



November 2, 2016

Chartiers Township  
Board of Supervisors  
2 Buccaneer Drive  
Houston, Pennsylvania 15342

**Reference: Sunoco Pipeline L.P. – Pennsylvania Pipeline Project  
Act 167 Stormwater/Floodplain Management Program Consistency Request-  
UPDATED Project Workspaces**

Dear Supervisors:

On behalf of Sunoco Pipeline, L.P. (SPLP), Tetra Tech, Inc. is writing to provide updated workspaces/floodplain maps associated with the Pennsylvania Pipeline Project (Project) in Chartiers Township (Township) as part of our Chapter 105 Water Obstruction and Encroachment Permit Application and Act 167 Stormwater/Floodplain Management Consistency Request. Similar to our previous requests on December 22, 2015 and March 22, 2016, we continue to seek a consistency letter from Chartiers Township in regard to the local Floodplain Management and Stormwater Management Program pursuant to 25 Pennsylvania Code, Chapter 105 Regulations (Sections 105.14(b)(9), 105.13(e)(1)(v-vi)), and under the Stormwater Management Act (32 P.S., §§ 680.1—680.17), respectively. This letter is being sent in addition to ongoing coordination currently occurring with the Township for the Houston Injection Station. Attached are the latest Project mapping identifying the revised Project workspaces in the Township. The workspaces are highlighted as additions and subtractions in the maps provided. Note additional permanent right-of-way (ROW) workspaces were identified shown in Sheets 1 and 2, and for the horizontal directional drill pullback required on Sheet 9.

As shown, the latest changes to the Project workspace do not affect our previous stormwater consistency analysis. The Project workspace is designed and will be constructed and operated in compliance the Countywide Washington County Act 167 Stormwater Management Plan and all applicable provisions of 25 Pennsylvania Code, Chapter 102

Consistent with the maps we initially sent, no aboveground facilities and no new access roads are proposed in FEMA designated floodways. However, the newly added workspace for the Houston Injection Station would be located within a 100-year floodplain, as has been identified in ongoing correspondence with the Township. In addition to the above, the newly added workspace for the HDD pullback alignment would be located within a FEMA-designated floodway and 100-year floodplain. However, use of this workspace would be temporary and limited to construction use only. No fill or aboveground structures would be required or located within this HDD pullback workspaces, and thus no changes to the base flood elevation are anticipated.

Based on the above, we have determined that the updated workspaces for the Project ROW do not affect our previous stormwater/floodplain consistency analyses. SPLP will continue to work with the Township to ensure consistency with the Stormwater Management and Floodplain Management Ordinance in effect for the Houston Injection site. If you have questions/comments regarding this letter, please contact me, Ailene Batoon, or Rachel Silva at (716) 849-9419 or via email at [ailene.batoon@tetrattech.com](mailto:ailene.batoon@tetrattech.com) or [rachel.silva@tetrattech.com](mailto:rachel.silva@tetrattech.com) within 30 days of receipt of this letter. Thank you for your time.

Sincerely,  
Tetra Tech, Inc.

A handwritten signature in black ink, appearing to read 'Ailene Batoon', written over a circular stamp or seal.

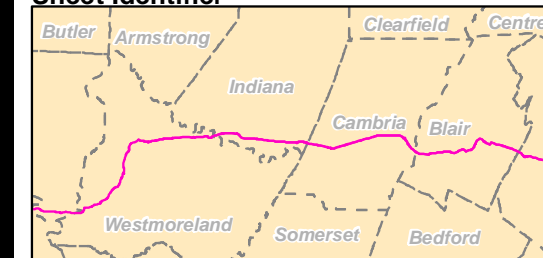
Ailene Batoon

Enclosures: Updated Site Plan/Floodplain Maps




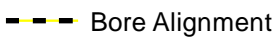
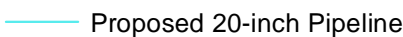
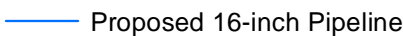







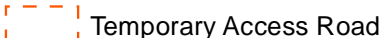




Tetra Tech

301 Ellicott St, Buffalo, New York 14203  
Tel 716.849.9419 Fax 716.849.9420 [www.tetrattech.com](http://www.tetrattech.com)

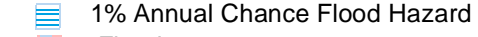
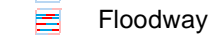

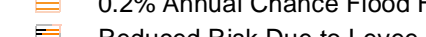
**Sheet Identifier**



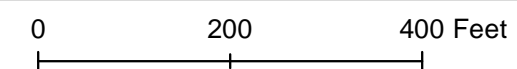
**Legend**

-  Added Workspace
-  Subtracted Workspace
-  HDD Alignment
-  Bore Alignment
-  Proposed 20-inch Pipeline
-  Proposed 16-inch Pipeline
-  ATWS
-  Block Valve
-  Block Valve Setting LOD
-  Permanent Access Road
-  Permanent ROW
-  Spoil Workspace
-  Stations
-  Temporary Access Road
-  Temporary ROW
-  Travel Lane
-  Municipal Boundary
-  Wetlands10222016

**Flood Hazard Zones**

-  1% Annual Chance Flood Hazard
-  Floodway
-  0.2% Annual Chance Flood Hazard
-  Reduced Risk Due to Levee


**FEMA NFHL Designated Floodplains along the Sunoco Pennsylvania Pipeline Project**



Sheet 1 Scale 1:2400

Prepared By: 	Date: 10/2016
--	------------------




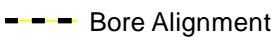
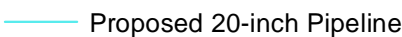
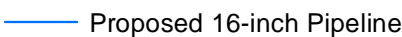












Floodplain & Floodway Data:  
 National Flood Hazard GIS Layer  
 Downloaded October, 2015  
<http://www.floodmaps.fema.gov/NFHL/status.shtml>







### Sheet Identifier



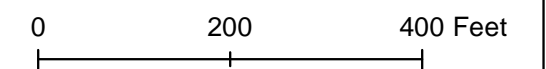
### Legend

-  Added Workspace
-  Subtracted Workspace
-  HDD Alignment
-  Bore Alignment
-  Proposed 20-inch Pipeline
-  Proposed 16-inch Pipeline
-  ATWS
-  Block Valve
-  Block Valve Setting LOD
-  Permanent Access Road
-  Permanent ROW
-  Spoil Workspace
-  Stations
-  Temporary Access Road
-  Temporary ROW
-  Travel Lane
-  Municipal Boundary
-  Wetlands10222016

### Flood Hazard Zones

-  1% Annual Chance Flood Hazard
-  Floodway
-  0.2% Annual Chance Flood Hazard
-  Reduced Risk Due to Levee

### FEMA NFHL Designated Floodplains along the Sunoco Pennsylvania Pipeline Project



Sheet 2 Scale 1:2400

Prepared By:



Date:

10/2016




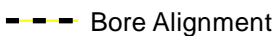
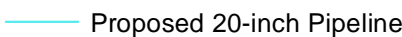
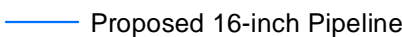












Floodplain & Floodway Data:  
National Flood Hazard GIS Layer  
Downloaded October, 2015  
<http://www.floodmaps.fema.gov/NFHL/status.shtml>





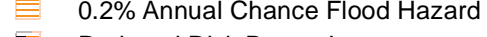
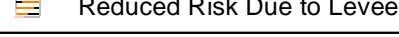
**Sheet Identifier**



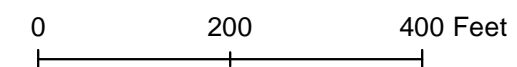
**Legend**

-  Added Workspace
-  Subtracted Workspace
-  HDD Alignment
-  Bore Alignment
-  Proposed 20-inch Pipeline
-  Proposed 16-inch Pipeline
-  ATWS
-  Block Valve
-  Block Valve Setting LOD
-  Permanent Access Road
-  Permanent ROW
-  Spoil Workspace
-  Stations
-  Temporary Access Road
-  Temporary ROW
-  Travel Lane
-  Municipal Boundary
-  Wetlands10222016

**Flood Hazard Zones**

-  1% Annual Chance Flood Hazard
-  Floodway
-  0.2% Annual Chance Flood Hazard
-  Reduced Risk Due to Levee

**FEMA NFHL Designated Floodplains along the Sunoco Pennsylvania Pipeline Project**



**Sheet 3** **Scale 1:2400**

Prepared By: 	Date: 10/2016
--	------------------



















Floodplain & Floodway Data:  
 National Flood Hazard GIS Layer  
 Downloaded October, 2015  
<http://www.floodmaps.fema.gov/NFHL/status.shtml>







**Sheet Identifier**



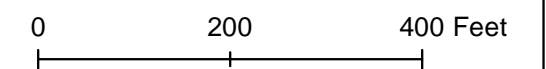
**Legend**

-  Added Workspace
-  Subtracted Workspace
-  HDD Alignment
-  Bore Alignment
-  Proposed 20-inch Pipeline
-  Proposed 16-inch Pipeline
-  ATWS
-  Block Valve
-  Block Valve Setting LOD
-  Permanent Access Road
-  Permanent ROW
-  Spoil Workspace
-  Stations
-  Temporary Access Road
-  Temporary ROW
-  Travel Lane
-  Municipal Boundary
-  Wetlands10222016

**Flood Hazard Zones**

-  1% Annual Chance Flood Hazard
-  Floodway
-  0.2% Annual Chance Flood Hazard
-  Reduced Risk Due to Levee

**FEMA NFHL Designated Floodplains along the Sunoco Pennsylvania Pipeline Project**



**Sheet 4** **Scale 1:2400**

Prepared By:  **TETRA TECH** Date: **10/2016**




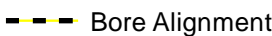
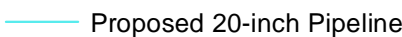
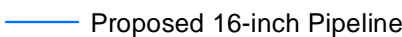












Floodplain & Floodway Data:  
National Flood Hazard GIS Layer  
Downloaded October, 2015  
<http://www.floodmaps.fema.gov/NFHL/status.shtml>






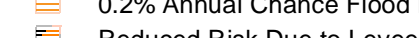
**Sheet Identifier**



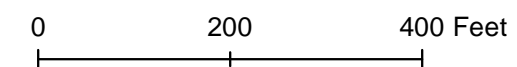
**Legend**

-  Added Workspace
-  Subtracted Workspace
-  HDD Alignment
-  Bore Alignment
-  Proposed 20-inch Pipeline
-  Proposed 16-inch Pipeline
-  ATWS
-  Block Valve
-  Block Valve Setting LOD
-  Permanent Access Road
-  Permanent ROW
-  Spoil Workspace
-  Stations
-  Temporary Access Road
-  Temporary ROW
-  Travel Lane
-  Municipal Boundary
-  Wetlands10222016

**Flood Hazard Zones**

-  1% Annual Chance Flood Hazard
-  Floodway
-  0.2% Annual Chance Flood Hazard
-  Reduced Risk Due to Levee

**FEMA NFHL Designated Floodplains along the Sunoco Pennsylvania Pipeline Project**



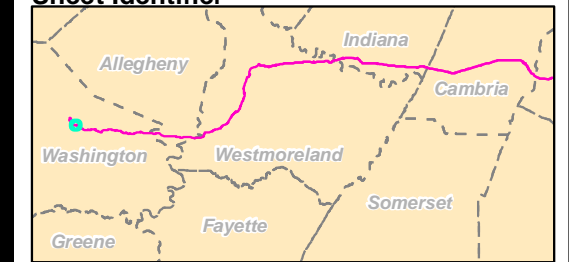
**Sheet 5** **Scale 1:2400**

Prepared By: 	Date: 10/2016
--	------------------



















Floodplain & Floodway Data:  
 National Flood Hazard GIS Layer  
 Downloaded October, 2015  
<http://www.floodmaps.fema.gov/NFHL/status.shtml>







**Sheet Identifier**



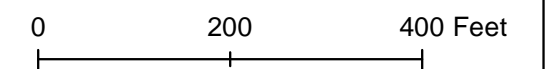
**Legend**

-  Added Workspace
-  Subtracted Workspace
-  HDD Alignment
-  Bore Alignment
-  Proposed 20-inch Pipeline
-  Proposed 16-inch Pipeline
-  ATWS
-  Block Valve
-  Block Valve Setting LOD
-  Permanent Access Road
-  Permanent ROW
-  Spoil Workspace
-  Stations
-  Temporary Access Road
-  Temporary ROW
-  Travel Lane
-  Municipal Boundary
-  Wetlands10222016

**Flood Hazard Zones**

-  1% Annual Chance Flood Hazard
-  Floodway
-  0.2% Annual Chance Flood Hazard
-  Reduced Risk Due to Levee

**FEMA NFHL Designated Floodplains along the Sunoco Pennsylvania Pipeline Project**



**Sheet 6** **Scale 1:2400**

<b>Prepared By:</b> 	<b>Date:</b> 10/2016
--	-------------------------




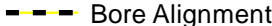
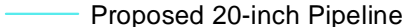













Floodplain & Floodway Data:  
National Flood Hazard GIS Layer  
Downloaded October, 2015  
<http://www.floodmaps.fema.gov/NFHL/status.shtml>







**Sheet Identifier**



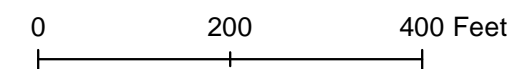
**Legend**

-  Added Workspace
-  Subtracted Workspace
-  HDD Alignment
-  Bore Alignment
-  Proposed 20-inch Pipeline
-  Proposed 16-inch Pipeline
-  ATWS
-  Block Valve
-  Block Valve Setting LOD
-  Permanent Access Road
-  Permanent ROW
-  Spoil Workspace
-  Stations
-  Temporary Access Road
-  Temporary ROW
-  Travel Lane
-  Municipal Boundary
-  Wetlands10222016

**Flood Hazard Zones**

-  1% Annual Chance Flood Hazard
-  Floodway
-  0.2% Annual Chance Flood Hazard
-  Reduced Risk Due to Levee

**FEMA NFHL Designated Floodplains along the Sunoco Pennsylvania Pipeline Project**



**Sheet 7** **Scale 1:2400**

Prepared By: 	Date: 10/2016
--	------------------




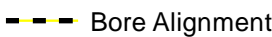
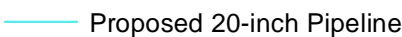
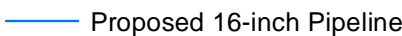












Floodplain & Floodway Data:  
 National Flood Hazard GIS Layer  
 Downloaded October, 2015  
<http://www.floodmaps.fema.gov/NFHL/status.shtml>







**Sheet Identifier**



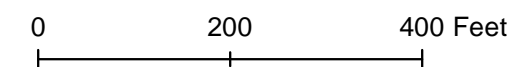
**Legend**

-  Added Workspace
-  Subtracted Workspace
-  HDD Alignment
-  Bore Alignment
-  Proposed 20-inch Pipeline
-  Proposed 16-inch Pipeline
-  ATWS
-  Block Valve
-  Block Valve Setting LOD
-  Permanent Access Road
-  Permanent ROW
-  Spoil Workspace
-  Stations
-  Temporary Access Road
-  Temporary ROW
-  Travel Lane
-  Municipal Boundary
-  Wetlands10222016

**Flood Hazard Zones**

-  1% Annual Chance Flood Hazard
-  Floodway
-  0.2% Annual Chance Flood Hazard
-  Reduced Risk Due to Levee

**FEMA NFHL Designated Floodplains along the Sunoco Pennsylvania Pipeline Project**



**Sheet 8** **Scale 1:2400**

Prepared By: 	Date: 10/2016
--	------------------

Floodplain & Floodway Data:  
 National Flood Hazard GIS Layer  
 Downloaded October, 2015  
<http://www.floodmaps.fema.gov/NFHL/status.shtml>



CHARTERS  
NORTH  
STRABANE

**Sheet Identifier**



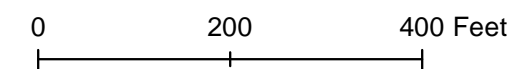
**Legend**

- Added Workspace
- Subtracted Workspace
- HDD Alignment
- Bore Alignment
- Proposed 20-inch Pipeline
- Proposed 16-inch Pipeline
- ATWS
- Block Valve
- Block Valve Setting LOD
- Permanent Access Road
- Permanent ROW
- Spoil Workspace
- Stations
- Temporary Access Road
- Temporary ROW
- Travel Lane
- Municipal Boundary
- Wetlands10222016

**Flood Hazard Zones**

- 1% Annual Chance Flood Hazard
- Floodway
- 0.2% Annual Chance Flood Hazard
- Reduced Risk Due to Levee

**FEMA NFHL Designated Floodplains along the Sunoco Pennsylvania Pipeline Project**



Sheet 9 Scale 1:2400

Prepared By: TETRA TECH Date: 10/2016

Floodplain & Floodway Data:  
National Flood Hazard GIS Layer  
Downloaded October, 2015  
<http://www.floodmaps.fema.gov/NFHL/status.shtml>




**From:** TrackingUpdates@fedex.com  
**Sent:** Thursday, November 03, 2016 1:57 PM  
**To:** Silva, Rachel  
**Subject:** FedEx Shipment 777622034260 Delivered

## Your package has been delivered

Tracking # 777622034260

Ship date: <b>Wed, 11/2/2016</b>	Delivery date: <b>Thu, 11/3/2016 1:54 pm</b>
<b>AILENE BATOON</b> TETRA TECH - HOME Buffalo, NY 14203 US	<b>Chartiers Township</b> 2 Buccaneer Drive Board of Supervisors HOUSTON, PA 15342 US



**Delivered**

### Shipment Facts

Our records indicate that the following package has been delivered.

<b>Tracking number:</b>	<a href="#">777622034260</a>
<b>Status:</b>	Delivered: 11/03/2016 1:54 PM Signed for By: A.WARCHOLAK
<b>Reference:</b>	112IC05958, 16
<b>Signed for by:</b>	A.WARCHOLAK
<b>Delivery location:</b>	HOUSTON, PA
<b>Delivered to:</b>	Receptionist/Front Desk
<b>Service type:</b>	FedEx Standard Overnight
<b>Packaging type:</b>	FedEx Envelope
<b>Number of pieces:</b>	1
<b>Weight:</b>	0.50 lb.
<b>Special handling/Services:</b>	Direct Signature Required Deliver Weekday
<b>Standard transit:</b>	11/3/2016 by 3:00 pm

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 12:56 PM CDT on 11/03/2016.

All weights are estimated.

