VILLAGE OF LIBERTYVILLE
BOARD OF TRUSTEES
STREETS COMMITTEE

May 24, 2016
7:00 pm
Village Hall

Agenda

1) Call to Order

2) Minutes of Tuesday, April 26, 2016 Meeting

3) 2016 Road Project Updates

4) 2017 Pavement Rehabilitation Program Update

5) Flashing Pedestrian Crossing Beacon Update at ILL Route 176 & Dymond Road

6) Sunnyside Avenue Speeding Concerns and Electronic Vehicle Display Sign Update

7) RFP for Village-Wide Master Stormwater Management Plan

8) Adjournment

VILLAGE OF LIBERTYVILLE
BOARD OF TRUSTEES
STREETS COMMITTEE

April 26, 2016
7:00 pm
Village Hall

Minutes

Attendance

Committee:	Trustee Donna Johnson, Trustee Scott Adams, Trustee Pete Garrity
Board:	Mayor Terry Weppler
Staff:	Village Administrator Kevin Bowens, Director of Public Works Paul Kendzior, Police Chief Clint Herdegen, Finance Director Patrice Sutton, Community Development Director John Spoden, Fire Chief Rich Carani, Assistant to the Director Laura Ditanto
Residents:	Barbara Schafer - 315 Minear Drive, Sally Bauer - 1007 Sandstone Drive, Susan Kelly - 945 Sandstone Drive, Robert Gerber - 321 Minear Drive, Kelly Richter - 249 E. Ellis Avenue

Agenda

1) CALL TO ORDER

The meeting was called to order at 7:00 pm

2) MINUTES OF TUESDAY, FEBRUARY 23, 2016 MEETING

The minutes were approved as written.

3) 2016 ROAD PROJECT UPDATES

Pavement Rehabilitation Project: The construction contract was awarded to Alamp Concrete Contractors for an amount not to exceed $3,585,771.11 at the February 23rd Board meeting. The contractor is currently doing curb and sidewalk work on Walnut Street, Carriage Hill Street, and Lake Street; and grinding the road on Lake Street, Wellington Ave, Sussex Lane, Claridge Drive, Oxford Court, Ashley Lane, Trinity Place, Blackberry Court, Checkerberry Court, Elderberry Court, Hackberry Court, Lingonberry Court, Mulberry Drive, Newcastle Court, Plumwood Drive, Portwine Court, Portwine Drive, Ronan Court, Vineyard Lane, Sunnyview, and Kildare.

FAU Resurfacing Project (Fourth/Greentree/Red Top): The project has received Phase 1 approval from IDOT. Construction for this project will be 80% Federal and 20% Village funded. Bids for this project were opened on the April 22, 2016 IDOT letting. There were two bids received, Peter Baker & Sons $932,127.00 and J.A. Johnson Paving Company $1,020,898.39. After IDOT awards contract, IDOT will set up a preconstruction meeting. This will likely be in about 45 days.

4) 2017 PAVEMENT REHABILITATION PROGRAM UPDATE

The list of streets for the 2017 Pavement Rehabilitation Program was approved at the January

26th Streets Committee Meeting. The engineering services contract with Christopher B. Burke Engineering, Ltd. was approved at the February 23rd Board meeting. Preliminary work (surveying, pavement cores, etc.) will begin soon.

5) FLASHING PEDESTRIAN CROSSING BEACON UPDATE AT ILL ROUTE 176 & DYMOND ROAD

The Village submitted the formal Permit materials to the IDOT on February 2nd. The submittal included a cover letter, engineering drawings and a description of the proposed work. Engineering Division Staff is in the process of responding to IDOT's comments. Staff resubmitted to IDOT on April 19, 2016.

6) ELECTRONIC VEHICLE DISPLAY SIGNS

In response to concerns with vehicle speeds, Public Works and Police Department Staff have recently installed the electronic vehicle display signs on Sunnyside Avenue. As mentioned in previous discussions with the Streets Committee, the signs were purchased with funds from an anonymous donor and will be rotated on a monthly or bi-monthly basis to pre-determined locations within the Village where speeding is a concern. Past studies have shown that electronic vehicle speed display signs have been effective in speed calming, but over time (45-60 days) lose their effectiveness. This is why Staff desires to rotate them. The next location where the signs will be installed is on Fourth Avenue between Golf and Red Top.

The electronic signs have technology in them that allow the Police Department to run customized reports for eastbound traffic, westbound traffic and certain dates/times of the month. These reports allow the Police department to better allocate their resources for speeding enforcement. The westbound traffic for the first three weeks of April has an average mile per hour reading of 18.67 MPH. The eastbound traffic for the first three weeks of April had an average mile per hour of 22 MPH. The Police Department is continuously working with the car dealerships to keep their test drives off residential streets.

7) SIDEWALK SNOW REMOVAL UPDATE

Snow removal operations for public sidewalks was discussed at the January and February Streets Committee meetings. One of the concerns was with the removal of snow along the frontages of elderly and handicapped residents. Public Works Administrative Staff has been in contact with the Recreation Department to get a list of addresses needing assistance through coordination with the Civic Center. Libertyville and Carmel High School, along with the local Boy Scout Troop, have indicated that volunteers should be available to clear snow when needed. This is a new program that will be started with the next snow season and we will report on its effectiveness after one or more events.

8) IMPACT OF CONTINUED E. ELLIS AVENUE NEW HOME CONSTRUCTION ON SUB-SURFACE DRAINAGE

During public comment at the November 23, 2015 Plan Commission meeting for proposed homes on two vacant lots at the end of East Ellis Avenue, concerns were raised by one resident regarding possible impacts to underground aquifers and sub-surface drainage. These concerns were reiterated during public comment at the January 12, 2016 Board Meeting, where Mayor Weppler directed that further discussion relating to the impacts to aquifers and sub-surface drainage as a result of new home construction on East Ellis Avenue be undertaken at a future

Streets Committee. It should be noted that there are three additional vacant lots on East Ellis Avenue that new single family homes could be constructed. In addition, there is the possibility of future teardowns on the street.

Current Surface Drainage Problems: The neighborhood has a history of surface drainage problems, in which the neighbors have previously contacted the Village about. Drainage is from west to east, with a significant change in elevation between Milwaukee Avenue and Sandstone Drive of approximately 35-feet. The factors most contributing to the surface drainage problems of the neighborhood are an undersized storm sewer system (inadequate intake & conveyance capacity) and the absence of suitable overland flow routes. The current storm sewer system has an approximate 5-year frequency storm capacity following some improvements in 2003. Current Village design standards for new storm sewer systems is that the 10-year frequency storm is safely conveyed and that suitable overland flow routes are established and maintained for storm events that exceed the 10-year frequency up to the 100-year event. When the existing storm sewer system reaches capacity, previous engineering studies indicate that the overflow point is at the east end of East Ellis Avenue.

Impact to Aquifers and Sub-Surface Drainage: General knowledge and understanding of sub-surface drainage, which includes the groundwater table and aquifers, is still rather ambiguous and ever changing. Borings can be taken, however, the information obtained from the boring can only be directly attributed to the exact location of the boring and for that particular moment in time; conditions can greatly vary, even for a few feet away and over time. An aquifer is defined as an underground permeable (water bearing) rock formation. Aquifers are a source of water in which a well can be drilled to extract the water. Another component of the sub-surface drainage system is the groundwater table, which is closer to the surface, generally in the 10-15 foot range. Aquifers are usually much deeper.

In an attempt to address the concerns of possible impacts to the sub-surface drainage system, Staff reviewed historical information and noted that there is a history of aquifers, most notably the Albana Spring. The original well for Albana Spring was located on Newberry Avenue in the 1800's, but went dry around 1910. At that time, a second well was drilled on Park Place. We do not know the depth of the wells, but both appear to be "artesian," where no pumping is required because the water flows to the surface under pressure. It was noted in the late 1800's that "wells drilled in Libertyville hit cool underground reservoirs at a depth of 60-70 feet where water flowed to the surface with no pumping required."

Since the late 1800's and before the switch to Lake Michigan water (1992), the areas shallow and deep wells that were drilled into the aquifers were utilized as the primary source for potable water, which significantly lowered their levels. The current depths for the Village's four operational wells:

Well #1 (Second Street):	251-feet – Silurian dolomite Aquifer
Well #5 (Newberry Ave.):	227-feet – Silurian dolomite Aquifer
Well #11 (Garfield Ave.):	1,485-feet – Silurian dolomite, St. Peter and Ironton-Galesville sandstone Aquifers
Well #12 (Greentree Pkwy):	1,926-feet – St. Peter, Ironton-Galesville and Mt. Simon sandstone Aquifers

Given the current depth of the wells to the aquifers in the area, staff can reasonably conclude that the greatest impact that new home construction on East Ellis Avenue, which would also include "teardowns," would be on the groundwater table (10 feet down). The groundwater

table is much shallower and the actual level can vary dramatically given wet/dry conditions, the time of year and location. A "perched" (higher than normal) water table is also a possibility. It is now the norm for new construction to provide very deep basements, usually 9 to 10-feet deep. The foundation footing is required to have a perforated perimeter drain tile to relieve hydrostatic pressure from ground water. The tile is encased in stone backfill, which will collect the ground water and drain it to a storm sump pump.

Usually the basements for the newly constructed homes are deeper than the basements for the adjacent existing homes. The deeper perimeter footing drain tiles become a conduit for the ground water, which is then pumped into the Village's fronting storm sewer lines. This tends to occur very frequent, even in dryer conditions and becomes a concern because this "base flow" detracts from the available conveyance capacity of the storm sewer. Staff may want to consider limiting the basement depth for these new homes to the previous traditional 8-feet, which should somewhat limit the continuous ground water pumping into the storm sewer system. Even if newer homes are only constructed with the 8-feet deep basement, additional groundwater may still be pumped to the storm sewer system because these new basements may still be deeper than the existing basements of the adjacent existing homes and far more efficient and newer drain tile collection systems.

Conclusions: The construction of new homes on and around East Ellis Avenue does not have a direct impact on the area's aquifers because of their significant depth in relation to the ground surface. The more immediate impact that new home construction would have would be on the water table, which is closer to the surface, especially during wet periods, or if it is "perched." In order to not reduce the conveyance capacity of the Village's receiving storm sewer system, it is recommended to not allow deeper basements than the traditional 8-foot depth.

There were several residents in the audience that wanted to speak with the Committee:

Barbara Shafer - 315 Minear Drive
- Ms. Shafer is the resident who spoke at the November 2015 Plan Commission meeting.
- Shafer stated that she represents over 100 residents on this issue.
- Ms. Shafer stated that the new homes will lessen the tree canopy interception and add to overland flow of stormwater.
- The new construction basements are disrupting the water table and will impede water flow and that basements shouldn't be allowed for new construction.
- Ms. Shafer stated that she is not anti-development.
- Ms. Shafer suggested that the open lots on E. Ellis Avenue be left as green space.
- Due to lack of an overland flow route and storm sewers that are too small; new construction is not going to make this better.

Sally Bauer - 1007 Sandstone Drive
- Ms. Bauer would like to know who will pay for basement repairs when her basement floods.
- Ms. Bauer suggested that it may be cheaper for the Village to buy the lots on E. Ellis Avenue and create a drainage swale.

Susan Kelly - 945 Sandstone Drive
- The E. Ellis Avenue lots acts as a retention pond due to the insufficient storm sewers.

Robert Gerber - 321 Minear Drive
- Mr. Gerber stated that there is standing water in his backyard 50% to 75% of the year.

- He has lived in this house for two years.
- If the soil at the end of E. Ellis Avenue is removed, his yard or basement will flood.

Kelly Richter - 249 E. Ellis Avenue

- Ms. Richter has the newest home on E. Ellis Avenue.
- The undeveloped lots on E. Ellis are owned by two brothers. The owners have not been agreeable to working with neighbor to keep the land undeveloped.

Trustee Johnson stated that the Committee appreciates the residents bringing this to their attention. It is an expensive solution to upgrade the storm sewer. The Committee and Staff will deliberate the options and alternatives about this land.

9) TIMBER CREEK TRAFFIC NOISE

Residents in Timber Creek subdivision have made complaints about noise caused by traffic on Route 137. They would like some sound abatement measures installed. IDOT will not provide sound abatement (usually sound walls) unless they are the cause of the noise. Staff will ask IDOT about installing "No Engine Breaking Signs" on Route 137.

10) ADJOURNMENT

The meeting adjourned at 7:56 pm.

Respectfully Submitted,

Laura Ditanto,
Assistant to the Director
Department of Public Works

Memorandum

To: Streets Committee

From: Public Works Staff

Date: May 24, 2016

Re: Staff Report

3) 2016 Road Project Updates

Pavement Rehabilitation Project: The construction contract was awarded to ALamp Concrete Contractors for an amount not to exceed $3,585,771.11 at the February 23rd Board meeting. Construction for the project started in late March with curb & gutter removal/replacement, pavement milling, pavement patching and then pavement resurfacing on Trinity Place, Sussex Ln., Oxford Ct., Lake St., Elderberry Dr., Mulberry Dr., Newcastle Ct., Plumwood Dr., Ronan Ct., Vineyard Ln., Sunnyview Rd., Kildare Ave., Walnut St., Carriage Hill Cr. and Parkview Dr. to date.

FAU Resurfacing Project (Fourth/Greentree/Red Top): Construction for this project will be 80% Federal and 20% Village funded. Bids for this project were opened on the April 22, 2016 IDOT letting. There were two bids received, Peter Baker & Son $932,127.00 and J.A. Johnson Paving Company $1,020,898.39. It is anticipated that IDOT will award the Contract to the low bidder Peter Baker & Son in mid-June. Following the Contract award, a preconstruction meeting will be held and more definitive construction start date will be known.

4) 2017 Pavement Rehabilitation Program Update

The list of streets for the 2017 Pavement Rehabilitation Program was approved at the January 26th Streets Committee Meeting. The engineering services contract with Christopher B. Burke Engineering, Ltd. was approved at the February 23rd Board meeting. Preliminary work (surveying, pavement cores, etc.) has begun and Staff and the consultant will have a coordination progress meeting in mid-June.

5) Update on Flashing Pedestrian Crossing Beacon & School Zone Establishment (Route 176 at Dymond Road)

The Village submitted the formal Permit materials to the IDOT in early February. The submittal included a cover letter, engineering drawings and a description of the proposed work. Engineering Division Staff received comments back from IDOT in early March. The re-submittal back to IDOT addressing their comments was mailed on April 19th and we are now awaiting either IDOT's approval or additional review comments.

6) Sunnyside Avenue Speeding Concerns & Electronic Vehicle Display Sign Update

The solar powered electronic vehicle display signs were installed in early April and have been relocated to Fourth Avenue as of May 16th. Attached you will find a summary and a table of the daily vehicle counts, average speed and 85% speed when the signs were in "stealth" (not displaying) mode and displaying mode. For the eastbound direction, the average vehicle speed dropped 2 MPH from the start date to the end date of the sign installation. For the westbound direction, the average vehicle speed dropped 4 MPH from the start date to the end date.

7) **Request for Consultant Proposals for Village-Wide Master Stormwater Management Plan**

During the Budget discussions the creation of a Utility funded by a stormwater fee to provide the necessary funding for all maintenance activities and capital improvements to the Village's stormwater management system was discussed. One of the first steps in the creation of a "Stormmwater Utility," which would operate similar to the Village's current Water and Sanitary Sewer Utilities, is to prepare a Village-wide Master Stormwater Management Plan that would identify all flooding locations in the Village that cause damage to structures, property and significant inundation of strategic roadways. As part of the development of the Master Plan, the selected consultant would be responsible to identify a proposed flood reduction project for each location to the appropriate (optimum) protection level, prepare an estimate of total (final design & construction) project costs, determine the resulting benefits and then prioritize (rank) each proposed project by the estimated total costs and benefits. The minimum level of protection for each recommended project will be 10-year frequency rainfall event. It is the intent that the Master Plan will be relevant for the next 20-years, with updates only being needed on a 5-year interval. With the completion of the Master Plan, the Village would know the necessary amount of funding that would be required for the design and construction of the proposed flood reduction capital projects. The inclusion of these capital costs along with the identified maintenance and personnel costs for the stormwater management system would then be used determine the fee amount and structure of the new "stormwater utility fee."

There is currently no funding in the current Fiscal Year Budget for the Master Stormwater Plan, which is anticipated to cost $300,000. Therefore, Staff has offered the following options that could be considered to undertake the Plan:

OPTION 1: Distribute the Request for Consultant Proposal at this time and undertake the initial Phases of Plan in this Fiscal Year. This would require discussions with the Village Board to identify any items that can be deferred in either the Capital Improvements or General Fund. It needs to be mentioned that the anticipated schedule to complete the Master Plan would be 15-months, so spending would occur over two Fiscal Years.

OPTION 2: Distribute the Request for Consultant Proposal on, or about January 1st. This would allow for the selection process to be completed by the end of April 2017 and would involve no additional expenditures in this fiscal year. Through the meeting and discussion process for next year's Budget, allocate the necessary funding in the Capital Improvements Fund to complete the majority (first 12 months of the total 15 months anticipated).

Staff recommends Option 2. A copy of the Request for Consultant Proposal is enclosed.

Radar speed signs – analysis and notes

East Sunnyside Avenue

Dates/mode deployed in 2016:

April 5-11	Stealth
April 12-25	Live
April 26-May 2	Stealth
May 3-13	Live

Total # of days deployed: 39

Results:

Eastbound

- Average speed dropped 2 mph (23 MPH to 21 MPH) from start date to end date
- 85th percentile speed dropped 1 mph from start date to end date

Westbound

- Average speed dropped 4 mph (21 MPH to 17 MPH) from start date to end date
- 85th percentile speed dropped 3 mph from start date to end date

Posted Speed Limit is 25 MPH

Utilizing the raw data counts, speeds were evaluated to determine specific time periods (by hour of day) where speeding appeared to be most prevalent in order to focus enforcement efforts.

Speeds under 30 mph were not counted so as to allow for variations in speedometers and minor driver adjustments. Any time frame in the 30-34 mph range where 5 or more violations in an hour occurred were flagged, as were any time frames of 35 mph or greater where 3 or more violations occurred.

Eastbound

- 0700-0800 had 11 days with 5 or more violations of 30 mph or greater
- 1700-0800 had 6 days with 5 or more violations of 30 mph or greater
- 1100-1200 and 1500-1600 each had 5 days with 5 or more violations of 30 mph or greater
- 0900-1000, 1200-1300, 1600-1700 each had 4 days with 5 or more violations of 30 mph or greater

Westbound

- No hours of any day were identified as having more than 2 violations of 30 mph or greater

VILLAGE OF LIBERTYVILLE

RADAR SPEED SURVEY SIGNS

EASTBOUND SUNNYSIDE AVENUE

APRIL 5, 2016 - MAY 13, 2016

Mode	Date	Day	Vehicle Count	Average Speed	85th % Speed
Stealth	4/5/16	Tue	421	23	29
	4/6/16	Wed	343	24	30
	4/7/16	Thu	368	24	31
	4/8/16	Fri	432	23	29
	4/9/16	Sat	414	23	28
	4/10/16	Sun	195	21	28
	4/11/16	Mon	289	24	29
	Phase	*Total*	*2462*	*23*	*29*
Live	4/12/16	Tue	444	22	29
	4/13/16	Wed	416	22	29
	4/14/16	Thu	422	23	30
	4/15/16	Fri	502	22	29
	4/16/16	Sat	435	21	28
	4/17/16	Sun	281	19	27
	4/18/16	Mon	461	22	29
	4/19/16	Tue	475	21	28
	4/20/16	Wed	415	22	29
	4/21/16	Thu	442	22	28
	4/22/16	Fri	578	21	29
	4/23/16	Sat	408	21	28
	4/24/16	Sun	400	21	27
	4/25/16	Mon	675	18	27
	Phase	*Total*	*6354*	*21*	*28*
Stealth	4/26/16	Tue	439	21	28
	4/27/16	Wed	436	23	29
	4/28/16	Thu	378	23	29
	4/29/16	Fri	445	22	29
	4/30/16	Sat	374	22	28
	5/1/16	Sun	307	19	27
	5/2/16	Mon	394	21	28
	Phase	Total	2773	22	28
Live	5/3/16	Tue	332	21	28
	5/4/16	Wed	331	23	29
	5/5/16	Thu	395	22	29
	5/6/16	Fri	573	21	27
	5/7/16	Sat	520	18	26
	5/8/16	Sun	280	20	27
	5/9/16	Mon	484	19	26
	5/10/16	Tue	350	21	28
	5/11/16	Wed	426	22	28
	5/12/16	Thu	531	21	28
	5/13/16	Fri	526	21	28
	Phase	*Total*	*4748*	*21*	*28*

VILLAGE OF LIBERTYVILLE

RADAR SPEED SURVEY SIGNS

WESTBOUND SUNNYSIDE AVENUE

APRIL 5, 2016 - MAY 13, 2016

Mode	Date	Day	Vehicle Count	Average Speed	85th % Speed
Stealth	4/5/16	Tue	335	21	26
	4/6/16	Wed	342	21	27
	4/7/16	Thu	394	21	26
	4/8/16	Fri	432	21	27
	4/9/16	Sat	305	19	26
	4/10/16	Sun	215	20	26
	4/11/16	Mon	293	19	25
	Phase	*Total*	*2316*	*20*	*26*
Live	4/12/16	Tue	394	20	25
	4/13/16	Wed	334	19	24
	4/14/16	Thu	389	19	24
	4/15/16	Fri	451	18	24
	4/16/16	Sat	296	19	24
	4/17/16	Sun	298	18	24
	4/18/16	Mon	390	18	23
	4/19/16	Tue	487	16	23
	4/20/16	Wed	395	19	26
	4/21/16	Thu	405	19	24
	4/22/16	Fri	475	19	24
	4/23/16	Sat	327	19	24
	4/24/16	Sun	319	16	23
	4/25/16	Mon	463	18	24
	Phase	*Total*	*5423*	*18*	*24*
Stealth	4/26/16	Tue	437	18	23
	4/27/16	Wed	420	17	24
	4/28/16	Thu	346	8	16
	4/29/16	Fri	389	18	24
	4/30/16	Sat	265	9	18
	5/1/16	Sun	643	9	19
	5/2/16	Mon	351	19	24
	Phase	Total	2851	14	21
Live	5/3/16	Tue	293	18	23
	5/4/16	Wed	295	19	25
	5/5/16	Thu	441	18	24
	5/6/16	Fri	494	19	24
	5/7/16	Sat	376	17	24
	5/8/16	Sun	267	17	23
	5/9/16	Mon	376	11	22
	5/10/16	Tue	342	11	22
	5/11/16	Wed	378	19	24
	5/12/16	Thu	428	16	23
	5/13/16	Fri	402	16	23
	Phase	*Total*	*4092*	*16*	*23*

REQUEST FOR PROPOSAL (RFP)
MASTER STORMWATER MANAGEMENT PLAN

Village of Libertyville
Libertyville, Illinois
June 1, 2016

Introduction:

The Village of Libertyville ("***Village***") is requesting proposals for professional engineering consultant services ("***Consultant Services***"), which include, but are not limited to, the evaluation, research, design and cost estimation that is necessary to prepare a Village-wide Master Stormwater Management Plan ("***Project***") described below in this Request for Proposal ("***RFP***"). Respondents must be able to demonstrate similar past experience with the type of project described herein. The submitted proposal should include the firm's qualifications, project team, resumes, scope of services/tasks, verification that the proposed schedule can be met, man-hours and not-to-exceed costs for completing the project specified below.

Background:

The Village has separate storm sewer and sanitary sewer mains (i.e., no combined sewer systems). The Village routinely experiences localized surface flooding in numerous locations during moderate to heavy rain fall events, usually in excess of 2.5-inches. Some of the contributing factors to the surface flooding is that a majority of the storm sewer lines in these areas were designed and constructed prior to modern stormwater management standards and are thus undersized (2-5 year design storm conveyance) and suitable/safe overland flood routes are nonexistent. The Des Plaines River also flows through the east side of the Village and overbank flooding can cause private property, structures and roadways to be inundated. A smaller watercourse, Bull Creek flows through the north-central part of the Village and causes some localized overbank flooding as well.

Project Description:

As part of the development of the Master Plan, the selected consultant will be responsible to undertake all tasks necessary to identify all flooding locations in the Village, identify a proposed flood reduction project for each location to the appropriate (optimum) protection level (which may include analyzing several options), prepare an estimate of total (final design & construction) project costs, determine the resulting benefits and then prioritize (rank) each proposed project by the estimated total costs and benefits. The minimum level of protection for each recommended project will be 10-year frequency rainfall event. It is the intent that the Master Plan will be relevant for the next 20-years, with updates only being needed on a 5-year interval. The selected consultant will also be responsible for determining what approvals and/or permits will be required to be obtained from the necessary governing agencies (FEMA, IDNR-OWR, USACOE and LCSMC) to permit and construct the proposed flood reduction projects included in the Master Plan.

All RFP recipients are encouraged to review the current layout of the Village (i.e. on-line floodplain limits and contour mapping that is available on the Lake County website, etc.) and visit the noted problematic drainage areas referenced in the Appendix to gain a better understanding of the current conditions, site constraints, etc.

Scope of Services/Tasks:

Phase 1 (Data Collection/Gathering)

- "Kick-off" meeting with Village staff.
- Coordination with the Village's GIS/Engineering Technician to obtain all available utility data for the Village. It is the intent that this data will supplement and hopefully reduce any field survey work that would be needed.

- Coordination with Lake County to obtain all available aerial contour and other electronic data for the Village. It is the intent that this data will supplement and hopefully reduce any field survey work that would be needed.
- Coordination with the local public utilities (North Shore Gas Co., ComEd, etc.) in order to obtain copies of their respective utility atlases.
- Review and evaluation of past rain fall related flooding information, which includes, but is not limited to the current Flood Insurance Rate Maps (FIRMs) & Flood Insurance Rate Studies (FIS) and Lake County on-line mapping information.
- Review and compilation of historic rain fall data.
- Review of all pertinent past stormwater studies and reports. (See Appendix for listing).
- Review of photographs, written accounts, etc. of past flooding events.
- Interviews with long time current and retired (if readily available) Village Public Works staff.

Phase 2 (Preliminary Investigations & Analysis)

- Complete the necessary hydrologic and hydraulic (H&H) modeling to the appropriate level of detail to supplement the review of past available studies and reports and interviews with Village staff (completed in Phase 1) to identify the major flooding locations in the Village in which a flood reduction project will be proposed.
- Identify a flood reduction project for the Charles Brown Reservoir that includes a gravity outfall.
- Identify a flood reduction project for the rear yards of the properties along Sunnyside Avenue, east of Fourth Avenue adjacent to the North Shore Bike Path.
- Identify a flood protection project for the Village's Waste Water Treatment Plant that is located adjacent to the Des Plaines River.
- Evaluation of existing detention facilities in problematic drainage areas to determine if they can be either modified and/or enlarged to provide additional flood relief.
- Identification of any Village owned properties (including alleys) that would be suitable to provide local detention.
- Acquisition Program to identify suitable properties that are located in problematic drainage neighborhoods as a means to provide local (neighborhood) storage if they come up for sale.
- Evaluating the merits of an Overhead Sanitary Sewer Conversion Cost Reimbursement Program on an annual basis and recommendation for Budget funding level for those areas experiencing sanitary sewer back-ups.
- Evaluate any areas where there could be adverse impacts to structures due to groundwater (high localized water table).
- Evaluating the merits of implementing a Private Property Drainage/Flood Protection Cost Reimbursement Program for rain gardens, flood protection berms/walls, swales, rain barrels and other BMP's on an annual basis for properties in problematic drainage areas and recommendation for an annual Budget funding level.
- Evaluation of the merits of implementing additional programs, which may include a battery back-up storm sump pump program that could involve "economies of scale" savings for Village coordinated volume purchasing.

Phase 3 (Plan Preparation of Identified Projects)

- Prepare a Type, Size & Location (T,S &L) Plan for each of the identified and recommended flood reduction projects. This will include an analysis to determine which storm frequency (i.e. 10-year, 25-year, 50-year, etc.) is the most cost effective level of protection (resulting in the highest B/C ratio). Each T,S&L Plan will also include the limits of inundation for the existing condition and proposed (post-project) conditions.
- The T,S&L Plan will also include all known existing Village and other (gas, electric, etc.) utilities to ensure no conflicts with the proposed identified project.
- Prepare a preliminary estimate of the design, permitting and construction costs to complete the identified projects.
- Identification of any projects to address areas where there are adverse impacts to structures due to groundwater (high localized water table).
- Presentation of proposed identified projects to senior level Village staff. This will involve two separate meetings during normal business hours.
- Incorporation of all pertinent and applicable comments received from Village staff.
- Refined preliminary design, permitting and construction cost estimates for the identified projects based on Village staff comments.
- Determination/analysis of the resulting benefits (building damage, contents damage, property damage, lost wages, etc.) for each of the identified projects. Benefit analysis shall be consistent with IDNR-OWR, FEMA, NFIP and USACOE methodologies for stormwater management projects.
- Prepare a table containing the cost/benefit ratio and number of overall properties and structures protected for each identified project.
- Prepare a table containing the overall rank of each prioritized project, which will also include the total estimated project cost. Note that the order of the rankings will be based on a combination of the benefit/cost ratio and the number of properties and structures protected. The number of structures protected should be given a higher degree of importance in determining the overall rankings.
- Coordination with all applicable agencies (FEMA, IDNR-OWR, USACOE and LCSMC) to determine any and all required permits and approvals for the identified prioritized projects.
- Identify any available sources for grant and/or matching funding to design and construct the proposed prioritized projects.
- Determination of any improvements and/programs that were evaluated in Phase 2 that could be undertaken by property owners to improve future flooding conditions.
- Determination of any public outreach activities that could be undertaken to increase awareness and prevention of flooding and flood damages.
- Include a table of all historical significant rainfall events in the Village's history.
- Include the FIRMs for the Village.
- Presentation of proposed Draft Master Plan to the senior level Village staff. This will include two separate meetings during normal business hours.
- Incorporation of all pertinent and applicable comments received from Village staff.

Phase 4 (Presentation to Streets Committee)
- Presentation of proposed Draft Master Plan to the Village's Streets Committee of the Village Board. This will involve two evening meetings.
- Incorporation of all pertinent and applicable comments received from the Streets Committee and the public in attendance.

Phase 5 (Presentation to General Public)
- Presentation of proposed Draft Master Plan to the general public at an evening meeting.
- Incorporation of all pertinent and applicable comments received from the general public.

Phase 6 (Presentation to Full Village Board)
- Presentation of proposed Draft Master Plan to the Village Board and general public at an evening meeting.
- Incorporation of all pertinent and applicable comments received from the Village Board and general public.

Phase 7 (Final Plan)
- Provide twenty-five (25) bound copies and five (5) electronic copies on a flash-drive of the Final Plan.

Anticipated Schedule:

It is the intent to begin the Consultant Services immediately upon execution of a Contract with the chosen consultant and complete the project by September 1, 2016. The completion dates are as follows:

- Phase 1 – December 1, 2016
- Phase 2 – April 1, 2017
- Phase 3 – July 1, 2017
- Phase 4 – September 1, 2017
- Phase 5 – October 1, 2017
- Phase 6 – November 1, 2017
- Phase 7 – December 1, 2017

Instructions to Bidders:

Preparation of Proposals
All proposals must be signed by an authorized official. Proposals that contain omissions, erasures, alterations, or additions not called for, conditional or alternate bids unless called for, or that contain irregularities of any kind may be rejected.

Format
All Proposals shall include the following:
- Firm History.
- Relevant Project Experience (Last 5 Years Only).

- Project Team.
- Project Approach.
- Cost (this will include detail listing of man-hours and all costs for each task, phase and the overall project).
- Schedule.

Clarifications
Village reserves the right to make clarifications, corrections, or changes in this RFP at any time prior to the time proposals are opened. All bidders or prospective bidders will be informed of said clarifications, corrections, or changes.

Delivery of Proposals
Please submit **four (4) paper bound copies** of your Proposals to the **Village of Libertyville, Office of the Director of Public Works, 200 E. Cook Avenue, Libertyville, Illinois 60048, no later than 12:00 P.M., June 30, 2016**. In addition, **please submit one (1) flash-drive containing your proposal.** Proposals may be delivered by mail or in person. Proposals received after the time specified above will be returned unopened.

Freedom of Information Act
All information submitted to the Village in response to this Request for Proposals shall be deemed a public record and will be subject to disclosure under the Illinois Freedom of Information Act (5 ILCS 140 *et seq.*) subsequent to the award of the contract. Proposers are advised that Section 7(1)(g) of that Act exempts the following from disclosure:

> Trade secrets and commercial or financial information obtained from a person or business where the trade secrets or commercial or financial information are furnished under a claim that they are proprietary, privileged or confidential, and that disclosure of the trade secrets or commercial or financial information would cause competitive harm to the person or business, and only insofar as the claim directly applies to the records requested.

Proposers desiring to have portions of their proposals considered exempt are advised to mark these portions accordingly.

Withdrawal of Proposals
No proposal shall be withdrawn for a period of 90 days after the opening of any proposal.

Rejection of Proposals
Proposals that are not prepared in accordance with these Instructions may be rejected. If not rejected, Village may request correction of any deficiency and accept the deficiently prepared proposal upon compliance with these Instructions.

Acceptance of Proposals
Proposals submitted are offers only and the decision to accept or reject is a function of quality, reliability, capability, reputation and expertise of the respondents.

The Village reserves the right to accept the proposal that is, in its judgment, the best and most favorable to the interests of Village and to the public based on the evaluation factors listed below; to reject the low price proposal; to accept any item of any proposal; to reject any and all proposals; and to waive irregularities and informalities in any proposal submitted or in the request for proposal process; provided, however, the waiver of any prior defect or informality shall not be considered a waiver of any future or similar defect or informality. Respondents should not rely upon, or anticipate, such waivers in submitting their proposal.

Evaluation of Proposals:

The submitted proposals will be reviewed and the ultimate selection will be based upon factors including the following:

(1) Experience on similar stormwater management projects and plans with client references provided (name, title, address, phone number and e-mail) within the last five years only;

(2) Firm Information (size, location, history, resources, etc.);

(3) Qualifications (resumes) of personnel assigned to work on the project (project team), organizational chart, etc.;

(4) Ability to meet project deadlines (provide schedule with work items/staff hours needed, critical path items, etc.);

(5) Completeness of project approach (detailed scope of services/tasks, etc.)

(6) **Any additional services/tasks not identified in this RFP that the consultant believes will improve the project, reduce costs and time, etc.**; and

(7) Overall not-to-exceed cost (detailed cost breakdowns in terms of hours, hourly rates, direct costs, etc. for each task and phase).

Follow-up discussions and interviews may be conducted with several firm(s) to resolve any questions, finalize the scope of work and agreement on final not-to-exceed costs as a means to recommend a final selection to the Board of Trustees.

Consultant Services Contract:

Village uses a standard Contract (with appropriate project description inserts/details) for consultant services, which the successful firm must execute. A copy of the form of Contract is included in the Appendix. **Any**

modifications that the consultant plans to request to be made to the standard Contract must be noted in the consultant's Proposal. The Village will take these requests under consideration.

Appendix:

- Consultant Services Contract.
- Burdick Street Drainage Analysis, December, 2014.
- South 2nd Ave./Windsor Terr. Area Stormwater Evaluation Report, August, 2014.
- Informational Binder of Flooding Event, April, 2013.
- Charles Brown Stormwater Pumping Station and Storage Basin Report, December, 2008.
- Ellis Avenue Drainage Study Update, November, 2008.
- 3rd Street and North Avenue Drainage Study, January, 2008.
- Bull Creek/Bull's Brook Watershed-Based Plan, January, 2008.
- Letter of Map Revision Report for Bull Creek Tributary, September, 2007.
- Informational Binder of Flooding Event, August, 2007.
- Informational Binder of Flooding Event, May, 2004.
- Ellis Avenue Drainage Study, December, 2001.
- Informational Binder of Flooding Event, September/October, 1986.

Only the Consultant Services Contract will be provided at this time to all RFP recipients. The other referenced information will be loaned to the selected consultant.

Questions:

If you have any questions or need additional information regarding this RFP, contact Paul Kendzior, Director of Public Works at pkendzior@libertyville.com. Inquiries submitted will be answered in writing and circulated to all entities who have registered with the Village as having received a copy of this RFP.

APPENDIX