

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

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ENGINEER'S REPORT FOR
MAY 13, 2020 MEETING

Church Road/Green Pond Road Sewers

TOA resumed construction of sanitary sewers on May 4 and MGK also resumed work on Pump Station 12. We had a Zoom meeting with Authority staff, TOA and their contractors, and the contractor for Pump Station 11 on May 7. TOA has gotten their equipment and materials off the site for Pump Station 11 and the Authority's contractor can now mobilize. TOA still has some storm sewer to install before the force main installation from Pump Station 11 can begin. LB Industries will be providing an updated schedule to us for review. As of now the surveyor will be on site on May 18 to provide control points and construction layout.

Nothing new regarding any grant approval from the Commonwealth Financing Authority, although a mid-July meeting is unlikely, most likely now in September. We may have a better idea after the CFA meeting the middle of this month. Discussions about acquiring local financing for the project may need to occur again to establish a potential schedule for bidding of the collection sewers.

We re-submitted the Highway Occupancy Permit application for the sewers on Green Pond Road and Country Club Road, including the revised detour plan. We are awaiting their review.

Based on the delay in potential grant financing and issues with PADOT, we still have no anticipated date for advertising for bids for the collection sewers along Green Pond Road, Church Road, and Country Club Road.

Northeast Trunk Sewer

Flows for the first quarter averaged slightly over 1.8 mgd, an increase of over 0.1 mgd from the last 2 quarters of 2019 after repairs were completed, but 0.6 mgd less from the first quarter of 2019. Due to Township staff schedules, flow information for April is not yet available, but we may have that information in time for the meeting. Schuylkill Paving has been contacted about doing the paving on Willow Park Road, but no schedule has been provided as of this date.

Chipman Road Sewer Extension

The Agreements were signed and Conformed Contract Documents were issued to Wexcon and the Authority. A pre-construction meeting was held via Zoom on April 20. The contractor began mobilizing on April 27, but due to issues with site access and tree removal, construction has been delayed. Wexcon hopes to have someone in to cut down the trees the

end of next week. All easements have been acquired and property owners were notified to mark the requested location for their laterals.

Pond Circle Sewer Extension

No additional work on this project other than continuing with preparation of application 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.

Investigation of Asbestos-Cement Sewers

Mr. Hunsberger received the report of the internal analysis performed by RedZone on the 21” and 24” asbestos cement interceptor sewers. The report and an accompanying video were reviewed by Township operating staff and there is minimal evidence of corrosion.

Oakland Road Sewer Extension

We did receive the survey information and prepared background drawings for the sewer extension. We completed a preliminary horizontal layout, but are awaiting confirmation on the location of the water main before finalizing the layout. The water main location was field marked by the City this week, and we are currently awaiting the surveyor to pick up those markings so we can add the location to our plans.

Easton Avenue 2-lot Sewer Extension

We received survey data and prepared a plan and profile drawing for the sewer extension to serve 2 properties on Easton Avenue just east of Willow Park Road. We also sent the plan to the surveyor for preparation of easement plats and legal descriptions. The cost of the work may be within the range that would not require public bidding, and Mr. Hunsberger is in the process of acquiring quotes for the work.

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Palmer Township, Bethlehem Township Intermunicipal Sewer Service Agreement Finalized preparing for BTMA adoption.

Public Works Complex

On hold.

BTCC

Lighting migration to LED – nearing completion.
Steam room Boiler wall construction – on hold.
Duct cleaning - complete
Painting and general maintenance - complete

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@bethlehemtp.com

Stormwater

On Hold (COVID-19 stall) 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. – on hold

CCTV and Jetting

Complete, all lines are in good to excellent condition. Redzone report and PPIS summary analysis available upon request.

Electrical Conservation, Traffic Control and Lighting

Pending Grant award

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

Housenick mansion

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.bethlehemtp.org – Project still in progress – Target Completion date is 3rd Quarter 2020 Server approved by BOC, Unit has been ordered
- **Firewall Upgrade from Cisco ASA to Redundant Fortinet FWF-61E Firewall** – Project is completed – Will be submitting requisition for yearly maintenance/upgrades/support. Support/Maintenance has been approved and submitted to vendor.
- **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. Machines arrived late February -Upgraded 39 Machines to date

- 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. Project is completed – Fully migrated all mail users to the cloud
- 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 85% completed
- Barracuda on Premise/Cloud Backup – In progress, currently evaluating options for cloud email filtering. Migrated users to new cloud portal, set up, tested, on-going configuration/testing
- 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 Project is completed
- 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 – Demo has been cancelled for now due to the Coronavirus – No update at this time
- 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 completed

- MS One Drive Users – Setup/Migration completed for Director of Planning & Township Manager.

Users now have the ability to access network files migrated from Township Servers to One Drive Cloud. Provides ability to work remotely with any network/desktop files uploaded to the One Drive. Project is completed

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);
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 Dewalt St. Revisions (BT290) – Final Plan Approval 3/13/20;
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; Lateral installation invoice approved for payment 2/13/20;
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 performed 3/6/20 - field work items not complete;
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; Follow-up Final Inspection performed 3/6/20 with all field work items satisfactory; 18 month Maintenance Period Inspection due 9/6/21;
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; Follow-up Final Inspection scheduled for week of 3/16/20;
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; Follow-up Final Inspection scheduled for week of 3/16/19;
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; Final Inspection required;
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;