

EARTHWORK						
LOCATION		EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE, 25%	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS
IL ROUTE 15		CU YD	CU YD	CU YD	CU YD	CU YD
PRE-STAGE 1*						
671+00	675+00	58	44	-101	-58	160
675+00	680+00	23	17	-560	-543	652
680+00	685+00	43	32	-356	-324	512
685+00	686+00	45	34	-33	1	
727+00	730+00	108	81	-81		99
730+00	735+00	6	5	-69	-65	1,289
735+00	740+00					1,314
740+00	742+00	41	31	-88	-57	182
PRE-STAGE 1 SUBTOTAL		324	243	-1,288	-1,045	4,208
STAGE 1						
698+00	705+00	241	181	-2,070	-1,889	
705+00	710+00	57	43	-20,532	-20,489	
710+00	715+00	232	174	-7,279	-7,105	
715+00	720+00	160	120	-392	-272	
720+00	723+80	124	93	-177	-84	
STAGE 1 SUBTOTAL		814	611	-30,450	-29,840	
STAGE 2						
699+00	705+00	120	90	-4,318	-4,228	
705+00	710+00	517	388	-19,915	-19,527	
710+00	715+00	88	66	-3,880	-3,814	
715+00	720+00	82	62	-439	-378	
720+00	723+80	70	53	-393	-341	
STAGE 2 SUBTOTAL		877	658	-28,945	-28,287	
STAGE 3						
671+00	675+00	56	42	-145	-103	
675+00	680+00	188	141	-288	-147	
680+00	685+00	147	110	-269	-159	
685+00	686+00					
727+00	730+00	81	61	-61		
730+00	735+00	366	275		275	
735+00	740+00	284	213		213	
740+00	742+00	108	81		81	
STAGE 3 SUBTOTAL		1,230	923	-763	160	
NON-SPECIAL WASTE REMOVAL		400				
IL ROUTE 15 SUBTOTAL		3,645	2,434	-61,446	-59,012	4,208
IL ROUTE 13						
8+00	13+00	138	104	-105	-2	
IL ROUTE 13 SUBTOTAL		138	104	-105	-2	
TOTAL		3,783	2,537	-61,551	-59,014	4,208

EARTH EXCAVATION	3,785	CU YD
SHORTAGE	59,010	CU YD
BORROW EXCAVATION	78,680	CU YD
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS	4,208	CU YD

SHRINKAGE FACTOR (SF) = 25%; BORROW EXCAVATION = (EARTHWORK SHORTAGE)/(1-SF) ASSUMED THAT 1' OF UNSUITABLE MATERIAL WILL BE REMOVED AND DISPOSED IN PRE-STAGE 1 UNDER TEMPORARY PAVEMENT.

* FILL FOR REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS FOR EAST CROSSOVER WILL BE PAID AS SUBBASE GRANULAR MATERIAL, TYPE B

STABILIZED SUBBASE 6"				
LOCATION		AREA (SQ. FT.)	AREA (SQ. YD.)	
WB IL ROUTE 15				
699+00.00	TO 703+61.17	11,811	1312	
707+70.93	TO 709+15.77	3,775	419	
711+03.36	TO 713+40.00	6,390	710	
EB IL ROUTE 15				
700+00.00	TO 704+93.31	13,006	1445	
709+03.06	TO 709+64.60	1,582	176	
711+54.21	TO 715+25.00	9,368	1041	
TOTAL		5,103		

AGGREGATE BASE COURSE, TYPE A						
LOCATION		WIDTH OF SHOULDER (FOOT)	SURFACE AREA (SQ FT)	AVERAGE DEPTH OF BASE COURSE (FOOT)	QTY (CU YD)	QTY (TON)
WB IL ROUTE 15						
689+60.00	TO 699+00.00	LT 3	2,820	0.25	26	54
699+00.00	TO 702+54.26	LT 13	4,605	0.30	52	106
699+00.00	TO 702+54.26	RT 9	3,188	0.25	30	62
702+54.26	TO 703+47.32	LT 13	1,210	0.30	14	28
702+54.26	TO 703+61.17	RT 9	962	0.25	9	19
707+57.07	TO 709+02.64	LT 13	1,892	0.42	29	60
707+70.93	TO 709+15.77	RT 9	1,304	0.25	12	25
710+88.84	TO 711+95.53	LT 13	1,387	0.42	21	44
711+03.36	TO 711+95.53	RT 9	830	0.41	13	26
711+95.53	TO 713+40.00	LT 13	1,878	0.42	29	59
711+95.53	TO 713+40.00	RT 6	867	0.41	13	27
713+40.00	TO 718+72.19	LT 13	6,918	0.42	107	219
713+40.00	TO 718+70.82	RT 6	3,185	0.42	49	101
718+70.82	TO 723+69.93	RT 6	2,995	0.42	46	95
EB IL ROUTE 15						
691+70.00	TO 700+00.00	RT 3	2,490	0.25	23	47
697+43.62	TO 700+00.00	LT 3	769	0.25	7	15
700+00.00	TO 704+00.23	LT 9	3,602	0.30	41	83
700+00.00	TO 704+00.23	RT 13	5,203	0.25	49	100
704+00.23	TO 704+93.31	LT 9	838	0.30	9	19
704+00.23	TO 705+07.16	RT 13	1,390	0.25	13	27
709+03.06	TO 709+64.60	LT 9	554	0.42	9	18
709+16.91	TO 709+77.81	RT 13	792	0.41	12	25
711+54.21	TO 712+62.22	LT 9	972	0.42	15	31
711+69.14	TO 712+62.22	RT 13	1,210	0.41	18	38
712+62.22	TO 715+25.00	LT 6	1,577	0.42	24	50
712+62.22	TO 715+25.00	RT 13	3,416	0.41	52	106
715+25.00	TO 718+70.82	LT 6	2,075	0.42	32	66
715+25.00	TO 718+70.82	RT 9	3,112	0.42	48	98
718+70.82	TO 723+69.93	LT 9	4,492	0.42	69	142
718+70.82	TO 723+69.93	RT 13	6,488	0.42	100	205
IL ROUTE 15 EXIT RAMP						
18+00.00	TO 18+69.17	RT 6	415	0.42	6	13
18+00.00	TO 21+98.42	LT 6	2,391	0.42	37	76
TOTAL					2,082	

TONS = 2.05*(CU. YD. OF AGGREGATE BASE COURSE)

BITUMINOUS SCHEDULE											
LOCATION	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90			POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50			BITUMINOUS MATERIALS (PRIME COAT)		AGGREGATE (PRIME COAT)		
	AREA (SQ. FT.)	DEPTH (IN)	QTY (TON)	AREA (SQ. FT.)	DEPTH (IN)	QTY (TON)	RATE (GAL/SQ YD)	QTY (GAL)	RATE (LBS/SQ YD)	QTY (TON)	
WB IL ROUTE 15											
699+00.00	TO 702+54.26	8,502	1.5	79	8,502	1.5	79	0.05	47.2	3	1.4
711+95.53	TO 713+40.00	3,498	1.5	33	3,498	1.5	33	0.05	19.4	3	0.6
EB IL ROUTE 15											
700+00.00	TO 704+00.23	9,606	1.5	90	9,606	1.5	90	0.05	53.4	3	1.6
712+62.23	TO 715+25.00	6,248	1.5	58	6,248	1.5	58	0.05	34.7	3	1.0
WB IL ROUTE 15 / RESURFACING											
713+40.00	TO 723+69.90	32,230	1.5	301				0.05	179.1	3	5.4
EB IL ROUTE 15 / RESURFACING											
715+25.00	TO 723+80.50	20,219	1.5	189				0.05	112.3	3	3.4
TOTALS				749			260		446		13.4

NOTE: AGGREGATE (PRIME COAT) IS ASSUMED TO BE 3 LBS/SQ YD SURFACE COURSE AND BINDER COURSE ASSUMED TO BE 112 LBS/SQYD/INCH

POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50						
WB IL ROUTE 15	DISTANCE BETWEEN STA	AVG DEPTH OF LEVELING BINDER (INCH)	WIDTH OF RESURFACING AREA (FOOT)	AVERAGE WIDTH (FOOT)	SURFACE AREA (SQ. YD.)	TONS
713+40		1.88	4.23			
714+00	60	1.49	9.86	7.05	47	4.4
714+50	50	1.13	10.11	9.99	55	4.1
715+00	50	1.13	9.48	9.80	54	3.4
715+50	50	1.13	9.62	9.55	53	3.3
716+00	50	1.91	4.34	6.98	39	3.3
716+50	50	1.85	3.81	4.08	23	2.4
717+00	50	1.91	3.14	3.48	19	2.0
717+50	50	2.03	2.42	2.78	15	1.7
718+00	50	1.85	3.47	2.95	16	1.8
718+50	50	1.91	3.70	3.59	20	2.1
719+00	50	1.79	5.53	4.62	26	2.6
719+50	50	1.85	3.90	4.72	26	2.7
720+00	50	1.91	3.80	3.85	21	2.2
720+50	50	1.91	3.20	3.50	19	2.1
721+00	50	1.37	5.72	4.46	25	2.3
721+50	50	1.85	3.79	4.76	26	2.4
722+00	50	1.97	2.53	3.16	18	1.9
722+50	50	1.55	5.20	3.87	21	2.1
723+00	50	2.15	1.23	3.22	18	1.8
723+50	50	1.13	22.31	11.77	65	6.0
EB IL ROUTE 15						
715+50		1.13	9.32			
716+00	50	2.15	2.12	5.72	32	2.9
716+50	50	1.97	3.36	2.74	15	1.8
717+00	50	1.67	9.02	6.19	34	3.5
717+50	50	1.61	13.11	11.07	61	5.6
718+00	50	1.13	14.70	13.90	77	5.9
718+50	50	1.13	12.71	13.70	76	4.8
719+00	50	1.31	14.44	13.58	75	5.1
719+50	50	1.55	12.80	13.62	76	6.0
720+00	50	1.13	13.87	13.34	74	5.5
720+50	50	1.37	13.42	13.65	76	5.3
721+00	50	1.37	12.29	12.85	71	5.5
721+50	50	1.49	10.53	11.41	63	5.1
722+00	50	1.73	6.51	8.52	47	4.3
722+50	50	1.73	8.01	7.26	40	3.9
723+00	50	1.73	7.80	7.91	44	4.2
723+80	80	0.00	0.00	3.90	35	1.7
					TOTAL	126

QUANTITY OF LEVELING BINDER IS CALCULATED AS FOLLOWS: (AVERAGE DEPTH OF LEVELING BINDER) x (SURFACE AREA) x (112 LBS/SQ YD/IN)/2000