



**HIGH ACRES LANDFILL &  
RECYCLING CENTER**  
A WASTE MANAGEMENT COMPANY

425 Perinton Parkway  
Fairport, New York 14450  
585/223-6132  
585/223-6898 (Fax)

December 20, 2017

Mr. Paul J. D'Amato  
Regional Director, Region 8  
New York State Department of Environmental Conservation  
6274 East Avon-Lima Road  
Avon, NY 14414

Re: High Acres Meeting Summary

Dear Mr. D'Amato:

Thank you for the time you and your staff spent meeting with myself and representatives from Waste Management on December 13, 2017 to discuss the recent increase in offsite odors at the High Acres Landfill and our plan to address these odors. As you are aware, High Acres has a long history of operating successfully in compliance with our permits. These recent elevated odors are taken seriously by Waste Management and we are committed to investing the resources necessary to implement solutions and return to our historic good neighbor status that the community has known. This letter is intended to summarize the topics and items discussed at the December 13<sup>th</sup> meeting.

***Primary Odor Contributors***

High Acres has an established procedure for the community to notify the site of unusual or increased odors. That feedback is correlated with site operations to determine potential activities that may have caused the increased odor. Community members who notice an unusual or offensive odor can call the site directly 24 hours per day, 7 days per week at (585) 223-6132 to report the odor. The notification is logged, distributed via email to key operations and management personnel, and investigated to determine the potential source. A chart depicting the odor notifications received at the site in 2017 is included in Attachment 1.

While there are intermittent odors associated with any solid waste management facility, there was an increase in community odor notifications during the late summer months of 2017. This increase is directly attributable to the removal of an access road in cell 10 as we transitioned traffic flow to cell 11. The removal of the road materials required the excavation and on-site transport of odorous materials which



resulted in the increase in intermittent odors during that timeframe. The intrusive activities performed were necessary to ensure effective management of liquid and gas in this area.

Following the completion of the road removal, we continued to note increased intermittent odors. We initiated an extensive site review involving High Acres Staff as well as internal and external industry experts in consultation with NYSDEC Region 8 to identify potential odor sources and develop best practices to mitigate them. The High Acres Landfill faced some unique challenges in 2017, including an unusually high amount of rainfall and resulting increase in leachate generation as depicted in Attachment 2. The site received over 42 inches of rain through November, compared to 27 inches in 2016, and this excess liquid in the landfill compromised portions of the landfill gas collection and conveyance system in active cells 10 and 11.

The major odor contributors were identified to be:

- A restriction in the 24-inch perimeter landfill gas header resulting in the temporary reduction of gas collection efficiency;
- Excess rainwater and leachate generation in 2017 caused the temporary “watering out” of gas collection wells and sections of collection header in cells 10 and 11;
- Reliance solely on vertical gas wells and previous generation slip form well technology (Figures 1 and 2) in cell 11 for operational landfill gas collection resulted in reduced collection, given 2017’s wet weather conditions;
- A header system configuration which restricted gas collection system flexibility and ability to induce additional vacuum on odor sources; and,
- Excess rainwater compromised the ability to place and compact cover soils.

These identified issues resulted in an increase in community odor notifications beginning in the fourth quarter of 2017. As depicted on Attachment 1, approximately 70 percent of odor notifications for the site have occurred over a six week period. The recent increase in intermittent odors, we believe, are the result of unusual circumstances and will be mitigated.

### ***Primary Mitigation Measures***

The design and implementation of the mitigation measures to correct these odor issues requires careful planning, detailed engineering and regulatory approvals as well as procurement of supplies and engagement of contractors. High Acres has engaged in a fast track approach to incorporate these measures as quickly as practical. Specialty contractors and consultants were engaged to expedite the engineering, monitoring and construction tasks. The primary mitigation measures that are currently underway and will be completed in the near future include:

- The identification and removal of a restriction within the 24-inch perimeter gas collection header;
- The design, approval and installation of approximately 10,000 lineal feet of horizontal collection piping in cell 10 and cell 11;
- The design, approval, installation of an additional 24 and 18-inch vacuum header from the flare/gas to energy plant to cell 11;



- The identification, abandonment, and replacement of an approximate 1100 lineal foot sub header in cell 11;
- The design, approval and installation of 9 acres of exposed temporary geomembrane cover along the North and East slopes of cell 11; and,
- The initiation of waste placement efforts into the newly constructed cell 12, which incorporates improved gas collection measures.

The primary mitigation measures which are being implemented at the site are presented on Figure 3, which is included in Attachment 3

### ***Long Term Odor Management***

Using the information gathered from the site-wide assessment and issues identified in cells 10 and 11, WM has engineered additional collection and conveyance controls into future cells, beginning with cell 12. These represent design and performance improvements to the long term collection and conveyance of landfill gas at the facility and will be installed as site development occurs. The long-term development initiatives include:

- The incorporation of next generation free draining slip form wells, complemented with a regularly installed horizontal collection piping network (Figures 4 and 5, Attachment 3) on all new cell construction in the future;
- Hiring additional, permanent staff to support this new infrastructure construction, increase monitoring and maintenance of the landfill gas collection and conveyance system; and,
- Continued identification, replacement and repair of impaired landfill gas collection wells, laterals and headers.

Attachment 4 includes an overall implementation schedule for the mitigation measures proposed at High Acres.

In addition, High Acres has modified various operating practices with a focus on reducing off-site odors. These operational improvements include:

- The placement and compaction of additional daily and intermediate cover soils;
- Evaluating the characteristics of soils types used for cover;
- Limiting the acceptance of odorous materials;
- Incorporating additional odor neutralizing distribution systems and products at the working face and at the facility perimeter;
- Installing geomembrane liner along internal roadway stormwater collection channels;
- Incorporating a daily odor patrol around the adjacent residential areas;
- Contracting with third party consultants and contractors to increase monitoring frequency of landfill gas collection and cover systems; and,
- The additional analysis of landfill gas collection system components.



## ***Communications***

We have also developed a plan to improve communication with the community during the implementation of the mitigation measures and beyond. As you are aware, the majority of work being performed to reduce the offsite odors, may in fact result in the temporary increase in odors due to the excavation within the waste, or the necessary shutdown of components of the landfill gas collection system to “tie in” or connect new headers and laterals. The elements of this community outreach plan include the following:

- Conducting tours and individual meetings with residents;
- Community information meeting at High Acres administrative offices held on December 11<sup>th</sup>;
- Neighborhood Update tab created on our website [www.highacreslandfill.wm.com](http://www.highacreslandfill.wm.com). This will include weekly updates on mitigation work completed and planned work for the week ahead;
- Email notifications for neighbors and state and local officials regarding completed and upcoming site activities;
- Presentation of mitigation plan to the community at the January 16, 2017 meeting of the Town of Perinton Conservation Board; and,
- Monthly updates on mitigation progress to NYSDEC and Town of Perinton Conservation Board.

As discussed in the meeting on December 13<sup>th</sup>, we will provide monthly updates to the Department regarding our progress on the mitigation plan as well as the status of additional improvements made at the site to reduce offsite odors. We are committed to provide the resources and effort to ensure that the facility is returned to a standard of excellence that the community has known for over 40 years.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Jeffrey Richardson', is written over a large, circular blue scribble.

Jeffrey Richardson  
Sr. District Manager  
Waste Management of New York, LLC.

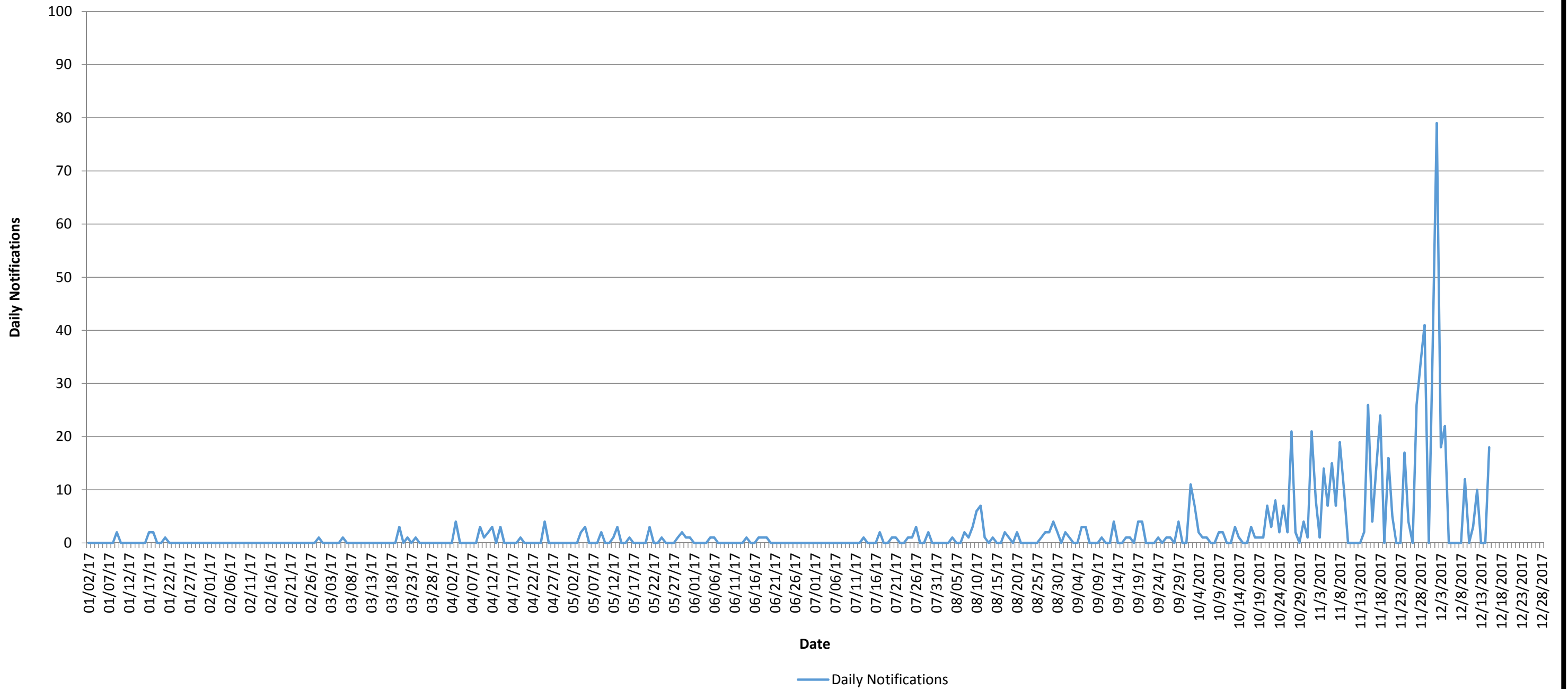
## Attachments

cc:

Greg MacLean – NYSDEC  
Senator Rich Funke – 55<sup>th</sup> District  
Michael Garland – Director, Monroe County DES  
Michael Barker – Supervisor, Town of Perinton  
Cassandra Pagano – Supervisor, Town of Macedon

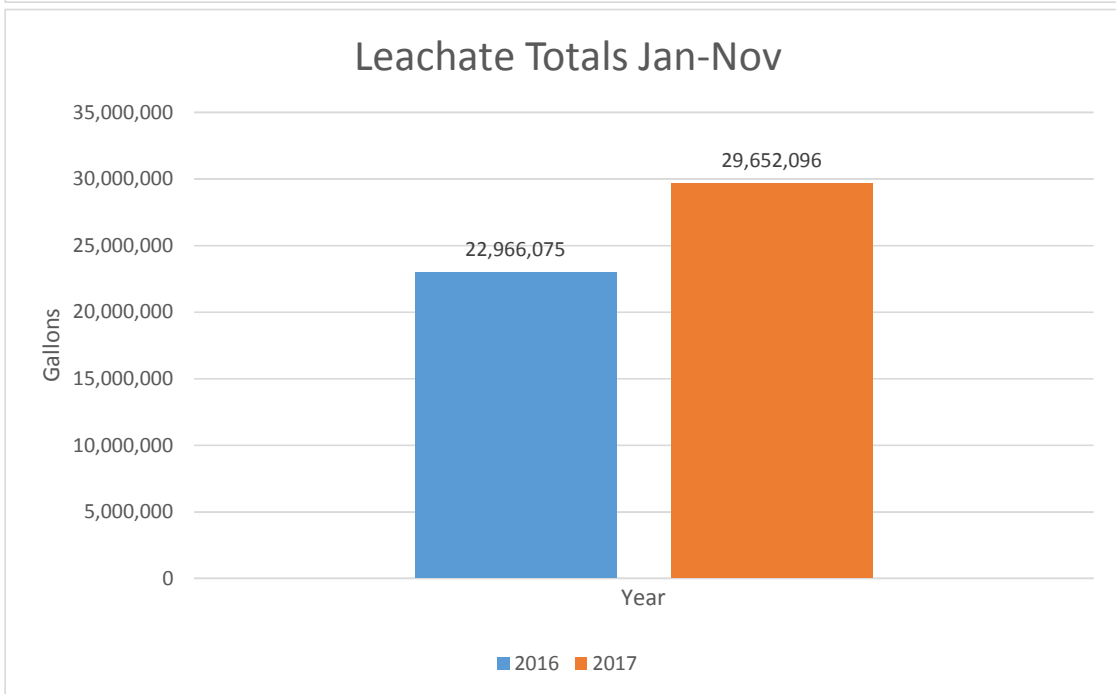
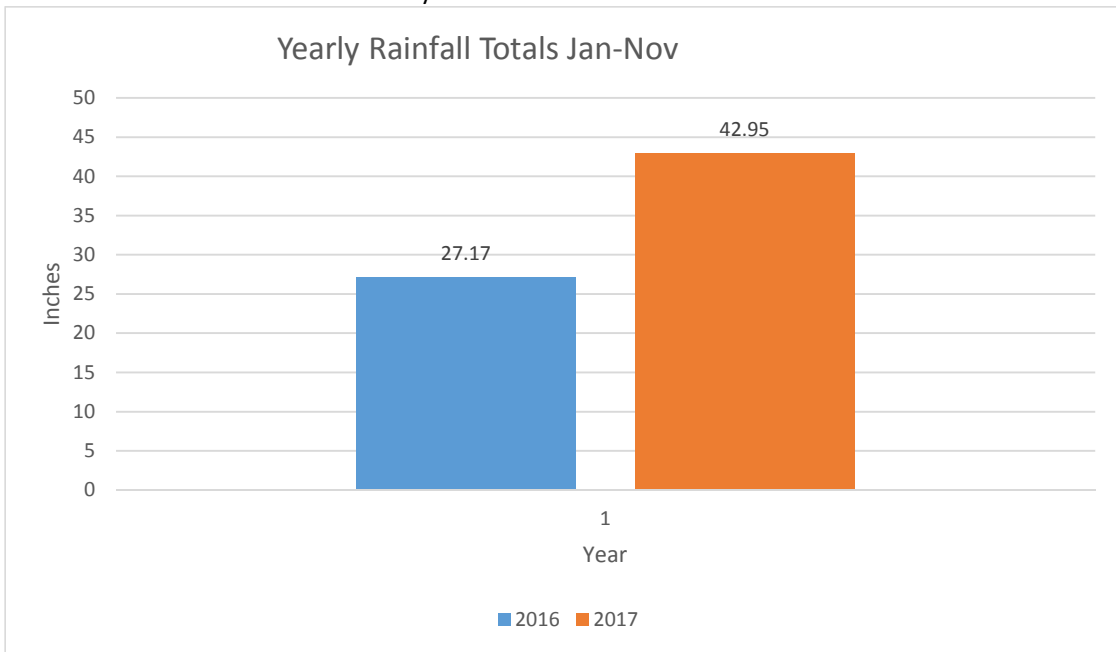
## Attachment 1 – Odor Notification Chart

# Odor Notifications Received by High Acres



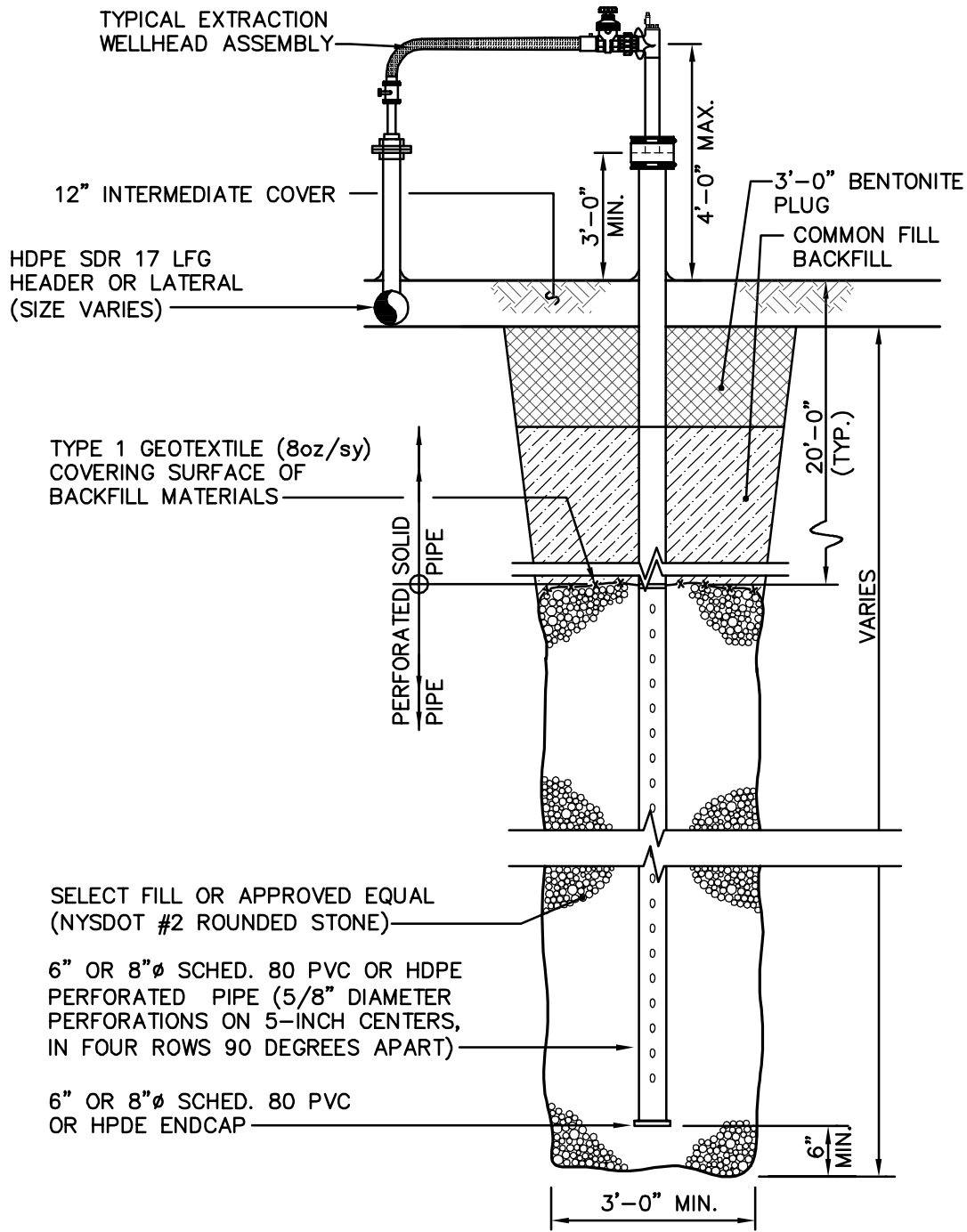
## Attachment 2 – Rainfall and Leachate Data Comparison

Waste Management of New York, LLC.  
High Acres Landfill and Recycling Center  
Yearly Rainfall and Leachate Totals





## Attachment 3 – Key Figures



**TYPICAL DRILLED VERTICAL  
LFG EXTRACTION WELL DETAIL**  
NOT TO SCALE

Plotted: Dec 20, 2017 - 4:36PM  
 C:\Users\jgs\Documents\Drawing1.dwg  
 SYR By: JGS



Date  
**DECEMBER, 2017**

Scale  
**NOT TO SCALE**

WASTE MANAGEMENT  
 HIGH ACRES LANDFILL

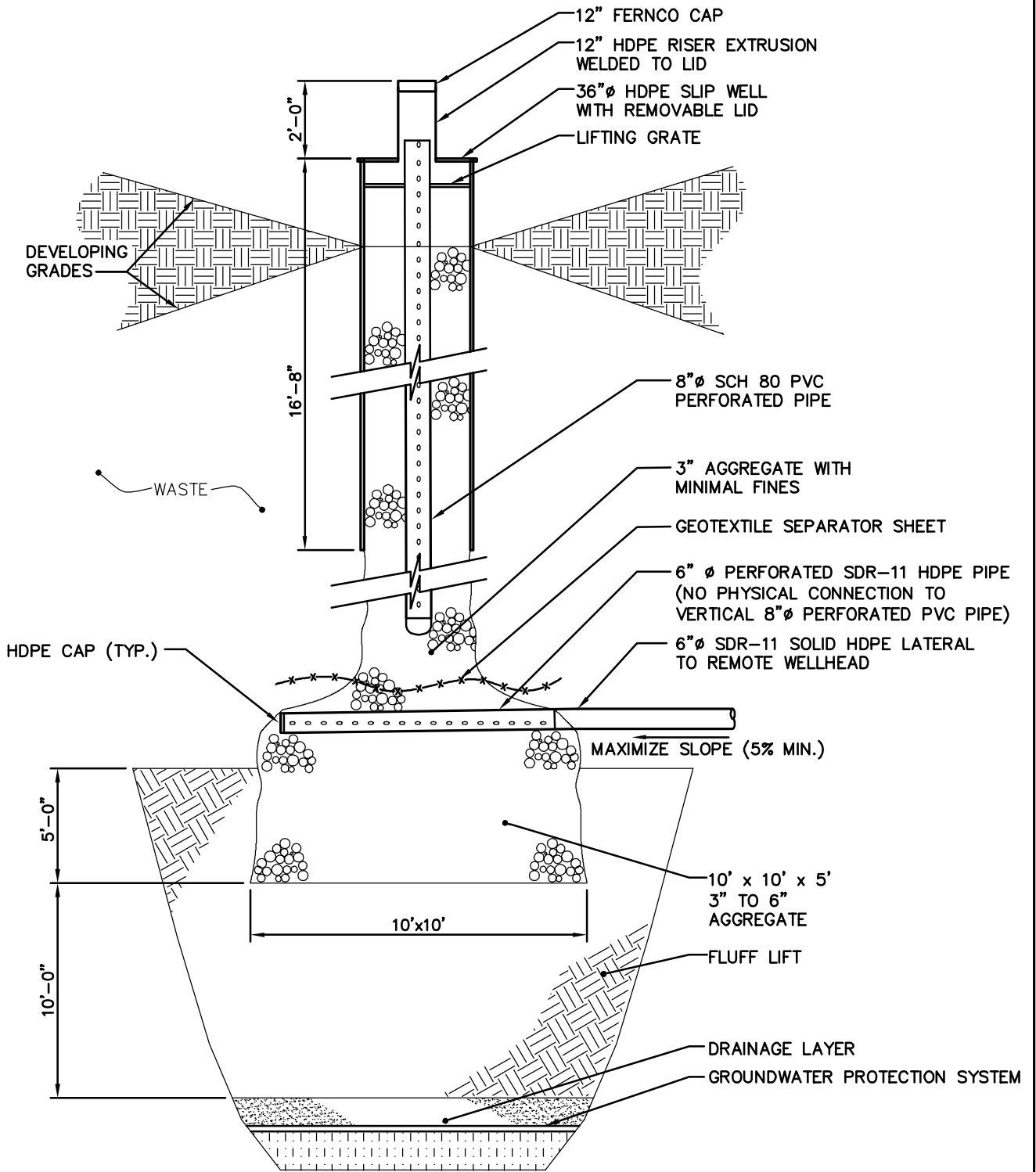
**TYPICAL DRILLED VERTICAL  
 LFG EXTRACTION WELL DETAIL**

TOWNS OF PERINTON AND MACEDON      MONROE AND WAYNE COUNTIES, NEW YORK

Figure Number  
**1**

Project Number  
**1242.074.003**

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 Z:\BL-Vault\1 - Project Files\1 - Sorted by Project Number {2} Class {2} Folder\1200\1242.074.003\CAD\1242.074.003\_Figure 1\_2\_4 Well details.dwg  
 SYR By: JGS



## SLIP FORM WELL DETAIL — PREVIOUS GENERATION

NOT TO SCALE



WASTE MANAGEMENT  
 HIGH ACRES LANDFILL

Figure Number

2

SLIP FORM WELL DETAIL —  
 PREVIOUS GENERATION

Project Number

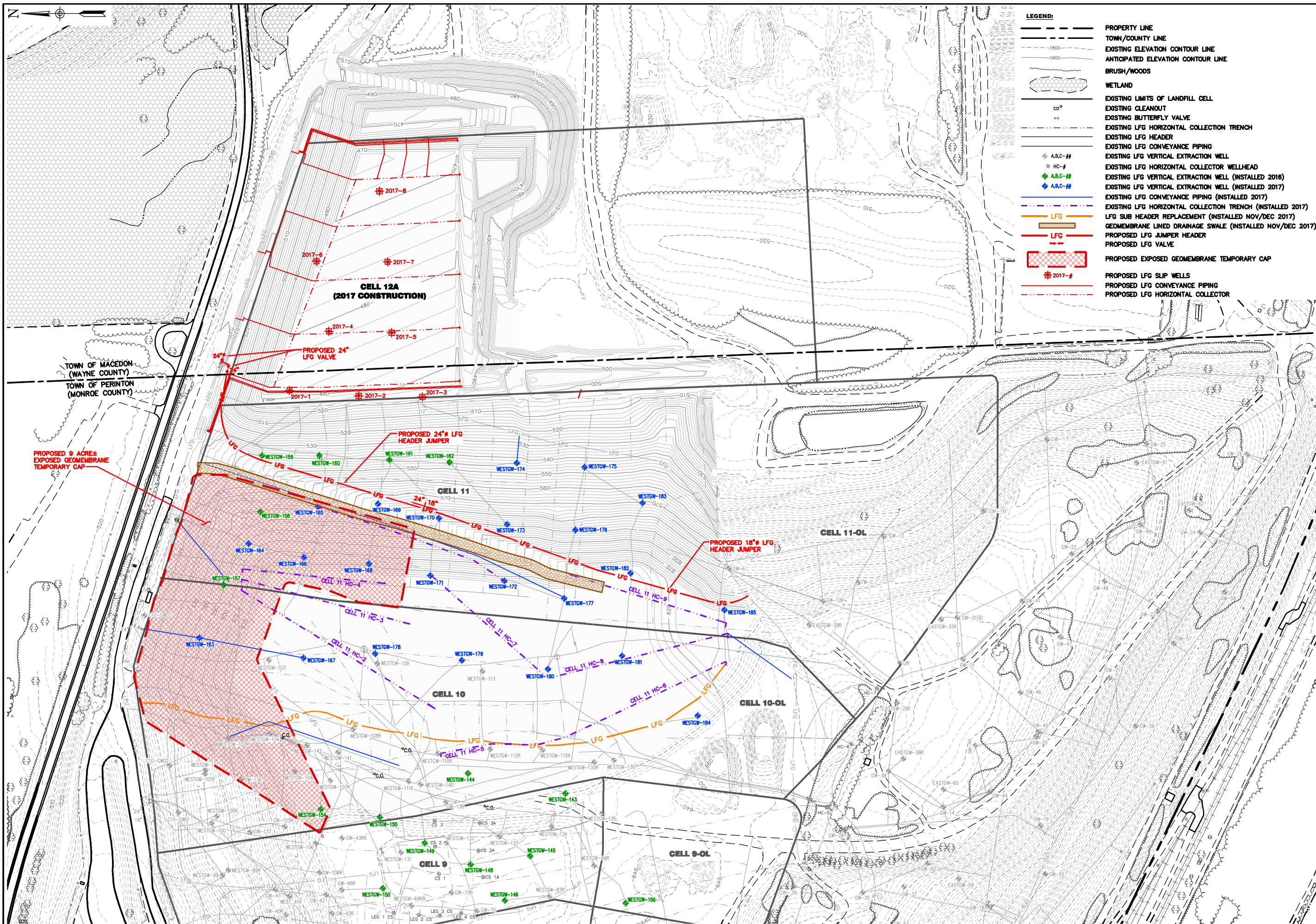
1242.074.003

Date  
 DECEMBER, 2017

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TOWNS OF PERINTON AND MACEDON      MONROE AND WAYNE COUNTIES, NEW YORK

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 Z: \\BL-Vault\02\18217AD2-1C71-4823-8927-99D5C4054147\0\1380000-1380999\1380647\1\1242.074.003\_Figure 3 (ID 1380647).dwg



WASTE MANAGEMENT  
 HIGH ACRES LANDFILL

**PRIMARY MITIGATION MEASURES**

TOWNS OF PERINTON AND MACEDON  
 MONROE AND WAYNE COUNTIES, NEW YORK

**Barton & Loguidice**

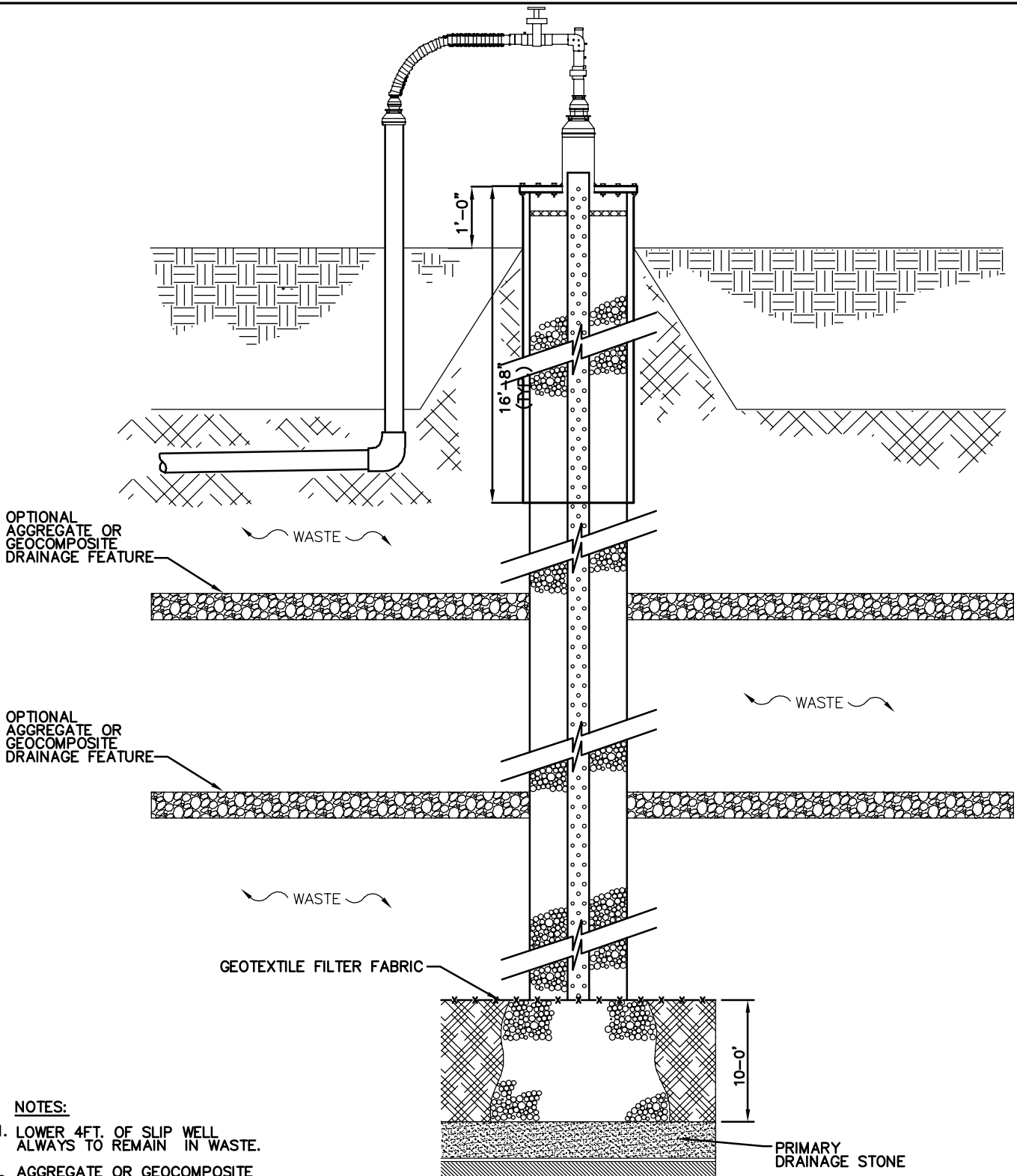
Date  
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Figure Number  
 3

Project Number  
 1242.074.003

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 SYR By: JGS  
 1380999\1380953\L\L\1242.074.003\_Figure 1\_2\_4 Well details (ID 1380953).dwg



**NOTES:**

1. LOWER 4FT. OF SLIP WELL ALWAYS TO REMAIN IN WASTE.
2. AGGREGATE OR GEOCOMPOSITE DRAINAGE FEATURE TO BE INSTALLED AT 60 FT. INTERVALS.

# SLIP FORM WELL WITH DRAINAGE DETAIL

NOT TO SCALE



WASTE MANAGEMENT  
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## SLIP FORM WELL WITH DRAINAGE DETAIL

Figure Number

4

Project Number

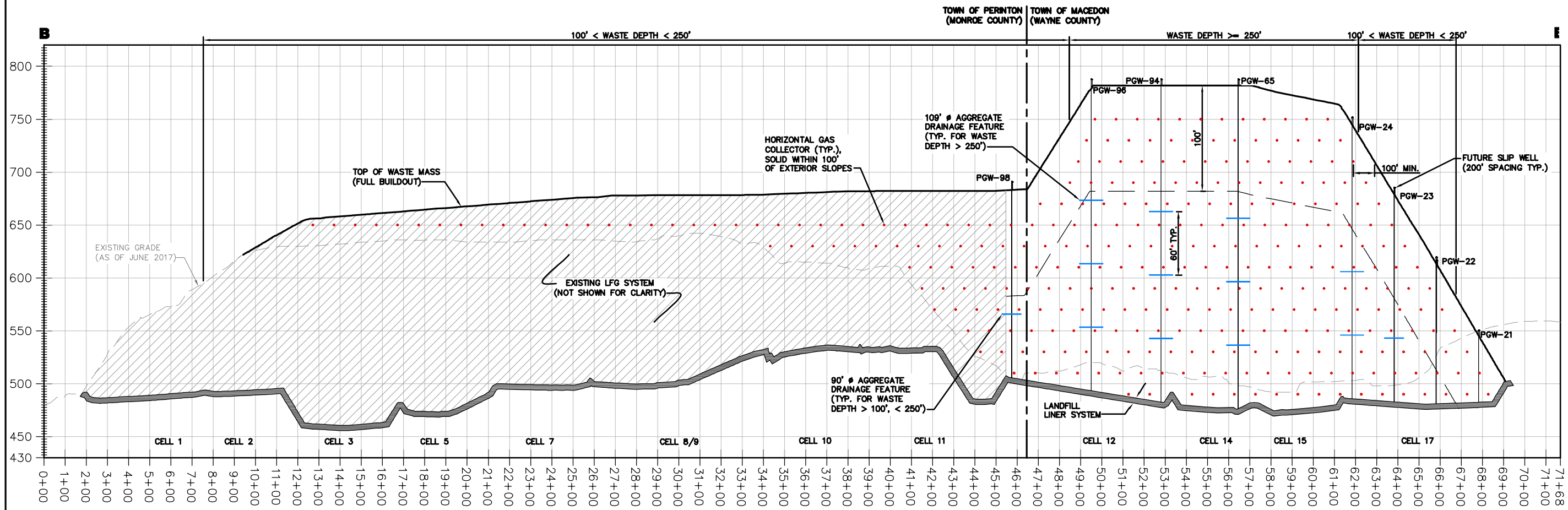
1242.074.003

Date  
DECEMBER, 2017

Scale  
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TOWNS OF PERINTON AND MACEDON MONROE AND WAYNE COUNTIES, NEW YORK

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 Z: \BL-Vault\1 - Project Files\1 - Sorted by Project Number {2} Class {2} Folder\1200\1242.074.003\CAD\1242.074.003\_Figure 5 - Cross Section.dwg

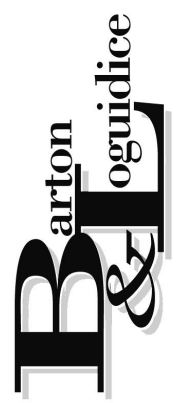


**SECTION B-B'**  
 HORIZONTAL SCALE: 1" = 500'  
 VERTICAL SCALE 1" = 100'

WASTE MANAGEMENT  
 HIGH ACRES LANDFILL

**CROSS SECTION OF VIEW OF LONG TERM  
 GAS COLLECTION SYSTEM**

TOWNS OF PERINTON AND MACEDON  
 MONROE AND WAYNE COUNTIES, NEW YORK



Date  
 DECEMBER, 2017

Scale  
 AS SHOWN

Figure Number  
 5

Project Number  
 1242.074.003

Attachment 4 – Primary Mitigation Measures  
Implementation Plan

**Waste Management of New York, LLC.  
High Acres Landfill and Recycling Center  
Primary Mitigation Measures  
Implementation Plan**

Action	Estimated Start	Estimated Completion	2017					2018											
			Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar									
Cell 10 Road Removal/Relocation	8/5/17	10/10/17	█	█															
Design/Approval/Installation of 10,000 feet of Horizontal Collection Piping in Cell 10/Cell 11	9/20/17	12/1/17		█	█	█													
Design/Approval/Installation of New Vacuum Header from Flare/Plant to Cell 11 (24"/18" Jumper Line)	11/1/17	1/30/18				█	█	█											
Design/Approval/Installation of 9 Acres of Geosynthetic Cover - North and East Slope Cell 11	11/1/17	1/30/18				█	█	█											
Replacement and Repair of Watered Out LFG Wells, Laterals and Headers	11/1/17	3/31/18				█	█	█	█	█	█	█	█	█	█	█	█	█	█
Identify and Remove 24 inch Perimeter Header Restriction	10/4/17	11/10/17				█	█												
identification, Abandonment and Replacement of 1100 lf Sub-Header in Cell 11	11/18/17	12/8/17						█	█										
Hiring Additional Staff to Monitor and Maintain Infrastructure	11/27/17	3/31/18							█	█	█	█	█	█	█	█	█	█	█
Relocate Waste Placement Operations into Cell 12 (Requires Regulatory Approval)	12/15/17	3/31/18												█	█	█	█	█	█
Implementation of Slip Form Wells with Drainage and Horizontal Collectors in Cell 12 Going Forward	12/15/17	3/31/18												█	█	█	█	█	█