



Agenda
Village of Glen Ellyn
Regular Workshop Meeting
Monday, July 21, 2014
7:00 PM
Glen Ellyn Civic Center, Room 301

Village Board Workshop Procedures Statement

Visitors are most welcome to attend all meetings of the Village Board and can find copies of the Agenda on their chairs or online at www.glenellyn.org prior to the meeting. Any individual with a disability requiring a reasonable accommodation in order to participate in a meeting should contact Harold Kolze, Village of Glen Ellyn ADA Coordinator, 630-469-5000, at least five (5) business days in advance of the next scheduled meeting. All matters on the Agenda may be discussed, amended, and acted upon.

A. Call to Order

B. Roll Call

C. Pledge of Allegiance

D. Audience Participation

1. Open:

Members of the public are welcome to speak to any item *not* specifically listed on tonight's agenda for up to three minutes. For those items which are on tonight's agenda, the public will have the opportunity to comment at the time the item is discussed. In either case, please complete the Audience Participation form and turn it in to the Village Clerk. It is requested that, if possible, one spokesman for a group be appointed to present the views of the entire group. Speakers who are recognized are requested to step to a microphone and state their name, address and the group they are representing prior to addressing the Village Board.

E. 10-Year Capital Plan Update (Presented by Professional Engineer Minix)

1. Discuss the updated plan and continue to evaluate capital allocation decisions.

F. Engineer Services (Presented by Professional Engineer Minix)

1. Discuss engineering services for Village Infrastructure Improvements Projects.

G. Other Items

H. Adjournment

I. Agenda Items



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 07/21/14 07:00 PM
Department: Public Works
Department Head: Julius Hansen
Category: Discussion Item
Prepared By: Bob Minix

SCHEDULED

AGENDA ITEM (ID # 1333)

DOC ID: 1333

Discuss the updated plan and continue to evaluate capital allocation decisions.

The Village of Glen Ellyn roadway rehabilitation program consists of a rolling 10-year plan of street improvements founded on a long-term master plan. The program is funded on an ongoing basis by a combination of utility, real estate transfer and property taxes. The 2014 - 2031 master plan, as originally developed in 2012, calls for resurfacing and reconstruction of approximately 71.4 miles of roadways at an estimated cost of \$125.8 million, consisting of 4.6 miles of reconstruction costing \$17.6 million and 66.8 miles of resurfacing of various types costing \$108.2 million. (Please note that all program costs referenced herein include engineering and construction expenses that include an annual adjustment factor of 5% and all references to years are calendar years, with fiscal years coinciding with calendar years starting in 2015).

ORIGINAL 2014 - 2031 ROADWAY PROGRAM COST SUMMARY (Based on 2012 Master Plan)					
Calendar Year	Street Resurfacing	Street Reconstruction	Total Construction Cost	Total Cost w/ Engineering	Total Miles
2014	\$ 5,868,089	\$ 663,460	\$ 6,531,549	\$ 7,511,282	5.04
2015	\$ 5,241,370	\$ 963,527	\$ 6,204,897	\$ 7,135,632	2.73
2016	\$ 3,570,742	\$ 1,604,772	\$ 5,175,514	\$ 5,951,841	4.15
2017	\$ 2,043,944	\$ 2,438,023	\$ 4,481,967	\$ 5,154,262	2.10
2018	\$ 849,479	\$ 3,860,071	\$ 4,709,550	\$ 5,415,983	1.86
2019	\$ 5,145,114	\$ -	\$ 5,145,114	\$ 5,916,881	2.29
2020	\$ 3,718,316	\$ 735,444	\$ 4,453,761	\$ 5,121,825	2.66
2021	\$ 2,938,361	\$ 170,991	\$ 3,109,351	\$ 3,575,754	2.04
2022	\$ 1,905,740	\$ 2,583,427	\$ 4,489,167	\$ 5,162,542	2.55
2023	\$ 5,768,872	\$ -	\$ 5,768,872	\$ 6,634,203	5.94
2024	\$ 6,597,883	\$ 2,282,733	\$ 8,880,616	\$ 10,212,708	6.82
2025	\$ 9,287,555	\$ -	\$ 9,287,555	\$ 10,680,689	6.31
2026	\$ 7,934,863	\$ -	\$ 7,934,863	\$ 9,125,092	7.68
2027	\$ 9,726,992	\$ -	\$ 9,726,992	\$ 11,186,041	5.40
2028	\$ 9,795,009	\$ -	\$ 9,795,009	\$ 11,264,261	4.99
2029	\$ 5,033,165	\$ -	\$ 5,033,165	\$ 5,788,140	2.74
2030	\$ 4,114,483	\$ -	\$ 4,114,483	\$ 4,731,656	3.03
>2030	\$ 4,535,617	\$ -	\$ 4,535,617	\$ 5,215,960	3.03
Totals	\$ 94,075,596	\$ 15,302,449	\$ 109,378,044	\$ 125,784,751	71.36

The Village has significant capital improvement needs outside the realm of roadway work that are largely under- or un-funded at this point. In addition, CBD streetscaping / street improvements to fully implement the planned and desired level of upgrades as envisioned in the downtown streetscape plan are not adequately budgeted for in the 2014-2031 program. Furthermore, a large roadway network will be

inherited in the near future as a result of anticipated annexations in the Glen Crest Subdivision area near Route 53 and Marston in the southeast quadrant of the Village as well as pending annexations near the Glen Oak Country Club involving Hill Avenue and Cumnor Avenue; these road systems were not included in the 2012 master plan.

Pending major capital projects in this category include:

Pending Major Capital Projects		
Project	Estimated Total Cost	Other Funding Sources
Downtown Roadway and Streetscape	8,000,000	STP, ITEP
New Taylor Avenue Pedestrian Tunnel (CBD-Feasibility Study)	2,100,000	STP, CMAQ
CBD Pedestrian Tunnel (CBD-Feasibility Study)	8,100,000	Various federal and state programs and transportation agencies
Viaduct / Underpass (CBD-Feasibility Study)	No viable option identified yet	
Stormwater System Improvements	4,000,000	County and state programs
New Police Station	15,000,000	Village reserve funds
CBD Parking Structure(s) - Village Portion	2,000,000	TIF
Fire Station	Likely funded through means other than Capital Projects Fund	
Train Station		

It is anticipated that significant outside funding assistance will be utilized for the Taylor Avenue and CBD pedestrian tunnel projects, with Village outlays amounting to only 10 - 15% of the total project costs. Implementation of the CBD roadway/streetscaping, stormwater system improvements, police station and CBD parking structures projects would likely be accomplished through a bond issue in the \$30 million range, to be paid back in annual \$2 million increments over 20 years. Based on recent staff discussions, repayment of the bonds would be through the Capital Projects Fund budget.

Rehabilitation of the Glen Crest Subdivision area roadways would be merged into the Village long-term program and managed accordingly. This subset of roads consists of 2.1 miles of curbed and un-curbed streets in generally fair condition. Estimated short- and long-term rehabilitation measures and costs are shown in the attached memorandum prepared by Engineering Division staff in March 2014. Cumnor and Hill Avenues near GOCC would add about 0.5 miles to the uncurbed roadway inventory in the Village.

To accomplish funding of the major pending projects listed above as well as the integration of new roadways into the rehabilitation schedule, a major revision in the 2012 long-term roadway master plan is required. Three alternatives can be considered on the expense side: annual reductions to the program; skipping full years of the program; and delaying the reconstruction of curb-less roadways, in effect

modifying the scope of the proposed program.

- q **Annual Program Reduction** - Starting in 2015, the annual element would be modified by deferring one or more projects to the following year so that the Capital Projects Fund balance would always be positive.
- q **Multi-Year Program Hiatus** - In this alternative, all projects currently planned for implementation in a given year, starting in 2015 or any selected year, would be pushed back. The roadway program would be essentially suspended as needed to accrue the necessary funds.
- q **Postpone Reconstruction of Curb-Less Roadways** - The majority of street reconstruction work in the 2015 - 2031 program involves substantial improvements to rural-road design streets that became Village rights-of-way during annexations over the past 20 years, and all this work is scheduled to be completed by the end of 2024. It is proposed that in lieu of complete reconstruction during this current program cycle, these roadways would receive maintenance overlays costing far less and the reconstructions be delayed for a period of 10 to 15 years. All roadways currently in the program would thus receive treatment in accordance with the current schedule, but the total program cost drops to \$112.1 million, a reduction of \$13.7 million.

COMMENTS ON PROGRAM MODIFICATIONS

- q Deferment of projects will result in higher overall costs to achieve the end products currently programmed.
- q The alternative to defer reconstruction of curb-less roadways appears to be the most appealing when looking strictly at the existing program timeframe, as the vast majority of streets are worked on in accordance with the current schedule and planned scope of work. Overall roadway network condition is best maintained with this alternative. This strategy is also applicable to roadways that the Village would take over as a result of future annexations. Beyond the current program timeframe, the deferment of reconstruction of curb-less roadways likely poses the biggest challenge to maintaining a progressive and solvent program.
- q Staff would prefer an annual reduction in program costs to the alternative involving skipping full years of any roadway work.

ANALYSIS

The recent budget preparation efforts yielded a revised and updated 5-Year Capital Improvements Plan for all Village endeavors. The Capital Projects Fund portion of the document was extracted and expanded another five years to provide a means to evaluate the impacts of pending projects and assess roadway program modification strategies. The resulting 10-Year Capital Improvements Plan is attached and is a key element of this discussion.

The spreadsheet includes projected revenues into the Capital Projects Fund (recently updated by the Finance Department) and all estimated cost components. It has been revised to include the recent CELL project funding authorizations for construction and resident engineering services as well as the results from the now-deferred Elm-Cottage-Geneva Connectors project bidding process. Similar to the table above, major pending projects are listed with the anticipated \$30 million dollar bond repayment shown as a series of \$2.035 million paybacks starting in CY2016, as shown in the attached debt service schedule. (A \$20 million dollar bond repayment schedule was also calculated, resulting in average annual repayments of \$1,410,000.) Roadway rehabilitation work in the Glen Crest Subdivision area is spread out over alternating years starting in CY2017; GOCC area roadway work would occur in CY 2019.

Please note that costs and revenues are shown through CY2023 and not through the full CY2031 timeframe. The implications of this will be discussed below.

With the revenue side available in this analysis, a preferred scenario emerges, namely to fully implement the curb-less roadway strategy and then to manipulate future roadway rehabilitation programs as needed to maintain solvency in the Capital Projects Fund. Based on the revenues and costs shown, **it appears that there will be no need to modify the current roadway schedule until after CY2023, other than to substitute simply resurfacing for reconstruction of curb-less roadways.** The vast majority of the project work in the post 2020 timeframe will be rather straightforward resurfacing, capitalizing on the very significant roadway rehabilitation work undertaken since the year 2001 to date. The street rehabilitation program can be customized going forward to defer or move up projects based on specific needs and available funds.

The capital project fund is projected to maintain a positive balance until after CY2023, when large resurfacing programs are planned to refresh roadways rehabilitated following the adoption of the initial version of the long-term master plan in 2001. The compounding of the 5% annual adjustment factor really starts to impact project costs beyond a five year horizon. This is particularly evident for program years between 2024 and 2028 where the average annual program costs are estimated to average \$10 million, outstripping funding by \$1.5 to 2.0 million per year. How costs actually develop and how revenues track in future years needs to be watched carefully; however it appears feasible to take on significant extra bond repayment burden and still complete most of the original program, with the exception of reconstruction of currently curb-less roadways, until the next rehabilitation cycle.

Engineering staff will be challenged continuously to come up with the most cost-effective way to balance roadway rehabilitation needs with available resources, considering the pending loss of up to \$2 million annually in funding. On a Village-wide basis - but somewhat in the future - dealing with the deferment of roadway reconstruction will be every bit as testing as the question of addressing the many non-roadway capital needs currently facing the Village.

CAPITAL IMPROVEMENTS COMMISSION COMMENTS

Over the course of the past nine months, various drafts of this memorandum have been shared and discussed with the Capital Improvements Commission. The CIC understands that important capital

projects other than roadway and storm sewer improvements currently exist and expresses interest and basic support for those endeavors. They wish to make it crystal clear however, that deferment of substantial rehabilitation for rural road streets is a temporizing measure with significant future cost implications that again will task Village decision-makers with difficult choices.

ATTACHMENTS:

- Attachments to Capital Project Funding Issues Memo (PDF)

MEMORANDUM

TO: Lauren Parisi, Planning Intern

FROM: Bob Minix, Professional Engineer 

DATE: March 21, 2014

SUBJECT: Glen Crest Subdivision and Environs Annexation
Roadway Rehabilitation Expenses



Per your request, the Engineering Division has reviewed the roadway network that likely would be taken over by the Village as a result of the proposed annexation of properties in the area of Route 53 and Marston / Bemis. These roadways are currently under the jurisdiction of Milton Township. The roadways involved in this analysis are depicted in the annexation area map prepared by Planning and Development Department, a copy of which is enclosed herewith. Please note that Route 53 within the annexation area is under the jurisdiction of the Illinois Department of Transportation and would remain as such after the proposed annexations.

Civil Engineer Jeff Perrigo performed the portion of the analysis that identified the individual roadway segments and the existing dimensional parameters (lengths and areas). The roadway segments included in the analysis are shown in the attached table. The roadway network consists of slightly more than two miles of local streets and two bridge/box culvert segments spanning Glen Crest Creek on Bemis Road near Ridge and near the intersection of Glen Crest and Danby drives. The existing cross-section of the roadways varies between asphalt roadways without curbs, asphalt roadways with separate curb and gutters, and asphalt-over-concrete roadways with integral curbs. Based on available records, the Glen Crest Subdivision roadways (north and south of Bemis and east of Route 53) were constructed in the 1970's and are likely now about 40 years old. The age of the rural-road streets (Marston west of Route 53, Taylor, Bemis and Sunnybrook) are likely somewhat older. Birchbrook Court was constructed in the early 1980's; Jenna Court was built in the early 2000's.

The overall current condition of the roadways in the area is judged to be fair, with some level of rehabilitation likely required for most of the roadways within the next 3-5 years. Based on engineering judgment and using the current methodology employed for estimating roadway rehabilitation costs, various project expenses were developed. The methodology consists of applying a unit cost factor multiplied by the roadway surface area to estimate costs based on the type of rehabilitation selected. The unit cost factors for this analysis were as follows:

Glen Crest Subdivision and Environs Roadway Rehabilitation Rehabilitation Types and Unit Costs		
Type of Rehabilitation	Description	Unit Cost (\$/SY) (2014 Basis)
Type IA Resurfacing	Removal and replacement of asphalt surface; shoulder work	\$40
Type IB Resurfacing	Removal and replacement of asphalt surface; moderate spot curb and concrete base repairs	\$50

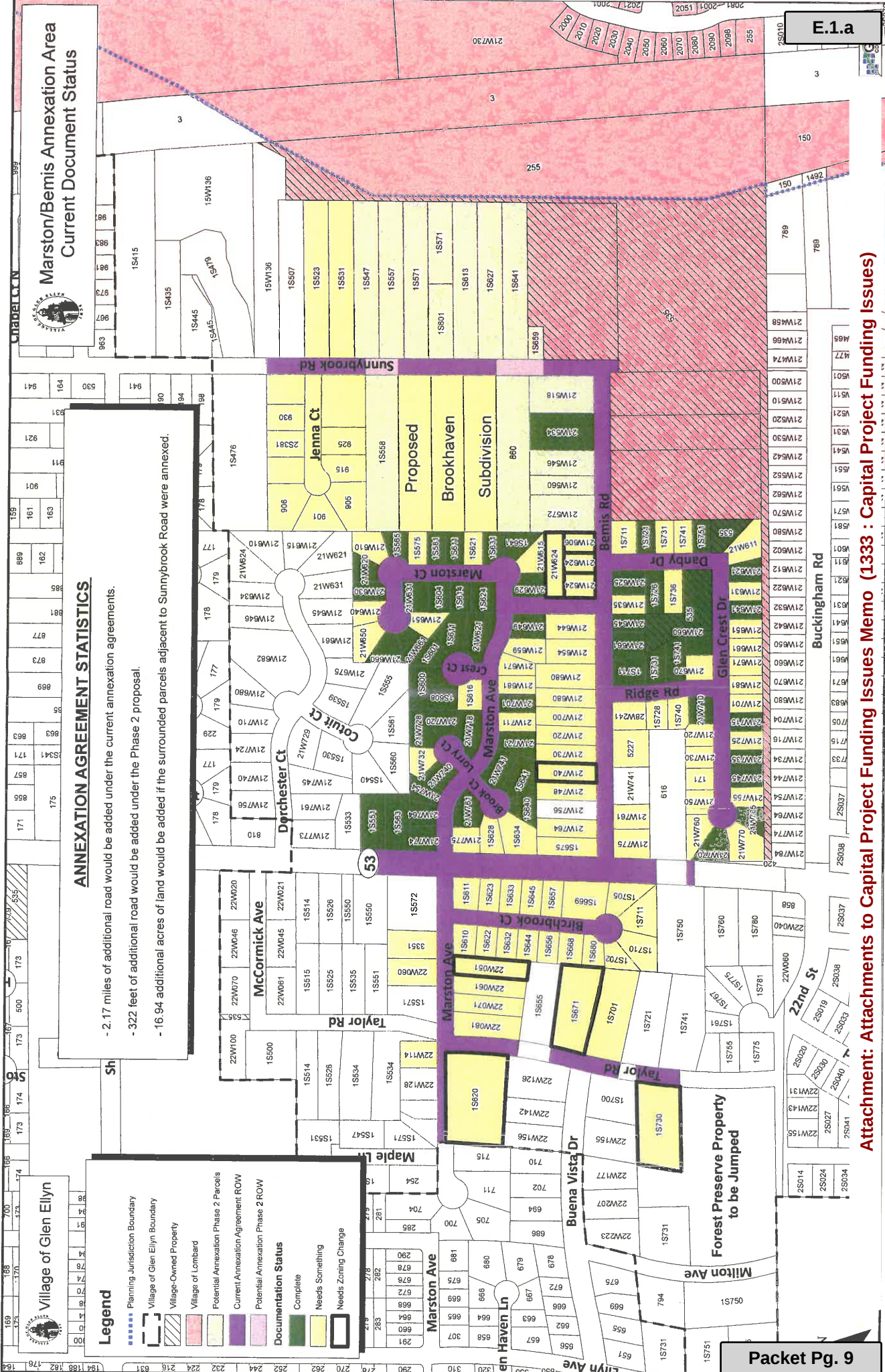
Type II Rehabilitation	Complete removal and replacement of asphalt cross section down to aggregate base; full curb and driveway replacement	\$140
Type IIA Rehabilitation	Complete removal of entire existing street cross section down to sub-grade and replacement with a full depth asphalt section; full curb and driveway replacement	\$190
Asphalt Reconstruction	Complete rebuilding of the roadway with full-depth asphalt; construction of curb and gutter and new driveway approaches; sidewalk installation; closed drainage system installation	\$220

The initial recommended rehabilitation for the proposed annexation roadways would be a **resurfacing** project that is estimated to cost about **\$1.8 Million** (in 2014 dollars) including engineering and construction.

Ultimately all the roadways would need to be reconstructed. Given the current age of most of the roads in the proposed annexation area, these reconstructions would be warranted within a 15 year timeframe. To reconstruct all the roadways, including replacement of the box culvert / bridges, the estimated cost is **\$8.2 Million** (in 2014 dollars) including engineering and construction.

enc. as noted

cc: Julius Hansen, Public Works Director
 Jeff Perrigo, Civil Engineer
 Staci Hulseberg, Planning and Development Director
 Michele Stegall, Village Planner
 Ray Ulreich, Stormwater Engineer



**Marston/Bemis Annexation Area
Current Document Status**

ANNEXATION AGREEMENT STATISTICS

- 2.17 miles of additional road would be added under the current annexation agreements.
- 322 feet of additional road would be added under the Phase 2 proposal.
- 16.94 additional acres of land would be added if the surrounded parcels adjacent to Sunnybrook Road were annexed.

Legend

- Planning Jurisdiction Boundary
- Village of Glen Ellyn Boundary
- Village-Owned Property
- Potential Annexation Phase 2 Parcels
- Current Annexation Agreement ROW
- Potential Annexation Phase 2 ROW

Documentation Status

- Complete
- Needs Something
- Needs Zoning Change

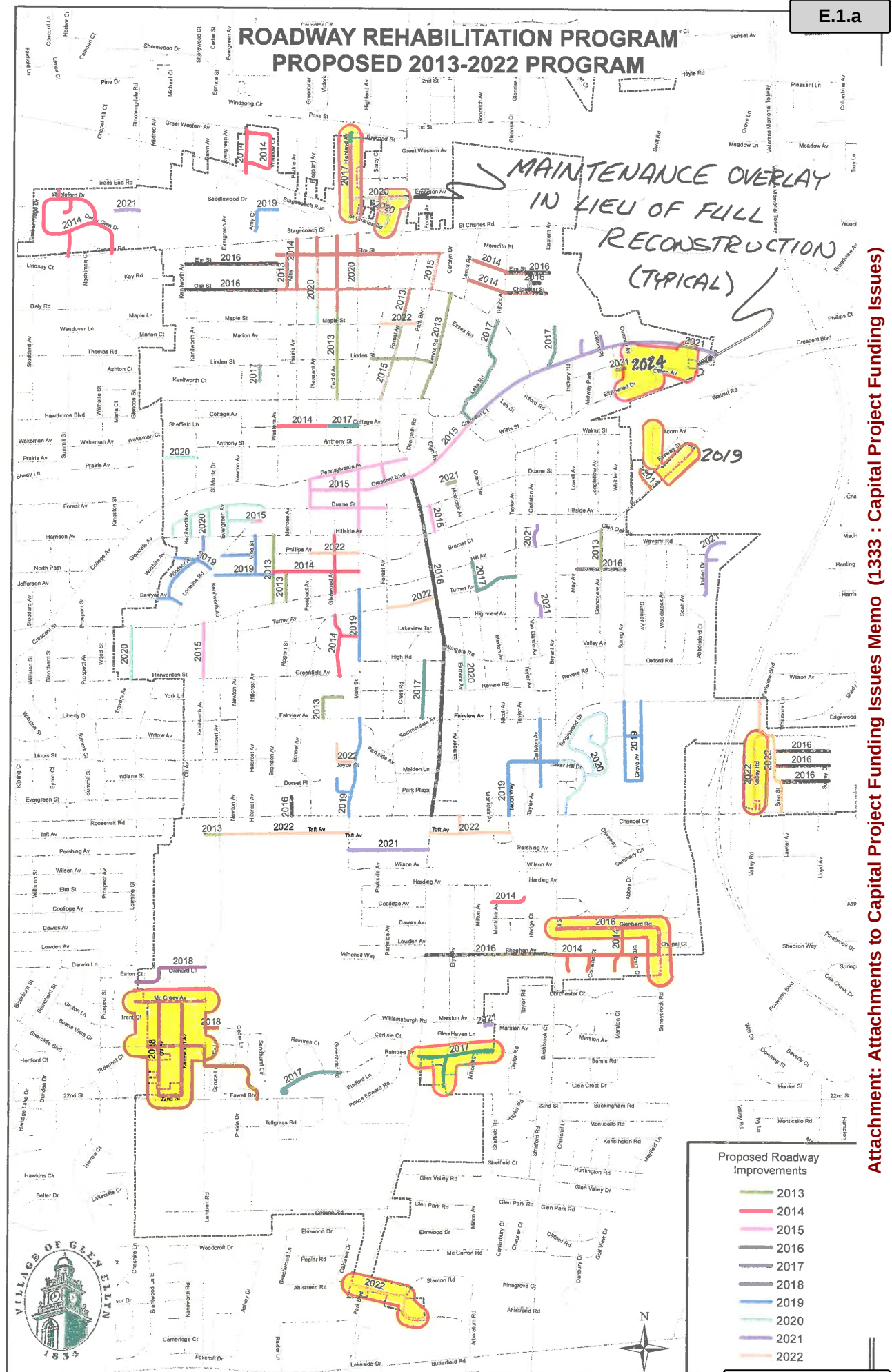
GLEN CREST SUBDIVISION AND ENVIRONS ANNEXATION - ROADWAY REHABILITATION EXPENSES

March 20, 2014

Street Name	Segment	Existing Cross-Section	Length (ft)	Width (ft, avg.)	Area (SY)	NEXT REHABILITATION WORK			RECONSTRUCTION COST		
						Resurfacing Type	Unit Cost (\$/SY)	Cost (2014) (\$'s)	Type	Unit Cost (\$/SY)	Cost (2014) (\$'s)
Bemis Rd	Route 53 to Ridge	Asphalt - Stone Base	708	23	1,811	Type IA	\$40	\$72,440	Asphalt Reconstruction	\$220	\$362,200
Bemis Rd	Ridge to Greenview	Asphalt - Stone Base	353	22	863	Type IA	\$40	\$34,520	Asphalt Reconstruction	\$220	\$172,600
Bemis Rd	Glen Crest Creek Bridge	Pre-cast Box Culvert				Misc. Repair		\$50,000	Replacement		\$300,000
Bemis Rd	Greenview to Danby	Asphalt - Stone Base	178	23	456	Type IA	\$40	\$18,240	Asphalt Reconstruction	\$220	\$91,200
Bemis Rd	Danby to Sunnybrook	Asphalt - Stone Base - Separate Curb	775	23	1,981	Type IA	\$40	\$79,240	Asphalt Reconstruction	\$220	\$396,200
Ridge Rd	Bemis to Glen Crest	Asphalt - Stone Base - Separate Curb	471	26	1,362	Type IB	\$50	\$68,100	Type II	\$140	\$272,400
Danby Dr	Bemis to Glen Crest	Asphalt - Stone Base - Separate Curb	452	28	1,405	Type IB	\$50	\$70,250	Type II	\$140	\$281,000
Glen Crest Dr	Ridge to West End	Asphalt - Stone Base - Separate Curb	557	28	1,733	Type IB	\$50	\$86,650	Type II	\$140	\$346,600
Glen Crest Dr	Ridge to Danby	Asphalt - Stone Base - Separate Curb	505	27	1,515	Type IB	\$50	\$75,750	Type II	\$140	\$303,000
Glen Crest & Danby	Glen Crest Creek Bridge	Pre-cast Box Culvert				Misc. Repair		\$10,000	Replacement		\$300,000
Sunnybrook Rd	Bemis to Jenna	Asphalt - Stone Base	1149	20	2,554	Type IA	\$40	\$102,160	Asphalt Reconstruction	\$220	\$510,800
Sunnybrook Rd	Jenna to Village Limits	Asphalt - Stone Base	403	19	851	Type IA	\$40	\$34,040	Asphalt Reconstruction	\$220	\$170,200
Jenna Ct	Sunnybrook to West End	Asphalt - Stone Base - Separate Curb	509	20	1,132	Type IA	\$40	\$45,280	Type II	\$140	\$226,400
Marston Av	Village Limits to Taylor	Asphalt - Stone Base	386	28	1,202	Type IA	\$40	\$48,080	Asphalt Reconstruction	\$220	\$240,400
Marston Av	Taylor to Taylor	Asphalt - Stone Base	22	28	67	Type IA	\$40	\$2,680	Asphalt Reconstruction	\$220	\$13,400
Marston Av	Taylor to Birchbrook	Asphalt - Stone Base	476	21	1,111	Type IA	\$40	\$44,440	Asphalt Reconstruction	\$220	\$222,200
Marston Av	Birchbrook to Route 53	Asphalt - Stone Base	203	20	452	Type IA	\$40	\$18,080	Asphalt Reconstruction	\$220	\$90,400
Taylor Rd	Marston to Buena Vista	Asphalt - Stone Base	558	20	1,240	Type IA	\$40	\$49,600	Asphalt Reconstruction	\$220	\$248,000
Birchbrook Ct	Marston to South End	Asphalt - Stone Base - Separate Curb	693	28	2,157	Type IA	\$40	\$86,280	Type II	\$140	\$431,400
Marston Av	Route 53 to Brook	Asphalt over Concrete Base - Integral Curb	426	28	1,325	Type IB	\$50	\$66,250	Type IIA	\$190	\$265,000
Marston Av	Brook to Lorry	Asphalt over Concrete Base - Integral Curb	39	40	171	Type IB	\$50	\$8,550	Type IIA	\$190	\$34,200
Marston Av	Lorry to Crest	Asphalt over Concrete Base - Integral Curb	459	27	1,376	Type IB	\$50	\$68,800	Type IIA	\$190	\$275,200
Marston Av	Crest to Greenview	Asphalt over Concrete Base - Integral Curb	279	28	867	Type IB	\$50	\$43,350	Type IIA	\$190	\$173,400
Marston Av	Greenview to Marston Ct.	Asphalt over Concrete Base - Integral Curb	114	28	354	Type IB	\$50	\$17,700	Type IIA	\$190	\$70,800
Marston Ct	Marston to North / West End	Asphalt over Concrete Base - Integral Curb	635	28	1,974	Type IB	\$50	\$98,700	Type IIA	\$190	\$394,800
Brook Ct	Marston to South End	Asphalt over Concrete Base - Integral Curb	209	52	1,205	Type IB	\$50	\$60,250	Type IIA	\$190	\$241,000
Lorry Ct	Marston to North End	Asphalt over Concrete Base - Integral Curb	174	55	1,065	Type IB	\$50	\$53,250	Type IIA	\$190	\$213,000
Crest Ct	Marston to North End	Asphalt over Concrete Base - Integral Curb	177	57	1,123	Type IB	\$50	\$56,150	Type IIA	\$190	\$224,600
Greenview Dr	Bemis to Marston	Asphalt - Stone Base - Separate Curb	401	29	1,293	Type IB	\$50	\$64,650	Type II	\$140	\$258,600
TOTALS			11,311	feet	32,645	square yards	with 15% Engineering	\$1,533,480		with 15% Engineering	\$7,129,000
			2.14	miles				\$1,763,502			\$8,198,350

Attachment: Attachments to Capital Project Funding Issues Memo (1333 : Capital Project Funding Issues)

ROADWAY REHABILITATION PROGRAM PROPOSED 2013-2022 PROGRAM



Village of Glen Ellyn
10-Year Capital Improvement Plan
CAPITAL PROJECT FUND

Capital Fund	SPENT TO-DATE	SY2014 BUDGET	CY2015 BUDGET	CY2016 FORECAST	CY2017 FORECAST	CY2018 FORECAST	CY2019 FORECAST	CY2020 FORECAST	CY2021 FORECAST	CY2022 FORECAST	CY2023 FORECAST
Revenues - Capital Projects Fund		\$ 5,435,500	\$ 6,772,000	\$ 6,720,500	\$ 6,871,100	\$ 7,028,300	\$ 7,192,100	\$ 7,362,900	\$ 7,540,900	\$ 7,726,300	\$ 7,919,400
Minor capital investment/other expenditures	ongoing	\$ 17,500	\$ 17,500	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Pavement Preservation Program	ongoing	270,000	450,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Non-Roadway Construction Projects:											
Lake Ellyn Outlet Control Structure Modifications	173,500		390,000								
Nicolli Way Land Bridge Repairs	10,000	175,000									
Hill Avenue Bridge	5,000	25,000	250,000								
Reno Center Expansion - Salt Storage Facility (See MFT)		300,000	60,000								
Street Lighting Improvements - Rte 38 / LED Initiative		260,000									
Other Projects: Stormwater, Traffic, etc.	113,500	70,000	100,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Streetscape and Signage	47,000	45,000									
Bike Plan	6,000										
Sidewalk Program	ongoing										
Roadway Rehabilitation Program		170,000	265,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
2014 Street Resurfacing	49,000	1,065,000									
2014 Chidester-Elm-Lenox-Linden	100,000	2,702,000									
Elm-Geneva Connectors-Cottage	68,000		1,542,000	(funding based on 2014 Lamp bid and ERA proposal)							
Glenwood-Arbor-Ridgewood	67,000		2,070,000	(current PW staff estimate for construction and RE services)							
Engineering for Future Projects	97,000	365,000									
Future Street Projects (Resurfacing)			1,230,000	3,265,000	2,350,000	975,000	5,915,000	4,277,000	3,404,000	2,193,000	6,634,000
Future Street Projects (Reconstruction - Defer "Rural Roads")			940,000	1,140,000	375,000	555,000		105,000		370,000	
New Annexation Area Streets - Glen Crest Subd. Area - 2.1 miles					510,000		565,000		620,000		685,000
New Annexation Area Streets near GOCC - Hill, Cummer - 0.5 miles							235,000				
IFT / General Fund Engineering	ongoing	154,000	157,000	240,000	245,000	250,000	235,000	260,000	265,000	270,000	275,000
Subtotal - Planned Improvements - Capital Projects Fund		5,663,500	7,471,500	5,445,000	4,280,000	2,580,000	7,770,000	5,337,000	5,089,000	3,263,000	8,394,000
Pending Major Capital Projects - Financed by \$30 million bond program paid back in \$2.05 million annual increments for 20 years starting in CY2016											
Pending Project		Estimated Total Cost									
Downtown Roadway and Streetscape		8,000,000									
New Taylor Ped. Tunnel (CBD-Feasibility Study)		2,100,000									
CBD Pedestrian Tunnel (CBD-Feasibility Study)		8,100,000									
Viaduct / Underpass (CBD-Feasibility Study)		??									
Stormwater System Improvements		4,000,000									
New Police Station		15,000,000									
CBD Parking Structure(s)		2,000,000									
Fire Station		??									
Train Station		??									
SUBTOTAL OF PROJECT COSTS (BOLD Items)		30,000,000									
Bond Repayments				2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000	2,050,000
Total Improvements - Capital Projects Fund		\$ 5,663,500	\$ 7,471,500	\$ 7,495,000	\$ 6,330,000	\$ 4,630,000	\$ 9,820,000	\$ 7,387,000	\$ 7,139,000	\$ 5,313,000	\$ 10,444,000
Change In Fund Balance, Capital Projects Fund		\$ (228,000)	\$ (699,500)	\$ (774,500)	\$ 541,100	\$ 2,398,300	\$ (2,627,900)	\$ (24,100)	\$ 401,900	\$ 2,413,300	\$ (2,524,600)
Capital Projects Fund Balance, Beginning of Year		\$ 2,873,000	\$ 2,645,000	\$ 1,945,500	\$ 1,171,000	\$ 1,712,100	\$ 4,110,400	\$ 1,482,500	\$ 1,458,400	\$ 1,860,300	\$ 4,273,600
Capital Projects Fund Balance, End of Year		\$ 2,645,000	\$ 1,945,500	\$ 1,171,000	\$ 1,712,100	\$ 4,110,400	\$ 1,482,500	\$ 1,458,400	\$ 1,860,300	\$ 4,273,600	\$ 1,749,000

CAPITAL PROJECTS FUND
10 Year Capital Plan Revenue Projections

Account Description	2013 5 year Forecast assumption*	Average Growth 2006- 2014**	Assumption Used***	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Property Tax	3.40%	2.40%	3.40%	A	\$ 3,516,000	\$ 3,635,544	\$ 3,759,152	\$ 3,886,964	\$ 4,019,120	\$ 4,155,771	\$ 4,297,067	\$ 4,443,167	\$ 4,594,235	\$ 4,750,439
Telecommunications Tax	1.30%	-1.70%	-1.70%	B	\$ 1,100,000	\$ 1,081,300	\$ 1,062,918	\$ 1,044,848	\$ 1,027,086	\$ 1,009,625	\$ 992,462	\$ 975,590	\$ 959,005	\$ 942,702
Electricity Use Tax	1.30%	0.25%	0.25%	C	\$ 1,000,000	\$ 1,002,500	\$ 1,005,006	\$ 1,007,519	\$ 1,010,038	\$ 1,012,563	\$ 1,015,094	\$ 1,017,632	\$ 1,020,176	\$ 1,022,726
Natural Gas Use Tax	1.30%	3.16%	3.00%	D	\$ 325,000	\$ 334,750	\$ 344,793	\$ 355,136	\$ 365,790	\$ 376,764	\$ 388,067	\$ 399,709	\$ 411,700	\$ 424,051
Real Estate Transfer Tax	0.50%	0.52%	5.00%	E	\$ 625,000	\$ 656,250	\$ 689,063	\$ 723,516	\$ 759,691	\$ 797,676	\$ 837,560	\$ 879,438	\$ 923,410	\$ 969,580
Interest Income	-1.10%	-17.79%	1.00%	F	\$ 10,000	\$ 10,100	\$ 10,201	\$ 10,303	\$ 10,406	\$ 10,510	\$ 10,615	\$ 10,721	\$ 10,829	\$ 10,937
TOTAL REVENUES					\$ 6,576,000	\$ 6,720,444	\$ 6,871,133	\$ 7,028,286	\$ 7,192,132	\$ 7,362,909	\$ 7,540,865	\$ 7,726,257	\$ 7,919,354	\$ 8,120,435
Annual Growth Rate						2.20%	2.24%	2.29%	2.33%	2.37%	2.42%	2.46%	2.50%	2.54%

*From the 2013 Five Year Forecast assumptions. This was the most recent year a full capital projects fund evaluation was completed. The revenue assumptions did not distinguish between the types of utility taxes. It also did not include specific assumptions for Real Estate Transfer Tax, Interest Income, and Miscellaneous Revenue.

**From historical data analysis below.

***Assumptions used are based upon review of historical data and other known industry trends. Please see the notes referenced above for detailed discussion.

Notes:

A: Property tax increases are tied to changes in CPI and new growth in the EAV (construction or annexations). CPI over the last 10 years has averaged 2.4%. A conservative 1% new growth has been added to arrive at the 3.4%.

B: Telecommunications tax is declining due to the shift from landlines to cell phones. We anticipate this revenue will continue its decline.

C: Electricity tax is taxed on the kilowatt hour. This revenue stream is affected more greatly by the weather, which cannot be planned. Hot summers with increased air conditioner usage will increase these revenues. We have used a minimal growth rate of 0.25% which accounts for spikes due to weather.

D: Natural gas tax is taxed on the therm. This revenue stream is also most greatly affected by the weather, which cannot be planned. Colder winters with greater use of natural gas heaters will increase this revenue stream. A growth rate of 3% has been used as it is the average growth rate over the past 10 years.

E: Real Estate transfer tax is \$3 per \$1,000 of the sales price of the house. This revenue stream is affected by increases in housing prices and increased sales volume. The assumption is based upon a 3% increase in housing values and 2% increase in sales volume. Zillow indicates the median house value has gone up 9% over the past year and predicts a 0.5% increase in the coming year. There was a 23% increase in number of stamps issued from 2013 to 2014.

F: Interest income has been stagnant since the economic decline in 2008. A conservative 1% increase has been used.

HISTORICAL DATA AND GROWTH RATES - FOR REFERENCE

Historical Data	2006	2007	2008	2009	2010	2011	2012	2013	2014	Growth from 2006-2014	Average Annual Growth Rate
Telecommunications Tax	\$ 1,280,012.00	\$1,060,790.00	\$ 1,177,360.00	\$ 1,353,193.00	\$ 1,344,022.00	\$1,195,488.00	\$1,236,387.00	\$1,133,981.00	\$1,067,945.00	-17%	-2%
Electricity Use Tax	\$ 1,004,852.00	\$ 977,189.00	\$ 1,028,289.00	\$ 1,009,011.00	\$ 955,153.00	\$1,045,989.00	\$1,007,438.00	\$1,048,547.00	\$1,015,349.00	1%	0%
Natural Gas Use Tax	\$ 295,821.00	\$ 316,063.00	\$ 322,937.00	\$ 342,861.00	\$ 322,985.00	\$ 322,359.00	\$ 279,174.00	\$ 323,568.00	\$ 372,046.00	24%	3%
Real Estate Transfer Tax	\$ 936,481.00	\$ 828,668.00	\$ 698,422.00	\$ 363,227.00	\$ 375,097.00	\$ 432,843.00	\$ 367,028.00	\$ 628,774.00	\$ 657,959.00	-30%	1%
Interest Income	\$ 174,834.00	\$ 207,450.00	\$ 78,306.00	\$ 27,545.00	\$ 10,203.00	\$ 7,123.00	\$ 7,304.00	\$ 7,541.00	\$ 11,571.00	-93%	-18%
Growth Rates											
Telecommunications Tax		-17%	11%	15%	-1%	-11%	3%	-8%	-6%		
Electricity Use Tax		-3%	5%	-2%	-5%	10%	-4%	4%	-3%		
Natural Gas Use Tax		5%	2%	6%	-6%	0%	-13%	16%	15%		
Real Estate Transfer Tax		-12%	-16%	-48%	3%	15%	-15%	71%	5%		
Interest Income		19%	-62%	-65%	-63%	-30%	3%	3%	53%		

Village of Glen Ellyn, Illinois

Hypothetical Illustration for General Obligation Bonds

Dated: August 1, 2014

Assumes Aa1 Rating, Current NBQ Rates, 20 Year Amortization, \$30 Million Par

Hypothetical Debt Service Schedule

Date	Principal	Assumed Rate*	Interest	Total P+I	Fiscal Total
08/01/2014	-	-	-	-	-
01/01/2015	-	-	334,596.88	334,596.88	334,596.88
07/01/2015	-	-	401,516.25	401,516.25	-
01/01/2016	1,230,000.00	0.450%	401,516.25	1,631,516.25	2,033,032.50
07/01/2016	-	-	398,748.75	398,748.75	-
01/01/2017	1,235,000.00	0.740%	398,748.75	1,633,748.75	2,032,497.50
07/01/2017	-	-	394,179.25	394,179.25	-
01/01/2018	1,245,000.00	1.090%	394,179.25	1,639,179.25	2,033,358.50
07/01/2018	-	-	387,394.00	387,394.00	-
01/01/2019	1,260,000.00	1.450%	387,394.00	1,647,394.00	2,034,788.00
07/01/2019	-	-	378,259.00	378,259.00	-
01/01/2020	1,275,000.00	1.780%	378,259.00	1,653,259.00	2,031,518.00
07/01/2020	-	-	366,911.50	366,911.50	-
01/01/2021	1,300,000.00	2.060%	366,911.50	1,666,911.50	2,033,823.00
07/01/2021	-	-	353,521.50	353,521.50	-
01/01/2022	1,325,000.00	2.290%	353,521.50	1,678,521.50	2,032,043.00
07/01/2022	-	-	338,350.25	338,350.25	-
01/01/2023	1,355,000.00	2.480%	338,350.25	1,693,350.25	2,031,700.50
07/01/2023	-	-	321,548.25	321,548.25	-
01/01/2024	1,390,000.00	2.630%	321,548.25	1,711,548.25	2,033,096.50
07/01/2024	-	-	303,269.75	303,269.75	-
01/01/2025	1,425,000.00	2.850%	303,269.75	1,728,269.75	2,031,539.50
07/01/2025	-	-	282,963.50	282,963.50	-
01/01/2026	1,465,000.00	2.950%	282,963.50	1,747,963.50	2,030,927.00
07/01/2026	-	-	261,354.75	261,354.75	-
01/01/2027	1,510,000.00	3.050%	261,354.75	1,771,354.75	2,032,709.50
07/01/2027	-	-	238,327.25	238,327.25	-
01/01/2028	1,555,000.00	3.160%	238,327.25	1,793,327.25	2,031,654.50
07/01/2028	-	-	213,758.25	213,758.25	-
01/01/2029	1,605,000.00	3.240%	213,758.25	1,818,758.25	2,032,516.50
07/01/2029	-	-	187,757.25	187,757.25	-
01/01/2030	1,660,000.00	3.310%	187,757.25	1,847,757.25	2,035,514.50
07/01/2030	-	-	160,284.25	160,284.25	-
01/01/2031	1,710,000.00	3.380%	160,284.25	1,870,284.25	2,030,568.50
07/01/2031	-	-	131,385.25	131,385.25	-
01/01/2032	1,770,000.00	3.440%	131,385.25	1,901,385.25	2,032,770.50
07/01/2032	-	-	100,941.25	100,941.25	-
01/01/2033	1,830,000.00	3.500%	100,941.25	1,930,941.25	2,031,882.50
07/01/2033	-	-	68,916.25	68,916.25	-
01/01/2034	1,895,000.00	3.550%	68,916.25	1,963,916.25	2,032,832.50
07/01/2034	-	-	35,280.00	35,280.00	-
01/01/2035	1,960,000.00	3.600%	35,280.00	1,995,280.00	2,030,560.00
Total	\$30,000,000.00	-	\$10,983,929.88	\$40,983,929.88	-

Yield Statistics

Bond Year Dollars	\$353,440.00
Average Life	11.781 Years
Average Coupon	3.1077212%
Potential Net Interest Cost (NIC)	3.1077212%
Potential True Interest Cost (TIC)	3.0682777%

*This illustration represents a mathematical calculation of potential interest cost, assuming hypothetical rates based on current non bank-qualified rates for general obligation bonds rated Aa1 as of June 27, 2014. Actual rates may vary. If actual rates are higher than those assumed, the interest cost would be higher. This illustration provides information and is not intended to be a recommendation, proposal or suggestion for a refinancing or otherwise be considered as advice.

\$30 million 20 Year GO 06 | SINGLE PURPOSE | 6/27/2014 | 3:49 PM

Robert W. Baird & Co.
Public Finance - DJW

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say \$2,050,000 per year for 20 years
 Attachment: Attachments to Capital Project Funding Issues Memo (1333 : Capital Project Funding Issues)

Village of Glen Ellyn, Illinois

General Obligation Bonds

Dated: July 1, 2014

Assumes Aa1 Rating, Current NBQ Rates, 20 Year Amortization \$20 Million Par
 Illustrations are subject to change based on market conditions. Actual rates may vary from those assumed.

Hypothetical Debt Service Schedule

Date	Principal	Assumed Coupon*	Interest	Total P+I	Fiscal Total
07/01/2014	-	-	-	-	-
01/01/2015	-	-	297,516.25	297,516.25	297,516.25
07/01/2015	-	-	297,516.25	297,516.25	-
01/01/2016	800,000.00	0.600%	297,516.25	1,097,516.25	1,395,032.50
07/01/2016	-	-	295,116.25	295,116.25	-
01/01/2017	805,000.00	0.950%	295,116.25	1,100,116.25	1,395,232.50
07/01/2017	-	-	291,292.50	291,292.50	-
01/01/2018	815,000.00	1.300%	291,292.50	1,106,292.50	1,397,585.00
07/01/2018	-	-	285,995.00	285,995.00	-
01/01/2019	825,000.00	1.600%	285,995.00	1,110,995.00	1,396,990.00
07/01/2019	-	-	279,395.00	279,395.00	-
01/01/2020	835,000.00	1.950%	279,395.00	1,114,395.00	1,393,790.00
07/01/2020	-	-	271,253.75	271,253.75	-
01/01/2021	855,000.00	2.250%	271,253.75	1,126,253.75	1,397,507.50
07/01/2021	-	-	261,635.00	261,635.00	-
01/01/2022	870,000.00	2.500%	261,635.00	1,131,635.00	1,393,270.00
07/01/2022	-	-	250,760.00	250,760.00	-
01/01/2023	895,000.00	2.700%	250,760.00	1,145,760.00	1,396,520.00
07/01/2023	-	-	238,677.50	238,677.50	-
01/01/2024	920,000.00	2.900%	238,677.50	1,158,677.50	1,397,355.00
07/01/2024	-	-	225,337.50	225,337.50	-
01/01/2025	945,000.00	3.050%	225,337.50	1,170,337.50	1,395,675.00
07/01/2025	-	-	210,926.25	210,926.25	-
01/01/2026	975,000.00	3.250%	210,926.25	1,185,926.25	1,396,852.50
07/01/2026	-	-	195,082.50	195,082.50	-
01/01/2027	1,005,000.00	3.400%	195,082.50	1,200,082.50	1,395,165.00
07/01/2027	-	-	177,997.50	177,997.50	-
01/01/2028	1,040,000.00	3.450%	177,997.50	1,217,997.50	1,395,995.00
07/01/2028	-	-	160,057.50	160,057.50	-
01/01/2029	1,075,000.00	3.550%	160,057.50	1,235,057.50	1,395,115.00
07/01/2029	-	-	140,976.25	140,976.25	-
01/01/2030	1,115,000.00	3.650%	140,976.25	1,255,976.25	1,396,952.50
07/01/2030	-	-	120,627.50	120,627.50	-
01/01/2031	1,155,000.00	3.700%	120,627.50	1,275,627.50	1,396,255.00
07/01/2031	-	-	99,260.00	99,260.00	-
01/01/2032	1,195,000.00	3.800%	99,260.00	1,294,260.00	1,393,520.00
07/01/2032	-	-	76,555.00	76,555.00	-
01/01/2033	1,245,000.00	3.900%	76,555.00	1,321,555.00	1,398,110.00
07/01/2033	-	-	52,277.50	52,277.50	-
01/01/2034	1,290,000.00	3.950%	52,277.50	1,342,277.50	1,394,555.00
07/01/2034	-	-	26,800.00	26,800.00	-
01/01/2035	1,340,000.00	4.000%	26,800.00	1,366,800.00	1,393,600.00
Total	\$20,000,000.00	-	\$8,212,593.75	\$28,212,593.75	-

Yield Statistics

Bond Year Dollars	\$239,035.00
Average Life	11.952 Years
Average Coupon	3.4357286%
Hypothetical Net Interest Cost (NIC)	3.4357286%
Hypothetical True Interest Cost (TIC)	3.3871629%
Hypothetical All Inclusive Cost (AIC)	3.4930559%

This illustration represents a mathematical calculation of potential interest cost, assuming current hypothetical rates for general obligation bonds rated Aa1 as of May 2, 2014. Actual rates may vary. If actual rates are higher than those assumed, the interest cost would be higher. This illustration provides information and is not intended to be a recommendation, proposal or suggestion for a financing or otherwise be considered as advice.

\$20 million 20 Year GO 00 | SINGLE PURPOSE | 5/5/2014 | 8:00 AM

Robert W. Baird & Co.
 Public Finance - DJW

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say \$1,410,000 per year for 20 years

Attachment: Attachments to Capital Project Funding Issues Memo (1333 : Capital Project Funding Issues)

Robert W. Baird & Co. G-17 Disclosures

BAIRD

Robert W. Baird & Co. Incorporated ("Baird") is very interested in serving either as financial advisor to the Issuer and/or Obligor or as underwriter (or placement agent) for the proposed issuance(s). However, Baird is unable to serve in both capacities. Under MSRB Rule G-23, if Baird is hired as financial advisor, Baird may not be able to serve as underwriter or placement agent for the securities to be offered and sold in the proposed issuance(s). The Issuer and/or Obligor will need to determine the Baird's role for the securities to be offered and sold in the proposed issuance(s).

If Baird is hired as financial advisor in connection with the proposed issuance(s), Baird will provide financial advisory and consultant services with respect to the issuance(s), including advice, recommendations and other assistance regarding the structure, timing, terms and other similar matters concerning such issuance(s). As financial advisor, Baird will serve as a fiduciary and act solely in the best interests of the Issuer and/or Obligor. Baird's fiduciary duties include the duty of care and the duty of loyalty. Baird is registered as a municipal advisor with the SEC and MSRB.

If Baird is hired as underwriter (or placement agent), Baird's primary role will be to purchase as principal, or arrange for the placement of the securities in a commercial arm's length transaction with the Issuer and/or Obligor, and may have financial and other interests that differ from those of the Issuer and/or Obligor. In its capacity as underwriter (or placement agent) and not as financial advisor, Baird may provide incidental financial advisory services at the request of the Issuer and/or Obligor, including advice regarding the structure, timing, terms and other similar matters concerning the issuance. However, Baird would be providing such services in its capacity as an underwriter (or placement agent) and not as a municipal advisor or financial advisor. Baird does not assume any financial advisory or fiduciary responsibilities with respect to the Issuer and/or Obligor when it acts as underwriter (or placement agent).

MSRB Rule G-17 requires an underwriter (or placement agent) to deal fairly at all times with both municipal issuers and investors. An underwriter (or placement agent) has a duty to purchase or to facilitate the purchase of securities from an issuer at a fair and reasonable price but must balance that duty with its duty to sell securities to investors at prices that are fair and reasonable. Unlike a municipal advisor or financial advisor, an underwriter (or placement agent) does not have a fiduciary duty to the issuer under the federal securities laws and is, therefore, not required by federal law to act in the best interests of the issuer without regard to its own financial or other interests. An underwriter has a duty to purchase securities from the issuer at a fair and reasonable price but must balance that duty with its duty to sell securities to investors at prices that are fair and reasonable. An underwriter will review the official statement for the securities in accordance with, and as part of, its responsibilities to investors under the federal securities laws, as applied to the facts and circumstances of the transaction.

As underwriter (or placement agent), Baird's compensation will be in the form of an underwriting (placement agent) fee and/or an underwriting discount that will be set forth in the bond purchase (placement) agreement to be negotiated and entered into in connection with the proposed issuance(s). Payment or receipt of such compensation will be based, in whole or in part, on a percentage of the principal or par amount of the securities being offered. While this form of compensation is customary in the municipal securities market, it presents a conflict of interest since the underwriter (or placement agent) may have an incentive to recommend to the issuer and/or obligor a transaction that is unnecessary or to recommend that the size of the transaction be larger than is necessary.



Glen Ellyn Village Board
535 Duane Street
Glen Ellyn, IL 60137

Meeting: 07/21/14 07:00 PM
Department: Public Works
Department Head: Julius Hansen
Category: Vouchers
Prepared By: Bob Minix

SCHEDULED

AGENDA ITEM (ID # 1334)

DOC ID: 1334

Discuss engineering services for Village Infrastructure Improvements Projects.

The purpose of this memorandum is to describe the current practice for performing and providing design and resident engineering services for the Village of Glen Ellyn and to explore possible modifications to improve economies. Both in-house and outside engineering services are currently utilized, with the bulk of design and construction oversight on larger capital projects performed by consultants, while Village engineering staff coordinates and manages all projects and provides needed engineering for maintenance-related efforts.

CURRENT PRACTICE - PW ENGINEERING

The Village engineering staff consists of the Professional Engineer, Civil Engineer and Stormwater Engineer. The Stormwater Engineer - a 30 hour per week position - works in the Planning and Development Department and concentrates primarily on private drainage and development projects and issues. The Professional and Civil engineers are in the Public Works Department and are full-time positions with a wide variety of responsibilities. These two engineers focus on public improvements: the Professional Engineer is in charge of the planning and implementation of capital projects; the Civil Engineer is involved with both large and small capital projects and takes the lead in various maintenance projects including sidewalk, striping, roadway rehabilitation / maintenance and pipe/manhole lining. The Professional Engineer also participates in reviews of larger private development projects for conformance with Village design requirements. The Civil Engineer also deals with various GIS, CAD and information storage and retrieval endeavors.

Currently, the Public Works engineering staff provides design services primarily in the form of specifications and contract document preparation for maintenance-related or very small-scale repair or enhancement work, with construction management oversight provided in conjunction with other PW operating staff. Some larger-scale projects - such as sewer pipe lining - have been handled in-house in the last few years by the Civil Engineer. The total construction value of in-house projects has been on the order of \$500,000 to \$700,000 in the past two years.

PAST PRACTICE - PW ENGINEERING

During my tenure, the Public Works Engineering staff has traditionally consisted of two or three personnel, with the Professional Engineer overseeing a technician and/or engineer. Prior to 2006, the PW engineering team provided the design and oversight for an annual street improvements project, with a construction value usually between \$500,000 and \$1,000,000. These projects were normally very straight-forward resurfacing projects with limited underground improvements. The design drawings were typically plan-only views with most of the scope of work described in text and notes. On some Village-lead projects, outside consultants provided assistance with required surveying, design and drawing production that supplemented the basic Village presentations.

Specifications and contract documents were produced in-house. Construction oversight was provided by the Engineering Technician.

Prior to 2002, the PW staff engineers provided many of the services now performed by the Stormwater Engineer. Starting in 2002 and the advent of a major roadway and storm sewer rehabilitation program, PW staff resources focused on infrastructure rehabilitation projects. Prior to 2006, the PW engineering staff did not have significant involvement with maintenance-related initiatives.

In the Public Works reorganization following the offer of early retirement in 2006, the PW engineering team was reconfigured to consist of the Professional Engineer and Civil Engineer with duties as currently described.

CONSULTING ENGINEERING SERVICES

The Village relies heavily on engineers in private practice to provide the detailed designs and construction oversight for most of the current infrastructure improvements projects. The scope of most recent projects has been beyond the basic capabilities of PW staff, requiring detailed project surveys, full plan and profile sheets, drainage designs and software capable of preparing cross-sections and calculating quantities. Most recent construction projects have a price point in excess of \$2 million and require multiple personnel to oversee construction in an effective manner. The Village works with a number of engineering consultants, with perhaps a half-dozen design firms providing most of the contract document preparations. Civiltech Engineering has managed the vast majority of construction projects in the past 10 years.

Selection of engineers typically is based on a review of materials submitted to the Village in response to a request for proposal. The RFP is targeted to firms that have provided services in the past or have demonstrated continuing interest in Village work, with the pool of consultants generally limited to between five and ten firms. Both qualification and cost data are submitted with the proposals, with the selection of the consultant based on an assessment of all information. In some cases - depending on the schedule, project timing, phase of work or other circumstances - a single engineering firm is requested to provide a sole source proposal for an assignment. The Professional Engineer has played the primary role in consultant selection.

Engineering fees are significant, generally running about 15% of the construction cost of a project. A summary of consultant purchase orders developed by the Finance Department (attached) shows fees averaging about \$1 million annually over the past five years, about evenly split between design / studies and construction engineering assignments.

Members of the Village Board have recently expressed concerns about the cost of engineering services, with two different perspectives offered, perhaps best framed with the following questions: "Are there opportunities for cost savings if the Village engineering staff is expanded to take a greater role in the design or construction management of projects?" In addition, "When approving an engineering contract, how can the Village be assured that it is getting a fair price?"

VILLAGE ENGINEERING STAFF EXPANSION

A staffing survey was conducted by Village Administrative Intern Justin Keenan, polling area communities on how engineering services are provided. The results of the survey are shown in the attached memorandum. Most communities have relatively modest-sized engineering staffs and all utilize the services of outside consultants for implementation of major projects. In contracting with consultants, most communities provide a funding contingency ranging from 3 to 10%.

If Village engineering staff was expanded to provide more in-house design and construction work to offset consultant costs, the following items should be considered:

General Considerations

- q What are the upcoming major projects that engineering staff will be involved with? For example, how will the CBD rehabilitation and enhancement projects be managed?
- q Are there likely candidate projects that lend themselves to an entirely in-house approach?
- q Another vehicle would be required in the fleet (estimated first cost of \$25,000)

Design Engineer

- q Needs a background in roadways and underground utilities with experience in producing complete project plans and specifications
- q Some construction experience would be desirable
- q Needs to be versatile to handle various survey, structural, hydraulic, geotechnical, traffic, electrical issues and questions, with any lacking disciplines filled in with consultants / specialty firms
- q Needs to be proficient in CAD and the use of engineering software
- q Needs to have good writing skills
- q Engineering design software would need to be purchased and training supplied (estimated first cost of \$25,000)
- q Production of detailed plan and profile sheets would require field surveying and base plan development, either through the services of a third party or via the use of Village-owned equipment (estimated first cost of \$25,000)
- q Needs sufficient time and an appropriate working environment to allow for productive and accurate work products
- q A quality control / quality assurance protocol must be established to check and verify the produced engineering products
- q A registered professional engineer would need to be on staff to sign and seal plans

Construction Engineer

- q A field engineer would need a diverse background in transportation and utility construction

as a lead resident engineer

- q During active projects, need to work “contractor hours” which usually exceed 8 hours per day and 40 hours per week
- q A construction project typically needs additional personnel at critical times, especially if the dollar value is in excess of \$1,000,000
- q How would this engineer be productively utilized during the non-construction season?

Analysis and Recommendations

Estimated annual cost for a new staff engineer would be approximately \$100,000 in salary, \$40,000 in benefits and \$10,000 in operating expenses (total of \$150,000). Estimated one-time costs would be \$50,000 - \$75,000 for a new vehicle, software and equipment. Depending on the services provided by staff, the value of annual projects would have to be greater than \$1 million dollars in order to at least match consultant expenses with staff costs.

There are upcoming opportunities where the scope of required infrastructure improvements is likely well-within the capabilities of a moderately experienced design / construction engineer. The future long-term plan - depending on near-term Board decisions - features a large percentage of roadways with relatively straightforward resurfacing. These are the types of projects that staff performed in the 1996 - 2005 timeframe with reasonable success.

In my opinion, it is feasible for Engineering Division staff to assume a greater role in the production and field management of projects with a reasonable likelihood of some cost savings. In the transition period for the Engineering Division through my pending retirement date of December 2016, a third Public Works engineer with the right capabilities (including potential to assume the Professional Engineer duties) could be hired in the immediate future to beta test the increased staff project-load alternative: if successful, another engineer would be brought on in late 2016; if deemed unsuccessful, the current model would be resumed with the Civil Engineer and new Project Engineer trained and ready.

PROCUREMENT OF CONSULTING ENGINEERING SERVICES

The procurement of professional engineering services should be predicated primarily on a qualifications based selection (QBS) system. Under QBS, the choice of a particular consultant is based solely on qualifications-based factors such as corporate and individual experience, ability of personnel, work load, work history, project understanding, scope of work, schedule and specific project experience provided in response to a request for qualifications (RFQ). Once a firm is selected based on its qualifications and competency, only then would negotiations be entered into to develop a contract and determine the appropriate compensation for the work. If negotiations do not yield a satisfactory contract with the highest ranked firm, the second-most qualified firm is contacted. QBS is mandated by the Local Government Professional Services Selection Act (50 ILCS 510/, attached), although home rule units are not included in the Act’s definition of a “Political Subdivision”, the entity making the selection.

Selected communities where engineering personnel are well known to Village staff were queried regarding their procedures for hiring consultants. Representatives from Lisle, Bensenville and Warrenville responded as summarized below:

- q Lisle uses QBS, but tries to consolidate multi-year or similar scope assignments into a single process to avoid multiple RFQ's. Once a firm is selected based on merit, the proposed fees are benchmarked against past projects in terms of hours and scope as well as the mix of personnel proposed for the work. Sometimes, a Board member sits on the evaluation team and reviews the qualifications statements and proposal(s).
- q Bensenville also uses QBS, with their process closely following the model developed by Lombard. The Lombard model uses a short-list of at least five consultants developed biennially in multiple specialties (including Roadway Improvements and Resident Engineering). The short-lists are created following a very comprehensive review of both general firm qualifications and responses to a specific up-coming project and involve a large initial pool of possible consultants. Once the short-lists are developed, firms are selected for individual assignments based on staff assessments and the contracts are then negotiated.
- q Warrenville has a written policy that describes their QBS process (copy enclosed). City staff selects a limited number of firms to receive a RFQ, asking for qualifications and, in a separate sealed envelope, fees for the projects. The responding firms are ranked according to qualifications by the City review team that generally consists of two or three individuals. The fee envelope is opened after the ranking process so that the reasonableness of the hours and fees can be assessed. Fees are generally found to be comparable and commensurate with the approach to the work as described in the qualification statements.

Analysis and Recommendations

Most communities use some form of QBS tailored to meet their particular circumstances and requirements. While the current Glen Ellyn practice of mixing qualifications and dollar proposals into a single submittal has not met with overt resistance by the consulting community, our system could be improved in terms of consistency, accountability and clarity.

The following process is proposed for the Village of Glen Ellyn:

- q Develop a written policy for consultant selection to be adopted by the Village Board, using the Warrenville process as a guideline
- q Develop a "Satisfactory Relationship" list of consultants developed from a review of a reasonable number of qualification submittals for both design and resident engineering services. The review committee would consist of Village staff engineers, the Public Works Director, a representative from Village Administration and, if available, an elected official. The list would normally be maintained for no less than two years before considering alterations and would be Board approved.
- q Request current financial and staff information from the short-listed firms based on IDOT

prequalification materials and keep on file.

- q For particular assignments, seek specific qualifications from at least three short-listed firms, with cost information provided in a separate, sealed envelope. Selection should be based on qualifications, with provided cost information utilized as a reasonableness test. The selection committee would generally consist of the Public Works Engineers.
- q Negotiate the final scope of work and engineering costs.
- q Present the recommendation for Village Board approval, including the appropriate contingency and funding sources.

ATTACHMENTS:

- Attachments to Engineering Services Memo (PDF)

ENGINEERING PURCHASE ORDERS 2010 - 2014

Purchase Order	Name	Project	Fiscal Year	Total Ordered	Contract Amount	Contingency	Contingency %	Original Approval	Change Orders	Approved	Total Invoiced	Contract Utilization	Contract Status
20100001	CIVILTECH ENGINEERING, INC.	Park GE Place Prairie Improvements - Construction	2010	199,540	137,500	7,500	5%	145,000	54,540	199,540	122,652	61%	
20100015	CIVILTECH ENGINEERING, INC.	Braeside Improvements - Construction	2010	217,000	190,000	10,000	5%	200,000	17,000	217,000	216,762	100%	
20100017	CIVILTECH ENGINEERING, INC.	2009 Street Improvements - Construction	2010	316,147	285,000	15,000	6%	280,000	36,147	316,147	264,908	84%	
20100019	KUDRHA & ASSOC., LTD.	South Park / South Lambert LAPP - Design	2010	31,000	28,500	2,500	9%	31,000	-	31,000	29,223	94%	
20100022	ENGINEERING RESOURCE ASSOC INC	Bryant/Thain's Addition - Design	2010	430,000	409,000	21,000	5%	430,000	-	430,000	336,178	78%	
20100026	BURNS & MCDONNELL ENGINEERING CO	Lake Elyn Outlet Channel - Design	2010	58,500	11,000	1,500	14%	12,500	-46,000	58,500	56,000	95%	
20100039	PAVIA-MARTING & CO.	Crescent Blvd Sidewalk Extension - Design	2010	44,000	39,700	4,300	11%	44,000	-	44,000	44,000	100%	
20100041	WALTER DUCHILLER ASSOCIATES INC	Nicoll Way Bridge Repair - Design	2010	15,000	13,500	1,500	11%	15,000	-	15,000	14,914	99%	Purchase order still open
20100042	BURNS & MCDONNELL ENGINEERING CO	Crescent Blvd Concept Study - Design	2010	44,000	40,000	-4,000	10%	44,000	-	44,000	40,000	91%	
20100043	SUBTOTALS												
20100043	CIVILTECH ENGINEERING, INC.	South Park / South Lambert LAPP - Construction	2011	65,000	61,871	3,129	5%	65,000	-	65,000	60,967	94%	
20110005	CIVILTECH ENGINEERING, INC.	Bryant/Thain's Addition - Construction	2011	518,714	503,000	22,000	4%	525,000	-	525,000	447,721	85%	Purchase order still open
20110018	PAVIA-MARTING & CO.	Braeside Lighting - Design	2011	55,000	49,750	5,250	11%	55,000	-	55,000	52,140	95%	
20110020	CIVILTECH ENGINEERING, INC.	Rivard Road - Construction	2011	230,000	219,000	11,000	5%	230,000	-	230,000	222,745	97%	Purchase order still open
20110027	REZELK HEURY MEISENHEIMER/GENDT INC	Esser Court Drainage - Design	2011	77,000	60,000	5,000	8%	65,000	12,000	77,000	77,000	100%	
20120003	CIVILTECH ENGINEERING, INC.	Sunset/Turner - Construction	2012	300,000	281,650	18,350	7%	300,000	-	300,000	860,573	129,140 Design; 731,433 Construction	
20120005	CIVILTECH ENGINEERING, INC.	Braeside Lighting - Construction	2012	65,000	58,635	6,365	11%	65,000	-	65,000	278,333	93%	Purchase order still open
20120006	ENGINEERING RESOURCE ASSOC INC	Hawthorne - Design	2012	290,000	263,000	27,000	10%	290,000	-	290,000	48,066	74%	
20120017	REZELK HEURY MEISENHEIMER/GENDT INC	ELDG Drainage/Roadway - Design	2012	182,242	159,200	15,800	10%	175,000	7,242	182,242	281,633	97%	
20120022	PAVIA-MARTING & CO.	Braeside Drainage - Design	2012	57,000	51,550	5,050	10%	57,000	-	57,000	176,783	97%	
20120026	REZELK HEURY MEISENHEIMER/GENDT INC	Lake Elyn Hydrologic/Hydraulic - Design	2012	82,451	51,450	5,070	10%	56,500	25,951	82,451	50,663	89%	
20130002	CIVILTECH ENGINEERING, INC.	Hawthorne - Construction	2013	470,000	398,625	21,375	5%	420,000	25,000	445,000	910,995	584,596 Design; 326,399 Construction	
20130015	ENGINEERING ENTERPRISES, INC	Park Blvd STP - Design	2013	125,000	116,200	8,800	8%	125,000	-	125,000	419,866	94%	CD Approved 7/12/13
20130016	RHM GROUP, INC.	Central Basin Sanitary Sewer - Design	2013	85,000	74,420	10,580	14%	85,000	-	85,000	98,446	79%	Purchase order still open
20130017	BURNS & MCDONNELL ENGINEERING CO	Crescent Blvd Reconstruction - Design	2013	130,000	121,640	8,360	7%	130,000	-	130,000	80,809	95%	
20130021	THOMAS ENGINEERING GROUP, LLC	Lambert Road Turn Lane - Construction	2013	72,000	68,500	3,500	5%	72,000	-	72,000	130,000	100%	
20130030	REZELK HEURY MEISENHEIMER/GENDT INC	Cludewier Elm-Tenox-Inden - Design	2013	192,000	95,500	9,500	10%	105,000	87,000	192,000	70,215	98%	
20130031	BAXTER & WOODMAN, INC.	EOAF - Design	2013	120,211	95,000	10,000	11%	105,000	15,211	120,211	119,721	100%	
20130032	PAVIA-MARTING & CO.	2013 Street Improvements - Design	2013	155,000	146,000	9,000	6%	155,000	-	155,000	98,523	51%	Purchase order still open
20130035	CIVILTECH ENGINEERING, INC.	Braeside Drainage - Construction	2013	102,188	66,000	7,000	11%	73,000	29,188	102,188	152,346	98%	
20130039	STRAND ASSOCIATES, INC	Roosevelt Road Water Main - Design	2013	26,000	24,200	1,800	7%	26,000	-	26,000	101,812	100%	
20130041	REMPF-SHARPE AND ASSOCIATES, INC	Duane Glenwood Lot - Design	2013	30,000	26,000	4,000	15%	30,000	-	30,000	24,200	93%	Purchase order still open
20130043	CIVILTECH ENGINEERING, INC.	Glen Elyn Plate-Prairie Imp Project - Construction	2013	54,540	54,540	-	0%	54,540	-	54,540	30,000	100%	
20130045	ENGINEERING RESOURCE ASSOC INC	Duane Lorraine Lot - Design	2013	95,000	89,700	5,300	6%	95,000	-	95,000	54,540	100%	
20140018	BURNS & MCDONNELL ENGINEERING CO	Lake Elyn Outlet Channel - Construction	2014	1,376,325	788,660	587,665	58%	788,665	-	788,665	26,471	28%	Purchase order still open
20140019	BAXTER & WOODMAN, INC.	EOAF - Construction	2014	29,000	26,500	2,500	9%	29,000	-	29,000	1,406,949	760,517 Design; 646,433 Construction	
20140020	ENGINEERING RESOURCE ASSOC INC	2013 Street Improvements - Construction	2014	215,000	204,500	10,500	5%	215,000	-	215,000	19,200	66%	
20140034	REMPF-SHARPE AND ASSOCIATES, INC	Duane Glenwood Lot - Construction	2014	156,000	148,800	7,200	5%	156,000	-	156,000	214,999	100%	Purchase order still open
20140036	REZELK HEURY MEISENHEIMER/GENDT INC	Lake Elyn Outlet Modification - Design	2014	45,000	39,075	5,925	15%	45,000	-	45,000	156,000	100%	
20140038	REMPF-SHARPE AND ASSOCIATES, INC	Duane Glenwood Lot - Design	2014	59,000	53,917	5,083	9%	59,000	-	59,000	38,767	86%	Purchase order still open
20140039	ENGINEERING RESOURCE ASSOC INC	Lake Elyn - Design	2014	4,416	4,416	-	0%	4,416	-	4,416	8,229	14%	Purchase order still open
20140044	PAVIA-MARTING & CO.	2014 Street Resurfacing - Design	2014	38,000	34,700	3,300	10%	38,000	-	38,000	4,416	100%	
20140045	HAMPTON, LENZINI AND RENWICK, INC	Glenwood/Ashe/Hidgewood - Design	2014	49,000	44,500	4,500	10%	49,000	-	49,000	20,803	55%	Purchase order still open
20140046	URS CORPORATION	Elm-Geneva-Contage Improvements - Design	2014	102,000	97,500	9,500	10%	102,000	-	102,000	45,745	92%	Purchase order still open
20140055	HOH ENGINEERING, INC	Under/Overpass - Design	2014	88,000	79,900	8,100	10%	88,000	-	88,000	74,667	73%	Purchase order still open
20140062	RHM GROUP, INC.	Manhole rehabilitation - Design	2014	70,000	64,800	5,200	8%	70,000	-	70,000	60,511	69%	Purchase order still open
20140062	SUBTOTALS												
20140062			2014	101,100	884,708	465,833	46%	465,833	-	465,833	642,836	213,871 Design; 428,966 Construction	

Copy to
Julius of Bb

MEMORANDUM

TO: Mark Franz, Village Manager
Al Stonitsch, Assistant Village Manager

FROM: Justin Keenan, Administrative Intern

DATE: June 11, 2014

RE: Engineering Staffing Assessment

Survey Summary

As part of the engineering staffing assessment survey, 13 communities were contacted. Of those contacted, 11 responded. 9 of the 11 communities have either a engineering division or department that handles the majority of their engineering services. However, 2 communities, LaGrange and Clarendon Hills, with the exception of their Public Works Directors, do not have any engineers on staff and therefore outsource the vast majority of their engineering services. Clarendon Hills has a contract with Christopher B. Burke Engineering, and LaGrange with Baxter & Woodman to provide village engineer services.

Engineering Staffing Assessment Survey						
Community	Population	Department	# of Staff	Pre-Qualify Eng	Contingencies	CIP Budget
Glen Ellyn	27,500	PW	3	Yes	Project Specific	\$7,494,500
Downers Grove	49,399	PW	16	Yes	Rarely	\$18,625,205
Hinsdale	17,126	PW	3	No	10%	\$7,580,000
Naperville	143,684	TED ¹	12.5	Yes	3-5%	\$52,492,375
Wheaton	53,469	Engineering	6	Yes	5-10%	\$8,765,648
Arlington Heights	75,777	Engineering	9	Yes	Project Specific	\$13,296,600
Geneva	21,722	PW	2	Yes	8-10%	\$13,453,260
Lombard	43,165	PW	11	Yes	Project Specific	\$6,736,960
Woodridge	33,305	PW	2	Yes	No	\$2,355,860
Elmhurst	45,171	PW	5	Project Specific	No	
Clarendon Hills ²	8,570	PW	0	Project Specific	10%	\$2,340,317
LaGrange ²	15,680	PW	0	Project Specific	Project Specific	\$3,848,349

Notes:

1. Transportation, Engineering, Development Department (TED)

2. Clarendon Hills & LaGranges' PW outsources majority of engineering services.

8 of the 11 community's surveyed had their engineering services assigned to their Public Works Department. Only Wheaton and Arlington Heights had designated Engineering Departments. Naperville's engineering services were a part of their Transportation, Engineering and Development Department (TED). Whether or not a community included a contingency for engineering projects varied from community to community. Hinsdale and Clarendon Hills included a 10% contingency for most of their projects. Wheaton includes a 5-10% contingency, and Geneva includes a 8-10% contingency. Arlington Heights, Lombard, and LaGrange based their contingencies on the size and scope of the project. Downers Grove mentioned that they rarely provide a contingency, unless a

Engineering Staffing Assessment

June 6, 2014

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large number of sub-contractors would be involved. Naperville has a preapproved ability to include a 5% contingency on projects that are under \$100,000, and 3% on projects over \$100,000. If the costs go over that sum, they must obtain Village Board approval. Woodridge and Elmhurst do not include contingencies.

In regards to pre-qualifying engineering firms, only Hinsdale stated that they never asked for qualifications. Elmhurst, Clarendon Hills and LaGrange requested qualifications depending on the size and scope of the project. The rest of the surveyed communities pre-qualified engineering firms on either an annual or bi-annual basis. All of the communities surveyed at least outsourced major improvement oversight. Woodridge specifically mentioned that they outsource their Village Engineer position. Elmhurst uses James Benes and Associates for plan reviews and flood plain plans.

Below is a table that contains the names of the engineering companies that have been used by the surveyed communities. Christopher B. Burke Engineering was the most used company by a large margin. Baxter & Woodman and Strand Engineering rounded out the top three.

Engineering Firms Used		
Christopher Burke Engineering ¹	ESI	Engineering Resource Associates (ERA)
Strand Engineering ¹	Engineering Enterprise	VDM Smith
Baxter & Woodman ¹	Thomas Engineering Group	VBK Associate
CivilTech	HR Green	Walker Parking Consultants
Rempe Sharpe	Dickson Engineering	ERA
V3 Companies	James Benes & Associates	Robinson Engineering
RJN Group	Hey and Associates	T.Y. Lin

Notes:

1. Most Popular Firms

Attachments

1. Community In-house Positions

Community In-House Engineering Positions

Community	# of Staff	Positions	
Lombard	11	Village Engineer (1) Civil Engineer (3)	Civil Engineer Tech (3) Seasonal Engineer Co-op (4)
Woodridge	2	Civil Engineer (2)	
Wheaton	6	Director of Engineering (1) Senior Project Engineer (1) Project Engineer (1) Sanitary Sewer Engineer (1)	Storm Water Engineer (1) Development Engineer (1)
Geneva	2	Civil Engineer (1) Engineering Technician (1)	
Downers Grove	16	Traffic Engineer Manager (1) Assistant Director Engineering (1) Staff Engineer (8)	Stormwater Administrator (1) Engineering Technician (4) CAD Technician (1)
Elmhurst	5	City Engineer (1) Civil Engineer (4) Utility Capital Projects Admin (1)	Part-Time Inspectors (3) JULIE Locator (1)
Hinsdale	3	Village Engineer (1) Assistant Village Engineer (1) Engineering Technician (1)	
Naperville	12.5	Engineering Team Leader (1) Engineering Manager (1) Transportation Team Leader (1)	TED Inspection Supervisor (1) Project Manager (2) Project Engineer (6.5)
Arlington Heights	9	Director of Engineering (1) Deputy Director of Engineering (1) Civil Engineer (2) Traffic Engineer (1)	Engineer Inspector (2) Engineer Technician (1) Traffic Technician (1)

Illinois Compiled Statutes

Information maintained by the Legislative Reference Bureau

Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as Public Acts soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the Guide.

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

LOCAL GOVERNMENT

(50 ILCS 510/) Local Government Professional Services Selection Act.

(50 ILCS 510/0.01) (from Ch. 85, par. 6400)

Sec. 0.01. Short title. This Act may be cited as the Local Government Professional Services Selection Act.
(Source: P.A. 86-1324.)

(50 ILCS 510/1) (from Ch. 85, par. 6401)

Sec. 1. Policy. It shall be the policy of the political subdivisions of the State of Illinois to negotiate and enter into contracts for architectural, engineering and land surveying services on the basis of demonstrated competence and qualifications for the type of services required and at fair and reasonable compensation.
(Source: P.A. 85-854.)

(50 ILCS 510/2) (from Ch. 85, par. 6402)

Sec. 2. Federal Requirements. In the procurement of architectural, engineering and land surveying services and in the awarding of contracts, a political subdivision of the State of Illinois may comply with federal law and regulations and take all necessary steps to adapt its rules, specifications, policies and procedures accordingly to remain eligible for federal aid.
(Source: P.A. 85-854.)

(50 ILCS 510/3) (from Ch. 85, par. 6403)

Sec. 3. Definitions. As used in this Act unless the context specifically requires otherwise:

(1) "Firm" means any individual, firm, partnership, corporation, association or other legal entity permitted by law to practice the profession of architecture, engineering or land surveying and provide architectural, engineering or land surveying services.

(2) "Architectural services" means any professional service as defined in Section 5 of the Illinois Architecture Practice Act of 1989.

(3) "Engineering services" means any professional service as defined in Section 4 of the Professional Engineering Practice Act of 1989 or Section 5 of the Structural

Engineering Practice Act of 1989.

(4) "Land surveying services" means any professional service as defined in Section 5 of the Illinois Professional Land Surveyor Act of 1989.

(5) "Political subdivision" means any school district and any unit of local government of fewer than 3,000,000 inhabitants, except home rule units.

(6) "Project" means any capital improvement project or any study, plan, survey or new or existing program activity of a political subdivision, including development of new or existing programs which require architectural, engineering or land surveying services.

(Source: P.A. 91-91, eff. 1-1-00.)

(50 ILCS 510/4) (from Ch. 85, par. 6404)

Sec. 4. Public notice. Present provisions of law notwithstanding, in the procurement of architectural, engineering or land surveying services, each political subdivision which utilizes architectural, engineering or land surveying services shall permit firms engaged in the lawful practice of their professions to annually file a statement of qualifications and performance data with the political subdivision. Whenever a project requiring architectural, engineering or land surveying services is proposed for a political subdivision, the political subdivision shall, unless it has a satisfactory relationship for services with one or more firms:

(1) mail or e-mail a notice requesting a statement of interest in the specific project to all firms who have a current statement of qualifications and performance data on file with the political subdivision;

(2) place an advertisement in a secular English language daily newspaper of general circulation throughout such political subdivision, requesting a statement of interest in the specific project and further requesting statements of qualifications and performance data from those firms which do not have such a statement on file with the political subdivision. Such advertisement shall state the day, hour and place the statement of interest and the statements of qualifications and performance data shall be due; or

(3) place an advertisement for professional services on the political subdivision's website requesting a statement of interest in the specific project. The professional services advertisement shall include a description of each project and state the time and place for interested firms to submit its letter of interest, statement of qualifications, and performance data, as required.

(Source: P.A. 98-420, eff. 8-16-13.)

(50 ILCS 510/5) (from Ch. 85, par. 6405)

Sec. 5. Evaluation Procedure. A political subdivision shall, unless it has a satisfactory relationship for services with one or more firms, evaluate the firms submitting letters of interest, taking into account qualifications, ability of professional personnel, past record and experience, performance data on file, willingness to meet time requirements, location, workload of the firm, and such other

qualifications-based factors as the political subdivision may determine in writing are applicable. The political subdivision may conduct discussions with and require public presentations by firms deemed to be the most qualified regarding their qualifications, approach to the project, and ability to furnish the required services. In no case shall a political subdivision, prior to selecting a firm for negotiation under Section 7, seek formal or informal submission of verbal or written estimates of costs or proposals in terms of dollars, hours required, percentage of construction cost, or any other measure of compensation.

(Source: P.A. 94-1097, eff. 2-2-07.)

(50 ILCS 510/6) (from Ch. 85, par. 6406)

Sec. 6. Selection procedure. On the basis of evaluations, discussions and presentations, the political subdivision shall, unless it has a satisfactory relationship for services with one or more firms, select no less than 3 firms which it determines to be the most qualified to provide services for the project and rank them in order of qualifications to provide services regarding the specific project. The political subdivision shall then contact the firm ranked most preferred and attempt to negotiate a contract at a fair and reasonable compensation, taking into account the estimated value, scope, complexity, and professional nature of the services to be rendered. If fewer than 3 firms submit letters of interest and the political subdivision determines that one or both of those firms are so qualified, the political subdivision may proceed to negotiate a contract pursuant to this Section and Section 7.

(Source: P.A. 85-854.)

(50 ILCS 510/7) (from Ch. 85, par. 6407)

Sec. 7. Contract negotiation. (1) The political subdivision shall prepare a written description of the scope of the proposed services to be used as a basis for negotiations and shall negotiate a contract with the highest qualified firm at compensation that the political subdivision determines in writing to be fair and reasonable. In making this decision the political subdivision shall take into account the estimated value, scope, complexity and professional nature of the services to be rendered.

(2) If the political subdivision is unable to negotiate a satisfactory contract with the firm which is most preferred, negotiations with that firm shall be terminated. The political subdivision shall then begin negotiations with the firm which is next preferred. If the political subdivision is unable to negotiate a satisfactory contract with that firm, negotiations with that firm shall be terminated. The political subdivision shall then begin negotiations with the firm which is next preferred.

(3) If the political subdivision is unable to negotiate a satisfactory contract with any of the selected firms, the political subdivision shall re-evaluate the architectural, engineering or land surveying services requested, including the estimated value, scope, complexity and fee requirements. The political subdivision shall then compile a second list of not less than three qualified firms and proceed in accordance with the provisions of this Act.

(Source: P.A. 85-854.)

(50 ILCS 510/8) (from Ch. 85, par. 6408)

Sec. 8. Waiver of competition. A political subdivision may waive the requirements of Sections 4, 5, and 6 if it determines, by resolution, that an emergency situation exists and a firm must be selected in an expeditious manner, or the cost of architectural, engineering, and land surveying services for the project is expected to be less than \$25,000.
(Source: P.A. 87-1034.)

Top

CITY OF WARRENVILLE QUALITY BASED SELECTION (QBS) PROCESS

Adopted by the City Council at their regular meeting on March 21, 2011

The following process will be utilized to develop staff recommendations on contracts for new professional services and as a reference for elected officials when considering these staff recommendations.

Step One: Determine if an Outside Consultant is Necessary

The first step in any project is to evaluate whether it is appropriate for City staff to handle a specific project partially or entirely in-house or if it should be outsourced. The following considerations will be evaluated when making this determination:

- Does staff have the expertise necessary for the proposed project?
- Will staff's current workload allow them to take on the responsibilities to complete this project effectively and in a timely manner?
- If staff does not have the expertise or availability to perform the entire project, how much, if any, of the project can be handled in-house? Can staff efficiently coordinate with the consultant without hindering the progress of the project?

Step Two: Preparation/Distribution of Request for Qualifications (RFQ)

City staff will maintain a list of qualified firms for various categories of standard projects. The list will be based on staff experience with specific firms as well as statements of qualifications (SOQs) provided to City staff by various firms and will be updated on a regular basis based on experience with existing consultants and contacts with new consultants.

Staff, led by at least one Senior Staff member and a second City staff member who have experience with and will be directly involved with the project (at least 2-3 people), will prepare and distribute the RFQ for the project. For most projects, staff will distribute a Request for Qualifications (RFQ) to up to three (3) qualified firms. Staff will determine which consultants will receive the RFQ. The RFQ will request each firm provide the qualifications of the specific consultant staff that will be assigned to the project, a project approach, proposed scope of work, and proposed hours. Staff does not envision any situation where the City would open this up to a public advertisement and bidding process. Staff will determine who is qualified based on past experience and statements of qualifications that have been submitted.

The RFQ requirements will be defined to discourage firms from including excessive marketing materials, graphics or pictures; and focus instead on the qualifications of the firm, its proposed staff for the project, similar projects and other pertinent items. Preparation of proposals can cost firms \$5,000 or more when you factor in the hours, pay rates and printing involved. Staff wants to limit this waste of effort and encourage substance in the proposals. Staff envisions a submittal with little to no color, limited copies (maybe electronic only), and limited project profiles and pictures.

Step Three: Review of Statement of Qualifications

Staff, led by at least one Senior Staff member and a second City staff member who have experience with and will be directly involved with the project (at least 2-3 people), will evaluate the SOQs submitted for the project. Each staff member involved will read and evaluate the SOQs before meeting to decide, as a group, which consultant is most qualified and provided the best proposal. The City's Senior Civil Engineer will be involved in the RFQ / SOQ / contract negotiation process for all civil engineering related contracts.

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Step Four: Scope of Services Negotiation

Staff led by at least one Senior Staff member will negotiate with the selected firm to formalize scope, hours and fees. This negotiation allows both sides to be clear on details of who will be responsible the various items associated with the project. For instance:

- How many meetings are anticipated?
- What deliverables are required?
- How many copies of each deliverable are required?
- What information can the City provide to help the surveyor or engineer?
- What can City staff do rather than using the consultant?

The discussion can result in recommendations from the consultant on where there are opportunities for saving money. This often benefits both parties and results in a lower cost contract, because the consultant is required to make fewer assumptions.

The goal is a fair contract for both parties. The City is not obligated to contract with the best qualified consultant if they do not negotiate in good faith and will not agree to provide services for a fair price. City Staff has experience with many different types of contracts and has a reasonable expectation for the costs associated with those contracts.

Step Five: Staff Recommendation

The process will conclude with staff preparing a written recommendation memorandum to memorialize the firm, scope of services, estimated costs, and supporting professional services agreement/contract it is recommending the City Council ultimately approve.

Special Circumstances:

There will be special circumstances where the City will determine it is not appropriate to follow the standard process and instead have staff select one qualified firm and negotiate a contract directly with that firm. Examples of such circumstances include, but are not limited to:

- **Time Constraints:** An example is a project like the section of Batavia Road between Warrenville Road and Butterfield Road / Route 56. In that situation, applications for potential Stimulus (ARRA) funding were requested and projects that were "shovel-ready" had an advantage. It was important to begin the survey and design work associated with that project to reach a stage where it was ready for construction as soon as possible.
- **Expansion of Existing Scope of Work:** An example is a project like the Route 56 Streetscape Improvements where the project has evolved and staff determined that the scope of work for the contract needed to be expanded.
- **Continuation of a Project:** Examples would be moving from preliminary to final design of a project or an additional phase or segment of a project where the consultant performing the earlier phase of the project has done a good job and is best positioned to provide efficient and quality services for the City.

In any situation where Staff determines it is not in the City's best interest to follow the standard Professional Services Selection process. Staff will prepare and present a memo to the City Council to explain and justify why the standard process was not followed.