

**Mount Joy Borough
Council Meeting Agenda
7:00 PM, Monday, September 13, 2021**

1. Call to Order
2. Roll Call—Councilors, Castaldi, Deering, Eichler, Fahndrich, Ginder, Reese, Ruschke, Youngerman, President Hall and Mayor Bradley
3. Invocation
4. Pledge of Allegiance
5. Announcement of Executive Sessions – Discuss Personnel Matter for Public Works Promotion
6. Consider a motion to approve the September 13, 2021, Borough Council Meeting Agenda.
7. Public Input Period - Comments of Any Borough Resident or Property Owner. Time limit of three minutes per individual.
8. Reports
 - a. Mayor
 - b. Police Chief
 - c. Fire Department Mount Joy
 - d. PSH Life Lion LLC
 - e. EMA
 - f. Main Street Mount Joy
 - g. Library
 - h. Code Officer
 - i. Stormwater Officer
 - j. Public Works Department
 - k. Borough Authority Manager
 - l. Borough Manager
9. Approval of Minutes of the Regular Borough Council Meeting held on July 12, 2021 & August 2, 2021.
10. Administration and Finance Committee
 - a. Item removed pending Admin & Finance Committee
 - b. Item removed
 - c. Consider a motion to approve the future issuance of Letters of No Trespass as determined by the Chief of Police and Borough Manager with just cause and to authorize the Borough Manager to sign said letters on Council's behalf.
 - d. Consider a motion to adopt Ordinance 8-21 to amend Chapter 270, Zoning to regulate personal expression signs and clarify regulations concerning special exceptions. *(NOTE: Public Hearing was held on July 12, 2021. Following public comments, the Public*

If you are a person requiring accommodations to participate, please contact
Borough staff to discuss how we may best accommodate your needs.
21 East Main Street, Mount Joy, PA 17552 • (717) 653-2300
Fax (717) 653-6680 • Borough@mountjoypa.org • www.mountjoyborough.com

Hearing was closed. Public comments may no longer be considered by Council as they deliberate on the proposed ordinance.)

- e. Lancaster County Vo-Tech School Authority, 1730 Hans Herr Drive, Willow Street, PA 17584 is requesting a Subdivision and Land Development Plan Deferral of Chapter 240, to Mount Joy Township to subdivide and construct 2 single-family dwellings located at the existing LCCTC- Mount Joy Campus in the Township and Borough and requesting approval of a Stormwater Management Plan to construct an infiltration basin south of proposed Lot 14 as shown on the LCCTC Subdivision and Land Development Plan.
 - i. Consider a motion to approve a Subdivision and Land Development Plan Deferral of Chapter 240 to Mount Joy Township to subdivide and construct 2 single-family dwellings,
 - ii. Consider a motion to approve a Stormwater Management Plan to construct an infiltration basin south of proposed Lot 14 as shown on the LCCTC Subdivision and Land Development Plan- Mount Joy Campus, on property owned by LCCTC (Rotary Park) next to the sub-leased area to the Borough to manage stormwater from 2 single-family lots, conditioned upon the Borough Solicitor and Borough Engineer comments being addressed, and a Stormwater Management Agreement being recorded.
- f. Discussion on Electrical Supply Contract which is set to expire on 11/30/2021.
- g. Discussion of use of funds related to the American Rescue Plan Act Grant.
- h. Consider a motion to approve Friday, October 29, 2021, from 6:00 pm until 8:00 pm as Trick or Treat in Mount Joy Borough as recommended by the Lancaster Inter-Municipal Committee.
- i. Consider a motion to approve Resolution 12-21 reducing employee contribution to the police pension plan for 2021.
- j. Consider a motion to move to approve Amendment No. 4 to the Non-Uniform Pension Plan defining Eligible Employees as an employee who is hired on a permanent full-time bases other than the police persons and to authorize the Borough Manager to distribute "Notice To Plan Participants" as appropriate, all in accordance with the PA Department of the Auditor General's audit findings dated 3/31/2021.
- k. Consider a motion to approve Council Resolution 13-21 appointing the Borough Manager as the Chief Administrative Officer for the Borough of Mount Joy Police and Non-Uniformed Pension Plans in accordance with the PA Department of the Auditor General's audit findings dated 3/31/2021.
- l. Act 50 of 2021 Expansion of 5G Technology.
 - i. Consider a motion authorizing staff to work with the Borough Solicitor to amend or draft new ordinance to address Act 50 of 2021.

- m. Consider a motion to move to full Council to award contract for Manheim Street Storm Water Project to Wexcon, Inc. in the amount of \$151,485.00 to be drawn from funds received from the American Rescue Plan Act.
- n. Discussion of "Budget Timeline"
- o. Consider a motion to authorize staff to distribute funds received from revenue of the soda machine at Rotary Park to David Eichler for the construction, installation and maintenance of bird habitat boxes along Little Chiques Creek in the area of Little Chiques Park as well as other locations in the Borough.
- p. Acknowledge receipt of the Mount Joy Borough Authority Sewer System Audit report.
- q. Acknowledge receipt of the 2022 Minimum Municipal Obligation (MMO) for both the Uniform and Non-Uniform Pension Plans.
- r. Consider a motion to move to full Council authorizing Certified Carpet to clean, sanitize and protect carpets in municipal building at a cost of \$996.00.
- s. Consider a motion authorizing the Borough Manager to attend the PSAB Fall Leadership Conference in Erie, PA on Oct 8 through the 10th, 2021 and to pay for and/or reimburse authorized expenses as provided by Section 701 of the Borough Code.
- t. Consider a motion authorizing staff to submit a "Request for Capital Budget Project" for design and construction public transportation to include pedestrian and bicycle transportation linking the recreational, historic, restaurants, commercial business and other points of interest within the Borough.
- u. Acknowledge completion of the Complete Street Guide.
 - i. Consider a motion to adopt Resolution 11-21 to encourage and support the planning, design, operation and maintenance of streets so that they are safe for all ages and abilities and provide for a multimodal transportation network.

11. Public Safety Committee

- a. Consider a motion to authorize the Borough Solicitor to draft an Ordinance amending Chapter 255, Vehicles and Traffic of the Boroughs Code of ordinances with the following revisions:
 - i. No parking on the west side of Springville Road from Main Street to Cedar Street.
 - ii. Deleting the 30-minute parking restriction on East Main Street, south side, at a point 54 feet east of High Street and a point 107 feet east thereof.
 - iii. Making Williams Alley a One-Way Street, traveling north from 190 feet north of Henry Street to West Main Street.
- b. Consider a motion to approve the closing of Main Street from New Haven Street to the intersection with Marietta Ave and Delta Street from Henry Street to Main Street on Friday, October 22, 2021, from 4:30 pm to 8:30 pm for Main Street Mount Joy event "Downtown Trick or Treat".

- c. Consider a motion to approve the closing of Main Street from Market Street to Barbara Street, Delta Street from Henry Street to Main Street and Marietta Avenue from Main Street to Sassafra Alley on Saturday, December 4, 2021, from 1:00 pm to 9:00 pm for Main Street Mount Joy event "Winterfest."
- d. Consider a motion to direct the Borough Manager to negotiate the Ground Ambulance Service Provider agreement directly with Penn State Health Life Lion LLC based upon the concerns as presented by Council.

12. Public Works Committee

- a. Consider a motion to authorize the Borough Solicitor to draft an Ordinance amending Chapter 182, Parks and Recreation Areas of the Borough Code of Ordinances revising the park rules as presented.
- b. Consider a motion to pass Resolution 9-21 authorizing Council President to sign the 902 Recycling Grant Fund Application on its behalf.
- c. Consider a motion to pass Resolution 10-21 authorizing the sale of various equipment using the Municibid online Municipal Auction Service.
- d. Consider a motion to authorize to advertise and bid the ARLE (Automatic Red Light Enforcement) Grant project. For traffic signal improvements at five intersections on Main Street.
- e. Consider a motion to adopt Resolution 14-21 authorizing the Director of Public Works to sign the traffic Signal Maintenance Agreement as required by the ARLE (Automatic Red Light Enforcement) Grant.
- f. Consider a motion to accept letter of retirement from Parks Superintendent Brian Brubaker, effective September 17, 2021, and acknowledge his 21 years of service to the Borough.
- g. Consider a motion for a promotion to the position of Park Superintendent effective September 26, 2021 as recommended by the Director of Public Works.
- h. Consider a motion to raise the starting wage for Public Works Maintenance Technician and Parks Department Maintenance Technician by \$1.00 to \$16.50 per hour.
- i. Consider a motion to authorize the manager to fill 1 vacant Public Works Maintenance Technician, and 1 Parks Department Maintenance Technician position.

13. Building Committee

- a. Discussion on vacant building at 1 West Main Street.

14. Public Input Period - Comments of Any Borough Resident or Property Owner. Time limit of three minutes per individual.

15. Any other matter proper to come before Council.

16. Authorization to pay bills.

17. Meetings and dates of importance, see the green calendar.

18. Executive Session – if requested.

19. Adjourn

The next regular Borough Council meeting is scheduled for 7:00 PM, on Monday, October 4, 2021

Detective Summary of Cases

| CASE DESCRIPTION | Previous Month 2021 | NEW CASES July 2021 | Monthly CLOSED CASES | TOTAL |
|---------------------------------|---------------------------|---------------------------|----------------------------|------------|
| Accident, Hit & Run | 0 | | | 0 |
| Arson | 2 | | | 2 |
| Assault | 2 | 1 | 1 | 2 |
| Assist Other Agency | 0 | | | 0 |
| Burglaries | 36 | | (5) | 36 |
| Criminal Mischief / Vandalism | 5 | | | 5 |
| Child & Family Offense (Abuse) | 3 | | | 3 |
| Death Investigation | 4 | | | 4 |
| Drug Offense | 0 | | | 0 |
| Harassment by Communication | 1 | | | 1 |
| Fraud (Forgery, Id Theft, etc.) | 13 | 4 | | 17 |
| Receiving Stolen Property | 1 | | | 1 |
| Robbery | 8 | | | 8 |
| Suspicious Activity | 0 | | | 0 |
| Theft | 41 | | (6) | 41 |
| Trespass | 0 | | | 0 |
| Miscellaneous | 3 | | | 3 |
| Threat to Official | 1 | | | 1 |
| Sex Offense | | | | |
| Adult | 0 | | | 0 |
| Juvenile | 1 | | | 1 |
| TOTAL OPEN CASES | 121 | 5 | 1 | 125 |
| New Cases Assigned | 5 | MTH | | |
| Closed Cases* | 27 | YTD | | |
| Warrants Served | 1 | MTH | | |
| Surveillance Hours Conducted** | 0 | MTH | | |

*cold cases are marked in ()



MOUNT JOY POLICE DEPARTMENT

Calls for Service

July 2021

| Code | Call for Service | Totals |
|-------------|---------------------------------------|---------------|
| 0613 | THEFT SHOPLIFTING | 2 |
| 0614 | THEFT FROM VEHICLE (INSIDE) | 1 |
| 0619 | THEFT ALL OTHERS | 2 |
| 0800 | SIMPLE ASSAULT | 2 |
| 1130 | FRAUD ALL OTHERS | 29 |
| 1440 | CRIMINAL MISCHIEF ALL | 3 |
| 1711 | SEX OFFENSE ALL OTHERS | 1 |
| 1810 | DRUG POSSESSION OFFENSE | 1 |
| 2040 | FAMILY OFFENSES - DOMESTIC | 5 |
| 2111 | DUI-ALCOHOL/UNDER INFL | 2 |
| 2310 | PUBLIC INTOXICATION / DRUNKENNESS | 2 |
| 2415 | DISPUTE | 1 |
| 2450 | NOISE COMPLAINT | 4 |
| 2480 | DISORDERLY PERSONS / NOISE ALL OTHERS | 1 |
| 2640 | MUN ORD VIOLATIONS | 4 |
| 2654 | DISTURBANCE | 10 |
| 2656 | THREATS | 5 |
| 2657 | HARASSMENT | 9 |
| 2660 | TRESPASSING | 3 |
| 2664 | STALKING | 4 |
| 2665 | FIREWORKS | 21 |



MOUNT JOY POLICE DEPARTMENT

Calls for Service

July 2021

| Code | Call for Service | Totals |
|-------------|--|---------------|
| 2911 | RUNAWAY-INCORRIG-MALE | 1 |
| 4014 | OPEN DOORS/WINDOWS GENERAL POLICE | 2 |
| 4018 | STREET LIGHTS-OUT/REPAIRS | 3 |
| 4021 | SUSPICIOUS ACTIVITY | 18 |
| 4051 | ALARM BURGLARY OR HOLD UP RESIDENCE | 1 |
| 4052 | ALARM BURGLARY OR HOLDUP NON RESIDENCE | 13 |
| 4100 | ALARMS (FIRE ALARMS) | 1 |
| 4101 | FIRES (ALL WORKING FIRES) | 2 |
| 4102 | ALARM - CARBON MONOXIDE ALARM | 1 |
| 4167 | HAZMAT SPILL / INCIDENT | 1 |
| 5004 | FOUND ARTICLES | 2 |
| 5008 | LOST ARTICLES | 3 |
| 5510 | ANIMAL COMPLAINTS ALL | 5 |
| 6006 | REPORTABLE MV CRASH W/INJURY | 1 |
| 6008 | REPORTABLE MV CRASH NO INJURIES | 7 |
| 6015 | REPORTABLE MV CRASH HIT & RUN | 1 |
| 6016 | NON REPORTABLE MV CRASH | 7 |
| 6303 | TRAFFIC OFFENSE ALL OTHER | 3 |
| 6305 | SELECTIVE ENFORCEMENT TRAFFIC | 2 |
| 6308 | TRAFFIC MV COMPLAINT | 6 |
| 6310 | TRAFFIC ENFORCE / STOP | 111 |
| 6335 | TRAFFIC HAZARD | 7 |



MOUNT JOY POLICE DEPARTMENT

Calls for Service

July 2021

| Code | Call for Service | Totals |
|------|------------------------------------|--------|
| 6336 | DISABLED MV | 2 |
| 6511 | PARKING VIOLATION COMPLAINT | 20 |
| 6602 | ABANDONED IMPOUND/TOWAWAY | 2 |
| 6612 | SIGNALS SIGNS OUT | 1 |
| 6614 | TRAFFIC POST | 1 |
| 7002 | BUILDING CHECK | 53 |
| 7008 | MEDICAL ASSISTANCE | 54 |
| 7010 | NOTIFICATIONS | 1 |
| 7014 | OTH PUB SERV/WELFARE CHK | 12 |
| 7015 | ASSIST CITIZEN | 14 |
| 7025 | EMOTIONALLY DISTURBED PERSON (EDP) | 4 |
| 7502 | ASSISTING-FIRE DEPT | 4 |
| 7504 | ASSISTING-OTHER POLICE DP | 20 |
| 7506 | ASSISTING-OTHER AGENCIES | 2 |
| 8010 | WARRANTS-LOCAL | 9 |
| 9002 | ADMINISTRATIVE DUTIES | 1 |
| 9008 | COURT | 22 |
| 9016 | LOCAL ADMIN USE | 3 |
| 9020 | POLICE INFORMATION | 49 |
| 9021 | TRAINING | 3 |
| 9025 | FIELD CONTACT INFORMATION | 8 |
| 9028 | FINGERPRINT | 3 |



MOUNT JOY POLICE DEPARTMENT

Calls for Service

July 2021

| Code | Call for Service | Totals |
|--------------------|------------------------------|---------------|
| 9030 | SPECIAL DETAIL ASSIGNMENT | 8 |
| 9068 | COMMUNITY RELATIONS ACTIVITY | 1 |
| 911 | 911 HANG UP / CHK WELFARE | 4 |
| 9112 | FOOT PATROL | 10 |
| 9115 | FOLLOW UP | 126 |
| 9137 | EVIDENCE DUTIES | 1 |
| 9192 | VEHICLE MAINTENANCE | 6 |
| 9989 | CALL BY PHONE | 10 |
| 9999 | NON-CAT DATA | 6 |
| Grand Total | | 770 |

MOUNT JOY POLICE DEPARTMENT

21 E MAIN ST, MOUNT JOY,
PA 17552

Phone: 717-653-1650

Fax: 717-653-0062

Citation Output By Charge

Starting Issue Date 7/1/2021

to Ending Issue Date 7/31/2021

| Charge | Total |
|---|-----------|
| 4703 A - OPERAT VEH W/O VALID INSPECT | 2 |
| 255.66 - VEHICLES AND TRAFFIC - PARKING TIME LIMITS | 1 |
| 1301 - 1301 A - Dr Unregist Veh | 5 |
| 1371 - 1371 A - Veh Reg Suspended | 1 |
| 1501 - 1501 A - Driving W/O A License | 1 |
| 1514 - 1514 A - License Expired | 1 |
| 1543 - 1543 A - Driv While Oper Priv Susp Or Revoked | 4 |
| 1543 - 1543 B1i - Drg Lic Sus/Rev Purs to Sec 3802/1547B1 | 1 |
| 1786 - 1786 A - Required Financial Responsibility | 3 |
| 1786 - 1786 F - Oper Veh W/O Req'd Financ Resp | 1 |
| 3323 - 3323 B - Duties At Stop Sign | 11 |
| 3361 - 3361 - Driving at Safe Speed | 2 |
| 3714 - 3714 A - Careless Driving | 1 |
| 4703 - 4703 A - Operat Veh W/O Valid Inspect | 4 |
| 4942 - 4942 B - Exceed Gross Reg Weight/Truck | 1 |
| 3308 A - ONE WAY ROADWAYS/ROTARY TRAFFIC ISLAND | 1 |
| Total: | 40 |

MOUNT JOY POLICE DEPARTMENT

21 E MAIN ST, MOUNT JOY,
PA 17552

Phone: 717-653-1650

Fax: 717-653-0062

Criminal Charges by Charge Type

Starting Issue Date 7/1/2021

to Ending Issue Date 7/31/2021

Charge Type: ARREST

| Charge | Total |
|--|----------|
| 2701 A3 - SIMPLE ASSAULT - ATTEMPT BY MENACE | 1 |
| 2705 - RECKLESSLY ENDANGERING ANOTHER PERSON | 1 |
| 2706 A1 - TERRORISTIC THREATS W/ INT TO TERRORIZE ANOTHER | 1 |
| 2709 A4 - HARASSMENT - COMM. LEWD, THREATENING, ETC. LANG. | 1 |
| 2709.1 A2 - PA TITLE 18, SECTION CS-2709.1 (A)(2): STALKING. | 2 |
| 4914 A - FALSE IDENTIFICATION TO LAW ENFORCEMENT | 1 |
| 5503 A1 - DISORDERLY CONDUCT | 1 |
| 5503 A2* - DISORDERLY CONDUCT - UNREAS. NOISE - COURT CASE | 1 |
| Total: | 9 |

Charge Type: COMPLAINT

| Charge | Total |
|--|--------------|
| 2709 A1 - HARASSMENT/STRIKE, SHOVE, KICK, ETC. | 1 |
| 6501 A1 - SCATTER RUBBISH UPON LAND/STREAM ETC | 1 |
| Total: | 2 |

**MOUNT JOY BOROUGH POLICE DEPARTMENT
MONIES COLLECTED JULY 2021**

| | | | |
|------------------------|---------|--|-------------------|
| | 331.120 | Borough Tickets (Other) | \$180.00 |
| | 321.310 | Bicycle Registration | \$0.00 |
| | 380.010 | Alarm Fees | \$1,600.00 |
| | 321.600 | Mercantile Licenses | \$0.00 |
| | 362.100 | Police Reports (includes \$2.00 misc.) | \$92.00 |
| 331.11 | 331.120 | Clerk of Court Disbursement | \$482.81 |
| 331.11 | 331.120 | Magisterial Court Disbursement | \$1,401.77 |
| | 331.130 | DUI Roving Reimbursement | \$517.76 |
| | 395.001 | Taser Credit | \$500.00 |
| TOTAL July 2021 | | | \$4,774.34 |
| <i>Total July 2020</i> | | | <i>\$5,440.84</i> |

Submitted by: _____ N. Scordo _____

Approved by: _____  _____

New Detective Cases

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-----------|------|------|------|------|------|------|------|------|------|
| January | 11 | 0 | 6 | 6 | 7 | 5 | 3 | 4 | 2 |
| February | 4 | 8 | 12 | 6 | 9 | 5 | 3 | 7 | 2 |
| March | 5 | 6 | 11 | 6 | 8 | 7 | 7 | 6 | 2 |
| April | 8 | 4 | 5 | 8 | 6 | 6 | 4 | 6 | 3 |
| May | 7 | 1 | 13 | 2 | 3 | 14 | 5 | 7 | 2 |
| June | 8 | 3 | 10 | 2 | 7 | 3 | 10 | 5 | 5 |
| July | 10 | 5 | 8 | 3 | 20 | 12 | 4 | 9 | 4 |
| August | 8 | 4 | 10 | 12 | 7 | 3 | 3 | 6 | |
| September | 10 | 1 | 6 | 4 | 6 | 4 | 3 | 7 | |
| October | 9 | 11 | 6 | 13 | 7 | 6 | 6 | 9 | |
| November | 9 | 7 | 4 | 10 | 7 | 4 | 10 | 1 | |
| December | 4 | 12 | 6 | 10 | 9 | 4 | 3 | 5 | |

Police Activity Statistics 2021

| | Citation Charges | Criminal Charges | Deposits | Incidents | Total Inc YTD | Total Inc Prev YTD |
|--------------|------------------|------------------|------------|-----------|---------------|-----------------------|
| Jan | 60 | 26 | \$2,716.89 | 589 | 589 | 574 |
| Feb | 86 | 34 | \$3,959.23 | 1118 | 1,118 | 1133 |
| Mar | 55 | 7 | \$6,065.89 | 674 | 1,792 | 1619 |
| Apr | 85 | 24 | \$5,491.40 | 763 | 2,555 | 1976 |
| May | 38 | 22 | \$4,179.51 | 741 | 3,296 | 2529 |
| June | 26 | 32 | \$5,581.16 | 738 | 4034 | 3229 |
| July | 40 | 11 | \$2,676.70 | 770 | 4804 | 3897 |
| Aug | | | | | | 4615 |
| Sept | | | | | | 5282 |
| Oct | | | | | | 5806 |
| Nov | | | | | | 6303 |
| Dec | | | | | | 6802 |
| TOTAL | | | | | | 6802 |

FDMJ Monthly Incident Report Summary

July 2021

Responded to 38 alarms for the month of July 2021 – 304 total alarms for year as of 7/31/21

Time in service for month: 15 hours and 56 minutes

Average manpower per incident: 9 members per call for month - (6a-4p 17 calls/5.5 members per call)

Total Man-hours: 161 hours & 28 minutes

Calls by Municipality First Due: 31 first due alarms – 7 mutual aid alarms

- Mount Joy Borough - 10
- Rapho Township - 13
- Mount Joy Township - 2
- East Donegal Township – 6

Apparatus used

- Engine 75-1 -16
- Engine 75-2 - 17
- Truck 75 - 16
- Squad 75-1 - 4
- Traffic 75 - 8
- Duty Chief Vehicle - 15
- Duty Officer Vehicle - 9

Property pre-incident value: \$ 160,000.00

Property fire loss: \$40,810.00

Property post incident saved: \$119,190.00

2021 FDMJ responds to a call every 16 hours & 44 min

Total Training hours of 32 members trained for 326 hours & 30 min

Fire Prevention Details – no fire prevention details for the month

Community Service Details for the month – 1 fire police event and 1 duty crew.

Notable First Due Calls:

- 7/5/21 – MJT – Rt 283 WB – tractor trailer fire - \$40,000.00 fire loss
- 7/13/21 – RT – Ridgewood MHP – electrical fire in mobile home - \$810.00 fire loss

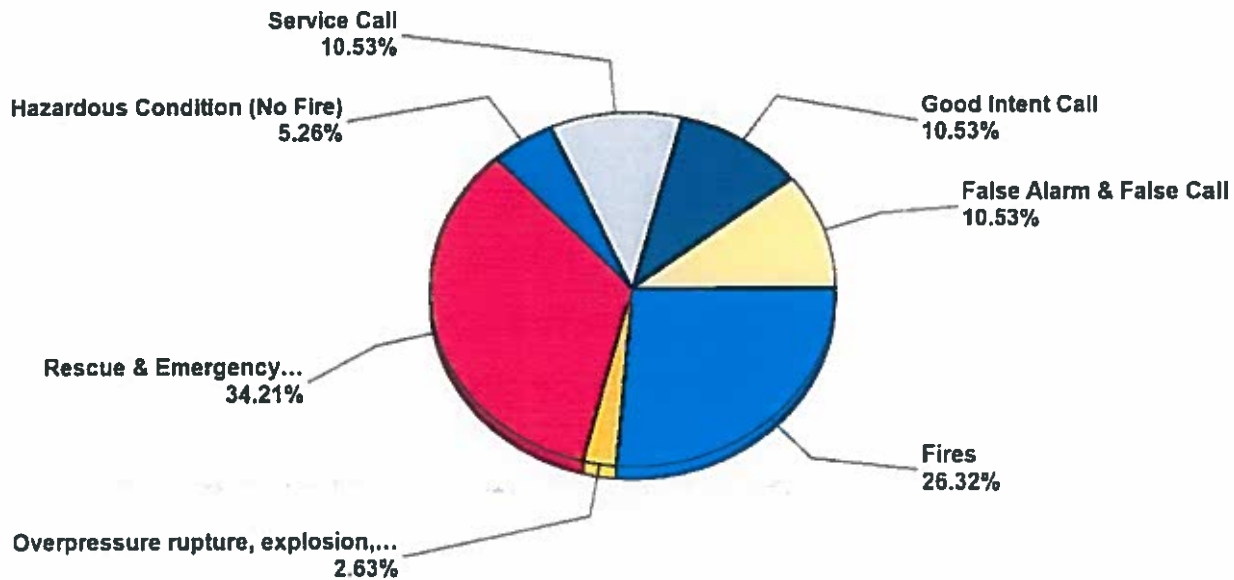
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 8/7/2021 11:58:01 AM

Breakdown by Major Incident Types for Date Range

Zone(s): All Zones | Start Date: 07/01/2021 | End Date: 07/31/2021



| MAJOR INCIDENT TYPE | # INCIDENTS | % of TOTAL |
|---|-------------|-------------|
| Fires | 10 | 26.32% |
| Overpressure rupture, explosion, overhear - no fire | 1 | 2.63% |
| Rescue & Emergency Medical Service | 13 | 34.21% |
| Hazardous Condition (No Fire) | 2 | 5.26% |
| Service Call | 4 | 10.53% |
| Good Intent Call | 4 | 10.53% |
| False Alarm & False Call | 4 | 10.53% |
| TOTAL | 38 | 100% |

Only REVIEWED and/or LOCKED IMPORTED incidents are included. Summary results for a major incident type are not displayed if the count is zero.

Detailed Breakdown by Incident Type

| INCIDENT TYPE | # INCIDENTS | % of TOTAL |
|--|-------------|-------------|
| 111 - Building fire | 3 | 7.89% |
| 121 - Fire in mobile home used as fixed residence | 1 | 2.63% |
| 132 - Road freight or transport vehicle fire | 1 | 2.63% |
| 142 - Brush or brush-and-grass mixture fire | 4 | 10.53% |
| 143 - Grass fire | 1 | 2.63% |
| 210 - Overpressure rupture from steam, other | 1 | 2.63% |
| 311 - Medical assist, assist EMS crew | 3 | 7.89% |
| 322 - Motor vehicle accident with injuries | 5 | 13.16% |
| 324 - Motor vehicle accident with no injuries. | 4 | 10.53% |
| 352 - Extrication of victim(s) from vehicle | 1 | 2.63% |
| 412 - Gas leak (natural gas or LPG) | 1 | 2.63% |
| 413 - Oil or other combustible liquid spill | 1 | 2.63% |
| 531 - Smoke or odor removal | 1 | 2.63% |
| 550 - Public service assistance, other | 1 | 2.63% |
| 555 - Defective elevator, no occupants | 2 | 5.26% |
| 621 - Wrong location | 1 | 2.63% |
| 651 - Smoke scare, odor of smoke | 2 | 5.26% |
| 671 - HazMat release investigation w/no HazMat | 1 | 2.63% |
| 743 - Smoke detector activation, no fire - unintentional | 1 | 2.63% |
| 745 - Alarm system activation, no fire - unintentional | 2 | 5.26% |
| 746 - Carbon monoxide detector activation, no CO | 1 | 2.63% |
| TOTAL INCIDENTS: | 38 | 100% |

Only REVIEWED and/or LOCKED IMPORTED incidents are included. Summary results for a major incident type are not displayed if the count is zero.



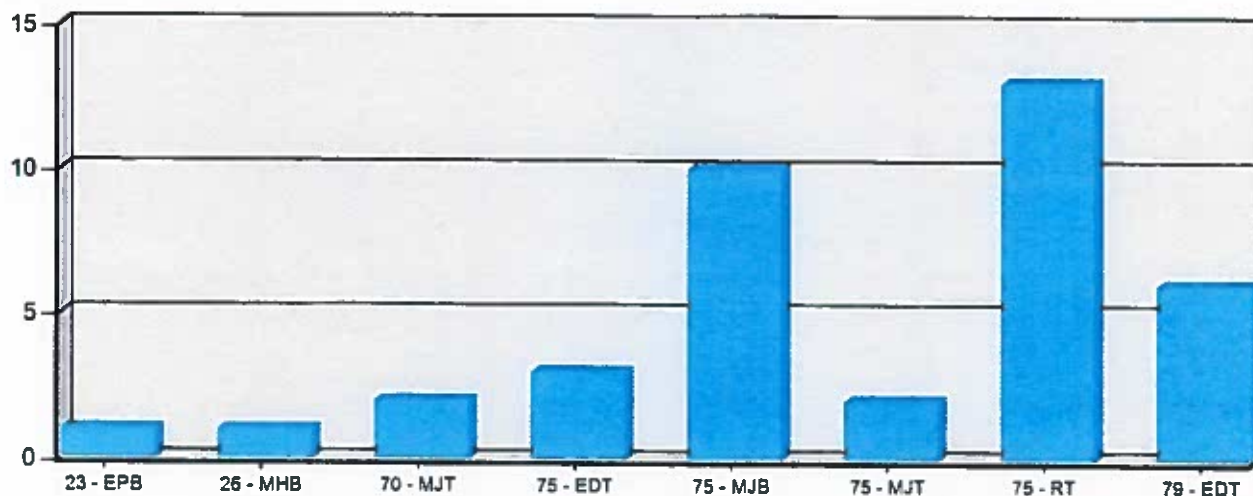
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 8/7/2021 11:56:48 AM

Incident Count per Zone for Date Range

Start Date: 07/01/2021 | End Date: 07/31/2021



| ZONE | # INCIDENTS |
|---------------------------------------|-------------|
| 23 - EPB - 23 East Petersburg Borough | 1 |
| 26 - MHB - 26 Manheim Borough | 1 |
| 70 - MJT - 70 Mount Joy Township | 2 |
| 75 - EDT - 75 East Donegal Township | 3 |
| 75 - MJB - 75 Mount Joy Borough | 10 |
| 75 - MJT - 75 Mount Joy Township | 2 |
| 75 - RT - 75 Rapho Township | 13 |
| 79 - EDT - 79 East Donegal Township | 6 |
| TOTAL: | 38 |

Zone information is defined on the Basic Info 3 screen of an incident. Only REVIEWED incidents included. Archived Zones cannot be unarchived.



emergencyreporting.com
Doc Id: 270
Page # 1 of 1

Fire Department Mount Joy

Mount Joy, PA

This report was generated on 8/7/2021 11:57:24 AM

Incident Statistics

Zone(s): All Zones | Start Date: 07/01/2021 | End Date: 07/31/2021

| INCIDENT COUNT | | | |
|--|---------------------------|-------------------------------|-----------------------------|
| INCIDENT TYPE | | # INCIDENTS | |
| EMS | | 13 | |
| FIRE | | 25 | |
| TOTAL | | 38 | |
| TOTAL TRANSPORTS (N2 and N3) | | | |
| APPARATUS | # of APPARATUS TRANSPORTS | # of PATIENT TRANSPORTS | TOTAL # of PATIENT CONTACTS |
| TOTAL | | | |
| PRE-INCIDENT VALUE | | LOSSES | |
| \$160,000.00 | | \$40,810.00 | |
| GO CHECKS | | | |
| 746 - Carbon monoxide detector activation, no CO | | 1 | |
| TOTAL | | 1 | |
| MUTUAL AID | | | |
| Aid Type | | Total | |
| Aid Given | | 10 | |
| Aid Received | | 7 | |
| OVERLAPPING CALLS | | | |
| # OVERLAPPING | | % OVERLAPPING | |
| 6 | | 15.79 | |
| LIGHTS AND SIREN - AVERAGE RESPONSE TIME (Dispatch to Arrival) | | | |
| Station | EMS | FIRE | |
| Station 75 | 0:10:53 | 0:08:47 | |
| AVERAGE FOR ALL CALLS | | 0:10:23 | |
| LIGHTS AND SIREN - AVERAGE TURNOUT TIME (Dispatch to Enroute) | | | |
| Station | EMS | FIRE | |
| Station 75 | 0:05:35 | 0:04:15 | |
| AVERAGE FOR ALL CALLS | | 0:05:06 | |
| AGENCY | | AVERAGE TIME ON SCENE (MM:SS) | |
| Fire Department Mount Joy | | 25:28 | |

Only Reviewed Incidents included. EMS for Incident counts includes only 300 to 399 Incident Types. All other incident types are counted as FIRE. CO Checks only includes Incident Types: 424, 736 and 734. # Apparatus Transports = # of incidents where apparatus transported. # Patient Transports = All patients transported by EMS. # Patient Contacts = # of PCR contacted by apparatus. This report now returns both NEMSIS 2 & 3 data as appropriate. For overlapping calls that span over multiple days, total per month will not equal Total count for year.

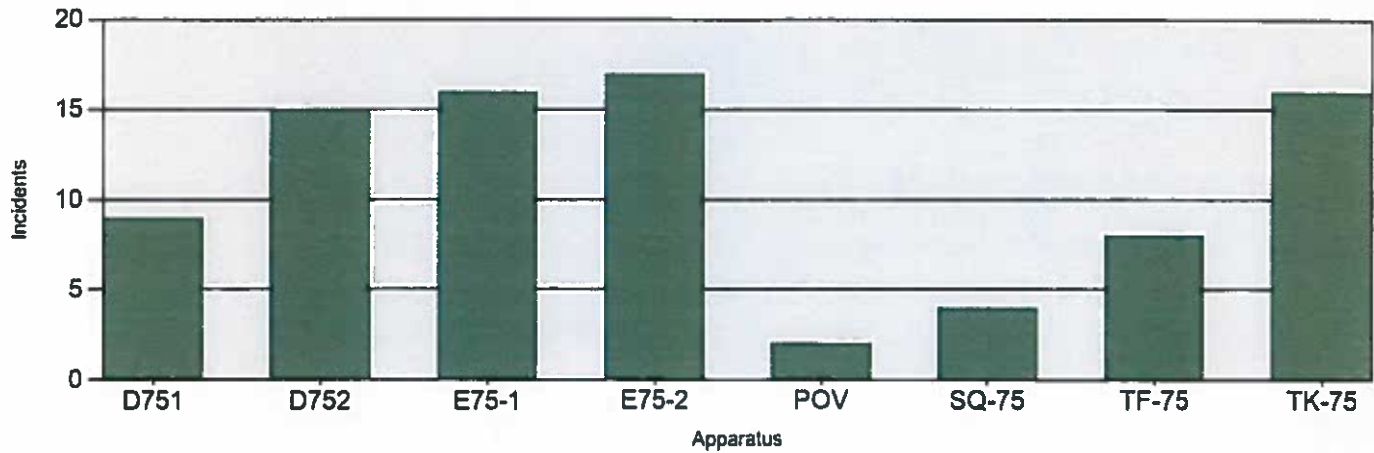
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 8/7/2021 12:00:48 PM

Incident Count per Apparatus for Date Range

Start Date: 07/01/2021 | End Date: 07/31/2021



| APPARATUS | #of INCIDENTS |
|-----------|---------------|
| D751 | 9 |
| D752 | 15 |
| E75-1 | 16 |
| E75-2 | 17 |
| POV | 2 |
| SQ-75 | 4 |
| TF-75 | 8 |
| TK-75 | 16 |

Canceled apparatus (per the THIS APPARATUS WAS CANCELLED checkbox on Basic Info 4) not included.
Only REVIEWED incidents included.



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Fire Department Mount Joy

Mount Joy, PA

This report was generated on 8/7/2021 12:01:18 PM

Incident Count with Man-Hours per Zone for Date Range

Incident Type(s): All Incident Types | Start Date: 07/01/2021 | End Date: 07/31/2021

| ZONE | INCIDENT COUNT | MAN-HOURS |
|---------------------------------------|----------------|---------------|
| 23 - EPB - 23 East Petersburg Borough | 1 | 2:56 |
| 26 - MHB - 26 Manheim Borough | 1 | 12:32 |
| 70 - MJT - 70 Mount Joy Township | 2 | 2:52 |
| 75 - EDT - 75 East Donegal Township | 3 | 13:55 |
| 75 - MJB - 75 Mount Joy Borough | 10 | 53:29 |
| 75 - MJT - 75 Mount Joy Township | 2 | 22:06 |
| 75 - RT - 75 Rapho Township | 13 | 37:16 |
| 79 - EDT - 79 East Donegal Township | 6 | 16:42 |
| TOTAL | 38 | 161:48 |

NOTE that this report takes into consideration ONLY those Personnel that are associated with an Apparatus, and that only Reviewed incidents are included in the counts.



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Doc Id: 1306
Page # 1 of 1

Fire Department Mount Joy

Mount Joy, PA

This report was generated on 8/7/2021 12:01:43 PM

Losses for Date Range

Start Date: 07/01/2021 | End Date: 07/31/2021

| TOTAL INCIDENTS | TOTAL PROPERTY LOSS | TOTAL CONTENT LOSS | TOTAL LOSSES | AVERAGE LOSS |
|-----------------|---------------------|--------------------|--------------|--------------|
| 2 | \$20,800.00 | \$20,010.00 | \$40,810.00 | \$20,405.00 |

| INCIDENT NUMBER | DATE | Incident Type | PROPERTY LOSS | CONTENT LOSS | TOTAL | % of Total |
|-----------------|------------|---|---------------|--------------|-------------|------------|
| 2021-289 | 07/05/2021 | 132 - Road freight or transport vehicle fire | \$20,000.00 | \$20,000.00 | \$40,000.00 | 98.02% |
| 2021-280 | 07/13/2021 | 121 - Fire in mobile home used as fixed residence | \$800.00 | \$10.00 | \$810.00 | 1.98% |

Only REVIEWED incidents included



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Doc Id: 265

Page # 1 of 1

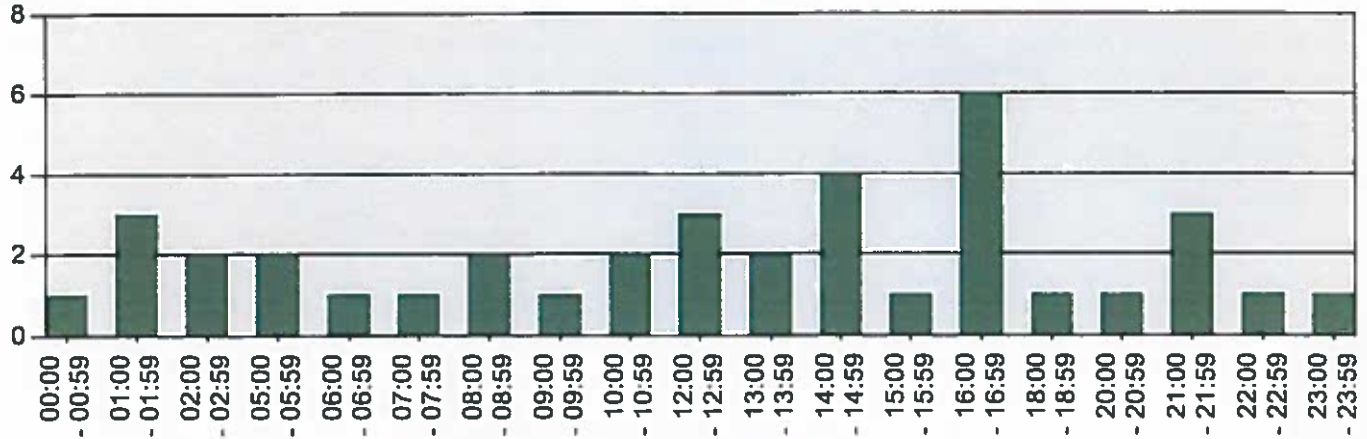
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 8/7/2021 12:02:20 PM

Incidents by Hour for Date Range

Start Date: 07/01/2021 | End Date: 07/31/2021



| Hour | # of Calls |
|---------------|------------|
| 00:00 - 00:59 | 1 |
| 01:00 - 01:59 | 3 |
| 02:00 - 02:59 | 2 |
| 03:00 - 03:59 | 2 |
| 04:00 - 04:59 | 2 |
| 05:00 - 05:59 | 2 |
| 06:00 - 06:59 | 1 |
| 07:00 - 07:59 | 1 |
| 08:00 - 08:59 | 2 |
| 09:00 - 09:59 | 1 |
| 10:00 - 10:59 | 2 |
| 11:00 - 11:59 | 2 |
| 12:00 - 12:59 | 3 |
| 13:00 - 13:59 | 2 |
| 14:00 - 14:59 | 4 |
| 15:00 - 15:59 | 1 |
| 16:00 - 16:59 | 6 |
| 17:00 - 17:59 | 1 |
| 18:00 - 18:59 | 1 |
| 19:00 - 19:59 | 1 |
| 20:00 - 20:59 | 1 |
| 21:00 - 21:59 | 3 |
| 22:00 - 22:59 | 1 |
| 23:00 - 23:59 | 1 |

Only REVIEWED incidents included

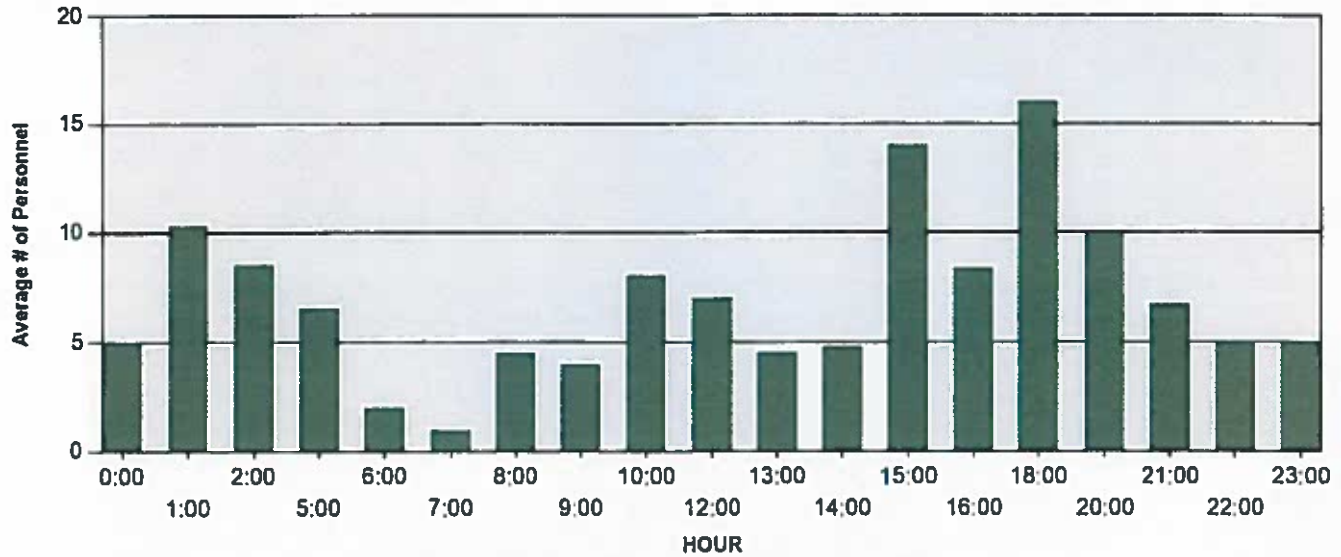
Fire Department Mount Joy

Mount Joy, PA

This report was generated on 8/7/2021 12:02:44 PM

Average Number of Responding Personnel per Hour for Date Range

Start Date: 07/01/2021 | End Date: 07/31/2021

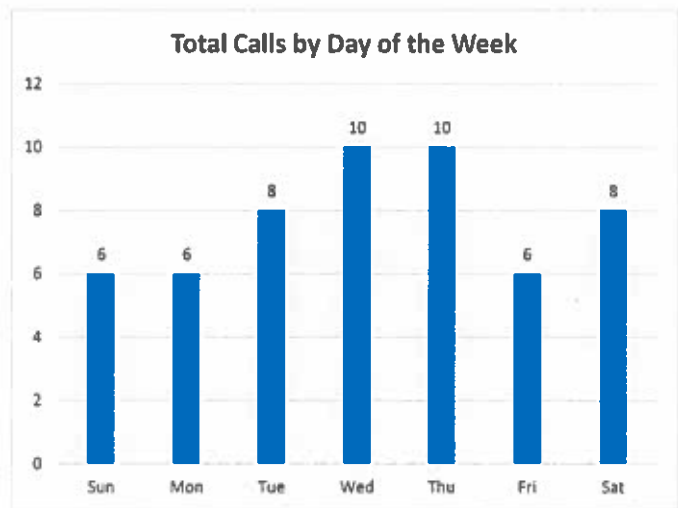
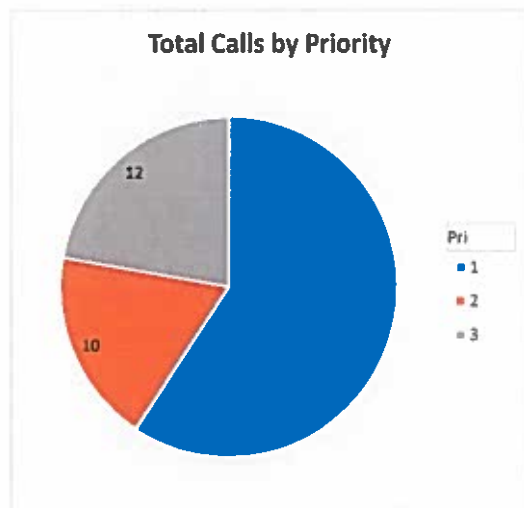
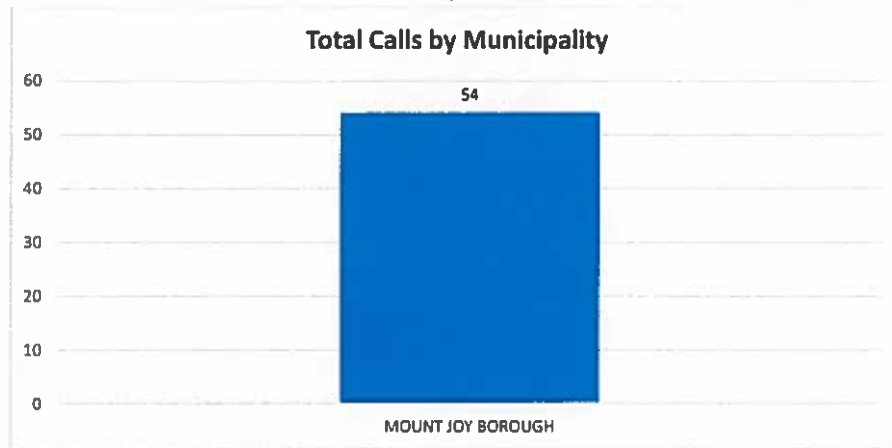


| Hour | Avg. # Personnel |
|---------------|------------------|
| 00:00 - 00:59 | 5.00 |
| 01:00 - 01:59 | 10.33 |
| 02:00 - 02:59 | 8.50 |
| 05:00 - 05:59 | 6.50 |
| 06:00 - 06:59 | 2.00 |
| 07:00 - 07:59 | 1.00 |
| 08:00 - 08:59 | 4.50 |
| 09:00 - 09:59 | 4.00 |
| 10:00 - 10:59 | 8.00 |
| 12:00 - 12:59 | 7.00 |
| 13:00 - 13:59 | 4.50 |
| 14:00 - 14:59 | 4.75 |
| 15:00 - 15:59 | 14.00 |
| 16:00 - 16:59 | 8.33 |
| 18:00 - 18:59 | 16.00 |
| 20:00 - 20:59 | 10.00 |
| 21:00 - 21:59 | 6.67 |
| 22:00 - 22:59 | 5.00 |
| 23:00 - 23:59 | 5.00 |

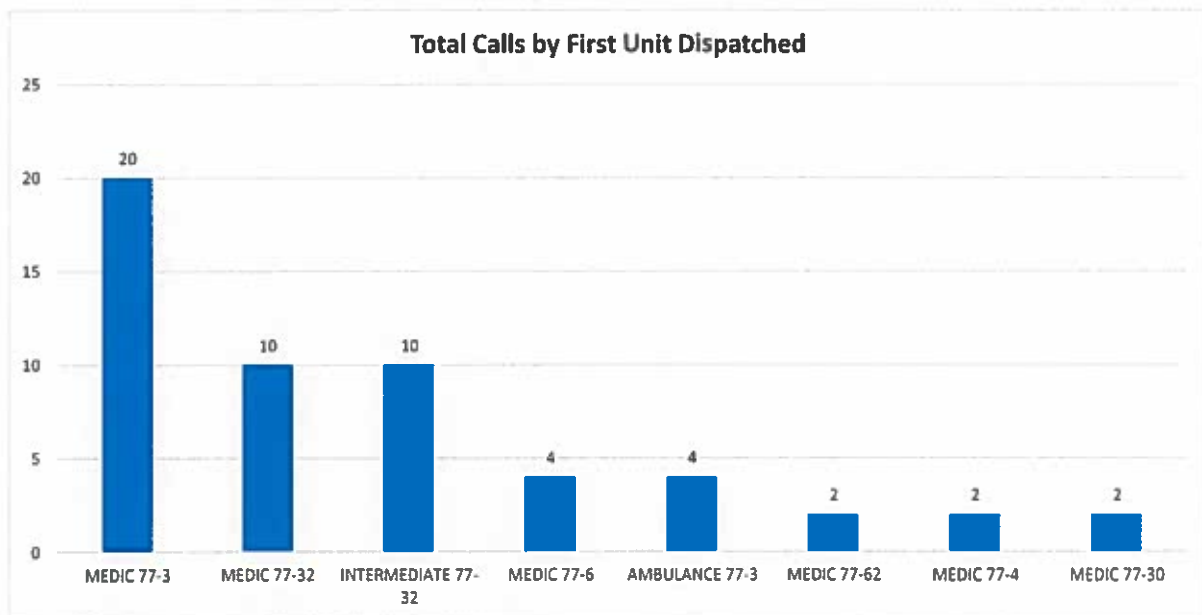
AVE. # PERSONNEL calculated from total number of personnel responding to incidents begun at the HOUR divided by total number of REVIEWED incidents for that HOUR. Includes personnel that responded both on or off apparatus.



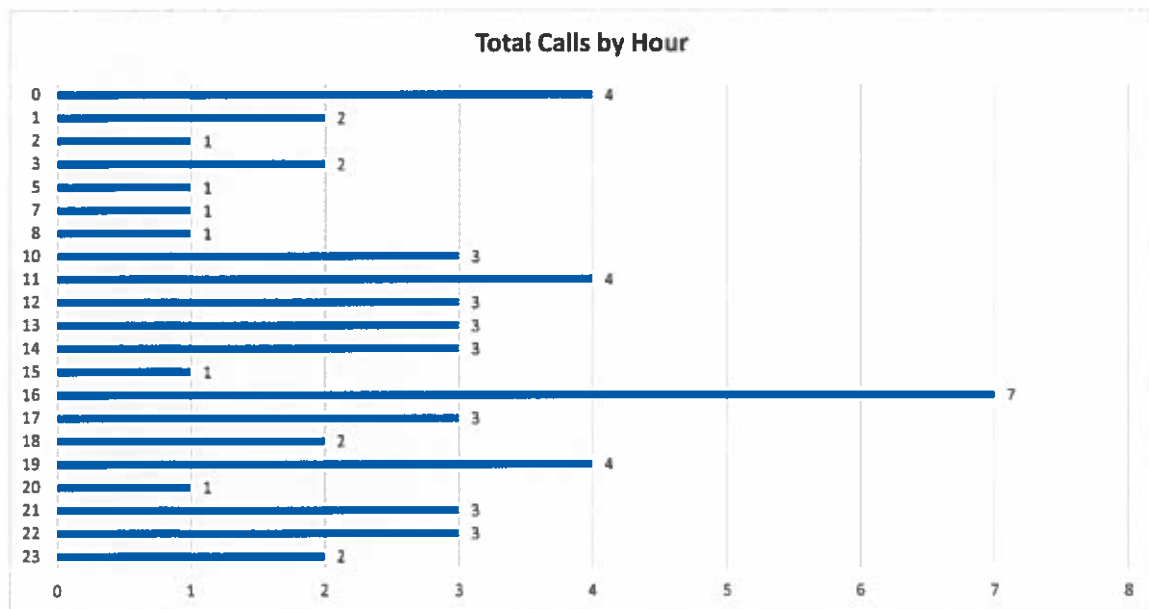
Penn State Health Life Lion
August 2021



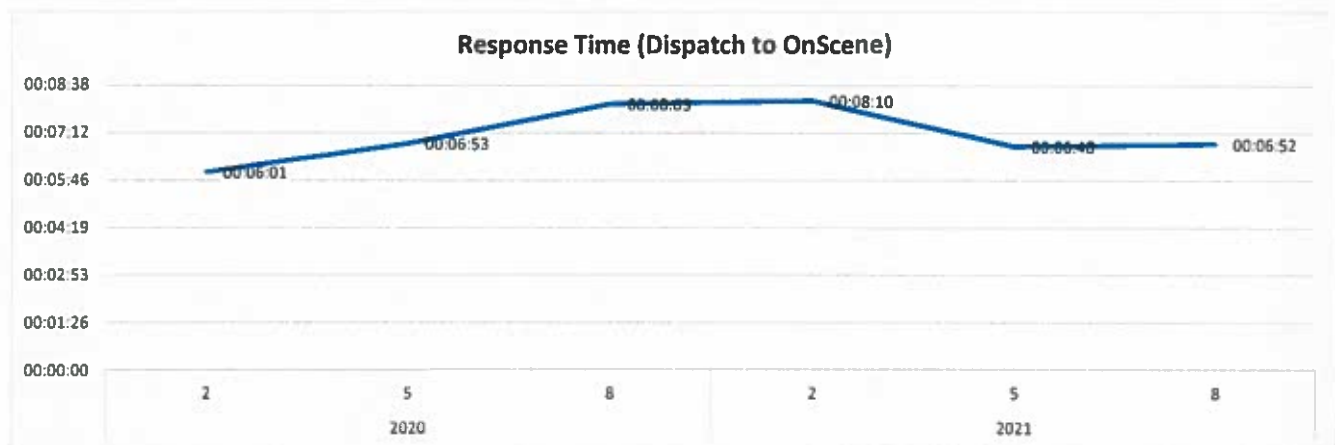
Penn State Health Life Lion
August 2021



Penn State Health Life Lion
August 2021



Penn State Health Life Lion August 2020 - August 2021



Missed calls in Mount Joy Borough August 2021-23 Calls were covered

8/1/2021 @ 1543 Class 2 Call covered by 86-2

773 @ 1426 on an MCI in East Hempfield Twp

8/3/2021 @ 1720 Class 1 86-2

773 @ 1605 on a Class 1 call in Mt Joy Twp

8/4/2021 @ 2213 Class 3 86-1

77-32 @ 2143 on a Class 1 call in Mt Joy Borough

8/5/2021 @ 0940 Class 1 86-2

77-3-@ 0920 on Class 3 call in West Hempfield Township

8/7/2021@ 1642 Class 3 86-2

77-3 @ 1526 on a class 1 call in Mt Joy Borough

8/8/2021 @ 1402 Class 1 86-1

77-3 @ 1328 on a Class 1 call in Columbia Borough

8/11/2021 @ 1052 Class 2 86-2

77-3 @ 1006 on a class 2 call in West Donegal Township

8/11/2021@ 2008 Class 2 86-2

77-32 @ 1855 on a Class 3 call in Mt Joy Township

8/12/2021 @ 2124 Class 1 86-2

77-32 @ 1958 on a Class 1 call in Mt Joy Township

8/15/2021 @ 1626 Class 1 86-2

77-3 @ 1519 on a Class 1 call in Mt Joy Township

8/19/2021 @ 1336 Class 1 86-11

7703 @ 1301 on a Class 1 call in Mt Joy Borough

8/20/21 @ 0836 Class 1 86-2

77-3 @ 0810 on a Class 2 in East Donegal Township

8/21/2021 @ 1656 Class 1 86-2

77-3 @ 1604 on a Class 3 call in Mt Joy Borough

8/22/21 @ 1842 Class 2 86-1

77-32 on an EMS activity

8/23/21 @ 1148 Class 1 86-2

77-3@1015 on a Class 1 in Columbia Borough

8/23/21 @ 1559 Class 3 86-5

77-3 @ 1523 ion a Class 1 call in Mt Joy Borough

8/24/21 @ 1838 Class 2 86-2-Call canceled

77-32 @ 1824 on a Class 1 call in Columbia Borough

8/25/2014 @ 1452 Class 1 86-11

77-3@1413 Class 1 call in Manor Township

8/25/21 @ 1102 Class 3 86-2

77-3 @ 0954 on a Class 1 call in Rapho Township

8/23/21 @ 1431 Class 1 86-1

77-3 on a transport

8/27/21 @ 2028 Class 3 86-2

8/27 @ 2028 Class 3 86-5

77-32 on a transport



55 East Main Street : Mount Joy, PA 17552 : 717.653.4227
 mainstreetmountjoy.com : info@mainstreetmountjoy.com

MOUNT JOY BOROUGH COUNCIL REPORT FOR AUGUST 2021 ACTIVITIES

I'm using this month's report to summarize some of the \$ MSMJ has put back into the downtown business community since January 2021. This is a valuation of the services we have provided and project we're currently working on with businesses. Valuation is based on market value if businesses were to obtain services outside of MSMJ.

- Website Development (5 businesses) – valued at \$21,000
- Strategic Planning Development (3 businesses) – valued at \$14,000
- Business Advice – valued at \$ covering a variety of topics, including:
 - E-Commerce (3 businesses) – valued at \$1,200
 - Business Budgeting (2 businesses) – valued at \$600
 - Business Conveyance (2 businesses) – valued at \$1,000
 - Branding (3 businesses) – valued at \$6,500
 - IT Consulting (2 businesses) – valued at \$2,500
 - Business model revision (1 business) – valued at \$15,000
- Retail Floor Space Modifications (2 businesses) – valued at \$9,000
- Market Data Research (3 businesses) – valued at \$4,500
- Product Development (4 businesses) – valued at \$20,000
- Business start-ups (6 potential businesses) – valued at \$6,000
- Print Design / Layout Project (1 business) – valued at \$1,500
- Worked with landlords for business recruitment (2 landlords) – valued at their monthly rent

Here are some current projects we are working on that are not complete yet:

- Website Development (2 businesses) – valued at \$10,000
- Social Media Development (2 businesses) – valued at \$2,500
- Business Branding (1 business) – valued at \$8,000
- Print Design / Layout Projects (1 business) – valued at \$1,000
- Strategic Planning (1 business) – valued at \$4,000

Total \$ given back to the MSMJ downtown community so far in 2021: \$128,300

This does not include the time we provide to residents looking for apartments, jobs, unemployment questions, finding businesses or looking for products available in Mount Joy.

This does not include the time for the events we provide to bring a value of sales to businesses during those events.



55 East Main Street : Mount Joy, PA 17552 : 717.653.4227
mainstreetmountjoy.com : info@mainstreetmountjoy.com

2021 Sponsorship Update

Festival of the Arts (postponed until April)

- Major Sponsor : T-Mobile

Chocolate Walk

- Major Sponsor : T-Mobile

Craft Show

- Major Sponsor : T-Mobile
- Major Sponsor : Sheetz Funeral Home

Car Show

- Major Sponsor : T-Mobile
- Major Sponsor : Members 1st Federal Credit Union
- Major Sponsor : Lanco Federal Credit Union
- Major Sponsor : Marietta Notary
- Sponsor: Knowlton Dental Associates
- Sponsor: Whitmoyer Auto Group

Winterfest

- Major Sponsor : T-Mobile
- Sponsor: Olde Square Inn

- T-Mobile is a Diamond Sponsor of MSMJ for 2021.



MILANOF-SCHOCK LIBRARY

1184 Anderson Ferry Road, Mount Joy, PA 17552

Tel: 717.653.1510 Fax: 717.653.4030

www.mslibrary.org

Milanof-Schock Library is a community resource that enriches lives through, education, information, exploration, and socialization.

Serving East Donegal Township, Marietta Boro, Mount Joy Boro, Mount Joy Township & Rapho Township

July 2021- Compiled by Joseph McIlhenney, Executive Director
Contributors: Susan Craine, Kim Beach, Jan Betty & Kirstin Rhoades

| July 2021 Statistics | 2021 | 2021 YTD | 2020 | 2020 YTD | 2019 | 2018 |
|---------------------------------|---------------|----------------|---------------|---------------|---------------|---------------|
| TOTAL CIRCULATION | 18,140 | 106,666 | 13,804 | 58,178 | 21,661 | 19,615 |
| OVERDRIVE & E format | 1,605 | 9,970 | 1,442 | 9,557 | 1,047 | 1,179 |
| NEW PATRONS | 111 | 401 | 41 | 119 | 119 | 146 |
| PATRON COUNT | 5,400 | 29,151 | 3,626 | 20,383 | 8,200 | 8,825 |
| Computer Log-ins | 384 | N | 281 | 1,389 | 530 | 707 |
| Wireless Access | 309 | N | 225 | 1,770 | 504 | 560 |
| PASSPORTS | 89 | 555 | 38 | 379 | 65 | 73 |
| Website Users | 4,108 | | | | | |
| Facebook | 2,070 | | | | | |
| Instagram | 692 | | | | | |

| | |
|--|------------|
| DONATIONS FOR USED BOOKS SOLD IN LOBBY | \$964.10 |
| ADDED DONATIONS | \$497.00 |
| DONATIONS as PRIZES | \$219.00 |
| TOTAL INCOME/SAVINGS FROM USED BOOKS | \$1,680.10 |

| PASSPORT INCOME 2019 AND 2021 | | | | | | | | |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|--------|
| | JAN | FEB | MARCH | APRIL | MAY | JUNE | JULY | TOTAL |
| 2019 | 6,258 | 6,607 | 7,712 | 6,178 | 4,846 | 4,974 | 4,035 | 40,610 |
| 2021 | 4,022 | 2,765 | 5,880 | 3,390 | 3,793 | 4,193 | 3,976 | 28,019 |

Executive Summary

July was busy and the library was in high gear. Programs went from a soap bubble expert to soap carving with a master woodcarver, from an award-winning equestrian to a Medicare expert, from chalk to slugs, from reptiles and dinosaurs to a visit from Zoo America. In the midst of all this staff dealt with record-breaking heat and worked on getting ready for the Library's Benefit Auction [Aug 28th]. There was barely time for MSL staff to catch our breath!

- Library's Benefit Auction has 8 Gold Sponsors -- More than any other year by far
- Youth Summer Reading Program events were attended by nearly 1,000 people
- Donations for Used Books in Lobby is nearly \$1,000 for third month in a row

ALL PROGRAMMING / CLUBS / PROCTORS NUMBERS

| ADULT DATA | Programs | Participants | Prog. Total YTD | Participants YTD |
|---------------------|----------|--------------|-----------------|------------------|
| In-Library Programs | 3 | 62 | 9 | 104 |
| CLUBS | 6 | 33 | 47 | 181 |
| Proctoring | 0 | 0 | 0 | 0 |
| Totals | 9 | 95 | 56 | 285 |

| YOUTH DATA | Programs | Participants | Prog. Total YTD | Participants YTD |
|---------------------|-----------|--------------|-----------------|------------------|
| In-Library Programs | 28 | 981 | 153 | 2998 |
| Virtual Videos | 0 | 0 | 27 | 1048 |
| Virtual Programs | 0 | 0 | 2 | 672 |
| Totals | 28 | 981 | 182 | 4718 |

| Volunteer Hours | Hours | Total YTD |
|-----------------|--------|-----------|
| | 101.75 | 754.75 |

Joseph

- Meetings: LSLC [Director's Meeting], July 2; Nolt Electric [convert indoor lights to LED], July 6; Mount Joy Township Council, July 19; Chamber of Commerce Picnic, July 14; Premium Card Solutions [credit card machine], July 21; Mount Joy Financial Committee, [Auction Sponsorship] July 22; Security System [Choice], July 28; Lancaster County Library Association [Fall Planning], July 29.
- Staff: Core4 meeting July 27; Auction Meetings July 1, 13 and 28; Newspaper interviews [Auction], July 15 & 27; Extra Give Zoom meeting, July 22.

Community/Service Point (Susan)

- Weeded collection in sections that needed it
- Attended staff meeting and Auction meeting/planning session
- Trained new volunteer
- Assembled Summer Reading Program prize packets
- Passport tracking

Youth Services (Jan)

- Had great numbers in July...Jesse the reptile guy, the Bubble Man and Zoo America were huge successes. Spent a lot of time planning and doing live programs.
- Dropped in on one of the system-wide teen virtual author sessions (Teen Zine). Looked like fun. It's basically a guided writing program. They've been getting between 12 and 15 teens countywide for each session. Good way to have tween/ teen participation, even if it doesn't get them physically into the library!
- Attended picture book palooza an online seminar about children's picture books. It was ok, but probably would not do another one!
- Worked on book orders; will get cracking on more children's movies in August.
- Morgan and Megan (the M&M team) put together 4 weeks of a great passive teen survey. Week 1: what is your favorite genre? (Fantasy) 30 participants. Week 2: Who is the most dastardly villain? (Voldemort) 15 participants. Week 3: Who has the best book cover? (Ghost Wood Song by Erica Waters) 12 participants. Week 4: Which Hogwarts house are you? (Gryffindor and Hufflepuff tied) 28 participants. The best part for me is that teens had to be in the library to participate!

Public Relations/Promotions (Kirstin)

- **CONSTANT CONTACT:**
 - August 2021 Enews: sent to 2,935 contacts, added 23 new contacts; 639 opens (22.7%), 74 clicks (11.6%), 1 unsubscribes. 56.2% opened on PCs, 43.8% opened on devices
- **SOCIAL MEDIA:**
 - Facebook – Total Page Followers 2,070; 12 New Follows; 5,474 people reached (went down, most-likely because I've been posting less); 2,285 post engagements (less posts mean less engagement)
 - Instagram – 692 followers = 28 NEW followers
 - Kept patrons updated with new books on the shelves – Adults thru Children
 - Created new weekly post: "This Week at the Library" to pin to top of page; stopped posting individual weekly program promotions
- **3 PRESS RELEASES** - Distributed via news media, municipalities, and Chamber of Commerce.
- **WEBSITE**
 - 4,108 website entrances; 9,325 page views; 1,609 page views of calendar; 306 views of Family Story Time; 184 views of Passport page
 - Created 1 new banner for the home page
 - Updated programs for August.
- **AUCTION**
 - Designed promotional poster and postcard invitation
 - Attended 2 meetings
- **MISC**
 - Added more photos to our Google page; updated summer hours
 - Continued the emptying of the book donation shed and gathering books for sale in lobby, which made over \$900 in July
 - Listed sign changes for the street marquee
 - Updated August print calendar
 - Use Sparkpost App to create monthly program promos to be used on Social Media platforms and Enews

Volunteers/Programming/Fundraising (Kim)

- **Auction 2021**
 - Gold Sponsors: We have 7 Gold sponsors as of August 5! More than any other year by far!
 - Planning continues. Currently (August 5) we have received almost \$15,000 in sponsorships, ads and auction items!
 - PLEASE plan to be at the auction and tell all of your friends and neighbors.
 - Met with writers from Elizabethtown Advocate and Merchandiser.
- **Adult Summer Reading Program: Reading Olympics**
 - Huge participation continues.
 - First round of gold medal prizes were a big hit.
- **Hosted an extremely successful blood drive for Central PA Blood Bank.**
 - 38 people come out to donate; were able to collect from 27 of them.
 - That saves the lives of (81) patients in our local area.
 - They are hoping to come back in October.
- **Met with local girl scout who would like to do her Gold Award Project (similar to BSA Eagle Scout project) to benefit MSL.**
- **Welcomed one Adult Club back to in-person meetings in the library. Another club is starting in-person meetings in August.**
- **Worked on programming for 2021.**

Mount Joy Borough

Zoning & Code Department

REPORT

To: Borough Council; Borough Manager

From: Stacie Gibbs- Zoning, Codes and Planning Administrator

Date: August 2021

Re: August 2021 Zoning, Code and Planning Report

UPDATES

- The Lancaster County Commissioners adopted Ordinance 150 of 2021 approving a 5-year extension of the Local Economic Revitalization Tax Act for Mount Joy Borough.
- Laurel Harvest Labs- Currently working through interior finishes, and the majority of mechanical work has been completed in the office area and continuing in the production spaces. Site work completion will be happening shortly.
- Mount Joy Senior Housing, 240 W. Main Street- Permit application and construction drawings received and in review. Awaiting documents and plans for execution and recording.
- Fox Chapel Publishing, 950 Square Street- Permit application and construction drawings received and in review for approved addition. This project previously went through Land Development reviews and approval and has been recorded.
- Received completed Demolition permit for 922 W. Main Street. The property is a vacant single-family home approximately 1,240sf. The current owner advised, in the midst of renovations the previous owner passed away. Walls were half-demolished, bathroom fixtures removed and plumbing exposed, etc. He further advised the cost of making the renovations to code were prohibitive. The current owner advised he would like to consult with his architect to come up with the best and highest use for the future of the property. He would also like to discuss the future of the property with the Chamber of Commerce and Borough officials to see what can be built that would be a true asset to bring more customers and visitors into the community. He advised he would look to do this in the next 2-3 years depending on market conditions. The permit is currently in the required 45 day waiting period for potential historic structures and will be issued on September 18, 2021.

REPORT

- Fulfilled several RTKL requests.
- Conference call with real estate agent regarding 1 W. Main Street and potential uses.
- Conference call with Giant regarding layout for curb side pick-up.
- Conference call with property owner of 624 School Lane regarding possible future project for in-ground pool.
- Reviewed Land Development plans and Solicitor and Engineer review letters for Mount Joy Dental's proposed parking lot expansion.
- Conference call with Wesley of CGA Architects to review questions on submitted construction documents for 950 Square Street.
- Received and reviewed 100% completed Mount Joy Borough Active Transportation Implementation Guidebook.
- Received and reviewed two Zoning Hearing Board (ZHB) cases for September.
- Drafted ZHB Agenda, public notices, and legal advertisement.

MEETINGS

- 8/10/21- Attended County Commissioners work session and provided presentation on LERTA extension.
- 8/11/21- Attended County Commissioners meeting regarding action on the LERTA extension.
- 8/24/21 staff meeting.
- 8/26/21- meeting with Garber and DC Gohn to discuss stormwater and landscaping regarding 202 Fairview Street.
- 8/26/21- Administration and Finance Committee meeting.
- 8/31/21 – preconstruction meeting at 950 Square Street for Fox Chapel Publishing regarding their approved addition plan.

TRAINING

- Completed Pennsylvania Notary Basic and Continuing Education Course – Required for Notary License renewal.

MOUNT JOY BOROUGH-Violations: " 8/1/2021 - 8/31/2021

AUGUST 2021 VIOLATION AND CODE REPORT

Building

Open

Total number of Open Building Violations: 1

Fire

Closed

Total number of Closed Fire Violations: 1

Property

Closed

Total number of Closed Property Violations: 29

Open

Total number of Open Property Violations: 26

Trees/Bushes

Closed

Total number of Closed Trees/Bushes Violations: 2

Zoning

Closed

Total number of Closed Zoning Violations: 2

Open

Total number of Open Zoning Violations: 1

62

MOUNT JOY BOROUGH Inspections by STACIE GIBBS: 8/1/2021 - 8/31/2021

AUGUST 2021 RENTAL INSPECTION REPORT

| Type / No / TaxNo / Subtype / Task / Notes | Pass/Fail/Comp Fee | Inspector | Date |
|---|--|-----------|------|
| Tenant - Property | | | |
| 3 N HIGH ST 1ST FL - Tenant - Property | 4509181100000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/17/2021 | |
| 3 N HIGH ST 2ND FL - Tenant - Property | 4509181100000 | | |
| Tenant Space | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> SG | 8/17/2021 | |
| smoke detectors not working | | | |
| 42 E MAIN ST APT B - Tenant - Property | 4507724100000 | | |
| Tenant Space | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> SG | 8/5/2021 | |
| Lots of mold on ceiling in bathroom; peeling paint on walls in bathroom; railing required on rear stairs; noted for the record strong cat odor. | | | |
| 42 E MAIN ST APT A - Tenant - Property | 4507724100000 | | |
| Tenant Space | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> SG | 8/5/2021 | |
| This unit is vacant and was not accessible. Property is listed for sale. Peeling paint around trim of 3rd floor window; missing siding by this window; replace deteriorated front porch floor boards | | | |
| 123 S DELTA ST APT D - Tenant - Property | 4505850200000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/3/2021 | |
| 123 S DELTA ST APT C - Tenant - Property | 4505850200000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/3/2021 | |
| 1- 10 year required in living room Completed. | | | |
| 123 S DELTA ST APT B - Tenant - Property | 4505850200000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/3/2021 | |
| Unit is vacant and they are working on cosmetic like painting. 1- 10 year in living room and bedroom. | | | |
| 123 S DELTA ST APT A - Tenant - Property | 4505850200000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/3/2021 | |
| 44 W DONEGAL ST - Tenant - Property | 4504875200000 | | |
| Tenant Space | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> SG | 8/13/2021 | |
| Rubbish on side of garage and large TV; high weeds and grass in rear on this side of the property only; 2A fire extinguisher needed; observed pool with no permit on file | | | |
| 53 W DONEGAL ST APT 2 - Tenant - Property | 4504514900000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/13/2021 | |
| 53 W DONEGAL ST APT 1 - Tenant - Property | 4504514900000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/13/2021 | |
| 447 E MAIN ST - Tenant - Property | 4504861200000 | | |

| Type / No / TaxNo / Subtype / Task / Notes | Pass/Fail/Comp Fee Inspector | Date |
|--|--|-----------|
| Tenant - Property | | |
| 447 E MAIN ST - Tenant - Property | 4504861200000 | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/5/2021 |
| 2A fire extinguisher needed | | |
| 445 E MAIN ST - Tenant - Property | 4504861200000 | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/5/2021 |
| 443 E MAIN ST - Tenant - Property | 4504861200000 | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/5/2021 |
| repair door trim at the bottom; | | |
| 437 E MAIN ST - Tenant - Property | 4504861200000 | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/5/2021 |
| screen in window above door is ripped; Remove broken branches hanging from tree. | | |
| 435 E MAIN ST - Tenant - Property | 4504861200000 | |
| Tenant Space | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> SG | 8/5/2021 |
| Chipped and peeling paint on balcony, repair post | | |
| 433 E MAIN ST - Tenant - Property | 4504861200000 | |
| Tenant Space | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> SG | 8/5/2021 |
| repair/replace porch floor boards that are deteriorated; peeling/chipped paint on porch floor, railings and posts and some window trims throughout; check to see if leak in kitchen ceiling. Tenant advised it was fixed but still has remnants of a leak; | | |
| 31 NEW HAVEN ST APT B - Tenant - Property | 4501530800000 | |
| Tenant Space | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> SG | 8/13/2021 |
| repair portion of bathroom ceiling and storage room wall; 2nd floor exterior porch is deteriorating and needs to be replaced. | | |
| 31 NEW HAVEN ST APT A - Tenant - Property | 4501530800000 | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/13/2021 |
| 2A fire extinguisher required | | |
| 27 MOUNT JOY ST - Tenant - Property | 4502068200000 | |
| Tenant Space | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> SG | 8/4/2021 |
| Side porch deterioration floor boards and trim need replaced; missing siding on small portion next to side porch; observed peeling paint on exterior window trim; rear exterior porch roof and trim peeling paint; repair small area of concrete on rear porch; front porch needs railing for 3 steps; front porch floor needs replaced many bad and loose boards; patch small hole in 1st floor bathroom near corner by tub; 1st floor bath exhaust fan does not work; 2A fire extinguisher required; CO detectors required; 10-year smoke in basement required; 2nd floor rear broken window in storage room needs replaced. | | |
| 919 W MAIN ST - Tenant - Property | 4503345400000 | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/16/2021 |
| 253 LAKESIDE XING - Tenant - Property | 4506975800000 | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | 8/12/2021 |
| 2A fire extinguisher needed | | |

| Type / No / TaxNo / Subtype / Task / Notes | Pass/Fail/Comp Fee | Inspector | Date |
|--|--|-----------|-----------|
| Tenant - Property | | | |
| 251 LAKESIDE XING - Tenant - Property | 4506857500000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | | 8/12/2021 |
| 2A fire extinguisher needed | | | |
| 245 LAKESIDE XING - Tenant - Property | 4506463900000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | | 8/12/2021 |
| 2A fire extinguisher needed | | | |
| 247 LAKESIDE XING - Tenant - Property | 4506661000000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | | 8/12/2021 |
| 2A fire extinguisher needed | | | |
| 249 LAKESIDE XING - Tenant - Property | 4506759200000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | | 8/12/2021 |
| 2A fire extinguisher needed | | | |
| 216 LAKESIDE XING 209 - Tenant - Property | 4509128600000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | | 8/12/2021 |
| 2A fire extinguisher needed | | | |
| 584 W MAIN ST - Tenant - Property | 4508616800000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | | 8/10/2021 |
| 2A fire extinguisher | | | |
| 203 E MAIN ST 2ND FL - Tenant - Property | 4509181100000 | | |
| Tenant Space | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SG | | 8/17/2021 |
| Total Inspections: 29 | | | |

MOUNT JOY BOROUGH-MultiSelect Permits App Date: 8/1/2021 - 8/31/2021

AUGUST 2021 ZONING AND CONSTRUCTION PERMIT REPORT

| PermitNo | App Date | Issue Date | Owner | Project Addr | Descript | Fee |
|------------------------------------|-----------|------------|------------------------------|-----------------------|--|--------------------|
| Building | | | | | | |
| Com-Addition | | | | | | |
| Pending | | | | | | |
| 210770 | 8/20/2021 | | FOX CHAPEL PUBLISHING | 950 SQUARE ST | Alterations for Addition | \$10,115.00 |
| Total Com-Addition 1 | | | | | | \$10,115.00 |
| Com-Alterations | | | | | | |
| Pending | | | | | | |
| 210765 | 8/10/2021 | | MANORVEST LLC | 240 W MAIN ST | Alterations/renovations | \$34,606.00 |
| Total Com-Alterations 1 | | | | | | \$34,606.00 |
| Com-pit | | | | | | |
| Active | | | | | | |
| 210757 | 8/5/2021 | 8/20/2021 | JUNIATA RIVER DEVELOPMENT CO | 1160 E MAIN ST | Pit Installation | \$415.00 |
| Total Com-pit 1 | | | | | | \$415.00 |
| deck | | | | | | |
| Active | | | | | | |
| 210755 | 8/5/2021 | 8/12/2021 | WITMER ERICA SHEARER SCOTT | 325 W DONEGAL ST | deck | \$121.00 |
| Total deck 1 | | | | | | \$121.00 |
| porch | | | | | | |
| Active | | | | | | |
| 210771 | 8/20/2021 | 9/3/2021 | ERB SHAWN ERB JILL | 224 W MAIN ST | Construct front porch | \$117.00 |
| Total porch 1 | | | | | | \$117.00 |
| Residential repairs | | | | | | |
| Complete | | | | | | |
| 210754 | 8/4/2021 | 8/12/2021 | H ALLEN INVESTMENTS LLC | 8 MANHEIM ST | Repairs to front of home from vehicle da | \$109.00 |
| Total Residential repairs 1 | | | | | | \$109.00 |
| Res-Renovations | | | | | | |
| Active | | | | | | |
| 210762 | 8/9/2021 | 8/12/2021 | MESSIAH FAMILY SERVICES | 503 UNION SCHOOL ROAD | Enclose back porch | \$145.00 |
| 210773 | 8/23/2021 | 9/3/2021 | JOHN CROUMER LAURA VASH | 115 LAKESIDE XING | Finish basement | \$265.00 |
| Total Res-Renovations 2 | | | | | | \$410.00 |
| SFD | | | | | | |
| Active | | | | | | |
| 210764 | 8/10/2021 | 8/16/2021 | CHARLAN GROUP | 315 MUSSER RD | New single family | \$1,465.00 |
| 210763 | 8/10/2021 | 8/16/2021 | CHARLAN GROUP | 100 LAKESIDE XING | New single family | \$1,265.00 |
| Total SFD 2 | | | | | | \$2,730.00 |
| solar panels | | | | | | |
| Pending | | | | | | |
| 210748 | 8/3/2021 | | SMITH JENNIFER | 114 LAKESIDE XING | Install solar panels | \$201.00 |
| Total solar panels 1 | | | | | | \$201.00 |
| Total Building 11 | | | | | | \$48,824.00 |

Electrical

Electrical

| | | | | | | |
|---------------------------|-----------|-----------|----------------------------|---------------|----------------------------------|----------------|
| Active | | | | | | |
| 210775 | 8/25/2021 | 8/31/2021 | ROBERT AND THERESA EHRHART | 524 BRUCE AVE | Upgrade electric/install hot tub | \$65.00 |
| Total Electrical 1 | | | | | | \$65.00 |
| Total Electrical 1 | | | | | | \$65.00 |

ROW

new service

| PermitNo | App Date | Issue Date | Owner | Project Addr | Descript | Fee |
|-------------------------------|-----------|------------|------------------------------------|-----------------------|---|-------------|
| ROW | | | | | | |
| new service | | | | | | |
| Denied | | | | | | |
| 210753 | 8/3/2021 | | CHARLAN GROUP | 101 LAKESIDE XING | New service | |
| Total new service 1 | | | | | | \$0.00 |
| Total ROW 1 | | | | | | \$0.00 |
| Use | | | | | | |
| Motor Vehicle Storage | | | | | | |
| Active | | | | | | |
| 210778 | 8/27/2021 | 8/27/2021 | STACY KLINEDINST | 53 DONEGAL SPRINGS RD | Storage of red Honda Civic | \$80.00 |
| Total Motor Vehicle Storage 1 | | | | | | \$80.00 |
| Total Use 1 | | | | | | \$80.00 |
| Zoning | | | | | | |
| Fence | | | | | | |
| Active | | | | | | |
| 210756 | 8/5/2021 | 8/5/2021 | RUGH JENNIFER L RUGH BRIAN J | 598 UNION SCHOOL RD | Install fence | \$40.00 |
| 210746 | 8/3/2021 | 8/3/2021 | PRICE DONALD G JR PRICE FANNIE S | 35 DETWILER AVE | Fence | \$40.00 |
| 210766 | 8/11/2021 | 8/11/2021 | TODD ADAM | 831 WATER ST | Install fence | \$40.00 |
| 210777 | 8/26/2021 | 8/26/2021 | MIKOCHIK STEPHEN & EILEEN | 17 N JACOB ST | Install fence | \$40.00 |
| Total Fence 4 | | | | | | \$160.00 |
| Patio | | | | | | |
| Active | | | | | | |
| 210760 | 8/9/2021 | 8/9/2021 | BRUBAKER JAMES F REVOCABLE TRUST | 322 FARMVIEW LN | Install patio | \$40.00 |
| Total Patio 1 | | | | | | \$40.00 |
| Special Event | | | | | | |
| Active | | | | | | |
| 210758 | 8/5/2021 | 9/10/2021 | W S EBERSOLE POST OF THE AMERI LEG | 560 CLAY ALY | Special Event- Craft Show and Flea Mark | \$60.00 |
| 210772 | 8/20/2021 | 9/8/2021 | W S EBERSOLE POST OF THE AMERI LEG | 560 CLAY ALY | The Market at Mount Joy | \$60.00 |
| Total Special Event 2 | | | | | | \$120.00 |
| Temporary | | | | | | |
| Active | | | | | | |
| 210759 | 8/5/2021 | 9/3/2021 | FLORIN CHURCH OF THE BRETHRE | 815 BRUCE AVE | Special Event- Outdoor Movie | \$60.00 |
| Total Temporary 1 | | | | | | \$60.00 |
| Total Zoning 8 | | | | | | \$380.00 |
| Total Permits: 22 | | | | | | \$49,349.00 |

BUILDING PERMITS ANALYSIS OF FEES RECEIVED

| MONTH | 2018 | 2019 | 2020 | 2021 |
|-----------|---------------------------------------|---------------------------------------|--|---------------------------------------|
| JANUARY | \$ 496.00 | \$ 645.00 | \$ 4,874.00 | \$ 800.00 |
| FEBRUARY | \$ 837.00 | \$ 375.00 | \$ 525.00 | \$ 375.00 |
| MARCH | \$ 3,729.00 | \$ 1,293.00 | \$ 4,212.00 | \$ 4,275.00 |
| APRIL | \$ 2,980.80 | \$ 3,160.00 | \$ 631.00 | \$ 5,207.00 |
| MAY | \$ 7,371.00 | \$ 1,910.00 | \$ 967.00 | \$ 1,806.00 |
| JUNE | \$ 1,295.00 | \$ 3,058.00 | \$ 4,025.00 | \$ 4,270.00 |
| JULY | \$ 10,276.00 | \$ 1,905.00 | \$ 987.00 | \$ 1,456.00 |
| AUGUST | \$ 4,237.00 | \$ 5,645.00 | \$ 2,324.00 | \$ 49,349.00 |
| SEPTEMBER | \$ 2,273.00 | \$ 3,752.00 | \$ 2,457.00 | |
| OCTOBER | \$ 6,431.10 | \$ 1,714.00 | \$ 22,351.00 | |
| NOVEMBER | \$ 2,027.00 | \$ 1,994.00 | \$ 1,687.00 | |
| DECEMBER | \$ 593.68 | \$ 859.00 | \$ 4,161.00 | |
| TOTALS | (\$42,546.58 Budgeted \$35,000) | (\$26,310.00 Budgeted \$35,000) | (\$49,201.00 Budgeted- \$25,000) | (\$67,538.00 Budgeted \$25,000) |

MOUNT JOY BOROUGH-StormWater Permits App Date: 8/1/2021 - 8/31/2021

AUGUST 2021 STORMWATER PERMIT REPORT

| PermitNo | App Date | Issue Date | Owner | Project Addr | Descript | Fee |
|---------------------------|----------|------------|----------------------------------|-----------------|---------------|----------------|
| StormWater | | | | | | |
| Exemption | | | | | | |
| Active | | | | | | |
| 210761 | 8/9/2021 | 8/9/2021 | BRUBAKER JAMES F REVOCABLE TRUST | 322 FARMVIEW LN | Install patio | \$50.00 |
| Total Exemption 1 | | | | | | \$50.00 |
| Total StormWater 1 | | | | | | \$50.00 |
| Total Permits: 1 | | | | | | \$50.00 |

STORMWATER PERMITS COMPARISON SPREADSHEET

| MONTH | 2018 | 2019 | 2020 | 2021 |
|-----------|--|--|---------------------------------------|--|
| JANUARY | X | \$ 100.00 | \$ 50.00 | X |
| FEBRUARY | \$ 100.00 | \$ 200.00 | \$ 225.00 | \$ 50.00 |
| MARCH | \$ 325.00 | \$ 325.00 | \$ 600.00 | \$ 300.00 |
| APRIL | \$ 200.00 | \$ 500.00 | \$ 100.00 | \$ 625.00 |
| MAY | \$ 350.00 | \$ 450.00 | \$ 300.00 | \$ 350.00 |
| JUNE | \$ 250.00 | \$ 525.00 | \$ 675.00 | \$ 325.00 |
| JULY | \$ 375.00 | \$ 400.00 | \$ 300.00 | \$ 100.00 |
| AUGUST | \$ 150.00 | \$ 425.00 | \$ 300.00 | \$ 50.00 |
| SEPTEMBER | \$ 50.00 | \$ 250.00 | \$ 475.00 | |
| OCTOBER | \$ 200.00 | \$ 50.00 | \$ 575.00 | |
| NOVEMBER | \$ 50.00 | X | \$ 250.00 | |
| DECEMBER | \$ 50.00 | \$ 100.00 | \$ 50.00 | |
| TOTALS | (\$2,100.00 Budgeted \$2,500.00) | (\$3,325.00 Budgeted \$2,000.00) | (\$ 3,900.00 Budgeted- \$2,000) | (\$1,800.00 Budgeted \$2,500.00) |

MOUNT JOY BOROUGH-Rental Permits App Date: 8/1/2021 - 8/31/2021

AUGUST 2021 RENTAL LICENSE PERMIT REPORT

| PermitNo | App Date | Issue Date | Owner | Project Addr | Descript | Fee |
|--|-----------|------------|------------------------|-----------------------|-------------------------|-----------------|
| Rental | | | | | | |
| 2021 Residential Rental | | | | | | |
| Active | | | | | | |
| 210769 | 8/16/2021 | 8/16/2021 | STACY KLINEDINST | 53 DONEGAL SPRINGS RD | 53 DONEGAL SPRINGS ROAD | \$50.00 |
| 210752 | 8/3/2021 | 8/3/2021 | PRIME HOME INVESTMENTS | 584 W MAIN ST | 584 W MAIN STREET | \$50.00 |
| Pending | | | | | | |
| 210776 | 8/25/2021 | | SNAVELY TYLER & TESSA | 212 MOUNT JOY ST | 212 MOUNT JOY STREET | |
| 210768 | 8/12/2021 | | MARTIN BRENDA S | 303 SAGAMORE HL | 303 SAGAMORE HILL | |
| Total 2021 Residential Rental 4 | | | | | | \$100.00 |
| Total Rental 4 | | | | | | \$100.00 |
| Total Permits: 4 | | | | | | \$100.00 |

RENTAL LICENSES COMPARISON SPREADSHEET

| MONTH | 2018 | 2019 | 2020 | 2021 |
|-----------|---|---|--|---|
| JANUARY | \$ 23,600.00 | \$ 32,100.00 | \$ 33,500.00 | \$ 36,300.00 |
| FEBRUARY | \$ 29,650.00 | \$ 18,375.00 | \$ 14,620.00 | \$ 12,000.00 |
| MARCH | \$ 14,250.00 | \$ 17,650.00 | \$ 19,200.00 | \$ 20,150.00 |
| APRIL | \$ 1,050.00 | \$ 450.00 | \$ 1,350.00 | \$ 600.00 |
| MAY | \$ 150.00 | \$ 50.00 | \$ 200.00 | \$ 250.00 |
| JUNE | \$ 100.00 | \$ 150.00 | X | \$ X |
| JULY | \$ 150.00 | \$ 100.00 | \$ 200.00 | \$ X |
| AUGUST | \$ 400.00 | \$ 250.00 | \$ 100.00 | \$ 100.00 |
| SEPTEMBER | \$ 200.00 | \$ 50.00 | \$ 100.00 | |
| OCTOBER | \$ 100.00 | \$ 100.00 | X | |
| NOVEMBER | X | X | X | |
| DECEMBER | X | \$ 50.00 | X | |
| TOTALS | \$69,700 + \$725 late fees = \$70,425 (Budgeted \$68,000) | \$69,325.00 + \$900.00 = \$70,225 late fees (Budgeted \$70,000) | (\$69,270.00 + \$750.00 late fees = \$70,020 (Budgeted \$70,000) | (\$69,400 + \$350 late fees = \$69,650 \$Budgeted \$71,500) |

STREET OPENING PERMITS COMPARISON SPREADSHEET

| MONTH | 2018 | 2019 | 2020 | 2021 |
|------------------|-------------------------|-------------------------|------------------------------------|-------------------------------------|
| JANUARY | \$ 375.00 | \$ 300.00 | \$ 75.00 | \$ 300.00 |
| FEBRUARY | \$ 75.00 | \$ 150.00 | X | \$ 525.00 |
| MARCH | \$ 130.00 | X | \$ 150.00 | \$ 300.00 |
| APRIL | X | \$ 75.00 | X | \$ 225.00 |
| MAY | \$ 225.00 | \$ 220.00 | X | \$ 290.00 |
| JUNE | \$ 75.00 | \$ 75.00 | X | \$ 150.00 |
| JULY | \$ 150.00 | \$ 75.00 | X | X |
| AUGUST | \$ 300.00 | \$ 75.00 | \$ 75.00 | X |
| SEPTEMBER | \$ 150.00 | \$ 75.00 | X | |
| OCTOBER | \$ 75.00 | \$ 450.00 | X | |
| NOVEMBER | \$ 300.00 | \$ 450.00 | \$ 75.00 | |
| DECEMBER | \$ 225.00 | \$ 300.00 | X | |
| TOTALS | (\$2,080.00 Budgeted | (\$2,245.00 Budgeted | (\$375.00 Budgeted - \$1,500 | (\$1,790.00 Budgeted \$1,000) |



**BOROUGH OF MOUNT JOY
STORMWATER MANAGEMENT REPORT**

TO: Mount Joy Borough Council

FROM: Dave Salley, Assistant Public Works Director

DATE: September 7, 2021

RE: Stormwater Management Report for August

Stormwater/Public Works:

- Meeting with contractor for a pre-construction meeting for the Rotary Park swale stormwater project
- Public Works staff meeting for 5-year capital budget
- Meeting w/ PennDOT for SR 772 paving project
- TE Connectivity paving project meeting
- Discussion for Parks grants for Kunkle Field
- DEP 902 Recycling Grant pre-application meeting with DEP and LCSWMA
- Pre-construction meeting with contractor for Borough basin reconstruction
- Meeting with Mount Joy Borough Authority discussing future project scheduling
- Meeting with Garber Storage to discuss their lot construction and scheduling
- Meeting with Melhorn Manor's contractor for a future pond project
- Meeting with Kinsley and ARRO to discuss E&S control measures that were put in place at the Borough basin
- Pre-construction meeting at Fox Chapel Publishing
- General and capital budget organization and research
- Hurricane Ida preparations, observance of stormwater facilities and safety precautions
- Response to stormwater concerns from residents
- Heavy equipment demos for 902 grant
- Review active transportation implementation guide
- Meeting with PennDOT and solicitor for train station concerns
- Rholan paving project review and inspection
- Little Chiques Creek streambank restoration grant project overview
- Attended Staff meetings
- Attended PW staff meeting
- Attended Public Works Committee meeting
- Attended Council meeting



**BOROUGH OF MOUNT JOY
PUBLIC WORKS DEPARTMENT
MEMORANDUM**

TO: Mark Pugliese, Borough Manager

FROM: Dennis Nissley, Public Works Director

DATE: September 8, 2021

RE: Public Works Department Activities for August 2021

Following is a list of activities for the Public Works Department for August 2021:

- Parks – Mowing
- Parks – Clean up and haul logs from cutting down trees.
- Parks – General Parks maintenance,
- PW – Weed spraying along curbs
- PW – Weed wacking and swale maintenance
- PW – Install Gabion baskets at Rotary Park swale
- Stormwater – Clean and monitor facilities after significant rainfall events.
- Signs – Repair and replacement as needed
- Compost Site – Screen compost
- Compost Site – Screen topsoil
- Attend Public Works Committee meeting
- Attend Borough Council meeting
- Work on gathering and compiling information and equipment quotes for 2021 DEP 902 grant application
- Meet with DEP and LCSWMA staff for 902 grant pre-application meeting
- Attend staff meetings
- Virtual meeting with PennDOT concerning coordination of 772 repaving and Borough projects
- Oversee fog seal application in Arbor Rose streets.
- Conduct interviews for hiring to fill Public Works Maintenance Technician position
- Meet with new owners of 202 Fairview Street to discuss plans moving forward related to Brady's Alley
- Attend Pre-construction meeting for Borough basin project
- Meet with Borough Engineer, Contractor, and staff to review E&S measures at borough basin
- Meet with contractor for 279 Manheim Street curb replacement
- Staff meetings to work on budget for 2022
- Meet with Borough Authority to review and coordinate street plans and Authority projects planning.
- Attend Pre-construction meeting at 950 Square Street.

To: Mount Joy Borough Councilors, Borough Manager Pugliese & Mayor Bradley

From: Joseph Ardini

August 2021 Authority Administrator Report

1. Clarifier/Thickener Project:
 - Sandblasting of clarifier #3 is complete.
 - Primer has been applied to the bridge and influent piping.
2. Quarterly meter reading was completed.
3. Staff made a repair to a section of sanitary sewer main beside the Gathering Place.
4. Staff made repairs to 3 water service lines, 2 were in Rapho Township and 1 was in Mount Joy Borough.
5. Authority staff will be replacing the watermain on a section of Water Street, work is expected to start in mid-September. Letters have been sent to the affected customers. The work will be east of North Angle Street on Water Street to the end, consisting of approximately 260 feet.
6. Fire Hydrant flushing for this year has been completed.



MOUNT JOY BOROUGH MEMORANDUM

TO: Borough Council & Mayor

FROM: Mark G. Pugliese I, Borough Manager

DATE: September 3, 2021

RE: Manager's Report

- File Reviews continue to be on-going.
- I attended Public Works Committee Meeting on August 9, 2021, as well as I will be attending the Public Safety on August 23, 2021.
- As mentioned previously, we have received the first half of our grant under the American Rescue Plan Act (ARPA) of 2021 in the amount of \$433,225.87. This money must be used for one of the following expenditures.
 - Support Public Health Expenditures
 - Address Negative Economic Impact Caused by the Pandemic
 - Replace Lost Public Sector Revenue
 - Provide Premium Pay for Essential Workers
 - Invest in Water, Sewer, Broadband Infrastructure. (This would include storm water projects.)

Last month I provided some literature for your review that may help explain some ways that we can utilize the funds. After some discussions with Public Works, they provided me with an estimate of storm water infrastructure work that will need repairs in 2021 & 2022 totaling \$746,478.00 that would constitute ARPA authorized expenditures. While I'm not suggesting that this entire expense be taken from ARPA grant monies as there are a multitude of other authorized expenditures, I would note that the storm water work on Manheim Street was an unbudgeted expense estimate at \$146,600.00 to \$160,000.00. The Manheim Street Project is on the agenda.

- The Borough's electrical supplier contract expires in November. It has been placed on the Borough Council agenda for discussion purposes and consideration of how Council wants to proceed. At issue if those figures change daily. You may have to consider authorizing the Borough Manager (myself) to sign an agreement on behalf of Borough Council which would provide the best option for the Borough considering cost and duration of the contract.
- I have processed five (5) Right-To-Know Requests in July.
- I had previously advised Council of a situation occurring on the privately owned retention basin on Locust Lane. Due to property owners being deceased or otherwise failing to pay taxes, the Lancaster County Tax Collection Bureau (LCTCB) technically owns 2 of the three lots. There are several sink holes developing on the property that may need to be addressed. In March of 2019, our solicitor provided some guidance on actions that we can take. I requested that she review the letter to see if any of our options have changed and asked if she could draft a letter to the LCTCB advising them of the issues and potential danger. I received a response from our Borough Solicitor advising that the options for the Borough are the same as outlined in 2019. She has provided me with a letter to send to LCTCB which I have already distributed. I did send a letter to LCTCB and received a response indicating that they are not responsible for any issues that arise on this property. In the meantime, the Public Works Director, Assistant Public Works Director and I met with Penn State Extension to get some ideas on solutions as well as possible grant monies that may be obtained to resolve this issue. More to come on this issue.
- Met with Department Heads to discuss park improvements to Kunkle Field and some minor upgrades to Rotary Park in reference to the possibility of a grant funding opportunity. Ideas included updating and/or adding

bleachers, press box, stormwater managements, bike and hiking trails, and LED lighting just to name a few. I met with the vice-president of MJAA and the only request they had was updating the electrical system in the concession stand.

- Staff and I have started working on the budget. This year will probably be a little different for the department heads, but they have been willing to work with me on this. This will encompass a four-step process.
 - First, each department was asked to develop a 5-year capital expense plan. This will primarily address any capital expense of \$1,000.00 or more. The purpose of this is for all of management and elected officials to have an idea of upcoming expenses for the next 5 years. This will be updated annually. This was due by August 15th. I am in the process of consolidating these requests at this time.
 - Second, August receipts and revenues are in and expenditures paid, each department head was given their line-item budget with year-to-date figures. From there, they will need to provide me with an estimate of expenses and revenues for the remainder of the year. The purpose of this is to give management and elected officials a broader picture of our financial situation come the end of the year. This will also assist the department heads in creating their 2022 budget estimates. This will be due by the first week in September.
 - Third, each department head will need to submit their 2022 expenses and revenue budgets. Submission date yet to be determined pending review of the “Budget Schedule” Council has on their agenda. I will meet with each department head to review their expenses and revenues, making recommendations where possible to create the best estimates for them to provide to the respective committees.
 - At this point, we will follow past practices with committee and Council reviews, etc. through budget adoption.
- If you recall at the last Council meeting, Council was made aware of a new law now know as Act 50 of 2021, Small Wireless Facilities Deployment Act that was passed. Following the meeting, staff and I contacted the Borough Solicitor. We have received a correspondence from the Borough Solicitor that includes a sample ordinance. According to Act 50, the Borough should have a ordinance in place by the end of October. In order for this to happen, council will need to authorize the sample ordinance with any changes to be advertised for the October Council Meeting. Please refer to this letter and sample ordinance are an agenda item.
- I continue to meet with the “North West Municipal Authority Committee” as well as Scott Kingsboro reference the future of EMS and other municipal services.
- I have met with Scott Buchle and Adam Marden, Penn State Health Life Lion LLC. This was more of an introductory meeting since Council has yet to approve the list of items that they wish to see in the agreement.
- I have been assisting with the Borough’s Police Contract Negotiating Committee and the Borough’s Labor Attorney to negotiate the current Collective Bargaining Agreement as well as the Police Association and Councils items in dispute. I have met with the committee on 3 separate occasions and with the police associations representatives. I remain hopeful that a acceptable agreement can be reached..
- I met with Zach Williard from PFM Financial Advisors LLC. He had met last year with members of the Building Committee. In essence, he just wanted to meet with me and bring me up to speed on what he had previously discussed with the Committee.
- Public Works Director, Assistant Public Works Director & I met virtually with PennDOT reference to the repaving of Manheim St and the conflict with the Borough’s storm water project. There has been a consistent lack of communications within and from PennDOT. The Department handling the repaving had no communications with the department issuing the HOP permits so essentially, they were not aware of the Borough project. Additionally, as mentioned before, PennDOT did not make us aware of their project until after our budget was passed meaning that the storm water replacement/repairs were not budgeted for. Since that time, PennDOT has had little communication with us regarding their project, so we were not sure the project was going to happen until 2 weeks before they were to start. A compromise was reached so that both projects can proceed. PennDOT will do what work they can do next year and finish the areas where we are doing the stormwater work next year.
- Public Works Director, Assistant Public Works Director and I met with DEP & LCSWMA to review the 2021 902 Grant. Overall, excellent job by Dennis and Dave on their initial draft, minor recommendations were made, and they will be working on those changes. I have made contact with Senator Aument, Representative Hickernell and East Donegal and Mount Joy Townships for letters of support for this grant. Submission is due end of September.

- I submitted a small safety grant through Susquehanna Mutual Trust for an SED device in Council Chambers. Total amount is \$1,750.00 and is a 50/50 split.
- The Borough/Borough Authority Picnic is scheduled for Friday, September 10th starting at noon. Borough Offices will be closed that afternoon so that all can enjoy the picnic. Invitations were sent out.
- Parks Superintendent Brian Brubaker will be retiring after 21 years of service. His last day with the Borough will be September 17th. This is also an agenda item.
- Staff is currently working on a new Community Guide with updated Borough information and new business advertisements. The last one was updated in 2015. I understand that this initiative started in 2020 but got sidelined due to COVID.
- I've initiated a Mount Joy Borough Twitter Account (@MountJoyBorough. Just another means to get communications out to the Borough Residents.

Agenda Items

There are several agenda items that may need some clarification.

- Item 10.b – Ordinance 8-21, Personal Expression of Signs – Council held a Public Hearing on July 12, 2021. After all public comments were held and an exhibit presented, public comment was closed. By law, Council may not take into consideration any additional public comment to render a decision. This item had to be advertised a second time because a final decision was not reach within the specified time frame from the initial advertisement. This item is now before Council to render a decision. I will note that you have an original draft and an amended draft in this packet. The amended draft permits 3X5 flags/signs.
- Item 10.i. Resolution 12-21 – This was an oversight and should have been taken addressed and passed in December 2020.
- Item 10.j. Amendment No. 4 – Per the Auditor General's Audit, Amendment No. 4 addresses the verbiage in our Non-Uniform Pension Plan to indicate that the pension is only open to full-time employees. The passing of this amendment will trigger the adoption of an ordinance which will be presented at the next Borough Council Meeting.
- Item 10.k. Resolution 13-21 – Another requirement of the Auditor General's audit which states that the Borough Manager should be named Chief Administrative Officer of our Pension Plans. This has been before Council on a previous occasion when interim Manager Casey Kraus was named Chief Administrative Officer.
- Item 10.l. Act 50 of 2021 – Please review the Borough Solicitor's letter and Draft Ordinance regarding our current ordinance as it pertains to Act 50. As mentioned earlier in this memo, this ordinance with any changes should be advertised to be voted on at your October Council Meeting.
- Item 10.m. Manheim Street Storm Water Project. There has been discussion that this be taken from the ARPA but I do not believe that a decision was final. Council was previously advised that this is an unbudgeted project due to the late notice from PennDOT that they would be repaving Manheim Street.
- Item 10.o. Distribution of funds from the soda machines at Rotary Park – This item's process started in 2020 by the previous Manager however, Council did not take any formal action on it. In short, Mr. Eichler made arrangements to have soda machine (s) placed at the Rotary Park. There is a slight profit that occurs when individual's buy from these machines and the vendor will forward a check to the Borough on a monthly basis. A separate line item was made in the budget revenues to receive said monies. The purpose of machines was to generate monies for the placement and maintenance of "bird habitat boxes" along Little Chiques Creek and other location in the Borough. I would like the Committee and Council to authorize the disbursement of funds to Mr. Eichler for the stated purposes.
- Item 10.r. Carpet Cleaning – I realize that Council is in the middle of making decisions on a new facility however, this may not be completed until 2024/2025. In the meantime, staff needs to continue to work in the current facility and our residents come in to conduct business here as well. I believe that we should continue to maintain this facility as it represents you, our staff, and our entire community. I am currently asking permission to have our carpets professionally cleaned. To say they are disgusting is an understatement a best. I have been told that this hasn't taken place in several years. I contacted Certified Carpet and received a quote for under \$1,000 to have the carpets cleaned, sanitized and a protectant applied to them. I am asking the Council to authorize this work. I have also met with the Chief and toured his facility. There are several safety issues that

should be addressed as well. This will be addressed with the Public Safety Committee. Note that during the winter, I may ask council to authorize staff to paint the office area. In short, the staff needs to work in this facility for another 3 to 4 years. While I would certainly rule out any major repairs or upgrades, I feel that we should still be doing the minimum to maintain a safe, health, and clean looking facility.

- Item 10.t. Capital Budget Project – Representative Hickernell sent out letters advising of possible funding opportunities may be available for various projects should they meet a certain criteria. While we don't have any "shovel ready" projects, I would like to attempt to get monies to start the formal planning of the "Emerald Necklace".
- Item 10.s. PSAB Fall Leadership Conference – It is my understanding that this is an annual conference that past managers have been permitted to attend. I am therefore asking permission to attend. Cost will be total approximately \$700.00.
- Item 10.u. Resolution 11-21 – this Committee had already moved this resolution to Council, but it was necessary to wait until the Complete Streets Guide was completed. The guide is now completed so Council can move on the Resolution at their September 23rd meeting.
- Item 11.d. Ambulance Agreement – I've compiled a list from feedback received from you of items of importance to attempt to memorialized in the agreement. As I stated earlier, I have already met with PSH Life Lion LLC and one item that I did discuss was their reports.

As always, I welcome any questions and comments.

NOTE: in accordance with Act 65 of 2021, please review the agenda carefully. Any additions to the agenda need to be submitted to Lisa Peffley by 9:00 am on September 10, 2021.

10c

BOROUGH OF MOUNT JOY
21 EAST MAIN STREET
MOUNT JOY, PENNSYLVANIA 17552



From the Office of:
Mark G. Pugliese I
Borough Manager/Secretary

INCORPORATED 1851

TELEPHONE (717) 653-2300
FAX (717) 653-6680
E-MAIL: manager@mountjoy.org

LETTER OF NO TRESPASS

TO:
FROM:
DATE:
RE: LETTER OF NO TRESPASS

(Recipient's Name),

Please be advised that you have no right, either expressed or implied, to be **IN** or **ON** the property located at (property address) at any time whatsoever and for whatever purpose.

Should you not adhere to these wishes in this matter, the undersigned, who is the designated representative for the Borough of Mount Joy, who is owner of record for (property address) will have no choice but to pursue all those remedies that are available by law, including criminal prosecution for defiant trespass.

You are specifically advised, pursuant to Title 18 (PA Crimes Code), Section 3503(b) [Criminal Trespass-Defiant Trespasser], that you are not licensed or privileged to enter or remain at the address located at (property address). In the event that you attempt to enter (property address) premises located at (property address), you will give the undersigned, who is the designated representative for the Borough of Mount Joy, no alternative but to exercise their rights under the law.

You have been warned; being so advised, govern yourself accordingly.

Regards,

Mark G. Pugliese I
Borough Manager

10d1

BOROUGH OF MOUNT JOY

Lancaster County, Pennsylvania

ORDINANCE NO. 8-21

AN ORDINANCE TO AMEND THE MOUNT JOY BOROUGH CODE OF ORDINANCES, CHAPTER 270, ZONING, TO REVISE SIGN REGULATIONS AND CLARIFY REGULATIONS CONCERNING SPECIAL EXCEPTIONS.

BE AND IT IS HEREBY ORDAINED AND ENACTED by Borough Council of the Borough of Mount Joy, Lancaster County, Pennsylvania, as follows:

Section 1. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article I, Administration and Enforcement, §270-16, Special Exceptions, shall be amended by adding a new Subsection E which shall provide as follows:

- E. Expansion of preexisting uses authorized by special exception. When a use which was established prior to the enactment of this chapter or any amendment thereto is located in a zoning district where such use is permitted by special exception, such preexisting use shall be permitted to continue as of right. Any expansion or alteration of such preexisting use shall require the granting of a special exception by the Zoning Hearing Board, and the applicant for such special exception shall demonstrate compliance with all of the standards set forth in this chapter for the granting of a special exception for such use, if any, and with all of the general standards set forth in this chapter for all special exceptions.

Section 2. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article VII, Signs, §270-91, Purpose; permit requirements; changes on signs, Subsection B, Paragraph (1), Subparagraph (a) shall be amended to provide as follows:

- (a) Signs meeting the requirements of §270-93 and §270-103.

Section 3. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article VII, Signs, §270-93, Miscellaneous Signs Not Requiring Permits, Subsection A, 270 Attachment 6 table entitled Miscellaneous Signs Not Requiring Permits, shall be amended as follows:

ZONING

270 Attachment 6

Borough of Mount Joy

Miscellaneous Signs Not Requiring Permits

| Type and Definition of Signs Not Requiring Permits | Maximum Number of Signs Per Lot | Maximum Sign Area Per Sign on Residential Lots (square feet) | Maximum Sign Area Per Sign on Nonresidential Lots (square feet) | Other Requirements |
|--|--|---|--|---|
| *** | | | | |
| Flag A banner or pennant made of fabric or materials with a similar appearance that is hung in such a way to flow in the wind and that includes some type of message | 2 | See §270-103 | 50 | Government flags and flags without messages are not regulated by this chapter |

Section 4. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article VII, Signs, §270-93, Miscellaneous Signs Not Requiring Permits, Subsection A, 270 Attachment 6 table entitled Miscellaneous Signs Not Requiring Permits, shall be amended to delete the entry for "Political Sign" in its entirety.

Section 5. The Mount Joy Borough Code of Ordinances, Chapter 270, Zoning, Article VII, Signs, shall be amended by adding a new §270-103, Personal Expression Signs, which shall provide as follows:

§270-103. Personal Expression Signs.

A. As used in this section, the following term shall have the meaning indicated:

SIGN, PERSONAL EXPRESSION — A sign expressing or communicating a noncommercial message, opinion, feeling, interest, or point of view, including, but not limited to, ideological, religious, political, or social messages. A personal expression sign may convey such message through text, symbols and/or logos (such as for a sporting team or club). A flag governed by the American, Commonwealth, and Military Flag Act, Act of July 7, 2006, P.L. 609, No. 93, 44 P.S. §50.1 et seq., or Section 1202(3) of the Borough Code shall not be considered a personal expression sign and shall not be subject to limitations concerning personal expression signs. Holiday or seasonal decorations shall not be considered personal expression signs.

B. Within all zoning districts the occupant of any lot containing a dwelling unit shall be permitted to erect personal expression signs in accordance with the following requirements:

- (1) All personal expression signs shall comply with §270-100 and §270-101.
- (2) The total square footage of personal expression signs on the lot shall not exceed 36 square feet.

- (3) No personal expression sign other than a personal expression sign made of fabric (i.e. flag) displayed on a flag pole may exceed 5 feet in height.
- (4) No single personal expression sign may exceed 12 square feet.
- (5) No personal expression sign may be located within a required side yard or rear yard setback.
- (6) No permanent structure may be installed to serve as a base or mount for a personal expression sign other than a flagpole meeting all setback requirements.
- (7) All personal expression signs shall be set back at least 5 feet from the public street right-of-way.
- (8) No personal expression sign may be located within the clear sight triangle for any driveway serving an adjoining lot.

Section 6. All other sections, parts and provisions of the Mount Joy Borough Code of Ordinances shall remain in full force and effect as previously enacted and amended.

Section 7. In the event any provision, section, sentence, clause or part of this Ordinance shall be held to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such invalidity, illegality or unconstitutionality shall not affect or impair the remaining provisions, sections, sentences, clauses or parts of this Ordinance, it being the intent of Borough Council that the remainder of the Ordinance shall be and shall remain in full force and effect.

Section 8. This Ordinance shall take effect and be in force from and after its enactment as provided by law.

DULY ORDAINED AND ENACTED this ____ day of _____, 2021, by Borough Council of the Borough of Mount Joy, Lancaster County, Pennsylvania, in lawful session duly assembled.

BOROUGH OF MOUNT JOY
Lancaster County, Pennsylvania

Attest: _____
(Assistant) Secretary

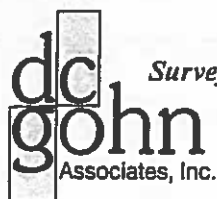
By: _____
(Vice) President
Borough Council

[BOROUGH SEAL]

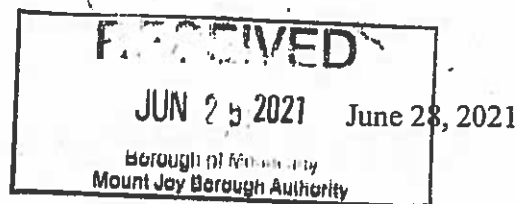
Examined and approved as an Ordinance this ____ day of _____, 2021.

By: _____
Mayor

10e



Surveyors - Engineers - Landscape Architects



Stacie Gibbs, BCO
Planning, Zoning & Code Administrator
Mount Joy Borough
21 E. Main Street
Mount Joy, PA 17552

SUBJECT: Lancaster County Career & Technology Center – Mount Joy Campus
Final Minor Subdivision Plan Submission
DCG Project Number 4343-21

Dear Ms. Gibbs:

On behalf of our client, Lancaster County Vo-Tech School Authority, we are submitting the Final Minor Subdivision Plan for the proposed improvements. The proposed improvements are located at the existing Lancaster County Career & Technology Center – Mount Joy Campus in Mount Joy Township and Mount Joy Borough. The site is located within the R-1 Low Density Residential zoning district. The total area of the subject property is 70.15 acres.

LCCTC, Mount Joy Borough staff, Mount Joy Township staff, MJBA, and DC Gohn held a pre application meeting on June 8, 2021 to review the proposed two lot subdivision, stormwater, and plan processing. A plan deferral request was previously submitted to Mount Joy Borough which requested the deferral of the subdivision and land development and zoning review to Mount Joy Township. The Borough will review the stormwater design since there is a proposed stormwater facility associated with this project in the Borough.

LCCTC has developed a master plan for the Mount Joy Campus. The master plan will be developed over a period of 30+ years and will consist of approximately 27 single family lots. All of the single family lots are located on the existing subject tract located in Mount Joy Township and are located in the R-1 Low Density Residential zoning district. The site improvements and unit construction for each lot will be completed in approximately 18 to 24 months. The majority of the improvements are completed by LCCTC students as part of the curriculum. After completion, the lots are sold to perspective buyers.

LCCTC is proposing 2 single family residential lots located along Fairview Street. The proposed lots will have a shared driveway which will connect to Fairview Street. There is a future right of way between Lots 1 and 14 which will provide a future street consistent with the overall master plan.

Stormwater will be managed by an infiltration basin. The infiltration basin will infiltrate the net increase in the two year volume and manage the stormwater rate for all of the design storms.

The stormwater facilities are designed to meet the Township and Borough stormwater management requirements and the NPDES permit requirements.

There is an existing sanitary sewer and water main in Fairview Street which will be extended to service the two proposed lots. The existing sewer lateral which services the school will be relocated. A request is being made to the Mount Joy Township Board of Supervisors for the transfer of two (2) EDU's from the Mount Joy Township allotment to LCCTC. As part of the review and approval process, plans will be submitted to MJBA for review.

We submit the following for your review:

1. 3 copies of the Final Minor Subdivision Plan
2. 6 copies 11 x 17 of the Final Minor Subdivision Plan
3. 2 copies of the PCSM Report with drainage maps
4. 2 copies of the Borough stormwater application
5. 2 copies of the Borough rate application
6. 2 copies of the Borough waiver request letter
7. 2 copies of the Township waiver request letter
8. 2 copies of the Township application
9. 2 copies of the zoning hearing board decision
10. 2 copies of the water and sewer feasibility study
11. 2 copies of the water and sewer capacity letter to the Board of Supervisors
12. 2 copies of the sinkhole repair report prepared by ECS
13. 2 copies of the wetland study prepared by Vortex Environmental
14. 2 copies of the Karst Evaluation for Stormwater Management prepared by Lancaster Geology
15. Borough review fees

Sincerely,

D. C. Gohn Associates, Inc.

Brian R. Cooley

Brian R. Cooley
Staff Landscape Architect

Cc: Lancaster County Vo-Tech School Authority, Owner
Lancaster County Planning Commission
Josele Cleary, Esquire, Township/Borough Solicitor
Ben Craddock, PE, Lancaster Civil, Township Engineer
Darrell Becker, PE, ARRO, Borough Engineer
Justin Evans, Mount Joy Township
File

MOUNT JOY BOROUGH

Lancaster County, Pennsylvania

APPLICATION FOR CONSIDERATION OF A SUBDIVISION AND/OR LAND DEVELOPMENT PLAN



The undersigned hereby applies for approval under Chapter 240, Subdivision and Land Development, of the Code of the Borough of Mount Joy for the Plan submitted herewith and described below:

For Mount Joy Borough Use Only

Mount Joy Borough File No: 210004 Date of Receipt/Filing: 5/26/21

Plan & Project Information

| | |
|--|---|
| Plan Name: <u>FINAL MINOR SUBDIVISION PLAN FOR LANCASTER COUNTY CAREER & TECHNOLOGY</u> | |
| Plan No: <u>CG-2920</u> | Plan Date: <u>MAY 26th, 2021</u> |
| Location: <u>432 OLD MARKET ST MOUNT JOY PA 17552</u> | |
| Property Owner: <u>LANCASTER COUNTY VO-TECH SCHOOL AUTHORITY</u> | |
| Owner Address: <u>1730 HANS HERR DRIVE WILLOW STREET PA 17584</u> | |
| Telephone Number: <u>717-653-3001</u> | |
| Email: <u>mdelpriore@lanasterctc.edu</u> | |
| Deed Reference: <u>L-570345</u> | Tax Parcel No: <u>461-96483-0-0000</u> |
| Applicant (if not landowner): <u>DR. MICHAEL DELPRIORE</u> | |
| Applicant Address: <u>1730 HANS HERR DRIVE WILLOW STREET PA 17584</u> | |
| Telephone Number: <u>717-464-7060</u> | |
| Email: <u>mdelpriore@lanasterctc.edu</u> | |
| Firm Which Prepared Plan: <u>DC GOHN ASSOCIATES, INC.</u> | |
| Firm Address: <u>32 MOUNT JOY ST PO BOX 128 MOUNT JOY PA 17552</u> | |
| Telephone Number: <u>717-653-5308</u> | |
| Person Responsible For Plan: <u>DONOVAN HOLLWAY</u> | |
| Email: <u>dhollway@dcgohn.com</u> | |
| Plan Type: <input type="checkbox"/> Sketch Plan <input type="checkbox"/> Change(s) to Recorded Plan | |
| <input type="checkbox"/> Preliminary Plan & Subdivision <input type="checkbox"/> Land Development <input type="checkbox"/> Lot-Line Change Plan | |
| <input type="checkbox"/> Final & Preliminary/Final Plan <input type="checkbox"/> Lot-Line Change Plan (expedited) | |
| <input type="checkbox"/> Improvement Construction Plan <input checked="" type="checkbox"/> Plan Deferral | |
| Description: <u>2 LOT SUBDIVISION</u> | |
| Total Acreage: <u>65.62 AC</u> | |
| Zoning District: <u>CONSERVATION</u> | |
| Is/was a zoning variance, special exception or conditional use approval necessary? <input type="checkbox"/> yes <input checked="" type="checkbox"/> no | |
| If yes, please attach Zoning Hearing Board Decision. | |

| | | Proposed Lots and Units | | | |
|---|-----------|-------------------------|-------------------------------------|-----------|------------|
| | # of Lots | # of Units | | # of Lots | # of Units |
| Total # | | | Mixed Use | | |
| Commercial | | | Single Family Detached | 2 | 2 |
| Industrial | | | Multifamily | | |
| Institutional | 1 | 1 | Other | | |
| Total Square Feet of Ground Floor Area (building footprint): | | | 111,800 SF | | |
| Total Square Feet of Existing Structures (all floors): | | | 111,800 SF | | |
| Total Square Feet of Proposed Structures (all floors): | | | 4,288 SF (Lot 1) + 4288 SF (Lot 14) | | |
| Total Square Feet (or Acres) of Proposed Parkland/Other Public Use: | | | | | |
| Linear feet of new street: | | | | | |
| Identify all street(s) not proposed for dedication: | | | | | |

NOTES:

1. All units of occupancy shall be provided with a complete water supply system which shall be connected to the Borough's water supply system in accordance with the requirements of Council, the Authority and DEP.
2. All units of occupancy shall be provided with a complete sanitary sewer system, which shall be connected to the Borough's sanitary sewer system in accordance with the requirements of Council, the Authority and DEP.
3. The final plan application shall include a statement from the Authority indicating the approval of plans for design, installation, and possible financial guarantees.
4. Applicants shall comply with all plan processing procedures of the County Planning Commission. It is the responsibility of the applicant to determine the requirements of the County Planning Commission, including, but not limited to, the number of copies which must be submitted and the filing fee.
5. The final plan or preliminary/final plan shall be recorded in the office of the Recorder of Deeds in and for Lancaster County.

Submission Requirements

Planning Commission Meeting: 2nd Wednesday of the month, 7:00 PM

Deadline: 2nd Wednesday of the month prior to meeting

Preliminary and Preliminary/Final Plans:

- Three (3) copies of preliminary plan, 24" x 36"
- Six (6) copies of the preliminary plan, 11" x 17"
- Two (2) copies of all reports, notifications, and certifications that are provided on the Plan, including Storm Water Management Plans and calculations.
- One (1) copy of the application form completely and correctly executed, with all information legible, and bearing all required signatures.
- The required filing fee as established from time to time by resolution by the Council.
- An electronic copy of the plan and all supporting documents in PDF format.
- All other items listed under Article VII, Plan Requirements.

Sketch Plans: (Expedited processing of certain plans) The Applicant will have the right to proceed to a preliminary/final plan and forego the preliminary plan phase/processing requirements. Developers are strongly urged, but not required to submit this plan for a proposed land development. This plan will be considered an informal submission, for discussion purposes by Borough staff, the Borough Solicitor, the Borough Engineer and Planning Commission.

- Plan sheets 24" x 36"
- Eight (8) paper copies of the plan.
- Two (2) copies of any supporting documents.
- One (1) electronic copy of the plans and supporting documents.
- Supplemental documents
- One (1) copy of the application form completely and correctly executed, with all information legible, and bearing all required signatures.
- The required filing and review fees as established from time to time by resolution by the Council.

Improvement Construction Plans: An applicant whose improvement construction plan is approved, is permitted to install all or part of the improvement required prior to final plan submission.

- After an applicant has received official notification that the preliminary plan has been approved and the required changes, if any have been made, an application may be processed.
- May be submitted in sections, each section covering a reasonable portion of the entire proposed subdivision, as shown on the approved preliminary plan.
- Applications should be made and processed in accordance with the Preliminary/Final Plan submission requirements above.

Lot Line Change Plan: A plan to shift lot lines or to merge lots.

- A lot-line change plan may be waived from the review by Lancaster County Planning Commission (LCPC) (if the Borough and LCPC agree), if the applicants provide a Lancaster County Appendix 24 form.
- Approval of this plan shall be permitted to file a single application for preliminary/final plan approval.

Changes to Recorded Plans: Any redevelopment or resubdivision, including changes to a recorded plan, shall be considered as a new application and shall comply with all requirements of this chapter, except that changes may be made to a recorded plan, provided that, in making such changes:

- (1) The original application shall have been made for residential purposes, and the residential character and use of the land shall be maintained.
- (2) No lot or tract of land shall be created that does not meet the minimum design standards required by this chapter and other applicable Borough ordinances.
- (3) No structure shall be relocated which does not meet the minimum design standards required by this chapter and other applicable Borough ordinances.
- (4) No increase shall be made in overall density of the development.
- (5) No easements, access drives, rights-of-way or stormwater management facilities shall be changed.
- (6) No street locations, block sizes, or point of access onto an existing Borough or state street shall be changed.

B. In every case where a plan alteration conforms to the above, the applicant shall:

- (1) Submit to the Borough Secretary two paper copies of the revised final plan, one electronic copy, and one application form. Upon review of the revision, the Borough Secretary shall notify the applicant, in writing, whether or not the revision complies with the above requirements.
- (2) If the revision complies, the applicant shall prepare two plans, which shall specifically identify the alterations to the previously recorded plan.
- (3) The applicant shall submit the plan to the Council for certification as specified in Article III of this chapter and to the Borough for signature as specified in § 240-29 of this chapter.
- (4) The plan shall be recorded as specified in § 240-29 of this chapter.

The undersigned hereby represents that, to the best of his/her knowledge and belief, all information listed in this application and on any attached plans or forms is true, correct and complete. The undersigned also authorizes Mount Joy Borough to enter the property in question for a general site inspection. The undersigned agrees to accept and abide by the applicable Ordinances, Resolutions, Rules and Regulations including application fees and reimbursement of Borough review expenses now in effect for the Borough of Mount Joy.


 Signature of Applicant
 Dr. Michael P. DelPriore Jr.
 Printed Name

5/27/2021
 Date

 Signature of Landowner
 (If different then above)

 Printed Name

 Date

MOUNT JOY BOROUGH ADMINISTRATIVE/APPLICATION FEE AND ESCROW FUND SCHEDULE
FOR SUBDIVISION AND LAND DEVELOPMENT AND STORMWATER MANAGEMENT

| PROJECT NAME: <u>FINAL</u> MINOR SUBDIVISION PLAN FOR LCCTC | | | | | | |
|---|--|-------------|--------------------------------|-----------------|-------------|----------|
| PLAN TYPE | RATE SCHEDULE | | NO. OF LOTS, ACRES, OR SQ. FT. | CALCULATIONS | | |
| | ADMINISTRATION/APPLICATION FEE | ESCROW FUND | | ADMIN./APP. FEE | ESCROW FUND | SUBTOTAL |
| SKETCH | \$100 | \$2,000 | | | | |
| RESIDENTIAL SUBDIVISION or LAND DEVELOPMENT (1 To 5 Lots or units of Occupancy) | \$150 + \$15/LOT/UNIT | \$2,000 | | | | |
| RESIDENTIAL SUBDIVISION or LAND DEVELOPMENT (6 to 20 Lots or Units of Occupancy) | \$150 + \$11/LOT/UNIT | \$5,000 | | | | |
| RESIDENTIAL SUBDIVISION or LAND DEVELOPMENT (21 or more Lots or Units of Occupancy) | \$150 + \$6.50/LOT/UNIT | \$10,000 | | | | |
| NON-RESIDENTIAL SUBDIVISION OR LAND DEVELOPMENT | \$250 + 10/ACRE or fraction thereof + \$10/1,000 SF/BLDG | \$7,500 | | | | |
| LOT-LINE CHANGE (LOT-ADD ON) | \$200 | \$2,000 | | | | |
| IMPROVEMENT | \$100 | \$2,000 | | | | |

**MOUNT JOY BOROUGH ADMINISTRATIVE/APPLICATION FEE AND ESCROW FUND SCHEDULE
FOR SUBDIVISION AND LAND DEVELOPMENT AND STORMWATER MANAGEMENT**

| CONSTRUCTION PLAN | | | # of Lots | Admin/APP Fee | Escrow | Subtotal |
|---|-----------|---------------------|--------------------|---------------|--------|----------|
| WAIVER REQUEST TO DEFER PLAN APPROVAL TO ADJOINING MUNICIPALITY | \$100 | \$1,000 | 3 Lots 65.62 Ac | 100 | 1000 | 1100 |
| WAIVER OF SUBDIVISION AND LAND DEVELOPMENT PLAN PROCESSING | \$150 | \$1,500 | | | | |
| WAIVER REQUEST OF SPECIFIC ORDINANCE REQUIREMENT | \$50 EACH | \$500 EACH | | | | |
| WAIVER OF SWM SITE PLAN | \$150 | \$1,500 | | | | |
| SWM SITE PLAN | \$250.00 | SAME AS SALDO ABOVE | | | | |
| TOTALS | | | | 100 | 1000 | 1100 |

FOR MOUNT JOY BOROUGH USE ONLY:

| TYPE OF PAYMENT | ADMINISTRATIVE/APPLICATION FEE | ESCROW FEE |
|-------------------|--------------------------------|------------|
| DATE OF PAYMENT | 5/26 | 5/26 |
| METHOD OF PAYMENT | ✓ 58897 | ✓ 58898 |
| AMOUNT OF PAYMENT | \$162- | \$1600 |

NOTES:

1. The Administrative/Application Fee is non-refundable.

NEED 2 CHECKS WRITTEN OUT TO

MOUNT JOY BOROUGH.

RESOLUTION NO. 12-13
EFFECTIVE: September 9, 2013

→ 1. \$100 APPLICATION FEE

→ 2. \$1000 ESCROW FEE

**MOUNT JOY BOROUGH ADMINISTRATIVE/APPLICATION FEE AND ESCROW FUND SCHEDULE
FOR SUBDIVISION AND LAND DEVELOPMENT AND STORMWATER MANAGEMENT**

2. If the Escrow Fund is at or falls below 50% of the original amount posted by the applicant, the Borough shall bill the applicant/developer an amount sufficient to restore the Escrow Fund to the original sum deposited.
3. In the event that the balance of the Escrow Fund is insufficient at any time to pay such costs, the Borough shall bill the applicant/developer for the actual or anticipated costs.
4. In the event the Escrow Fund is in excess of the Borough's costs, the Borough shall refund such excess monies, without interest, to the applicant/developer upon request in writing, and upon completion of the development of the property.

21 E MAIN STREET PO BOX 25 MOUNT JOY PA 17552

05/21/2021

Invoice #

Invoice Date PO #

Amount Account Code

Description

ESCROW FEE

05/18/2021

1000.00 10-0147-039-000-30-800-SUB-000-0000

LCCTC SUBDIVISION PLAN DEFERRA

Payment Amount:

1000.00

98.248.112

NON

ABLE

THIS DOCUMENT HAS A VOID PANTOGRAPH - BORDER CONTAINS MICROPRINTING AND A TRUE WATERMARK - HOLD TO LIGHT TO VERIFY WATERMARK

LANCASTER COUNTY CAREER & TECH CTR

P.O. BOX 527
WILLOW STREET, PA 17584
(717) 464-7050

GENERAL FUND

FULTON BANK
LANCASTER, PA 17602

60-142/313
0000058898

05/21/2021

*****1,000.00

PAY One Thousand and 00/100 Dollars

To the Order of:

MOUNT JOY BOROUGH
21 E MAIN STREET
PO BOX 25
MOUNT JOY PA 17552

VOID AFTER 60 DAYS

Michael J. Craig
James H. Hays

⑈058898⑈ ⑆031301422⑆211819525⑈

21 E MAIN STREET PO BOX 25 MOUNT JOY PA 17552

05/21/2021

| Invoice # | Invoice Date | PO # | Amount | Account Code | Description |
|---------------|--------------|------|--------|----------------------------|--|
| ADMIN/APP FEE | 05/18/2021 | | 100.00 | 10 0147 030 000 30 000 000 | 00-0000 LCCTC SUBDIVISION PLAN DEFERRA |

Payment Amount

261.300

NON PAYSABLE

THIS DOCUMENT HAS A VOID PANTOGRAPH - BORDER CONTAINS MICROPRINTING AND A TRUE WATERMARK - HOLD TO LIGHT TO VERIFY WATERMARK

LANCASTER COUNTY CAREER & TECH CTR

P.O. BOX 527
WILLOW STREET, PA 17584
(717) 464-7050

GENERAL FUND

FULTON BANK
LANCASTER, PA 17602

60-142/313

0000058897

05/21/2021

*****100.00

PAY One Hundred and 00/100 Dollars

To the Order of:

MOUNT JOY BOROUGH
21 E MAIN STREET
PO BOX 25
MOUNT JOY PA 17552

VOID AFTER 60 DAYS

Michael J. Craig
James H. Byrnes

⑈058897⑈ ⑆031301422⑆ 211819525⑈

**BOROUGH OF MOUNT JOY
DEPARTMENT OF PLANNING, ZONING & CODES COMPLIANCE**

**APPLICATION FOR
STORM WATER MANAGEMENT PLAN**



Plan and Permit Fee: \$250.00

At a minimum, the Stormwater Management Plan shall include:

- A narrative summarizing the proposed project, design methods used, and a table comparing post development peak flows with pre-development peak flows.
- A Drainage Area Map with topographical contours showing upstream contributing drainage areas and labeled to coincide with the drainage computations.
- Floodplain and/or floodway boundaries as defined on the Mount Joy Borough Flood Insurance Study, Flood Boundary and Floodway Map, if applicable.
- Inland Wetland boundaries as defined on the Mount Joy Borough Inland Wetlands and Watercourses Map or as field delineated by a soil scientist.
- An inventory and evaluation of on-site hydraulic structures and watercourses within the downstream zone of influence with information on their flow capacity and physical condition. The downstream of influence generally extends to the next two existing structures downstream of the proposed outlet. The Engineer will confirm the exact location of the limit of analysis required.
- Identification of drainage structures and watercourses that are inadequate under existing or reasonably anticipated future conditions.
- Identification of the peak rate of runoff and flow velocities at various key points in the watershed and the relative timing of the peak flow rates.
- Supporting calculations (including times of concentration and runoff coefficients) for all proposed drainage facilities, including but not limited to: piping, structures, riprap, swales, detention basins, drywells, etc.
- Ponding calculations at all low points.
- Identification of aquifers or aquifer zones of contribution within the limits of the project.

The report shall be supplemented with three (3) complete set of construction plans showing, in both plan and profile, all existing and proposed storm drainage features. Tops of frame and invert elevations of all structures are required. Construction details shall also be provided for all drainage structures. Drainage structures and pipe systems shall be labeled to coincide with the drainage calculations.

Electronic copies of drainage computations shall be submitted with the Stormwater Management Plan upon request.

APPLICATION INFORMATION

1. Project Name: Final Minor Subdivision Plan
2. Project Location: Fairview Street, across from Birchland Avenue; existing LLCTC Campus
Parcel Tax Map Number(s): 461-96483-0-0000
3. Project Description: Subdivide 2 proposed lots from parent tract: construct single family house, driveway, sidewalks, stormwater facilities, and other site improvements
Existing Land Use: Institutional No. of Lots/Units: 3 (2 proposed: 1 remaining)
Total Acreage: 65.21
4. Applicant Name(s): Lancaster County Vo-Tech School Authority
Address: 1730 Hans Herr Drive Willow Street, PA 17584
Phone Number: (717) 653-3001 Fax Number: ()
5. Property Owner Name(s): same as applicant
Address: _____
Phone Number: () Fax Number: ()
6. Firm Which Prepared Plan: DC Gohn Associates
Project/Plan Number: 4343-21 Plan Date: June 28, 2021
Name of Contact Person(s) for Plan: Brian R. Cooley
Address: 32 Mount Joy Street Mount Joy, PA 17552
Phone Number: (717) 653-5308 Fax Number: ()
7. Zoning Hearing Board / Conditional Use Approval Date: March 3, 2021 (Mount Joy Township)

AUTHORIZATION / SIGNATURES

The undersigned hereby represents that, to the best of his/her knowledge and belief, all information listed in this application and on any attached plans or forms is true, correct and complete. The undersigned also authorizes the Borough of Mount Joy to enter the property in question for a general site inspection. The undersigned agrees to accept and abide by the applicable Ordinances, Resolutions, Rules and Regulations including application fees and reimbursement of Borough review expenses now in effect for the Borough of Mount Joy.

Michael P. DePriore Jr.
Signature of Applicant

6/21/2021
Date

Dr. Michael P. DePriore Jr.
Printed Name

Brian R. Cooley
Signature of Applicant Engineer

6/21/2021
Date

Brian R. Cooley
Printed Name

| | | |
|---|--------------------------------------|------------------------|
| MJB File No. <u>210729</u> | | (For Borough Use Only) |
| Date Application Received: <u>6/25/21</u> | Application Accepted: <u>Yes</u> No* | |
| * Reason(s) for non-acceptance of application: _____ | | |
| Expiration Date: _____ | Extensions/Expiration: _____ | |
| Application Fee Paid: <input checked="" type="checkbox"/> Cash <input type="checkbox"/> Check (# _____) | | |
| <u>SEE RATE SCHEDULE</u> | | |
| MEETING RECORD | | |
| Date of Planning Commission Meetings: <u>7/14/21</u> | | |
| Date of Planning Commission Recommendation: <u>7/14/21</u> | | |
| Date of Council Meetings: <u>8/2/21</u> | | |
| Date of Council Action: _____ | | |
| <u>ADMIN - 7/22/21</u> | | |

LCCD Approval _____ Conditions Acceptance _____ Improvement Guarantee _____

F:\MSOFFICE\RAY\BOROAPPLFRM

**MOUNT JOY BOROUGH ADMINISTRATIVE/APPLICATION FEE AND ESCROW FUND SCHEDULE
FOR SUBDIVISION AND LAND DEVELOPMENT AND STORMWATER MANAGEMENT**

| PROJECT NAME: | | | | | | |
|--|--|--------------------|---------------------------------------|------------------------|--------------------|-----------------|
| PLAN TYPE | RATE SCHEDULE | | NO. OF LOTS, ACRES, OR SQ. FT. | CALCULATIONS | | |
| | ADMINISTRATION/APPLICATION FEE | ESCROW FUND | | ADMIN./APP. FEE | ESCROW FUND | SUBTOTAL |
| SKETCH | \$100 | \$2,000 | | | | |
| RESIDENTIAL SUBDIVISION or LAND DEVELOPMENT (1 To 5 Lots or units of Occupancy) | \$150 + \$15/LOT/UNIT | \$2,000 | | | | |
| RESIDENTIAL SUBDIVISION or LAND DEVELOPMENT (6 to 20 Lots or Units of Occupancy) | \$150 + \$11/LOT/UNIT | \$5,000 | | | | |
| RESIDENTIAL SUBDIVISION or LAND DEVELOPMENT (21 or more Lots or Units of Occupancy) | \$150 + \$6.50/LOT/UNIT | \$10,000 | | | | |
| NON-RESIDENTIAL SUBDIVISION OR LAND DEVELOPMENT | \$250 + 10/ACRE or fraction thereof + \$10/1,000 SF/BLDG | \$7,500 | | | | |
| LOT-LINE CHANGE (LOT-ADD ON) | \$200 | \$2,000 | | | | |
| IMPROVEMENT | \$100 | \$2,000 | | | | |

RESOLUTION NO. 12-13
EFFECTIVE: September 9, 2013

**MOUNT JOY BOROUGH ADMINISTRATIVE/APPLICATION FEE AND ESCROW FUND SCHEDULE
FOR SUBDIVISION AND LAND DEVELOPMENT AND STORMWATER MANAGEMENT**

| CONSTRUCTION PLAN | | | | | | | |
|---|-----------|---------------------|----------|-------|---------|---------|--|
| WAIVER REQUEST TO DEFER PLAN APPROVAL TO ADJOINING MUNICIPALITY | \$100 | \$1,000 | | | | | |
| WAIVER OF SUBDIVISION AND LAND DEVELOPMENT PLAN PROCESSING | \$150 | \$1,500 | | | | | |
| WAIVER REQUEST OF SPECIFIC ORDINANCE REQUIREMENT | \$50 EACH | \$500 EACH | 1 waiver | \$50 | \$500 | \$550 | |
| WAIVER OF SWM SITE PLAN | \$150 | \$1,500 | | | | | |
| SWM SITE PLAN | \$250.00 | SAME AS SALDO ABOVE | | \$250 | \$2,000 | | |
| TOTALS | | | | \$300 | \$2,500 | \$2,800 | |

FOR MOUNT JOY BOROUGH USE ONLY:

| | | |
|-------------------|--------------------------------|--------------------|
| TYPE OF PAYMENT | ADMINISTRATIVE/APPLICATION FEE | ESCROW FEE |
| DATE OF PAYMENT | 6/25/21 | 6/25/21 |
| METHOD OF PAYMENT | ✓ 59,375 | 59,374 |
| AMOUNT OF PAYMENT | \$300 | \$2,500 |

NOTES:

1. The Administrative/Application Fee is non-refundable.

RESOLUTION NO. 12-13
EFFECTIVE: September 9, 2013

**MOUNT JOY BOROUGH ADMINISTRATIVE/APPLICATION FEE AND ESCROW FUND SCHEDULE
FOR SUBDIVISION AND LAND DEVELOPMENT AND STORMWATER MANAGEMENT**

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RESOLUTION NO. 12-13
EFFECTIVE: September 9, 2013

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LANCASTER COUNTY CAREER & TECH CTR

P.O. BOX 527
WILLOW STREET, PA 17584
(717) 464-7050

GENERAL FUND

FULTON BANK
LANCASTER, PA 17602

60-142/313

0000059375

06/25/2021

*****300.00

PAY Three Hundred and 00/100 Dollars

To the Order of:

MOUNT JOY BOROUGH
21 E MAIN STREET
PO BOX 25
MOUNT JOY PA 17552

VOID AFTER 60 DAYS

Michael J. Craig
James H. Hayes

⑈059375⑈ ⑆031301422⑆211819525⑈

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LANCASTER COUNTY CAREER & TECH CTR

P.O. BOX 527
WILLOW STREET, PA 17584
(717) 464-7050

GENERAL FUND

FULTON BANK
LANCASTER, PA 17602

60-142/313

0000059374

06/25/2021

*****2,500.00

PAY Two Thousand Five Hundred and 00/100 Dollars

To the Order of:

MOUNT JOY BOROUGH
21 E MAIN STREET
PO BOX 25
MOUNT JOY PA 17552

VOID AFTER 60 DAYS

Michael J. Craig
James H. Hayes

⑈059374⑈ ⑆031301422⑆211819525⑈



Surveyors - Engineers - Landscape Architects

June 28, 2021

Stacie Gibbs, BCO
Planning, Zoning & Code Administrator
Mount Joy Borough
21 E. Main Street
Mount Joy, PA 17552

SUBJECT: Lancaster County Career & Technology Center – Mount Joy Campus
Final Minor Subdivision Plan Modification Request
DCG Project Number 4343-21

Ms. Stacie Gibbs:

On behalf of our client, Lancaster County Vo-Tech School Authority, we are requesting the following modification from the Mount Joy Borough Stormwater Management Ordinance.

1. Section 226-37.C.(1).(d).[4] – Swale Side Slopes

We request relief of the requirement that the side slopes of a swale in a residential area shall be 4:1 max. The request is to reduce the slope to 3:1 for Swale 1. Swale 1 is a diversion swale which diverts upland stormwater away from the proposed lots and infiltration basin. The diversion of the upland stormwater also minimizes the loading ratio of the infiltration basin. The swale is located on the remaining lands of the school and will be maintained by the school. The 3:1 slope allows for routine mowing. The swale is stabilized with erosion control matting.

Call me directly if you have any questions or concerns. Thank you.

Sincerely,

D. C. GOHN ASSOCIATES, INC.

Brian R. Cooley

Brian R. Cooley
Staff Landscape Architect

Cc: Lancaster County Vo-Tech School Authority, Owner
Lancaster County Planning Commission
Josele Cleary, Esquire, Township/Borough Solicitor
Ben Craddock, PE, Lancaster Civil, Township Engineer
Darrell Becker, PE, ARRO, Borough Engineer
Justin Evans, Mount Joy Township
File

LAW OFFICES
MORGAN, HALLGREN, CROSSWELL & KANE, P.C.

GEORGE J. MORGAN
WILLIAM C. CROSSWELL
ANTHONY P. SCHIMANECK
JOSELE CLEARY
ROBERT E. SISKI
JASON M. HESS

P. O. BOX 4686
LANCASTER, PENNSYLVANIA 17604-4686
WWW.MHCK.COM

RETIRED
CARL R. HALLGREN
MICHAEL P. KANE
700 NORTH DUKE STREET
TELEPHONE 299-5251
AREA CODE 717
FAX (717) 299-6170
E-MAIL: attorneys@mhck.com

June 30, 2021

VIA E-MAIL

Justin S. Evans, AICP, Township Manager
Mount Joy Township
8853 Elizabethtown Road
Elizabethtown, PA 17022

Stacie M. Gibbs, Planning, Zoning and Code
Administrator
Mount Joy Borough
21 East Main Street
Mount Joy, PA 17552

Re: Final Minor Subdivision for Lancaster County Career & Technology Center
Mount Joy Campus
Our File No. 10221-1

Dear Justin and Stacie:

I have received the Final Minor Subdivision for Lancaster County Career & Technology Center Mount Joy Campus (the "2021 Plan") and the supporting information which D. C. Gohn Associates, Inc. ("D. C. Gohn") submitted to each of you, including the waiver requests. The 2021 Plan proposes subdivision of two lots on the east side of Fairview Street (SR 4035) within the Township and the installation of a storm water infiltration basin in the Borough. I have also reviewed the documentation relating to the Final Minor Subdivision for Lancaster County Career & Technology Center Mount Joy Campus recorded at Document No. 2016-0355-J (the "2016 Plan") subdividing three residential lots on the west side of Old Market Street in the Township. This letter will set forth comments on the 2021 Plan and the documentation required in connection with the 2021 Plan.

Lancaster County Career and Technology Center ("LCCTC") proposes to eventually construct a street extending from Fairview Street to Old Market Street within the Township, and the 2016 Plan created an access easement to provide driveway access to Lot 2 and Lot 3 created by the 2016 Plan at the location of the future street. The 2021 Plan proposes the location of the access easement for Lot 1 and Lot 14 to create a four-way intersection with Birchland Drive. The 2021 Plan proposes the dedication of additional right-of-way along the frontage of Lot 1, Lot 14, and the proposed street within the Township and no additional right-of-way along any other portion of Fairview Street within either the Township or the Borough. The Township and the Borough will have to confirm that this dedication of right-of-way is acceptable.

The 2021 Plan proposes a single storm water management infiltration basin and piping which apparently will serve both the proposed common driveway and the dwellings to be constructed on Lot 1 and Lot 14. Storm Drainage Note 8 on Sheet 5 of the 2021 Plan states

Justin S. Evans, AICP, Township Manager
June 30, 2021
Page 2

Stacie M. Gibbs, Planning, Zoning and
Code Administrator

that the infiltration basin has been oversized to account for the possibility of future decks/pools for Lots 1 and 14. It would be best to assign a maximum impervious surface coverage for which the storm water management facilities have been designed for Lots 1 and 14 as was done for the lots created by the 2016 Plan and the Storm Water Management Agreement relating to the 2016 Plan. This will make administration simpler when the future owners of Lots 1 and 14 seek to install additional impervious surface coverage.

Sheet 8 of the 2021 Plan indicates that the lateral to serve the school on the LCCTC property is to be removed and relocated. The note states "proposed school 6" PVC sewer line lateral to follow property boundary". There is no easement shown over Lot 1. While the lateral will not be located on Lot 1, if there is any future maintenance needed for that lateral access onto Lot 1 (and future Lot 2) will be necessary. It would be reasonable for LCCTC to create an easement for that sewer line before Lot 1 is conveyed. Doing so on the 2021 Plan will eliminate the potential for creation of the access to be overlooked when Lot 1 is conveyed.

The 2021 Plan will require a Storm Water Management Agreement and Declaration of Easement. It would be reasonable for the Storm Water Management Agreement to be a four-party agreement among Lancaster Vo-Tech School Authority, now by change of name Lancaster County Career and Technology Center Authority (the "Vo-Tech Authority"), the record owner of the land, LCCTC, the Township and the Borough. The Vo-Tech Authority still owns two of the three lots created by the 2016 Plan, so the Storm Water Management Agreement for the 2021 Plan must expressly state that it does not supersede or revoke the 2016 Storm Water Management Agreement. I have prepared and attach a Storm Water Management Agreement for your review.

LCCTC has requested a waiver of the requirements to improve the Fairview Street frontage along Lots 1 and 14. LCCTC made a similar request concerning improvements to Old Market Street in connection with the 2016 Plan, and the Township, the Vo-Tech Authority, and the Township entered into a Road Improvements Agreement also dated July 26, 2016, which was recorded at Document No. 6283002. I have prepared and attach a Road Improvements Agreement for the 2021 Plan.

The 2021 Plan must contain the note set forth in the Pennsylvania Municipalities Planning Code ("MPC") when there is a proposed intersection with a state highway. The Pennsylvania Department of Transportation ("PennDOT") must grant a highway occupancy permit for the intersection of what is now proposed as a common driveway and will eventually become a through street. PennDOT may, or may not, require the additional right-of-way shown on the 2021 Plan to it. If PennDOT will not require the Vo-Tech Authority to convey additional right-of-way to it, then the additional right-of-way may be conveyed to the Township. Please let me know if I should prepare documentation to convey the additional right-of-way to the Township.

Justin S. Evans, AICP, Township Manager
June 30, 2021
Page 3

Stacie M. Gibbs, Planning, Zoning and
Code Administrator

If you have any questions concerning any of these comments or the attached documents, please contact me. I will await the direction of the Township and/or the Borough before taking any further action concerning this matter

Very truly yours,



Josele Cleary

JC:sle
MUNI\10221-1\210628\71

Attachments

cc: Benjamin S. Craddock, P.E. (via e-mail; w/attachments)
Darrell L. Becker, P.E. (via e-mail; w/attachments)
Brian R. Cooley, Landscape Architect (via e-mail; w/attachments)

Prepared by: Morgan, Hallgren, Crosswell & Kane, P.C.
700 North Duke Street, P. O. Box 4686
Lancaster, PA 17604-4686
(717) 299-5251
Return to: Same
Parcel I.D. #: 461-59458-0-0000

STORM WATER MANAGEMENT AGREEMENT AND DECLARATION OF EASEMENT

THIS AGREEMENT AND DECLARATION OF EASEMENT made this _____ day of _____, 2021, between and among **LANCASTER COUNTY VO-TECH SCHOOL AUTHORITY**, now by change of name **LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER AUTHORITY**, a municipality authority organized and operating under the laws of the Commonwealth of Pennsylvania with its administrative offices located at Hans Herr Drive, Willow Street, Pennsylvania 17584, hereinafter referred to as the "Authority"; **LANCASTER COUNTY CAREER and TECHNOLOGY CENTER**, an area vocational-technical school formed by School Districts of Lancaster County, with its administrative offices located at Hans Herr Drive, Willow Street, Pennsylvania 17584, hereinafter referred to as the "LCCTC"; **MOUNT JOY TOWNSHIP**, Lancaster County, Pennsylvania, a municipal corporation duly organized under the laws of the Commonwealth of Pennsylvania, with its municipal office located at 8853 Elizabethtown Road, Elizabethtown, Pennsylvania, hereinafter referred to as the "Township"; and **MOUNT JOY BOROUGH**, Lancaster County, Pennsylvania, a municipal corporation organized under the laws of the Commonwealth of Pennsylvania, with its municipal office located at 21 East Main Street, Mount Joy, Pennsylvania, hereinafter referred to as the "Borough".

BACKGROUND

The Authority is the record owner of land located on the east side of Fairview Street (SR 4035) which is a portion of a larger tract identified as Lancaster County Tax Account No. 461-59458-0-0000 (the "Premises") located principally within Mount Joy Township, Lancaster County, Pennsylvania, and partially within Mount Joy Borough, Lancaster County, Pennsylvania, by virtue of a deed recorded in Deed Book L, Volume 57, Page 345, in the Office of the Recorder of Deeds in and for Lancaster County, Pennsylvania. The LCCTC is the lessee of the Premises under a Lease Agreement dated as of October 7, 1998 (the "Lease"). Pursuant to the terms of the

Lease, LCCTC has developed the Premises with educational facilities. LCCTC has submitted an application to the Mount Joy Township Planning Commission for approval to subdivide two lots from the portion of the Premises on the east side of Fairview Street north of the municipal boundary between Mount Joy Township and Mount Joy Borough shown on the Final Minor Subdivision Plan for Lancaster County Career & Technology Center Mount Joy Campus prepared by D.C. Gohn Associates, Inc., Drawing No. CG-2920, Project No. 4343-21 dated June 25, 2021, last revised _____, 2021 (the "Plan"). Hereinafter the Authority and the LCCTC shall be jointly referred to as the "Grantor". The Plan additionally proposes the installation of storm water management facilities within the Borough.

The Mount Joy Township Storm Water Management Ordinance and the Mount Joy Borough Storm Water Management Ordinance (collectively the "Ordinances" and individually as to each municipality "Ordinance") requires that Grantor's plan reflect and/or be accompanied with supporting documentation which identifies the ownership of, and the method of administering and maintaining, all permanent storm water management facilities. Drainage courses, swales, grassed waterways, storm water inlets, pipes, conduits, detention basins, retention basins, infiltration structures, and other storm water management facilities, including Best Management Practices facilities ("BMPs"), shall be included under the term "storm water management facilities" in this Agreement and Declaration of Easement.

The purpose of this Agreement and Declaration of Easement is to describe the ownership and maintenance responsibilities for the storm water facilities which will be installed on the Premises and to impose the ownership and maintenance responsibilities upon Grantor, its successors and assigns and upon successor owners of the Premises, and set forth the rights of the Township.

NOW, THEREFORE, intending to be legally bound hereby and in consideration of receiving approval of its Plan from the Township, and in consideration of receiving permits from the Township and the Borough to develop the Premises, Grantor, for Grantor and the successors and assigns of Grantor, covenant and declare as follows:

1. The storm water facilities will be owned by Grantor, its successors and assigns.
2. All drainage courses, swales, storm water inlets, pipes, conduits, detention basins BMPs, and other storm water facilities shall be installed, constructed and maintained by Grantor, its successors and assigns, in a first-class condition in conformance with the Plan, including the

storm water management plans and information, approved by the Township Planning Commission, and in a manner sufficient to meet or exceed the performance standards and specifications set forth on the Plan. These responsibilities shall include, but not be limited to, the following:

(a) Liming, fertilizing, seeding and mulching of vegetated channels and all other unstablized soils or areas according to the specifications in the "Erosion and Sediment Pollution Control Manual" published by the Pennsylvania Department of Environmental Protection, the Penn State Agronomy Guide, or such similar accepted standard.

(b) Reestablishment of vegetation by seeding and mulching or sodding of scoured areas or areas where vegetation has not been successfully established.

(c) Mowing as necessary to maintain adequate strands of grass and to control weeds. Chemical weed control may be used if federal, state and local laws and regulations are met. Selection of seed mixtures shall be subject to approval by the Township.

(d) Removal of silt from all permanent structures which trap silt or sediment in order to keep the material from building up in grass waterways, pipes, detention or retention basins, infiltration structures, BMPs, and/or other facilities and thus reducing their capacity.

(e) Removal of silt from all permanent drainage structures, in particular BMPs, in order to maintain the design storage volumes. Regular programs shall be established and maintained.

(f) Regular inspection of the areas in question to assure proper maintenance and care, including but not limited to proper implementation of BMPs. Grantor shall inspect the infiltration basin and amended soils areas at least once each April, at least once each October, and within 48 hours after each rainfall event exceeding one inch of precipitation in 24 hours for erosion problems, vegetation damage, sediment and debris accumulation, and litter.

(g) Regular maintenance to insure that all pipes, swales and detention facilities shall be kept free of any debris or other obstruction.

(h) Regular maintenance of all facilities designed to improve water quality to insure that such facility function in accordance with their design. Grantor shall remove accumulations of sediment greater than three inches in depth and immediately stabilize

disturbed area. Grantor shall remove sediment during periods when rutting will be minimal. Grantor shall also prune vegetation and weed rain gardens to insure safety, aesthetics, proper operation, and removal of invasive/noxious vegetation.

(i) Repair of any subsidence, including subsidence caused by sinkholes.

Grantor, its successors and assigns, shall be responsible for performing the foregoing maintenance.

3. Grantor, for itself, its successors and assigns, agrees that the failure to maintain all drainage courses, swales, storm water inlets, pipes, conduits, detention basins, BMPs, and other storm water management facilities in a first-class condition in conformance with this Agreement and the Plan shall constitute a nuisance and shall be abatable by the Township, or the Borough, as applicable, as such.

4. Grantor, for itself, its successors and assigns, authorize the Township or the Borough, as applicable, at any time and from time to time, by its authorized representatives, to enter upon the Premises to inspect the storm water facilities.

5. The Township or the Borough, as applicable, may require that Grantor, and assigns or any future owner or occupier of the Premises or any part thereof, take such corrective measures as the Township or the Borough, as applicable, may deem reasonably necessary to bring the Premises into compliance with this Agreement and with the Plan.

6. Upon the failure of the owner or occupier of the Premises or any part thereof to comply with the terms of this Storm Water Management Agreement or to take corrective measures following 60 days' written notice from the Township or the Borough, as applicable, the Township or the Borough, as applicable, through its authorized representatives, may take such corrective measures as it deems reasonably necessary to bring the Premises into compliance with this Agreement and with the Plan, including, but not limited to, the removal of any blockage or obstruction from drainage pipes, swales, detention basins, and BMPs, and may charge the cost thereof to Grantor, its successors and assigns, or any owner of the Premises or any part thereof and, in default of such payment, may cause a municipal lien to be imposed upon the Premises or any part thereof. Any municipal lien filed pursuant to this Agreement shall be in the amount of all costs incurred by the Township or the Borough, as applicable, plus a penalty of ten (10%) of such costs, plus the Township or the Borough's reasonable attorneys' fees.

7. Grantor hereby imposes upon the Premises for the benefit of all present and future owners of the Premises or part of the Premises, the Township and the Borough, and all other

property owners affected by installation of the storm water facilities, the perpetual right, privilege and easement for the draining of storm water in and through the drainage courses, swales, storm water inlets, pipes, conduits, detention basins, BMPs, and other storm water facilities depicted on the plan or plans submitted to the Township or the Borough or hereafter made of record and now or hereafter installed on or constructed upon the Premises and, in addition, easements of access to the storm water facilities.

8. The storm water management facilities have been designed to allow a maximum impervious surface coverage of _____ square feet on Lot 1, and _____ square feet on Lot 14 to be created from the Premises. If the owner of any lot to be created from the Premises desires to install additional impervious surface coverage, such lot owner must submit an application under the Storm Water Management Ordinance in effect at such time as the application is filed and meet all applicable storm water management regulations.

9. Grantor agrees to indemnify the Township, the Borough, and all of their elected and appointed officials, agents and employees (hereafter collectively referred to as the "Indemnitees") against and hold Indemnitees harmless from any and all liability, loss or damage, including attorneys' fees and costs of investigation and defense, as a result of claims, demands, costs or judgments against Indemnitees which arise as a result of the design, installation, construction or maintenance of the storm water facilities.

10. Grantor's personal liability under this Agreement shall cease at such time as (a) all storm water management facilities have been constructed in accordance with the specifications of the Ordinances and the approved Plan; (b) the storm water management facilities have been inspected and approved by the Township Engineer and Borough Engineer, as applicable; (c) all financial security, including any maintenance security, posted by Grantor has been released by the Township and the Borough; and (d) Grantor has transferred all lots to be created from the Premises to third parties. Notwithstanding the foregoing, Grantor's personal liability shall continue for any violations of this Agreement and Declaration of Easement which occurred during the time that Grantor owned the Premises or any lot created from the Premises or in the event the storm water management facilities were not completed, inspected or approved as set forth in (a) through (c) herein.

11. It is the intent of the parties to this Agreement that personal liability and maintenance obligations shall pass to subsequent title owners upon change in ownership of the Premises or any

lot created from the Premises, and such subsequent owners shall assume all personal liability and maintenance obligations for the time period during which they hold title. Personal liability shall remain for any violations of this Agreement and Declaration of Easement which occurred during the period in which an owner held title.

12. The Township and/or the Borough may, in addition to the remedies prescribed herein, proceed with any action at law or in equity to bring about compliance with its Ordinance and this Agreement.

13. This Agreement and Declaration of Easement shall be binding upon the Grantor, the successors and assigns of Grantor, and all present and future owners of the Premises or any part thereof and is intended to be recorded in order to give notice to future owners of the Premises of their duties and responsibilities with respect to the storm water facilities. Grantor shall include a specific reference to this Agreement in any deed of conveyance for the Premises or any part thereof.

14. This Agreement and Declaration of Easement may be amended only by written instrument signed on behalf of all owners of the Premises, the Township, and the Borough.

15. The Storm Water Management Agreement and Declaration of Easement among Lancaster County Vo-Tech School Authority, now by change of name Lancaster County Career and Technology Center Authority, Lancaster County Career and Technology Center, and the Township dated July 26, 2016, and recorded August 18, 2016, at Document No. 6283004 in the Office of the Recorder of Deeds in and for Lancaster County, Pennsylvania, relating to the Final Minor Subdivision for Lancaster County Career & Technology Center Mount Joy Campus recorded at Document No. 2016-0355-J in the Office of the Recorder of Deeds in and for Lancaster County, Pennsylvania, shall remain in full force and effect, unaltered by this Agreement.

16. When the sense so requires, words of any gender used in this Agreement and Declaration of Easement shall be held to include any other gender, and the words in the singular number shall be held to include the plural, and vice versa.

IN WITNESS WHEREOF, the undersigned have caused this Agreement and Declaration to be executed on the day and year first above written.

LANCASTER COUNTY VO-TECH SCHOOL
AUTHORITY, now by change of name
LANCASTER COUNTY CAREER AND
TECHNOLOGY CENTER AUTHORITY

Attest: _____

By: _____
Name: _____
Title: _____

[AUTHORITY SEAL]

LANCASTER COUNTY CAREER and
TECHNOLOGY CENTER

Attest: _____

By: _____
Name: _____
Title: _____

TOWNSHIP OF MOUNT JOY
Lancaster County, Pennsylvania

Attest: _____
(Assistant) Secretary

By: _____
(Vice) Chairman
Board of Supervisors

[TOWNSHIP SEAL]

BOROUGH OF MOUNT JOY
Lancaster County, Pennsylvania

Attest: _____
(Assistant) Secretary

By: _____
(Vice) President
Borough Council

[BOROUGH SEAL]

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF LANCASTER)

On this _____ day of _____, 2021, before me, the undersigned officer, a notary public in and for the aforesaid Commonwealth and County, personally appeared _____ who acknowledged _____ self to be _____ of Lancaster County Vo-Tech School Authority, now by change of name Lancaster County Career and Technology Center Authority, and that he/she, as such officer, being authorized to do so, executed the foregoing Storm Water Management Agreement and Declaration of Easement, for the purposes therein contained, by signing the name of such Authority by _____ self as such officer.

IN WITNESS WHEREOF, I set my hand and official seal.

Notary Public

My commission expires:

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF LANCASTER)

On this ____ day of _____, 2021, before me, the undersigned officer, a notary public in and for the aforesaid Commonwealth and County, personally appeared _____ who acknowledged _____ self to be _____ of Lancaster County Career and Technology Center's Joint Operating Committee, and that he/she, as such officer, being authorized to do so, executed the foregoing Storm Water Management Agreement and Declaration of Easement, for the purposes therein contained, by signing the name of such Association by _____ self as such officer.

IN WITNESS WHEREOF, I set my hand and official seal.

Notary Public

My commission expires:

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF LANCASTER)

On this ____ day of _____, 2021, before me, the undersigned officer, a notary public in and for the aforesaid Commonwealth and County, personally appeared _____ who acknowledged _____ self to be (Vice) Chairman of the Board of Supervisors of the Township of Mount Joy, Lancaster County, Pennsylvania, and that s/he, as such officer, being authorized to do so, executed the foregoing Storm Water Management Agreement and Declaration of Easement, for the purposes therein contained, by signing the name of such Township by _____ self as such officer.

IN WITNESS WHEREOF, I set my hand and official seal.

Notary Public

My commission expires:

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF LANCASTER)

On this _____ day of _____, 2021, before me, the undersigned officer, a notary public in and for the aforesaid Commonwealth and County, personally appeared _____ who acknowledged _____ self to be (Vice) President of Borough Council of the Borough of Mount Joy, Lancaster County, Pennsylvania, and that s/he, as such officer, being authorized to do so, executed the foregoing Storm Water Management Agreement and Declaration of Easement, for the purposes therein contained, by signing the name of such Borough by _____ self as such officer.

IN WITNESS WHEREOF, I set my hand and official seal.

Notary Public

My commission expires:

Prepared by: Morgan, Hallgren, Crosswell & Kane, P.C.
700 North Duke Street, P. O. Box 4686
Lancaster, PA 17604-4686
(717) 299-5251
Return to: Same
Parcel I.D. #: 461-59458-0-0000

ROAD IMPROVEMENTS AGREEMENT

THIS AGREEMENT made as of the _____ day of _____, 2021, between and among **LANCASTER COUNTY VO-TECH SCHOOL AUTHORITY**, now by change of name **LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER AUTHORITY**, a municipality authority organized and operating under the laws of the Commonwealth of Pennsylvania with its administrative offices located at Hans Herr Drive, Willow Street, Pennsylvania 17584, hereinafter referred to as the "Authority"; **LANCASTER COUNTY CAREER and TECHNOLOGY CENTER**, an area vocational-technical school formed by School Districts of Lancaster County, with its administrative offices located at Hans Herr Drive, Willow Street, Pennsylvania 17584, hereinafter referred to as the "LCCTC"; and **MOUNT JOY TOWNSHIP**, Lancaster County, Pennsylvania, a municipal corporation duly organized under the laws of the Commonwealth of Pennsylvania, with its municipal office located at 8853 Elizabethtown Road, Elizabethtown, Pennsylvania, hereinafter referred to as the "Township".

BACKGROUND:

The Authority is the record owner of land located on the east side of Fairview Street (SR 4035) which is a portion of a larger tract identified as Lancaster County Tax Account No. 461-59458-0-0000 (the "Premises") located principally within Mount Joy Township, Lancaster County, Pennsylvania, and partially within Mount Joy Borough, Lancaster County, Pennsylvania, by virtue of a deed recorded in Deed Book L, Volume 57, Page 345, in the Office of the Recorder of Deeds in and for Lancaster County, Pennsylvania. The LCCTC is the lessee of the Premises under a Lease Agreement dated as of October 7, 1998 (the "Lease"). Pursuant to the terms of the Lease, LCCTC has developed the Premises with educational facilities. LCCTC has submitted an application to the Mount Joy Township Planning Commission for approval to subdivide two lots from the portion of the Premises on the east side of Fairview Street north of the municipal boundary between Mount Joy Township and Mount Joy Borough shown on the Final Minor Subdivision Plan for Lancaster County Career & Technology Center Mount Joy Campus prepared by D.C. Gohn Associates, Inc., Drawing No. CG-2920, Project No. 4343-21 dated June 25, 2021, last revised _____, 2021 (the "Plan"). Hereinafter the Authority and the LCCTC shall be jointly referred to as the "Developer".

The Township Subdivision and Land Development Ordinance requires that persons

developing land make certain improvements to the abutting street including, but not limited to, the installation of curb and sidewalk. Developer has requested that the Township grant Developer waivers from these requirements of the Subdivision and Land Development Ordinance. The Township has granted such waivers conditioned upon Landowner making the improvements in the future when the Township requests Landowner to do so or reimbursing the Township for such costs if the Township makes the improvements. The purpose of this Agreement is to place these understandings on record.

NOW, THEREFORE, for and in consideration of the mutual promises contained herein, and intending to be legally bound hereby, the parties agree as follows:

1. The foregoing background recitals are incorporated into and made a substantive part of this Agreement.

2. Developer acknowledges that Developer is required to install all improvements required by Sections 119-53.B and 119-53.C of the Township Subdivision and Land Development Ordinance, a copy of which is attached hereto as Exhibit "A" and incorporated herein, along the Fairview Street frontage of the Premises and along the access drive on the Premises within six months after receipt of notice by the Township to install such improvements. The Township may, at the option of the Township, allow installation of a shared use path in lieu of curb and sidewalk along the frontage of Fairview Street. All improvements to the Fairview Street frontage shall meet all applicable Township regulations. If Developer does not install the improvements required under Sections 119-53.B and 119-53.C of the Subdivision and Land Development Ordinance within six (6) months after the date of notification from the Township to install such improvements, the Township may enter on the Premises and install the improvements. Developer shall reimburse the Township for all expenses the Township incurs in the installation of such improvements within thirty (30) days after the date of an invoice for such costs. If Developer fails to pay such invoice, the Township shall be entitled to file a municipal lien against the Premises for such costs and the Township's attorneys' fees in the preparation and filing of such municipal claim.

3. If the Township or the Pennsylvania Department of Transportation undertakes any project to improve Fairview Street before Developer has installed the improvements required by Sections 119-53.B and 119-53.C of the Subdivision and Land Development Ordinance, the Township may install such improvements as part of its project. The Township shall forward an invoice to Developer for the costs of improvements required by Sections 119-53.B and 119-53.C of the Subdivision and Land Development Ordinance which the Township installed as part of its project. If Developer does not pay such invoice in full within thirty (30) days of the date of the invoice, the Township may file a municipal lien against the Premises for such costs and all attorneys' fees incurred in the preparation and filing of the municipal lien.

4. This Agreement shall be binding upon Developer, its successors and assigns, and all

present and future owners of the Premises or any part thereof and is intended to be recorded in order to give notice to future owners of the Premises of their duties and responsibilities with respect to the installation of improvements required under Sections 119-53.B and 119-53.C of the Subdivision and Land Development Ordinance.

5. This Agreement may be amended only by written instrument signed on behalf of all owners of the Premises and the Township.

6. When the sense so requires, words of any gender used in this Agreement shall be held to include any other gender, and the words in the singular number shall be held to include the plural, and vice versa.

IN WITNESS WHEREOF, the undersigned have caused this Agreement to be executed on the day and year first above written.

LANCASTER COUNTY VO-TECH SCHOOL
AUTHORITY, now by change of name
LANCASTER COUNTY CAREER AND
TECHNOLOGY CENTER AUTHORITY

Attest: _____

By: _____
Name: _____
Title: _____

[AUTHORITY SEAL]

LANCASTER COUNTY CAREER and
TECHNOLOGY CENTER

Attest: _____

By: _____
Name: _____
Title: _____

TOWNSHIP OF MOUNT JOY
Lancaster County, Pennsylvania

Attest: _____
(Assistant) Secretary

By: _____
(Vice) Chairman
Board of Supervisors

[TOWNSHIP SEAL]

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF LANCASTER)

On this _____ day of _____, 2021, before me, the undersigned officer, a notary public in and for the aforesaid Commonwealth and County, personally appeared _____ who acknowledged _____ self to be _____ of Lancaster County Vo-Tech School Authority, now by change of name Lancaster County Career and Technology Center Authority, and that he/she, as such officer, being authorized to do so, executed the foregoing instrument, for the purposes therein contained, by signing the name of such Authority by _____ self as such officer.

IN WITNESS WHEREOF, I set my hand and official seal.

Notary Public

My commission expires:

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF LANCASTER)

On this _____ day of _____, 2021, before me, the undersigned officer, a notary public in and for the aforesaid Commonwealth and County, personally appeared _____ who acknowledged _____ self to be _____ of Lancaster County Career and Technology Center's Joint Operating Committee, and that he/she, as such officer, being authorized to do so, executed the foregoing instrument, for the purposes therein contained, by signing the name of such entity by _____ self as such officer.

IN WITNESS WHEREOF, I set my hand and official seal.

Notary Public

My commission expires:

COMMONWEALTH OF PENNSYLVANIA)

COUNTY OF LANCASTER)

On this _____ day of _____, 2021, before me, the undersigned officer, a notary public in and for the aforesaid Commonwealth and County, personally appeared _____, who acknowledged _____ self to be (Vice) Chairman of the Board of Supervisors of the Township of Mount Joy, Lancaster County, Pennsylvania, and that he/she, as such officer, being authorized to do so, executed the foregoing Agreement, for the purposes therein contained, by signing the name of such Township by _____ self as such officer.

Executed before me the day and year aforesaid.

Notary Public

My commission expires:



MOUNT JOY TOWNSHIP

LANCASTER COUNTY, PENNSYLVANIA

Application for Consideration of a Subdivision and/or Land Development Plan

For Mount Joy Township Use Only:

| | |
|--------------------------|-------------------------|
| M.J.T.P.C. File No.: | Date of Receipt/Filing: |
| School District: Donegal | Elizabethtown |

The undersigned hereby applies for approval under Chapter 119, Subdivision and Land Development, of the Code of the Township of Mount Joy for the Plan submitted herewith and described below:

Plan & Project Information

| | | | |
|--|--------------------------|--|------------------------------|
| Plan Name: Final Minor Subdivision | | | |
| Plan No.: 4343-21 | Plan Date: June 28, 2021 | | |
| Location: Fairview Street, across from Birchland Avenue | | | |
| Property Owner: Lancaster County Vo-Tech School Authority | | | |
| Owner Address: 1730 Hans Herr Drive Willow Street, PA 17584 | | | |
| Telephone No.: 717-653-3001 | | | |
| E-mail: mdelpriore@lancasterctc.edu | | | |
| Deed Reference: L-570345 | | Tax Parcel No.: 461-96483-0-0000 | |
| Plan Type: | Sketch | Preliminary | X Final |
| | Lot Line Change | Minor Agricultural or Land Development | |
| Description: Subdivide 2 proposed lots from parent tract. Construct 2 single family houses, sidewalks, driveway, stormwater facilities, and other site improvements. | | | |
| Zoning District: R-1 Low Density Residential | | | |
| Is a zoning change necessary? n/a | | If yes, please specify: | |
| Is/was a zoning variance, special exception, or conditional use approval necessary? | | X | If yes, attach ZHB decision. |
| Total Acreage: 65.62 | | | |
| Name of applicant (if other than owner): same as owner | | | |
| Address: | | | |
| Telephone No.: | | | |
| E-mail: | | | |
| Firm which prepared plan: DC Gohn Associates | | | |
| Address: 32 Mount Joy Street Mount Joy, PA 17552 | | | |
| Phone No.: 717-653-5308 | | | |
| Person responsible for plan: Brian R. Cooley | | | |
| E-mail: bcooley@dcgothn.com | | | |

♦ SUPERVISORS ♦ PARK & RECREATION BOARD ♦ PLANNING COMMISSION ♦ ZONING HEARING BOARD

8853 ELIZABETHTOWN ROAD, ELIZABETHTOWN, PA 17022
PHONE (717) 367-8917 - FAX (717) 367-9208
www.mtjoytwp.org

Proposed Lots and Units

| | # of Lots | # of Units | | # of Lots | # of Units |
|---|-----------|------------|-------------------------------|----------------|------------|
| Total # | 3 | | Mixed Use | | |
| Agricultural | | | Single Family Detached | 2 | |
| Commercial | | | Multifamily (attached-sale) | | |
| Industrial | | | Multifamily (attached-rental) | | |
| Institutional | 1 | | Other: | | |
| Total Square Feet of Ground Floor Area (building footprint): | | | | 120,556 | |
| Total Square Feet of Existing Structures (all floors): | | | | 111,980 | |
| Total Square Feet of Proposed Structures (all floors): | | | | 17,152 | |
| Total Square Feet (or Acres) of Proposed Parkland/Other Public Use: | | | | 0 | |
| Linear feet of new street: | | | | 0 | |
| Identify all street(s) not proposed for dedication: | | | All streets private | | |

Type of water supply proposed:

| | | | |
|-------------------------------------|-----------------|--|------------|
| <input checked="" type="checkbox"/> | Public (Live) | | Community |
| | Public (Capped) | | Individual |

Type of sanitary sewage disposal proposed:

| | | | |
|-------------------------------------|-----------------|--|------------|
| <input checked="" type="checkbox"/> | Public (Live) | | Community |
| | Public (Capped) | | Individual |

The undersigned hereby represents that, to the best of his knowledge and belief, all information listed above is true, correct and complete.

Michael P. O'Connell
Signature of Landowner of Applicant

6/21/2021
Date

WATER AND SEWER FEASIBILITY REPORT

For

LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER - MOUNT JOY CAMPUS

DCG Project No.: 4343-21

Mount Joy Township/Mount Joy Borough
Lancaster County, PA

June 28, 2021

REVISIONS



Surveyors – Engineers – Landscape Architects

32 Mount Joy Street P.O. Box 128
Mount Joy, PA 17552

OUR BENCHMARK IS QUALITY

(717) 653-5308

The purpose of this report is to provide for the water and sewer feasibility of the proposed 2 lot subdivision associated with the Final Minor Subdivision Plan for Lancaster County Career and Technology Center – Mount Joy Campus.

Sanitary Sewer:

The type of sanitary sewer disposal is public through the Mount Joy Borough Authority. The existing sewer main in Fairview Street will be extended to service the two lots.

Water System:

The type of water service is public through the Mount Joy Borough Authority. The existing water main in Fairview Street will be extended to service the two lots.

A request is being made to the Mount Joy Township Board of Supervisors for the transfer of two (2) EDU's from Mount Joy Township allotment to LCCTC for the construction of two dwellings. There is adequate capacity in the existing system to accommodate the 2 single family residential units.



Surveyors - Engineers - Landscape Architects

June 28, 2021

Mr. Justin Evans
Township Manager/Zoning Officer
Mount Joy Township
8853 Elizabethtown Road
Elizabethtown, PA 17022

SUBJECT: Lancaster County Career & Technology Center – Mount Joy Campus
Final Minor Subdivision Plan Modification Requests
DCG Project Number 4343-21

Dear Mr. Evans:

On behalf of our client, Lancaster County Vo-Tech School Authority, we are requesting the following modifications from the Mount Joy Township Subdivision and Land Development Ordinance and Stormwater Management Ordinance.

Subdivision and Land Development Ordinance

1. Section 119-32.C.(2) – Traffic Impact Study

We request relief from the requirement to provide a traffic study for all residential subdivisions containing 20 or more units. Section 119-32.C.(2)(a) requires that the number of dwelling units shall be computed based upon all phases of a development planned and that the traffic study and report be completed and submitted with the first phase.

There are 2 proposed single family units associated with this project. It is projected that each unit and associated sitework will take 18 to 24 months to complete. LCCTC incorporates the construction of each unit and sitework into their curriculum and the students construct the units during the Fall and Spring semesters. There is no summer school. It is anticipated that the 2 units will be completed in approximately 4 years. The 2 single family units will have a nominal traffic impact.

The master plan for LCCTC is based on the development of 27 single family units. Based on the construction schedule for each unit, the total build out of the project would be approximately 38 years. The 27 units are being developed at different areas of the property. It is anticipated that traffic impacts over the entire life of the project will vary from what exists today and over the next 4 years for the development of the two proposed lots.

2. Section 119-52.J.(3)(a) – Improvement of Existing Streets

We request relief from the requirement to improve existing streets where a subdivision abuts an existing street. The street shall be improved to the ultimate width in accordance with Subsection J or as indicated on the Township Official Map, whichever is greater, and additional right of way shall be provided, concrete curb and sidewalk, and any other street improvements shall be constructed.

As an alternative to the improvement of the existing street, the applicant is requesting to enter into a deferred road improvement agreement with the Township related to the construction of curb, sidewalk, and additional cartway width. There is proposed right of way provided along the two proposed lots which will be offered for dedication to the Township. The existing cartway width of Fairview Street is approximately 10 feet wide along the frontage of the two lots which provides adequate width for traffic along the existing street. The 2 single family units will have a nominal traffic impact. There is no existing sidewalk along either side of Fairview Street along the subject property. A proposed sidewalk along Fairview Street for the two lots would create a short segment of sidewalk for which there is no connection point for pedestrians along the north and south side of Fairview Street.

3. Section 119-53.B(1) and 119-53.B(2) – Sidewalks

We request relief from the requirement that sidewalks are required on both sides of a new street and access drive subject to Section 119-52.J(3)(a) which states that where a subdivision abuts an existing street, the street shall be improved to the ultimate width, curb, sidewalk, and any other improvements required by the SALDO shall be constructed. The request is to defer sidewalk along Fairview Street.

Currently, there is no sidewalk on either side of Fairview Street along the subject property. There is no existing sidewalk along either side of Fairview Street along the subject property. A proposed sidewalk along Fairview Street for the two lots would create a short segment of sidewalk for which there is no connection point for pedestrians along the north and south side of Fairview Street.

4. Section 119-53.C – Curbs

We request relief of the requirement that concrete curb shall be provided for all subdivisions along street frontage. The request is to defer curb along Fairview Street.

There is no curbing along Fairview Street along the two proposed lots or the subject property. Stormwater from Fairview Street currently sheet flows to the existing grass and riprap apron and drains to the existing swale located in Rotary Park. There is a proposed bypass pipe which diverts upland stormwater away from the two proposed lots and Fairview Street. The existing condition does not create any ponding of stormwater. The addition of curbing would create the unnecessary need for additional inlets and storm sewer along Fairview Street which will convey stormwater to the same location as it currently drains to.

5. Section 119-61 – Park and Rec Fee

We request relief of the requirement that all residential subdivisions shall provide for suitable and adequate recreation. The requirement is 0.054 acre per lot. There are 2 proposed lots for a total of 0.108 acres of proposed park and rec areas. LCCTC provided Cove Outlook Park to Mount Joy Township which is approximately 30 acres and Rotary Park to Mount Joy borough which is approximately 12 acres. The parks provide areas for recreation, walking trails, parking areas and other park amenities. The existing parks exceed the requirements of the park and rec fee for the 2 proposed lots.

Stormwater Management Ordinance

1. Section 113-37.C.(1).(d).[4] – Swale Side Slopes

We request relief of the requirement that the side slopes of a swale in a residential area shall be 4:1 max. The request is to reduce the slope to 3:1 for Swale 1. Swale 1 is a diversion swale which diverts upland stormwater away from the proposed lots and infiltration basin. The diversion of the upland stormwater also minimizes the loading ratio of the infiltration basin. The swale is located on the remaining lands of the school and will be maintained by the school. The 3:1 slope allows for routine mowing. The swale is stabilized with erosion control matting.

2. Section 113-43.I(6) – Existing Stormwater Management Facilities

We request relief of the requirement to provide all existing stormwater management facilities on the site. Field survey was conducted in the areas of the improvements and all existing features are shown within this area. There are existing stormwater facilities which exist on site but are not within the project area. These facilities do not impact the overall stormwater design for this project.

We respectfully request your consideration of the requested modifications.

Sincerely,

D. C. Gohn Associates, Inc.

Brian R. Cooley

Brian R. Cooley
Staff Landscape Architect

Cc: Lancaster County Vo-Tech School Authority, Owner
Lancaster County Planning Commission
Josele Cleary, Esquire, Township/Borough Solicitor
Ben Craddock, PE, Lancaster Civil, Township Engineer
Darrell Becker, PE, ARRO, Borough Engineer
Stacie Gibbs, Mount Joy Borough
File



Surveyors - Engineers - Landscape Architects

June 28, 2021

Board of Supervisors
Mount Joy Township
8853 Elizabethtown Road
Elizabethtown, PA 17022

SUBJECT: Lancaster County Career & Technology Center – Mount Joy Campus
Final Minor Subdivision Plan Water and Sewer Capacity Request
DCG Project Number 4343-21

Dear Chairman of the Board of Supervisors:

On behalf of our client, Lancaster County Vo-Tech School Authority, we are submitting the sewer and water capacity requests for the proposed site improvements. The project will consist of 2 proposed lots which will each contain a single family unit. The water and sewer main in Fairview Street will be extended to service the two lots. Lancaster County Career & Technology Center students will construct the units as part of the education curriculum. After completion, the unit is sold to a perspective buyer. The buildout of the LCCTC residential lots was factored into the EDU allocations that were part of the 2019 agreement with MJBA.

Per Mount Joy Borough Authority, one water EDU is represented as being 171 gallons per day and one sewer EDU is represented as being 237 gallons per day. The two single family units will each require one EDU for water and sewer. As a result, we are requesting the allocation of two EDU's for this project.

Sincerely,

D. C. Gohn Associates, Inc.

Brian R. Cooley

Brian R. Cooley
Staff Landscape Architect

Cc: Lancaster County Vo-Tech School Authority, Owner
MJBA
ARRO, MJBA Engineer
File



Vortex Environmental, Inc.

ENVIRONMENTAL CONSULTANTS

June 23, 2021

Mr. Brian R. Cooley, ASLA
D.C. Gohn & Associates, Inc.
32 Mount Joy Street
P.O. Box 128
Mount Joy, PA 17552-0128

RE: WETLAND INVESTIGATION FOR THE LANCASTER COUNTY CAREER & TECHNOLOGY CENTER - LOTS 1 & 14 PROJECT; MOUNT JOY CAMPUS, MOUNT JOY BOROUGH AND MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

Dear Brian:

Vortex Environmental, Inc. has conducted a wetland investigation within an approximately 5.5-acre study area on the Lancaster County Career & Technology Center – Mount Joy Campus for the proposed Lots 1 & 14 Project located along Fairview Road in Mount Joy Borough and Mount Joy Township, Lancaster County, Pennsylvania. Two (2) single family buildings lots and associated infrastructure are proposed within the study area for the project. The approximately 5.5-acre study area is located east of Fairview Road at its intersection with Birchland Avenue in the west-central portion of the school campus (Figure 1). The purpose of this investigation was to determine the presence or absence of "waters of the United States and Commonwealth" within the study area for this project. Waters of the United States and Commonwealth include lakes, ponds, reservoirs, swamps, marshes, wetlands, rivers and/or streams (including intermittent streams). One (1) intermittent stream channel (Watercourse 1 – UNT to the Little Chiques Creek) was identified within the northwestern portion of the study area for the project.

The approximately 5.5-acre study area is generally situated in the west-central portion of the overall school campus property. There are no existing buildings or structures within the study area. The vegetation within the approximately 5.5-acre study area for this project consists of cultivated agricultural lands, mixed deciduous forest, and mowed lawn. An unnamed tributary to the Little Chiques Creek (Watercourse 1) was observed flowing from north to south through the northwestern portion of the study area. No wetlands were observed within or immediately adjacent to the study area for the project.

The investigation of the study area included an examination of background materials and a field investigation. The background information examined included the Columbia West, PA 7.5-minute USGS topographic quadrangle, aerial photographs, and the Online Web Soils Survey for Lancaster County, PA (<http://websoilsurvey.nrcs.usda.gov/app>). The field investigation was conducted on May 4, 2021 by Bradley J. Gochner of Vortex Environmental, Inc. The soils, hydrology, and vegetation within the study area were examined for wetland characteristics in accordance with the United States Army Corps of Engineers Wetland Delineation Manual (1987) and the Regional Supplement to the Corps

of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region –
Version 2.0 (April 2012).

Vegetation

The vegetation within the study area consisted of cultivated agricultural lands, mixed deciduous forest and mowed lawn. The cultivated agricultural lands dominated the study area and consisted of harvested soybean fields. The associated vegetation within the agricultural lands consisted of common chickweed, field garlic, purple deadnettle, Kentucky bluegrass, corn stubble and soybean stubble. The mixed deciduous forest was observed within the northwestern portion the study area. The mixed deciduous forest vegetation consisted of unidentified bluegrass, English ivy, field garlic, garlic mustard, jewelweed, Japanese honeysuckle, common barberry, unidentified blackberry, multiflora rose, poison ivy, Tartarian honeysuckle, black cherry, black walnut, box-elder and common hackberry. The mowed lawn was observed in the western portion of the study area along Fairview Road. The mowed lawn vegetation consisted of Kentucky bluegrass, unidentified fescue, smooth crabgrass, common dandelion, gill over ground, common chickweed, Indian strawberry and white clover. No areas dominated by wetland vegetation were observed within the approximately 5.5-acre study area during the field investigation.

Soils

Two soil series including three soil types; Duffield silt loam, DbA; Hagerstown silt loam, HaA and HaB; exist within the study area according to the Soil Survey for Lancaster County, PA (Figure 3). These soil series are not listed as having any major hydric characteristics according to the Hydric Soils of the United States and the "Hydric Soils of Lancaster County". The Duffield silt loam soil series is listed as having possible inclusions of hydric characteristics. No hydric soils were observed within the approximately 5.5-acre study area for the project.

Hydrology

Hydrology within the study area is generally conveyed via overland sheet flow to the west, where it drains into an existing storm water drainage swale along Fairview Road. This drainage swale conveys storm water from north to south along the roadway. The drainage swale discharges to a larger storm water drainage swale to the south of the study area. An intermittent stream channel (UNT to the Little Chiques Creek) was observed in the northwestern portion of the study area. This intermittent stream channel originates to the northwest of the study area, then drains south along Fairview Road into the northwestern portion of the study area. This is a losing stream channel, that ends at an existing sinkhole in the northwestern portion of the study area. Hydrology not captured within the sinkhole is

Mr. Brian R. Cooley, ASLA
June 23, 2021
Page 3

conveyed to the south within the existing storm water drainage swale. The existing sinkhole was recently mitigated by a geologist. No wetlands or areas of wetland hydrology were observed within the study area for the project.

Conclusion

Vortex Environmental, Inc. examined background information and conducted a field investigation to determine the presence or absence of "waters of the United States and Commonwealth" within the approximately 5.5-acre study area for the LCCTC - Lots 1 & 14 Project located along Fairview Road in Mount Joy Borough and Mount Joy Township, Lancaster County, Pennsylvania. The background information for the project did indicate the possibility of "waters of the United States and Commonwealth" within the study area. Vortex Environmental, Inc. conducted a wetland investigation within the study area and identified one (1) regulated feature including; an intermittent stream channel (Watercourse 1 – UNT to the Little Chiques Creek). This losing stream channel is located in the northwestern portion of the study area.

Based on the May 4, 2021 field investigations, Vortex Environmental, Inc. concludes that one (1) "waters of the United States and Commonwealth", exists within the approximately 5.5-acre study area for the LCCTC - Lots 1 & 14 Project, consisting of the intermittent stream channel (Watercourse 1). The location of this regulated feature is shown on the attached site plan. No wetlands were observed within or immediately adjacent to the approximately 5.5-acre study area for the project.

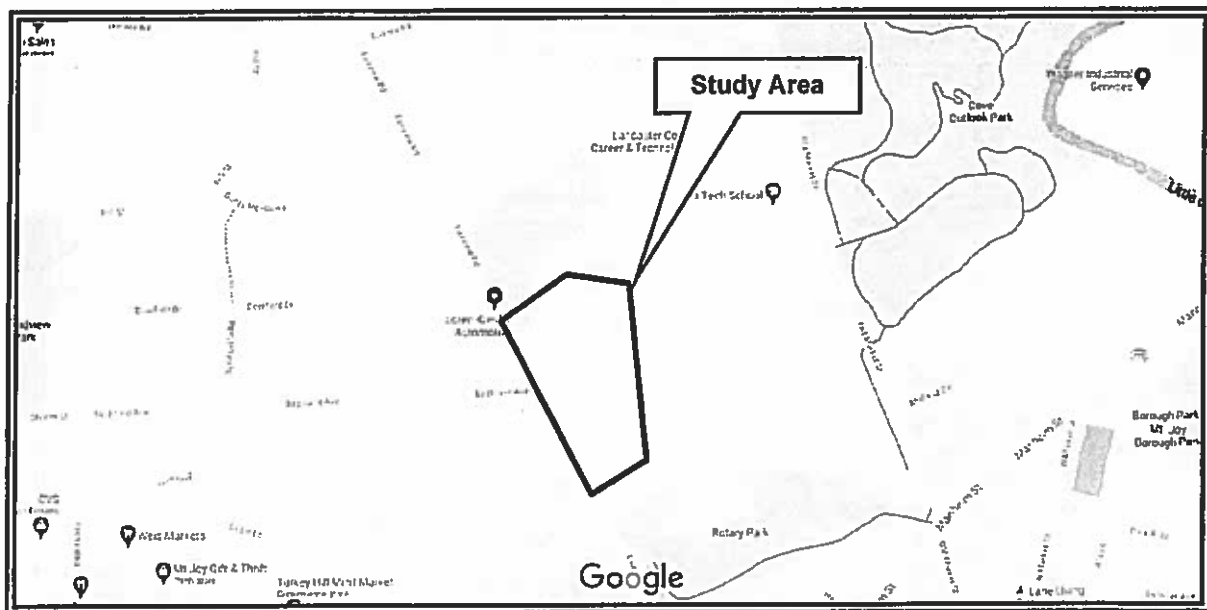
If there are any questions regarding this project, please feel free to contact me.

Sincerely,

VORTEX ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read "Brady J. Gochbauer", with a stylized flourish at the end.

Brady J. Gochbauer
President

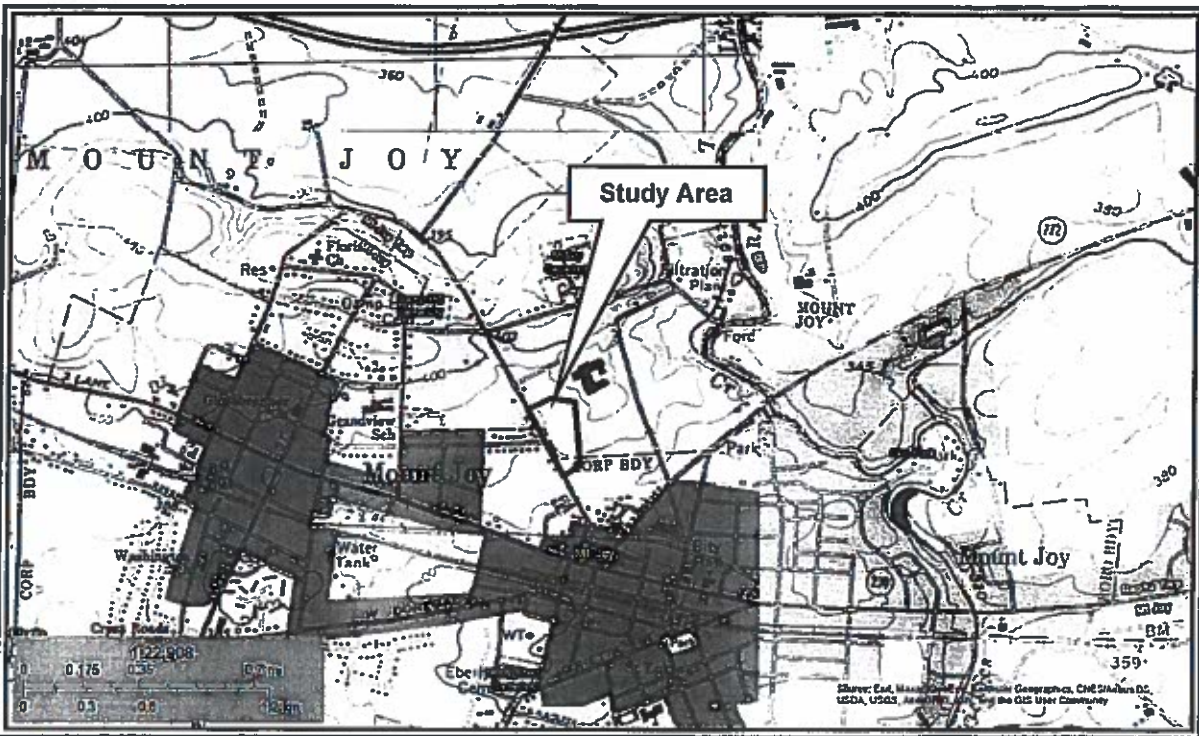


Legend:
Study Area Boundary ———

NOT TO SCALE

Figure 1: Site Map for the LCCTC - Lots 1 & 14 Project
Google Maps
Google.com
Mount Joy Borough and Mount Joy Twp., Lancaster Co., PA

VORTEX ENVIRONMENTAL, INC.

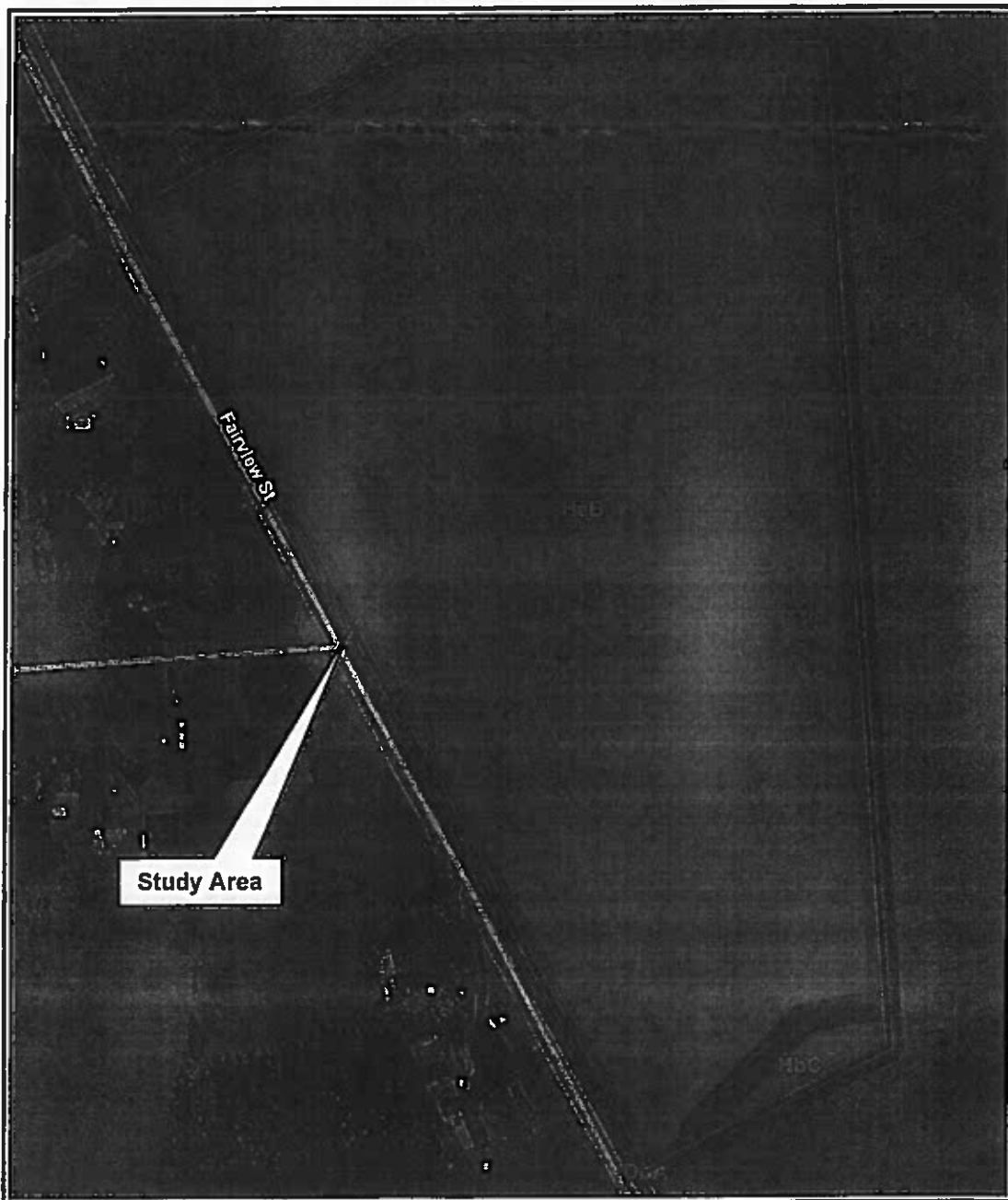


Legend:
Study Area Boundary ———

NOT TO SCALE

Figure 2: USGS Map for the LCCTC - Lots 1 & 14 Project
Columbia West, PA, 7.5-minute USGS Topographic Quadrangle
1964, Photo Revised 1990
Mount Joy Borough and Mount Joy Twp., Lancaster Co., PA

VORTEX ENVIRONMENTAL, INC.



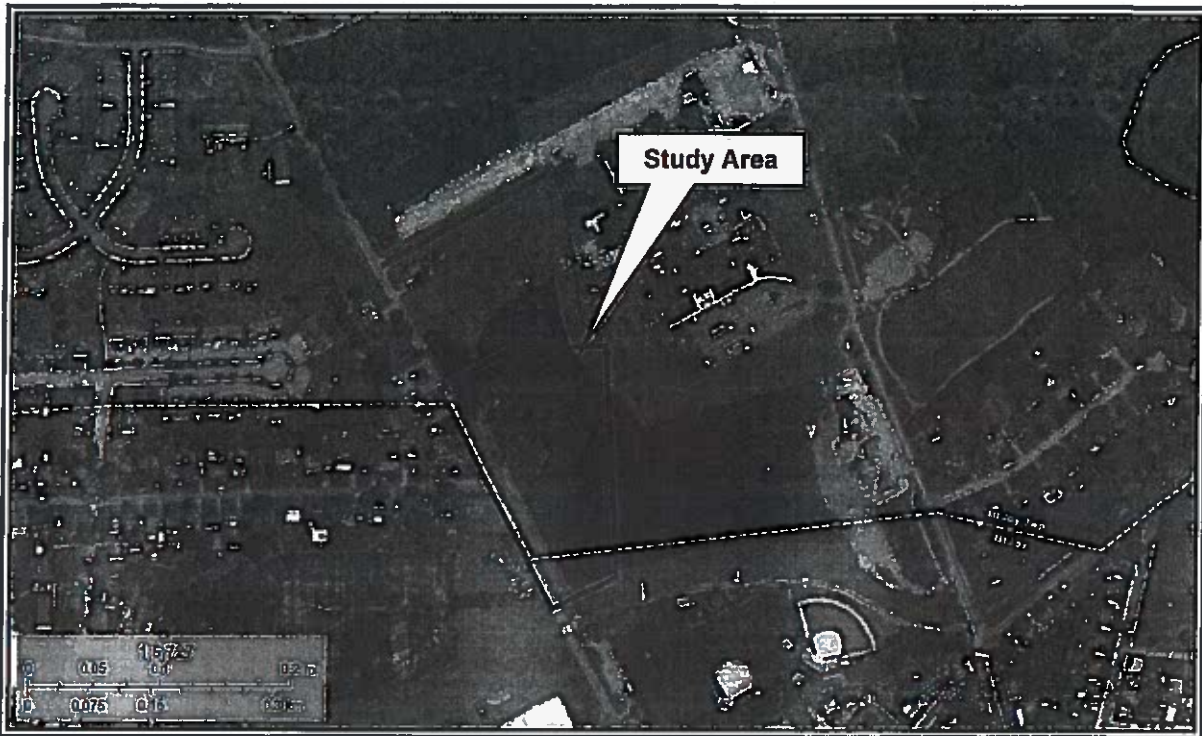
Legend:

Study Area Boundary ———

NOT TO SCALE

Figure 3: Soil Map for the LCCTC - Lots 1 & 14 Project
 Online Web Soil Survey of Lancaster County, PA
<http://websoilsurvey.nrcs.usda.gov/app>
 Mount Joy and Mount Joy Twp., Lancaster Co., PA

VORTEX ENVIRONMENTAL, INC.



Legend:
Study Area Boundary ———

NOT TO SCALE

Figure 4: NWI Map for the LCCTC - Lots 1 & 14 Project
U.S. Fish and Wildlife Service Wetlands Online Wetland Mapper
<http://wetlandsfws.er.usgs.gov/NWI/index.html>
Mount Joy Borough and Mount Joy Twp., Lancaster Co., PA

VORTEX ENVIRONMENTAL, INC.

DATA SHEETS
(1 – 3)

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont (DRAFT)

Project/Site: LCCTC - Lots 1 & 14 Project City/County: Lancaster Sampling Date: May 4, 2021
 Applicant/Owner: Lancaster County Career & Technology Center State: PA Sampling Point: 1
 Investigator(s): Bradly J. Gochner Section, Township, Range: Mount Joy Township
 Landform (hill/slope, terrace, etc.): stream bank Local relief (concave, convex, none): none
 Slope (%): 4% Lat: 40.115448 Long: 76.509379 Datum: UTM
 Soil Map Unit Name: HsB NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---------------------------------|---|---------------------------------------|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Is the Sampled Area within a Wetland? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Hydric Soil Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | | |
| Wetland Hydrology Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | | |

Remarks: Mixed deciduous forest adjacent to Watercourse 1 in the northwestern portion of the study area

VEGETATION - Use scientific names of plants.

| Tree Stratum: (Plot Size: <u>30'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|------------------|-------------------------------------|------------------|
| 1. <u>Juglans nigra (Black Walnut)</u> | <u>55</u> | <input checked="" type="checkbox"/> | <u>FACU</u> |
| 2. <u>Acer negundo (Box-elder)</u> | <u>20</u> | <input checked="" type="checkbox"/> | <u>FAC</u> |
| 3. <u>Celtis occidentalis (Common Hackberry)</u> | <u>15</u> | <input type="checkbox"/> | <u>FACU</u> |
| 4. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 5. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 6. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 7. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 8. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 9. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u>90</u> = Total Cover | | | |
| Sapling/Shrub Stratum: (Plot Size: <u>15'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
| 1. <u>Rubus sp (Blackberry sp)</u> | <u>15</u> | <input type="checkbox"/> | <u>N</u> |
| 2. <u>Lonicera tatarica (Tartarian Honeysuckle)</u> | <u>25</u> | <input checked="" type="checkbox"/> | <u>FACU</u> |
| 3. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 4. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 5. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 6. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 7. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 8. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 9. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u>40</u> = Total Cover | | | |
| Herb Stratum: (Plot Size: <u>5'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
| 1. <u>Poa sp. (Unidentified Bluegrass)</u> | <u>15</u> | <input type="checkbox"/> | <u>N</u> |
| 2. <u>Allium vineale (Field Garlic)</u> | <u>5</u> | <input type="checkbox"/> | <u>FACU</u> |
| 3. <u>Impatiens capensis (Jewelweed)</u> | <u>25</u> | <input checked="" type="checkbox"/> | <u>FACW</u> |
| 4. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 5. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 6. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 7. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 8. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 9. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u>45</u> = Total Cover | | | |
| Woody Vine Stratum: (Plot Size: <u>30'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
| 1. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 2. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u> </u> = Total Cover | | | |

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species x1=

FACW species x2=

FAC species x3=

FACU species x4=

UPL species x5=

Totals: (A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation

☐ Dominance Test is > 50%

☐ Prevalence Index is 3.0 ¹

☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

SOIL

Sampling Point : 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (Inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|-------------------|---------------|-----|----------------|---|--------|-------|-----------|---------|
| | Color (moist) | % | Color (moist) | % | Type * | Loc** | | |
| 0-8 | 10YR 4/3 | 100 | | | | | Silt Loam | |
| 8-16 | 10YR 4/4 | 100 | | | | | Silt Loam | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon
☐ Black Histic
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (LRR N)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface
☐ Sandy Mucky Mineral (S1) (LRR N, MRLA 147, 148)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8)(MRLA 147, 148)
☐ Thin Dark Surface (S9)(MRLA 147, 148)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12)(LRR N, MLRA 136)
☐ Umbric Surface (F13) (MRLA 136, 122)
☐ Piedmont Floodplain Soils (F19)(MLRA 148)

Indicators for Problematic Soils: ***

- ☐ 2cm Muck (A10) (MLRA147)
☐ Piedmont Floodplain Soils(F19)(MLRA 136, 147)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

*** Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed and problematic.

Restrictive Layer (if observed):

Type:

Hydric Soil Present? Yes ☐ No ☒

Depth:

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B13)
☐ Aquatic Fauna (B13)

- ☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres or Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two Required)

- ☐ Surface Soil Cracks (B6)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Drainage Patterns (B10)
☐ Moss Trim Lines (B16)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ Microtopographic Relief (D4)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? Yes ☐ No ☒ Depth (inches): _____

(Includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Mixed deciduous forest.

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont (DRAFT)

Project/Site: LCCTC - Lots 1 & 14 Project City/County: Lancaster Sampling Date: May 4, 2021
 Applicant/Owner: Lancaster County Career & Technology Center State: PA Sampling Point: 2
 Investigator(s): Bradly J. Gochner Section, Township, Range: Mount Joy Township
 Landform (hillslope, terrace, etc.): drainage swale Local relief (concave, convex, none): concave
 Slope (%): 4% Lat: 40.114733 Long: -76.509082 Datum: UTM
 Soil Map Unit Name: HaB NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

| | | | | | |
|---------------------------------|------------------------------|--|---------------------------------------|------------------------------|--|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | Is the Sampled Area within a Wetland? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Hydric Soil Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | | | |
| Wetland Hydrology Present? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | | | |

Remarks: Mowed lawn within existing storm water drainage swale along Fairview Road.

VEGETATION - Use scientific names of plants.

| Tree Stratum: (Plot Size: <u>30'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|------------------|-------------------------------------|------------------|
| 1. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 2. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 3. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 4. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 5. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 6. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 7. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 8. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 9. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u> </u> = Total Cover | | | |
| Sapling/Shrub Stratum: (Plot Size: <u>15'</u>) | | Dominant Species? | Indicator Status |
| 1. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 2. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 3. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 4. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 5. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 6. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 7. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 8. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 9. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u> </u> = Total Cover | | | |
| Herb Stratum: (Plot Size: <u>5'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
| 1. <u>Taraxacum officinale (Dandelion)</u> | <u>5</u> | <input type="checkbox"/> | <u>FACU</u> |
| 2. <u>Festuca sp (Fescue sp)</u> | <u>15</u> | <input type="checkbox"/> | <u>NI</u> |
| 3. <u>Poa pratensis (Kentucky Bluegrass)</u> | <u>60</u> | <input checked="" type="checkbox"/> | <u>FACU</u> |
| 4. <u>Trifolium repens (White Clover)</u> | <u>20</u> | <input checked="" type="checkbox"/> | <u>FACU</u> |
| 5. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 6. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 7. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 8. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 9. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u>100</u> = Total Cover | | | |
| Woody Vine Stratum: (Plot Size: <u>30'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
| 1. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 2. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u> </u> = Total Cover | | | |

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species x1=

FACW species x2=

FAC species x3=

FACU species x4=

UPL species x5=

Totals: (A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation

☐ Dominance Test is > 50%

☐ Prevalence Index is 3.0*

☐ Morphological Adaptations* (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation* (Explain)

* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

SOIL

Sampling Point : 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|-------------------|---------------|-----|----------------|---|--------|-------|-----------|---------|
| | Color (moist) | % | Color (moist) | % | Type * | Loc** | | |
| 0-16 | 10YR 4/3 | 100 | | | | | Silt Loam | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

*1Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon
☐ Black Histic
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (LRR N)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface
☐ Sandy Mucky Mineral (S1) (LRR N, MRLA 147, 148)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S8)(MRLA 147, 148)
☐ Thin Dark Surface (S9)(MRLA 147, 148)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12)(LRR N, MLRA 136)
☐ Umbric Surface (F13) (MRLA 136, 122)
☐ Piedmont Floodplain Soils (F19)(MLRA 148)

Indicators for Problematic Soils: ***

- ☐ 2cm Muck (A10) (MLRA147)
☐ Piedmont Floodplain Soils(F19)(MLRA 136, 147)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

*** Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed and problematic.

Restrictive Layer (if observed):

Type:

Depth:

Hydric Soil Present? Yes ☐ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required, check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B13)
☐ Aquatic Fauna (B13)

- ☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres or Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two Required)

- ☐ Surface Soil Cracks (B6)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Drainage Patterns (B10)
☐ Moss Trim Lines (B16)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ Microtopographic Relief (D4)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒Water Table Present? Yes ☐ No ☒Saturation Present? Yes ☐ No ☒

(Includes capillary fringe)

Depth (inches): _____

Depth (inches): _____

Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Mowed lawn within drainage swale.

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont (DRAFT)

Project/Site: CCTC - Lots 1 & 14 Project City/County: Lancaster Sampling Date: May 4, 2021
 Applicant/Owner: Lancaster County Career & Technology Center State: PA Sampling Point: 3
 Investigator(s): Brady J. Gochner Section, Township, Range: Mount Joy Township
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none
 Slope (%): 5% Lat: 40.115334 Long: -76.508569 Datum: UTM
 Soil Map Unit Name: HaB NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

| | | | |
|---|---|---------------------------------------|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Is the Sampled Area within a Wetland? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Hydric Soil Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | | |
| Wetland Hydrology Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | | |
| Remarks: Cultivated agricultural lands (harvested soybean) in the central portion of the study area | | | |

VEGETATION - Use scientific names of plants.

| Tree Stratum: (Plot Size: <u>30'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|------------------|--------------------------|------------------|
| 1. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 2. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 3. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 4. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 5. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 6. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 7. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 8. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 9. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u> </u> = Total Cover | | | |
| Sapling/Shrub Stratum: (Plot Size: <u>15'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
| 1. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 2. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 3. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 4. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 5. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 6. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 7. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 8. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 9. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u> </u> = Total Cover | | | |
| Herb Stratum: (Plot Size: <u>5'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
| 1. <u>Stellaria media (Common Chickweed)</u> | <u>5</u> | <input type="checkbox"/> | <u>UPL</u> |
| 2. <u>Zea mays (Corn Stubble)</u> | <u>10</u> | <input type="checkbox"/> | <u>UPL</u> |
| 3. <u>Glycine max (Soybean Stubble)</u> | <u>25</u> | <input type="checkbox"/> | <u>FACU</u> |
| 4. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 5. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 6. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 7. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 8. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 9. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u>40</u> = Total Cover | | | |
| Woody Vine Stratum: (Plot Size: <u>30'</u>) | Absolute % Cover | Dominant Species? | Indicator Status |
| 1. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| 2. <u> </u> | <u> </u> | <input type="checkbox"/> | <u> </u> |
| <u> </u> = Total Cover | | | |

| Dominance Test worksheet: | |
|--|-----------------|
| Number of Dominant Species That Are OBL, FACW, or FAC: | <u>0</u> (A) |
| Total Number of Dominant Species Across All Strata: | <u>1</u> (B) |
| Percent of Dominant Species That Are OBL, FACW, or FAC | <u>0%</u> (A/B) |

| Prevalence Index worksheet: | |
|------------------------------------|-----------------------------|
| Total % Cover of: | Multiply by: |
| OBL species <u> </u> | x1= <u> </u> |
| FACW species <u> </u> | x2= <u> </u> |
| FAC species <u> </u> | x3= <u> </u> |
| FACU species <u> </u> | x4= <u> </u> |
| UPL species <u> </u> | x5= <u> </u> |
| Totals: | (A) <u> </u> (B) <u> </u> |
| Prevalence Index = B/A = <u> </u> | |

| Hydrophytic Vegetation Indicators: | |
|---|--|
| <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation | |
| <input type="checkbox"/> Dominance Test is > 50% | |
| <input type="checkbox"/> Prevalence Index is 3.0 * | |
| <input type="checkbox"/> Morphological Adaptations* (Provide supporting data in Remarks or on a separate sheet) | |
| <input type="checkbox"/> Problematic Hydrophytic Vegetation* (Explain) | |
| * Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. | |

| | |
|---------------------------------|---|
| Hydrophytic Vegetation Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|---------------------------------|---|

Remarks:

SOIL

Sampling Point : 3

Profile Description: (Describes to the depth needed to document the indicator or confirm the absence of indicators.)

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|-------------------|---------------|-----|----------------|---|--------|-------|-----------|---------|
| | Color (moist) | % | Color (moist) | % | Type * | Loc** | | |
| 0-16 | 10YR 4/4 | 100 | | | | | Silt Loam | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

*1Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

**Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon
☐ Black Histic
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ 2 cm Muck (A10) (LRR N)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface
☐ Sandy Mucky Mineral (S1) (LRR N, MRLA 147, 148)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S8)

- ☐ Dark Surface (S7)
☐ Polyvalue Below Surface (S9)(MRLA 147, 148)
☐ Thin Dark Surface (S9)(MRLA 147, 148)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Iron-Manganese Masses (F12)(LRR N, MLRA 136)
☐ Umbric Surface (F13) (MRLA 136, 122)
☐ Piedmont Floodplain Soils (F19)(MLRA 148)

Indicators for Problematic Soils: ***

- ☐ 2cm Muck (A10) (MLRA147)
☐ Piedmont Floodplain Soils(F19)(MLRA 136, 147)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

*** Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed and problematic.

Restrictive Layer (if observed):

Type:

Depth:

Remarks:

Hydric Soil Present? Yes ☐ No ☒

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal or Crust (B4)
☐ Iron Deposits (B5)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B13)
☐ Aquatic Fauna (B13)

- ☐ True Aquatic Plants (B14)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres or Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two Required)

- ☐ Surface Soil Cracks (B8)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Drainage Patterns (B10)
☐ Moss Trim Lines (B16)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ Microtopographic Relief (D4)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

Yes ☐No ☒

Depth (inches): _____

Water Table Present?

Yes ☐No ☒

Depth (inches): _____

Saturation Present?

Yes ☐No ☒

Depth (inches): _____

(Includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Agricultural land - harvested soybean.

PHOTOGRAPHS
(A - L)



Photo A. Northern view of the road frontage along Fairview Road, which forms the western boundary of the study area.



Photo B. Northeastern view of the mowed lawn within the existing storm water drainage swale in the western portion of the study area.



Photo C. Southern view of the road frontage along Fairview Road.



Photo D. Northern view of the cultivated agricultural lands in the central portion of the study area.

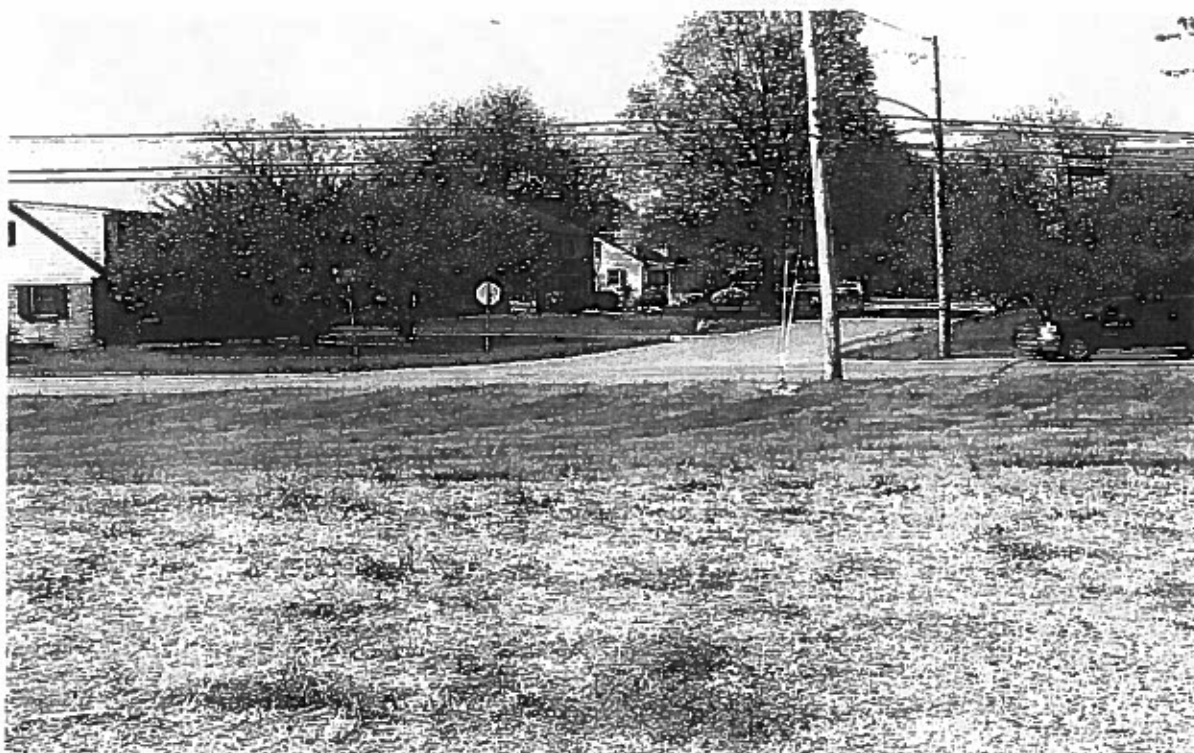


Photo E. Southwestern view of the cultivated agricultural lands and mowed lawn in the western portion of the study area.

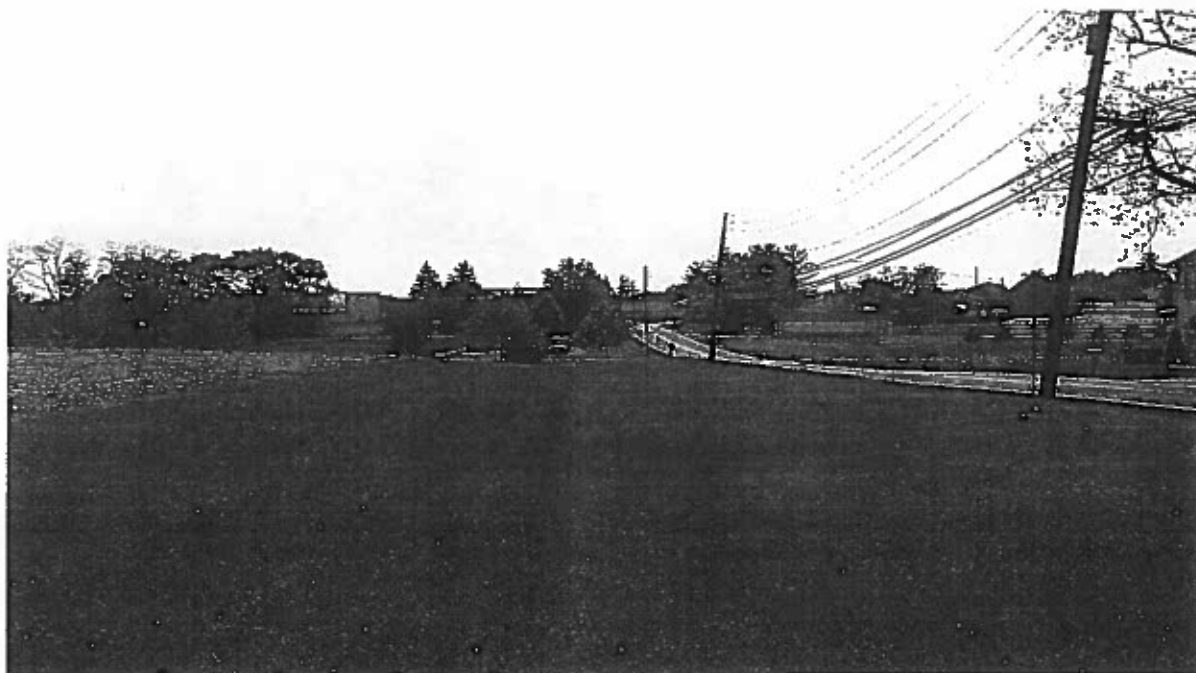


Photo F. Southern view of the mowed lawn within the existing storm water drainage swale in the western portion of the site.



Photo G. Northeastern view of the cultivated agricultural lands in the central portion of the study area.



Photo H. Southwestern view of the cultivated agricultural lands in the central portion of the study area.



Photo I. Northwestern view of the cultivated agricultural lands and mixed deciduous forest in the northern portion of the study area.



Photo J. Northern view of the intermittent stream channel (Watercourse 1) in the northwestern portion of the study area.

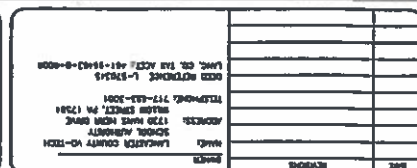


Photo K. Northern view of the intermittent stream channel (Watercourse 1) in the northwestern portion of the study area.



Photo L. Northern view of the existing sinkhole that drains the intermittent stream channel (Watercourse 1) in the northwestern portion of the study area.

SITE PLAN



RESUME

BRADLY J. GOCHNAUER

EXPERIENCE

| | |
|--------------|--|
| 2004-Present | Vortex Environmental, Inc. President |
| 2003 | RETTEW Associates, Inc. Senior Biologist |
| 1997-2002 | Vortex Environmental Partner |
| 1993-1997 | Landstudies, Inc. Environmental Scientist |

Mr. Gochnauer has been involved in environmental research and consulting for eighteen (18) years. He has conducted environmental studies throughout Pennsylvania, Maryland, Delaware, and New Jersey.

Mr. Gochnauer has conducted wetland delineations using the Federal Manual for Identifying and Delineating Jurisdictional Wetlands and analysis of soils, vegetation, and hydrology to determine the extent of regulatory jurisdiction. He has compiled and prepared numerous state and federal permit applications for a variety of residential commercial and industrial projects.

Mr. Gochnauer has prepared many wetland mitigation and wetland restoration plans. He has designed several stream stabilization and stream corridor enhancement projects. He has also been involved in the restoration of dredge spoil areas. Mr. Gochnauer managed the biological control program for Purple Loosestrife in the State of Pennsylvania. Mr. Gochnauer has been certified by the Maryland Department of Natural Resources as a qualified professional to perform and review Forest Stand Delineations, and Forest Conservation Plans as per the requirements of COMAR 08.19.65.51.

EDUCATION

The Pennsylvania State University, State College, PA.
Bachelor of Science - Environmental Resource Management, 1992.

CONTINUING EDUCATION

PAEP, Phase I Bog Turtle Program, 2003, 2004
SAIC, Freshwater Wetland Construction, 1999
Pennsylvania State University; Construction of Treatment Wetlands; 1995
Maryland DNR; Forest Conservation and Stormwater Workshop; 1995
Rutgers State University of New Jersey; Stabilization and Restoration of Disturbed Sites, 1995
Pennsylvania State University; Stormwater Runoff and Water Quality Management Conference, 1994
Glen Flora Preserve; Carex, Gramineae, and Composite identifications; 1994.



MOUNT JOY TOWNSHIP

• Lancaster County, Pennsylvania •

8853 Elizabethtown Road, Elizabethtown, PA 17022
717.367.8917 • 717.367.9208 fax
www.mtjoytwp.org

March 5, 2021

Lancaster County Career & Technology Center
c/o Michael DelPriore
1730 Hans Herr Drive
Willow Street, PA 17584

Lancaster County Vo-Tech School Authority
1730 Hans Herr Drive
Willow Street, PA 17584

Re: Mount Joy Township Zoning Hearing Board – Lancaster County Career & Technology Center
432 Old Market Street, Mount Joy
Zoning Case No. 210004

Dear Mr. DelPriore –

As a result of a public hearing held on March 3, 2021, the Mount Joy Township Zoning Hearing Board (the “Board”) voted unanimously to grant the following requests on the Application for the property located at 432 Old Market Street, Mount Joy, PA 17552, Tax Parcel ID #461-96483-0-0000 (the “Property”) in accordance with the Mount Joy Township Zoning Ordinance of 2012, as amended (the “Ordinance”):

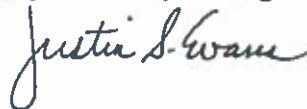
- (i) A Variance from Section 135-95.C of the Ordinance to create a lot that will not meet the minimum lot width at the building setback line; and
- (ii) A Variance from Section 135-383.C.3 of the Ordinance to permit two years from the grant of the requested variance to obtain a zoning permit, and three years to complete construction.

The Property is located within the R-1 – Low Density Residential District and consists of approximately 65.62 acres. Applicant proposes to subdivide two (2) residential lots from the parent tract, which is the site of the Lancaster County Career & Technology Center. One of the proposed lots (Lot 14) is proposed to contain a lot width of seventy (70) feet instead of the required ninety (90) feet. The alignment of the future road connecting Fairview Road to Old Market Street, through the future 14-lot subdivision, dictates the layout of Lot 14, particularly given the location of the existing wetland and buffer located on Lot 1. Further, the layout of Lot 14 is driven by the southern boundary line thereof which adjoins the portion of the Property located in Mount Joy Borough and which is zoned Conservation, thus preventing the construction of any improvements thereon. The improvements (single-family dwellings) to be erected on the proposed lots will be constructed by students of the school over a greater period of time than a typical construction contractor schedule, and several governmental approvals will be necessary in connection with the project, including PennDOT approvals.

The Variances shall be subject to the following conditions and safeguards which the Board deems necessary to implement the purpose of the Ordinance and the Pennsylvania Municipalities Planning Code.

1. The Applicant and/or the owner(s) of the Property shall comply with all other provisions contained in the Ordinance for which relief has not been requested or granted;
2. The Applicant shall file and obtain approval of a subdivision plan by the Mount Joy Township Planning Commission, and adhere to all other provisions the Mount Joy Township Subdivision and Land Development Ordinance;
3. The Applicant and any representative of the Applicant shall comply with and adhere to the testimony and any evidence presented to the Board at the hearing held on March 3, 2021, except to the extent modified by conditions imposed by the Board Hearing.

Mount Joy Township Zoning Hearing Board



For: Thomas N. Campbell, Chairman
James E. Hershey, Vice Chairman
Gregory R. Hitz, Sr., Secretary
Robert F. Newton, Jr., Alternate Member

cc: Zoning Hearing Board Members
Board of Supervisors

**ECS Mid-Atlantic, LLC**

52-6 Grumbacher Road

York, PA 17406

7177674788

7177675658

LETTER OF TRANSMITTAL

June 16, 2021

DC Gohn

32 Mount Joy Street P.O. Box 128

Mount Joy, PA 17552

ATTN: Donovan Hollway

RE: **Lancaster County Career & Technology
Sinkhole Repair**ECS Job # **18:5267-A**

Permits:

Location: **Fairview Road
Mount Joy, PA 17552**☒

Field Reports

☒

For your use

☒

As requested

CC:

ENCL: Field Report # 1 6/15/2021 Sink Hole Remediation

J. Matthew Carroll, P.E.
Office ManagerDerek G. Ridinger, P.E.
Geotechnical Department Manager**Disclaimer**

1. This report (and any attachments) shall not be reproduced except in full without prior written approval of ECS.
2. The information in this report relates only to the activities performed on the report date.
3. Where appropriate, this report includes statements as to compliance with applicable project drawings, and specifications for the activities, performed on this report date.
4. Incomplete or non-conforming work will be reported for future resolution.
5. The results of samples and/or specimens obtained or prepared for subsequent laboratory testing will be presented in separate reports/documents.



ECS Mid-Atlantic, LLC
52-6 Grumbacher Road
York, PA 17406
(717) 767-4788 [Phone]
(717) 767-5658 [Fax]

FIELD REPORT

Project **Lancaster County Career & Technology Sinkhole**
Location **Mount Joy, PA**
Client **DC Gohn**
Contractor **None Listed**

Project No. **18:5267-A**
Report No. **1**
Day & Date **Tuesday 6/15/2021**
Weather **75 °/**
On-Site Time **7.00**
Lab Time **0.75**
Travel Time* **0.50**
Total **8.25**
Re Obs Time **0.00**

Remarks **Sink Hole Remediation**

| Trip Charges* | Tolls/Parking* | Mileage* | Time of Arrival | Departure |
|------------------|----------------|----------|-----------------|--------------|
| Chargeable Items | | | 7:30A | 2:30P |

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived onsite, as requested, to observe the excavation and give guidance on the repair of a sinkhole that developed on the Lancaster County Career and Technology Center property in Mount Joy, PA.

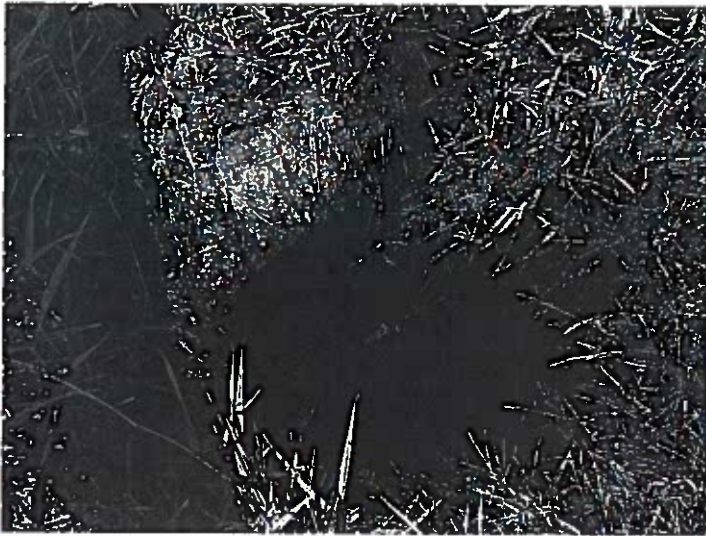
During an initial site visit performed on May 21, 2021, the potential sinkhole had an approximate diameter on the order of 5.0 feet with a max depth of 6.0 feet below existing grade. Based on our assessment of the feature, we suggested excavating out the existing hole with the objective of removing all loose, wet and compromised soil, and extending the excavation to sound materials with very limited signs of sinkhole activity in the subsurface. Once the excavation process is complete, we proposed backfilling with flowable fill to create a plug to limit future sinkhole development.

At the time of arrival on June 15, 2021, the sinkhole was measured to have a diameter of 6.0 feet with a max depth of 7.0 feet below existing grade. Once the excavator arrived, the collapsed soils were removed from the opening and the subsurface conditions were observed. We advised the on-site excavation crew to extend the excavation to 8.5 feet below existing grade. The soils exposed in the opening appeared to be stable and no signs of karst activity were observed in the opening. The final dimensions of the excavated area were on the order of 21.0 feet by 11.0 feet with a max depth of approximately 8.5 feet. The final excavated cavity contained bedrock on three of the four sides before being determined acceptable to create a concrete plug.

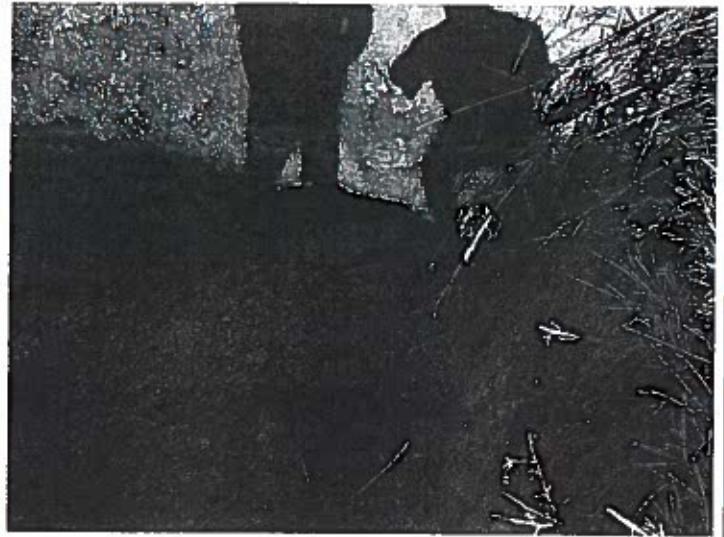
A plug was created in the subsurface using approximately 9.0 cubic yards of flowable fill. The flowable fill was inserted into the opening which extended up to approximately 5.0 feet below existing grade. To decrease the change of future sinkhole development, a drainage channel leading to the excavated sinkhole was excavated to 1 foot in depth and flowable fill was placed in the bottom 0.5 feet of the excavated area. The ground was then sloped to prevent future water flow from entering the repaired sinkhole. Onsite crews were told to let the remediated area "set up" before placing removed soils on top of the flowable fill bringing excavated area to existing grade.

Attached to this report are pictures of the remediation process.





Initial



Remove Soft Soils



Intermittent Creek Bed Exposed



Final Excavation

LANCASTER COUNTY CAREER AND
TECHNOLOGY CENTER SINKHOLE
ECS PROJECT NO. 18:5067-A
LANCASTER COUNTY, PENNSYLVANIA



SINKHOLE REMEDIATION

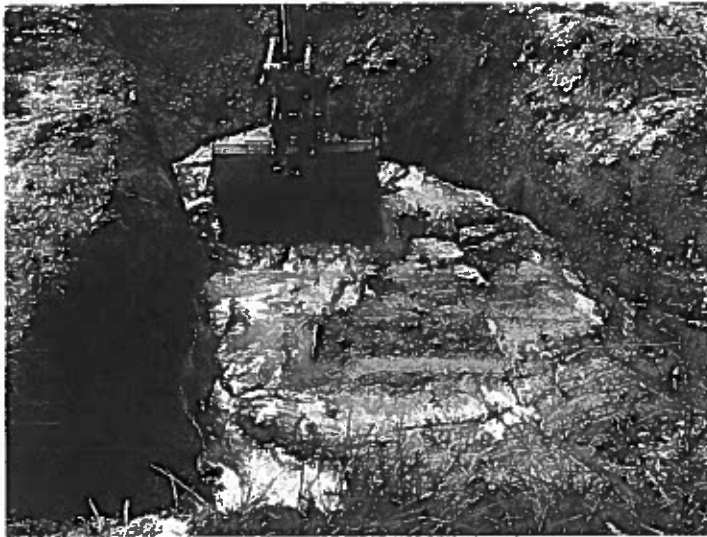
JUNE 2021



Flowable Fill



Flowable Fill



Flowable Fill



Remediation Complete

**LANCASTER COUNTY CAREER AND
TECHNOLOGY CENTER SINKHOLE**
ECS PROJECT NO. 18:5067-A
LANCASTER COUNTY, PENNSYLVANIA



SINKHOLE REMEDIATION

JUNE 2021



LANCASTER GEOLOGY

May 17, 2021

Donovan Hollway
D.C. Gohn Associates, Inc.
32 Mount Joy Street
Mt. Joy, PA 17552

RE: Karst Evaluation for Storm Water Management
LCCTC – Fairview Street
Mt. Joy, PA
Mt. Joy Borough & Mt. Joy Township, Lancaster County

Dear Mr. Hollway:

This letter addresses storm water management ordinances of Mt. Joy Borough and Mt. Joy Township for the submission of the proposed the storm water management facility at the above listed location. Specifically Mt. Joy Boroughs' Sections 226-31 J., 226-32 A.(2.)(c), and 226-45 and Mt. Joy Township's Section 81-301K associated with karst or carbonate geology.

Mt. Joy Borough:
Section 226-31 J. states the following:

J. *The design of all stormwater management facilities over karst areas shall include an evaluation of measures to minimize adverse effects and to certify the:*

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www.lancastergeology.com
610-864-9638

LANCASTER GEOLOGY

(1) *No stormwater facilities shall be placed in, over or immediately adjacent to the following features:*

- (a) *Sinkholes.*
- (b) *Closed depressions.*
- (c) *Lineaments in carbonate areas.*
- (d) *Fracture traces.*
- (e) *Caverns.*
- (f) *Intermittent lakes.*
- (g) *Ephemeral disappearing streams.*
- (h) *Bedrock pinnacles (surface or subsurface).*

No karst features were observed at the Site.

(2) *Stormwater management basins shall not be located closer than 100 feet from the rim of sinkholes or closed depressions, nor within 100 feet from disappearing streams; nor shall these basins be located closer than 50 feet from lineaments or fracture traces; nor shall these basins be located closer than 25 feet from surface or identifies pinnacles.*

No karst features were observed at the Site.

(3) *Stormwater resulting from regulated activities shall not be discharged into sinkholes.*

No stormwater is proposed to be discharged into any sinkhole(s).

(4) *It shall be the applicant's responsibility to verify if the development is underlain by carbonate geology. The following certificate shall be included on all SWM Site Plans and shall be signed and sealed by the developer's professional geologist: "I, _____, certify that the proposed stormwater/BMP facility (circle one) is/is not underlain by carbonate geology."*

The certificate will be included on all SWM Site Plans.

(5) *Whenever a stormwater facility will be located in an area underlain by carbonate geology, a geological evaluation of the proposed location by a registered professional geologist shall be conducted to determine susceptibility to sinkhole formation. The evaluation may include the use of impermeable liners or eliminate the separation distances listed in Subsection J.1. and J.2.*

The site is underlain by carbonate geology and the geologic evaluation is discussed in the narrative below.

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Section 226-32 A.(2.)(c) states the following:

- (c) The maximum loading ratio for volume control facilities in Karst areas shall be 3:1 impervious drainage area to infiltration area and 5:1 total drainage area to infiltration area. The maximum loading ratio for volume control facilities in non-Karst areas shall be 5:1 impervious drainage area to infiltration area and 8:1 total drainage area to infiltration area. A higher ratio may be approved by the Township if justification is provided. Hydraulic depth may be used as an alternative to an area-based loading ratio if the design hydraulic depth is shown to be less than the depth that could result from the maximum area loading ratio.*

The loading ratios for the proposed storm water management facility(ies) are calculated and discussed in the storm water management plan submitted by D.C. Gohn.

Section 226-45 C.(1.) states the following:

- A. *In areas of carbonate geology, a detailed geologic evaluation prepared by a registered Professional Geologist (PG) must be submitted as part of the SWM Site Plan. The report shall include but not limited to the following:*

- (1) The location of the following karst features:*
- (a) Sinkholes.*
 - (b) Closed depressions.*
 - (c) Lineaments in carbonate areas.*
 - (d) Fracture traces.*
 - (e) Caverns.*
 - (f) Intermittent lakes.*
 - (g) Ephemeral disappearing streams.*
 - (h) Bedrock pinnacles (surface or subsurface).*

The site is underlain by carbonate geology and the geologic evaluation is discussed in the narrative below.

- (2) A plan for remediation of any identified karst features.*

The remediation of karst features is discussed in the narrative below.

- (3) Impacts of stormwater management facilities on adjacent karst features, and impacts of karst features on adjacent stormwater management facilities.*

The geologic evaluation is discussed in the narrative below.

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Mt. Joy Township:

Section 81-301 K. states the following:

The design of all facilities over karst shall include an evaluation of measures to minimize adverse effects.

The geologic evaluation is discussed in the narrative below.

The Site is underlain by bedrock of the Epler Formation as shown on <http://www.gis.dcnr.state.pa.us/geology/index.html>, Pennsylvania Geologic Survey's Web Mapping Application. The Epler Formation, as defined in *Engineering Characteristics of the Rocks of Pennsylvania*, is composed of very finely crystalline, medium gray limestone interbedded with gray dolomite. Coarsely crystalline limestone lenses are present. Beds are moderately well bedded that are thin to flaggy. Joints have a seamy pattern that are poorly to well developed. Joints are also moderately abundant, open, and steeply dipping. The overlying mantle varies in thickness and can be extremely thick in places. Pinnacles are common and characterize the soil bedrock interface of this formation. This formation is a carbonate rock.

Infiltration testing was completed on May 12 & 13, 2021 by Lancaster Geological Solutions, LLC. The test results are as follows:

| | |
|--------|------------|
| Test 1 | 2.55 in/hr |
| Test 2 | 3.01 in/hr |
| Test 3 | 0.20 in/hr |
| Test 4 | 1.10 in/hr |
| Test 5 | 1.94 in/hr |

These infiltration rates are within the Pennsylvania Department of Environmental Protection guidance manual of 0.1 to 10 inches per hour.

Review of aerial photography and on-site observations did not identify closed depressions karst features at the proposed storm water management facility(ies). No mapped sinkholes were observed at the Site or the <http://www.gis.dcnr.state.pa.us/geology/index.html> web site.

Susceptibility to sinkhole formation for infiltration of storm water is always a risk in karst areas but may be minimized with sound engineering design and practices. The soil types, infiltration rates of the soils, depth to bedrock loading ratios, are parameters in determining the stability of the subgrade.

To minimize the susceptibility for sinkhole formation, reduce the time between removing the topsoil and the construction. The area of the proposed infiltration basin facility should not be impacted by construction vehicles so storm water infiltrates as designed.

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To minimize the susceptibility of sinkhole formation, the following tasks are recommended:

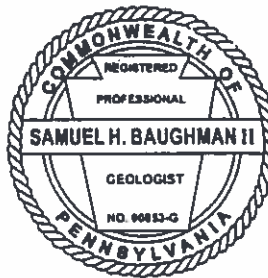
- Reduce the time between removal of topsoil and the construction.
- The area under the storm water management facility should not be impacted by construction vehicles so that storm water may infiltrate the soils as designed.
- Depth to bedrock varies in karst areas, pinnacles may be found during construction.

If during installation, throats, areas of soil piping, or other karst features are discovered, remediation of karst features can be accomplished as follows:

- Areas of soil piping should be excavated to determine the extent of piping. This entails excavation to bedrock to identify the throat. Remove all loose soil and rock.
- Use of non-woven geo-fabric to line the bottom of the excavation, between rock layers and above the upper rock layer, the sidewalls do not require covering.
- Placement of reverse stone filter to permit drainage of water but not soils.
- This process should be overseen by a professional geologist or engineer experienced in sinkhole remediation.

Specific design, measures, procedures, and materials shall be determined by the design engineer as part of the installation of the proposed SWM Facility. If any sinkholes or other karst features are discovered during construction, do not hesitate to contact me.

Sincerely,



Samuel H. Baughman II, M.S., P.G.
Principal Geologist

attachments: infiltration data sheets

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Limitations

This report and its observations, evaluations, interpretations, and conclusions are based solely upon the observations, data from the client, gathered by this author, and publicly available at the time of the study. The conclusions and interpretations are focused on the scope and purpose of this study and should not be construed as a more comprehensive investigation. If additional or contrary information to the conclusions stated herein, is obtained by any connected party, then Lancaster Geology and this author should be notified to allow critical evaluation.

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LANCASTER GEOLOGICAL SOLUTIONS, LLC

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610-864-9638

LCCTC - Fairfield Street

Date: 5/13/2021

Infiltration Test Location: Infiltration Test 1

Infiltration location is at the depth of proposed infiltration.

| | | |
|---------------------|-----------|--------|
| Inner Ring diameter | <u>8</u> | inches |
| Outer Ring diameter | <u>12</u> | inches |

Pre-soak - minimum 4" depth in inner ring

| | |
|------------------|----------|
| Water Depth (in) | <u>9</u> |
|------------------|----------|

| | |
|---------------------------|-------------|
| Water drop - first 30 min | <u>1.25</u> |
|---------------------------|-------------|

| | |
|----------------------------|------------|
| Water drop - second 30 min | <u>1.5</u> |
|----------------------------|------------|

Water level drop after second 30 min:

if 2-inches or more, use 10-minute measurement intervals

if less than 2-inches, use 30-minute measurement intervals

Start Time 10:27 Test depth - 48"

| Time | Displacement (in) | Interval (min) |
|-------|-------------------|----------------|
| 10:57 | 1.39 | 30 |
| 11:27 | 1.34 | 30 |
| 11:57 | 1.20 | 30 |
| 12:27 | 1.16 | 30 |
| | | |
| | | |
| | | |
| | | |

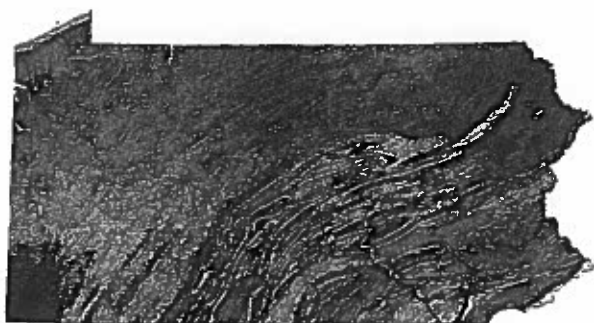
2.55 inches per hour

| | |
|---------|---|
| 0-12" | Topsoil |
| 12"-30" | brown silty clay, moist |
| 30"-84" | yellow tan silty clay, moist |
| 24"-30" | terra cotta pipe encountered while digging and oriented NE-SW |
| 6.5'-7' | limestone boulder |

Test complete until a minimum of eight (8) readings are completed or until a stabilized rate of drop is obtained, whichever comes first. A stabilized rate of drop means a difference of 1/4-inch or less of drop between the highest and lowest of four (4) consecutive water level readings.

The infiltration rate is the drop that occurs in the center ring during the final period or the average stabilized rate, expressed in inches per hour, at this location.

PA Stormwater BMP Manual, Appendix C - Site Evaluation and Soil Testing recommended infiltration rate of 0.1 to 10 inches per hour (page 14 of 21).



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LCCTC - Fairfield Street

Date: 5/12/2021

Infiltration Test Location: Infiltration Test 2

Infiltration location is at the depth of proposed infiltration.

| | | |
|---------------------|-----------|--------|
| Inner Ring diameter | <u>8</u> | inches |
| Outer Ring diameter | <u>12</u> | inches |

Pre-soak - minimum 4" depth in inner ring

| | |
|------------------|----------|
| Water Depth (in) | <u>6</u> |
|------------------|----------|

| | |
|---------------------------|------------|
| Water drop - first 30 min | <u>1.3</u> |
|---------------------------|------------|

| | |
|----------------------------|------------|
| Water drop - second 30 min | <u>1.4</u> |
|----------------------------|------------|

Water level drop after second 30 min:

if 2-inches or more, use 10-minute measurement intervals

if less than 2-inches, use 30-minute measurement intervals

Start Time 14:32 Test depth - 48"

| Time | Displacement (in) | Interval (min) |
|-------|-------------------|----------------|
| 15:02 | 1.64 | 30 |
| 15:32 | 1.51 | 30 |
| 16:02 | 1.41 | 30 |
| 16:32 | 1.46 | 30 |
| | | |
| | | |
| | | |
| | | |

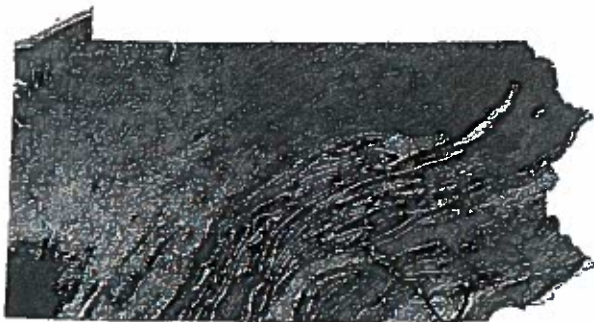
| | |
|---------|------------------------------|
| 0-10" | Topsoil |
| 10"-27" | brown silty clay, moist |
| 27"-84" | yellow tan silty clay, moist |

3.01 inches per hour

Test complete until a minimum of eight (8) readings are completed or until a stabilized rate of drop is obtained, whichever comes first. A stabilized rate of drop means a difference of 1/4-inch or less of drop between the highest and lowest of four (4) consecutive water level readings.

The infiltration rate is the drop that occurs in the center ring during the final period or the average stabilized rate, expressed in inches per hour, at this location.

PA Stormwater BMP Manual, Appendix C - Site Evaluation and Soil Testing recommended infiltration rate of 0.1 to 10 inches per hour (page 14 of 21).



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LCCTC - Fairfield Street

Date: 5/12/2021

Infiltration Test Location: Infiltration Test 3

Infiltration location is at the depth of proposed infiltration.

Inner Ring diameter 8 inches
Outer Ring diameter 12 inches

Pre-soak - minimum 4" depth in inner ring

Water Depth (in) 9.5

Water drop - first 30 min 0.3

Water drop - second 30 min 0.1

Water level drop after second 30 min:

if 2-inches or more, use 10-minute measurement intervals

if less than 2-inches, use 30-minute measurement intervals

Start Time 13:22 60"

0-12" Topsoil
12"-36" brown silty clay, moist
36"-96" yellow tan silty clay, moist

| Time | Displacement (in) | Interval (min) |
|-------|-------------------|----------------|
| 13:52 | 0.10 | 30 |
| 14:22 | 0.11 | 30 |
| 14:52 | 0.00 | 30 |
| 15:52 | 0.19 | 30 |
| | | |
| | | |
| | | |
| | | |

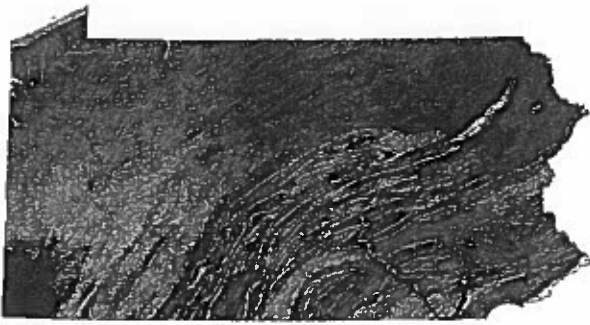
0.20 inches per hour

Basin Infiltration rate = ave of test pits
Infiltration rate = (test 3+test 4+test 5)/3
(0.2+1.1+1.94)/3 = **1.08 in/hr**

Test complete until a minimum of eight (8) readings are completed or until a stabilized rate of drop is obtained, whichever comes first. A stabilized rate of drop means a difference of 1/4-inch or less of drop between the highest and lowest of four (4) consecutive water level readings.

The infiltration rate is the drop that occurs in the center ring during the final period or the average stabilized rate, expressed in inches per hour, at this location.

PA Stormwater BMP Manual, Appendix C - Site Evaluation and Soil Testing recommended infiltration rate of 0.1 to 10 inches per hour (page 14 of 21).



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LCCTC - Fairfield Street

Date: 5/12/2021

Infiltration Test Location: Infiltration Test 4

Infiltration location is at the depth of proposed infiltration.

Inner Ring diameter 8 inches
Outer Ring diameter 12 inches

Pre-soak - minimum 4" depth in inner ring

Water Depth (in) 6

Water drop - first 30 min 0.5

Water drop - second 30 min 0.4

Water level drop after second 30 min:

if 2-inches or more, use 10-minute measurement intervals

if less than 2-inches, use 30-minute measurement intervals

Start Time 11:04 Test depth - 24"

0-10" Topsoil
10"-20" brown silty clay, moist
20"-60" yellow tan silty clay, moist

| Time | Displacement (in) | Interval (min) |
|-------|-------------------|----------------|
| 11:34 | 0.46 | 30 |
| 12:04 | 0.48 | 30 |
| 12:34 | 0.59 | 30 |
| 13:04 | 0.66 | 30 |
| | | |
| | | |
| | | |
| | | |

1.10 inches per hour

Basin Infiltration rate = ave of test pits
Infiltration rate = (test 3+test 4+test 5)/3
(0.2+1.1+1.94)/3 = **1.08 in/hr**

Test complete until a minimum of eight (8) readings are completed or until a stabilized rate of drop is obtained, whichever comes first. A stabilized rate of drop means a difference of 1/4-inch or less of drop between the highest and lowest of four (4) consecutive water level readings.

The infiltration rate is the drop that occurs in the center ring during the final period or the average stabilized rate, expressed in inches per hour, at this location.

PA Stormwater BMP Manual, Appendix C - Site Evaluation and Soil Testing recommended infiltration rate of **0.1 to 10 inches per hour** (page 14 of 21).



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610-864-9638

LCCTC - Fairfield Street

Date: 5/12/2021

Infiltration Test Location: Infiltration Test 5

Infiltration location is at the depth of proposed infiltration.

Inner Ring diameter 8 inches

Outer Ring diameter 12 inches

Pre-soak - minimum 4" depth in inner ring

Water Depth (in) 7

Water drop - first 30 min 3.1

Water drop - second 30 min 2.1

Water level drop after second 30 min:

if 2-inches or more, use 10-minute measurement intervals

if less than 2-inches, use 30-minute measurement intervals

| Start Time | 11:24 | 48" |
|------------|-------------------|----------------|
| Time | Displacement (in) | Interval (min) |
| 11:34 | 0.36 | 10 |
| 11:44 | 0.30 | 10 |
| 11:54 | 0.31 | 10 |
| 12:04 | 0.32 | 10 |
| | | |
| | | |
| | | |
| | | |

1.94 inches per hour

0-8" Topsoil
8"-24" brown silty clay, moist
24"-84" yellow tan silty clay,
moist

Basin Infiltration rate = ave of test pits
Infiltration rate = (test 3+test 4+test 5)/3
(0.2+1.1+1.94)/3 = 1.08 in/hr

Test complete until a minimum of eight (8) readings are completed or until a stabilized rate of drop is obtained, whichever comes first. A stabilized rate of drop means a difference of 1/4-inch or less of drop between the highest and lowest of four (4) consecutive water level readings.

The infiltration rate is the drop that occurs in the center ring during the final period or the average stabilized rate, expressed in inches per hour, at this location.

PA Stormwater BMP Manual, Appendix C - Site Evaluation and Soil Testing recommended infiltration rate of 0.1 to 10 inches per hour (page 14 of 21).



ROLLMAX™
ROLLED EROSION CONTROL

Specification Sheet – BioNet® S75BN™ Erosion Control Blanket

DESCRIPTION

The short-term single net erosion control blanket shall be a machine-produced mat of 100% agricultural straw with a functional longevity of up to 12 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with a 100% biodegradable woven natural organic fiber net. The netting shall consist of machine directional strands formed from two intertwined yarns with across directional strands interwoven through the twisted machine strands (commonly referred to as a Leno weave) to form approximate 0.50 x 1.0 in. (1.27 x 2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for adjacent mats.

The S75BN shall meet Type 2.C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17

Material Content

| | | |
|---------|--|---------------------------------------|
| Matrix | 100% straw fiber | 0.5 lbs/sq yd (0.27 kg/sm) |
| Netting | Top side only: Leno woven 100% biodegradable natural organic fiber | 9.3 lbs/1000 sq ft (4.5 kg/100 sm) |
| Thread | Biodegradable | |

Standard Roll Size

| | |
|--------------|---------------------|
| Width | 6.67 ft (2.0 m) |
| Length | 108 ft (32.92 m) |
| Weight ± 10% | 46.4 lbs (21.05 kg) |
| Area | 80 sq yd (66.9 sm) |

Design Permissible Shear Stress

| | |
|--------------------------|---------------------|
| Unvegetated Shear Stress | 1.60 psf (76 Pa) |
| Unvegetated Velocity | 5.00 fps (1.52 m/s) |

| Index Property | Test Method | Typical |
|-----------------------|-----------------|-----------------------------|
| Thickness | ASTM D6525 | 0.29 in. (7.37 mm) |
| Resiliency | ECTC Guidelines | 81.4% |
| Water Absorbency | ASTM D1117 | 440% |
| Mass/Unit Area | ASTM D6475 | 9.12 oz/sy (510 g/sm) |
| Swell | ECTC Guidelines | 15.7% |
| Smolder Resistance | ECTC Guidelines | Yes |
| Stiffness | ASTM D1388 | 6.92 oz-in |
| Light Penetration | ASTM D6567 | 9.1% |
| Tensile Strength - MD | ASTM D6818 | 146.4 lbs/ft (2.17 kN/m) |
| Elongation - MD | ASTM D6818 | 10.9% |
| Tensile Strength - TD | ASTM D6818 | 109.2 lbs/ft (1.62 kN/m) |
| Elongation - TD | ASTM D6818 | 14.3% |
| Biomass Improvement | ASTM D7322 | 398% |

Slope Design Data: C Factors

| Slope Gradients (S) | | | |
|---------------------|-------|-----------|-------|
| Slope Length (L) | ≤ 3:1 | 3:1 – 2:1 | ≥ 2:1 |
| ≤ 20 ft (6 m) | 0.029 | N/A | N/A |
| 20-50 ft | 0.11 | N/A | N/A |
| ≥ 50 ft (15.2 m) | 0.19 | N/A | N/A |

Roughness Coefficients – Unveg.

| Flow Depth | Manning's n |
|--------------------|---------------|
| ≤ 0.50 ft (0.15 m) | 0.055 |
| 0.50 – 2.0 ft | 0.055 – 0.021 |
| ≥ 2.0 ft (0.60 m) | 0.021 |



North American Green
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Poseyville, Indiana 47633

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800-772-2040

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Corporate Headquarters

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www.arroconsulting.com

July 8, 2021

Stacie Gibbs, BCO
Zoning/Code Officer
Borough of Mount Joy
21 East Main Street
Mount Joy, PA 17552

RE: LCCTC Mount Joy Campus Minor Subdivision Plan
Stormwater Review
ARRO # 10863.46

Dear Stacie:

ARRO Consulting, Inc. reviewed the following information in accordance with the Mount Joy Borough Stormwater Management Ordinance.

1. Final Minor Subdivision (Plan) for Lancaster County Career & Technology Center – Mount Joy Campus, prepared by D.C. Gohn Associates, Inc., dated June 25, 2021.
2. Karst Evaluation for Stormwater Management, prepared by Lancaster Geology, dated May 17, 2021.
3. Post Construction Stormwater Management Report (with Drainage Area Maps) for Lancaster County Career and Technology Center – Mount Joy Campus, prepared by D.C. Gohn Associates, Inc., dated June 25, 2021.
4. Wetland Investigation for the Lancaster County Career & Technology Center – Lots 1 & 14 Project, prepared by Vortex Environmental, Inc., dated June 23, 2021.
5. Modification Request Letter, prepared by D.C. Gohn Associates, Inc., dated June 28, 2021.

We offer the following comments.

Stormwater

1. The applicant shall prepare and submit an E&S plan (§226-31.E.)

OUT IN FRONT

2. The applicant shall include the location of the repaired sinkhole on the plans (§226-31.J.).
3. A note including the comments on page 5 of the Karst Evaluation by Lancaster Geology shall be included on the plans (§226-31.J.)
4. The applicant shall add a note stating "Infiltration BMPs shall not be constructed nor receive runoff from disturbed areas until the entire contributory drainage area to the infiltration BMP has achieved final stabilization." The construction sequence shall be staged in a way to prevent sediment from entering the finished basin [§226-31.P].
5. It appears the calculations have allowed for 500 sq ft. of additional impervious surface from each lot. The plans shall state this allowable increase for lots 1 and 14.
6. The dewatering calculations shall be revised because the applicant divided the 1.25 feet of depth by an infiltration rate in inches per hour when the infiltration rate should be in feet per hour (ie. the dewatering time would be 12 times larger than calculated) [§226-32.D].
7. The time of concentration (Tc) lines are not drawn perpendicular to the contour lines. Both the pre-development and post-development Tc lines shall be revised to be accurate. In the post-development, the Tc line will flow into the proposed swale and could increase the Tc which will increase the post-development peak discharge [§226-35.I].
8. The rational coefficients shall be revised to match the slopes that are found on site. Most of the pre-development slopes are between 2-6% which would correspond with a coefficient of 0.19. The existing impervious is from a building with a flat roof which would correspond with a coefficient of 0.91 [§226-35.H.(1)].
9. The applicant shall include all downspout piping locations on the plans. All downspout outlets shall have a flared end section with appropriate energy dissipation [§226-37.C.(1)(e)].
10. The Tc line for the offsite flow utilizes a Manning's coefficient of 0.40 for the sheet flow portion. This coefficient corresponds to woods, however, the first 100 feet of sheet flow is in the cemetery which is grass. The Tc computations shall be revised [§226-35.J].
11. The rational coefficients shall be considered poor/winter conditions for the design of the 36" pipe. The pipe and rip-rap shall be redesigned (if necessary) to accommodate these changes in methodology [§226-35.G].
12. The Mount Joy Borough SWM Site Plan Approval Certificate (Appendix 6) shall be provided on the plans [§226-43.E].

Stacie Gibbs, BCO
Borough of Mount Joy
July 8, 2021
Page 2

13. The applicant shall submit an O&M agreement to the Municipality and shall include it with a future submission [§226-61.E.].
14. Financial security shall be provided to the Borough for the stormwater facilities within the Borough. The applicant shall provide an engineer's cost estimate for review [§226-60].

Modifications

1. The applicant is requesting a modification of Section 226-37.C.(1).(d).[4] – 4:1 maximum swale side slope in residential areas. The applicant is requesting to use 3:1 swale side slopes.

Because there is adequate space to construct a swale with 4:1 side slopes and there is no acceptable justification provided for utilizing a swale with 3:1 side slopes, ARRO recommends denying this waiver request.

Please call me if you have any questions.

Sincerely,



Darrell L. Becker, P.E.
Vice President
DLB:acb

c: Mark G. Pugliese, Manager – Mount Joy Borough
Josele Cleary, Esquire – Morgan Hallgren Crosswell & Kane
Justin Evans, Manager – Mount Joy Township
Ben Craddock, P.E. – Lancaster Civil Engineering

POST CONSTRUCTION STORMWATER MANAGEMENT REPORT

For

LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER - MOUNT JOY CAMPUS

DCG Project No.: 4343-21

Mount Joy Township & Mount Joy Borough
Lancaster County, PA

June 25, 2021

REVISIONS



Surveyors - Engineers - Landscape Architects

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| APPENDIX E | TOWNSHIP VOLUME / NPDES PHASE 2 REQUIREMENTS |

1 PROJECT INTRODUCTION

The enclosed information should be considered part of the Final Minor Subdivision Plan & Land Development Plan for Lancaster County Career and Technology Center – Mount Joy Campus (“LCCTC”) located at 432 Old Market Street, Mount Joy, PA 17552.

1.1 Project Intent

LCCTC proposes subdivide 2 single family lots from the existing subject tract. The 2 single family lots will consist of a single family house & driveway. The proposed lots will access directly to Fairview Street via a common drive. The stormwater facility for this project is located just south of the Municipal Boundary Line. Therefore, both municipalities (Mount Joy Township & Mount Joy Borough shall review the plans prior to final plan approvals.

1.2 Project Location

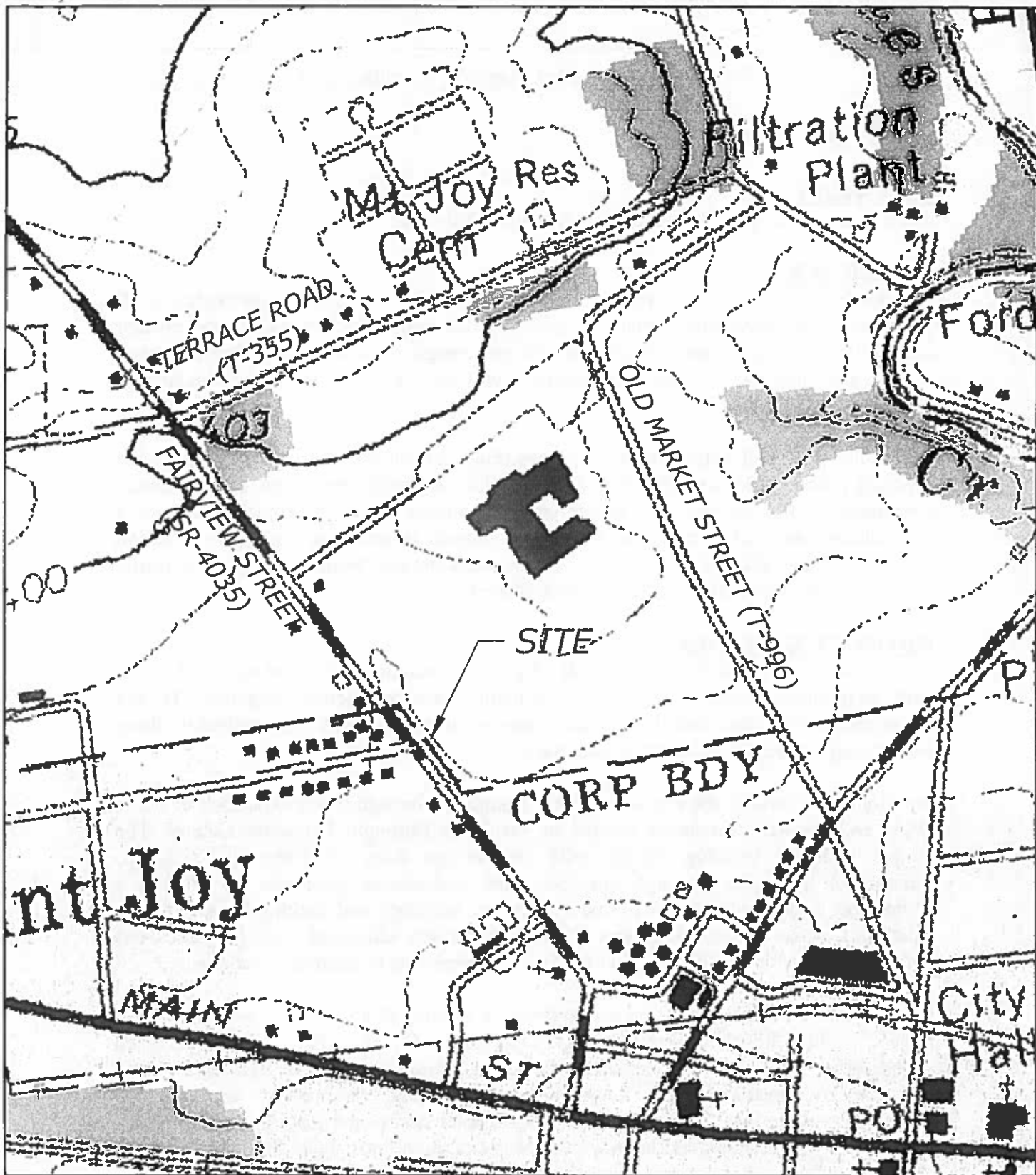
The property is located within the R-1 Low Density Residential District of Mount Joy Township & Conservation District within Mount Joy Borough. The site is located at 432 Old Market Street. Refer to the USGS Map provided in Figure 1.

1.3 Site Description

The subject property primarily contains grass areas & cultivated areas. There are no wetlands in the area of the proposed lots. All stormwater drains to an existing channel in Rotary Park and to an existing culvert. The site ultimately drains to Little Chickies Creek. The designated use is TSF. The past and present land use is educational and the proposed land use is educational and residential.

Governing Ordinance

The Governing Ordinances are the Mount Joy Township Subdivision and Land Development Ordinance as well as the Mount Joy Township Stormwater Management Ordinance. Within Mount Joy Borough the governing ordinances are the Mount Joy Borough Subdivision and Land Development Ordinance as well as the Mount Joy Borough Stormwater Management Ordinance.



COLUMBIA WEST USGS MAP
FOR
LCCTC

432 OLD MARKET STREET
MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA

FIGURE - 1

PROJECT NO.: 4343-21
DATE: JUNE 17, 2021
DRAWN BY: DEH
CHECKED BY: SAC
SCALE: 1"=500'

dc gohn
Associates, Inc.

Surveyors • Engineers • Landscape
Architects

32 Mount Joy Street
Po Box 128
Mount Joy, PA 17552
PH: (717) 663-5308
www.dcgohn.com

OWNER

NAME: LANCASTER COUNTY VO-TECH
SCHOOL AUTHORITY
ADDRESS: 1730 HANS HERR DRIVE
WILLOW STREET, PA 17584
TELEPHONE: 717-653-3001

DEED REFERENCE L-570345
LANC. CO. TAX ACCT.: 461-96483-0-0000

Figure 2 – PCSM Plan Preparer Qualifications

DONOVAN E. HOLLWAY

EDUCATION

B.S.L.A, Landscape Architecture, West Virginia University

EXPERIENCE

Mr. Hollway has over 6 years' experience in the stormwater management & subdivision/land development planning process. His responsibilities include stormwater and infiltration design, stormwater conveyance design, erosion and sediment control design, site grading, and application/report writing. He is also knowledgeable in landscaping design and 3D Modeling.

Mr. Hollway is well versed in project permitting and managing a project through the approval process. He has collaborated with architects, traffic engineers, environmental consultants, geologists, and other design professionals on numerous projects. He has met with clients and sub-consultants to review project information to develop design solutions. He has also attended meetings with contractors and municipal engineers' onsite to develop solutions during the construction phases.

PROJECT EXPERIENCE

Mr. Hollway has worked on a multitude of projects including subdivisions of all types, multiple industrial warehouses, churches, residential, and commercial properties. He has developed sketch plans and final plans to present to the associated municipality along with the supporting documentation necessary.

Mr. Hollway provided site and storm water design on the significant expansion of Carel USA, an industrial warehouse located in Manheim Borough, Lancaster County. The project included working closely with the design team including the architect, construction manager, borough engineer, and professional geologist to develop a stormwater design solution for the new proposed buildings and parking lot expansions which will occur in multiple phases. This particular site addressed borough regulations for volume control, as well as LCCD/PA DEP requirements to address water quality.

Mr. Hollway provided stormwater management & grading design on the United Churches project within Elizabethtown Borough, Lancaster County. The project involved collaborating with several engineers, architect, borough officials, geologists, and surveyors to construct a new Social Services Building. The project also included additional parking area, a playground, and associated stormwater management facilities. The project was designed to maximize efficiency of the proposed site through the layout using multiple stormwater facilities. Mr. Hollway was involved in the application/permitting process, as well as obtaining the necessary modifications & variances that were required from the Borough to advance this project through the approval process.

PRE-DEVELOPMENT CONDITION

1.4 Land Cover Conditions

The subject property primarily contains grass areas, cultivated areas, and an area of existing trees. There are no wetlands in the area of the proposed lots. All stormwater drains to existing channel in Rotary Park and to an existing culvert. The site ultimately drains to Little Chickies Creek.

1.5 Soils

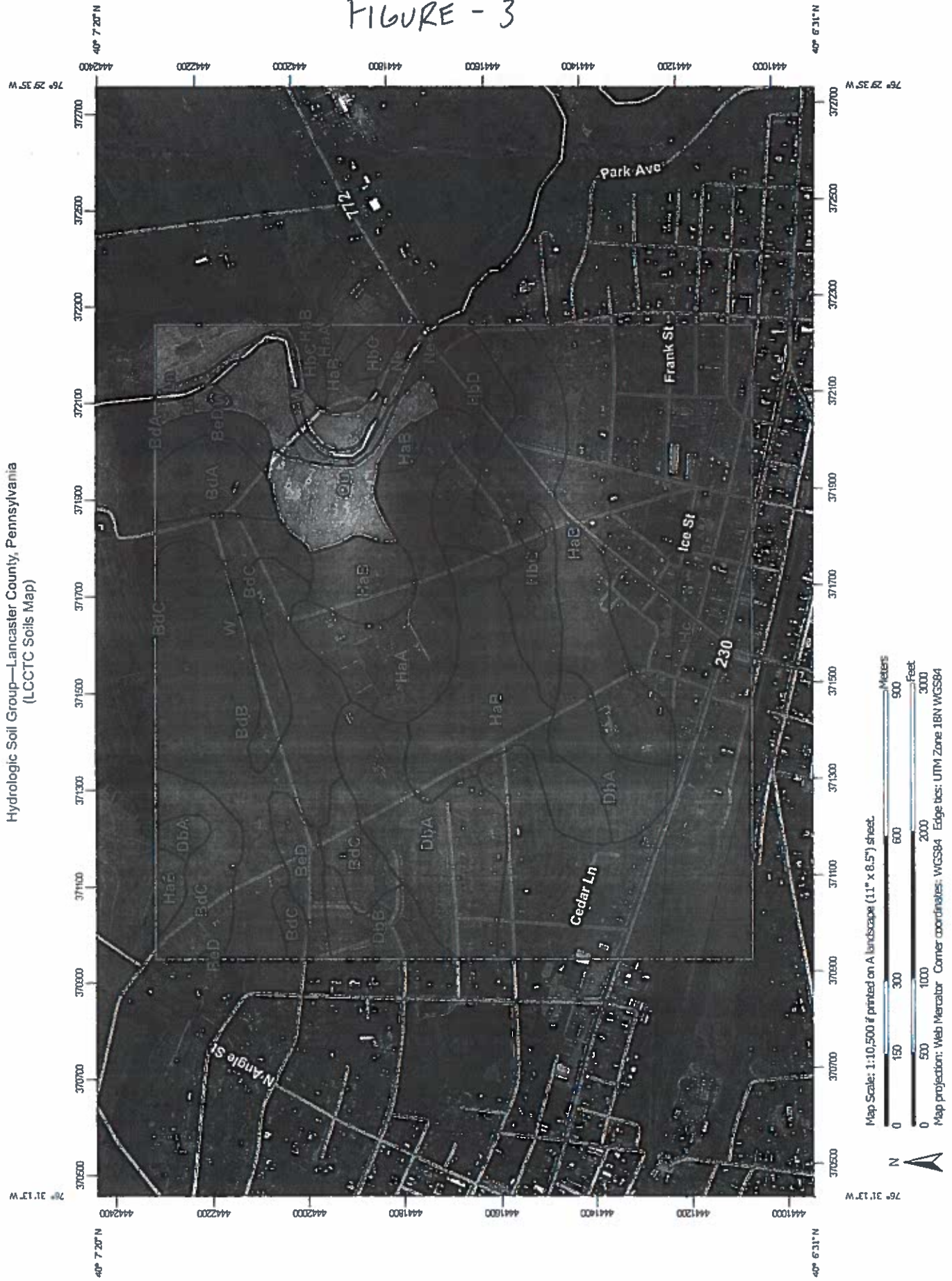
According to the Soil Survey of Lancaster County, the site contains the soil types listed below. Table 1 provides a summary of the present soil types. The soil types listed are the soils within the disturbed area only.

Table 1 – Soils Series

| MAP SYMBOL | SOIL NAME | HYDRO. SOIL GROUP |
|------------|-----------------------------------|-------------------|
| HaB | Hagerstown Silt Loam, 3-8% | B |
| HbC | Hagerstown Silty Clay Loam, 8-15% | B |

Figure 3 presents an excerpt from the Soil Survey of Lancaster County.

FIGURE - 3



1.6 Drainage Areas

Pre Area is analyzed from Lot 1 south across the existing Borough/Township line and down toward the channel in Rotary Park. The study point corresponds to the southern limit of the proposed improvements and disturbance.

1.7 Peak Runoff Determination

1.7.1 Calculation Method

In accordance with the ordinance, the Rational Method has been used to calculate the stormwater runoff for the project site. The Runoff Coefficient "C" used with the Rational Method is based upon the information provided in the Appendix of the Stormwater Management Ordinance. The Runoff Coefficient is based on the Rational Formula, soil group, and slope percentage. The Rainfall Intensity data used in the Rational Method is based upon Region 4 intensity data. The point precipitation frequency per NOAA for the project location is 2.99 inches for the 2 year/24 hour storm.

1.7.2 Drainage Area Properties

The following table summarizes the pre-development drainage area as required to utilize the Rational Method to calculate stormwater runoff. Please refer to Appendix 'A' for the detailed calculations.

Table 2 - Pre-Development Drainage Areas

| Drainage Area | Total Area (acres) | Weighted 'C' Value | Tc (Min.) |
|----------------------|---------------------------|---------------------------|------------------|
| Pre Area | 8.96 | 0.311 | 18.44 |

1.7.3 Drainage Area Peak Flows

The following table summarizes the peak flows calculated for the pre-development drainage area using the Rational Method. All of the flow values are in units of cubic feet per second (cfs). Please refer to Appendix 'A' for the detailed calculations.

Table 3 - Pre-Development Drainage Area Peak Flows

| Drainage Area | 2 Year | 10 Year | 25 Year | 50 Year | 100 Year |
|----------------------|---------------|----------------|----------------|----------------|-----------------|
| Pre Area | 6.79 | 9.38 | 10.40 | 11.44 | 12.73 |

2 POST-DEVELOPMENT CONDITION

2.1 Overview

LCCTC proposes subdivide 2 single family lots from the existing subject tract. The 2 single family lots will consist of a single family house & driveway. Stormwater will be managed by an infiltration basin to the south of Lot 14.

The actual proposed improvements have been used to determine the impervious coverage utilized within the hydrologic calculations. The basin has been oversized to account for any future impervious areas each lot proposes whenever that may be in the future.

2.2 Peak Runoff Determination

2.2.1 Calculation Method

Similar to pre-development, the Rational Method has been used to calculate the stormwater runoff for the project site. The Runoff Coefficient "C" used with the Rational Method is based upon the information provided in the Appendix of the Stormwater Management Ordinance. The runoff coefficient is based on a storm recurrence or 2 years. The Rainfall Intensity data used in the Rational Method is based upon the data provided in the Appendix (PA-DOT Region 4 Storm IDF Data Base Rainfall Intensity) of the ordinance. Time of Concentration or Travel Times are calculated using VTPSUHM 6.0. Time of Concentrations were calculated using the SCS Segmental Approach, TR-55 within VTPSUHM 6.0.

2.2.2 Calculation Approach

Stormwater management facilities will be required to mitigate the increased stormwater being generated by the proposed development. Stormwater will be managed by an infiltration basin to the south of Lot 14. The infiltration basin is designed to control stormwater rate and volume to meet the Borough & Township requirements in addition to the NPDES permit requirements.

2.2.3 Drainage Area Properties

The following table summarizes the post-development drainage areas as required to utilize the Rational Method to calculate stormwater runoff. Please refer to Appendix 'B' and for the detailed calculations.

Table 4 - Post-Development Drainage Area Properties

| Drainage Area | Total Area (acres) | Weighted 'C' Value | Tc (Min.) |
|--------------------------------|---------------------------|---------------------------|------------------|
| Post Area Undetained | 7.23 | 0.325 | 18.44 |
| To Infiltration Basin 1 | 1.73 | 0.402 | 5.0 |

2.2.4 Drainage Area Peak Flows

The following table summarizes the peak flows obtained for the Post-Development Drainage Areas. Please refer to Appendix 'B' for the detailed calculations.

Please note that the values presented in the table for the "Infiltration Basin" represents the peak flow to the infiltration basin for each hydrograph.

Table 5 - Post-Development Drainage Area Peak Flows

| Drainage Area | 2 Year | 10 Year | 25 Year | 50 Year | 100 Year |
|--------------------------------|---------------|----------------|----------------|----------------|-----------------|
| Post Area A Undetained | 5.73 | 7.91 | 8.77 | 9.65 | 10.73 |
| To Infiltration Basin 1 | 2.91 | 3.76 | 4.17 | 4.60 | 5.09 |

2.2.5 Pre/Post Peak Runoff Comparison

As required by the ordinance, the post-development runoff for the 2, 10, 25, 50 and 100 year storm events shall not exceed the peak rates of runoff prior to development.

The following table represents the actual post development peak runoff compared to the pre development peak runoff.

Table 6 – Pre Area / Post Area A Undetained / Infiltration Basin Discharge Pre/Post Peak Runoff Comparison

| Storm Frequency | Pre Area Peak Flow, cfs | Post Area Undetained Peak Flow, cfs | Infil. Basin Peak Flow Discharges, cfs | Allowable Post Peak Flow, cfs |
|------------------------|--------------------------------|--|---|--------------------------------------|
| 2 Year | 6.79 | 5.73 | 0.00 | 6.79 |
| 10 Year | 9.38 | 7.91 | 0.00 | 9.38 |
| 25 Year | 10.40 | 8.77 | 0.00 | 10.40 |
| 50 Year | 11.44 | 9.65 | 0.00 | 11.44 |
| 100 Year | 12.73 | 10.73 | 0.00 | 12.73 |

3 STORMWATER MANAGEMENT FACILITY DESIGN

The infiltration basin is designed to mitigate the increase in runoff.

The basin is designed for the 100 year storm event consistent with the stormwater ordinance. As a result, there is no discharge.

3.1 Infiltration Basin Design

The Infiltration Basin is designed in accordance with the ordinance requirements. An emergency spillway and berm are proposed for the Infiltration Basin. The results of the proposed Infiltration Basin routings are presented in the following table. Please refer to Appendix 'C' of this report for detailed calculations.

Table 7 - Proposed Infiltration Basin 1 Routing Summary

| Storm Frequency | Peak Elevation (ft) | Peak Storage (acre-ft) | Peak Outflow (cfs) |
|-----------------|------------------------|---------------------------|-----------------------|
| 2 Year | 352.39 | 0.0940 | 0.00 |
| 10 Year | 352.55 | 0.1344 | 0.00 |
| 25 Year | 352.65 | 0.1575 | 0.00 |
| 50 Year | 352.73 | 0.1773 | 0.00 |
| 100 Year | 352.88 | 0.2139 | 0.00 |

3.1.1 Emergency Spillway Design

The emergency spillway has been designed to safely convey the one hundred (100) year storm. As required by the ordinance, the emergency spillways have been designed for the peak 100-year inflow to the basin. Please refer to Appendix 'C' of this report for the detailed calculations.

Table 8 - Proposed Emergency Spillway Design

| Basin ID | Top of Berm Elevation (ft) | Emergency Spillway Crest Elev. (ft) | 100-year Peak Elevation (ft) | Flow Depth thru Spillway (ft) |
|-------------------------|----------------------------------|--|------------------------------------|-------------------------------------|
| Infiltration Basin 1 | 354.00 | 353.25 | 352.88 | 0.00 |

3.1.2 Dewatering

The dewatering time for Infiltration Basin 1 is 3.32 hours. The dewatering time is based on the 0.376 inches per hour infiltration rate noted in the geology report which includes the geometric mean rate and a safety factor of 2. The depth of water in the Infiltration Basin is 1.25 feet (from spillway to bottom).

4 CONVEYANCE SYSTEMS DESIGN

4.1 Swale Design

The swales were designed for the 100 year storm event and the appropriate erosion control matting is proposed for each swale. Please refer to Appendix 'D' of this report for the detailed calculations.

4.1.1 Roof Leader Design

All roof leaders are designed to discharge/daylight to grade.

4.2 Outfall Erosion Protection

There are 2 rip-rap aprons associated with this project. Refer to Appendix 'D' within the report.

5 VOLUME / NPDES PERMIT REQUIREMENTS

The NPDES Phase II requirements state that the increased runoff volume shall be managed from the 2 YR/24 HR Storm Event. The Mount Joy Borough/Township stormwater ordinance requires that the volume control BMP's shall be designed so the post development total runoff volume for all storms equal to or less than the 2 year, 24 hour storm event shall not be increased from the pre development total runoff.

A geotechnical investigation report was completed by Lancaster Geology, dated May 17, 2021. The investigation included 5 infiltration test pits in the area of the proposed stormwater facilities. The 5 infiltration test pits locations and depths are shown on the Final Grading / PCSM Plan.

Based on the infiltration testing, the site is suitable for infiltration. The site is located in an area of carbonate geology (karst).

A limiting zone consisting of a limestone boulder was encountered in TP-1 at 6.5-7' deep. The remaining test pits did not encounter any limiting zones to the depths tested. Infiltration rates are acceptable in TP-3, TP-4, and TP-5 which is the area of the proposed Infiltration Basin.

The maximum loading ratio for volume control facilities in karst areas shall be 3:1 impervious drainage area to infiltration area and 5:1 total drainage area to infiltration area.

Infiltration Basin 1 has an infiltration area of 15,198 square feet. The total drainage area is 75,329 square feet which results in a loading ratio for the total drainage area to infiltration area of 4.95:1 which is less than the 5:1 maximum. The Infiltration Basin drainage area has an impervious area of 16,053 square feet which results in a loading ratio of 1.05:1 which is less than the 3:1 maximum.

The Infiltration Basin is designed to infiltrate the net increase in the two year storm event and meet the Borough/Township volume and NPDES permit requirements. The total two year net increase in volume is 0.108 acre feet.

Infiltration Basin 1 provides 0.33 acre feet of volume.

As a result, the proposed BMP's meet the net increase for the two year storm event.

The thermal impacts of the project were minimized using the Infiltration Basin by treating the first flush of stormwater.

As required as part of the NPDES permit, a licensed professional or their designee must be present during the critical stages of implementation of the PCSM plan. It is noted on the plans that the contractor must coordinate and contact DC Gohn Associates prior to installation of the Infiltration Basin so a representative can be present to observe the installation and construction of the proposed BMP's.

APPENDICES

APPENDIX A **PRE-DEVELOPMENT CALCULATIONS**

| Item | Quantity | Unit | Price | Total |
|--------------------|----------|--------|-------|---------|
| 1. Excavation | 100 | cuyd | 1.00 | 100.00 |
| 2. Backfill | 100 | cuyd | 1.00 | 100.00 |
| 3. Paving | 100 | sqr yd | 1.00 | 100.00 |
| 4. Gravel | 100 | cuyd | 1.00 | 100.00 |
| 5. Sand | 100 | cuyd | 1.00 | 100.00 |
| 6. Cement | 100 | bags | 1.00 | 100.00 |
| 7. Rebar | 100 | lbs | 1.00 | 100.00 |
| 8. Formwork | 100 | sqr yd | 1.00 | 100.00 |
| 9. Labor | 100 | hrs | 1.00 | 100.00 |
| 10. Equipment | 100 | hrs | 1.00 | 100.00 |
| 11. Materials | 100 | lbs | 1.00 | 100.00 |
| 12. Transportation | 100 | hrs | 1.00 | 100.00 |
| 13. Insurance | 100 | hrs | 1.00 | 100.00 |
| 14. Taxes | 100 | hrs | 1.00 | 100.00 |
| 15. Profit | 100 | hrs | 1.00 | 100.00 |
| 16. Contingency | 100 | hrs | 1.00 | 100.00 |
| 17. Subtotal | | | | 1000.00 |
| 18. Total | | | | 1000.00 |

Pre Development Drainage Areas

6/14/2021

| | Total Area, SF | Total Area, acres | Wtd. 'C' | T _c , min. | On-Site Areas - Good Condition | | | | | | | | | | |
|------------|-------------------|----------------------|----------|-----------------------|--------------------------------|-------|--------|------------|------|---------|-------------|------|------|---|---|
| | | | | | Impervious, sf. | | | Grass, sf. | | | Forest, sf. | | | | |
| | | | | | <2% | 2-6% | >6% | <2% | 2-6% | >6% | <2% | 2-6% | >6% | | |
| | | | | | B | B | B | B | B | B | B | B | B | B | B |
| Soil Type | | | | | | | | | | | | | | | |
| C' Value | | | | | 0.91 | 0.92 | 0.93 | 0.14 | 0.19 | 0.26 | 0.10 | 0.14 | 0.18 | | |
| Pre Area | | | | | | | | | | | | | | | |
| Pre Area A | 390,122 | 8.96 | 0.311 | 18.44 | | 5,646 | 24,409 | | | 360,067 | | | | | |

SCS Segmental Travel Time

Summary for Pre&Post Area A TC Path

Segment 1: Overland Flow

L = 100 ft, S = .025 ft/ft, n = .24, P(2yr/24hr) = 2.99 in
Travel Time = 13.5 minutes

Segment 2: Concentrated Flow

L = 359 ft, S = .024 ft/ft, Unpaved surface
Travel Time = 2.4 minutes

Segment 3: Concentrated Flow

L = 168 ft, S = .059 ft/ft, Unpaved surface
Travel Time = 0.7 minutes

Segment 4: Concentrated Flow

L = 250 ft, S = .02 ft/ft, Unpaved surface
Travel Time = 1.8 minutes

Total Travel Time = 18.44 Minutes

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

2 Year Storm in PA. Region 4 at Pre Area A
Time of Concentration: 18.44 min.
Drainage Area: 8.9600 acres.
Weighted 'C' Factor: 0.3110

| Time (min) | Rainfall Incr. (inches) | Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|-----------------------|--|---------------------------|---|-----------------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.07 | 0.07 | 0.24 | 0.68 |
| 37 | 0.17 | 0.24 | 0.54 | 1.50 |
| 55 | 0.75 | 0.99 | 2.44 | 6.79 |
| 74 | 0.27 | 1.26 | 0.89 | 2.47 |
| 92 | 0.11 | 1.37 | 0.35 | 0.98 |
| 111 | 0.09 | 1.46 | 0.28 | 0.79 |
| 129 | 0.07 | 1.52 | 0.22 | 0.60 |
| 148 | 0.06 | 1.58 | 0.19 | 0.54 |
| 166 | 0.05 | 1.64 | 0.18 | 0.49 |
| 184 | 0.05 | 1.69 | 0.16 | 0.45 |

At time = 461 minutes, the flow is 0.23 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

10 Year Storm in PA. Region 4 at Pre Area A
Time of Concentration: 18.44 min.
Drainage Area: 8.9600 acres.
Weighted 'C' Factor: 0.3110

| Time (min) | Rainfall Incr. (inches) | Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|-----------------------|--|---------------------------|---|-----------------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.13 | 0.13 | 0.41 | 1.15 |
| 37 | 0.22 | 0.35 | 0.73 | 2.04 |
| 55 | 1.03 | 1.39 | 3.37 | 9.38 |
| 74 | 0.39 | 1.77 | 1.26 | 3.52 |
| 92 | 0.16 | 1.94 | 0.53 | 1.49 |
| 111 | 0.15 | 2.08 | 0.48 | 1.33 |
| 129 | 0.11 | 2.20 | 0.36 | 1.01 |
| 148 | 0.10 | 2.30 | 0.33 | 0.91 |
| 166 | 0.09 | 2.39 | 0.30 | 0.83 |
| 184 | 0.08 | 2.47 | 0.27 | 0.76 |

At time = 461 minutes, the flow is 0.36 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 4 at Pre Area A

Time of Concentration: 18.44 min.

Drainage Area: 8.9600 acres.

Weighted 'C' Factor: 0.3110

| Time (min) | Rainfall Incr. (inches) | Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|-----------------------|--|---------------------------|---|-----------------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.15 | 0.15 | 0.50 | 1.40 |
| 37 | 0.26 | 0.42 | 0.85 | 2.37 |
| 55 | 1.15 | 1.56 | 3.73 | 10.40 |
| 74 | 0.44 | 2.00 | 1.43 | 3.99 |
| 92 | 0.21 | 2.21 | 0.69 | 1.91 |
| 111 | 0.18 | 2.39 | 0.58 | 1.62 |
| 129 | 0.14 | 2.53 | 0.45 | 1.24 |
| 148 | 0.12 | 2.65 | 0.40 | 1.12 |
| 166 | 0.11 | 2.77 | 0.37 | 1.02 |
| 184 | 0.10 | 2.87 | 0.34 | 0.94 |

At time = 461 minutes, the flow is 0.46 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 4 at Pre Area A

Time of Concentration: 18.44 min.

Drainage Area: 8.9600 acres.

Weighted 'C' Factor: 0.3110

| Time (min) | Rainfall Incr. (inches) | Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|-----------------------|--|---------------------------|---|-----------------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.18 | 0.18 | 0.58 | 1.63 |
| 37 | 0.32 | 0.50 | 1.03 | 2.87 |
| 55 | 1.26 | 1.76 | 4.11 | 11.44 |
| 74 | 0.51 | 2.26 | 1.65 | 4.60 |
| 92 | 0.25 | 2.51 | 0.81 | 2.26 |
| 111 | 0.21 | 2.72 | 0.67 | 1.87 |
| 129 | 0.16 | 2.88 | 0.52 | 1.45 |
| 148 | 0.14 | 3.02 | 0.47 | 1.31 |
| 166 | 0.13 | 3.16 | 0.43 | 1.20 |
| 184 | 0.12 | 3.28 | 0.40 | 1.10 |

At time = 461 minutes, the flow is 0.55 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at Pre Area A

Time of Concentration: 18.44 min.

Drainage Area: 8.9600 acres.

Weighted 'C' Factor: 0.3110

| Time (min) | Rainfall | | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------|----------------------------------|---------------|
| | Incr. (inches) | Total (inches) | | |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.21 | 0.21 | 0.69 | 1.92 |
| 37 | 0.36 | 0.57 | 1.16 | 3.22 |
| 55 | 1.40 | 1.97 | 4.57 | 12.73 |
| 74 | 0.57 | 2.54 | 1.85 | 5.15 |
| 92 | 0.29 | 2.83 | 0.95 | 2.64 |
| 111 | 0.24 | 3.07 | 0.79 | 2.21 |
| 129 | 0.19 | 3.26 | 0.61 | 1.71 |
| 148 | 0.17 | 3.43 | 0.55 | 1.54 |
| 166 | 0.16 | 3.59 | 0.51 | 1.41 |
| 184 | 0.14 | 3.73 | 0.47 | 1.30 |

At time = 461 minutes, the flow is 0.65 CFS.

APPENDIX B

POST-DEVELOPMENT CALCULATIONS

Post Development Drainage Areas

6/15/2021

| | Total Area, SF | Total Area, acres | Wtd. 'C' | T _c , min. | On-Site Areas - Good Condition | | | | | | | | |
|------------------------------|-------------------|----------------------|----------|-----------------------|--------------------------------|-----------|----------|------------|-----------|----------|-------------|-----------|----------|
| | | | | | Impervious, sf. | | | Grass, sf. | | | Forest, sf. | | |
| | | | | | <2% B | 2-6% B | >6% B | <2% B | 2-6% B | >6% B | <2% B | 2-6% B | >6% B |
| Soil Type C' Value | | | | | 0.91 | 0.92 | 0.93 | 0.14 | 0.19 | 0.26 | 0.10 | 0.14 | 0.18 |
| Post Area | | | | | | | | | | | | | |
| Post Undetained Area A | 314,793 | 7.23 | 0.325 | 18.44 | | 6,216 | 24,409 | | | 284,168 | | | |
| Post Area A to Infil Basin 1 | 75,329 | 1.73 | 0.402 | 5.00 | | 7,477 | 8,576 | | | 59,276 | | | |

SCS Segmental Travel Time

Summary for Pre&Post Area A TC Path

Segment 1: Overland Flow

L = 100 ft, S = .025 ft/ft, n = .24, P(2yr/24hr) = 2.99 in
Travel Time = 13.5 minutes

Segment 2: Concentrated Flow

L = 359 ft, S = .024 ft/ft, Unpaved surface
Travel Time = 2.4 minutes

Segment 3: Concentrated Flow

L = 168 ft, S = .059 ft/ft, Unpaved surface
Travel Time = 0.7 minutes

Segment 4: Concentrated Flow

L = 250 ft, S = .02 ft/ft, Unpaved surface
Travel Time = 1.8 minutes

Total Travel Time = 18.44 Minutes

**Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart**

2 Year Storm in PA. Region 4 at Post Undetained Area A

Time of Concentration: 18.44 min.

Drainage Area: 7.2300 acres.

Weighted 'C' Factor: 0.3250

| Time (min) | Rainfall | | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------|----------------------------------|---------------|
| | Incr. (inches) | Total (inches) | | |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.07 | 0.07 | 0.24 | 0.57 |
| 37 | 0.17 | 0.24 | 0.54 | 1.27 |
| 55 | 0.75 | 0.99 | 2.44 | 5.73 |
| 74 | 0.27 | 1.26 | 0.89 | 2.08 |
| 92 | 0.11 | 1.37 | 0.35 | 0.82 |
| 111 | 0.09 | 1.46 | 0.28 | 0.66 |
| 129 | 0.07 | 1.52 | 0.22 | 0.51 |
| 148 | 0.06 | 1.58 | 0.19 | 0.46 |
| 166 | 0.05 | 1.64 | 0.18 | 0.42 |
| 184 | 0.05 | 1.69 | 0.16 | 0.38 |

At time = 461 minutes, the flow is 0.19 CFS.

**Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart**

10 Year Storm in PA. Region 4 at Post Undetained Area A

Time of Concentration: 18.44 min.

Drainage Area: 7.2300 acres.

Weighted 'C' Factor: 0.3250

| Time (min) | Rainfall | | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------|----------------------------------|---------------|
| | Incr. (inches) | Total (inches) | | |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.13 | 0.13 | 0.41 | 0.97 |
| 37 | 0.22 | 0.35 | 0.73 | 1.72 |
| 55 | 1.03 | 1.39 | 3.37 | 7.91 |
| 74 | 0.39 | 1.77 | 1.26 | 2.97 |
| 92 | 0.16 | 1.94 | 0.53 | 1.25 |
| 111 | 0.15 | 2.08 | 0.48 | 1.12 |
| 129 | 0.11 | 2.20 | 0.36 | 0.85 |
| 148 | 0.10 | 2.30 | 0.33 | 0.77 |
| 166 | 0.09 | 2.39 | 0.30 | 0.70 |
| 184 | 0.08 | 2.47 | 0.27 | 0.64 |

At time = 461 minutes, the flow is 0.31 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

25 Year Storm in PA. Region 4 at Post Undetained Area A

Time of Concentration: 18.44 min.

Drainage Area: 7.2300 acres.

Weighted 'C' Factor: 0.3250

| Time (min) | Rainfall Incr. (inches) | Rainfall Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------------------|-------------------------------|----------------------------------|---------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.15 | 0.15 | 0.50 | 1.18 |
| 37 | 0.26 | 0.42 | 0.85 | 2.00 |
| 55 | 1.15 | 1.56 | 3.73 | 8.77 |
| 74 | 0.44 | 2.00 | 1.43 | 3.37 |
| 92 | 0.21 | 2.21 | 0.69 | 1.61 |
| 111 | 0.18 | 2.39 | 0.58 | 1.37 |
| 129 | 0.14 | 2.53 | 0.45 | 1.05 |
| 148 | 0.12 | 2.65 | 0.40 | 0.95 |
| 166 | 0.11 | 2.77 | 0.37 | 0.86 |
| 184 | 0.10 | 2.87 | 0.34 | 0.79 |

At time = 461 minutes, the flow is 0.39 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 4 at Post Undetained Area A

Time of Concentration: 18.44 min.

Drainage Area: 7.2300 acres.

Weighted 'C' Factor: 0.3250

| Time (min) | Rainfall Incr. (inches) | Rainfall Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------------------|-------------------------------|----------------------------------|---------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.18 | 0.18 | 0.58 | 1.37 |
| 37 | 0.32 | 0.50 | 1.03 | 2.42 |
| 55 | 1.26 | 1.76 | 4.11 | 9.65 |
| 74 | 0.51 | 2.26 | 1.65 | 3.88 |
| 92 | 0.25 | 2.51 | 0.81 | 1.91 |
| 111 | 0.21 | 2.72 | 0.67 | 1.58 |
| 129 | 0.16 | 2.88 | 0.52 | 1.22 |
| 148 | 0.14 | 3.02 | 0.47 | 1.10 |
| 166 | 0.13 | 3.16 | 0.43 | 1.01 |
| 184 | 0.12 | 3.28 | 0.40 | 0.93 |

At time = 461 minutes, the flow is 0.47 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at Post Undetained Area A

Time of Concentration: 18.44 min.

Drainage Area: 7.2300 acres.

Weighted 'C' Factor: 0.3250

| Time (min) | Incr. (inches) | Rainfall Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------------------|----------------------------------|---------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.21 | 0.21 | 0.69 | 1.62 |
| 37 | 0.36 | 0.57 | 1.16 | 2.72 |
| 55 | 1.40 | 1.97 | 4.57 | 10.73 |
| 74 | 0.57 | 2.54 | 1.85 | 4.34 |
| 92 | 0.29 | 2.83 | 0.95 | 2.22 |
| 111 | 0.24 | 3.07 | 0.79 | 1.86 |
| 129 | 0.19 | 3.26 | 0.61 | 1.44 |
| 148 | 0.17 | 3.43 | 0.55 | 1.30 |
| 166 | 0.16 | 3.59 | 0.51 | 1.19 |
| 184 | 0.14 | 3.73 | 0.47 | 1.10 |

At time = 461 minutes, the flow is 0.55 CFS.

**Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart**

2 Year Storm in PA. Region 4 at Post Area to Infil Basin 1

Time of Concentration: 5 min.

Drainage Area: 1.7300 acres.

Weighted 'C' Factor: 0.4020

| Time (min) | Rainfall | | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------|----------------------------------|---------------|
| | Incr. (inches) | Total (inches) | | |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.07 | 0.07 | 0.87 | 0.60 |
| 10 | 0.14 | 0.21 | 1.62 | 1.13 |
| 15 | 0.35 | 0.56 | 4.19 | 2.91 |
| 20 | 0.19 | 0.75 | 2.28 | 1.59 |
| 25 | 0.11 | 0.85 | 1.26 | 0.88 |
| 30 | 0.09 | 0.94 | 1.03 | 0.72 |
| 35 | 0.06 | 1.00 | 0.75 | 0.52 |
| 40 | 0.05 | 1.05 | 0.65 | 0.46 |
| 45 | 0.05 | 1.10 | 0.58 | 0.40 |
| 50 | 0.04 | 1.15 | 0.52 | 0.36 |

At time = 125 minutes, the flow is 0.15 CFS.

Computed Basin Volume using Parabolic Outflow Hydrograph

Basin Outflow Rate: 0.00 cfs

Suggested Basin Volume: 3761 Cubic Feet or 0.0863 Acre-Feet

**Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart**

10 Year Storm in PA. Region 4 at Post Area to Infil Basin 1

Time of Concentration: 5 min.

Drainage Area: 1.7300 acres.

Weighted 'C' Factor: 0.4020

| Time (min) | Rainfall | | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------|----------------------------------|---------------|
| | Incr. (inches) | Total (inches) | | |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.10 | 0.10 | 1.24 | 0.86 |
| 10 | 0.20 | 0.30 | 2.38 | 1.65 |
| 15 | 0.45 | 0.75 | 5.41 | 3.76 |
| 20 | 0.28 | 1.03 | 3.33 | 2.31 |
| 25 | 0.15 | 1.18 | 1.84 | 1.28 |
| 30 | 0.12 | 1.31 | 1.49 | 1.03 |
| 35 | 0.09 | 1.39 | 1.05 | 0.73 |
| 40 | 0.08 | 1.47 | 0.91 | 0.63 |
| 45 | 0.07 | 1.53 | 0.79 | 0.55 |
| 50 | 0.06 | 1.59 | 0.70 | 0.48 |

At time = 125 minutes, the flow is 0.25 CFS.

**Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart**

25 Year Storm in PA. Region 4 at Post Area to Infil Basin 1
Time of Concentration: 5 min.
Drainage Area: 1.7300 acres.
Weighted 'C' Factor: 0.4020

| Time (min) | Rainfall | | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------|----------------------------------|---------------|
| | Incr. (inches) | Total (inches) | | |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.12 | 0.12 | 1.41 | 0.98 |
| 10 | 0.22 | 0.34 | 2.64 | 1.84 |
| 15 | 0.50 | 0.84 | 5.99 | 4.17 |
| 20 | 0.31 | 1.14 | 3.66 | 2.55 |
| 25 | 0.17 | 1.31 | 2.06 | 1.43 |
| 30 | 0.14 | 1.45 | 1.67 | 1.16 |
| 35 | 0.10 | 1.55 | 1.20 | 0.84 |
| 40 | 0.09 | 1.64 | 1.04 | 0.73 |
| 45 | 0.08 | 1.72 | 0.92 | 0.64 |
| 50 | 0.07 | 1.78 | 0.82 | 0.57 |

At time = 125 minutes, the flow is 0.31 CFS.

**Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart**

50 Year Storm in PA. Region 4 at Post Area to Infil Basin 1
Time of Concentration: 5 min.
Drainage Area: 1.7300 acres.
Weighted 'C' Factor: 0.4020

| Time (min) | Rainfall | | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------|----------------------------------|---------------|
| | Incr. (inches) | Total (inches) | | |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.13 | 0.13 | 1.62 | 1.13 |
| 10 | 0.24 | 0.38 | 2.91 | 2.03 |
| 15 | 0.55 | 0.93 | 6.61 | 4.60 |
| 20 | 0.33 | 1.26 | 3.98 | 2.77 |
| 25 | 0.19 | 1.45 | 2.31 | 1.60 |
| 30 | 0.16 | 1.61 | 1.91 | 1.33 |
| 35 | 0.12 | 1.73 | 1.41 | 0.98 |
| 40 | 0.10 | 1.83 | 1.24 | 0.86 |
| 45 | 0.09 | 1.92 | 1.10 | 0.77 |
| 50 | 0.08 | 2.01 | 0.99 | 0.69 |

At time = 125 minutes, the flow is 0.35 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at Post Area to Infil Basin 1

Time of Concentration: 5 min.

Drainage Area: 1.7300 acres.

Weighted 'C' Factor: 0.4020

| Time (min) | Rainfall Incr. (inches) | Rainfall Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|-----------------------|--|--|---|-----------------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.15 | 0.15 | 1.82 | 1.26 |
| 10 | 0.27 | 0.42 | 3.25 | 2.26 |
| 15 | 0.61 | 1.03 | 7.32 | 5.09 |
| 20 | 0.37 | 1.40 | 4.44 | 3.09 |
| 25 | 0.21 | 1.62 | 2.58 | 1.79 |
| 30 | 0.18 | 1.80 | 2.13 | 1.48 |
| 35 | 0.13 | 1.93 | 1.58 | 1.10 |
| 40 | 0.12 | 2.04 | 1.39 | 0.97 |
| 45 | 0.10 | 2.15 | 1.24 | 0.86 |
| 50 | 0.09 | 2.24 | 1.11 | 0.77 |

At time = 125 minutes, the flow is 0.42 CFS.

Computed Basin Volume using Parabolic Outflow Hydrograph

Basin Outflow Rate: 0.00 cfs

Suggested Basin Volume: 8017 Cubic Feet or 0.1841 Acre-Feet

Study Points for Pre-Post Development Flow Analysis

Pre Area A / Post Area A Undetained

| Storm Event | Pre-Development | | Post-Development | | |
|-------------|---------------------------|---------------------------------------|-----------------------------------|---|--|
| | Pre Area A Peak Flow, cfs | Post Area A Undetained Peak Flow, cfs | Prop. Infil. Basin 1 Outflow, cfs | Allowable Post Development Peak Flow, cfs | |
| 2 Year | 6.79 | 5.73 | 0.00 | 6.79 | |
| 10 Year | 9.38 | 7.91 | 0.00 | 9.38 | |
| 25 Year | 10.40 | 8.77 | 0.00 | 10.40 | |
| 50 Year | 11.44 | 9.65 | 0.00 | 11.44 | |
| 100 Year | 12.73 | 10.73 | 0.00 | 12.73 | |

APPENDIX C

INFILTRATION BASIN CALCULATIONS

Basin Storage/Elevation Input

| | Elevation (ft) | Area (acres) | Storage (acre-ft) |
|------------|-------------------|-----------------|----------------------|
| BOTTOM → | 352 | 0.1474 | 0.000 |
| | 353 | 0.3404 | 0.244 |
| SPILLWAY → | 353.25 | 0.3488 | 0.330 |
| BERM → | 354 | 0.3743 | 0.601 |

14,374.8 CF

STORAGE @ SPILL

(BASIN OVERSIZED FOR FUTURE PATIOS/POOLS +
FUTURE LOTS TO THE EAST)

BASIN INFILTRATION AREA @ SPILL = 0.3488 AC (15,198 SF)

LOADING RATIOS (KARST) { IMPERVIOUS TO INFILTRATION AREA = 16,053 to 15,198
(NEEDS TO BE 3:1) (1.05 to 1.0)

TOTAL TO INFILTRATION AREA = 75,329 to 15,198
(NEEDS TO BE 5:1) (4.95 to 1.0)

5:1 + 3:1
✓

Project Files:

Outlet Structure Configuration: P:\4343\4343-52\Drainage\Basin Spillway.OSC

Discharge/Elevation Curve: P:\4343\4343-52\Drainage\Basin Spillway.EO

Outlet Structure Configuration for:**Stage 1: Emergency Spillway**

Crest Elevation = 353.25 feet

Crest Length = 15 feet

Discharge Coefficient = 3

Basin Rating Curve

| Basin Water Elevation | Basin Outflow (cfs) | Riser Box Water Elevation | Tailwater Elevation (ft) | Outfall Culvert Control | Outfall Culvert Override? |
|-----------------------------|---------------------------|---------------------------------|--------------------------------|-------------------------------|---------------------------------|
| 352.00 | 0.00 | N/A | N/A | N/A | N/A |
| 352.10 | 0.00 | N/A | N/A | N/A | N/A |
| 352.20 | 0.00 | N/A | N/A | N/A | N/A |
| 352.30 | 0.00 | N/A | N/A | N/A | N/A |
| 352.40 | 0.00 | N/A | N/A | N/A | N/A |
| 352.50 | 0.00 | N/A | N/A | N/A | N/A |
| 352.60 | 0.00 | N/A | N/A | N/A | N/A |
| 352.70 | 0.00 | N/A | N/A | N/A | N/A |
| 352.80 | 0.00 | N/A | N/A | N/A | N/A |
| 352.90 | 0.00 | N/A | N/A | N/A | N/A |
| 353.00 | 0.00 | N/A | N/A | N/A | N/A |
| 353.10 | 0.00 | N/A | N/A | N/A | N/A |
| 353.20 | 0.00 | N/A | N/A | N/A | N/A |
| 353.30 | 0.50 | N/A | N/A | N/A | N/A |
| 353.40 | 2.61 | N/A | N/A | N/A | N/A |
| 353.50 | 5.63 | N/A | N/A | N/A | N/A |
| 353.60 | 9.32 | N/A | N/A | N/A | N/A |
| 353.70 | 13.58 | N/A | N/A | N/A | N/A |
| 353.80 | 18.36 | N/A | N/A | N/A | N/A |
| 353.90 | 23.58 | N/A | N/A | N/A | N/A |
| 354.00 | 29.23 | N/A | N/A | N/A | N/A |

Modified Puls Routing

Inflow Hydrograph: P:\4343\4343-52\Drainage\Post Area to Basin - 2 YR EXT.HYD

Storage/Elevation Curve: P:\4343\4343-52\Drainage\Proposed Infil. Basin 1.ES

Discharge/Elevation Curve: P:\4343\4343-52\Drainage\Basin Spillway.EO

Basin Bypass Capacity = 0.0 cfs

Starting Pool Elevation = 352.00 feet

Time Interval = 0.0208333 hours

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 0.00 | 0.00 | 0.00 | 0.0000 | 352.00 | 0.000 | 0.000 |
| 0.02 | 0.15 | 0.15 | 0.0001 | 352.00 | 0.000 | 0.000 |
| 0.04 | 0.30 | 0.30 | 0.0005 | 352.00 | 0.000 | 0.000 |
| 0.06 | 0.45 | 0.45 | 0.0012 | 352.00 | 0.000 | 0.000 |
| 0.08 | 0.60 | 0.60 | 0.0021 | 352.01 | 0.000 | 0.000 |
| 0.10 | 0.73 | 0.73 | 0.0032 | 352.01 | 0.000 | 0.000 |
| 0.12 | 0.87 | 0.87 | 0.0046 | 352.02 | 0.000 | 0.000 |
| 0.15 | 1.00 | 1.00 | 0.0062 | 352.03 | 0.000 | 0.000 |
| 0.17 | 1.13 | 1.13 | 0.0080 | 352.03 | 0.000 | 0.000 |
| 0.19 | 1.57 | 1.57 | 0.0104 | 352.04 | 0.000 | 0.000 |
| 0.21 | 2.02 | 2.02 | 0.0135 | 352.06 | 0.000 | 0.000 |
| 0.23 | 2.47 | 2.47 | 0.0173 | 352.07 | 0.000 | 0.000 |
| 0.25 | 2.91 | 2.91 | 0.0220 | 352.09 | 0.000 | 0.000 |
| 0.27 | 2.58 | 2.58 | 0.0267 | 352.11 | 0.000 | 0.000 |
| 0.29 | 2.25 | 2.25 | 0.0308 | 352.13 | 0.000 | 0.000 |
| 0.31 | 1.92 | 1.92 | 0.0344 | 352.14 | 0.000 | 0.000 |
| 0.33 | 1.59 | 1.59 | 0.0375 | 352.15 | 0.000 | 0.000 |
| 0.35 | 1.41 | 1.41 | 0.0400 | 352.16 | 0.000 | 0.000 |
| 0.37 | 1.23 | 1.23 | 0.0423 | 352.17 | 0.000 | 0.000 |
| 0.40 | 1.05 | 1.05 | 0.0443 | 352.18 | 0.000 | 0.000 |
| 0.42 | 0.88 | 0.88 | 0.0459 | 352.19 | 0.000 | 0.000 |
| 0.44 | 0.84 | 0.84 | 0.0474 | 352.19 | 0.000 | 0.000 |
| 0.46 | 0.80 | 0.80 | 0.0488 | 352.20 | 0.000 | 0.000 |
| 0.48 | 0.76 | 0.76 | 0.0502 | 352.21 | 0.000 | 0.000 |
| 0.50 | 0.72 | 0.72 | 0.0514 | 352.21 | 0.000 | 0.000 |
| 0.52 | 0.67 | 0.67 | 0.0526 | 352.22 | 0.000 | 0.000 |
| 0.54 | 0.62 | 0.62 | 0.0537 | 352.22 | 0.000 | 0.000 |
| 0.56 | 0.57 | 0.57 | 0.0547 | 352.22 | 0.000 | 0.000 |
| 0.58 | 0.52 | 0.52 | 0.0557 | 352.23 | 0.000 | 0.000 |
| 0.60 | 0.50 | 0.50 | 0.0566 | 352.23 | 0.000 | 0.000 |
| 0.62 | 0.49 | 0.49 | 0.0574 | 352.24 | 0.000 | 0.000 |
| 0.65 | 0.47 | 0.47 | 0.0582 | 352.24 | 0.000 | 0.000 |
| 0.67 | 0.46 | 0.46 | 0.0590 | 352.24 | 0.000 | 0.000 |
| 0.69 | 0.44 | 0.44 | 0.0598 | 352.25 | 0.000 | 0.000 |
| 0.71 | 0.43 | 0.43 | 0.0606 | 352.25 | 0.000 | 0.000 |
| 0.73 | 0.42 | 0.42 | 0.0613 | 352.25 | 0.000 | 0.000 |
| 0.75 | 0.40 | 0.40 | 0.0620 | 352.25 | 0.000 | 0.000 |
| 0.77 | 0.39 | 0.39 | 0.0627 | 352.26 | 0.000 | 0.000 |
| 0.79 | 0.38 | 0.38 | 0.0633 | 352.26 | 0.000 | 0.000 |
| 0.81 | 0.37 | 0.37 | 0.0640 | 352.26 | 0.000 | 0.000 |
| 0.83 | 0.36 | 0.36 | 0.0646 | 352.26 | 0.000 | 0.000 |
| 0.85 | 0.35 | 0.35 | 0.0652 | 352.27 | 0.000 | 0.000 |
| 0.87 | 0.34 | 0.34 | 0.0658 | 352.27 | 0.000 | 0.000 |
| 0.90 | 0.33 | 0.33 | 0.0664 | 352.27 | 0.000 | 0.000 |
| 0.92 | 0.32 | 0.32 | 0.0670 | 352.27 | 0.000 | 0.000 |
| 0.94 | 0.32 | 0.32 | 0.0675 | 352.28 | 0.000 | 0.000 |
| 0.96 | 0.31 | 0.31 | 0.0681 | 352.28 | 0.000 | 0.000 |
| 0.98 | 0.30 | 0.30 | 0.0686 | 352.28 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 1.00 | 0.30 | 0.30 | 0.0691 | 352.28 | 0.000 | 0.000 |
| 1.02 | 0.28 | 0.28 | 0.0696 | 352.29 | 0.000 | 0.000 |
| 1.04 | 0.26 | 0.26 | 0.0701 | 352.29 | 0.000 | 0.000 |
| 1.06 | 0.25 | 0.25 | 0.0705 | 352.29 | 0.000 | 0.000 |
| 1.08 | 0.23 | 0.23 | 0.0709 | 352.29 | 0.000 | 0.000 |
| 1.10 | 0.23 | 0.23 | 0.0713 | 352.29 | 0.000 | 0.000 |
| 1.12 | 0.23 | 0.23 | 0.0717 | 352.29 | 0.000 | 0.000 |
| 1.15 | 0.23 | 0.23 | 0.0721 | 352.30 | 0.000 | 0.000 |
| 1.17 | 0.23 | 0.23 | 0.0725 | 352.30 | 0.000 | 0.000 |
| 1.19 | 0.23 | 0.23 | 0.0729 | 352.30 | 0.000 | 0.000 |
| 1.21 | 0.22 | 0.22 | 0.0733 | 352.30 | 0.000 | 0.000 |
| 1.23 | 0.22 | 0.22 | 0.0737 | 352.30 | 0.000 | 0.000 |
| 1.25 | 0.22 | 0.22 | 0.0740 | 352.30 | 0.000 | 0.000 |
| 1.27 | 0.21 | 0.21 | 0.0744 | 352.31 | 0.000 | 0.000 |
| 1.29 | 0.21 | 0.21 | 0.0748 | 352.31 | 0.000 | 0.000 |
| 1.31 | 0.21 | 0.21 | 0.0751 | 352.31 | 0.000 | 0.000 |
| 1.33 | 0.21 | 0.21 | 0.0755 | 352.31 | 0.000 | 0.000 |
| 1.35 | 0.20 | 0.20 | 0.0758 | 352.31 | 0.000 | 0.000 |
| 1.37 | 0.20 | 0.20 | 0.0762 | 352.31 | 0.000 | 0.000 |
| 1.40 | 0.20 | 0.20 | 0.0765 | 352.31 | 0.000 | 0.000 |
| 1.42 | 0.20 | 0.20 | 0.0769 | 352.32 | 0.000 | 0.000 |
| 1.44 | 0.20 | 0.20 | 0.0772 | 352.32 | 0.000 | 0.000 |
| 1.46 | 0.19 | 0.19 | 0.0776 | 352.32 | 0.000 | 0.000 |
| 1.48 | 0.19 | 0.19 | 0.0779 | 352.32 | 0.000 | 0.000 |
| 1.50 | 0.19 | 0.19 | 0.0782 | 352.32 | 0.000 | 0.000 |
| 1.52 | 0.19 | 0.19 | 0.0785 | 352.32 | 0.000 | 0.000 |
| 1.54 | 0.18 | 0.18 | 0.0789 | 352.32 | 0.000 | 0.000 |
| 1.56 | 0.18 | 0.18 | 0.0792 | 352.32 | 0.000 | 0.000 |
| 1.58 | 0.18 | 0.18 | 0.0795 | 352.33 | 0.000 | 0.000 |
| 1.60 | 0.18 | 0.18 | 0.0798 | 352.33 | 0.000 | 0.000 |
| 1.62 | 0.18 | 0.18 | 0.0801 | 352.33 | 0.000 | 0.000 |
| 1.65 | 0.18 | 0.18 | 0.0804 | 352.33 | 0.000 | 0.000 |
| 1.67 | 0.18 | 0.18 | 0.0807 | 352.33 | 0.000 | 0.000 |
| 1.69 | 0.17 | 0.17 | 0.0810 | 352.33 | 0.000 | 0.000 |
| 1.71 | 0.17 | 0.17 | 0.0813 | 352.33 | 0.000 | 0.000 |
| 1.73 | 0.17 | 0.17 | 0.0816 | 352.33 | 0.000 | 0.000 |
| 1.75 | 0.17 | 0.17 | 0.0819 | 352.34 | 0.000 | 0.000 |
| 1.77 | 0.17 | 0.17 | 0.0822 | 352.34 | 0.000 | 0.000 |
| 1.79 | 0.17 | 0.17 | 0.0825 | 352.34 | 0.000 | 0.000 |
| 1.81 | 0.16 | 0.16 | 0.0827 | 352.34 | 0.000 | 0.000 |
| 1.83 | 0.16 | 0.16 | 0.0830 | 352.34 | 0.000 | 0.000 |
| 1.85 | 0.16 | 0.16 | 0.0833 | 352.34 | 0.000 | 0.000 |
| 1.87 | 0.16 | 0.16 | 0.0836 | 352.34 | 0.000 | 0.000 |
| 1.90 | 0.16 | 0.16 | 0.0839 | 352.34 | 0.000 | 0.000 |
| 1.92 | 0.16 | 0.16 | 0.0841 | 352.34 | 0.000 | 0.000 |
| 1.94 | 0.16 | 0.16 | 0.0844 | 352.35 | 0.000 | 0.000 |
| 1.96 | 0.15 | 0.15 | 0.0847 | 352.35 | 0.000 | 0.000 |
| 1.98 | 0.15 | 0.15 | 0.0849 | 352.35 | 0.000 | 0.000 |
| 2.00 | 0.15 | 0.15 | 0.0852 | 352.35 | 0.000 | 0.000 |
| 2.02 | 0.15 | 0.15 | 0.0854 | 352.35 | 0.000 | 0.000 |
| 2.04 | 0.15 | 0.15 | 0.0857 | 352.35 | 0.000 | 0.000 |
| 2.06 | 0.15 | 0.15 | 0.0860 | 352.35 | 0.000 | 0.000 |
| 2.08 | 0.15 | 0.15 | 0.0862 | 352.35 | 0.000 | 0.000 |
| 2.10 | 0.15 | 0.15 | 0.0865 | 352.35 | 0.000 | 0.000 |
| 2.12 | 0.15 | 0.15 | 0.0867 | 352.36 | 0.000 | 0.000 |
| 2.15 | 0.15 | 0.15 | 0.0870 | 352.36 | 0.000 | 0.000 |
| 2.17 | 0.15 | 0.15 | 0.0873 | 352.36 | 0.000 | 0.000 |
| 2.19 | 0.14 | 0.14 | 0.0875 | 352.36 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 2.21 | 0.14 | 0.14 | 0.0877 | 352.36 | 0.000 | 0.000 |
| 2.23 | 0.14 | 0.14 | 0.0880 | 352.36 | 0.000 | 0.000 |
| 2.25 | 0.14 | 0.14 | 0.0882 | 352.36 | 0.000 | 0.000 |
| 2.27 | 0.14 | 0.14 | 0.0885 | 352.36 | 0.000 | 0.000 |
| 2.29 | 0.14 | 0.14 | 0.0887 | 352.36 | 0.000 | 0.000 |
| 2.31 | 0.13 | 0.13 | 0.0889 | 352.36 | 0.000 | 0.000 |
| 2.33 | 0.13 | 0.13 | 0.0892 | 352.37 | 0.000 | 0.000 |
| 2.35 | 0.13 | 0.13 | 0.0894 | 352.37 | 0.000 | 0.000 |
| 2.37 | 0.13 | 0.13 | 0.0896 | 352.37 | 0.000 | 0.000 |
| 2.40 | 0.12 | 0.12 | 0.0898 | 352.37 | 0.000 | 0.000 |
| 2.42 | 0.12 | 0.12 | 0.0900 | 352.37 | 0.000 | 0.000 |
| 2.44 | 0.12 | 0.12 | 0.0902 | 352.37 | 0.000 | 0.000 |
| 2.46 | 0.12 | 0.12 | 0.0904 | 352.37 | 0.000 | 0.000 |
| 2.48 | 0.12 | 0.12 | 0.0907 | 352.37 | 0.000 | 0.000 |
| 2.50 | 0.11 | 0.11 | 0.0909 | 352.37 | 0.000 | 0.000 |
| 2.52 | 0.11 | 0.11 | 0.0910 | 352.37 | 0.000 | 0.000 |
| 2.54 | 0.11 | 0.11 | 0.0912 | 352.37 | 0.000 | 0.000 |
| 2.56 | 0.11 | 0.11 | 0.0914 | 352.37 | 0.000 | 0.000 |
| 2.58 | 0.10 | 0.10 | 0.0916 | 352.38 | 0.000 | 0.000 |
| 2.60 | 0.10 | 0.10 | 0.0918 | 352.38 | 0.000 | 0.000 |
| 2.62 | 0.10 | 0.10 | 0.0919 | 352.38 | 0.000 | 0.000 |
| 2.65 | 0.10 | 0.10 | 0.0921 | 352.38 | 0.000 | 0.000 |
| 2.67 | 0.09 | 0.09 | 0.0923 | 352.38 | 0.000 | 0.000 |
| 2.69 | 0.09 | 0.09 | 0.0924 | 352.38 | 0.000 | 0.000 |
| 2.71 | 0.09 | 0.09 | 0.0926 | 352.38 | 0.000 | 0.000 |
| 2.73 | 0.08 | 0.08 | 0.0927 | 352.38 | 0.000 | 0.000 |
| 2.75 | 0.08 | 0.08 | 0.0929 | 352.38 | 0.000 | 0.000 |
| 2.77 | 0.08 | 0.08 | 0.0930 | 352.38 | 0.000 | 0.000 |
| 2.79 | 0.07 | 0.07 | 0.0931 | 352.38 | 0.000 | 0.000 |
| 2.81 | 0.07 | 0.07 | 0.0933 | 352.38 | 0.000 | 0.000 |
| 2.83 | 0.06 | 0.06 | 0.0934 | 352.38 | 0.000 | 0.000 |
| 2.85 | 0.06 | 0.06 | 0.0935 | 352.38 | 0.000 | 0.000 |
| 2.87 | 0.05 | 0.05 | 0.0936 | 352.38 | 0.000 | 0.000 |
| 2.90 | 0.05 | 0.05 | 0.0937 | 352.38 | 0.000 | 0.000 |
| 2.92 | 0.04 | 0.04 | 0.0937 | 352.38 | 0.000 | 0.000 |
| 2.94 | 0.04 | 0.04 | 0.0938 | 352.38 | 0.000 | 0.000 |
| 2.96 | 0.03 | 0.03 | 0.0939 | 352.38 | 0.000 | 0.000 |
| 2.98 | 0.03 | 0.03 | 0.0939 | 352.38 | 0.000 | 0.000 |
| 3.00 | 0.02 | 0.02 | 0.0940 | 352.39 | 0.000 | 0.000 |
| 3.02 | 0.02 | 0.02 | 0.0940 | 352.39 | 0.000 | 0.000 |
| 3.04 | 0.01 | 0.01 | 0.0940 | 352.39 | 0.000 | 0.000 |
| 3.06 | 0.00 | 0.00 | 0.0940 | 352.39 | 0.000 | 0.000 |
| 3.08 | 0.00 | 0.00 | 0.0940 | 352.39 | 0.000 | 0.000 |

Total Routing Mass Balance Discrepancy is 0.00%

Modified Puls Routing

Inflow Hydrograph: P:\4343\4343-52\Drainage\Post Area to Basin - 10 YR EXT.HYD

Storage/Elevation Curve: P:\4343\4343-52\Drainage\Proposed Infil. Basin 1.ES

Discharge/Elevation Curve: P:\4343\4343-52\Drainage\Basin Spillway.EO

Basin Bypass Capacity = 0.0 cfs

Starting Pool Elevation = 352.00 feet

Time Interval = 0.0208333 hours

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|--------------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 0.00 | 0.00 | 0.00 | 0.0000 | 352.00 | 0.000 | 0.000 |
| 0.02 | 0.21 | 0.21 | 0.0002 | 352.00 | 0.000 | 0.000 |
| 0.04 | 0.43 | 0.43 | 0.0007 | 352.00 | 0.000 | 0.000 |
| 0.06 | 0.64 | 0.64 | 0.0017 | 352.01 | 0.000 | 0.000 |
| 0.08 | 0.86 | 0.86 | 0.0030 | 352.01 | 0.000 | 0.000 |
| 0.10 | 1.06 | 1.06 | 0.0046 | 352.02 | 0.000 | 0.000 |
| 0.12 | 1.26 | 1.26 | 0.0066 | 352.03 | 0.000 | 0.000 |
| 0.15 | 1.46 | 1.46 | 0.0089 | 352.04 | 0.000 | 0.000 |
| 0.17 | 1.65 | 1.65 | 0.0116 | 352.05 | 0.000 | 0.000 |
| 0.19 | 2.18 | 2.18 | 0.0149 | 352.06 | 0.000 | 0.000 |
| 0.21 | 2.71 | 2.71 | 0.0191 | 352.08 | 0.000 | 0.000 |
| 0.23 | 3.23 | 3.23 | 0.0242 | 352.10 | 0.000 | 0.000 |
| 0.25 | 3.76 | 3.76 | 0.0303 | 352.12 | 0.000 | 0.000 |
| 0.27 | 3.40 | 3.40 | 0.0364 | 352.15 | 0.000 | 0.000 |
| 0.29 | 3.04 | 3.04 | 0.0420 | 352.17 | 0.000 | 0.000 |
| 0.31 | 2.67 | 2.67 | 0.0469 | 352.19 | 0.000 | 0.000 |
| 0.33 | 2.31 | 2.31 | 0.0512 | 352.21 | 0.000 | 0.000 |
| 0.35 | 2.05 | 2.05 | 0.0549 | 352.23 | 0.000 | 0.000 |
| 0.37 | 1.80 | 1.80 | 0.0582 | 352.24 | 0.000 | 0.000 |
| 0.40 | 1.54 | 1.54 | 0.0611 | 352.25 | 0.000 | 0.000 |
| 0.42 | 1.28 | 1.28 | 0.0635 | 352.26 | 0.000 | 0.000 |
| 0.44 | 1.22 | 1.22 | 0.0657 | 352.27 | 0.000 | 0.000 |
| 0.46 | 1.16 | 1.16 | 0.0677 | 352.28 | 0.000 | 0.000 |
| 0.48 | 1.09 | 1.09 | 0.0697 | 352.29 | 0.000 | 0.000 |
| 0.50 | 1.03 | 1.03 | 0.0715 | 352.29 | 0.000 | 0.000 |
| 0.52 | 0.96 | 0.96 | 0.0732 | 352.30 | 0.000 | 0.000 |
| 0.54 | 0.88 | 0.88 | 0.0748 | 352.31 | 0.000 | 0.000 |
| 0.56 | 0.81 | 0.81 | 0.0762 | 352.31 | 0.000 | 0.000 |
| 0.58 | 0.73 | 0.73 | 0.0776 | 352.32 | 0.000 | 0.000 |
| 0.60 | 0.71 | 0.71 | 0.0788 | 352.32 | 0.000 | 0.000 |
| 0.62 | 0.68 | 0.68 | 0.0800 | 352.33 | 0.000 | 0.000 |
| 0.65 | 0.66 | 0.66 | 0.0811 | 352.33 | 0.000 | 0.000 |
| 0.67 | 0.63 | 0.63 | 0.0822 | 352.34 | 0.000 | 0.000 |
| 0.69 | 0.61 | 0.61 | 0.0833 | 352.34 | 0.000 | 0.000 |
| 0.71 | 0.59 | 0.59 | 0.0843 | 352.35 | 0.000 | 0.000 |
| 0.73 | 0.57 | 0.57 | 0.0853 | 352.35 | 0.000 | 0.000 |
| 0.75 | 0.55 | 0.55 | 0.0863 | 352.35 | 0.000 | 0.000 |
| 0.77 | 0.53 | 0.53 | 0.0872 | 352.36 | 0.000 | 0.000 |
| 0.79 | 0.52 | 0.52 | 0.0881 | 352.36 | 0.000 | 0.000 |
| 0.81 | 0.50 | 0.50 | 0.0890 | 352.36 | 0.000 | 0.000 |
| 0.83 | 0.48 | 0.48 | 0.0899 | 352.37 | 0.000 | 0.000 |
| 0.85 | 0.47 | 0.47 | 0.0907 | 352.37 | 0.000 | 0.000 |
| 0.87 | 0.46 | 0.46 | 0.0915 | 352.37 | 0.000 | 0.000 |
| 0.90 | 0.45 | 0.45 | 0.0923 | 352.38 | 0.000 | 0.000 |
| 0.92 | 0.43 | 0.43 | 0.0930 | 352.38 | 0.000 | 0.000 |
| 0.94 | 0.42 | 0.42 | 0.0938 | 352.38 | 0.000 | 0.000 |
| 0.96 | 0.41 | 0.41 | 0.0945 | 352.39 | 0.000 | 0.000 |
| 0.98 | 0.40 | 0.40 | 0.0952 | 352.39 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|--------------------|-------------------------|--------------------|------------------------|----------------------------|---------------------|---------------------|
| 1.00 | 0.39 | 0.39 | 0.0958 | 352.39 | 0.000 | 0.000 |
| 1.02 | 0.39 | 0.39 | 0.0965 | 352.40 | 0.000 | 0.000 |
| 1.04 | 0.39 | 0.39 | 0.0972 | 352.40 | 0.000 | 0.000 |
| 1.06 | 0.39 | 0.39 | 0.0978 | 352.40 | 0.000 | 0.000 |
| 1.08 | 0.39 | 0.39 | 0.0985 | 352.40 | 0.000 | 0.000 |
| 1.10 | 0.38 | 0.38 | 0.0992 | 352.41 | 0.000 | 0.000 |
| 1.12 | 0.38 | 0.38 | 0.0998 | 352.41 | 0.000 | 0.000 |
| 1.15 | 0.37 | 0.37 | 0.1004 | 352.41 | 0.000 | 0.000 |
| 1.17 | 0.36 | 0.36 | 0.1011 | 352.41 | 0.000 | 0.000 |
| 1.19 | 0.36 | 0.36 | 0.1017 | 352.42 | 0.000 | 0.000 |
| 1.21 | 0.36 | 0.36 | 0.1023 | 352.42 | 0.000 | 0.000 |
| 1.23 | 0.35 | 0.35 | 0.1029 | 352.42 | 0.000 | 0.000 |
| 1.25 | 0.35 | 0.35 | 0.1035 | 352.42 | 0.000 | 0.000 |
| 1.27 | 0.35 | 0.35 | 0.1041 | 352.43 | 0.000 | 0.000 |
| 1.29 | 0.35 | 0.35 | 0.1047 | 352.43 | 0.000 | 0.000 |
| 1.31 | 0.35 | 0.35 | 0.1053 | 352.43 | 0.000 | 0.000 |
| 1.33 | 0.35 | 0.35 | 0.1059 | 352.43 | 0.000 | 0.000 |
| 1.35 | 0.34 | 0.34 | 0.1065 | 352.44 | 0.000 | 0.000 |
| 1.37 | 0.34 | 0.34 | 0.1071 | 352.44 | 0.000 | 0.000 |
| 1.40 | 0.34 | 0.34 | 0.1077 | 352.44 | 0.000 | 0.000 |
| 1.42 | 0.33 | 0.33 | 0.1083 | 352.44 | 0.000 | 0.000 |
| 1.44 | 0.33 | 0.33 | 0.1088 | 352.45 | 0.000 | 0.000 |
| 1.46 | 0.33 | 0.33 | 0.1094 | 352.45 | 0.000 | 0.000 |
| 1.48 | 0.32 | 0.32 | 0.1100 | 352.45 | 0.000 | 0.000 |
| 1.50 | 0.32 | 0.32 | 0.1105 | 352.45 | 0.000 | 0.000 |
| 1.52 | 0.32 | 0.32 | 0.1111 | 352.46 | 0.000 | 0.000 |
| 1.54 | 0.31 | 0.31 | 0.1116 | 352.46 | 0.000 | 0.000 |
| 1.56 | 0.31 | 0.31 | 0.1121 | 352.46 | 0.000 | 0.000 |
| 1.58 | 0.30 | 0.30 | 0.1127 | 352.46 | 0.000 | 0.000 |
| 1.60 | 0.30 | 0.30 | 0.1132 | 352.46 | 0.000 | 0.000 |
| 1.62 | 0.30 | 0.30 | 0.1137 | 352.47 | 0.000 | 0.000 |
| 1.65 | 0.30 | 0.30 | 0.1142 | 352.47 | 0.000 | 0.000 |
| 1.67 | 0.29 | 0.29 | 0.1147 | 352.47 | 0.000 | 0.000 |
| 1.69 | 0.29 | 0.29 | 0.1152 | 352.47 | 0.000 | 0.000 |
| 1.71 | 0.29 | 0.29 | 0.1157 | 352.47 | 0.000 | 0.000 |
| 1.73 | 0.29 | 0.29 | 0.1162 | 352.48 | 0.000 | 0.000 |
| 1.75 | 0.28 | 0.28 | 0.1167 | 352.48 | 0.000 | 0.000 |
| 1.77 | 0.28 | 0.28 | 0.1172 | 352.48 | 0.000 | 0.000 |
| 1.79 | 0.28 | 0.28 | 0.1177 | 352.48 | 0.000 | 0.000 |
| 1.81 | 0.28 | 0.28 | 0.1182 | 352.48 | 0.000 | 0.000 |
| 1.83 | 0.27 | 0.27 | 0.1186 | 352.49 | 0.000 | 0.000 |
| 1.85 | 0.27 | 0.27 | 0.1191 | 352.49 | 0.000 | 0.000 |
| 1.87 | 0.27 | 0.27 | 0.1196 | 352.49 | 0.000 | 0.000 |
| 1.90 | 0.27 | 0.27 | 0.1200 | 352.49 | 0.000 | 0.000 |
| 1.92 | 0.27 | 0.27 | 0.1205 | 352.49 | 0.000 | 0.000 |
| 1.94 | 0.26 | 0.26 | 0.1209 | 352.50 | 0.000 | 0.000 |
| 1.96 | 0.26 | 0.26 | 0.1214 | 352.50 | 0.000 | 0.000 |
| 1.98 | 0.26 | 0.26 | 0.1218 | 352.50 | 0.000 | 0.000 |
| 2.00 | 0.26 | 0.26 | 0.1223 | 352.50 | 0.000 | 0.000 |
| 2.02 | 0.25 | 0.25 | 0.1227 | 352.50 | 0.000 | 0.000 |
| 2.04 | 0.25 | 0.25 | 0.1232 | 352.50 | 0.000 | 0.000 |
| 2.06 | 0.25 | 0.25 | 0.1236 | 352.51 | 0.000 | 0.000 |
| 2.08 | 0.25 | 0.25 | 0.1240 | 352.51 | 0.000 | 0.000 |
| 2.10 | 0.24 | 0.24 | 0.1244 | 352.51 | 0.000 | 0.000 |
| 2.12 | 0.24 | 0.24 | 0.1249 | 352.51 | 0.000 | 0.000 |
| 2.15 | 0.23 | 0.23 | 0.1253 | 352.51 | 0.000 | 0.000 |
| 2.17 | 0.23 | 0.23 | 0.1257 | 352.52 | 0.000 | 0.000 |
| 2.19 | 0.22 | 0.22 | 0.1260 | 352.52 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 2.21 | 0.22 | 0.22 | 0.1264 | 352.52 | 0.000 | 0.000 |
| 2.23 | 0.21 | 0.21 | 0.1268 | 352.52 | 0.000 | 0.000 |
| 2.25 | 0.21 | 0.21 | 0.1272 | 352.52 | 0.000 | 0.000 |
| 2.27 | 0.20 | 0.20 | 0.1275 | 352.52 | 0.000 | 0.000 |
| 2.29 | 0.20 | 0.20 | 0.1279 | 352.52 | 0.000 | 0.000 |
| 2.31 | 0.19 | 0.19 | 0.1282 | 352.53 | 0.000 | 0.000 |
| 2.33 | 0.19 | 0.19 | 0.1285 | 352.53 | 0.000 | 0.000 |
| 2.35 | 0.18 | 0.18 | 0.1288 | 352.53 | 0.000 | 0.000 |
| 2.37 | 0.18 | 0.18 | 0.1291 | 352.53 | 0.000 | 0.000 |
| 2.40 | 0.17 | 0.17 | 0.1294 | 352.53 | 0.000 | 0.000 |
| 2.42 | 0.17 | 0.17 | 0.1297 | 352.53 | 0.000 | 0.000 |
| 2.44 | 0.16 | 0.16 | 0.1300 | 352.53 | 0.000 | 0.000 |
| 2.46 | 0.16 | 0.16 | 0.1303 | 352.53 | 0.000 | 0.000 |
| 2.48 | 0.15 | 0.15 | 0.1306 | 352.54 | 0.000 | 0.000 |
| 2.50 | 0.15 | 0.15 | 0.1308 | 352.54 | 0.000 | 0.000 |
| 2.52 | 0.14 | 0.14 | 0.1311 | 352.54 | 0.000 | 0.000 |
| 2.54 | 0.14 | 0.14 | 0.1313 | 352.54 | 0.000 | 0.000 |
| 2.56 | 0.13 | 0.13 | 0.1315 | 352.54 | 0.000 | 0.000 |
| 2.58 | 0.13 | 0.13 | 0.1318 | 352.54 | 0.000 | 0.000 |
| 2.60 | 0.12 | 0.12 | 0.1320 | 352.54 | 0.000 | 0.000 |
| 2.62 | 0.12 | 0.12 | 0.1322 | 352.54 | 0.000 | 0.000 |
| 2.65 | 0.11 | 0.11 | 0.1324 | 352.54 | 0.000 | 0.000 |
| 2.67 | 0.11 | 0.11 | 0.1326 | 352.54 | 0.000 | 0.000 |
| 2.69 | 0.10 | 0.10 | 0.1328 | 352.54 | 0.000 | 0.000 |
| 2.71 | 0.10 | 0.10 | 0.1329 | 352.54 | 0.000 | 0.000 |
| 2.73 | 0.09 | 0.09 | 0.1331 | 352.55 | 0.000 | 0.000 |
| 2.75 | 0.09 | 0.09 | 0.1333 | 352.55 | 0.000 | 0.000 |
| 2.77 | 0.08 | 0.08 | 0.1334 | 352.55 | 0.000 | 0.000 |
| 2.79 | 0.07 | 0.07 | 0.1335 | 352.55 | 0.000 | 0.000 |
| 2.81 | 0.07 | 0.07 | 0.1336 | 352.55 | 0.000 | 0.000 |
| 2.83 | 0.06 | 0.06 | 0.1338 | 352.55 | 0.000 | 0.000 |
| 2.85 | 0.06 | 0.06 | 0.1339 | 352.55 | 0.000 | 0.000 |
| 2.87 | 0.05 | 0.05 | 0.1340 | 352.55 | 0.000 | 0.000 |
| 2.90 | 0.05 | 0.05 | 0.1340 | 352.55 | 0.000 | 0.000 |
| 2.92 | 0.04 | 0.04 | 0.1341 | 352.55 | 0.000 | 0.000 |
| 2.94 | 0.04 | 0.04 | 0.1342 | 352.55 | 0.000 | 0.000 |
| 2.96 | 0.03 | 0.03 | 0.1343 | 352.55 | 0.000 | 0.000 |
| 2.98 | 0.03 | 0.03 | 0.1343 | 352.55 | 0.000 | 0.000 |
| 3.00 | 0.02 | 0.02 | 0.1343 | 352.55 | 0.000 | 0.000 |
| 3.02 | 0.02 | 0.02 | 0.1344 | 352.55 | 0.000 | 0.000 |
| 3.04 | 0.01 | 0.01 | 0.1344 | 352.55 | 0.000 | 0.000 |
| 3.06 | 0.00 | 0.00 | 0.1344 | 352.55 | 0.000 | 0.000 |

Total Routing Mass Balance Discrepancy is 0.00%

Modified Puls Routing

Inflow Hydrograph: P:\4343\4343-52\Drainage\Post Area to Basin - 25 YR EXT.HYD

Storage/Elevation Curve: P:\4343\4343-52\Drainage\Proposed Infil. Basin 1.ES

Discharge/Elevation Curve: P:\4343\4343-52\Drainage\Basin Spillway.EO

Basin Bypass Capacity = 0.0 cfs

Starting Pool Elevation = 352.00 feet

Time Interval = 0.0208333 hours

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 0.00 | 0.00 | 0.00 | 0.0000 | 352.00 | 0.000 | 0.000 |
| 0.02 | 0.24 | 0.24 | 0.0002 | 352.00 | 0.000 | 0.000 |
| 0.04 | 0.49 | 0.49 | 0.0008 | 352.00 | 0.000 | 0.000 |
| 0.06 | 0.73 | 0.73 | 0.0019 | 352.01 | 0.000 | 0.000 |
| 0.08 | 0.98 | 0.98 | 0.0034 | 352.01 | 0.000 | 0.000 |
| 0.10 | 1.19 | 1.19 | 0.0052 | 352.02 | 0.000 | 0.000 |
| 0.12 | 1.41 | 1.41 | 0.0075 | 352.03 | 0.000 | 0.000 |
| 0.15 | 1.62 | 1.62 | 0.0101 | 352.04 | 0.000 | 0.000 |
| 0.17 | 1.84 | 1.84 | 0.0131 | 352.05 | 0.000 | 0.000 |
| 0.19 | 2.42 | 2.42 | 0.0167 | 352.07 | 0.000 | 0.000 |
| 0.21 | 3.00 | 3.00 | 0.0214 | 352.09 | 0.000 | 0.000 |
| 0.23 | 3.59 | 3.59 | 0.0271 | 352.11 | 0.000 | 0.000 |
| 0.25 | 4.17 | 4.17 | 0.0337 | 352.14 | 0.000 | 0.000 |
| 0.27 | 3.76 | 3.76 | 0.0406 | 352.17 | 0.000 | 0.000 |
| 0.29 | 3.36 | 3.36 | 0.0467 | 352.19 | 0.000 | 0.000 |
| 0.31 | 2.95 | 2.95 | 0.0521 | 352.21 | 0.000 | 0.000 |
| 0.33 | 2.55 | 2.55 | 0.0569 | 352.23 | 0.000 | 0.000 |
| 0.35 | 2.27 | 2.27 | 0.0610 | 352.25 | 0.000 | 0.000 |
| 0.37 | 1.99 | 1.99 | 0.0647 | 352.27 | 0.000 | 0.000 |
| 0.40 | 1.71 | 1.71 | 0.0679 | 352.28 | 0.000 | 0.000 |
| 0.42 | 1.43 | 1.43 | 0.0706 | 352.29 | 0.000 | 0.000 |
| 0.44 | 1.36 | 1.36 | 0.0730 | 352.30 | 0.000 | 0.000 |
| 0.46 | 1.30 | 1.30 | 0.0753 | 352.31 | 0.000 | 0.000 |
| 0.48 | 1.23 | 1.23 | 0.0774 | 352.32 | 0.000 | 0.000 |
| 0.50 | 1.16 | 1.16 | 0.0795 | 352.33 | 0.000 | 0.000 |
| 0.52 | 1.08 | 1.08 | 0.0814 | 352.33 | 0.000 | 0.000 |
| 0.54 | 1.00 | 1.00 | 0.0832 | 352.34 | 0.000 | 0.000 |
| 0.56 | 0.92 | 0.92 | 0.0849 | 352.35 | 0.000 | 0.000 |
| 0.58 | 0.84 | 0.84 | 0.0864 | 352.35 | 0.000 | 0.000 |
| 0.60 | 0.81 | 0.81 | 0.0878 | 352.36 | 0.000 | 0.000 |
| 0.62 | 0.78 | 0.78 | 0.0892 | 352.37 | 0.000 | 0.000 |
| 0.65 | 0.75 | 0.75 | 0.0905 | 352.37 | 0.000 | 0.000 |
| 0.67 | 0.73 | 0.73 | 0.0918 | 352.38 | 0.000 | 0.000 |
| 0.69 | 0.70 | 0.70 | 0.0930 | 352.38 | 0.000 | 0.000 |
| 0.71 | 0.68 | 0.68 | 0.0942 | 352.39 | 0.000 | 0.000 |
| 0.73 | 0.66 | 0.66 | 0.0954 | 352.39 | 0.000 | 0.000 |
| 0.75 | 0.64 | 0.64 | 0.0965 | 352.40 | 0.000 | 0.000 |
| 0.77 | 0.62 | 0.62 | 0.0975 | 352.40 | 0.000 | 0.000 |
| 0.79 | 0.60 | 0.60 | 0.0986 | 352.40 | 0.000 | 0.000 |
| 0.81 | 0.58 | 0.58 | 0.0996 | 352.41 | 0.000 | 0.000 |
| 0.83 | 0.57 | 0.57 | 0.1006 | 352.41 | 0.000 | 0.000 |
| 0.85 | 0.56 | 0.56 | 0.1016 | 352.42 | 0.000 | 0.000 |
| 0.87 | 0.55 | 0.55 | 0.1025 | 352.42 | 0.000 | 0.000 |
| 0.90 | 0.54 | 0.54 | 0.1035 | 352.42 | 0.000 | 0.000 |
| 0.92 | 0.53 | 0.53 | 0.1044 | 352.43 | 0.000 | 0.000 |
| 0.94 | 0.53 | 0.53 | 0.1053 | 352.43 | 0.000 | 0.000 |
| 0.96 | 0.52 | 0.52 | 0.1062 | 352.44 | 0.000 | 0.000 |
| 0.98 | 0.51 | 0.51 | 0.1071 | 352.44 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|--------------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 1.00 | 0.51 | 0.51 | 0.1080 | 352.44 | 0.000 | 0.000 |
| 1.02 | 0.50 | 0.50 | 0.1088 | 352.45 | 0.000 | 0.000 |
| 1.04 | 0.49 | 0.49 | 0.1097 | 352.45 | 0.000 | 0.000 |
| 1.06 | 0.48 | 0.48 | 0.1105 | 352.45 | 0.000 | 0.000 |
| 1.08 | 0.47 | 0.47 | 0.1113 | 352.46 | 0.000 | 0.000 |
| 1.10 | 0.46 | 0.46 | 0.1121 | 352.46 | 0.000 | 0.000 |
| 1.12 | 0.46 | 0.46 | 0.1129 | 352.46 | 0.000 | 0.000 |
| 1.15 | 0.46 | 0.46 | 0.1137 | 352.47 | 0.000 | 0.000 |
| 1.17 | 0.46 | 0.46 | 0.1145 | 352.47 | 0.000 | 0.000 |
| 1.19 | 0.45 | 0.45 | 0.1153 | 352.47 | 0.000 | 0.000 |
| 1.21 | 0.45 | 0.45 | 0.1161 | 352.48 | 0.000 | 0.000 |
| 1.23 | 0.45 | 0.45 | 0.1168 | 352.48 | 0.000 | 0.000 |
| 1.25 | 0.45 | 0.45 | 0.1176 | 352.48 | 0.000 | 0.000 |
| 1.27 | 0.44 | 0.44 | 0.1184 | 352.49 | 0.000 | 0.000 |
| 1.29 | 0.43 | 0.43 | 0.1191 | 352.49 | 0.000 | 0.000 |
| 1.31 | 0.43 | 0.43 | 0.1199 | 352.49 | 0.000 | 0.000 |
| 1.33 | 0.42 | 0.42 | 0.1206 | 352.49 | 0.000 | 0.000 |
| 1.35 | 0.42 | 0.42 | 0.1213 | 352.50 | 0.000 | 0.000 |
| 1.37 | 0.41 | 0.41 | 0.1220 | 352.50 | 0.000 | 0.000 |
| 1.40 | 0.41 | 0.41 | 0.1228 | 352.50 | 0.000 | 0.000 |
| 1.42 | 0.41 | 0.41 | 0.1235 | 352.51 | 0.000 | 0.000 |
| 1.44 | 0.40 | 0.40 | 0.1242 | 352.51 | 0.000 | 0.000 |
| 1.46 | 0.40 | 0.40 | 0.1248 | 352.51 | 0.000 | 0.000 |
| 1.48 | 0.39 | 0.39 | 0.1255 | 352.51 | 0.000 | 0.000 |
| 1.50 | 0.39 | 0.39 | 0.1262 | 352.52 | 0.000 | 0.000 |
| 1.52 | 0.39 | 0.39 | 0.1269 | 352.52 | 0.000 | 0.000 |
| 1.54 | 0.38 | 0.38 | 0.1275 | 352.52 | 0.000 | 0.000 |
| 1.56 | 0.38 | 0.38 | 0.1282 | 352.53 | 0.000 | 0.000 |
| 1.58 | 0.37 | 0.37 | 0.1288 | 352.53 | 0.000 | 0.000 |
| 1.60 | 0.37 | 0.37 | 0.1295 | 352.53 | 0.000 | 0.000 |
| 1.62 | 0.37 | 0.37 | 0.1301 | 352.53 | 0.000 | 0.000 |
| 1.65 | 0.36 | 0.36 | 0.1307 | 352.54 | 0.000 | 0.000 |
| 1.67 | 0.36 | 0.36 | 0.1313 | 352.54 | 0.000 | 0.000 |
| 1.69 | 0.36 | 0.36 | 0.1320 | 352.54 | 0.000 | 0.000 |
| 1.71 | 0.35 | 0.35 | 0.1326 | 352.54 | 0.000 | 0.000 |
| 1.73 | 0.35 | 0.35 | 0.1332 | 352.55 | 0.000 | 0.000 |
| 1.75 | 0.35 | 0.35 | 0.1338 | 352.55 | 0.000 | 0.000 |
| 1.77 | 0.34 | 0.34 | 0.1344 | 352.55 | 0.000 | 0.000 |
| 1.79 | 0.34 | 0.34 | 0.1350 | 352.55 | 0.000 | 0.000 |
| 1.81 | 0.34 | 0.34 | 0.1356 | 352.56 | 0.000 | 0.000 |
| 1.83 | 0.34 | 0.34 | 0.1361 | 352.56 | 0.000 | 0.000 |
| 1.85 | 0.33 | 0.33 | 0.1367 | 352.56 | 0.000 | 0.000 |
| 1.87 | 0.33 | 0.33 | 0.1373 | 352.56 | 0.000 | 0.000 |
| 1.90 | 0.33 | 0.33 | 0.1378 | 352.56 | 0.000 | 0.000 |
| 1.92 | 0.32 | 0.32 | 0.1384 | 352.57 | 0.000 | 0.000 |
| 1.94 | 0.32 | 0.32 | 0.1390 | 352.57 | 0.000 | 0.000 |
| 1.96 | 0.32 | 0.32 | 0.1395 | 352.57 | 0.000 | 0.000 |
| 1.98 | 0.32 | 0.32 | 0.1401 | 352.57 | 0.000 | 0.000 |
| 2.00 | 0.31 | 0.31 | 0.1406 | 352.58 | 0.000 | 0.000 |
| 2.02 | 0.31 | 0.31 | 0.1411 | 352.58 | 0.000 | 0.000 |
| 2.04 | 0.30 | 0.30 | 0.1417 | 352.58 | 0.000 | 0.000 |
| 2.06 | 0.30 | 0.30 | 0.1422 | 352.58 | 0.000 | 0.000 |
| 2.08 | 0.31 | 0.31 | 0.1427 | 352.58 | 0.000 | 0.000 |
| 2.10 | 0.31 | 0.31 | 0.1432 | 352.59 | 0.000 | 0.000 |
| 2.12 | 0.30 | 0.30 | 0.1438 | 352.59 | 0.000 | 0.000 |
| 2.15 | 0.30 | 0.30 | 0.1443 | 352.59 | 0.000 | 0.000 |
| 2.17 | 0.29 | 0.29 | 0.1448 | 352.59 | 0.000 | 0.000 |
| 2.19 | 0.29 | 0.29 | 0.1453 | 352.60 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 2.21 | 0.28 | 0.28 | 0.1458 | 352.60 | 0.000 | 0.000 |
| 2.23 | 0.28 | 0.28 | 0.1463 | 352.60 | 0.000 | 0.000 |
| 2.25 | 0.27 | 0.27 | 0.1467 | 352.60 | 0.000 | 0.000 |
| 2.27 | 0.27 | 0.27 | 0.1472 | 352.60 | 0.000 | 0.000 |
| 2.29 | 0.26 | 0.26 | 0.1477 | 352.61 | 0.000 | 0.000 |
| 2.31 | 0.26 | 0.26 | 0.1481 | 352.61 | 0.000 | 0.000 |
| 2.33 | 0.25 | 0.25 | 0.1485 | 352.61 | 0.000 | 0.000 |
| 2.35 | 0.25 | 0.25 | 0.1490 | 352.61 | 0.000 | 0.000 |
| 2.37 | 0.24 | 0.24 | 0.1494 | 352.61 | 0.000 | 0.000 |
| 2.40 | 0.24 | 0.24 | 0.1498 | 352.61 | 0.000 | 0.000 |
| 2.42 | 0.23 | 0.23 | 0.1502 | 352.62 | 0.000 | 0.000 |
| 2.44 | 0.23 | 0.23 | 0.1506 | 352.62 | 0.000 | 0.000 |
| 2.46 | 0.22 | 0.22 | 0.1510 | 352.62 | 0.000 | 0.000 |
| 2.48 | 0.22 | 0.22 | 0.1514 | 352.62 | 0.000 | 0.000 |
| 2.50 | 0.21 | 0.21 | 0.1518 | 352.62 | 0.000 | 0.000 |
| 2.52 | 0.21 | 0.21 | 0.1521 | 352.62 | 0.000 | 0.000 |
| 2.54 | 0.20 | 0.20 | 0.1525 | 352.62 | 0.000 | 0.000 |
| 2.56 | 0.20 | 0.20 | 0.1528 | 352.63 | 0.000 | 0.000 |
| 2.58 | 0.19 | 0.19 | 0.1531 | 352.63 | 0.000 | 0.000 |
| 2.60 | 0.19 | 0.19 | 0.1535 | 352.63 | 0.000 | 0.000 |
| 2.62 | 0.18 | 0.18 | 0.1538 | 352.63 | 0.000 | 0.000 |
| 2.65 | 0.18 | 0.18 | 0.1541 | 352.63 | 0.000 | 0.000 |
| 2.67 | 0.17 | 0.17 | 0.1544 | 352.63 | 0.000 | 0.000 |
| 2.69 | 0.17 | 0.17 | 0.1547 | 352.63 | 0.000 | 0.000 |
| 2.71 | 0.16 | 0.16 | 0.1550 | 352.64 | 0.000 | 0.000 |
| 2.73 | 0.16 | 0.16 | 0.1553 | 352.64 | 0.000 | 0.000 |
| 2.75 | 0.15 | 0.15 | 0.1555 | 352.64 | 0.000 | 0.000 |
| 2.77 | 0.14 | 0.14 | 0.1558 | 352.64 | 0.000 | 0.000 |
| 2.79 | 0.13 | 0.13 | 0.1560 | 352.64 | 0.000 | 0.000 |
| 2.81 | 0.12 | 0.12 | 0.1562 | 352.64 | 0.000 | 0.000 |
| 2.83 | 0.11 | 0.11 | 0.1564 | 352.64 | 0.000 | 0.000 |
| 2.85 | 0.10 | 0.10 | 0.1566 | 352.64 | 0.000 | 0.000 |
| 2.87 | 0.09 | 0.09 | 0.1568 | 352.64 | 0.000 | 0.000 |
| 2.90 | 0.08 | 0.08 | 0.1569 | 352.64 | 0.000 | 0.000 |
| 2.92 | 0.07 | 0.07 | 0.1570 | 352.64 | 0.000 | 0.000 |
| 2.94 | 0.06 | 0.06 | 0.1571 | 352.64 | 0.000 | 0.000 |
| 2.96 | 0.05 | 0.05 | 0.1572 | 352.64 | 0.000 | 0.000 |
| 2.98 | 0.04 | 0.04 | 0.1573 | 352.64 | 0.000 | 0.000 |
| 3.00 | 0.03 | 0.03 | 0.1574 | 352.65 | 0.000 | 0.000 |
| 3.02 | 0.02 | 0.02 | 0.1574 | 352.65 | 0.000 | 0.000 |
| 3.04 | 0.01 | 0.01 | 0.1575 | 352.65 | 0.000 | 0.000 |
| 3.06 | 0.00 | 0.00 | 0.1575 | 352.65 | 0.000 | 0.000 |

Total Routing Mass Balance Discrepancy is 0.00%

Modified Puls Routing

Inflow Hydrograph: P:\4343\4343-52\Drainage\Post Area to Basin - 50 YR EXT.HYD

Storage/Elevation Curve: P:\4343\4343-52\Drainage\Proposed Infil. Basin 1.ES

Discharge/Elevation Curve: P:\4343\4343-52\Drainage\Basin Spillway.EO

Basin Bypass Capacity = 0.0 cfs

Starting Pool Elevation = 352.00 feet

Time Interval = 0.0208333 hours

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|--------------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 0.00 | 0.00 | 0.00 | 0.0000 | 352.00 | 0.000 | 0.000 |
| 0.02 | 0.28 | 0.28 | 0.0002 | 352.00 | 0.000 | 0.000 |
| 0.04 | 0.56 | 0.56 | 0.0010 | 352.00 | 0.000 | 0.000 |
| 0.06 | 0.84 | 0.84 | 0.0022 | 352.01 | 0.000 | 0.000 |
| 0.08 | 1.13 | 1.13 | 0.0039 | 352.02 | 0.000 | 0.000 |
| 0.10 | 1.35 | 1.35 | 0.0060 | 352.02 | 0.000 | 0.000 |
| 0.12 | 1.58 | 1.58 | 0.0085 | 352.03 | 0.000 | 0.000 |
| 0.15 | 1.80 | 1.80 | 0.0114 | 352.05 | 0.000 | 0.000 |
| 0.17 | 2.03 | 2.03 | 0.0147 | 352.06 | 0.000 | 0.000 |
| 0.19 | 2.67 | 2.67 | 0.0188 | 352.08 | 0.000 | 0.000 |
| 0.21 | 3.31 | 3.31 | 0.0239 | 352.10 | 0.000 | 0.000 |
| 0.23 | 3.95 | 3.95 | 0.0302 | 352.12 | 0.000 | 0.000 |
| 0.25 | 4.60 | 4.60 | 0.0375 | 352.15 | 0.000 | 0.000 |
| 0.27 | 4.14 | 4.14 | 0.0451 | 352.18 | 0.000 | 0.000 |
| 0.29 | 3.68 | 3.68 | 0.0518 | 352.21 | 0.000 | 0.000 |
| 0.31 | 3.23 | 3.23 | 0.0577 | 352.24 | 0.000 | 0.000 |
| 0.33 | 2.77 | 2.77 | 0.0629 | 352.26 | 0.000 | 0.000 |
| 0.35 | 2.48 | 2.48 | 0.0674 | 352.28 | 0.000 | 0.000 |
| 0.37 | 2.19 | 2.19 | 0.0714 | 352.29 | 0.000 | 0.000 |
| 0.40 | 1.89 | 1.89 | 0.0749 | 352.31 | 0.000 | 0.000 |
| 0.42 | 1.60 | 1.60 | 0.0780 | 352.32 | 0.000 | 0.000 |
| 0.44 | 1.53 | 1.53 | 0.0807 | 352.33 | 0.000 | 0.000 |
| 0.46 | 1.46 | 1.46 | 0.0832 | 352.34 | 0.000 | 0.000 |
| 0.48 | 1.40 | 1.40 | 0.0857 | 352.35 | 0.000 | 0.000 |
| 0.50 | 1.33 | 1.33 | 0.0880 | 352.36 | 0.000 | 0.000 |
| 0.52 | 1.24 | 1.24 | 0.0903 | 352.37 | 0.000 | 0.000 |
| 0.54 | 1.15 | 1.15 | 0.0923 | 352.38 | 0.000 | 0.000 |
| 0.56 | 1.07 | 1.07 | 0.0942 | 352.39 | 0.000 | 0.000 |
| 0.58 | 0.98 | 0.98 | 0.0960 | 352.39 | 0.000 | 0.000 |
| 0.60 | 0.95 | 0.95 | 0.0976 | 352.40 | 0.000 | 0.000 |
| 0.62 | 0.92 | 0.92 | 0.0993 | 352.41 | 0.000 | 0.000 |
| 0.65 | 0.89 | 0.89 | 0.1008 | 352.41 | 0.000 | 0.000 |
| 0.67 | 0.86 | 0.86 | 0.1023 | 352.42 | 0.000 | 0.000 |
| 0.69 | 0.84 | 0.84 | 0.1038 | 352.43 | 0.000 | 0.000 |
| 0.71 | 0.81 | 0.81 | 0.1052 | 352.43 | 0.000 | 0.000 |
| 0.73 | 0.79 | 0.79 | 0.1066 | 352.44 | 0.000 | 0.000 |
| 0.75 | 0.77 | 0.77 | 0.1079 | 352.44 | 0.000 | 0.000 |
| 0.77 | 0.75 | 0.75 | 0.1092 | 352.45 | 0.000 | 0.000 |
| 0.79 | 0.73 | 0.73 | 0.1105 | 352.45 | 0.000 | 0.000 |
| 0.81 | 0.71 | 0.71 | 0.1117 | 352.46 | 0.000 | 0.000 |
| 0.83 | 0.69 | 0.69 | 0.1129 | 352.46 | 0.000 | 0.000 |
| 0.85 | 0.67 | 0.67 | 0.1141 | 352.47 | 0.000 | 0.000 |
| 0.87 | 0.66 | 0.66 | 0.1152 | 352.47 | 0.000 | 0.000 |
| 0.90 | 0.64 | 0.64 | 0.1164 | 352.48 | 0.000 | 0.000 |
| 0.92 | 0.63 | 0.63 | 0.1175 | 352.48 | 0.000 | 0.000 |
| 0.94 | 0.63 | 0.63 | 0.1185 | 352.49 | 0.000 | 0.000 |
| 0.96 | 0.62 | 0.62 | 0.1196 | 352.49 | 0.000 | 0.000 |
| 0.98 | 0.62 | 0.62 | 0.1207 | 352.49 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 1.00 | 0.62 | 0.62 | 0.1218 | 352.50 | 0.000 | 0.000 |
| 1.02 | 0.61 | 0.61 | 0.1228 | 352.50 | 0.000 | 0.000 |
| 1.04 | 0.60 | 0.60 | 0.1239 | 352.51 | 0.000 | 0.000 |
| 1.06 | 0.58 | 0.58 | 0.1249 | 352.51 | 0.000 | 0.000 |
| 1.08 | 0.57 | 0.57 | 0.1259 | 352.52 | 0.000 | 0.000 |
| 1.10 | 0.56 | 0.56 | 0.1268 | 352.52 | 0.000 | 0.000 |
| 1.12 | 0.55 | 0.55 | 0.1278 | 352.52 | 0.000 | 0.000 |
| 1.15 | 0.55 | 0.55 | 0.1287 | 352.53 | 0.000 | 0.000 |
| 1.17 | 0.54 | 0.54 | 0.1297 | 352.53 | 0.000 | 0.000 |
| 1.19 | 0.53 | 0.53 | 0.1306 | 352.54 | 0.000 | 0.000 |
| 1.21 | 0.52 | 0.52 | 0.1315 | 352.54 | 0.000 | 0.000 |
| 1.23 | 0.52 | 0.52 | 0.1324 | 352.54 | 0.000 | 0.000 |
| 1.25 | 0.51 | 0.51 | 0.1333 | 352.55 | 0.000 | 0.000 |
| 1.27 | 0.51 | 0.51 | 0.1342 | 352.55 | 0.000 | 0.000 |
| 1.29 | 0.50 | 0.50 | 0.1350 | 352.55 | 0.000 | 0.000 |
| 1.31 | 0.49 | 0.49 | 0.1359 | 352.56 | 0.000 | 0.000 |
| 1.33 | 0.49 | 0.49 | 0.1367 | 352.56 | 0.000 | 0.000 |
| 1.35 | 0.48 | 0.48 | 0.1376 | 352.56 | 0.000 | 0.000 |
| 1.37 | 0.48 | 0.48 | 0.1384 | 352.57 | 0.000 | 0.000 |
| 1.40 | 0.47 | 0.47 | 0.1392 | 352.57 | 0.000 | 0.000 |
| 1.42 | 0.47 | 0.47 | 0.1400 | 352.57 | 0.000 | 0.000 |
| 1.44 | 0.46 | 0.46 | 0.1408 | 352.58 | 0.000 | 0.000 |
| 1.46 | 0.46 | 0.46 | 0.1416 | 352.58 | 0.000 | 0.000 |
| 1.48 | 0.45 | 0.45 | 0.1424 | 352.58 | 0.000 | 0.000 |
| 1.50 | 0.45 | 0.45 | 0.1432 | 352.59 | 0.000 | 0.000 |
| 1.52 | 0.44 | 0.44 | 0.1439 | 352.59 | 0.000 | 0.000 |
| 1.54 | 0.44 | 0.44 | 0.1447 | 352.59 | 0.000 | 0.000 |
| 1.56 | 0.44 | 0.44 | 0.1455 | 352.60 | 0.000 | 0.000 |
| 1.58 | 0.43 | 0.43 | 0.1462 | 352.60 | 0.000 | 0.000 |
| 1.60 | 0.43 | 0.43 | 0.1470 | 352.60 | 0.000 | 0.000 |
| 1.62 | 0.42 | 0.42 | 0.1477 | 352.61 | 0.000 | 0.000 |
| 1.65 | 0.42 | 0.42 | 0.1484 | 352.61 | 0.000 | 0.000 |
| 1.67 | 0.42 | 0.42 | 0.1491 | 352.61 | 0.000 | 0.000 |
| 1.69 | 0.41 | 0.41 | 0.1498 | 352.61 | 0.000 | 0.000 |
| 1.71 | 0.41 | 0.41 | 0.1506 | 352.62 | 0.000 | 0.000 |
| 1.73 | 0.41 | 0.41 | 0.1513 | 352.62 | 0.000 | 0.000 |
| 1.75 | 0.40 | 0.40 | 0.1520 | 352.62 | 0.000 | 0.000 |
| 1.77 | 0.40 | 0.40 | 0.1526 | 352.63 | 0.000 | 0.000 |
| 1.79 | 0.40 | 0.40 | 0.1533 | 352.63 | 0.000 | 0.000 |
| 1.81 | 0.39 | 0.39 | 0.1540 | 352.63 | 0.000 | 0.000 |
| 1.83 | 0.39 | 0.39 | 0.1547 | 352.63 | 0.000 | 0.000 |
| 1.85 | 0.39 | 0.39 | 0.1554 | 352.64 | 0.000 | 0.000 |
| 1.87 | 0.38 | 0.38 | 0.1560 | 352.64 | 0.000 | 0.000 |
| 1.90 | 0.38 | 0.38 | 0.1567 | 352.64 | 0.000 | 0.000 |
| 1.92 | 0.38 | 0.38 | 0.1573 | 352.64 | 0.000 | 0.000 |
| 1.94 | 0.37 | 0.37 | 0.1580 | 352.65 | 0.000 | 0.000 |
| 1.96 | 0.37 | 0.37 | 0.1586 | 352.65 | 0.000 | 0.000 |
| 1.98 | 0.37 | 0.37 | 0.1592 | 352.65 | 0.000 | 0.000 |
| 2.00 | 0.36 | 0.36 | 0.1599 | 352.66 | 0.000 | 0.000 |
| 2.02 | 0.36 | 0.36 | 0.1605 | 352.66 | 0.000 | 0.000 |
| 2.04 | 0.36 | 0.36 | 0.1611 | 352.66 | 0.000 | 0.000 |
| 2.06 | 0.36 | 0.36 | 0.1617 | 352.66 | 0.000 | 0.000 |
| 2.08 | 0.35 | 0.35 | 0.1623 | 352.67 | 0.000 | 0.000 |
| 2.10 | 0.34 | 0.34 | 0.1629 | 352.67 | 0.000 | 0.000 |
| 2.12 | 0.33 | 0.33 | 0.1635 | 352.67 | 0.000 | 0.000 |
| 2.15 | 0.32 | 0.32 | 0.1641 | 352.67 | 0.000 | 0.000 |
| 2.17 | 0.31 | 0.31 | 0.1646 | 352.67 | 0.000 | 0.000 |
| 2.19 | 0.30 | 0.30 | 0.1652 | 352.68 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 2.21 | 0.29 | 0.29 | 0.1657 | 352.68 | 0.000 | 0.000 |
| 2.23 | 0.28 | 0.28 | 0.1661 | 352.68 | 0.000 | 0.000 |
| 2.25 | 0.27 | 0.27 | 0.1666 | 352.68 | 0.000 | 0.000 |
| 2.27 | 0.27 | 0.27 | 0.1671 | 352.68 | 0.000 | 0.000 |
| 2.29 | 0.26 | 0.26 | 0.1675 | 352.69 | 0.000 | 0.000 |
| 2.31 | 0.26 | 0.26 | 0.1680 | 352.69 | 0.000 | 0.000 |
| 2.33 | 0.25 | 0.25 | 0.1684 | 352.69 | 0.000 | 0.000 |
| 2.35 | 0.25 | 0.25 | 0.1689 | 352.69 | 0.000 | 0.000 |
| 2.37 | 0.24 | 0.24 | 0.1693 | 352.69 | 0.000 | 0.000 |
| 2.40 | 0.24 | 0.24 | 0.1697 | 352.70 | 0.000 | 0.000 |
| 2.42 | 0.23 | 0.23 | 0.1701 | 352.70 | 0.000 | 0.000 |
| 2.44 | 0.23 | 0.23 | 0.1705 | 352.70 | 0.000 | 0.000 |
| 2.46 | 0.22 | 0.22 | 0.1709 | 352.70 | 0.000 | 0.000 |
| 2.48 | 0.22 | 0.22 | 0.1713 | 352.70 | 0.000 | 0.000 |
| 2.50 | 0.21 | 0.21 | 0.1716 | 352.70 | 0.000 | 0.000 |
| 2.52 | 0.21 | 0.21 | 0.1720 | 352.70 | 0.000 | 0.000 |
| 2.54 | 0.20 | 0.20 | 0.1723 | 352.71 | 0.000 | 0.000 |
| 2.56 | 0.20 | 0.20 | 0.1727 | 352.71 | 0.000 | 0.000 |
| 2.58 | 0.19 | 0.19 | 0.1730 | 352.71 | 0.000 | 0.000 |
| 2.60 | 0.19 | 0.19 | 0.1734 | 352.71 | 0.000 | 0.000 |
| 2.62 | 0.18 | 0.18 | 0.1737 | 352.71 | 0.000 | 0.000 |
| 2.65 | 0.18 | 0.18 | 0.1740 | 352.71 | 0.000 | 0.000 |
| 2.67 | 0.17 | 0.17 | 0.1743 | 352.71 | 0.000 | 0.000 |
| 2.69 | 0.17 | 0.17 | 0.1746 | 352.72 | 0.000 | 0.000 |
| 2.71 | 0.16 | 0.16 | 0.1749 | 352.72 | 0.000 | 0.000 |
| 2.73 | 0.16 | 0.16 | 0.1751 | 352.72 | 0.000 | 0.000 |
| 2.75 | 0.15 | 0.15 | 0.1754 | 352.72 | 0.000 | 0.000 |
| 2.77 | 0.14 | 0.14 | 0.1757 | 352.72 | 0.000 | 0.000 |
| 2.79 | 0.13 | 0.13 | 0.1759 | 352.72 | 0.000 | 0.000 |
| 2.81 | 0.12 | 0.12 | 0.1761 | 352.72 | 0.000 | 0.000 |
| 2.83 | 0.11 | 0.11 | 0.1763 | 352.72 | 0.000 | 0.000 |
| 2.85 | 0.10 | 0.10 | 0.1765 | 352.72 | 0.000 | 0.000 |
| 2.87 | 0.09 | 0.09 | 0.1766 | 352.72 | 0.000 | 0.000 |
| 2.90 | 0.08 | 0.08 | 0.1768 | 352.72 | 0.000 | 0.000 |
| 2.92 | 0.07 | 0.07 | 0.1769 | 352.73 | 0.000 | 0.000 |
| 2.94 | 0.06 | 0.06 | 0.1770 | 352.73 | 0.000 | 0.000 |
| 2.96 | 0.05 | 0.05 | 0.1771 | 352.73 | 0.000 | 0.000 |
| 2.98 | 0.04 | 0.04 | 0.1772 | 352.73 | 0.000 | 0.000 |
| 3.00 | 0.03 | 0.03 | 0.1773 | 352.73 | 0.000 | 0.000 |
| 3.02 | 0.02 | 0.02 | 0.1773 | 352.73 | 0.000 | 0.000 |
| 3.04 | 0.01 | 0.01 | 0.1773 | 352.73 | 0.000 | 0.000 |
| 3.06 | 0.00 | 0.00 | 0.1773 | 352.73 | 0.000 | 0.000 |

Total Routing Mass Balance Discrepancy is 0.00%

Modified Puls Routing

Inflow Hydrograph: P:\4343\4343-52\Drainage\Post Area to Basin - 100 YR EXT.HYD

Storage/Elevation Curve: P:\4343\4343-52\Drainage\Proposed Infil. Basin 1.ES

Discharge/Elevation Curve: P:\4343\4343-52\Drainage\Basin Spillway.EO

Basin Bypass Capacity = 0.0 cfs

Starting Pool Elevation = 352.00 feet

Time Interval = 2.083333E-02 hours

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|--------------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 0.00 | 0.00 | 0.00 | 0.0000 | 352.00 | 0.000 | 0.000 |
| 0.02 | 0.32 | 0.32 | 0.0003 | 352.00 | 0.000 | 0.000 |
| 0.04 | 0.63 | 0.63 | 0.0011 | 352.00 | 0.000 | 0.000 |
| 0.06 | 0.95 | 0.95 | 0.0024 | 352.01 | 0.000 | 0.000 |
| 0.08 | 1.26 | 1.26 | 0.0043 | 352.02 | 0.000 | 0.000 |
| 0.10 | 1.51 | 1.51 | 0.0067 | 352.03 | 0.000 | 0.000 |
| 0.12 | 1.76 | 1.76 | 0.0096 | 352.04 | 0.000 | 0.000 |
| 0.15 | 2.01 | 2.01 | 0.0128 | 352.05 | 0.000 | 0.000 |
| 0.17 | 2.26 | 2.26 | 0.0165 | 352.07 | 0.000 | 0.000 |
| 0.19 | 2.97 | 2.97 | 0.0210 | 352.09 | 0.000 | 0.000 |
| 0.21 | 3.68 | 3.68 | 0.0267 | 352.11 | 0.000 | 0.000 |
| 0.23 | 4.39 | 4.39 | 0.0336 | 352.14 | 0.000 | 0.000 |
| 0.25 | 5.09 | 5.09 | 0.0418 | 352.17 | 0.000 | 0.000 |
| 0.27 | 4.59 | 4.59 | 0.0501 | 352.21 | 0.000 | 0.000 |
| 0.29 | 4.09 | 4.09 | 0.0576 | 352.24 | 0.000 | 0.000 |
| 0.31 | 3.59 | 3.59 | 0.0642 | 352.26 | 0.000 | 0.000 |
| 0.33 | 3.09 | 3.09 | 0.0700 | 352.29 | 0.000 | 0.000 |
| 0.35 | 2.76 | 2.76 | 0.0750 | 352.31 | 0.000 | 0.000 |
| 0.37 | 2.44 | 2.44 | 0.0795 | 352.33 | 0.000 | 0.000 |
| 0.40 | 2.12 | 2.12 | 0.0834 | 352.34 | 0.000 | 0.000 |
| 0.42 | 1.79 | 1.79 | 0.0868 | 352.36 | 0.000 | 0.000 |
| 0.44 | 1.72 | 1.72 | 0.0898 | 352.37 | 0.000 | 0.000 |
| 0.46 | 1.64 | 1.64 | 0.0927 | 352.38 | 0.000 | 0.000 |
| 0.48 | 1.56 | 1.56 | 0.0954 | 352.39 | 0.000 | 0.000 |
| 0.50 | 1.48 | 1.48 | 0.0981 | 352.40 | 0.000 | 0.000 |
| 0.52 | 1.39 | 1.39 | 0.1005 | 352.41 | 0.000 | 0.000 |
| 0.54 | 1.29 | 1.29 | 0.1028 | 352.42 | 0.000 | 0.000 |
| 0.56 | 1.19 | 1.19 | 0.1050 | 352.43 | 0.000 | 0.000 |
| 0.58 | 1.10 | 1.10 | 0.1070 | 352.44 | 0.000 | 0.000 |
| 0.60 | 1.06 | 1.06 | 0.1088 | 352.45 | 0.000 | 0.000 |
| 0.62 | 1.03 | 1.03 | 0.1106 | 352.45 | 0.000 | 0.000 |
| 0.65 | 1.00 | 1.00 | 0.1124 | 352.46 | 0.000 | 0.000 |
| 0.67 | 0.97 | 0.97 | 0.1141 | 352.47 | 0.000 | 0.000 |
| 0.69 | 0.94 | 0.94 | 0.1157 | 352.47 | 0.000 | 0.000 |
| 0.71 | 0.91 | 0.91 | 0.1173 | 352.48 | 0.000 | 0.000 |
| 0.73 | 0.89 | 0.89 | 0.1188 | 352.49 | 0.000 | 0.000 |
| 0.75 | 0.86 | 0.86 | 0.1203 | 352.49 | 0.000 | 0.000 |
| 0.77 | 0.84 | 0.84 | 0.1218 | 352.50 | 0.000 | 0.000 |
| 0.79 | 0.82 | 0.82 | 0.1232 | 352.51 | 0.000 | 0.000 |
| 0.81 | 0.79 | 0.79 | 0.1246 | 352.51 | 0.000 | 0.000 |
| 0.83 | 0.77 | 0.77 | 0.1260 | 352.52 | 0.000 | 0.000 |
| 0.85 | 0.76 | 0.76 | 0.1273 | 352.52 | 0.000 | 0.000 |
| 0.87 | 0.76 | 0.76 | 0.1286 | 352.53 | 0.000 | 0.000 |
| 0.90 | 0.75 | 0.75 | 0.1299 | 352.53 | 0.000 | 0.000 |
| 0.92 | 0.74 | 0.74 | 0.1312 | 352.54 | 0.000 | 0.000 |
| 0.94 | 0.73 | 0.73 | 0.1324 | 352.54 | 0.000 | 0.000 |
| 0.96 | 0.72 | 0.72 | 0.1337 | 352.55 | 0.000 | 0.000 |
| 0.98 | 0.71 | 0.71 | 0.1349 | 352.55 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 1.00 | 0.70 | 0.70 | 0.1362 | 352.56 | 0.000 | 0.000 |
| 1.02 | 0.69 | 0.69 | 0.1373 | 352.56 | 0.000 | 0.000 |
| 1.04 | 0.67 | 0.67 | 0.1385 | 352.57 | 0.000 | 0.000 |
| 1.06 | 0.66 | 0.66 | 0.1397 | 352.57 | 0.000 | 0.000 |
| 1.08 | 0.64 | 0.64 | 0.1408 | 352.58 | 0.000 | 0.000 |
| 1.10 | 0.64 | 0.64 | 0.1419 | 352.58 | 0.000 | 0.000 |
| 1.12 | 0.64 | 0.64 | 0.1430 | 352.59 | 0.000 | 0.000 |
| 1.15 | 0.64 | 0.64 | 0.1441 | 352.59 | 0.000 | 0.000 |
| 1.17 | 0.63 | 0.63 | 0.1452 | 352.59 | 0.000 | 0.000 |
| 1.19 | 0.63 | 0.63 | 0.1463 | 352.60 | 0.000 | 0.000 |
| 1.21 | 0.62 | 0.62 | 0.1473 | 352.60 | 0.000 | 0.000 |
| 1.23 | 0.61 | 0.61 | 0.1484 | 352.61 | 0.000 | 0.000 |
| 1.25 | 0.60 | 0.60 | 0.1494 | 352.61 | 0.000 | 0.000 |
| 1.27 | 0.60 | 0.60 | 0.1505 | 352.62 | 0.000 | 0.000 |
| 1.29 | 0.59 | 0.59 | 0.1515 | 352.62 | 0.000 | 0.000 |
| 1.31 | 0.58 | 0.58 | 0.1525 | 352.63 | 0.000 | 0.000 |
| 1.33 | 0.58 | 0.58 | 0.1535 | 352.63 | 0.000 | 0.000 |
| 1.35 | 0.57 | 0.57 | 0.1545 | 352.63 | 0.000 | 0.000 |
| 1.37 | 0.56 | 0.56 | 0.1554 | 352.64 | 0.000 | 0.000 |
| 1.40 | 0.56 | 0.56 | 0.1564 | 352.64 | 0.000 | 0.000 |
| 1.42 | 0.55 | 0.55 | 0.1574 | 352.65 | 0.000 | 0.000 |
| 1.44 | 0.55 | 0.55 | 0.1583 | 352.65 | 0.000 | 0.000 |
| 1.46 | 0.54 | 0.54 | 0.1592 | 352.65 | 0.000 | 0.000 |
| 1.48 | 0.53 | 0.53 | 0.1602 | 352.66 | 0.000 | 0.000 |
| 1.50 | 0.53 | 0.53 | 0.1611 | 352.66 | 0.000 | 0.000 |
| 1.52 | 0.52 | 0.52 | 0.1620 | 352.66 | 0.000 | 0.000 |
| 1.54 | 0.52 | 0.52 | 0.1629 | 352.67 | 0.000 | 0.000 |
| 1.56 | 0.52 | 0.52 | 0.1638 | 352.67 | 0.000 | 0.000 |
| 1.58 | 0.51 | 0.51 | 0.1647 | 352.67 | 0.000 | 0.000 |
| 1.60 | 0.51 | 0.51 | 0.1655 | 352.68 | 0.000 | 0.000 |
| 1.62 | 0.50 | 0.50 | 0.1664 | 352.68 | 0.000 | 0.000 |
| 1.65 | 0.50 | 0.50 | 0.1673 | 352.69 | 0.000 | 0.000 |
| 1.67 | 0.49 | 0.49 | 0.1681 | 352.69 | 0.000 | 0.000 |
| 1.69 | 0.49 | 0.49 | 0.1690 | 352.69 | 0.000 | 0.000 |
| 1.71 | 0.48 | 0.48 | 0.1698 | 352.70 | 0.000 | 0.000 |
| 1.73 | 0.48 | 0.48 | 0.1706 | 352.70 | 0.000 | 0.000 |
| 1.75 | 0.47 | 0.47 | 0.1714 | 352.70 | 0.000 | 0.000 |
| 1.77 | 0.47 | 0.47 | 0.1723 | 352.71 | 0.000 | 0.000 |
| 1.79 | 0.47 | 0.47 | 0.1731 | 352.71 | 0.000 | 0.000 |
| 1.81 | 0.46 | 0.46 | 0.1739 | 352.71 | 0.000 | 0.000 |
| 1.83 | 0.46 | 0.46 | 0.1747 | 352.72 | 0.000 | 0.000 |
| 1.85 | 0.46 | 0.46 | 0.1754 | 352.72 | 0.000 | 0.000 |
| 1.87 | 0.45 | 0.45 | 0.1762 | 352.72 | 0.000 | 0.000 |
| 1.90 | 0.45 | 0.45 | 0.1770 | 352.73 | 0.000 | 0.000 |
| 1.92 | 0.45 | 0.45 | 0.1778 | 352.73 | 0.000 | 0.000 |
| 1.94 | 0.44 | 0.44 | 0.1785 | 352.73 | 0.000 | 0.000 |
| 1.96 | 0.44 | 0.44 | 0.1793 | 352.73 | 0.000 | 0.000 |
| 1.98 | 0.43 | 0.43 | 0.1800 | 352.74 | 0.000 | 0.000 |
| 2.00 | 0.43 | 0.43 | 0.1808 | 352.74 | 0.000 | 0.000 |
| 2.02 | 0.43 | 0.43 | 0.1815 | 352.74 | 0.000 | 0.000 |
| 2.04 | 0.42 | 0.42 | 0.1822 | 352.75 | 0.000 | 0.000 |
| 2.06 | 0.42 | 0.42 | 0.1830 | 352.75 | 0.000 | 0.000 |
| 2.08 | 0.42 | 0.42 | 0.1837 | 352.75 | 0.000 | 0.000 |
| 2.10 | 0.41 | 0.41 | 0.1844 | 352.76 | 0.000 | 0.000 |
| 2.12 | 0.41 | 0.41 | 0.1851 | 352.76 | 0.000 | 0.000 |
| 2.15 | 0.40 | 0.40 | 0.1858 | 352.76 | 0.000 | 0.000 |
| 2.17 | 0.40 | 0.40 | 0.1865 | 352.76 | 0.000 | 0.000 |
| 2.19 | 0.39 | 0.39 | 0.1872 | 352.77 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|-----------------------|-------------------------------|--------------------------|------------------------------|----------------------------------|---------------------------|---------------------------|
| 2.21 | 0.39 | 0.39 | 0.1879 | 352.77 | 0.000 | 0.000 |
| 2.23 | 0.38 | 0.38 | 0.1885 | 352.77 | 0.000 | 0.000 |
| 2.25 | 0.38 | 0.38 | 0.1892 | 352.78 | 0.000 | 0.000 |
| 2.27 | 0.37 | 0.37 | 0.1898 | 352.78 | 0.000 | 0.000 |
| 2.29 | 0.37 | 0.37 | 0.1905 | 352.78 | 0.000 | 0.000 |
| 2.31 | 0.36 | 0.36 | 0.1911 | 352.78 | 0.000 | 0.000 |
| 2.33 | 0.36 | 0.36 | 0.1917 | 352.79 | 0.000 | 0.000 |
| 2.35 | 0.35 | 0.35 | 0.1923 | 352.79 | 0.000 | 0.000 |
| 2.37 | 0.35 | 0.35 | 0.1929 | 352.79 | 0.000 | 0.000 |
| 2.40 | 0.34 | 0.34 | 0.1935 | 352.79 | 0.000 | 0.000 |
| 2.42 | 0.34 | 0.34 | 0.1941 | 352.80 | 0.000 | 0.000 |
| 2.44 | 0.33 | 0.33 | 0.1947 | 352.80 | 0.000 | 0.000 |
| 2.46 | 0.33 | 0.33 | 0.1952 | 352.80 | 0.000 | 0.000 |
| 2.48 | 0.32 | 0.32 | 0.1958 | 352.80 | 0.000 | 0.000 |
| 2.50 | 0.32 | 0.32 | 0.1964 | 352.80 | 0.000 | 0.000 |
| 2.52 | 0.31 | 0.31 | 0.1969 | 352.81 | 0.000 | 0.000 |
| 2.54 | 0.31 | 0.31 | 0.1974 | 352.81 | 0.000 | 0.000 |
| 2.56 | 0.30 | 0.30 | 0.1980 | 352.81 | 0.000 | 0.000 |
| 2.58 | 0.30 | 0.30 | 0.1985 | 352.81 | 0.000 | 0.000 |
| 2.60 | 0.29 | 0.29 | 0.1990 | 352.82 | 0.000 | 0.000 |
| 2.62 | 0.29 | 0.29 | 0.1995 | 352.82 | 0.000 | 0.000 |
| 2.65 | 0.28 | 0.28 | 0.2000 | 352.82 | 0.000 | 0.000 |
| 2.67 | 0.28 | 0.28 | 0.2005 | 352.82 | 0.000 | 0.000 |
| 2.69 | 0.27 | 0.27 | 0.2009 | 352.82 | 0.000 | 0.000 |
| 2.71 | 0.27 | 0.27 | 0.2014 | 352.83 | 0.000 | 0.000 |
| 2.73 | 0.26 | 0.26 | 0.2018 | 352.83 | 0.000 | 0.000 |
| 2.75 | 0.26 | 0.26 | 0.2023 | 352.83 | 0.000 | 0.000 |
| 2.77 | 0.25 | 0.25 | 0.2027 | 352.83 | 0.000 | 0.000 |
| 2.79 | 0.25 | 0.25 | 0.2032 | 352.83 | 0.000 | 0.000 |
| 2.81 | 0.24 | 0.24 | 0.2036 | 352.83 | 0.000 | 0.000 |
| 2.83 | 0.24 | 0.24 | 0.2040 | 352.84 | 0.000 | 0.000 |
| 2.85 | 0.23 | 0.23 | 0.2044 | 352.84 | 0.000 | 0.000 |
| 2.87 | 0.23 | 0.23 | 0.2048 | 352.84 | 0.000 | 0.000 |
| 2.90 | 0.22 | 0.22 | 0.2052 | 352.84 | 0.000 | 0.000 |
| 2.92 | 0.22 | 0.22 | 0.2056 | 352.84 | 0.000 | 0.000 |
| 2.94 | 0.21 | 0.21 | 0.2059 | 352.84 | 0.000 | 0.000 |
| 2.96 | 0.21 | 0.21 | 0.2063 | 352.85 | 0.000 | 0.000 |
| 2.98 | 0.20 | 0.20 | 0.2067 | 352.85 | 0.000 | 0.000 |
| 3.00 | 0.20 | 0.20 | 0.2070 | 352.85 | 0.000 | 0.000 |
| 3.02 | 0.19 | 0.19 | 0.2073 | 352.85 | 0.000 | 0.000 |
| 3.04 | 0.19 | 0.19 | 0.2077 | 352.85 | 0.000 | 0.000 |
| 3.06 | 0.18 | 0.18 | 0.2080 | 352.85 | 0.000 | 0.000 |
| 3.08 | 0.18 | 0.18 | 0.2083 | 352.85 | 0.000 | 0.000 |
| 3.10 | 0.17 | 0.17 | 0.2086 | 352.85 | 0.000 | 0.000 |
| 3.12 | 0.17 | 0.17 | 0.2089 | 352.86 | 0.000 | 0.000 |
| 3.15 | 0.16 | 0.16 | 0.2092 | 352.86 | 0.000 | 0.000 |
| 3.17 | 0.16 | 0.16 | 0.2094 | 352.86 | 0.000 | 0.000 |
| 3.19 | 0.15 | 0.15 | 0.2097 | 352.86 | 0.000 | 0.000 |
| 3.21 | 0.15 | 0.15 | 0.2100 | 352.86 | 0.000 | 0.000 |
| 3.23 | 0.14 | 0.14 | 0.2102 | 352.86 | 0.000 | 0.000 |
| 3.25 | 0.14 | 0.14 | 0.2105 | 352.86 | 0.000 | 0.000 |
| 3.27 | 0.13 | 0.13 | 0.2107 | 352.86 | 0.000 | 0.000 |
| 3.29 | 0.13 | 0.13 | 0.2109 | 352.86 | 0.000 | 0.000 |
| 3.31 | 0.12 | 0.12 | 0.2111 | 352.87 | 0.000 | 0.000 |
| 3.33 | 0.12 | 0.12 | 0.2113 | 352.87 | 0.000 | 0.000 |
| 3.35 | 0.11 | 0.11 | 0.2115 | 352.87 | 0.000 | 0.000 |
| 3.37 | 0.11 | 0.11 | 0.2117 | 352.87 | 0.000 | 0.000 |
| 3.40 | 0.10 | 0.10 | 0.2119 | 352.87 | 0.000 | 0.000 |

| Event Time (hours) | Hydrograph Inflow (cfs) | Basin Inflow (cfs) | Storage Used (acre-ft) | Elevation Above MSL (feet) | Basin Outflow (cfs) | Outflow Total (cfs) |
|--------------------|-------------------------|--------------------|------------------------|----------------------------|---------------------|---------------------|
| 3.42 | 0.10 | 0.10 | 0.2121 | 352.87 | 0.000 | 0.000 |
| 3.44 | 0.09 | 0.09 | 0.2122 | 352.87 | 0.000 | 0.000 |
| 3.46 | 0.09 | 0.09 | 0.2124 | 352.87 | 0.000 | 0.000 |
| 3.48 | 0.08 | 0.08 | 0.2125 | 352.87 | 0.000 | 0.000 |
| 3.50 | 0.08 | 0.08 | 0.2127 | 352.87 | 0.000 | 0.000 |
| 3.52 | 0.07 | 0.07 | 0.2128 | 352.87 | 0.000 | 0.000 |
| 3.54 | 0.07 | 0.07 | 0.2129 | 352.87 | 0.000 | 0.000 |
| 3.56 | 0.06 | 0.06 | 0.2130 | 352.87 | 0.000 | 0.000 |
| 3.58 | 0.06 | 0.06 | 0.2131 | 352.87 | 0.000 | 0.000 |
| 3.60 | 0.05 | 0.05 | 0.2132 | 352.87 | 0.000 | 0.000 |
| 3.62 | 0.05 | 0.05 | 0.2133 | 352.87 | 0.000 | 0.000 |
| 3.65 | 0.04 | 0.04 | 0.2134 | 352.87 | 0.000 | 0.000 |
| 3.67 | 0.04 | 0.04 | 0.2135 | 352.87 | 0.000 | 0.000 |
| 3.69 | 0.03 | 0.03 | 0.2135 | 352.88 | 0.000 | 0.000 |
| 3.71 | 0.03 | 0.03 | 0.2136 | 352.88 | 0.000 | 0.000 |
| 3.73 | 0.03 | 0.03 | 0.2136 | 352.88 | 0.000 | 0.000 |
| 3.75 | 0.02 | 0.02 | 0.2137 | 352.88 | 0.000 | 0.000 |
| 3.77 | 0.02 | 0.02 | 0.2137 | 352.88 | 0.000 | 0.000 |
| 3.79 | 0.02 | 0.02 | 0.2137 | 352.88 | 0.000 | 0.000 |
| 3.81 | 0.01 | 0.01 | 0.2138 | 352.88 | 0.000 | 0.000 |
| 3.83 | 0.01 | 0.01 | 0.2138 | 352.88 | 0.000 | 0.000 |
| 3.85 | 0.01 | 0.01 | 0.2138 | 352.88 | 0.000 | 0.000 |
| 3.87 | 0.01 | 0.01 | 0.2138 | 352.88 | 0.000 | 0.000 |
| 3.90 | 0.01 | 0.01 | 0.2138 | 352.88 | 0.000 | 0.000 |
| 3.92 | 0.01 | 0.01 | 0.2139 | 352.88 | 0.000 | 0.000 |
| 3.94 | 0.00 | 0.00 | 0.2139 | 352.88 | 0.000 | 0.000 |
| 3.96 | 0.00 | 0.00 | 0.2139 | 352.88 | 0.000 | 0.000 |
| 3.98 | 0.00 | 0.00 | 0.2139 | 352.88 | 0.000 | 0.000 |
| 4.00 | 0.00 | 0.00 | 0.2139 | 352.88 | 0.000 | 0.000 |
| 4.02 | 0.00 | 0.00 | 0.2139 | 352.88 | 0.000 | 0.000 |
| 4.04 | 0.00 | 0.00 | 0.2139 | 352.88 | 0.000 | 0.000 |
| 4.06 | 0.00 | 0.00 | 0.2139 | 352.88 | 0.000 | 0.000 |
| 4.08 | 0.00 | 0.00 | 0.2139 | 352.88 | 0.000 | 0.000 |
| 4.10 | 0.00 | <u>0.00</u> | <u>0.2139</u> | <u>352.88</u> | 0.000 | <u>0.000</u> |

Total Routing Mass Balance Discrepancy is 0.00%

BASIN SPILWAY CREST @ 353.25

BASIN DESIGNED TO MITIGATE ALL STORMS
W/ 0 CFS DISCHARGE

D.C. Gohn Associates, Inc.

Surveyors and Engineers

Landscape Architects

P.O. Box 128, 32 Mount Joy Street

MOUNT JOY, PA 17552

Phone 653-5308

JOB LCLTC

SHEET NO. _____

OF _____

CALCULATED BY DEH

DATE 6/16/21

CHECKED BY _____

DATE _____

SCALE _____

INFILTRATION BASIN # 1

To BASIN # 1 = 8,017 CF or 0.1841 AC-FT
REQUIRED PER 100 YR HYDRO

INFILTRATION BASIN # 1 = 14,374.8 CF or 0.33 AC-FT
PROVIDED PER STAGE STORAGE

BOTTOM = 352.00

SPILL = 353.25

1.25' DEEP BASIN

INFIL. RATES = 0.20 in/hr (TEST 3)

1.10 in/hr (TEST 4)

1.94 in/hr (TEST 5)

GEOMETRIC MEAN = $0.20 \times 1.10 \times 1.94 = 0.4268$

$\sqrt[3]{0.4268} = 0.7529$ in/hr

0.7529 @ SAFETY FACTOR OF 2 = 0.376 in/hr

1.25' / 0.376 = 3.32 HRS DEWATERING

APPENDIX D
CONVEYANCE FACILITY DESIGN CALCULATIONS

Post Sub Development Drainage Areas

6/15/2021

| | Total Area, SF | Total Area, acres | Wtd. 'C' | T _C min. | On-Site Areas - Good Condition | | | | | | | |
|-------------------------------|-------------------|----------------------|----------|---------------------|--------------------------------|-----------|----------|----------|------------|----------|----------|-----------|
| | | | | | Impervious, sf. | | | | Grass, sf. | | | |
| | | | | | <2% B | 2-6% B | >6% B | <2% B | 2-6% B | >6% B | <2% B | 2-6% B |
| Soil Type C' Value | | | | | 0.91 | 0.92 | 0.93 | 0.14 | 0.19 | 0.26 | 0.10 | 0.14 |
| | | | | | | | | | | | | 0.18 |
| Post Sub Area | | | | | | | | | | | | |
| SUB Area To FES-1/SWALE-A | 35,690 | 0.82 | 0.435 | 5.00 | | 6,435 | 5,445 | | 23,810 | | | |
| SUB Area To DIVERSION SWALE 1 | 223,508 | 5.13 | 0.289 | 5.00 | | 5,558 | 24,499 | | 193,451 | | | |

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 4 at FES-1 & Swale-A
Time of Concentration: 5 min.
Drainage Area: 0.8200 acres.
Weighted 'C' Factor: 0.4350

| Time (min) | Rainfall Incr. (inches) | Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|-----------------------|--|---------------------------|---|-----------------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.13 | 0.13 | 1.62 | 0.58 |
| 10 | 0.24 | 0.38 | 2.91 | 1.04 |
| 15 | 0.55 | 0.93 | 6.61 | 2.36 |
| 20 | 0.33 | 1.26 | 3.98 | 1.42 |
| 25 | 0.19 | 1.45 | 2.31 | 0.82 |
| 30 | 0.16 | 1.61 | 1.91 | 0.68 |
| 35 | 0.12 | 1.73 | 1.41 | 0.50 |
| 40 | 0.10 | 1.83 | 1.24 | 0.44 |
| 45 | 0.09 | 1.92 | 1.10 | 0.39 |
| 50 | 0.08 | 2.01 | 0.99 | 0.35 |

At time = 125 minutes, the flow is 0.18 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at FES-1 & Swale-A
Time of Concentration: 5 min.
Drainage Area: 0.8200 acres.
Weighted 'C' Factor: 0.4350

| Time (min) | Rainfall Incr. (inches) | Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|-----------------------|--|---------------------------|---|-----------------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.15 | 0.15 | 1.82 | 0.65 |
| 10 | 0.27 | 0.42 | 3.25 | 1.16 |
| 15 | 0.61 | 1.03 | 7.32 | 2.61 |
| 20 | 0.37 | 1.40 | 4.44 | 1.58 |
| 25 | 0.21 | 1.62 | 2.58 | 0.92 |
| 30 | 0.18 | 1.80 | 2.13 | 0.76 |
| 35 | 0.13 | 1.93 | 1.58 | 0.56 |
| 40 | 0.12 | 2.04 | 1.39 | 0.50 |
| 45 | 0.10 | 2.15 | 1.24 | 0.44 |
| 50 | 0.09 | 2.24 | 1.11 | 0.40 |

At time = 125 minutes, the flow is 0.22 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

50 Year Storm in PA. Region 4 at Diversion Swale 1

Time of Concentration: 5 min.

Drainage Area: 5.1300 acres.

Weighted 'C' Factor: 0.2890

| Time (min) | Rainfall | | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------|----------------------------------|---------------|
| | Incr. (inches) | Total (inches) | | |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.13 | 0.13 | 1.62 | 2.40 |
| 10 | 0.24 | 0.38 | 2.91 | 4.32 |
| 15 | 0.55 | 0.93 | 6.61 | 9.80 |
| 20 | 0.33 | 1.26 | 3.98 | 5.91 |
| 25 | 0.19 | 1.45 | 2.31 | 3.42 |
| 30 | 0.16 | 1.61 | 1.91 | 2.83 |
| 35 | 0.12 | 1.73 | 1.41 | 2.09 |
| 40 | 0.10 | 1.83 | 1.24 | 1.83 |
| 45 | 0.09 | 1.92 | 1.10 | 1.64 |
| 50 | 0.08 | 2.01 | 0.99 | 1.47 |

At time = 125 minutes, the flow is 0.75 CFS.

Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart

100 Year Storm in PA. Region 4 at Diversion Swale 1

Time of Concentration: 5 min.

Drainage Area: 5.1300 acres.

Weighted 'C' Factor: 0.2890

| Time (min) | Rainfall | | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------|-------------------|----------------------------------|---------------|
| | Incr. (inches) | Total (inches) | | |
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.15 | 0.15 | 1.82 | 2.69 |
| 10 | 0.27 | 0.42 | 3.25 | 4.82 |
| 15 | 0.61 | 1.03 | 7.32 | 10.86 |
| 20 | 0.37 | 1.40 | 4.44 | 6.58 |
| 25 | 0.21 | 1.62 | 2.58 | 3.82 |
| 30 | 0.18 | 1.80 | 2.13 | 3.17 |
| 35 | 0.13 | 1.93 | 1.58 | 2.34 |
| 40 | 0.12 | 2.04 | 1.39 | 2.06 |
| 45 | 0.10 | 2.15 | 1.24 | 1.84 |
| 50 | 0.09 | 2.24 | 1.11 | 1.65 |

At time = 125 minutes, the flow is 0.89 CFS.

FES-1 to FES-2
100 YR

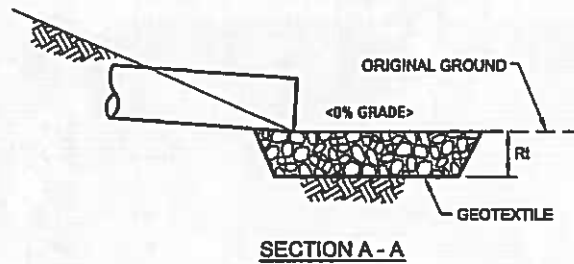
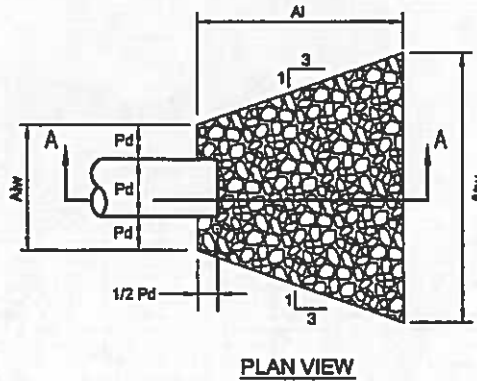
| Line | To Line | Line Length (ft) | Incr. Area (ac) | Total Area (ac) | Runoff Coeff. (C) | Incr C x A | Total C x A | Inlet Time (min) | Time Conc (min) | Rtrial Int (in/hr) | Total Runoff (cfs) | Adnt Flow (cfs) | Total Flow (cfs) | Capac Full (cfs) | Veloc (ft/s) | Pipe Size (in) | Pipe Slope (%) | Inv Elev Dn (ft) | Inv Elev Up (ft) | HGL Dn (ft) | HGL Up (ft) | Grnd/Rim Dn (ft) |
|------|---------|---------------------|--------------------|--------------------|----------------------|------------|-------------|---------------------|--------------------|-----------------------|-----------------------|--------------------|---------------------|---------------------|-----------------|-------------------|-------------------|---------------------|---------------------|----------------|----------------|---------------------|
| 1 | Outfall | 115.704 | 0.82 | 0.82 | 0.44 | 0.36 | 0.36 | 5.0 | 5.0 | 8.2 | 2.95 | 0.00 | 2.95 | 7.91 | 4.25 | 15 | 1.51 | 352.00 | 353.75 | 352.69 | 354.44 | 353.87 |

| Line | Grnd/Rim Up (ft) | Line ID |
|------|------------------------|---------|
| 1 | 355.61 | PIPE-1 |

STANDARD E&S WORKSHEET # 20 **Riprap Apron Outlet Protection**

PROJECT NAME: LCCTC
 LOCATION: MT Joy CAMPUS
 PREPARED BY: DEH
 CHECKED BY: _____

DATE: 6/15/21
 DATE: _____



| NO. | PIPE DIA. Do (in.) | TAIL WATER COND. (Max or Min) | MAN. "n" FOR PIPE | PIPE SLOPE (FT/FT) | Q (CFS) | V* (FPS) | RIPRAP SIZE | Rt (in) | AI (ft) | Aiw (ft) | Atw (ft) |
|-----|--------------------------|----------------------------------|----------------------|-----------------------|------------|-------------|-------------|------------|------------|-------------|-------------|
| 1 | 15 | MIN | .013 | .015 | 2.95 | 4.25 | R-3 | 12" | 6' | 3.75' | 9.15' |
| 2 | 36 | MIN | .013 | .0078 | 57.06 | 8.59 | R-5 | 27" | 20' | 9' | 29' |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

*:The anticipated velocity (V) should not exceed the maximum permissible shown in Table 6.6 for the proposed riprap protection. Adjust for less than full pipe flow. Use Manning's equation to calculate velocity for pipe slopes ≥ 0.05 ft/ft.

PIPE-1

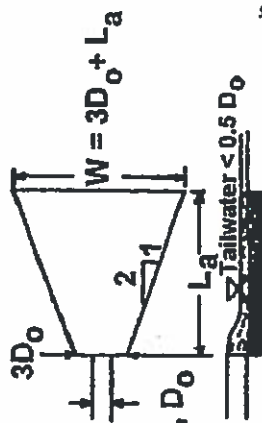
FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition

PIPE-1

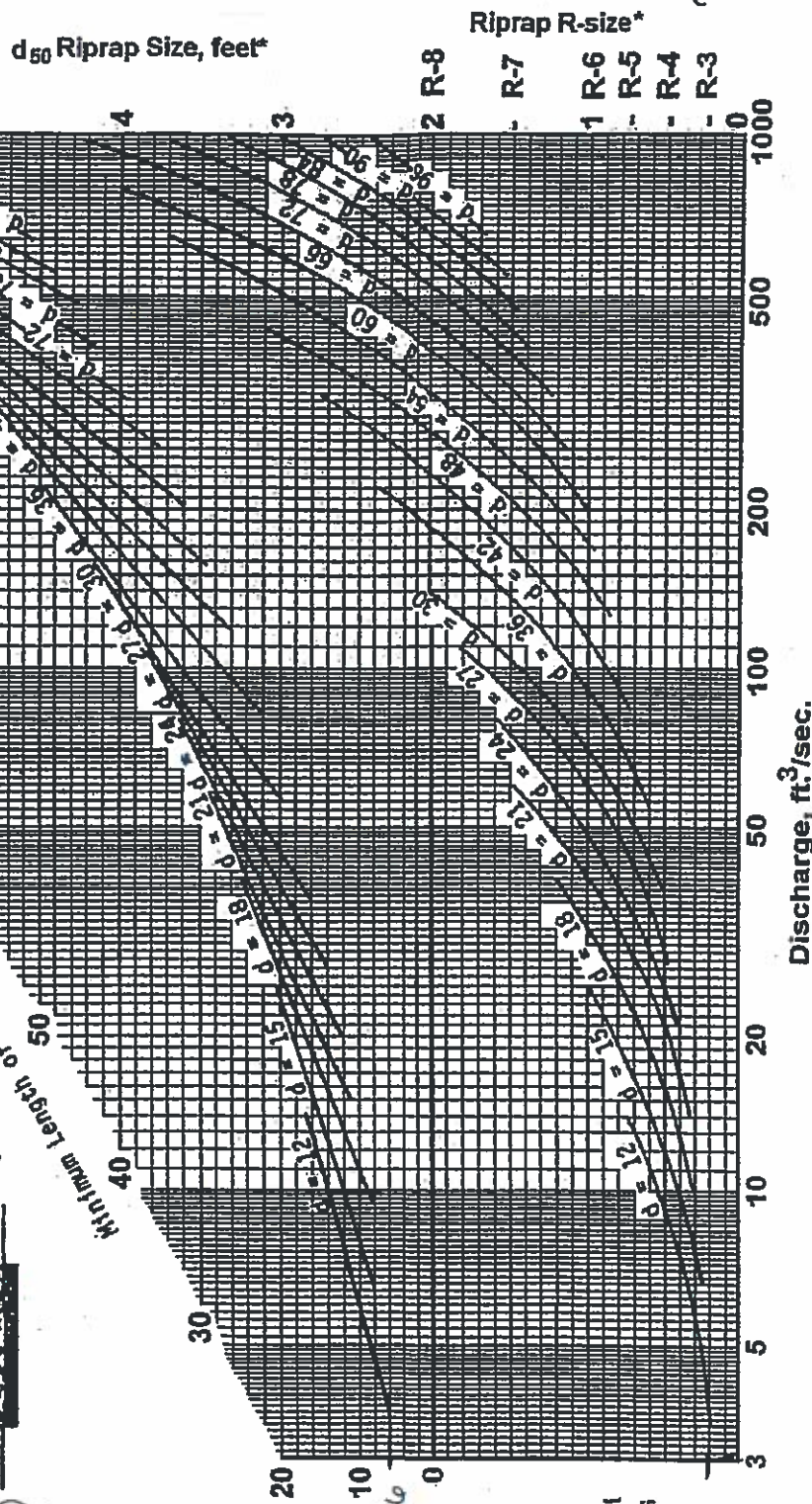
(FES-1 + FES-2)

DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)

Adapted from USDA - NRCS



$D_o = 15"$
 $3D_o = 45" (3.75')$
 $Q_{max} = 2.95$
 $D_{50} = R-3$
 $RipRap = 3"$
 $Placement = 12"$
 $Thickness = 6'$
 $L_a = 9.75'$
 $W =$



| D50 sizes | Placement Thickness |
|-----------|---------------------|
| R-3=3" | 12" |
| R-4=6" | 18" |
| R-5=9" | 27" |
| R-6=12" | 36" |
| R-7=15" | 45" |
| R-8=24" | 72" |

* For discharge velocities exceeding Maximum Allowable for Riprap Indicated, Increase d_{50} stone size and/or provide velocity reduction device.

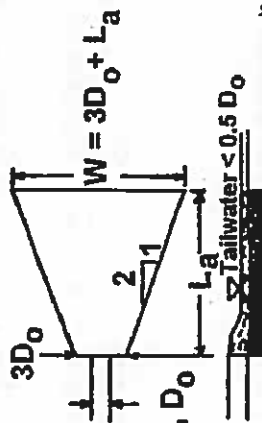
FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition

PIPE-2

(HW-1 to EW-1)

DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)

Adapted from USDA - NRCS

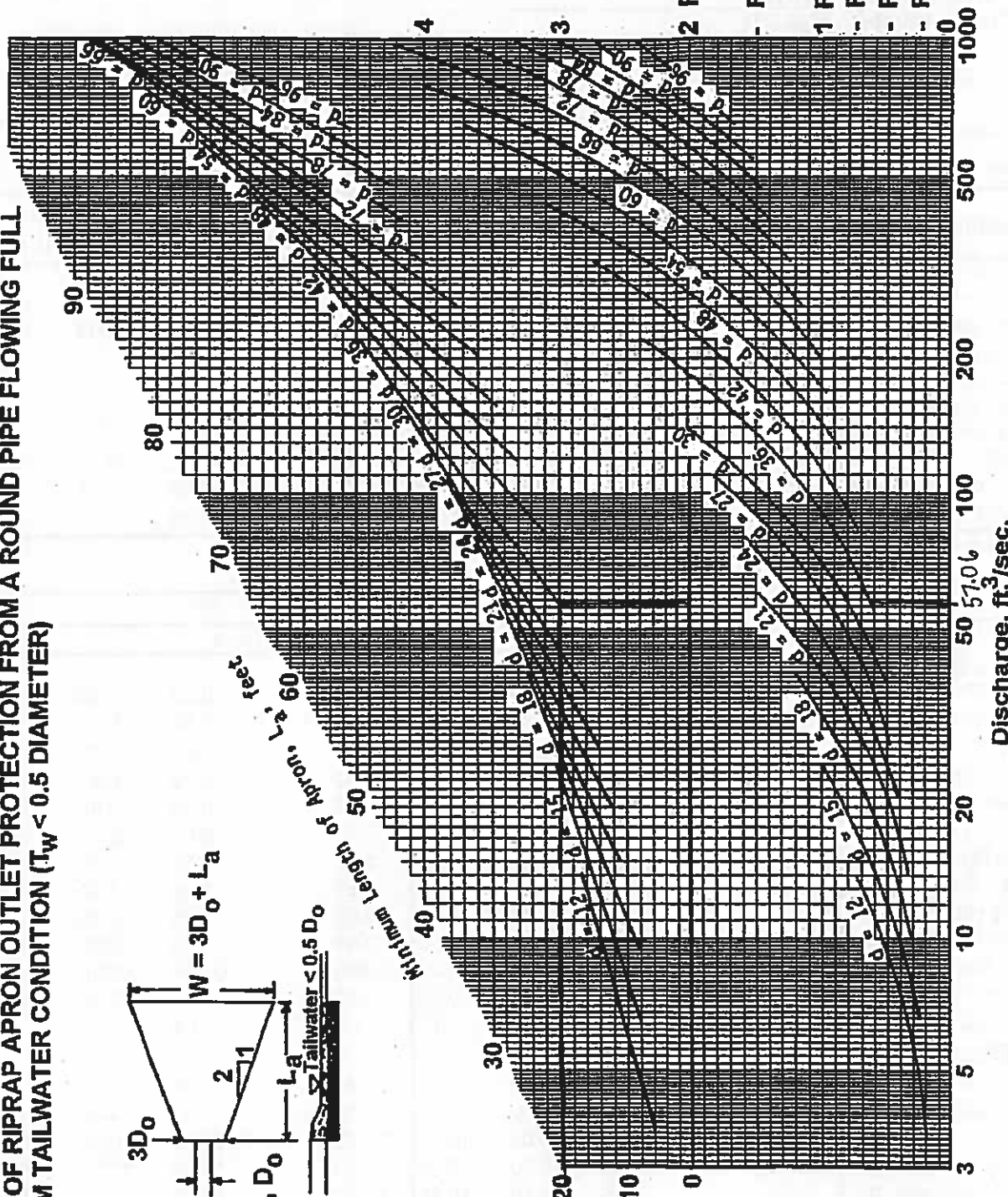


Outlet
Pipe
Diameter, D_o

$D_o = \frac{36'' (3')}{9'}$
 $3D_o = \frac{57.66}{57.66}$
 $Q_{max} = \frac{R-5}{R-5}$
 $D_{50} = \frac{9''}{9''}$
 RipRap =
 Placement 27"
 Thickness = 20'
 $L_a = \frac{29'}{29'}$
 $W = \frac{ }{ }$

d_{50} Riprap Size, feet*

Riprap R-size*



| D50 sizes | Placement Thickness |
|-----------|---------------------|
| R-3=1" | 12" |
| R-4=6" | 18" |
| R-5=9" | 27" |
| R-6=12" | 36" |
| R-7=15" | 45" |
| R-8=24" | 72" |

* For discharge velocities exceeding Maximum Allowable for Riprap Indicated, Increase d_{50} stone size and/or provide velocity reduction device.

Channel Design Data

Project Name: LCCTC

Project Number: 4343-21

Prepared By: DEH

Checked By: TES

Date: 6/15/2021

Date:

| Bare Earth (Table 4.7a) | | Swale A | | | | Diversion Swale-1 | | | |
|-------------------------------------|-----------------------|-----------------|-------------|-------------|-----------------------|-------------------|-------------|-------------|--|
| Silt Loam, noncolloidal | | Type of Channel | | Parabolic | | Type of Channel | | Parabolic | |
| Design Criteria | Bare Earth | Lining | Grass (Vel) | Grass (Cap) | Bare Earth | Lining | Grass (Vel) | Grass (Cap) | |
| | | NAG S75 | | | | NAG S75 | | | |
| Installation Depth,ft | 1.00 | 1.00 | 1.00 | 1.00 | 1.50 | 1.50 | 1.50 | 1.50 | |
| Manning's 'n' Value | 0.020 | 0.055 | 0.030 | 0.030 | 0.020 | 0.055 | 0.030 | 0.030 | |
| Bottom Slope, ft/ft | 0.022 | 0.022 | 0.022 | 0.022 | 0.014 | 0.014 | 0.014 | 0.014 | |
| Right Slope, _H: 1V | 5.0 | 5.0 | 5.0 | 5.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Left Slope, _H: 1V | 5.0 | 5.0 | 5.0 | 5.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Top Width (Parabolic Only) | 15.0 | 15.0 | 15.0 | 15.0 | 10.0 | 10.0 | 10.0 | 10.0 | |
| Bottom Width (Other), ft | | | | | | | | | |
| Flow, cfs | 2.61 | 2.61 | 2.61 | 2.61 | 10.86 | 10.86 | 10.86 | 10.86 | |
| Length of Channel, ft | 121 | 121 | 121 | 121 | 600 | 600 | 600 | 600 | |
| Allowable Shear, lb/ft ² | | 1.55 | | | | 1.55 | | | |
| Bottom Width:Depth Ratio | - | - | - | - | - | - | - | - | |
| 12:1 Maximum | | Stable: | | | | Stable: | | | |
| Lining Quantity, yd ² | | 204.0 | | | | 704.7 | | | |
| Design Comments | 100 year design storm | | | | 100 year design storm | | | | |
| Design Capacity | | | | | | | | | |
| Flow Depth,ft | 0.20 | 0.32 | 0.24 | 0.24 | 0.58 | 0.92 | 0.69 | 0.69 | |
| Top Width,ft | 6.74 | 8.51 | 7.40 | 7.40 | 6.19 | 7.84 | 6.81 | 6.81 | |
| Area,ft ² | 0.91 | 1.83 | 1.20 | 1.20 | 2.38 | 4.81 | 3.15 | 3.15 | |
| Wetted Perimeter,ft | 6.76 | 8.55 | 7.42 | 7.42 | 6.33 | 8.12 | 6.99 | 6.99 | |
| Hydraulic Radius,ft | 0.13 | 0.21 | 0.16 | 0.16 | 0.38 | 0.59 | 0.45 | 0.45 | |
| Hydraulic Depth,ft | 0.13 | 0.21 | 0.16 | 0.16 | 0.38 | 0.61 | 0.46 | 0.46 | |
| Froude Number | 1.38 | 0.54 | 0.95 | 0.95 | 1.30 | 0.51 | 0.89 | 0.89 | |
| Velocity, ft/s | 2.88 | 1.43 | 2.17 | 2.17 | 4.57 | 2.26 | 3.45 | 3.45 | |
| Velocity Head, ft | 0.13 | 0.03 | 0.07 | 0.07 | 0.32 | 0.08 | 0.18 | 0.18 | |
| Total Energy, ft | 0.33 | 0.35 | 0.32 | 0.32 | 0.90 | 1.00 | 0.88 | 0.88 | |
| Critical Slope | 0.011 | 0.074 | 0.024 | 0.024 | 0.008 | 0.054 | 0.018 | 0.018 | |
| Required Freeboard, ft | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | |
| Design Depth, ft | 0.7 | 0.8 | 0.7 | 0.7 | 1.1 | 1.4 | 1.2 | 1.2 | |
| Maximum Capacity | | | | | | | | | |
| Flow, ft ³ /s | 83 | 30 | 55 | 55 | 93 | 34 | 62 | 62 | |
| Flow Depth, ft | 1.00 | 1.00 | 1.00 | 1.00 | 1.50 | 1.50 | 1.50 | 1.50 | |
| Area, ft ² | 10.00 | 10.00 | 10.00 | 10.00 | 10.57 | 10.57 | 10.57 | 10.57 | |
| Top Width, ft | 15.00 | 15.00 | 15.00 | 15.00 | 10.00 | 10.00 | 10.00 | 10.00 | |
| Wetted Perimeter, ft | 15.18 | 15.18 | 15.18 | 15.18 | 10.57 | 10.57 | 10.57 | 10.57 | |
| Hydraulic Radius, ft | 0.66 | 0.66 | 0.66 | 0.66 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Hydraulic Depth, ft | 0.67 | 0.67 | 0.67 | 0.67 | 1.06 | 1.06 | 1.06 | 1.06 | |
| Froude Number | 1.46 | 0.53 | 0.98 | 0.98 | 1.26 | 0.46 | 0.84 | 0.84 | |
| Velocity, ft/s | 8.31 | 3.02 | 5.54 | 5.54 | 8.79 | 3.20 | 5.86 | 5.86 | |
| Velocity Head, ft | 1.07 | 0.14 | 0.48 | 0.48 | 1.20 | 0.16 | 0.53 | 0.53 | |
| Total Energy, ft | 2.07 | 1.14 | 1.48 | 1.48 | 2.70 | 1.66 | 2.03 | 2.03 | |

UPLAND DRAINAGE AREA

To PIPE-2

Post Development Drainage Area to Pipe

6/15/2021

| On-Site Areas - Good Condition | | | | | | | | | | | | | |
|--------------------------------|-------------------|----------------------|----------|-----------------------|-----------------|--------|------|------------|------|------|-------------|--------|------|
| | Total Area, SF | Total Area, acres | Wtd. 'C' | T _c , min. | Impervious, sf. | | | Grass, sf. | | | Forest, sf. | | |
| | | | | | <2% | 2-6% | >6% | <2% | 2-6% | >6% | <2% | 2-6% | >6% |
| | | | | | B | B | B | B | B | B | B | B | B |
| | | | | | 0.91 | 0.92 | 0.93 | 0.14 | 0.19 | 0.26 | 0.10 | 0.14 | 0.18 |
| Soil Type | | | | | | | | | | | | | |
| C' Value | | | | | | | | | | | | | |
| Post Area | | | | | | | | | | | | | |
| Post Area to Pipe | 1,704,882 | 39.14 | 0.294 | 32.00 | 178,611 | 75,732 | | 1,212,074 | | | 175,744 | 62,721 | |

SCS Segmental Travel Time

Summary for Post TC to Pipe

Segment 1: Overland Flow

L = 100 ft, S = .02 ft/ft, n = .4, P(2yr/24hr) = 2.99 in
Travel Time = 22.2 minutes

Segment 2: Concentrated Flow

L = 31 ft, S = .032 ft/ft, Unpaved surface
Travel Time = 0.2 minutes

Segment 3: Concentrated Flow

L = 12 ft, S = .02 ft/ft, Paved surface
Travel Time = 0.1 minutes

Segment 4: Concentrated Flow

L = 388 ft, S = .074 ft/ft, Unpaved surface
Travel Time = 1.5 minutes

Segment 5: Concentrated Flow

L = 24 ft, S = .02 ft/ft, Paved surface
Travel Time = 0.1 minutes

Segment 6: Concentrated Flow

L = 539 ft, S = .053 ft/ft, Unpaved surface
Travel Time = 2.4 minutes

Segment 7: Concentrated Flow

L = 261 ft, S = .059 ft/ft, Paved surface
Travel Time = 0.9 minutes

Segment 8: Concentrated Flow

L = 29 ft, S = .02 ft/ft, Unpaved surface
Travel Time = 0.2 minutes

Segment 9: Concentrated Flow

L = 24 ft, S = .02 ft/ft, Paved surface
Travel Time = 0.1 minutes

Segment 10: Concentrated Flow

L = 331 ft, S = .026 ft/ft, Unpaved surface
Travel Time = 2.1 minutes

Segment 11: Channel Flow

A = 1134 sq. ft, P = 1138 ft, L = 567 ft, S = .014 ft/ft, n = .04
Travel Time = 2.1 minutes

Total Travel Time = 32.00 Minutes

**Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart**

50 Year Storm in PA. Region 4 at Post to Pipe
Time of Concentration: 32 min.
Drainage Area: 39.1400 acres.
Weighted 'C' Factor: 0.2940

| Time (min) | Rainfall Incr. (inches) | Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------------------|-------------------|----------------------------------|---------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 32 | 0.21 | 0.21 | 0.40 | 4.56 |
| 64 | 0.37 | 0.58 | 0.69 | 7.96 |
| 96 | 1.66 | 2.24 | 3.11 | 35.82 |
| 128 | 0.55 | 2.79 | 1.03 | 11.88 |
| 160 | 0.29 | 3.08 | 0.55 | 6.28 |
| 192 | 0.24 | 3.33 | 0.46 | 5.26 |
| 224 | 0.19 | 3.51 | 0.35 | 4.04 |
| 256 | 0.17 | 3.68 | 0.32 | 3.64 |
| 288 | 0.15 | 3.84 | 0.29 | 3.33 |
| 320 | 0.14 | 3.98 | 0.27 | 3.07 |

At time = 800 minutes, the flow is 1.51 CFS.

**Rational Formula Hydrograph
PDT-IDF Storm Intensity Chart**

100 Year Storm in PA. Region 4 at Post to Pipe
Time of Concentration: 32 min.
Drainage Area: 39.1400 acres.
Weighted 'C' Factor: 0.2940

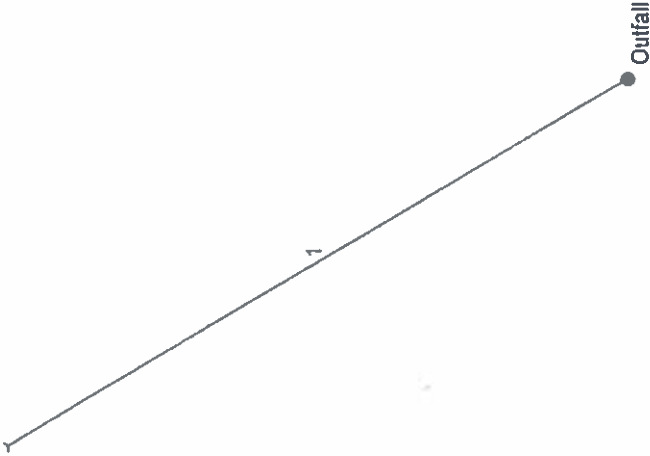
| Time (min) | Rainfall Incr. (inches) | Total (inches) | Rainfall Intensity (in/hr) | Flow (cfs) |
|---------------|-------------------------------|-------------------|----------------------------------|---------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 |
| 32 | 0.25 | 0.25 | 0.47 | 5.37 |
| 64 | 0.44 | 0.68 | 0.82 | 9.39 |
| 96 | 1.85 | 2.53 | 3.47 | 39.91 |
| 128 | 0.62 | 3.16 | 1.17 | 13.42 |
| 160 | 0.34 | 3.50 | 0.64 | 7.41 |
| 192 | 0.29 | 3.79 | 0.54 | 6.20 |
| 224 | 0.22 | 4.01 | 0.41 | 4.75 |
| 256 | 0.20 | 4.21 | 0.37 | 4.28 |
| 288 | 0.18 | 4.39 | 0.34 | 3.91 |
| 320 | 0.17 | 4.55 | 0.31 | 3.59 |

→ USED TO
SIZE PIPE

At time = 800 minutes, the flow is 1.74 CFS.

(ADDITIONAL 8.647 CFS FROM UPLAND BASINS)

Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



100 YR

| Line | To Line | Line Length (ft) | Incr. Area (ac) | Total Area (ac) | Runoff Coeff. (C) | Incr C x A | Total C x A | Inlet Time (min) | Time Conc (min) | Rnfall Int (in/hr) | Total Runoff (cfs) | Adml Flow (cfs) | Total Flow (cfs) | Capac Full (cfs) | Veloc (ft/s) | Pipe Size (in) | Pipe Slope (%) | Inv Elev Dn (ft) | Inv Elev Up (ft) | HGL Dn (ft) | HGL Up (ft) | Gnd/Rim Dn (ft) |
|------|---------|------------------|-----------------|-----------------|-------------------|------------|-------------|------------------|-----------------|--------------------|--------------------|-----------------|------------------|------------------|--------------|----------------|----------------|------------------|------------------|-------------|-------------|-----------------|
| 1 | Outfall | 470.882 | 39.14 | 39.14 | 0.29 | 11.35 | 11.35 | 32.0 | 32.0 | 4.3 | 48.42 | 8.65 | 57.07 | 62.38 | 8.59 | 36 | 0.85 | 345.00 | 349.00 | 348.02 | 351.44 | 348.75 |

→ FROM UPLAND GRANDVIEW + DEERFIELD BASINS.

36" PIPE REQUIRED UNDER COMMON DRIVE
FOR THE 100 YR STORM EVENT.

| Line | Gmd/Rim Up | Line ID |
|------|----------------|---------|
| 1 | 352.25 (ft) | PIPE-2 |

STORM WATER MANAGEMENT RECORD PLAN
FOR
GRANDVIEW MEADOWS
IN
MOUNT JOY TOWNSHIP

The project is located on the southeast corner of the intersection of Terrace Avenue (T 838) and Fairview Road (SR 4035) in Mount Joy Township, Lancaster County. The project included the construction of 78 residential units, related utilities, and implementation of a stormwater management plan.

Record plan calculations were performed on the permanent stormwater basin and the entire inlet and piping system. These calculations were based on values from actual survey data of the facilities as they were constructed in the field. Weber Surveyors, Inc provided the survey information.

The pre- versus post-development stormwater analysis was performed for the 10, 25, and 100-year frequency storms. Per the Mount Joy Township Stormwater Ordinance, the pre- vs. post-development analysis for the site utilizes the Modified Rational Method of runoff calculations for the 10, 25, and 100-year frequency storm events. Rainfall values are per said Township ordinance.

The Detention Basin "B" was re-routed using record survey data to allow comparison to the design calculations. The detention basin currently has the temporary sediment control riser in place. By assuming that the temporary riser will be removed and the permanent outlet structure will be fitted with a 10-inch diameter orifice plate, as designed, the record plan basin could be analyzed. The invert of the outlet structure was found to be at an elevation of 370.46. The emergency spillway was determined to be at an elevation of 376.90. It was also calculated that the emergency spillway was built in a manner to adequately convey the 100yr storm event. The 100-yr water surface elevation over the emergency spillway in the event of a clogged orifice is 377.49. The top of basin berm was determined to be at an elevation of 378.60, which provides a freeboard of 1.11ft. The 100-yr water surface elevation was found to be at an elevation of 374.99, well below the elevation of the emergency spillway. It appears that the basin remains as a sediment control basin. The design values for the sediment basin top of berm and emergency spillway reflect the values for the surveyed top of basin berm and emergency spillway. It has been determined that the entire basin is adequate and meets all design criteria as it was actually constructed. No further grading is required to the basin top of berm or to the basin's emergency spillway in order to allow it to function properly as a permanent stormwater basin.

The inlet and piping system was analyzed to determine if the system would adequately convey the 25-yr storm through the site. The pipe runs between Inlet 7A and the Existing Inlet 1 and Inlet 22 to EW2 were analyzed through the StormCAD program. This analysis shows the hydraulic grade line through the systems. When analyzed, it was found that the hydraulic grade lines remained below the ground elevation through these runs of storm sewer. This shows that the inlet and piping system has the ability and capacity to properly convey the 25-yr design storm through the site.

A summary of the peak rate of flows follows this narrative.

Basin B

| | | DESIGN | RECORD PLAN |
|----|--|---------|-------------|
| a. | Orifice 10" Design/ 10" Assumed Record | 370.50 | 370.60 |
| b. | Top of Grate | N/A | N/A |
| c. | Emergency Spillway | 375.10 | 376.90 |
| d. | Top of Berm | 377.00 | 378.60 |
| e. | 100-Year Surface Elevation | 375.03 | 374.99 |
| f. | 100-Year Storage Acre Ft. | 1.12784 | 1.16330 |
| g. | Basin Volume | 148366 | 213,518 |
| h. | 100-Year Peak Discharge | 4.628 | 4.637 |
| i. | 25-Year Peak Discharge | 4.380 | 4.398 |
| j. | 10-Year Peak Discharge | 4.239 | 4.243 |

→ USED
TO
CALCULATE

David Miller/ Associates, Inc.

Civil Engineering - Landscape Architecture - Land Planning

Client : GRANDVIEW MEADOWS RECORD PLAN
Project : GRANDVIEW MEADOWS RECORD PLAN
Location : MOUNT JOY TOWNSHIP, LANCASTER COUNTY

Job No.: 93-165.3
File: 1653stsum
Date: 02/08/01
By: DWM

AREA A

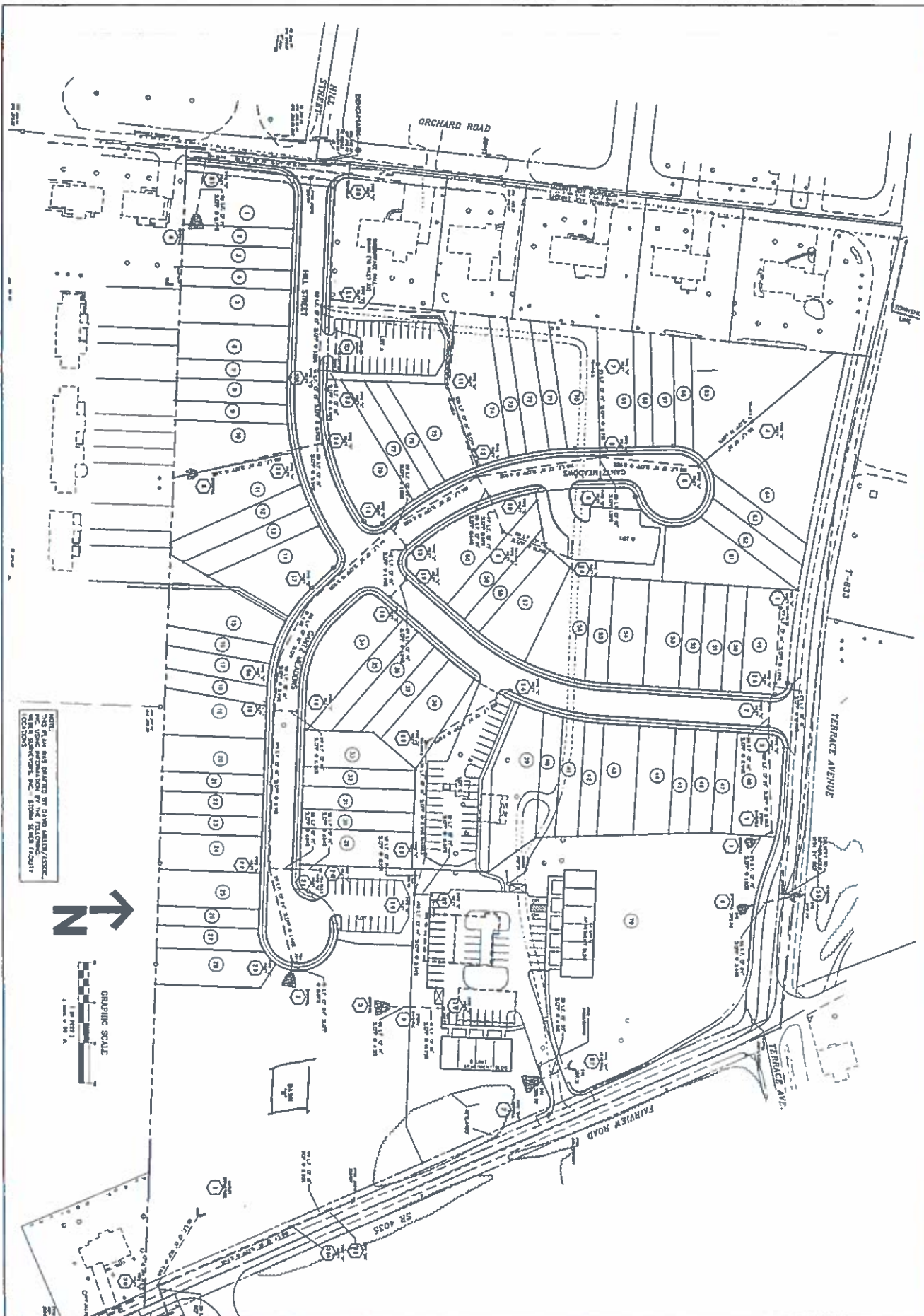
| Event (Year) | Pre-Dev. Runoff (CFS) (A) | Undetained Post-Dev. Runoff (CFS) (B) | Total Undetained Runoff (CFS) (C) |
|-----------------|--|---|---|
| 10 | 10.466 | 0.569 | 0.569 |
| 25 | 12.011 | 0.656 | 0.656 |
| 100 | 14.503 | 0.805 | 0.805 |

AREA B

| Event (Year) | Pre-Dev. Runoff (CFS) (D) | Undetained Post-Dev. Runoff (CFS) (E) | Design Discharge Basin B (CFS) (F) | Rec. Plan Discharge Basin B (CFS) (G) | Total Area B Runoff (CFS) (H=E+G) |
|-----------------|------------------------------------|---|--|---|---|
| 10 | 20.545 | 14.180 | 4.239 | 4.243 | 18.423 |
| 25 | 23.473 | 16.200 | 4.380 | 4.398 | 20.598 |
| 100 | 28.819 | 19.890 | 4.628 | 4.637 | 24.527 |

TOTAL SITE

| Event (Year) | Pre-Dev. Runoff (CFS) (I=A+D) | Undetained Post-Dev. Runoff (CFS) (J=B+E) | Rec. Plan Discharge (CFS) (G) | Total Site Runoff (CFS) (K=J+G) | Total Site Reduction (CFS) (L=K-I) |
|-----------------|--|---|--|---|--|
| 10 | 31.011 | 14.749 | 4.243 | 18.992 | 12.019 |
| 25 | 35.484 | 16.856 | 4.398 | 21.254 | 14.230 |
| 100 | 43.322 | 20.695 | 4.637 | 25.332 | 17.990 |



NOTE:
THIS PLAN WAS PREPARED BY DAVID MILLER/ASSOC.
ENGINEERS, INC. FOR THE MOUNT JOY TOWNSHIP
LOCALITY



| | | | | |
|---|--|--|---|---|
| <p>PROJECT NO. 1001</p> <p>DATE 10/1/83</p> <p>BY J. C. DORR</p> <p>CHECKED BY J. C. DORR</p> <p>SCALE 1" = 40'</p> <p>PROJECT 1001</p> | <p>STORM SEWER RECORD PLANS</p> | <p>GRANDVIEW MEADOWS</p> <p>MOUNT JOY TOWNSHIP • LANCASTER, PA.</p> | <p>GRANDVIEW MEADOWS, INC.</p> <p>C/O LARRY C. DORR</p> <p>38 KENNEL CHURCH ROAD</p> <p>MOUNT JOY, PA. 17552</p> <p>(717) 637-6000</p> | <p>DAVID MILLER/ASSOCIATES, INC.</p> <p>1001</p> |
|---|--|--|---|---|

CALCULATIONS FROM AS-BUILT SWM REPORT FOR DEERFIELD PHASE 2

Deerfield Subdivision Phase II
DCG Project Number 3660-38

DATED 11-5-2005
LAST REVISED 4-11-2006

An As-Built Survey was performed on Phase II of the Deerfield Subdivision. The following report summarizes the As-Built conditions of the Storm Water Management Basin. The design parameters were used to regenerate the inflow hydrographs. The following tables summarize and compare the As-Built conditions:

Table 1: Basin Volume

| STAGE | DESIGN (AC-FT) | AS-BUILT (AC-FT) | CHANGE (AC-FT) |
|--------|----------------|------------------|----------------|
| Bottom | (363.40) 0.000 | (363.37) 0.000 | - |
| 364 | 0.045 | 0.033 | -0.012 |
| 365 | 0.391 | 0.353 | -0.038 |
| 366 | 1.047 | 0.975 | -0.072 |
| 367 | 1.919 | 1.742 | -0.177 |
| 368 | 3.016 | 2.627 | -0.389 |

Table 2: Outlet Comparison

| STAGE | DESIGN | AS-BUILT |
|--------------------|---------------------|---------------------|
| No. 1 | 7" circ. @ 363.37 | 9.5" circ @ 363.37 |
| No. 2 | N/A | 2" circ @ 364.41 |
| Outfall Culvert | 18" @ 363.37 (1.1%) | 18" @ 363.37 (1.1%) |
| Emergency Spillway | 367.00 @ 20' | 366.98 @ 35' |

Table 3: Routing Comparison

| STORM EVENT | DESIGN (CFS) | AS-BUILT (CFS) |
|-------------|--------------|----------------|
| 10 Yr | 2.03 | 3.27 |
| 25 Yr | 2.16 | 3.47 |
| 100 Yr | 2.31 | <u>4.01</u> |

→ USED FOR CALCS

The design release rate for the basin was 4.15 cfs, as specified on Page 1 of the Storm Water Management and Erosion Control Report dated December 12, 1997 by D. C. Gohn Associates, Inc. As shown in Table 3, we are under the allowable release rate of 4.15 cfs with the 100 Yr Basin Discharge of 4.01 cfs.

A blocked orifice condition was run on the basin for the 100 Yr Storm Event. From that routing, a water surface elevation of 367.15 was obtained. The as-built top of berm elevation is 368.15 which provides the required 1.0' of freeboard. The blocked orifice water surface elevation

(367.15) is contained within the provided storm water management (SWM) easement. This is the case at the corner of the easement on Lot 61 at the southern corner of the existing dwelling. The SWM easement touches an elevation of 367.15 at its lowest spot. This was obtained by interpolating the contours.

The As-Built basin's dewatering time is 10.7 hours.

Swale A was constructed so that the swale within the associated easement has a depth of 1'. The as-built swale was checked for capacity and for stability.

The closed storm sewer system from Inlet I-7 to EW-13 was not part of the approved Final Plan. The design called for a swale to be constructed, but the Township requested the installation of the closed storm sewer system. We have analyzed this system under the as-built conditions by using the design input data for the inlets. The system had a Hydraulic Grade Line (HGL) calculation run for the 100 Yr Storm Event with the HGL starting at normal flow depth of the terminal pipe run. The normal depth is the depth of the flow in a pipe for that given flow. The water surface elevation of the Basin at the peak inflow condition was not checked. This was done because the Basin's water surface elevation at peak inflow is 365.79 which is below the normal depth elevation of 366.18. So the normal depth will dictate the worst condition.

An inlet capacity was run on the inlets of the closed system, Inlets I-7, I-9, and I-11. The inlet capacity check looked at both the weir and orifice flow of the inlet grate. All calculations on the closed system indicate that there is no bypass, 100% capture, of the 100 Yr Storm Event to the Basin.

The pipe run from I-11 to Ew-13 is a 24" SLCPP (ADS) installed at 0.44% which is less than the required minimum of 0.5%. However, this run's flow full velocity is 5.17 fps which is over the required minimum of 3 fps.

The Township's As-Built Inlet Worksheets have been prepared and included with this report. The worksheets are for the four inlets located on Deerfield Drive. Inlets I-1 and I-2 were constructed with a 1.1" sump while Inlets I-3 and I-3A were constructed with a 1.7" and 1.9" sump, respectively.

In conclusion, the Storm Water Management System that was constructed for the Deerfield Subdivision functioning within the intent of the Storm Water Management Ordinance of Mount Joy Township.

Worksheet 4. Change in Runoff Volume for 2-YR Storm Event

| | |
|-------------------------|-------------------------------------|
| Project: | LCCTC/Mount Joy Borough |
| Drainage Area: | Overall Drainage Area to LOD |
| 2-Year Rainfall: | 2.99 in |

| | | |
|-----------------------------|-------------|--------------|
| Total Site Area: | 4.26 | acres |
| Protected Site Area: | 0.00 | acres |
| Managed Area: | 4.26 | acres |

Existing Conditions:

| Cover Type/Condition | Soil Type | Area (sf) | Area (ac) | CN | S | Ia (0.2*S) | Q Runoff (In) | Runoff Volume (cf) |
|----------------------|-----------|----------------|-------------|----|------|------------|---------------|--------------------|
| Impervious | B | | - | 98 | | | | |
| Impervious | C | | - | 98 | | | | |
| Meadow | B | 185,812 | 4.27 | 58 | 7.24 | 1.45 | 0.27 | 4,190 |
| Meadow | C | | - | 71 | | | | |
| Meadow | D | | - | 78 | | | | |
| Woods | B | | - | 55 | | | | |
| Woods | C | | - | 70 | | | | |
| Woods | D | | - | 77 | | | | |
| Total | | 185,812 | 4.27 | | | | 0.27 | 4,190 |

Developed Conditions

| Cover Type/Condition | Soil Type | Area (sf) | Area (ac) | CN | S | Ia (0.2*S) | Q Runoff (In) | Runoff Volume (cf) |
|----------------------|-----------|----------------|-------------|----|------|------------|---------------|--------------------|
| Impervious | B | 16,621 | 0.38 | 98 | 0.20 | 0.04 | 2.76 | 3,820 |
| Impervious | C | | - | 98 | | | | |
| Impervious | D | | - | 98 | | | | |
| Grass | B | 169,191 | 3.88 | 61 | 6.39 | 1.28 | 0.36 | 5,095 |
| Grass | C | | - | 74 | | | | |
| Grass | D | | - | 80 | | | | |
| Agricultural | B | | - | 78 | | | | |
| Woods | B | | - | 55 | | | | |
| Woods | C | | - | 70 | | | | |
| Woods | D | | - | 77 | | | | |
| Total | | 185,812 | 4.27 | | | | 3.12 | 8,915 |

2-Year Volume Increase (ft3): 4,725

0.108 acre/feet

2-Year Volume Increase = Developed Conditions Runoff Volume - Existing Conditions Runoff Volume

1. Runoff (In) = $Q = (P - 0.2S)^2 / (P + 0.8S)$ where

P = 2-Year Rainfall (In)

S = $(1000/CN) - 10$

2. Runoff Volume CF = $Q \times \text{Area} \times 1/12$

Q = Runoff (In)

Area = Land use area (sq. ft.)

Note: Runoff Volume must be calculated for EACH land use type/condition and HSGI.

The Use of a weighted CN value for volume calculations is not acceptable.

20% of the existing impervious has been converted to meadow condition for the existing condition.



NOAA Atlas 14, Volume 2, Version 3
 Location name: Mount Joy, Pennsylvania, USA*
 Latitude: 40.115°, Longitude: -76.5089°
 Elevation: 354.57 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M. Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

PF tabular

| PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹ | | | | | | | | | | |
|--|-------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Duration | Average recurrence interval (years) | | | | | | | | | |
| | 1 | 2 | 5 | 10 | 25 | 50 | 100 | 200 | 500 | 1000 |
| 5-min | 0.322 (0.291-0.357) | 0.383 (0.346-0.426) | 0.451 (0.407-0.502) | 0.501 (0.450-0.555) | 0.560 (0.500-0.620) | 0.601 (0.536-0.665) | 0.643 (0.570-0.710) | 0.679 (0.600-0.752) | 0.723 (0.634-0.800) | 0.757 (0.659-0.838) |
| 10-min | 0.514 (0.464-0.571) | 0.613 (0.553-0.682) | 0.723 (0.651-0.803) | 0.801 (0.720-0.888) | 0.892 (0.797-0.988) | 0.958 (0.853-1.06) | 1.02 (0.906-1.13) | 1.08 (0.950-1.19) | 1.14 (1.00-1.27) | 1.19 (1.04-1.32) |
| 15-min | 0.643 (0.580-0.714) | 0.770 (0.695-0.857) | 0.914 (0.824-1.02) | 1.01 (0.911-1.12) | 1.13 (1.01-1.25) | 1.21 (1.08-1.34) | 1.29 (1.15-1.43) | 1.36 (1.20-1.50) | 1.44 (1.26-1.59) | 1.50 (1.30-1.66) |
| 30-min | 0.881 (0.796-0.978) | 1.06 (0.960-1.18) | 1.30 (1.17-1.44) | 1.47 (1.32-1.63) | 1.68 (1.50-1.85) | 1.83 (1.63-2.02) | 1.98 (1.75-2.19) | 2.12 (1.87-2.34) | 2.29 (2.01-2.54) | 2.42 (2.11-2.68) |
| 60-min | 1.10 (0.992-1.22) | 1.34 (1.20-1.49) | 1.67 (1.50-1.85) | 1.91 (1.72-2.12) | 2.23 (1.99-2.47) | 2.48 (2.21-2.74) | 2.72 (2.42-3.01) | 2.97 (2.62-3.28) | 3.29 (2.88-3.64) | 3.54 (3.08-3.92) |
| 2-hr | 1.30 (1.18-1.45) | 1.58 (1.43-1.76) | 2.00 (1.80-2.22) | 2.32 (2.09-2.58) | 2.78 (2.49-3.08) | 3.15 (2.80-3.48) | 3.55 (3.13-3.91) | 3.95 (3.47-4.36) | 4.53 (3.93-5.00) | 5.00 (4.30-5.53) |
| 3-hr | 1.42 (1.28-1.58) | 1.72 (1.56-1.92) | 2.18 (1.96-2.43) | 2.54 (2.28-2.82) | 3.03 (2.71-3.36) | 3.44 (3.06-3.81) | 3.87 (3.42-4.28) | 4.31 (3.78-4.77) | 4.95 (4.29-5.47) | 5.45 (4.68-6.04) |
| 6-hr | 1.75 (1.58-1.97) | 2.12 (1.92-2.38) | 2.68 (2.40-3.00) | 3.13 (2.80-3.50) | 3.79 (3.37-4.22) | 4.34 (3.83-4.82) | 4.94 (4.32-5.47) | 5.58 (4.84-6.18) | 6.51 (5.58-7.21) | 7.29 (6.17-8.08) |
| 12-hr | 2.14 (1.92-2.42) | 2.58 (2.32-2.93) | 3.28 (2.93-3.70) | 3.87 (3.44-4.36) | 4.74 (4.19-5.32) | 5.50 (4.81-6.15) | 6.33 (5.49-7.07) | 7.26 (6.21-8.08) | 8.65 (7.27-9.62) | 9.83 (8.15-10.9) |
| 24-hr | 2.47 (2.27-2.72) | 2.99 (2.74-3.29) | 3.82 (3.49-4.20) | 4.53 (4.13-4.97) | 5.62 (5.08-6.13) | 6.56 (5.88-7.15) | 7.62 (6.77-8.28) | 8.82 (7.72-9.55) | 10.6 (9.15-11.5) | 12.2 (10.4-13.1) |
| 2-day | 2.87 (2.63-3.17) | 3.47 (3.19-3.84) | 4.43 (4.06-4.89) | 5.24 (4.78-5.77) | 6.44 (5.84-7.05) | 7.47 (6.72-8.17) | 8.61 (7.67-9.39) | 9.85 (8.69-10.7) | 11.7 (10.2-12.8) | 13.3 (11.4-14.5) |
| 3-day | 3.04 (2.80-3.34) | 3.67 (3.38-4.03) | 4.67 (4.30-5.13) | 5.53 (5.06-6.05) | 6.79 (6.18-7.42) | 7.89 (7.12-8.60) | 9.09 (8.15-9.89) | 10.4 (9.25-11.3) | 12.4 (10.9-13.5) | 14.2 (12.2-15.4) |
| 4-day | 3.21 (2.96-3.50) | 3.87 (3.58-4.23) | 4.92 (4.54-5.37) | 5.81 (5.34-6.34) | 7.15 (6.53-7.78) | 8.30 (7.53-9.02) | 9.58 (8.63-10.4) | 11.0 (9.82-11.9) | 13.2 (11.6-14.3) | 15.0 (13.0-16.3) |
| 7-day | 3.76 (3.49-4.10) | 4.53 (4.20-4.93) | 5.70 (5.27-6.20) | 6.69 (6.17-7.27) | 8.17 (7.49-8.86) | 9.44 (8.61-10.2) | 10.8 (9.81-11.7) | 12.4 (11.1-13.4) | 14.7 (13.0-16.0) | 16.7 (14.6-18.1) |
| 10-day | 4.31 (4.02-4.66) | 5.17 (4.83-5.59) | 6.43 (5.98-6.95) | 7.48 (6.94-8.06) | 8.99 (8.29-9.68) | 10.3 (9.42-11.0) | 11.6 (10.6-12.5) | 13.1 (11.9-14.1) | 15.3 (13.6-16.4) | 17.0 (15.1-18.4) |
| 20-day | 5.88 (5.53-6.26) | 6.99 (6.58-7.45) | 8.41 (7.91-8.97) | 9.56 (8.98-10.2) | 11.2 (10.5-11.9) | 12.5 (11.6-13.3) | 13.8 (12.8-14.7) | 15.2 (14.1-16.2) | 17.2 (15.7-18.3) | 18.7 (17.0-20.0) |
| 30-day | 7.27 (6.87-7.71) | 8.59 (8.12-9.12) | 10.2 (9.61-10.8) | 11.4 (10.8-12.1) | 13.2 (12.4-14.0) | 14.6 (13.6-15.4) | 16.0 (14.9-17.0) | 17.4 (16.2-18.5) | 19.4 (17.9-20.6) | 20.9 (19.2-22.3) |
| 45-day | 9.16 (8.71-9.64) | 10.8 (10.3-11.4) | 12.6 (11.9-13.2) | 13.9 (13.2-14.6) | 15.7 (14.9-16.5) | 17.1 (16.2-17.9) | 18.4 (17.4-19.4) | 19.7 (18.6-20.8) | 21.5 (20.1-22.6) | 22.7 (21.2-24.0) |
| 60-day | 11.0 (10.5-11.5) | 12.9 (12.3-13.5) | 14.8 (14.1-15.5) | 16.3 (15.5-17.1) | 18.2 (17.3-19.1) | 19.7 (18.7-20.6) | 21.0 (19.9-22.1) | 22.3 (21.1-23.5) | 24.0 (22.6-25.3) | 25.3 (23.7-26.6) |

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical



ROLLMAX™
ROLLED EROSION CONTROL

Specification Sheet – BioNet® S75BN™ Erosion Control Blanket

DESCRIPTION

The short-term single net erosion control blanket shall be a machine-produced mat of 100% agricultural straw with a functional longevity of up to 12 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with a 100% biodegradable woven natural organic fiber net. The netting shall consist of machine directional strands formed from two intertwined yarns with across directional strands interwoven through the twisted machine strands (commonly referred to as a Leno weave) to form approximate 0.50 x 1.0 in. (1.27 x 2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for adjacent mats.

The S75BN shall meet Type 2.C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17

Material Content

| | | |
|---------|--|---------------------------------------|
| Matrix | 100% straw fiber | 0.5 lbs/sq yd (0.27 kg/sm) |
| Netting | Top side only: Leno woven 100% biodegradable natural organic fiber | 9.3 lbs/1000 sq ft (4.5 kg/100 sm) |
| Thread | Biodegradable | |

Standard Roll Size

| | |
|--------------|---------------------|
| Width | 5.67 ft (2.0 m) |
| Length | 108 ft (32.92 m) |
| Weight ± 10% | 46.4 lbs (21.05 kg) |
| Area | 80 sq yd (66.9 sm) |

Design Permissible Shear Stress

| | |
|--------------------------|---------------------|
| Unvegetated Shear Stress | 1.60 psf (76 Pa) |
| Unvegetated Velocity | 5.00 fps (1.52 m/s) |

| Index Property | Test Method | Typical |
|-----------------------|-----------------|-----------------------------|
| Thickness | ASTM D6525 | 0.29 in. (7.37 mm) |
| Resiliency | ECTC Guidelines | 81.4% |
| Water Absorbency | ASTM D1117 | 440% |
| Mass/Unit Area | ASTM D6475 | 9.12 oz/sy (310 g/sm) |
| Swell | ECTC Guidelines | 15.7% |
| Smolder Resistance | ECTC Guidelines | Yes |
| Stiffness | ASTM D1388 | 6.92 oz-in |
| Light Penetration | ASTM D6567 | 9.1% |
| Tensile Strength - MD | ASTM D6818 | 146.4 lbs/ft (2.17 kN/m) |
| Elongation - MD | ASTM D6818 | 10.9% |
| Tensile Strength - TD | ASTM D6818 | 109.2 lbs/ft (1.62 kN/m) |
| Elongation - TD | ASTM D6818 | 14.3% |
| Biomass Improvement | ASTM D7322 | 398% |

Slope Design Data: C Factors

| | Slope Gradients (S) | | |
|------------------|---------------------|-----------|-------|
| | ≤ 3:1 | 3:1 – 2:1 | ≥ 2:1 |
| Slope Length (L) | | | |
| ≤ 20 ft (6 m) | 0.029 | N/A | N/A |
| 20-50 ft | 0.11 | N/A | N/A |
| ≥ 50 ft (15.2 m) | 0.19 | N/A | N/A |

Roughness Coefficients – Unveg.

| Flow Depth | Manning's n |
|--------------------|---------------|
| ≤ 0.50 ft (0.15 m) | 0.055 |
| 0.50 – 2.0 ft | 0.055 – 0.021 |
| ≥ 2.0 ft (0.60 m) | 0.021 |



North American Green
5401 St. Wendel-Cynthiana Road
Poseyville, Indiana 47633

nagreen.com
800-772-2040

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EC_RM_X_MP05_B575BN_6.13

10

Surveyors - Engineers - Landscape Architects



July 16, 2021

Stacie Gibbs, BCO
Planning, Zoning & Code Administrator
Mount Joy Borough
21 E. Main Street
Mount Joy, PA 17552

SUBJECT: Lancaster County Career & Technology Center – Mount Joy Campus
Final Minor Subdivision Plan Modification Request Withdrawal
DCG Project Number 4343-21

Dear Ms. Gibbs:

On behalf of our client, Lancaster County Vo-Tech School Authority, we are withdrawing the following modifications based on the ARRO review letter dated July 8, 2021.

Stormwater Ordinance

1. Section 226-37.C.(1).(d).[4] – Swale Side Slopes

Sincerely,

D. C. GOHN ASSOCIATES, INC.

Donovan E. Hollway
Civil 3D Designer

Cc: File

[illegible]

BaB-Bedington Sil Loom, 35-8% Slopes
BaC-Bedington Sil Loom, 85-15% Slopes
BeD-Bedington Churnery Sil Loom, 15%-5% Slopes
Da-Durfield Sil Loom, 0%-3% Slopes
DeB-Durfield Sil Loom, 35-8% Slopes
Ha-Hagerstown Sil Loom, 0%-3% Slopes
HeB-Hagerstown Sil Loom, 35-8% Slopes
HeC-Hagerstown Silty Clay Loom, 85-15% Slopes
He-Hagerstown-Urban land complex

THE ELEVATIONS SHOWN HEREON ARE BELIEVED TO BE THE MOST ACCURATE AVAILABLE AND DO NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE POINTS SHOWN SPECIFICALLY BASED ON THE FOLLOWING SURVEY CONTROL RECORDS OF LANCASTER COUNTY AS DOCUMENT #2016-0335-9 ON OCTOBER 30, 2016.

2,978,925.14 SQ.FT. = 68,387 AC
(GROSS-INCLUDES ALL RIGHTS-OF-WAY AND EASEMENTS)
2,858,432.05 SQ.FT. = 65,621 AC.
(NET EXCLUDES ALL RIGHTS-OF-WAY AND EASEMENTS)

[illegible]

ED REFERENCE L-570345
NC. CO. TAX ACCT.: 461-96483-0-0000


dc
john
Associates, Inc.

Surveyors Engineers
Landscape Architects

P.O. Box 175
Houma, LA 70729
(713) 633-4388
FAX: 603-1998


EXISTING CONDITIONS PLAN
FOR
LANCASTER COUNTY CAREER
& TECHNOLOGY CENTER
MOUNT JOY CAMPUS
MOUNT JOY TOWNSHIP &
LANCASTER COUNTY, PENNSYLVANIA

PROJECT NO.: 4343-21
SCALE: 1"=120'
DATE: JUNE 25, 2021
DRAWN BY: GRH
CHECKED BY:
DRAWING NO.: CC-2920
SHEET NO.: 2 OF 10

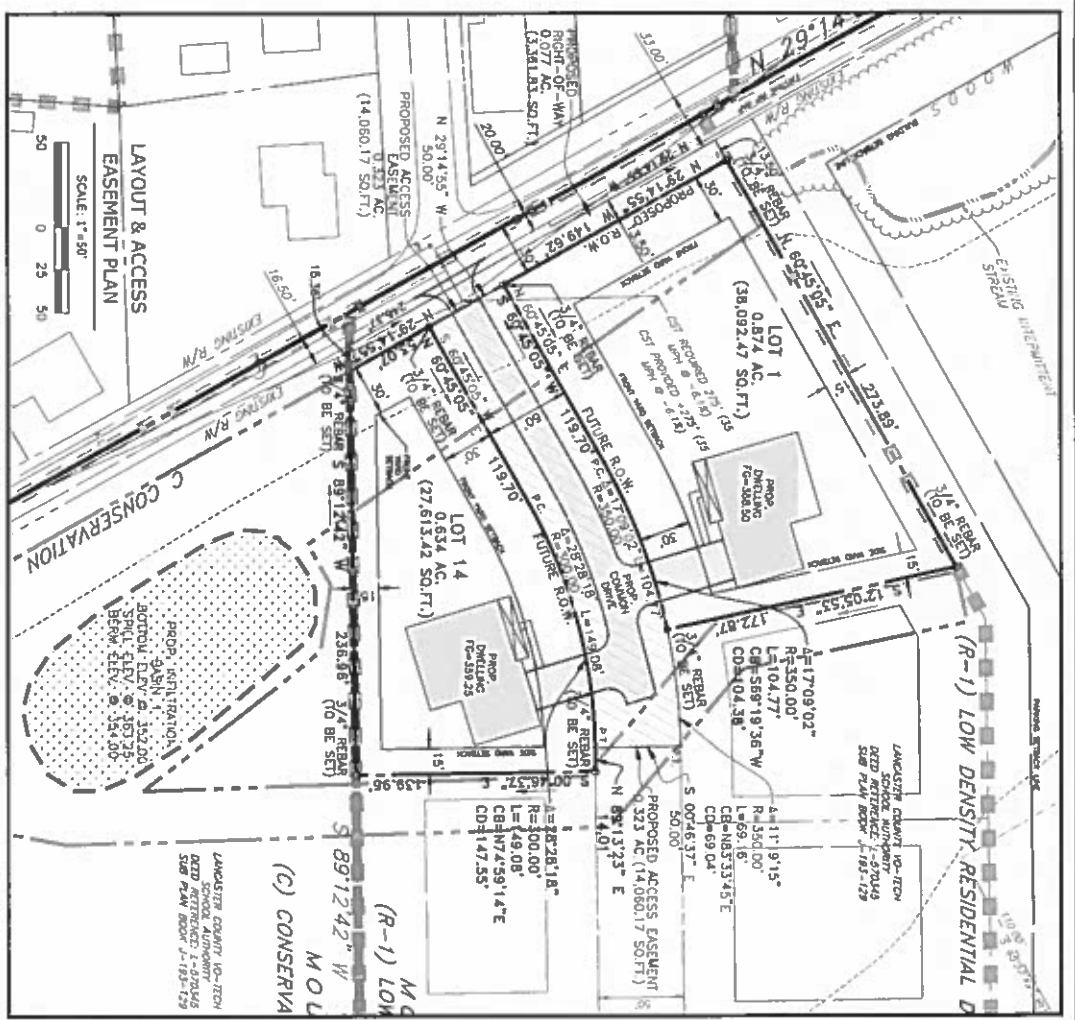
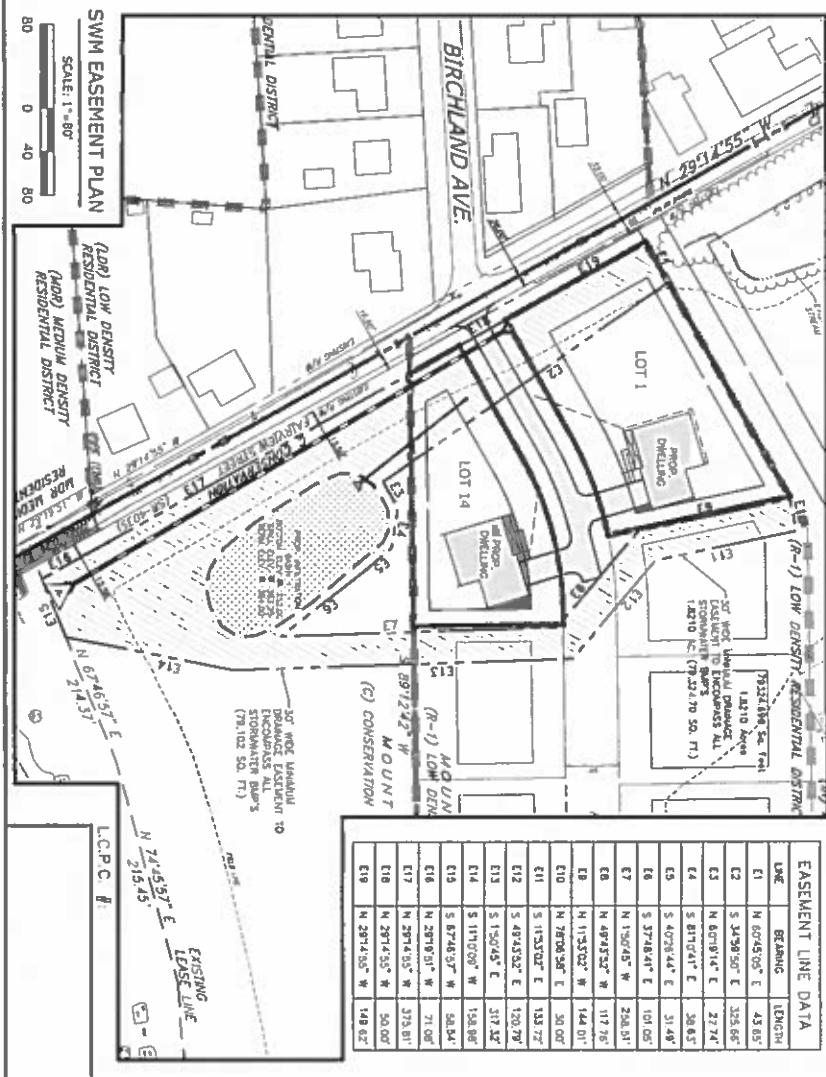


120
60
0
SCALE: 1"=120'



SCALE: AS NOTED
DATE: JUNE 25, 2021
DRAWN BY: CRH
CHECKED BY:
DRAWING NO.: CG-2920
SHEET NO.: 3 OF 10

SCALE: 1"=100'

Landscape Architects
Surveyors Engineers[illegible]



| EASEMENT LINE DATA | | | |
|--------------------|--------------|---------|--|
| LINE | BEARING | LENGTH | |
| C1 | N 62°55'30"E | 43.55' | |
| C2 | S 34°59'50"E | 325.68' | |
| C3 | N 87°01'4"E | 27.87' | |
| C4 | S 1°01'04"E | 38.85' | |
| C5 | S 4°02'04"E | 31.96' | |
| C6 | S 37°04'1"E | 161.05' | |
| C7 | N 7°00'45"E | 236.31' | |
| C8 | N 48°53'2"E | 117.16' | |
| C9 | N 17°53'2"E | 144.01' | |
| C10 | N 78°30'0"E | 30.00' | |
| C11 | S 1°33'2"E | 133.72' | |
| C12 | S 48°53'2"E | 170.72' | |
| C13 | S 5°04'5"E | 31.97' | |
| C14 | S 11°00'0"E | 158.88' | |
| C15 | S 37°06'37"E | 38.84' | |
| C16 | N 37°06'37"E | 71.08' | |
| C17 | N 28°14'5"E | 313.81' | |
| C18 | N 28°14'5"E | 50.00' | |
| C19 | N 28°14'5"E | 148.02' | |

1. THE PURPOSE OF THIS PLAN IS TO SUBSIDIZE 2 SINGLE FAMILY LOTS FROM THE EXISTING LCCIC LOT AND FOR CAMPUS PROPERTY. THE SUBSIDIZED LOTS WILL BE PART OF THE EDUCATIONAL CURRICULUM FOR THE LCCIC STUDENTS. ONCE THE LOTS ARE COMPLETE, THEY WILL BE SOLD TO PERSPECTIVE BUYERS.

2. BRICK LANE
LANCASTER COUNTY CORNING MONUMENT
NAME: 16-01-0047 D/E 5624
LOC: 262029 1417' N
E: 208.258.560 US FEET
S: 211.624130 US FEET
W: 208.258.560 US FEET
N: 211.624130 US FEET (1982)
AN SOUTH DAK (1202)
SC&L PLATON: 0.9997979
COM: ANGLE: -94.829468°
DISTANCE: 127.64 US FEET
TERREST: PLATE 04108
BRICK LANE 12
DISTANCE STATION POINT 1202
SET 1/4" REBAR 9/2" ALUMINUM CAP
LABELED T.C. COM+ SURVEY MC. =
DISTANCE: 127.64 US SURVEY FEET
BRICK MONUM (CERO 124)
3. THE SET IS SETTING AND WILL CONTINUE TO BE SETTING BY PUBLIC WATER AND PUBLIC SEWER. MONUM. MONUM. FOR
BOTH MONUMENTS IS THE PROPERTY.
4. NO PARTS WHEN THIS LAND DEVELOPMENT ARE TO BE DEDICATED TO THE TOWNSHIP OR BOROUGH, THE
OWNER OF THE LOTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF ANY IMPROVEMENTS WITHIN THE LOTS.
5. THIS PROPERTY WAS SURVEYED IN ACCORDANCE WITH ACCEPTED PRACTICES UTILIZING THE CURRENT GRID OR
DETERMINED THROUGH THE RESULTS OF A TITLE SEARCH. ALL LOTS WITH NEW DEED DISCREPANCIES
MAY BE RECTIFIED WITHIN 30 DAYS OF RECORDING OF THIS PLAN.
6. PERMANENT LOT CORNER MARKERS NOT OTHERWISE SET WILL BE PLACED UPON APPROVAL OF THIS PLAN.
7. ALL IMPROVEMENTS UTILITIES ARE SUBJECT TO THE BEST AVAILABLE INFORMATION. THE LOCATIONS
ARE APPROXIMATE AND MUST BE ADJUSTED PRIOR TO CONSTRUCTION. EXISTENCE OR ABSENCE OF ANY
ASSASSINATIONS, INC. ASSURES NO RESPONSIBILITY FOR ANY DAMAGES INCURRED AS A RESULT OF UTILITIES
ORIGINATED OR MAINTAINED THEREIN. THE CONSTRUCTION SHALL BE THE PROPERTY SET PRIOR TO FINISHING
THE LOTS. THE CONSTRUCTION SHALL BE THE PROPERTY SET PRIOR TO FINISHING THE LOTS.
8. THE INFORMATION PROVIDED IN THIS PLAN IS FOR INFORMATION ONLY. THE INFORMATION PROVIDED IN THIS PLAN IS FOR INFORMATION ONLY.
THE INFORMATION PROVIDED IN THIS PLAN IS FOR INFORMATION ONLY. THE INFORMATION PROVIDED IN THIS PLAN IS FOR INFORMATION ONLY.
THE INFORMATION PROVIDED IN THIS PLAN IS FOR INFORMATION ONLY. THE INFORMATION PROVIDED IN THIS PLAN IS FOR INFORMATION ONLY.
9. THE PROPERTY LOTS AND THE REMAINING ACREAGE ARE SUBJECT TO CERTAIN EASEMENTS TO ESTABLISH
STORMWATER DRAINAGE AND UTILITY PLACEMENT.

1. ALL CONCRETE STRUCTURES, INCLUDING WATER BODIES, TUNNELS, AND PIPES, SHALL BE REPAIRED TO ORIGINAL CONDITION, INCLUDING REINFORCEMENT, AND SHALL BE PROTECTED AGAINST FURTHER DAMAGE.

- [illegible]

1. The Contractor shall contact and invite the Owner, Mount Joy Township Officials, the Erosion and Sediment Control Plan Preparer/site engineer, Site Contractor, Mount Joy Borough Authority, Mount

- [illegible]

1. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, DIRT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR

2. PRESERVATION TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, ISOLATE PROPERTY IDENTIFICATION, RECORDING, AND PHOTOGRAPHY, SHALL BE USED TO IDENTIFY AND DOCUMENT THE EXISTING CONDITION OF THE PROPERTY AND THE LOCATION OF ALL DISCOVERED REMAINS. THE PROPERTY IDENTIFICATION AND RECORDING SHALL BE COMPLETED PRIOR TO THE START OF ANY EXCAVATION OR REMEDIATION WORK. THE PROPERTY IDENTIFICATION AND RECORDING SHALL BE COMPLETED PRIOR TO THE START OF ANY EXCAVATION OR REMEDIATION WORK. THE PROPERTY IDENTIFICATION AND RECORDING SHALL BE COMPLETED PRIOR TO THE START OF ANY EXCAVATION OR REMEDIATION WORK.
3. THE PROPERTY IDENTIFICATION AND RECORDING SHALL BE COMPLETED PRIOR TO THE START OF ANY EXCAVATION OR REMEDIATION WORK. THE PROPERTY IDENTIFICATION AND RECORDING SHALL BE COMPLETED PRIOR TO THE START OF ANY EXCAVATION OR REMEDIATION WORK. THE PROPERTY IDENTIFICATION AND RECORDING SHALL BE COMPLETED PRIOR TO THE START OF ANY EXCAVATION OR REMEDIATION WORK.
4. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE OF THE PROPERTY IDENTIFICATION AND RECORDING. THE PROPERTY IDENTIFICATION AND RECORDING SHALL BE COMPLETED PRIOR TO THE START OF ANY EXCAVATION OR REMEDIATION WORK. THE PROPERTY IDENTIFICATION AND RECORDING SHALL BE COMPLETED PRIOR TO THE START OF ANY EXCAVATION OR REMEDIATION WORK.

The reason for the on-site work is to provide the proper compaction in fill work. Erosion is slight and will be controlled by mowing and permanent seeding. Vegetated areas will be

- [illegible]

Small subject AS-BALT PLAN TO THE BOMBROOK THE AS-BALT PLAN MUST SHOW THE FINAL DESIGN SPECIFICATION FOR ALL STORMWATER MANAGEMENT FACILITIES AND BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER

- [illegible]

THE ENFORCEMENT OFFICER SHALL INSPECT ALL PHASES OF THE REGULATED ACTIVITY, INCLUDING BUT NOT LIMITED TO THE FOLLOWING PHASES:

- [illegible]

1. CONTINUATION OF CONTRACTING THE INFORMATION CONTAINED ON FORMER AND NO RECORD PRIOR TO A REQUESTED REPECTION.

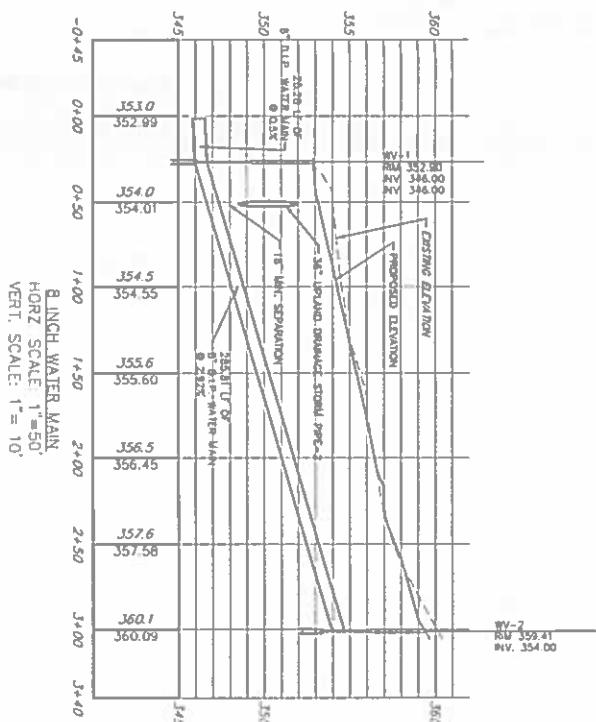
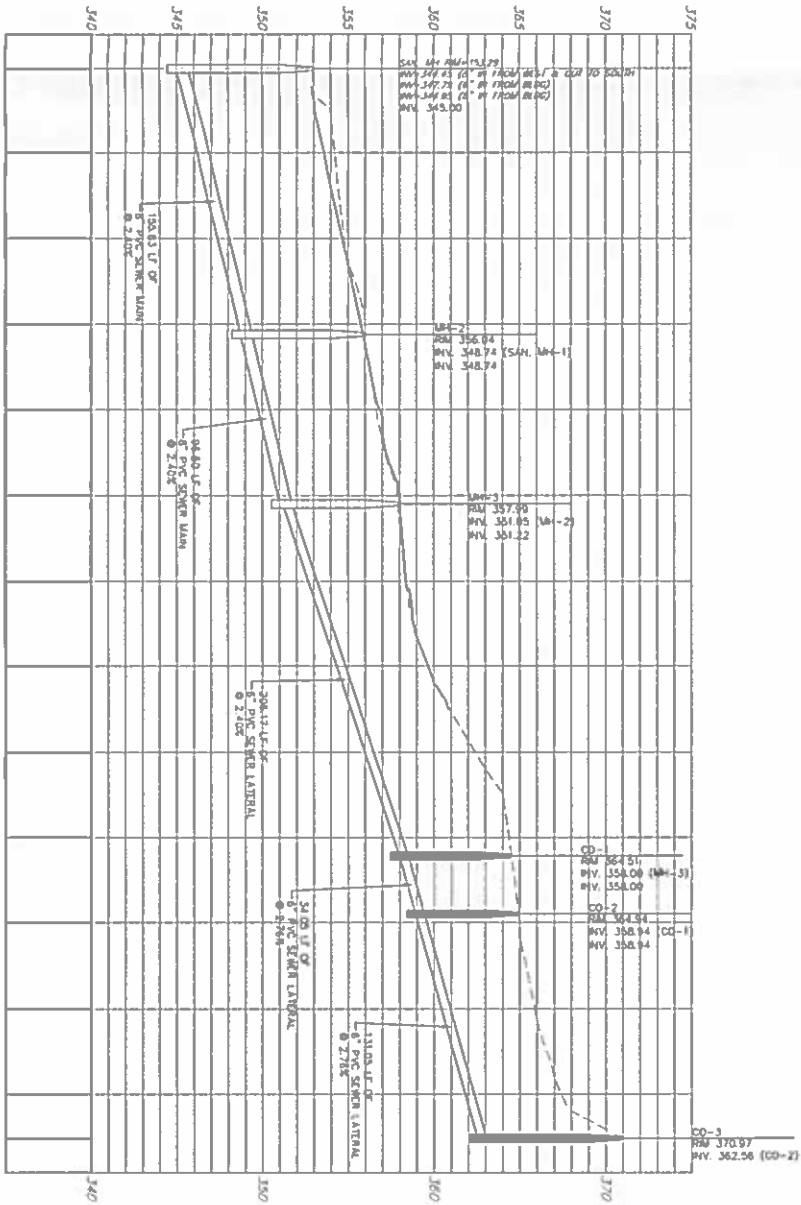
- the following information shall reflect all phases of the earth disturbance activity, including but not limited to the following phases:
- (a) the collection of preliminary site preparation, including stripping of vegetation, stockpiling of topsoil, and construction of temporary stormwater management facilities;
 - (b) the collection of final grading, final seeding to plant/cover for topsoil, permanent drainage on other site development improvements and ground covers;
 - (c) during the construction of the permanent stormwater management facilities, as such tasks as specified by the District Office;
 - (d) the collection of permanent stormwater management facilities, including establishment of ground covers and plantings;
 - (e) the collection of any final grading, vegetation control, measures on other site development work done in final compliance with the permit;

the soils is to provide the proper
Fertilizer is applied and will be controlled by
Vegetated seeders will be

- | | |
|---------------------|---|
| REVISIONS | |
| NAME: | LANCASTER COUNTY VO-TECH |
| ADDRESS: | SCHOOL AUTHORITY DRIVE WILLOW STREET, PA 17584 |
| TELEPHONE: | 717-653-3501 |
| DED REFERENCE: | ACCIT 1-5570345 |
| LANC. CO. TAX ACCT: | 461-96483-0000 |



| | | | | |
|------|-----------|-------|---------------------------------------|--------------------------|
| DATE | REVISIONS | OWNER | NAME: | LANCASTER COUNTY VO-TECH |
| | | | SCHOOL AUTHORITY | |
| | | | ADDRESS: 1730 WAYS HERR DRIVE | |
| | | | MELLOW STREET, PA 17584 | |
| | | | TELEPHONE: 717-653-3001 | |
| | | | DEED REFERENCE L-570345 | |
| | | | LANC. CO. TAX ACCT: 461-96483--0-0000 | |



UTILITY PLAN AND PROFILES
FOR
LANCASTER COUNTY CAREER
& TECHNOLOGY CENTER
MOUNT JOY CAMPUS
MOUNT JOY TOWNSHIP &
MOUNT JOY BOROUGH
LANCASTER COUNTY, PENNSYLVANIA

| |
|----------------------|
| PROJECT NO.: 4343-21 |
| SCALE: AS NOTED |
| DATE: JUNE 25, 2021 |
| DRAWN BY: GRN |
| CHECKED BY: |
| DRAWING NO.: CO-2920 |
| SHEET NO.: 8 OF 10 |

22 Mount Joy Street
Mount Joy, PA 17528-0128
Phone: 610-251-1500
Fax: 610-251-1506
dcjohn Associates, Inc.
Surveyors Engineers
Landscape Architects

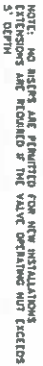
NAME: LANCASTER COUNTY VO-TECH
SCHOOL AUTHORITY
ADDRESS: 1730 HAYS HERR DRIVE
WILLOW STREET, PA 17584
TELEPHONE: 717-653-3001
DEED REFERENCE: L-570345
LANC. CO. TAX ACCT.: 461-96483-0-0000

DATE

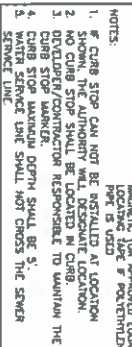
REVISIONS



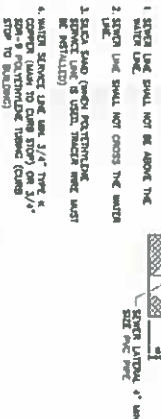
Mount Joy Borough Authority
STANDARD DETAIL - WATER SYSTEM
STANDARD FIRE HYDRANT
SETTING DETAIL

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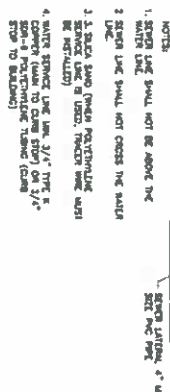
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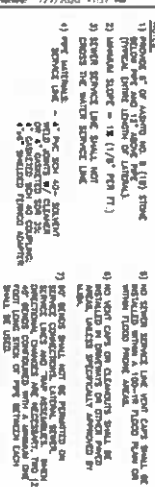
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NAME: LANCASTER COUNTY VO-TECH
SCHOOL AUTHORITY
ADDRESS: 1750 HANS HERR DRIVE
WILLOW STREET, PA 17584
TELEPHONE: 717-653-3001
CROSS REFERENCE L-570345
CIC, CO. TAX ACCT., 461-96483-0-0000

Mount Joy, PA 17552-0128
(717) 653-5308
Fax: 653-1994

4343-21
TED
25, 2021
RN
CG-2920
OF 10

ER AND TRENCH DETAILS
FOR
MASTER COUNTY CAREER
TECHNOLOGY CENTER
MOUNT JOY TOWNSHIP &
MOUNT JOY BOROUGH
CASTER COUNTY, PENNSYLVANIA



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| DATE: | AUG 7 20 |
| DETAILED: | 73 |

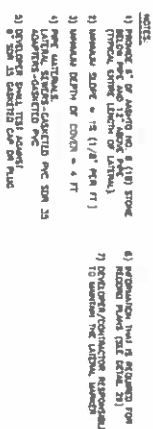
| DATE | DESCRIPTION | AMOUNT |
|---------|-------------|--------|
| JULY 21 | | |
| BALANCE | | 75 |



NRRC

| | |
|------|---|
| DATE | 7 |
|------|---|

| | |
|------|------------|
| DATE | 12/12/2023 |
| TIME | 7 |



אמרי

SEWER LATERAL INSTALLATION DETAIL

| | |
|------|-------|
| DATE | MONTH |
|------|-------|



1477C

GRAVITY SEWER CONNECTION TO EXISTING MANHOLE DETAIL

17



APRIL

TYPICAL TRAP ASSEMBLY

DATE: JULY 2



MARC

PRECAST MANHOLE DETAIL
8" THRU 24" SEWERS

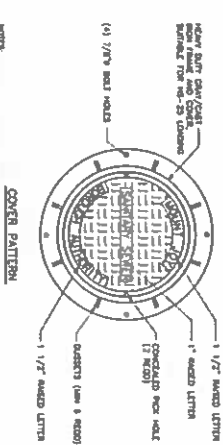
2007 22



APRIL

VENTS & CLEANOUTS IN PAVED AREA DETAIL

| | |
|---------|---------|
| DATE: | JULY 20 |
| DETERM: | 30 |

**AURO**

STANDARD MANHOLE FRAME & COVER DETAIL

| | |
|----------|--------|
| DATE | MAY 20 |
| RECEIVED | 17 |

EROSION & SEDIMENTATION CONTROL REPORT

For

LANCASTER COUNTY CAREER & TECHNOLOGY CENTER

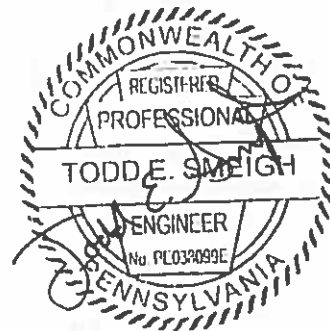
FINAL MINOR SUBDIVISION PLAN

DC Gohn Project No.: 4343-21

Mount Joy Township & Mount Joy Borough
Lancaster County, PA

June 30, 2021

REVISIONS



Surveyors - Engineers - Landscape Architects

**EROSION AND SEDIMENT CONTROL NARRATIVE
FOR
LANCASTER COUNTY CAREER & TECHNOLOGY CENTER
in
MOUNT JOY BOROUGH AND MOUNT JOY TOWNSHIP, LANCASTER
COUNTY, PA**

This narrative is to accompany the Erosion and Sediment Control Plans for LCCTC prepared by DC Gohn Associates, Project No. 4343-21, Sheets 1-5. Sheets 1-10 of the Final Minor Subdivision Plan for LCCTC shall also be considered part of the said Erosion and Sediment Control Plan.

PAST, PRESENT, AND PROPOSED LAND USES

The past land use for the last 50 years is institutional/agricultural. The present land use for the last 5 years has been institutional/agricultural. The proposed land use for the 2 subdivided lots is residential. The remaining lands is to remain the same as the present.

EROSION AND SEDIMENT PLAN PLANNING AND DESIGN

The erosion and sediment control plans minimize extent and duration of earth disturbance in the construction sequence by noting that all areas of disturbance must be stabilized immediately including the installation of any erosion control matting and other erosion control measures.

Erosion and sediment control measures noted on the drawings are designed to protect the existing drainage features and vegetation. Perimeter BMP's are proposed to further protect the existing features of the site.

SURFACE WATER CLASSIFICATIONS

The project site drains to the south to the existing channel located within Rotary Park. The channel drains east to Little Chickies Creek. The designated use of Little Chickies Creek is TSF, MF (Trout Stocking Fishery – Migratory Fishery).

EROSION AND SEDIMENT CONTROL BMP'S

The erosion and sediment control BMP's proposed to control erosion are filtersoxx, rock construction entrance, rock filter, temporary and permanent seeding, rip rap aprons, and erosion control matting, & orange construction fencing.

PROPOSED IMPROVEMENTS

The Final Minor Subdivision Plan proposes a 2 new residential lots. Each lot contains a new dwelling. The two separate lots will share access to a common drive. Both lots will drain south to a proposed stormwater management facility within Mount Joy Borough. The subject property has a total site area of 65.621 acres.

CRITICAL STAGES OF IMPLEMENTATION OF BMP'S

During installation of the proposed infiltration basin, the contractor must contact DC Gohn Associates to coordinate the inspection of the construction and installation of the proposed BMP's.

SOILS

The soils located on the project site, as defined by the Natural Resources Conservation Service, are as follows:

| MAP SYMBOL | SOIL NAME | HYDRO. SOIL GROUP |
|------------|-----------------------------------|-------------------|
| HaB | Hagerstown silt loam, 3-8% slopes | B |

TABLE 1: BUILDING SITE DEVELOPMENT

| Soil Name | Shallow Excavations | Dwellings w/o Basements | Dwellings w/ Basements | Small Commercial Buildings | Local Roads and Streets | Lawns and Landscaping |
|-----------|-------------------------------------|-------------------------|---------------------------------------|-------------------------------|-------------------------|------------------------|
| HaB | Moderate: depth to rock, too clayey | Moderate: shrink-swell | Moderate: depth to rock, shrink-swell | Moderate: shrink-swell, slope | Severe: low strength | Moderate: large stones |

TABLE 2: CONSTRUCTION MATERIALS

| Soil Name | Roadfill | Sand | Gravel | Topsoil |
|-----------|--------------------|--------------------------|--------------------------|---------------------|
| HaB | Poor: low strength | Improbable: excess fines | Improbable: excess fines | Poor: small stones. |

TABLE 3: WATER MANAGEMENT

| Soils Name | Limitations For: | | | Features Affecting: | | |
|------------|--|---------------------------|-----------------------------|---------------------|----------------------|-------------------|
| | Pond Reservoir Areas | Embankments, Dike, Levees | Aquifer-fed Excavated Ponds | Drainage | Terrace & Diversions | Grassed Waterways |
| HaB | Moderate: seepage, depth to rock, slope. | Severe: hard to pack. | Severe: no water. | Deep to Water | Favorable | Favorable |

Soil Resolutions

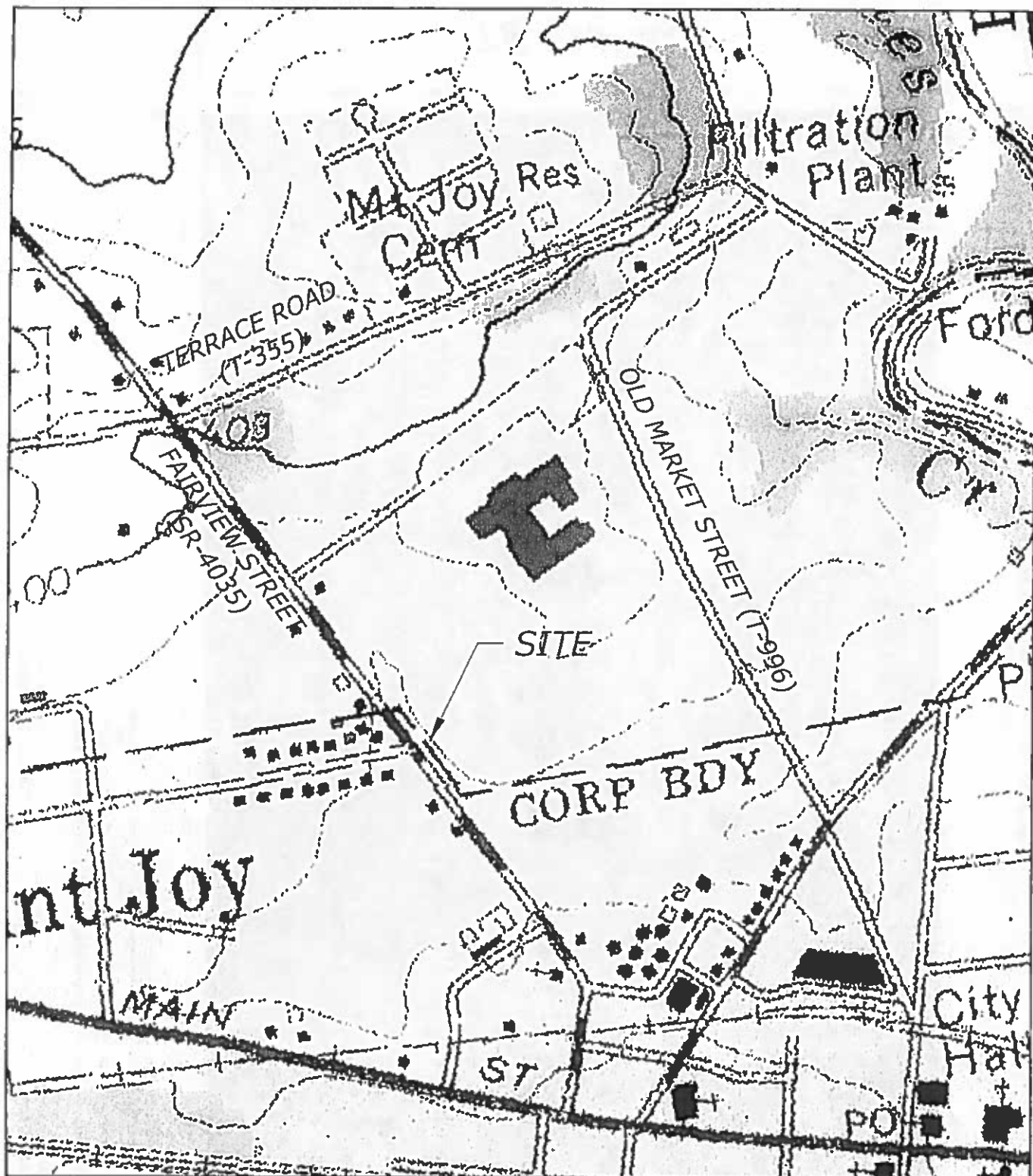
The resolution for the soils is to provide proper compaction in all fill areas. Erosion will be controlled by matting, rock filter, rip rap aprons and filter socks.

Thermal Impacts

The thermal impacts during construction were minimized by the filtersox, the rock filter dam, and the erosion control matting.

The thermal impacts of the project were minimized using the stormwater facilities to treat the first flush of stormwater.

There are no naturally occurring geological formations or soil conditions that have the potential to cause pollution during or after earth disturbance activities.



COLUMBIA WEST USGS MAP
FOR
LCCTC
432 OLD MARKET STREET
MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA

FIGURE-1

PROJECT NO. 4343-21
DATE: JUNE 17, 2001
DRAWN BY: DEN
CHECKED BY: SAC

SCALE: 1"=100'

dc gohn
Associates, Inc.

Surveyors - Engineers - Landscape
Architects

37 Mount Joy Street
PO Box 175
Mount Joy, PA 17552
Ph: (717) 653-5300
www.dcgohn.com

OWNER

NAME: LANCASTER COUNTY VO-TECH
SCHOOL AUTHORITY
ADDRESS: 1730 HANS HERR DRIVE
WILLOW STREET, PA 17584
TELEPHONE: 717-653-3001

DEED REFERENCE: L-570345
LANC. CO. TAX ACCT.: 461-98483-0-0000

FIGURE - 2



Hydrologic Soil Group—Lancaster County, Pennsylvania
(LCCTC Soils Map)

Map Scale: 1:10,500 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge box: UTM Zone 18N WGS84

Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

Figure 3 – Plan Preparer Qualifications
DONOVAN E. HOLLWAY

EDUCATION

B.S.L.A, Landscape Architecture, West Virginia University

EXPERIENCE

Mr. Hollway has over 6 years' experience in the stormwater management & subdivision/land development planning process. His responsibilities include stormwater and infiltration design, stormwater conveyance design, erosion and sediment control design, site grading, and application/report writing. He is also knowledgeable in landscaping design and 3D Modeling.

Mr. Hollway is well versed in project permitting and managing a project through the approval process. He has collaborated with architects, traffic engineers, environmental consultants, geologists, and other design professionals on numerous projects. He has met with clients and sub-consultants to review project information to develop design solutions. He has also attended meetings with contractors and municipal engineers' onsite to develop solutions during the construction phases.

PROJECT EXPERIENCE

Mr. Hollway has worked on a multitude of projects including subdivisions of all types, multiple industrial warehouses, churches, residential, and commercial properties. He has developed sketch plans and final plans to present to the associated municipality along with the supporting documentation necessary.

Mr. Hollway provided site and storm water design on the significant expansion of Carel USA, an industrial warehouse located in Manheim Borough, Lancaster County. The project included working closely with the design team including the architect, construction manager, borough engineer, and professional geologist to develop a stormwater design solution for the new proposed buildings and parking lot expansions which will occur in multiple phases. This particular site addressed borough regulations for volume control, as well as LCCD/PA DEP requirements to address water quality.

Mr. Hollway provided stormwater management & grading design on the United Churches project within Elizabethtown Borough, Lancaster County. The project involved collaborating with several engineers, architect, borough officials, geologists, and surveyors to construct a new Social Services Building. The project also included additional parking area, a playground, and associated stormwater management facilities. The project was designed to maximize efficiency of the proposed site through the layout using multiple stormwater facilities. Mr. Hollway was involved in the application/permitting process, as well as obtaining the necessary modifications & variances that were required from the Borough to advance this project through the approval process.

Appendices

Appendix A Filter Socks

STANDARD E&S WORKSHEET #1

Compost Filter Socks

PROJECT NAME: LCCTC

LOCATION: 432 OLD MARKET STREET

PREPARED BY: DEH

DATE: 6-30-21

CHECKED BY:

DATE:

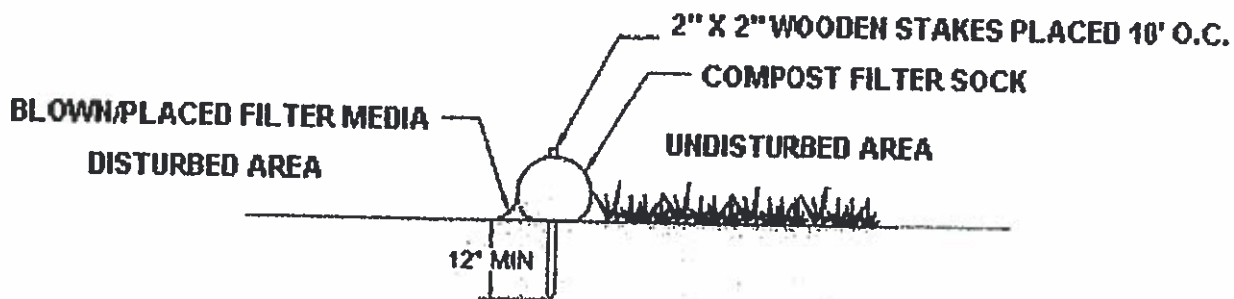
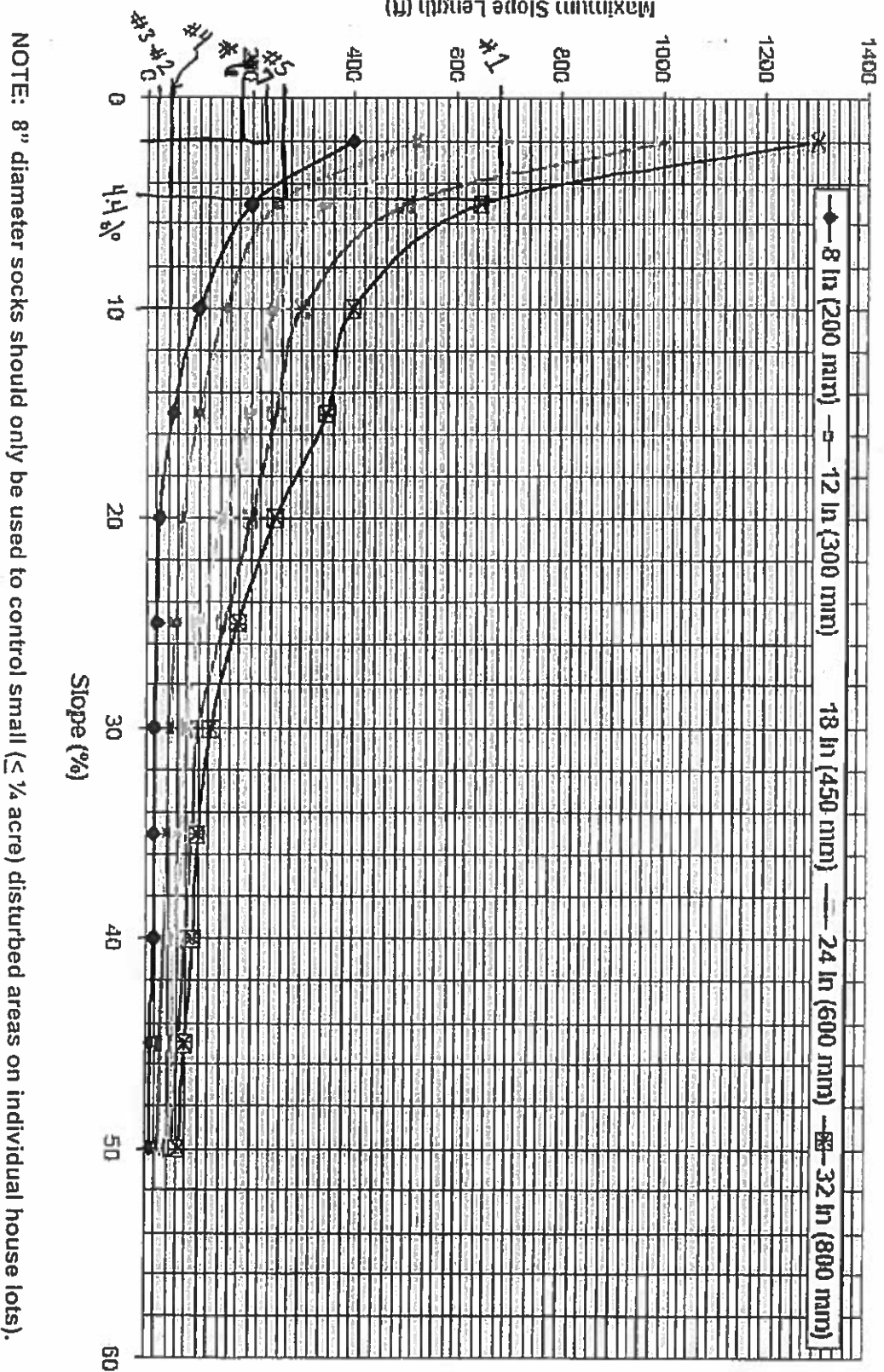
[illegible]

FIGURE 4.2
MAXIMUM PERMISSIBLE SLOPE LENGTH ABOVE COMPOST FILTER SOCKS



Adapted from Filtrexx

Appendix B ES Matting



ROLLMAX™
ROLLED EROSION CONTROL

Specification Sheet – BioNet® S75BN™ Erosion Control Blanket

DESCRIPTION

The short-term single net erosion control blanket shall be a machine-produced mat of 100% agricultural straw with a functional longevity of up to 12 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with a 100% biodegradable woven natural organic fiber net. The netting shall consist of machine directional strands formed from two intertwined yarns with across directional strands interwoven through the twisted machine strands (commonly referred to as a Leno weave) to form approximate 0.50 x 1.0 in. (1.27 x 2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for adjacent mats.

The S75BN shall meet Type 2.C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-D3 Section 713.17

Material Content

| | | |
|---------|--|---------------------------------------|
| Matrix | 100% straw fiber | 0.5 lbs/sq yd (0.27 kg/sm) |
| Netting | Top side only: Leno woven 100% biodegradable natural organic fiber | 9.3 lbs/1000 sq ft (4.5 kg/100 sm) |
| Thread | Biodegradable | |

Standard Roll Size

| | |
|--------------|---------------------|
| Width | 6.67 ft (2.0 m) |
| Length | 108 ft (32.92 m) |
| Weight ± 10% | 46.4 lbs (21.05 kg) |
| Area | 80 sq yd (66.9 sm) |

Design Permissible Shear Stress

| | |
|--------------------------|---------------------|
| Unvegetated Shear Stress | 1.60 psf (76.3 Pa) |
| Unvegetated Velocity | 5.00 fps (1.52 m/s) |

| Index Property | Test Method | Typical |
|-----------------------|-----------------|-----------------------------------|
| Thickness | ASTM D6525 | 0.29 in. (7.37 mm) |
| Permeability | ECTC Guidelines | 87.4% |
| Water Absorbency | ASTM D1117 | 440% |
| Mass/Unit Area | ASTM D6475 | 9.3 lbs/1000 sq ft (4.5 kg/sm) |
| Swell | ECTC Guidelines | 15.7% |
| Smolder Resistance | ECTC Guidelines | Yes |
| Stiffness | ASTM D1388 | 6.92 oz-in |
| Light Penetration | ASTM D6567 | 9.1% |
| Tensile Strength - MD | ASTM D6818 | 145.4 lbs/ft (2.17 kN/m) |
| Elongation - MD | ASTM D6818 | 10.9% |
| Tensile Strength - TD | ASTM D6818 | 109.2 lbs/ft (1.62 kN/m) |
| Elongation - TD | ASTM D6818 | 14.3% |
| Biomass Improvement | ASTM D7322 | 398% |

Slope Design Data: C Factors

| | Slope Gradient (S) | | |
|------------------|--------------------|-----------|-------|
| | ≤ 3:1 | 3:1 – 2:1 | ≥ 2:1 |
| Slope Length (L) | | | |
| ≤ 20 ft (6 m) | 0.029 | N/A | N/A |
| 20-50 ft | 0.11 | N/A | N/A |
| ≥ 50 ft (15.2 m) | 0.09 | N/A | N/A |

Roughness Coefficients – Unveg.

| Flow Depth | Manning's n |
|--------------------|---------------|
| ≤ 0.50 ft (0.15 m) | 0.055 |
| 0.50 – 2.0 ft | 0.055 – 0.021 |
| ≥ 2.0 ft (0.60 m) | 0.021 |



**NORTH
AMERICAN
GREEN**

North American Green
5401 St. Wendel-Cynthiana Road
Poseyville, Indiana 47633

nagreen.com
800-772-2040

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ECT_RM_X_MPDS_B575BN_6.13

Appendix C
OFFSITE CHANNEL DISCHARGE

Channel Design Data

Project Name: **LCCTC OFFSITE DISCHARGE CHANNEL**

Project Number: **4343-21**

Prepared By: **DEH**

Checked By: **TES**

Date: **6/15/2021**

Date: _____

Bare Earth (Table 4.7a)

Silt Loam, noncolloidal ▼

Rotary Park Swale A.1.

Type of Channel

Parabolic ▼

Manheim Street Swale A.2.

Type of Channel

Parabolic ▼

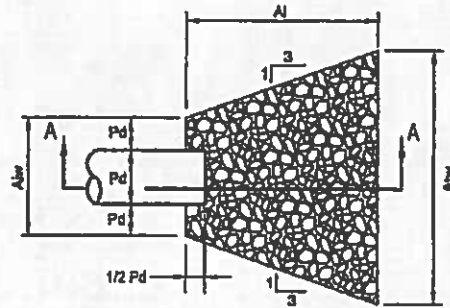
| Design Criteria | Bare Earth | Lining NAG S75 ▼ | Grass (Vel) | Grass (Cap) | Bare Earth | Lining NAG S75 ▼ | Grass (Vel) | Grass (Cap) |
|-------------------------------------|-----------------------|---------------------|----------------|----------------|-----------------------|---------------------|----------------|----------------|
| Installation Depth, ft | 7.00 | | 7.00 | 7.00 | 3.00 | | 3.00 | 3.00 |
| Manning's 'n' Value | 0.020 | | 0.030 | 0.030 | 0.020 | | 0.030 | 0.030 |
| Bottom Slope, ft/ft | 0.005 | | 0.005 | 0.005 | 0.015 | | 0.015 | 0.015 |
| Right Slope, _H: 1V | 3.0 | | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Left Slope, _H: 1V | 3.0 | | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Top Width (Parabolic Only) | 35.0 | | 35.0 | 35.0 | 50.0 | | 50.0 | 50.0 |
| Bottom Width (Other), ft | | | | | | | | |
| Flow, cfs | 7.91 | | 7.91 | 7.91 | 7.91 | | 7.91 | 7.91 |
| Length of Channel, ft | 1267 | | 1267 | 1267 | 1573 | | 1573 | 1573 |
| Allowable Shear, lb/ft ² | | | | | | | | |
| Bottom Width Depth Ratio | - | - | - | - | - | - | - | - |
| 12:1 Maximum | | Stable | | | | Stable | | |
| Lining Quantity, yd ² | | 0.0 | | | | 0.0 | | |
| Design Comments | 100 year design storm | | | | 100 year design storm | | | |
| Design Capacity | | | | | | | | |
| Flow Depth, ft | | | 0.61 | 0.61 | | | 0.33 | 0.33 |
| Top Width, ft | | | 10.30 | 10.30 | | | 16.51 | 16.51 |
| Area, ft ² | | | 4.16 | 4.16 | | | 3.60 | 3.60 |
| Wetted Perimeter, ft | | | 10.39 | 10.39 | | | 16.53 | 16.53 |
| Hydraulic Radius, ft | | | 0.40 | 0.40 | | | 0.22 | 0.22 |
| Hydraulic Depth, ft | | | 0.40 | 0.40 | | | 0.22 | 0.22 |
| Froude Number | | | 0.53 | 0.53 | | | 0.83 | 0.83 |
| Velocity, ft/s | | | 1.90 | 1.90 | | | 2.20 | 2.20 |
| Velocity Head, ft | | | 0.06 | 0.06 | | | 0.07 | 0.07 |
| Total Energy, ft | | | 0.66 | 0.66 | | | 0.40 | 0.40 |
| Critical Slope | | | 0.018 | 0.018 | | | 0.022 | 0.022 |
| Required Freeboard, ft | | | 0.50 | 0.50 | | | 0.50 | 0.50 |
| Design Depth, ft | | | 1.1 | 1.1 | | | 0.8 | 0.8 |
| Maximum Capacity | | | | | | | | |
| Flow, ft ³ /s | | | 1501 | 1501 | | | 972 | 972 |
| Flow Depth, ft | | | 7.00 | 7.00 | | | 3.00 | 3.00 |
| Area, ft ² | | | 163.33 | 163.33 | | | 100.95 | 100.95 |
| Top Width, ft | | | 35.00 | 35.00 | | | 50.00 | 50.00 |
| Wetted Perimeter, ft | | | 38.44 | 38.44 | | | 50.48 | 50.48 |
| Hydraulic Radius, ft | | | 4.25 | 4.25 | | | 2.00 | 2.00 |
| Hydraulic Depth, ft | | | 4.67 | 4.67 | | | 2.02 | 2.02 |
| Froude Number | | | 0.61 | 0.61 | | | 0.98 | 0.98 |
| Velocity, ft/s | | | 9.19 | 9.19 | | | 9.63 | 9.63 |
| Velocity Head, ft | | | 1.31 | 1.31 | | | 1.44 | 1.44 |
| Total Energy, ft | | | 8.31 | 8.31 | | | 4.44 | 4.44 |

10 yr →

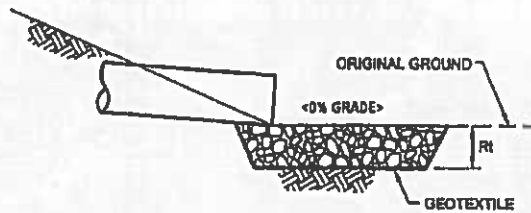
Appendix D RIPRAP

STANDARD E&S WORKSHEET # 20
Riprap Apron Outlet Protection

PROJECT NAME: LCCTC
 LOCATION: MT Joy CAMPUS
 PREPARED BY: DEIA DATE: 6/15/21
 CHECKED BY: _____ DATE: _____



PLAN VIEW



SECTION A - A

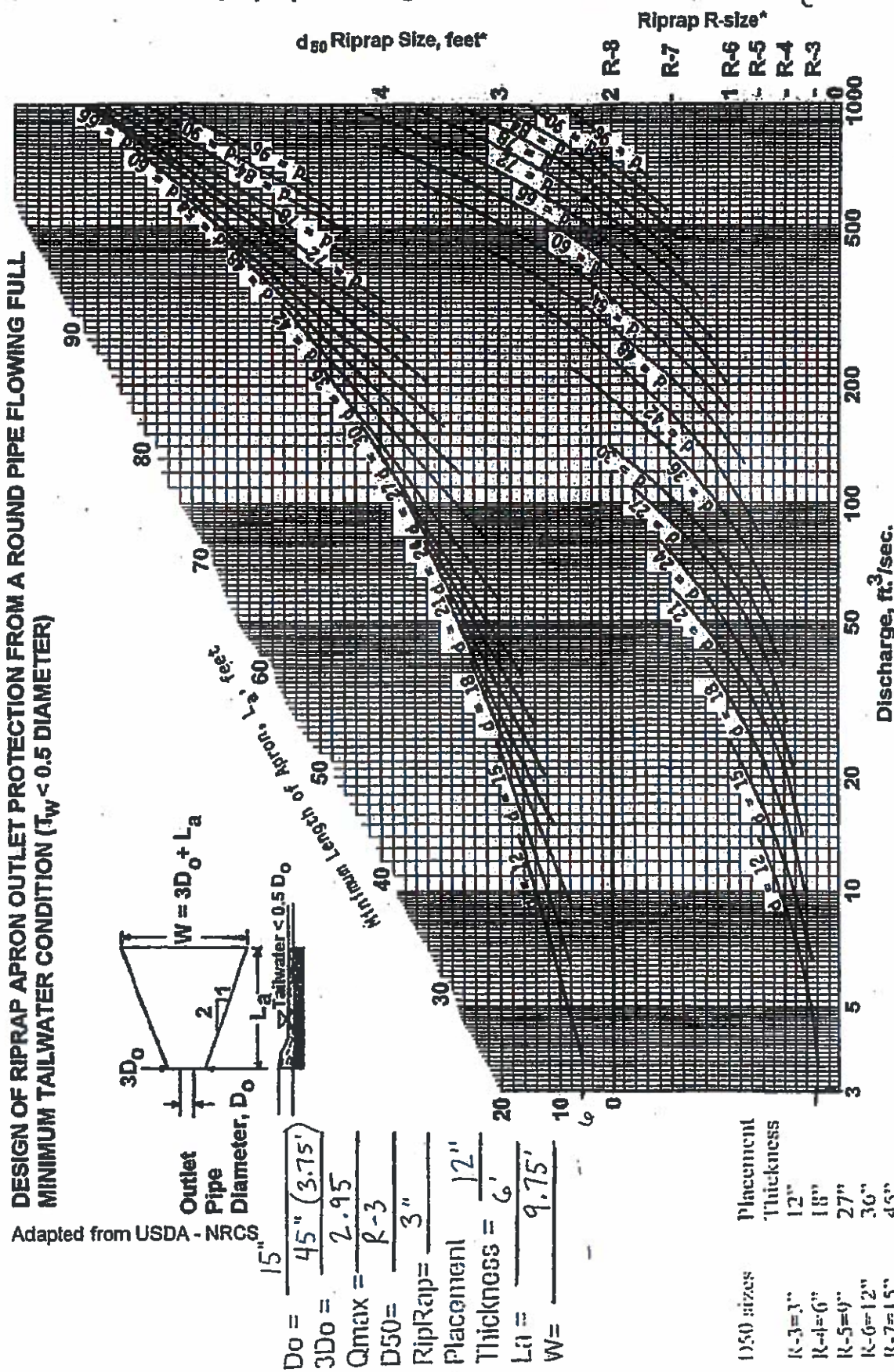
| NO. | PIPE DIA. Do (in.) | TAIL WATER COND. (Max or Min) | MAN. "n" FOR PIPE | PIPE SLOPE (FT/FT) | Q (CFS) | V* (FPS) | RIPRAP SIZE | Rt (in) | AI (ft) | Alw (ft) | Atw (ft) |
|-----|--------------------------|----------------------------------|----------------------|-----------------------|------------|-------------|-------------|------------|------------|-------------|-------------|
| 1 | 15 | MIN | .013 | .015 | 2.95 | 4.25 | R-3 | 12" | 6' | 3.75' | 9.75' |
| 2 | 36 | MIN | .013 | .0078 | 57.06 | 8.59 | R-5 | 27" | 20' | 9' | 29' |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

*:The anticipated velocity (V) should not exceed the maximum permissible shown in Table 6.6 for the proposed riprap protection. Adjust for less than full pipe flow. Use Manning's equation to calculate velocity for pipe slopes ≥ 0.05 ft/ft.

PIPE-1

FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition

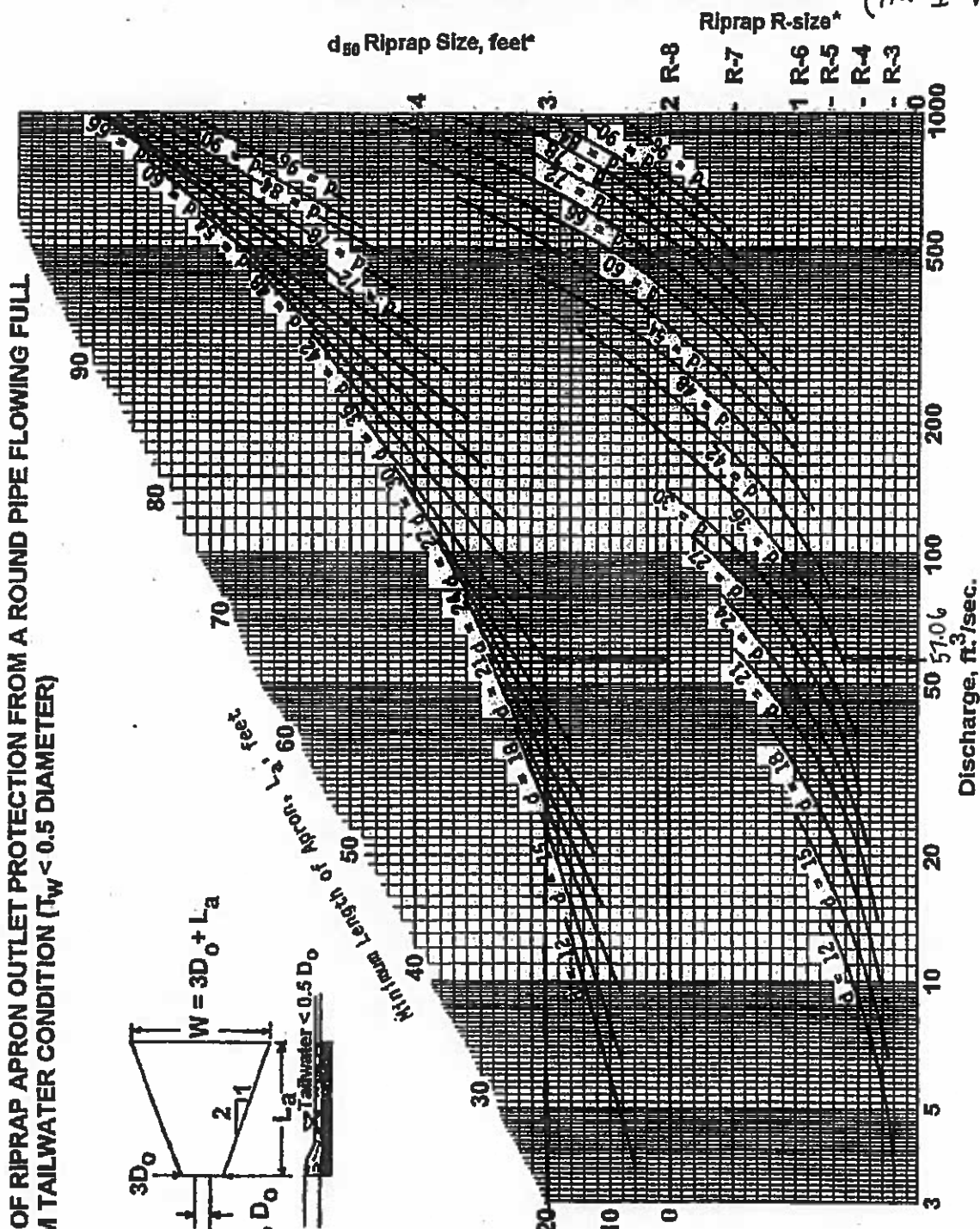
PIPE-1
(FES-1 to FES-2)



* For discharge velocities exceeding Maximum Allowable for Riprap Indicated, increase d₅₀ stone size and/or provide velocity reduction device.

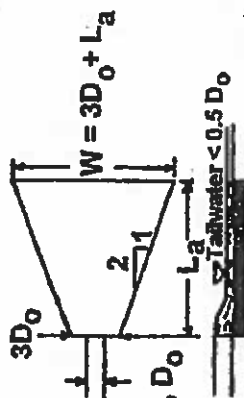
PIPE-2

FIGURE 9.3
Riprap Apron Design, Minimum Tailwater Condition (HW-1 to EW-1)



DESIGN OF RIPRAP APRON OUTLET PROTECTION FROM A ROUND PIPE FLOWING FULL
MINIMUM TAILWATER CONDITION ($T_w < 0.5$ DIAMETER)

Adapted from USDA - NRCS



Outlet
Pipe
Diameter, D_o

$36'' (3')$

$D_o =$

$3D_o =$

$Q_{max} =$

$D50 =$

RipRap =

Placement $27''$

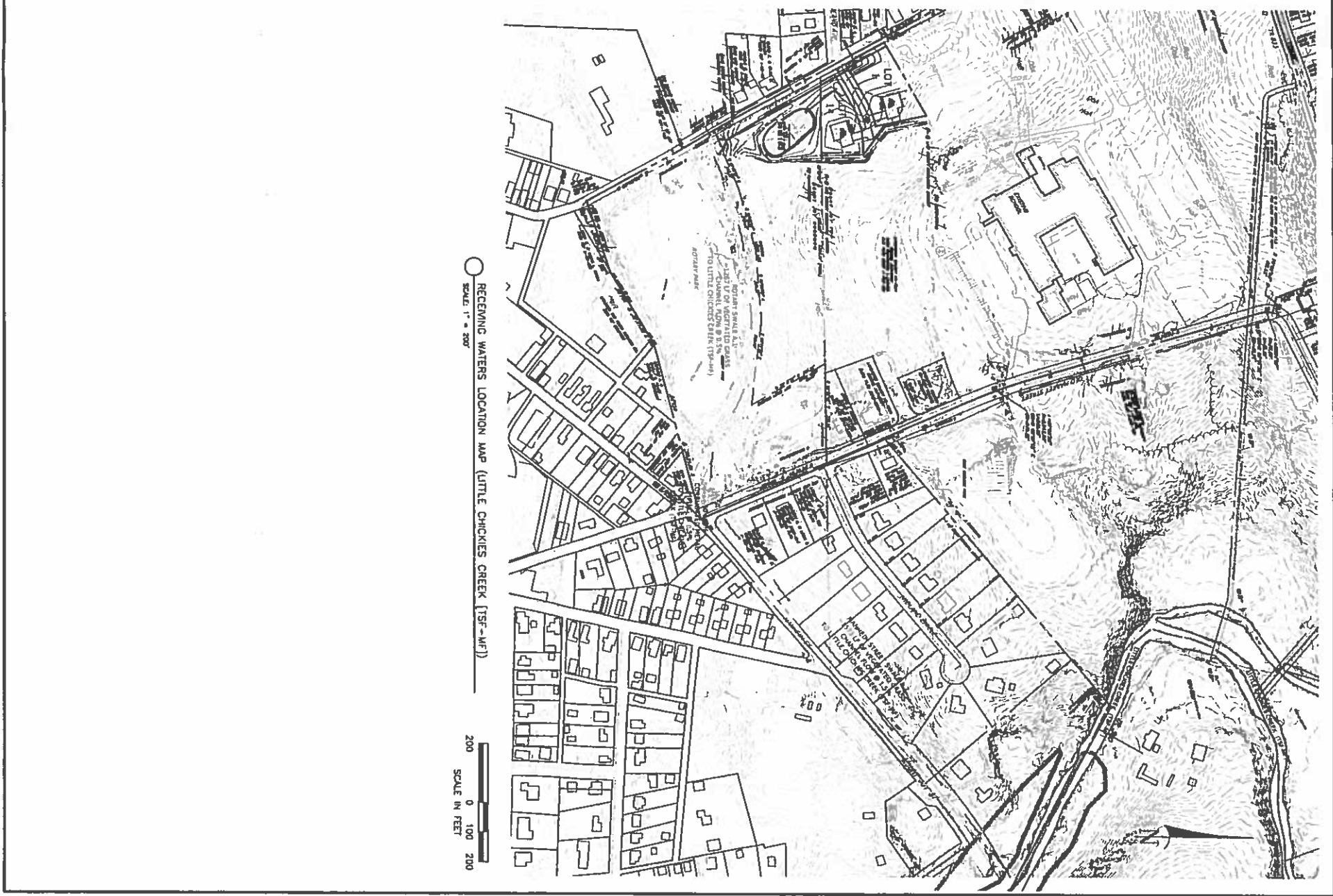
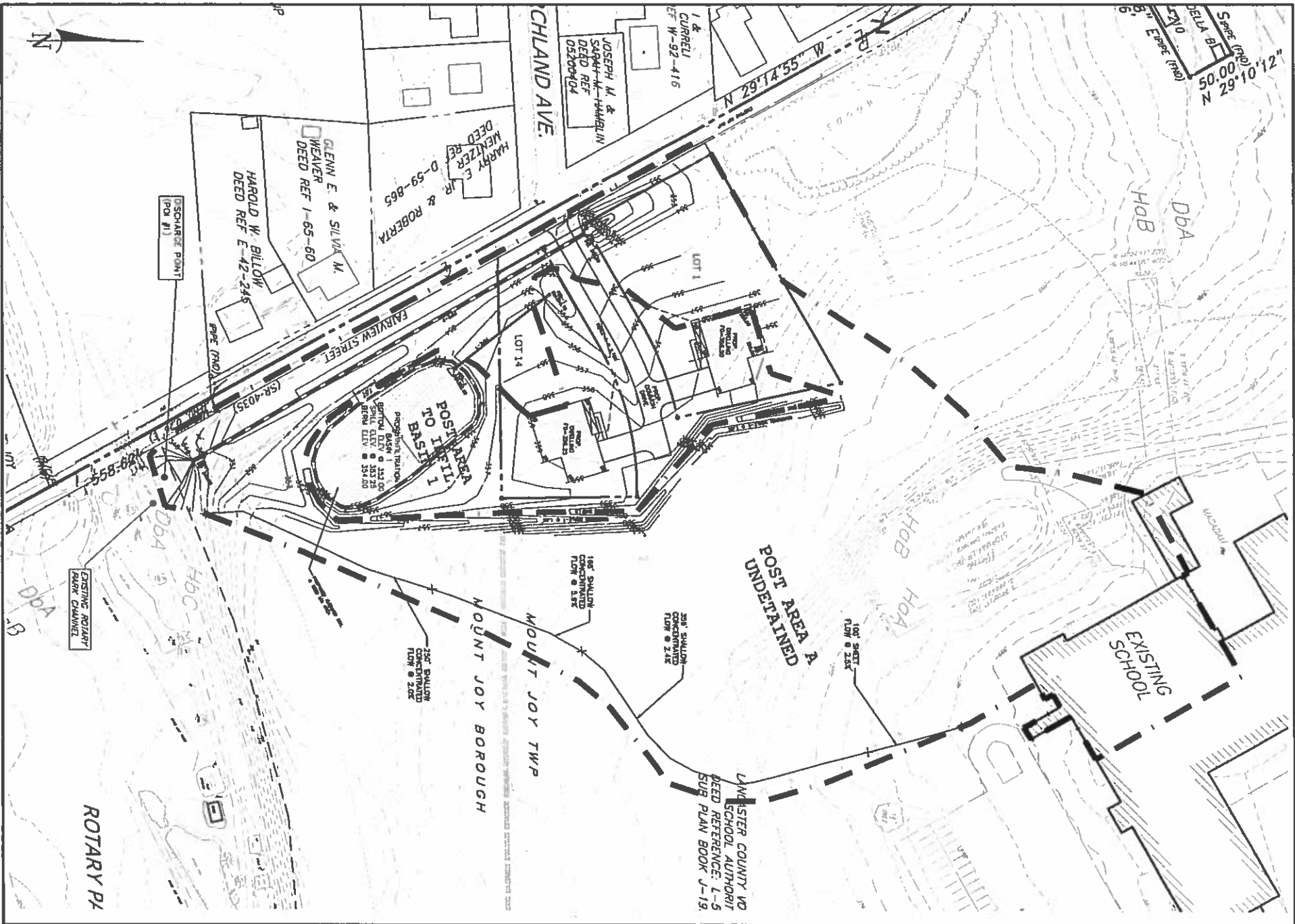
Thickness = $20''$

$L_a =$

$W =$

| $D50$ sizes | Placement Thickness |
|-------------|---------------------|
| R-3=3" | 12" |
| R-4=6" | 18" |
| R-5=9" | 27" |
| R-6=12" | 36" |
| R-7=15" | 45" |
| R-8=24" | 72" |

* For discharge velocities exceeding Maximum Allowable for Riprap indicated, increase d_{50} stone size and/or provide velocity reduction device.



| EROSION AND SEDIMENT CONTROL PLAN OVERVIEW AND DRAINAGE AREA PLAN FOR LANCASTER COUNTY CAREER & TECHNOLOGY CENTER MOUNT JOY CAMPUS MOUNT JOY TOWNSHIP & MOUNT JOY BOROUGH LANCASTER COUNTY, PENNSYLVANIA | | PROJECT NO. 4343-21 DATE July 2, 2021 DRAWN BY GRU/DEH CHECKED BY TES/BAC SCALE 1"=60' 0 60 90 120 SCALE IN FEET | | dc gohn Associates, Inc. Surveyors - Engineers Landscape Architects 32 Mount Joy Street Po Box 128 Mount Joy, PA 17552 Ph: (717) 613-5308 www.dcgohn.com | | OWNER NAME: LANCASTER COUNTY VO-TECH SCHOOL AUTHORITY ADDRESS: 1730 HANS HERR DRIVE WILLOW STREET, PA 17584 TELEPHONE: 717-653-3001 DEED REFERENCE L-570345 LANC. CO. TAX ACCT: 461-96483-0-0000 | | <table><thead><tr><th>REVISIONS</th><th>DATE</th></tr></thead><tbody><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></tbody></table> | | REVISIONS | DATE | | | | | | | | | | |
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| REVISIONS | DATE | | | | | | | | | | | | | | | | | | | | |
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addition 10e
to



September 1, 2021

Corporate Headquarters

108 West Airport Road

Lititz, PA 17543

T 717.569.7021

www.arroconsulting.com

Via Electronic Mail

Ms. Stacie Gibbs, BCO
Zoning/Code Officer
Borough of Mount Joy
21 East Main Street
Mount Joy, PA 17552

**RE: LCCTC Mount Joy Campus Minor Subdivision Plan
Stormwater Review
ARRO # 10863.46**

Dear Stacie:

ARRO Consulting, Inc. (ARRO) reviewed the following information in accordance with the Mount Joy Borough Stormwater Management Ordinance and ARRO's Review Letter dated July 8, 2021:

1. Final Minor Subdivision Plan for Lancaster County Career & Technology Center – Mount Joy Campus prepared by D.C. Gohn Associates, Inc., dated June 25, 2021; last revised August 17, 2021.
2. Karst Evaluation for Stormwater Management prepared by Lancaster Geology, dated May 17, 2021.
3. Post Construction Stormwater Management Report for Lancaster County Career and Technology Center – Mount Joy Campus prepared by D.C. Gohn Associates, Inc., dated June 25, 2021; last revised August 17, 2021.
4. Wetland Investigation for the Lancaster County Career & Technology Center – Lots 1 & 14 Project prepared by Vortex Environmental, Inc., dated June 23, 2021.
5. Modification Request Letter prepared by D.C. Gohn Associates, Inc., dated August 17, 2021.
6. Drainage Area Maps for Lancaster County Career & Technology Center – Mount Joy Campus prepared by D.C. Gohn Associates, Inc. dated June 14, 2021; last plotted August 19, 2021.
7. Erosion and Sediment Control Plan for Lancaster County Career & Technology Center – Mount Joy Campus prepared by D.C. Gohn Associates, Inc., dated July 2, 2021.

OUT IN FRONT

8. Draft Engineer's Opinion of Probable Cost for Lot 14, Undetained Pipe & Infiltration Basin 1 for Lancaster County Career & Technology Center – Mount Joy Campus prepared by Todd Smeigh, P.E., dated August 17, 2021.
9. Draft Engineer's Opinion of Probable Cost for Lot 1, Site Improvements for Lancaster County Career & Technology Center – Mount Joy Campus prepared by Todd Smeigh, P.E., dated August 17, 2021.

We offer the following comments.

Stormwater

1. The time of concentration (Tc) lines are not drawn perpendicular to the contour lines. Both the pre-development and post-development Tc lines shall be revised to be accurate. In the post-development, the Tc line will flow into the proposed swale and could increase the Tc which will increase the post-development peak discharge [§226-35.I].

The pre- and post-development Tc lines still do not flow perpendicular to the contours and do not show the path that water would take within the drainage area. The line currently follows the drainage area divide which is not an accurate depiction of how water would flow.

In the pre-development condition, the Tc flowpath would travel down the center of the drainage area towards Fairview Road and then south along the Fairview road swale until it left the project site. In the post-development condition, the Tc flowpath would travel the same as the pre-development path until it reaches the proposed swale where it would enter channel flow until it left the site.

2. The applicant shall include all downspout piping locations on the plans. All downspout outlets shall have a flared end section with appropriate energy dissipation [§226-37.C.(1)(e)].

Splash blocks shall be provided at all downspout discharges. Downspout details shall be included on the plans.

3. The rational coefficients shall be considered poor/winter conditions for the design of the 36" pipe. The pipe and rip-rap shall be redesigned (if necessary) to accommodate these changes in methodology [§226-35.G].

The coefficients are acceptable. It is unclear why the drainage area (DA) to the pipe decreased by 1.99 acres (0.56 ac imp., 1.43 ac grass) from the previous submission while the DA map still shows the original 39.14 acre DA. Additionally, there are approximately 2.30 acres of lawn and impervious area just west of Fairview Road between the roads and the basins that will drain to the new bypass pipe which is not included in the report.

4. The applicant shall submit an O&M agreement to the Municipality and shall include it with a future submission [§226-61.E.].

The applicant indicated that the Borough Solicitor will create a draft O&M agreement.

5. Financial security shall be provided to the Borough for the stormwater facilities within the Borough. The applicant shall provide an engineer's cost estimate for review [§226-60].

There are approximately 614 LF of 32" filter sock between lots 1 and 14. The Opinion of Probable Cost (OPC) only includes 311 LF between the properties. The combined OPCs shall include the entire length of the 32" filter sock.

6. The NAG S75 E&S matting shall be shown with hatching throughout all swales [§226-34.H.].
7. The swale just downstream of the repaired sinkhole shall be analyzed as a swale for stability and freeboard and include a channel design chart [§226-31.E.].
8. The 32" filter sock is shown going through the proposed BMP and building. The filter sock shall be relocated or the construction sequence shall indicate the relocation of this sock [§226-31.E.].
9. It appears that the existing swale paralleling Fairview Road and the existing power lines and poles are not provided on the plans. The current conditions of the site shall be shown on the plans [§226-43.I.].

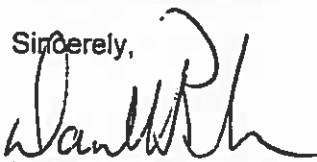
Modifications

1. The applicant is requesting a modification of §113.43.I.(5). The applicant requests relief of the requirement that all existing manmade features within two hundred feet (200') of the development site boundary be shown on the plans. The plans focus on Lots 1 & 14. Locating all manmade features within 200' for the entire LCCTC parent parcel tract of 68.387 acres is not necessary.

Given that the Applicant has provided all existing manmade features within 200' of the limit of disturbance, **ARRO recommends granting this waiver.**

Please call me if you have any questions.

Sincerely,



Darrell L. Becker, P.E.
Vice President

Stacie Gibbs, BCO
Borough of Mount Joy
September 1, 2021
Page 4

DLB:ely

c: Mark G. Pugliese I, Manager – Mount Joy Borough (via email)
Josele Cleary, Esquire – Morgan Hallgren Crosswell & Kane (via email)
Justin Evans, Manager – Mount Joy Township (via email)
Ben Craddock, P.E. – Lancaster Civil Engineering (via email)
Donovan Hollway - D.C. Gohn Associates, Inc. (via email)

\\LANCFILE3\Lancaster-Technical\Active Projects\Mount Joy Borough\LCCTC Stormwater Plan 10863.46\Correspondence\10863.46.01_LCCTC Stormwater Review

Borough of Mount Joy
Lancaster County, Pennsylvania

Resolution No. 12-21

A RESOLUTION OF THE BOROUGH COUNCIL OF THE BOROUGH OF MOUNT JOY, LANCASTER COUNTY, PENNSYLVANIA, REDUCING EMPLOYEE CONTRIBUTIONS TO THE POLICE PENSION PLAN FOR THE YEAR 2021.

WHEREAS: Act 600 previously provided for the elimination / reduction of members' contributions if certain criteria were met, and

WHEREAS: Act 30 amended Act 600 by eliminating certain criteria for the elimination/reduction of contributions, and

WHEREAS: The only criteria for the elimination/reduction of contributions according to Act 30 is:

Any reduction or elimination of contributions shall be authorized on an annual basis by resolution or ordinance, and;

WHEREAS: the Borough of Mount Joy has reviewed the criteria and approves the reduction of member's contributions by the Police Pension Plan members to zero for the year 2021.

NOW, THEREFORE, BE IT RESOLVED, that Borough of Mount Joy does hereby ratify and affirm the elimination of members' contributions to the Police Pension Plan by its members for 2021.

ADOPTED, by the Council of the Borough of Mount Joy, at a public meeting this 13th day of September 2021.

ATTEST:

(Assistant) Borough Secretary

Borough Council (Vice) President

[BOROUGH SEAL]

Exert from the current Collective Bargaining Agreement, Article 7,B:

- B. The contribution rate by full-time police employees to the retirement fund shall be reduced from three percent (3%) of pay up to Social Security base to no contribution beginning January 1, 1985, provided an actuarial study shows that the condition of the police pension fund is such that payments into the fund by full-time police employees may be eliminated, and that if such payments are eliminated, the Borough will not be required to keep the fund actuarially sound.**

AMENDMENT NO. 4

BOROUGH OF MOUNT JOY NON-UNIFORMED RETIREMENT PLAN

The Plan named above gives the Employer the right to amend it at any time. According to that right, the Plan is amended effective February 1, 1965 as follows:

By striking the first sentence in the **Eligible Employee** definition in SECTION 1.02 – DEFINITIONS and substituting the following:

Eligible Employee means any Employee of the Employer who is hired on a permanent full-time basis other than police person.

This amendment is made an integral part of the aforesaid Plan and is controlling over the terms of said Plan with respect to the particular items addressed expressly herein. All other provisions of the Plan remain unchanged and controlling.

Unless otherwise stated on any page of this amendment, eligibility for benefits and the amount of any benefits payable to or on behalf of an individual who is an Inactive Participant on the effective date(s) stated above, shall be determined according to the provisions of the aforesaid Plan as in effect on the day before he became an Inactive Participant.

Signed this _____ day of _____, _____.

MOUNT JOY BOROUGH

By: _____

Title

NOTICE TO PLAN PARTICIPANTS

To all Participants and Beneficiaries of the Borough of Mount Joy Non-Uniformed Retirement Plan:

A recent amendment to the plan document has changed the eligibility requirements for entry into the Plan.

This notice advises you of changes in the information presented in your Summary Plan Description (SPD) with respect to the Plan. The change described in this notice is effective February 1, 1965.

The following change has been made:

- The eligibility requirements to participate in the Plan also require that you are hired on a permanent full-time basis.

If you have any questions, contact your Plan Administrator.

Management's Response:

On behalf of the Mount Joy Borough Non-Uniformed Pension Plan, please allow this written Management Response to serve as a disagreement to the finding in the Mount Joy Borough Non-Uniformed Pension Plan audit for the period of January 1, 2017 to December 31, 2020.

The Mount Joy Borough Non-Uniformed Pension Plan has and will continue to be a benefit offered for full-time employees only. From the time the plan was established on February 1, 1965 to present day the Borough has never funded nor intended to fund for part-time employee benefits.

The Borough recognizes the language in the plan document. The process of amending the plan document has already commenced, specifically stating only full-time employees are eligible for benefits. This will eliminate the confusion on who is eligible for the plan. Precedent was set in prior audits, funding requirements, and valuation reports that the Borough has never considered/intended part-time employees to be included.

In an effort to maintain consistency with regard to historical action/decision making processes by prior auditors and audits conducted by the Auditor General's auditing staff, the Borough asks for this finding to be rescinded.

The Borough thanks you for your time and consideration regarding this matter as we strive for consistency and uniformity across prior and future audit periods.



April 13, 2021

Mr. Rob Lutz
R.J. Hall Company, Inc.
3461 Spring Road
Carlisle, PA 17013

**RE: Borough of Mount Joy
Non-Uniformed Retirement Plan**

Dear Rob:

Enclosed please find Amendment No. 4 and the Notice to Plan Participants for the above named Plan. The amendment adds to the eligibility requirement that an eligible employee must be hired on a permanent full-time basis in order to participate in the plan.

Please review and let us know of any changes you would like. Also, please return a signed copy to our office.

Sincerely,

Kristen Y. Backenstoe

Kristen Y. Backenstoe, EA, MAAA, MSEA
Actuary

KYB/kdc
Enclosures

10k

BOROUGH OF MOUNT JOY

Lancaster County, Pennsylvania

RESOLUTION NO. 13-21

A RESOLUTION APPOINTING THE CHIEF ADMINISTRATIVE OFFICE OF THE POLICE AND THE NON-UNIFORMED PENSION PLANS OF THE BOROUGH OF MOUNT JOY, LANCASTER COUNTY.

The Council of the Borough of Mount Joy hereby appoints the Borough Manager as the Chief Administrative Officer for the Borough of Mount Joy Police and Non-Uniformed Pension Plans.

ADOPTED, by the Council of the Borough of Mount Joy, at a public meeting, the 13th day of September 2021.

ATTEST:

(Assistant) Borough Secretary

Borough Council (Vice) President

SEAL

LAW OFFICES
MORGAN, HALLGREN, CROSSWELL & KANE, P.C.

P. O. BOX 4686

LANCASTER, PENNSYLVANIA 17604-4686

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RETIRED
 CARL R. HALLGREN
 MICHAEL P. KANE

700 NORTH DUKE STREET
 TELEPHONE 299-5251
 AREA CODE 717

FAX (717) 299-6170

E-MAIL: attorneys@mhck.com

August 11, 2021

To: Morgan, Hallgren, Crosswell & Kane, P.C. Municipal Clients

From: Josele Cleary

Re: Act 50 of 2021, The Small Wireless Facilities Deployment Act

The Governor signed House Bill 1621, The Small Wireless Facilities Deployment Act, into law as Act 50 of 2021 on June 30, 2021. Act 50 becomes effective on August 29, 2021, and it requires action within 60 days of August 29, 2021. The purpose of this Memorandum is to provide you with information on Act 50 and a recommendation of steps to take. While this Memorandum will provide a general recommendation, each municipality will have to have a tailored ordinance to address, where applicable, existing regulations governing public street rights-of-way and zoning ordinance provisions.

Whether or not a municipality enacts an ordinance under Act 50, the municipality is bound by Act 50. Act 50 strips municipalities of many powers, and its provisions which purport to give municipalities some control over wireless facilities within public street rights-of-way are vague at best and in some instances contradictory. A municipality may as well enact an ordinance to avail itself of what little the Legislature has allowed, such as the right-of-way fee discussed below.

Act 50 regulates what it defines as a "small wireless facility" which includes antennas, each of which can be up to three cubic feet, and up to 28 cubic feet of additional ground-mounted or pole-mounted equipment. A wireless service provider (a "Provider") under by Act 50 includes both wireless carriers such as Verizon and additional entities such as Crown Castle which provide services to those entities. Providers are given the absolute right to install their facilities within public street rights-of-way. See Act 50 §3(d). Act 50 also defines the term "right-of-way" to be broader than a public street right-of-way. A "right-of-way" for the purposes of small wireless facilities includes the "area on, below or above a public roadway, highway, street, sidewalk, alley, *utility easement* or similar property. The term does not include a Federal interstate highway." A municipality which operates water or sewer systems or which has storm water management easements may be faced with a Provider seeking to install facilities within a utility easement.

The Provider can install its facilities on an existing utility pole as long as it does not extend more than five feet above the existing pole or it can install a new pole. Act 50 §3(e). A new pole and wireless facility are not supposed to be taller than 50 feet but the Provider has the right to obtain a variance. Act 50 §3(e)(2).

The provision concerning waivers from the height requirement is one of those where Act 50 appears to grant municipalities protection but in reality does not do so. The variance request is

to be “processed subject to applicable codes.” Act 50 §3(e)(2). The term “applicable codes” is defined to be a uniform code adopted by a recognized national organization “enacted solely to address imminent threats of destruction of property or injury to persons” (the Legislature apparently was unaware of the Uniform Construction Code because it did not reference the Uniform Construction Code in its definition of “applicable codes”) or local ordinances “that comply with this act.” Act 50 allows a municipality to “develop objective design guidelines ... regarding the minimization of aesthetic impact” but only if they do “not have the effect of prohibiting the wireless provider’s technology.” Act 50 §3(h). In order to deny a height waiver, a municipality would have to demonstrate either that the increased height will violate an International Building Code requirement or have an enacted ordinance and be able to refute a claim by the Provider that the height is necessary for its technology to function.

Act 50 also demonstrates that the Legislature is unfamiliar with the Pennsylvania Municipalities Planning Code (“MPC”) and holdings of the courts regarding zoning. Act 50 prohibits municipalities from making applications for facilities within rights-of-way “subject to discretionary zoning review, including conditional use or special exception requirements.” Act 50 §4(b). Zoning approvals, including special exceptions and conditional use applications, are not discretionary. Nevertheless, because Act 50 states that such facilities must be allowed in all areas of the municipality and cannot be special exceptions or conditional uses, I strongly recommend that municipalities enact separate police power ordinances to regulate small wireless facilities in rights-of-way rather than include provisions in zoning ordinances. Municipalities will not have to go through the MPC mandated review by the County Planning Commission and municipal planning commission and so will have more flexibility in enacting an ordinance before October 29, 2021.

Act 50 has also removed additional municipal control over municipal-owned facilities. Act 50 defines the term “municipal pole” as a “utility pole owned, managed or operated by or on behalf of a municipality.” It defines a “utility pole” to include any structure used for “lighting, traffic control, signage or a similar function” and specifically “includes the vertical support structure for traffic lights.” While municipal officials may believe their municipality does not own utility poles, as the term is defined in Act 50 every traffic signal and every streetlight is a “municipal pole”.

Section 5 of Act 50 expressly requires that each municipality “shall allow co-location on municipal poles using the process required under this act and applicable codes unless the small wireless facility would cause structural or safety deficiencies to the municipal pole, in which case the municipality and applicant shall work together for any make-ready work or modifications or replacements that are needed to accommodate the small wireless facility.” The only limitation on this mandate that municipalities must allow Providers to use municipally-owned poles is that the wireless communications facilities must not “obstruct nor hinder travel or public safety within the right-of-way.” Not only does a municipality have to allow a Provider to put facilities on its streetlights or traffic signals, if the streetlight or traffic signal is not structurally able to support the facility, the municipality must change the facility at the Provider’s expense. In addition, the municipality “may require replacement of the municipal pole only if the municipality demonstrates that the co-location will make the municipal pole structurally unsound.” Act 50 §5(e)(2).

Act 50 imposes stringent time limitations on processing applications to locate facilities within street rights-of-way and limits on fees that municipalities may charge. Municipalities are expressly prohibited from requiring a permit for maintenance, repair, or replacement of small wireless facilities with new facilities that are the same size or smaller. Act 50 §4(m). Where a municipality may require a permit, it has ten business days to notify the applicant in writing if the application is incomplete. Act 50 §4(d). A complete application must be acted upon within 60 days of receipt or it is deemed approved. Act 50 §4(e). A municipality can only deny the request if the facility “materially interferes with the safe operation of traffic control equipment, sight lines or clear zones for transportation or pedestrians or compliance with the Americans with Disabilities Act”; it fails to comply with “applicable codes”; fails to comply with Act 50; or the applicant fails to submit a report by an engineer stating that it will comply with FCC regulations. Act 50 §4(f). Any denial has to be in writing and must provide all of the reasons. The applicant is then given a chance to cure the defect without paying any further fees. Act 50 §4(f)(3).

Many municipalities have small staffs. Act 50 does not recognize this reality. An applicant may file a consolidated application for up to 20 different small wireless facilities. Act 50 §4(g). The only limitation is that an applicant may not submit more than one consolidated or 20 single applications in each 30 day period. Act 50 §4(g)(3). If a municipality receives more than one consolidated application or more than 20 single applications within a 45-day period, it has an additional 15 days to process all of the applications. *Id.*

Section 4(i) of Act 50 provides additional requirements if an applicant wants to install a new pole. The municipality “may require the wireless provider to demonstrate that it cannot meet service reliability and functional objections of the application by co-locating” but this is illusory because all that it may require is that the applicant “self-certify that the wireless provider has made this determination in good faith and to provide a documented summary of the basis for the determination.”

A permit granted under Act 50 or an ordinance enacted under Act 50 is valid for five years, and the applicant can renew that permit for two additional five-year periods. Act 50 §4(j)(2).

Act 50 contains some authorization to impose fees, which is one reason to enact an ordinance. Act 50 authorizes the following fees:

1. A one-time application fee of up to \$500 for an application seeking 1 – 5 co-located small wireless facilities with up to \$100 for each additional co-located small wireless facility. Act 50 §4(n)(1).

2. A one-time application fee of up to \$1,000 for an application requiring the installation of a new or replacement pole. Act 40 §4(n)(2).

3. An annual fee for the use of the right-of-way which shall not exceed \$270 per small wireless facility or \$270 per new utility pole with a small wireless facility. Act 50 §3(c). There is language in Act 50 which would allow this fee to be higher, but the proof to justify a higher fee would probably be beyond most municipalities.

The fees in Act 50 can only be changed if the Federal Communications Commission ("FCC") adjusts its fee limitations or if the United States Supreme Court invalidates the current FCC fee limitations. Municipalities should assume that the limits in Act 50 on fees will remain indefinitely. We recommend that the municipalities impose the maximum fees allowed by Act 50 and incorporate the language of Section 7(c) to allow increases in its ordinance.

Act 50 also specifically prohibits certain types of fee and cost recovery. These prohibitions include:

1. Requiring the applicant to provide any services or goods including, but not limited to, reserving fiber, conduit or pole space for the municipality. Act 50 §4(c)(2)(i).
2. Charging a fee to co-locate on a municipal-owned pole. Act 50 §5(d).
3. Charging anything other than "nondiscriminatory, competitively neutral and commercially reasonable" sums for any fees relating to improvements to or replacement of a municipal pole necessary for co-location.

Section 6 of Act 50 is entitled "Local Authority". It is misleading. It states that subject to the provisions of Act 50 nothing in Act 50 "shall be construed to: (1) limit or preempt the scope of a municipality's zoning, land use, planning, streets and sidewalks, rights-of-way and permitting authority as it relates to small wireless facilities." Since Act 50 requires that the small wireless facilities be allowed throughout the municipality, prohibits requiring special exception or conditional use approval, severely limits what criteria a municipality can use in considering such applications, and imposes its own time limits, it does, in fact, strictly limit municipal zoning and other powers. The impact of Act 50 is far broader than Section 6 implies.

We are in the process of preparing a general police power ordinance for some of our municipal clients and will apportion the time spent for all municipal clients who desire such an ordinance. The ordinance will incorporate the provisions of Act 50 and will include fees at the maximum rate allowed by Act 50 and all increases to those fees which may be authorized by the FCC. We recommend that municipalities with provisions in their zoning ordinances recognize that these provisions will not be able to be enforced. Any amendment to a zoning ordinance must comply with all requirements of the MPC. It would probably be most cost-effective for the municipalities with provisions governing small wireless facilities within their rights-of-way in their zoning ordinance to simply include a repeal of those provisions when next amending their zoning ordinance. If you desire for us to prepare an ordinance and have not already requested such an ordinance, please contact me as soon as possible.

§ ____-1. Short Title.

This Article shall be known and may be cited as The _____ Small Wireless Facilities and Use of Public Street Right-of-Way Ordinance.

§ ____-2. Legislative Intent.

The GOVERNING BODY enacts this Article to govern use of public street rights-of-way and municipal poles in accordance with and as limited by Act 50 2021, The Small Wireless Facilities Deployment Act. The GOVERNING BODY recognizes the limitations of the Act on its powers and desires to regulate the public street rights-of-way and municipal poles to the maximum extent allowed by such Act. The GOVERNING BODY further desires to limit, to the extent legally permissible, conflicts with other uses of the public street rights-of-way.

§ ____-3. Word Usage and Definitions.

- A. Word usage. In interpreting this Article, the singular shall include the plural, and the masculine shall include the feminine and the neuter.
- B. Definitions. All words and phrases not otherwise defined herein shall have the meanings set forth in Section 2 of the Act.

ACT – The Small Wireless Facilities Deployment Act, the Act of June 30, 2021, P.L. ____, No. 50, 53 P.S. §11704.1 et seq., and as may be amended in the future.

ADA – The federal Americans with Disabilities Act, as amended, and all regulations adopted to implement such statute.

CODE ENFORCEMENT OFFICER – The person designated by the GOVERNING BODY to administer this Article.

FCC – The Federal Communications Commission or any agency successor thereto.

ONE CALL – The Pennsylvania One Call Act, the Act of December 10, 1974, P.L. 852, as amended, 73 P.S. §176 et seq., and all regulations adopted to implement such statute.

UCC – The Pennsylvania Uniform Construction Code, as adopted and administered by this TOWNSHIP/BOROUGH.

§ ____-4. Permit Application Requirements.

These requirements are not in Act 50. Because municipalities have a limited time to act on applications, I have attempted to require that the applicant provide as much information as possible and that the applicant have its engineer certify some information. I am aware that one DAS service provider misrepresented the right-of-way width of a 33 feet right street as 50 feet

wide. Please let me know if there is additional information that you would like to see or if any of these provisions are not clear, There will need to be an application form.

All persons who desire to install a small wireless facility within a right-of-way, whether by co-location or by the installation of a new utility pole, shall file an application in writing for a permit with the Code Enforcement Officer. In order to be considered a complete application, such application must include all of the following:

- A. A written application form identifying in detail the name of the applicant and contact information for the applicant and the name and contact information of the person who prepared the application and whether applicant proposes erection of a new utility pole or co-location on an existing utility pole.
- B. Precise location of all portions of the proposed small wireless facility, including pole mounted and ground mounted small wireless facility components.
- C. Identity of the owner of the utility pole if the Applicant proposes co-location on an existing utility pole.
- D. A report by a qualified engineering expert which shows that the small wireless facility will comply with all applicable FCC regulations. The report must identify the person who prepared the report and his or her qualifications.
- E. Construction drawings demonstrating compliance with Section 3 of the Act, the UCC and this Article.
- F. Plan showing the proposed small wireless facility installation sealed by a professional engineer which shall contain a certification that after installation of the facility any sidewalk, curb, or curb cuts which may be impacted will comply with the ADA after installation of the small wireless facility. The plan shall meet all of the following requirements and include all of the following information:
 - 1. Existing right-of-way width, sidewalk, curbing, and cartway with sufficient information to demonstrate that the small wireless facility will be located completely within the existing public street right-of-way and will not interfere with the safe operation of traffic control equipment, sight lines, or clear zones for vehicles or pedestrians.
 - 2. Location of all storm water management facilities within the public street right-of-way including swales, inlets, rain gardens, and pipes, with sufficient information to demonstrate that the small wireless facility will be located and installed in a manner that will not interfere with existing storm water management facilities.
 - 3. Location of all utility facilities within the public street right-of-way including but not limited to public water and sewer facilities, including all hydrants and manholes with sufficient information to demonstrate that the small wireless facility will be located and installed in a manner that will not interfere with existing utility facilities.

- G. Where the application proposes co-location on an existing utility pole which is not a municipal pole, written permission from the owner of the existing utility pole.
- H. Where the application proposes installation of a new utility pole, a self-certification that the applicant has determined in good faith that it cannot meet its service reliability and functional objectives of the application by co-locating on an existing utility pole or municipal pole. This self-certification shall include documentation of the basis of the determination which shall identify all existing utility poles and municipal poles in the vicinity and why they are not suitable.
- I. Where a new pole or excavation for any reason is proposed, an application for a street opening permit meeting all requirements of [applicable portion of code of ordinances or ordinance number] with street opening permit fee and evidence of compliance with One Call.
- J. The fee established by this Article.

§____-5. Time and Manner of Submission of Applications.

Act 50 gives a municipality 10 business days after receiving an application to determine if an application is complete. This section is to address an application being dropped off when the office is closed.

All applications shall be submitted to the TOWNSHIP/BOROUGH office on a day that the TOWNSHIP/BOROUGH office is open to the public and during hours that the office is open to the public. Applications received within one hour of close of business shall be considered filed on the next day that the TOWNSHIP/BOROUGH office is open for business.

§____-6. Consideration of Application and Issuance of Permit.

These time period for the permit are the minimum that Act 50 allows. The automatic renewal is also required by Act 50. I have added the provision stating that the municipality will send an invoice for the right-of-way fee with the permit.

The Code Enforcement Officer shall review the application for completion within the time periods required by the Act and, if incomplete, shall notify the applicant in accordance with the Act. The Code Enforcement Officer shall review and act upon the application in accordance with the Act.

- A. If the application meets all requirements of the Act and this Article, the Code Enforcement Officer shall issue a permit to authorize installation of the small wireless facility and an invoice for the right-of-way fee for the small wireless facility.
- B. The proposed collocation, the modification or replacement of a utility pole or the installation of a new utility pole with small wireless facilities attached for which a permit is granted under this Article shall be completed within one year of the permit issuance date.

- C. Subject to the permit requirements and the wireless provider's right to terminate at any time, the permit shall grant the wireless provider authorization to operate and maintain small wireless facilities and any associated equipment on the utility pole covered by the permit for a period of five years, which shall be renewed for two additional five-year periods if the permit holder is in compliance with the criteria set forth in this Article and the Act and the permit holder has obtained all necessary consent from the utility pole owner.

§____-7. Design Standards for Small Wireless Communications Facilities.

Please carefully review these. Subsection A incorporates the minimal requirements in Act 50. The others are based on a number of existing ordinances while at the same time attempting to comply with Act 50.

All small wireless facilities to be installed and maintained within the right-of-way shall meet all of the following requirements:

- A. The small wireless facility and all associated equipment shall meet the size limits and height limits of the Act.
- B. The small wireless facility shall be located so as not to cause any physical or visual obstruction to pedestrian or vehicular traffic, or to otherwise create safety hazards to pedestrians and/or motorists or to otherwise inconvenience public use of the right-of-way. This shall include, but not be limited to, any interference with compliance with the ADA.
- C. A new pole shall not be located within 10 feet of an existing driveway or street intersection. A new pole shall not be located within any storm water management facility including, but not limited to, any swale or rain garden. A new pole shall not be located within 18 inches of the face of the curb.
- D. All equipment of the small wireless facility which is mounted on a pole shall have a clearance of not less than 18 feet if located over a cartway and not less than 10 feet if not located over a cartway.
- E. Ground-mounted accessory equipment, walls, or landscaping shall not be located within any storm water management facility including, but not limited to, any swale or rain garden or within 18 inches of the face of the curb.
- F. A new pole or ground mounted accessory equipment, walls or landscaping shall not be located an easement extending onto the lot adjoining the right-of-way without the written permission of the easement holder.
- G. Ground-mounted accessory equipment that cannot be placed underground shall be screened, to the fullest extent possible, through the use of landscaping or other decorative features. Any required electrical meter cabinets shall be screened to blend in with the surrounding area.

- H. All underground facilities shall be designed and installed in a manner which will not require the removal or relocation of any storm water management facility or underground utility.

§ ____ -8. Maintenance of Small Wireless Facilities.

Maintenance of facilities after installation is not mentioned in Act 50 but it seems reasonable to require maintenance of the facilities.

The wireless provider shall maintain the small wireless facility in a manner that meets or exceeds all of the design standards of this Article and all standards of the UCC. If the small wireless facility is the only facility on a pole, the wireless provider shall maintain the pole in accordance with this Article and all applicable requirements. The wireless provider shall remove any graffiti on the small wireless facility, including but not limited to ground-mount accessory equipment, within 30 days after notice from the TOWNSHIP/BOROUGH to do so.

§ ____ -9. Damage to Existing Facilities and Indemnification.

The majority of this section is from Act 50. I added the language concerning failure to maintain. I believe that if an antenna falls off a pole the wireless provider should have to repair the damage.

- A. A wireless provider shall repair all damage to the right-of-way or any other land so disturbed, directly caused by the activities of the wireless provider or the wireless provider's contractors, including installation of the small wireless facility or the failure to properly maintain the small wireless facility, and return the right-of-way in as good of condition as it existed prior to any work being done in the right-of-way by the wireless provider or damage resulting from the failure to maintain the small wireless facility. If the wireless provider fails to make the repairs required by the TOWNSHIP/BOROUGH within 30 days after written notice, the TOWNSHIP/BOROUGH may perform those repairs and charge the wireless provider the reasonable, documented cost of the repairs plus a penalty of \$500. The wireless provider who has failed to make the required repairs shall not be eligible to receive a new permit from the TOWNSHIP/BOROUGH until the wireless provider has paid the amount assessed for the repair costs and the assessed penalty or deposited the amount assessed for the repair costs and the assessed penalty in escrow pending an adjudication of the merits of the dispute by a court of competent jurisdiction.
- B. A wireless provider shall fully indemnify and hold the TOWNSHIP/BOROUGH and its officers, employees and agents harmless against any claims, lawsuits, judgments, costs, liens, expenses or fees or any other damages caused by the act, error or omission of the wireless provider or its officers, agents, employees, directors, contractors or subcontractors while installing, repairing or maintaining small wireless facilities or utility poles within the right-of-way.

§ ____ -10. Annual Right-of-Way Fee.

The amount is the maximum Act 50 allows without studies to demonstrate the actual cost is higher. I added the procedural requirements. It seemed reasonable to impose the fee on a calendar year

basis starting on January 1. Act 50 doesn't have any provisions about what rights a municipality has if the fee is not paid, so I attempted to address that issue. Please confirm the administrative provisions are acceptable.

In accordance with Section 3(c) of the Act, the TOWNSHIP/BOROUGH hereby imposes an annual fee for the use of right-of-way in the amount of \$270 per small wireless facility or \$270 per new utility pole with a small wireless facility. The annual fee shall become effective beginning on January 1, 2022, and shall be imposed for each calendar year or portion thereof during which a small wireless facility is located in a right-of-way. The owner of each small wireless facility installed within the TOWNSHIP/BOROUGH shall be responsible to pay such right-of-way fee whether or not such provider receives an invoice from the TOWNSHIP/BOROUGH. The fee will be due by January 31 of the calendar year for the calendar year to which the fee relates.

- A. The failure to pay the annual right-of-way fee shall be a violation of this Article and shall be subject to the penalties and remedies in this Article.
- B. If the annual right-of-way fee is not paid in full by January 31 of the calendar year, a penalty of ten (10%) percent of the annual fee shall be added. If the annual fee plus penalty is not paid in full by March 31 of the calendar year, interest at the rate of one (1%) percent per month shall continue until the annual right-of-way fee, penalty, and interest are paid in full.
- C. The annual fee shall be adjusted upward by resolution of the GOVERNING BODY if authorized by Section 7(c) of the Act.
- D. The owner of each small wireless facility installed within a right-of-way on the effective date of this Article shall provide the TOWNSHIP/BOROUGH with a report identifying each existing small wireless facility identifying the location of such small wireless facility, the dimensions of such small wireless facility, and the date of installation of the small wireless facility. This report shall include the name and contact information for the owner of the small wireless facilities, including the address to send invoices for the annual right-of-way fee and any notices under this Article.
- E. The owner of each small wireless facility shall provide the TOWNSHIP/BOROUGH with up-to-date contact information. If ownership of a small wireless facility changes, the new owner of the small wireless facility shall provide notice and new contact information to the TOWNSHIP/BOROUGH within 30 days.

§____-11. Application Fees.

The fees are the maximum that Act 50 allows.

An applicant for a permit to install a small wireless facility shall include the following fees with its application:

- A. For an application seeking approval for between one and five co-located small wireless facilities: \$500.

- B. For an application seeking approval of more than five co-located small wireless facilities: \$500 plus \$100 for each co-located small wireless facility beyond five.
- C. For an application seeking approval of a small wireless facility that requires the installation of a new or replacement utility pole: \$1,000.
- D. The fees established by this Section shall be adjusted upward by resolution of the GOVERNING BODY if authorized by Section 7(c) of the Act.

§____-12. Removal of Small Wireless Facilities from Right-of-Way.

Subsections A and B are from Act 50. Act 50 gives a provider the right to discontinue using a facility, so it seems reasonable to require the provider to remove it and that requirement is in Subsection C.

- A. Within 60 days of suspension or revocation of a permit due to noncompliance with this article or the Act, the permit holder shall remove the small wireless facility and any associated equipment, including the utility pole and any support structures if the permit holder's wireless facilities and associated equipment are the only facilities on the utility pole, after receiving adequate notice and an opportunity to cure any noncompliance.
- B. Within 90 days of the end of a permit term or an extension of the permit term, the permit holder shall remove the small wireless facility and any associated equipment, including the utility pole and any support structures if the permit holder's wireless facilities and associated equipment are the only facilities on the utility pole.
- C. A wireless provider which elects to discontinue the use of a small wireless facility shall notify the TOWNSHIP/BOROUGH in writing not less than 45 days prior to the discontinuance of use of the small wireless facility, which notice shall specify when and how the wireless provider will remove the small wireless facility and, if applicable, the pole. The wireless provider shall complete the removal within 45 days of the discontinuance of the use of the small wireless facility. A permit issued under this Article for a small wireless facility which is voluntarily removed shall expire upon the removal of the small wireless facility.

§____-13. Violations and Penalties.

Act 50 does not have any enforcement provisions; it assumes that all small wireless providers will make application for permits, pay fees, etc. These are standard police power ordinance enforcement provisions.

- A. Violations. It shall be a violation of this Article to do or permit the following:
 - 1. To install a small wireless facility prior to obtaining the permit required by this Article.
 - 2. To install a small wireless facility in a manner other than that authorized by the permit.

3. To place any false or misleading information on an application including, but not limited to, incorrectly identifying the right-of-way width, the identity of the owner of a utility pole, the precise location of the utility pole, or the size and location of any proposed or existing equipment.
 4. To fail to make any payment required by this Article or to make a payment by a means which is later dishonored.
 5. To violate any other provision of this Article.
- B. Penalties. Any person who violates or permits the violation of any provision of this Article shall be liable upon summary conviction therefor to fines and penalties of not less than \$100.00 nor more than \$1,000.00 plus all costs of prosecution, including attorneys' fees, which costs, fines, and penalties may be collected as provided by law. Each day that a violation continues and each Section of this Article which is violated constitutes a separate violation.

10m



August 19, 2021

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Via Electronic Mail (manager@mountjoy.pa.org)

Mark G. Pugliese I, Manager
Borough of Mount Joy
21 East Main Street
Mount Joy, PA 17552

**RE: Manheim Street (S.R. 0772) Storm Sewer Replacement
Award Recommendation Letter
ARRO #10863.42**

Dear Mark:

The bid opening for the above-referenced project occurred on August 17, 2021. The low bid was submitted by Wexcon, Inc. in the amount of \$151,485.00. The totals for all eight (8) bidders are shown on the attached bid tabulation. I reviewed the submitted bid documents for Wexcon, Inc. and they have been properly prepared and executed.

Therefore, I recommend the Manheim Street Storm Sewer Replacement project be awarded to Wexcon, Inc. in the amount of \$151,485.00.

Please call me at 717-560-6065 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Darrell L. Becker".

Darrell L. Becker, P.E.

DLB:ely

Enclosure

c: Dennis Nissley, Public Works Director – Borough of Mount Joy (via email)
 David Salley, Stormwater Enforcement Officer – Borough of Mount Joy (via email)

**Borough of Mount Joy
Manheim Street Storm Sewer Replacement**

ARRO #10863.42

| Description | Type | UOM | Qty | Wexcon, Inc. | JVI Group, Inc | SM Johns & Son | Shiloh Paving & Excavating | Matthews Construction | Greenland Construction | Construction Masters Services | CPA Pavement Services |
|--|------|-----|-----|---------------------|---------------------|---------------------|----------------------------|-----------------------|------------------------|-------------------------------|-----------------------|
| Bid Price Ratio | | | | 100% | 98.09% | 97.99% | 84.93% | 79.19% | 55.28% | 55.14% | 49.36% |
| Total Extended | | | | \$151,485.00 | \$154,431.35 | \$154,584.32 | \$178,948.00 | \$191,280.00 | \$274,000.00 | \$274,679.50 | \$906,840.50 |
| 1 Install Type M Inlet, Frame, and Grate | Base | EA | 5 | \$10,000.00 | \$7,675.00 | \$9,908.00 | \$16,400.00 | \$25,000.00 | \$8,500.00 | \$25,750.00 | \$16,532.80 |
| 2 Install Type C Inlet, Frame, and Grate | Base | EA | 3 | \$6,168.00 | \$4,935.00 | \$6,038.01 | \$11,700.00 | \$15,000.00 | \$5,700.00 | \$26,400.00 | \$15,422.01 |
| 3 Install 18" RCP Storm Sewer Pipe | Base | LF | 91 | \$8,008.00 | \$19,214.65 | \$13,133.12 | \$19,474.00 | \$10,920.00 | \$21,385.00 | \$17,290.00 | \$28,773.29 |
| 4 Install 24" RCP Storm Sewer Pipe | Base | LF | 89 | \$10,235.00 | \$19,620.05 | \$9,723.25 | \$19,936.00 | \$11,570.00 | \$25,365.00 | \$18,022.50 | \$28,508.48 |
| 5 Install 12" HDPE Storm Sewer Pipe | Base | LF | 51 | \$3,672.00 | \$5,931.30 | \$4,202.91 | \$8,823.00 | \$6,120.00 | \$10,710.00 | \$8,670.00 | \$15,440.76 |
| 6 Install 18" HDPE Storm Sewer Pipe | Base | LF | 413 | \$41,300.00 | \$37,768.85 | \$28,914.13 | \$35,518.00 | \$24,780.00 | \$88,795.00 | \$62,569.50 | \$85,775.97 |
| 7 for Temporary Trench Restoration | Base | SY | 255 | \$8,415.00 | \$6,438.75 | \$4,034.10 | \$6,885.00 | \$19,125.00 | \$11,985.00 | \$14,407.50 | \$14,491.65 |
| 8 for Permanent Trench Restoration | Base | SY | 380 | \$41,800.00 | \$34,656.00 | \$32,231.60 | \$36,860.00 | \$28,500.00 | \$45,600.00 | \$64,600.00 | \$43,190.80 |
| 9 Mill Roadway (2" Depth) | Base | SY | 360 | \$5,400.00 | \$6,606.00 | \$8,733.60 | \$6,120.00 | \$18,000.00 | \$14,760.00 | \$7,920.00 | \$22,320.00 |
| 10 Furnish and Place 2" of 12.5mm Wearing Course | Base | SY | 360 | \$14,400.00 | \$8,550.00 | \$20,073.60 | \$9,252.00 | \$27,000.00 | \$32,760.00 | \$16,650.00 | \$26,038.80 |
| 11 for Lawn/Agricultural Area Restoration | Base | LS | 1 | \$1,040.00 | \$1,159.00 | \$3,343.00 | \$4,250.00 | \$2,500.00 | \$6,780.00 | \$10,300.00 | \$8,269.00 |
| 12 Perform Miscellaneous Unclassified Excavation | Base | CY | 5 | \$350.00 | \$464.50 | \$4,123.00 | \$1,540.00 | \$1,250.00 | \$950.00 | \$500.00 | \$785.30 |
| 13 Miscellaneous Aggregate for Backfill and Other Uses | Base | CY | 5 | \$280.00 | \$317.25 | \$1,733.00 | \$665.00 | \$1,250.00 | \$310.00 | \$600.00 | \$826.65 |
| 14 Miscellaneous Concrete | Base | CY | 1 | \$417.00 | \$1,095.00 | \$8,393.00 | \$925.00 | \$265.00 | \$400.00 | \$1,000.00 | \$464.99 |

Mount Joy Budget Calendar for Fiscal Year 2022

| Due Day | Due Date | Budget Activity | Responsible Person(s) |
|---------|-----------------|---|-----------------------|
| Mon. | Aug. 16 | Submit 5-Year Capital Expenditure Plan | Department Heads |
| Wed. | Sept. 1 | Submit End-of Year Expenditure Projections | Department Heads |
| Fri. | Sept. 3 | Distribute Annual Budget Forms | Manager |
| Fri. | Sept. 10 | Submit End-of-Year Revenue Projections | Department Heads |
| Wed. | Sept. 15 | Post current year expenditures and revenues or estimates to the budget form | Manager/Asst Manager |
| | Sept. 13 - 17 | Department Budget Meeting | Staff |
| Thurs. | Sept. 30 | Submit MMO | Pension Administrator |
| Fri. | Oct. 1 | Submit Activity Expenditure estimates to Secretary | Department Heads |
| | Oct. 11, 25, 28 | Committee reviews their respective budgets with Department Head/Manager | Committees |
| Fri. | Friday, Oct. 29 | Enter expenditure requests and revenue estimates in annual budget form | Manager |
| Fri. | Oct. 29 | Advertise Budget Meetings | Manager |
| Mon. | Nov. 1 | Regular Borough Council Meeting | Governing Body |
| Thurs. | Nov. 4 | Council Budget Meeting | Governing Body |
| Tues. | Nov. 9 | Council Budget Meeting, consider/adopt preliminary Budget | Governing Body |
| Tues. | Nov. 16 | Council Budget Meeting, adopt preliminary Budget * | Governing Body |
| Mon. | Nov. 22 | Submit advertisement to newspaper | Manager |
| Mon. | Nov. 22 | Make budget available for public inspection | Manager |
| Mon. | Dec. 6 | Adopt budget and ordinance setting real estate tax rate. | Governing Body |
| Fri. | Dec. 31 | Create budget accounts and enter amount in ledger | Manager/Asst Manager |

* If raising taxes, budget adoption must be by ordinance, otherwise, resolution will suffice.

2302880

704666481 Bottling Group LLC-FSV

07/30/2021

| MACHINE ID. NO. | Per/ Qtr | Flat/ Tier | REV/ QTY | UNITS SOLD | Rev - Vend | Rev - CIB | DEP / CRV (CA)* | Sales Tax | Vend Rate | Comm Rate | Commission \$ |
|--------------------|-------------|---------------|-------------|---|------------|-----------|--------------------|-----------|-----------|-----------|---------------|
| CUST NO:3926124 | | | | NAME:ROTARY PARK : 3926124 ASSET LOC:BASEBALL FIELD 1 | | | | | | | LOC:1044 |
| 11864661 | P | F | REV | 73 | 146.00 | 170.10 | 0.00 | 7.94 | 2.00 | 0.3500 | 56.76 |
| CUST NO:3926124 | | | | NAME:ROTARY PARK : 3926124 ASSET LOC:BASEBALL FIELD 2 | | | | | | | LOC:1044 |
| 11812901 | P | F | REV | 47 | 94.00 | 181.95 | 0.00 | 3.62 | 2.00 | 0.3500 | 62.42 |
| CUST NO:3926124 | | | | NAME:ROTARY PARK : 3926124 ASSET LOC:BLEACHERS | | | | | | | LOC:1044 |
| 11664682 | P | F | REV | 180 | 360.00 | 359.25 | 0.00 | 16.33 | 2.00 | 0.3500 | 120.02 |

01,380.011

FOR SECURITY PURPOSES, THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK



Bottling Group LLC-FSV

JPMorgan Chase Bank, N.A.
Syracuse, NY
50-937 / 213

| Date | Check Number |
|------------|--------------|
| 07/30/2021 | 704666481 |

\$239.20

PAY Two Hundred Thirty Nine And 20/100 Dollars

TO THE
ORDER
OF

BOROUGH OF MOUNT JOY
21 E MAIN ST
MOUNT JOY, PA 17552-1415

244



Void After 180 Days
DISBURSEMENT ACCOUNT

SIGNATURE HAS A BLUE-GREEN BACKGROUND - BORDER CONTAINS MICROPRINTING MP

704666481 021309379 6301542845509

Manager

From: David Eichler
Sent: Wednesday, August 25, 2021 5:23 PM
To: Dennis Nissley; Randy Wolgemuth; David Christian; Manager
Subject: Re: Rotary Park MOU

Dennis, Randy and David,

Thank you for including me on this email. Yes, I'll still be the responsible party regarding the vending machines (main contact to PepsiCo representative). Commissions/Proceeds from the machines are forwarded to the attention of the Mount Joy Business Manager, Mark G. Pugliese and will notify me when checks are deposited in the Borough's extraneous income account. As agreed with Rotary all proceeds/commissions will be used specifically for the placement/installation, building and maintaining of bird habitat boxes, not just in Rotary park, but also in other Borough Parks and Borough Authority properties.

To date, there have been 24 nesting boxes placed by me, of which 21 were used this spring and early summer; Swallows still inhabit their boxes. Three other boxes, Wood duck boxes that are placed at the Borough Authority's Wastewater Treatment Facility and Stauffertown Pump Station Facility (all reside along L. Chiques Creek) will hopefully be used by Wood ducks in the late winter/early spring 2022.

Keep me posted when the meeting will take place. Thank you.

Dave

David F. Eichler, D.Ed
Mount Joy Borough Councilman, East Ward
Public Safety Committee member
21 East Main Street
Phone: (717)653-2300

From: Dennis Nissley <DNissley@mountjoypa.org>
Sent: Wednesday, August 25, 2021 11:43 AM
To: David Christian <dave@dcalarch.com>; Randy Wolgemuth <randy@koserjewelers.com>; Manager <Manager@mountjoypa.org>; David Salley <dsalley@mountjoypa.org>; Brian Brubaker <Brian@mountjoypa.org>; Barry Geltmacher <Barry@mountjoypa.org>; fields@donegalyouthsoccer.org <fields@donegalyouthsoccer.org>; David M. Smith <dmsmith@lancasterctc.edu>; David Eichler <David@mountjoypa.org>; maria@scottalbertlaw.com <maria@scottalbertlaw.com>; fields.dbsa@gmail.com <fields.dbsa@gmail.com>
Cc: Bill Hall <bhall@mountjoypa.org>; Leonard Nolt <leonard@noltelectric.com>; Chris Silvestri <csilves36@gmail.com>; Dr. Michael DelPriore <mdelpriore@lancasterctc.edu>; Joshua Deering <Joshua@mountjoypa.org>
Subject: RE: Rotary Park MOU

All

As I have stated in a previous email, I would like to set up a meeting with all of the stakeholders that are involved with Rotary Park in Mount Joy Borough. The intent of this meeting is to review and make any necessary changes to the attached MOU which was signed in 2015. I have also attached a response letter from Rotary Club. If there are other responses that may be helpful for our discussion, please forward those prior to the meeting. If someone has been



BOROUGH OF MOUNT JOY
21 EAST MAIN STREET
MOUNT JOY, PENNSYLVANIA 17552
INCORPORATED 1851

10Q

From the Office of:
Mark G. Pugliese I
Borough Manager/Secretary

TELEPHONE (717) 653-2300
FAX (717) 653-6680
E-MAIL: manager@mountjoy.org

September 13, 2021

***SUBJECT: 2022 Minimum Municipal Obligation (MMO)
Police Pension Plan***

TO: Mount Joy Borough Council

FROM: Mark G. Pugliese, Chief Administrative Officer

Act 205 of 1984 requires that the "chief administrative officer" of the pension plan inform the "governing board" of the municipality of the Minimum Municipal Obligation for the following year by the last business day in September. The Minimum Municipal Obligation (MMO) for the Police Pension Plan for 2022 is \$207,441.69.

The calculation of the 2022 Minimum Municipal Obligation requires several assumptions relating to projected payroll. The attached 2022 Minimum Municipal Obligation certification details this determination.

**BOROUGH OF MOUNT JOY
POLICE RETIREMENT PLAN
WORKSHEET FOR 2022 MMO**

| | | |
|--|----|--------------|
| 1. TOTAL ANNUAL PAYROLL (W-2 payroll for 2021) | \$ | 1,147,670.76 |
| 2. TOTAL NORMAL COST PERCENTAGE | | 17.53% |
| 3. TOTAL NORMAL COST (Item 1 x Item 2) | \$ | 201,186.69 |
| 4. TOTAL AMORTIZATION REQUIREMENT | \$ | 0 |
| 5. TOTAL ADMINISTRATIVE EXPENSES (Estimated based on recent experience) | \$ | 5,875 |
| 6. TOTAL FINANCIAL REQUIREMENTS (Item 3 + Item 4 + Item 5) | \$ | 207,061.69 |
| 7. TOTAL MEMBER CONTRIBUTIONS (Member Contribution Rate x Item 1) | \$ | 0 |
| 8. FUNDING ADJUSTMENT | \$ | 380 |
| 9. MINIMUM MUNICIPAL OBLIGATION (Item 6 - Item 7 - Item 8) | \$ | 206, 681.69 |

Signature of Chief Administrative Officer

Date Certified to Governing Body

Note: The 2022 Minimum Municipal Obligation is based on the most recent Actuarial Valuation Report on January 1, 2019.

Uniformed

[illegible]



BOROUGH OF MOUNT JOY
21 EAST MAIN STREET
MOUNT JOY, PENNSYLVANIA 17552
INCORPORATED 1851

From the Office of:
Mark G. Pugliese I
Borough Manager/Secretary

TELEPHONE (717) 653-2300
FAX (717) 653-6680
E-MAIL: manager@mountjoypa.org

September 13, 2021

***SUBJECT: 2022 Minimum Municipal Obligation (MMO)
Non-Uniform Plan***

TO: Mount Joy Borough Council

FROM: Mark G. Pugliese, Chief Administrative Officer

Act 205 of 1984 requires that the "chief administrative officer" of the pension plan inform the "governing board" of the municipality of the Minimum Municipal Obligation for the following year by the last business day in September. The Minimum Municipal Obligation (MMO) for the Non-Uniform Pension Plan is \$751,807.92.

The calculation of the 2022 Minimum Municipal Obligation requires several assumptions relating to projected payroll. The attached 2022 Minimum Municipal Obligation certification details this determination.

**BOROUGH OF MOUNT JOY
NON-UNIFORMED RETIREMENT PLAN
WORKSHEET FOR 2022 MMO**

| | | |
|--|----|------------|
| 1. TOTAL ANNUAL PAYROLL (W-2 payroll for 2021) | \$ | 643,448.42 |
| 2. TOTAL NORMAL COST PERCENTAGE | | 10.93% |
| 3. TOTAL NORMAL COST (Item 1 x Item 2) | \$ | 70,328.92 |
| 4. TOTAL AMORTIZATION REQUIREMENT | \$ | 42,604 |
| 5. TOTAL ADMINISTRATIVE EXPENSES (Estimated based on recent experience) | \$ | 5,875 |
| 6. TOTAL FINANCIAL REQUIREMENTS (Item 3 + Item 4 + Item 5) | \$ | 118,807.92 |
| 7. TOTAL MEMBER CONTRIBUTIONS (Member Contribution Rate x Item 1) | \$ | 0 |
| 8. FUNDING ADJUSTMENT | \$ | 0 |
| 9. MINIMUM MUNICIPAL OBLIGATION (Item 6 - Item 7 - Item 8) | \$ | 118,807.92 |

Signature of Chief Administrative Officer

Date Certified to Governing Body

Note: The 2022 Minimum Municipal Obligation is based on the most recent Actuarial Valuation Report on January 1, 2019.

Non-Uniformed

(Insert this amount in line 1 on MMO Sheet)



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Lancaster 394-3731

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Estimate: Mr. Jay Barovich

21 E. Main Street

Mr. Jay, PA 17552

Phone: 717-653-2300

C/O: Mark Pugliese

E-mail: _____

Job at: _____

Directions: _____

| JOB DATE | PLATINUM PACKAGE with Sg or Sanitizer | GOLD PACKAGE with Sg or Sanitizer | SILVER PACKAGE | TOTAL JOB COST |
|--|---|--------------------------------------|-----------------------------------|-------------------|
| ESTIMATOR <u>Tom</u> | ESTIMATE DATE <u>8-18-29</u> | PLUS TAX <u>Jan AM</u> | | |
| CARPET, FURNITURE, & HARD SURFACE CLEANING | | | | |
| Clean <input type="checkbox"/> | Scotchgard® <input type="checkbox"/> | Sanitizer <input type="checkbox"/> | Hardwood <input type="checkbox"/> | |
| Carpet Appearance Maintenance <input type="checkbox"/> | Ceramic Tile & Grout <input type="checkbox"/> | | | |
| Living Room <input type="checkbox"/> | all carpet in borough & Police offices | | | |
| Dining Room <input type="checkbox"/> | | | | |
| Family Room <input type="checkbox"/> | | | | |
| Laundry Room <input type="checkbox"/> | clean, sanitize & protect | | | \$ 996 |
| Hallway <input type="checkbox"/> | | | | |
| Stairway <input type="checkbox"/> | | | | |
| Kitchen <input type="checkbox"/> | clean & sanitize | | | \$ 747 |
| Master Bedroom <input type="checkbox"/> | | | | |
| Bedroom 2 <input type="checkbox"/> | | | | |
| Bedroom 3 <input type="checkbox"/> | | | | |
| Bathroom <input type="checkbox"/> | clean | | | \$ 498 |
| Other <input type="checkbox"/> | | | | |
| Furniture <input type="checkbox"/> | | | | |

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SALE



10 R

BOROUGH: _____

| Delegate Name/Spouse Name (if attending) (As you want it to appear on badge) | Title | Full Package | Saturday Only | Extra Lunch Tickets | Extra Dinner Tickets |
|---|-------|--------------|---------------|---------------------|----------------------|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |

 Special Requirements including food allergies (Please list name & requirements): _____

BEFORE SEPT. 20 AFTER SEPT. 20

_____ \$ 185 \$ 235 **FULL PACKAGE:**

Includes All Conference Sessions, Breaks, Lunch, and Dinner

_____ \$ 150 \$ 175 **SATURDAY ONLY:**

Includes All Saturday Conference Sessions, Breaks, and Lunch

_____ \$ 20 \$ 20 Extra Lunch Tickets (Saturday, October 9)

_____ \$ 30 \$ 30 Extra Dinner Tickets (Saturday, October 9)

Contact Person: _____

Phone: (_____) _____

Email: _____

Total: \$ _____

10T

STATE REPRESENTATIVE
DAVID S. HICKERNELL

43 EAST WING
PO BOX 202098
HARRISBURG, PA 17120-2098
PHONE: (717) 783-2076
FAX: (717) 787-9175

222 SOUTH MARKET STREET
SUITE 103
ELIZABETHTOWN, PA 17022
PHONE: (717) 367-5525
FAX: (717) 367-6425

236 LOCUST STREET
COLUMBIA, PA 17512
PHONE: (717) 684-5525
FAX: (717) 684-2538

RECEIVED

AUG 23 2021

Borough of Mount Joy
Mount Joy Borough Authority



House of Representatives

Commonwealth of Pennsylvania
Harrisburg

COMMITTEES

MAJORITY CHAIRMAN,
PROFESSIONAL LICENSURE

EDUCATION

RULES

MEMO:

DATE: August 19, 2021

SUBJECT: Request for Capital Budget Projects

TO: Municipal Officials/Managers in the 98th Legislative District

FROM: Dave Hickernell *DH*

It is very likely that the General Assembly will pass a Capital Project Itemization (Capital Budget) Bill in the upcoming Fall Session. As you know, this legislation is the vehicle used to place large capital projects on a list for potential funding by the governor. I am asking for your help in identifying projects within your municipality.

Capital projects are grouped into 3 categories and are outlined below:

Public Improvement Projects: Include the design and construction of new buildings or renovations to existing structures owned by the Commonwealth. These projects must be valued at \$100,000 or more.

Transportation Assistance Projects: Include the design, construction, acquisition or improvement of fixed facilities, equipment, rights of way, and rolling stock directly involved with providing surface public transit, rail freight transportation or the operation of a public airport. This category does not include highway or bridge projects. Projects must be valued at \$100,000 or more.

Redevelopment Assistance Projects: This category provides grants for the acquisition of land and the construction of buildings and other property appurtenances for local government entities or redevelopment and industrial authorities for the prevention and elimination of blight and economic development. To qualify for state funding, a redevelopment assistance project must generate a substantial increase in employment or tax revenues and have a regional or multi-jurisdictional impact. The total project must be valued at \$1 million or more. Any project that is classified under this category must have fifty percent (50%) non-state participation (matching funds). Please note that redevelopment assistance projects do not include the design or construction of housing units, highways, bridges, waste disposal facilities, sewage facilities or water facilities.

Page 2.

If you have projects, please submit them to my Elizabethtown Office by September 22nd. All requests must be in writing and should be submitted on the enclosed "Capital Budget Itemization Request" form. Please forward completed forms to Abby Akers by email at aakers@pahousegop.com.

In order to avoid duplication of project requests, you may want to coordinate the submission of requests through your borough or township manager.

Thank you for your assistance with this matter, and I look forward to continuing to work with you in the future. As always, please feel free to contact me if I may ever be of assistance to you with a state-related problem or concern.

DSH/aa

Enclosure

CAPITAL BUDGET ITEMIZATION REQUEST

Requesting Member: _____ Date Submitted: _____

Project/Facility Name: _____

Responsible Grantee: _____

(must be an eligible Grantee, such as a City, Borough, Township, County, Public Authority, Local Industrial Development Agency, Redevelopment Authority, etc. Responsible Grantee for rail projects can be the railroad company.)

Contact Person(s): Name, Phone, Fax, and E-mail address

Total Project Cost: \$ _____ Requested Authorization (State share): \$ _____

Municipality: _____ County: _____

Project Category: Please check those that apply.

_____ **Public Improvement**

- _____ State-owned facility
- _____ State System University
- _____ State-Related University
- _____ Community College

_____ **Redevelopment Assistance**

- _____ Regional Economic Development
- _____ Cultural or Civic
- _____ Historical

_____ **Transportation Assistance**

- _____ Mass Transit
- _____ Air
- _____ Rail

Nature of Project: Please check all that apply.

_____ Construction

_____ Acquisition (buildings/land)

_____ Infrastructure (related to project)

_____ Redevelopment

_____ Abatement of Hazardous Materials

_____ Renovation/Rehabilitation

_____ Other (specify)

Project Description: Please include a brief description of the project:

10u

BOROUGH OF MOUNT JOY

Lancaster County, Pennsylvania

RESOLUTION NO. 11-21

A RESOLUTION TO ENCOURAGE AND SUPPORT THE PLANNING, DESIGN, OPERATION AND MAINTENANCE OF STREETS SO THAT THEY ARE SAFE FOR ALL AGES AND ABILITIES AND PROVIDE A MULTI-MODAL TRANSPORTATION NETWORK.

WHEREAS, active transportation and complete streets are designed and operated to provide safety and accessibility for all users of roadways and trail systems, including pedestrians, bicyclists, transit users, motorists, emergency vehicles, freight and commercial vehicles, and people of all ages and abilities; and

WHEREAS, the Lancaster County Planning Commission and the County of Lancaster have takes steps to encourage Lancaster County municipalities to plan for and maintain complete streets and active transportation facilities by preparing the Lancaster County Complete Streets Guidebook and the Lancaster Active Transportation Plan; and

WHEREAS, active transportation and complete street-based principles contribute toward the safety, health, equity, economic viability, and quality of life in a community by providing accessible and efficient connections between home, school, work, recreation, and retail destinations by improving the transportation environments throughout the Borough; and

WHEREAS, the Borough recognizes that users, which includes users of all ages and abilities, of various modes of transportation, including, but not limited to, pedestrians, bicyclists, transit users, motorists, emergency responders, freight and commercial drivers, are legitimate users of the transportation network and deserve safe facilities: and

WHEREAS, the Borough recognizes that complete streets encourage people to engage in "active transportation" such as walking and bicycling which contributes to improved health and helps to reduce the incidence and severity of obesity and diseases such as diabetes, high blood pressure and heart attacks that are related to sedentary lifestyles and the public cost to treat these diseases; and

WHEREAS, the Borough recognizes that low income individuals own fewer cars and may rely more heavily on walking and public transportation than those of higher incomes, the elderly, youth and disabled may also rely more heavily on non-motorized transportation, and by creating a

safe environment for pedestrians and bicyclists, complete streets contribute to a more equitable transportation system for people of all income levels, ages and abilities; and

WHEREAS, the Borough recognizes that all projects, new, maintenance, or reconstruction, are opportunities to apply active transportation and complete streets design principles; and

WHEREAS, the Borough will, to the maximum extent practical, design, construct, maintain, and operate all streets to provide a comprehensive and integrated street network of facilities for people of all ages and abilities.

NOW, THEREFORE, BE AND IT IS HEREBY RESOLVED by Borough Council of the Borough of Mount Joy, Lancaster County, Pennsylvania, as follows:

Section 1. It is this Borough's policy that active transportation design recommendations shall be incorporated into all publicly and privately funded projects, as appropriate. All transportation infrastructure and street design projects requiring funding or approval by the Borough of Mount Joy, as well as projects funded by the State and/or Federal government, shall adhere to the Borough's policies. To the greatest extent possible, the Borough of Mount Joy shall work to incorporate native plant species and sustainable landscaping elements into active transportation projects. The latest design guidance, standards, and recommendations available will be used in the implementation of active transportation, including:

- A. Documents and plans created specifically for the Borough of Mount Joy, including the Mount Joy Active Transportation Implementation Guidebook prepared by Michael Baker International, Inc., which Council hereby adopts.
- B. Lancaster County Complete Streets Guidebook.
- C. American Association of State Highway Transportation Officials (AASHTO)
- D. The United States Department of Transportation Federal Highway Administration's Manual of Uniform Traffic Design Controls (MUTCD).
- E. National Association of City Transportation Officials Design Guides (NACTO).
- F. Small Town and Rural Design Guide, Federal Highway Administration.
- G. United States Access Board Guidelines and Standards.
- H. Public Rights of Way Access Guidelines.
- I. Americans with Disabilities Standards for Accessible Design.
- J. Urban Street Stormwater Guide.

Section 2. This Borough shall review provisions of its ordinances, including, but not limited to, Chapter 232, Streets and Sidewalks; Chapter 240, Subdivision and Land Development;

and Chapter 270, Zoning, of the Code of Ordinances and shall make appropriate amendments to such ordinances to support active transportation within the Borough.

Section 3. The Borough Manager shall annually report to Council on the implementation of the Active Transportation Guidelines within the Borough. Such report shall use the categories and metrics included in such Guidebook.

Section 4. The Borough will work to encourage funding prioritization for active transportation implementation in accordance with the following principles and criteria. The project prioritization and selection process should reflect overall program goals, integrating criteria, weights and scoring to ensure objectivity and a commitment to addressing critical disparities in safety, health, accessibility, economic benefits and equity within the community.

- A. Improved Safety – targeting improvements to identified high crash/critical safety concern location(s). Complete streets can reduce pedestrian and bicycle accidents by creating a safer environment for non-motorized trips.
- B. Connectivity – connecting existing infrastructure to existing infrastructure and creating additional connections to community assets (including, but not limited to, businesses, schools, transit facilities, community centers, city halls, medical facilities, parks/recreation facilities, voting locations, or libraries). Complete streets can reduce traffic congestion by enabling people to reach such destination by means other than motor vehicles.
- C. Economic Development – proposed project supports broader efforts to enhance business activity and local serving retail in the Borough. Complete streets may attract people to shop, eat at restaurants in the Borough, and walk around the Borough.
- D. Social Development – broadening transportation options for neighborhoods with persons of limited income and/or limited connectivity to community assets. The Borough recognizes that low income individuals own fewer cars and may rely more heavily on walking and public transportation than those of higher incomes, the elderly, youth and disabled may also rely more heavily on non-motorized transportation, and by creating a safe environment for pedestrians and bicyclists, complete streets contribute to a more equitable transportation system for people of all income levels, ages and abilities.

Section 5. In the event any provision, section, sentence, clause or part of this Resolution shall be held to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such invalidity, illegality or unconstitutionality shall not affect or impair the remaining provisions, sections, sentences, clauses or parts of this Resolution, it being the intent of Borough Council that the remainder of the Resolution shall be and shall remain in full force and effect.

Section 6. This Resolution shall take effect and be in force immediately.

DULY ADOPTED this _____ day of _____, 2021, by Borough Council of the
Borough of Mount Joy, Lancaster County, Pennsylvania, in lawful session duly assembled.

BOROUGH OF MOUNT JOY
Lancaster County, Pennsylvania

Attest: _____
(Assistant) Secretary

By: _____
(Vice) President
Borough Council

[BOROUGH SEAL]



11 b + c

55 East Main Street : Mount Joy, PA 17552 : 717.653.4227
mainstreetmountjoy.com : info@mainstreetmountjoy.com

Main Street Mount Joy is requesting street closures for 2 events.

Event # 1 – Downtown Trick or Treat (4th Friday in October)

Event Date: OCTOBER 22, 2021

Requested Street Closure Time: 4:30 pm to 8:30 pm (event runs from 5:00 – 8:00)

Requested Closure Area: Main Street from ^{NEW HAWK} Market to the intersection where the town clock is located. Delta Street from Henry Alley to Main Street. Map below. Closure request in yellow.

MSMJ can assist with setting up road barriers and provide at least 1 person to help with traffic. This street closure is a new one for MSMJ, but needed for the growth of this 4th Friday event and the safety of the children – allowing for a safe area to cross the road.





55 East Main Street : Mount Joy, PA 17552 : 717.653.4227
mainstreetmountjoy.com : info@mainstreetmountjoy.com

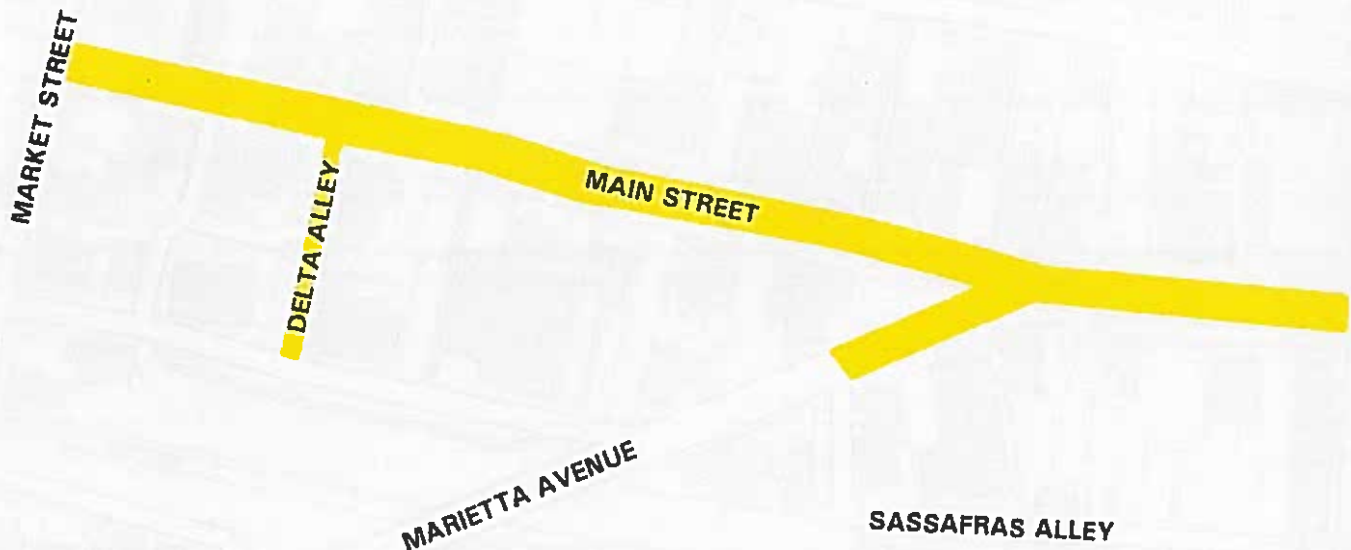
Event # 2 – WINTERFEST

Event Date: DECEMBER 04, 2021

Requested Street Closure Time: 1:00 pm to 9:00 pm (event runs 4:00 – 7:00 + set up and tear down time)

Requested Closure Area: Main Street from Market to Barbara Street. Delta Street from Henry Alley to Main Street. Marietta Avenue from Main to Sassafras Alley. Map below. Closure request in yellow.

This is a regular road closure event for MSMJ. Tree lighting will take place at 7pm. Entertainment will take place near Delta Street. Requesting use of electric in the overhang areas next to the Police station. MSMJ will have vendors at this event and direct people down Delta Street around 1:30 for set up and will have someone stationed there to allow entry / exit for vendors.



Main Street Mount Joy is committed to enhancing the economic, social and cultural quality of downtown Mount Joy.

2021 DIAMOND SPONSOR

T Mobile

PennState Health Life Lion LLC

Ground Ambulance Service Agreement – Council /Mayor Concerns

1. Language suggested by Borough Solicitor to address concerns expressed by Council/Mayor for lack of ambulance response.
 - a. Not less than one Ambulance shall be stationed at 820 Church Street, Mount Joy Borough. If Provider ceases to station at least one Ambulance at 820 Church Street and fails to resume stationing not less than one Ambulance at 820 Church Street within one month after written notice from Municipality to resume stationing not less than one Ambulance at 820 Church Street, Provider shall convey 820 Church Street to Municipality. This requirement to station not less than one Ambulance at 820 Church Street and the requirement to convey 820 Church Street to the Municipality if Provider does not do so shall survive termination of this Agreement.
2. Address PSH Life Lion LLC's participation in Mount Joy Borough and Main Street Mount Joy sponsored events.
3. From Councilor Eichler
 - a. Language should be included in the agreement with PSHLL that the Borough owns the land and any improvements upon it and has the unalienable right to vacate the PSHLL agreement with 30 days' notice. Does Borough Ordinance require change for this to occur? I'm not a legal expert, but I read Josele's letter and am somewhat uncertain. Bottom line, I'd like to protect this borough land and add language that any and all improvements upon said land is that of the borough. I'm afraid If PSHLL changes its tune and uses the land & building for "administrative purposes", but this still meets the requirement of "EMS use" that they, PSHLL can't be removed/terminated from the property.
4. From President Hall
 - a. A staffed BLS (ALS preferred) ambulance available exclusively for responding to 911 calls at the Church Street station 24/7/365. Unit not to be used for routine transports.
 - b. Complimentary EMS standbys for:
 - i. Memorial Day Parade
 - ii. Car Show
 - iii. Winter Fest
 - iv. Other events?
 - c. Complimentary (except cost of cards) CPR and First Aid Training for MJBPD, FDMJ and MJB staff. MJBPD and FDMJ would be secondary to their in-house instructors and only used when the officers or firefighters cannot attend classes provided by MJBPD or FDMJ.
 - d. Annual joint training session with FDMJ to familiarize firefighters with equipment carried by Life Lion LLC

- e. Annual joint training sessions with MJBPD to familiarize officers with equipment carried by Life Lion LLC
- f. Participation in National Night Out (if established in MJB).
- g. Community outreach stand/display at:
 - i. Car show
 - ii. Winterfest
 - iii. October 4th Friday
- h. Monthly report of EMS activity in MJB to include:
 - i. Total number of EMS calls in MJB
 - ii. Total calls in MJB handled by Life Lion LLC out of the Church Street station
 - iii. List of calls in MJB not handled by Life Lion LLC out of the Church Steet station
 - iv. Any times that there was no ambulance stationed at the Church Street station
 - v. Total amount of time that no ambulance was stationed at the Church Street station.
 - vi. Any times that the ambulance was moved out of the Church Street station as a transfer or on a routine transport where timing was critical

Mount Joy Borough Park Rules and Regulations

These recreation areas are meant for the enjoyment of the general public. Please respect the rights of others to use them as such. Violations of any of the provisions set forth may result in prosecution under the law.

1. **Hours:** All parks shall be open to the public from dawn to dusk unless otherwise posted, or permission is granted by the Mount Joy Borough Council. Certain areas may be restricted from use.
2. **Vehicles:** Speed – 15 m.p.h. maximum
 Parking – designated areas only.
 Repairs – In emergencies only.
 Washing, Waxing, etc. – Prohibited
 Operation – on roadways or specially designated areas only
 Bicycles – must be kept out of marked areas.
3. **Intoxicating Beverages:** Possession or use of alcoholic or malt beverages in the parks is prohibited. Persons under the influence of intoxicating beverages shall not be permitted in the parks.
4. **Animals:** No animals shall be brought into the parks except domestic animals on a leash not more than four feet in length. Any person bringing an animal into a park shall clean up after such animal.
5. **Gambling:** No person shall engage in any kind of gambling at which money or other valuable things may or shall be played for, staked, or betted upon., unless otherwise specified by the Mount Joy Borough Council.
6. **Fires:** No one is permitted to build a fire except in those areas designed for that purpose.
7. **Littering:** No one is permitted to discard any form of waste material, paper, or rubbish, except in those containers supplied for that purpose.
8. **Injuring or Destroying Property:** No person shall injure, deface, remove, cut, or damage any of the trees, plants, turf, buildings, structures, or fixtures therein, or any other property of the Borough within a park.
9. **Park Materials:** No person shall gather or remove any wood, turf, soil, rock sand, gravel, wildlife, or other materials stored at a park ~~without written permission of the Borough.~~
10. **Firearms:** No person shall discharge within any Borough Park or Borough property any firearms, as that term is defined by 6120(b) of the Pennsylvania Uniform Firearms Act, except for the justifiable use of force as authorized by Chapter 5 of the Pennsylvania Crimes Code. No person shall use or possess within any Borough Park or Borough property any bow and arrow, slingshot,

air rifle or any other device (other than firearms as defined above) capable of throwing any projectile of any sort, including the hand throwing of rocks or stones intended to be used as weapons.

11. Profane Language: No person shall use profane language within a park, or conduct themselves in any lewd, immoral, or commonly objectionable manner within a park, or conduct himself/~~herself~~ to annoy any other person using a park for recreational purposes.
- ~~12. Concessions: No person shall set up any booth, table or stand, mobile or otherwise, for the sale of any article whatsoever, within the limits of a park, without written permission from the Mount Joy Borough Council.~~
13. Athletic Activities: The playing of athletic games and athletic activities shall be confined to areas designated therefore, and no such activities shall be carried on in any other areas.
- ~~14. Scaling of Trees: No person shall climb or scale any trees in Borough parks without written permission of the Borough.~~
- ~~15. Fireworks: No person shall light, or discharge any fireworks, or sparklers of any kind within any Borough Park or Borough property without written permission of the Borough.~~
16. Hunting: No person shall engage in any hunting of any kind within a Borough Park
- ~~17. Fishing is permitted as per Title 30, PA Fish & Boat Code following the licensing requirements depicted by the PA Fish and Boat Commission. Edit per D. Eichler~~
- ~~18. Certain activities in Borough parks will be allowed by expressed written permission of the Mount Joy Borough Council~~

FOR INFORMATION CALL THE MOUNT JOY BOROUGH OFFICE AT 717-653-2300 OR FOR EMERGENCY CALL 911 OR 717-653-1650

Borough of Mount Joy

Lancaster County, Pennsylvania

Resolution No. 9-21

Be it **RESOLVED**, by the authority of the **Borough Council** of the **Borough of Mount Joy, Lancaster County, Pennsylvania**, and it is hereby resolved by the authority of the same, that the **Council President** of said Political Subdivision be authorized and directed to sign the attached 902 Recycling Grant Funding Application on its behalf

I, Mark G. Pugliese I qualified Borough Secretary of the Borough of Mount Joy, Lancaster County, PA hereby certify that the forgoing is a true and correct copy of a Resolution duly adopted by a majority vote of the Mount Joy Borough Council at a regular meeting held August 2nd, 2021 and said Resolution has been recorded in the Minutes of the Borough of Mount Joy and remains in effect as of this date.

IN WITNESS THEREOF, I affix my hand and attach the seal of the **Borough of Mount Joy, PA, this 2nd day of August 2021.**

ATTEST:

Borough of Mount Joy

Attest: _____
(Assistant) Borough Secretary

Council (Vice) President

(Borough Seal)

12c

Borough of Mount Joy

Lancaster County, Pennsylvania

Resolution No. 10-21

A RESOLUTION OF THE BOROUGH COUNCIL OF THE BOROUGH OF MOUNT JOY, LANCASTER COUNTY, PENNSYLVANIA, AUTHORIZING THE SALE OF VARIOUS EQUIPMENT USING THE MUNICIBID ONLINE MUNICIPAL AUCTION SERVICE.

WHEREAS, the Borough of Mount Joy has various excess equipment; and

WHEREAS, the Borough of Mount Joy desires to sell the excess equipment listed below using the Municibid Online Municipal Auction Service;

NOWE THEREFORE BE IT RESOLVED that the Borough Council of the Borough of Mount Joy hereby authorizes the sale of the following excess equipment using the Municibid Online Auction Service

One (1) FORD Model 906 post hole digger w/12" and 18" augers

One (1) ODB Leaf collector- vacuum type, with leaf box

One (1) TRAC VAC Model 1080

DULY ADOPTED THIS 2ND DAY OF August 2021 by Borough Council of the Borough of Mount joy, Lancaster County, Pennsylvania, in lawful session duly assembled.

ATTEST:

Borough of Mount Joy

Attest:

(Assistant) Borough Secretary

Council (Vice) President

(Borough Seal)

BOROUGH OF MOUNT JOY**Lancaster County, Pennsylvania****RESOLUTION No. 14-21**

BE IT RESOLVED, by the authority of the **Borough Council** of the **Borough of Mount Joy, Lancaster County, Pennsylvania**, and it is hereby resolved by the authority of the same that the **Director of Public Works** of the **Borough of Mount Joy** be authorized and directed to submit the attached Traffic Signal Maintenance Agreement, to submit future modifications to the attached Traffic Signal Maintenance Agreement, and to submit future Applications for traffic Signal Approval either in writing or via electronic signature, to the Department of Transportation and to sign this agreement on behalf of the **Borough of Mount Joy**.

IN WITNESS THEREOF, I affix my hand and the attached seal of the Borough of Mount Joy this 13th day of September 2021.

ATTEST

Attest: _____
(Assistant) Borough Secretary

Council (Vice) President

I, **Mark G. Pugliese I**, **Borough Manager/Secretary** of the **Borough of Mount Joy**, do hereby certify that the forgoing is a true and correct copy of the Resolution legally adopted at the meeting held the **13th** day of **September 2021**.

Date

Signature

(SEAL)

AGREEMENT NO.: _____

EFFECTIVE DATE: _____

**COMMONWEALTH AND MUNICIPAL
TRAFFIC SIGNAL MAINTENANCE AGREEMENT**

This Commonwealth and Municipal Traffic Signal Maintenance Agreement ("Agreement") is made between the Commonwealth of Pennsylvania, Department of Transportation ("PennDOT")

and

Borough of Mount Joy _____, a political subdivision in the County of
Lancaster _____, Pennsylvania, by acting through its proper official ("Municipality").

BACKGROUND

This Agreement is pursuant to 74 Pa.C.S. Chapter 92 (relating to traffic signals) and 75 Pa.C.S. § 6122 (relating to authority to erect traffic control devices) to define maintenance requirements for all traffic signals within the Municipality.

Local authorities are required to obtain the approval of PennDOT prior to erecting any traffic signal pursuant to 75 Pa.C.S. § 6122(a)(2). Local authorities are responsible for the installation, revision, maintenance, operation and removal of traffic signals on highways under their jurisdiction with written PennDOT approval pursuant to 67 Pa. Code § 212.5(c)(1). The Municipality is a local authority having the authority to enact laws relating to traffic pursuant to the definition in 75 Pa.C.S. § 102.

The Municipality is required to enter into an agreement with PennDOT to properly maintain and time traffic signals for critical corridors pursuant to 74 Pa.C.S. § 9202(b). The Municipality may enter into an agreement with PennDOT to properly maintain and time traffic signals for designated corridors pursuant to 74 Pa.C.S. § 9202(a). An agreement is required as a condition of eligibility for financial assistance out of the Motor License Fund to replace, synchronize, time, operate, and maintain traffic signals pursuant to 75 Pa.C.S. § 9511(e.1)(5).

Traffic signal equipment is installed to serve a specific purpose through a distinct mode of operations.

PennDOT and the Municipality share a common interest in facilitating the safe and efficient management of traffic flow on a daily basis as well as during incidents.

The parties agree, with the intent to be legally bound, to the following:

1. **Defined Terms.** In addition to the terms defined elsewhere in this Agreement, as used in this Agreement, the terms set forth below shall have the respective meanings set forth below.
 - a. **Maintenance** means preventative, periodic, and emergency work (including by contract), as described in this Agreement. The definition shall include all work forms and tenses (including, but not limited to, maintain, maintained, and maintaining).
 - b. **Personally Identifiable Information** means individual's name, address, photograph, social security number, driver identification number, photograph, medical or disability information, or a combination of that information, as per 18 U.S.C. § 2725(3), the Breach of Personal Information Notification Act, 73 P.S. § 2301, et seq., Commonwealth IT Policy ITP-SEC019 (Policy and Procedures for Protecting Commonwealth Electronic Data), and the applicable OPD documents publicly available at: <https://www.oa.pa.gov/Policies/Pages/itp.aspx>.

- c. **Traffic Control Devices** means geometric features, signs, signals, pavement markings, pedestrian accommodations, and other items associated with traffic control devices.
- d. **TSAMS** means Traffic Signal Asset Management System and is the preferred method for electronic record keeping.
- e. **Traffic Signal** means an electronically operated traffic control device that facilitates the orderly movement of traffic (including, without limitation, traffic control signals, pedestrian signals, flashing beacons, emergency vehicle access signals, lane-use control signals, ramp metering signals, school warning systems, and in-roadway lights). The useful life of traffic signal equipment is defined as the time from installation until it is either removed or replaced with signal equipment or other traffic control device(s) which better serves the need of the intersection.
- f. **Traffic Signal Permit** means a document issued by PennDOT, which:
 - i. approves installation of the Traffic Signal;
 - ii. captures some basic information such as who the permit is issued to, the hours that the Traffic Signal will be on flash, the type of controller mounting, and the permittee's responsibilities; and
 - iii. contains information about the operation of the Traffic Signal, the placement of signal equipment, signing, and markings, and a signal plan sheet showing a scaled drawing of the intersection with the approved Traffic Signal and other associated traffic control devices (such as signal structures, vehicular and pedestrian signal heads, controller, traffic detectors, traffic signs and any sign structures, pavement markings, pedestrian curb ramps).

2. **Applicability.** This agreement applies to all traffic signals in the Municipality for which a Traffic Signal Permit has been issued by PennDOT. Traffic Signals shall remain subject to this Agreement in perpetuity unless and until the Traffic Signal Permit is cancelled by PennDOT. A record of Traffic Signal Permits is maintained electronically by PennDOT and may be accessed at any time by the Municipality.

3. **Ownership of Traffic Signals and Maintenance Requirements.**

a. Ownership.

- i. Title to all Traffic Signal installations shall vest in the Municipality, unless PennDOT has indicated otherwise through publication in the Pennsylvania Bulletin pursuant to 74 Pa.C.S. § 9202(i)(1).
- ii. When a new Traffic Signal is constructed, ownership of the Traffic Signal transfers to the Municipality upon end of the thirty- (30-) day test period. PennDOT will confirm end of the thirty- (30-) day test period in writing.
- iii. When a Traffic Signal is modified, ownership of the modified elements of the Traffic Signal transfers to the Municipality upon end of the thirty- (30-) day test period in writing. Traffic Signal appurtenances that are not modified as part of the work remain under ownership of the Municipality.
- iv. All items associated with the Traffic Control Device are the Municipality's responsibility, as documented on the Traffic Signal Permit issued by PennDOT. Longitudinal pavement markings on state highways are the responsibility of PennDOT and will be maintained by PennDOT.
- v. The Municipality shall, at its own expense, operate the Traffic Signals in accordance with the permit(s) issued by PennDOT.

b. Preventative and Response Maintenance.

- i. The Municipality shall provide preventative and response Maintenance at its own expense, for all Traffic Signals owned by the Municipality in order to provide the Maintenance program described in this Agreement.
- ii. The required preventative and response Maintenance functions shall be provided in the manner indicated in Exhibit A, attached to and made part of this Agreement.
- iii. The Municipality agrees that the provisions of Exhibit B, attached to and made a part of this Agreement, shall apply if either Maintenance function is performed using municipal personnel.
- iv. If the Municipality employs a contractor to perform either Maintenance function, the Municipality agrees to submit the name and address of the contractor to PennDOT using the form in Exhibit C, attached to and made part of this Agreement, together with a copy of the agreement between the

contractor and the Municipality. The Municipality shall submit a revised Municipal Contact Form (Exhibit C) within thirty (30) days of any changes to the information contained on the form. The form shall be submitted to the attention of the District Traffic Engineer within the PennDOT Engineering District encompassing the Municipality, or in such other format as prescribed by PennDOT. The use of a contractor does not relieve the Municipality of any obligations of this Agreement.

c. Maintenance Records.

- i. The Municipality agrees to prepare and retain an accurate record of the preventative and response Maintenance activities performed on Traffic Signals owned by the Municipality in accordance with the provisions of Exhibit D, attached to and made part of this Agreement.
- ii. The Municipality shall make Maintenance records available at all reasonable times for inspection by PennDOT.

4. Failure to Perform Maintenance. If the Municipality fails to fulfill its responsibilities as described herein, PennDOT shall provide written notice pursuant to 74 Pa.C.S. § 9202(e). If the Municipality failed to meet the requirements of the written notice, PennDOT may take action to correct the deficiencies and may deduct the actual costs of correcting the deficiencies from the Municipality's liquid fuels payments pursuant to 74 Pa.C.S. § 9202(g). Performance of the Maintenance services by PennDOT in the Municipality's stead shall not relieve the Municipality of its responsibility for continued Maintenance of Traffic Signals. If the Traffic Signal was installed or improved using state or federal funds, federal- and/or state-aid participation may be withheld on all future projects until the Municipality demonstrates to PennDOT and the Federal Highway Administration that all required Maintenance and operation services are being provided by the Municipality without the necessity of PennDOT performing duties herein described as being the responsibility of the Municipality.

5. **Notices.** Notices sent by PennDOT to the Municipality relating to Traffic Signals will be sent by regular mail, facsimile, e-mail, or delivery in person to the address of the nonemergency contact provided on the form in Exhibit C.
6. **Application for Traffic Signal Permits.** A signed Traffic Signal Application Form TE-160, see attached Exhibit E, attached to and made part of this Agreement, shall be submitted by the Municipality in accordance with the form and instructions provided by PennDOT, and a Traffic Signal Permit must be issued by PennDOT, before any work can begin on any new Traffic Signal or modification to an existing Traffic Signal. If PennDOT approves a new Traffic Signal after a traffic engineering study and engineering judgment indicates the need, the Traffic Signal shall be installed, owned, operated, and maintained in accordance with this Agreement. PennDOT may direct appropriate alterations to the design or operation (including, but not limited to, hours of operation) of the Traffic Signal, or require removal of the Traffic Signal, if traffic conditions or other considerations necessitate alteration or removal. The Municipality is responsible for the obtaining approval for installation of Traffic Signal appurtenances outside highway right-of-way. Traffic Signals installed using Liquid Fuels Tax funds must conform to PennDOT specifications as set forth in the current Publication 408, supplements and Standard Drawings.
7. **Highway Occupancy Permits.** Section 441.3 of Title 67 of the Pennsylvania Code (67 Pa. Code, Chapter 441) stipulates that a highway occupancy permit is required from the Department prior to the construction or alteration of any driveway, local road, drainage facility, or structure within state highway right-of-way; or connection to or alteration of a PennDOT drainage facility. The Municipality shall submit for a Highway Occupancy Permit whenever embankment removal, curbing and/or sidewalk, drainage structures, changes in highway geometry, pavement widening, or installation of additional lanes are performed within the right-of-way of any state highway. Additional requirements and guidance are defined within Publication 441 (*see* Chapter 441, i.e., "Access to and Occupancy of Highways by Driveways and Local Roads").

8. Remote Communications and Operations.

- a. **Virtual Private Network.** Communications (including field-to-field and field-to-network) access shall be provided through PennDOT's virtual private network ("VPN"). The Municipality may request user credentials, which may be provided on a case-by-case basis at PennDOT's discretion.
- b. **System Equipment Cabinet.** Access to the on-site equipment cabinet housing connections to PennDOT's VPN shall be restricted (by key, access badge, or otherwise). The Municipality may request access, which may be provided at the PennDOT's discretion. PennDOT may establish minimum qualifications for Traffic Signal technicians to have access.
- c. **Traffic Signal System Monitoring.** The Municipality agrees to permit PennDOT to monitor traffic conditions using Traffic Signal equipment within the boundaries of the Municipality during times of normal traffic flow and during times of an incident. PennDOT during signal monitoring will suggest traffic signal timing adjustments to the Municipality in order to improve normal traffic flow. Traffic signal timings suggested to improve normal traffic flow can be implemented remotely by either PennDOT or the Municipality upon mutual acceptance of new timings.
- d. **Incident Management.** In the event of an incident, the Municipality agrees to allow PennDOT to implement revised traffic signal timing and phasing plans at any Traffic Signal subject to this agreement. PennDOT will contact the Municipality prior to the implementation of revised traffic signal timing and phasing plans. Upon clearance of incident, PennDOT will return affected Traffic Signals to operate as reflected on the approved Traffic Signal Permit. Upon resumption of normal operations, PennDOT will notify the Municipality. Notification under this section from PennDOT to the Municipality will be to the emergency contact identified in Exhibit C.

9. **Data Ownership.** All data generated by the Traffic Signal equipment shall be jointly owned by PennDOT and the Municipality. PennDOT or the Municipality may share data with third parties for the purpose of providing traveler information. PennDOT and the

Municipality have the obligation to protect any Personally Identifiable Information collected in accordance with the applicable laws and regulations.

10. **Engineering Studies and Ordinances.** The Municipality shall comply with the study and ordinance requirements of 75 Pa.C.S. § 6109.

11. **Save Harmless.** The Municipality agrees that it will indemnify, save harmless and defend (if requested) PennDOT, its agents, representatives and employees, from all suits, actions or claims of any character name or description, damages, judgments, expenses, attorney's fees and compensation arising out of personal injury, death or property damage, sustained or alleged to have been sustained in whole or in part by any and all persons whatsoever, as a result of or arising out of any act, omission, neglect or misconduct of the Municipality, its officers, agents, contractors or employees, during the performance of its obligations under this Agreement and thereafter. This provision shall not be construed to limit the Municipality in asserting any rights or defenses. Additionally, the Municipality shall include in any contracts into which it enters for Maintenance, operation, or inspection of the traffic control device this same obligation to indemnify PennDOT and its officers, agents, and employees; and it shall require its contractor(s) to provide public liability insurance coverage, naming PennDOT and the Municipality as additional insureds for bodily injury, including death and property damage, in the minimum amounts of \$500,000 per person, \$1,000,000 per occurrence, it being the intention of parties to have the contractor fully insure and indemnify PennDOT and the Municipality.

12. **Required Commonwealth Provisions.** The Municipality shall comply with the following required Commonwealth provisions. As used in these provisions, "Contractor" refers to the Municipality:

- a. **Commonwealth Nondiscrimination/Sexual Harassment Clause.** The current version of the Commonwealth Nondiscrimination/Sexual Harassment Clause, attached as Exhibit F.
- b. **Contractor Integrity Provisions.** The current version of the Contractor Integrity Provisions, attached as Exhibit G.

- c. **Provisions Concerning the Americans with Disabilities Act.** The current version of the Commonwealth Provisions Concerning the Americans with Disabilities Act, attached as Exhibit H.
 - d. **Contractor Responsibility Provisions.** The current version of the Commonwealth Contractor Responsibility Provisions, attached as Exhibit I.
- 13. **Right-to-Know Law.** The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, applies to this Agreement. Therefore, this Agreement is subject to, and the Grantee shall comply with, the clause entitled Contract Provisions—Right to Know Law, attached as Exhibit J and made a part of this Agreement. As used in this exhibit, the term “Contractor” refers to the Grantee.
- 14. **Form TE-160 Application for Traffic Signal Approval.** Applications for traffic signals shall follow the process as specified in PennDOT Publication 46. As part of this process, the Municipality shall submit via writing recommended changes to the existing traffic signals, or request to remove an existing Traffic Signal or install a new Traffic Signal using Form TE-160, attached as Exhibit E, along with all supporting studies and documentation for PennDOT review and approval.
- 15. **Amendments and Modifications.** No alterations or variations to this Agreement shall be valid unless made in writing and signed by the parties, except as otherwise provided in this Agreement. Amendments to this Agreement shall be accomplished through a formal written document signed by the parties with the same formality as this Agreement.
- 16. **Titles Not Controlling.** Titles of paragraphs are for reference only and shall not be used to construe the language in this Agreement.
- 17. **Severability.** The provisions of this Agreement shall be severable. If any phrase, clause, sentence or provision of this Agreement is declared to be contrary to the Constitution of Pennsylvania or of the United States or the laws of the Commonwealth, or the applicability thereof to any government, agency, person or circumstance is held invalid, the validity of

the remainder of this Agreement and the applicability thereof to any government, agency, person or circumstance shall not be affected thereby.

18. **No Waiver.** Either party may elect not to enforce its rights and remedies under this Agreement in the event of a breach by the other parties of any term or condition of this Agreement. In any event, the failure by either party to enforce its rights and remedies under this Agreement shall not be construed as a waiver of any subsequent breach of the same or any other term or condition of this Agreement.
19. **Independence of the Parties.** This Agreement is not intended and shall not be construed to, in any respect, create or establish the relationship of partners between the Municipality and PennDOT, or to constitute PennDOT as the representative or general agent of the Municipality for any purpose whatsoever.
20. **Assignment.** This Agreement may not be assigned by the Municipality, either in whole or in part, without the written consent of the Commonwealth.
21. **No Third-Party Beneficiary Right.** This Agreement does not create or confer any rights in or on persons or entities not a party to this Agreement.
22. **Force Majeure.** Neither party shall be liable for failure to perform under this Agreement if the failure to perform arises out of causes beyond the control and without the fault or negligence of the nonperforming party. Causes may include, but are not limited to, acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes, and unusually severe weather. This provision shall become effective only if the party failing to perform immediately notifies the other party of the extent and nature of the problem, limits delay in performance to that required by the event, and takes all reasonable steps to minimized delays. This provision shall not be effective unless the failure to perform is beyond the control and without the fault or negligence of the nonperforming party.
23. **Integration and Merger.** This Agreement, when executed, approved and delivered, shall constitute the final, complete and exclusive Agreement between the parties containing all

the terms and conditions agreed on by the parties. All representations, understandings, promises and agreements pertaining to the subject matter of this Agreement made prior to or at the time this Agreement is executed are superseded by this Agreement unless specifically accepted by any other term or provision of this Agreement. No conditions precedent to the performance of this Agreement exist, except as expressly set forth in this Agreement.

- 24. Repeals.** Upon execution of this Agreement, any other existing agreements between PennDOT and the Municipality relating to the Maintenance of Traffic Signals are superseded and repealed, and any such Traffic Signals shall be subject to the terms of this Agreement.

[The remainder of this page is intentionally left blank.]

The parties have executed this Agreement to be effective as of the date of the last signature affixed below.

Attest:

Municipality

Signature Date

Mark G. Pugliese I

Printed Name

Borough Manager/Secretary

Title

Signature Date

Dennis Nissley

Printed Name

Director of Public Works

Title

Please attach a resolution providing proof of signature authority for the signer to sign on behalf of the Municipality, Authority or other governmental entity. Signers need to indicate titles and date signatures.

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF TRANSPORTATION

Secretary or Designee

Date

APPROVED AS TO FORM AND LEGALITY:

BY _____

Office of Chief Counsel

Date

Preapproved Form: OGC No. 18-FA-81.0
OAG Approved 8/17/2021

PREVENTATIVE AND RESPONSE MAINTENANCE REQUIREMENTS

PREVENTATIVE MAINTENANCE

Municipality or its contractor shall provide preventative maintenance for individual components of each traffic signal installation covered by this Agreement. PennDOT Publication 191 identifies the required preventative maintenance activities/scheduling intervals for each of the various traffic signal components. Provide preventative maintenance as specified in Publication 191 to keep the intersection control equipment and signals in mechanically, structurally and aesthetically good condition.

RESPONSE MAINTENANCE

Municipality or its contractor shall provide response maintenance for individual components of each traffic signal installation covered by this Agreement. PennDOT Publication 191 identifies the required response intervals and repair intervals for each of the various traffic signal components. Provide response maintenance as specified in Publication 191 to restore a traffic signal system to proper and safe operation. Includes Emergency (Temporary) Repair and Final Repair.

FINAL REPAIR:

Repair or replace failed equipment to restore system to proper and safe operation in accordance with permit and within response intervals and repair intervals as specified in Publication 191.

EMERGENCY (TEMPORARY) REPAIR:

Use alternative means or mode to temporarily restore system to safe operation within response intervals and repair intervals as specified in Publication 191. Final repairs must then be completed within time intervals as specified in Publication 191.

SIGNAL MAINTENANCE ORGANIZATION

PERSONNEL CLASSIFICATIONS

In order to properly maintain the traffic signal equipment covered by this agreement, Municipality agrees to provide, as minimum, the following staff throughout the useful life of the equipment. Municipality agrees to abide by all guidance provided in PennDOT Publication 191 related to minimum requirements for each position as follows:

Traffic Engineer – Administrative position with prime responsibility for proper operation of traffic signal equipment. Supervises and plans activities of Signal Technicians and Signal Specialists to ensure adequate preventative and response maintenance programs.

Signal Specialist – Responsible for the diagnostics and repair of all traffic signal equipment including solid state equipment.

Signal Technician – Responsible for the operation and maintenance of traffic signals and all associated equipment.

TRAINING

Municipality agrees to secure training in order to upgrade the ability of its present staff to properly perform the required maintenance functions. Municipality agrees to abide by all guidance provided in PennDOT Publication 191.

BUDGET REQUIREMENTS

Municipality agrees to provide, in its annual operating budget, dedicated funds which are sufficient to cover the cost of the personnel, training, contractors (if utilized) and specialized maintenance equipment which are required, by virtue of this agreement. Municipality agrees to abide by all guidance provided in PennDOT Publication 191.

MUNICIPAL CONTACT INFORMATION

Non – Emergency Municipal Contact Information

Name of Municipality: Borough of Mount Joy
Municipal Address: 21 East Main Street
Municipal Phone Number: (717) 653-2300 Alternate Phone Number: (717) 653-6002
Municipal Contact Person: Dennis Nissley Title: Public Works Director
E-mail Address: dnissley@mountjoypa.org
Municipal Hours of Operation: Mon - Fri 7:00 am - 4:00 pm
Preferred Method of Contact: ☒ Phone ☐ E-Mail

Emergency Municipal Contact Information

Emergency Contact Person: Dennis Nissley Title: Public Works Director
Municipal Phone Number: (717) 653-2300 Alternate Phone Number: (717) 653-6002
E-mail Address: dnissley@mountjoypa.org
Preferred Method of Contact: ☒ Phone ☐ E-Mail

Maintenance and Operation Information

Preventative Maintenance performed by:

☒ Municipal Personnel ☐ Municipal Contractor ☐ Municipal Personnel & Contractor

Response Maintenance performed by:

☐ Municipal Personnel ☒ Municipal Contractor ☐ Municipal Personnel & Contractor

Maintenance and Operations Contractor Contact Name: _____

Company/Organization: TELCO, Inc. 1224 Cross Keys Rd, Reading, PA 19605

Phone #: (610) 916-6200 Alt Phone #: (610) 916-1377

E-mail: _____

RECORDKEEPING

Accurate and up-to-date recordkeeping is an essential component of a good traffic signal maintenance program. Municipality shall prepare, retain, and make available to PennDOT, on request, a record of all preventive and response maintenance activities performed on the traffic signal equipment covered by this agreement.

Municipality shall establish a separate file for each traffic signal installation and keep its records in TSAMS or on other forms prescribed by PennDOT in Publication 191.

At a minimum, the following records shall be kept by the Municipality or its contractor for each intersection.

Master Intersection Record

List of all maintenance functions performed at the intersection, which should be updated within one day of the activity but no more than one week later

Response Maintenance Record

A log recording the location, date, time, caller, receiver and complaint received, maintenance personnel, time dispatched, trouble found, and time cleared

Preventive Maintenance Record

A log for each preventative maintenance service that includes the date, tasks performed, and signatures of personnel performing the work



APPLICATION FOR TRAFFIC SIGNAL APPROVAL

PLEASE TYPE OR PRINT ALL INFORMATION IN BLUE OR BLACK INK

A – Maintenance and Operation Information

- ☐ Municipality has an existing Traffic Signal Maintenance Agreement covering all signals in the municipality. Issuance of a new or revised permit amends Municipality's signal list in TSAMS.
- ☐ Municipality does not have an existing Traffic Signal Maintenance Agreement covering all signals in the municipality. Traffic Signal Maintenance Agreement must be completed, executed by the municipality, and attached to this application.

B – Application Description

PennDOT District: _____ County: _____ Municipality: _____

Location (Intersection): _____

Traffic Control Device is: ☐ NEW Traffic Signal ☐ EXISTING Traffic Signal, permit # _____

Type of Device (select one): ☐ Traffic Control Signal (MUTCD Section 4D, 4E, 4G)
☐ Flashing Beacon (MUTCD Section 4L) ☒ School Warning System (MUTCD Section 7B)
☐ Other _____

Is Traffic Signal part of a system? ☐ Yes ☐ No System Number (if applicable): _____

If YES, provide locations of all signalized intersections in system.

Explain the proposed improvements.

C – Attachments Listing

- | | | |
|---|--|---|
| <input type="checkbox"/> Municipal Resolution | <input type="checkbox"/> Location Map | <input type="checkbox"/> Traffic Volumes/Pedestrian Volumes |
| <input type="checkbox"/> Letter of Financial Commitment | <input type="checkbox"/> Photographs | <input type="checkbox"/> Turn Lane Analysis |
| <input type="checkbox"/> Warrant Analysis | <input type="checkbox"/> Straight Line Diagram | <input type="checkbox"/> Turn Restriction Studies |
| <input type="checkbox"/> Crash Analysis | <input checked="" type="checkbox"/> Capacity Analysis | <input type="checkbox"/> Municipal Contact Information |
| <input type="checkbox"/> Traffic Signal Study | <input checked="" type="checkbox"/> Traffic Impact Study (TIS) | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Condition Diagram | | |

D – Applicant (Municipal) Certification

The applicant desires to own, operate, and maintain the traffic control device in the location identified above; and the Vehicle Code requires the approval of the Department of Transportation ("Department") before any traffic signals may be legally erected or modified. Applicant agrees to own and maintain the traffic signal in accordance with the Traffic Signal Maintenance Agreement executed between Municipality and the Department, dated _____.

By (Signature): _____ Date: _____

Printed Name of Municipal Authorized Official: _____

Title of Signatory: _____

DEPARTMENT USE ONLY

County: _____ Engineering District: _____

Department Tracking #: _____ Initial Submission Date: _____

NONDISCRIMINATION/SEXUAL HARASSMENT CLAUSE [Contracts]

The Contractor agrees:

1. In the hiring of any employee(s) for the manufacture of supplies, performance of work, or any other activity required under the contract or any subcontract, the Contractor, each subcontractor, or any person acting on behalf of the Contractor or subcontractor shall not discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the *Pennsylvania Human Relations Act* (PHRA) and applicable federal laws, against any citizen of this commonwealth who is qualified and available to perform the work to which the employment relates.
2. Neither the Contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against or intimidate any employee involved in the manufacture of supplies, the performance of work, or any other activity required under the contract.
3. Neither the Contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, in the provision of services under the contract.
4. Neither the Contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate against employees by reason of participation in or decision to refrain from participating in labor activities protected under the *Public Employee Relations Act*, *Pennsylvania Labor Relations Act* or *National Labor Relations Act*, as applicable and to the extent determined by entities charged with such Acts' enforcement, and shall comply with any provision of law establishing organizations as employees' exclusive representatives.
5. The Contractor and each subcontractor shall establish and maintain a written nondiscrimination and sexual harassment policy and shall inform their employees in writing of the policy. The policy must contain a provision that sexual harassment will not be tolerated and employees who practice it will be disciplined. Posting this Nondiscrimination/Sexual Harassment Clause conspicuously in easily-accessible and well-lighted places customarily frequented by employees and at or near where the contracted services are performed shall satisfy this requirement for employees with an established work site.
6. The Contractor and each subcontractor shall not discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of PHRA and applicable federal laws, against any subcontractor or supplier who is qualified to perform the work to which the contract relates.
7. The Contractor and each subcontractor represents that it is presently in compliance with and will maintain compliance with all applicable federal, state, and local laws, regulations and policies relating to nondiscrimination and sexual harassment. The Contractor and each subcontractor further represents that it has filed a Standard Form 100 Employer Information Report ("EEO-1") with the U.S. Equal Employment

Exhibit F



Opportunity Commission ("EEOC") and shall file an annual EEO-1 report with the EEOC as required for employers' subject to *Title VII of the Civil Rights Act of 1964*, as amended, that have 100 or more employees and employers that have federal government contracts or first-tier subcontracts and have 50 or more employees. The Contractor and each subcontractor shall, upon request and within the time periods requested by the commonwealth, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to their books, records, and accounts by the contracting agency and the Bureau of Diversity, Inclusion and Small Business Opportunities for purpose of ascertaining compliance with provisions of this Nondiscrimination/Sexual Harassment Clause.

8. The Contractor shall include the provisions of this Nondiscrimination/Sexual Harassment Clause in every subcontract so that those provisions applicable to subcontractors will be binding upon each subcontractor.
9. The Contractor's and each subcontractor's obligations pursuant to these provisions are ongoing from and after the effective date of the contract through the termination date thereof. Accordingly, the Contractor and each subcontractor shall have an obligation to inform the commonwealth if, at any time during the term of the contract, it becomes aware of any actions or occurrences that would result in violation of these provisions.
10. The commonwealth may cancel or terminate the contract and all money due or to become due under the contract may be forfeited for a violation of the terms and conditions of this Nondiscrimination/Sexual Harassment Clause. In addition, the agency may proceed with debarment or suspension and may place the Contractor in the Contractor Responsibility File.

Exhibit F



CONTRACTOR INTEGRITY PROVISIONS

It is essential that those who seek to contract with the Commonwealth of Pennsylvania ("Commonwealth") observe high standards of honesty and integrity. They must conduct themselves in a manner that fosters public confidence in the integrity of the Commonwealth contracting and procurement process.

1. **DEFINITIONS.** For purposes of these Contractor Integrity Provisions, the following terms shall have the meanings found in this Section:
 - a. **"Affiliate"** means two or more entities where (a) a parent entity owns more than fifty percent of the voting stock of each of the entities; or (b) a common shareholder or group of shareholders owns more than fifty percent of the voting stock of each of the entities; or (c) the entities have a common proprietor or general partner.
 - b. **"Consent"** means written permission signed by a duly authorized officer or employee of the Commonwealth, provided that where the material facts have been disclosed, in writing, by prequalification, bid, proposal, or contractual terms, the Commonwealth shall be deemed to have consented by virtue of the execution of this contract.
 - c. **"Contractor"** means the individual or entity, that has entered into this contract with the Commonwealth.
 - d. **"Contractor Related Parties"** means any affiliates of the Contractor and the Contractor's executive officers, Pennsylvania officers and directors, or owners of 5 percent or more interest in the Contractor.
 - e. **"Financial Interest"** means either:
 - (1) Ownership of more than a five percent interest in any business; or
 - (2) Holding a position as an officer, director, trustee, partner, employee, or holding any position of management.
 - f. **"Gratuity"** means tendering, giving, or providing anything of more than nominal monetary value including, but not limited to, cash, travel, entertainment, gifts, meals, lodging, loans, subscriptions, advances, deposits of money, services, employment, or contracts of any kind. The exceptions set forth in the [Governor's Code of Conduct, Executive Order 1980-18](#), the 4 Pa. Code §7.153(b), shall apply.
 - g. **"Non-bid Basis"** means a contract awarded or executed by the Commonwealth with Contractor without seeking bids or proposals from any other potential bidder or offeror.
2. In furtherance of this policy, Contractor agrees to the following:
 - a. Contractor shall maintain the highest standards of honesty and integrity during the performance of this contract and shall take no action in violation of state or federal laws or regulations or any other applicable laws or regulations, or other requirements applicable to Contractor or that govern contracting or procurement with the Commonwealth.



- b. Contractor shall establish and implement a written business integrity policy, which includes, at a minimum, the requirements of these provisions as they relate to the Contractor activity with the Commonwealth and Commonwealth employees and which is made known to all Contractor employees. Posting these Contractor Integrity Provisions conspicuously in easily-accessible and well-lighted places customarily frequented by employees and at or near where the contract services are performed shall satisfy this requirement.
- c. Contractor, its affiliates, agents, employees and anyone in privity with Contractor shall not accept, agree to give, offer, confer, or agree to confer or promise to confer, directly or indirectly, any gratuity or pecuniary benefit to any person, or to influence or attempt to influence any person in violation of any federal or state law, regulation, executive order of the Governor of Pennsylvania, statement of policy, management directive or any other published standard of the Commonwealth in connection with performance of work under this contract, except as provided in this contract.
- d. Contractor shall not have a financial interest in any other contractor, subcontractor, or supplier providing services, labor, or material under this contract, unless the financial interest is disclosed to the Commonwealth in writing and the Commonwealth consents to Contractor's financial interest prior to Commonwealth execution of the contract. Contractor shall disclose the financial interest to the Commonwealth at the time of bid or proposal submission, or if no bids or proposals are solicited, no later than Contractor's submission of the contract signed by Contractor.
- e. Contractor certifies to the best of its knowledge and belief that within the last five (5) years Contractor or Contractor Related Parties have not:
 - (1) been indicted or convicted of a crime involving moral turpitude or business honesty or integrity in any jurisdiction;
 - (2) been suspended, debarred or otherwise disqualified from entering into any contract with any governmental agency;
 - (3) had any business license or professional license suspended or revoked;
 - (4) had any sanction or finding of fact imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, bid rigging, embezzlement, misrepresentation or anti-trust; and
 - (5) been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or civil anti-trust investigation by any federal, state or local prosecuting or investigative agency.

If Contractor cannot so certify to the above, then it must submit along with its bid, proposal or contract a written explanation of why such certification cannot be made and the Commonwealth will determine whether a contract may be entered into with the Contractor. The Contractor's obligation pursuant to this certification is ongoing from and after the effective date of the contract through the termination date thereof. Accordingly, the Contractor shall have an obligation to immediately notify the Commonwealth in writing if at any time during the term of the contract if becomes aware of any event which would cause the Contractor's certification or explanation to change. Contractor acknowledges that the Commonwealth may, in its sole discretion, terminate the contract for cause if it learns that any of the certifications made herein are currently false due to intervening factual circumstances or were false or should have been known to be false when entering into the contract.



- f. Contractor shall comply with the requirements of the *Lobbying Disclosure Act (65 Pa.C.S. §13A01 et seq.)* regardless of the method of award. If this contract was awarded on a Non-bid Basis, Contractor must also comply with the requirements of the *Section 1641 of the Pennsylvania Election Code (25 P.S. §3260a)*.
- g. When Contractor has reason to believe that any breach of ethical standards as set forth in law, the Governor's Code of Conduct, or these Contractor Integrity Provisions has occurred or may occur, including but not limited to contact by a Commonwealth officer or employee which, if acted upon, would violate such ethical standards, Contractor shall immediately notify the Commonwealth contracting officer or the Office of the State Inspector General in writing.
- h. Contractor, by submission of its bid or proposal and/or execution of this contract and by the submission of any bills, invoices or requests for payment pursuant to the contract, certifies and represents that it has not violated any of these Contractor Integrity Provisions in connection with the submission of the bid or proposal, during any contract negotiations or during the term of the contract, to include any extensions thereof. Contractor shall immediately notify the Commonwealth in writing of any actions for occurrences that would result in a violation of these Contractor Integrity Provisions. Contractor agrees to reimburse the Commonwealth for the reasonable costs of investigation incurred by the Office of the State Inspector General for investigations of the Contractor's compliance with the terms of this or any other agreement between the Contractor and the Commonwealth that results in the suspension or debarment of the Contractor. Contractor shall not be responsible for investigative costs for investigations that do not result in the Contractor's suspension or debarment.
- i. Contractor shall cooperate with the Office of the State Inspector General in its investigation of any alleged Commonwealth agency or employee breach of ethical standards and any alleged Contractor non-compliance with these Contractor Integrity Provisions. Contractor agrees to make identified Contractor employees available for interviews at reasonable times and places. Contractor, upon the inquiry or request of an Inspector General, shall provide, or if appropriate, make promptly available for inspection or copying, any information of any type or form deemed relevant by the Office of the State Inspector General to Contractor's integrity and compliance with these provisions. Such information may include, but shall not be limited to, Contractor's business or financial records, documents or files of any type or form that refer to or concern this contract. Contractor shall incorporate this paragraph in any agreement, contract or subcontract it enters into in the course of the performance of this contract/agreement solely for the purpose of obtaining subcontractor compliance with this provision. The incorporation of this provision in a subcontract shall not create privity of contract between the Commonwealth and any such subcontractor, and no third party beneficiaries shall be created thereby.
- j. For violation of any of these Contractor Integrity Provisions, the Commonwealth may terminate this and any other contract with Contractor, claim liquidated damages in an amount equal to the value of anything received in breach of these Provisions, claim damages for all additional costs and expenses incurred in obtaining another contractor to complete performance under this contract, and debar and suspend Contractor from doing business with the Commonwealth. These rights and remedies are cumulative, and the use or non-use of any one shall not preclude the use of all or any other. These rights and remedies are in addition to those the Commonwealth may have under law, statute, regulation, or otherwise.



PROVISIONS CONCERNING THE AMERICANS WITH DISABILITIES ACT

For the purpose of these provisions, the term contractor is defined as any person, including, but not limited to, a bidder, offeror, supplier, or grantee, who will furnish or perform or seeks to furnish or perform, goods, supplies, services, construction or other activity, under a purchase order, contract, or grant with the Commonwealth of Pennsylvania (Commonwealth).

During the term of this agreement, the contractor agrees as follows:

1. Pursuant to federal regulations promulgated under the authority of the *Americans with Disabilities Act*, 28 C. F. R. § 35.101 et seq., the contractor understands and agrees that no individual with a disability shall, on the basis of the disability, be excluded from participation in this agreement or from activities provided for under this agreement. As a condition of accepting and executing this agreement, the contractor agrees to comply with the "General Prohibitions Against Discrimination," 28 C. F. R. § 35.130, and all other regulations promulgated under Title II of the *Americans with Disabilities Act* which are applicable to the benefits, services, programs, and activities provided by the Commonwealth through contracts with outside contractors.
2. The contractor shall be responsible for and agrees to indemnify and hold harmless the Commonwealth from all losses, damages, expenses, claims, demands, suits, and actions brought by any party against the Commonwealth as a result of the contractor's failure to comply with the provisions of paragraph 1.

EXHIBIT H



Contractor Responsibility Provisions

(December 2020)

For the purpose of these provisions, the term Contractor is defined as any person, including, but not limited to, a bidder, offeror, loan recipient, grantee or lessor, who has furnished or performed or seeks to furnish or perform, goods, supplies, services, leased space, construction or other activity, under a contract, grant, lease, purchase order or reimbursement agreement with the Commonwealth of Pennsylvania (Commonwealth). The term Contractor includes a permittee, licensee, or any agency, political subdivision, instrumentality, public authority, or other public entity in the Commonwealth.

1. The Contractor certifies, in writing, for itself and its subcontractors required to be disclosed or approved by the Commonwealth, that as of the date of its execution of this Bid/Contract, that neither the Contractor, nor any such subcontractors, are under suspension or debarment by the Commonwealth or any governmental entity, instrumentality, or authority and, if the Contractor cannot so certify, then it agrees to submit, along with its Bid/Contract, a written explanation of why such certification cannot be made.
2. The Contractor also certifies, in writing, that as of the date of its execution of this Bid/Contract it has no tax liabilities or other Commonwealth obligations, or has filed a timely administrative or judicial appeal if such liabilities or obligations exist, or is subject to a duly approved deferred payment plan if such liabilities exist.
3. The Contractor's obligations pursuant to these provisions are ongoing from and after the effective date of the Contract through the termination date thereof. Accordingly, the Contractor shall have an obligation to inform the Commonwealth if, at any time during the term of the Contract, it becomes delinquent in the payment of taxes, or other Commonwealth obligations, or if it or, to the best knowledge of the Contractor, any of its subcontractors are suspended or debarred by the Commonwealth, the federal government, or any other state or governmental entity. Such notification shall be made within 15 days of the date of suspension or debarment.
4. The failure of the Contractor to notify the Commonwealth of its suspension or debarment by the Commonwealth, any other state, or the federal government shall constitute an event of default of the Contract with the Commonwealth.
5. The Contractor agrees to reimburse the Commonwealth for the reasonable costs of investigation incurred by the Office of State Inspector General for investigations of the Contractor's compliance with the terms of this or any other agreement between the Contractor and the Commonwealth that results in the suspension or debarment of the contractor. Such costs shall include, but shall not be limited to, salaries of investigators, including overtime; travel and lodging expenses; and expert witness and documentary fees. The Contractor shall not be responsible for investigative costs for investigations that do not result in the Contractor's suspension or debarment.
6. The Contractor may search the current list of suspended and debarred Commonwealth contractors by visiting the eMarketplace website at <http://www.emarketplace.state.pa.us> and clicking the Debarment List tab.

Exhibit I

Contract Provisions – Right to Know Law

- a. The Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101-3104, (“RTKL”) applies to this Contract. For the purpose of these provisions, the term “the Commonwealth” shall refer to the contracting Commonwealth agency.
- b. If the Commonwealth needs the Contractor’s assistance in any matter arising out of the RTKL related to this Contract, it shall notify the Contractor using the legal contact information provided in this Contract. The Contractor, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Commonwealth.
- c. Upon written notification from the Commonwealth that it requires the Contractor’s assistance in responding to a request under the RTKL for information related to this Contract that may be in the Contractor’s possession, constituting, or alleged to constitute, a public record in accordance with the RTKL (“Requested Information”), the Contractor shall:
 - 1. Provide the Commonwealth, within ten (10) calendar days after receipt of written notification, access to, and copies of, any document or information in the Contractor’s possession arising out of this Contract that the Commonwealth reasonably believes is Requested Information and may be a public record under the RTKL; and
 - 2. Provide such other assistance as the Commonwealth may reasonably request, in order to comply with the RTKL with respect to this Contract.
- d. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, the Contractor must notify the Commonwealth and provide, within seven (7) calendar days of receiving the written notification, a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL.
- e. The Commonwealth will rely upon the written statement from the Contractor in denying a RTKL request for the Requested Information unless the Commonwealth determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should the Commonwealth determine that the Requested Information is clearly not exempt from disclosure, the Contractor shall provide the Requested Information within five (5) business days of receipt of written notification of the Commonwealth’s determination.
- f. If the Contractor fails to provide the Requested Information within the time period required by these provisions, the Contractor shall indemnify and hold the Commonwealth harmless for any damages, penalties, costs, detriment or harm that the Commonwealth may incur as a result of the Contractor’s failure, including any statutory damages assessed against the Commonwealth.

EXHIBIT J



g. The Commonwealth will reimburse the Contractor for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

h. The Contractor may file a legal challenge to any Commonwealth decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, the Contractor shall indemnify the Commonwealth for any legal expenses incurred by the Commonwealth as a result of such a challenge and shall hold the Commonwealth harmless for any damages, penalties, costs, detriment or harm that the Commonwealth may incur as a result of the Contractor's failure, including any statutory damages assessed against the Commonwealth, regardless of the outcome of such legal challenge. As between the parties, the Contractor agrees to waive all rights or remedies that may be available to it as a result of the Commonwealth's disclosure of Requested Information pursuant to the RTKL.

i. The Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this Contract and shall continue as long as the Contractor has Requested Information in its possession.

EXHIBIT J





MOUNT JOY BOROUGH MEMORANDUM

TO: Mount Joy Borough Council
FROM: Ad Hoc Building Committee
DATE: September 2, 2021
RE: 1 West Main Street

The Mount Joy Borough Ad-hoc building committee did look at the Wells Fargo Bank building, as was suggested by a member of the public.

Here are the findings of the analysis, as compared to the current and proposed areas for the Mount Joy Borough and Mount Joy Authority areas.

The building committee asked CRA to look into the Wells Fargo property to see if it could fit the future needs of the Borough and Authority. After analyzing the Wells Fargo property, the available area on the first and second floors is approximately 2,700 sf. (the area is taken from the interior of the perimeter walls)

First Floor: 2,178 sf
Second Floor: 500 sf

The current Mount Joy Borough and Authority areas currently house:

Borough: 820 sf
Authority: 995 sf
Shared Areas: 3,362 sf
Total: 5,177 sf

The proposed Mount Joy Borough and Authority areas developed during the study include:

Borough: 1,200 sf
Authority: 1,880 sf
Shared Areas: 7,640 sf
Total: 10,720 sf

As you can see, the Wells Fargo property does not currently support your existing needs. Adding a second floor into the building could be considered but would be very costly. If a second floor was considered, the need for a new elevator should also be factored in to provide second floor ADA access to staff. Likewise additional stairs would need to be added for life safety.

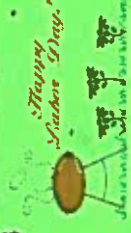
After analysis, the Borough ad-hoc building committee does not feel the Wells Fargo Building would suit the needs of the Borough and Authority going into the future.

Respectfully,
Joshua Deering
Ad-hoc Building Chair



September 2021



| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|---|--|--------------------------|----------------------------------|-----|-----|
| | | | 1 | 2 | 3 | 4 |
| 5 | 6  OFFICE CLOSED | 7 Authority 4 PM | 8 Plan. Comm. 7 PM | 9 | 10 | 11 |
| | | TRASH DELAYED ONE DAY WOODY WASTE PICK-UP | | 16 | 17 | 18 |
| 12 | 13 Council 7 PM | 14 | 15 | | | |
| 19 | 20 Public Works 6:30 PM | 21 Authority 4 PM | 22 ZHB 7 PM | 23 Admin / Finance 6:30 PM | 24 | 25 |
| | | WOODY WASTE PICK-UP | | | | |
| 26 | 27 Civil Service Com 5:30 PM (as needed) Public Safety 6:30 PM | 28 | 29 | 30 | | |