ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

Haeger Engineering LLC Consulting Engineers and Land Surveyors

Briarwood Lane Re-Alignment and Salt Creek Crossing Replacement Project Project:

Palatine Township, IL - Plum Grove Estates Subdivision

Reviewed: LAK Project #: 08-041E Date: 10/31/11

	IDOT					
	CODED				UNIT	
ITEM NO.		DESCRIPTION	QTY	UNIT	PRICE	TOTAL PRICE
1		and Clearing				
1.01		Pavement Removal	1774		\$10.00	\$17,740.00
1.02		Driveway Removal	677	SY	\$10.00	\$6,770.00
1.03		Removal of Existing Structure (SN 016-4000)	1	LS	\$85,000.00	\$85,000.00
1.04		Removal of Existing Culverts	553	LF	\$10.00	\$5,530.00
1.05		Guardrail Removal	124	LF	\$10.00	\$1,240.00
1.06		Selective Clearing and Removal	1	LS	\$10,000.00	\$10,000.00
1.07	-	Removal and Relocation/Re-Installation of Existing Mailboxes, Signs, Fences, Delineators, Lights and the like along the proposed improvements.	1	LS	\$10,000.00	\$10,000.00
					SBTL	\$136,280.00
2	Earthwork					
2.01		Earthwork Complete per Plan	1	LS	\$60,000.00	\$60,000.00
2.01		Removal and Disposal of Unsuitable Material for Roadway	75		\$45.00	\$3,375.00
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2.03	50200450	Removal and Disposal of Unsuitable Material for Structures	75	CY	\$45.00	\$3,375.00
					SBTL	\$66,750.00
3	Storm Sew	ver				
3.01		Precast Reinforced Concrete Flared End Section, 12"	1	EA	\$400.00	\$400.00
3.02		Precast Reinforced Concrete Flared End Section, 15"	20	EA	\$550.00	\$11,000.00
3.03		Storm Sewer, Type 1, RCP, Class IV, 12"	47	LF	\$36.00	\$1,692.00
3.04		Storm Sewer, Type 1, RCP, Class IV, 15"	435	LF	\$43.00	\$18,705.00
3.05		Catch Basin, Type C, with Type 8 Grate	1	EA	\$1,500.00	\$1,500.00
0.00	00207000	Caton Buom, Type o, with Type o Grate	•		SBTL	\$33,297.00
					SBIL	φ33,291.00
4	Three Side					
4.01		ed Precast Structure				
	_	ed Precast Structure Three Sided Precast Structure Complete per Plan	1	LS	\$385,000,00	\$385,000,00
	-	Three Sided Precast Structure Complete per Plan	1	LS	\$385,000.00	\$385,000.00 \$385,000.00
	-		1	LS	\$385,000.00 SBTL	\$385,000.00 \$385,000.00
		Three Sided Precast Structure Complete per Plan	1	LS		
5	Roadway a		1	LS		
5 Roadway	Roadway a	Three Sided Precast Structure Complete per Plan and Driveway Improvements			SBTL	\$385,000.00
5 Roadway	Roadway a Pavement 40603340	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY)	211.68	TON	\$85.00	\$385,000.00 \$17,992.80
5 Roadway 5.01 5.02	Roadway a Pavement 40603340 40603085	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY)	211.68 423.36	TON TON	\$85.00 \$75.00	\$385,000.00 \$17,992.80 \$31,752.00
5 Roadway 5.01 5.02 5.03	Roadway a Pavement 40603340 40603085 35102000	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8"	211.68	TON TON	\$85.00	\$385,000.00 \$17,992.80 \$31,752.00
5 Roadway 5.01 5.02 5.03 Bituminou	Roadway a Pavement 40603340 40603085 35102000 us Driveways	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8"	211.68 423.36 1,760	TON TON SY	\$85.00 \$75.00 \$10.00	\$385,000.00 \$17,992.80 \$31,752.00 \$17,600.00
5 Roadway 5.01 5.02 5.03 Bituminou 5.04	Roadway a Pavement 40603340 40603085 35102000 is Driveways 40603310	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" B Hot-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY)	211.68 423.36 1,760 54.54	TON TON SY	\$85.00 \$75.00 \$10.00	\$17,992.80 \$17,600.00 \$17,600.00 \$4,090.80
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05	Roadway a Pavement 40603340 40603085 35102000 as Driveways 40603310 35101800	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8"	211.68 423.36 1,760	TON TON SY	\$85.00 \$75.00 \$10.00	
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete	Roadway a Pavement	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" S Hot-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6"	211.68 423.36 1,760 54.54 487	TON TON SY TON SY	\$85.00 \$75.00 \$10.00 \$75.00 \$8.00	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete	Roadway a Pavement 40603340 40603085 35102000 as Driveways 40603310 35101800 Driveways 42000101	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" S Hot-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6" Portland Cement Concrete Pavement (Jointed), 6"	211.68 423.36 1,760 54.54 487	TON TON SY TON SY	\$85.00 \$75.00 \$10.00 \$75.00 \$8.00	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00 \$6,360.00
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete	Roadway a Pavement 40603340 40603085 35102000 as Driveways 40603310 35101800 Driveways 42000101	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" S Hot-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6"	211.68 423.36 1,760 54.54 487	TON TON SY TON SY	\$85.00 \$75.00 \$10.00 \$75.00 \$8.00 \$40.00 \$3.00	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00 \$6,360.00 \$477.00
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete	Roadway a Pavement 40603340 40603085 35102000 as Driveways 40603310 35101800 Driveways 42000101	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" S Hot-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6" Portland Cement Concrete Pavement (Jointed), 6"	211.68 423.36 1,760 54.54 487	TON TON SY TON SY	\$85.00 \$75.00 \$10.00 \$75.00 \$8.00	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00 \$6,360.00 \$477.00
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete 5.06 5.07	Roadway a Pavement	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" S Hot-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6" Portland Cement Concrete Pavement (Jointed), 6" Aggregate Base Course, Type B, 2"	211.68 423.36 1,760 54.54 487	TON TON SY TON SY	\$85.00 \$75.00 \$10.00 \$75.00 \$8.00 \$40.00 \$3.00	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00 \$6,360.00 \$477.00
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete 5.06 5.07	Roadway a Pavement	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" S Hot-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6" Portland Cement Concrete Pavement (Jointed), 6" Aggregate Base Course, Type B, 2"	211.68 423.36 1,760 54.54 487 159	TON TON SY TON SY SY	\$85.00 \$75.00 \$10.00 \$8.00 \$40.00 \$3.00 \$BTL	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00 \$6,360.00 \$477.00 \$82,168.60
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete 5.06 5.07	Roadway a Pavement	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" S Hot-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6" Portland Cement Concrete Pavement (Jointed), 6" Aggregate Base Course, Type B, 2" and Pavement Markings Raised Reflective Pavement Markers, Two-Way Amber	211.68 423.36 1,760 54.54 487 159 159	TON TON SY TON SY SY SY	\$85.00 \$75.00 \$10.00 \$75.00 \$8.00 \$8.00 \$40.00 \$3.00 \$BTL	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00 \$6,360.00 \$477.00 \$82,168.60
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete 5.06 5.07	Roadway a Pavement	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" Not-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6" Portland Cement Concrete Pavement (Jointed), 6" Aggregate Base Course, Type B, 2" and Pavement Markings Raised Reflective Pavement Markers, Two-Way Amber Guardrail Markers, Two-Way White	211.68 423.36 1,760 54.54 487 159 159	TON TON SY TON SY SY SY SY	\$85.00 \$75.00 \$10.00 \$75.00 \$8.00 \$8.00 \$40.00 \$3.00 \$BTL	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00 \$6,360.00 \$477.00 \$82,168.60 \$1,200.00 \$540.00
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete 5.06 5.07	Roadway a Pavement	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" S Hot-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6" Portland Cement Concrete Pavement (Jointed), 6" Aggregate Base Course, Type B, 2" and Pavement Markings Raised Reflective Pavement Markers, Two-Way Amber Guardrail Markers, Two-Way White Barrier Wall Markers	211.68 423.36 1,760 54.54 487 159 159	TON TON SY TON SY SY SY SY	\$85.00 \$75.00 \$10.00 \$75.00 \$8.00 \$8.00 \$40.00 \$3.00 \$BTL	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00 \$6,360.00 \$477.00 \$82,168.60 \$1,200.00 \$540.00 \$360.00
5 Roadway 5.01 5.02 5.03 Bituminou 5.04 5.05 Concrete 5.06 5.07	Roadway a Pavement 40603340 40603085 35102000 IS Driveways 40603310 35101800 Driveways 42000101 35101500 Guardrail a 78100100 78200405 78200500	Three Sided Precast Structure Complete per Plan and Driveway Improvements Hot-Mix Asphalt Surface Course, Mix "D", N70 (2", 1890 SY) Hot-Mix Asphalt Binder Course, IL-19.0, N70 (4", 1890 SY) Aggregate Base Course, Type B, 8" Not-Mix Asphalt Surface Course, Mix "C", N50 (2", 487 SY) Aggregate Base Course, Type B, 6" Portland Cement Concrete Pavement (Jointed), 6" Aggregate Base Course, Type B, 2" and Pavement Markings Raised Reflective Pavement Markers, Two-Way Amber Guardrail Markers, Two-Way White	211.68 423.36 1,760 54.54 487 159 159	TON TON SY TON SY SY SY SY	\$85.00 \$75.00 \$10.00 \$75.00 \$8.00 \$8.00 \$40.00 \$3.00 \$BTL	\$17,992.80 \$31,752.00 \$17,600.00 \$4,090.80 \$3,896.00 \$6,360.00 \$477.00 \$82,168.60 \$1,200.00 \$540.00

Prepared: KAS

7	Erosion Con	itrol and Restoration				
7.01	20101100 Tr	ree Trunk Protection	9	EA	\$150.00	\$1,350.00
7.02	28000305 Te	emporary Ditch Checks	14	EA	\$250.00	\$3,500.00
7.03	28000400 Pc	erimeter Erosion Barrier	300	LF	\$3.00	\$900.00
7.04	28000500 In	nlet and Pipe Protection	14	EA	\$175.00	\$2,450.00
7.05	21101615 To	opsoil Respread, 4"	2,554	SY	\$4.00	\$10,216.00
7.06	25000210 Se	eeding, Class 2A	0.53	AC	\$3,000.00	\$1,590.00
7.07	25000310 Se	eeding, Class 4	0.01	AC	\$4,500.00	\$45.00
7.08	25000400 N	litrogen Fertilizer Nutrient	50.88	LB	\$2.25	\$114.48
7.09	25000500 PI	hosphorous Fertilizer Nutrient	50.88	LB	\$2.25	\$114.48
7.10	25000600 Po	otassium Fertilizer Nutrient	50.88	LB	\$2.25	\$114.48
7.11	25100630 E	rosion Control Blanket (NAG DS75)	2,345	SY	\$1.00	\$2,345.00
7.12	25100800 E	rosion Control Mat (NAG SC250)	209	SY	\$5.00	\$1,045.00
7.13	- R	tip Rap, Class A4, Scour Protection Including Excavation and Removal of	294	SY	\$60.00	\$17,640.00
	U	Insuitable Material, Geotextile Fabric, and Rip Rap Complete per Plan				
7.14	- 1.	.5" Diameter Tree Installed	12	EΑ	\$250.00	\$3,000.00
					CRTI	\$44.424.43

8	Traffic Control				
8.01	70101700 Traffic Control and Protection Complete per Plans	1	LS	\$15,000.00	\$15,000.00
				SBTL	\$15.000.00

TOTAL \$775,020.03 15% CONTINGENCY \$116,253.00

TOTAL WITH 15% CONTINGENCY \$891,273.04

Notes:

- 1. Based on "Briarwood Lane Re-Alignment and Salt Creek Crossing Replacement Plans," dated 10/31/2011.
- 2. This estimate does not include cost of permits, engineering fees, inspection, or other rights of access. Also does not include the cost of easement or R.O.W. acquisition
- 3. Selective clearing and removal shall include all necessary clearing, grubbing, tree removal and other incidental removals including disposal necessary to construct the proposed improvements.
- 4. Earthwork shall include all work and materials necessary to bring grades to subgrade including but not limited to topsoil stripping and stockpiing, excavation, embankment fill, compaction, and subgrade preparation prior to placement of aggregate base course material or topsoil. Removal and replacement of unsuitable material for structures of roadway will be paid for separately, if required. Removal and replacement of unsuitable material for structures or roadway shall include removal and disposal of unsuitable material as well as approved material to bring back up to grade.
- 5. Three Sided Precast Structure Pay Item shall include all work, labor and materials necessary beyond demolition of existing structure required to fabricate and install the three sided precast structure including but not limited to structural shop drawings and calculations, in-stream work plan, cofferdams, dewatering, fabrication of precast components as well as construction and installation of all components of structure from footings through the waterproofing membrane system including but not limited to excavation for footings, installation of footings and pedestals, culvert sections, wingwalls, parapet walls with ashlar finish with pedestrian railing and lighting, structure backfill, waterproofing membrane system, etc.
- 6. Does not include the cost of any construction staking or the resident engineer.
- 7. Traffic Control and Protection shall include all traffic control devices, barriers, signs, temporary pavement markings, etc.
- 8. All disturbed grass areas shall be restored with a minimum of 4-Inches of topsoil, specified Seed Mix and specified erosion control blanket or mat. All disturbed areas shall be restored to their preconstruction condition or better.
- 9. The cost of relocation or lowering existing utilities has not been included in this estimate and may be required.
- 10. Whenever the performance of work is indicated on the plans, and no item is included in the contract for payment, the work shall be considered incidental to the contract and no additional compensation will be allowed.
- 11. This Opinion of Probable Cost is prepared as a guide only. Haeger Engineering, LLC makes no warranty that actual costs will not vary from amount indicated, and assumes no liability for such variance. Historical costs have been used and actual construction cost may vary.