EST 1808
CITY OF
DELAWARE
OHIO

CITY MANAGER'S PROPOSED 2019-2023 CAPITAL IMPROVEMENT PLAN

Proposed Pedestrian Bridge Over E. William St. at Lake St.

Revised 09/19/18

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OHIO

MEMORANDUM

TO: Mayor Riggle and Members of City Council
FROM: R. Thomas Homan, City Manager
DATE: 08/15/18
RE: 2019-2023 Capital Improvement Plan

Pursuant to section 79 of the City Charter, submitted herewith is my proposed 2019-2023 Capital Improvement Plan, adoption of which must occur by October 15. The first reading of the Plan will take place Monday, August 27; the second reading on Monday, September 10; and the third reading and adoption on Monday, October 8. Work Sessions to review the CIP have been scheduled for Thursday, September 6 and Monday October 1. The work session format allows for a more in depth review and discussion.

Council will notice a new look to the plan, reflecting consistent branding and better-organized project worksheets.

As was mentioned in last year's message, absent a new and dedicated revenue for the city's transportation infrastructure, the city's challenge in meeting its transportation needs will continue to increase. Had the levy passed, approximately $800,000 annually would have been available for street resurfacing. Instead, this plan reflects only $150,000 annually dedicated to local street resurfacing.

Separate but related, I can report progress on our Access Delaware initiative. We gained valuable feedback from more than 1,000 residents on general transportation issues and reasons for the levy failure. The findings will help us as we move forward on this most important City issue.

Also, a comprehensive update to the City's Pavement Condition Report is being finalized and will provide new information on the current pavement condition and funding requirements to improve the level of service. Not surprising, as was indicated earlier, this will require additional investment.

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While the CIP continues to advance a number of important projects, all of which will be discussed during the work sessions, Council will see that deficits are projected in each of the five years (general fund summary, page 3). This underscores the challenge in addressing the capital needs of the community. Options for eliminating the deficits will be presented to Council as part of the review process, each of which will require difficult choices.

I want to thank my staff for their efforts in developing this document. My thanks as well to Finance Director Dean Stelzer for his efforts, especially over the last four weeks in preparing and finalizing this document. Finally, my thanks to Executive Assistant Kim Gepper and City Council Clerk Elaine McCloskey for their support and assistance.

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DELAWARE, OH

CITY OF DELAWARE
CAPITAL IMPROVEMENT PLAN
GENERAL FUND SUMMARY
2019 - 2023

	2019	2020	2021	2022	2023
BALANCE FORWARD	**729,649**	**129,281**	**104,621**	**328,592**	**499,565**
REVENUES:					
INCOME TAX (14% of net 1% Collections)	2,065,055	2,147,657	2,233,563	2,322,906	2,415,822
CITY HALL ANNEX RENT	78,000	78,000	78,000	78,000	78,000
ADVANCE GENERAL RESERVE FUND	59,285	59,285	59,285	59,285	
BALANCE PLUS REVENUE	**2,872,704**	**2,354,938**	**2,416,184**	**2,729,498**	**2,993,387**
EXPENDITURES:					
DEBT SERVICE					
2012 Streetscape ($2,542,516 through 2022)	282,635	269,904	261,067	263,538	0
2019 City Hall/Annex/Parking Lot (through 2034)	137,285	137,285	137,285	137,285	137,285
Advance from Reserve Fund Payback					59,285
TOTAL DEBT SERVICE	419,920	407,189	398,352	400,823	196,570
AMOUNT AVAILABLE FOR CAPITAL IMPROVEMENTS AFTER DEBT	**2,452,784**	**1,947,749**	**2,017,832**	**2,328,675**	**2,796,817**
OTHER EXPENDITURES					
AIRPORT IMPROVEMENTS (pg. 4)	33,000	18,500	33,000	0	33,000
STREET IMPROVEMENTS (pg. 9)	1,017,703	560,828	301,440	571,310	766,407
PARK IMPROVEMENTS (pg. 21)	55,000	20,000	30,000	30,000	0
EQUIPMENT REPLACEMENT (pg. 25)	500,000	650,000	650,000	650,000	650,000
TECHNOLOGY IMPROVEMENTS (pg. 29)	275,300	335,300	365,300	345,300	345,300
BUILDING MAINTENANCE (pg. 32)	271,000	171,000	195,000	145,000	260,000
SIDEWALK MAINTENANCE (pg. 37)	87,500	87,500	87,500	87,500	87,500
DEVELOPER TRUST (pg. 119)	84,000	0	27,000	0	0
TOTAL OTHER EXPENDITURES	**2,323,503**	**1,843,128**	**1,689,240**	**1,829,110**	**2,142,207**
ENDING BALANCE	**129,281**	**104,621**	**328,592**	**499,565**	**654,610**

Increased General Fund allocation	***+135,680***	***+121,813***	***+106,427***	***+89,413***	***+70,655***
Decreased Airport allocation	***-124,703***		***-2,250***	***-72,000***	***-67,000***
Decreased/Increased Street allocation	***-48,432***	***-100,000***	***-100,000***	***+100,000***	***-100,000***
Decreased Park Improvements	***-30,900***	***-34,000***	***-10,000***		
Decreased Equipment Replacement	***-150,000***				
Decreased/Increased Building Maintenance	***-40,000***		***+80,000***		***-40,000***

CAPITAL IMPROVEMENT PLAN
AIRPORT IMPROVEMENT FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCE FORWARD	**0**	**0**	**0**	**0**	**0**
REVENUES:					
FAA Entitlement	150,000	150,000	150,000	150,000	150,000
FAA Entitlement - Carryover amount (needs verified)	150,000		150,000		150,000
FAA Apportionment			0		
ODOT - Apron A Expansion			0		
ODOT - Apron B Expansion		351,500			
ODOT - Hangar A - F	**0**				
TIF Revenue	**0**		**190,692**	**0**	
CIP Allocation *(pg. 1)*	***33,000***	***18,500***	***33,000***	***0***	***33,000***
TOTAL REVENUES	**333,000**	**520,000**	**523,692**	**150,000**	**333,000**
EXPENDITURES:					
City Non-Grant					
Corporate Parking Lot Access Drive	**0**		**190,692**	**0**	
Grant Improvements					
T Hangar Pavement Areas Resurfacing	**333,000**		**333,000**		**333,000**
Apron A Expansion			**0**		
Apron B Rehabilitation		370,000			
TOTAL EXPENDITURES	**333,000**	**370,000**	**523,692**	**0**	**333,000**
AIRPORT IMPR. FUND BALANCE	**0**	**0**	**0**	**0**	**0**

Entitlement Balance	*-*	*150,000*	*-*	*150,000*	*-*
TIF Balance	*136,550*	*163,623*	*-*	*27,068*	*54,136*

- *Move Corporate Parking lot to 2021 when it can be fully funded with TIF funds.*
- *Remove T-Hangar repaving ODOT grant per denial letter. Replace with scaled back FAA Allocation funding and City 10% match of $333,000 in 2019, 2021 and 2023.*
- *Remove Apron A Expansion project previously listed for 2021.*

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SEPTEMBER 18, 2018

AIRPORT CORPORATE PARKING ACCESS DRIVE

INFORMATION AT A GLANCE

COST
$ 192,000

FUNDING

TIF $192,000

PROJECTED SCHEDULE

Prelim. Design	2019
Final Design	2020
Construction	2021

CITY LEAD
Public Works

DESIGN CONSULTANT
TBD

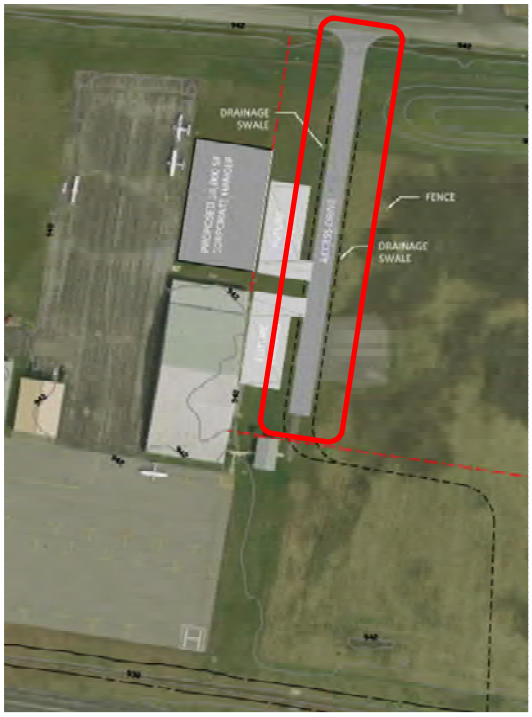
CONTRACTOR
TBD

Purpose

Delaware Municipal Airport Jim Moore Field is a leading Central Ohio general aviation facility. It is home to approximately 100 aircraft and handles an estimated 40,000 operations per year. To encourage additional growth opportunities, City is partnering to construct an access drive for a new corporate hanger facility proposed for construction north of the Jet Steam hanger. This corporate expansion is consistent with the City's 10-year Airport Capital Improvement Plan. The hanger owners will be responsible to construct desired parking areas off the new drive. There will be a ditch for drainage on either side of the proposed access drive that will drain to the south, and outlet into the existing runway ditch. This ditch will be sized to carry the runoff from both the roadway and new parking lots. The airport fence will need adjusted to separate the parking areas from the runway, ramp and apron areas.

Financing

The project is anticipated to cost $192,000 funded through a combination of Airport TIF and local funds. The TIF funds are generated from property taxes paid on the existing corporate hangar and the private t-hangars constructed at the airport. TIF proceeds must be used for public improvements at the Airport as identified when the TIF was originally established in 2004.



Status

The project is in early stages of development. When constructed, the drive will be 26-ft. wide and extend to the mid-point of the existing hanger. A potential construction scenario would involvement construction by the proposed hanger developer with associated payment by the City to the Developer.

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SEPTEMBER 18, 2018

AIRPORT T-HANGER PAVEMENT REHABILITATION

INFORMATION AT A GLANCE

COST
$ 861,408

FUNDING AVAILABLE

FAA	$ 900,000
LOCAL	$ 99,000

PROJECTED SCHEDULE

Prelim. Design	2018
Final Design	2018
Construction	2019, 2021, & 2023

CITY LEAD
Public Works

DESIGN CONSULTANT
CHA

CONTRACTOR
TBD

Purpose

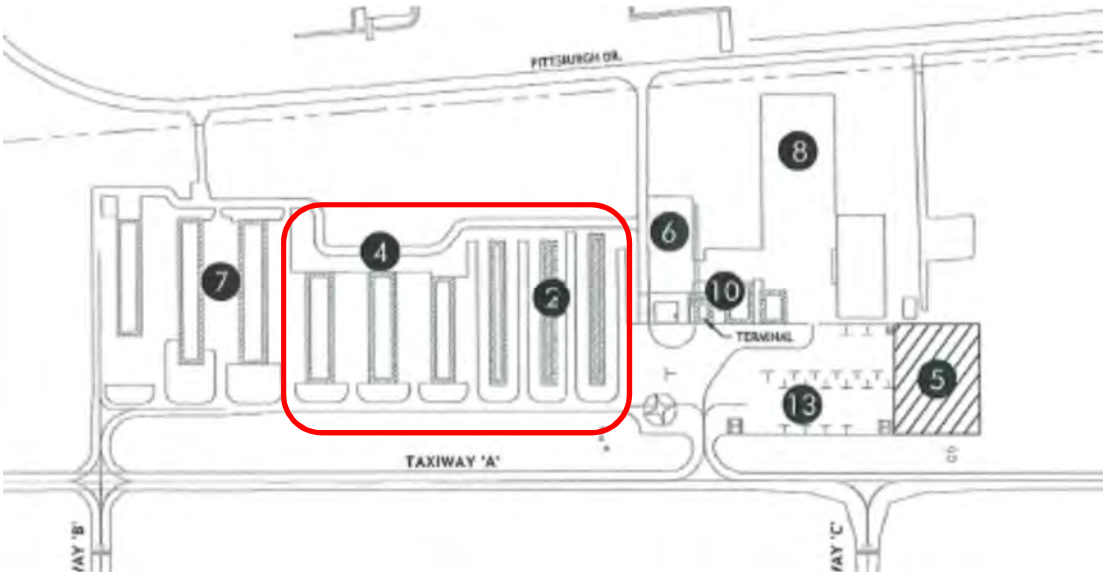
The latest pavement rating performed by ODOT Dept. of Aviation in November 2016 revealed that the pavement between existing T-hangers is in poor condition. Originally constructed in 1987, the pavement is over 25 years old and in need of rehabilitation.

Financing

The project is anticipated to cost $861,408 in total and must be broken into three phases of construction. This project will be funded through a combination of FAA Entitlement Funds, ODOT grant (5%), and with (5%) Local funds. The pavement between the drive aisles and the hangers are non-eligible for grant funds as they are defined by the FAA as privately maintained with exclusive use by the hanger tenant.

Status

The project is currently in preliminary phase. Design will commence in the fall pending grant award notification.



EST 1808
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SEPTEMBER 18, 2018

AIRPORT APRON 'A' EXPANSION

INFORMATION AT A GLANCE

COST
$ 705,000

FUNDING

TBD

PROJECTED SCHEDULE

FAA App	TBD
Prelim. Design	TBD
Final Design	TBD
Construction	TBD

CITY LEAD
Public Works

DESIGN CONSULTANT
CHA

CONTRACTOR
TBD

Purpose

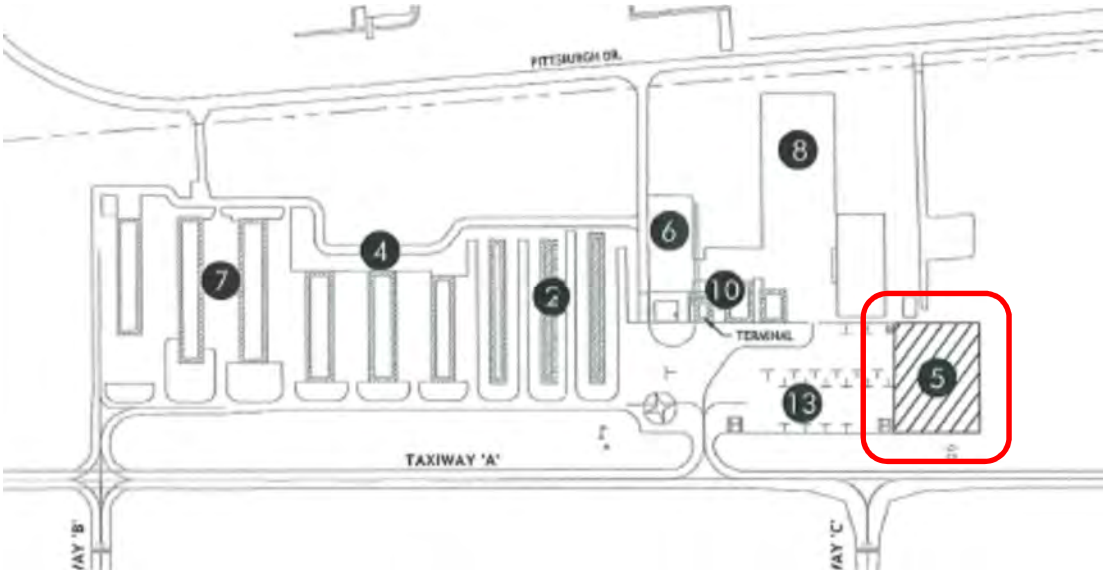
As airport use continues to increase, specifically by larger jet aircraft, the need to adjust the availability of ample apron space for aircraft staging and storage remains a challenge. The expansion of Apron 'A' to the east will allow for existing small aircraft tie-downs to be relocated further east. It is important to retain small aircraft tie-downs to serve the many transient and overnight aircraft customers utilizing DLZ. Relocating the tie-downs will open the existing Apron 'A' area for use by increased jet aircraft staging for fuel delivery or on brief and overnight layover.

Financing

The project is anticipated to cost $705,000. Funding for this project is not yet established.

Status

The project is currently in the planning stage with Grant Application preparation and submission in 2023.



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SEPTEMBER 18, 2018

AIRPORT APRON 'B' REHABILITATION

INFORMATION AT A GLANCE

COST
$ 370,000

FUNDING

ODOT	$ 351,500
LOCAL	$18,500

PROJECTED SCHEDULE

Grant Application	2019
Prelim. Design	2019
Final Design	2019
Construction	2020

CITY LEAD
Public Works

DESIGN CONSULTANT
CHA

CONTRACTOR
TBD

Purpose

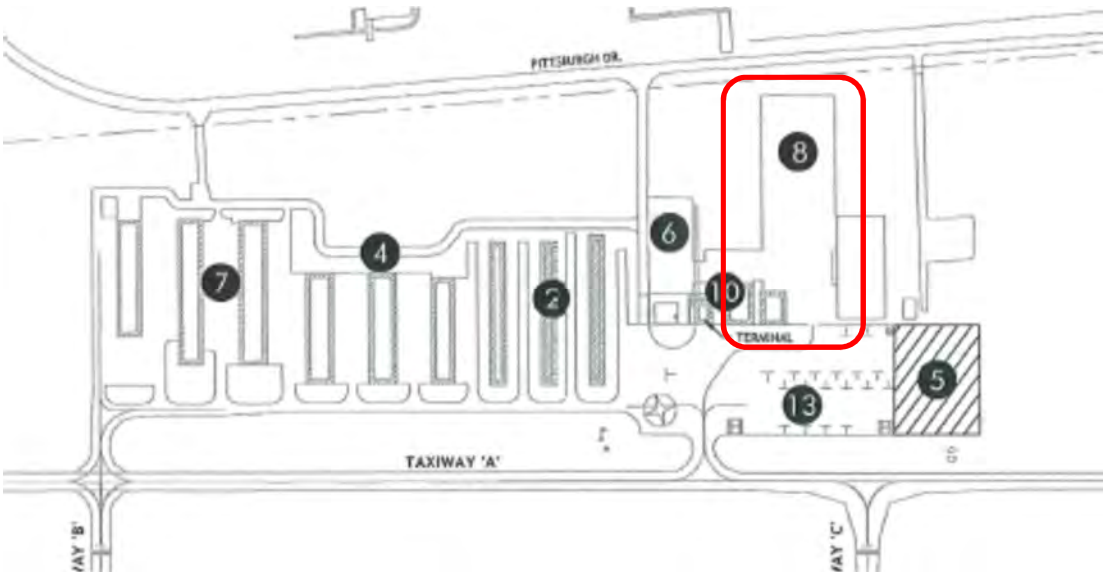
The latest pavement rating was completed in November 2016 and revealed that the pavement of Apron 'B' is in poor condition and in need of rehabilitation. Originally constructed in 1987, the pavement is over 25 years old and in need of significant restorative efforts including drainage improvements, subgrade repairs, and pavement replacement, collectively identified as rehabilitation. The utility of the apron is also in transition as a potential corporate hanger project may require the relocation or elimination of existing small aircraft tie-downs in order to provide ample maneuvering room for larger jet aircraft accessing the northeast quadrant of the apron.

Financing

The project is anticipated to cost $370,000 and will be potentially funded through a $351,500 ODOT Aviation Grant assistance and $18,500 in local matching funds

Status

The project is currently in the planning phase. . The grant application would be prepared and submitted in 2019.



CAPITAL IMPROVEMENT PLAN
STREET IMPROVEMENTS
2019 - 2023

	2019	2020	2021	2022	2023
REVENUES:					
PERMISSIVE TAX (License Fee Fund)	416,242	420,404	424,608	428,854	433,143
STATE LICENSE FEES	18,211	18,393	18,577	18,763	18,950
STATE GASOLINE TAXES	85,000	85,000	85,000	85,000	85,000
CIP Allocation	***1,017,703***	***560,828***	***301,440***	***571,310***	***766,407***
TOTAL REVENUE	**1,537,155**	**1,084,625**	**829,625**	**1,103,927**	**1,303,500**
EXPENDITURES:					
DEBT SERVICE					
Bonds - S. Houk Road (through 2022)	31,023	29,625	29,625	28,927	0
TOTAL DEBT SERVICE	**31,023**	**29,625**	**29,625**	**28,927**	**0**
STREET RESURFACING					
City Grant Match Street Resurfacing	**357,750**	155,000	325,000	305,000	653,500
ODOT URP Street Resurfacing City Match		175,000		120,000	200,000
City Street Resurfacing -					
Local Streets	150,000	150,000	150,000	150,000	150,000
Administrative/Inspection	50,000	50,000	50,000	50,000	50,000
TOTAL STREET RESURFACING	**557,750**	**530,000**	**525,000**	**625,000**	**1,053,500**
TRANSPORTATION IMPROVEMENTS					
City Grant Match Transportation Improvements	**671,382**	75,000	25,000		
Point Project City Funds	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**
US 23 Bin Wall Improvement		50,000			
Curtis St. Turn Lane	27,000				
Bridge Improvements	**0**	**0**	**0**	**200,000**	**0**
Signal Improvements (APS/Safety/RRFB)	25,000	25,000	25,000	25,000	25,000
Springfield Branch Bridge Repair		150,000			
Sidewalk Improvements (Complete Streets)	25,000	25,000	25,000	25,000	25,000
TOTAL TRANSPORTATION IMPROVEMENTS	**948,382**	**525,000**	**275,000**	**450,000**	**250,000**
TOTAL EXPENDITURES	**1,537,155**	**1,084,625**	**829,625**	**1,103,927**	**1,303,500**

- *Reduce Point allocation to $200k each year ($50,000 reduction each year)*
- *Bridge Improvement previously @ $50K per year changed to $200k in 2022.*

SEPTEMBER 18, 2018

US23/US36 EXIT BIN WALL IMPROVEMENT

(PID 98141 - DEL-23-11.89)

INFORMATION AT A GLANCE

COST
$50,000

FUNDING

LOCAL $50,000

PROJECTED SCHEDULE

Design 2018-2019

Construction 2020

PROJECT LEAD
ODOT

CITY LEAD
Public Works

DESIGN CONSULTANT
2LMN

CONTRACTOR
TBD

Purpose

ODOT District Six is leading a project to address the deteriorated metal retaining wall (Bin Wall) along the west edge of the off ramp from US 23 North to US 36 (William Street). Along with this work ODOT will patch the tops of the concrete parapets and back of the walls, replace the overlay on the approach slab and decks for the ramp bridge and repair the concrete slope protection along Delaware Run that passes under the area.

Financing

ODOT will fund 100% of the bridge and retaining wall work necessary to complete the project. The City is requesting a decorative finish to the concrete be included as part of the project. The City of Delaware will be asked to participate and fund these aesthetic improvements to the wall face. ODOT will develop the plans with this in mind, and will isolate the costs of the aesthetic treatments. We are anticipating a cost of roughly $50,000 for this work.

Status

The project is currently in the survey and preliminary design phase. Construction is anticipated in 2020. Public Works, Parks and Planning are working closely with ODOT and their consultant on aesthetics and Maintenance of Traffic (MOT). The project will necessitate a ramp closure and major detour of US42, US36 and SR37. We are proposing a night time closure with one ramp lane open to traffic during the day. The times of night closure are to be 8:00 pm to 6:00 am.

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SEPTEMBER 18, 2018

US23/US36 EXIT BIN WALL IMPROVEMENT

(PID 98141 - DEL-23-11.89)

IMAGE #1
US23/US36 Exit

IMAGE # 2

Sample of the new limestone patterned bin wall with the form-liner. It will be stained and sealed as directed by the city.

IMAGE #3
Deteriorated concrete slope protection under the off-ramp along the Delaware Run. The bottom two rows will be replaced with cable matting.

IMAGE #4

Proposed Flexmat material to replace damaged concrete bank protection.

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SEPTEMBER 19, 2018

SPRINGFIELD BRANCH US 23 BRIDGE PIER REPAIR

INFORMATION AT A GLANCE

COST
$150,000

FUNDING

LOCAL $150,000

PROJECTED SCHEDULE

Design 2019
Construction 2020

CITY LEAD
Public Works

DESIGN CONSULTANT
CT Consultants

CONTRACTOR
TBD

Purpose

This structure carries pedestrian traffic over US 23, the Olentangy River, and River Street. This bridge is a plate girder structure with a timber deck and asphalt overlay. This structure was recently inspected as a joint effort from E.P. Ferris and Burgess and Niple in May 2017 and was found to be in fair condition with a general rating of a 5. The most pressing need regarding the bridge is to address the deteriorated concrete piers within the footprint of, or adjacent to US 23. Repairs are required to prevent both further deterioration and from spalled concrete from falling onto the adjacent highway pavement.

Financing

$25,000 budgeted for 2018 Bridge Maintenance is being utilized to develop plans, specifications, and an estimate for pier rehabilitation. A $150,000 expenditure proposed in 2020 reflects an order of magnitude estimate for repairing the center pier and west pier, based on similar efforts by ODOT in other locations. More accurate estimates will be available in early 2019. As part of the consultant work, it is being proposed to complete an engineering analysis to compare the cost of long term maintenance of the existing structure versus replacement with a new lightweight pedestrian structure similar to the pedestrian structure recently constructed over US 23 in Orange Township south of the City.

Status

Design work is anticipated to commence this year and be completed in 2019. Construction is proposed for 2020.

CAPITAL IMPROVEMENT PLAN
GRANT PROJECTS
2019 - 2023

	2019	2020	2021	2022	2023
REVENUES:					
Grant Funds:					
ODOT Earmark E. William St.	2,551,000				
MORPC - STP Funds -US36/E. William	**727,618**				
MORPC - Signal Improvements			2,500,000		
MORPC - Houk Rd.					609,000
OPWC - Street Rehabilitation	497,250	495,000	475,000	495,000	495,000
County OPWC Project	125,000	50,000	50,000	50,000	50,000
RLF Fund	30,000		30,000		30,000
CDBG Rehabilitation	120,000		120,000		120,000
US 36/E. William St. Water Fund Transfer	300,000				
City Match Transportation Improvements Total	***671,382***	***75,000***	***25,000***		
City Match Street Resurfacing	***357,750***	***155,000***	***325,000***	***305,000***	***653,500***
TOTAL REVENUE	**5,380,000**	**775,000**	**3,525,000**	**850,000**	**1,957,500**
EXPENDITURES:					
Transportation Improvements					
US 36/E. William St. Improvements (Design)	4,250,000				
Signal Improvement Phase I		75,000	2,500,000		
Street Resurfacing					
OPWC Projects					
- Houk B+D, Union St.	975,000				
- Belle Ave, Pittsburgh Drive		700,000			
- Hawthorn & Liberty			850,000		
- Glenn (Ohio Health - Sycamore)				850,000	
- Pennsylvania/Lincoln					912,500
MORPC Grant					
- Houk A+C					870,000
CDBG Grant					
- Birch, Wade, English & Pumphrey Terrace	155,000				
- Flax and Rheem Streets			175,000		
- Todd/Delta/Parsons					175,000
TOTAL EXPENDITURES	**5,380,000**	**775,000**	**3,525,000**	**850,000**	**1,957,500**

- ***MORPC Surface Transportation Project [STP] Funds reduced by $51,568 for E. William St. project.***

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SEPTEMBER 18, 2018

EAST WILLIAM STREET IMPROVEMENTS

INFORMATION AT A GLANCE

REMAINING COST
$ 4.25M

FUNDING

FEDERAL	$2.55M
MORPC	$727,618
UTILITY	$300,000
LOCAL	$671,382

SCHEDULE

Final Design	2018
Land Acquisition	2018
Utility Relocates	2018
Construction	2019

CITY LEAD
Public Works

DESIGN CONSULTANT
DLZ

CONTRACTOR
TBD

Purpose

Project consists of widening E William Street by adding a center turn lane from Potter Street to just east of Foley Street, and enlarging the intersection of William and Lake to better accommodate truck turning movements. Enlarging this intersection entails replacing the existing pedestrian bridge over William Street. The project will include street lighting, new sidewalks, enhanced landscaping and aesthetic improvements at the William and Lake intersection, and installation of a new mast arm traffic signal at Cheshire road replacing the existing signal at Ann St.

Financing

The project construction cost is currently estimated at $4.25 million and is funded primarily through federal earmark and federal-aid Surface Transportation Program (STP) funds. The local share is currently $971,382 of which $300,000 will be covered through Utility Funds for water line and storm sewer work. The remaining balance of $600,000 will be covered through general revenues, though staff continues to work with State agencies in identifying additional funds to reduce the local commitment. The final cost estimate is anticipated later in 2018 and may increase subject to the inclusion of additional landscape enhancements and decorative retaining walls at the Lake Street pedestrian bridge.

Status

Design of the project will be complete in August of 2018. Land acquisition for the project consists of roughly 60 small strips of property adjacent existing sidewalks. This phase of the project is also scheduled to be complete in August of 2018, at which point private utility companies are scheduled to start relocating power poles and underground lines. Private utilities must be relocated by the beginning of 2019 to make way for full construction starting in the Spring of 2019. The project will take only one construction season to complete. The City will be responsible for project bidding, award, and construction administration.

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SEPTEMBER 18, 2018

EAST WILLIAM STREET IMPROVEMENTS

IMAGE #1

William Street Cross-section

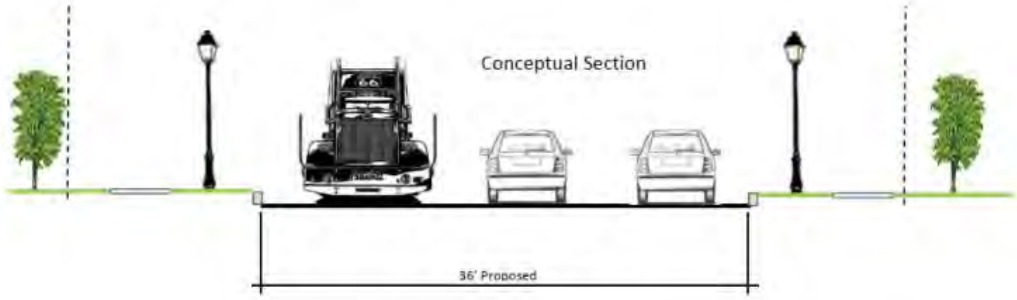

IMAGE #2

Project Limits

IMAGE #3

Lake Street Pedestrian Bridge

EST 1808
CITY OF
DELAWARE
OHIO

DLZ
ARCHITECTURE · ENGINEERING · PLANNING
SURVEYING · CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

DEL-36-10.59
E. WILLIAM ST. IMPROVEMENTS

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OHIO

SEPTEMBER 18, 2018

CITYWIDE SIGNAL SYSTEM UPGRADES – PHASE 1

INFORMATION AT A GLANCE

COST
$3.0 M

AVAILABLE FUNDING

MORPC	$2.5M
LOCAL	$500,000

PROJECTED SCHEDULE

Prelim. Design	2018
Environmental	2018
Final Design	2019
Land Acquisition	2020
Construction	2021

CITY LEAD
Public Works

DESIGN CONSULTANT
HDR, INC

CONTRACTOR
TBD

Purpose

The project consists of upgrading signal systems along US-36 (William St), SR-37 (Central Ave), Sandusky St and London Rd, which includes 37 signalized intersections. The project will improve safety and reduce emissions by improving average travel speed and reducing delay at each signalized intersection. The upgrades include optimizing traffic signal timing for each corridor and at each intersection, system level improvements including a central software system & CCTV IP-camera system, signal equipment upgrades including cabinets/controllers, communication (fiber or spread spectrum radios), vehicle detection, emergency vehicle preemption, uninterruptible power supply and insuring the equipment is expandable for peripherals & future technology (i.e. wireless pavement temperature sensors, cameras, DSRC, Connected Vehicles, etc.), and pedestrian upgrades such as curb ramps and pedestrian pedestal & pushbutton replacements to meet ADA standards. Additional upgrades may include upgrading signal heads with back-plates.

Financing

The project is anticipated to cost roughly $3.25M. The City has been awarded funding through MORPC for $2.5M to cover 100% of the construction of the project. The City's local grant match contribution will be $0.5M, which will consist of approximately $325,000 to cover preliminary and final design, ROW acquisition, and utility relocations (if needed), and $175,000 of in-house services to cover the Construction Management & Inspection during construction. The need for additional funding for right of way costs is anticipated.

Status

The project is currently in Part 1 of the design, which includes traffic data collection, survey and preliminary design work. The remainder of 2018 will consist of analyzing the traffic data collected to develop updated optimized signal timing plans to coordinate the traffic signals along each corridor throughout each day of the week, determining needed equipment improvements required at each signalized intersection, developing a project webpage to keep the public informed of the progress of the project and developing preliminary design plans.

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CITYWIDE SIGNAL SYSTEM UPGRADES – PHASE 1

IMAGE #1

Signalized Intersections Included with the Project

US-36
(US23 to Lehner Woods Blvd)
SR-37
(US-23 to Warrensburg Rd)
Sandusky St
(SR-37 to Belle Ave)
London Rd
(US-42 to Sandusky St)

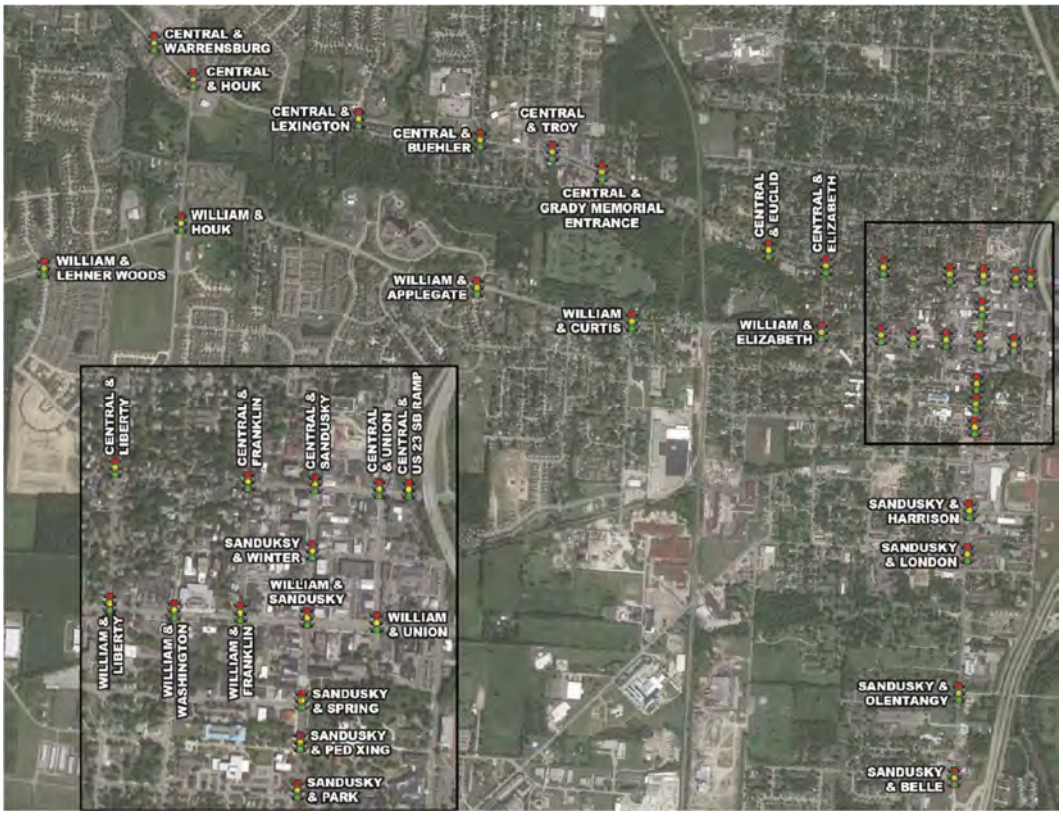


IMAGE #2
Equipment Inside of a Typical Traffic Signal Cabinet

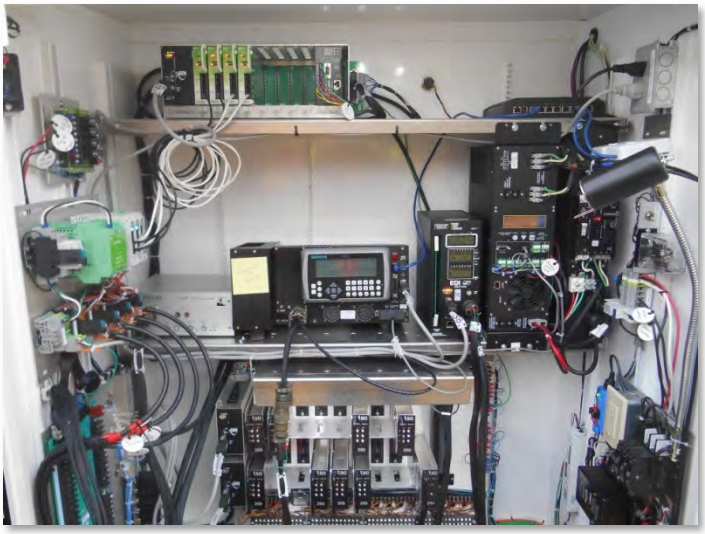
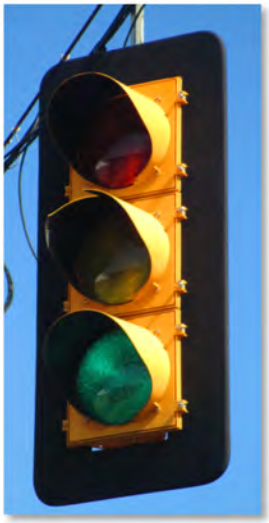


IMAGE #3
Signal Head with back plate to improve visibility with sun in background



CAPITAL IMPROVEMENT PLAN
POINT RAILROAD BRIDGE REPLACEMENT
2019 - 2027

	2019	2020	2021	2022	2023	2024	2025	2026	2027
BALANCE FORWARD	**3,553,889**	**1,561,153**	**1,381,750**	**140,697**	**46,481**	**(203,811)**	**(177,691)**	**(200,138)**	**(221,132)**
REVENUES:									
TRAC Grant (75/25)		1,500,000							
MORPC Grant (80/20)				13,279,467					
Berkshire JEDD Income Tax Receipts	85,000	90,000	91,350	92,720	94,111	95,523	96,956	98,410	99,886
Outlet Center NCA (1.5 mills)	55,597	55,597	55,597	55,597	55,597	55,597	55,597	55,597	55,597
City Funds	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**
Note Issue Proceeds			18,400,000	5,000,000	4,500,000				
Bond Issue Proceeds						4,250,000			
TOTAL REVENUES	**340,597**	**1,845,597**	**18,746,947**	**18,627,784**	**4,849,708**	**4,601,120**	**352,553**	**354,007**	**355,483**
EXPENDITURES:									
DEBT SERVICE									
Note Principal & Interest				18,722,000	5,100,000	4,575,000			
Bond Principal & Interest ($4.25M, 15 yrs, 3.75%)							375,000	375,000	375,000
IMPROVEMENT COSTS									
Final Engineering (PE DD)	2,333,333								
Railroad Force Account		25,000	1,500,000						
ROW		2,000,000							
Construction			17,638,000						
Construction Engineering			750,000						
Private Utilities			100,000						
TOTAL EXPENDITURES	**2,333,333**	**2,025,000**	**19,988,000**	**18,722,000**	**5,100,000**	**4,575,000**	**375,000**	**375,000**	**375,000**
ENDING BALANCE	**1,561,153**	**1,381,750**	**140,697**	**46,481**	**(203,811)**	**(177,691)**	**(200,138)**	**(221,132)**	**(240,648)**

- ***Reduce Point allocation to $200k each year ($50,000 reduction each year).***

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US 36/SR 37 INTERSECTION "THE POINT" IMPROVEMENTS

INFORMATION AT A GLANCE

COST
$ 25.2M

AVAILABLE FUNDING

MORPC	$14.0M
TRAC	$ 1.5M
SAFETY	$ 3.0M
JEDD/NCA	$1.0M
LOCAL	$6.4M

PROJECTED SCHEDULE

Prelim. Design	2018
Environmental	2019
Final Design	2020
Land Acquisition	2021
Permitting	2021-22
Construction	2022-24

CITY LEAD
Public Works

DESIGN CONSULTANT
Gannett Fleming

CONTRACTOR
TBD

Purpose

The project will relieve congestion and increase safety along US 36 and SR 37 by increasing the number of vehicular lanes beneath the Norfolk Southern Railroad bridge. The western project limit on SR 37 is Channing Street. The western project limit on US 36 is Foley Street. The project will include extensive multi-use path improvements, as well. This project is one of several key improvement projects on the east side of the City designed to address traffic concerns specifically during peak traffic hours.

Financing

The project is anticipated to cost $25.2M. The City has secured both State and Federal funding sources, outside of local general funds, to cover 75 percent of the total project cost. City staff will continue to pursue additional grant and funding opportunities as the project progresses, in an effort to reduce the estimated $6.4M local funding contribution necessary for the project to advance through construction.

Status

The project is currently in the survey phase of both the roadway and railway above. Also, soil exploration is being performed. The remainder of 2018 will include advancement of preliminary design, alternatives analysis, stakeholder meetings, and public involvement. Public involvement will utilize several different media platforms and will culminate in an Open House/Public Hearing, most likely in early 2019.

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US 36/SR 37 INTERSECTION "THE POINT" IMPROVEMENTS

IMAGE #1

Project Limits

SR 37
(Channing to SR 521)
US36
(Foley to The Point)
SR 521
(US 36 to Bowtown)

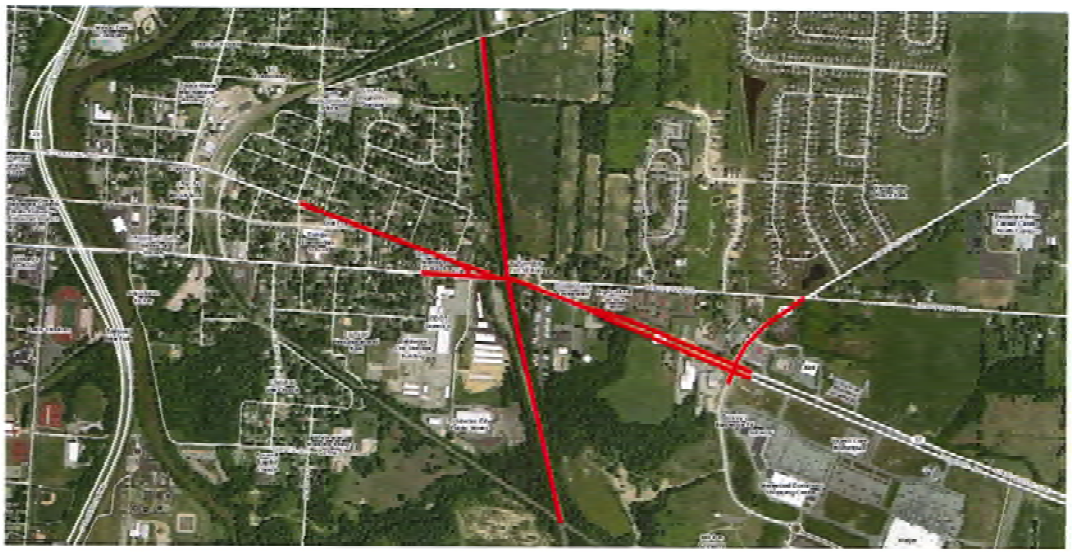

IMAGE #2

Afternoon peak hour traffic delay on US36 westbound toward The Point intersection from SR 521.

IMAGE #3

Afternoon peak hour traffic delay on SR 37 eastbound toward The Point intersection

CAPITAL IMPROVEMENT PLAN
PARKS IMPROVEMENT FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCE FORWARD	***138,000***	***0***	***0***	***0***	***55,000***
REVENUES:					
Neighborhood Park Exaction Fees	5,000	5,000	5,000	5,000	5,000
Park Improvement Grants		25,000	20,000	20,000	
CIP Allocation (pg. 1)	***55,000***	***20,000***	***30,000***	***30,000***	***0***
TOTAL REVENUES	**60,000**	**50,000**	**55,000**	**55,000**	**5,000**
EXPENDITURES:					
COMMUNITY PARKS					
- Mingo		20,000			
- Smith Park		15,000			
- Blue Limestone		15,000			
- Roof Replacement	**0**	**0**	**0**		
NEIGHBORHOOD PARK IMPROVEMENTS					
- Cheshire			25,000	**0**	
- Eastside	30,000				
- Lexington Glen	10,000				
- Nottingham	20,000				
- Oakhurst			30,000	**0**	
- Willowbrook Park	138,000				
TOTAL EXPENDITURES	**198,000**	**50,000**	**55,000**	**0**	**0**
ENDING FUND BALANCE	***0***	***0***	***0***	***55,000***	***60,000***

- ***Roof replacements removed ($30,900 in 2019, $34,000 in 2020, $10,000 in 2021) as this project is funded in the Park Operations Budget as a reduced cost.***
- ***Cheshire & Oakhurst amounts in 2021 were mistakenly duplicated in 2022.***

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SITE IMPROVEMENTS

INFORMATION AT A GLANCE

COST
2019-$198,000
2020- 50,000
2021-55,000
2022-0

FUNDING

Park Improvement Fund
$358,000

CITY LEAD

Stacy Davenport

(740)-203-1403
sdavenport@delawareohio.net

Project Title: Playground Equipment Replacement

Project Justification: Playground equipment generally lasts 15 years. Our goal is to extend this life span with periodic maintenance, but replacement is warranted when equipment becomes unsafe and repair costs become too costly.

Financing: The City has identified the parks improvement funds to replace the equipment.

Year: 2019

Bennett Park (fka Eastside)

Estimated Project Cost: $30,000.00
Project Description: Replace playground equipment that was installed in 2002. Equipment includes swings, play structure and play toys.
Status: Bids will be requested spring 2019 with construction in the summer of 2019.

Lexington Glen Park

Estimated Project Cost: $10,000.00
Project Description: Replace playground equipment that was installed in 1998. Equipment to be replaced includes swings and climber.
Status: Bids will be requested spring 2019 with construction in the summer of 2019.

Nottingham Park

Estimated Project Cost: $20,000.00
Project Description: Replace swings, slide and climber.
Status: Bids will be requested spring/summer 2019 with construction in the fall of 2019.

Year: 2020

Blue Limestone Park

Estimated Project Cost: $15,000.00
Project Description: Replace tot toy structure, installed 2005. The play structure is a heavily used playground in the park district.
Status: Bids will be requested spring 2020 with construction in the summer of 2020.

Mingo Park

Estimated Project Cost: $20,000.00

Project Description: Replace tot toy structure, installed 2000, originally scheduled for replacement in 2015 but annual inspections have pushed replacement to 2020.
Status: Bids will be requested spring/summer 2020 with construction in the fall of 2020.

Smith Park

Estimated Project Cost: $15,000.00
Project Description: Replace exercise stations, installed 2003. The Smith Park exercise stations were scheduled for replacement in 2018 but the life has been extended to 2020.
Status
Bids will be requested spring 2020 with construction in the summer of 2020.

Year: 2021

Cheshire Park Replace Playground

Estimated Project Cost: $25,000.00
Project Description: Replace play toy structure. The Cheshire Park play toy was installed in 2007 and is scheduled for replacement in 2021. The play structure is in fast growing section of the city and the parks popularity has steadily climbed.
Status: Bids will be requested spring 2021 with construction in the summer of 2021.

Oakhurst Park Replace Playground

Estimated Project Cost: $30,000.00
Project Description: Replace play toy structure. The Oakhurst Park play toy was installed in 2007 and is scheduled for replacement in 2021.
Status: Bids will be requested spring 2021 with construction in the summer of 2021.

Year: TBD

Mingo Park

Estimated Project Cost: $180,000.00
Project Description: Replace large play structure - installed 2000, originally scheduled for replacement in 2015 but annual inspections have pushed replacement to 2019. Pursuing grant funding that will leverage the CIP funding to replace what is currently on site. The project design will also include a turf surface that will reduce long term maintenance costs. The Mingo playground is one of the busiest amenities in the park district and has outlived its expected life span. Staff has been able to maintain the structure extending its life span. The replacement will significantly impact a large number of recreation users.

Status: Evaluate funding options in 2019.

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ACQUISITION AND DEVELOPMENT

INFORMATION AT A GLANCE

COST
Willow Brook
$138,000

FUNDING

Park Improvement Fund

$138,000

PROJECTED SCHEDULE

Construction 2019

DESIGN CONSULTANT

CITY LEAD

Ted Miller

(740)-203-1452
tmiller@delawareohio.net

Project Title: Willow Brook Park Phase 1

Year: 2019

Estimated Project Cost: $138,000.00

Project Description – The project proposes a 1 mile loop around a future neighborhood park. Approximately 1,200 lf of the loop would be built by the adjacent development when the Boulder Drive extension is built.

Project Justification: The parcel owned by the city has sat vacant for years and the recent development to the north has introduced roadway improvements that would make the area easily accessible and add several park amenities to the area. The neighborhood park would complement the nearby Veterans Park.

Impact on Operating Expenses: The impact of future maintenance will add 1.0 miles of trail to maintain.

Financing

The project is anticipated to cost roughly $138,000. The City has identified the park impact fee improvement funds to develop the expansion.

Status

Planning stages.

CAPITAL IMPROVEMENT PLAN
EQUIPMENT REPLACEMENT FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**163,635**	**17,312**	**48,939**	**34,089**	**32,060**
REVENUES:					
CIP Allocation (pg. 1)	***500,000***	***650,000***	***650,000***	***650,000***	***650,000***
TOTAL REVENUE	**500,000**	**650,000**	**650,000**	**650,000**	**650,000**
EXPENDITURES:					
PUBLIC WORKS					
Pickup Trucks		31,000	31,000		50,000
Bucket Truck	130,000				
Tandem Axle Dump Truck			192,000		
Single Axle Dump Truck	170,000	**0**	170,000	170,000	170,000
Backhoe		90,000			
Skid Steer	**0**	**53,100**			
Asphalt Hotbox Unit	**0**	**80,000**			
Asphalt Paver				185,000	
Utility Van		25,000			
TOTAL PUBLIC WORKS	***300,000***	***279,100***	***393,000***	***355,000***	***220,000***
PARKS AND RECREATION					
Pickup Trucks	35,668	37,451			
Skid Steer			45,373		
Park Mowers	29,355	30,822	31,747	32,699	33,750
Flail/Rotary/Woods Mower	42,000	15,000			
Hillside Mower	35,000				
Bucket Truck		80,000			
Chipper/Stump Grinder				65,330	
TOTAL PARKS AND RECREATION	***142,023***	***163,273***	***77,120***	***98,029***	***33,750***
AIRPORT					
Mower	16,000			18,000	
TOTAL AIRPORT	***16,000***	***0***	***0***	***18,000***	***0***
POLICE DEPARTMENT					
Police Cruiser Replacements (3/yr.)	143,000	145,000	147,000	149,000	149,000
Detective/Administration Vehicle	31,000	31,000	32,000	32,000	32,000
TOTAL POLICE	***174,000***	***176,000***	***179,000***	***181,000***	***181,000***
CEMETERY					
Mower Replacement	14,300		15,730		
TOTAL CEMETERY	***14,300***	***0***	***15,730***	***0***	***0***
TOTAL EXPENDITURES	**646,323**	**618,373**	**664,850**	**652,029**	**434,750**
CARRY OVER BALANCE	**17,312**	**48,939**	**34,089**	**32,060**	**247,310**

* *Remove single **axle dump truck replacement** in 2020*
* ***Skid Steer and Asphalt Hotbox Unit moved to 2022***

CITY OF DELAWARE OHIO

SEPTEMBER 18, 2018

STREET MAINTENANCE, TRAFFIC AND AIRPORT EQUIPMENT REPLACEMENT

INFORMATION AT A GLANCE

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5 YEAR TOTAL COST
$1,723,600

PROJECTED SCHEDULE

2019 - $300,000

2020 - $279,100

2021 - $393,000

2022 - $453,000

2023 - $220,000

Purpose

The Public Works Street Division operates over 70 different types of equipment and trucks during different times of the year ranging from dump trucks, pickup trucks, backhoes, skid steers, rollers, trailers, and plate compactors. All have a useful life expectancy and are replaced at the final determination of the fleet supervisor in consideration of general condition, maintenance costs and safety.

Asphalt Hot Box: The Public Works Street Division operates the Asphalt Hot Box primarily during winter time operation to haul hot asphalt for pavement repairs. This unit works in conjunction with the asphalt recycler which allows us to make asphalt to fill potholes and small asphalt repairs. This unit can also be utilized in the summer when a large dump truck would be to large. Replacement is anticipated in 2020 at a cost of $80,000.

Skid Steer: Replacement of two skid steers #399 Case 2002 model and #429 Case 2004 model with a single new unit. New unit will be compatible with existing skid steer remaining in fleet regarding operation, attachments, service and repairs. Total cost for one new unit less trade in of the two skid steers is estimated replacement cost: $53,100. 2020

Backhoe: The Public Works Street Division operates the Back hoe for asphalt projects ranging from base repair work, total roadway paving projects, parking lot paving, and bike path installation, and Concrete work-ADA installation and sidewalk. This unit also assists in Emergency responses – tree removal during major storms. This unit was purchased in 2005 and currently due to be replaced in 2020 at a cost of $90,000 assuming $22,000 trade-in value.

Single Axle Dump Trucks: The Public Works Street Division operates multiple dump trucks for daily operations including road maintenance, concrete repairs, and winter snow and ice management. Trucks have a useful service life of 10-years. Five trucks will be rotated out of service over the next five years including #484 (2019); #485 (2021); #517 (2022); #551 (#2023) and #635 (2024). New trucks are each equipped with 120-inch plow, salt spreader, controls; lighting/radio at a cost of $170,000 each.

Tandem Axle Dump Trucks: The Public Works Street Division operates tandem axle trucks with carrying capacity up to 18 tons that can facilitate street maintenance work and highway plowing with larger blades on state routes. Trucks have a useful service life of 10-years. Truck #605, a 2011 tandem truck will be replaced with the new truck including 132-inch blade, salt spreader with controls; lighting and radios at a cost of $192,000.

Asphalt Paver: The Public Works Street Division operates the street paver for asphalt projects ranging from base repair work, total roadway paving projects, parking lot paving, and bike path installation. This unit was purchased in 1999 and currently due to be replaced in 2022 at an estimated cost of $185,000.

Tack Machine: The Public Works Street Division operates the 2003 Marathon tack machine primarily during summertime operation to tack existing asphalt area to allow new asphalt to bond with new. This unit works in conjunction with the asphalt recycler and paver. Purchase in 2019 at a cost of $6,500.

½ Ton Pickup Trucks: The Public Works Engineering Division utilizes compact pickup trucks for daily assignments in the provision of construction inspections throughout the city. The useful life of these vehicles can be as long as 20 years. Trucks being replaced: 2020 (#336) and 2021 (#341); Both 2000 Dodge Dakotas. Replacement cost is $31,000 each including bed cover, tool box and waring lights.

¾ Ton Pickup Truck: The Public Works Streets and Traffic Divisions use commercial duty full-size pickup trucks for daily work including carrying staff, supplies and equipment to various job locations. Trucks are also used for winter snow and ice maintenance operations and accordingly are equipped with 84-inch plows. The useful life of these vehicles is typically 15-years: Truck being replaced: 2008 F250 (#520) in 2023. Replacement cost is $50,000 each and includes plow blades, controls and warning lighting.

Bucket Truck: The Public Works Traffic Division operates bucket trucks to service the traffic signals, lighting and other overhead appurtenances. Often requiring two vehicles for many maintenance and replacement operations. The 2008 F550 Bucket Truck is proposed for replacement in 2019 based on age and safety. Cost of replacement estimated at $130,000.

Service Van: The Public Works Facilities Division performs daily tasks in several public facility locations throughout the community, travelling with tools, equipment and supplies in service vans. Proposed for replacement in 2020 is the 2000 Chevy full-size van (#326) at an estimated cost of $25,000.

Airport Mowers: The Airport includes an estimated 180 acres of mowable property, requiring continuous effort for several months out of the year. Two zero-turn mowers are dedicated for this operation and nearing the end of their respective service life. Proposed replacement includes both units in 2019 and 2022 at an estimated cost of $18,000 each.

First Column

Marathon 250 gallon Tack Applicator

Marathon 4 Ton Asphalt Hot Box

Single Axel Dump Truck

Bucket Truck

Compact Pickup Truck

Second Column

Case 590 Backhoe

Leeboy 85000 Paver

Case Skid Steer

Utility Van

Airport Mower

CAPITAL IMPROVEMENT PLAN
TECHNOLOGY IMPROVEMENTS
2019 - 2023

	2019	2020	2021	2022	2023
REVENUES:					
CIP Allocation *(pg. 1)*	***275,300***	***335,300***	***365,300***	***345,300***	***345,300***
TOTAL REVENUE	**275,300**	**335,300**	**365,300**	**345,300**	**345,300**
EXPENDITURES:					
Equipment Acquisition					
PC Replacement	30,000	30,000	30,000	30,000	30,000
Copier Replacement	20,000	20,000	20,000	20,000	20,000
Internal Network Acquisition					
Network Switch and Firewall Replacements	10,800	20,800	10,800	10,800	10,800
Data Storage Acquisition			40,000	20,000	20,000
External Nework Infrastructure					
Fiber System Expansion		50,000	50,000	50,000	50,000
Software Application Acquisition/Retention					
Finance ERP System ($825k, 5 yrs.)	165,000	165,000	165,000	165,000	165,000
Document Management ($230k, 5 yrs.)	49,500	49,500	49,500	49,500	49,500
TOTAL EXPENDITURES	**275,300**	**335,300**	**365,300**	**345,300**	**345,300**

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SEPTEMBER 18, 2018

TECHNOLOGY IMPROVEMENTS

Cost: $30,000 annually
2019-2023

PC Replacement

This project allows for the City to refresh our desktop and laptop computers on a rotating annual basis. By cycling out the oldest computers each year we are able to keep the technology current and working efficiently for City employees. The life expectancy today for a traditional desktop or laptop computer is 5 years.

Cost: $20,000 annually
2019-2023

Copier/Scanner Replacement

The City continues to replace the oldest multi-function copiers in service. This project will continue annually rotating out machines to keep functioning equipment available for City employees.

Cost: $10,000 2020

Firewall Replacement

The firewall replacement project is anticipated to occur in 2020. The current City Hall firewall will have reached its capacity in 2 years. The growing need for bandwidth and external access to City resources would be limited by the current equipment. The current firewall does not allow for any increase in speed or resources.

Cost: $10,800 annually
2019-2023

Switch Replacement

In 2017 a network switch replacement project began allowing for the IT department to replace core network switches within City Hall and the Justice Center. Beginning in 2018 and moving through the next several years this project will continue to replace switches in our 'edge' facilities that were not included in the initial purchase. Moving forward the replacement cycle for these switches will be based on several factors including but not limited to operational capacity, availability of support and updates. The core switches will begin the review process after 4 years in service with the potential to be replaced after 5 years depending on the outcome of the review. The edge switches will be reviewed after 5 years with the potential to be replaced after 6 years in service.

Data Storage Acquisition

In addition to server needs for redundancy and high availability, additional storage will also be required. Not only is data continually growing, requiring

---
Cost: $40,000 2021
$20,000 2022
$20,000 2023
---

additional storage to be purchased, it also needs to be backed-up at an off-site location. The equivalent amount storage will be necessary in our off site, secondary location to provide the same level of service for City employees in the event of failure or load balancing efforts. The IT department will continue to assess the storage needs to be sure requirements are met for City applications. Both cloud and in house options will be assessed on a case by case basis to ensure the most efficient, cost effective systems are implemented.

Fiber System Expansion

Cost: $50,000
2020-2023

In the previously mentioned efforts to provide a redundant and highly available server infrastructure, the network itself cannot be overlooked. Currently in many City locations there is one connection or 'backbone' leading to our main hub in City Hall. In other locations we have outlying buildings that do not have fiber connections at all, they are reliant on wireless connections that are not as reliable. To protect the network from issues such as fiber cuts or other outages it is necessary to implement, where possible, redundant connections to our primary location in City Hall. Having multiple paths to City Hall allows for network traffic to be rerouted with minimal impact and downtime for City applications.

Finance ERP System

Cost: $165,000 annually
$825k total
2019-2023

The City is looking to purchase and implement an Enterprise Resource Planning system in 2019. This system will replace the current Creative Microsystem [CMI] with a more robust and informative system to perform the City's financial accounting, including general ledger, budgetary, payroll, and utility billing. The system should be able to 1] provide departments with close to real-time data and information to assist in making more informed decisions as it relates to spending their limited budgeted resources, 2] allow payroll and time management to be entered into the system at the department level, and 3] provide residents with more options to view, receive, and pay their utility bills.

Document Management

Cost: $49,500 annually
2019-2023

At the end of 2017, beginning of 2018 a document management team was formed with representation from most departments in the City. The team met on several occasions gathering information both internally as well as from neighboring cities to decide whether or not a document management system was an initiative the City should take on. The concluding recommendation from the team was to continue the process of developing a plan for purchasing (RFP) and then implementing a document management system. An RFP, first phase purchase and implementation would begin in 2019. Additional modules to be add thru 2023.

CAPITAL IMPROVEMENT PLAN
BUILDING MAINTENANCE IMPROVEMENTS
2019 - 2023

	2019	2020	2021	2022	2023
REVENUES:					
CIP Allocation *(pg. 1)*	***271,000***	***171,000***	***195,000***	***145,000***	***260,000***
TOTAL REVENUE	**271,000**	**171,000**	**195,000**	**145,000**	**260,000**
EXPENDITURES:					
Carpet Replacement	35,000	25,000	25,000	25,000	25,000
Justice Center HVAC/Other Building Improvements	175,000	25,000	25,000	25,000	25,000
Roof Repairs City Hall, Justice Center				70,000	35,000
Justice Center Interior Painting		25,000	25,000	25,000	
City Hall Interior Painting					25,000
EM Backup Generators - Justice, City Hall	61,000	61,000			150,000
Public Works Building					
- Exterior Wall Repair		35,000			
- Fire Suppression System	**0**		**120,000**		**0**
TOTAL EXPENDITURES	**271,000**	**171,000**	**195,000**	**145,000**	**260,000**

**** Fire suppression system at Public Works. Change $40k in 2019, 2021, 2023 to $120K in 2021.***

CITY OF DELAWARE OHIO

SEPTEMBER 18, 2018

FACILITIES MAINTENANCE, REPAIR AND REPLACEMENT

INFORMATION AT A GLANCE

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5 YEAR TOTAL COST
$1,047,000

PROJECTED EXPENSES

2019 - $271,000

2020 - $171,000

2021 - $195,000

2022 - $145,000

2023 - $260,000

Purpose

The Public Works Facilities Division maintains the buildings and systems for several city facilities including Public Works, Justice Center, City Hall, 10 & 20 E William Street, and a condominium building on W Central Avenue. The projects listed below are identified building and equipment improvements necessary for the ongoing upkeep and maintenance of these facilities.

Financing

All repairs to the facilities managed through the Public Works Department are funded through general revenues.

Status

Justice Center Emergency Backup Generators: The Justice Center is supported by two (2) emergency backup generators, one for the Courts facilities and one dedicated to Police operations. Both units are original to the construction of the facility in 1992 and have exceeded their respective 15 to 20 year service life. Units will be replaced over the next two years (2019 & 2020) with new Kohler 180 kw diesel fuel operated units at a cost of $61,000 each.

City Hall Emergency Backup Generators: City Hall is not currently supported by emergency power. To better prepare for future emergency situations requiring the continued operation of vital local government operations, the installation of an emergency generator is being proposed in 2023. The installation would include the unit, power transfer switch and all necessary electrical circuit upgrades necessary for the installation to be complete. The estimated cost of the total installation is $150,000

Fire Suppression Systems: All public buildings are outfitted with fire suppression systems that require periodic maintenance, repair, and at times replacement of key components. The Public Works Facility requires replacement of main distribution piping original to the construction of the facility sixty years ago. As the pipes age, they develop leaks that allow pressurized air to escape, setting off the system in areas with old piping, charging the system with water, which then leaks out of these holes. There are four remaining building areas with piping that requires replacement including Streets, Parks & Natural Resources, Fleet Maintenance, and Traffic. $120,000 in 2021 planned expenditure.

Justice Center HVAC Improvements: The Justice Center is outfitted with an HVAC system that includes fifty-seven (57) individual heat pumps to control the environment in individual areas throughout the facility. The anticipated service life of these units is 10-15 years, with replacement becoming necessary to maintain appropriate internal building climate. Heat pump units are replaced on a schedule that includes five (5) units per year at an average installed cost of $5,000 per unit ($25,000 annually).

The CIP also includes $150,000 for the replacement and upgrade of the HVAC control system in 2019. The system includes operating software and hardware that interfaces between all system components, heat pumps and cooling tower to control the interior environment in all areas. Twenty percent (20%) of the control units original to the building no longer function, reducing system efficiency and response. Additionally, the proprietary nature of the current operating system requires repairs be addressed by multiple contractors, each limited to service only their respective components. Replacing the 25-year old system with updated non-proprietary controls and software will reestablish efficient and fully functional operations, while reducing maintenance issues and service costs.

Carpet Replacement: Carpeting in the Justice Center and City Hall is subject to replacement when the flooring in areas reaches the end of its service life. For carpeting this is a function of location, foot traffic and appearance. The Justice Center has one-hundred seven (107) distinct carpeted areas while City Hall has a total of thirty-seven (37) areas. In total, there is 3570 SY of carpeting in the two facilities with a replacement cost estimated at $178,500. Carpeting is replaced by area, and with carpet tile squares popular within modern public facilities due to quality, appearance, and ease of spot replacement from damage, staining or wear. For budgeting purposes a $50/SY replacement cost is established to include the cost of flooring replacement and all associated improvements such as base cove replacement, floor repairs, seems, transitions etc. An annual budget of $25,000 provides funding to address all carpet maintenance on a ten-year program cycle.

Interior Painting: The CIP includes funding to repaint all interior walls of both the Justice Center and City Hall over a five year program. The Justice center will be painted over three years on a floor by floor basis. City Hall will be painted in two years, with the basement and first floor levels in one year followed by the second floor the following year. $25,000/year has been budgeted for each floor with the Justice Center to be painted in 2020-2022 and City Hall in 2023 and 2024.

Roof Repair: The useful life of the shingled portions of both City Hall and Justice Center are both approaching the end of their 30 year service life. The CIP includes $70,000 in 2022 for replacement of the Justice Center roofing and $35,000 in 2023 for City Hall. Alternative roofing materials such as standing seam metal roofing is being considered to substantially increase the useful life to fifty years of more, though initial installation costs could be substantially higher.

Exterior Wall Repairs: The original concrete masonry unit walls of the Public Works Facility are in places highly deteriorated and in need of proper maintenance and repair to prevent further damage. In places the cracking has allowed individual masonry units to come loose and/or joints deteriorate especially during winter when water penetrates the cracks yielding to additional damage to adjacent blocks. The walls need to be properly repaired by tuck pointing and sealing at a cost of $35,000.

Image #1
Emergency Backup Generator

Image #2
Typical Ceiling Mount Heat Pump Unit

Image #3
Example of Fire Suppression Distribution Piping

Image #4
Public Works Facility Masonry Walls Requiring Repair

Image #5
Typical Damaged Masonry Wall Section

CAPITAL IMPROVEMENT PLAN
SAFEWALK SIDEWALK PROGRAM
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**0**	**48,410**	**69,840**	**42,470**	**16,800**
REVENUES:					
Property Tax Assessments					
Prior Years					
2014	3,980				
2015	25,600	25,600	300		
2016	11,660	11,660	11,660	11,660	
2017	9,670	9,670	9,670	9,670	9,670
Note Issue	400,000	325,000	225,000	125,000	90,000
CIP Allocation Safewalk	87,500	87,500	87,500	87,500	87,500
Total CIP Allocation (pg. 1)	***87,500***	***87,500***	***87,500***	***87,500***	***87,500***
TOTAL REVENUE	**538,410**	**459,430**	**334,130**	**233,830**	**187,170**
EXPENDITURES:					
RESIDENT REPAIR RESPONSIBILITY					
Invoice	10,000	10,000	10,000	10,000	10,000
Assessment	10,000	10,000	10,000	10,000	10,000
CITY REPAIR RESPONSIBILITY					
City Invoice	10,000	10,000	10,000	10,000	10,000
DEBT SERVICE	460,000	408,000	331,500	229,500	127,500
Total Safewalk Expenditures	**490,000**	**438,000**	**361,500**	**259,500**	**157,500**
ENDING FUND BALANCE	**48,410**	**69,840**	**42,470**	**16,800**	**46,470**

CAPITAL IMPROVEMENT PLAN
PARK IMPACT FEE IMPROVEMENT FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCE FORWARD	**700,000**	**725,000**	**600,000**	**504,000**	**279,000**
REVENUES:					
Impact Fees	225,000	225,000	225,000	225,000	225,000
Trail Improvement Grants		**0**		**0**	**0**
TOTAL REVENUES	**225,000**	**225,000**	**225,000**	**225,000**	**225,000**
EXPENDITURES:					
COMMUNITY PARK IMPROVEMENTS					
Ross St. Parkland Expansion (bldg. demo)	100,000				
Ross St. Park Improvement	75,000				
South Community Park Land Acquisition				**350,000**	**350,000**
COMMUNITY TRAIL IMPROVEMENTS					
Trail Improvements City Grant Match		**100,000**		**100,000**	**100,000**
SR 37 (Lexington-Houk)	**25,000**	**250,000**			
Stratford/Olentangy Trail (Meeker-Chapman)	**0**		**321,000**		
London Road				0	0
Bruce Road Trail Connector			0		
Stratford Rd (Olentangy Ave-Meeker Way)				0	
Olentangy River Trail (Pollock Rd)					0
TOTAL IMPACT FEE EXPENDITURES	**200,000**	**350,000**	**321,000**	**450,000**	**450,000**
IMPACT FEE BALANCE	**725,000**	**600,000**	**504,000**	**279,000**	**54,000**

Debt Balance Outstanding	**0**	**0**	**0**	**0**	**0**

- ***Multiple trail project amounts removed and replaced with City grant match amount of $100k per year in years without projects.***
- ***South Community Park land acquisition reduced by $150K each year.***

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

ACQUISITION AND DEVELOPMENT

INFORMATION AT A GLANCE

COST
$175,000

FUNDING

Building Demo
$100,000

Park Improvements

$75,000

PROJECTED SCHEDULE

Construction 2019

DESIGN CONSULTANT

CITY LEAD

JP Linkous

(740)-203-1402
Jlinkous@delawareohio.net

Project Title: Ross Street Park Expansion

Year: 2019
Estimated Project Cost: $175,000.00
Project Description –The Parks and Natural Resource Department maintenance staff will relocate to Public Works and Parks facility leaving the additional park area for expanding the existing Ross St Park. The project will remove existing buildings on the site to make way for additional park land.

Project Justification: The Ross St. park expansion will provide additional programming space for a park that has outgrown its existing amenities. The Community Coalition and SWCI will be active partners in future programming of the park. In addition, a public survey and public meetings have taken place to help guide the master plan for the park.

Impact on Operating Expenses: The impact of future maintenance will add to staff duties due to additional mowing and landscaping. The operating costs will increase as the park attracts more users.

Financing

The project is estimated at $100,000 for building demolition and $75,000 for park improvements. The City has identified the park impact fee improvement funds to develop the expansion.

Status

Bids will be requested spring 2019 with construction in the summer of 2019.

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SEPTEMBER 18, 2018

ACQUISITION AND DEVELOPMENT

INFORMATION AT A GLANCE

COST
South Community Park
$700,000

FUNDING

Park Impact Fee Improvement Fund
$700,000

PROJECTED SCHEDULE

Acquisition 2022 -2023

DESIGN CONSULTANT

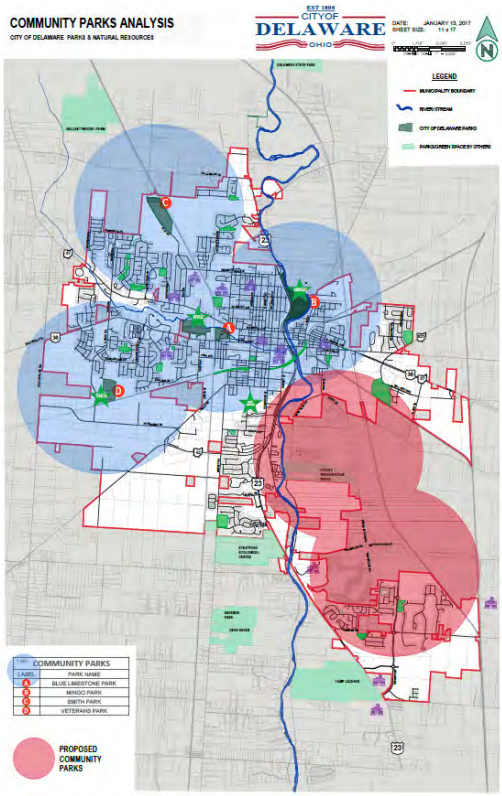
CITY LEAD

Ted Miller

(740)-203-1452
tmiller@delawareohio.net

Project Title: South Community Park

Year: 2022-2023
Estimated Project Cost: $700,000.00
Project Description –The City will need to expand recreational services to fill in gaps on the southeast section near the new Glen Parkway. Identifying a potential seller and price will allow the city to secure a community park site and discuss potential recreation partners.



Project Justification: The Park Index completed in 2016 has identified gaps in recreation services in the southeast section of the city. Residents in the southeast part of the city currently travel 7 miles to reach Mingo Park, the closest community park. The goal would be to locate a community park within 1 mile of all residents. The proposed community park would fulfill the need to add athletic fields, sport courts, leisure activities and outdoor recreation. To accommodate these uses, the city would ideally identify a site that was 25-30 acres.

Impact on Operating Expenses: The impact of a south community park will significantly add to future maintenance costs introducing a need for additional full time and seasonal staff. Operating costs will also increase significantly. Projecting the increases will be possible once the conceptual design is complete. In addition, site development costs will need to be allocated once the site is secured.

Financing

The project is anticipated to cost roughly $700,000. The City has identified the park impact fee improvement funds to develop the expansion.

Status

Negotiations should be started immediately with final purchase agreement by 2020.

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SEPTEMBER 18, 2018

ACQUISITION AND DEVELOPMENT

INFORMATION AT A GLANCE

COST
$275,000

FUNDING

Design Fees
$25,000

Improvement Fees
$250,000

PROJECTED SCHEDULE

Design 2019

Construction 2020

DESIGN CONSULTANT

CITY LEAD

Chad Green

(740)-203-1402
cgreen@delawareohio.net

Project Title: Central Avenue Pedestrian Corridor (Lexington to Houk)

Year: 2019/2020
Estimated Project Cost: $275,000.00
Project Description – The Lexington Avenue to Houk Road would be the final section of the active transportation corridor along Central Ave. The link will involve an 8'-5' multi-use trail that will link existing trails and provide east- west connection across the city. The design work would be completed in 2019 and the improvements completed in 2020.

Project Justification: The link will connect a growing part of the city and open safe access for thousands of residents. The corridor is unsafe for pedestrians and bicycles that must use the roadway to travel. The improvement will greatly impact the safety for the many residents that currently use this corridor.

Impact on Operating Expenses: The impact of future maintenance will minimally add to the maintenance. The operating costs will minimally increase with some additional mowing for the new pathway.

Financing
The project is anticipated to cost roughly $250,000. The City has identified the park impact fee improvement funds to develop the expansion. Recreational Trails Program grant will be applied for in 2019.

Status
Design proposed in 2019, bids will be requested fall/winter 2019.

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CITY OF
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SEPTEMBER 18, 2018

ACQUISITION AND DEVELOPMENT

INFORMATION AT A GLANCE

COST
$300,000

FUNDING

Park Impact Fee Improvement Fund
$321,000

PROJECTED SCHEDULE

Construction 2021

DESIGN CONSULTANT

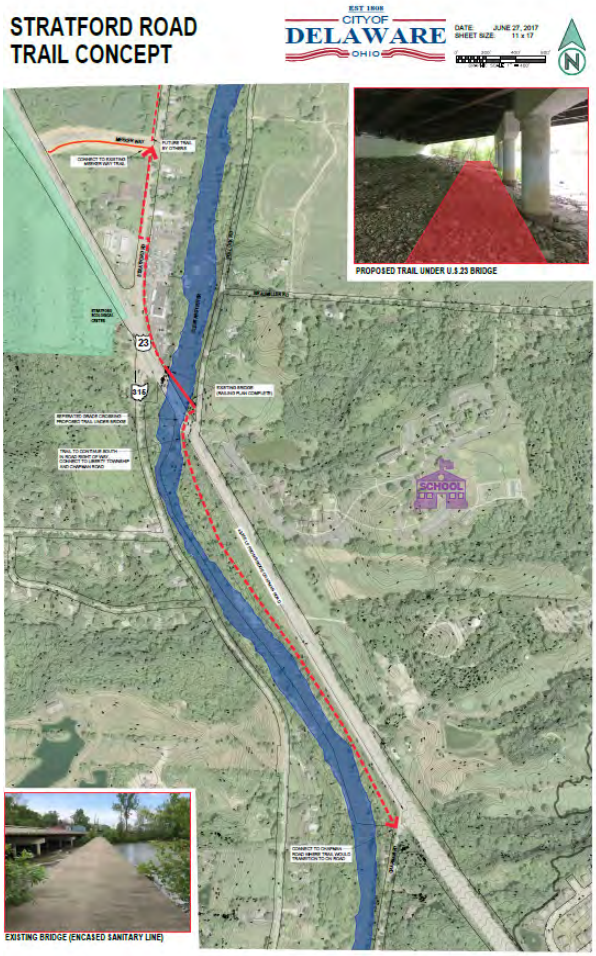
CITY LEAD

Chad Green

(740)-203-1402
cgreen@delawareohio.net

Project Title: Stratford Road/Olentangy River Trail (Meeker Way-Chapman Road)

Year: 2021
Estimated Project Cost: $321,000.00
Project Description – The project would involve a segment of the Olentangy River Trail from the south edge of the City into Liberty Township. The trail would begin at Stratford Road and extend across the Olentangy River on the existing encased sanitary line, adding railings to the existing surface. The trail would continue under the U.S. 23 bridge and travel south along existing ODOT right of way between U.S. 23 and the Olentangy River. At Chapman Road the trail would transition to a shared road trail.



Project Justification: The regional context of this trail is extremely significant as it would begin to link the city to a primary greenway that is part of the Central Ohio Greenways (COG) network.

Impact on Operating Expenses: The impact of future maintenance will be minimal as the proposed segment in the City is not significant.

Financing
The project is anticipated to cost roughly $321,000. The City has identified the park impact fee improvement funds to develop the expansion. Clean Ohio Trail Funds will be applied for in 2020 to help fund this project.

Status
Grant applications would be completed June 2020. Bids will be requested spring 2021.

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SEPTEMBER 18, 2018

ACQUISITION AND DEVELOPMENT

INFORMATION AT A GLANCE

COST
$650,000

FUNDING

TBD

PROJECTED SCHEDULE

Construction TBD

DESIGN CONSULTANT

CITY LEAD

Chad Green

(740)-203-1402
cgreen@delawareohio.net

Project Title: Bruce Road Trail Connector (Bruce Road- Pennsylvania Ave)

Year: TBD
Estimated Project Cost: $650,000.00

Project Description – The project would propose a connection between Bruce Road and Pennsylvania Ave. The final alignment would need to be determined but would begin at Oakhurst Park to the north and travel south through a utility easement, Pinecrest Subdivision and the Delaware County Fairgrounds. The project is commonly referred to in the community as the Bruce Road-Oakhurst-Pennsylvania Avenue Travel Home Safely or BROPATHS.

Project Justification: The project has gained a lot of public support and is ranked as the #10 bike and pedestrian connection in the Master Plan. The completion of this project would connect northern communities with the local schools and downtown and provide a safe active transportation route for residents walking and biking along the U.S. 23 corridor.

Impact on Operating Expenses:
The impact of future maintenance will add 1 mile of trail to maintain.

Financing
The project is anticipated to cost roughly $650,000. The City has identified the park impact fee improvement funds to develop the expansion.

Status
Planning stages.

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SEPTEMBER 18, 2018

ACQUISITION AND DEVELOPMENT

INFORMATION AT A GLANCE

COST
$800,000

FUNDING

TBD

PROJECTED SCHEDULE

Construction TBD

DESIGN CONSULTANT

CITY LEAD

Chad Green

(740)-203-1402
cgreen@delawareohio.net

Project Title: Stratford Road (Olentangy Ave- Meeker Way)

Year: TBD
Estimated Project Cost: $800,000.00
Project Description – The project would propose a connection between Meeker Way and Olentangy Ave, a heavily traveled pedestrian corridor. A segment of this corridor will be constructed in the newly developed Coughlin Crossing project.

Project Justification: Stratford Road has several multi-family developments and produces a high volume of pedestrian/bike traffic. There are currently no sidewalks along the road and connecting this area with existing active transportation routes will provide a much safer corridor. The project was identified in the Bike and Pedestrian Master Plan and ranked #70 but with safety concerns and additional developer driven segments this project has gained importance.

Impact on Operating Expenses: The impact of future maintenance will add 1.3 miles of trail to maintain.

Financing
The project is anticipated to cost roughly $800,000. The City has identified the park impact fee improvement funds to develop the expansion.

Status
Planning stages.

CAPITAL IMPROVEMENT PLAN
POLICE IMPACT FEE FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**362,380**	**363,170**	**363,960**	**364,750**	**365,540**
REVENUES					
Police Impact Fees	60,000	60,000	60,000	60,000	60,000
TOTAL REVENUE	**60,000**	**60,000**	**60,000**	**60,000**	**60,000**
IMPACT FEE EXPENDITURES					
DEBT SERVICE					
Justice Center ($890,000, 19yrs 2.94%, 2032)	59,210	59,210	59,210	59,210	59,210
TOTAL IMPACT FEE EXPENDITURES	**59,210**	**59,210**	**59,210**	**59,210**	**59,210**
IMPACT FEE BALANCE	**363,170**	**363,960**	**364,750**	**365,540**	**366,330**
Debt Balance Outstanding	**574,928**	**530,891**	**486,854**	**442,816**	**396,333**

CAPITAL IMPROVEMENT PLAN
FIRE IMPACT FEE FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**323,982**	**313,982**	**303,982**	**293,982**	**283,982**
REVENUES:					
Fire Impact Fees	90,000	90,000	90,000	90,000	90,000
TOTAL REVENUE	**90,000**	**90,000**	**90,000**	**90,000**	**90,000**
IMPACT FEE EXPENDITURES:					
DEBT SERVICE					
Station 303/304	100,000	100,000	100,000	100,000	100,000
TOTAL IMPACT FEE EXPENDITURES:	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
IMPACT FEE BALANCE	**313,982**	**303,982**	**293,982**	**283,982**	**273,982**

CAPITAL IMPROVEMENT PLAN
MUNICIPAL SERVICES IMPACT FEE FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCE FORWARD	**207,296**	**32,661**	**38,026**	**43,391**	**48,756**
REVENUES:					
Impact Fees	110,000	110,000	110,000	110,000	110,000
Sewer Fund Reimbursement Cherry St. Facility	65,000	65,000	65,000	65,000	65,000
TOTAL REVENUES	**175,000**	**175,000**	**175,000**	**175,000**	**175,000**
EXPENDITURES:					
DEBT SERVICE					
Public Works Facility ($1,060,000 19yrs, 2.94%, 2031)	72,094	72,094	72,094	72,094	72,094
Justice Center ($900,000, 19yrs 2.94%, 2032)	62,541	62,541	62,541	62,541	62,541
City Hall/City Hall Annex/Parking Lot 2018	35,000	35,000	35,000	35,000	35,000
MUNICIPAL FACILITY IMPROVEMENTS					
Public Works Facility - Land Acquisition (3 acres)	180,000				
TOTAL EXPENDITURES	**349,635**	**169,635**	**169,635**	**169,635**	**169,635**
IMPACT FEE BALANCE	**32,661**	**38,026**	**43,391**	**48,756**	**54,121**

Debt Outstanding - PW Fac/Justice Center	**1,295,072**	**1,170,891**	**1,093,146**	**992,184**	**888,667**
- Gazette Bldg.	**1,957,738**	**1,843,333**	**1,725,471**	**1,604,046**	**1,478,951**

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SEPTEMBER 18, 2018

PUBLIC WORKS & PARKS FACILITY PROPERTY AQUISITION

INFORMATION AT A GLANCE

COST
$ 180,000

FUNDING

LOCAL $180,000

PROJECTED SCHEDULE

2019 Purchase

CITY LEAD
Public Works

DESIGN CONSULTANT
TBD

CONTRACTOR
TBD

Purpose

The proposed acquisition of the 3 acre parcel adjacent to and north of the current Public Works Facility is both a protective purchase to provide for the future expansion of the Public Works and Parks and Natural Resources Facilities, as well as to provide immediate material laydown and storage area on the same site. With the recently completed expansion of the Refuse operation, and considering the planned relocation of Parks & Natural Resources to 440 E. William, adequate area for material staging and storage for all divisions at Public Works and Parks is extremely limited. The area will provided needed area for staging street trees, pavement millings, street pavers, and other construction material stockpiles. The additional acreage can accommodate and additional 30,000 SF of building area in the future with parking. Purchase of the property is in conformance to the original Facilities Improvements planning effort presented to City Council in May 2014.

Financing

The purchase could be funded from both general fund revenues, Park Impact Fees and Municipal Impact Fees.

Status

Proposed purchase to be in 2019

3 Acre Property Purchase for Public Works & Parks & Natural Resources Operations

CAPITAL IMPROVEMENT PLAN
FIRE/EMS FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**321,373**	**450,240**	**90,931**	**277,742**	**805,412**
REVENUES:					
Fire/EMS Income Tax	1,100,000	1,380,000	1,100,000	1,100,000	1,200,000
Fire Impact Fee Funds	100,000	100,000	100,000	100,000	100,000
TOTAL REVENUE	**1,200,000**	**1,480,000**	**1,200,000**	**1,200,000**	**1,300,000**
EXPENDITURES:					
DEBT SERVICE					
Station 302 ($573,416, 10 yrs, 1.502%, 2022)	63,743	60,872	60,872	60,872	
Station 303 ($2,755,000, 2.94%, 2032)	176,518	174,569	174,569	174,569	174,569
Station 304 ($3,500,000, 15 yrs, 2031)	371,250	280,950	285,550	284,850	284,850
Ladder Truck Lease (1,090,176, 1.83%, 7yrs, 2019)	41,573				
EMS Vehicles (3) - (800,000, 10 yrs. 2024)	90,750	94,150	94,150	94,150	94,150
APPARATUS/VEHICLES					
Engine/Pumper Truck		823,401			899,752
Paramedic Units		392,699			
Staff/Utilility Vehicles	12,299	12,668	13,048	57,889	174,622
EQUIPMENT					
Traffic Pre-Emption	315,000		385,000		
Defibrillators/Cardiac Monitors					355,000
Technology					101,483
TOTAL EXPENDITURES:	**1,071,133**	**1,839,309**	**1,013,189**	**672,330**	**2,084,426**
ENDING BALANCE	**450,240**	**90,931**	**277,742**	**805,412**	**20,986**

Debt Balance Outstanding	**5,587,726**	**5,185,300**	**4,783,718**	**4,653,718**	**4,523,718**

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CITY OF
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SEPTEMBER 18, 2018

TECHNOLOGY REPLACEMENT

INFORMATION AT A GLANCE

COST
$145,307

FUNDING
LOCAL $ TBD

2019 -$37,354

2020 - $0

2021 - $0

2022 - $6,470

2023 – $101,483

PROJECTED SCHEDULE

Purchasing 2019-2023

CITY LEAD
Fire Department

DESIGN CONSULTANT
TBD

CONTRACTOR
TBD

Purpose

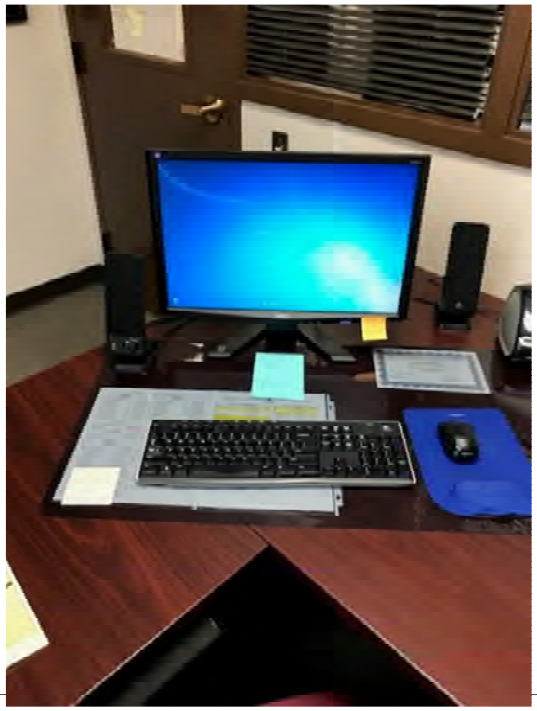
Provide for the replacement of computers, mobile data terminals, mobile wireless interfaces and copiers.

Financing

The replacement of the computers, mobile data terminals, mobile wireless are anticipated to cost roughly $145,307. This project will be funded utilizing the Fire Fund. The Fire Department will be looking for alternative funding sources for this equipment.

Status

In 2019, the existing computers are needing replacement due to the operating system they are operating on will no longer be supported. The Department replaced the mobile data computers located in all the medical apparatus in 2018. In 2019, the Department will also replace the remainder of the Mobile Data Computers.



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CITY OF
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OHIO

SEPTEMBER 18, 2018

TECHNOLOGY REPLACEMENT

IMAGE #1

Mobile Data Computers

Mobile Data Computers provide access to dispatch information, access to information in existing databases, researching hazardous materials and the uploading of medical reports to the hospital. These are replaced every 5-years.

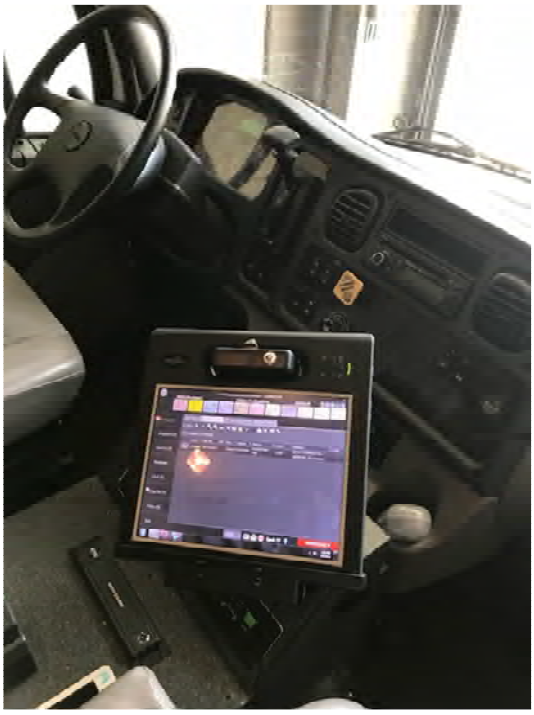

IMAGE #2

Scanner/Copiers/ Printers

These devices are connected to the network. They serve as document scanners, printers and copiers. Each Station has one of these and the Administrative office has a larger copier.

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CITY OF
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SEPTEMBER 18, 2018

EMERGENCY VEHICLE PREEMPTION

INFORMATION AT A GLANCE

COST
$700,000

FUNDING

LOCAL $700,000

2019 - $315,000

2020 - $0

2021 - $385,000

2022 - $0

2023 – $0

PROJECTED SCHEDULE

Design 2018

Construction 2019-2020

CITY LEAD
Public Works

DESIGN CONSULTANT
City In-house Services

CONTRACTOR
TBD

Purpose

Emergency Vehicle Preemption is an important piece of technology deployed at signalized intersections where normal traffic operations impede emergency vehicles and where traffic conditions create a potential for conflicts between emergency and non-emergency vehicles. Emergency Vehicle Preemption can reduce emergency vehicle response times and is especially useful along corridors that emergency vehicles use to travel longer distances. It also can provide both a safety and operational benefit on roadways where emergency vehicles need to enter the intersection from the minor road. This project, planned for 2019, consists of installing Emergency Vehicle Preemption at 20 signalized intersections. Emergency Vehicle Preemption will be installed at the 31 remaining signalized intersections, which are being improved as part of the Citywide Signal Update Phase 1 Project, planned for construction in 2020-21. All City Fire and EMS vehicles have already been equipped with the GPS transmitters that activate the preemption at each signalized intersection.

Financing

The project is anticipated to cost roughly $700,000, which will be covered 100% utilizing the Fire Fund. City Traffic & Engineering Division in-house staff will design, bid, and oversee the construction and inspection of the project.

Status

The project is currently in the preliminary planning stages and scheduled to have the final plans and bidding documentation completed by the end of 2018. Construction is scheduled for 2019-2020.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

EMERGENCY VEHICLE PREEMPTION

IMAGE #1

Overall visual of how this system works between emergency vehicle and signalized intersection

IMAGE #2

Confirmation light which gives indication to emergency vehicle that they have been detected by signal pre-emption system

IMAGE #3

This signal pre-emption devices that receives GPS signal from emergency vehicle

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

STAFF VEHICLES

INFORMATION AT A GLANCE

COST
$ 270,526

FUNDING

LOCAL $270,526

2019 - $12,299

2020 - $12,668

2021 - $13,048

2022 - $57,889

2023 – 174,622

PROJECTED SCHEDULE

Specifications 2018

Purchase 2018 - 2023

CITY LEAD
Fire Department

DESIGN CONSULTANT
Not Applicable

CONTRACTOR
TBD

Purpose

The Fire Department utilizes staff vehicles for emergency response of command officers, for fire inspectors conducting fire inspections and for various non-emergent transportation. The emergency response vehicles are purchased new and remain in the fleet for 10-years. The fire inspection and station cars are retired police cruisers that are wrapped with reflective and used for an additional 5-years at the Fire Department.

Financing

The replacement of the staff vehicles are anticipated to cost $270,526. This project will be funded utilizing the Fire Fund. The Fire Department will be looking for alternative funding sources for this equipment.

Status

The Fire Department has been utilizing the Police cruisers for six years. These have proven to be efficient and cost-effective for their purpose. The Command vehicles have been in the fleet and are continuing to work well for their operations.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

STAFF VEHICLES

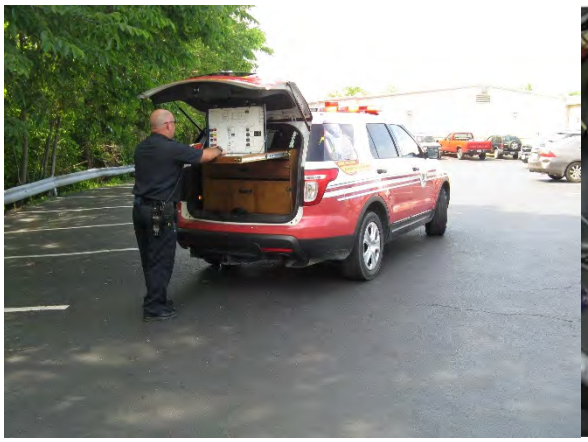
IMAGE #1

Fire Inspector Vehicles

Used Police Vehicles are utilized for an additional 5-years for fire inspections and station vehicles.

IMAGE #2 & #3

Command Vehicles are used for the management of emergency incidents. Incident management needs to be conducted in a controlled environment to allow for communication, planning and documentation, away from the scene elements.



EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

FIRE APPARATUS

INFORMATION AT A GLANCE

COST
$ 1,723,153

FUNDING
LOCAL $ 1,723,153

2019 - $0

2020 - $823,401

2021 - $0

2022 - $0

2023 – $899,752

PROJECTED SCHEDULE

Specifications 2019
Construction 2020
&
Specifications 2022
Construction 2023

CITY LEAD
Fire Department

DESIGN CONSULTANT
Not Applicable

CONTRACTOR
TBD

Purpose

The Fire Department has established a long-term replacement schedule for the fire apparatus. In 2020, the Department will be replacing the 1989 Emergency One fire engine and in 2023 will be replacing the 1997 Pierce fire engine.

Financing

The replacement of the fire apparatus are anticipated to cost roughly $1,723,153. This project will be funded utilizing the Fire Fund. The Fire Department will be looking for alternative funding sources for this equipment.

Status

Since the passage of the 2010 Fire Levy, the Fire Department has replaced the majority of its front line fleet. A replacement schedule has been established for a replacement of fire apparatus at 20-years. Fire apparatus include fire engines, ladder truck, quint/engine and the heavy rescue/hazmat unit. The department will continue to evaluate the mileage and use of this apparatus to prolong the longevity and efficient use of these vehicles.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

FIRE APPARATUS

IMAGE #1 & 2

Fire Engine and Quint/Engine

The Primary usage of the fire engine is for the rapid extinguishment of fire. Rapid extinguishment of a fire supports the rescue of trapped patients and increases the safety of firefighters.

IMAGE #3 & 4

Ladder Truck & Heavy Rescue

The Department operates a ladder truck with a primary function of search and rescue, forcible entry and ventilation and salvage operations. The heavy rescue is responsible for the rescue of patients trapped and for hazardous material responses.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

MEDICAL APPARATUS

INFORMATION AT A GLANCE

COST
$ 392,699

FUNDING

LOCAL $392,699

2019 - $0

2020 - $392,699

2021 - $0

2022 - $0

2023 – $0

PROJECTED SCHEDULE

Specifications 2019

Purchase 2020

CITY LEAD
Fire Department

DESIGN CONSULTANT
Not Applicable

CONTRACTOR
TBD

Purpose

With the opening of St 304 and the projected growth of the City, it is anticipated that an additional transport unit may be needed. This will also allow a back-up unit to be in the fleet. The existing 4 units will be operational with the 4 Station configuration.

Financing

The replacement of the medical apparatus are anticipated to cost roughly $392,699. This project will be funded utilizing the Fire Fund. The Fire Department will be looking for alternative funding sources for this equipment.

Status

Since the passage of the 2010 Fire Levy, the Fire Department has replaced its entire EMS fleet of ambulances. With the addition of the 4th Fire Station and an EMS transport unit operating from the Station, a reserve vehicle will be needed. The Department will also be evaluating the possibility of using an additional Quick Response Vehicle in lieu of this additional transport unit. This concept would dispatch a Quick Response Vehicle on the low acuity/low transport operations in lieu of an ambulance.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

MEDICAL APPARATUS

IMAGE #1

Interior of an Ambulance

The inside of an ambulance is essentially an Emergency Room on wheels. Paramedics are capable of continuing the care and treatment of patients while enroute to a hospital.

IMAGE #2

Quick Response Vehicle

The Department is continuing to research the implementation of programs to decrease the transport of patients unnecessarily to hospitals. One alternative is the use of Community Paramedics and also the use of on-line physicians.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

CARDIAC MONITORS/DEFIBRILLATORS

INFORMATION AT A GLANCE

COST
$ 355,000

FUNDING

LOCAL $355,000

2019 - $0

2020 - $0

2021 - $0

2022 - $0

2023 – $355,000

PROJECTED SCHEDULE

Specification 2022

Purchase 2023

CITY LEAD
Fire Department

DESIGN CONSULTANT
Not Applicable

CONTRACTOR
TBD

Purpose

The Department's cardiac monitors will be aging and will be reaching their life expectancy. This is one of the primary pieces of medical equipment that is used on all medical calls. This piece of equipment includes the capability of monitoring blood pressure, oxygen saturation, breathing wave forms, cardiac electrical activity including 12 lead capability, CPR feedback, provides cardiac defibrillation and pacing. The life expectancy of this equipment is 5-years for the 12-Lead Monitor/Defibrillator and 10-years for the Automatic Defibrillators.

Financing

The cardiac monitors and defibrillators are anticipated to cost $355,000. This project will be funded utilizing the Fire Fund. The Fire Department will also be looking for alternative funding sources for this equipment.

Status

The Fire Department replaced their 12-Lead Cardiac Monitors and Defibrillators in 2018. In 2023 we will be replacing these devices on all medic units and replacing the AED/Blood Pressure machines on all fire apparatus.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

CARDIAC MONITORS/DEFIBRILLATORS

IMAGE #1

12-Lead Cardiac Monitor and Defibrillator

Provides Capabilities:
EKG Monitoring,
12-Lead Monitoring,
BP Monitor,
Oxygen Saturation,
Breathing Wave Forms,
CPR Feedback,
Cardiac Defibrillation
Cardiac Pacing
Care for Pediatrics

IMAGE #2

The AEDs and AED Pro's located in Staff vehicles and fire apparatus are replaced every 10 years. These devices will be replaced in 2023.

CAPITAL IMPROVEMENT PROGRAM
WATER FUND CAPACITY PROJECTS
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**3,661,852**	**3,570,541**	**3,237,073**	**2,699,805**	**2,195,817**
REVENUES:					
Water Capacity Fees	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Water Debt Meter Fee Allocation	255,000	260,100	265,302	270,608	276,020
TOTAL REVENUES	**1,455,000**	**1,460,100**	**1,465,302**	**1,470,608**	**1,476,020**
EXPENDITURES:					
DEBT SERVICE					
Westside Trans Line ($2,225,051, 25 yrs, 3.67%, 2036)	136,750	136,750	136,750	136,750	136,750
Penry Rd. Waterline ($1,000,000, 25 yrs, 3.55%, 2037)	62,976	62,976	62,976	62,976	62,976
Kingman Hill Tower ($3,545,000, 25 yrs, 4.51%, 2031)	213,971	211,228	210,230	212,256	210,978
Plant Expansion ($9,600,000, 25yrs., 3.23%, 2039)	562,614	562,614	562,614	562,614	562,614
TOTAL DEBT SERVICE	**976,311**	**973,568**	**972,570**	**974,596**	**973,318**
WATER SYSTEM IMPROVMENTS					
Water Master Plan			100,000		
DISTRIBUTION CAPACITY PROJECTS					
Panhandle to US 42 Water Main	120,000	570,000	570,000		
Braumiller Rd. 16" Water Main			160,000	800,000	800,000
New Line Oversizing/Extension	***450,000***	***250,000***	***200,000***	***200,000***	***200,000***
TOTAL WATER CAPACITY PROJECTS	**570,000**	**820,000**	**1,030,000**	**1,000,000**	**1,000,000**
ENDING FUND BALANCE	**3,570,541**	**3,237,073**	**2,699,805**	**2,195,817**	**1,698,519**

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

PANHANDLE TO US 42

INFORMATION AT A GLANCE

COST
$ 1.26M

FUNDING

Water Capacity Fund

PROJECTED SCHEDULE

Phase I Design - 2019

Phase I Construction

2020

Phase II Construction

2021

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTOR
TBD

Purpose

Currently, the areas of the City that are east of the Olentangy River main source of supply is the 1960 - 16" water main from the water plant then through the 16" East/West Connector which runs along Central Avenue. If the water supply from the plant treatment to the East/West Connector is interrupted the distribution system has issues with suppling water to the Eastside tower. This project will give the City an addition larger main feed to the Eastside water tank, and provide the areas citizens with the proper level of service which should be provided.

Financing

Phase I of the project will cost $1.26M, to be broken up between 3 years:

2019 - $120,000 for design services

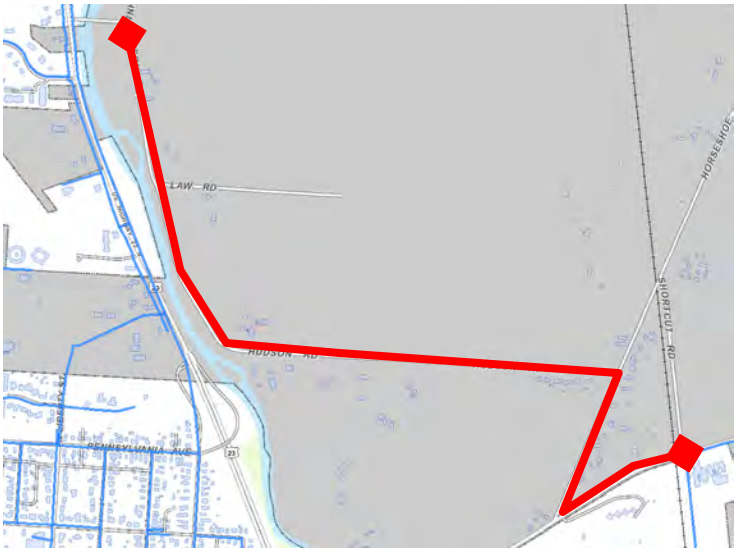
2020 - $570,000 for construction

Phase II :

2021 - $570,000 for construction

Status

This project is a part of the recommendations from the 2009 water master plan, and is a highly recommended East side of the service area up to proper service redundancy levels.



EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

BRAUMILLER RD WATER MAIN

INFORMATION AT A GLANCE

COST
$ 1.76M

FUNDING

Water Capacity Fund

PROJECTED SCHEDULE

Phase I Design - 2021

Phase I Construction

2022

Phase II Construction

2023

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTOR
TBD

Purpose

Currently, the areas of the City that are South of Pollock Road only have 1 main source of water feeding from the distribution network. Should a shutdown or break occur between the S.E. Water Tank and the primary distribution network, we have no reliable way to keep pace with long term water demand of the area. This project will give the City an additional supply to our S.E. water tank, and provide the area citizens with the proper level of service which should be provided.

Financing

Phase I of the project will cost $1.76M, to be broken up between 3 years:

2021 - $120,000 for design services

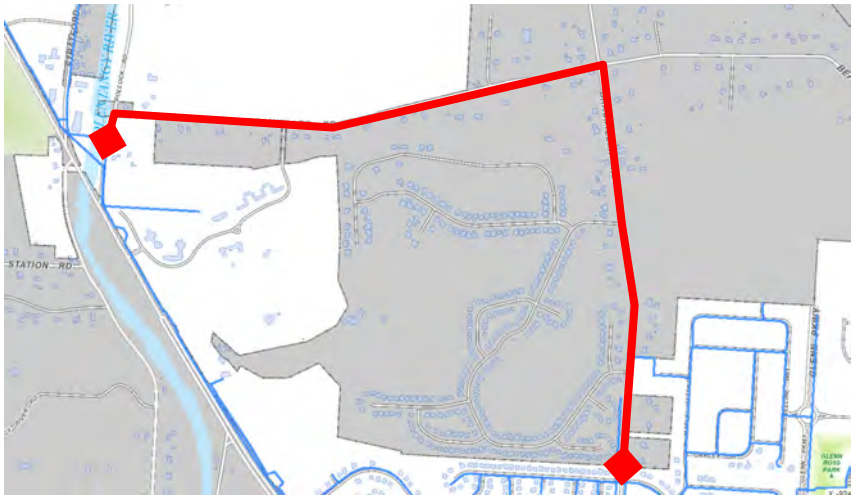
2022 - $800,000 for construction

Phase II:

2023 - $800,000 for construction

Status

This project is a part of the recommendations from the 2009 water master plan, and is a highly recommended project to bring the S.E. service area up to proper service redundancy levels.



SEPTEMBER 2018

NEW LINE OVERSIZING AND EXTENSION

INFORMATION AT A GLANCE

COST
2019 - $ 450,000

PROJECTED SCHEDULE

Repeated Yearly

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The City of Delaware continues to experience rapid growth, with several new developments beginning each year. Each new development is expected to install all the needed connections needed for their utilities services, including taking those services to the edge of their property for the next development to continue. When the City requires a developer to put in larger service lines than their development requires, this fund is used to pay the City's portion of the oversizing.

Financing

This work is being allocated $450,000 in 2019, and will change yearly with expected development rates.

Status

The City is always willing to work with developers regarding payments for utility oversizing, as this benefits the City's growth potential going forward.

CAPITAL IMPROVEMENT PROGRAM
WATER FUND MAINTENANCE PROJECTS
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**1,429,216**	**724,082**	**766,100**	**615,714**	**253,376**
REVENUES:					
Transfer from Water Fund	800,000	800,000	800,000	800,000	800,000
Water Debt Meter Fee Allocation	1,107,631	1,129,783	1,152,379	1,175,427	1,198,935
TOTAL REVENUES	**1,907,631**	**1,929,783**	**1,952,379**	**1,975,427**	**1,998,935**
EXPENDITURES:					
DEBT SERVICE					
Treatment Plant ($22,400,000 - 25 yrs, 3.23%, 2039)	1,312,765	1,312,765	1,312,765	1,312,765	1,312,765
WATER PLANT MAINTENANCE					
Plant Maintenance	100,000	100,000	75,000	75,000	75,000
Well Cleaning	40,000				25,000
Nano and Ultra Filtration Membrane Replacement				675,000	
South Intake New VFD Pump	85,000				
Instrumentation Replacement		25,000			
WATER DISTRIBUTION PROJECTS					
West Water Tank Painting	550,000				
Water Tank Maintenance	40,000				
Large Meter Replacement		25,000			25,000
Water Line Improvements:					
Small Main/Service Replacement	50,000	50,000	50,000	50,000	50,000
Fire Flow Improvement	75,000	75,000	75,000	75,000	75,000
S. Washington St. Waterline					90,000
Pennsylvania Ave. Waterline			525,000		
Lincoln Ave. Waterline		300,000			
E. William St Road Project	300,000				
S. Franklin St.					190,000
Equipment Replacement	60,000		65,000	150,000	30,000
TOTAL WATER REPAIR AND MAINT.	**2,612,765**	**1,887,765**	**2,102,765**	**2,337,765**	**1,872,765**
ENDING FUND BALANCE	**724,082**	**766,100**	**615,714**	**253,376**	**379,546**

SEPTEMBER 18, 2018

WATER PLANT MAINTENANCE

INFORMATION AT A GLANCE

COST
$ 100,000

PROJECTED SCHEDULE

Unforeseen Yearly Needs

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

While the department does its best to pre-identify all plant maintenance needs, unforeseen equipment or plant structural failures do occur. In order to react to these unforeseen circumstances this item provides unallocated funds for emergencies.

Financing

The fund is to cover up to $100,000 of unexpected maintenance.

Status

This funding helps the treatment facility comply with required Ohio EPA Asset management practices. By having the funding available for equipment repair or replacement, as well as any structural repairs, in order to be able to constantly provide a safe potable water supply.

SEPTEMBER 2018

PENRY WELL CLEANING

INFORMATION AT A GLANCE

COST
$ 40,000

PROJECTED SCHEDULE

Calendar years

2019

2024

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The project will help maintain proper flows to each of the (3) raw groundwater wells at the Penry well field. Over time the well flows gradually start deteriorating. This is due to iron and other mineral build up plugging the voids in the lime stone, which blocks groundwater flow to the well pumps. If these minerals are not cleaned every five years, the well flow can become permanently decreased, unable to be restored to original volume. Entirely new wells would need to be drilled and established if that were to happen.

Financing

The project is anticipated to cost roughly $40,000.

Status

This is a required preventive maintenance item to keep in a 5-year cycle. Thus ensuring that the wells maintain their original flows so that enough finished water can be produced for our customers.

SEPTEMBER 2018

RIVERVIEW WELL CLEANING

INFORMATION AT A GLANCE

COST
$ 28,000

PROJECTED SCHEDULE

Calendar year 2023

CITY LEAD
Public Utilities

CONTRACTORS
TBD

Purpose

The project will help maintain proper flows to each of the (2) raw groundwater wells at the Penry well field. Over time the well flows gradually start deteriorating. This is due to iron and other mineral build up plugging the voids in the lime stone, which blocks groundwater flow to the well pumps. If these minerals are not cleaned every five years, the well flow can become permanently decreased, unable to be restored to original volume. Entirely new wells would need to be drilled and established if that were to happen.

Financing

The project is anticipated to cost roughly $28,000.

Status

This is a required preventive maintenance item to keep in a 5-year cycle. Thus ensuring that the wells maintain their original flows so that enough finished water can be produced for our customers.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

NANO-FILTRATION MEMBRANE REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 675,000

PROJECTED SCHEDULE

Calendar year 2021

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

The Nano Filtration (NF) membrane flow deteriorates over time, which steadily increases operating pressure to the point where the NF feed pumps cannot push water thru the membranes. The conservative estimates for life of these NF membranes are 5-7 years. With the plant beginning operation in 2015, the NF membranes will be 6 years old in 2021, and should be budgeted for replacement. At the end of the NF life, the high pressure conditions can begin to increase rapidly, having the funds available to replace these NF membranes will be essential, although the work being done can continue to push until actual membrane pressures dictate necessity.

Financing

The project is estimated at $675,000 to replace all NF cartridges.

Status

These NF Membranes are cleaned approximately every 3 months, when operating pressures increase to the point of losing design flow. At the end of the life of the NF membranes the cleaning frequency will increase substantially. Having this funding available when necessary will ensure the ability to provide the required volume of water for the daily needs of our customers.

SEPTEMBER 2018

SOUTH INTAKE VFD PUMP REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 85,000

PROJECTED SCHEDULE

Calendar year 2019

CITY LEAD
Public Utilities

CONTRACTORS
TBD

Purpose

When the plant was constructed only (1) of the (2) original raw surface water intake pumps, at the South pump station, was replaced. The existing intake pumps were a constant flow-rate pump, whereas the new intake pumps installed are variable frequency drive (VFD). The way that the new treatment plant process is operated, these raw water intake pumps have been found to need to be VFD controlled, necessitating replacement of the last remaining original intake pump.

Financing

The project is estimated to be $85,000.

Status

The plant currently runs (1) 2.5MGD VFD pump from each of the (2) raw surface water intake pump stations. This means the (1) VFD pump at the south intake runs all of the time and if it fails we may not be able to pull in enough raw surface water necessary to produce enough water to supply the utility rate payers from the City of Delaware. This project is necessary to have a backup pump for this raw water pump station.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

2020 PLANT INSTRUMENTATION REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 25,000

PROJECTED SCHEDULE

Calendar year 2020

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

Replacement of the (2) plant **SCADA*** computers will be necessary for the optimum operation of the plant process. This also includes; new software, new server, (2) computers, (8) monitors, and integration assistance.

Financing

The project is estimated to cost $25,000.

Status

In 2020 these (2) plant SCADA computers will be 5 years old. The IT department has suggested that this money be allocated, to be proactive in negating the chances of operations failures. The SCADA instrumentation is necessary for the operation of the complex plant processes.

***Supervisory Control and Data Acquisition** – A system of software and hardware elements that allows industrial organizations to: Control processes locally or at remote locations. And to monitor, gather, and process real-time data.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

WEST WATER TANK PAINTING

INFORMATION AT A GLANCE

COST
$ 550,000

PROJECTED SCHEDULE

Spring/Summer 2019

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

The projects purpose is to maintain the structural integrity of the water tank. Water tank paint normally lasts 15-20 years. When performed, the exterior and interior surfaces are sandblasted and painted. The City will use an engineering firm to help with the bidding of the work, and to manage the entire tank resurfacing project. This also helps the utility department provide the highest quality of finished water to the citizens of Delaware.

Financing

The project is anticipated to cost roughly $550,000.

Status

The West water tank was last resurfaced in 2001. In 2019 the existing coating will be 18 years old, and in its end of life condition.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

SE HIGHLAND 2MG & EAST 1MG WATER TANK REPAIRS

INFORMATION AT A GLANCE

COST
$ 40,000

PROJECTED SCHEDULE

Spring/Summer 2019

CITY LEAD
Public Utilities

DESIGN CONSULTANT
Burgess & Niple

CONTRACTORS
TBD

Purpose

The project will maintain the structural integrity of these water tanks. In 2016 both of these water tanks were drained and cleaned as part of the utility department's preventive maintenance program. Every 5 years the water tanks are drained, cleaned, and inspected by a qualified engineering consultant to ensure that the structural integrity is maintained. Using this outside engineering firm also provides the City an unbiased evaluation of any deficiencies that these water tanks may have, so that these deficiencies can be corrected in order to maintain and protect the City's investment and to ensure the highest quality of water delivered to our customers.

Financing

The project is anticipated to cost roughly $40,000.

Status

In 2016 Burgess & Niple noted the deficiencies below.

East 1MG Water Tank:

- Tanks needs washed to remove mildew which will help maintain the exterior paint surfaces and extend the paint surface protection from erosion. This will require the use of a large man lift in order to complete this task.
- Concrete base and overhead door base need to be grouted to restore and protect these concrete areas from deterioration.
- Painting and priming also need completed around the entire perimeter base of the tank and overhead door to protect these surfaces from deterioration.
- The concrete approach and asphalt driveway are in disrepair and need completely resurfaced.
- Insulation on the riser pipe needs repaired, this will require a man lift.

SE Highland 2MG Water Tank;

- Concrete base needs to be grouted to restore and protect this concrete area from deterioration.
- Painting and priming also need completed around the entire perimeter base of the tank and overhead door to protect these surfaces from deterioration.
- Ceiling tiles need to be replaced, this will require man lift to repair.

SEPTEMBER 2018

LARGE METER REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 25,000 yearly alternated between water and sewer funds

PROJECTED SCHEDULE

Repeated yearly

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

With normal use, a water meter loses accuracy during the span of its life expectancy. The loss of flow reading ability is most pronounced in large diameter meters. This rotating fund is aimed at replacing the large diameter meters used by the high flow business users of the City. This ensures proper water use tracking within the system.

Financing

This work is rotated between the water maintenance and sewer maintenance funds yearly, as it has impacts on the billing of both systems. The funds alternately allocate $25,000 to this work, yearly.

Status

As large diameter meters reach the end of their expected life, or recorded flows begin trending lower, replacement is scheduled.

SEPTEMBER 2018

SMALL MAIN/SERVICE REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 50,000

FUNDING
Water Maintenance Fund

PROJECTED SCHEDULE

Repeated Yearly

CITY LEAD
Public Utilities

Purpose

The small main and service replacement program is primarily focused on the removal of old style lead lines still within the system. Lead service lines were the primary style of service lines used for many years. While the locations of all lead lines are not known, we find several every year, and this fund is used for the replacement to current water safety standards.

Financing

This work has a yearly $50,000 allowance.

Status

As lead material small mains and service taps are found, they are replaced immediately.

SEPTEMBER 2018

FIRE FLOW IMPROVEMENT

INFORMATION AT A GLANCE

COST
$ 75,000

FUNDING
Water Maintenance Fund

PROJECTED SCHEDULE

Repeated Yearly

CITY LEAD
Public Utilities

Purpose

Current City fire flow standards require 8" water mains be installed in order to meet the demands of fire department needs when battling fires. Many existing lines within the City are smaller than 8", and with the help of system flow testing, the areas of the City with the most flow restriction are scheduled for replacement.

Financing

This work has a yearly $75,000 allowance.

Status

Many areas have been identified for replacement, and a working schedule through 2022 has been identified. 2019 lines include: Sheldon St, Henry St, and Griswold St.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

SOUTH WASHINGTON WATERLINE REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 90,000

FUNDING
Water Maintenance Fund

PROJECTED SCHEDULE

Replacement in 2023

CITY LEAD
Public Utilities

Purpose

The project will remove 1,175 linear ft. of 4" water main along South Washington Street from Park Avenue to West Harrison Street, and replace with an 8" main. The size of the water main along S. Washington Street has become a constriction to the water distribution system, and also does not meet current fire flow requirements.

Financing

The project is anticipated to cost roughly $90,000.

Status

The project is currently planned to take place in calendar year 2023, to be self-performed by the Public Utilities' Water Distribution department.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

PENNSYLVANIA AVENUE WATERLINE REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 525,000

FUNDING
Water Maintenance Fund

PROJECTED SCHEDULE

Replacement in 2021

CITY LEAD
Public Utilities

Purpose

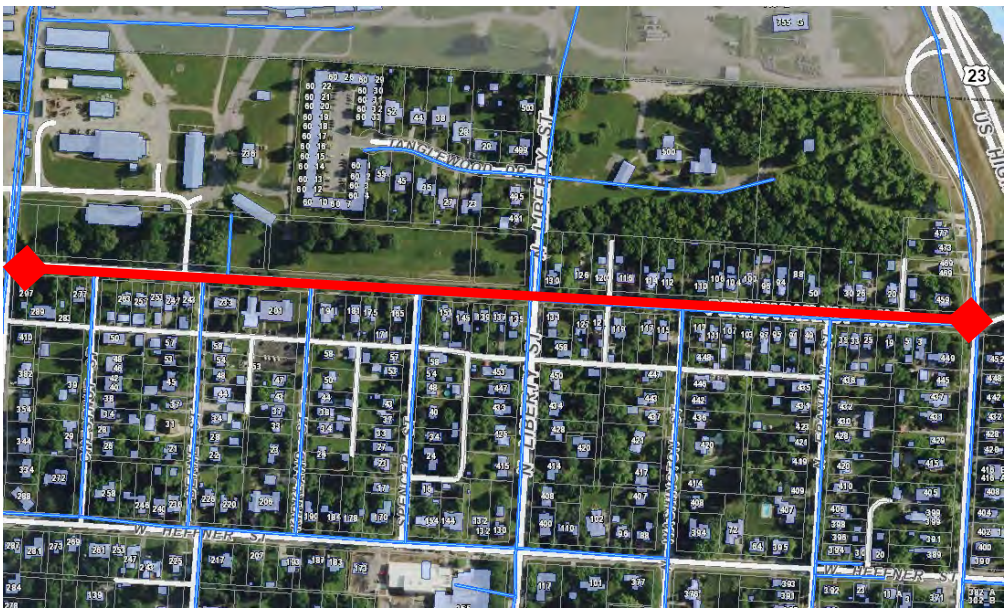
The project will replace the 6" water main along Pennsylvania Avenue from N. Sandusky St to Euclid Avenue. Waterlines are considered to be in "failed" condition when they have experienced 3 or more breaks. At such time they are planned and scheduled for replacement, as is the case for this waterline. In addition, the current main size is deficient for todays required fire flows.

Financing

The project is anticipated to cost roughly $525,000. Water line rehabilitation is an anticipated part of an infrastructure's life-cycle, and is an included factor when calculating user rate schedules.

Status

The project is currently planned to take place in calendar year 2021, to be self-performed by the Public Utilities' Water Distribution department.



EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

LINCOLN AVENUE WATERLINE REPLACEMENT PH II

INFORMATION AT A GLANCE

COST
$ 300,000

FUNDING

Water Maintenance Fund

PROJECTED SCHEDULE

Summer of 2020

CITY LEAD
Public Utilities

Purpose

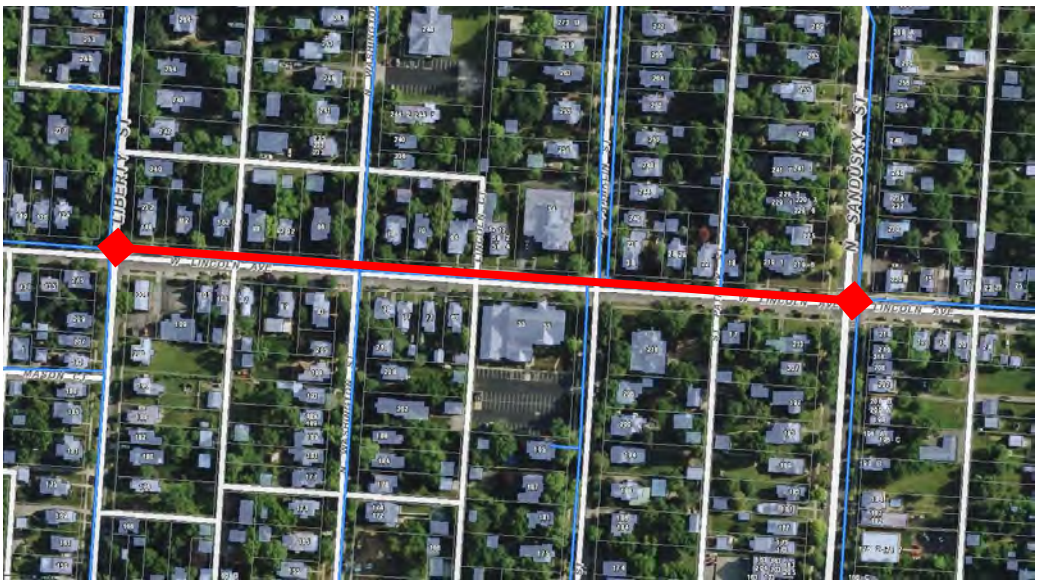
The project will replace the 6" water main along Lincoln Avenue from N. Sandusky St to N. Liberty St. Waterlines are considered to be in "failed" condition when they have experienced 3 or more breaks. At such time they are planned and scheduled for replacement, as is the case for this waterline. In addition, the current main size is deficient for todays required fire flows.

Financing

The project is anticipated to cost roughly $300,000. Water line rehabilitation is an anticipated part of an infrastructure's life-cycle, and is an included factor when calculating user rate schedules.

Status

The project is currently planned to take place in calendar year 2020, to be self-performed by the Public Utilities' Water Distribution department.



EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

SOUTH FRANKLIN WATERLINE REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 190,000

FUNDING
Water Maintenance Fund

PROJECTED SCHEDULE

Replacement in 2023

CITY LEAD
Public Utilities

Purpose

The project will replace the 6" water main along S. Franklin Street from W. William Street to Spring Street. Waterlines are considered to be in "failed" condition when they have experienced 3 or more breaks. At such time they are planned and scheduled for replacement, as is the case for this waterline. In addition, the current main size is deficient for todays required fire flows.

Financing

The project is anticipated to cost roughly $190,000. Water line rehabilitation is an anticipated part of an infrastructure's life-cycle, and is an included factor when calculating user rate schedules.

Status

The project is currently planned to take place in calendar year 2023, to be self-performed by the Public Utilities' Water Distribution department.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

EAST WILLIAM STREET WIDENING

INFORMATION AT A GLANCE

COST
$ 300,000

PROJECTED SCHEDULE

Calendar Year 2019

CITY LEAD
Public Works

CONTRACTOR
TBD

Purpose

The City's thoroughfare plan includes the widening of East William Street from 23 to the point. While the majority of this work belongs to the Streets Department, there is utility relocation work that is involved as well.

Financing

This work is being allocated $300,000 from the water capacity fund.

Status

The Public Works Dept. has already begun initial phases of the widening project. Utilities relocation work is expected to occur in 2019, to be performed under the same contract as the rest of the project.

CAPITAL IMPROVEMENT PROGRAM
SEWER FUND CAPACITY PROJECTS
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**1,100,000**	**695,441**	**341,572**	**273,621**	**237,519**
REVENUES:					
Sewer Capacity Fees	1,150,000	1,150,000	1,150,000	1,150,000	1,150,000
SE Highland Sewer ERU Fees	200,000	200,000	200,000	200,000	200,000
Sewer Fees Transfer - 2007,2008,2009	1,663,640	1,696,913	1,730,851	1,765,468	1,800,778
TOTAL REVENUES	**3,013,640**	**3,046,913**	**3,080,851**	**3,115,468**	**3,150,778**
EXPENDITURES:					
DEBT SERVICE					
Land Armstrong Rd. ($2,915,000 10 yrs. 1.49%, 2022)	328,500	302,400	301,700	300,900	
23 North Sewer ($1,000,000, 25 yrs, 4.51%), 2031	60,166	59,395	59,115	59,684	59,325
SE Highland Sewer ($15,000,000, 25 yrs, 4.49%, 2037)	995,772	997,609	996,609	999,609	999,609
SE Highland Sewer ($2,750,000, 20 yrs, 3.59%, 2026)	188,418	189,305	189,305	189,305	189,305
Plant Expansion ($20,882,000, 20 yrs, 3.59%, 2026)	1,430,343	1,437,073	1,437,073	1,437,073	1,437,073
TOTAL DEBT SERVICE	3,003,199	**2,985,782**	**2,983,802**	**2,986,571**	**2,685,312**
SEWER SYSTEM IMPROVEMENTS					
COLLECTION CAPACITY PROJECTS					
Sewer Oversizing/Extension	100,000	100,000	100,000	100,000	100,000
Riverby Sewer Extension	250,000				
Spring Street Sewer Upsizing		250,000			
Reimbursement for Cherry St. Maint. Facility	65,000	65,000	65,000	65,000	65,000
TOTAL SEWER CAPACITY PROJECTS	**415,000**	**415,000**	**165,000**	**165,000**	**165,000**
ENDING FUND BALANCE	**695,441**	**341,572**	**273,621**	**237,519**	**537,984**

- *Sewer capacity limited with available funds moving forward. 2018 collections will be about $500k higher than budgeted which provides some flexibility and balances the CIP.*
- *Balance forward increased by $353k.*

SEPTEMBER 2018

NEW LINE OVERSIZING AND EXTENSION

INFORMATION AT A GLANCE

COST
2019 - $ 100,000

PROJECTED SCHEDULE

Repeated Yearly

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The City of Delaware continues to experience rapid growth, with several new developments beginning each year. Each new development is expected to install all the needed connections needed for their utilities services, including taking those services to the edge of their property for the next development to continue. When the City requires a developer to put in larger service lines than their development requires, this fund is used to pay the City's portion of the oversizing.

Financing

This work is being allocated $100,000 in 2019, and will change yearly with expected development rates.

Status

The City is always willing to work with developers regarding payments for utility oversizing, as this benefits the City's growth potential going forward.

EST 1808
CITY OF
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SEPTEMBER 2018

RIVERBY SEWER EXTENSION

INFORMATION AT A GLANCE

COST
$ 250,000

PROJECTED SCHEDULE

Calendar Year 2019

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The Riverby subdivision, located on Pollock Rd, has been ordered by the Ohio EPA to abandon their private wastewater treatment plant, and tie into a public sewer system. The City of Delaware has the closest existing sewer mains, so Riverby's integration into the City's system is currently being planned.

Financing

While this allocation is to cover the upfront costs of the project, the community will be entering into a multi-year payback agreement. These funds will be returned to the City in an agreed upon timeframe.

Status

Key details of the project are still being agreed upon between the City, the Riverby Home Owners Association, and the Delaware County Regional Sewer District. The work is expected to occur in calendar year 2019.

EST 1808
CITY OF
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OHIO

SEPTEMBER 2018

SPRING STREET SEWER UPSIZING

INFORMATION AT A GLANCE

COST
$ 250,000

PROJECTED SCHEDULE

Calendar year 2020

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

Removal of 500ft of 8" sewer main and replacement with 12" sewer main. Work is located along Spring Street from South Franklin Street to Sandusky Street. This area of sewer is a system capacity restriction, and currently effects large portions of the upstream sewer system.

Financing

This project is anticipated to cost $250,000.

Status

Scope of work has been identified via the sewer master plan, and is scheduled to occur in 2020.

CAPITAL IMPROVEMENT PROGRAM
SEWER FUND MAINTENANCE PROJECTS
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**1,473,172**	**1,713,227**	**1,696,517**	**1,849,342**	**2,582,292**
REVENUES:					
Transfer from Sewer Fund	1,447,750	1,476,705	1,506,239	1,536,364	1,567,091
TOTAL REVENUES	**1,447,750**	**1,476,705**	**1,506,239**	**1,536,364**	**1,567,091**
EXPENDITURES:					
DEBT SERVICE					
Plant Rehabilitation ($2,230,000 20 yrs. 3.59%, 2026)	152,695	153,414	153,414	153,414	153,414
TOTAL DEBT SERVICE	**152,695**	**153,414**	**153,414**	**153,414**	**153,414**
WASTEWATER TREATMENT PROJECTS					
Aeration Tank Diffuser Replacement		100,000	100,000		
Belt Filter Press			500,000		
Plant Maintenance	125,000	125,000	125,000	125,000	125,000
Influent Pump Replacement		150,000		150,000	
Settling Tank Upgrades		250,000			
Concrete EQ Basin Repairs	300,000				
Site Concrete Repairs		50,000		50,000	
Influent VFD Upgrade	50,000	50,000	50,000		
PLC Upgrades	50,000				100,000
WASTEWATER COLLECTION PROJECTS					
Large Meter Replacement		25,000		25,000	
Inflow/Infiltration Remediation	175,000	175,000	175,000	175,000	175,000
Sanitary Sewer Replacement	75,000	75,000	100,000	100,000	100,000
Wesleyan Woods Sewer Rehav			150,000		
Hayes Colony Sewer Rehab	200,000				
Pump Station Repair/Upgrade		25,000		25,000	
West William St CIPP Lining		150,000			
Shelbourne forest CIPP Lining					280,000
Stratford Pedestrian Bridge/Sewer Repair		35,000			
Equipment Replacement	80,000	130,000			45,000
TOTAL SEWER REPAIR/MAINTENANCE	**1,207,695**	**1,493,414**	**1,353,414**	**803,414**	**978,414**
ENDING FUND BALANCE	**1,713,227**	**1,696,517**	**1,849,342**	**2,582,292**	**3,170,969**

SEPTEMBER 2018

WASTEWATER PLANT AERATION TANK DIFFUSERS

INFORMATION AT A GLANCE

COST
2020 - $100,000
2021 - $100,000

PROJECTED SCHEDULE

Calendar Years

2020

2021

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The project will replace out of date diffusers in our aeration system. These diffusers have exceeded their life expectancy, and should be replaced to increase the efficiency of the new High Speed Turbo Blowers that were installed in 2017. This may in turn may lower our utility bills.

Financing

Project cost is anticipated at $100,000 for each year of replacements.

Status

As diffusers age, they become less efficient, allowing less air to be released into and absorbed within the treatment system. This requires the plant blowers to run at a higher speed to achieve needed dissolved oxygen levels. Current diffusers are reaching this point, and should be replaced as such.

SEPTEMBER 2018

WASTEWATER PLANT BELT FILTER PRESS

INFORMATION AT A GLANCE

COST
$500,000

PROJECTED SCHEDULE

Calendar Year 2021

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The project will replace the belt filter press which has exceeded its life expectancy. Replacement parts are becoming obsolete, and becoming very difficult to find. The Plant's belt filter press has been refurbished at least once in the past to prolong its lifespan, but that is no longer an option as current generation parts are no longer compatible with the existing unit.

Financing

Replacement cost is estimated to be $500,000.

Status

The belt filter press is currently being maintained by finding reconditioned/used parts as needed. Replacing the existing belt filter press will allow for manufacturer support of equipment when repairs are needed.

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SEPTEMBER 2018

WASTEWATER PLANT MAINTENANCE

INFORMATION AT A GLANCE

COST
$125,000

PROJECTED SCHEDULE

Unforeseen Yearly Needs

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

While the department does its best to pre-identify all plant maintenance needs, unforeseen equipment or plant structural failures do occur. In order to react to these unforeseen circumstances this item provides unallocated funds for emergencies.

Financing

The fund is to cover up to $125,000 of unexpected maintenance.

Status

This funding helps the department by having the funding available for equipment repair or replacement as well as any structural repair in order to maintain the equipment and facilities to be able to constantly provide a safe effluent for discharge into the Olentangy River.

2018

WASTEWATER PLANT INFLUENT PUMP REPLACEMENT

INFORMATION AT A GLANCE

COST
$150,000

PROJECTED SCHEDULE

Calendar years

2020

2022

2024

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The project will replace an influent pump at each of the budgeted times. The pumps were installed during the 2007 plant expansion, and have begun to require semi-regular major repairs. Each pump has been repaired at least once during its life span, some multiple times. A typical repair ranges from $25,000 to $35,000, and are becoming more expensive and difficult to get rebuilt as they continue to age.

Financing

Pump replacement cost is expected to be $150,000 for each of the listed years.

Status

Influent pumps are currently being disconnected and transported to the Cincinnati area for repair as needed. As these repairs have begun happening in more frequent intervals, a phased replacement of pumps has become the best solution to ensure stable plant operation.

SEPTEMBER 2018

WASTEWATER SETTLING TANK UPGRADES

INFORMATION AT A GLANCE

COST
$250,000

PROJECTED SCHEDULE

Calendar Year 2020

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The project is aimed to repair or replace the rotating mechanism within the settling tanks. Some of these tanks are going on 50 years old, and the structure is starting to crumble and is becoming unsafe for employees. Also, the treatment technology of these tanks is out of date and inefficient, this work will allow for better wastewater treatment.

Financing

Costs are estimated to be $250,000.

Status

The project is currently in initial planning stages; the City will soon begin bringing equipment manufacturers onsite to assess what equipment options are available to fit the existing clarifier tanks.

SEPTEMBER 2018

WASTEWATER PLANT EQUALIZATION BASIN

INFORMATION AT A GLANCE

COST
$300,000

PROJECTED SCHEDULE

Calendar Year 2019

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The project will repair the concrete structure called the equalization basin. The basin was modified during the 2007 plant expansion, and the concrete has since settled and needs major rehab work. The concrete ballasts supporting the airlines in the tank are in disrepair.

Financing

Cost for repairs is estimated at $300,000.

Status

Qualified professionals have been brought in to assess damage and begin planning repairs. The use of an epoxy mortar to seal the cracks is the method of repair planned, larger openings will be reinforced with a fiberglass mesh prior to the epoxy.

SEPTEMBER 2018

WASTEWATER PLANT SITE CONCRETE REPAIRS

INFORMATION AT A GLANCE

COST
$50,000

PROJECTED SCHEDULE

Calendar Years

2020

2022

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The project will repair concrete tanks and structure around the facility. With portions of the plant going on 50 years old, areas of concrete are starting to crumble, and are becoming unsafe for the employees to walk on or around.

Financing

Cost: $50,000.

Status

Plant staff currently repair and maintain concrete surfaces in many ways, including grouting, patching and painting. These repairs are meant to address areas in which these methods are no longer enough to maintain what is present.

EST 1808
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SEPTEMBER 2018

WASTEWATER INFLUENT VFD REPLACEMENT

INFORMATION AT A GLANCE

COST
$50,000

PROJECTED SCHEDULE

Phased Replacements in

2019

2020

2021

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

The project will replace the variable frequency drives (VFD) for the influent pumps at the wastewater plant. The VFD's were installed during the 2007 plant expansion and are nearing the end of their life expectancy, according to the manufacturer. The current VFD's are obsolete, and have become increasingly difficult to repair and maintain.

Financing

Replacement costs are expected to be $50,000 for each of the project years listed.

Status

Through conversations with the existing VFD's manufacturer, the City has been notified that this equipment is no longer supported, and new replacement parts are no longer in production. Currently as repairs are needed, the plant maintenance staff has been able to scavenge parts from other pieces of equipment on-site. This method will soon no longer be an option, and new VFD's are required.

SEPTEMBER 2018

WASTEWATER 2019 PLC UPGRADES

INFORMATION AT A GLANCE

COST
$50,000

PROJECTED SCHEDULE

Calendar Year 2019

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

This project will begin the process of upgrading the Plant's influent pumps programmable logic controllers (PLC) at the wastewater plant. The PLC's were installed during the 2007 plant expansion and are nearing the end of their life expectancy, according to the manufacturer. Plant PLC and communications with the SCADA system is in need of major retrofitting in the near future, as we are currently using software that will soon be obsolete and no longer supported.

Financing

The cost of the work is expected to be $50,000.

Status

The project is currently in the planning process between the IT department and Public Utilities. When ready, a systems integrator will be brought in to help City staff achieve a seamless replacement of equipment.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

WASTEWATER 2023 PLC UPGRADES

INFORMATION AT A GLANCE

COST
$100,000

PROJECTED SCHEDULE

Calendar Year 2023

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

This stage of programmable logic controller (PLC) upgrades is intended to continue the work started in 2019, bringing plant processes up to current standards, and allowing for easier upkeep and maintenance when needed.

Financing

The cost of the work is expected to be $100,000.

Status

The project is currently in the process of getting updated quotes for upgrading the PLC's.

SEPTEMBER 2018

LARGE METER REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 25,000 yearly alternated between water and sewer funds

PROJECTED SCHEDULE

Repeated yearly

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

With normal use, a water meter loses accuracy during the span of its life expectancy. The loss of flow reading ability is most pronounced in large diameter meters. This rotating fund is aimed at replacing the large diameter meters used by the high flow business users of the City. This ensures proper water use tracking within the system.

Financing

This work is rotated between the water maintenance and sewer maintenance funds yearly, as it has impacts on the billing of both systems. The funds alternately allocate $25,000 to this work, yearly.

Status

As large diameter meters reach the end of their expected life, or recorded flows begin trending lower, replacement is scheduled.

EST 1808
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OHIO

SEPTEMBER 2018

SEWER INFLOW/INFILTRATION REMEDIATION

INFORMATION AT A GLANCE

COST
$ 175,000

PROJECTED SCHEDULE

Repeated yearly

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

As sewer lines age, they begin to allow ground water infiltration into the sewers. During rain events these areas of I&I allow large amounts of water into the system, which disrupts wastewater treatment plant operations. Once introduced, the City must also absorb the cost of treating this otherwise clean water.

Financing

The remediation work is being allotted up to $175,000 per operating year to address problem areas as encountered.

Status

As areas in need of repair are found via camera inspection, they will be scheduled for repair.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

SANITARY SEWER REPLACEMENT

INFORMATION AT A GLANCE

COST
2019-2020 $75,000
2021-2023 $100,000

PROJECTED SCHEDULE

Repeating yearly

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

As sewer lines age, deteriorate, and begin to fail, they must be replaced. A failed sewer line can allow wastewater to discharge into the surrounding soil, potentially poisoning natural soils and waterways. This is also a required maintenance item, as knowingly allowing the exfiltration of sewers into the environment would be a violation of the City's EPA permits.

Financing

This is a revolving yearly fund, currently funded at $75,000/year, and is proposed to increase to $100,000 in years 2021-2023.

Status

As sewer lines are found to be in a failed condition via camera inspections, they will be scheduled for replacement by City staff.

SEPTEMBER 2018

WESLYAN WOODS SEWER REHABILITATION

INFORMATION AT A GLANCE

COST
$ 150,000

PROJECTED SCHEDULE

Calendar year 2021

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

Through sewer system camera inspections, areas of the Weslyan Woods subdivision have been found to be a high source of system inflow & infiltration (I&I). The size and scope of repairs needed within the subdivision exclude it from fitting within the revolving I&I remediation line item.

Financing

This project is anticipated to cost $150,000.

Status

Portions of Weslyan Woods' sewer system have been found to be high contributors of inflow & infiltration. The remediation efforts entail grout injection into cracks, from within, to seal off these sources of infiltration.

EST 1808
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DELAWARE
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SEPTEMBER 2018

HAYES COLONY SEWER REHABILITATION

INFORMATION AT A GLANCE

COST
$ 200,000

PROJECTED SCHEDULE

Calendar year 2019

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

Through sewer system flow monitoring, the Hayes Colony subdivision has been found to be a high source of system inflow & infiltration (I&I). The size and scope of repairs needed within the subdivision exclude it from fitting within the revolving I&I remediation line item. 1,935 linear foot of 8" to 12" diameter pipe will be rehabilitated.

Financing

This project is anticipated to cost $200,000.

Status

Flow modeling work performed by HDR engineering has identified this area to be of critical importance for rehabilitation. These repairs will help the sewer system as a whole by greatly reducing sewer flows during rain events.

SEPTEMBER 2018

PUMP STATION REPAIRS

INFORMATION AT A GLANCE

COST
$ 25,000 bi-yearly

PROJECTED SCHEDULE

Repeated bi-yearly

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

This allocation is for the routine maintenance required with keeping the City's 12 pump stations in good operating order. As items require replacement or repair, this fund will allow for the work to happen.

Financing

This maintenance is allocated $25,000 bi-yearly.

Status

As components within City owned pump stations are identified for replacement, they will be scheduled in accordance with the bi-yearly funding.

EST 1808
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SEPTEMBER 2018

WEST WILLIAM STREET SEWER CIPP LINING

INFORMATION AT A GLANCE

COST
$ 150,000

PROJECTED SCHEDULE

Calendar year 2020

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

Cast in-place pipe (CIPP) is a form of sewer repair that can be used in lieu of digging up and replacing. West William street sewer has been found to be in failed condition, in need of replacement, and CIPP lining will work in this location to correct failures. Approximately 2,344 linear foot of 8" to 12" diameter pipe will be lined. This will also reduce the areas inflow & infiltration rates during rain events.

Financing

This project is anticipated to cost $150,000.

Status

West William Street sewers have been found to be in failed condition via camera inspections. The City must schedule these lines for rehabilitation so that sewer flows do not make their way into surrounding soils.

EST 1808
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SEPTEMBER 2018

SHELBOURNE FOREST SEWER CIPP LINING

INFORMATION AT A GLANCE

COST
$ 280,000

PROJECTED SCHEDULE

Calendar year 2023

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

Cast in-place pipe (CIPP) is a form of sewer repair that can be used in lieu of digging up and replacing. The Shelbourne Forest subdivision sewers have been found to be in failed condition, in need of replacement, and CIPP lining will work in this location to correct failures. This will also reduce the areas inflow & infiltration (I&I) rates during rain events.

Financing

This project is anticipated to cost $280,000.

Status

Shelbourne Forest sewers have been found to be in failed condition via camera inspections. The City must schedule these lines for rehabilitation so that sewer flows do not make their way into surrounding soils, as well as to reduce I&I.

CAPITAL IMPROVEMENT PLAN
STORM WATER FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**822,039**	**394,653**	**269,521**	**386,785**	**196,595**
REVENUES:					
Storm Water Fees	362,615	369,867	377,264	384,810	392,506
TOTAL REVENUE	**362,615**	**369,867**	**377,264**	**384,810**	**392,506**
EXPENDITURES:					
Storm Water Repair	125,000	125,000	125,000	125,000	125,000
Storm Water I&I Remediation		100,000		100,000	
Bernard Avenue (Sandusky to Liberty St.)	400,000				
Montrose/Columbus/Toledo		200,000			
Vernon Ave.			135,000		
Birch Terrace	225,000				
Chamberlain/Channing St.				350,000	
Pittsburgh Drive					200,000
100 Pincrest Slope Remediation	20,000				
Equipment Replacement	20,000	70,000			20,000
TOTAL EXPENDITURES	**790,000**	**495,000**	**260,000**	**575,000**	**345,000**
ENDING FUND BALANCE	**394,653**	**269,521**	**386,785**	**196,595**	**244,101**

SEPTEMBER 2018

STORM WATER LINE REPAIR

INFORMATION AT A GLANCE

COST
$125,000

PROJECTED SCHEDULE

Repeating yearly

CITY LEAD
Public Utilities

CONTRACTOR
TBD

Purpose

As storm water lines age, deteriorate, and begin to fail, they must be replaced. A failed storm water line can lose its ability to properly convey storm flows, potentially causing flooding to Delaware neighborhoods.

Financing

This is a revolving yearly fund of $125,000.

Status

As storm water lines are found to be in a failed condition, via camera inspections, they will be scheduled for replacement by City staff.

EST 1808
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OHIO

SEPTEMBER 2018

STORM WATER INFLOW/INFILTRATION REMEDIATION

INFORMATION AT A GLANCE

COST
$ 100,000

PROJECTED SCHEDULE

Repeated yearly

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

As storm water lines age, they begin to allow ground water infiltration into the storm flows. During rain events these areas of infiltration can cause storm water lines to become full sooner, leading to possible storm drain backups and localized flooding.

Financing

The remediation work is being allotted up to $100,000 bi-yearly.

Status

As areas in need of repair are found, via camera inspection, they will be scheduled for repair.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

BERNARD AVENUE STORM SEWER REPLACEMENT

INFORMATION AT A GLANCE

COST
$ 400,000

PROJECTED SCHEDULE

Calendar Year 2019

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

Bernard Avenue's storm sewer has been found to be in failed condition, unable to properly convey storm flows from the area, causing localized flooding. The existing storm sewer will be removed and replaced with good condition storm sewer lines.

Financing

The estimated cost for this project is $400,000.

Status

Work is currently scheduled to be performed by City of Delaware utilities staff in calendar year 2019.

SEPTEMBER 2018

MONTROSE AVE/COLUMBUS AVE/TOLEDO ST STORM

INFORMATION AT A GLANCE

COST
$ 200,000

PROJECTED SCHEDULE

Calendar Year 2020

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

The ability of the area storm sewers to properly convey storm water flows has greatly diminished in recent years. Many properties in the area are regularly on the verge of flooding conditions during rain events. This project is intended to quicken storm flow removal in the area, better serving local residents.

Financing

The estimated cost for this project is $200,000.

Status

Work is currently scheduled to be performed by City of Public Utilities Department staff in calendar year 2020.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

VERNON AVENUE DITCH CLEANING

INFORMATION AT A GLANCE

COST
$ 135,000

PROJECTED SCHEDULE

Calendar Year 2021

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

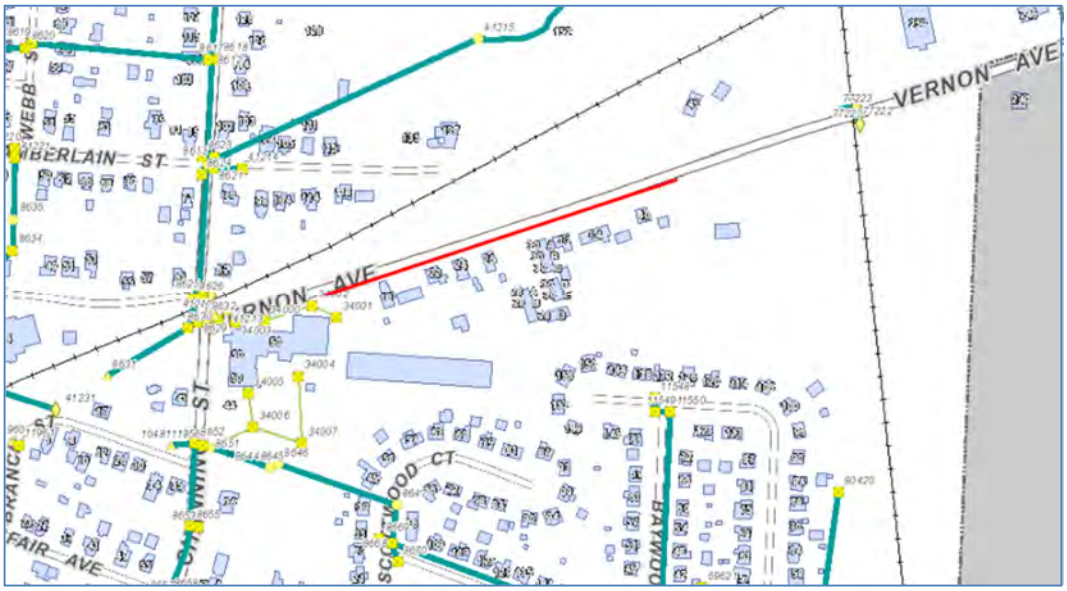
Vernon Avenue's ditch ways are no longer able to convey the required storm flows from the area, this is due to buildup of sediment from years of storm water conveyance. Ditches are as integral a part of storm water removal as storm sewers are, and must also be maintained to ensure needed levels of flow.

Financing

The estimated cost for this project is $135,000.

Status

Work is currently scheduled to be performed by City of Delaware utilities staff in calendar year 2021.



EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 2018

BIRCH TERRACE STORM SEWER CAPACITY IMPROVEMENTS

INFORMATION AT A GLANCE

COST
$ 225,000

PROJECTED SCHEDULE

Calendar Year 2019

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

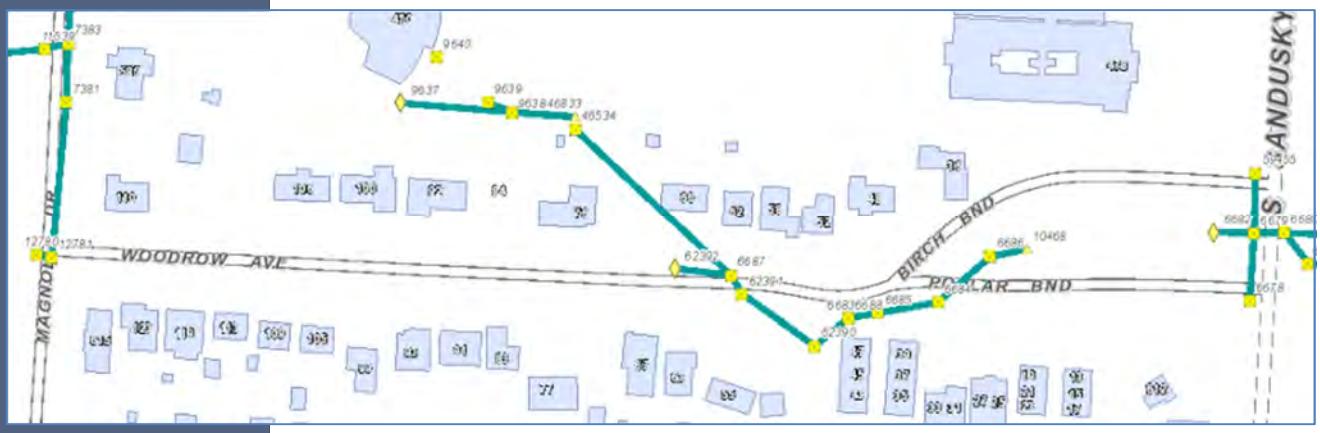
The Birch Terrace area does not currently have the needed storm sewer infrastructure to handle storm flows generated. Increasing the areas storm sewer connections will allow residents to see quicker storm flow drainage, and decrease the likelihood of residential flooding.

Financing

The estimated cost for this project is $225,000.

Status

Work is currently scheduled to be performed by City of Delaware utilities staff in calendar year 2019.



SEPTEMBER 2018

CHAMBERLAIN & CHANNING STREET STORM

INFORMATION AT A GLANCE

COST
$ 350,000

PROJECTED SCHEDULE

Calendar Year 2022

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

The area of Chamberlain St. and Channing St. is experiencing storm sewer failure shown by area flooding during rain events. This project is intended to open up flow in the area to reduce the likelihood of flooding events.

Financing

The estimated cost for this project is $350,000.

Status

Work is currently scheduled to be performed by City of Delaware utilities staff in calendar year 2022.

SEPTEMBER 2018

PITTSBURGH DRIVE STORM SEWER

INFORMATION AT A GLANCE

COST
$ 200,000

PROJECTED SCHEDULE

Calendar Year 2023

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

Pittsburgh Drive's ditch ways are no longer able to convey the required storm flows from the area, this is due to buildup of sediment from years of storm water conveyance. Ditches are as integral a part of storm water removal as storm sewers are, and must also be maintained to ensure needed levels of flow.

Financing

The estimated cost for this project is $200,000.

Status

Work is currently scheduled to be performed by City of Public Utilities Department staff in calendar year 2023.

SEPTEMBER 2018

100 PINECREST DRIVE SLOPE REMEDIATION

INFORMATION AT A GLANCE

COST
$ 20,000

PROJECTED SCHEDULE

Calendar Year 2019

CITY LEAD
Public Utilities

DESIGN CONSULTANT
TBD

CONTRACTORS
TBD

Purpose

The sloped side yard of 100 Pinecrest Drive has begun to experience failure due to storm events washing away native soils. During heavy rain soils are being washed down into the roadways, and ultimately into the storm sewers. Proper upkeep of storm water flows falls to the utilities department to address.

Financing

The estimated cost for this project is $20,000.

Status

Work is currently scheduled to be performed by City of Delaware Parks Department staff in calendar year 2019.

CAPITAL IMPROVEMENT PLAN
UTILITY EQUIPMENT REPLACEMENT FUND
2019 - 2023

	2019	2020	2021	2022	2023
REVENUES:					
Water Fund Allocation	60,000		65,000	150,000	30,000
Sewer Fund Allocation	80,000	130,000			45,000
Storm Water Fund Allocation	20,000	70,000			20,000
TOTAL REVENUE	**160,000**	**200,000**	**65,000**	**150,000**	**95,000**
EXPENDITURES:					
One Ton Dump Truck			65,000		65,000
Two Ton Dump Truck		130,000			
Backhoe	100,000				
One-ton Sevice Truck		70,000			
Utility Truck - Water				150,000	
Pickup Truck - Water	60,000				30,000
TOTAL PUBLIC UTILITIES EQUIPMENT	***160,000***	***200,000***	***65,000***	***150,000***	***95,000***

CAPITAL IMPROVEMENT PLAN
REFUSE FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**165,437**	**292,677**	**485,917**	**595,642**	**506,367**
REVENUES:					
Refuse Fees	624,240	624,240	636,725	636,725	649,459
Bond Revenue					
TOTAL REVENUE	**624,240**	**624,240**	**636,725**	**636,725**	**649,459**
EXPENDITURES:					
Equipment					
Rear Load 20-Yard Packer - Commercial		179,000		184,000	
Side Load Truck	245,000	252,000	260,000	267,000	275,000
Recycling Vehicle - Recycling	252,000		267,000	275,000	283,000
TOTAL EXPENDITURES	**497,000**	**431,000**	**527,000**	**726,000**	**558,000**
ENDING FUND BALANCE	**292,677**	**485,917**	**595,642**	**506,367**	**597,826**

CAPITAL IMPROVEMENT PLAN
DEVELOPER TRUST FUND
2019 - 2023

	2019	2020	2021	2022	2023
BALANCES FORWARD	**536,221**	**582,721**	**499,221**	**333,721**	**341,221**
REVENUES:					
Assessments	7,500	7,500	7,500	7,500	7,500
Grant Revenue		100,000			
City Contribution	84,000		27,000		
TOTAL REVENUE	**91,500**	**107,500**	**34,500**	**7,500**	**7,500**
EXPENDITURES:					
Equipment					
Stratford Pedestrian Bridge		165,000			
Hills Miller Sidewalk	45,000				
Curtis St Turn Lane		26,000	200,000		
TOTAL EXPENDITURES	**45,000**	**191,000**	**200,000**	**0**	**0**
ENDING FUND BALANCE	**582,721**	**499,221**	**333,721**	**341,221**	**348,721**

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

STRATFORD PEDESTRIAN BRIDGE IMPROVEMENTS

INFORMATION AT A GLANCE

COST
$200,000

FUNDING

OEPA	$100,000
Sanitary	$35,000
Developer	$65,000

PROJECTED SCHEDULE

EPA Grant App	2019
Construction	2020

CITY LEAD
Public Works

DESIGN CONSULTANT
Pomeroy & Associates

CONTRACTOR
TBD

Purpose

The City's South Central Sanitary Trunk Sewer crosses the Olentangy River suspended beneath a bridge structure located near the intersection of Stratford Road and US 23. The structure provides protection to the sewer and will serve to carry pedestrian traffic over the river. This structure is comprised of two (2) concrete box beams, with the sewer suspended between the beams, below a concrete slab poured over the top. The bridge was recently inspected and found to be in fair condition, though there is notable concrete cracking at the south bridge abutment that must be repaired. The purpose of this project is to improve the bridge to:

- Make necessary repairs to the south abutment
- Installing railing along the entire span of the bridge
- Connect both ends of the bridge to adjacent roadway.

Not included in the scope of this project is a 1500 LF multi-use path extension that would connect the north end of the bridge to the proposed Stratford Road and Meeker Way path system.

Finance

Various funding sources could be tapped to cover the construction costs for this project, currently estimated to be $175,000-$200,000 (depending on contingency items performed). The proposed strategy to fund this project is to combine a possible OEPA Clean Trails Grant with sanitary sewer maintenance funds (structural repairs) and developer contributions (pedestrian pathway component). The City is owed a developer contribution from the car dealership in the amount of $117,364 if the second phase of its 2014 Development Plan is executed. These funds could help fund the bridge rehabilitation effort as well as 1500 LF offsite path extension to Meeker Way.

Status

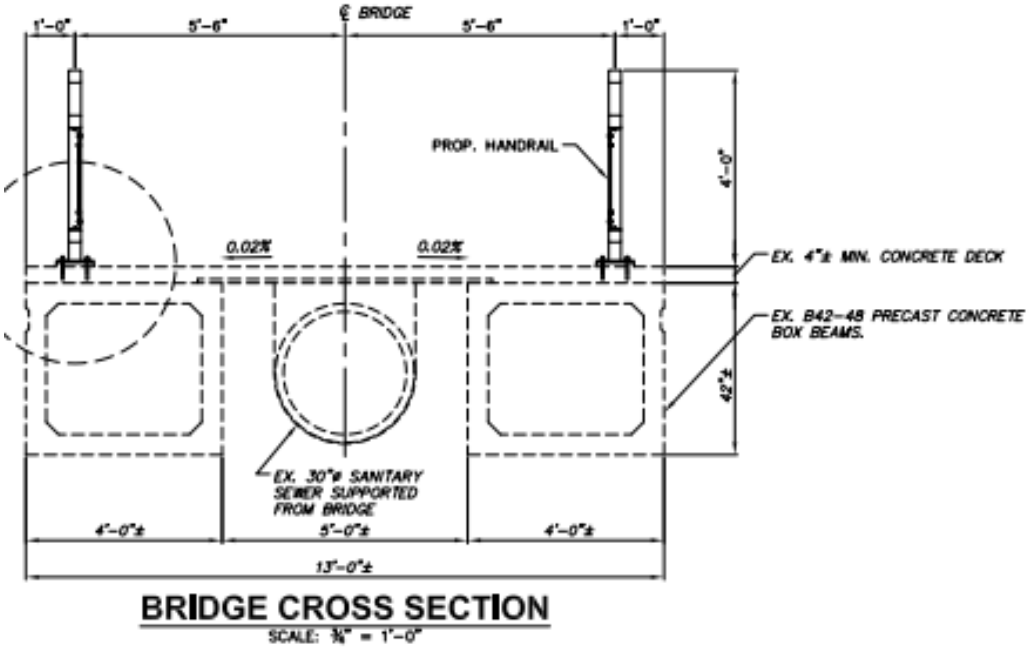
Design plans for the structural repairs, railing improvements, and the short path to Pollock Road are complete. The 2018 Budget included an appropriation of sanitary maintenance funds that will need to be moved to 2020, increased to account for contingency items, and combined with developer contributions - in order to execute this project.

Image #1

Existing Bridge Structure crossing the Olentangy River at US23/SR315/Stratford Road

Image #2

Cross-Section of Existing Bridge Showing Proposed Addition of Rail Improvements



EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

HILLS MILLER ROAD SIDEWALK EXTENSION

INFORMATION AT A GLANCE

COST
$ 45,000

FUNDING

Trust Fund $45,000

PROJECTED SCHEDULE

Prelim. Design	2018
Final Design	2019
Construction	2019

CITY LEAD
Public Works

DESIGN CONSULTANT
TBD

CONTRACTOR
TBD

Purpose

700 LF Extension of a 5'-0 concrete sidewalks along Hills Miller Road from the current terminus at the southwest corner of the Speedway property to the east side of Oakhurst Drive. Project will include construction of required ADA ramps on both sides of Hills Miller Road at Bruce Road as well as installation of an RRFB warning signal.

Financing

The project is anticipated to cost roughly $45,000. The Trust Fund has $46,375 in developer contributions available for sidewalk improvements along the US 23/Hills Miller corridor.

Status

The project is currently in the concept phase to determine the level of survey and design effort required to advance the initiative through to construction.

EST 1808
CITY OF
DELAWARE
OHIO

SEPTEMBER 18, 2018

CURTIS STREET & FIRESTONE DRIVE INTERSECTION IMPROVEMENTS

INFORMATION AT A GLANCE

PROJECT COST
$226,000

FUNDING

TRUST FUND

$80,000

ASSESSMENTS

$119,000

LOCAL
$27,000

PROJECTED SCHEDULE

Design	2020
Construction	2021

CITY LEAD
Public Works

DESIGN CONSULTANT
TBD

CONTRACTOR
TBD

IMAGE #1

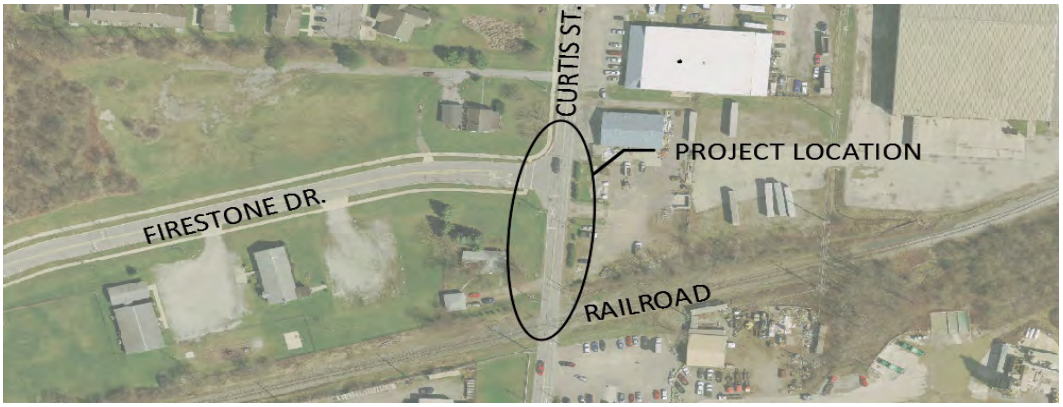
Project Location Map

Purpose

This project will add a left turn lane for northbound traffic on Curtis Street turning left onto Firestone Drive to travel westbound. Currently, during periods of heavy traffic, there is a need to separate turning vehicles from vehicles continuing to travel northbound. Curtis Street and Firestone Drives are both Collector Streets that provide routes for high volumes of traffic. The project will also include improvements to the existing railroad grade crossing. These improvements will fulfill a portion of the Curtis Street Realignment Project identified in the City's 2016 Priority Roadway Improvements and Expansion Projects document.

Financing

The project is anticipated to cost approximately $226,000. The City's Transportation Trust Fund/Assessments will cover $199,000 assuming the Del-Mor project proposed for the northwest corner of the intersection advances. The amount includes the anticipation final collection of $119,000 through property assessment contributions in the Curtis Farms subdivision.

Status

The project is in the conceptual design stage and will advance to full design in 2020 if funds for design are appropriated in the 2020 Budget. As additional development is proposed at the northwest corner of this intersection, it is important to construct this project in a timely manner. Also, the completion of Boulder Drive to the west will increase the utilization of Firestone Drive as an alternate path to travel to Veteran's Park and the YMCA.