

**VILLAGE OF LIBERTYVILLE  
BOARD OF TRUSTEES**

**Public Works Committee**

**May 25, 2021  
7:00 p.m.**

**AGENDA**

**Pursuant to the Open Meetings Act, as amended by Public Act 100-0640, the Mayor of the Village of Libertyville, as the head of the public body, has made a determination that an in-person meeting is not practical or prudent because of a disaster.**

**Please join my meeting from your computer, tablet or smartphone.**

**<https://global.gotomeeting.com/join/882194605>**

**You can also dial in using your phone.**

**United States: +1 (872) 240-3311**

**Access Code: 882-194-605**

1. Roll Call
2. Public Works Capital Project Updates
3. Other Items
4. Adjournment





May 25, 2021 Public Works Committee Meeting

PUBLIC WORKS DEPARTMENT CAPITAL PROJECT UPDATES:

**Annual Road Rehabilitation Program**

Since 2019 the Village has partnered with Mundelein and Vernon Hills for a joint bid road rehabilitation program in order to receive advantageous competitive unit price bids based upon an “economies of scale” from larger contract quantities. The Pavement Assessment Report completed in 2019 was utilized to select the Village’s streets to be rehabilitated, which include: Crane Blvd. (Butterfield to west end), Victory Dr., Stevenson Dr. (Lothair to south end), Pine Tree Ln., Nordic Ct., Carter St. (Austin to west end), Stewart Ave. (Maple to Park), Wedgemere Pl. (Rockland to Lincoln), Fairlawn Ave. (Dymond to Butterfield) and Crestfield Ave. (Dymond to Butterfield). Approximate length of streets to be resurfaced is 2-miles.

This year’s low bid contractor is Peter Baker & Son Co. The Village’s share of the construction costs is approximately \$900,000. It is hopeful that the work will begin shortly after June 1st.

**Rockland Road Bridge Replacement**

The bridge is equally owned and maintained by both the Village and the Libertyville Township Road District. The Village has previously executed an Intergovernmental Agreement with the Township for the engineering design and construction for the replacement of the deteriorating bridge. The Public Works Department and the Township completed a qualifications based selection process for design consultants and chose Civiltech for the design of the new bridge. The Village and Township have secured the use Federal STP-Br Funds, which will cover 80% of the project (engineering & construction) costs.

The bridge had a decorative “army” green steel truss that had to be removed a few years ago due to its badly deteriorated condition. The truss was only an aesthetic feature and did not offer any structural support for the bridge. Its replacement would not be covered by the Federal Bridge funding. Village staff, the Libertyville Township Highway Commissioner and bridge designers Civiltech developed several aesthetic railing and lighting options that are anticipated to be covered by the Federal funding and retain the historical intent of the steel truss. These aesthetic treatment alternatives were presented at two in-person Public Meetings that were held in October of last year. The consensus between all stakeholders was an IDOT aesthetically enhanced concrete railing, “army” green Sternberg dimly lit bollards and “downward” lighting for the sidewalk and travel lanes, which will be embedded into the railing at the bollard locations.

Phase 1 (preliminary) engineering is now completed, and we are just awaiting approval by IDOT to begin the phase 2 (final) engineering for the project. The bridge superstructure will consist of

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Waste Water Treatment Plant (847) 918-2007 (847) 362-4256 fax  
Parks Maintenance (847) 918-2074 (847) 918-9429 fax  
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precast/prestressed concrete 27-inch I-Beams. Construction is anticipated to occur in 2024 and cost approximately \$2,900,000, and will involve full replacement of the bridge, including the abutments.

### **Annual Watermain Replacement Program**

The Public Works Department has identified several locations within the Village that are in need of water main replacements due to age, condition and history of multiple breaks: 1) Walnut Street; 2) Mullady Parkway & Winners Circle; and 3) Oak Street. The project is still being designed and construction is anticipated to start later in the summer. The current construction estimate is \$975,000.

### **Rockland Road Corridor Flood Reduction Project – Final Phase**

One of the proposed flood reduction projects contained in the Village’s Master Stormwater Plan is the Rockland Road Corridor project. The initial phase of this project, which is anticipated to provide flooding protection up to the 100-year frequency storm, was completed as part of the Rockland Road reconstruction project. This consisted of the 36-inch to 84-inch trunk sewer within the Rockland Road right-of-way extending between Second Ave. to the Des Plaines River. Also included were the “stubs” for the connections to the trunk sewer at Seventh Ave. and Wrightwood Terr. and conveyance/grate improvements at the Second Ave. intersection.

The engineering design for the final phase of the project is now completed and will consist of the connecting sewers on Lincoln Ave. (36-inch), Wrightwood Terr. (36-inch), Windsor Terr. (30-inch), Fourth Ave. (36-inch) and Seventh Ave. (48-inch). The current construction estimate is \$2,300,000. The project has been awarded a DCEO-STOCIP grant that is anticipated to cover up to 85% of the construction costs. The project cannot be advertised for competitive contractor bids until the grant is released, which may now not occur until the beginning of 2022 at the earliest.

### **Highlands Subdivision Flood Reduction Project**

The Highlands Subdivision, which consists of Ames Street, Burdick Street, Carter Street, Dawes Street, Drake Street, Crane Boulevard, Rockland Road and Garfield Avenue (a total 550-acre area), experiences chronic street flooding, and sometimes even structure flooding, during heavy rainfall events. The flooding can be attributed to the existing storm sewer system only having an intake and conveyance capacity of an approximate 2-year design storm, no available/safe overland flow routes once the sewer system capacity is exceeded and no available detention. The entire subdivision drains to the Charles Brown Reservoir, where a pumping station directs the discharge to the Seavey Ditch.

The recommended conceptual flood reduction project for the Highlands Subdivision contained in the Master Stormwater Plan includes a larger receiving storm sewer system, on-site detention on a portion of Nicholas Dowden Park and possible flood-proofing measures for some of the homes and properties that suffer the worst damages. The total estimated overall cost for the proposed conceptual flood reduction project in 2018 dollars is \$7,583,255. The two-year final engineering design for the project started last June and is intended to be completed by the end of the fiscal year. An in-person project information meeting is anticipated for this early fall to engage all stakeholders so the conceptual designed can be refined. It is currently planned to complete construction in two phases; 1) detention facility at Nicholas Dowden Park; and 2) the upstream storm sewer network and structure floodproofing. DCEO-STOCIP grant funding applications have also been prepared for each phase.

### **Wastewater Treatment Plant – Replacement of Aeration Blowers & Diffusers**

The Village's treatment plant has three existing 125 horsepower centrifugal aeration blowers that were installed in 1975 and are now well beyond their useful service life and necessitate replacement at this time. The aeration blowers are a critical component of the biological treatment process for the sewage influent. The replacement of the aeration diffusers and segments of corroded aeration piping will also be included in the project. It is currently proposed to provide high-speed, high-efficiency turbo blowers and fine bubble diffusers. A ComEd energy audit/assessment will also be included to determine if any energy saving incentives are available to partially off-set the future construction costs, which are anticipated to be \$1,500,000 and will be spread across the next two fiscal years.

### **Wastewater Treatment Plant – Screen & Grit Building Improvements**

The Master Facilities Plan for the Village's wastewater treatment plant recommends replacement of the existing electrical system, headworks screen and grit collector system that are housed in the Screen & Grit building because all these components have reached the end of their respective service lives. The proper functioning of these items is critical to the primary treatment operations for the plant. The proposed improvements will include replacing/upgrading the existing electrical system, replacement of the screening systems and replacement of the grit removal system. Final engineering is underway, and construction is anticipated to occur next fiscal year at an estimated cost of \$1,625,000.

### **High School Sanitary Lift Station Replacement**

The Village operates an existing sanitary lift station that is located on Village property and abuts the west side of the rear parking lot at Libertyville High School. This is one of sixteen lift stations that the Village owns and maintains. The station was constructed in 1973 and is approaching the end of its useful service life. In addition, the station contains pneumatic ejector pumps in a "dry-tube" that is 19-feet below grade. This presents confined entry and space concerns for staff during routine inspections and maintenance work. There is also an emergency natural gas generator on-site to operate the station in times of electrical outages. Staff desires to convert the existing 8-foot concrete diameter wet-well to a dry well and house the proposed submersible pumps that can be lifted to surface on rails for servicing, thus eliminating confined entry and space concerns. This design is similar to the recently completed US Route 45 and Dawes Street lift stations. Modernized pumps, electrical controls and SCADA improvements will also be included in the project. Final engineering is expected to be completed this fiscal year and construction, at an estimated cost of \$650,000 to occur next fiscal year.

