

EARTHWORK										
1	2	3	4	5	6	7	8	9	10	
LOCATION	EARTH EXCAVATION	ROCK EXCAVATION	UNDERCUT	TOPSOIL STRIPPING & EARTH EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	SUITABLE EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTH BALANCE WASTE(+) OR SHORTAGE(-)	TOPSOIL EXCAVATION & PLACEMENT	
STATION TO STATION	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	
STAGE 1										
IL 47										
6277+00 TO 6311+00	10430			11877	9126	7823	36365	-28543	2751	
6311+00 TO 6636+34	84934	470	17211	77984	77765	64171	182501	-118331	17430	
WHITEWILLOW RD										
601+17 TO 608+19	1151		1530		1222	863	85	778	308	
JOLIET RD										
701+00 TO 707+31	1031					773	327	446		
TOWNHALL RD										
903+59 TO 907+08	318					239	2	237		
US 52										
995+00 TO 1008+13	695					521	1178	-657		
1008+72 TO 1022+05	796					597	169	428		
CHICAGO RD										
1111+22 TO 1117+34	2843				-234	2132	7	2125	234	
PLATTVILLE RD										
1300+92 TO 1309+05	4922				-220	3692	112	3580	220	
HELMAR RD										
1509+91 TO 1516+50	2568		278		40	1926	64	1862	238	
STAGE 1A & 1B										
IL 47										
6449+54 TO 6451+00	117				-20	88	792	-704	20	
US 52										
996+37 TO 1008+08	406		628		628	305	400	-96		
1008+60 TO 1020+44	126		998		938	95	390	-296	60	
STAGE 2										
IL 47										
6451+00 TO 6451+77	50				-24	38	398	-361	24	
6591+00 TO 6635+87	10637			2573	-22	7978	15465	-7487	2595	
US 52										
995+00 TO 1007+96	484		2461		2008	363	254	109	453	
1008+60 TO 1022+05	211		763		529	158	439	-281	234	
STAGE 3										
IL 47										
6313+00 TO 6635+87	150848	442	22187	19987	18025	113578	78478	35100	24149	
JOLIET RD										
705+00 TO 708+00							496	-496		
QUARRY RD										
800+77 TO 801+95	230				-65	173	214	-42	65	
TOWNHALL RD										
900+50 TO 907+08	702				-140	527	46	481	140	
CHICAGO RD										
1102+50 TO 1108+77	1239		1513		1294	929	15	914	219	
LISBON CENTER RD										
1201+50 TO 1208+08	1359		1496		1072	1019	529	490	424	
NEWARK RD										
1402+00 TO 1408+08	219		1737		1433	164	436	-272	304	
HELMAR RD										
1501+03 TO 1508+09	1777				-148	1333	216	1117	148	

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STATION TO STATION	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	
STAGE 3A										
US 52										
996+37 TO 1008+60	95		1190		918	71	174	-103	272	
1015+00 TO 1020+44	30		141		92	23	72	-50	49	
STAGE 4										
IL 47										
6260+00 TO 6311+50	42636			168	-8791	31977	5127	26850	8959	
6311+50 TO 6318+50	1113			129	-174	835	2120	-1285	303	
WHITEWILLOW RD										
609+79 TO 616+00	1466		1045		546	1100	1765	-666	499	
JOLIET RD										
701+00 TO 709+11	1429				-447	1072	118	954	447	
TOTAL										
	324862	912	53178	112718	105351	244559	328754	-84196	60545	

USE PAY ITEM TOTALS BELOW

**INFORMATION:**  
SHRINKAGE FACTORS: EARTH EXCAVATION: 25%  
ROCK EXCAVATION:

UC = UNDERCUT (FROM CROSS-SECTIONS)  
C = CUT (FROM CROSS-SECTIONS)  
TSE = TOPSOIL STRIPPING & EARTH EXCAVATION  
TSP = TOPSOIL EXCAVATION & PLACEMENT (COLUMN 8)

COLUMN 1 - LOCATION FROM PLANS  
COLUMN 2 - CUT QUANTITIES FROM CROSS SECTIONS ( C )  
COLUMN 3 - QUANTITIES FROM CROSS SECTIONS  
COLUMN 4 - UNDERCUT QUANTITIES FROM CROSS SECTIONS (UC)  
COLUMN 5 - TOPSOIL STRIPPING & EARTH EXCAVATION QUANTITIES FROM CROSS SECTIONS (TSE)  
COLUMN 6 - CUT MATERIAL THAT IS DETERMINED TO BE EITHER UNSTABLE OR UNSUITABLE FOR USE IN EMBANKMENT  
= COLUMN 4 (UC) + COLUMN 5 (TSE)- COLUMN 10 (TSP)  
COLUMN 7 - [(COLUMN 2) x (1-EARTH EXCAVATION SHRINKAGE FACTOR) + COLUMN 3 x (1-ROCK EXCAVATION SHRINKAGE FACTOR)]  
COLUMN 8 - QUANTITIES FROM CROSS SECTIONS  
COLUMN 9 - = COLUMN 7 - COLUMN 8  
COLUMN 10 - QUANTITIES FROM CROSS SECTIONS, THESE QUANTITIES ARE NOT INCLUDED IN EARTH EXCAVATION OR EMBANKMENT

**PAY ITEMS:**  
COLUMN #2 IS EARTH EXCAVATION = 324862 CU YD  
COLUMN #3 IS ROCK EXCAVATION = 912 CU YD  
COLUMN #6 IS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL = 105351 CU YD  
COLUMN #9 IS FURNISHED EXCAVATION = 84196 CU YD  
COLUMN #10 IS TOPSOIL EXCAVATION & PLACEMENT = 60545 CU YD

**NOTES:**

- THE TOP 12 INCHES OF THE EXISTING SOILS WITHIN THE LIMITS OF THE PROPOSED PAVEMENT SHALL BE REMOVED (TSE) AS SHOWN IN THE CROSS SECTIONS. THIS WORK SHALL BE PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS, OR IF USED FOR TOPSOIL PURPOSES, TOPSOIL EXCAVATION AND PLACEMENT (TSP).
- ALL SOILS SHALL BE TESTED BEFORE BEING INCORPORATED INTO THE NEW EMBANKMENT. THE ENGINEER RESERVES THE RIGHT TO RE-CLASSIFY ANY OF THE UNSUITABLE MATERIAL AND USE IT AS EMBANKMENT MATERIAL FOR SIDESLOPES OR IN SOD COVERED RAISED MEDIANS.
- THE EXISTING SUBGRADE SOILS MAY BE PRONE TO SWELLING UPON WETTING. THEREFORE, AT LOCATIONS WHERE NEW EMBANKMENT FILL HEIGHT IS GREATER THAN 2 FEET AND LESS THAN 8 FEET, THE TOP 6 INCHES OF SUBGRADE SOILS SHOULD BE DISKED, DRIED, AND RECOMPACTED BETWEEN +2% AND +4% OF THE OPTIMUM MOISTURE CONTENT AND BETWEEN 90% AND 95% OF THE STANDARD DRY DENSITY.
- ALL SOILS USED FOR EMBANKMENT SHALL HAVE LL LESS THAN 50%, PI BETWEEN 12% AND 20%, A MAXIMUM DRY DENSITY GREATER THAN 90 PCF, AND ORGANIC CONTENT LESS THAN 10%.
- REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL INCLUDES EXCAVATION OF MATERIAL.