252' 253' 254' 255' 256' 257' 258' 259' 260' 261' 262' 263' 264' 265' 266' 267' 268' 269' 270' 271' 272' 273' 274' 275' 276' 277' 278' 279' 280' 281' 282' 283' 284' 285' 286' 287' 288' 289' 290' 291' 292' 293' 294' 295' 296' 297' 298' 299' 300' 301' 302' 303' 304' 305' 306' 307' 308' 309' 310' 311' 312' 313' 314' 315' 316' 317' 318' 319' 320' 321' 322' 323' 324' 325' 326' 327' 328' 329' 330' 331' 332' 333' 334' 335' 336' 337' 338' 339' 340' 341' 342' 343' 344' 345' 346' 347' 348' 349' 350' 351' 352' 353' 354' 355' 356' 357' 358' 359' 360' 361' 362' 363' 364' 365' 366' 367' 368' 369' 370' 371' 372' 373' 374' 375' 376' 377' 378' 379' 380' 381' 382' 383' 384' 385' 386' 387' 388' 389' 390' 391' 392' 393' 394' 395' 396' 397' 398' 399' 400' 401' 402' 403' 404' 405' 406' 407' 408' 409' 410' 411' 412' 413' 414' 415' 416' 417' 418' 419' 420' 421' 422' 423' 424' 425' 426' 427' 428' 429' 430' 431' 432' 433' 434' 435' 436' 437' 438' 439' 440' 441' 442' 443' 444' 445' 446' 447' 448' 449' 450' 451' 452' 453' 454' 455' 456' 457' 458' 459' 460' 461' 462' 463' 464' 465' 466' 467' 468' 469' 470' 471' 472' 473' 474' 475' 476' 477' 478' 479' 480' 481' 482' 483' 484' 485' 486' 487' 488' 489' 490' 491' 492' 493' 494' 495' 496' 497' 498' 499' 500' 501' 502' 503' 504' 505' 506' 507' 508' 509' 510' 511' 512' 513' 514' 515' 516' 517' 518' 519' 520' 521' 522' 523' 524' 525' 526' 527' 528' 529' 530' 531' 532' 533' 534' 535' 536' 537' 538' 539' 540' 541' 542' 543' 544' 545' 546' 547' 548' 549' 550' 551' 552' 553' 554' 555' 556' 557' 558' 559' 560' 561' 562' 563' 564' 565' 566' 567' 568' 569' 570' 571' 572' 573' 574' 575' 576' 577' 578' 579' 580' 581' 582' 583' 584' 585' 586' 587' 588' 589' 590' 591' 592' 593' 594' 595' 596' 597' 598' 599' 600' 601' 602' 603' 604' 605' 606' 607' 608' 609' 610' 611' 612' 613' 614' 615' 616' 617' 618' 619' 620' 621' 622' 623' 624' 625' 626' 627' 628' 629' 630' 631' 632' 633' 634' 635' 636' 637' 638' 639' 640' 641' 642' 643' 644' 645' 646' 647' 648' 649' 650' 651' 652' 653' 654' 655' 656' 657' 658' 659' 660' 661' 662' 663' 664' 665' 666' 667' 668' 669' 670' 671' 672' 673' 674' 675' 676' 677' 678' 679' 680' 681' 682' 683' 684' 685' 686' 687' 688' 689' 690' 691' 692' 693' 694' 695' 696' 697' 698' 699' 700' 701' 702' 703' 704' 705' 706' 707' 708' 709' 710' 711' 712' 713' 714' 715' 716' 717' 718' 719' 720' 721' 722' 723' 724' 725' 726' 727' 728' 729' 730' 731' 732' 733' 734' 735' 736' 737' 738' 739' 740' 741' 742' 743' 744' 745' 746' 747' 748' 749' 750' 751' 752' 753' 754' 755' 756' 757' 758' 759' 760' 761' 762' 763' 764' 765' 766' 767' 768' 769' 770' 771' 772' 773' 774' 775' 776' 777' 778' 779' 780' 781' 782' 783' 784' 785' 786' 787' 788' 789' 790' 791' 792' 793' 794' 795' 796' 797' 798' 799' 800' 801' 802' 803' 804' 805' 806' 807' 808' 809' 810' 811' 812' 813' 814' 815' 816' 817' 818' 819' 820' 821' 822' 823' 824' 825' 826' 827' 828' 829' 830' 831' 832' 833' 834' 835' 836' 837' 838' 839' 840' 841' 842' 843' 844' 845' 846' 847' 848' 849' 850' 851' 852' 853' 854' 855' 856' 857' 858' 859' 860' 861' 862' 863' 864' 865' 866' 867' 868' 869' 870' 871' 872' 873' 874' 875' 876' 877' 878' 879' 880' 881' 882' 883' 884' 885' 886' 887' 888' 889' 890' 891' 892' 893' 894' 895' 896' 897' 898' 899' 900' 901' 902' 903' 904' 905' 906' 907' 908' 909' 910' 911' 912' 913' 914' 915' 916' 917' 918' 919' 920' 921' 922' 923' 924' 925' 926' 927' 928' 929' 930' 931' 932' 933' 934' 935' 936' 937' 938' 939' 940' 941' 942' 943' 944' 945' 946' 947' 948' 949' 950' 951' 952' 953' 954' 955' 956' 957' 958' 959' 960' 961' 962' 963' 964' 965' 966' 967' 968' 969' 970' 971' 972' 973' 974' 975' 976' 977' 978' 979' 980' 981' 982' 983' 984' 985' 986' 987' 988' 989' 990' 991' 992' 993' 994' 995' 996' 997' 998' 999' 1000'
	733.08		608.0	5' 10" 48'
	674.42		552.0	6' 00" 54' 91.5
	603.30		503.5	1' 41" 66' 91.9
	562.67		446.5	7' 2" 66' 91.2
	471.0		386.0	9' 0" 15' 94.3
	423.1		6,536.0	

Grade change

South St Extension

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL			
			LEFT	C	RIGHT	
31+53.33	103.85	400 415	-1.4 241	-5.4	51-146-206-287 60 830 300 415	
31+75.66	102.70	275 300	-5.4 237	-6.0 200	-5.4 130	55-20.2-30.4 130 230 450
31+99.0 = 31+101.55	170	185	-4.8 227	-6.3 170	-5.2 150	196-20.2 380 450
32+31.94	99.82	99.97 100.12	-6.1 147	-4.4 180	-5.4 170	49-130-206-289 170 270 450 520
32+64.88	98.08	98.23 98.38	-7.7 137	-2.7 130	-5.9 175	53-174-204-234 170 350 410 475
32+97.82	96.34	96.49 96.64	-3.8 207	-4.8 200	-6.1 170	154-210-246-320 170 230 390 450
33+30.72 = 33+94.60	94.75	94.75 94.90	-3.8 207	-5.2 180	-5.9 170	57-20.9-244-320 170 270 400 450
33+64.86	96.75	96.88 97.00	-3.5 203	-6.5 200	-6.0 170	57-196-232-285 170 250 400 500
33+99.0 = 34+90.91	91.01	90.91	-5.1 207	-5.0 170	-6.8 200	52-106 200 300
34+30	89.27	89.37 89.67	-7.5 188	-6.6 170	-6.5 165	50 205

Grade Change

AREAS		CUBIC YDS.		REMARKS
EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
	423.1			Diff 8° 41' 18" 34.0
	345.1		332.0	9° 21' 21" 96.0 Nate M.H. to Point
	207.7		238.7	31+85 10' 10" 10" 10" 102.85 214.97 331 1000 525
	265.7		288.5	10° 01' 30" 0° 56' 37" Chord 32.94
	281.3		333.5	10° 58' 07"
	385.2		406.5	11° 54' 44" 92.6
	372.1		461.5	90.4 12° 51' 21" 90.5
	289.4		418.0	13° 48' 00" 39.5
	224.4		325.0	86.9
	186.1		236.0	84.6
	178.9		236.5	86.8
			3276.2	83.8

Sixty St Extension

SECTION

53-29
9

STA.	ELEVA.	GRADE	CUT OR FILL					AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.			
34+15	8741	8752	8741	-13 17.0	-5.6 11.0	-5.9	-5.1 12.0	-5.6 10.2	178.8		846	52.2
35+0	8557	8567	8567	-22 18.3	-5.1 15.0	-5.3	-4.5 12.5	-9.0 16.0	166.1	224.0		823
35+30	8399	8409	8399	-2.7 17.1	-5.6 17.5	-5.4	-4.7 11.0	-3.6 10.4	185.2		788	798
35+65	8211	8231	8214	-5.1 22.7	-6.6 20.5	-6.3	-5.8 10.0	-10.6 20.0	311.7		756	74.1
36+0	8039	8039	8039	-4.4 21.1	-7.0	-5.8 8.0	-11.6 17.0	-13.8 34.0	343.2		727	
36+30	7871	7881	7871	-4.4 21.1	-7.0	-5.6 13.0	-11.2 20.0	-12.5 33.5	320.8			
36+65	7686	7696	7686	-5.7 23.6	-6.2	-5.8 14.0	-11.2 23.0	-14.4 37.1	274.9		709	
37+0	7501	7511	7501	-3.2 19.8	-5.1 18.7	-6.0	-5.1 18.0	-8.5 23.0	224.0		697	
37+30	7343	7353	7343	-0.6 15.0	-3.0 14.5	-5.5 11.0	-5.2	-5.3 23.3	181.3			
37+65	7158	7168	7158	+1.6 15.9	+1.0 14.0	+0.0 14.0	-5.8 15.0	-5.7 14.0	6.0	157.2		
									4.8	140.8		
										7.0	199.7	
										10.9	2,894.4	

Grade Change

Sixth Extension

SECTION

10

STA.	ELEVA. <i>Left</i>	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
38+0	6973	6973	$\frac{+16}{15.8}$	$\frac{0.0}{9.0}$	$\frac{-17}{7.0}$	-5.6	4.8	140.79		
								298.36	2.7	165.8
38+30	6815	6815	$\frac{0.0}{15.0}$	$\frac{-12}{9.0}$	$\frac{-12}{7.0}$	-5.4	0	157.57		
								307.53		199.2
38+65	6630	6640	$\frac{-12}{16.3}$	$\frac{-19}{10.5}$	$\frac{-45}{8.0}$	-5.1		149.96		
								281.42		182.3
39+00	6415	6455	$\frac{0.0}{15.0}$	$\frac{-0.2}{11.5}$	$\frac{-12}{8.0}$	-4.8		131.46		
								245.65		136.3
39+30	6289	6297	$\frac{0.0}{15.0}$	$\frac{-0.2}{11.5}$	$\frac{-12}{9.0}$	-4.6		114.19		
								221.03		77.8
39+49	6187	6197	$\frac{0.0}{15.0}$		$\frac{-38}{7.0}$	-3.9		106.84		
								198.28		91.8
39+74	6062	6072	$\frac{0.0}{15.0}$	$\frac{-0.8}{11.0}$	$\frac{-36}{9.0}$	-3.4		91.44		
								179.11		83.0
39+99	5951	5961	$\frac{-1.0}{16.5}$	$\frac{-1.0}{14.0}$	$\frac{-3.0}{13.0}$	-3.0		87.67		
								163.87		75.8
40+14	5853	5863	$\frac{-2.0}{18.0}$	$\frac{-2.3}{12.0}$	$\frac{-2.5}{7.5}$	-2.8		76.20		56.2 56.1 56.9
								151.44		70.1
40+49	5769	5779	$\frac{-2.7}{17.1}$	$\frac{-2.7}{14.0}$	$\frac{-2.3}{7.5}$	-2.4		75.24		55.0 55.5 56.0
								151.55		
								76.31	2.7	143.0
										11225.1

Grade Change

Sixth St Extension

SECTION

SECTION

12

STA.	ELEVA.	GRADE	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS	
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.			
44+0	47.05	47.11	47.06	+0.6 15.3	0.0 15.0	-2.0	-1.1 16.7	1.8	24.9		47.5 45.0 45.8	
43.5	45.96	46.06	45.96	+1.6 15.8	0.0 15.0	-1.2 1.0	-2.1 1.0	7.2	25.0	5.8	32.3	47.4 44.0 44.7
46.5	45.06	45.16	45.01	+5.9 18.0	0.0 15.0	-2.2	-1.1 15.7	46.1	17.9		50.2 43.07 44.15	
45+0	44.01	44.11	44.01	+1.0 17.0	+2.8 15.0	0.0 1.0	-1.0 16.4	36.2	18.5		47.7	
45+30	43.11	43.21	43.11	+1.0 16.0	+2.8 15.0	0.0 1.0	-1.0 16.2	6.8	21.8		41.8	
45+15	42.01	42.11	42.01	+1.0 15.0	+2.8 15.0	0.0 1.0	-1.0 16.2	13.6	19.9		44.7	
46+0	41.01	41.11	41.01	+1.0 15.0	+2.8 15.0	0.0 1.0	-1.0 16.2	60.0	18.3		46.6	
46+18.85	39.57	39.67	39.57	+1.0 15.0	+2.8 15.0	0.0 1.0	-1.1 16.2	77.8	25.1		46.8	
46+81.85	38.57	38.67	38.41	+1.0 15.0	+2.8 15.0	0.0 1.0	-1.1 16.2	17.5	22.6		42.2 37.1 37.1	
47+15.10	37.11	37.21	37.31	+0.2 15.1	0.0 15.0	-0.3	-0.2 16.1	2.8	9.4		36.2 37.2 36.6	
8-22.05								4.6	7.6	3.0	6.9	
										371.8	249.4	

Grade Change

22.05

South Extension

SECTION

13

STA.	ELEVA.	GRADE	CUT OR FILL						AREAS		CUBIC YDS.		REMARKS
			LEFT		C	RIGHT		EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
17+37.5	36.92	35.98	36.63	4.07 1.57	0.0 2.0	-0.4	-0.4 1.57	4.6	7.6			363 364 370	
17+59.71	36.31	35.11	35.91	4.02 1.51	0.0 1.0	-0.2	-1.0 -0.8 1.00 1.65	1.1	12.2	22.06	2.3	8.1	363 370 35.1
17+81.96	35.50	35.43	35.71	4.06 1.53	0.0 1.0	-0.5	-1.0 -0.8 1.00 1.65	3.0	14.7	22.05	1.7	11.0	362 350 39.7
18+03.81	34.90	34.75	34.60		0.0 1.50	-0.7	-1.0 -1.2 1.00 1.80	0	20.7	22.05	1.2	14.5	
18+25.86	34.23	34.08	33.93		0.0 1.0	-0.7	-1.0 -1.2 1.00 1.80		24.7	22.05		18.6	349 340 334
18+47.98	33.55	33.40	33.25		0.0 1.0	-0.7	-1.0 -1.2 1.00 1.80		24.7	22.06	5.4	16.2	336 331 339
18+70.01	32.87	32.71	32.57		0.0 1.0	-0.7	-1.0 -1.2 1.00 1.80	1.3	15.0	22.05		10.2	333 327 320
18+92.04	32.19	32.04	31.89		0.0 1.0	-0.7	-1.0 -1.2 1.00 1.80	3.2	9.9	22.05	1.8	10.2	318 326 326
19+14.07	31.51	31.36	31.21		0.0 1.0	-0.7	-1.0 -1.2 1.00 1.80	2.5	8.6	22.06	23.3	7.6	
19+36.10	30.83	30.68	30.53		0.0 1.0	-0.7	-1.0 -1.2 1.00 1.80	1.5	10.1	31.39	2.6	12.2	312 327 319
19+58.13	30.15	29.99	29.85		0.0 1.0	-0.7	-1.0 -1.2 1.00 1.80	3.3	12.2	31.39			310 314 306
19+80.16	29.47	29.31	29.15		0.0 1.0	-0.7	-1.0 -1.2 1.00 1.80	3.6	8.5	31.39	3.3	12.2	
								2.4	7.7	31.38	3.9	10.6	302 309 290
											45.5	121.2	

Grade change

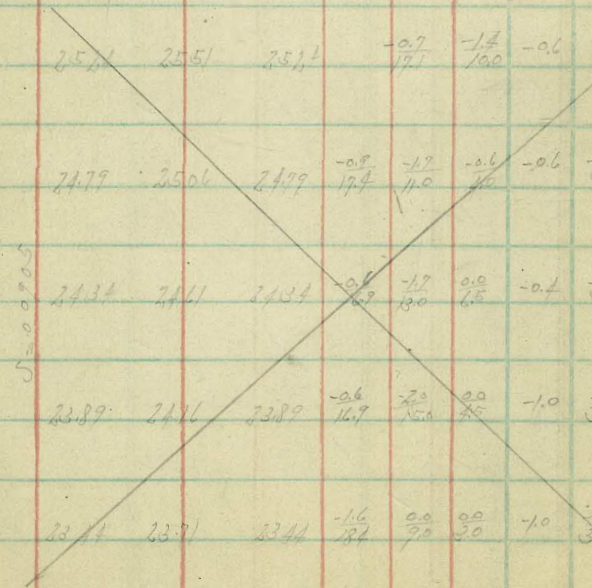
6th St Extension

SECTION

SECTION

14

STA.	ELEVA. <i>Left</i>	GRADE <i>Right</i>	CUT OR FILL						AREAS		CUBIC YDS.		REMARKS	
			LEFT	C		RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.				
49+98.18-PVC	2853	2853	$\frac{+0.4}{7.2}$	$\frac{0.0}{3.0}$	$\frac{-1.4}{9.5}$	$\frac{0.0}{3.0}$	+0.6	$\frac{0.0}{3.5}$	$\frac{-0.3}{1.5}$	2.4	7.7		49+98.18 - Change of Reading 30.5 to 43.2/2.6	
50+33.18	2727	2751	$\frac{+0.5}{10.3}$	$\frac{0.0}{10.5}$	$\frac{-0.8}{10.5}$	$\frac{0.0}{7.0}$	+0.5	$\frac{0.0}{3.5}$	$\frac{-0.2}{1.3}$	2.6	5.0	3.7	9.4	2.26 2.30 2.72
50+78.18	2618	2675	$\frac{+0.4}{11.2}$	$\frac{0.0}{10.5}$	$\frac{-0.8}{7.0}$	$\frac{0.0}{7.0}$	+0.7	$\frac{0.0}{1.5}$	$\frac{-0.1}{1.6}$	4.0	4.2	4.9	6.7	
51+181.18-PVC	2598	2675	$\frac{0.0}{7.0}$	$\frac{-0.0}{7.0}$	$\frac{0.0}{3.0}$	$\frac{0.0}{3.0}$	+0.2	$\frac{0.0}{2.0}$	$\frac{-0.1}{7.0}$	1.0	6.7	3.7	8.1	2.57 2.64 2.71
51+50	2519	2596	$\frac{0.0}{7.0}$	$\frac{-1.1}{7.0}$	$\frac{0.0}{0.0}$	$\frac{0.0}{0.0}$		$\frac{-0.9}{2.0}$	$\frac{-0.8}{1.6}$	3.5	11.34	2.7	10.6	
52+0	2521	2551	$\frac{-0.7}{17.1}$	$\frac{-1.1}{10.0}$	$\frac{-0.6}{0.0}$	$\frac{-1.1}{8.7}$	-0.6	$\frac{-1.1}{8.7}$	$\frac{-1.3}{17.8}$	0	42.0	3.2	49.4	
53+50	2479	2506	$\frac{-0.7}{17.4}$	$\frac{-1.0}{11.0}$	$\frac{-0.6}{1.0}$	$\frac{-0.6}{0.0}$	-0.6	$\frac{-1.6}{5.0}$	$\frac{-1.4}{18.1}$					
53+0	2434	2441	$\frac{0.0}{8.9}$	$\frac{-1.7}{10.0}$	$\frac{0.0}{1.5}$	$\frac{0.0}{0.0}$	-0.4	$\frac{-1.5}{5.0}$	$\frac{-1.6}{17.1}$					
53+50	2389	2416	$\frac{-0.6}{11.7}$	$\frac{-2.3}{15.0}$	$\frac{0.0}{2.5}$	$\frac{0.0}{0.0}$	-1.0	$\frac{-1.9}{5.0}$	$\frac{-1.4}{18.1}$					
54+0	2371	2371	$\frac{-1.6}{8.7}$	$\frac{0.0}{7.0}$	$\frac{0.0}{3.0}$	$\frac{0.0}{0.0}$	-1.0	$\frac{-1.3}{3.0}$	$\frac{-1.2}{17.8}$					



18.2 84.2

Sixth Extension

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL						
			LEFT	C		RIGHT			
52+0	2539	2511	2539	-0.5 172	-1.6 90	-0.8	-1.4 86	-1.6 184	
+50	2502	2530	2503	-1.5 185	-2.2 165	-0.8 70	-0.9	-1.2 50	-1.7 185
53+0	2478	2495	2478	-1.0 175	-2.0 130	-0.4 60	-0.7	-1.0 95	-1.1 137
+50	2432	2459	2432	-1.0 175	-2.3 125	-0.7 70	-1.4	-2.1 70	-1.9 189
54+	2396	2422	2396	-1.2 187	-0.4 50	+1.6	-1.2 80	-1.8 187	
119.7	2399	2409	2385	-2.4 181	-1.6 90	-1.9	-1.6 181		
+59.8	2370	2320	2352	-2.0 170		-1.9	-2.0 170		
+99.8	2341	2351	2321	-2.1 183		-2.3	-1.8 183		
55+18.8	2311	2338	2311	-2.7 221	-1.4 100	-1.5	-1.7 120	-1.6 181	
55+58.8	2291	2323	2291	-2.0 185		-1.4	-1.5 187		

AREAS		CUBIC YDS.		REMARKS
EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
	42.0			
			86.0	
	50.9			
			90.5	
	46.9			
	102.7		95.1	
	55.8			
	104.2		96.5	
	48.4			
			353	
	48.0			
			875	
	70.1			
			103.8	
	70.1			
	67.1		41.8	
	55.8			
			83.9	
	57.5			
	127.0		93.0	
	69.5		218.7	

see page 58 for sec.
up to this sec.

16
5-8-89

St. 45 St. Extension

SECTION

17

STA.	ELEVA. <i>Left</i>	GRADE <i>Right</i>	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS		
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.				
55+97.68	2326	2331	2299	-2.3 19.5	-2.3 5.0	-17	-2.0 1.0	-1.2 1.2	0	69.5	151.3	110.7	
56+37.18	2352	2349	2300	-3.3 21.0	-2.1	-2.0	-1.2 1.2	-1.2 1.2		81.8	170.8	124.9	
56+76.68	2386	2313	2301	-4.4 21.0	-3.4 1.0	-2.3	-1.6 1.4	-1.6 1.4		89.0	160.4	69.8	
57+00.15				-3.1 20.5	-1.9	-1.5	-1.5 1.3	-1.5 1.3		71.6	146.2	63.5	4° 28' 57"
57+33.62				-3.2 20.5	-2.2	-1.5	-1.5 1.3	-1.5 1.3		74.6	140.4	61.0	8° 57' 51"
57+47.09				-3.0 20.5	-2.3 1.0	-1.9	-1.5 1.3	-1.5 1.3		65.8	123.9	53.8	13° 26' 51" 81' 22.19'
57+90.51				-4.5 17.8	-2.2 1.0	-1.1	-1.3 1.3	-1.3 1.3		58.0	109.3	47.5	17° 55' 49"
57+91.02				-2.1 19.2	-1.5	-1.0	-1.0 1.0	-1.0 1.0		51.3	102.3	44.4	22° 24' 47"
58+17.50				-1.6 18.1	-1.6	-1.4	-1.4 1.4	-1.4 1.4		51.0	110.0	47.8	21° 53' 41"
58+40.99	2286	2212	2206	-2.1 19.0	-1.6	-1.8	-1.8 1.5	-1.7 1.7		59.0	115.8	50.3	31° 42' 42"
				(19)						56.8		673.7	

58+65 Extension

SECTION

SECTION

18

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS	
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
58+64.44			-23 20.1	-13 11.0	-19 9.0	4.1	-1.4 2.18.1	56.8		35'51"39"	
58+67.91			-28 20.2	-20 7.5	-20	-1.6 18.4	69.8		55.0	40'20"36"	
59+11.39	23.86	23.63	23.06	-28 20.2	-20 7.0	-20	7.6 18.4	69.2		41'49"34"	
Continued F.B. 1342 Pg 9											
59+63.88											
								54+99.8 to 59+11.39	1143.6	Total	
60+15.37	Brk 22.96	22.73	22.96								
60+50											
61+0											
61+50											
62+0											
62+15.37	Brk 22.56	22.83	22.56								

Sixth St Extension

SECTION

SECTION

20
5-15-29
S. J. J. J.
No. 1000
No. 1000
No. 1000

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
89+92 ^{pb}						33.3				TP 3119 1399 2463 222 1591
Continued from F.B. 1342 Pg 16										
90+12.39	3145	3120	315	32.4	33.0	50.8		32.1		177 29 R
90+38.39	3209	3205	35.6		34.5	78.0		80.9		
90+65.61	3287	3290	36.9		35.0	89.3		124.3		Nail Pole RM 4126 917.50
91+0	3407	3411	38.1		36.9	105.8		175.9		
+150	3579	3587	39.8		37.6	84.2		56.2		
+65	3622	3644	45.3		38.2	118.1		88.2		
+83	3691	3706	47.4		39.1	146.6		93.1		
92+00	3757					279.2		93.1		
92+01	3710	3770	44.8		41.7	132.6		55.2		
92-15.1	3812	3822	43.4		40.1	71.6				
						99.8	7.5	28.3	2.1	
						27.7	7.5	196.4	2.1	

Station Extension

SECTION

4326-T P-26-Book 1342

21

STA.	ELEVA.	GRADE	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
91+310	38.61 out.	38.80 out	43.2 16.9 41.9	0.0 -1.0 38.8	-1.0 -1.0 38.8	27.7	7.5			43.78-T from P-70 43.54-T-P 13.15-T 35.69-T	
92+45.99	39.10 out	39.31 out	41.7 15.9 40.7	0.0 -1.0 38.4	-0.6 -1.5 38.8	9.3	14.5			15.31=chds. =2' W. Start edge P-1170 from P.C. to Lt. 4 P.C. on Lt. and from P.C. to E.C. on Lt.	
92+50.97	39.27 45.1 4.8 -0.10	39.65 41.7 4.8 -0.10	40.3 11.9 40.3	0.0 -1.0 38.4	-1.0 -1.0 38.6	0.6	51.6				
92+75.97	40.28 37.0 -0.24	40.50 40.75 3.03 3.27 -0.24	40.3 11.9 40.3	0.0 -1.0 38.4	-1.0 -1.0 38.6	0.6	13.06	0.2	50.8		
92+96.96	40.28 2.94	41.28 41.53 2.25 3.08 -0.83	39.4 18.2	0.0 -2.0 38.7	-2.0 -2.0 38.7	79.0	179.7			182' on L 4° 06' 27.9' on L 12' out of 6'	
92+117.25	41.63 2.15	42.07 42.32 1.46 2.46 -1.00	40.7 19.7	0.0 -2.6 38.9	-3.5 -2.0 39.0	95.7	191.7			19.7' on L 8' 12'	
92+138.11	42.35 7.93	42.85 43.10 0.68 1.88 -1.20	41.6 18.8	-0.5 -1.4 38.9	-1.0 -1.0 39.5	96.0	187.5			20.0' on L 11' 12'	
93+59.53	42.13 0.65	42.13 42.88 1.010 1.70 -1.80	42.1 11.2	-0.8 -1.8 41.8	-2.0 -2.0 39.6	91.5	164.0			20.0' on L 16' 24'	
93+80.42	43.91 11.78	44.11 44.66 11.03 1.31 -0.32	42.8 11.7	-0.7 -2.0 42.4	-2.0 -2.0 41.8	72.5	113.9			20.0' on L 20' 36'	
94+01.31	44.70 10.99	45.10 45.45 10.24 10.24 -0.70	44.4 10.0	0.0 -1.3 43.9	-2.6 -1.3 43.5	41.4	66.4			20.0' on L 24' 36' 20.0' on L 24.0' P-1287 94+01.31	
94+22.10	45.47 10.21	45.97 46.23 8.46 9.95 -0.49	45.4 10.0	0.0 -0.4 45.6	-1.0 -1.0 44.2	25.0	29.0	3.1	11.3	20.0' on L 28' 48'	
						7.9	4.0	16.9	441.0		

SECTION

22

STA.	ELEVA.	GRADE	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
94+43.09-RK	41.27 942 702 +040	41.27 8.67 ✓	+1.07 701 46.9	10.2 6.0 47.0	-0.7 764 46.2	7.9 ✓	4.0 ✓	14.0	1.4	5569-T P-21 129 3715 cut on any. 7542.84 3820-871 905=diff. 20' on L 32° 49'	
94+61.51-RK	47.03 866 791 +075	47.23 791 783 +038	+1.1 801 47.8	+2.0 125 49.1	+1.3 15.0 47.8	33.3 ✓	0 ✓	27.7		20' on L 36° 25' 57"	
94+79.69-RK	42.28 771 676 +075	42.48 676 660 +036	+1.5 808 49.8	+2.0 795 49.9	+1.1 151 49.5	48.5 ✓		32.8		20' on L 40° 00'	
94+97.98-RK	42.93 676 606 070	42.48 601 ✓	+1.1 804 50.3	+2.0 790 51.3	+1.9 152 50.5	50.0		39.4		197' on L 43° 33' 03"	
95+15.79-RK	50.01 568 520 +048	50.22 4.97 ✓	+2.2 807 52.9	+2.3 800 51.8	+1.1 151 51.9	68.3 ✓		44.5		185' on L 47° 04' 30"	
95+33.71-RK	51.18 451 384 +067	51.61 3.83 ✓	+1.3 800 54.7	+1.4 790 52.2	+1.9 150 52.1	65.3 ✓		21.2		173' on L 30° 35' 33"	
95+41.81-RK	51.77 590 524 +076	52.41 3.23 ✓	+1.2 808 55.7	+1.1 791 53.2	+1.9 150 54.4	62.1 ✓		24.5		169' on L 52° 23'	
95+58.74-RK	52.36 533 241 +092	52.74 4.70 ✓	+1.2 808 57.2	+2.0 790 58.2	+1.9 150 54.8	70.3 ✓		130.8		157' on L	
95+76.78-RK	53.61 536 531 +035	53.80 1.89 ✓	+2.4 807 62.0	+2.0 790 55.9	+2.1 800 57.4	106.2 ✓		128.4		957' on L 60' on R	
96+20	56.12	56.99	+1.0 805	+2.3 130	+3.7 150	147.8 ✓		394.8			
			65.9	60.7	58.9	247.0		219.4	1.4		

Sixty 5/ Extension

SECTION

SECTION

23

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS					
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.						
96+50	588	589	588	+115 83.3	+115 75	+15 80	+27 80	00 150	247.0						96+50 18' 7" 4" old channel
				72.3	65.4		57.8		472.3	9.5	437.3	8.8			
97+0	621 588	621	620	+114 83.2	+118 150	+11 80	+10 80	00 85	225.3	9.5					
				74.9	68.5		60.6		465.7	22.7	172.5	8.4			
+20	6329	6329	6329	+114 83.7	+120 110	+15 85	00 90	47 11	240.4	13.2					
				77.3	69.9		61.5		409.9	30.5	227.7	16.9			
+50	6521 613	6521	6521	+115 85.5	+120 160	+21 85	00 90	44 11	169.5	17.3					
				76.7	68.7		62.8		251.8	52.7	116.6	24.4			
+75	668	669	668	+117 87.7	+118 120	00 85	00 90	00 11	82.3	35.4					
				74.9	66.9		64.7		127.8	76.6	59.2	35.5			
98+0	684	685	684	+118 88.1	+118 10	00 80	00 80	00 11	45.5	41.2					
				74.1	66.5		66.3		53.5	103.3	24.8	47.8			
+25	7001	701	7001	+118 88.5	+118 10	00 80	00 80	00 11	8.0	62.1					
				72.3	67.4		67.5		8.0	125.2	1.8	27.8			
+37	7078	7088	7078	+118 88.0	+118 10	00 80	00 80	00 11	0	63.1					
				70.8	68.8		70.8			109.3		26.3			
+50	7111	7121	7111	+118 88.0	+118 10	00 80	00 80	00 11	0	46.2					
				69.5	69.3		71.6		2.3	107.4	1.1	49.7			
+75	7321	7331	7321	+118 88.0	+118 10	00 80	00 80	00 11	2.3	61.2					
				70.4	73.3		73.5		5.2	62.9	2.4	29.1			
									2.9	1.7	1043.4	274.7			

7005
 French structure finished

5x2651 Extension

SECTION

SECTION

24

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS	
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
99+0	74.8	74.81	74.81	$\frac{-0.3}{15.5}$ 0.0	+0.3	$\frac{0.0}{15.0}$	2.9	1.7			
				74.5	75.2	74.8	2.9	4.5	1.3	21.3	
+25	76.41	76.51	76.31	$\frac{-0.1}{15.0}$	-0.2	$\frac{-0.2}{15.0}$	0	44.2			
				74.5	75.3	75.8		97.9		45.3	
+50	78.01	78.11	78.04	$\frac{-0.1}{17.1}$	-0.1	$\frac{0.0}{17.0}$		53.7			
				76.5	76.0	78.0		96.9		44.9	
+75	79.61	79.71	79.61	$\frac{-0.1}{17.0}$	-0.1	$\frac{0.0}{17.0}$	0	43.2			
				78.2	76.6	79.6	9.8	74.9	4.5	34.7	
100+0	81.21	81.31	81.21	$\frac{-0.1}{17.1}$	-0.1	$\frac{0.0}{17.0}$	9.8	31.7			
				79.1	80.7	81.9	16.5	55.7	7.6	25.8	
+25	82.81	82.91	82.81	$\frac{-0.1}{17.1}$	0.0	$\frac{0.0}{17.0}$	6.7	24.0			
				80.4	82.9	83.6		76.3		18.4	
+37	83.51	83.61	83.58	$\frac{0.0}{15.0}$	-0.1	$\frac{-0.1}{15.0}$		52.3			
				83.6	81.9	83.6		60.0		13.3	
+50	84.41	84.51	84.41	$\frac{-0.1}{17.5}$	-0.1	$\frac{0.0}{15.0}$		7.7			
				83.6	84.1	84.4	6.8		3.1		
+75	86.01	86.11	86.01	$\frac{0.0}{15.0}$	+0.1	$\frac{0.0}{15.0}$	6.8	0			
				86.0	86.3	86.5	12.1	15.0	5.6	6.9	
101+0	87.61	87.71	87.61	$\frac{+0.4}{15.2}$	+0.1	$\frac{0.0}{15.0}$	5.3	15.0			
				88.0	87.2	87.6					
							22.1			210.6	

57x45 Extension

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS	
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
101.0											
101+2.5	8931	8931	8921	91.4	90.5	88.8	26.2	30	14.6	8.3	
+50	9091	9091	9081	93.4	90.9	89.7	14.5	6.9			
+75	9241	9251	9241	94.2	92.7	92.4	17.2	0			
102+0	9401	9411	9401	94.9	94.4	91.8	10.0	13.0			
+275	9675	9675	9675	99.6	94.6	94.5	9.0	44.7			
+638	9851	9811	9814	100.1	98.6	95.7	2.6	32.9			
102+96.07	10027	10027	10053	101.7	101.0	97.5	6.8	32.3			
103+1.0					90		7.4	32.2			
103+20	10185	10197	10210	101.3	103.0	99.5	6.5	30.4			
103+40	10216	10228	10241	103.2	101.8	100.6	0	34.6			
103+69	10411	10415	10473	104.5	103.4	102.5		38.6			
									94.4	217.5	

Left 2 18196

101+2.5 8931 8931 8921
 101.4 90.5 88.8

+50 9091 9091 9081
 93.4 90.9 89.7

+75 9241 9251 9241
 94.2 92.7 92.4

102+0 9401 9411 9401
 94.9 94.4 91.8

+275 9675 9675 9675
 99.6 94.6 94.5

+638 9851 9811 9814
 100.1 98.6 95.7

102+96.07 10027 10027 10053
 101.7 101.0 97.5

103+1.0
 90

103+20 10185 10197 10210
 101.3 103.0 99.5

103+40 10216 10228 10241
 103.2 101.8 100.6

103+69 10411 10415 10473
 104.5 103.4 102.5

EXCAVATION EMBANKMENT EXCAV. EMBANK.
 5.8 15.0
 31.5 18.5 14.6 8.3

26.2 30
 40.7 9.9 18.8 4.6

14.5 6.9
 31.7 6.7 14.7 3.2

17.2 0
 22.2 13.0 12.6 6.0

10.0 13.0
 19.0 57.7 15.0 45.6

9.0 44.7
 11.6 77.6 5.7 38.2

2.6 32.9
 9.4 65.2 4.6 32.1

6.8 32.3
 13.2 64.5 3.4 16.7

7.4 32.2
 13.9 62.6 2.6 16.6

6.5 30.4
 6.5 65.0 2.4 24.1

0 34.6
 73.2 0 29.1

38.6
 94.4 217.5

on 10255
 1081.5
 12.62
 95.53-TP 102200
 0.41
 73.94
 12.43
 83.51-TP
 0.97
 84.8-T
 12.93
 71.55-TP
 7.03-T
 9.40
 62.68-TP
 11.4
 63.87-T

Sta 45 St Extension

SECTION

SECTION

26

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
103+60										
103+80	105.79 236	105.91 211	106.61 211	105.8	103.7	104.6	20 570.9 43.5	30.4	102.15 = T from P. 27 97 107.24 = TP on HDJ611 100.83 117.32 = T 40.21 117.33 = TP 12.204 127.53 = T sec P. 27	
104+0	107.10 105	107.22 0.80	107.35 0.80	106.5	105.4	104.9	20 55.0	36.5	517.69	
760	108.42 8.90	108.54 8.65	108.67 8.65	108.0	106.5	106.4	20 49.7	30.2	TP 106.50 on 2 St 6 101.20	
740	109.73 7.59	109.85 7.34	109.98 7.34	109.1	108.6	110.0	20 31.7	22.2		
760	111.04 6.28	111.16 6.03	111.29 6.03	110.5	109.3	111.6	0 28.2	1.3 20.3		
780	112.34 4.96	112.48 4.71	112.61 4.71	111.3	110.3	113.3	3.5 26.5	4.9 22.4		
105+0	113.67 3.65	113.79 3.40	113.92 3.40	112.31	111.5	114.1	9.6 33.9	4.3 26.3		
780	114.99 2.54	115.11 2.09	115.23 2.09	113.4	113.0	114.6	2.1 37.0	0.2 7.1		
785	116.29 out.	116.43 act	116.56 act	113.9	115.5	116.6	00 40.1	24.4		
740	116.79 1.93	116.92 0.77	117.05 0.77	113.9	115.5	115.9	47.9	41.5		
760	117.61 11.93	117.72 11.67	117.85 11.67	117.6	115.4	116.0	64.1 10.7	300.1		

SIXTENTH Extension

SECTION

SECTION

27

51799

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS	
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
105+60											
105+80	11893 1060	11905	11908 1035 120.1	+33 00 -27 -14 -15 -17 167 110 110 30	117.5	117.5	1.6 1.6	64.1 114.9 50.8	0.6	42.6	311 1936
106+0	12051 929	12036	12040 704 123.0	+36 00 -20 -20 -20 -14 170 90 90 25	118.4	119.2	10.8	38.2			12953 = T from P-26 0.07 12941 = TP 9.83 13829 = T
120	12155 797	12148	12151 772 124.7	+43 00 -11 -14 -14 172 80 70	120.3	120.7	12.9	29.8			
140	12287 666	12279	12312 641 125.1	+43 00 -12 -20 -11 172 80 70	120.7	121.4	5.0	41.3			
160	12418 535	12430	12445 570 127.3	+37 00 -12 -21 -12 169 80 70	123.4	122.5	7.8	36.1			
180	12550 423	12572	12575 378 129.4	+59 00 -18 -20 -20 175 80	123.9	123.2	22.5	41.9			
107+0	12691 272	12693	12701 247 130.6	+59 00 -17 -21 -11 175 80 70	124.8	125.9	20.0	44.9			
120	12822 149	12825	12838 715 129.1	00 -21 -20 -16 -09 150 135 20 20	126.1	127.4	0	53.0			
140	12945 884	12957	12970 859 131.5	+33 00 -21 -30 -20 -10 -19 170 130 100 90 20 100	126.6	128.8	3.9	58.1			
160	13076 753	13088	13101 728 134.6	+50 00 00 -23 -21 -10 -14 175 90 31.5 70 110 100 100	128.6	129.0	18.6	55.0			
107+69							38.6	105.7	6.8	18.7	
							20.0	50.7	76.1	35.5.0	

Sixth St Extension

SECTION

SECTION

28

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS	
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
107	131.55	131.49	131.12	135.2	129.6	129.0	20.0	50.7	17.4	73.3	138.29 = T from P-27 1.85 cut bank 138.44 = chg on 13C cont. 137.469 JT 138.4 = EN. Strb
108	132.05	131.5	131.5	135.5	132.4	132.4	2.8	45.5	8.2	70.0	
109	131.805	131.80	131.80	139.6	134.3	135.7	8.4	50.7	3.9	46.3	
110	131.55	131.55	131.55	138.6	137.1	137.6	0	49.4	1.8	44.7	
109	140.30	140.10	140.10	142.1	138.6	138.7	3.9	47.2	3.6	103.0	
110	142.80	142.80	142.80	141.8	141.0	142.0	0	64.0	132.5	61.3	
111	145.55	145.15	145.55	143.7	142.7	143.5		68.5	120.1	55.6	
110	147.30	147.10	147.30	145.0	146.4	146.0		51.6	83.0	46.1	
110	149.40	149.50	149.40	146.8	149.0	149.4	20.3	31.4	36.8	7.5	13.6
110	150.80	150.80	150.80	150.3	150.7	153.4	20.3	5.4	21.7	8.0	
110	150.80	150.80	150.80	150.3	150.7	153.4	38.2	16.3	64.1	521.9	

+75

Sixth Extension

SECTION

29

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS	
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
110+7.5	152.55	57.15	57.55	7.10	153.7	155.9	38.2	16.3	17.7	35.0	1820-812 Below 317- 186.37 1026- 178.91 = T.P 206 ± 177.77 - T 1304 - 1473 = T.P 245 ± 6538 = T 845 - 1649 = T.P 872 + 7365 - T
111+0	154.30 + 1.0	54.10 + 1.0	54.30	7.10	152.7	154.3	0	59.4			120.0 5 - 6538 = T 845 - 1649 = T.P 872 + 7365 - T
112+5	156.05	54.15	54.05	7.10	154.7	154.9		60.6			118.4 54.8
113+50	157.80 + 1.0	57.80 + 1.0	57.80	7.10	156.8	156.3		57.8			149.7 85.1
114+70 = B.P.	159.05 5.43	60.05 5.43	59.05	7.10	157.9	157.5		91.9			157.5 131.0
115+35.57	162.95 2.43	62.95 2.68	62.95	7.10	160.2	161.7		65.6			132.5 55.0
116+48.00	164.45 out	64.30 out	64.45	7.10	161.0	164.7	0	66.9			122.3 2.2 50.7
117+70 = P.C.	166.96 7.69	66.96 8.17	66.96	7.10	162.9	166.8	5.3	55.4			11.2 98.5 6.1 54.0
117+85.4	168.85 2.88	68.85 7.30	68.85	7.10	162.9	166.8	11.2	98.5	6.1	54.0	
118+0	167.71 5.91	67.71 6.91	67.71	7.10	165.8	168.1	5.9	43.1			102.2 1.3 22.3
119+0	168.00	68.00	68.00	7.10	166.3	168.3	0	59.1			126.3
120+0	169.50 4.70	69.50 5.20	69.50	7.10	166.3	168.3		67.2			21.3 18.7 562.6

5-060 ft

2.5
26.30

2.5

1

30.7
56.86

24.9
83.15

22.4
7.48

2.4
1

29.6
57.81

12.0
2.222

8.0
1.481

G.J.
P.C.

T.P. 16700

16700

16700

16700

16700

16700

16700

16700

16700

Sixth St Extension

SECTION

30 5-18-29

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS		
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.			
113+20	17016 3.49	6991 3.99	6916 21.2	7110 7.0	716 2.6	716 3.0	167	168.5	67.2 130.5 63.3	48.3	on Left on track	17365-T 026- 17337-T.P. 11.34+
760	7157 2.78	7173 2.78	7087 19.7	717 2.2	-13	716 2.5	169.2	169.8	122.8 59.5	45.5	15.23	18475-T 0.04- 18469-T.P. 11.43+
780	7257 1.08	7232 1.58	7207 21.7	715 2.8	-0.9	716 2.0	170.7	171.4	52.4 114.4	42.4	15.31	
114+0	7378 1095	7353 1145	7328 30.8	710 2.0	-1.6	716 2.0	171.5	172.3	62.0 167.7	62.1	15.41	
720	7500 9.73	7474 1035	7448 33.3	710 2.0	-0.3	716 2.0	172.1	171.4	105.7 166.0	61.5	15.49	
740	7631 8.2	7625 9.04	7569 31.7	710 2.0	-1.0	716 2.0	173.6	174.7	60.3 115.7	42.9	15.55	
760	7722 7.31	7716 7.83	7690 17.9	710 2.0	-1.9	716 2.0	175.0	175.3	55.4 112.1	41.5	15.61	
780	7862 6.11	7836 6.63	7810 16.1	710 2.0	-1.6	716 2.0	176.6	176.8	56.7 115.0	42.6	15.68	
115+40	7983 4.90	7957 5.42	7931 17.7	710 2.0	-2.7	716 2.0	178.0	177.9	58.3 93.9	34.8	15.75	
720	8105 3.68	8078 4.22	8051 16.6	710 2.0	-1.7	716 2.0	179.9	179.5	35.6 61.4 25.8	22.7	15.81	
									485.7			

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
1154.10	18226 7.47 ✓	81.99 81.72 5.01 2.49 +0.57	-0.07 181.7	-1.0 181.0	-0.09 181.1	25.8	49.7	15.8	18.4	196.12 = T
1160	8247 1.26 ✓	82.00 82.93 1.80 ✓	-0.08 182.7	-0.6 182.6	1.0 181.9	23.9	35.6	13.2		15.92
1180	8417 0.66 ✓	84.40 84.13 0.60 ✓	0.0 184.3	-0.2 184.1	-0.3 183.6	11.7	42.6	3.9	15.8	16.01
1162.0	8588 10.24 ✓	85.11 85.31 10.78 ✓	0.0 189.4	-0.2 184.7	-0.9 183.5	10.5	39.0	57.6	14.4	21.3
1160	8710 9.02 ✓	86.82 86.54 9.58 ✓	+5.7 191.2	0.0 185.1	-1.9 184.9	28.5	50.5	65.9	18.7	17.0
1160	8831 7.81 ✓	88.03 87.75 8.37 ✓	0.0 192.2	0.0 186.5	-1.5 186.2	22.0	65.4	84.7	24.2	31.4
1160	8952 6.60 ✓	89.24 88.96 7.16 6.69 +0.49	0.0 195.5	0.0 180.9	-2.3 187.5	43.4	119.1	29.7	44.1	29.5
1180	9077 5.40 5.28 +0.12	90.41 90.16 5.96 6.06 -0.10	0.0 199.5	0.0 190.3	-0.7 189.2	75.7	200.4	51.1	74.2	18.9
1172.0	9192 4.18 3.74 +0.45	91.65 91.37 4.75 ✓	0.0 201.4	+7.8 193.1	+1.4 191.7	124.7	229.8	35.5	85.1	13.1
1180	9215 2.97 ✓	92.86 92.57 3.55 ✓	0.0 201.8	-7.9 193.5	-1.6 191.5	105.1	153.4	34.5	56.8	12.8
						48.3	16.1	321.4	191.4	

134.73

196.12 = T

Sixth St Extension

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL		
			LEFT	C	RIGHT
117+40	19431 176 184 +0.50	9407 9378 934 184 +0.50	199.5	193.9	192.6
+60	19559 955	9528 9499 113 0.64 +0.49	201.0	195.0	194.3
+80	19677 13.77	9618 9619 1762 1214 +0.48	204.4	196.3	195.0
118+0	19798 12.56	9769 9740 11.4	203.9	197.0	195.8
120	19920 11.34	9890 9810 1021 921 +0.24	198.8	197.8	197.5
+40	20041 10.13	20011 199.81 9.00	197.5	197.7	197.4
119	20162 8.77	20132 20103	200.7	200.9	199.1
+75.57	20256 7.98	20226 20184	201.0	201.7	200.4
+94.37	20319 6.85	20289 202.77	202.5	203.4	202.1
117+21.2	20423 5.71	20389 20411	203.2	204.3	202.0
122	20511 out.	20456 204 out.	205.5	205.0	203.3

AREAS		CUBIC YDS.		REMARKS
EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
48.3	16.1	36.2	6.0	196.12-T 0.18- 195.94-T 12.87-T 208.51-T 2.42-BP 206.39-dk EN 206.37-BP 0.02-Error BP 206.37-BP 4.17-T 210.54-T
49.4	9.0	49.2	7.9	206.37-BP
83.3	12.6	50.0	11.5	210.54-T
51.7	18.7	19.1	18.9	
32.3	32.3	26.8		
39.9	40.0	28.0		
35.5	35.5	18.7		
29.2	29.1	17.0		
3.3	42.8	1.1	14.9	
13.7	3.3	13.7		
3.3	44.1	1.1	15.4	
30.4	30.4	8.9		
24.3	24.3	156.7	157.0	

32 6-21-29

S. 27th St Extension

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
119+21.97	205.97 4.57 ✓	205.17 Top of Pavement	115.00 178	-1.1 178	-1.9 178	32.3	24.3 56.6 32.3		10.5	730 20.5/16 1053 5.20/11 323
+10	206.45 out	6.15 out	206.0	204.3	203.5	8.0	86.0		12.7	
+50.77 = 15	206.11 3.43	6.81 6.39	206.3	204.5	202.6	53.7 10.8	53.7 114.1		22.8	
+70.19	205.45	8.15	205.8	203.7	206.1	60.4 24.1	60.4 69.3		28.4	616 512 104
117+72.84 = DD	203.37 3.34	203.37 6.34	209.5	207.6	208.0	8.9 0.3	8.9 30.9	0.3	11.5	11.5 -0.58 = 11.5/16
+93.45 = 0.1	210.17 7.50	210.00 8.33	208.0	209.0	209.9	10	22			Used top of the grade Section 0-0 Stake
170+42.95	212.25 4.56 ✓	12.11 4.98	212.3	212.8	215.2	38	7.5	50.	44.4 27.3	27.3 11.91.5 21.0/16
+ 91.95 = 0.1	211.28 1.63	16.28 1.63	214.3	215.2	215.0	0	32	50.	35.2 36.6	207.97 = Elev. Shell P. 28 at cut 207.96 = Elev. Shell 6.204 0.1166 x 6.30 208.32 9.591 207.91 = x
314+21.67	217.95	17.95	216.8	216.4	218.0	1	28	20.52	0.5 31.7	
+50	219.81	7.11	217.8	219.1	211.1	24.5	24	20.03	13.6 27.7	
+75	221.00	21.00	219.7	220.8	223.3	37	9	25	28.5 15.3	
122+00						59.0	5	25	44.4 6.5	
									16.6 231.0	

Planimetered See Sections

Section 45 Extension

SECTION

SECTION

34

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
122+0	222.54	225.4	225.4			59	5	75.9	17.6	241.65 = BM 0.42 + 242.07 - H 12.53 - 229.54 - TP 0.20 - 229.74 - T 11.67 - 217.07 - K 0.21 + 217.09 - K 9.07 - 208.02 = T.P. 2.61 + 210.63 - T 4.26 - 206.37 = B.M. B.P. 10 H.C. 246.11 119 + 50.00 lot.
+50	225.47	25.47	25.47			23	14	14.4	13.0	
+75	221.93	26.93	26.93			8	14	3.4	5.5	
+88	227.19	27.19	27.19			6	9	3.7	3.8	
123+0	228.30	28.30	28.30			10.5	8	8.6	10.8	
+30	230.1	30.1	30.1			5	11.5	7.8	11.3	
+50	231.32	31.32	31.32			16	19	32.8	14.8	
+99.6-PC	233.05 10.07	33.05	33.05			43	8	38.5	3.0	BM 241.65 0.716 H 14.71 0.1 PC 243.12 + H 241.65 = BM 6.99 + 248.64 - T
124+0	234.22 14.10	34.22	34.22			59	0	40.4	0.4	
+30	235.40 13.24	35.40	35.40			50	1	31.1	1.9	
+40						34	4	256.6	82.1	

FINISHED existing top of cut station
 S = 0.50%

Planimetered

St. 451 Extension

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL					
			LEFT	C	RIGHT			
126+50.80	248.88 7.42 ✓	4888 7.42 ✓	4888 7.42 ✓	+1.1 1.2	0.0 0.0	-1.5 1.0	0.0 0.0	-0.7 1.0
			252.2	247.4	248.5			
+18	249.88 S. 0.581	4988	4988	0.0 1.0	1.0 0.0	-2.3 0.0	-0.5 0.0	0.0 1.0
			249.8	242.6	249.8			
+96.39	251.56 4.74 ✓	5156 4.74 ✓	5156 4.74 ✓	-1.1 1.7	0.5 1.0	-1.8 0.0	-0.0 0.0	+5.1 1.7
			250.7	49.8	255.0			
127+20	252.04	5204	5204	0.0 1.0	1.0 0.0	-1.5 0.0	0.0 0.0	1.7 1.0
			252.6	251.4	258.1			
+497-81	254.22 2.07 ✓	5422 2.07 ✓	5422 2.07 ✓	0.0 1.0	0.0 0.0	-0.8 0.0	-2.0 0.0	-1.0 0.0
			254.2	253.9	256.0			
+70.95	255.75	5575	5575	+1.0 1.0	0.0 0.0	-0.8 0.0	-0.0 0.0	-1.0 0.0
			258.7	255.0	255.6			
128+0	257.28	5728	5728	+1.0 1.0	0.0 0.0	-1.1 0.0	-1.0 0.0	-1.0 0.0
			262.4	256.2	257.1			
+25	268.59	5859	5859	+1.0 1.0	0.0 0.0	-1.7 0.0	-2.5 0.0	-1.0 0.0
			261.3	256.9	259.1			
+50	259.20	5920	5920	+1.0 1.0	0.0 0.0	-2.6 0.0	-2.1 0.0	-1.0 0.0
			259.9	257.3	260.5			
+75	261.21	6121	6121	+1.0 1.0	0.0 0.0	-2.0 0.0	-0.8 0.0	+0.2 0.0
			261.7	259.2	262.9			

Planimetered

AREAS		CUBIC YDS.		REMARKS
EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
48	3.5			256.30-T P-25
		17.3	3.0	
6.5	6			
		22.3	9.4	
36	12			
		24.7	7.2	
20.5	4.5			
		18.2	4.3	
24.5	6			
		30.1	5.4	
31.5	4			
		48.1	5.9	
58.	7			
		40.7	8.3	
30.	11			
		17.4	11.6	
7.5	14			
		10.0	15.0	
14	18.5			
		10.2	18.1	
8	20.5			
		239.0	88.2	

SECTION

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL						AREAS		CUBIC YDS.		REMARKS		
			LEFT		C	RIGHT		EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.				
129+0	212.53	1253	1253	+1.9 17.9	0.0 13.5	-2.9 1.0	-2.2	-1.5 2.0	0.0 13.0	+1.6 17.8	8	20.5			
				263.1		260.3				263.2			7.2	22.5	
+25	213.84	1384	1384	+1.6 17.8	0.0 15.5	-2.8 7.0	-2.0	-1.9 8.0	0.0 15.5	+2.1 18.3	7.5	28			
				263.6		263.6				265.1			8.6	24.8	
+50	215.15	1515	1515	+9.7 17.4	0.0 11.0	-2.3 10.0	-2.3	-3.0 5.5	0.0 12.5	+2.7 18.9	11	25.5			
				264.8		262.9				266.7			8.3	23.4	
+75	216.46	1646	1646	+1.6 17.8	0.0 13.5	-2.0 3.0	-3.0	-3.1 5.0	0.0 13.5	+1.9 18.0	7	25			
				267.1		263.5				267.0			10.6	27.3	
136+0	217.77	1777	1777	+3.9 19.0	0.0 10.0	-1.9 6.0	-2.1	-3.4 1.0	0.0 13.5	+2.0 17.0	16	34			
				270.0		265.7				267.0			19.7	38.0	
+25	219.08	1908	1908	+4.4 17.9	0.0 8.0	-1.8 3.0	-2.0	-2.6 7.0	0.0 13.5	+1.5 17.3	26.5	48			
				271.9		267.1				265.3			18.8	45.4	
+50	220.40	2040	2040	+3.0 18.5	0.0 10.0	-1.7 5.0	-2.1	-2.7 7.0	0.0 13.5	+1.4 18.1	14	50			
				272.8		268.3				266.9			9.0	45.8	
+75	221.71	2171	2171	+2.1 18.1	0.0 13.5	-1.0 7.0	-2.6	-4.1 5.0	0.0 13.5	+1.0 17.0	5.5	49			
				270.7		268.9				270.9			1.4	19.4	
+85	222.22	2222	2222	0.0 17.0	-1.2 12.0	-4.5 11.0	-2.6	-4.8 5.0	0.0 13.5	+1.2 17.7	2	56			
				271.6		271.6				272.6			1.8	30.8	
131+0	223.06	2306	2306	-1.3 17.0	-2.9 15.0	-3.5 4.0	-2.9	-4.4 5.0	0.0 13.5	+2.3 18.3	4.5	55			
				270.1		270.1				273.8			3.9	52.3	
+25											4	58	89.3	329.7	

Planim.

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS	
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
181+25	77433	7433	7433	15 25 27 30 17.3 20.0 20.0	4.0	25 35 44 2.0 15.0 17.8	4	58	1.9	51.9	B.M. 27978 25 P.M. 1317.00
+50	77565	7565	7565	0.0 17.0	-12 9.0	-22 9.0	0	54	1.5	29.3	201 28179-T 201 27978-T.P. 11.11 290.89-T
+63.4-P.C.	77640	7640	7640	12.0 18.0	0.0 12.0	-11 9.0	5.5	56.5	7.5	33.2	
+80	77722	7722	7722	1.0 15.0	0.0 9.0	-22 15.0	20.5	58	22.4	42.6	
132+0	77827	7827	7827	1.4 15.0	0.0 9.0	-22 15.0	40	57	34.8	40.0	
+100	77932	7932	7932	1.0 15.0	0.0 9.0	-27 15.0	54	51	37.0	38.9	
+140	78037	8037	8037	1.0 15.0	0.0 9.0	-23 15.0	46	54	38.5	38.9	
+160	78142	8142	8142	1.0 15.0	0.0 9.0	-16 15.0	58	51	47.4	32.2	
+180	78247	8247	8247	1.0 15.0	0.0 9.0	-10 15.0	70	36	56.3	24.8	P. 28146 0.0 25.00 121.80
133+0	78352	8352	8352	1.0 15.0	0.0 9.0	-20 15.0	82	31	63.7	25.6	
133+20							90	38	311.0	357.4	

Planim

Small Extension

SECTION

SECTION

40

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
135+10	99454	99454	99454	-10 -39 185 100	-39	-66 00 90 170	0	90	0	51.3 ✓
+25	99533	99533	99533	0 47 170 100	-45	-45 -15 90 170	0	94.5	6.0	84.0 ✓
+50	99611	99611	99611	+34 00 -40 180 100 60	-44	-44 -20 110 100	13	87.	4.8	63.3 ✓
+70	99769	99769	99769	00 -34 170 110	-42	-38 -12 120 150	0	84	0	95.6 ✓
136+0	99927	99927	99927	-10 -38 185 90	-41	-41 -05 70 178	0	88	0	82.0 ✓
+25	30058	30058	30058	-08 -34 180 100 100	-41	-41 -05 60 70	0	89	2.8	80.1 ✓
+50	30189	30189	30189	-17 -30 170 80	-42	-41 00 +34 50 130 184	6	84	14.4	72.7 ✓
+75	30320	30320	30320	-37 -35 210 120	-44	-46 00 41 50 75 71	25	73	13.9	69.5 ✓
137+0	30451	30451	30451	-14 -34 191 100 110	-44	-45 00 45 50 130 150	5	77	1.9	61.1 ✓
+80	30556	30556	30556	00 -40 170 90	-50	-46 00 70 170	0	88	0	76.6 ✓
+42				304.7	300.6	304.7		100	43.8	736.2

Planim.

SECTION

41

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
139+11.8	306.71 1065	7.72 10.65	303.6	302.0	306.0	0	100	11.3	104.4	317.37 = π P-43
+71	308.83	8.43	308.2	302.6	311.0	21	94.5	12.6	105.5	
139+0	310.13	10.13	307.7	305.2	310.1	2.5	102	0.5	38.3	
+10	310.72	10.72	309.4	306.1	309.4		105	0.7	103.2	
+3	312.19	12.19	312.2	307.9	307.5	1.5	118	1.5	61.4	
+50	313.08	13.08	313.7	309.0	309.0	4	103	2.3	94.0	5-24-22
+75	314.55	14.55	314.3	310.2	311.9	1	100	0.5	99.1	GP 31110
139+0	316.02	16.02	314.7	311.5	314.6	0	114	0	115.8	
+85	317.49	17.49	315.4	311.4	313.4		136		92.2	
+45	318.68	18.68	318.1	313.3	314.5	0	113	0.3	19.4	
+50	319.97	18.97	319.6	314.6	314.6	3.5	96	29.7	833.3	

Note: Finish stakes started per Sta. 137+00 and 142+18.01 = PC
 S = 105.88

Planim

STA.	ELEVA.	GRADE	CUT OR FILL		
			LEFT	C	RIGHT
139+7.5	320.91	20.44	30.11		
			324.0	320.6	316.8
140+0	321.91	21.91	21.91		
			324.9	328.0	320.5
✓ 142.5	323.38	23.38	23.38		
			328.4	327.3	324.0
145.0	324.85	24.85	24.85		
			328.2	327.6	326.6
147.5	326.02	26.02	26.02		
			331.0	328.6	328.1
141+0	327.80	27.80	27.80		
			330.2	329.7	329.9
150	330.74	30.74	30.74		
			332.2	331.4	331.0
147.5	332.21	32.21	32.21		
			333.1	333.0	332.6
142+0	333.68	33.68	33.68		
			334.0	333.0	332.8
147.5	335.11	35.11	35.11		
			335.1	334.2	334.5

AREAS	CUBIC YDS.		REMARKS
	EXCAVATION	EMBANK.	
59	28.9	52.8	
177	109.3	17.8	
153	152.8	3.5	
141	136.1	0	
111	116.7		
79	88.0		
48	117.6		BM 327.72 327.80 111.72
43	42.1	0	
11	25.0	3.2	
7	8.3	6.0	
0.5	3.5	11.3	
18.5	828.3	88.6	

Planimetered Sect-Sec.

S: 0.0588

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
142+35.31-PC. on Pt.										349.27 = B.M. Page 44
142+50	336.63	361.3	335.7	334.8	336.4	0.5	18.5	7.2	7.8	20.3+ 377.8 351.30+ 1.11+ 11.74+ 329.09+ 339.56+ TP 12.66 6.81+ 316.45+ TP 340.37+ 317.57+ 12.37+ 337.78+ TP 17002 16912 D-D Sec 5400
DO	337.20	377.0	337.0	337.7	331.1	21	5.0	6.5	1.1	349.57 Above 541 216 114 and 16.20 RL 337.43+ 16.20 RL 16.20 RL
143+50						8.2				9.4
143+75	337.63	377.63	338.7	338.6	338.1	26.1	26.1			28.6
143+100	339.03	391.1	340.6	340.4	339.8	39.3	39.2			33.4
143+125	340.43	405.3	342.4	341.6	340.9	37.2	37.2			25.5
143+150	341.83	418.3	343.3	342.3	342.2	21.2	21.2			12.2
143+175	343.23	431.3	344.0	343.6	343.6	1.4	1.4			0.5
144+00	344.65	444.5	344.7	344.2	344.7	9.0	9.0			0
144+25	345.10	457.0	345.3	345.2	345.6	9.9	9.9			0.3
144+50						0.8	7.3			123.6

See Page 60 this sect.
GRADE CHANGE

Planimeted
see X-sections

142+35.31-PC. on Pt.

DO

B.M. 143+75

B.M. 143+150

B.M. 143+175

B.M. 144+25

144+50

SECTION

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
144+54.1	341.40 5.03 ✓	11.50 41.40 5.03 ✓	-0.6 15.7	-0.7 15.0	0.0 15.0	0.8 7.3	20.01	1.1 ✓	6.8 ✓	35/43-T Page 43
147+82	420.4 4.9 ✓	11.4 420.4 4.9 ✓	0.8 15.0	-0.7 15.0	0.0 15.0	2.2 11.0	20.01	1.3 ✓	10.0 ✓	
149+83	425.2 3.9 ✓	11.6 425.2 3.9 ✓	1.0 15.3	-1.0 15.0	0.0 15.0	1.4 16.0	20.01	0.5 ✓	11.5 ✓	
145+14.1	427.8 3.58 ✓	11.25 427.8 3.58 ✓	0.0 15.0	-1.0 15.0	0.0 15.0	15.0	23.76		11.3 ✓	
147+20	421.13 3.30 ✓	11.23 421.13 3.30 ✓	0.0 15.0	-0.1 15.0	0.4 15.0	12.2	22.38	1.1 ✓	7A ✓	
149+58.1	425.41 3.02 ✓	11.5 425.41 3.02 ✓	1.0 15.5	0.0 15.0	0.0 15.0	2.7 5.1	40.42	18.1 ✓	4.4 ✓	31/30.27 on top of of EC 145+49.49
146+10	418.91 2.57 ✓	11.01 418.91 2.57 ✓	1.0 15.0	1.1 15.0	0.0 15.0	21.5 0.8	25	12.5 ✓	0.6 ✓	
148	422.11 out	11.36 422.11 out	1.0 15.0	1.0 15.0	0.0 15.0	5.4 0.6	25	2.5 ✓	1.7 ✓	
1450	429.51 189 ✓	11.14 429.51 189 ✓	0.0 15.0	0.0 15.0	0.0 15.0	3.0	25	2.8 ✓	1.4 ✓	
1475	419.85 out	11.45 419.85 out	1.0 15.0	1.0 15.0	0.0 15.0	6.1 6.0	25			
1471+00						18.2		11.2 ✓	0 ✓	
								51.1	55.1	

SECTION

45

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
117+0	55011 1.27 ✓	5091 1.27 ✓	1.12 1.57	1.05	0.00 1.57	18.2		14.7 ✓		351.43-T from 10-44 0.63 350.80-T 7.65 358.45-T
+25	55047 out	5057 out	0.00 1.57	1.01	1.11 1.57	13.5		11.2 ✓		
+50	55079 0.64 ✓	5099 0.64 ✓	0.00 1.57	1.01	1.06 1.57	10.6		12.6 ✓		351.34 0.0 of 3500 1.17-1.50
+75	55110 out	5120 out	1.01 1.57	1.06	1.06 1.57	16.7		20.4 ✓	0	
118+0	55141 7.04 ✓	5151 7.04 ✓	0.00 1.57	1.12	1.12 1.57	27.4		13.8 ✓	0.4 ✓	
+25	55172 out	5182 out	1.01 1.57	1.01	0.00 1.57	2.4 2.9	0.8	1.6 ✓	2.1 ✓	RM 352.20 4.79-4.8 1.49-1.50 1.52-1.6
+50	55203 6.42 ✓	5113 6.42 ✓	0.00 1.57	1.03	0.00 1.57	1.0 2.9	3.8	7.8 ✓	1.8 ✓	
+75	55231 out	5141 out	1.01 1.57	1.03	1.05 1.57	15.9		12.3 ✓	0	
119+0	55261 5.79 ✓	5276 5.79 ✓	1.06 1.57	1.03	1.03 1.57	10.6		15.8 ✓		
+25	55297 out	5107 out	1.09 1.57	1.03	1.06 1.57	23.6		13.0 ✓		
149+50						4.5		123.2	4.3	

SECTION

47

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
151+30										
151+50	5296 3.05 ✓	5296 3.05 ✓	333.9	354.7	354.9	18.2	18 R	6.7	2.8	356.91 - T 352.34 - ckt. on H.P. 11/11 See above.
+25 out.	5296 out	5296 out	354.1	353.7	354.0	0.3	0.3	5.4	5.4	
152+0	5275 3.26 ✓	5275 3.26 ✓	354.7	354.8	353.3	21.3	21 R	0.8	9.8	
+25 out	5275 out	5275 out	353.6	353.2	352.8	13.8		13.8	0	
+50	5256 3.47 ✓	5256 3.47 ✓	352.9	352.7	353.1	18.5		18.5		
+75	5234 out	5234 out	353.1	352.3	353.3	18.2		18.2		
153+0	5233 3.68 ✓	5233 3.68 ✓	352.0	352.2	352.5	22.3		32.3		
+25 out	5233 out	5233 3.78 ✓	352.4	353.2	352.4	10.5		10.5		
+39.79	5216 3.85 ✓	5216 3.85 out.	351.8	352.2	353.1	35.6		35.6		R.P. in Culvert on H.P. 11/11 on H.P. 11/11 on H.P. 11/11
153	5216 3.0	5216	352.9	352.7	352.4	15.6		15.6		
153+74.91								8.0	35.1	7.0
									128.1	

Sixth St. Extension

SECTION

SECTION

48

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
152+7.21	353.06	52/16	353.04	353.0	352.3	8.0	80'		11.4'	
+93			353.06	352.1	352.6	26.0	260'		8.7'	
152+11							0			
LEFT CURVE Lt. Grades			Rt. Grades			Total Vol between		6143.6		7284.9
153+8.92	353.06	3.85	353.06	3.85		Sta 89+92 to +154+11				
PART D	353.07		353.06	3.85						
" ②	352.98	PART D	353.12	3.79						
" ①	352.94	" ②	353.18	3.73						
" ④	352.90	" ③	353.24	3.67						
" ⑤-EC	352.85	" ④	353.20	3.61						
		" ④-EC	353.37	3.54						

Sixth Extension
Grade Change

SECTION

49 5-26-39

STA.	ELEVA.	GRADE	CUT OR FILL						
			LEFT	C	RIGHT				
25+62.36	See page 5 this Book								
125+97.25-5	121.18	121.18	+46.4 35.2	+120 200	+170 30	+90 150	0.0 50	-38 70	-13 115
21+80	129.34	129.44	+50.7 60	+120 800	+130 70	+210 20	0.0 20	-24 100	-38 30.7
+15	127.34	127.44	+46.4 38	+135 200	+110 70	0.0 60	-30 80	-37 206	
17+10	125.35	125.45	+39.8 34.7	+130 200	+120 70	+110 20	0.0 20	-24 100	-38 175
+20	123.11	123.21	+40.5 36.3	+128 200	+130 70	+125 20	0.0 35	-24 100	-38 175
+15	121.11	121.21	+40.5 36.3	+128 200	+130 70	+125 20	0.0 35	-24 100	-38 175
+22.5	119.67	119.77	+38.0 34	+120 200	+120 70	+110 20	0.0 20	-24 100	-34 18.7
28+70	115.09	115.14	+20.0 250	+161 70	0.0 70	-21 35	-37 75	-22 193	
+31	117.97	117.97	0.0 150	39 70	-37 70	-20 150			
+29.4-26	116.80	116.85							

AREAS	CUBIC YDS.		REMARKS
	EXCAVATION	EMBANKMENT	
→ 414.72	→ 101.0	354	
694.55 ✓	18.55 ✓	727.1	98.0
1726.56	73.29	1061.9	45.0 ✓
1032.01 ✓	24.74 ✓		
1121.11	59.59	1189.7	38.6 ✓
803.7 ✓	34.85 ✓		
1111.11	59.81	950.3	38.8 ✓
662.57 ✓	24.96 ✓		
1326.26	51.36	628.6	28.5 ✓
562.4 ✓	26.40 ✓		
1232.7	57.0	733.2	36.9
569.0 ✓	30.6 ✓		
185.3	71.8	565.5	45.7
316.3 ✓	41.0 ✓		
374.9		197.1	62.1
58.6 ✓	77.1 ✓		
11.6	12	3.3 ✓	8.6
0 ✓	77.3 ✓		
	21		83.2
	172.5 ✓		
	612.1		264.1
	439.6 ✓		
	6056.7 ✓		749.5 ✓

5+0670.9

1801

3M 116.77 0.770
34.7
34.7

State St Extension
Grade Change

SECTION

SECTION 50

STA.	ELEVA.	GRADE	CUT OR FILL					AREAS		CUBIC YDS.		REMARKS
			LEFT	C		RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
28+728.4	115.41	13.71	15.71	-21 1.5	-21 9.0	-6.8	-29.6 20.0	-21.5 11.9	439.6		109.03/11	
795.67	114.13	14.19	14.13	-5.3 23.0	-9.4 15.0	-1.49	-19.3 20.0	-20.3 10.0	757.2		516.3	
27+41.9	112.90	12.95	13.10	-11.6 32.4	-12.7 15.0	-1.52	-15.4 20.0	-19.1 10.3	824.1		725.3	
442.33	111.47	11.62	11.77	-9.6 37.4	-12.5 15.0	-1.52	-18.4 34.0	-19.0 12.5	796.8		699.3	
415.11	110.14	10.39	10.44	-10.4 30.2	-12.8 15.0	-1.52	-18.5 27.0	-18.1 10.7	797.8		645.8	
486	108.81	10.61	10.94	-9.2 30.2	-11.3 15.0	-1.33	-16.0 27.0	-17.8 12.1	699.3		569.6	
36+293	107.18	10.763	10.778	-6.4 24.0	-8.0 18.0	-1.25	-12.1 12.0	-15.1 11.0	621.1		489.4	
351.1	106.15	10.630	10.645	-7.0 18.0	-5.1 10.0	-1.0	-11.3 8.0	-10.0 13.0	513.4		407.7	
4590	104.82	10.427	10.512	-1.5 17.0	-7.0 10.0	-7.81	-11.0 10.0	-12.2 20.0	431.6		343.0	
482.33	103.49	10.344	10.379	-1.6 17.0	-1.0 5.0	-4.1	-11.0 13.0	-17.5 17.0	353.6		284.2	
									304.2		5368.5	

South Extension
Grade Change

SECTION

SECTION

51

STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS						
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.							
71+05.11	10215	10230	10245	-16 171	-15 160	-19 160	-13 25	-17 75	304.2						311 89.84	
729	10082	10097	10112	-14 171	-12 70	-13 70	-10 200	-16 300	202.1						218.4	92.14 92.14 92.14 92.14
+5283	9999	9964	9979	-17 176	-10 60	-13 300	-18 300	-16 300	287.4						152.6	89.84 90.1 92.14 92.14 92.14 92.14
775.11	9811	9831	9846	-17 176	-07 180	-10 380	-15 380	-16 370	65.6						39.5	10.35 10.35 10.35
7990	9183	9198	9213	-16 176	-05 150	-03 150	-15 177		25.8						23.9	
81+37.91	9491	9509	9521	0.0 150	-10 100	-05 150	0.0 150		13.7							
914.88	9305	9320	9335	11.4 161	0.0 90	0.0 90	0.7 11.4	-0.8 11.4	4.2						19.6	
+9782	9116	9131	9146	0.0 150	-10	-05 162			21.6						24.7	
33+30.77	8936	8951	8966	0.0 150	-13 150	-06 152	-05 152		21.6						24.2	
+6486	8750	8765	8780	0.0 150	-13 150	-08 150	-08 150		18.2						23.2	
				0.0 150	-13 150	-08 150	-08 150		0.87						25.3	
									18.5							
									21.6						762.6	

Six 45' Extra
Grade Change

SECTION

SECTION

52

STA.	ELEVA.	GRADE	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
33+92.0	8515	8525	8565	0.0 15.0	0.0 9.5	-14	0.0 15.0		21.6 ✓		
							11.8	31	45.2	7.3	25.9 ✓
34+30	8111	8111	8111	4.2 16.3	4.2 13.5	0.0 9.5	-0.8 16.2	12.7	23.6 ✓		
							18.9	35	32.7	12.5	21.2 ✓
34+65	8248	8258	8241	4.3 12.9	0.0 7.0	-0.7	0.0 15.0	6.6 ✓	9.1 ✓		
							11.2	35	15.0	7.3 ✓	9.7 ✓
35+0	8080	8080	8080	0.0 15.0	0.0	-0.5	0.0 15.9	4.6 ✓	5.9 ✓		35+0 - 80' at New Fall
							4.6	30	8.9	2.6 ✓	4.9 ✓
35+35	7940	7950	7940	0.0 15.0	0.0	-0.1	0.0 15.0	0 ✓	3.0 ✓		on New Fall
								35	3.0		1.9 ✓
35+65	7778	7788	7778	0.0 15.0	0.0	0.0	0.0 15.0		0		on New Fall
								35	25.8		16.7 ✓
36+0	7615	7615	7615	0.0 15.0	0.0	-0.1	0.0 15.0		25.8 ✓		on New Fall
								30	41.2		22.9 ✓
36+30	7475	7485	7475	0.0 15.0	0.0	-0.1	0.0 15.0		15.4 ✓		on New Fall
								35	25.6		16.6 ✓
36+65	7312	7322	7312	0.0 15.0	0.0	-0.1	0.0 15.0		10.6 ✓		on New Fall
								35	34.1		22.2 ✓
37+0	7150	7160	7150	0.0 15.0	0.0	-0.1	0.0 15.0		23.9 ✓		on New Fall
								30	63.3		35.2 ✓
37+30									39.1		
										29.7 ✓	177.2 ✓

6th St Extension
Grade Change

SECTION

13

STA.	ELEVA.	GRADE	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
37+30	7010	7020	7010	0.0	-0.9	-0.9	0	39.1 ✓			
							29.1	65.5	18.8	42.4	
37+5	6850	6860	6850	0.0	0.0	0.0	29.1	26.4 ✓			
							55.8	60.5	36.2	39.2 ✓	
38+0	6698	6708	6698	0.0	-1.0	-1.0	26.7 ✓	34.1 ✓			
							39.2	65.6	21.8	36.5 ✓	
38+0	6528	6538	6528	0.0	-1.0	-1.0	12.5	31.5 ✓			
							20.5	105.5	133	68.4	
38+5	6300	6300	6300	0.0	0.0	0.0	8.0	74.0			
							15.0	154.0	9.7	99.8	
39+0	6278	6288	6278	0.0	0.0	0.0	7.0	80.0			
							8.9	114.1	4.9	63.4	
39+0	6157	6167	6157	0.0	-1.0	-1.0	1.9 ✓	34.1 ✓			
							2.7	58.1	1.0	20.4	
39+30	6080	6090	6080	0.0	-1.0	-1.0	0.8 ✓	24.0 ✓			
							1.4	49.6	0.6	23.0	
39+4	5920	6000	5920	0.0	-8.0	-8.0	0.6 ✓	25.6 ✓			
							0.6	44.9	0.1	10.0	
39+6	5747	5967	5747	0.0	-22.0	-22.0	0	19.3 ✓			
								43.5		10.5 ✓	
39+8	5900	5910	5900	0.0	-1.0	-1.0		24.2 ✓			
								12.1	106.4	16.8	

Plotted
old x sec.
with New
Grade

Page Tot.
106.4 430.4

Next to Extension
Grade Change

SECTION

54 5-31-20

STA.	ELEVA.	GRADE	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
40+74	5810	5810	77	78	-0.2	-0.2	0	12.1			
							2.4	19.9	1.1	9.2	
44+0	5720	5720	78	79	0.0	1.0	2.4	7.8			
							2.4	24.7	2.3	23.3	
44+0	5512	5512	79	80	-0.5	-0.5		16.9			
								16.9			
42+0	5410	5410			0.0	0.0		9.1			
								16.6		4.3	
44+1					0.0	0.0		7.5			
							2.0	12.7	0.5	3.2	
47+72	5385	5385	79	80	-0.1	0.0	2.0	5.2			
							31.1	9.1	17.8	5.2	
48+23	5291	5291	79	80	-0.7	0.0	29.1	3.9			
							105.2	10.2	60.5	5.8	
49+54	5208	5208	79	80	-0.7	-0.1	76.1	6.3			
							164.0	21.4	94.4	12.4	
49+56	5119	5119	79	80	-0.8	-0.5	87.9	15.1			
							165.9	42.5	152.0	3.89	
46+0	4977	4977	79	80	-1.8	-1.1	78.0	27.4			
							140.1	54.3	77.8	30.2	
							62.1	26.9			
								406.4	146.9		

S. + 657.51 + 1002
Grade Change

SECTION

55

STA.	ELEVA.	GRADE	CUT OR FILL				AREAS		CUBIC YDS.		REMARKS		
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.				
13+30	1591	461	469 185	+5 20	48 20	0.0 7.0	-19	-16 118	62.1	26.9			
13+5		480	434 166	46 20	0.0 20	-28 118	-14	-18 118	20.1	27.6			
14+10		470	406 153	0.0 170		-20	-11 167	0.9	37.0				
13+5		460	416 159	0.0 20	12 10	-21	-12 118	7.2	25.0				
14+5		454	450 180	28 20	0.0 20	-22	-11 110	46.2	22.9				
15+0		441	440 170	28 20	0.0 20	-10	-9 118	36.2	18.4				
14+30		432	430 160	28 15	0.0 110	-05	-10 118	5.8	21.9				
14+5		427	435 163	28 15	0.0 110	-07	-23 118	13.6	19.9				
16+0		422	426 188	28 25	0.0 110	-12	-12 118	58.3	22.1				
18+18=364	3978	3988	3978	3978	3978	3978	3978	3978	3978	3978	3978	3978	3978
			426 178	28 20	0.0 110	-08	-16 118	66.5	29.4				
								124.8	51.5				
								80.6	61.1				
								14.1	31.7				
										399.3		331.3	

Sixth St Extension
Grade Change

SECTION

46 78.18
33.71

STA.	ELEVA.	GRADE	CUT OR FILL			
			LEFT	C	RIGHT	
46+81.89	3893	3892	3878	+17.08 74.90	7.7 7.0	-13.70
47+1510-PC 8-2205	3816	3795	3780	+14.5 70.0	7.1 7.0	-16.70
48+765	3747	3732	3717	0.0 15.0	7.1 7.0	-12.10
49+971	3634	3619	3651	0.0 15.0	7.0 7.0	-12.10
48+276	3621	3606	3591			
49+038	3551	3541	3521			
49+586	3493	3478	3463			
49+993	3420	3415	3400			
49+997	3369	3354	3339			
49+005-FC	3318	3297	3282			

Plotted old X sec for
ground line & New Grade

7 15.6
6 81.89
33.71

56

AREAS		CUBIC YDS.		REMARKS
EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	
14.1	31.7			
15.6	58.2	9.7	36.3	BN 3750 TOP 47.15.100%
1.5	26.5			
1.5	53.0	0.6	21.6	
0	26.5			
	54.6		22.3	27.50 27.20 19.20 19.20 27.05 25.68 25.68 23.20 23.10
	28.1			
	54.1		22.0	27.50 27.20 19.20 19.20 27.05 25.68 25.68 23.20 23.10
	26.0			
	70.0		28.5	
	44.0			TOP 46.1 S End Hill 45.10 8.60 2.90 -1.30
	92.0		37.5	
	48.0			N End Hill 41.10 8.60 10.20 1.30
	86.5		35.2	
	38.5			
	72.5		29.5	
	34.0			
	70.0		29.7	
	39.0			
	89.1		54.5	
	44.1			
		10.3	31.71	

25.39

40.0

St. 46 St. Extension
Grade Change

SECTION

STA.	ELEVA.	GRADE	CUT OR FILL					AREAS		CUBIC YDS.		REMARKS
			LEFT	C		RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.		
49+2741	3212	3205	3191	-08 160	-27 100	-04 80	-14 80	-14 100	44.1 ✓			
									91.6		60.0 ✓	
4128	3113	3114	3103	-09 160	-27 100	-03 80	-15 80	-16 100	47.5 ✓			
									1118		73.3 ✓	
49818	3021	3036	3021	-14 181	-14 100	-30 100	-11 80	-30 100	64.3 ✓			49+818 Change of Right of Way 132%
									1340		99.3 ✓	
50+3318	2921	2928	2921	-16 91	-16 100	-30 100	-15 80	-30 100	69.7 ✓			
									1347		99.8 ✓	
49818	2840	2847	2840	-15 100	-16 100	-30 100	-15 80	-30 100	65.0 ✓			
									1382		102.4 ✓	
51+1518	2768	2775	2768	-18 107	-16 100	-30 100	-15 80	-30 100	73.2 ✓			
									1421		83.7 ✓	
450	2711	2738	2711	-15 100	-16 100	-30 100	-15 80	-30 100	68.9 ✓			
									1485		137.5 ✓	
52+0	2645	2672	2645	-30 190	-16 100	-30 100	-18 80	-30 100	79.6 ✓			
									1495		147.7 ✓	
450	2585	2612	2585	-30 190	-27 100	-18 80	-18 80	-30 100	79.9 ✓			
									1496		138.5 ✓	
53+0	2522	2560	2522	-14 151	-24 100	-14 80	-14 80	-25 100	69.7 ✓			
									1383		128.1 ✓	
									68.6			
											1070.3 ✓	

Note Grade is for perm

31.4
41.5
10'
31.82
50'

2522

SWAY Extension
Grade Change

SECTION

SECTION

SP

STA.	ELEVA.	GRADE	CUT OR FILL					AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.			
52+50	2486	2509	2412	15	18	19	24	22	686			
54+0	2481	2458	2421	22	18	18	20	22	629	1315	121.7	
59+8	2411	2428	2411	24	11	11	24	18	624	1250	45.9	
59+8	2371	2398	2391	22	18	18	18	18	59.8	1232	90.5	
59+8	2371	2398	2391	18	18	18	18	18	67.1	1269	94.0	
59+8	2371	2398	2391	18	18	18	18	18	67.1	1269	94.0	

See Page 16 this Book for this Sec. and ahead sec's

Sta	Exc.	Fill	Total	Excav.	Embank.
0+00 to 13+63.8	5,586.8	13,173.3			
13+63.8 to 25+62.36	17,743.7	6,940.7			
25+62.36 to 54+99.8	7,014.9	9,705.9			
54+99.8 to 59+11.39		1,143.6			
59+11.39 to 89+92.8	57.6	4,715.3			
89+92.8 to 154+11	6,143.6	7,284.9			
	Cut 36,546.6	Fill 42,963.7			
		36,546.6			
	Excess	6,417.1			
	Fill				

Sta 25497
" 54998
Page 49 to 58
Total 7014.9 9405.9

352.1

ENGINEERING DEPARTMENT,
CITY OF SAN DIEGO,
CALIFORNIA.

107 | 2,000 2.9
107.
930
826 0.19
1423 5.3

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

38.30
67
37.63

MINUTES.	LKS.	MINUTES.	LKS.	MINUTES.	LKS.
1	21 $\frac{1}{2}$	21	49	41	95 $\frac{1}{2}$
2	4 $\frac{1}{2}$	22	51 $\frac{1}{2}$	42	98
3	7	23	53 $\frac{1}{2}$	43	100 $\frac{1}{2}$
4	9 $\frac{1}{2}$	24	56	44	102 $\frac{1}{2}$
5	11 $\frac{1}{2}$	25	58 $\frac{1}{2}$	45	105
6	14	26	60 $\frac{1}{2}$	46	107 $\frac{1}{2}$
7	16 $\frac{1}{2}$	27	63	47	109 $\frac{1}{2}$
8	18 $\frac{1}{2}$	28	65 $\frac{1}{2}$	48	112
9	21	29	67 $\frac{1}{2}$	49	114 $\frac{1}{2}$
10	23 $\frac{1}{2}$	30	70	50	116 $\frac{1}{2}$
11	25 $\frac{1}{2}$	31	72 $\frac{1}{2}$	51	119
12	28	32	74 $\frac{1}{2}$	52	121 $\frac{1}{2}$
13	30 $\frac{1}{2}$	33	77	53	123 $\frac{1}{2}$
14	32 $\frac{1}{2}$	34	79 $\frac{1}{2}$	54	126
15	35	35	81 $\frac{1}{2}$	55	128 $\frac{1}{2}$
16	37 $\frac{1}{2}$	36	84	56	130 $\frac{1}{2}$
17	39 $\frac{1}{2}$	37	86 $\frac{1}{2}$	57	133
18	42	38	88 $\frac{1}{2}$	58	135 $\frac{1}{2}$
19	44 $\frac{1}{2}$	39	91	59	137 $\frac{1}{2}$
20	46 $\frac{1}{2}$	40	93 $\frac{1}{2}$	60	140

4274
102968
4274
5329

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS
0		0		0		0	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

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