

**BETHLEHEM TOWNSHIP PHYSICAL PLANT AND IT REPORT
BETHLEHEM TOWNSHIP MUNICIPAL AUTHORITY
March 2020**

Church Road/Green Pond Road Sewers

We are meeting again with the Contractors for both Pump Station 11 and Pump Station 12 to discuss construction schedules and any questions that the Contractors may have. Most of the material and equipment submittals have been received and reviewed by ARRO for both pump stations for basic uniformity.

Based on recent correspondence with the Commonwealth Financing Authority, we now don't expect to hear anything about possible receipt of grant funds for the sewer installation work until mid-July. Future discussions about acquiring local financing for the project may have to wait for a few more months.

As a result of a meeting in the field with PADOT on February 13, we have prepared a detour plan for construction of the sewers on Green Pond Road. The detour plan has been submitted for review. Traffic will be detoured via Farmersville Road, Easton Avenue and Church Road. When that construction is completed, traffic will be detoured off Church Road via Green Pond Road, Farmersville Road and Easton Avenue. PADOT also had comments from our last submittal that had not been included in any other previous reviews and we are addressing those.

Based on the delay in potential grant financing and issues with PADOT, we do not anticipate advertising for bids for another couple of months.

Northeast Trunk Sewer

Flow in January was 1.866 mgd and flow in February was 1.871 mgd; both months up by over 200,000 gpd over December's flow. Rainfall in January and February was less than 3 inches, but there was one day of almost 1-1/2 inches of rain and the flow during that period was over 300,000 gallons higher than the average for the month. This may not be completely due to the Northeast Interceptor. Township personnel should continue monitoring the system for excessive I/I. Final paving on Willow Park Road is still scheduled for early spring.

Chipman Road Sewer Extension

Bids were received via PennBid on March 5 and opened online. We will provide the Authority with our evaluation of the bids at the Authority meeting.

Pond Circle Sewer Extension

The plans and specifications are basically complete. We provided the surveyor with the necessary information for preparation of easement plans and should have those shortly. We will need to apply to PADOT for a Highway Occupancy Permit for the work on Green Pond Road. We intend to hold off advertising for bids at this time due to no determination on grant funding until mid-July, and also due to the proposed detour on Green Pond Road for the major sewer project.

Reservation of Capacity Fee

As a result of discussions at the February meeting, we are currently working with Mr. Hunsberger on revising the resolution for the reservation of capacity fee. It seems the

best way to assure payment is via an agreement with each developer/landowner that requests capacity.

Investigation of Asbestos-Cement Sewers

We are awaiting the report of the internal analysis performed by RedZone on the 21" and 24" asbestos cement interceptor sewers.

Chapter 94 Questionnaires

Chapter 94 Questionnaires for both the City of Bethlehem and Easton Area Joint Sewer Authority were completed and submitted by the Township prior to the end of February as requested.

Tapping Fees

The new tapping fee resolution was adopted by the Authority last month. TOA will soon be pulling building permits for the first phase of their project and the new fees will apply.

Oakland Road Sewer Extension

The surveyor has been authorized to proceed with the surveying required for design of a sanitary sewer extension on Oakland Road east of Hecktown Road to serve about 10 properties. We would expect to have a preliminary design done within a few weeks after receipt of survey data.

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Annual Life Safety Inspection – All Facilities

Completed 95% of punch-list items from inspection of 2/6/2020, by March 5th 2020. Remaining items to be addressed over the next several weeks during normal PPIS work request and scheduling process – O and M – MCWO.

Palmer Township, Bethlehem Township Intermunicipal Sewer Service Agreement rewrite

In progress. Meeting between Palmer and Bethlehem Township Intermunicipal negotiation members set for Thursday, March 12th 2020 at 10:00AM. This could be the final DRAFT agreement meeting before solicitor content review.

Public Works Complex

Met with key staff and discussed priority improvements to Falmer Drive facility. It was determined to concentrate on the electrical system upgrade in 2020, and evaluate the next major improvement for 2021.

BTCC

Replacement of RTU #4 scheduled. Delayed due to inability to access front grounds with 150-ton crane for fear of extensive damage to lawn area.
Evaluation of hot water supply in progress. Corrected with minor adjustment.
Evaluation of Steam room boiler replacement – design complete – ENTECH evaluating need for L&I submission, looking to obtain installation quotes in April.
Evaluation of gym roof and Kalwall replacement in progress. ENTECH currently preparing a proposal for design services. Other identified 2020 project scheduling TBD.

Only locations with active projects are reported, routine PM maintenance is not reported in the monthly report. For information on PM programs, IT, minor repairs, and services please email me at shunsberger@bethlehempwp.com

Stormwater

Requested funding commitment of \$7,000.00 from the GIS budget for GPS library and GIS attribute data field modification. Services of T&M and GIS Consultant. Work to include import of available information, and evaluation of missing data fields for GPS and data acquisition assignment.

CCTV and Jetting

Routine Jet and CCTV (O&M) work in progress.
New Pathfinder camera in service.
Aires (CCTV Manufacturer) has selected Bethlehem Township as a BETA test partner for equipment testing of new laser pipe profiling robotics. System essentially uses LiDAR laser pulse to create an interior pipe surface profile to detect deterioration, cracks and structural flaws. Also evaluating WinCam software for systemwide data collection of all O&M work performed, possible switch from current Flexidata platform.

Electrical Conservation, Traffic Control and Lighting

LED conversion of PPIS office areas in progress.

Awaiting award notification: Green-light-go Grant PADOT application filed - Traffic signals at remaining non-LED intersections awaiting award notification.

Lighting – Ongoing monthly inspections and repair dispatching.

Housenick mansion

Routine inspections, no major work scheduled.

Information Services

- **Single Label Domain Upgrade**- Project is almost completed, One new server is needed to replace aging domain controller (Sentinel 2) All workstations, peripherals, and most servers Have been moved to the new domain ad.bethlehemtwp.org – Project still in progress – Target Completion date is 3rd Quarter 2020
- **Firewall Upgrade from Cisco ASA to Redundant Fortinet FWF-61E Firewall**
– Project is completed – Will be submitting requisition for yearly maintenance/upgrades/support
- **Software Upgrades for Windows Compliancy / Project Migration** – Project is less than 50% completed, currently waiting on new windows 10 pro machines to arrive, units have been on back order since December, 2019. To date approximately 30 machines have been upgraded. Remaining Computers have arrived, configuring and deploying new machines for Police Dept
- **Exchange Server 2010 Migration to Microsoft Exchange 365 Cloud** – Project is 98% completed, Remaining items include decommissioning of In-house mail server, mail redirect to MS365, and set up new mail filter system. Not completed
- **Microsoft Navision Upgrade to Microsoft Cloud Dynamics** – Project is completed
- **Rec-Trac Database Migration Project 10.3 to 3.1** – Project is completed
- **Symantec Antivirus migration to AVAST Cloud Care Portal** – Project is underway about 50% completed to date, as new units are deployed project will continue to develop. New client machines are being added daily to the Portal, currently 75% completed
- **Barracuda on Premise/Cloud Backup** – In progress, currently evaluating options for cloud email filtering. Microsoft / Proof-point quotes for service have been received – evaluating final option.
- **Workstation Upgrades from Windows 7 Pro to Windows 10 Pro** – Same response as item 3

- **Citrix 2** – Environment has been decommissioned, product being retired due to version 4.5 and MS Server 2008 x64 being unsupported, rules for firewall access from public IP have been terminated. Removing RAM and CPU's from old server to utilize in same spec servers, like BTPD2 – Sentinel2 – Sentinel5
- **PPIS Sanitary Sewer Maintenance Team** – Currently evaluating switching Flexi data CCTV software to WinCam, in order to update the public sewer field operations, and WinCam appears to offer a much more appropriate approach to entire public sewer system maintenance. Basically, as the team progresses through a designated sewer shed, they will not leave it until; lines are completely jetted & televised, manholes are cleaned & repaired, and assets are fully GIS corrected. This process will require data recording, which WinCam appears to be a much better fit. On-site Demo is scheduled for March 11th, 2020
- **Police Department EOC Software** – We are currently working with our Vendor to build a secure VPN Tunnel for our departments to be able to query and share data from our SQL servers. Basically, it will look like: Bethlehem EOC Queries Lehigh SQL Server and Lehigh EOC □ Queries Bethlehem SQL Server. This will provide critical data sharing between both agencies. Project is not yet complete

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I. Status of Bethlehem Township Municipal Authority Projects

Week of Monday, February 10, 2020

I. **Under Review**

1. 2112 12th Street (BT400) – Plans reviewed (resubmission required);
2. Basile Senior Housing (4023 Oakland Road)(BT156) – Plans reviewed (resubmission required);
3. Birches at Bethlehem (BT315) – Plans reviewed (resubmission required); Plan review escrow received 9/17/19;
4. Dutt Tract (BT304) – Sketch Plan reviewed (no comments at this time); Planning meeting held 4/19/17 with developers engineer ARRO;
5. Freemansburg Square (BT126) – Revised plans reviewed (resubmission required); Sketch Plan reviewed (no comments at this time);
6. Greek Orthodox Annunciation Church (BT286) – Plans reviewed (resubmission required);
7. Hecktown Road Business Park Lots 6 & 7 (BT317) – Planning items reviewed & plan resubmission is required;
8. Hope Road Commercial Development (BT277) – Sketch plan reviewed (no comments);
9. Justice Grown Medical Marijuana Dispensary (BT400) – Wastewater flow data requested;
10. King’s View Avenue Medical Office Building (BT308) – Sketch Plan reviewed (no comments); Plan review escrow required;
11. Lehigh Valley Charter Academy (BT316) – Sketch Plan reviewed; Flow data under review by ARRO; Plan review escrow & agreement received 9/11/19;
12. Lehigh Valley Underground (BT312) – Plans reviewed (resubmission required);
13. Louise Moore Park Maintenance Building (BT400) - Plans currently under review;
14. LVIP IV Lot 17A (BT400) – Reviewed Sketch Plan (no comments at this time);
15. LVIP VI Lot 44 Fairfield Inn & Suites (BT314) – Plans reviewed; (plan review escrow required);
16. Meals on Wheels Addition (BT309) – Plans reviewed and wastewater flow data was requested;
17. Mill Creek Corporate Center Ph 1 (BT282) – Plans reviewed by ARRO (resubmission required);
18. MNB Properties Office & Garage (BT306) - Plans reviewed (resubmission required); Comments on hold pending establishment of escrow;
19. Nancy Run Estates Ph 7-10 Revisions (BT290) – Plans reviewed (resubmission required);
20. Notre Dame High School Auditorium Addition (BT400) – Wastewater flow data requested;
21. Panda Express (Bethlehem Square Shopping Center)(BT400) - Sketch Plan reviewed (no comments at this time);
22. River Hill Estates (BT313) – Plans reviewed (resubmission required);
23. TSAN Green Pond Road (BT400) – Reviewed Plan (no comments at this time);

II. **Pending Construction**

1. 4006 Wm. Penn Highway – Ali Proposed Med Office (BT228);
2. American Bank (BT201) – Issued final certificate 6/18/09;
3. Lands of Edward Youwakim (BT151) – Issued revised final certificate 4/19/11; Escrow again requested 7/11/11;

4. Lift-All East, Inc. (BT145) – Connect Monitoring MH to existing lateral;
5. Devine Subdivision (BT252) – Construction escrow required;
6. LVIP VI Lot 43 (BT255) – Final Plans reviewed; Pre-construction meeting held 9/30/18; Shop drawings, escrow & cut sheets required;
7. 3025 Northampton Street Lateral Installation (BT294) - Lateral location to be staked by developer and escrow established;
8. Washington Park Estates (BT197) – Pre-construction conference required; 1 set of Final plans required prior to preconstruction conference;

III. Under Construction

1. 3551 Country Club Road Lateral Installation (BT318) – Escrow received; Pending lateral location; Lateral installed 12/6/19; Permanent paving restoration still required; Lateral invoice approved for payment;
2. 4217 Fritch Drive (BT310) – Pre-construction conference held 11/19/19; Monitoring manhole installed 1/21/20; Vacuum test 30 days after frame & cover installed;
3. 4240 Nicolas Street Lateral (BT319) – Lateral installed 1/20/20; Permanent paving restoration required;
4. Green Pond Country Club/TOA PRGCC (BT280) - Pre-construction conference held 8/19/19; Additional sanitary sewer pre-construction conference scheduled for 8/26/19; Construction to start in second half of September; Post-pre-construction coordination meeting held 8/29/19; Scheduled to start 9/30/19; Sanitary sewer shop drawings reviewed; Construction in progress; 30 day test waiting period ends 11/22/19 for gravity system, and ends 12/11/19 for force main; Flushing & televising of loop around club house is performed by BTMA; Pipe and manhole testing (gravity & force main) of loop completed 2/6/20;
5. William Penn Commons (BT261) – Pre-construction meeting held 7/10/12; Shop drawings received; PENNDOT HOP received; Site meeting was held on 12/11/12 with PENNDOT; on-site construction completed 2/8/13; PENNDOT work delayed; Letter issued 5/23/14 re condition of manholes; Meeting with developer, design engineer & BTMA scheduled for 8/27/14; New PENNDOT HOP required;
6. Nancy Run Estates Phase 7 – 10 (BT290) – Pre-construction meeting held 8/8/19; 2 complete sets of Final Plans received 10/16/19; Anticipated start is Oct/Nov; BTMA TV investigation of 10th Street laterals performed 9/24/19; 10th Street lateral installations performed week of 11/4/19; Construction continues;

IV. Require As-Built/Testing/Final or Maintenance Inspection

1. 1880 Chain Dam Road - Requires final paving inspection after curb replacement;
2. 5000 Township Line Road (BT311) – 2 sets of plans required; Pre-construction conference held 2/7/19; Construction to start week of 2/18/19; Plan revisions required due to gas conflict; Construction started 3/18/19; Construction completed 3/29/19; Pipe testing performed 6/18/19; Manhole testing required after 4/29/19; Permanent paving restoration performed 6/21/19 (street & driveway); As-Builts satisfactory & electronic version received; Final Inspection performed 10/11/19 with items to be addressed; Follow-up Final Inspection performed 11/27/19 with items to be addressed; Maintenance Period started 12/4/19 and ends 6/4/21 (schedule Maintenance Inspection 5/4/21);
3. 8030 William Penn Highway (BT275) – Pre-construction meeting held 6/30/16; PENNDOT manhole approval received; Construction started January 13, 2017; Testing, flushing & televising completed 3/28/17; As-Builts reviewed & final submission received; Final Inspection performed 3/30/17 & follow-up Final Inspection performed 4/3/17 with work items required;

- Watertight manhole frame & cover installed on doghouse manhole 5/16/17; Follow-up Final Inspection performed 6/8/18 with field items addressed; Maintenance Inspection required;
4. Bethlehem Area Vocational Technical School (Haines Property/Skills Hill)(BT258) – Two sets of signed and sealed plans required prior to construction; Pre-construction meeting held 9/11/15; Construction completed 11/18/15; Air pressure testing performed 5/20/16 & mandrel testing performed 12/22/15 & 12/28/15; Manhole vacuum testing completed 11/4/16; Pipe televising performed 9/28/16; Final Inspection performed January 12, 2017 with items to be addressed; Follow-up Final Inspection performed 1/20/17 with all field items satisfactorily addressed; As-Builts reviewed (mylar or .pdf required) – 2nd request issued 11/5/18; 3rd request issued 1/29/19; As-Built .pdf received 2/7/19; Maintenance Inspection required;
 5. Birchwood Commons (BT191) – Pre-construction meeting held 7/19/12; Additional pre- construction meeting held 7/10/15; Construction started 11/16/15. Tie-in manhole base to be retained and filled with concrete for future BTMA pipe lining project; Partial testing performed 3/23/16; Construction restarted March 21, 2017; Construction completed 4/24/17 & testing can be performed after 5/24/17; Last of pipe testing scheduled for 6/6/17 – manhole testing performed; Final Inspection performed 12/13/18 with items to be addressed; As-Builts required - 2nd request issued 1/29/19; Follow-up Final Inspection performed 3/28/19; Follow-up Final Inspection performed again on 5/1/19 with all field work items satisfactory; As-Builts (final electronic version) received 8/23/19;
 6. Brodhead Road Distribution Center (BT302) – Pre-construction meeting held 4/25/18; Construction scheduled to start 7/24/18; Shop drawings reviewed 6/22/18; Cut sheet reviewed 8/30/18; Construction agreement & escrow received 9/4/18; Construction completed 11/1/18; Pipe testing performed 2/15/19; Manhole testing & pipe flushing & televising performed satisfactorily 6/4/19; As-Builts required; Final Inspection performed 11/26/19 with field items to be addressed; Follow-up Final Inspection performed 1/7/20 with field items to be addressed;
 7. Charles Chrin Comm. Center of Palmer Twp. - Requires vacuum testing, Final Inspection and As-Builts;
 8. CHS Medical Office – LVIP 4 Lot 26B (BT166) – Pending Maintenance Inspection;
 9. CVS – Dischinat (BT253) – Apartments sanitary sewer manhole vacuum test completed 5/12/11; Final Inspection was performed 5/18/11 with all items satisfactory; Maintenance Inspection required;
 10. Freemansburg Dental (BT266) - Pre-construction conference held 7/30/14; Meeting w/BTMA & BTMA contractor scheduled for 9/29/14; BTMA contractor installed lateral and monitoring manhole 12/9/14; Manhole vacuum testing was performed 2/18/15; As-Builts reviewed & .pdf received; Final Inspection performed 6/25/15; Maintenance Inspection required;
 11. LVIP IV Lot 55 & 56 Fresh Pet (BT268) – Lateral installed 9/19/19;
 12. LVIP IV Lot 57 Freshpet (BT298) – Site meeting held 5/11/18 with BTMA, developer and engineer; Two complete sets of plans received 6/10/19; Pre-construction meeting scheduled for 7/22/19; Cut sheets reviewed 7/18/19; Shop drawings reviewed (additional required); Construction completed 8/14/19; Pipe testing & CCTV completed 8/14/19; Manhole vacuum testing and Final Inspection performed 1/24/20 with field items to be addressed; As-Builts required; Lateral installed 9/19/19;

13. Madison Farms Phase 1 (BT260) – Partial mandrel & air pressure pipe testing performed; Manhole vacuum testing performed 4/21/15; Pipe flushing & televising performed 3/24/15; Final Inspection performed 12/13/16; Follow-up final Inspection performed 3/10/17 with all field items satisfactorily addressed – report issued 6/5/17 with field item to be addressed; Revised As-Builts satisfactory & electronic final version for GIS received 6/11/19; Follow-up Final Inspection performed 12/9/19 with all field work items satisfactorily addressed; Maintenance Inspection required;
14. Madison Farms Phase 2 (BT260) – Testing, flushing & televising performed 11/17/16; As-Builts reviewed (PDF received 10/17/19); Final Inspection performed 12/9/19 with field work items to be addressed;
15. Madison Farms Phase 3 (BT260) – Testing, flushing & televising performed 11/17/16; As-Builts requested; Revised As-Builts satisfactory and electronic version received 7/2/19; Final Inspection performed 12/9/19 with all field work items satisfactorily addressed; Maintenance Inspection required;
16. Madison Farms Phase 4 (BT260) – Partial pipe testing performed 4/28/17 & 6/21/17; As-Builts required; Pipe repair between MH 17 & MH 30 addressed 6/9/17; Pipe repair addressed 6/17/17 between MH 16 & MH 17; As-Builts reviewed (PDF received 10/17/19); Final Inspection performed 12/9/19 with field work items to be addressed;
17. Madison Farms Phase 5 (BT260) – Pipe testing performed 2/6/18; As-Builts required; Manhole testing performed 9/12/18; As-Builts reviewed; Signed & sealed PDF requested 11/18/19; Revised As-Builts satisfactory and electronic version received 11/19/19;
18. McDonald's Re-Build – Rt. 191 (BT289) - Pre-construction meeting held 5/1/17; Lateral investigation scheduled for 5/22/17 showed broken pipe; Site meeting with BTMA contractor 5/23/17 to provide price for McDonald's payment; Site meeting 5/31/17 with NCCD, BTMA & contractor, & site manager re E & S requirements; Monitoring manhole installation performed without observation notice; Pipe installation completed 6/12/17; Pipe and manhole testing performed 7/11/17; Final Inspection performed 8/15/17 with field items to be addressed; As-Builts reviewed (resubmission required); As-Builts requested; 3rd request issued 1/29/19;
19. Negrao (BT105) – City of Bethlehem; As-Builts required;
20. Vineyard at Wagner Farms – Phase 8 (BT148) –Reviewed As-Builts (mylar to be submitted). Final Inspection performed 11/11/11 and no field work items remain to be addressed; Project close-out pending;
21. William Penn Commons (BT261) – On-site sanitary sewer testing completed 5/31/13; As-Builts required;

V. As-Built in Progress

- 1) GIS Updating for BTMA (BT405) –
 - A. LVIP VI Lot 25A – With BTMA staff;
 - B. LVIP VI Lot 9 BGSD – With BTMA staff;
 - C. LVIP VI Flexicon Expansion - With BTMA staff;
 - D. NCACC Dorm Expansion – With BTMA staff;
 - E. Freemansburg Dental - With BTMA staff;
 - F. Freemansburg Avenue Corridor Improvements – With BTMA Staff
 - G. Meyer Lane Apartments – With BTMA Staff
 - H. BAVTS Skills Hill - With BTMA Staff
 - I. Our Lady of Perpetual Help Emergency Repair - With BTMA Staff
 - J. Madison Farms Phase 1 – With BTMA staff
 - K. Madison Farms Phase 3 – With BTMA staff
 - L. 5000 Township Line Road – With BTMA Staff
 - M. Madison Farms Phase 2 – With BTMA staff

- N. Madison Farms Phase 4 – With BTMA staff
- O. Madison Farms Phase 5 – With BTMA staff

VI. As-Builts Completed, Mylars Received, in GIS

VII. Miscellaneous

- 1) Chapter 94 Report (BT400) – Provided to BTMA staff 1/3/20;
- 2) William Penn Highway/Indiana Street (BT400) – Gravity and LPSS lateral investigation;
- 3) COB/BTMA Northeast Interceptor Repairs (19007C) – Site meeting held 7/1/19 to determine extent of paving requirements; Paving tentatively scheduled for late August/early September time frame; Schuylkill Paving met for site visit 8/14/19; PENNDOT HOP data provided to ARRO; Sunset Dr. emergency paving is scheduled for 9/3/19; Final pavement restoration performed 9/6/19, except for Willow Park Rd. (PENNDOT HOP) paving still to be performed; Paving invoice for Township roads processed for payment; PENNDOT HOP received and permanent paving restoration work is to be performed Spring 2020;

VIII. Review Complete – No Field Work