

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2666	00-00254-01-BR	LAKE	70	63
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

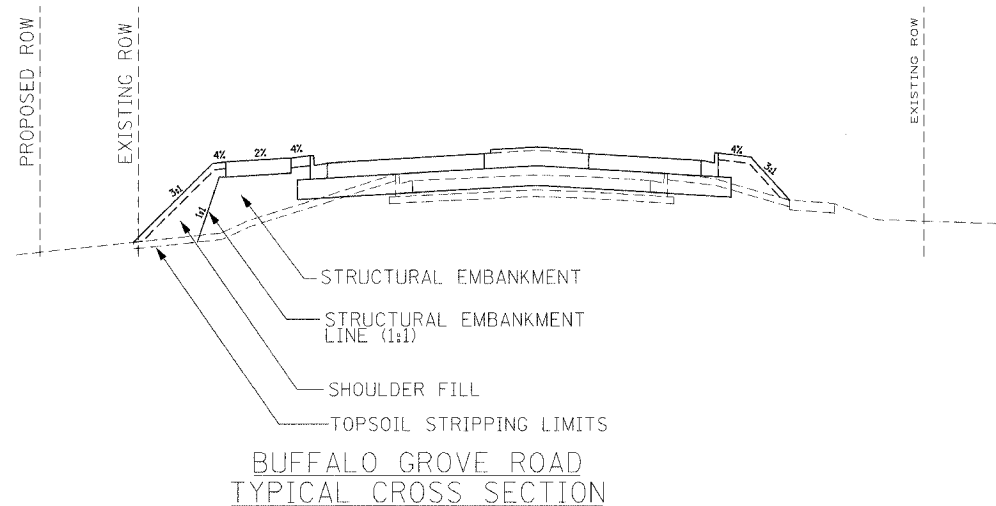
PROJECT NO. BHM-8003(213)
CONTRACT NO. 83875

EARTHWORK GENERAL NOTES

- ALL EARTHWORK QUANTITIES ARE CALCULATED BY THE METHOD OF AVERAGE END AREAS USING THE PLAN CROSS SECTIONS. SHRINKAGE FACTOR, ASSUMED TO BE 15% FOR THIS PROJECT, ARE ESTIMATED FOR THE SOLE PURPOSE OF DETERMINING A BALANCE OF EARTHWORK. THE CONTRACTOR SHALL ESTIMATE HIS OWN SHRINKAGE FACTORS IN DETERMINING HIS EARTHWORK. NO PAYMENT WILL BE MADE ON EARTHWORK QUANTITIES DUE TO VARIATION IN THE SHRINKAGE FACTOR SINCE EARTHWORK IS MEASURED IN ITS FINAL POSITION.
- TOPSOIL STRIPPING WILL BE MEASURED FOR PAYMENT AS UNSUITABLE OR UNSTABLE MATERIAL.
- ALL SURPLUS MATERIAL SHALL BE HAULED OFF SITE, REGARDLESS OF THE TYPE OF MATERIAL. COST OF DISPOSING THE EXCESS MATERIALS OFF SITE SHALL BE INCLUDED IN THE UNIT PRICE FOR THE ASSOCIATED EARTHWORK ITEM.
- IN ADDITION TO NUCLEAR DENSITY TESTING OF EMBANKMENTS AND SUBGRADES, THE FINAL SHALL BE PROOF ROLLED USING A FULLY LOADED SEMI TRUCK. THE PROOF-ROLL SHOULD DEMONSTRATE A MAXIMUM ONE-QUARTER (1/4) INCH DEFLECTION AT TOP OF SUBGRADE LEVEL. THE NUMBER OF PROOF ROLLS SHALL AS REQUIRED BY THE ENGINEER AND THEY SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- ONCE THE SUBGRADE HAS BEEN PREPARED, FINAL DETERMINATION OF THE NEED FOR UNDERCUT/PGE SHALL BE BASED ON FIELD OBSERVATION AND PROOF ROLLS. THE FINAL DETERMINATION SHALL BE BY THE ENGINEER. PAYMENT WILL BE MADE FOR THE ACTUAL AREAS WHERE UNDERCUT AND PGES IS PLACED. THERE WILL BE NO ADJUSTMENT TO THE UNIT PRICE OF THE ASSOCIATED ITEMS IF THE QUANTITIES ARE LESS THAN ANTICIPATED.
- IN DEVELOPING THE EARTHWORK QUANTITIES FOR BUFFALO GROVE ROAD, A NOMINAL QUANTITY FOR UNDERCUT/PGES REPLACEMENT HAS BEEN INCLUDED IN THE CONTRACT. UNDERCUT SHALL BE PAID FOR AS PAY ITEM #20201200 "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL". PGES REPLACEMENT SHALL BE PAID FOR AS PAY ITEM #20700300 "POROUS GRANULAR EMBANKMENT, SPECIAL".
- GEOTEXTILE FABRIC WILL BE PLACED UNDER THE 12" AGGREGATE SUBGRADE. IN THOSE AREAS WHERE ADDITIONAL UNDERCUT AND PGE IS REQUIRED IMMEDIATELY BELOW THE AGGREGATE SUBGRADE, THE GEOTEXTILE FABRIC WILL BE PLACED AT THE BOTTOM OF THE UNDERCUT. IF THE UNDERCUT AND PGE AREA ARE CONSTRUCTED AT AN ELEVATION BELOW THE AGGREGATE SUBGRADE AND SOIL EMBANKMENT WILL BE CONSTRUCTED ON TOP OF THE PGE, A LAYER OF GEOTEXTILE FABRIC WILL BE PLACED BELOW THE UNDERCUT AREA AND ALSO AT THE BOTTOM OF THE AGGREGATE SUBGRADE. ALL FABRIC PLACED WILL BE MEASURED FOR PAYMENT.
- EARTH SHALL BE PAID FOR ONLY ONCE, REGARDLESS OF STAGING OR SEQUENCING OF CONTRACTOR'S OPERATIONS THAT REQUIRE STOCKPILING OF MATERIALS FOR LATER USE, REDISTRIBUTION AND RESPREADING IN SHOULDERS AND CONSTRUCTING OF EMBANKMENTS.
- THE DEPTH OF TOP SOIL REMOVAL HAS BEEN QUANTIFIED AS PAY ITEM #20201200 "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL" WITH AN ASSUMED DEPTH OF 4 INCHES.
- ALL EMBANKMENT WIDENING SHALL BE BENCHED INTO THE EXISTING SLOPES. EMBANKMENT SHALL BE PLACED ACCORDING TO SECTION 205 OF THE STANDARD SPECIFICATIONS.

LOCATION STATION TO STATION	UNSUITABLE EXCAVATION (TOPSOIL) (CU YD)			EARTH EXCAVATION (CU YD)			EXCAVATION TO BE USED IN EMBANKMENT (ADJ. FOR SHRINKAGE) 15% (CU YD)			EMBANKMENT (CU YD)						
	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STRUCTURAL			SHOULDER			
SOUTH OF BRIDGE																
98+50.00	99+00.00	3	11	0	25	30	0	21	26	0	3	3	0	0	0	0
99+00.00	99+50.00	5	21	0	12	24	0	11	20	0	10	26	7	0	0	0
99+50.00	100+00.00	8	23	0	8	10	0	7	8	0	25	68	15	0	18	0
100+00.00	100+45.00	21	28	0	11	7	0	9	6	0	83	95	19	18	26	0
	SUB-TOTAL	37	83	0	56	71	1	48	60	1	120	192	41	18	44	0
NORTH OF BRIDGE																
102+55.00	103+00.00	0	27	0	9	13	0	8	11	0	12	12	20	0	0	0
103+00.00	103+50.00	21	26	0	14	22	0	12	18	0	24	21	42	0	0	0
103+50.00	104+00.00	19	24	0	14	21	0	12	18	0	25	21	38	0	0	0
104+00.00	104+50.00	15	20	0	15	21	0	13	18	0	24	46	33	0	0	0
104+50.00	105+00.00	11	17	0	16	20	0	14	17	0	31	53	24	0	0	0
105+00.00	105+50.00	6	11	0	12	19	0	11	16	0	40	33	8	0	0	0
105+50.00	106+00.00	4	9	0	7	16	0	6	14	0	46	32	0	0	0	0
106+00.00	106+50.00	7	8	0	6	14	0	5	12	0	55	33	0	0	0	0
106+50.00	106+75.00	8	4	0	3	5	0	3	5	0	31	18	0	0	0	0
	SUB-TOTAL	90	146	0	97	152	0	82	129	0	288	268	165	0	0	0
TOTALS		127	228	0	153	223	1	130	189	1	408	460	206	18	44	0

	STAGE 1	STAGE 2	STAGE 3	TOTAL
UNSUITABLE EXCAVATION	127	228	0	355
EARTH EXCAVATION	153	223	1	376
EXCAVATION TO BE USED IN EMBANKMENT	130	189	1	320
EMBANKMENT STRUCTURAL	408	460	206	1,074
EMBANKMENT SHOULDER	18	44	0	62
FURNISHED EXCAVATION	278	271	205	754



EXISTING PAVEMENT DEPTH IS AN ASSUMED DEPTH BASED ON RECORD DRAWINGS AND IS SHOWN IN THE CROSS SECTIONS. PAVEMENT REMOVAL SHALL BE PAID FOR AS ITEM NO. 44000100 "PAVEMENT REMOVAL" AND NO PAYMENT IS ACCOUNTED FOR THIS AREA IN THE EARTH EXCAVATION. EARTH EXCAVATION IS ONLY ACCOUNTED FOR DEPTHS BELOW THE EXISTING PAVEMENT STRUCTURE FROM THE CROSS SECTIONS AND THAT WHICH IS OUTSIDE OF THE PAVEMENT. TOPSOIL REMOVAL HAS BEEN QUANTIFIED AS ITEM #20201200 "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL" TO THE TIE IN POINT OF THE IMPROVEMENTS AS SHOWN IN THE CROSS SECTIONS. ADDITIONAL REMOVAL SHALL BE AT THE CONTRACTOR'S EXPENSE.

DATE	BY	CHECKED	DATE

DATE	BY	CHECKED	DATE

L:\LAKECO\022011\3\draw\sheet\earth\work\summary.dgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EARTHWORK SCHEDULE AND GENERAL NOTES

CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS
SPRINGFIELD, IL ■ AURORA, IL ■ ST. LOUIS, MO

SCALE: VERT.: 1"=50'
HORIZ.:
DATE: 7/21/06
DRAWN BY: SNH
CHECKED BY: PWK