

MEMORANDUM

DATE: October 14, 2011

TO: Jane Turley, Senior Planner,
Village of Orland Park, Planning Division

FROM: Bryan L. Luke, PE

SUBJECT: Village of Orland Park
153rd Bike Path Project
(CBBEL Project # 11-0166)

Attached is the updated concept level cost estimate which includes the anticipated construction cost savings by relocating the path outside the ROW. It now shows a more detailed breakout of the anticipated savings at each of the two parcels (Ashburn Baptist Church and 1716 153rd St). Below is a brief explanation of the anticipated savings for each parcel.

1716 153rd St.

Subsequent to the initial submittal of the cost savings analysis it was found that Cook County (County) had recently acquired the additional ROW needed at the 1716 153rd St property.

The preferred alignment option is in the additional ROW acquired by the County and the associated anticipated cost savings shown on the attached spreadsheet should be reflected in the project's final cost estimate.

Ashburn Baptist Church.

Besides the anticipated construction cost savings there are other significant benefits to locating the path outside the ROW at the Church. They include:

- Reduction of potential pedestrian/vehicle conflicts due to the increased lateral separation between roadway and path
- Decreased potential of path differential settlement
- Decreased conflict with potential future utility maintenance
- Decreased conflict with potential intersection channelization on 153rd St
- Less impact on roadway drainage system

At a meeting with the Village and Church to discuss the possibility of acquiring a Permanent Easement for the path, the Church brought up the separate issue of stormwater backup and slow draw-down time for their pond (and also at the roadway

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ditch drainage structure). This issue is resultant of the continual decay of the downstream storm water channel on private property across the 153rd Street north of the Church. This issue is related to the path project, as either path alignment (inside ROW or outside of ROW) crosses the affected area, however, neither path alignment will eliminate or fix this downstream issue. As all parties are aware, the cause and solution to this issue are located on the downstream property and although the Village is proposing to address them during the 153rd St Bike Path Project (Project), the cost associated with addressing this issue should be considered independent of the Project.

The preferred alignment option is outside the ROW at the Church. If the Village pursues this option the associated anticipated cost savings shown on the attached spreadsheet should be reflected in the Project's final cost estimate.

In summary, the Village will still realize the total anticipated Project construction cost savings amount presented as well as having the preferred design alignment; the County has acquired the additional ROW for 1716 153rd St and the Church has agreed to grant an easement. If the Village choose to assist the Church and address the offsite drainage issues, this can be accommodated during the Project but should not be considered as an additional cost to the 153rd Street Bike Path Project.

PROJECT NAME:	153rd and Wolf Road, 8' @ 3600 LF
LOCATION:	ORLAND PARK, ILLINOIS
DATE:	10/14/2011

ITEM NO.	ITEMS	UNIT	Alignment Option Within Ex ROW			Alignment Option Outside of Ex ROW			Combined Savings Outside of Ex ROW			Savings At Church			Savings At "1716 153rd St" Property (Sta 119+00, PIN 27-17-103-005)		
			QUANTITY	UNIT COST		QUANTITY	ITEM COST		QUANTITY	ITEM COST		QUANTITY	ITEM COST		QUANTITY	ITEM COST	
1	EARTH EXCAVATION	CY	2,133	\$28		1,600	\$59,733	\$44,800	533	\$14,933		462	\$12,942		71	\$1,991	
2	GROUND STABILIZATION FABRIC	SY	6,400	\$3		6,400	\$16,000	\$16,000	0	\$0		0	\$0		0	\$0	
3	UNSUITABLE EXCAVATION	CY	356	\$39		89	\$13,884	\$3,471	267	\$10,413		75	\$2,925		192	\$7,488	
4	PGE SUBGRADE	CY	356	\$33		89	\$11,748	\$2,937	267	\$8,811		75	\$2,475		192	\$6,336	
5	TREE REMOVAL	EA	42	\$200		33	\$8,400	\$6,600	9	\$1,800		9	\$1,800		0	\$0	
6	CURB REM & REPLACE	LF	40	\$50		40	\$2,000	\$2,000	0	\$0		0	\$0		0	\$0	
7	RELOCATE FIRE HYDRANT	EA	1	\$3,000		0	\$3,000	\$0	1	\$3,000		0	\$0		1	\$3,000	
8	15" STORM SEWER	LF	1,250	\$60		1,250	\$75,000	\$75,000	0	\$0		0	\$0		0	\$0	
9	CATCH BASINS	EA	10	\$2,300		10	\$23,000	\$23,000	0	\$0		0	\$0		0	\$0	
10	ADJUSTING FRAMES AND LIDS	EA	6	\$200		6	\$1,200	\$1,200	0	\$0		0	\$0		0	\$0	
11	AGGREGATE SUBGRADE 6"	SY	3,200	\$15		3,200	\$48,000	\$48,000	0	\$0		0	\$0		0	\$0	
12	HMA BINDER N50 1-1/2"	TON	269	\$85		269	\$22,848	\$22,848	0	\$0		0	\$0		0	\$0	
13	HMA SURFACE N50 1"	TON	179	\$95		179	\$17,024	\$17,024	0	\$0		0	\$0		0	\$0	
14	DRIVEWAY REMOVAL / REPLACEMENT	SY	162	\$35		162	\$5,670	\$5,670	0	\$0		0	\$0		0	\$0	
15	THERMO PVMT MARKING LINE 4"	FT	3,600	\$1.5		3,600	\$5,400	\$5,400	0	\$0		0	\$0		0	\$0	
16	STEEL PLATE BEAM GRDRL W/ BIKE RAIL & END	FT	200	\$100		200	\$20,000	\$20,000	200	\$20,000		0	\$0		200	\$20,000	
17	PEDESTRIAN SIGNALS	LS	1	\$35,000		1	\$35,000	\$35,000	0	\$0		0	\$0		0	\$0	
18	TOPSOIL F&P 4"	SY	4,770	\$3		4,030	\$14,310	\$12,090	740	\$2,220		579	\$1,737		161	\$483	
19	SEEDING / EROSION BLANKET	SY	3,756	\$3		3,177	\$11,268	\$9,531	579	\$1,737		579	\$1,737		0	\$0	
20	SODDING, SALT TOLERANT	SY	1,012	\$5		856	\$5,060	\$4,280	156	\$780		0	\$0		156	\$780	
21	SIDEWALK W/ DETECTABLE WARNINGS	SF	256	\$6		256	\$1,536	\$1,536	0	\$0		0	\$0		0	\$0	
22	RETAINING WALLS	SF	3,810	\$40		2,700	\$108,000	\$108,000	1,110	\$44,400		790	\$31,600		320	\$12,800	
23	RAILINGS	FT	1,262	\$20		1,040	\$20,800	\$20,800	222	\$4,440		142	\$2,840		80	\$1,600	
SUB TOTAL							\$577,721	\$465,187		\$112,534		0	\$68,056		0	\$54,478	
24	EROSION AND SEDIMENT CONTROL			2%			\$11,555	\$9,304		\$2,251			\$1,161			\$1,090	
25	TRAFFIC CONTROL & PROTECTION			1%			\$5,778	\$4,652		\$1,126			\$581			\$545	
26	CONTINGENCY			10%			\$57,773	\$46,519		\$11,254			\$5,806			\$5,448	
TOTAL							\$652,827	\$525,662		\$127,165			\$65,604			\$61,561	