F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
315	34-4	HANCOCK	452	19
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

D-98-551-02

CONTRACT NO. 72680

EARTHWORK SCHEDULE

LOCATION	DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12
		THEORETICAL		TOPSOIL ADJUSTMENT		TOPSOIL PLACEMENT	ADJUSTED EARTHWORK			TOPSOIL EXCAVATION AND PLACEMENT	EXCESS (BORROW)	CUMALTIVE EXCESS (BORROW)	FURNISHED EXCAVATION
		CUT	FILL	4" CUT	4" FILL	4"	CUT	FILL	FILL x 1.25				
		CU YD				SQ YD	CU YD						
STAGE 1													
MAINLINE	927+00 TO 940+00	3,706	207	185	0	1,665	3,891	207	259	185	3,447	3,447	(2,758)
	940+00 TO 955+00	24,491	34,965	981	668	14,841	25,472	34,297	42,871	1,649	(19,048)	(15,601)	15,239
	955+00 TO 970+00	90,137	39,326	1,643	2,066	33,381	91,780	37,260	46,575	3,709	41,496	25,895	(33,197)
	970+00 TO 985+00	64,333	16,763	925	236	10,449	65,258	16,527	20,659	1,161	43,438	69,333	(34,751)
	985+00 TO 1000+00	13,759	7,588	610	251	7,749	14,369	7,337	9,171	861	4,337	73,670	(3,469)
	1000+00 TO 1015+00	1,043	19,443	269	437	6,354	1,312	19,006	23,758	706	(23,152)	50,519	18,521
	1015+00 TO 1030+00	2,233	14,349	375	332	6,363	2,608	14,017	17,521	707	(15,620)	34,898	12,496
	1030+00 TO 1045+0	4,067	7,893	587	158	6,705	4,654	7,735	9,669	745	(5,760)	29,139	4,608
	1045+00 TO 1060+0	7,421	6,904	649	150	7,191	8,070	6,754	8,443	799	(1,172)	27,967	937
	1060+00 TO 1075+0	49,490	4,724	971	82	9,477	50,461	4,642	5,803	1,053	43,606	71,573	(34,884)
	1075+00 TO 1090+0	102,081	3,423	1,518	97	14,535	103,599	3,326	4,158	1,615	97,827	169,399	(78,261)
	1090+00 TO 1105+00	57,289	58,698	1,055	885	17,460	58,344	57,813	72,266	1,940	(15,862)	153,537	12,690
	1105+00 TO 1120+00	29,860	14,223	771	365	10,224	30,631	13,858	17,323	1,136	12,173	165,709	(9,738)
	1120+00 TO 1135+00	23,282	44,231	6,833	612	67,005	30,115	43,619	54,524	7,445	(31,854)	133,856	25,483
	1135+00 TO 1150+00	3,934	59,337	550	827	12,393	4,484	58,510	73,138	1,377	(70,031)	63,825	56,024
	1150+00 TO 1165+00	2,062	44,070	410	914	11,916	2,472	43,156	53,945	1,324	(52,797)	11,028	42,238
	1165+00 TO 1174+00	1,878	19,895	176	329	4,545	2,054	19,566	24,458	505	(22,909)	(11,881)	18,327
TR 198		1,179	27	39	8	423	1,218	19	24	47	1,147	(10,733)	(918)
TR 222		162	734	27	9	324	189	725	906	36	(753)	(11,487)	603
TR 232		301	158	49	20	621	350	138	173	69	109	(11,378)	(87)
CH 17		124	15	17	2	171	141	13	16	19	106	(11,272)	(85)
ACCESS ROAD #2		1,864	1,341	472	178	5,850	2,336	1,163	1,454	650	232	(11,040)	(186)
STAGE 1 TOTAL		484,696	398,314	19,112	8,626	249,642	503,808	389,688	487,110	27,738	(11,040)	(11,040)	8,832
STAGE 2													
MAINLINE	927+00 TO 940+00	291	4,372	213	322	4,815	504	4,050	5,063	535	(5,094)	(5,094)	4,075
	940+00 TO 955+00	9,970	1,412	1,773	68	16,569	11,743	1,344	1,680	1,841	8,222	3,129	(6,578)
	955+00 TO 970+00	12,919	517	1,493	80	14,157	14,412	437	546	1,573	12,293	15,421	(9,834)
	970+00 TO 985+00	23,449	5,465	1,176	267	12,987	24,625	5,198	6,498	1,443	16,685	32,106	(13,348)
	985+00 TO 1000+00	3,185	4,480	513	206	6,471	3,698	4,274	5,343	719	(2,364)	29,742	1,891
TR 198		485	833	387	39	3,834	872	794	993	426	(547)	29,196	437
STAGE 2 TOTAL		50,299	17,079	5,555	982	58,833	55,854	16,097	20,121	6,537	29,196	29,196	(23,357)
STAGE 3													
MAINLINE	988+00 TO 1000+00	724	7,161	153	439	5,328	877	6,722	8,403	592	(8,118)	(8,118)	6,494
	1000+00 TO 1015+00	2,333	17,641	659	756	12,735	2,992	16,885	21,106	1,415	(19,529)	(27,647)	15,623
	1015+00 TO 1030+00	4,210	14,930	588	708	11,664	4,798	14,222	17,778	1,296	(14,276)	(41,922)	11,420
	1030+00 TO 1045+0	1,533	13,292	693	626	11,871	2,226	12,666	15,833	1,319	(14,926)	(56,848)	11,940
	1045+00 TO 1060+0	6,089	11,803	835	529	12,276	6,924	11,274	14,093	1,364	(8,533)	(65,380)	6,826
	1060+00 TO 1075+0	25,383	2,289	1,294	243	13,833	26,677	2,046	2,558	1,537	22,583	(42,798)	(18,066)
	1075+00 TO 1090+0	36,570	6,372	1,102	457	14,031	37,672	5,915	7,394	1,559	28,719	(14,079)	(22,975)
	1090+00 TO 1105+00	12,932	81,500	613	1,794	21,663	13,545	79,706	99,633	2,407	(88,495)	(102,573)	70,796
	1105+00 TO 1120+00	3,860	11,760	1,102	549	14,859	4,962	11,211	14,014	1,651	(10,703)	(113,276)	8,562
	1120+00 TO 1135+00	1,007	5,927	559	723	11,538	1,566	5,204	6,505	1,282	(6,221)	(119,497)	4,977
	1135+00 TO 1150+00	522	708	469	0	4,221	991	708	885	469	(363)	(119,860)	290
	1150+00 TO 1165+00	464	13,708	255	9	2,376	719	13,699	17,124	264	(16,669)	(136,529)	13,335
	1165+00 TO 1174+00	424	18	222	18	2,160	646	0	0	240	406	(136,123)	(325)
TR 232		351	270	50	62	1,008	401	208	260	112	29	(136,094)	(23)
CH 28		452	5,858	2	5	63	454	5,853	7,316	7	(6,869)	(142,963)	5,495
STAGE 3 TOTAL		96,854	193,237	8,596	6,918	139,626	105,450	186,319	232,899	15,514	(142,963)	(142,963)	114,370
PROJECT TOTAL		631,849	608,630	33,263	16,526	448,101	665,112	592,104	740,130	49,789	(124,807)	(124,807)	99,846

NOTES:

A MASS DIAGRAM FOR THE EARTHWORK IS NOT INCLUDED IN THESE PLANS AND WILL NOT BE AVAILABLE TO THE CONTRACTOR UPON REQUEST. THE EARTHWORK SHEDULAE HAS BEEN INCLUDED IN THESE PLANS TO TAKE THE PLACE OF THE NEED FOR A MASS DIAGRAM. THE SHEDULE GIVES QUANTITIES IN "COLUMN 10" FOE EXCESS EXCAVATION OR BORROW REQUIRED IN EACH SPECIFIED AREA ALONG THE LIMITS OF THE PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE REQUIRED HAUL DISTANCES AND QUANTITIES FROM THE INFORMATION SHOWN.

ALL TOPSOIL NECESSARY FOR PLACEMENT ON THIS PROJECT SHALL BE TAKEN FROM CUT AREAS WITHIN THE CONSTRUCTION LIMITS, AND ADDITIONAL QUANTITIES FOR FURNISHED EXCAVATION ARE INCLUDED TO REPLACE THE MATERIAL LOSS. TOPSOIL EXCAVATION AND PLACEMENT WILL BE MEASURED FOR PAYMENT.

QUANTITIES FOR THE DEGRADING OF EXISTING CONDITIONS HAVE BEEN INCLUDED IN THE APPROXIMATE STATION RANGE WHERE SUCH DEGRADING TAKES PLACE.

A SHRINKAGE FACTOR OF 20% WAS USED TO DETERMINE THE EXCESS AND BORROW QUANTITIES.
SHRINKAGE FACTOR = 1.00/(1.00-0.20) = 1.00/0.80 = 1.25

COLUMN 5 = (COLUMN 3 + COLUMN 4) x 9
COLUMN 6 = COLUMN 1 + COLUMN 3
COLUMN 7 = COLUMN 2 - COLUMN 4
COLUMN 8 = COLUMN 7 x 1.25 (SHRINKAGE FACTOR)
COLUMN 9 = (COLUMN 3 + COLUMN 4) x 1.0 (SHRINKAGE FACTOR)
COLUMN 10 = COLUMN 6 - COLUMN 8 - COLUMN 9
COLUMN 12 = COLUMN 7 - (COLUMN 6 - COLUMN 9) X 0.80

EARTH EXCAVATION = COLUMN 6 - COLUMN 9
(PAY ITEM QUANTITY) = 615,323 CU YD

FURNISHED EXCAVATION = COLUMN 12
(PAY ITEM QUANTITY) = 99,846 CU YD

TOPSOIL EXCAVATION AND PLACEMENT = COLUMN 9
(PAY ITEM QUANTITY) = 49,789 CU YD

ESTIMATED QUANTITIES

ITEMS	UNIT	TOTAL
THE FOLLOWING ITEMS INCLUDE ESTIMATED QUANTITIES FOR HANDLING FIELD TILES ACROSS MAINLINE (SEE SPECIAL PROVISIONS)		
EXPLORATORY TRENCH, 52" DEPTH	FOOT	1,500
MISCELLANEOUS CONCRETE	CU YD	50
STORM SEWER (SPECIAL) 6"	FOOT	4,000
STORM SEWER (SPECIAL) 8"	FOOT	1,000
STORM SEWER (SPECIAL) 10"	FOOT	1,000
STORM SEWER (SPECIAL) 12"	FOOT	1,000
PIPE DRAINS - 6"	FOOT	400
PIPE DRAINS - 8"	FOOT	400
PIPE DRAINS - 10"	FOOT	200
PIPE DRAINS - 12"	FOOT	200
PIPE DRAINS - 15"	FOOT	200
TRENCH BACKFILL	CU YD	500
THE FOLLOWING ITEMS INCLUDE ESTIMATED QUANTITIES FOR HANDLING TEMPORARY EROSION CONTROL (SEE SPECIAL PROVISIONS)		
SEEDING, CLASS 7	ACRE	40
MULCH METHOD 1	ACRE	40
TEMPORARY DITCH CHECKS	EACH	100
AGGREGATE (EROSION CONTROL)	TON	1,500
TEMPORARY EROSION CONTROL SEEDING	LBS	45,000
INLET AND PIPE PROTECTION	EACH	30
PERIMETER EROSION BARRIER	FOOT	9,500
EARTH EXCAVATION FOR EROSION CONTROL	CU YD	500
THE FOLLOWING ITEMS INCLUDE ESTIMATED QUANTITIES FOR HANDLING PERMANENT SEEDING AFTER TEMPORARY/TEMPORARY EROSION CONTROL SEEDING HAS BEEN PLACED AND ESTABLISHED ON FINISHED HIGHLY ERODABLE SLOPES (TO AVOID FURTHER GROUND DISTURBANCE)		
MOWING	ACRE	20
INTERSEEDING, CLASS 2	ACRE	20
THE FOLLOWING ITEMS INCLUDE ESTIMATED QUANTITIES (ADDITIONAL TO OTHER LOCATIONS ALREADY CALLED OUT IN THE PLANS) AT LOCATIONS (SUCH AS UNDER PROPOSED CULVERTS OR ROADWAYS) AS DESIGNATED BY THE ENGINEER (SEE SPECIAL PROVISIONS).		
ROCKFILL - EMBANKMENT	TON	15,500
ROCKFILL FOUNDATION	TON	2,500
ROCKFILL - SUBGRADE	TON	6,000
EARTH EXCAVATION (ROCKFILL)	CU YD	6,000
GRANULAR CULVERT BACKFILL	CU YD	3,000
THE FOLLOWING ITEMS INCLUDE ESTIMATED QUANTITIES FOR HANDLING EXISTING AGGREGATE ENTRANCES THAT ARE NOT RECONSTRUCTED THESE INCLUDE THOSE ENTRANCES PREVIOUSLY COMPLETED IN ADJACENT SECTIONS.		
PREPARATION OF BASE	SQ YD	850
AGGREGATE SURFACE COURSE, TYPE B	TON	2,500
AGGREGATE BASE REPAIR	TON	100
THE FOLLOWING ITEMS INCLUDE ESTIMATED QUANTITIES TO INSTALL FENCE AT LOCATIONS WHERE PROPERTY OWNERS HAVE NOT RELOCATED/INSTALLED NEW FENCE WHERE EXISTING FENCE IS CONTAINING LIVESTOCK.		
TEMPORARY FENCE	FOOT	2,000

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP 315
SCHEDULES OF QUANTITIES

DRAWN BY TJD
DATE 1/31/06 CHECKED BY JRB

V:/2173/21730002